Appendix K Waste Disposal Documents (Manifests and Laboratory Reports)

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT

1. Generator ID Number: NYD006978795
2. Page 1 of: 1
3. Emergency Response Phone: (800) 424-9300
4. Shipping Document Tracking Number: ZZ 00787296

GENERATOR

5. Generator's Name and Mailing Address: NATIONAL GRID, JOSEPH ODIERNA
GREENPOINT ENERGY CENTER
175 E OLD COUNTRY RD
HICKSVILLE, NY 11801-4257
Generator's Phone: 917 731-8543

Generator's Site Address (if different than mailing address)
287 MASPETH AVE
BROOKLYN, NY 11211-1703

6. Transporter 1 Company Name: ENVIRON TRANSPORT GROUP INC
U.S. EPA ID Number: NJD000692061

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT, LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 773 273-8600
U.S. EPA ID Number: NJ122500152 2

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Codes
	1. NON-REGULATED MATERIAL, NON-RCRA, NON-DOT	1	CM	EST 10	T	ID27 L
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: ER Service Contracted by CON15623 + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf. + 1) W: 470981 A: MSM#2719-0778, NON HAZ SOIL

Box 367

15. **GENERATOR S/OFFEROR S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Kevad Patel on behalf of National Grid
Signature:
Month: 06 Day: 18 Year: 19

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Shipment

Transporter 1 Printed/Typed Name: ASA Bay
Signature:
Month: 06 Day: 18 Year: 19

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Shipping Document Tracking Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a

Printed/Typed Name:
Signature:
Month: Day: Year:

GENERATOR / SHIPPER'S INITIAL COPY

VEOLIA

PACKING SUMMARY

Generator Number: 490352
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY 11211-1703
Attn: GEORGE HOLMES
EPA ID: NYD006978795

Manifest Number: ZZ00787296
Field System ID: JS
Work Order Number: 3302088000
Date Shipped: 06/18/2019

Container#: JS-3302088000-001 Waste Area: Manifest Page/Line: 01 / 1

WIP: 470981 DisposalCode: BSM#2719-0778 PHY State: S

Date Accumulated: 06/18/2019 Gen Drum ID:

Shipping Name: NON-REGULATED MATERIAL, NON-RCRA, NON-DOT.

No. of Commons: 01 Outer Container: 20YDRO-CM Inner Container:

Primary Waste Codes: ID27,L PCB Serial #: OOS Date: / /

Total Cmns Wt: 9999 SIC: 4911 Source: G39 Form: W319 System: H129 Cubic Ft.: 540.00

Individual Common Weights: 1 @ 9999 (POUNDS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	ROLLOF		NON HAZ SOIL [100%]	ID27, L

FORM# VES-6

VEOLIA

Activity Report

JOB NO: 3302088000
BILL DOC NO JS90613053
GENERATOR NO 490352

WO NO: 3302088000
EPA ID: NYD006978795

BILL TO: NATIONAL GRID
175 E OLD COUNTRY RD
HICKSVILLE, NY 11801-4257
(516) 545-2255

JOB SITE: GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY 11211-1703
(631) 759-2972

CONTACT: JOSEPH ODIERNA

CONTACT: GEORGE HOLMES

MANIFEST NUMBER(S):
ZZ00787296

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
		06/18/2019	N05

DESCRIPTION	# CONT.	CONT.CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # ZZ00787296 WIP 470981 / Approval BSM#2719-0778 NON HAZ SOIL	1	20YDRO-CM		P	1 / 1	

Total Hours: 0
# of Containers: 1

Comments:

Signature: _____

Print Name: on be half of National Grid.

Customer authorizes Contractor to make changes on Customer's behalf in regards to transporters used and to perfor
Services, including adding or changing transporters listed on manifests. If Customer provides an approved transporte
writing to Contractor at the time Customer executes this Agreement, Contractor shall select only those transporters on
when providing transportation services to Customer. If Customer does not provide an approved transporter list in writi
Contractor at the time Customer executes this Agreement, Customer authorizes Contractor to select any permitted tra
to provide transportation services to Customer.

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities

P.O. Box 296 • Flanders, NJ 07836 • 800-598-3844 • Fax: 973-347-3564

CUSTOMER Vecova

PO# 20uf

DROP

SPOT: 32119 (Date / Time)

DRIVER: Asa Cox Jr. TRACTOR#: 211 TRAILER#:

Greenpoint / Brooklyn, NY 1211

FACILITY NAME 257 Nassau Ave ADDRESS

TIME IN: 815 TIME OUT: 840

COMMENTS:

DRIVER RELEASED FROM DUTY TIME: CUSTOMER INITIAL:

PRINT: George Holmes SIGNATURE:

PICK-UP

PICK UP: 6-13-19 (Date / Time)

DRIVER: Asa Cox Jr TRACTOR#: 211 TRAILER#:

Greenpoint / Brooklyn, NY

FACILITY NAME 257 Nassau ADDRESS

TIME IN: 615 TIME OUT: 715

COMMENTS:

DRIVER RELEASED FROM DUTY TIME: CUSTOMER INITIAL:

PRINT: George Holmes SIGNATURE:

INTERMEDIATE/ SITE WORK

INT./SITE WORK: (Date / Time)

DRIVER: TRACTOR#: TRAILER#:

FACILITY NAME ADDRESS

TIME IN: TIME OUT:

COMMENTS:

DRIVER RELEASED FROM DUTY TIME: CUSTOMER INITIAL:

PRINT: SIGNATURE:

UNLOAD

UNLOAD: 6/8/19 (Date / Time)

DRIVER: TRACTOR#: TRAILER#:

Bayshore / Kearsey, NJ

FACILITY NAME ADDRESS

TIME IN: TIME OUT:

COMMENTS:

DRIVER RELEASED FROM DUTY TIME: CUSTOMER INITIAL:

PRINT: SIGNATURE:

DUMP BOX VAN TANK ROLL OFF

ROLLOFF#: 367-

LINER: LM

MANIFEST#: 2200787296

SPOT CHARGE: $ 65.00

PRELOAD CHARGE: $

RENTAL:

_____ (# of Days) @ $_____ (Per Day) = $_____

PICK/UP DEMURRAGE:

_____ (# of Hrs.) @ $_____ (Per Hr.) = $_____

INT. STOP CHARGE: $

INTERMEDIATE/SITE WORK:

_____ (# of Hrs.) @ $_____ (Per Hr.) = $_____

UNLOAD DEMURRAGE:

_____ (# of Hrs.) @ $_____ (Per Hr.) = $_____

LINER: $

TANK WASH: $

_____ TONS @ $_____ = $

_____ LOADS @ $_____ = $

LINE HAUL RATE: $

F/S_____% = $

PERMITS: $ 125.00

TOLLS: $

INVOICE TOTAL: $

Acknowledgment of Treatment and Recycling

Bayshore Soil Management, LLC hereby acknowledges

The Thermal Treatment

Of 266.44 Tons of

Coal Tar Contaminated Soil
(Received on 08/06/15)

From the **GRIT MFG Gas Plant Site, BROOKLYN, NY**

Bayshore Soil Management, LLC.

August 7, 2015
AIR: Facility ID Number 18437; Permit PCP100001
CLASS B: Facility ID Number 132397: Permit CBG110004
Keasbey, New Jersey

Certificate Number 2715-0773-080615

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 509931
Date: 8/5/2015
Time: 09:11:14 - 09:11:56

			Scale
Gross:	73020 lb	In	Scale 2
Tare:	28720 lb		P.T.
Net:	44300 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP544V

CUYDs: 25 License: AP544V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 001-196
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	22.15	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 001 -196 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center Brooklyn NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave Suite D
Middlesex NJ 08050
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 22.15 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

Shipment Date 08/05/15

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 287 Maspeth Ave
Brooklyn NY 11211

TRANSPORTER

Transporter Name Shamrock
Address ~~100~~ SINY

Phone No. _____

Truck Name Corbett
Truck No. 196
Driver Name (Print) John Paramithis
Vehicle License No./State AP544V

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

Shipment Date 08/05/15

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

Shipment Date 08/05/15

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Road Keasbey NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

Receipt Date 08/05/15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 509957
Date: 8/5/2015
Time: 09:31:43 - 09:33:54

			Scale
Gross:	71240 lb	In	Scale 1
Tare:	29300 lb		P.T.
Net:	41940 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP541V

CUYDs: 25
License: AP541V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 006-193
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	20.97	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # C06 - 193 Last Truck (check if yes) ☐ Job # _____

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite ID
Middlesex, NJ 08850
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 20.97 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site
2715077

Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd.
Staten Island NY 10301

Phone No. _____

Truck Name Corbett
Truck No. #[redacted] 193
Driver Name (Print) Ron Scott
Vehicle License No./State AP541V NJ

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/05/15
Shipment Date

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

509

08/05/15
Receipt Date

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 509960
Date: 8/5/2015
Time: 09:36:04 - 09:36:12

			Scale
Gross:	71800 lb	In	Scale 2
Tare:	29320 lb		P.T.
Net:	42480 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP543V

CUYDs: 25

License: AP543V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 009-195
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	21.24 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Weighmaster: Dennis

Driver:

(1)

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 0091-195 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516-545-2586

Contractor Name ESA
Address 435 Union Ave. Suite 1D
Middlesex, NJ 08850
Phone No. 516-398-7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 21.24 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR NATIONAL GRID NY
E Miller
Generator Authorized Agent Name

Signature

Shipment Date 08/15/15

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd
S.I. N.Y.
Phone No. 718 273 9223

Truck Name ~~Start~~ T. Corbett
Truck No. 195
Driver Name (Print) Pat Castoro
Vehicle License No./State N.J. AP543V

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

Shipment Date 08/05/15

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

Shipment Date 08/05/15

DESTINATION

Site Name Bayshore Soil Management Phone No. 732-738-6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

Receipt Date 08/05/15

509960

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510000
Date: 8/5/2015
Time: 10:05:10 - 10:05:19

Scale

Gross: 74040 lb In Scale 2
Tare: 29140 lb P.T.
Net: 44900 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP547V

CUYDs: 25 License: AP547V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 010-199
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	22.45 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 010 -199 Last Truck (check if yes) ☐ Job # 0715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
Middlesex, NJ 08850
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 22.45 TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR NATIONAL GRID NY
Emiller
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site

Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name SHAMROCK MATERIALS
Address 100 SIGNAC HILL RD
STATEN ISLAND 10301
Phone No. 718-273-9223

Truck Name Corbett
Truck No. 199
Driver Name (Print) JIMMY RYAN
Vehicle License No./State AP547V - NY

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/05/15
Shipment Date

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

132397

08/05/15
Receipt Date

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510210
Date: 8/5/2015
Time: 12:46:00 - 12:46:20

Scale

Gross: 81080 lb In Scale 3
Tare: 28720 lb P.T.
Net: 52360 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP544V

CUYDs: 25 License: AP544V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 002-196
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	26.18	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

AP544V

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 002 - 196 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 10
Middlesex NJ 08050
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS _____ TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

08 05 15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 287 Maspeth Ave
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock
Address SI NY

Truck Name Corbett
Truck No. 196
Driver Name (Print) John Paramithis
Vehicle License No./State AP544V NJ

Phone No. _____

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08 05 15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08 05 15
Shipment Date

DESTINATION

Site Name Bayshore Soil management Phone No. 732 - 738 - 6000
Address 75 Crans Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

08 05 15
Receipt Date

90 210

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510258
Date: 8/5/2015
Time: 13:18:42 - 13:18:48

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Scale
Gross: 71840 lb In Scale 2
Tare: 29300 lb P.T.
Net: 42540 lb

Truck: AP541V

CUYDs: 25 License: AP541V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 004-193
Profile: 2715-0773/GRIT MFG GAS PLANT Remaining: 0.00 TN
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	21.27 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Drivers: _____ Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 004 -193 Last Truck (check if yes) ☐ Job # 0715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
Middlesex, NJ 08050
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 21.27 TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR NATIONAL GRID NY
E Miller
Generator Authorized Agent Name

Signature

Shipment Date 08 05 15

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd
Staten Island NY 10301

Phone No. _____

Truck Name Corbett
Truck No. 193
Driver Name (Print) Ron Scott
Vehicle License No./State AP541V NJ

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

Shipment Date 08 05 15

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

Shipment Date 08 05 15

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

Receipt Date 08 05 15

510258

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510262
Date: 8/5/2015
Time: 13:21:47 - 13:21:54

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP543V

Scale

Gross: 75640 lb In Scale 2
Tare: 29320 lb P.T.
Net: 46320 lb

CUYDs: 25 License: AP543V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 008-195
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	23.16 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Drivers: _____ Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

6

Manifest # 008 - 195 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
middlesex, NJ 08050
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 23.16 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR
E Miller NATIONAL GRID NY
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MEP Site
Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill rd.
S.I. N.Y.
Phone No. 718 273 9223

Truck Name Corbett
Truck No. 195
Driver Name (Print) Pat Castord
Vehicle License No./State AP543V N.J.

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/06/15
Shipment Date

DESTINATION

Site Name Bayshore Soil management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

08/05/15
Receipt Date

510262

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510283
Date: 8/5/2015
Time: 13:35:45 - 13:35:52

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Scale
Gross: 80360 lb In Scale 2
Tare: 29140 lb P.T.
Net: 51220 lb

Truck: AP547V

CUYDs: 25 License: AP547V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 011-199
Profile: 2715-0773/GRIT MFG GAS PLANT Remaining: 0.00 TN
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	25.61 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____ Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 011 - 199 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
Middlesex, NJ 08850
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 25.61 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR NATIONAL GRID NY
E Miller
Generator Authorized Agent Name

Signature

080515
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 281 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd
Staten Island 10301
Phone No. 718-273-9223

Truck Name Corbett
Truck No. 199
Driver Name (Print) Jimmy Ryan
Vehicle License No./State AP547V - NJ

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

080515
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

080515
Shipment Date

DESTINATION

Site Name Bayshore Soil management Phone No. 732 - 738 - 6000
Address 75 Crows Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

080515
Receipt Date

510283

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510418
Date: 8/5/2015
Time: 16:05:13 - 16:05:40

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP544V

		Scale
Gross:	78600 lb	In Scale 1
Tare:	28720 lb	P.T.
Net:	49880 lb	

CUYDs: 25
License: AP544V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Manifest: 003
Remaining: 0.00 TN

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	24.94 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

AP544V

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 003 Last Truck (check if yes) ☐ Job # 2015-0773

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
middlesex, NJ 08850
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 24.94 TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E. Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site

Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name SHAMROCK
Address SI NY

Phone No. _____

Truck Name CORBETT
Truck No. 196
Driver Name (Print) John Paramithios
Vehicle License No./State AP544V NJ

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/05/15
Shipment Date

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6006
Address 75 Cronks Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

08/05/15
Receipt Date

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510427
Date: 8/5/2015
Time: 16:40:13 - 16:40:19

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP541V

Scale

Gross: 79080 lb In Scale 2
Tare: 29300 lb P.T.
Net: 49780 lb

CUYDs: 25

License: AP541V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 005-193
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	24.89	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 005 - 193 Last Truck (check if yes) ☐ Job # _____

GENERATOR

Generator Name National Grid
Address 1 Metrotech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESI
Address 405 Union Ave. Suite 1D
Middlesex, NJ 08850
Phone No. 516 - 398 - 7405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 24.89 TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

AGENT FOR E Miller NATIONAL GRID
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site
Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd
Staten Island NY 10301

Phone No. _____

Truck Name Corbett
Truck No. 193
Driver Name (Print) Ron Scott
Vehicle License No./State AP 541V NJ

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/05/15
Shipment Date

DESTINATION

Site Name Bayshore Soil Management Phone No. 732 - 738 - 6000
Address 75 Cross Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

08/05/15
Receipt Date

51.04

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510429
Date: 8/5/2015
Time: 16:42:41 - 16:42:48

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP543V

Scale
Gross: 74820 lb In Scale 2
Tare: 29320 lb P.T.
Net: 45500 lb

CUYDs: 25 License: AP543V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 007-195
Remaining: 0.00 TN

Profile: 2715-0773/GRIT MFG GAS PLANT
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	22.75 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Dennis

(3)

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 007 - 195 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 MetroTech Center
Brooklyn, NY 11201
Phone No. 516 - 545 - 2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
middlesex, NJ 08850
Phone No. 516 - 398 - 1405

TARE WEIGHT MUST BE INCLUDED

NEW WEIGHT _____ GROSS WEIGHT _____
NET TONS 22.75 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state law, has been property described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

08/05/15
Shipment Date

SITE LOCATION

JOB NAME Greenpoint MGP Site

Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal hill rd
STNY.

Phone No. 718 273 9227

Truck Name Corbett
Truck No. 195
Driver Name (Print) Pat Castoro
Vehicle License No./State AP 543U N.J.

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

08/05/15
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination

Driver Signature

08/05/15
Shipment Date

DESTINATION

Site Name Bayshore soil management Phone No. 732 - 738 - 6000
Address 75 Cronks Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

51049

08/05/15
Receipt Date

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 510431
Date: 8/5/2015
Time: 16:55:04 - 16:55:10

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Scale
Gross: 81940 lb In Scale 2
Tare: 29140 lb P.T.
Net: 52800 lb

Truck: AP547V

CUYDs: 25

License: AP547V
Truck Type: TRIAXLE

Carrier: THOMAS F CORBETT ASSOCI

Manifest: 012-199
Profile: 2715-0773/GRIT MFG GAS PLANT
Remaining: 0.00 TN
Generator: GRIT MFG GAS PLANT
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	26.40	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Dennis

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Manifest # 012-199 Last Truck (check if yes) ☐ Job # 2715-0773

GENERATOR

Generator Name National Grid
Address 1 MetroTech Center
Brooklyn, NY 11201
Phone No. 516-545-2586

Contractor Name ESA
Address 495 Union Ave. Suite 1D
Middlesex, NJ 08850
Phone No. 516-398-7405

TARE WEIGHT MUST BE INCLUDED

NET WEIGHT _____ GROSS WEIGHT _____
NET TONS 26.40 tons TARE WEIGHT _____
TICKET NUMBER _____

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not hazardous waste as defined by 40 CFT Part 261 or any applicable state low, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

E Miller AGENT FOR NATIONAL GRID NY
Generator Authorized Agent Name

Signature

080515
Shipment Date

SITE LOCATION

Job Name Greenpoint MGP Site
Address 287 Maspeth Ave.
Brooklyn, NY 11211

TRANSPORTER

Transporter Name Shamrock Materials
Address 100 Signal Hill Rd
S INY

Phone No. 718-273-9223

Truck Name Corbett
Truck No. 199
Driver Name (Print) Jimmy Ryan
Vehicle License No./State AP547V - NY

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature

080515
Shipment Date

I hereby certify that the above named material was delivered without incident to the destination.

Driver Signature

080515
Shipment Date

DESTINATION

Site Name Bayshore Soil management
Phone No. 732-738-6000
Address 75 Crons Mill Rd. Keasbey, NJ 08832

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent

Signature

080515
Receipt Date

510431

Acknowledgment of Treatment and Recycling

Bayshore Soil Management, LLC hereby acknowledges

The Thermal Treatment

Of 282.01 Tons of

Coal Tar Contaminated Soil
(Received on 08/05/15)

From the **GRIT MFG Gas Plant Site, BROOKLYN, NY**

August 6, 2015

Bayshore Soil Management, LLC.

AIR: Facility ID Number 18437; Permit PCP100001
CLASS B: Facility ID Number 132397: Permit CBG110004
Keasbey, New Jersey

Certificate Number 2715-0773-080515

Acknowledgment of Treatment and Recycling

Bayshore Soil Management, LLC hereby acknowledges

The Thermal Treatment

Of 282.01 Tons of

Coal Tar Contaminated Soil
(Received on 08/05/15)

From the **Fulton Municipal Works MGP Site, BROOKLYN, NY**

Bayshore Soil Management, LLC.

August 6, 2015
AIR: Facility ID Number 18437; Permit PCP100001
CLASS B: Facility ID Number 132397: Permit CBG110004
Keasbey, New Jersey

Certificate Number 2715-0773-080515

Environmental Strategies & Applications, Inc.
495 Union Avenue, Suite 1D
Middlesex, New Jersey 08846
Phone: (732) 469-8888 Fax: (732-469-1120)
Website: www.askesa.com email: wireland@askesa.com
Project Manager - Bill Ireland

INVOICE

National Grid NY
287 Maspeth Ave
Brooklyn New york
Attn: Bill Ryan

Invoice No.:	3565-22
Invoice Date:	6/29/15
Terms:	Net30
ESA Job Number:	3565
Customer PO No.:	3200014219

National Grid - Maspeth Water Main Project
287 Maspeth Ave, Brooklyn NY

Task: Provide MGP Impacted soil T&D

Date	*Units*	*Rate*	*Description*	*Amount*
7/23/15	6	$82.50	Site visit to inspect stockpile and determine extent of debris	$495.00
7/23/15	1	$137.50	Project Vehicle	$137.50
8/5 & 8/6	548.45	$85.25	Union Trans and Disposal at Bayshore Soil Management - tons	$46,755.36
8/5/15	12	$82.50	ESA Project Supervisor hours - set up, coordinate load out and sign manifests	$990.00
8/5/15	1	$137.50	ESA Project Vehicle	$137.50
8/6/15	12	$82.50	ESA Project Supervisor hours - set up, coordinate load out and sign manifests	$990.00
8/6/15	1	$137.50	ESA Project Vehicle	$137.50

Total Due $49,642.86

Acknowledgment of Treatment and Recycling

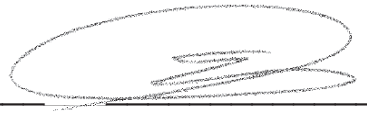
Bayshore Soil Management, LLC hereby acknowledges

The Thermal Treatment

Of 549.96 Tons of

Coal Tar Contaminated Soil
(Received on 12/18/15)

From the **Nat. Grid Greenpoint MGP Site, Brooklyn, NY**



Bayshore Soil Management, LLC.

December 21, 2015
AIR: Facility ID Number 18437; Permit PCP100001
CLASS B: Facility ID Number 132397: Permit CBG110004
Keasbey, New Jersey

Certificate Number 2715-1472-121815

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572343
Date: 12/18/2015
Time: 09:27:15 - 09:27:21

			Scale
Gross:	88160 lb	In	Scale 1
Tare:	28300 lb		P.T.
Net:	59860 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS468U

CUYDs: 25
License: AS468U
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122004
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.93	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122004

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CEUNCA CORONEL TRUCKING INC #64
U.S. EPA ID Number: AS468U NJ

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-5000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29.93
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY
Signature:
Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Edwin R. MATA
Signature:
Month 12 Day 18 Year 15
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572343
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone: 572343 CK
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name:
Signature:
Month 12 Day 18 Year 15

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572346
Date: 12/18/2015
Time: 09:28:21 - 09:28:30

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP139A

Scale
Gross: 94340 lb In Scale 2
Tare: 28360 lb P.T.
Net: 65980 lb

CUYDs: 25 License: AP139A
Truck Type:TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122003
Remaining: 0.00 TN

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	32.99 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 2715-1472
2. Page 1 of
3. Emergency Response Phone: 9738428937
4. Waste Tracking Number: E0122003

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: ---BILL RYAN 5165452586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CEUNCA COROWEL TRUCKING INC
U.S. EPA ID Number:

7. Transporter 2 Company Name: #33 - AP139A
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	OT	25	Yd	
2.						
3.						32-99(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E. MILLER NATIONAL GRID NY
Signature:
Month: 12 Day: 18 Year: 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: WILSON
Signature:
Month: 12 Day: 18 Year: 15
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572346
17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: FELIX
Signature:
Month: 12 Day: 18 Year: 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572366
Date: 12/18/2015
Time: 09:53:02 - 09:53:24

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AS4565

			Scale
Gross:	93480 lb	In	Scale 2
Tare:	29560 lb		P.T.
Net:	63920 lb		

CUYDs: 25

License: AS4565
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122005
Remaining: 0.00 TN

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	31.96 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122005

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CEUNCA COLONEL TRUCKING INC — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						31.96(t)
4.						

13. Special Handling Instructions and Additional Information
BSM 2716-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E MILLER NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: William Lozano #31 — Signature — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572366

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 12 Day 18 Year 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572378
Date: 12/18/2015
Time: 10:07:40 - 10:07:53

			Scale
Gross:	92000 lb	In	Scale 1
Tare:	31600 lb		P.T.
Net:	60400 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AN533Y

CUYDs: 25

License: AN533Y
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122006
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	30.20	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		973 842 8937	E0122006

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
267 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CEUNCA CORONEL TRUCKING INC ANS33Y #32
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						30.20 (1)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E MILLER NATIONAL GRID NY
Signature:
Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FABIO
Signature: Fabio
Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
5723778
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month 12 Day 18 Year 15

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572381
Date: 12/18/2015
Time: 10:11:14 - 10:11:18

Scale

Gross: 90740 lb In Scale 2
Tare: 29660 lb P.T.
Net: 61080 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP967H

CUYDs: 25 License: AP967H
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122008
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	30.54 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122008

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CEUNCA Colonel TRUCKING INC — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						30.54(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472
AP967H

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller — AGENT FOR NATIONAL GRID NY — Signature: [signature] — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jaime Ponjito — Signature: [signature] — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572381

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: FOM — Signature: [signature] — Month 12 Day 18 Year 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572393
Date: 12/18/2015
Time: 10:17:59 - 10:18:07

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP100N

		Scale
Gross:	87920 lb	In Scale 1
Tare:	28920 lb	P.T.
Net:	59000 lb	

CUYDs: 25 License: AP100N
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122007
Remaining: 0.00 TN

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NNCT	29.50	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122007

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CEMNCA CORONA 42 TRUCKING INC — U.S. EPA ID Number:

7. Transporter 2 Company Name: APLOON — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	yd	
2.						
3.						29.50(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR EMILLER NATIONAL GRID NY — Signature: [signature] — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: N GONZALEZ — Signature: [signature] — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 57233

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year 12 18 15

DESIGNATED FACILITY TO GENERATOR

169-BLC-O 5 11977 (Rev. 9/09)

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572406
Date: 12/18/2015
Time: 10:34:10 - 10:34:15

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP578F

Scale
Gross: 87940 lb In Scale 1
Tare: 31340 lb P.T.
Net: 56600 lb

CUYDs: 25 License: AP578F
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122010
Remaining: 0.00 TN

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	28.30	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		973 842 8937	E0122010

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Ceunca Colonel Trucking Inc — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone: — U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Td	
2.						
3.						28-30(F)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: A Gent For E Miller NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Enock Apolo — Signature — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572406

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 12 Day 18 Year 15

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572410
Date: 12/18/2015
Time: 10:36:41 - 10:36:45

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS211A

Scale

Gross:	92000 lb	In	Scale 1
Tare:	29180 lb		P.T.
Net:	62820 lb		

CUYDs: 25 License: AS211A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122009
Remaining: 0.00 TN

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	31.41	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122009

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

*Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
267 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CRUNCA COLONEL TRUCKING INC 74 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						361(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Wilson Calle — Signature — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: G72410

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 18 Year 15

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572413
Date: 12/10/2015
Time: 10:40:35 - 10:40:39

Scale

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Gross: 87040 lb In Scale 2
Tare: 29080 lb P.T.
Net: 57960 lb

Truck: AP757M

CUYDs: 25

License: AP757M
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122011
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	28.98	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122011

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CENNCA CORONEL TRUCKING INC — U.S. EPA ID Number:

7. Transporter 2 Company Name: # 41 AP757 M — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						28.98 (H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR G MILLER NATIONAL GRID NY — Signature: [signature] — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Luis Merchan — Signature: [signature] — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572413

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: ELM — Signature: [signature] — Month 12 Day 18 Year 15

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572534
Date: 12/18/2015
Time: 13:24:52 - 13:24:58

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS468U

			Scale
Gross:	86020 lb	In	Scale 1
Tare:	28300 lb		P.T.
Net:	57720 lb		

CUYDs: 25 License: AS468U
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122013
Remaining: 0.00 TN

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	28.86 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122013

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CEUNCA CORONEL TRUCKING INC #64 — U.S. EPA ID Number: NJP468U

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						2886(P)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Edwin E Mel — Signature — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572534

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 12 Day 18 Year 15

Keyshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572535
Date: 12/18/2015
Time: 13:26:55 - 13:27:04

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP139A

Scale
Gross: 96060 lb In Scale 1
Tare: 28360 lb P.T.
Net: 67700 lb

CUYDs: 25

License: AP139A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP

Manifest: E0122012
Remaining: 0.00 TN

Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	33.05	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		973842 8937	E0122012

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CRUNCH CORONEL TRUCKING INC
U.S. EPA ID Number:

7. Transporter 2 Company Name: #33 - AP139A
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						33-85(A)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: A Gent For E Miller NATIONAL GRID NY
Signature:
Month: 12 Day: 18 Year: 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: NELSON
Signature: NELSON
Month: 12 Day: 18 Year: 15

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572535

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: 12 Day: 18 Year: 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572548
Date: 12/18/2015
Time: 14:00:35 - 14:00:40

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS4565

Scale
Gross: 93780 lb In Scale 2
Tare: 29560 lb P.T.
Net: 64220 lb

CUYDs: 25 License: AS4565
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122014
Remaining: 0.00 TN

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	32.11 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122014

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CELNICK CORONEL TRUCKING INC #31
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	NT	25	YD	
2.						
3.						B2.10(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472
AS4565

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY
Signature:
Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: William Lozano
Signature:
Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572548

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM
Signature:
Month 12 Day 18 Year 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572551
Date: 12/18/2015
Time: 14:03:55 - 14:03:58

Scale

Gross: 94740 lb In Scale 1
Tare: 31600 lb P.T.
Net: 63140 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AN533Y

CUYDs: 25 License: AN533Y
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122015
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	31.57	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		973 842 8937	E0122015

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CERNOCA COLONEL TRUCKING INC AN5334 #32 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						361.57(+)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller — Agent For NATIONAL GRID NY — Signature: [signature] — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FABIO — Signature: [signature] — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572551

17b. Alternate Facility (or Generator) — U.S. EPA ID Number: 572551
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 12 Day 18 Year 15

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572558
Date: 12/18/2015
Time: 14:20:04 - 14:20:09

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP100N

			Scale
Gross:	88200 lb	In	Scale 1
Tare:	28920 lb		P.T.
Net:	59280 lb		

CUYDs: 25

License: AP100N
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122016
Remaining: 0.00 TN

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.64	Tons

THE ABOVE IS CORRECT AND ~~NOT~~ HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 2715-1472
2. Page 1 of
3. Emergency Response Phone: 9738428937
4. Waste Tracking Number: E0122016

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CELTICA CORONA 42 TRUCKING INC
U.S. EPA ID Number:

7. Transporter 2 Company Name: APLOON
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29.64(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR NATIONAL GRID NY
Signature:
Month: 12 Day: 18 Year: 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: N. GONZALEZ
Signature:
Month: 12 Day: 18 Year: 15

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number: 572558

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572560
Date: 12/18/2015
Time: 14:23:20 - 14:23:30

Scale

Gross: 91900 lb In Scale 2
Tare: 29660 lb P.T.
Net: 62240 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE ID
MIDDLESEX, NJ 08846-

Truck: AP967H

CUYDs: 25

License: AP967H
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122017
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	31.12 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122017

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CELNICA CORONEL TRUCKING INC — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	TN	
2.						
3.						31.12 (F)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR EMILLEN NATIONAL GRID NY — Signature: — Month: 12 Day: 18 Year: 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jaime Renjifo — Signature: — Month: 12 Day: 18 Year: 15

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572560

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month: 12 Day: 18 Year: 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572564
Date: 12/10/2015
Time: 14:30:16 - 14:30:19

Scale

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Gross: 90720 lb In Scale 2
Tare: 29180 lb P.T.
Net: 61540 lb

Truck: AS211A

CUYDs: 25

License: AS211A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122019
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	30.77	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	2715-1472		9738428937	E0122019

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Colonel Trucking Inc — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001622

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON HAZARDOUS PC MGP SOIL	001	OT	25	Td
2.					30.77 (T)
3.					~~30.77 (T)~~
4.					

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Wilson Calle — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572564

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 12 Day 18 Year 15

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572566
Date: 12/18/2015
Time: 14:34:10 - 14:34:14

Scale

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Gross: 90400 lb In Scale 2
Tare: 29080 lb P.T.
Net: 61320 lb

Truck: AP757M

CUYDs: 25

License: AP757M
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0122018

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP

Remaining: 0.00 TN

Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	30.66	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		9738428937	E0122018

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
Colonel Trucking Inc — U.S. EPA ID Number:

7. Transporter 2 Company Name
41 AP 757 M — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-5000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	OT	25	Yd	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature — Month 12 Day 18 Year 15

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Luis Mercha — Signature — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 572566

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 12 Day 18 Year 15

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 572567
Date: 12/18/2015
Time: 14:33:52 - 14:33:54

Scale

Gross: 86480 lb In Scale 1
Tare: 31340 lb P.T.
Net: 55140 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP578F

CUYDs: 25 License: AP578F
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Manifest: E0122020
Remaining: 0.00 TN

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	27.57	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 9738428937	4. Waste Tracking Number E0122020

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY 11201
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Colonel Trucking Inc — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	TY	
2.						
3.						27574
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: C Miller AGENT FOR NATIONAL GRID NY — Signature: — Month 12 Day 18 Year 15

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Edwin — Signature: — Month 12 Day 18 Year 15

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 57307

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 12 Day 18 Year 15

DESIGNATED FACILITY TO GENERATOR

Environmental Strategies & Applications, Inc.
495 Union Avenue, Suite 1D
Middlesex, New Jersey 08846
Phone: 732) 469-8888 **Fax:** (732-469-1120)
Website: www.askesa.com **email:** wireland@askesa.com
Project Manager - Bill Ireland

I N V O I C E

National Grid NY
287 Maspeth Ave
Brooklyn New york
Attn: Bill Ryan

Invoice No.: 3565-25
Invoice Date: 12/18/15
Terms: Net30
ESA Job Number: 3565
Customer PO No.: 3200014219

National Grid - Pipe Yard Project
287 Maspeth Ave, Brooklyn NY

Task: Provide MGP Impacted soil T&D

Date	*Units*	*Rate*	*Description*	*Amount*
12/18/15	549.96	$85.25	Union Trans and Disposal - tons - at Bayshore Soil Management (2 loads per truck)	$46,884.09
12/18/15	8	$82.50	ESA Project Supervisor hours - set up, coordinate load outs and sign manifests	$660.00
12/18/15	1	$137.50	ESA Project Vehicle	$137.50
			Total Due	$47,681.59

`

Acknowledgment of Treatment and Recycling

Bayshore Soil Management, LLC hereby acknowledges

The Thermal Treatment

Of 776.94 Tons of

Coal Tar Contaminated Soil
(Received on 1/8/16)

From the **Nat. Grid Greenpoint MGP Site, Brooklyn, NY**

Bayshore Soil Management, LLC.

January 11, 2016
AIR: Facility ID Number 18437; Permit PCP100001
CLASS B: Facility ID Number 132397: Permit CBG110004
Keasbey, New Jersey

Certificate Number 2715-1472-010816

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 230
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577257
Date: 1/8/2016
Time: 09:11:10 - 09:11:27
Scale

Gross: 94600 lb In Scale 2
Tare: 31600 lb P.T.
Net: 63000 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AN533Y

CUYDs: 25 License: AN533Y
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120511
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MOP
Generator: NAT GRID GREENPOINT MOP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	31.54 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120511

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
~~R.B.C. CORP~~ CAYUGA CORONET
U.S. EPA ID Number

7. Transporter 2 Company Name
ANDREW #32
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						31.54(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E. MILLER NATIONAL GRID NY
Signature:
Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FABIO
Signature:
Month: 1 Day: 8 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 57257

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM
Signature:
Month: 1 Day: 8 Year: 16

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577261
Date: 1/8/2016
Time: 09:12:07 - 09:12:12

Scale

Gross: 86720 lb In Scale 1
Tare: 29120 lb P.T.
Net: 57600 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS210A

CUYDs: 25 License: AS210A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120512
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	28.00 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120512

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
[illegible] AS 210 A
U.S. EPA ID Number

7. Transporter 2 Company Name
Chemical Coronet #46
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-5000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						28.80 (T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY
Signature:
Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: [illegible] MASpeed
Signature:
Month: 1 Day: 8 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 57726

17b. Alternate Facility (or Generator)
U.S. EPA ID Number: 577261 CL
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: Day: Year: 8 16

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577303
Date: 1/8/2016
Time: 09:42:43 - 09:42:47
Scale

Gross: 87040 lb In Scale 2
Tare: 31080 lb P.T.
Net: 55960 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25

License: AP579F
Truck Type: TRIAXLE

Truck: AP579F

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120513
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	27.98 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120513

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Rubbish Masters Corp CNWL #38 - AP579F — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						27.98(H
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E. Miller AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Nelson — Signature: Nelson — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577302

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577351
Date: 1/8/2016
Time: 10:15:29 - 10:15:33

Scale

Gross: 84500 lb In Scale 2
Tare: 28280 lb P.T.
Net: 56220 lb

Customer: PSO/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AS551R

CUYDs: 25

License: AS551R
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120514
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	28.11 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120514

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name — U.S. EPA ID Number
[illegible] Cuenca Colonel 61 ASSIR

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	28.11(1)
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Manuel Milian — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577351

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577356
Date: 1/8/2016
Time: 10:10:29 – 10:10:46

Scale

Gross: 85060 lb In Scale 1
Tare: 27940 lb P.T.
Net: 57120 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25

License: AS208J
Truck Type: TRIAXLE

Truck: AS208J

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120515
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	28.56	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120515

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: ---BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Covanta Covert LA54-AS108J — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						28.56(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E Miller NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: And Almaguer — Signature — Month 01 Day 08 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577358

17b. Alternate Facility (or Generator) — U.S. EPA ID Number: 577356 CK
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 08 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577360
Date: 1/8/2016
Time: 10:20:58 - 10:21:06
Scale

Gross: 83420 lb In Scale 2
Tare: 28420 lb P.T.
Net: 55000 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25

License: AS550R
Truck Type: TRIAXLE

Truck: AS550R

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120516
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	27.50 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120516

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: [illegible] CUENCA CORP #60 AS-5502 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	yd	
2.						
3.						27.50(+)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature: [signature] — Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOHN W PINELA. — Signature: JOHN PINELA — Month: 1 Day: 8 Year: 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: 577360

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [illegible] — Signature: [signature] — Month: 1 Day: 8 Year: 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 298
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577370
Date: 1/8/2016
Time: 10:28:38 - 10:28:42
Scale

Gross: 82780 lb In Scale 2
Tare: 27780 lb P.T.
Net: 55000 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS377F

CUYDs: 25 License: AS377F
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120517
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	27.50 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Emilio

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120517

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: ~~ROGERS~~ CUEVA CORONEL — U.S. EPA ID Number: AS377F #53

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1226001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						27.50(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR C Miller NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Alfonso Insuasti — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577370

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: BM — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577379
Date: 1/8/2016
Time: 10:46:19 – 10:46:29

Scale

Gross: 86460 lb In Scale 2
Tare: 30840 lb P.T.
Net: 55620 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 10
MIDDLESEX, NJ 08846-

CUYDs: 25

License: AN383M
Truck Type: TRIAXLE

Truck: AN383M

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120510
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	27.81 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120518

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name ~~Allcan Materials~~ CUENCA CORONET #28 — U.S. EPA ID Number AU383M

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						278(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name AGENT FOR Emilia NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name Jorge GARCIA — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577379

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
69 Crows Mill Rd
PO Box 298
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577381
Date: 1/8/2016
Time: 10:48:47 - 10:48:57

		Scale
Gross:	87900 lb In	Scale 2
Tare:	29620 lb	P.T.
Net:	58280 lb	

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP577P

CUYDs: 25

License: AP577P
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120519
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	29.14 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 2715-1472
2. Page 1 of
3. Emergency Response Phone: 2013200905
4. Waste Tracking Number: E0120519

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: [redacted] Cuenca Corona Trucking
U.S. EPA ID Number: NY 5737

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29.14(1)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

GENERATOR

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Agent for E Miller NATIONAL GRID NY
Signature:
Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Chris Garcia
Signature:
Month: 1 Day: 8 Year: 16

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: 577381

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month: 1 Day: 8 Year: 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577391
Date: 1/8/2016
Time: 10:56:10 - 10:56:25

Scale

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Gross: 87740 lb In Scale 2
Tare: 28080 lb P.T.
Net: 59660 lb

Truck: AS804E

CUYDs: 25

License: AS804E
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120520
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.83	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120520

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name ~~CHENCA~~ CORONET #52 — U.S. EPA ID Number: A58046

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
U.S. EPA ID Number: NJ1225001522
Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	~~35~~ DT	25	YD	
2.						
3.						29.83(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

INT'L

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: ~~CHENCA CORONET~~ TERRY MOLINA — Signature — Month 01 Day 08 Year 16
Transporter 2 Printed/Typed Name: TERRY MOLINA — Signature — Month 01 Day 08 Year 16

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577391 — U.S. EPA ID Number:

17b. Alternate Facility (or Generator)
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name — Signature — Month 1 Day 18 Year

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577399
Date: 1/8/2016
Time: 11:05:02 - 11:05:05 Scale

Gross: 88700 lb In Scale 2
Tare: 29360 lb P.T.
Net: 59340 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25 License: AS597J
Truck Type: TRIAXLE

Truck: AS597J

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120521
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	29.67 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120521

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CUENCA COLONEL — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ122S001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						29.67(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E MILLER NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Cuenca coronel — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name: #55455597J — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number: 577399 CL
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 15 Year 16

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577414
Date: 1/8/2016
Time: 11:20:19 - 11:20:22

Scale

Gross: 91740 lb In Scale 1
Tare: 29560 lb P.T.
Net: 62180 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AS456S

CUYDs: 25 License: AS456S
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120522
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	31.09	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120522

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: [illegible] CHENCA CORONEL #31 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	TD	
2.						
3.						31.09(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E MILLER NATIONAL GRID NY — Signature: [signature] — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: William Lozano — Signature: [signature] — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: 57744

17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577450
Date: 1/8/2016
Time: 11:45:38 - 11:45:50

Scale

Gross: 89620 lb In Scale 1
Tare: 28360 lb P.T.
Net: 61260 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AP139A

CUYDs: 25 License: AP139A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120523
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	30.63	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 2715-1472
2. Page 1 of
3. Emergency Response Phone: 2013200905
4. Waste Tracking Number: E0120523

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 3586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CUENCA CORONEL — U.S. EPA ID Number:

7. Transporter 2 Company Name: #33 API39A — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						30.63(+)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY — Signature: — Month 1 Day 8 Year 16

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JASON VICENTE — Signature: — Month 1 Day 8 Year 16
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 5774500
17b. Alternate Facility (or Generator) — U.S. EPA ID Number: 5774500
Facility's Phone: — Month Day Year
17c. Signature of Alternate Facility (or Generator)

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: — Signature: — Month 1 Day 08 Year 16

DESIGNATED FACILITY TO GENERATOR

169-BLC-O 5 11977 (Rev. 9/09)

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577554
Date: 1/8/2016
Time: 13:22:01 ~ 13:22:07

Scale

Gross: 93200 lb In Scale 1
Tare: 31600 lb P.T.
Net: 61600 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AN533Y

CUYDs: 25 License: AN533Y
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120497
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	30.84	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120497

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
[illegible] [illegible] CUENCA CORONEL
U.S. EPA ID Number

7. Transporter 2 Company Name
AN533Y #32
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PG MGP SOIL	001	DT	25	Yd	
2.						
3.						3084(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR [illegible] NATIONAL GRID NY
Signature:
Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FABIO
Signature:
Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577554

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name:
Signature:
Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577556
Date: 1/8/2016
Time: 13:23:34 - 13:23:37

Scale

Gross: 89100 lb In Scale 2
Tare: 29120 lb P.T.
Net: 59980 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS210A

CUYDs: 25 License: AS210A
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120490
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	29.99 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120498

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
267 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CUENCA CORONEL
U.S. EPA ID Number

7. Transporter 2 Company Name
AS 210 A # 46
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29-996(4)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name AGENT FOR EMILER NATIONAL GRID NY
Signature
Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name JEFF PUTNEY
Signature
Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577556

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name EM
Signature
Month 1 Day 8 Year 16

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 230
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577573
Date: 1/8/2016
Time: 13:39:10 - 13:39:22

			Scale
Gross:	87000 lb	In	Scale 2
Tare:	31000 lb		P.T.
Net:	56000 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP579F

CUYDs: 25

License: AP579F
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120499
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	20.00 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120499

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name CHENCA CORONEL — U.S. EPA ID Number

7. Transporter 2 Company Name #38 - AP579F — U.S. EPA ID Number

8. Designated Facility Name and Site Address BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone: — U.S. EPA ID Number NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						28.00(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name E MILLER AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name NELSON — Signature NELSON — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month 1 Day 8 Year 16

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577573

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name BM — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577605
Date: 1/8/2016
Time: 14:16:17 - 14:16:20

Scale

Gross: 88440 lb In Scale 2
Tare: 28420 lb P.T.
Net: 60020 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846

CUYDs: 25

License: AS550R
Truck Type: TRIAXLE

Truck: AS550R

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120503
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	30.01 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120503

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name [illegible] CUENCA CORONEL — U.S. EPA ID Number

7. Transporter 2 Company Name #60 AS-550L. — U.S. EPA ID Number

8. Designated Facility Name and Site Address BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-6000
U.S. EPA ID Number NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	TD	
2.						
3.						30.01(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR EMILIA NATIONAL GRID NY — Signature: [signature] — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOHN W RIVERA — Signature: JOHN RIVERA. — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577605

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature: [signature] — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577614
Date: 1/8/2016
Time: 14:24:15 – 14:24:19

Scale

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Gross: 87400 lb In Scale 2
Tare: 27780 lb P.T.
Net: 59620 lb

Truck: AS377F

CUYDs: 25

License: AS377F
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120504
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.81	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120504

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 5165452586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CYENCA CORONET — U.S. EPA ID Number: AS377F #53

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	29.81(H)
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national/governmental regulations.

Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JOHN BRUSCO — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 57614

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 1 Day 8 Year 16

GENERATOR | INTL | TRANSPORTER | DESIGNATED FACILITY

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577622
Date: 1/8/2016
Time: 14:30:33 - 14:30:36
Scale

Gross: 93460 lb In Scale 2
Tare: 30840 lb P.T.
Net: 62620 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AN383M

CUYDs: 25

License: AN383M
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120507
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	31.31 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120507

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
--BILL RYAN
Generator's Phone: 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CUENCA CORONEL #28
U.S. EPA ID Number
AK383M

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1265001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						31.31(H)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E MILLER AGENT FOR NATIONAL GRID NY
Signature:
Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JORGE GARCIA
Signature:
Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577628

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM
Signature:
Month 1 Day 8 Year 16

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577637
Date: 1/8/2016
Time: 14:44:44 - 14:44:47

Scale

Gross: 87260 lb In Scale 2
Tare: 27940 lb P.T.
Net: 59320 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE ID
MIDDLESEX, NJ 08846

Truck: AS208J

CUYDs: 25 License: AS208J
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120506
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.66	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120506

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name [illegible] CUENCA CORONEL 454-A5208 U.S. EPA ID Number

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone: U.S. EPA ID Number NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29.66(A)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national/governmental regulations.

Generator's/Offeror's Printed/Typed Name E MILLER AGENT FOR NATIONAL GRID NY Signature Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name Arl Alamsver Signature Month 01 Day 08 Year 16

Transporter 2 Printed/Typed Name Signature Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: 577637

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name ELM Signature Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577639
Date: 1/8/2016
Time: 14:46:49 - 14:46:53

Scale

Gross: 88780 lb In Scale 2
Tare: 28280 lb P.T.
Net: 60500 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AS551R

CUYDs: 25

License: AS551R
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120505
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	30.25 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120505

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
--BILL RYAN
Generator's Phone: 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
267 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CUENCA CORONEL — U.S. EPA ID Number: NJ AS551R

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1226001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	yd	
2.						
3.						3025(+)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature: [signature] — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Manuel Molina — Signature: [signature] — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577639

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [illegible] — Signature: [signature] — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577651
Date: 1/8/2016
Time: 14:52:51 - 14:52:54

Scale

Gross: 90680 lb In Scale 2
Tare: 29360 lb P.T.
Net: 61320 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-
Truck: AS597J

CUYDs: 25

License: AS597J
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120509
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	30.66 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120509

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
---BILL RYAN 516 545 2586
Generator's Phone:

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Cuenca Coronel — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1228001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	YD	
2.						
3.						30.66 G
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E Miller NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Cuenca Coronel — Signature — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name: #55 A5597J — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: 577651

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM — Signature — Month 1 Day 8 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577652
Date: 1/8/2016
Time: 14:55:29 - 14:55:34

			Scale
Gross:	88820 lb	In	Scale 2
Tare:	29620 lb		P.T.
Net:	59200 lb		

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AP577P

CUYDs: 25

License: AP577P
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120508

Profile: 2715-1472/NAT. GRID GREENPOINT MGP

Remaining: 0.00 TN

Generator: NAT GRID GREENPOINT MGP

Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	29.60	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0120508

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name
CUENCA CORONEL
U.S. EPA ID Number
NJ5772

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number
NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						29.60(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY
Signature:
Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Chris Garcia
Signature:
Month: 1 Day: 8 Year: 16

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577652

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: EM
Signature:
Month: 1 Day: 8 Year: 16

Facility ID: 132397

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Ticket: 577658
Date: 1/8/2016
Time: 15:05:27 - 15:05:34

Scale

Gross: 94620 lb In Scale 1
Tare: 28080 lb P.T.
Net: 66540 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25 License: AS804E
Truck Type: TRIAXLE

Truck: AS804E

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120510
Remaining: 0.00 TN

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	33.27 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Weighmaster: Joe S

Driver:

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number 2715-1472	2. Page 1 of	3. Emergency Response Phone 2013200905	4. Waste Tracking Number E0120510

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: ---BILL RYAN 5165452586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: Reggo Cuenca Coronel #52 — U.S. EPA ID Number: 45804E NJ.

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
Facility's Phone: 732-738-5000
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						33.27(+)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E Miller AGENT FOR NATIONAL GRID NY — Signature — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: TERRY MOLINA — Signature — Month 01 Day 08 Year 16

Transporter 2 Printed/Typed Name: TERRY MOLINA — Signature — Month 01 Day 08 Year 16

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577658

17b. Alternate Facility (or Generator) — U.S. EPA ID Number: 577658 CL
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month 1 Day 7 Year 16

Bayshore Recycling Corp.
75 Crows Mill Rd
PO Box 290
Keasbey, NJ 08832

Facility ID: 132397

Ticket: 577663
Date: 1/8/2016
Time: 15:13:07 - 15:13:12

				Scale
Gross:	96340 lb	In	Scale 1	
Tare:	29560 lb		P.T.	
Net:	66780 lb			

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

Truck: AS456S

CUYDs: 25

License: AS456S
Truck Type: TRIAXLE

Carrier: CUENCA CORONEL TRUCKING

Manifest: E0120495
Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Remaining: 0.00 TN
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity	Unit
Brooklyn	ID27 NHCT	33.39	Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver: _____

Weighmaster: Joe S

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 2715-1472
2. Page 1 of
3. Emergency Response Phone: 2013200905
4. Waste Tracking Number: E0120495

GENERATOR

5. Generator's Name and Mailing Address:
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
--BILL RYAN

Generator's Site Address (if different than mailing address):
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

Generator's Phone: 5165452586

6. Transporter 1 Company Name: CUEN CA CORONEL F31
U.S. EPA ID Number:

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
U.S. EPA ID Number: NJ1225001522

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						33.39(1)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E Miller NATIONAL GRID NY
Signature:
Month: 1 Day: 8 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Date leaving U.S.:
Transporter Signature (for exports only):

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: William Lopez
Signature:
Month: 1 Day: 8 Year: 16
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
U.S./EPA ID Number: 577669 577663

17b. Alternate Facility (or Generator)
Facility's Phone:
Month: Day: Year:

17c. Signature of Alternate Facility (or Generator)

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name:
Signature:
Month: 1 Day: 8 Year: 16

DESIGNATED FACILITY TO GENERATOR

Facility ID: 132397

Bayshore Recycling Corp.
75 Cheevs Mill Rd
PO Box 290
Keasbey, NJ 08832

Ticket: 577664
Date: 1/8/2016
Time: 15:25:05 - 15:25:12
Scale

Gross: 92340 lb In Scale 2
Tare: 28360 lb P.T.
Net: 63980 lb

Customer: ESA/BSM0022
495 UNION AVE
SUITE 1D
MIDDLESEX, NJ 08846-

CUYDs: 25

License: AP139A
Truck Type: TRIAXLE

Truck: AP139A

Manifest: E0122023
Remaining: 0.00 TN

Carrier: CUENCA CORONEL TRUCKING

Profile: 2715-1472/NAT. GRID GREENPOINT MGP
Generator: NAT GRID GREENPOINT MGP
Comment:

Origin	Materials & Services	Quantity Unit
Brooklyn	ID27 NHCT	31.99 Tons

THE ABOVE IS CORRECT AND NON-HAZARDOUS TO THE BEST OF MY KNOWLEDGE

Driver:

Weighmaster: Eamonn

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
2715-1472		2013200905	E0122023

GENERATOR

5. Generator's Name and Mailing Address
BROOKLYN UNION GAS DBA NATIONAL GRID NY
ONE METROTECH CENTER
BROOKLYN, NY
Generator's Phone: --BILL RYAN 516 545 2586

Generator's Site Address (if different than mailing address)
GREENPOINT ENERGY CENTER
287 MASPETH AVE
BROOKLYN, NY

6. Transporter 1 Company Name: CYPNCA Coronel — U.S. EPA ID Number:

7. Transporter 2 Company Name: #33 API39A — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
BAYSHORE SOIL MANAGEMENT LLC
75 CROWS MILL ROAD
KEASBEY, NJ 08832
732-738-6000
Facility's Phone:
U.S. EPA ID Number: NJ1225001522

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS PC MGP SOIL	001	DT	25	Yd	
2.						
3.						31.99(T)
4.						

13. Special Handling Instructions and Additional Information
BSM 2715-1472

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: AGENT FOR E Miller NATIONAL GRID NY — Signature: [signature] — Month 1 Day 8 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JASON VICENTE — Signature: [signature] — Month 1 Day 8 Year 16

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number: 577664

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [signature] — Signature: [signature] — Month 1 Day 8 Year 16

Environmental Strategies & Applications, Inc.
495 Union Avenue, Suite 1D
Middlesex, New Jersey 08846
Phone: 732) 469-8888 **Fax:** (732-469-1120)
Website: www.askesa.com **email:** wireland@askesa.com
Project Manager - Bill Ireland

I N V O I C E

National Grid NY
287 Maspeth Ave
Brooklyn New york
Attn: Bill Ryan

Invoice No.: 3565-27
Invoice Date: 1/8/15
Terms: Net30
ESA Job Number: 3565
Customer PO No.: 3200014219

National Grid - Pipe Yard Project
287 Maspeth Ave, Brooklyn NY

Task: Provide MGP Impacted soil T&D

Date	*Units*	*Rate*	*Description*	*Amount*
1/8/15	776.94	$85.25	Union Trans and Disposal - tons - at Bayshore Soil Management (2 loads per truck)	$66,234.14
1/8/15	10	$82.50	ESA Project Supervisor hours - set up, coordinate load outs and sign manifests	$825.00
1/8/15	1	$137.50	ESA Project Vehicle	$137.50
			Total Due	$67,196.64

`

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-12815-1

SDG Number:

Job Description: National Grid- Greenpoint, Brooklyn

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Cheryl Cascella
Data Review Analyst I
7/27/2010 7:27 AM

Designee for
Erin A Arasate
Project Manager I
erin.arasate@testamericainc.com
07/27/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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Sample Receipt Checklist 26

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

Metals
No analytical or quality issues were noted.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Scott R. Hall
Laboratory Director

July 27,2010
Date

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12815-3	**GPEC-MR-03**					
TCLP						
Lead		0.62		0.075	mg/L	6010B
220-12815-6	**GPEC-MR-06**					
TCLP						
Lead		0.032	J	0.075	mg/L	6010B
220-12815-7	**GPEC-MR-07**					
TCLP						
Lead		0.022	J	0.075	mg/L	6010B
220-12815-10	**GPEC-MR-10**					
TCLP						
Lead		0.048	J	0.075	mg/L	6010B
220-12815-11	**GPEC-MR-11**					
TCLP						
Lead		4.0		0.075	mg/L	6010B
220-12815-12	**GPEC-MR-12**					
TCLP						
Lead		0.37		0.075	mg/L	6010B
220-12815-13	**GPEC-MR-13**					
TCLP						
Lead		1.1		0.075	mg/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12815-1

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Metals (ICP)	TAL CT	SW846 6010B	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Total Metals	TAL CT		SW846 3010A

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Method	Analyst	Analyst ID
SW846 6010B	Petronchak, Nestor	NP

SAMPLE SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-12815-1	GPEC-MR-01	Solid	07/19/2010 0925	07/22/2010 1830
220-12815-2	GPEC-MR-02	Solid	07/19/2010 0950	07/22/2010 1830
220-12815-3	GPEC-MR-03	Solid	07/19/2010 1020	07/22/2010 1830
220-12815-4	GPEC-MR-04	Solid	07/19/2010 1100	07/22/2010 1830
220-12815-5	GPEC-MR-05	Solid	07/19/2010 1132	07/22/2010 1830
220-12815-6	GPEC-MR-06	Solid	07/19/2010 1204	07/22/2010 1830
220-12815-7	GPEC-MR-07	Solid	07/19/2010 1231	07/22/2010 1830
220-12815-8	GPEC-MR-08	Solid	07/19/2010 1310	07/22/2010 1830
220-12815-9	GPEC-MR-09	Solid	07/19/2010 1338	07/22/2010 1830
220-12815-10	GPEC-MR-10	Solid	07/19/2010 1400	07/22/2010 1830
220-12815-11	GPEC-MR-11	Solid	07/19/2010 1426	07/22/2010 1830
220-12815-12	GPEC-MR-12	Solid	07/19/2010 1449	07/22/2010 1830
220-12815-13	GPEC-MR-13	Solid	07/19/2010 1513	07/22/2010 1830

SAMPLE RESULTS

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-01**

Lab Sample ID: 220-12815-1
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1337			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-02**

Lab Sample ID: 220-12815-2
Client Matrix: Solid

Date Sampled: 07/19/2010 0950
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1340			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-03**

Lab Sample ID: 220-12815-3
Client Matrix: Solid

Date Sampled: 07/19/2010 1020
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1344			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.62		0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-04**

Lab Sample ID: 220-12815-4
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1348			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-05**

Lab Sample ID: 220-12815-5
Client Matrix: Solid

Date Sampled: 07/19/2010 1132
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1352			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-06**

Lab Sample ID: 220-12815-6
Client Matrix: Solid

Date Sampled: 07/19/2010 1204
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1355			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.032	J	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-07**

Lab Sample ID: 220-12815-7
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1406			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.022	J	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-08**

Lab Sample ID: 220-12815-8
Client Matrix: Solid

Date Sampled: 07/19/2010 1310
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1510			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-09**

Lab Sample ID: 220-12815-9
Client Matrix: Solid

Date Sampled: 07/19/2010 1338
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1514			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.075	U	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-10**

Lab Sample ID: 220-12815-10
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1518			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.048	J	0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-11**

Lab Sample ID: 220-12815-11
Client Matrix: Solid

Date Sampled: 07/19/2010 1426
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1528			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		4.0		0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-12**

Lab Sample ID: 220-12815-12
Client Matrix: Solid

Date Sampled: 07/19/2010 1449
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1532			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		0.37		0.012	0.075

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Client Sample ID: **GPEC-MR-13**

Lab Sample ID: 220-12815-13
Client Matrix: Solid

Date Sampled: 07/19/2010 1513
Date Received: 07/22/2010 1830

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40889		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40873		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40840		Initial Weight/Volume:	20 mL
Date Analyzed:	07/26/2010 1536			Final Weight/Volume:	50 mL
Date Prepared:	07/26/2010 1018				
Date Leached:	07/23/2010 1522				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		1.1		0.012	0.075

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
Sdg Number:

Lab Section	Qualifier	Description
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Joe Chiappetta	**Field Sampler:** R. Marshall	**TAT Required (business days):** Normal	**Lab PM/Contact:** Erin Arasate
Company: GEI Consultants	**Mobile/Field Number:** 607-592-7125	**Deliverable Type (Report/EDD):** email: Send to ~~data management~~	**Lab Job Number (Lab Use Only):** 12815
Address: 1 Greenwood Ave Suite 210	**E-Mail:** rmarshall@geiconsultants.com	**Sample Disposal:** [ ] Return to Client [X] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Passed Rad Screen (Lab Use Only):** [X] Yes [ ] No
City, State, Zip: Montclair, NJ 07042	**PO #:**		**Cooler Temperatures (Lab Use Only):** 1.8 pdw
Phone: 973-873-7110	**WO #:**		
Email: JChiappetta@geiconsultants.com	**Project #:** 09260-1-1103	**State Regulatory QC Criteria Requirements:** NYSDEC	
Project Name/Site Location (State): Greenpoint SI	**SSOW#:**		

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	No. of Containers/Preservatives: Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): TCLP lead	Comments
1	GPEC-MR-01	7-19-10	9:25	S	N								X	HOLD FOR ATTACHED LIST
2	GPEC-MR-02	7-19-10	9:50	S	N								X	
3	GPEC-MR-03	7-19-10	10:20	S	N								X	
4	GPEC-MR-04	7-19-10	11:00	S	N								X	
5	GPEC-MR-05	7-19-10	11:32	S	N								X	
6	GPEC-MR-06	7-19-10	12:04	S	N								X	
7	GPEC-MR-07	7-19-10	12:31	S	N								X	
8	GPEC-MR-08	7-19-10	13:10	S	N								X	
9	GPEC-MR-09	7-19-10	13:38	S	N								X	
10	GPEC-MR-10	7-19-10	14:00	S	N								X	

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	7/22/10 1515	GEI		7/22/10 1515	TAL/CT
Relinquished by:	7/22/10 1830	TAL/CT		7/22/10 1830	TAL/CT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Comments: Send to datagroup@geiconsultants.com

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

Page 26 of 27 7/23/2010

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: GEI Consultants	**Field Sampler:** R. Marshall	**TAT Required (business days):** Normal	**Lab PM/Contact:** Erin Arasate
Company: Joe Chiappetta	**Mobile/Field Number:** 607-592-7125	**Deliverable Type (Report/EDD):** Both Sent to datagroup@geiconsultants.com	**Lab Job Number (Lab Use Only):** 12815
Address: 1 Greenwood Ave Suite 210 ~~Joe Chio~~	**E-Mail:** rmarshall@geiconsultants.com	**Sample Disposal:** [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Passed Rad Screen (Lab Use Only):** [X] Yes [ ] No
City, State, Zip: Montclair, NJ 07042	**PO #:**		**Cooler Temperatures (Lab Use Only):** 1.8 probe
Phone: 973-873-7110	**WO #:**		
Email: jchiappetta@geiconsultants.com	**Project #:** 093260-1-1103	**State Regulatory QC Criteria Requirements:** NYSDEC	
Project Name/Site Location (State): Greenpoint SI	**SSOW#:**		

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	No. of Containers/Preservatives: Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): TCLP lead	Comments
/	GPEC-MR-10	7-19-10	14:00	S	N								X	Listed on COC 11710 (KB) 7/23/10
11	GPEC-MR-11	7-19-10	14:26	S	N								X	
12	GPEC-MR-12	7-19-10	14:49	S	N								X	
13	GPEC-MR-13	7-19-10	15:13	S	N								X	

HOLD FOR ATTACHED LIST

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	7/22/10 1515	GEI	Received by:	7/22/10 1515	TAL CT
Relinquished by:	7/22/10 1830	TAL CT	Received by:	7/22/10 1830	TAL CT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Comments: Send to datagroup@geiconsultants.com

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12815-1
SDG Number:

Login Number: 12815
List Source: TestAmerica Connecticut
Creator: Blocker, Kristina
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	1.8c
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	GPEC-MR-10 is listed on both coc's.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-12815-2

SDG Number:

Job Description: National Grid- Greenpoint, Brooklyn

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Cheryl Cascella
Data Review Analyst I
8/11/2010 10:55 AM

Designee for
Erin A Arasate
Project Manager I
erin.arasate@testamericainc.com
08/11/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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Job Narrative
220-12815-2

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the abundance of non-target analytes: SB-49 (12') (220-12835-4), SB-49 (12') (220-12835-4 MS), SB-49 (12') (220-12835-4 MSD). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: The continuing calibration verification (CCV) analyzed on 07/30/10 at 20:18 on GC-hp-6890-8 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8082: The surrogate, Tetrachlorometaxylene eluted outside the retention time window on the RTX-CLPesticides column for the following sample: COMPOSITE (GPEC-MR-01,02,03) (220-12815-15). This retention time shift was taken into account when reviewing the sample for target compounds.

No other analytical or quality issues were noted.

Metals
Method(s) 1311: Insufficient sample was provided to perform the leaching procedure with the required 100g for the following sample(s): COMPOSITE (GPEC-MR-01,02,03) (220-12815-15), COMPOSITE (GPEC-MR-04,05,06) (220-12815-16). The volume of leaching fluid was adjusted proportionally to maintain a 20:1 ratio of leaching fluid to weight of sample. Reporting limits (RLs) are not affected.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 9045C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: COMPOSITE (GPEC-MR-01,02,03) (220-12815-15), COMPOSITE (GPEC-MR-04,05,06) (220-12815-16), COMPOSITE (GPEC-MR-07,08,09) (220-12815-17), COMPOSITE (GPEC-MR-10,11,12,13) (220-12815-18)

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Subcontract Work
Method(s) ASTM D3176, ASTM D4239: The sample has been subcontracted to Texas Oil Tech Laboratories, Inc the subcontract certifications are different from those listed on the TestAmerica cover page of this final report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Scott R. Hall
Laboratory Director

August 11,2010
Date

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12815-15	**COMPOSITE (GPEC-MR-01,02,03)**					
Methylene Chloride		4.6	J B	23	ug/Kg	8260B
Acetone		23	* B	23	ug/Kg	8260B
PCB-1254		39		20	ug/Kg	8082
PCB-1260		22		20	ug/Kg	8082
Silver		0.19	J	1.4	mg/Kg	6010B
Aluminum		5420		69.6	mg/Kg	6010B
Arsenic		5.8		5.8	mg/Kg	6010B
Barium		52.5		1.4	mg/Kg	6010B
Beryllium		0.38	J	1.4	mg/Kg	6010B
Calcium		1830		139	mg/Kg	6010B
Cobalt		6.0		1.4	mg/Kg	6010B
Chromium		12.1		1.4	mg/Kg	6010B
Copper		30.0		1.7	mg/Kg	6010B
Iron		16300		34.8	mg/Kg	6010B
Potassium		944		139	mg/Kg	6010B
Magnesium		2380		139	mg/Kg	6010B
Manganese		571		2.1	mg/Kg	6010B
Sodium		56.7	J	139	mg/Kg	6010B
Nickel		16.3		1.4	mg/Kg	6010B
Lead		62.2		4.2	mg/Kg	6010B
Vanadium		132		1.4	mg/Kg	6010B
Zinc		68.4		7.0	mg/Kg	6010B
Mercury		0.21		0.058	mg/Kg	7471A
Ignitability		neg			mm/sec	1030
Temperature		1890			Fahrenheit	1030
pH		8.04	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		13.2		0.10	%	Moisture
Percent Solids		86.8		0.10	%	Moisture
TCLP						
Barium		0.71		0.025	mg/L	6010B
Cadmium		0.0060	J	0.025	mg/L	6010B
Lead		0.15		0.075	mg/L	6010B
Silver		0.0017	J	0.025	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12815-16	**COMPOSITE (GPEC-MR-04,05,06)**					
Methylene Chloride		6.2	J B	23	ug/Kg	8260B
Acetone		12	J * B	23	ug/Kg	8260B
Toluene		0.27	J	5.8	ug/Kg	8260B
PCB-1254		8.5	J	20	ug/Kg	8082
PCB-1260		4.9	J	20	ug/Kg	8082
Silver		0.15	J	1.4	mg/Kg	6010B
Aluminum		5420		71.5	mg/Kg	6010B
Arsenic		4.0	J	6.0	mg/Kg	6010B
Barium		56.1		1.4	mg/Kg	6010B
Beryllium		0.41	J	1.4	mg/Kg	6010B
Calcium		5420		143	mg/Kg	6010B
Cobalt		4.9		1.4	mg/Kg	6010B
Chromium		16.0		1.4	mg/Kg	6010B
Copper		46.9		1.7	mg/Kg	6010B
Iron		13400		35.7	mg/Kg	6010B
Potassium		1980		143	mg/Kg	6010B
Magnesium		2510		143	mg/Kg	6010B
Manganese		279		2.1	mg/Kg	6010B
Sodium		117	J	143	mg/Kg	6010B
Nickel		15.0		1.4	mg/Kg	6010B
Lead		47.8		4.3	mg/Kg	6010B
Vanadium		192		1.4	mg/Kg	6010B
Zinc		82.0		7.1	mg/Kg	6010B
Mercury		0.30		0.057	mg/Kg	7471A
Ignitability		No		2.2	mm/sec	1030
pH		8.49	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		13.4		0.10	%	Moisture
Percent Solids		86.6		0.10	%	Moisture
TCLP						
Tetrachloroethene		0.0032	J	0.0050	mg/L	8260B
Barium		0.75		0.025	mg/L	6010B
Lead		0.14		0.075	mg/L	6010B
Silver		0.0013	J	0.025	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12815-17	**COMPOSITE (GPEC-MR-07,08,09)**					
Methylene Chloride		4.8	J B	23	ug/Kg	8260B
Acetone		18	J * B	23	ug/Kg	8260B
Silver		0.099	J	1.4	mg/Kg	6010B
Aluminum		6130		72.4	mg/Kg	6010B
Arsenic		3.6	J	6.1	mg/Kg	6010B
Barium		69.3		1.4	mg/Kg	6010B
Beryllium		0.34	J	1.4	mg/Kg	6010B
Calcium		4510		145	mg/Kg	6010B
Cobalt		4.8		1.4	mg/Kg	6010B
Chromium		15.7		1.4	mg/Kg	6010B
Copper		57.2		1.7	mg/Kg	6010B
Iron		12400		36.2	mg/Kg	6010B
Potassium		1290		145	mg/Kg	6010B
Magnesium		3640		145	mg/Kg	6010B
Manganese		263		2.2	mg/Kg	6010B
Sodium		105	J	145	mg/Kg	6010B
Nickel		17.2		1.4	mg/Kg	6010B
Lead		82.6		4.3	mg/Kg	6010B
Vanadium		635		1.4	mg/Kg	6010B
Zinc		134		7.2	mg/Kg	6010B
Mercury		0.34		0.053	mg/Kg	7471A
Ignitability		No		2.2	mm/sec	1030
pH		7.66	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		13.7		0.10	%	Moisture
Percent Solids		86.3		0.10	%	Moisture
TCLP						
Trichloroethene		0.00091	J B	0.0050	mg/L	8260B
Tetrachloroethene		0.0039	J	0.0050	mg/L	8260B
Barium		0.72		0.025	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12815-18	**COMPOSITE (GPEC-MR-10,11,12,13)**					
Methylene Chloride		6.6	J B	24	ug/Kg	8260B
Acetone		20	J * B	24	ug/Kg	8260B
Benzene		1.1	J	5.9	ug/Kg	8260B
Toluene		0.29	J	5.9	ug/Kg	8260B
Ethylbenzene		1.2	J	5.9	ug/Kg	8260B
Xylenes, Total		2.0	J	5.9	ug/Kg	8260B
Silver		0.76	J	1.4	mg/Kg	6010B
Aluminum		4980		70.4	mg/Kg	6010B
Arsenic		9.3		5.9	mg/Kg	6010B
Barium		190		1.4	mg/Kg	6010B
Beryllium		0.30	J	1.4	mg/Kg	6010B
Calcium		9440		141	mg/Kg	6010B
Cadmium		2.6		1.4	mg/Kg	6010B
Cobalt		5.3		1.4	mg/Kg	6010B
Chromium		24.7		1.4	mg/Kg	6010B
Copper		353		1.7	mg/Kg	6010B
Iron		20500		35.2	mg/Kg	6010B
Potassium		885		141	mg/Kg	6010B
Magnesium		2910		141	mg/Kg	6010B
Manganese		882		2.1	mg/Kg	6010B
Sodium		234		141	mg/Kg	6010B
Nickel		37.8		1.4	mg/Kg	6010B
Lead		418		4.2	mg/Kg	6010B
Vanadium		343		1.4	mg/Kg	6010B
Zinc		1090		7.0	mg/Kg	6010B
Mercury		0.93		0.056	mg/Kg	7471A
Ignitability		No		2.2	mm/sec	1030
pH		7.02	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		15.0		0.10	%	Moisture
Percent Solids		85.0		0.10	%	Moisture
TCLP						
Benzene		0.0054		0.0050	mg/L	8260B
Trichloroethene		0.0054	B	0.0050	mg/L	8260B
Tetrachloroethene		0.016		0.0050	mg/L	8260B
Barium		1.3		0.025	mg/L	6010B
Cadmium		0.033		0.025	mg/L	6010B
Lead		1.3		0.075	mg/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12815-2

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
TCLP Extraction	TAL CT		SW846 1311
Purge and Trap	TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
TCLP Extraction	TAL CT		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Organochlorine Pesticides (GC)	TAL CT	SW846 8081A	
TCLP Extraction	TAL CT		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Ultrasonic Extraction	TAL CT		SW846 3550B
Herbicides (GC)	TAL EDI	SW846 8151A	
TCLP Extraction	TAL EDI		SW846 1311
Extraction (Herbicides)	TAL EDI		SW846 8151A
Metals (ICP)	TAL CT	SW846 6010B	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Total Metals	TAL CT		SW846 3010A
Preparation, Metals	TAL CT		SW846 3050B
Mercury (CVAA)	TAL CT	SW846 7470A	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Mercury	TAL CT		SW846 7470A
Mercury (CVAA)	TAL CT	SW846 7471A	
Preparation, Mercury	TAL CT		SW846 7471A
Ignitability, Solids	TAL CT	SW846 1030	
Ignitability, Solids	TAL EDI	SW846 1030	
Cyanide, Reactive	TAL CT	SW846 9012	
Cyanide, Reactive	TAL CT		SW846 7.3.3
Cyanide, Total andor Amenable	TAL CT	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL CT		SW846 9012B
Sulfide, Reactive	TAL CT	SW846 9034	
Sulfide, Reactive	TAL CT		SW846 7.3.4
pH	TAL CT	SW846 9045C	
Heat of Combustion	TAL SAV	ASTM D240-87	
Preparation, Heat of Combustion	TAL SAV		ASTM D240-87
Percent Moisture	TAL CT	EPA Moisture	
Geotechnical Analysis	SC0132	TCEQ Various	

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12815-2

Description	Lab Location	Method	Preparation Method

Lab References:

SC0132 = Texas Oil Tech Laboratories, Inc

TAL CT = TestAmerica Connecticut

TAL EDI = TestAmerica Edison

TAL SAV = TestAmerica Savannah

Method References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TCEQ = Texas Commission of Environmental Quality

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Method	Analyst	Analyst ID
SW846 8260B	Humbert, Dave	DH
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Szymczuk, Magdalena	MS
SW846 8081A	Szymczuk, Magdalena	MS
SW846 8082	Puccino, Tracy	TP
SW846 8151A	Kapoor, Sita	SK
SW846 6010B	Petronchak, Nestor	NP
SW846 7470A	Voytek, Joseph F	JFV
SW846 7471A	Voytek, Joseph F	JFV
SW846 1030	Carlone, John	JC
SW846 1030	Tillotson, Ray	RT
SW846 9012	Natoli, Richard A	RN
SW846 9012B	Natoli, Richard A	RN
SW846 9034	Natoli, Richard A	RN
SW846 9045C	Keene, Angela H	AHK
ASTM D240-87	Nelson, Christopher	CN
EPA Moisture	Culik, Marie E	MEC

SAMPLE SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-12815-15	COMPOSITE (GPEC-MR-01,02,03)	Solid	07/19/2010 0925	07/22/2010 1830
220-12815-16	COMPOSITE (GPEC-MR-04,05,06)	Solid	07/19/2010 1100	07/22/2010 1830
220-12815-17	COMPOSITE (GPEC-MR-07,08,09)	Solid	07/19/2010 1231	07/22/2010 1830
220-12815-18	COMPOSITE (GPEC-MR-10,11,12,13)	Solid	07/19/2010 1400	07/22/2010 1830

SAMPLE RESULTS

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4825.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1243			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1243				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77		65 - 136
4-Bromofluorobenzene	74		51 - 142
Dibromofluoromethane	82		68 - 132
Toluene-d8 (Surr)	88		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/28/2010 1236
Date Prepared: 07/28/2010 1236

Analysis Batch: 220-41102

Instrument ID: MSN
Lab File ID: N8536.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		5.8	U	0.90	5.8
Vinyl chloride		5.8	U	0.26	5.8
Bromomethane		5.8	U	2.4	5.8
Chloroethane		5.8	U	1.1	5.8
1,1-Dichloroethene		5.8	U	0.67	5.8
Carbon disulfide		5.8	U	0.47	5.8
Methylene Chloride		4.6	J B	1.3	23
Acetone		23	* B	2.6	23
trans-1,2-Dichloroethene		5.8	U	0.45	5.8
1,1-Dichloroethane		5.8	U	0.35	5.8
cis-1,2-Dichloroethene		5.8	U	0.43	5.8
Chloroform		5.8	U	0.39	5.8
1,1,1-Trichloroethane		5.8	U	0.61	5.8
Carbon tetrachloride		5.8	U	1.1	5.8
Methyl Ethyl Ketone		12	U	1.8	12
Benzene		5.8	U	0.66	5.8
1,2-Dichloroethane		5.8	U	0.67	5.8
Trichloroethene		5.8	U	0.93	5.8
1,2-Dichloropropane		5.8	U	0.77	5.8
Bromodichloromethane		5.8	U	0.35	5.8
cis-1,3-Dichloropropene		5.8	U	0.65	5.8
trans-1,3-Dichloropropene		5.8	U	0.31	5.8
1,1,2-Trichloroethane		5.8	U	0.43	5.8
Toluene		5.8	U	0.085	5.8
methyl isobutyl ketone		5.8	U	0.63	5.8
Tetrachloroethene		5.8	U	0.93	5.8
Dibromochloromethane		5.8	U	0.40	5.8
2-Hexanone		12	U	1.4	12
Chlorobenzene		5.8	U	0.68	5.8
Ethylbenzene		5.8	U	0.81	5.8
Styrene		5.8	U	0.17	5.8
Bromoform		5.8	U	0.70	5.8
1,1,2,2-Tetrachloroethane		5.8	U	0.60	5.8
Xylenes, Total		5.8	U	0.56	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	107		59 - 123
1,2-Dichloroethane-d4 (Surr)	108		59 - 132
Toluene-d8 (Surr)	101		50 - 118
4-Bromofluorobenzene	96		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4826.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1308			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1308				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0032	J	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79		65 - 136
4-Bromofluorobenzene	73		51 - 142
Dibromofluoromethane	84		68 - 132
Toluene-d8 (Surr)	86		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid % Moisture: 13.4

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/28/2010 1302
Date Prepared: 07/28/2010 1302

Analysis Batch: 220-41102

Instrument ID: MSN
Lab File ID: N8537.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		5.8	U	0.90	5.8
Vinyl chloride		5.8	U	0.27	5.8
Bromomethane		5.8	U	2.4	5.8
Chloroethane		5.8	U	1.1	5.8
1,1-Dichloroethene		5.8	U	0.67	5.8
Carbon disulfide		5.8	U	0.47	5.8
Methylene Chloride		6.2	J B	1.3	23
Acetone		12	J * B	2.6	23
trans-1,2-Dichloroethene		5.8	U	0.45	5.8
1,1-Dichloroethane		5.8	U	0.35	5.8
cis-1,2-Dichloroethene		5.8	U	0.43	5.8
Chloroform		5.8	U	0.39	5.8
1,1,1-Trichloroethane		5.8	U	0.61	5.8
Carbon tetrachloride		5.8	U	1.1	5.8
Methyl Ethyl Ketone		12	U	1.8	12
Benzene		5.8	U	0.66	5.8
1,2-Dichloroethane		5.8	U	0.67	5.8
Trichloroethene		5.8	U	0.94	5.8
1,2-Dichloropropane		5.8	U	0.77	5.8
Bromodichloromethane		5.8	U	0.35	5.8
cis-1,3-Dichloropropene		5.8	U	0.65	5.8
trans-1,3-Dichloropropene		5.8	U	0.31	5.8
1,1,2-Trichloroethane		5.8	U	0.43	5.8
Toluene		0.27	J	0.085	5.8
methyl isobutyl ketone		5.8	U	0.64	5.8
Tetrachloroethene		5.8	U	0.94	5.8
Dibromochloromethane		5.8	U	0.40	5.8
2-Hexanone		12	U	1.4	12
Chlorobenzene		5.8	U	0.68	5.8
Ethylbenzene		5.8	U	0.81	5.8
Styrene		5.8	U	0.17	5.8
Bromoform		5.8	U	0.70	5.8
1,1,2,2-Tetrachloroethane		5.8	U	0.60	5.8
Xylenes, Total		5.8	U	0.56	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	105		59 - 123
1,2-Dichloroethane-d4 (Surr)	106		59 - 132
Toluene-d8 (Surr)	102		50 - 118
4-Bromofluorobenzene	104		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4827.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1332			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1332				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.00091	J B	0.00062	0.0050
Tetrachloroethene		0.0039	J	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		65 - 136
4-Bromofluorobenzene	77		51 - 142
Dibromofluoromethane	86		68 - 132
Toluene-d8 (Surr)	91		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid % Moisture: 13.7

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/28/2010 1327
Date Prepared: 07/28/2010 1327

Analysis Batch: 220-41102

Instrument ID: MSN
Lab File ID: N8538.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		5.8	U	0.90	5.8
Vinyl chloride		5.8	U	0.27	5.8
Bromomethane		5.8	U	2.4	5.8
Chloroethane		5.8	U	1.1	5.8
1,1-Dichloroethene		5.8	U	0.67	5.8
Carbon disulfide		5.8	U	0.48	5.8
Methylene Chloride		4.8	J B	1.3	23
Acetone		18	J * B	2.6	23
trans-1,2-Dichloroethene		5.8	U	0.45	5.8
1,1-Dichloroethane		5.8	U	0.35	5.8
cis-1,2-Dichloroethene		5.8	U	0.43	5.8
Chloroform		5.8	U	0.39	5.8
1,1,1-Trichloroethane		5.8	U	0.61	5.8
Carbon tetrachloride		5.8	U	1.1	5.8
Methyl Ethyl Ketone		12	U	1.8	12
Benzene		5.8	U	0.66	5.8
1,2-Dichloroethane		5.8	U	0.67	5.8
Trichloroethene		5.8	U	0.94	5.8
1,2-Dichloropropane		5.8	U	0.78	5.8
Bromodichloromethane		5.8	U	0.35	5.8
cis-1,3-Dichloropropene		5.8	U	0.65	5.8
trans-1,3-Dichloropropene		5.8	U	0.31	5.8
1,1,2-Trichloroethane		5.8	U	0.43	5.8
Toluene		5.8	U	0.086	5.8
methyl isobutyl ketone		5.8	U	0.64	5.8
Tetrachloroethene		5.8	U	0.94	5.8
Dibromochloromethane		5.8	U	0.41	5.8
2-Hexanone		12	U	1.4	12
Chlorobenzene		5.8	U	0.68	5.8
Ethylbenzene		5.8	U	0.81	5.8
Styrene		5.8	U	0.17	5.8
Bromoform		5.8	U	0.71	5.8
1,1,2,2-Tetrachloroethane		5.8	U	0.60	5.8
Xylenes, Total		5.8	U	0.56	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	102		59 - 123
1,2-Dichloroethane-d4 (Surr)	104		59 - 132
Toluene-d8 (Surr)	101		50 - 118
4-Bromofluorobenzene	94		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4828.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1357			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1357				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0054		0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0054	B	0.00062	0.0050
Tetrachloroethene		0.016		0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		65 - 136
4-Bromofluorobenzene	78		51 - 142
Dibromofluoromethane	85		68 - 132
Toluene-d8 (Surr)	91		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid % Moisture: 15.0

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/28/2010 1353
Date Prepared: 07/28/2010 1353

Analysis Batch: 220-41102

Instrument ID: MSN
Lab File ID: N8539.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		5.9	U	0.92	5.9
Vinyl chloride		5.9	U	0.27	5.9
Bromomethane		5.9	U	2.4	5.9
Chloroethane		5.9	U	1.2	5.9
1,1-Dichloroethene		5.9	U	0.68	5.9
Carbon disulfide		5.9	U	0.48	5.9
Methylene Chloride		6.6	J B	1.3	24
Acetone		20	J * B	2.6	24
trans-1,2-Dichloroethene		5.9	U	0.46	5.9
1,1-Dichloroethane		5.9	U	0.35	5.9
cis-1,2-Dichloroethene		5.9	U	0.44	5.9
Chloroform		5.9	U	0.40	5.9
1,1,1-Trichloroethane		5.9	U	0.62	5.9
Carbon tetrachloride		5.9	U	1.1	5.9
Methyl Ethyl Ketone		12	U	1.9	12
Benzene		1.1	J	0.67	5.9
1,2-Dichloroethane		5.9	U	0.68	5.9
Trichloroethene		5.9	U	0.95	5.9
1,2-Dichloropropane		5.9	U	0.79	5.9
Bromodichloromethane		5.9	U	0.35	5.9
cis-1,3-Dichloropropene		5.9	U	0.66	5.9
trans-1,3-Dichloropropene		5.9	U	0.32	5.9
1,1,2-Trichloroethane		5.9	U	0.44	5.9
Toluene		0.29	J	0.087	5.9
methyl isobutyl ketone		5.9	U	0.65	5.9
Tetrachloroethene		5.9	U	0.95	5.9
Dibromochloromethane		5.9	U	0.41	5.9
2-Hexanone		12	U	1.4	12
Chlorobenzene		5.9	U	0.69	5.9
Ethylbenzene		1.2	J	0.82	5.9
Styrene		5.9	U	0.18	5.9
Bromoform		5.9	U	0.72	5.9
1,1,2,2-Tetrachloroethane		5.9	U	0.61	5.9
Xylenes, Total		2.0	J	0.57	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	98		59 - 123
1,2-Dichloroethane-d4 (Surr)	101		59 - 132
Toluene-d8 (Surr)	96		50 - 118
4-Bromofluorobenzene	89		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41122		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-41044		Lab File ID:	A12296.D
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1403			Final Weight/Volume:	1 mL
Date Prepared:	07/29/2010 1049			Injection Volume:	1 uL
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	105		29 - 126
2-Fluorobiphenyl	73		43 - 116
2-Fluorophenol	59		21 - 97
Nitrobenzene-d5	70		38 - 113
Terphenyl-d14	120	*	10 - 119
Phenol-d5	49		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41122		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-41044		Lab File ID:	A12297.D
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1431			Final Weight/Volume:	1 mL
Date Prepared:	07/29/2010 1049			Injection Volume:	1 uL
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	116	E	29 - 126
2-Fluorobiphenyl	82		43 - 116
2-Fluorophenol	66		21 - 97
Nitrobenzene-d5	77		38 - 113
Terphenyl-d14	128	*	10 - 119
Phenol-d5	55		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41122		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-41044		Lab File ID:	A12298.D
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1459			Final Weight/Volume:	1 mL
Date Prepared:	07/29/2010 1049			Injection Volume:	1 uL
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	113	E	29 - 126
2-Fluorobiphenyl	76		43 - 116
2-Fluorophenol	65		21 - 97
Nitrobenzene-d5	76		38 - 113
Terphenyl-d14	126	*	10 - 119
Phenol-d5	54		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41122		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-41044		Lab File ID:	A12299.D
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1527			Final Weight/Volume:	1 mL
Date Prepared:	07/29/2010 1051			Injection Volume:	1 uL
Date Leached:	07/28/2010 0850				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	111	E	29 - 126
2-Fluorobiphenyl	73		43 - 116
2-Fluorophenol	56		21 - 97
Nitrobenzene-d5	68		38 - 113
Terphenyl-d14	127	*	10 - 119
Phenol-d5	47		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1720			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	PRIMARY
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	79		29 - 156
Tetrachloro-m-xylene	87		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1720			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	SECONDARY
Date Leached:	07/27/2010 1920				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	74		29 - 156
Tetrachloro-m-xylene	86		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1745			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	PRIMARY
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	89		29 - 156
Tetrachloro-m-xylene	87		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1745			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	SECONDARY
Date Leached:	07/27/2010 1920				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	82		29 - 156
Tetrachloro-m-xylene	85		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1811			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	PRIMARY
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	86		29 - 156
Tetrachloro-m-xylene	86		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1811			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1040			Result Type:	SECONDARY
Date Leached:	07/27/2010 1920				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	80		29 - 156
Tetrachloro-m-xylene	85		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1836			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1057			Result Type:	PRIMARY
Date Leached:	07/28/2010 0850				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	84		29 - 156
Tetrachloro-m-xylene	90		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-41043		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40980		Final Weight/Volume:	10 mL
Date Analyzed:	07/30/2010 1836			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1057			Result Type:	SECONDARY
Date Leached:	07/28/2010 0850				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	78		29 - 156
Tetrachloro-m-xylene	88		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123	Instrument ID: GC9
Preparation:	3550B	Prep Batch: 220-41093	Initial Weight/Volume: 30.01 g
Dilution:	1.0		Final Weight/Volume: 10.0 mL
Date Analyzed:	07/30/2010 1622		Injection Volume: 1 uL
Date Prepared:	07/30/2010 0929		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	1.5	20
PCB-1221		20	U	1.5	20
PCB-1232		20	U	1.5	20
PCB-1242		20	U	1.5	20
PCB-1248		20	U	1.5	20
PCB-1254		39		1.7	20
PCB-1260		22		1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	30		24 - 150
DCB Decachlorobiphenyl	50		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-41093		Initial Weight/Volume:	30.01 g
Dilution:	1.0			Final Weight/Volume:	10.0 mL
Date Analyzed:	07/30/2010 1622			Injection Volume:	1 uL
Date Prepared:	07/30/2010 0929			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	27		24 - 150
DCB Decachlorobiphenyl	46		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid % Moisture: 13.4

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123	Instrument ID: GC9
Preparation:	3550B	Prep Batch: 220-41057	Initial Weight/Volume: 15.07 g
Dilution:	1.0		Final Weight/Volume: 5 mL
Date Analyzed:	07/30/2010 1213		Injection Volume: 1 uL
Date Prepared:	07/29/2010 1232		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	1.5	20
PCB-1221		20	U	1.5	20
PCB-1232		20	U	1.5	20
PCB-1242		20	U	1.5	20
PCB-1248		20	U	1.5	20
PCB-1254		8.5	J	1.7	20
PCB-1260		4.9	J	1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	44	p	24 - 150
DCB Decachlorobiphenyl	89		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-41057		Initial Weight/Volume:	15.07 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 1213			Injection Volume:	1 uL
Date Prepared:	07/29/2010 1232			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	72		24 - 150
DCB Decachlorobiphenyl	77		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid % Moisture: 13.7

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123	Instrument ID: GC9
Preparation:	3550B	Prep Batch: 220-41057	Initial Weight/Volume: 30.02 g
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	07/30/2010 1232		Injection Volume: 1 uL
Date Prepared:	07/29/2010 1232		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	1.5	20
PCB-1221		20	U	1.5	20
PCB-1232		20	U	1.5	20
PCB-1242		20	U	1.5	20
PCB-1248		20	U	1.5	20
PCB-1254		20	U	1.7	20
PCB-1260		20	U	1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	29		24 - 150
DCB Decachlorobiphenyl	24		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid % Moisture: 15.0

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123	Instrument ID: GC9
Preparation:	3550B	Prep Batch: 220-41057	Initial Weight/Volume: 30.08 g
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	07/30/2010 1251		Injection Volume: 1 uL
Date Prepared:	07/29/2010 1232		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		20	U	1.5	20
PCB-1221		20	U	1.5	20
PCB-1232		20	U	1.5	20
PCB-1242		20	U	1.5	20
PCB-1248		20	U	1.5	20
PCB-1254		20	U	1.7	20
PCB-1260		20	U	1.7	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	34		24 - 150
DCB Decachlorobiphenyl	75		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2108			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	PRIMARY
Date Leached:	07/29/2010 1523				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	137		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2108			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	SECONDARY
Date Leached:	07/29/2010 1523				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	119		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2125			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	PRIMARY
Date Leached:	07/29/2010 1523				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	132		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2125			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	SECONDARY
Date Leached:	07/29/2010 1523				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	117		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2143			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	PRIMARY
Date Leached:	07/29/2010 1523				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	120		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2143			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	SECONDARY
Date Leached:	07/29/2010 1523				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	113		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2200			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	PRIMARY
Date Leached:	07/29/2010 1523				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	129		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-44623		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-44432		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-44425		Final Weight/Volume:	5 mL
Date Analyzed:	07/30/2010 2200			Injection Volume:	
Date Prepared:	07/29/2010 1609			Result Type:	SECONDARY
Date Leached:	07/29/2010 1523				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid % Moisture: 13.2

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/30/2010 1122
Date Prepared: 07/29/2010 1354

Analysis Batch: 220-41112
Prep Batch: 220-41065

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.07 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.19	J	0.070	1.4
Aluminum		5420		2.8	69.6
Arsenic		5.8		1.9	5.8
Barium		52.5		0.070	1.4
Beryllium		0.38	J	0.070	1.4
Calcium		1830		13.9	139
Cadmium		1.4	U	0.28	1.4
Cobalt		6.0		0.14	1.4
Chromium		12.1		0.14	1.4
Copper		30.0		0.53	1.7
Iron		16300		4.2	34.8
Potassium		944		13.9	139
Magnesium		2380		2.5	139
Manganese		571		0.070	2.1
Sodium		56.7	J	13.9	139
Nickel		16.3		0.28	1.4
Lead		62.2		0.86	4.2
Antimony		4.6	U	1.4	4.6
Selenium		10.4	U	3.5	10.4
Thallium		4.2	U	0.97	4.2
Vanadium		132		0.28	1.4
Zinc		68.4		1.4	7.0

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/30/2010 1212
Date Prepared: 07/29/2010 1515
Date Leached: 07/27/2010 1920

Analysis Batch: 220-41112
Prep Batch: 220-41077
Leachate Batch: 220-40980

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.71		0.0012	0.025
Cadmium		0.0060	J	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.15		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.0017	J	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15
Client Matrix: Solid

Date Sampled: 07/19/2010 0925
Date Received: 07/22/2010 1830

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41076		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41038		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1407			Final Weight/Volume:	50 mL
Date Prepared:	07/29/2010 0952				
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Date Analyzed:	07/29/2010 1147			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.21		0.0046	0.058

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid
% Moisture: 13.4

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/30/2010 1125
Date Prepared: 07/29/2010 1354

Analysis Batch: 220-41112
Prep Batch: 220-41065

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.02 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.15	J	0.071	1.4
Aluminum		5420		2.9	71.5
Arsenic		4.0	J	1.9	6.0
Barium		56.1		0.071	1.4
Beryllium		0.41	J	0.071	1.4
Calcium		5420		14.3	143
Cadmium		1.4	U	0.29	1.4
Cobalt		4.9		0.14	1.4
Chromium		16.0		0.14	1.4
Copper		46.9		0.54	1.7
Iron		13400		4.3	35.7
Potassium		1980		14.3	143
Magnesium		2510		2.6	143
Manganese		279		0.071	2.1
Sodium		117	J	14.3	143
Nickel		15.0		0.29	1.4
Lead		47.8		0.89	4.3
Antimony		4.7	U	1.5	4.7
Selenium		10.7	U	3.6	10.7
Thallium		4.3	U	1.0	4.3
Vanadium		192		0.29	1.4
Zinc		82.0		1.4	7.1

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/30/2010 1215
Date Prepared: 07/29/2010 1515
Date Leached: 07/27/2010 1920

Analysis Batch: 220-41112
Prep Batch: 220-41077
Leachate Batch: 220-40980

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.75		0.0012	0.025
Cadmium		0.025	U	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.14		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.0013	J	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16
Client Matrix: Solid

Date Sampled: 07/19/2010 1100
Date Received: 07/22/2010 1830

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41076		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41038		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1408			Final Weight/Volume:	50 mL
Date Prepared:	07/29/2010 0952				
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Date Analyzed:	07/29/2010 1148			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.30		0.0045	0.057

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid
% Moisture: 13.7

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/30/2010 1128
Date Prepared: 07/29/2010 1354

Analysis Batch: 220-41112
Prep Batch: 220-41065

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.00 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.099	J	0.072	1.4
Aluminum		6130		2.9	72.4
Arsenic		3.6	J	2.0	6.1
Barium		69.3		0.072	1.4
Beryllium		0.34	J	0.072	1.4
Calcium		4510		14.5	145
Cadmium		1.4	U	0.29	1.4
Cobalt		4.8		0.14	1.4
Chromium		15.7		0.14	1.4
Copper		57.2		0.55	1.7
Iron		12400		4.3	36.2
Potassium		1290		14.5	145
Magnesium		3640		2.6	145
Manganese		263		0.072	2.2
Sodium		105	J	14.5	145
Nickel		17.2		0.29	1.4
Lead		82.6		0.90	4.3
Antimony		4.8	U	1.5	4.8
Selenium		10.9	U	3.6	10.9
Thallium		4.3	U	1.0	4.3
Vanadium		635		0.29	1.4
Zinc		134		1.4	7.2

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/30/2010 1225
Date Prepared: 07/29/2010 1515
Date Leached: 07/27/2010 1920

Analysis Batch: 220-41112
Prep Batch: 220-41077
Leachate Batch: 220-40980

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.72		0.0012	0.025
Cadmium		0.025	U	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.075	U	0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17
Client Matrix: Solid

Date Sampled: 07/19/2010 1231
Date Received: 07/22/2010 1830

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41076		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41038		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1409			Final Weight/Volume:	50 mL
Date Prepared:	07/29/2010 0952				
Date Leached:	07/27/2010 1920				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Date Analyzed:	07/29/2010 1152			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.34		0.0043	0.053

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid % Moisture: 15.0

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/30/2010 1131
Date Prepared: 07/29/2010 1354

Analysis Batch: 220-41112
Prep Batch: 220-41065

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.09 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.76	J	0.070	1.4
Aluminum		4980		2.8	70.4
Arsenic		9.3		1.9	5.9
Barium		190		0.070	1.4
Beryllium		0.30	J	0.070	1.4
Calcium		9440		14.1	141
Cadmium		2.6		0.28	1.4
Cobalt		5.3		0.14	1.4
Chromium		24.7		0.14	1.4
Copper		353		0.53	1.7
Iron		20500		4.2	35.2
Potassium		885		14.1	141
Magnesium		2910		2.6	141
Manganese		882		0.070	2.1
Sodium		234		14.1	141
Nickel		37.8		0.28	1.4
Lead		418		0.87	4.2
Antimony		4.6	U	1.4	4.6
Selenium		10.6	U	3.5	10.6
Thallium		4.2	U	0.99	4.2
Vanadium		343		0.28	1.4
Zinc		1090		1.4	7.0

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/30/2010 1229
Date Prepared: 07/29/2010 1515
Date Leached: 07/28/2010 850

Analysis Batch: 220-41112
Prep Batch: 220-41077
Leachate Batch: 220-40980

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		1.3		0.0012	0.025
Cadmium		0.033		0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		1.3		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18
Client Matrix: Solid

Date Sampled: 07/19/2010 1400
Date Received: 07/22/2010 1830

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41076		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41038		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40980		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1410			Final Weight/Volume:	50 mL
Date Prepared:	07/29/2010 0952				
Date Leached:	07/28/2010 850				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Date Analyzed:	07/29/2010 1153			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.93		0.0045	0.056

General Chemistry

Client Sample ID: **COMPOSITE (GPEC-MR-01,02,03)**

Lab Sample ID: 220-12815-15 Date Sampled: 07/19/2010 0925
Client Matrix: Solid % Moisture: 13.2 Date Received: 07/22/2010 1830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	576	U	ug/Kg	135	576	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1215						DryWt Corrected: Y
Prep Batch: 220-41047	Date Prepared: 07/28/2010 1100						

Analyte	Result	Qual	Units	Dil	Method
Ignitability	neg		mm/sec	1.0	1030
Analysis Batch: 220-41175	Date Analyzed: 08/02/2010 1430				DryWt Corrected: N
Temperature	1890		Fahrenheit	1.0	1030
Analysis Batch: 220-41175	Date Analyzed: 08/02/2010 1430				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1304						DryWt Corrected: N
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1845						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200						DryWt Corrected: N
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1845						
pH	8.04	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40992	Date Analyzed: 07/28/2010 1000						DryWt Corrected: N
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425						DryWt Corrected: N
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	13.2		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N
Percent Solids	86.8		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N

General Chemistry

Client Sample ID: **COMPOSITE (GPEC-MR-04,05,06)**

Lab Sample ID: 220-12815-16 Date Sampled: 07/19/2010 1100
Client Matrix: Solid % Moisture: 13.4 Date Received: 07/22/2010 1830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	577	U	ug/Kg	135	577	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1216						DryWt Corrected: Y
Prep Batch: 220-41047	Date Prepared: 07/28/2010 1100						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Ignitability	No		mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142						DryWt Corrected: N
Burn Rate	2.2	U	mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142						DryWt Corrected: N
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1305						DryWt Corrected: N
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1845						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200						DryWt Corrected: N
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1845						
pH	8.49	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40992	Date Analyzed: 07/28/2010 1000						DryWt Corrected: N
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425						DryWt Corrected: N
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	13.4		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N
Percent Solids	86.6		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N

General Chemistry

Client Sample ID: **COMPOSITE (GPEC-MR-07,08,09)**

Lab Sample ID: 220-12815-17 Date Sampled: 07/19/2010 1231
Client Matrix: Solid % Moisture: 13.7 Date Received: 07/22/2010 1830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	579	U	ug/Kg	136	579	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1217						DryWt Corrected: Y
Prep Batch: 220-41047	Date Prepared: 07/28/2010 1400						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Ignitability	No		mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142						DryWt Corrected: N
Burn Rate	2.2	U	mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142						DryWt Corrected: N
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1306						DryWt Corrected: N
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1845						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200						DryWt Corrected: N
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1845						
pH	7.66	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40992	Date Analyzed: 07/28/2010 1000						DryWt Corrected: N
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425						DryWt Corrected: N
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	13.7		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N
Percent Solids	86.3		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349						DryWt Corrected: N

General Chemistry

Client Sample ID: **COMPOSITE (GPEC-MR-10,11,12,13)**

Lab Sample ID: 220-12815-18 Date Sampled: 07/19/2010 1400
Client Matrix: Solid % Moisture: 15.0 Date Received: 07/22/2010 1830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	588	U	ug/Kg	138	588	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1220					DryWt Corrected: Y	
Prep Batch: 220-41047	Date Prepared: 07/28/2010 1400						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Ignitability	No		mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142					DryWt Corrected: N	
Burn Rate	2.2	U	mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-44787	Date Analyzed: 08/03/2010 1142					DryWt Corrected: N	
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1308					DryWt Corrected: N	
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1845						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200					DryWt Corrected: N	
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1845						
pH	7.02	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40992	Date Analyzed: 07/28/2010 1000					DryWt Corrected: N	
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425					DryWt Corrected: N	
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	15.0		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349					DryWt Corrected: N	
Percent Solids	85.0		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-41015	Date Analyzed: 07/28/2010 1349					DryWt Corrected: N	

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD exceeds the control limits
	B	The analyte was found in an associated blank, as well as in the sample.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Metals		
	*	Duplicate analysis not within control limits.
	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
Sdg Number:

Lab Section	Qualifier	Description
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	U	Indicates analyzed for but not detected.

SUBCONTRACTED DATA

Certificate of Analysis

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10630 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	Composite (GPEC-MR-01,02,03)	**REPORT DATE:**	August 10, 2010
LABORATORY NO:	60360-01	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	*Dry*
Moisture Content, ASTM D 3302, wt%	3.02	
Ash Content, ASTM D 3174, wt%	93.75	96.67
Sulfur Content, ASTM D 4239, wt%	0.10	0.10

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	*Dry*
Carbon Content, wt%.....	1.94	2.00
Hydrogen Content, wt%.....	0.31	0.32
Nitrogen Content, wt%.....	<0.01	<0.01
Oxygen (calc), ASTM D 3176, wt%	0.88	0.91

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

A. Phil Sorurbakhsh
Director of Laboratory Operations

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TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	Composite (GPEC-MR-04,05,06)	**REPORT DATE:**	August 10, 2010
LABORATORY NO:	60360-02	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	*Dry*
Moisture Content, ASTM D 3302, wt%	3.76	
Ash Content, ASTM D 3174, wt%	90.96	94.51
Sulfur Content, ASTM D 4239, wt%	0.07	0.07

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	*Dry*
Carbon Content, wt%.....	2.15	2.24
Hydrogen Content, wt%.....	0.23	0.24
Nitrogen Content, wt%.....	<0.01	<0.01
Oxygen (calc), ASTM D 3176, wt%	2.83	2.94

Respectfully submitted,
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A. Phil Sorurbakhsh
Director of Laboratory Operations

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TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	Composite (GPEC-MR-07,08,09)	**REPORT DATE:**	August 10, 2010
LABORATORY NO:	60360-03	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	*Dry*
Moisture Content, ASTM D 3302, wt%	5.08	
Ash Content, ASTM D 3174, wt%	92.17	97.11
Sulfur Content, ASTM D 4239, wt%	0.05	0.06

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	*Dry*
Carbon Content, wt%.....	1.18	1.24
Hydrogen Content, wt%.....	0.09	0.10
Nitrogen Content, wt%.....	<0.01	<0.01
Oxygen (calc), ASTM D 3176, wt%	1.43	1.49

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

A. Phil Sorurbakhsh
Director of Laboratory Operations

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P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	Composite (GPEC-MR-10,11,12,13)	**REPORT DATE:**	August 10, 2010
LABORATORY NO:	60360-04	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	Dry
Moisture Content, ASTM D 3302, wt%	3.96	
Ash Content, ASTM D 3174, wt%	91.94	95.73
Sulfur Content, ASTM D 4239, wt%	0.06	0.06

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	Dry
Carbon Content, wt%.....	2.38	2.48
Hydrogen Content, wt%.....	0.12	0.13
Nitrogen Content, wt%.....	<0.01	<0.01
Oxygen (calc), ASTM D 3176, wt%	1.54	1.60

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

A. Phil Sorurbakhsh
Director of Laboratory Operations

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Quality Management System Certified to ISO 9001:2008
Cert. No. 5065

COC No: 11710 Attachment.

Waste classification

- VOCs according to Environmental Protection Agency (EPA Method 8260B
- Total metals according to EPA Method 6010B
- Polychlorinated biphenyls (PCBs) according to EPA Method 8082
- Ignitability according to EPA Method 1010
- Corrosivity according to EPA Method 9040/9045
- Reactivity (Cyanides & Sulfides) according to EPA Method 7.3.3.2 & 7.3.4.1
- Total Cyanide according to EPA Method 9010
- Sulfur analysis by American Society for Testing and Materials (ASTM) Method D3176/ 4239D]
- BTU Content by ASTM Method D240-87
- Full EPA Toxicity Characteristic Leaching Procedure (TCLP)
    - VOCs via EPA Method 1311 / 8260C
    - SVOCs via EPA Method 1311 / 8270C
    - Metals via EPA Method 1311 / 6010B
    - Pesticides via EPA Method 1311 / 8081A
    - Herbicides via EPA Method 1311 / 8081A

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
SDG Number:

Login Number: 12815
List Source: TestAmerica Connecticut
Creator: Blocker, Kristina
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	1.8c
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	GPEC-MR-10 is listed on both coc's.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
SDG Number:

Login Number: 12815
List Source: TestAmerica Connecticut
Creator: Blocker, Kristina
List Number: 2

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	7/29/10 RECEIVED 4 CONTAINERS PUT IN A5
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
SDG Number:

Login Number: 12815
Creator: Smith, Anthony G
List Number: 1

List Source: TestAmerica Edison
List Creation: 07/29/10 01:52 PM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	NOT RECEIVED
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6 C. IR #40
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12815-2
SDG Number:

Login Number: 12815
Creator: Daughtry, Beth
List Number: 1

List Source: TestAmerica Savannah
List Creation: 07/28/10 10:13 AM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

08/11/2010

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arasate, Erin A	Carrier Tracking No(s):	COC No: 220-5908.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: erin.arasate@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 220-12815-2
Address: 5102 LaRoche Avenue,	Due Date Requested: 7/26/2010			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: National Grid- Greenpoint, Brooklyn	Project #: 22002226			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D240_87/D240_87_P D240_87 - BTU	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
COMPOSITE (GPEC-MR-01,02,03) (220-12815-15)	7/19/10	09:25 Eastern		Solid			X	1	
COMPOSITE (GPEC-MR-04,05,06) (220-12815-16)	7/19/10	11:00 Eastern		Solid			X	1	
COMPOSITE (GPEC-MR-07,08,09) (220-12815-17)	7/19/10	12:31 Eastern		Solid			X	1	
COMPOSITE (GPEC-MR-10,11,12,13) (220-12815-18)	7/19/10	14:00 Eastern		Solid			X	1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Erin Arasate	7/27/10 1730	TA	Bertha Daughtry	7.28.10 0856	TAL SAV
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.0

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT**
IAL Case Number: **E12-02579**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E12-02579

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 3/14/2012@18:05

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02579-001	GPEC-WC031412	n/a	3/14/2012@10:45	Aqueous	2
02579-002	GPEC-MP1 (0-0.5)	0/0.5	3/14/2012@13:40	Soil	2
02579-003	GPEC-MP2 (0.5-1)	0.5/1	3/14/2012@13:50	Soil	2
02579-004	GPEC-MP3 (0.5-1)	0.5/1	3/14/2012@14:00	Soil	2
02579-005	GPEC-MP4 COMP	n/a	3/14/2012@14:10	Soil	1

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC

CASE NARRATIVE

IAL SDG No.: E12-02579

Sample Receive Date: 3/14/12

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at

Client ID	Sample Date	IAL Lab No.	Analysis/Method
GPEC-WC031412	3/14/2012	02579-001	PCB(8082)
GPEC-MP1 (0-0.5)	3/14/2012	02579-002	DRO(8015B), S(ASTM D129)
GPEC-MP2 (0.5-1)	3/14/2012	02579-003	DRO(8015B), S(ASTM D129)
GPEC-MP3 (0.5-1)	3/14/2012	02579-004	DRO(8015B), S(ASTM D129)
GPEC-MP4 COMP	3/14/2012	02579-005	TCLP METALS(1311/6020/7470A)

Except as noted below, all method specific requirements and QA/QC criteria were met.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceed the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample.

LCSD Laboratory Control Sample Duplicate.

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants Inc	REPORT TO:	Jaimie Warso
Address:	1 Greenwood Ave Ste 210	Address:	datagroup@
	Montclair NJ 07042		geiconsultants.com
Telephone #:	973 873 7110	Attn:	Jaimie Warso
Fax #:	973 509 9625	FAX #	
Project Manager:	M Zukauskas	INVOICE TO:	Sandra St. Hilaire
EMAIL Address:	mzukauskas@gei.	Address:	400 Unicorn Park
Sampler:	Matthew Sweet		Dr Woburn MA
Project Name:	Greenpoint	Attn:	Sandra St. Hilaire
Project Location (State):	NY	PO #	093260-1-1104
Bottle Order #:			
Quote # :			

Turnaround time starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)

NJ EPH - C40 (5 day TAT)

DRO-8015 (3-5 day TAT) QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** 1 wk**

Other** (specify):

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%....
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
Results Only	NJ SRP format
Reduced	NYSDEC
Regulatory - 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix

DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	PCB 8082	TPH-DRO	Tot Sulfur	TCLP metals	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPEC-WC031412	NA	3/14/12	10:45	Aqu	2	1	X									X		
GPEC-MP1(0-0.5)	0-0.5	3/14/12	13:40	S	2	3		X	X							X		
GPEC-MP2(0.5-1)	0.5-1	3/14/12	13:50	S	2	3		X	X							X		
GPEC-MP3(0.5-1)	0.5-1	3/14/12	14:00	S	2	4		X	X							X		
GPEC-MP4Comp	NA	3/14/12	14:10	S	1	5				X						X		

Known Hazard: Yes or (No) Describe:

Conc. Expected: (Low) Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		3/14/12	1720	Received by:	3/14/12	17:20
Relinquished by:		3/14/12	18:05	Received by:	3/14/12	1805
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 0279

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2012 REV COC

01/2012 rev

PROJECT INFORMATION

** RUSH **

E12-02579

Case No. E12-02579 **Project** GREENPOINT

Customer	GEI Consultants Inc. - Montclair	**P.O. #**	093260-1-1104
Contact	Michael Zukauskas	**Received**	3/14/2012 18:05
EMail	mzukauskas@geiconsultants.com ☑ EMail EDDs	**Verbal Due**	3/19/2012
	datagroup@geiconsultants.com;		
Phone	(973) 575-7110 **Fax** 1(973) 509-9625	**Report Due**	4/5/2012
	msweet@geiconsultants.com;		
	rlinbelkin@jalonline.com		
Report To		**Bill To**	
1 Greenwood Ave.		1 Greenwood Ave.	
Suite 210		Suite 210	
Montclair, NJ 07042		Montclair, NJ 07042	
Attn: Michael Zukauskas		Attn: Michael Zukauskas	

Report Format Regulatory

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
02579-001	GPEC-WC031412	n/a	3/14/2012@10:45	Aqueous	ug/L	2
02579-002	GPEC-MP1 (0-0.5)	0 / 0.5	3/14/2012@13:40	Soil	mg/Kg	2
02579-003	GPEC-MP2 (0.5-1)	0.5 / 1	3/14/2012@13:50	Soil	mg/Kg	2
02579-004	GPEC-MP3 (0.5-1)	0.5 / 1	3/14/2012@14:00	Soil	mg/Kg	2
02579-005	GPEC-MP4 COMP	n/a	3/14/2012@14:10	Soil	mg/Kg	1

Sample #	Tests	Status	QA Method
001	PCB	Run	8082
002	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
003	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
004	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
005	TCLP Metals	Run	1311/6020/7470A

03/15/2012 09:59 by Mark - NOTE 1

FOR WASTE CLASS, SIGNATURE PAGE NEEDED.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

March 16, 2012

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 12** **02579** CLIENT: GEL

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 3/14/12

CORRECTIVE ACTION REQUIRED: **YES** (SEE BELOW) **NO**

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES Date/ Time: NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 3/15/12

Laboratory Custody Chronicle

IAL Case No.

E12-02579

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 3/14/2012@18:05

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PCB	02579-001	Aqueous	3/15/12	Archimede	3/16/12	Julia
TPH-DRO-24 HR	-002	Soil	3/15/12	Archimede	3/16/12	Shannon
"	-003	"	3/15/12	Archimede	3/16/12	Shannon
"	-004	"	3/15/12	Archimede	3/16/12	Shannon

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCLP Metals	-005	Soil	3/16/12	Lisa	3/16/12	Wei

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-002	Soil	n/a	n/a	3/16/12	Robert
"	-003	"	n/a	n/a	3/16/12	Robert
"	-004	"	n/a	n/a	3/16/12	Robert

E12-02579 0008

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RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E12-02579

	Lab ID:	02579-001			02579-002			02579-003			02579-004			02579-005		
	Client ID:	GPEC-WC031412			GPEC-MP1 (0-0.5)			GPEC-MP2 (0.5-1)			GPEC-MP3 (0.5-1)			GPEC-MP4 COMP		
	Depth:				0/0.5			0.5/1			0.5/1					
	Matrix:	Aqueous			Soil			Soil			Soil			Soil		
	TCLP Matrix:													TCLP Leachate		
	Sampled Date	3/14/12			3/14/12			3/14/12			3/14/12			3/14/12		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(ug/L-ppb)*														
Aroclor-1016		ND		0.020												
Aroclor-1221		ND		0.020												
Aroclor-1232		ND		0.020												
Aroclor-1242		ND		0.020												
Aroclor-1248		ND		0.020												
Aroclor-1254		ND		0.020												
Aroclor-1260		ND		0.020												
PCBs		ND		0.020												
Hydrocarbons (Units)					*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
TPH-DRO					72.5	J	61.4	143		64.7	124		61.0	~		~
TCLP Metals (Units)					*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*		
TCLP Arsenic					~		~	~		~	~		~	ND		0.100
TCLP Barium					~		~	~		~	~		~	1.28	J	0.500
TCLP Cadmium					~		~	~		~	~		~	ND		0.025
TCLP Chromium					~		~	~		~	~		~	ND		0.100
TCLP Lead					~		~	~		~	~		~	ND		0.050
TCLP Mercury					~		~	~		~	~		~	ND		0.0003
TCLP Selenium					~		~	~		~	~		~	ND		0.200
TCLP Silver					~		~	~		~	~		~	ND		0.025
General Analytical (Units)																
Sulfur as S(mg/Kg-ppm)					ND		812	ND		820	ND		804	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D.
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: 031512-10

Lab ID: 02579-001
Client ID: GPEC-WC031
Date Received: 03/14/2012
Date Extracted: 03/15/2012
Date Analyzed: 03/16/2012
Data file: Y3583.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
PCBs	ND		0.050	0.020

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-002	GC Column:	DB-5
Client ID:	GPEC-MP1 (0-0.5)	Sample wt/vol:	10.50g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	7.00
Data File:	Q9973.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	72.5	J	76.8	61.4

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-003	GC Column:	DB-5
Client ID:	GPEC-MP2 (0.5-1)	Sample wt/vol:	10.02g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	7.50
Data File:	Q9974.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	143		80.9	64.7

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-004	GC Column:	DB-5
Client ID:	GPEC-MP3 (0.5-1)	Sample wt/vol:	10.55g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	6.70
Data File:	Q9975.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	124		76.2	61.0

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID: E12-02579-005
Client ID: GPEC-MP4 COMP
Date Received: 3/14/2012
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 117

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Arsenic	ND		1	0.100	0.100	03/16/12	1311/6020
TCLP Barium	1.28	J	1	2.00	0.500	03/16/12	1311/6020
TCLP Cadmium	ND		1	0.100	0.025	03/16/12	1311/6020
TCLP Chromium	ND		1	0.400	0.100	03/16/12	1311/6020
TCLP Lead	ND		1	0.100	0.050	03/16/12	1311/6020
TCLP Mercury	ND		1	0.0005	0.0003	03/16/12	1311/7471A
TCLP Selenium	ND		1	0.400	0.200	03/16/12	1311/6020
TCLP Silver	ND		1	0.100	0.025	03/16/12	1311/6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREENPOINT

Date Received: 03/14/12 18:05

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	RL	% Solid	Date Analyzed
E12-02579-002	GPEC-MP1 (0-0.5)	ND		1	Soil-mg/Kg	812	974	93.0	03/16/12 10:00
E12-02579-003	GPEC-MP2 (0.5-1)	ND		1	Soil-mg/Kg	820	984	92.5	03/16/12 10:00
E12-02579-004	GPEC-MP3 (0.5-1)	ND		1	Soil-mg/Kg	804	964	93.3	03/16/12 10:00

J = The concentration was detected at a value below the RL and above MDL

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/16/2012

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	0315-BLK10	AQUEOUS	72		62		82		74	
AUD-V12-10	02492-001	AQUEOUS	37		44		48		52	
AUD-V12-10	02492-002	AQUEOUS	51		61		65		71	
AUD-V12-10	02492-003	AQUEOUS	43		60		64		72	
AUD-V12-10	02492-004	AQUEOUS	48		62		61		71	
AUD-V12-10	02492-005	AQUEOUS	49		61		64		72	
AUD-V12-10	02492-006	AQUEOUS	35		58		48		72	
PLA-V12-10	02494-001	AQUEOUS	47		63		65		78	
GPEC-WC031	02579-001	AQUEOUS	56		65		70		76	
PCB	02579-001-MS10	AQUEOUS	60		66		70		77	
PCB	02579-001-MSD10	AQUEOUS	63		69		75		80	
PCB	PBA0315-MS10	AQUEOUS	73		62		82		74	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	21-163	11-163
DCB = Decachlorobiphenyl	30-172	13-170

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBA0315-MS10

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	355.7	71	70 - 130
Aroclor-1260	500.0	0.0	400.3	80	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

AQUEOUS PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 02579-001-MSD10

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	402.6	81	18 - 174
Aroclor-1260	500.0	0.0	444.6	89	14 - 186

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	401.8	80	1	26	18 - 174
Aroclor-1260	0.0	470.6	94	5	29	14 - 186

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: Y3574.D

Instrument ID: GC-Y

Date Extracted: 03/15/2012

Matrix: AQUEOUS

Date Analyzed: 03/16/2012

Time Analyzed: 18:35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AUD-V12-10	02492-001	03/16/2012	18:52
AUD-V12-10	02492-002	03/16/2012	19:09
AUD-V12-10	02492-003	03/16/2012	19:26
AUD-V12-10	02492-004	03/16/2012	19:43
AUD-V12-10	02492-005	03/16/2012	20:00
AUD-V12-10	02492-006	03/16/2012	20:18
PLA-V12-10	02494-001	03/16/2012	20:52
GPEC-WC031	02579-001	03/16/2012	21:09
PCB	02579-001-MS10	03/16/2012	21:26
PCB	02579-001-MSD10	03/16/2012	21:43
PCB	PBA0315-MS10	03/16/2012	22:00

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.78 **DCB 1** 12.09 **TCMX 2** 2.68 **DCB 2** 12.08

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	0315-BLK10	03/16/2012	18:35	2.78		12.09		2.68		12.08	
AUD-V12-10	02492-001	03/16/2012	18:52	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-002	03/16/2012	19:09	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-003	03/16/2012	19:26	2.78		12.09		2.68		12.08	
AUD-V12-10	02492-004	03/16/2012	19:43	2.79		12.09		2.68		12.08	
AUD-V12-10	02492-005	03/16/2012	20:00	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-006	03/16/2012	20:18	2.79		12.09		2.68		12.07	
PLA-V12-10	02494-001	03/16/2012	20:52	2.79		12.09		2.68		12.08	
GPEC-WC031	02579-001	03/16/2012	21:09	2.79		12.09		2.68		12.08	
PCB	02579-001-MS10	03/16/2012	21:26	2.79		12.09		2.68		12.08	
PCB	02579-001-MSD10	03/16/2012	21:43	2.79		12.09		2.68		12.08	
PCB	PBA0315-MS10	03/16/2012	22:00	2.79		12.09		2.68		12.08	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3583.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:09
Operator : YG
Sample : GPEC-WC031,02579-001,A,1000ml,100,03/15/12,1
Misc : 031512-10,03/14/12,03/14/12,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	9288.2E6	3964.1E6	111.022	139.184 #
Spiked Amount 200.000			Recovery	=	55.51%	69.59%
2) S DCB	12.09	12.08	2542.7E6	1277.2E6	129.720m	152.480m
Spiked Amount 200.000			Recovery	=	64.86%	76.24%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

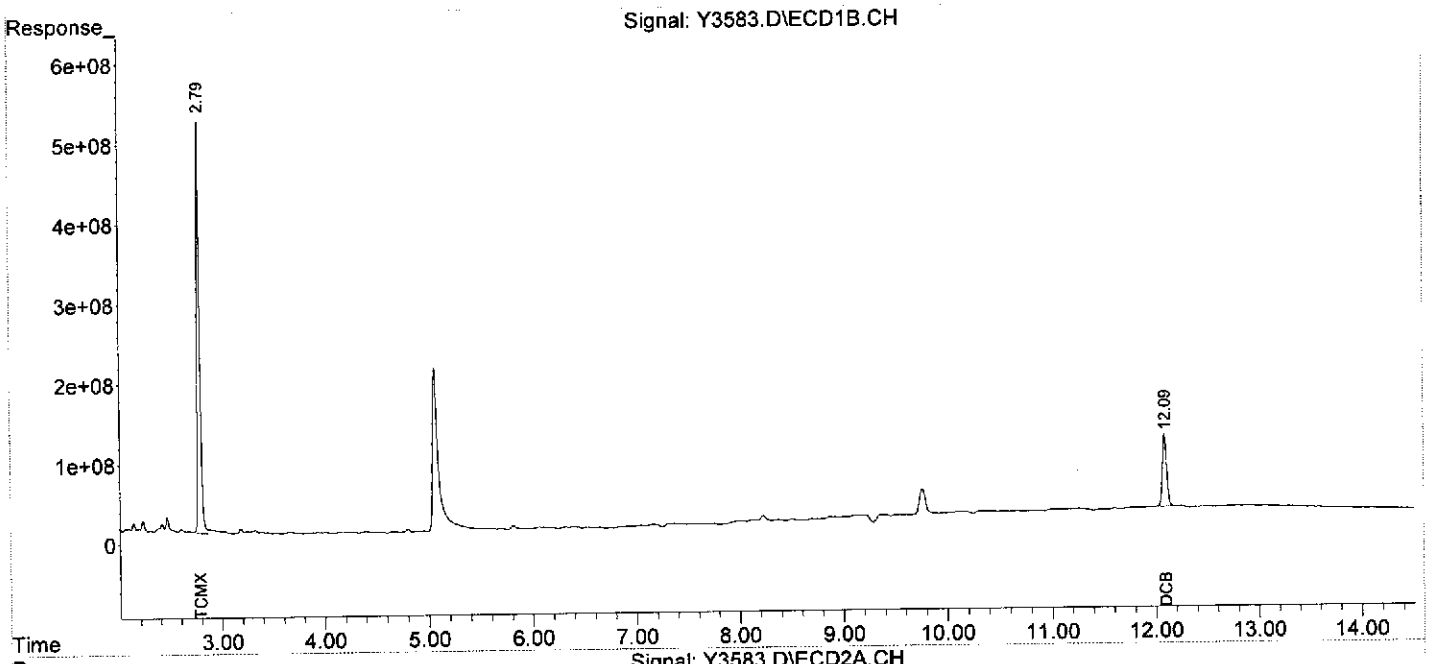
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

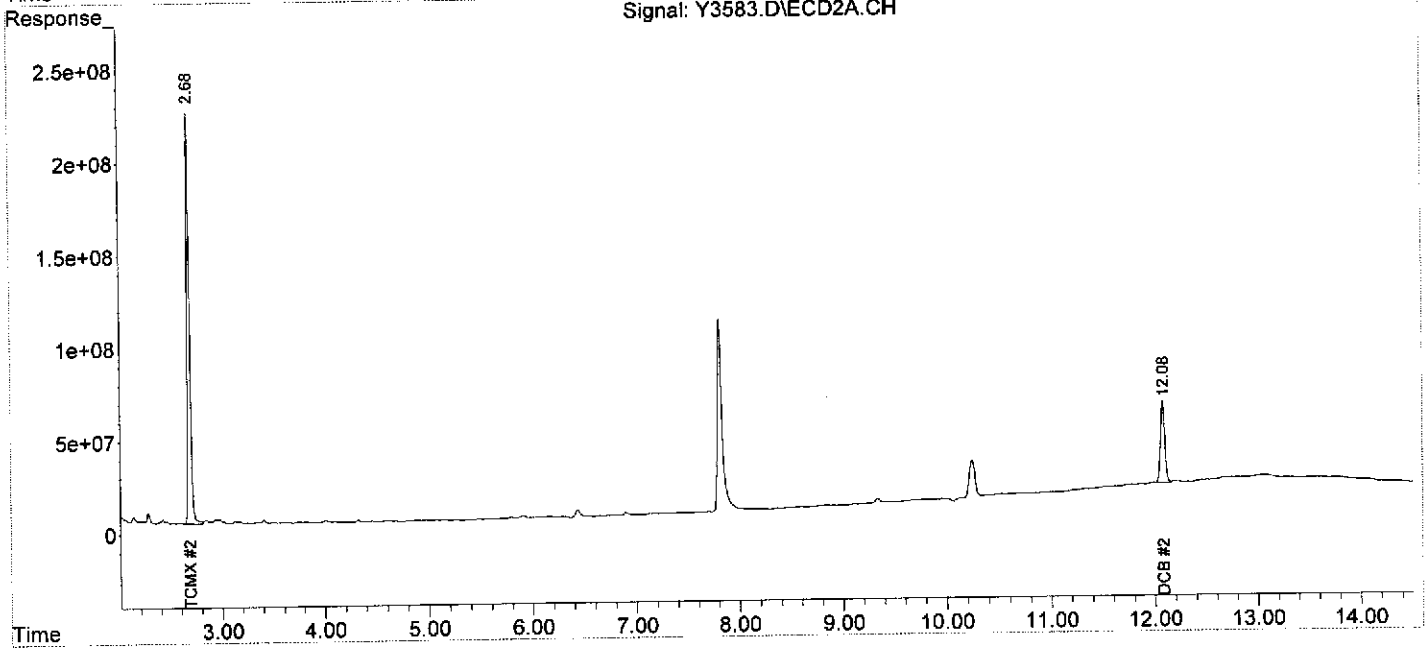
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3583.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:09
Operator : YG
Sample : GPEC-WC031,02579-001,A,1000ml,100,03/15/12,1
Misc : 031512-10,03/14/12,03/14/12,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB STANDARDS

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.25	3.25	3.25	3.25	3.25	3.25	3.18	3.32
Aroclor-1016 {2}	4.08	4.08	4.08	4.08	4.08	4.08	4.01	4.15
Aroclor-1016 {3}	4.64	4.64	4.64	4.64	4.63	4.64	4.57	4.71
Aroclor-1016 {4}	5.14	5.14	5.14	5.14	5.14	5.14	5.07	5.21
Aroclor-1016 {5}	5.54	5.54	5.54	5.54	5.54	5.54	5.47	5.61
Aroclor-1221			2.15				2.08	2.22
Aroclor-1221 {2}			3.05				2.98	3.12
Aroclor-1221 {3}			3.17				3.10	3.24
Aroclor-1221 {4}			3.25				3.18	3.32
Aroclor-1221 {5}			3.84				3.77	3.91
Aroclor-1232			3.25				3.18	3.32
Aroclor-1232 {2}			4.08				4.01	4.15
Aroclor-1232 {3}			4.75				4.68	4.82
Aroclor-1232 {4}			5.34				5.27	5.41
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.08				4.01	4.15
Aroclor-1242 {2}			5.02				4.95	5.09
Aroclor-1242 {3}			5.34				5.27	5.41
Aroclor-1242 {4}			6.04				5.97	6.11
Aroclor-1242 {5}			6.32				6.25	6.39
Aroclor-1248			4.48				4.40	4.56
Aroclor-1248 {2}			5.02				4.94	5.10
Aroclor-1248 {3}			5.34				5.26	5.42
Aroclor-1248 {4}			6.04				5.96	6.12
Aroclor-1248 {5}			6.32				6.24	6.40
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.87				6.79	6.95
Aroclor-1254 {3}			7.04				6.95	7.13
Aroclor-1254 {4}			7.45				7.36	7.54
Aroclor-1254 {5}			8.32				8.23	8.41
Aroclor-1260	8.32	8.32	8.32	8.32	8.32	8.32	7.42	9.22
Aroclor-1260 {2}	8.99	8.99	8.99	8.99	8.99	8.99	8.09	9.89
Aroclor-1260 {3}	9.47	9.47	9.47	9.47	9.46	9.47	8.57	10.37
Aroclor-1260 {4}	9.96	9.95	9.95	9.95	9.95	9.95	9.05	10.85
Aroclor-1260 {5}	11.01	11.01	11.01	11.01	11.00	11.01	10.11	11.91

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1923055	1588951	1545171	1647296	1601872	1661269	9.08
Aroclor-1016 {2}	2148469	2063087	2014083	2259535	2195201	2136075	4.63
Aroclor-1016 {3}	3610168	3012437	2908545	3153563	3037498	3144442	8.73
Aroclor-1016 {4}	1579013	1589399	1451433	1542951	1468812	1526322	4.14
Aroclor-1016 {5}	2448821	2477814	2402565	2627421	2549604	2501245	3.54
Aroclor-1221			668182				
Aroclor-1221 {2}			1109230				
Aroclor-1221 {3}			700918				
Aroclor-1221 {4}			2618404				
Aroclor-1221 {5}			554426				
Aroclor-1232			1569187				
Aroclor-1232 {2}			838727				
Aroclor-1232 {3}			781659				
Aroclor-1232 {4}			818994				
Aroclor-1232 {5}			1142427				
Aroclor-1242			1662968				
Aroclor-1242 {2}			1079324				
Aroclor-1242 {3}			1488301				
Aroclor-1242 {4}			2517459				
Aroclor-1242 {5}			2226421				
Aroclor-1248			3692294				
Aroclor-1248 {2}			2155329				
Aroclor-1248 {3}			2602542				
Aroclor-1248 {4}			5008363				
Aroclor-1248 {5}			3443426				
Aroclor-1254			5056472				
Aroclor-1254 {2}			3183448				
Aroclor-1254 {3}			6441190				
Aroclor-1254 {4}			2393713				
Aroclor-1254 {5}			6390077				
Aroclor-1260	5699087	6218050	6548823	6926600	7034669	6485446	8.41
Aroclor-1260 {2}	2143115	2496994	2407954	2783505	2998589	2566031	12.97
Aroclor-1260 {3}	6469437	7610340	7480141	6983424	8104015	7329471	8.52
Aroclor-1260 {4}	3654089	3954857	3620596	3400682	4047879	3735620	7.05
Aroclor-1260 {5}	1833584	1767360	1669235	1663408	1342234	1655164	11.41
					Average %RSD		7.85

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (2nd): RTX-CLP2

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.51	3.51	3.51	3.51	3.51	3.51	3.44	3.58
Aroclor-1016 {2}	4.08	4.08	4.08	4.08	4.08	4.08	4.01	4.15
Aroclor-1016 {3}	4.81	4.81	4.81	4.81	4.81	4.81	4.74	4.88
Aroclor-1016 {4}	5.01	5.01	5.01	5.01	5.01	5.01	4.94	5.08
Aroclor-1016 {5}	5.18	5.18	5.18	5.18	5.18	5.18	5.11	5.25
Aroclor-1221			2.28				2.21	2.35
Aroclor-1221 {2}			3.21				3.14	3.28
Aroclor-1221 {3}			3.43				3.36	3.50
Aroclor-1221 {4}			3.52				3.45	3.59
Aroclor-1221 {5}			4.39				4.32	4.46
Aroclor-1232			3.51				3.44	3.58
Aroclor-1232 {2}			4.45				4.38	4.52
Aroclor-1232 {3}			5.01				4.94	5.08
Aroclor-1232 {4}			5.18				5.11	5.25
Aroclor-1232 {5}			5.76				5.69	5.83
Aroclor-1242			4.45				4.38	4.52
Aroclor-1242 {2}			5.18				5.11	5.25
Aroclor-1242 {3}			5.76				5.69	5.83
Aroclor-1242 {4}			5.92				5.85	5.99
Aroclor-1242 {5}			6.46				6.39	6.53
Aroclor-1248			4.81				4.73	4.89
Aroclor-1248 {2}			5.37				5.29	5.45
Aroclor-1248 {3}			5.76				5.68	5.84
Aroclor-1248 {4}			5.92				5.84	6.00
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.75				6.67	6.83
Aroclor-1254 {2}			7.32				7.24	7.40
Aroclor-1254 {3}			7.94				7.85	8.03
Aroclor-1254 {4}			8.16				8.07	8.25
Aroclor-1254 {5}			8.74				8.65	8.83
Aroclor-1260	7.75	7.75	7.75	7.75	7.75	7.75	6.85	8.65
Aroclor-1260 {2}	8.16	8.16	8.16	8.16	8.15	8.16	7.26	9.06
Aroclor-1260 {3}	9.33	9.33	9.33	9.33	9.33	9.33	8.43	10.23
Aroclor-1260 {4}	9.83	9.84	9.83	9.83	9.83	9.83	8.93	10.73
Aroclor-1260 {5}	10.42	10.42	10.42	10.42	10.41	10.42	9.52	11.32

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (2nd): RTX-CLP2

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	525722	571605	484964	507835	485442	515113	6.96
Aroclor-1016 {2}	1114025	1148448	970829	1019759	973940	1045400	7.81
Aroclor-1016 {3}	2364110	2430802	2207798	2372886	2274214	2329962	3.79
Aroclor-1016 {4}	1068452	1152594	943375	1023490	962432	1030069	8.21
Aroclor-1016 {5}	783612	853334	736832	795378	758793	785590	5.62
Aroclor-1221			232600				
Aroclor-1221 {2}			341357				
Aroclor-1221 {3}			216723				
Aroclor-1221 {4}			786815				
Aroclor-1221 {5}			30704				
Aroclor-1232			502238				
Aroclor-1232 {2}			190420				
Aroclor-1232 {3}			419922				
Aroclor-1232 {4}			319538				
Aroclor-1232 {5}			447329				
Aroclor-1242			352445				
Aroclor-1242 {2}			604586				
Aroclor-1242 {3}			787031				
Aroclor-1242 {4}			664042				
Aroclor-1242 {5}			1303355				
Aroclor-1248			1214340				
Aroclor-1248 {2}			1873120				
Aroclor-1248 {3}			1339887				
Aroclor-1248 {4}			1229102				
Aroclor-1248 {5}			673200				
Aroclor-1254			1619845				
Aroclor-1254 {2}			1305174				
Aroclor-1254 {3}			1255817				
Aroclor-1254 {4}			926006				
Aroclor-1254 {5}			2152993				
Aroclor-1260	1340720	1425306	1214482	1313943	1255729	1310036	6.19
Aroclor-1260 {2}	1552850	1654199	1412700	1541707	1480407	1528372	5.88
Aroclor-1260 {3}	1244441	1187955	1139814	1256370	1246307	1214977	4.10
Aroclor-1260 {4}	2455592	2548993	2462023	2763305	2735109	2593004	5.69
Aroclor-1260 {5}	1559411	1742021	1804428	1990281	1886029	1796434	9.01
					Average %RSD		6.33

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012

Instrument ID: GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.61				7.71	7.71
Aroclor-1262 {2}			9.47				8.57	8.57
Aroclor-1262 {3}			10.09				9.19	9.19
Aroclor-1262 {4}			10.18				9.18	9.18
Aroclor-1262 {5}			11.01				10.01	10.01
Aroclor-1268			10.10				9.10	9.10
Aroclor-1268 {2}			10.18				9.08	9.08
Aroclor-1268 {3}			10.65				9.55	9.55
Aroclor-1268 {4}			10.78				9.68	9.68
Aroclor-1268 {5}			11.61				10.51	10.51

GC Column (2nd): DB-1701P

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.33				8.43	8.43
Aroclor-1262 {2}			9.83				8.93	8.93
Aroclor-1262 {3}			10.32				9.42	9.42
Aroclor-1262 {4}			10.41				9.41	9.41
Aroclor-1262 {5}			11.01				10.01	10.01
Aroclor-1268			10.32				9.32	9.32
Aroclor-1268 {2}			10.40				9.30	9.30
Aroclor-1268 {3}			10.65				9.55	9.55
Aroclor-1268 {4}			10.79				9.69	9.69
Aroclor-1268 {5}			11.87				10.77	10.77

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5789299				
Aroclor-1262 {2}			11144862				
Aroclor-1262 {3}			3464884				
Aroclor-1262 {4}			4859038				
Aroclor-1262 {5}			3358861				
Aroclor-1268			8946433				
Aroclor-1268 {2}			13676989				
Aroclor-1268 {3}			8598240				
Aroclor-1268 {4}			2670650				
Aroclor-1268 {5}			19995113				

GC Column (2nd): DB-1701P

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1689278				
Aroclor-1262 {2}			3867372				
Aroclor-1262 {3}			1243137				
Aroclor-1262 {4}			2705452				
Aroclor-1262 {5}			446349				
Aroclor-1268			3913692				
Aroclor-1268 {2}			4751027				
Aroclor-1268 {3}			3170423				
Aroclor-1268 {4}			1010255				
Aroclor-1268 {5}			7668000				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.69	59310.4E6	23566.9E6	738.980	871.459
Spiked Amount 200.000			Recovery	=	369.49%	435.73%
2) S DCB	12.09	12.08	14879.1E6	6724.5E6	856.360	898.689
Spiked Amount 200.000			Recovery	=	428.18%	449.34%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	3203.7E6	970.9E6	1928.492	1847.450
4) L2 Aroclor-1016 {2}	4.08	4.08	4390.4E6	1947.9E6	2055.359	1885.805
5) L2 Aroclor-1016 {3}	4.63	4.81	6075.0E6	4548.4E6	2042.689	1973.147
6) L2 Aroclor-1016 {4}	5.14	5.01	2937.6E6	1924.9E6	2011.380	1920.258
7) L2 Aroclor-1016 {5}	5.54	5.18	5099.2E6	1517.6E6	2024.797	1957.359
Sum Aroclor-1016			21706.0E6	10909.6E6	10062.716	9584.019
Average Aroclor-1016					2012.543	1916.804
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	14069.3E6	2511.5E6	2151.221	1917.091
34) L8 Aroclor-1260 {2}	8.99	8.15	5997.2E6	2960.8E6	2277.970	1937.233
35) L8 Aroclor-1260 {3}	9.46	9.33	16208.0E6	2492.6E6	2215.343	2014.621
36) L8 Aroclor-1260 {4}	9.95	9.83	8095.8E6	5470.2E6	2119.157	2162.093
37) L8 Aroclor-1260 {5}	11.00	10.41	2684.5E6	3772.1E6	1636.746	2061.249 #
Sum Aroclor-1260			47054.8E6	17207.2E6	10400.437	10092.288
Average Aroclor-1260					2080.087	2018.458
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

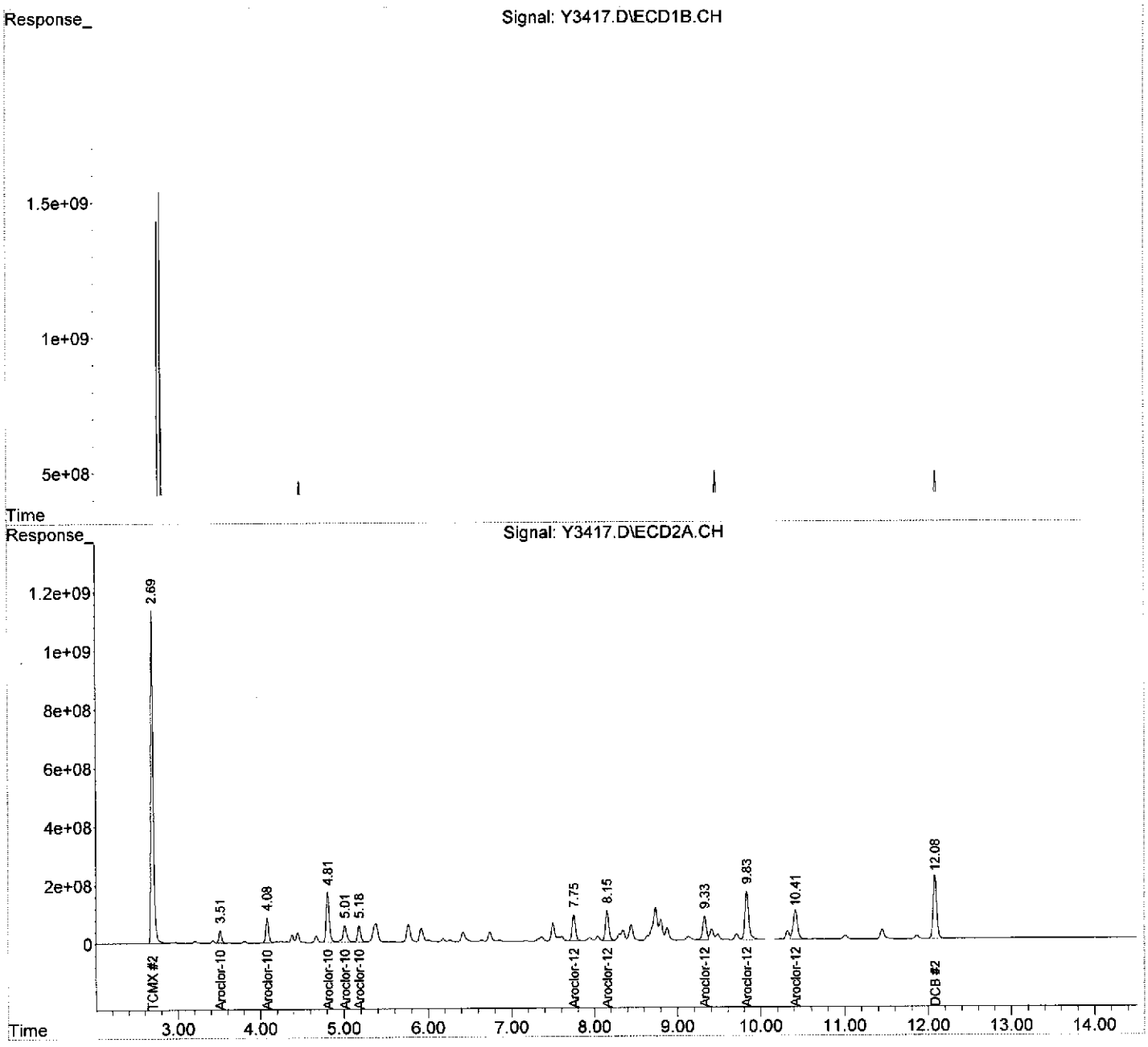
E12-02579 0036

Quantitation Report (QT Reviewed)

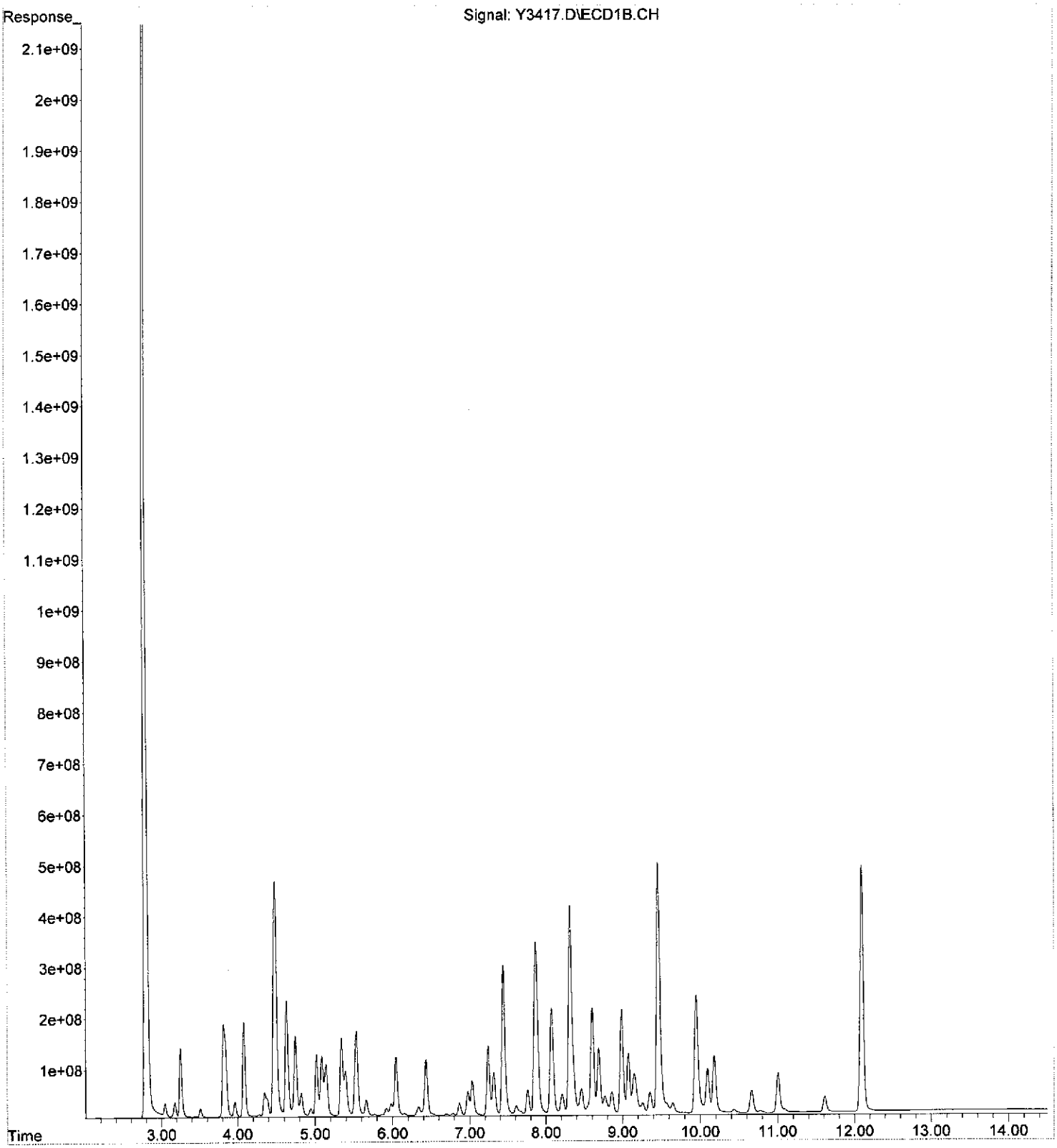
Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File :C:\MSDCHEM\1\DATA\03-12-12\Y3417.D
Operator : YG
Acquired : 12 Mar 2012 13:14 using AcqMethod YPCB0312.M
Instrument : GC_Y
Sample Name: 8082_L5_IAS_4219,2_PPM
Misc Info : NA,NA,NA,1
Vial Number: 1



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	35459.6E6	11758.3E6	441.811	434.800
Spiked Amount 200.000			Recovery	=	220.91%	217.40%
2) S DCB	12.10	12.08	7427.4E6	3123.4E6	427.481m	417.423m
Spiked Amount 200.000			Recovery	=	213.74%	208.71%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	1647.3E6	507.8E6	991.589	966.335
4) L2 Aroclor-1016 {2}	4.08	4.08	2259.5E6	1019.8E6	1057.798	987.262
5) L2 Aroclor-1016 {3}	4.64	4.81	3153.6E6	2372.9E6	1060.371	1029.378
6) L2 Aroclor-1016 {4}	5.14	5.01	1543.0E6	1023.5E6	1056.453	1021.040
7) L2 Aroclor-1016 {5}	5.54	5.18	2627.4E6	795.4E6	1043.298	1025.866
Sum Aroclor-1016			11230.8E6	5719.3E6	5209.508	5029.881
Average Aroclor-1016					1041.902	1005.976
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	6926.6E6	1313.9E6	1059.087	1002.983
34) L8 Aroclor-1260 {2}	8.99	8.16	2783.5E6	1541.7E6	1057.288	1008.724
35) L8 Aroclor-1260 {3}	9.47	9.33	6983.4E6	1256.4E6	954.507	1015.444
36) L8 Aroclor-1260 {4}	9.95	9.83	3400.7E6	2763.3E6	890.167	1092.191
37) L8 Aroclor-1260 {5}	11.01	10.42	1663.4E6	1990.3E6	1014.195	1087.594
Sum Aroclor-1260			21757.6E6	8865.6E6	4975.244	5206.935
Average Aroclor-1260					995.049	1041.387
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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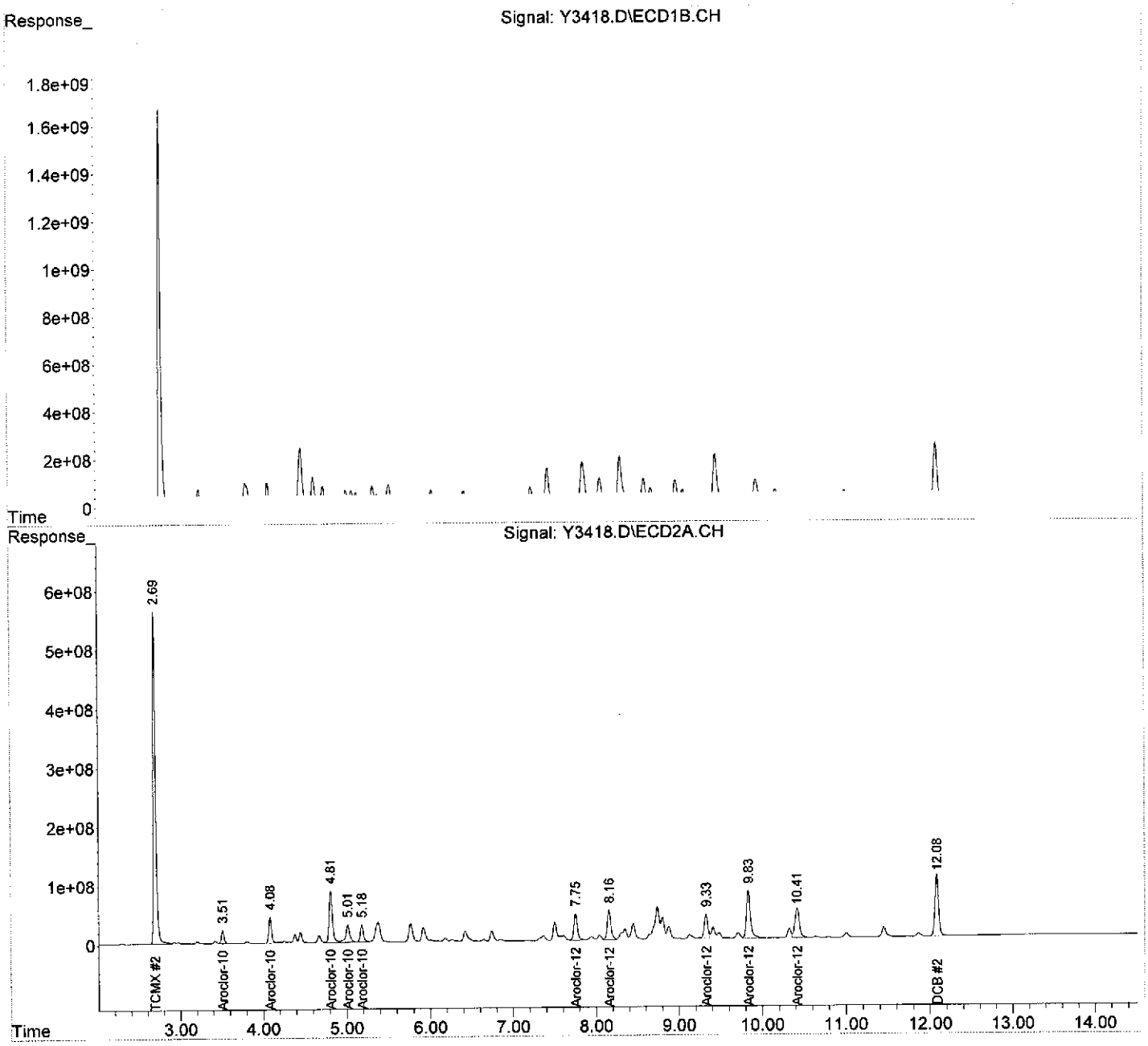
Quantitation Report (QT Reviewed)

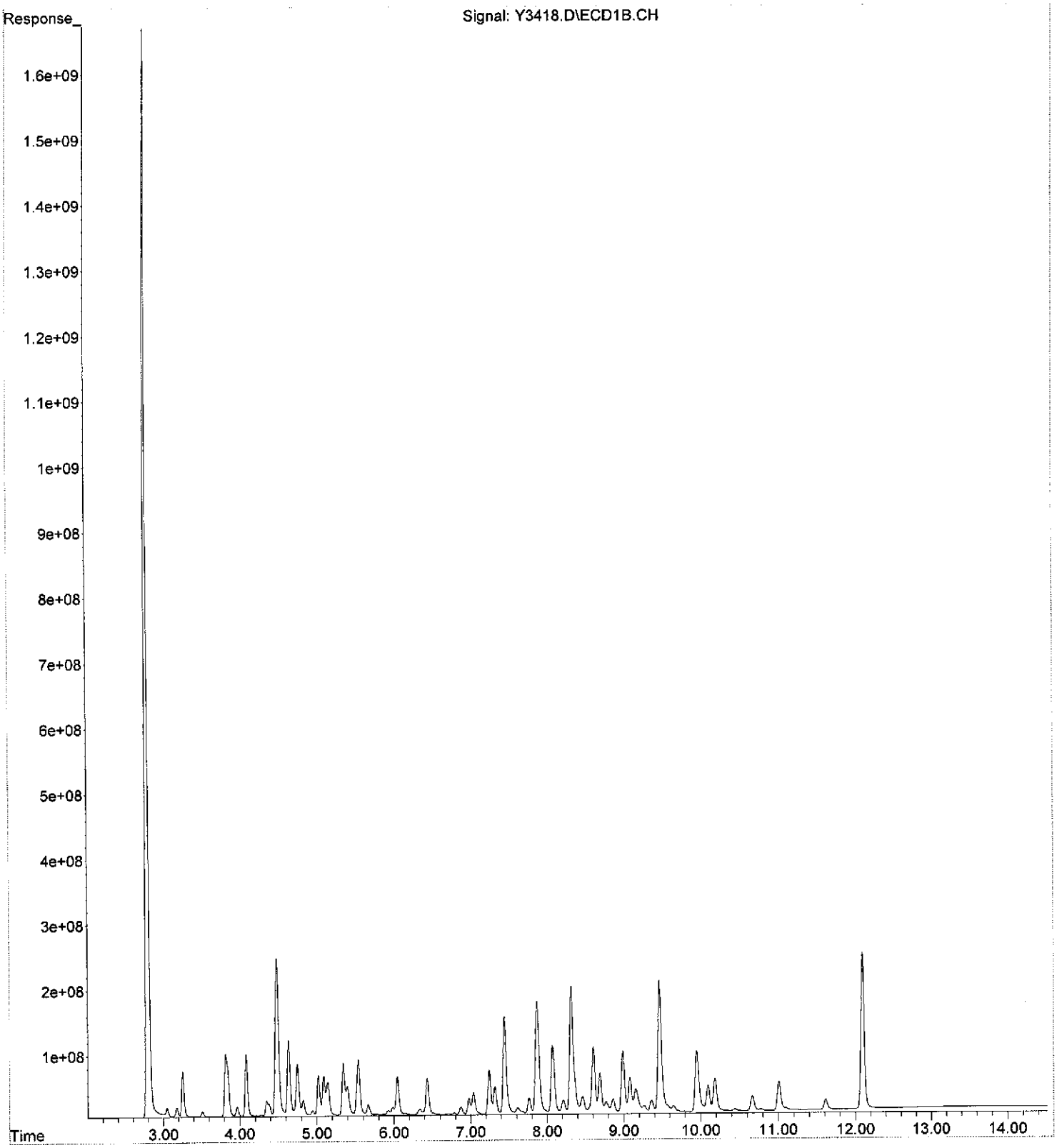
Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File : C:\MSDCHEM\1\DATA\03-12-12\Y3418.D
Operator : YG
Acquired : 12 Mar 2012 13:31 using AcqMethod YPCB0312.M
Instrument : GC_Y
Sample Name: 8082_L4_IAS_4220,1_PPM
Misc Info : NA,NA,NA,1
Vial Number: 2



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	17001.0E6	5422.0E6	211.824	200.495
Spiked Amount 200.000			Recovery	=	105.91%	100.25%
2) S DCB	12.09	12.08	2924.6E6	1402.2E6	168.324m	187.400m
Spiked Amount 200.000			Recovery	=	84.16%	93.70%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	772.6E6	242.5E6	465.057	461.407
4) L2 Aroclor-1016 {2}	4.08	4.08	1007.0E6	485.4E6	471.445	469.946
5) L2 Aroclor-1016 {3}	4.64	4.81	1454.3E6	1103.9E6	488.992	478.881
6) L2 Aroclor-1016 {4}	5.14	5.01	725.7E6	471.7E6	496.895	470.559
7) L2 Aroclor-1016 {5}	5.54	5.18	1201.3E6	368.4E6	477.006	475.177
Sum Aroclor-1016			5160.9E6	2671.9E6	2399.396	2355.970
Average Aroclor-1016					479.879	471.194
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	3274.4E6	607.2E6	500.662	463.530
34) L8 Aroclor-1260 {2}	8.99	8.16	1204.0E6	706.3E6	457.319	462.158
35) L8 Aroclor-1260 {3}	9.47	9.33	3740.1E6	569.9E6	511.200	460.620
36) L8 Aroclor-1260 {4}	9.95	9.83	1810.3E6	1231.0E6	473.866	486.555
37) L8 Aroclor-1260 {5}	11.01	10.42	834.6E6	902.2E6	508.874	493.017
Sum Aroclor-1260			10863.4E6	4016.7E6	2451.921	2365.880
Average Aroclor-1260					490.384	473.176
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

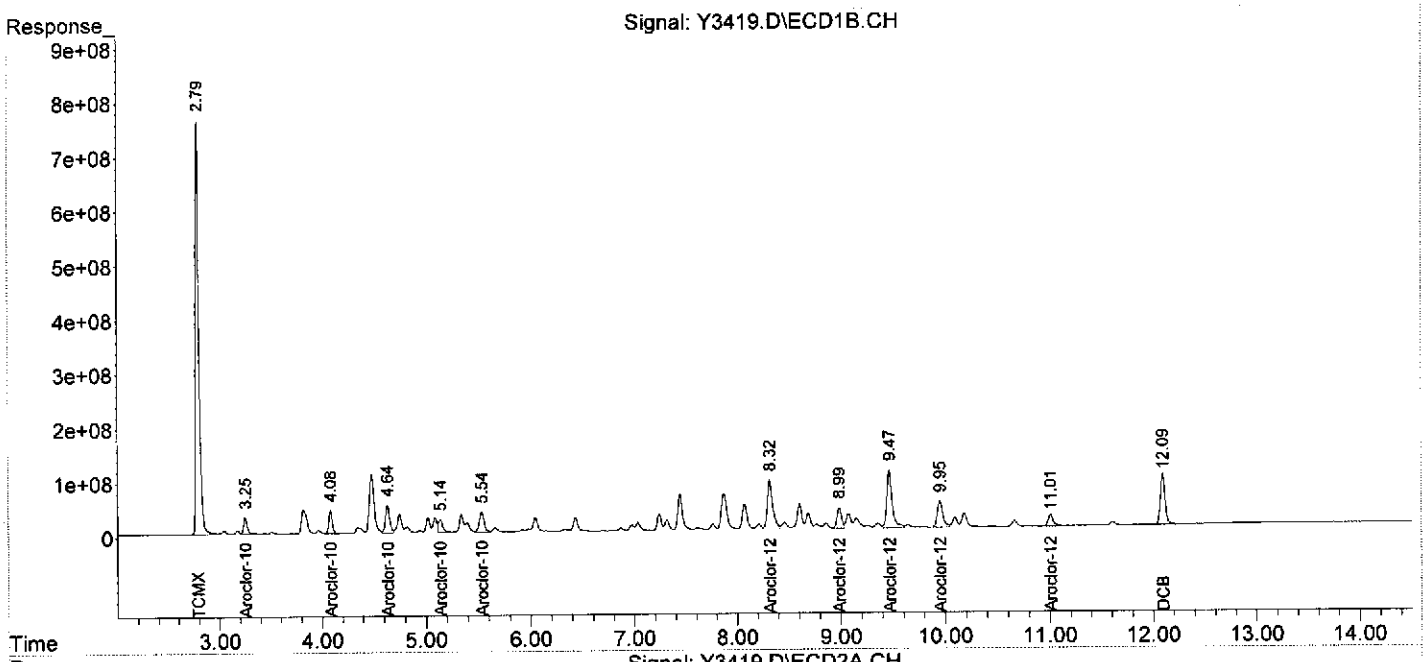
E12-02579 0044

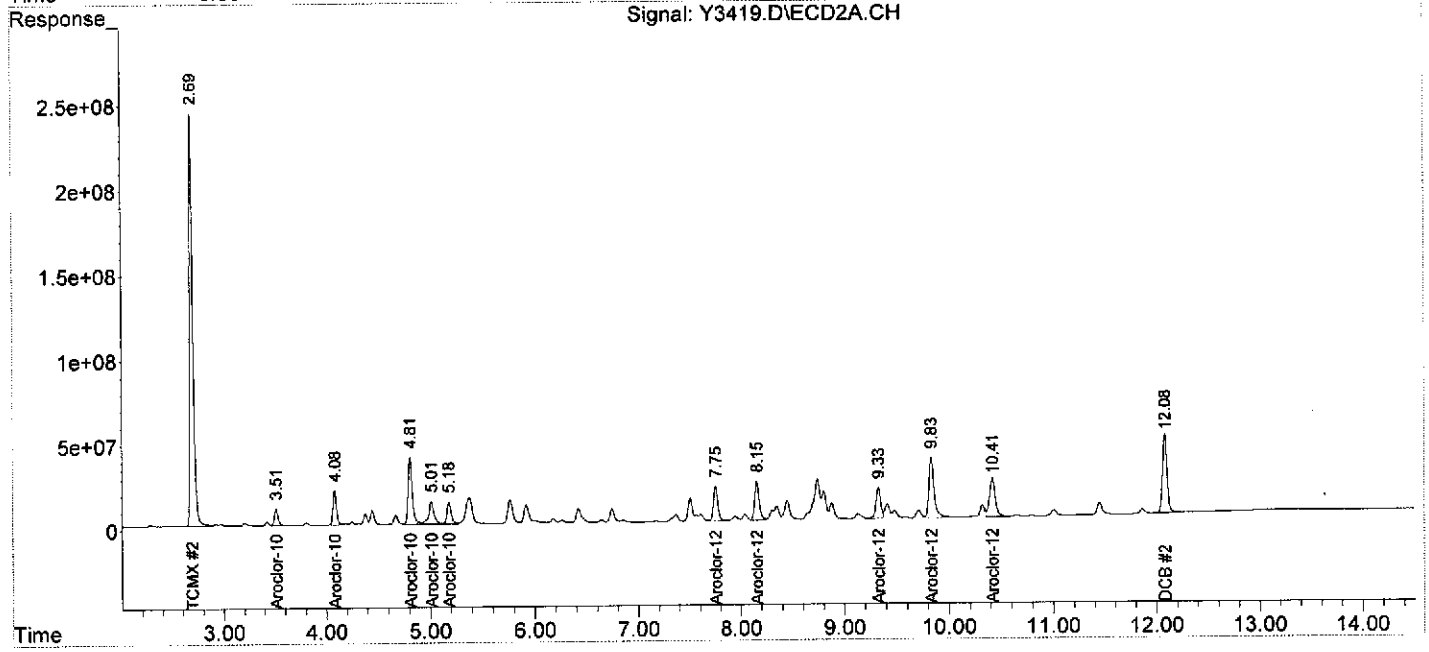
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	1669.2E6	526.4E6	20.797	19.467
Spiked Amount 200.000			Recovery =		10.40%	9.73%
2) S DCB	12.09	12.08	350.2E6	150.5E6	20.154m	20.109m
Spiked Amount 200.000			Recovery =		10.08%	10.05%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	79447555	28580245	47.823	54.384
4) L2 Aroclor-1016 {2}	4.08	4.08	103.2E6	57422409	48.292	55.593
5) L2 Aroclor-1016 {3}	4.64	4.81	150.6E6	121.5E6	50.646	52.725
6) L2 Aroclor-1016 {4}	5.14	5.01	79469927	57629707	54.413	57.492
7) L2 Aroclor-1016 {5}	5.54	5.18	123.9E6	42666717	49.195	55.031
Sum Aroclor-1016			536.6E6	307.8E6	250.368	275.224
Average Aroclor-1016					50.074	55.045
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	310.9E6	71265277	47.537	54.399
34) L8 Aroclor-1260 {2}	8.99	8.16	124.8E6	82709955	47.423	54.116
35) L8 Aroclor-1260 {3}	9.47	9.33	380.5E6	59397758	52.010	48.007m
36) L8 Aroclor-1260 {4}	9.95	9.84	197.7E6	127.4E6	51.761	50.374m
37) L8 Aroclor-1260 {5}	11.01	10.42	88368009	87101030	53.879m	47.597m
Sum Aroclor-1260			1102.4E6	427.9E6	252.610	254.494
Average Aroclor-1260					50.522	50.899
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

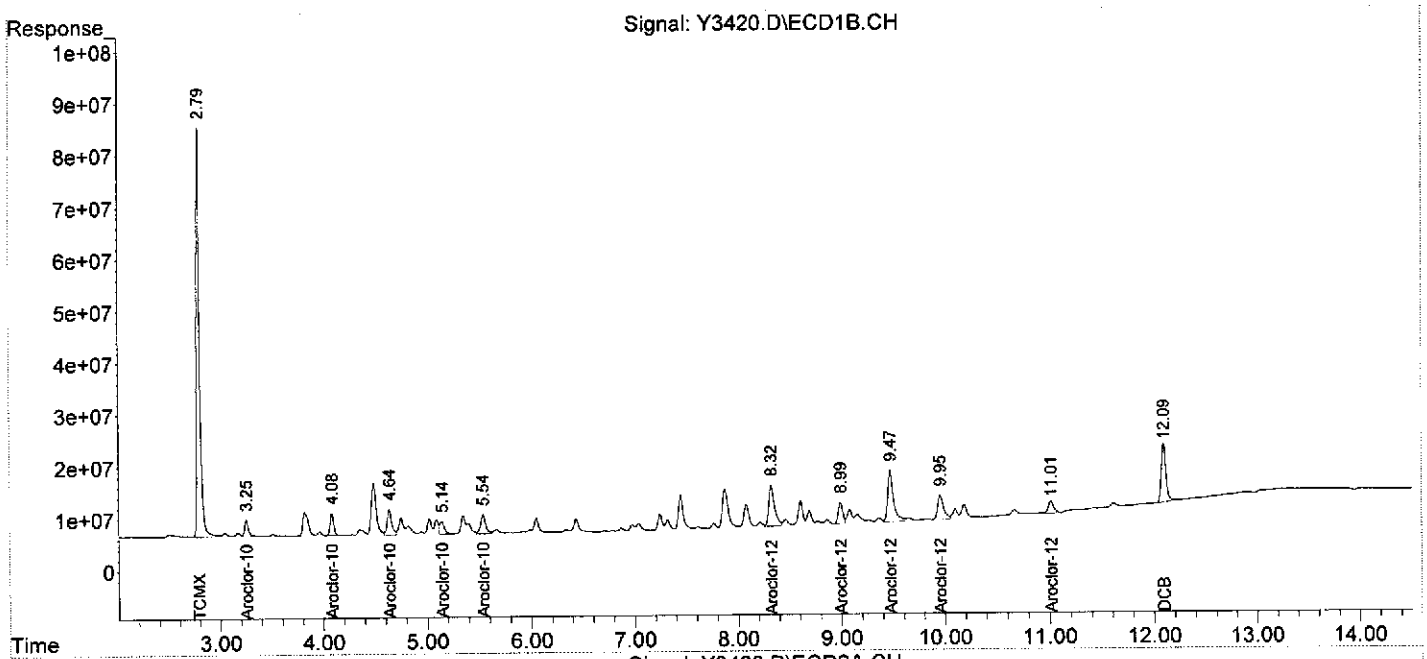
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

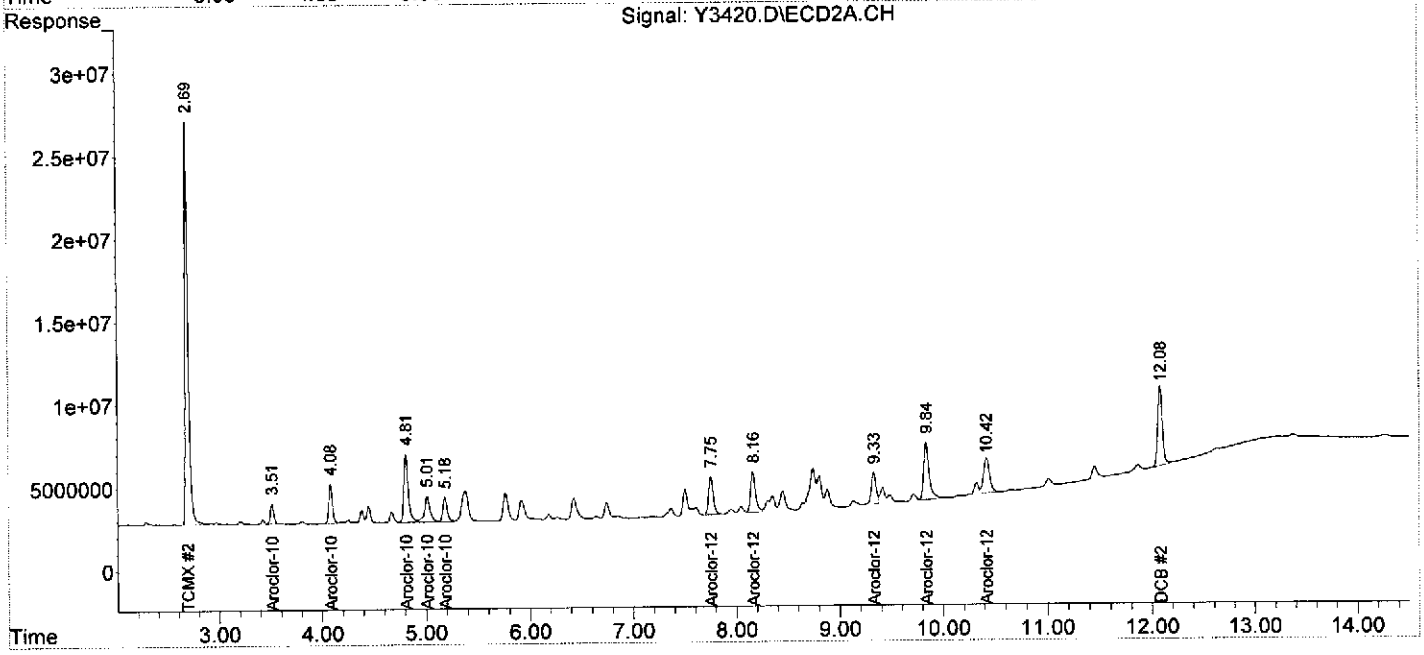
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	280.2E6	94780218	3.491m	3.505m
Spiked Amount 200.000			Recovery	=	1.75%	1.75%
2) S DCB	12.10	12.08	79568605	31497676	4.580m	4.209m
Spiked Amount 200.000			Recovery	=	2.29%	2.10%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	19230554	5257221	11.576	10.004
4) L2 Aroclor-1016 {2}	4.08	4.08	21484693	11140247	10.058	10.785
5) L2 Aroclor-1016 {3}	4.64	4.81	36101682	23641099	12.139	10.256
6) L2 Aroclor-1016 {4}	5.14	5.01	15790133	10684518	10.811m	10.659
7) L2 Aroclor-1016 {5}	5.54	5.18	24488209	7836123	9.724m	10.107
Sum Aroclor-1016			117.1E6	58559208	54.308	51.811
Average Aroclor-1016					10.862	10.362
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	56990873	13407202	8.714m	10.234
34) L8 Aroclor-1260 {2}	8.99	8.16	21431149	15528496	8.140m	10.160
35) L8 Aroclor-1260 {3}	9.47	9.33	64694366	12444406	8.843	10.058
36) L8 Aroclor-1260 {4}	9.96	9.83	36540890	24555923	9.565m	9.706m
37) L8 Aroclor-1260 {5}	11.01	10.42	18335842	15594112	11.180m	8.521m
Sum Aroclor-1260			198.0E6	81530138	46.441	48.680
Average Aroclor-1260					9.288	9.736
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

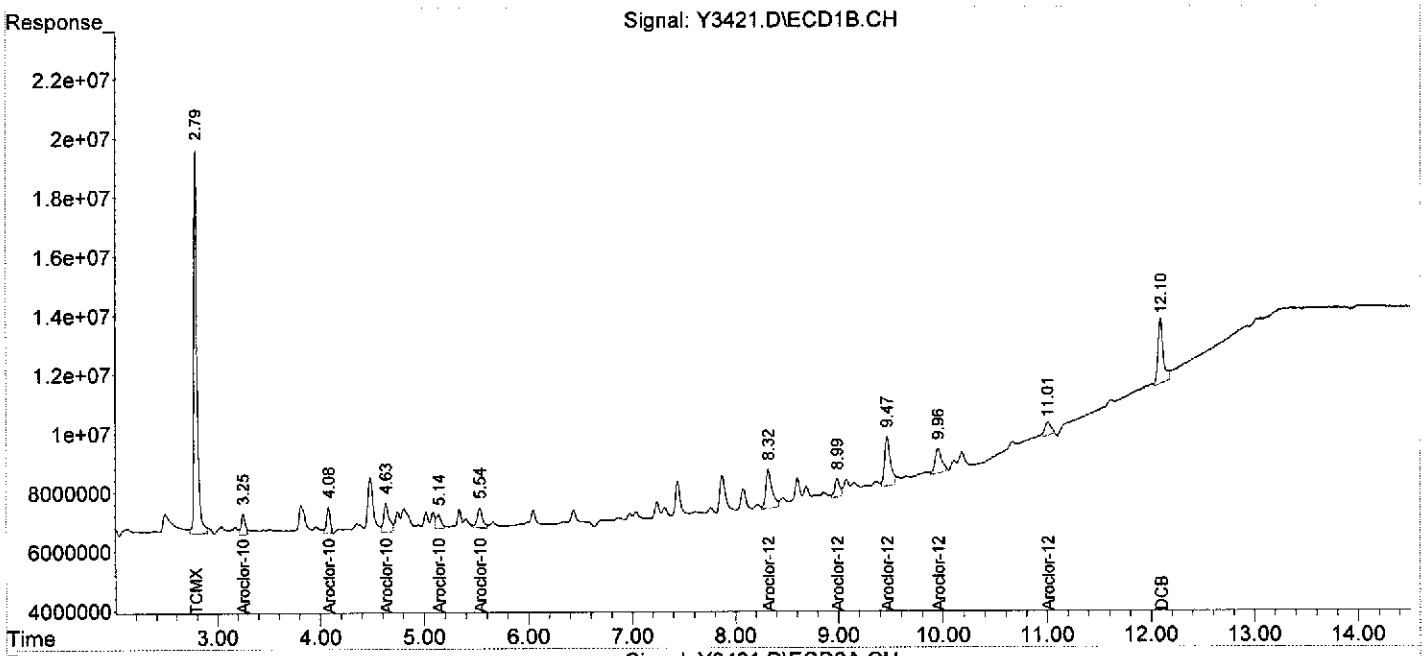
E12-02579 0050

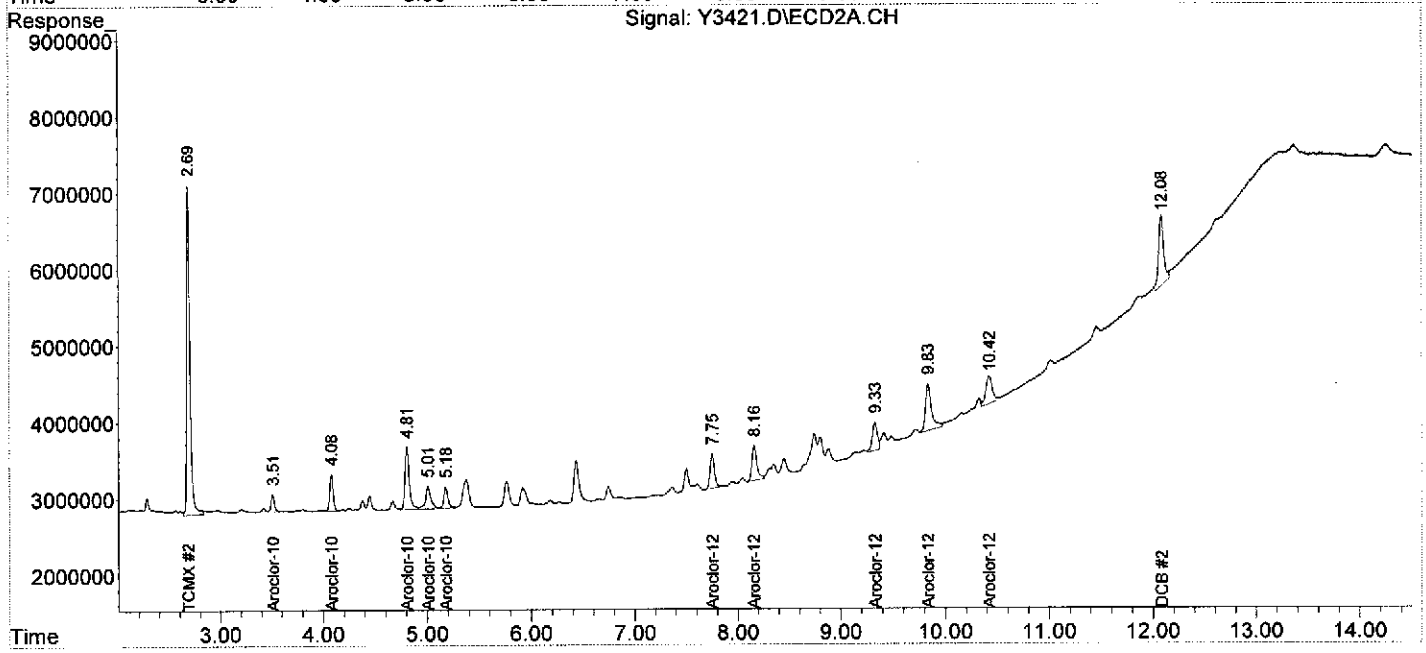
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:17
Operator : YG
Sample : 8082_1221_IAS_4224,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:42:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:34:57 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.70	21938.8E6	6878.7E6	257.505	241.361
Spiked Amount 200.000			Recovery	=	128.75%	120.68%
2) S DCB	12.09	12.09	3040.8E6	1504.8E6	173.887	198.121
Spiked Amount 200.000			Recovery	=	86.94%	99.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
8) L3 Aroclor-1221	2.15	2.28	334.1E6	116.3E6	500.000	500.000
9) L3 Aroclor-1221 {2}	3.05	3.21	554.6E6	170.7E6	500.000	500.000
10) L3 Aroclor-1221 {3}	3.17	3.43	350.5E6	108.4E6	500.000	500.000
11) L3 Aroclor-1221 {4}	3.25	3.52	1309.2E6	393.4E6	500.000	500.000
12) L3 Aroclor-1221 {5}	3.84	4.39	277.2E6	15352109	500.000	500.000
Sum Aroclor-1221			2825.6E6	804.1E6	2500.000	2500.000
Average Aroclor-1221					500.000	500.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

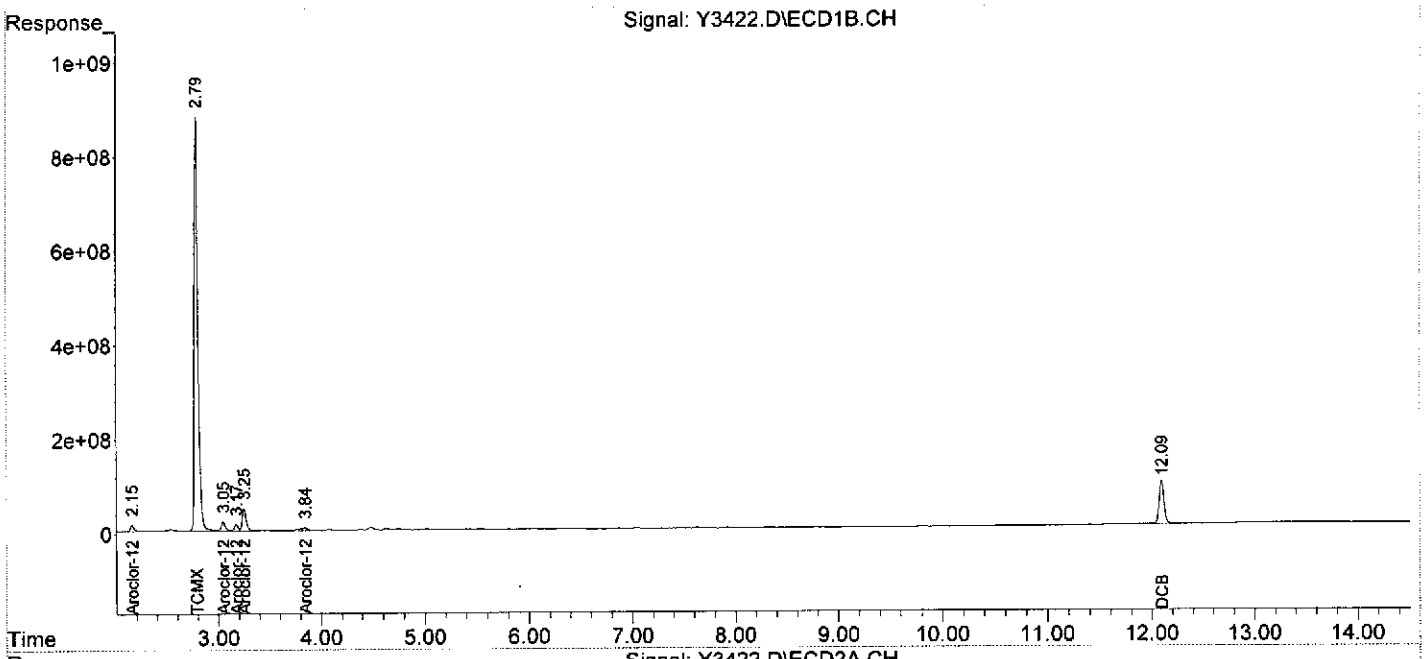
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

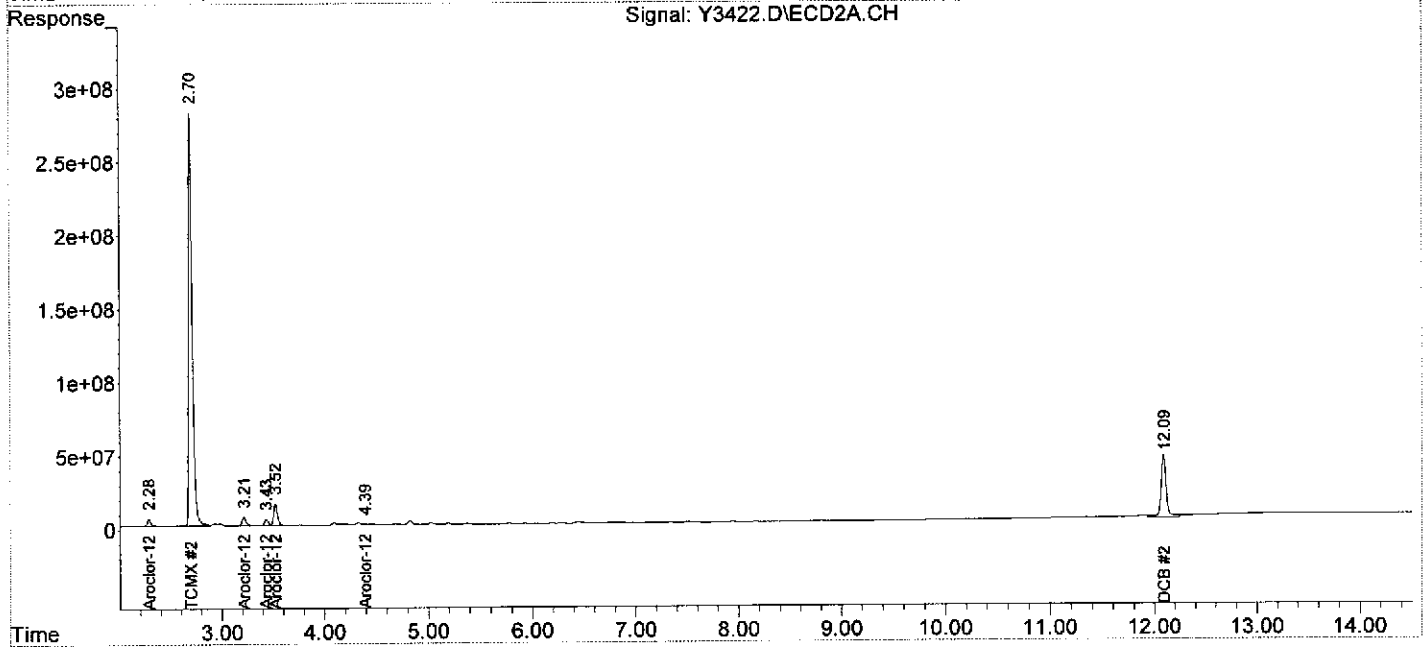
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:17
Operator : YG
Sample : 8082_1221_IAS_4224,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:42:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:34:57 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3423.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:34
Operator : YG
Sample : 8082_1232_IAS_4225,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:44:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:43:35 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	18043.1E6	5816.1E6	221.927	211.978
Spiked Amount 200.000			Recovery	=	110.96%	105.99%
2) S DCB	12.09	12.08	3389.9E6	1564.3E6	189.738m	204.715m
Spiked Amount 200.000			Recovery	=	94.87%	102.36%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
13) L4 Aroclor-1232	3.25	3.51	784.6E6	251.1E6	500.000	500.000
14) L4 Aroclor-1232 {2}	4.08	4.45	419.4E6	95209770	500.000	500.000
15) L4 Aroclor-1232 {3}	4.75	5.01	390.8E6	210.0E6	500.000	500.000
16) L4 Aroclor-1232 {4}	5.34	5.18	409.5E6	159.8E6	500.000	500.000
17) L4 Aroclor-1232 {5}	5.53	5.76	571.2E6	223.7E6	500.000	500.000
Sum Aroclor-1232			2575.5E6	939.7E6	2500.000	2500.000
Average Aroclor-1232					500.000	500.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

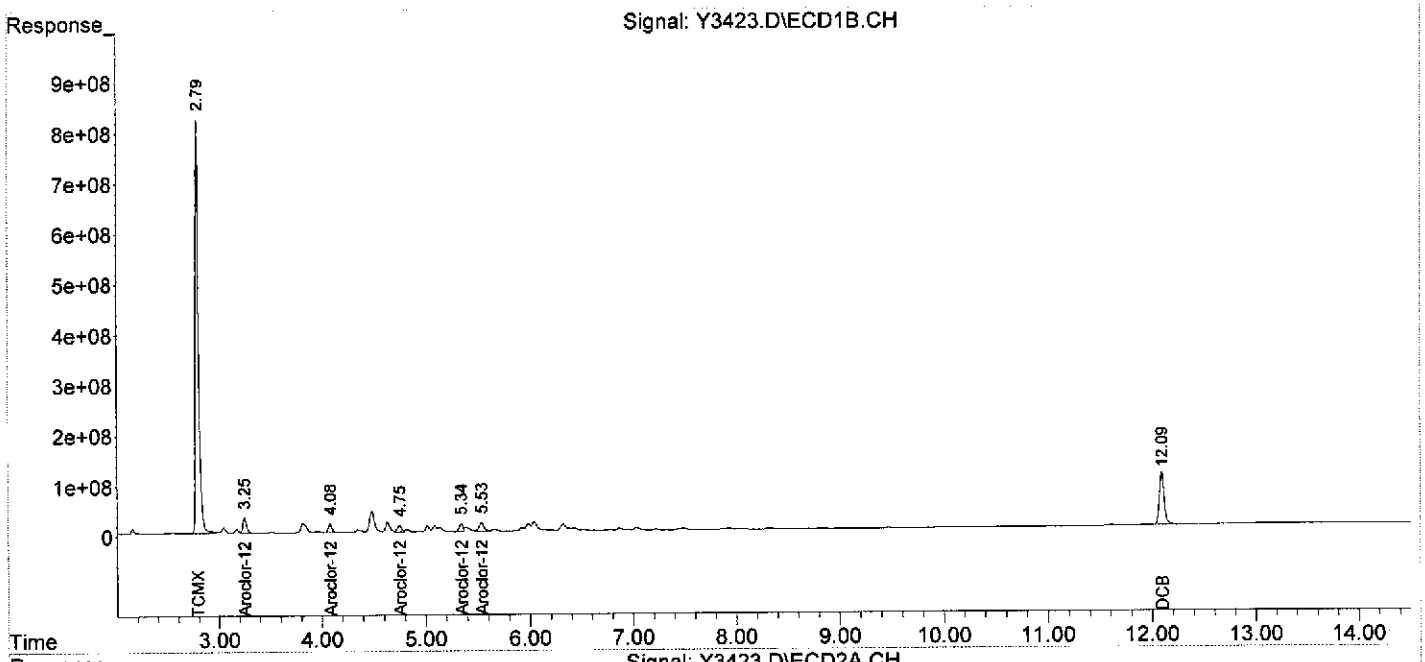
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

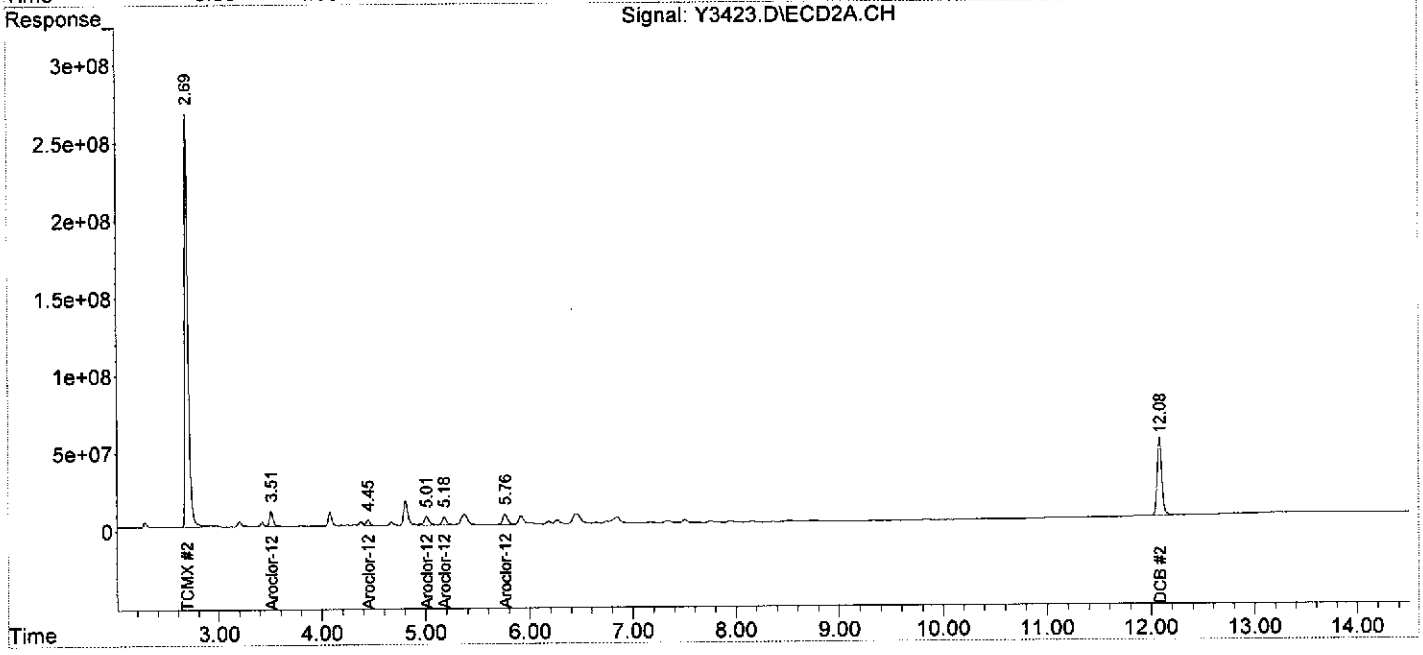
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3423.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:34
Operator : YG
Sample : 8082_1232_IAS_4225,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:44:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:43:35 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3424.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:51
Operator : YG
Sample : 8082_1242_IAS_4226,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:47:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:47:04 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.79	2.69	20638.8E6	6752.1E6	246.000	237.974
Spiked Amount 200.000				Recovery	=	123.00%	118.99%
2) S DCB		12.09	12.08	4032.3E6	1751.7E6	218.137m	223.008m
Spiked Amount 200.000				Recovery	=	109.07%	111.50%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
18) L5 Aroclor-1242		4.08	4.45	831.5E6	176.2E6	500.000	500.000
19) L5 Aroclor-1242	{2}	5.02	5.18	539.7E6	302.3E6	500.000	500.000
20) L5 Aroclor-1242	{3}	5.34	5.76	744.2E6	393.5E6	500.000	500.000
21) L5 Aroclor-1242	{4}	6.04	5.92	1258.7E6	332.0E6	500.000	500.000
22) L5 Aroclor-1242	{5}	6.32	6.46	1113.2E6	651.7E6	500.000	500.000
Sum Aroclor-1242				4487.2E6	1855.7E6	2500.000	2500.000
Average Aroclor-1242						500.000	500.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

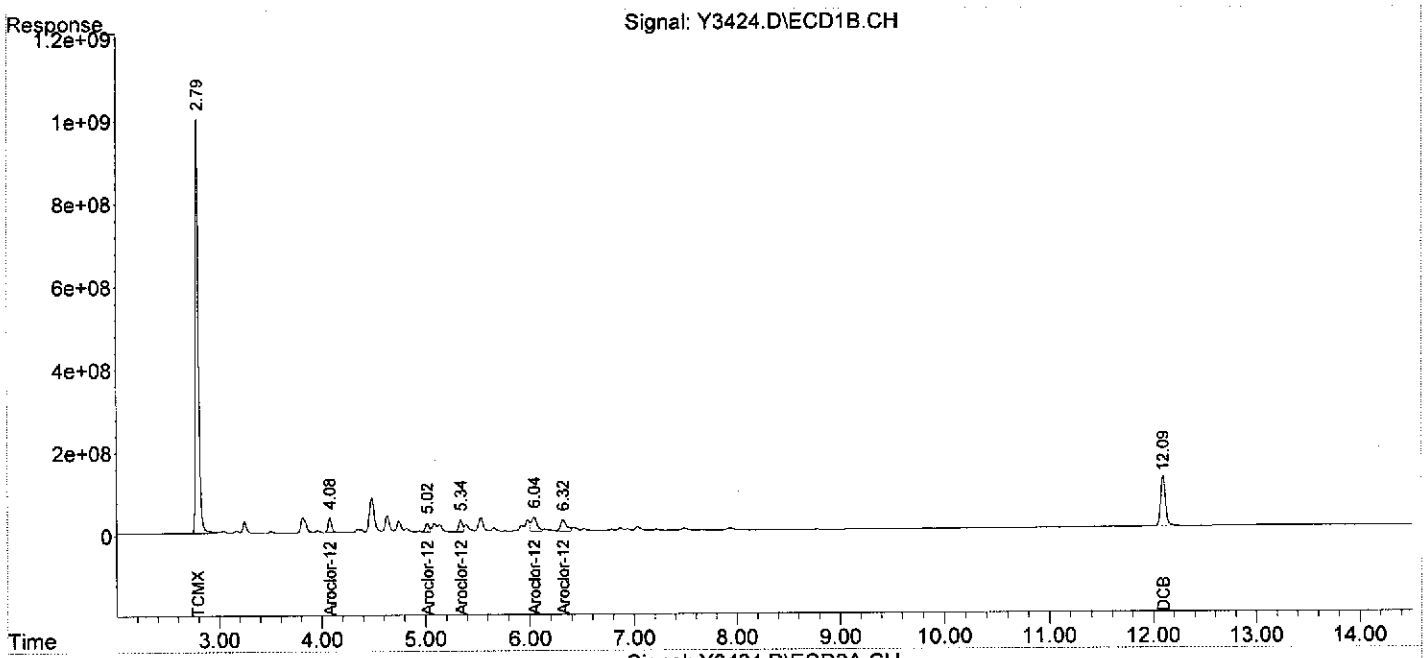
E12-02579 0056

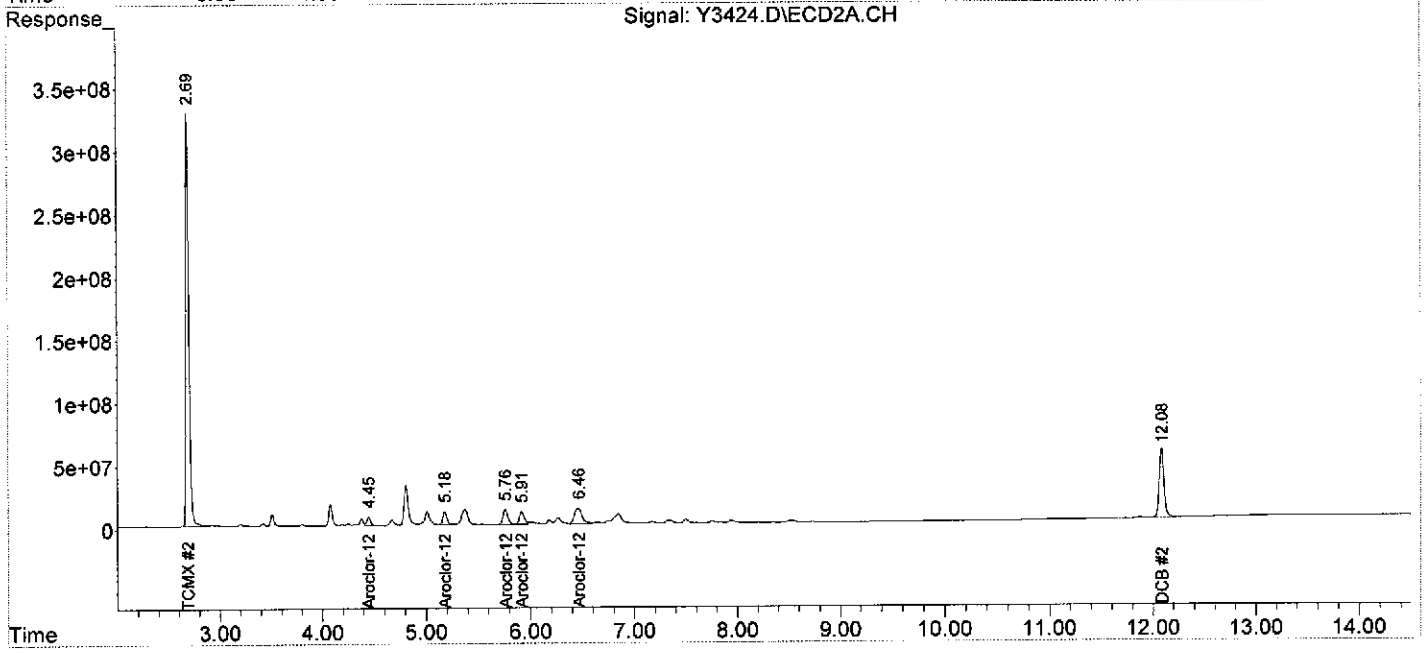
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3424.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:51
Operator : YG
Sample : 8082_1242_IAS_4226,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:47:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:47:04 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3425.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:08
Operator : YG
Sample : 8082_1248_IAS_4227,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:49:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:48:34 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	18644.4E6	6179.4E6	227.639	222.276
Spiked Amount 200.000			Recovery	=	113.82%	111.14%
2) S DCB	12.10	12.08	3969.0E6	1667.1E6	215.471m	215.110m
Spiked Amount 200.000			Recovery	=	107.74%	107.56%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.48	4.81	1846.1E6	607.2E6	500.000	500.000
24) L6 Aroclor-1248 {2}	5.02	5.37	1077.7E6	936.6E6	500.000	500.000
25) L6 Aroclor-1248 {3}	5.34	5.76	1301.3E6	669.9E6	500.000	500.000
26) L6 Aroclor-1248 {4}	6.04	5.92	2504.2E6	614.6E6	500.000	500.000
27) L6 Aroclor-1248 {5}	6.32	6.26	1721.7E6	336.6E6	500.000	500.000
Sum Aroclor-1248			8451.0E6	3164.8E6	2500.000	2500.000
Average Aroclor-1248					500.000	500.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

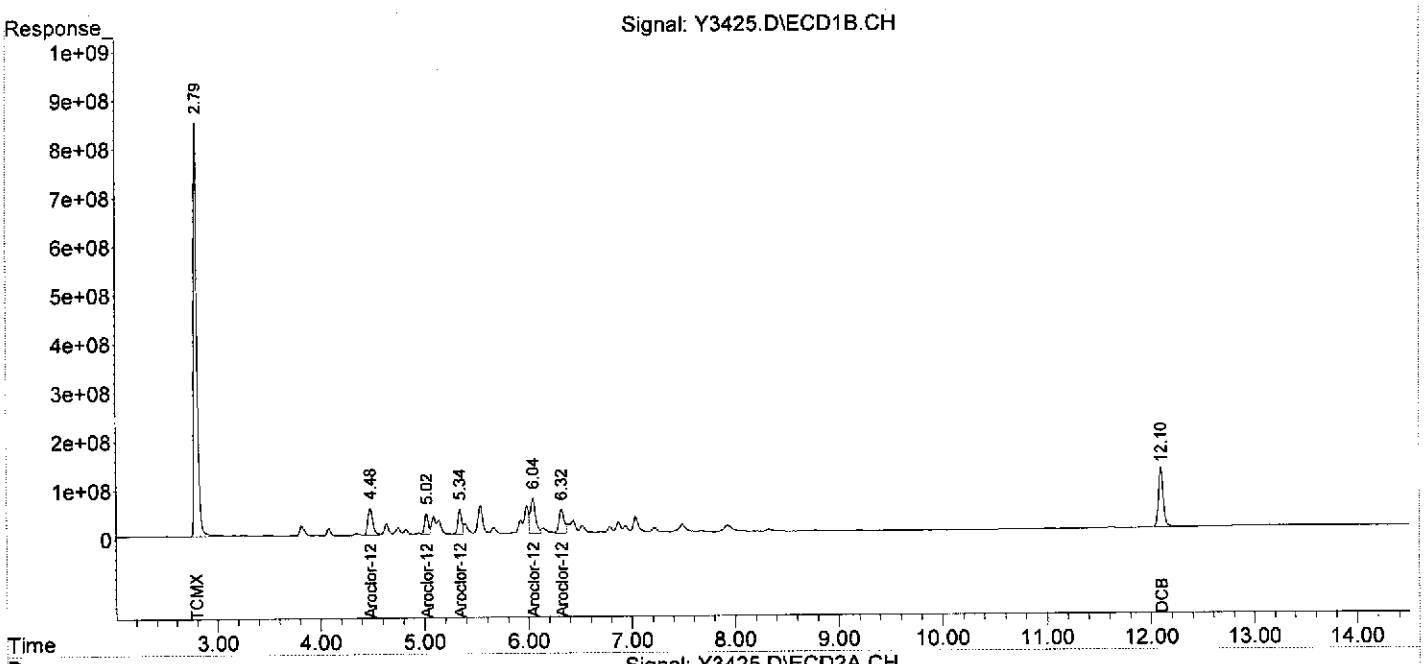
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

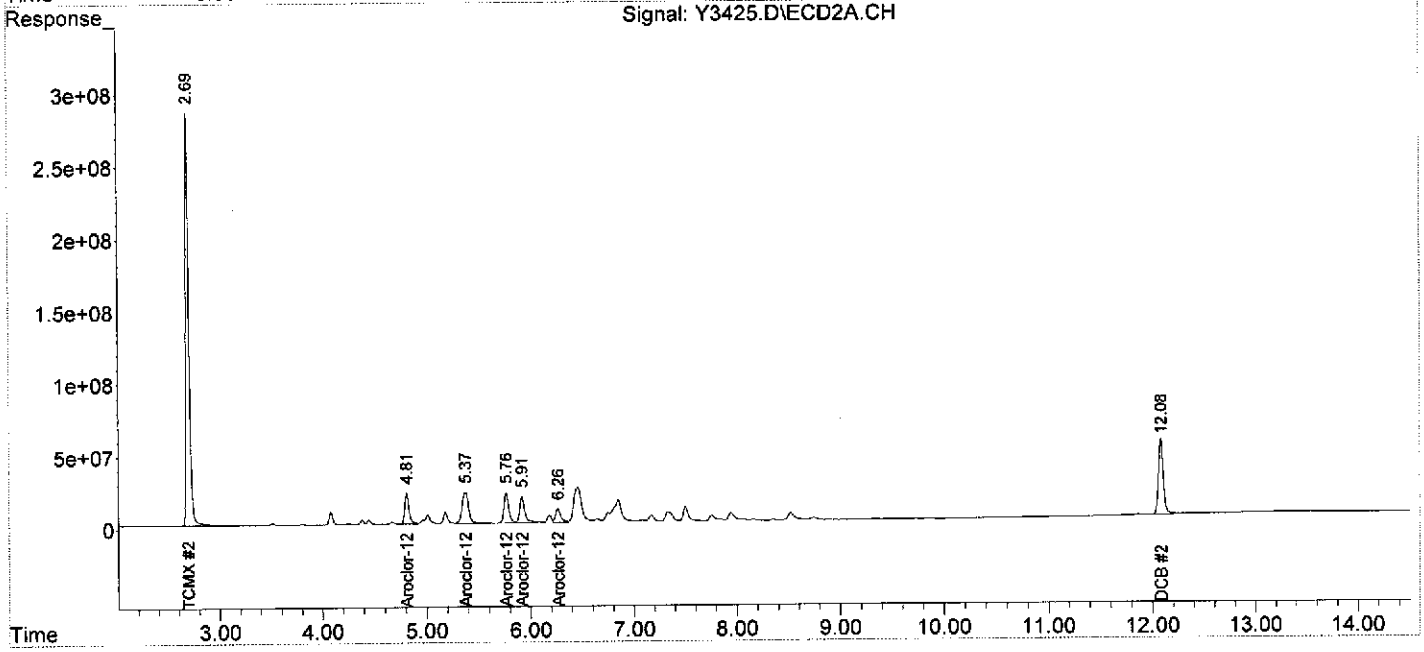
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3425.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:08
Operator : YG
Sample : 8082_1248_IAS_4227,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:49:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:48:34 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3426.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:26
Operator : YG
Sample : 8082_1254_IAS_4228,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:51:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:50:15 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	20266.4E6	6736.7E6	242.638	237.561
Spiked Amount 200.000			Recovery =		121.32%	118.78%
2) S DCB	12.09	12.08	3873.5E6	1795.4E6	211.437	227.678
Spiked Amount 200.000			Recovery =		105.72%	113.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.43	6.75	2528.2E6	809.9E6	500.000	500.000
29) L7 Aroclor-1254 {2}	6.87	7.32	1591.7E6	652.6E6	500.000	500.000
30) L7 Aroclor-1254 {3}	7.04	7.94	3220.6E6	627.9E6	500.000	500.000
31) L7 Aroclor-1254 {4}	7.45	8.16	1196.9E6	463.0E6	500.000	500.000
32) L7 Aroclor-1254 {5}	8.32	8.74	3195.0E6	1076.5E6	500.000	500.000
Sum Aroclor-1254			11732.5E6	3629.9E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

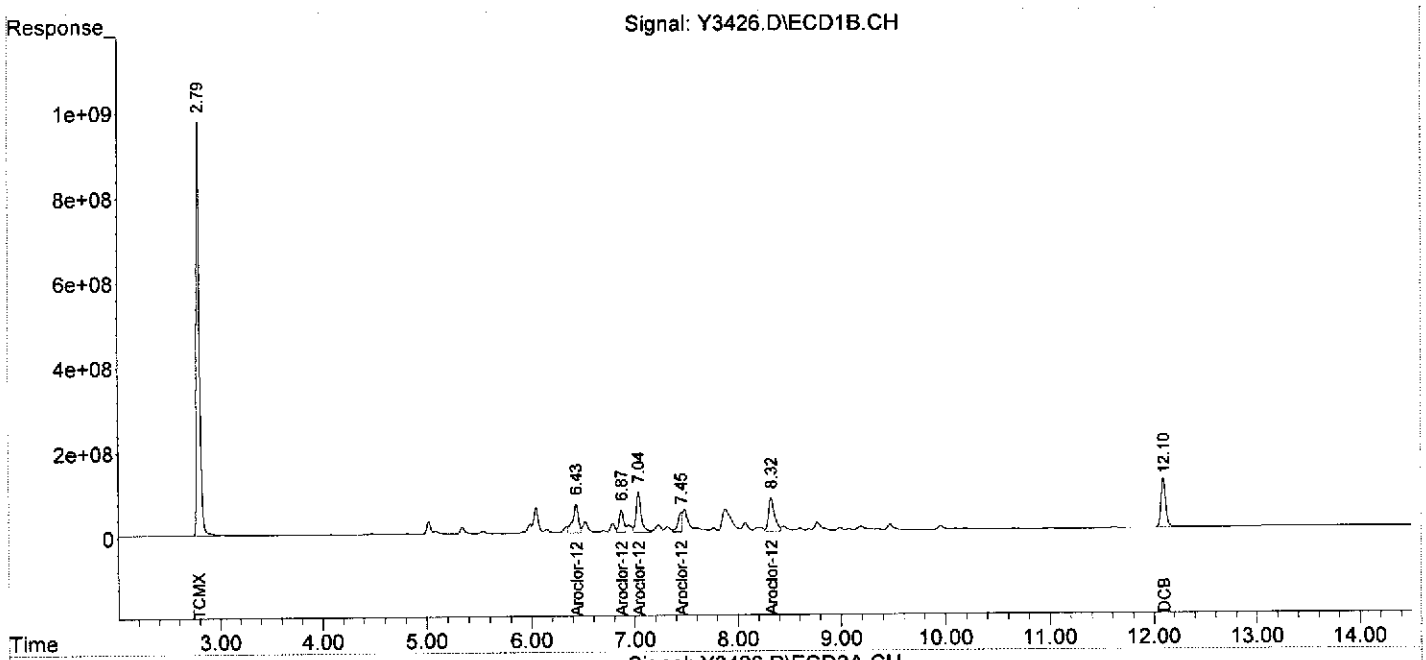
E12-02579 0060

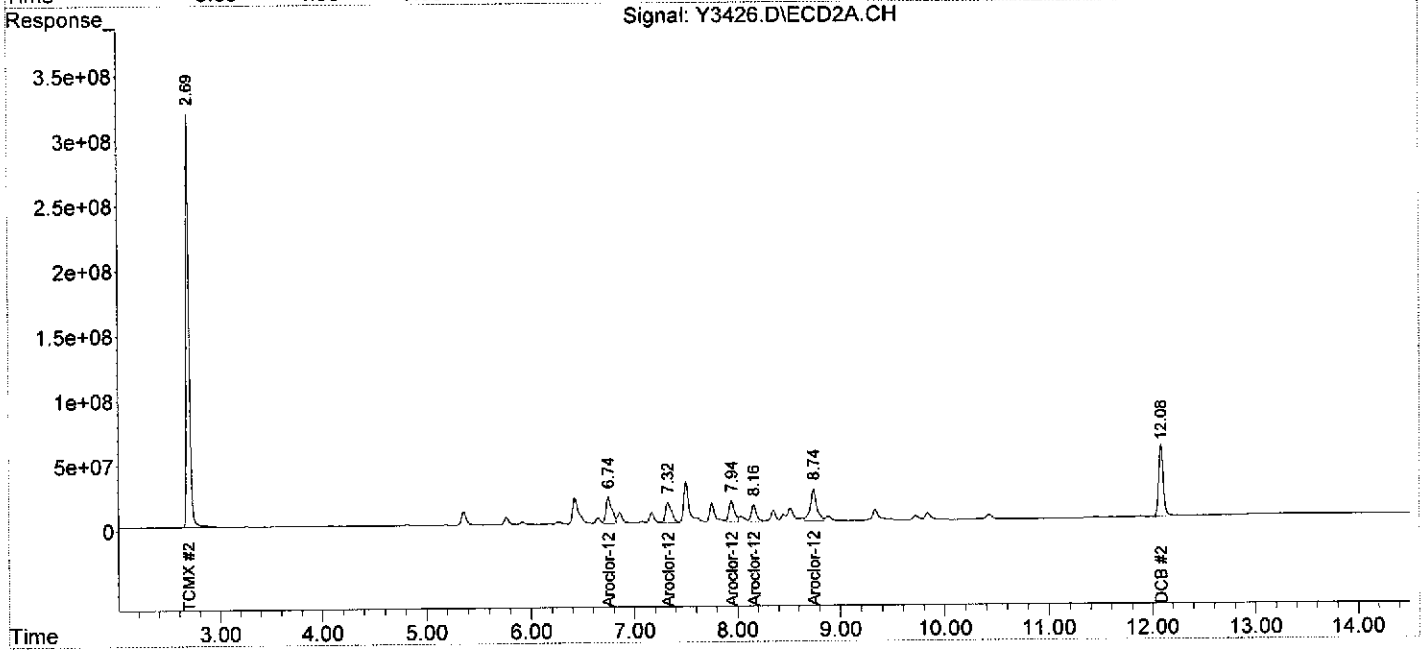
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3426.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:26
Operator : YG
Sample : 8082_1254_IAS_4228,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:51:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:50:15 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3427.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:43
Operator : YG
Sample : 8082_1262_IAS_4229,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:52:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:52:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	19862.7E6	6664.7E6	238.960	235.620
Spiked Amount 200.000			Recovery	=	119.48%	117.81%
2) S DCB	12.09	12.08	4010.2E6	1769.3E6	217.275	225.108
Spiked Amount 200.000			Recovery	=	108.64%	112.55%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
38) L9 Aroclor-1262	8.61	9.33	2894.6E6	844.6E6	500.000	500.000
39) L9 Aroclor-1262 {2}	9.47	9.83	5572.4E6	1933.7E6	500.000	500.000
40) L9 Aroclor-1262 {3}	10.09	10.32	1732.4E6	621.6E6	500.000	500.000
41) L9 Aroclor-1262 {4}	10.18	10.41	2429.5E6	1352.7E6	500.000	500.000
42) L9 Aroclor-1262 {5}	11.01	11.01	1679.4E6	223.2E6	500.000	500.000
Sum Aroclor-1262			14308.5E6	4975.8E6	2500.000	2500.000
Average Aroclor-1262					500.000	500.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

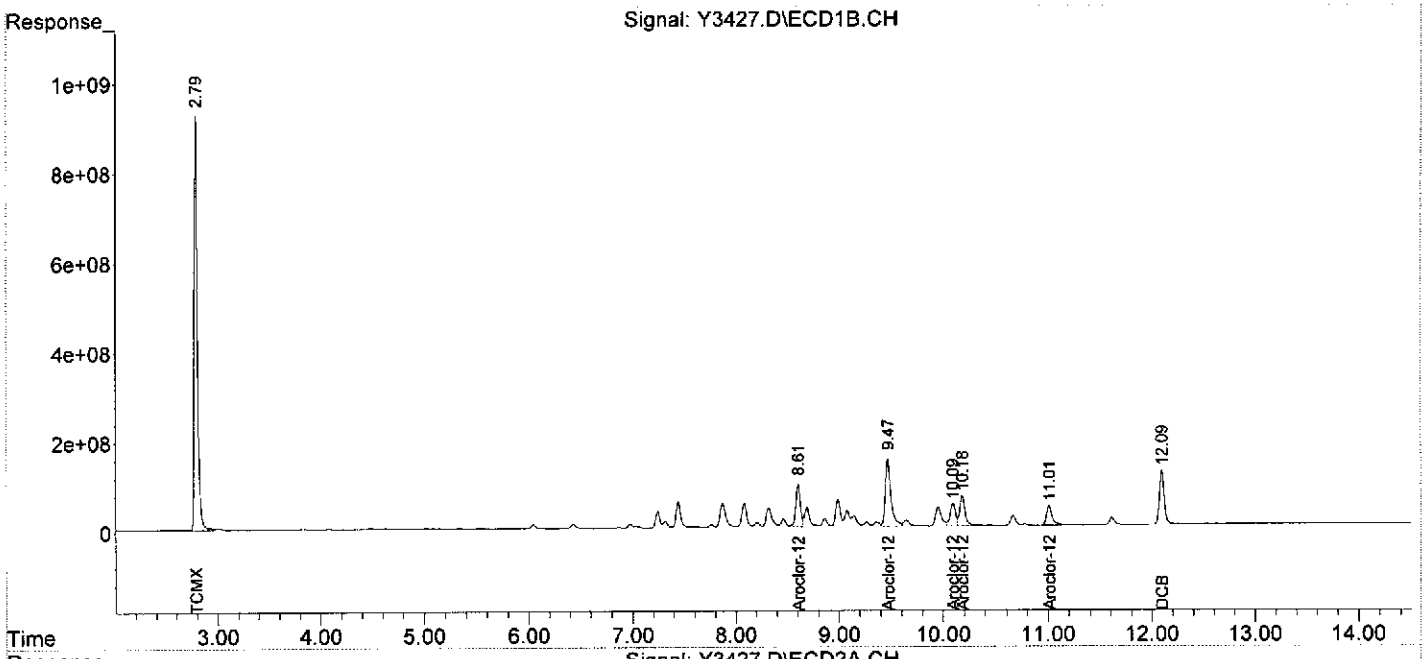
E12-02579 0062

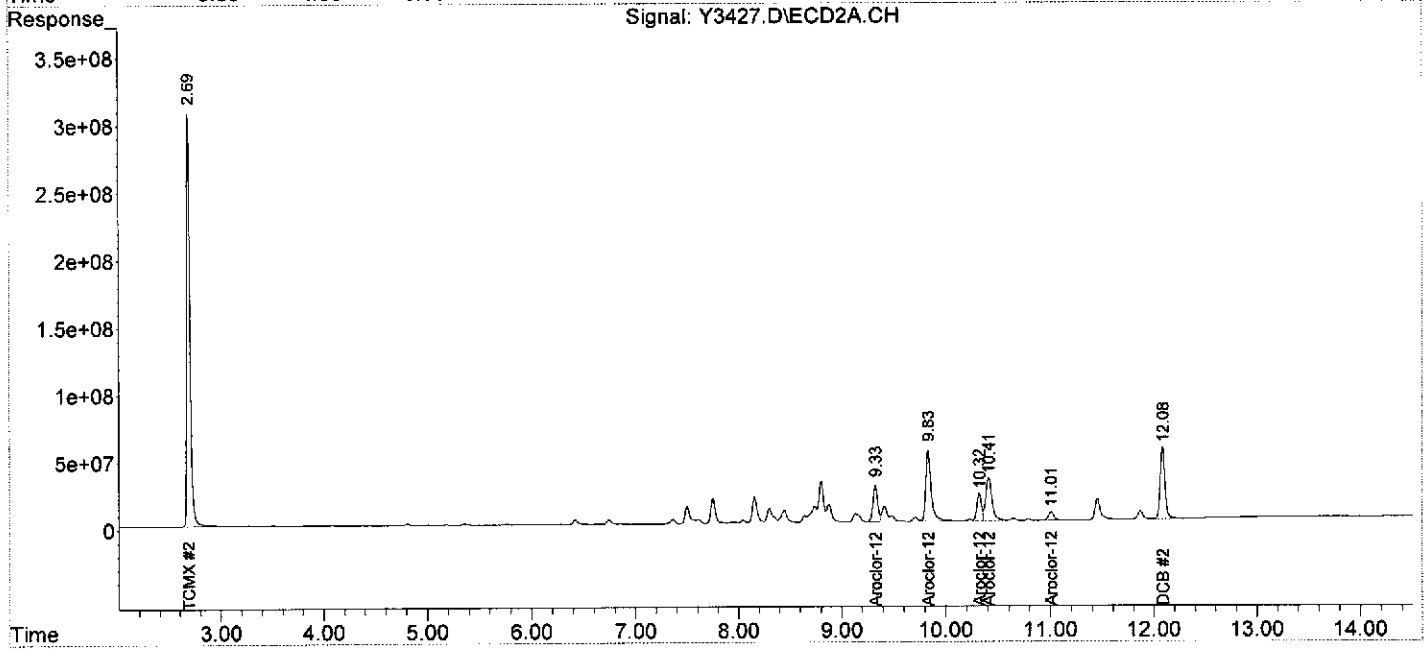
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3427.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:43
Operator : YG
Sample : 8082_1262_IAS_4229,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:52:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:52:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3428.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:00
Operator : YG
Sample : 8082_1268_IAS_4230,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	20402.1E6	6860.1E6	243.866	240.865
Spiked Amount 200.000			Recovery	=	121.93%	120.43%
2) S DCB	12.09	12.08	5132.6E6	2306.7E6	261.850m	275.391m
Spiked Amount 200.000			Recovery	=	130.93%	137.70%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
43) L10 Aroclor-1268	10.10	10.32	4473.2E6	1956.8E6	500.000	500.000
44) L10 Aroclor-1268 {2}	10.18	10.40	6838.5E6	2375.5E6	500.000	500.000
45) L10 Aroclor-1268 {3}	10.65	10.65	4299.1E6	1585.2E6	500.000	500.000
46) L10 Aroclor-1268 {4}	10.78	10.79	1335.3E6	505.1E6	500.000	500.000
47) L10 Aroclor-1268 {5}	11.61	11.87	9997.6E6	3834.0E6	500.000	500.000
Sum Aroclor-1268			26943.7E6	10256.7E6	2500.000	2500.000
Average Aroclor-1268					500.000	500.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

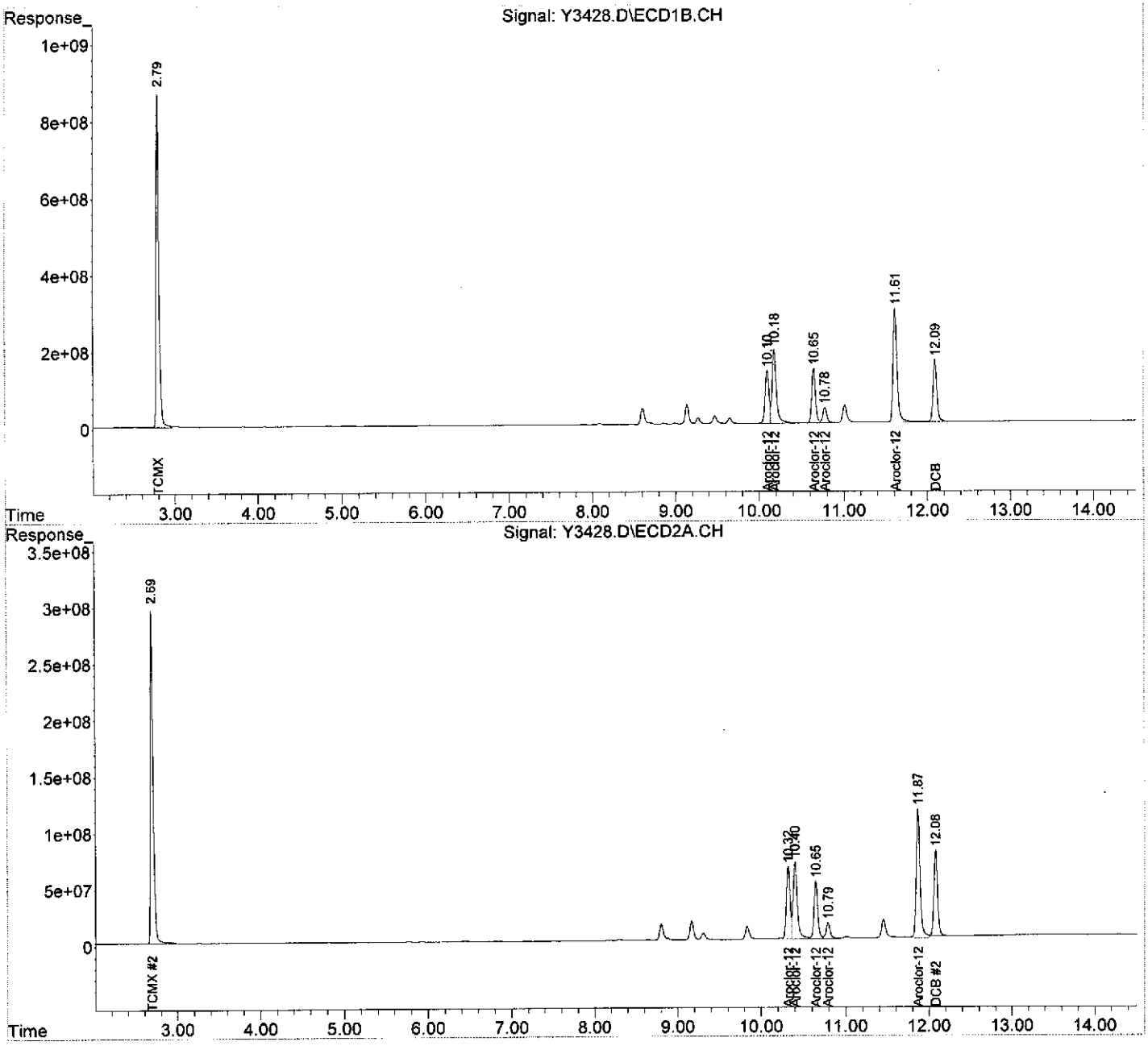
E12-02579 0064

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3428.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:00
Operator : YG
Sample : 8082_1268_IAS_4230,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	15226.7E6	5039.8E6	182.005	176.953
Spiked Amount 200.000			Recovery	=	91.00%	88.48%
2) S DCB	12.10	12.08	3148.5E6	1394.8E6	160.627m	166.522
Spiked Amount 200.000			Recovery	=	80.31%	83.26%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	702.7E6	225.4E6	422.965	428.954
4) L2 Aroclor-1016 {2}	4.08	4.08	903.8E6	449.6E6	423.128	435.242
5) L2 Aroclor-1016 {3}	4.64	4.81	1294.1E6	1014.0E6	435.139	439.877
6) L2 Aroclor-1016 {4}	5.14	5.01	663.6E6	441.7E6	454.338	440.644
7) L2 Aroclor-1016 {5}	5.54	5.18	1068.8E6	342.7E6	424.414	442.061
Sum Aroclor-1016			4633.0E6	2473.4E6	2159.985	2186.778
Average Aroclor-1016					431.997	437.356
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	2945.7E6	571.8E6	450.399	436.463
34) L8 Aroclor-1260 {2}	8.99	8.16	1124.4E6	662.8E6	427.082	433.674
35) L8 Aroclor-1260 {3}	9.47	9.33	3503.0E6	528.9E6	478.792	427.454
36) L8 Aroclor-1260 {4}	9.95	9.84	1725.7E6	1157.0E6	451.709	457.311
37) L8 Aroclor-1260 {5}	11.01	10.42	744.1E6	834.7E6	453.710	456.135
Sum Aroclor-1260			10042.8E6	3755.2E6	2261.692	2211.038
Average Aroclor-1260					452.338	442.208
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

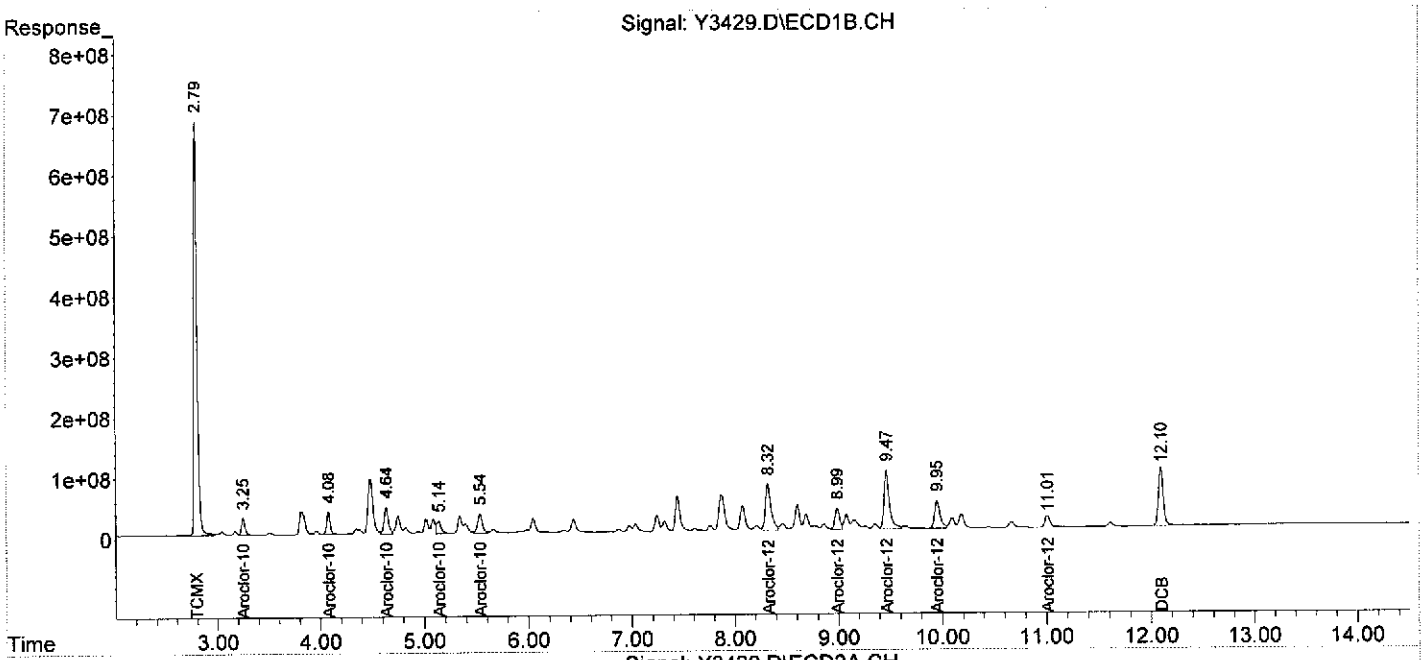
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

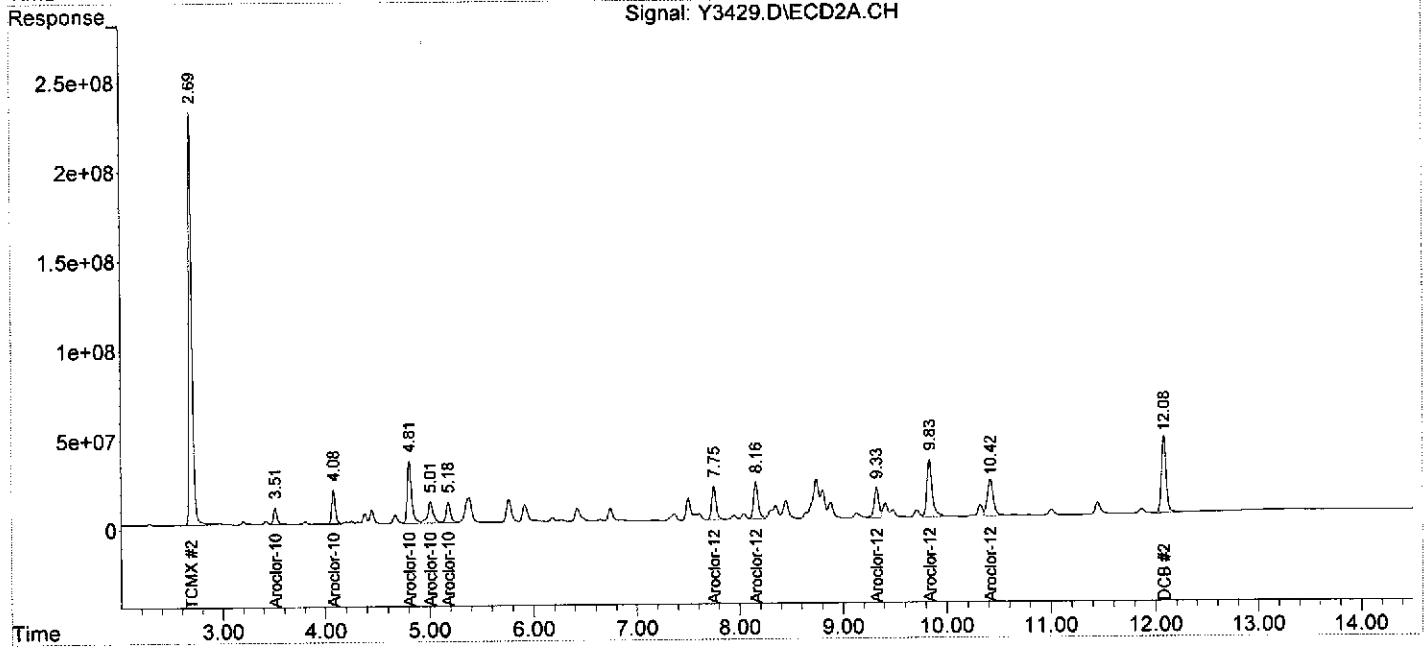
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/16/2012 **Instrument ID:** GC-Y

Data File: Y3573.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.25	3.18	3.32	1661269	1564372	5.83
Aroclor-1016 {2}	4.08	4.01	4.15	2136075	2104053	1.50
Aroclor-1016 {3}	4.63	4.57	4.71	3144442	2908180	7.51
Aroclor-1016 {4}	5.14	5.07	5.21	1526322	1454798	4.69
Aroclor-1016 {5}	5.53	5.47	5.61	2501245	2414545	3.47
Aroclor-1260	8.31	7.42	9.22	6485446	6010837	7.32
Aroclor-1260 {2}	8.99	8.09	9.89	2566031	2219150	13.52
Aroclor-1260 {3}	9.46	8.57	10.37	7329471	6755996	7.82
Aroclor-1260 {4}	9.95	9.05	10.85	3735620	3265311	12.59
Aroclor-1260 {5}	11.01	10.11	11.91	1655164	1368884	17.30
					Average %D	8.15

Data File: Y3573.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.51	3.44	3.58	515113	552441	7.25
Aroclor-1016 {2}	4.08	4.01	4.15	1045400	1115039	6.66
Aroclor-1016 {3}	4.80	4.74	4.88	2329962	2515352	7.96
Aroclor-1016 {4}	5.01	4.94	5.08	1030069	1060658	2.97
Aroclor-1016 {5}	5.18	5.11	5.25	785590	831090	5.79
Aroclor-1260	7.75	6.85	8.65	1310036	1340084	2.29
Aroclor-1260 {2}	8.15	7.26	9.06	1528372	1528396	0.00
Aroclor-1260 {3}	9.32	8.43	10.23	1214977	1191240	1.95
Aroclor-1260 {4}	9.83	8.93	10.73	2593004	2587610	0.21
Aroclor-1260 {5}	10.42	9.52	11.32	1796434	1903556	5.96
					Average %D	4.10

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/16/2012 **Instrument ID:** GC-Y

Data File: Y3587.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.25	3.18	3.32	1661269	1452970	12.54
Aroclor-1016 {2}	4.08	4.01	4.15	2136075	1986334	7.01
Aroclor-1016 {3}	4.63	4.57	4.71	3144442	2714381	13.68
Aroclor-1016 {4}	5.14	5.07	5.21	1526322	1381804	9.47
Aroclor-1016 {5}	5.53	5.47	5.61	2501245	2259403	9.67
Aroclor-1260	8.32	7.42	9.22	6485446	5687339	12.31
Aroclor-1260 {2}	8.99	8.09	9.89	2566031	2230123	13.09
Aroclor-1260 {3}	9.47	8.57	10.37	7329471	6592310	10.06
Aroclor-1260 {4}	9.95	9.05	10.85	3735620	3248003	13.05
Aroclor-1260 {5}	11.01	10.11	11.91	1655164	1577730	4.68
					Average %D	10.55

Data File: Y3587.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.51	3.44	3.58	515113	530643	3.01
Aroclor-1016 {2}	4.08	4.01	4.15	1045400	1079208	3.23
Aroclor-1016 {3}	4.81	4.74	4.88	2329962	2411302	3.49
Aroclor-1016 {4}	5.01	4.94	5.08	1030069	1022530	0.73
Aroclor-1016 {5}	5.18	5.11	5.25	785590	795695	1.29
Aroclor-1260	7.75	6.85	8.65	1310036	1286457	1.80
Aroclor-1260 {2}	8.15	7.26	9.06	1528372	1459836	4.48
Aroclor-1260 {3}	9.33	8.43	10.23	1214977	1141646	6.04
Aroclor-1260 {4}	9.83	8.93	10.73	2593004	2510019	3.20
Aroclor-1260 {5}	10.42	9.52	11.32	1796434	1817308	1.16
					Average %D	2.84

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	17619.6E6	6307.4E6	210.608	221.460
Spiked Amount 200.000			Recovery =		105.30%	110.73%
2) S DCB	12.09	12.08	3266.7E6	1696.7E6	166.658m	202.564m
Spiked Amount 200.000			Recovery =		83.33%	101.28%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	782.2E6	276.2E6	470.836	525.607
4) L2 Aroclor-1016 (2)	4.08	4.08	1052.0E6	557.5E6	492.504	539.753
5) L2 Aroclor-1016 (3)	4.63	4.80	1454.1E6	1257.7E6	488.931	545.591
6) L2 Aroclor-1016 (4)	5.14	5.01	727.4E6	530.3E6	498.047	529.060
7) L2 Aroclor-1016 (5)	5.53	5.18	1207.3E6	415.5E6	479.384	535.963
Sum Aroclor-1016			5223.0E6	3037.3E6	2429.704	2675.974
Average Aroclor-1016					485.941	535.195
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	3005.4E6	670.0E6	459.533	511.468
34) L8 Aroclor-1260 (2)	8.99	8.15	1109.6E6	764.2E6	421.462m	500.008
35) L8 Aroclor-1260 (3)	9.46	9.32	3378.0E6	595.6E6	461.711	481.402
36) L8 Aroclor-1260 (4)	9.95	9.83	1632.7E6	1293.8E6	427.366	511.374
37) L8 Aroclor-1260 (5)	11.01	10.42	684.4E6	951.8E6	417.311	520.101
Sum Aroclor-1260			9810.1E6	4275.4E6	2187.382	2524.353
Average Aroclor-1260					437.476	504.871
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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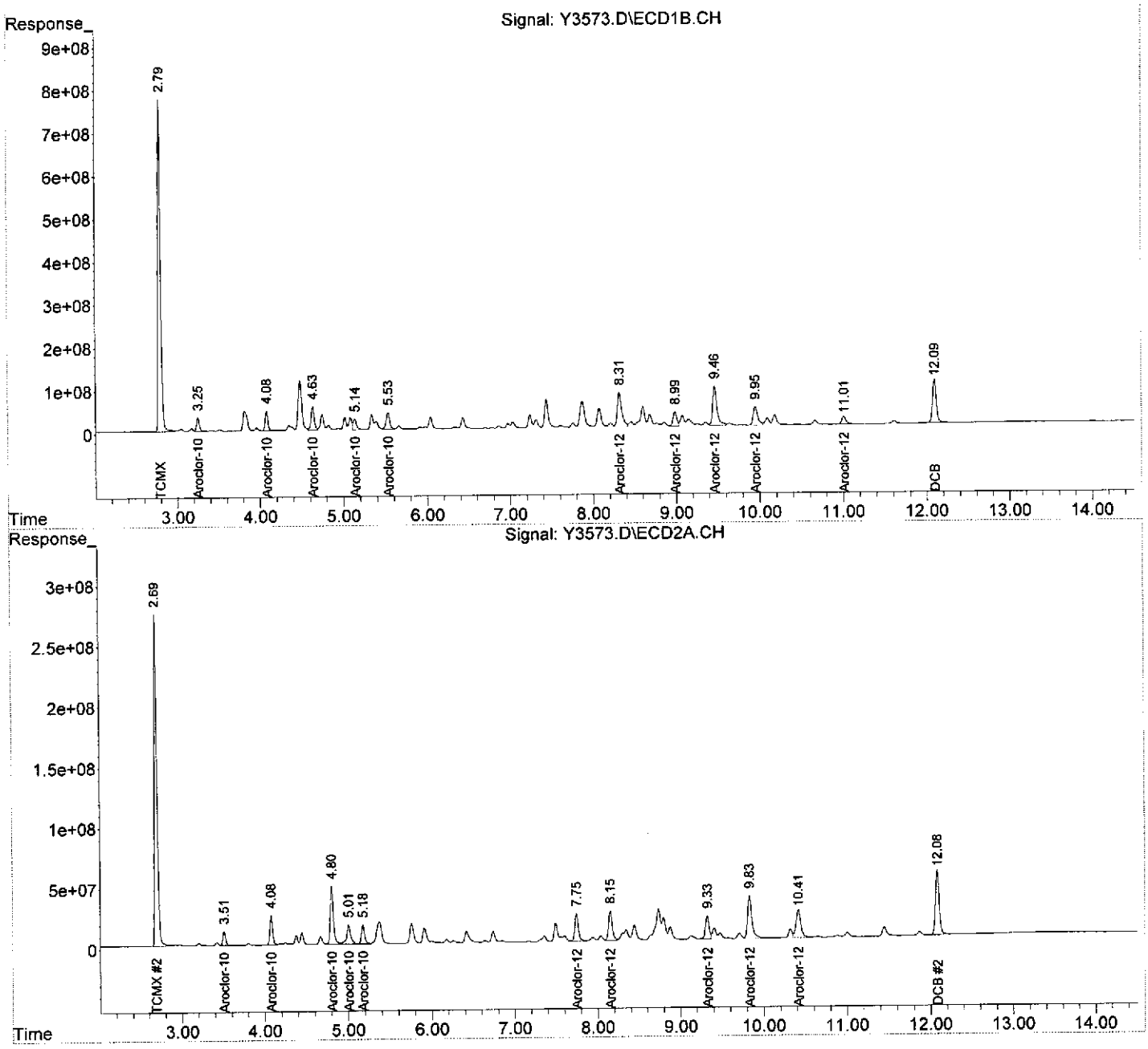
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	16411.6E6	6117.6E6	196.168	214.794
Spiked Amount 200.000			Recovery	=	98.08%	107.40%
2) S DCB	12.09	12.08	3205.4E6	1681.3E6	163.529m	200.724m
Spiked Amount 200.000			Recovery	=	81.76%	100.36%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	726.5E6	265.3E6	437.307	504.868
4) L2 Aroclor-1016 {2}	4.08	4.08	993.2E6	539.6E6	464.949	522.408
5) L2 Aroclor-1016 {3}	4.63	4.81	1357.2E6	1205.7E6	456.349	523.022
6) L2 Aroclor-1016 {4}	5.14	5.01	690.9E6	511.3E6	473.058	510.041
7) L2 Aroclor-1016 {5}	5.53	5.18	1129.7E6	397.8E6	448.582	513.138
Sum Aroclor-1016			4897.4E6	2919.7E6	2280.246	2573.477
Average Aroclor-1016					456.049	514.695
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	2843.7E6	643.2E6	434.801	491.001
34) L8 Aroclor-1260 {2}	8.99	8.15	1115.1E6	729.9E6	423.545m	477.579
35) L8 Aroclor-1260 {3}	9.47	9.33	3296.2E6	570.8E6	450.524	461.360
36) L8 Aroclor-1260 {4}	9.95	9.83	1624.0E6	1255.0E6	425.101	496.040
37) L8 Aroclor-1260 {5}	11.01	10.42	788.9E6	908.7E6	480.978	496.536
Sum Aroclor-1260			9667.8E6	4107.6E6	2214.950	2422.515
Average Aroclor-1260					442.990	484.503
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

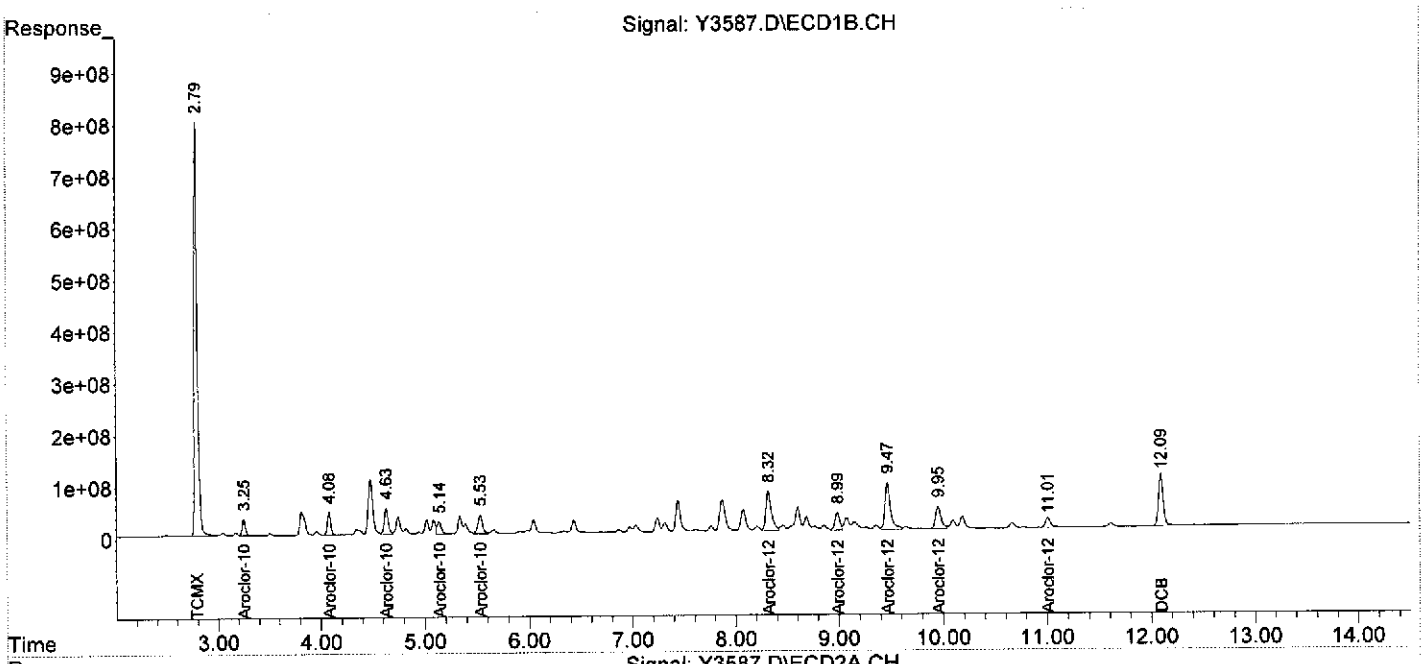
E12-02579 0075

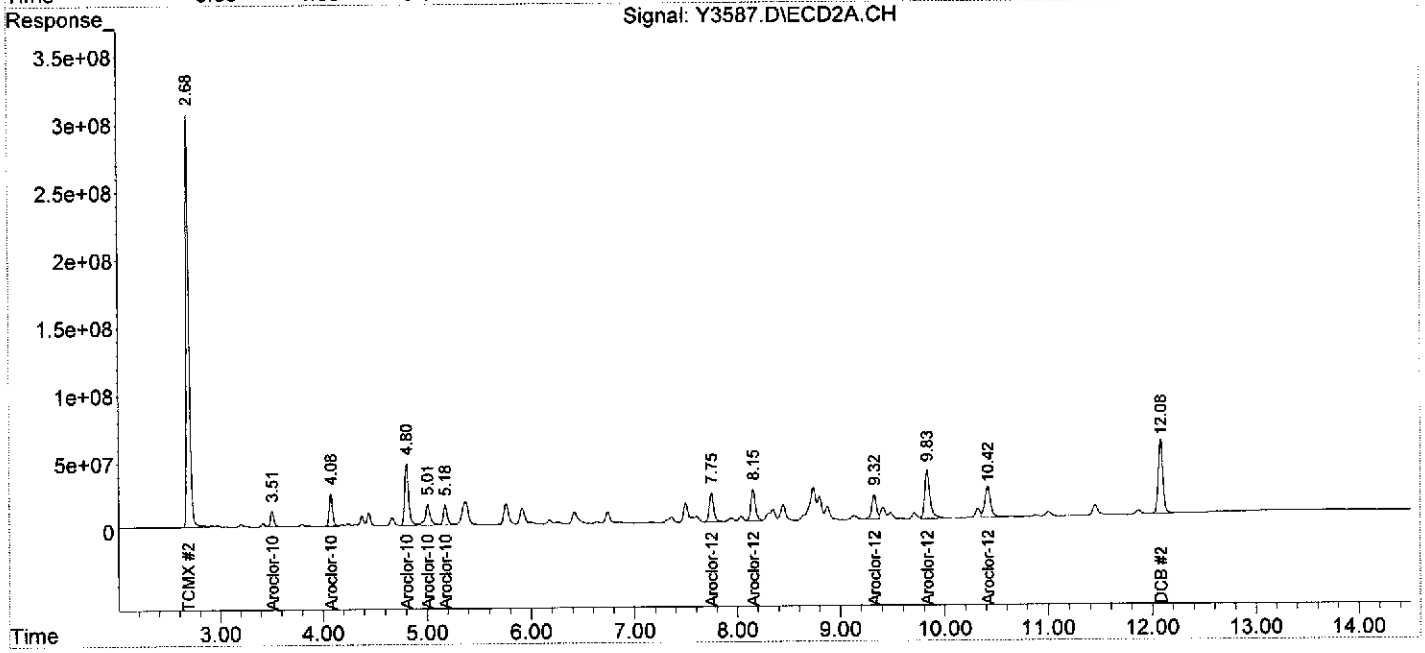
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0315-BLK10
Client ID: PCB
Date Received: NA
Date Extracted: 03/15/2012
Date Analyzed: 03/16/2012
Data file: Y3574.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
PCBs	ND		0.050	0.020

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:35
Operator : YG
Sample : PCB,0315-BLK10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:20:31 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.68	11992.8E6	4670.6E6	143.351	163.991
Spiked Amount 200.000			Recovery	=	71.68%	82.00%
2) S DCB	12.09	12.08	2417.4E6	1231.7E6	123.329m	147.050m
Spiked Amount 200.000			Recovery	=	61.66%	73.53%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

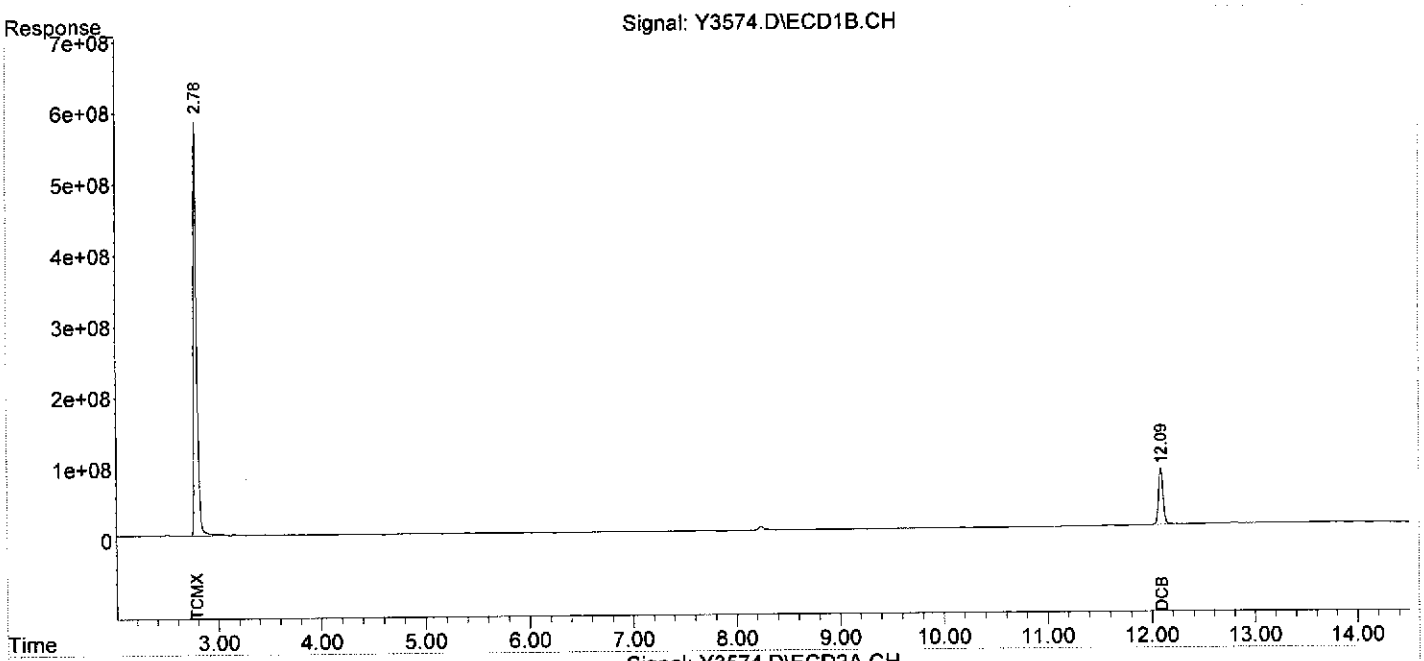
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

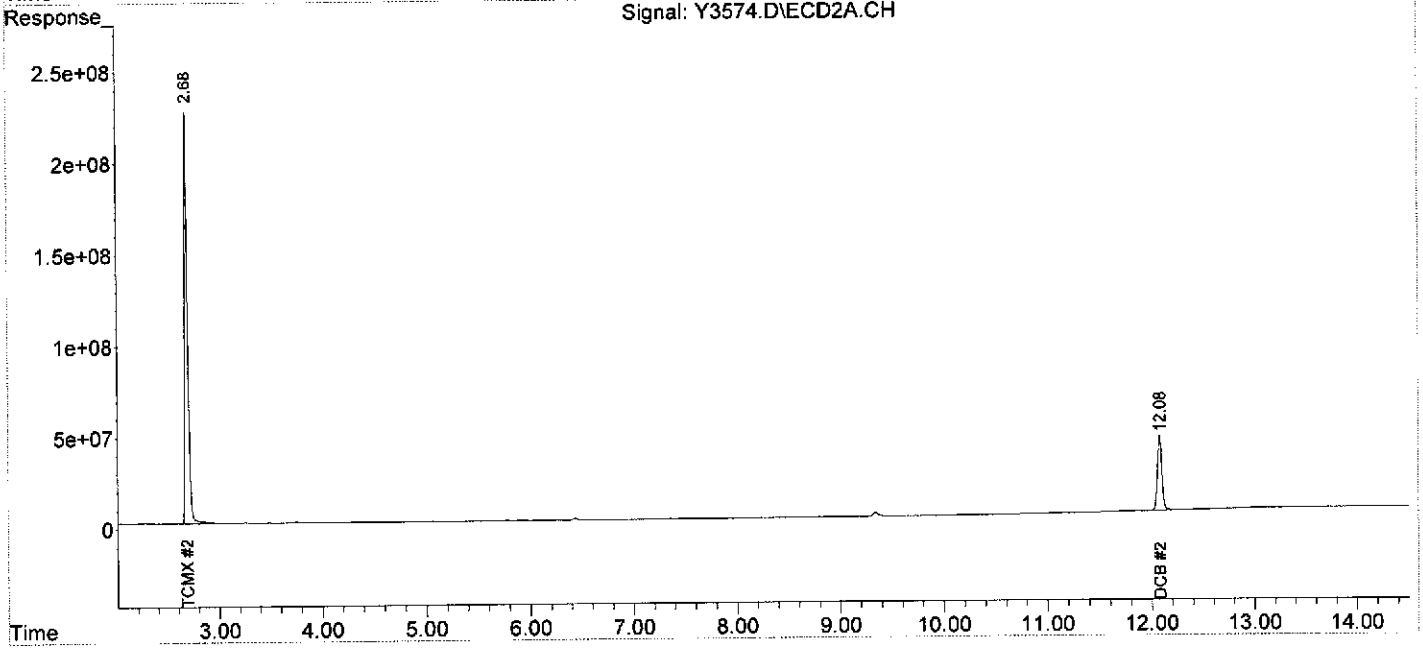
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:35
Operator : YG
Sample : PCB,0315-BLK10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:20:31 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	12150.6E6	4649.2E6	145.237	163.238
Spiked Amount 200.000			Recovery =		72.62%	81.62%
2) S DCB	12.09	12.08	2443.3E6	1230.7E6	124.651m	146.935m
Spiked Amount 200.000			Recovery =		62.33%	73.47%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	546.0E6	213.1E6	328.653	405.477
4) L2 Aroclor-1016 {2}	4.08	4.08	807.7E6	423.5E6	378.118	410.048
5) L2 Aroclor-1016 {3}	4.63	4.80	961.9E6	939.3E6	323.434	407.465 #
6) L2 Aroclor-1016 {4}	5.14	5.01	568.9E6	414.3E6	389.525	413.346
7) L2 Aroclor-1016 {5}	5.53	5.18	903.0E6	313.2E6	358.575	404.015
Sum Aroclor-1016			3787.5E6	2303.5E6	1778.305	2040.351
Average Aroclor-1016					355.661	408.070
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	2538.7E6	565.3E6	388.173	431.539
34) L8 Aroclor-1260 {2}	8.99	8.15	1102.8E6	647.2E6	418.899	423.460
35) L8 Aroclor-1260 {3}	9.46	9.32	2719.7E6	560.1E6	371.727	452.723
36) L8 Aroclor-1260 {4}	9.95	9.83	1440.3E6	1080.3E6	377.014	426.998
37) L8 Aroclor-1260 {5}	11.00	10.41	730.8E6	798.0E6	445.583	436.050
Sum Aroclor-1260			8532.3E6	3651.0E6	2001.395	2170.770
Average Aroclor-1260					400.279	434.154
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

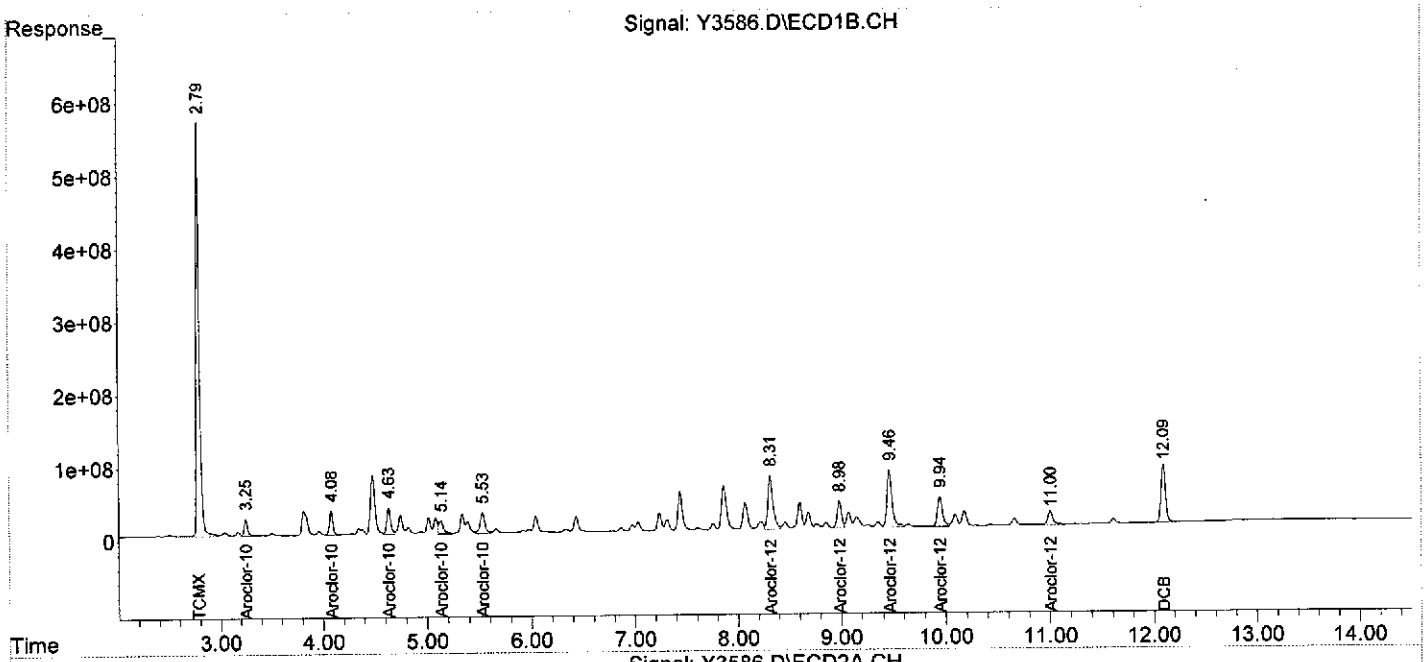
E12-02579 0082

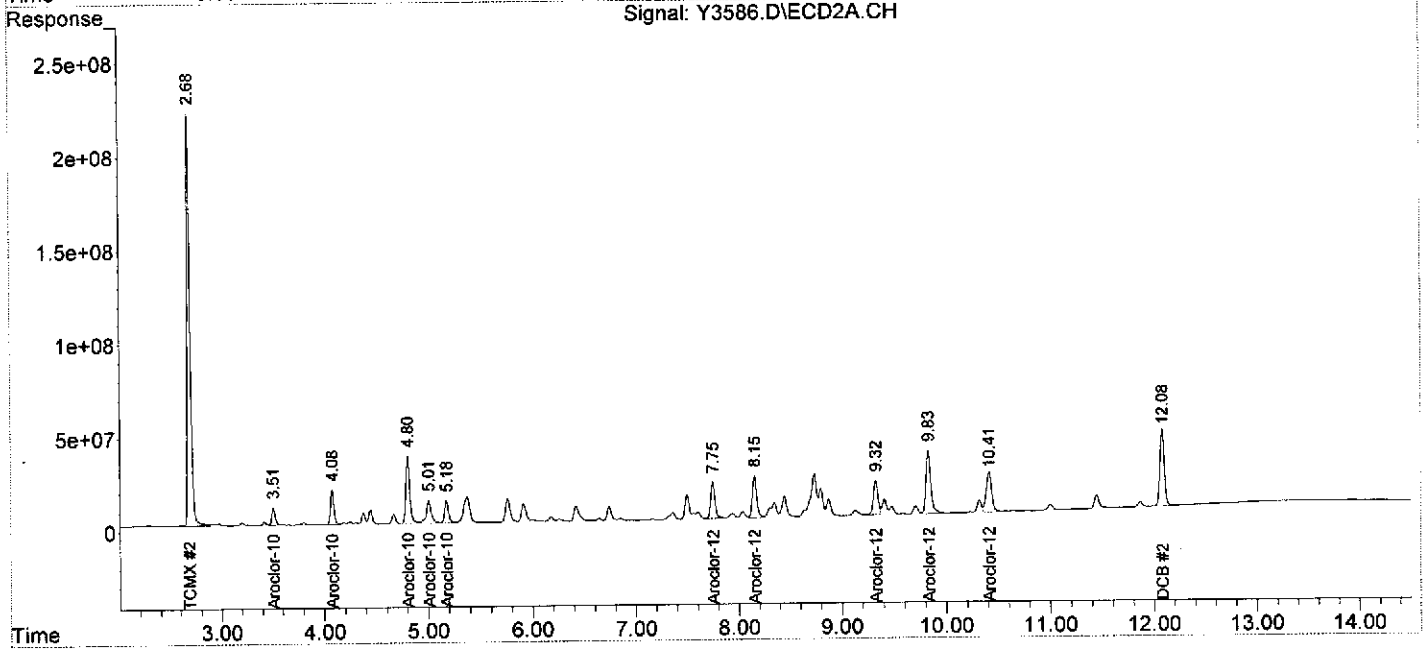
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	9988.0E6	3963.1E6	119.387	139.147
Spiked Amount 200.000			Recovery	=	59.69%	69.57%
2) S DCB	12.09	12.08	2586.3E6	1294.7E6	131.945m	154.568m
Spiked Amount 200.000			Recovery	=	65.97%	77.28%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	570.6E6	194.5E6	343.501	370.157
4) L2 Aroclor-1016 {2}	4.08	4.08	759.5E6	411.4E6	355.553	398.290
5) L2 Aroclor-1016 {3}	4.63	4.80	925.7E6	955.6E6	311.273	414.565 #
6) L2 Aroclor-1016 {4}	5.07	5.00	3781.3E6	422.4E6	2589.047	421.397 #
7) L2 Aroclor-1016 {5}	5.53	5.18	988.9E6	316.9E6	392.656	408.759
Sum Aroclor-1016			7026.0E6	2300.9E6	3992.031	2013.168
Average Aroclor-1016					798.406	402.634
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	2619.9E6	541.3E6	400.587	413.224
34) L8 Aroclor-1260 {2}	8.98	8.15	1314.7E6	701.5E6	499.381	458.960
35) L8 Aroclor-1260 {3}	9.46	9.32	2919.1E6	617.3E6	398.987	498.905 #
36) L8 Aroclor-1260 {4}	9.94	9.83	1642.2E6	1225.7E6	429.871	484.473
37) L8 Aroclor-1260 {5}	11.00	10.41	810.6E6	950.9E6	494.213	519.606
Sum Aroclor-1260			9306.5E6	4036.7E6	2223.040	2375.168
Average Aroclor-1260					444.608	475.034
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

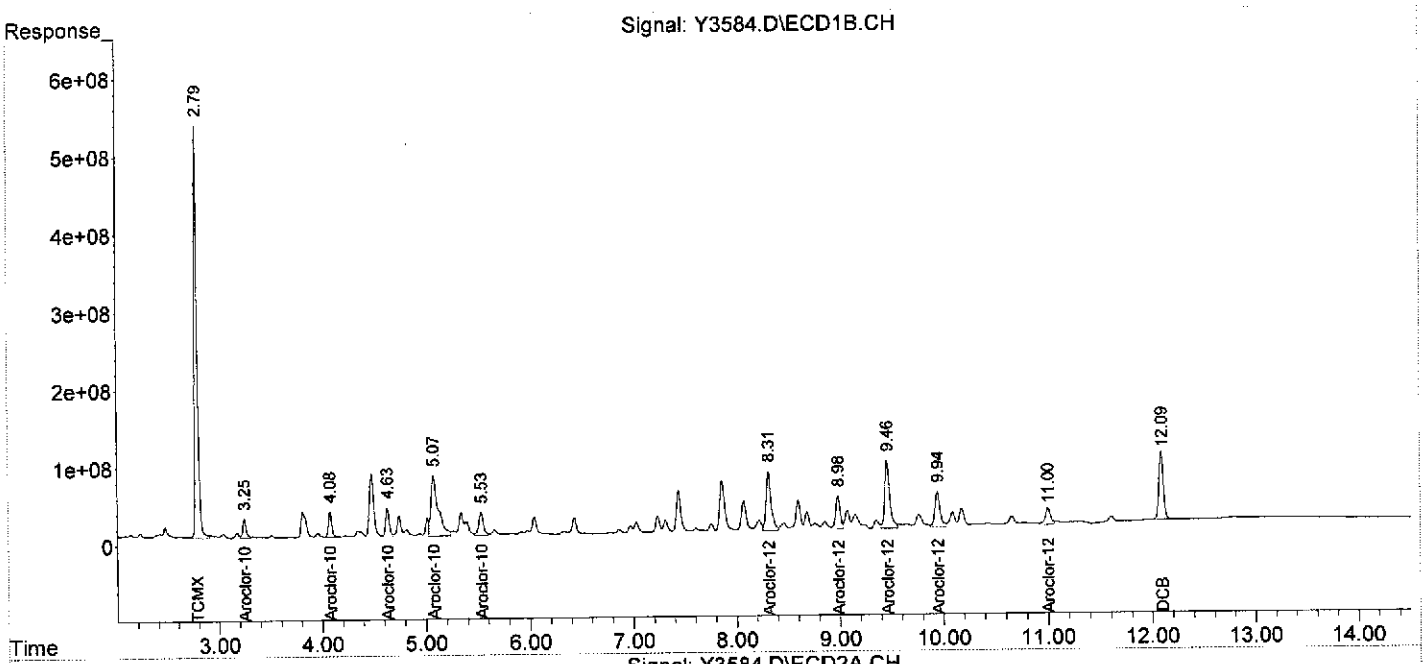
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

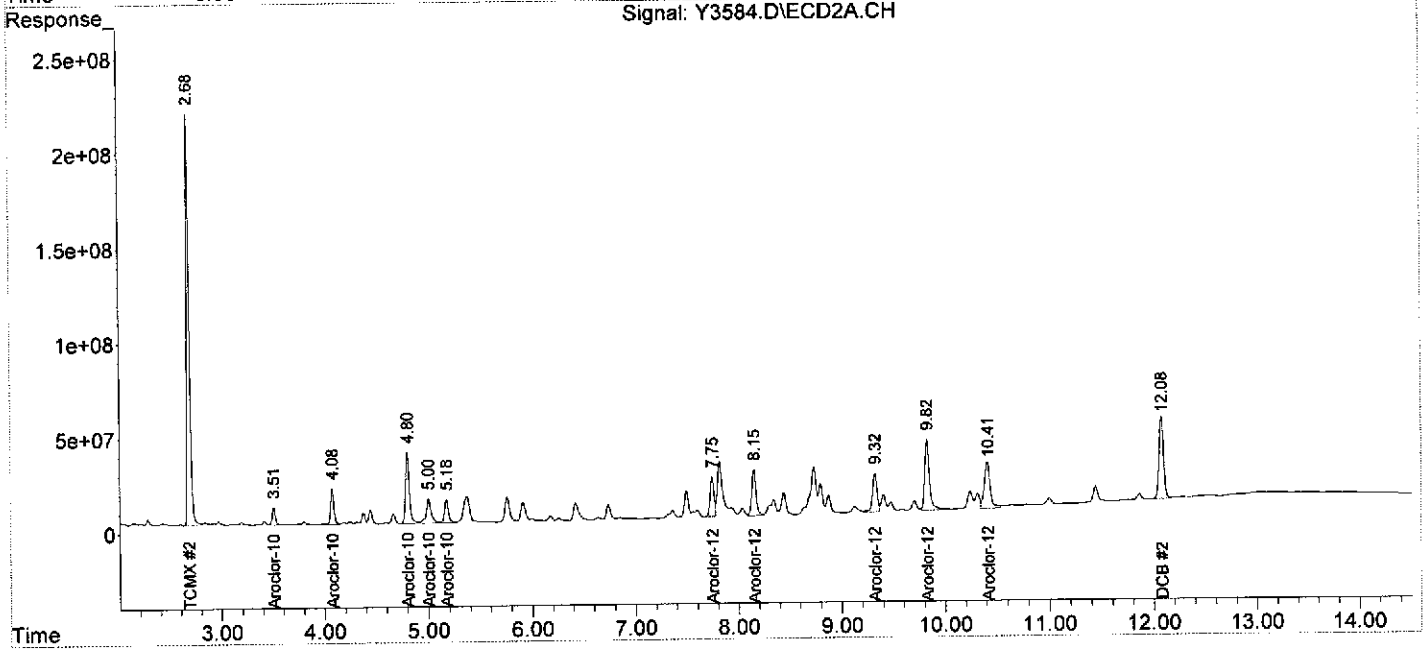
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.79	2.68	10600.4E6	4255.9E6	126.706	149.428	
Spiked Amount 200.000			Recovery =		63.35%	74.71%	
2) S DCB	12.09	12.08	2708.1E6	1347.2E6	138.162m	160.840m	
Spiked Amount 200.000			Recovery =		69.08%	80.42%	
Target Compounds							
3) L2 Aroclor-1016	3.25	3.51	634.9E6	193.2E6	382.207	367.690	
4) L2 Aroclor-1016 {2}	4.08	4.08	750.7E6	413.8E6	351.449	400.603	
5) L2 Aroclor-1016 {3}	4.63	4.80	909.6E6	951.8E6	305.858	412.900	#
6) L2 Aroclor-1016 {4}	5.08	5.01	3796.2E6	420.0E6	2599.231	418.994	#
7) L2 Aroclor-1016 {5}	5.53	5.18	969.4E6	316.8E6	384.915	408.609	
Sum Aroclor-1016			7060.8E6	2295.6E6	4023.659	2008.796	
Average Aroclor-1016					804.732	401.759	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.31	7.75	2664.1E6	557.6E6	407.348	425.608	
34) L8 Aroclor-1260 {2}	8.98	8.15	1295.7E6	728.4E6	492.141	476.587	
35) L8 Aroclor-1260 {3}	9.46	9.32	2911.7E6	673.0E6	397.975	543.956	#
36) L8 Aroclor-1260 {4}	9.94	9.83	1784.6E6	1320.8E6	467.152	522.058	
37) L8 Aroclor-1260 {5}	11.00	10.41	965.1E6	1066.1E6	588.440	582.572	
Sum Aroclor-1260			9621.2E6	4345.9E6	2353.056	2550.781	
Average Aroclor-1260					470.611	510.156	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

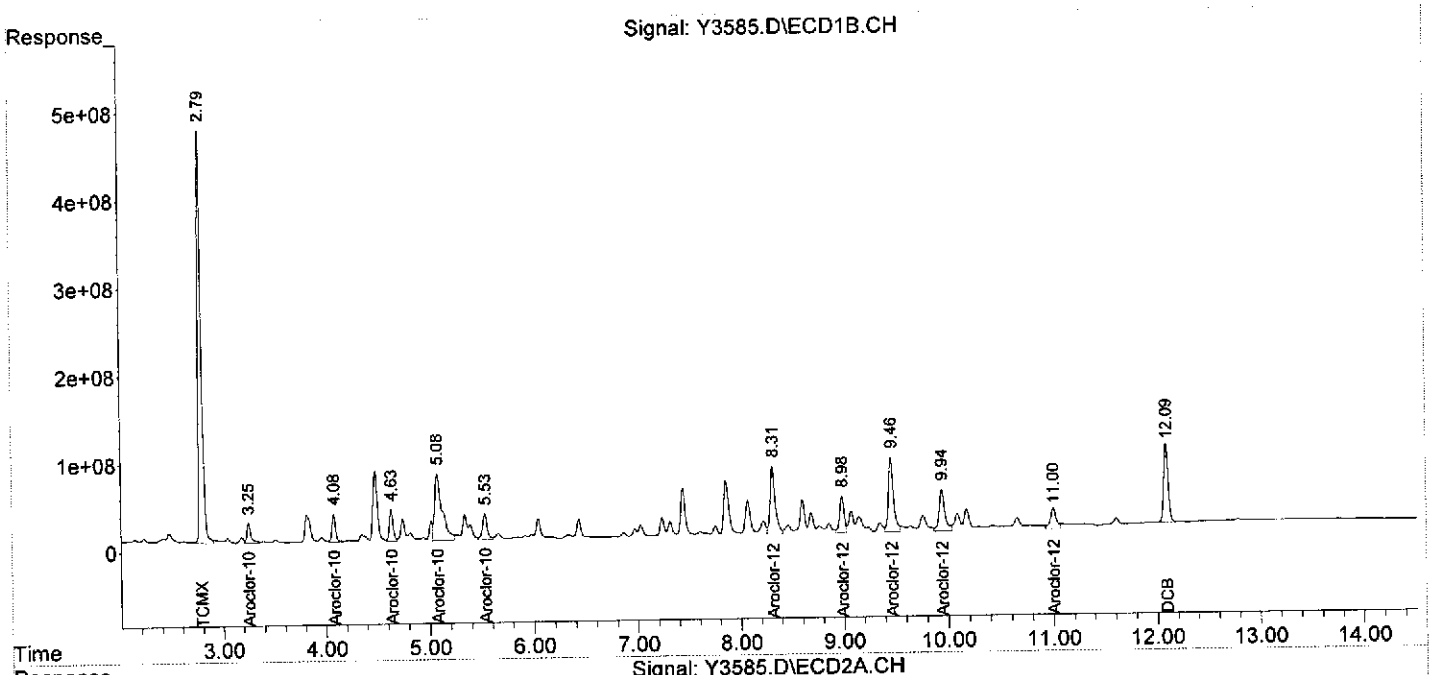
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

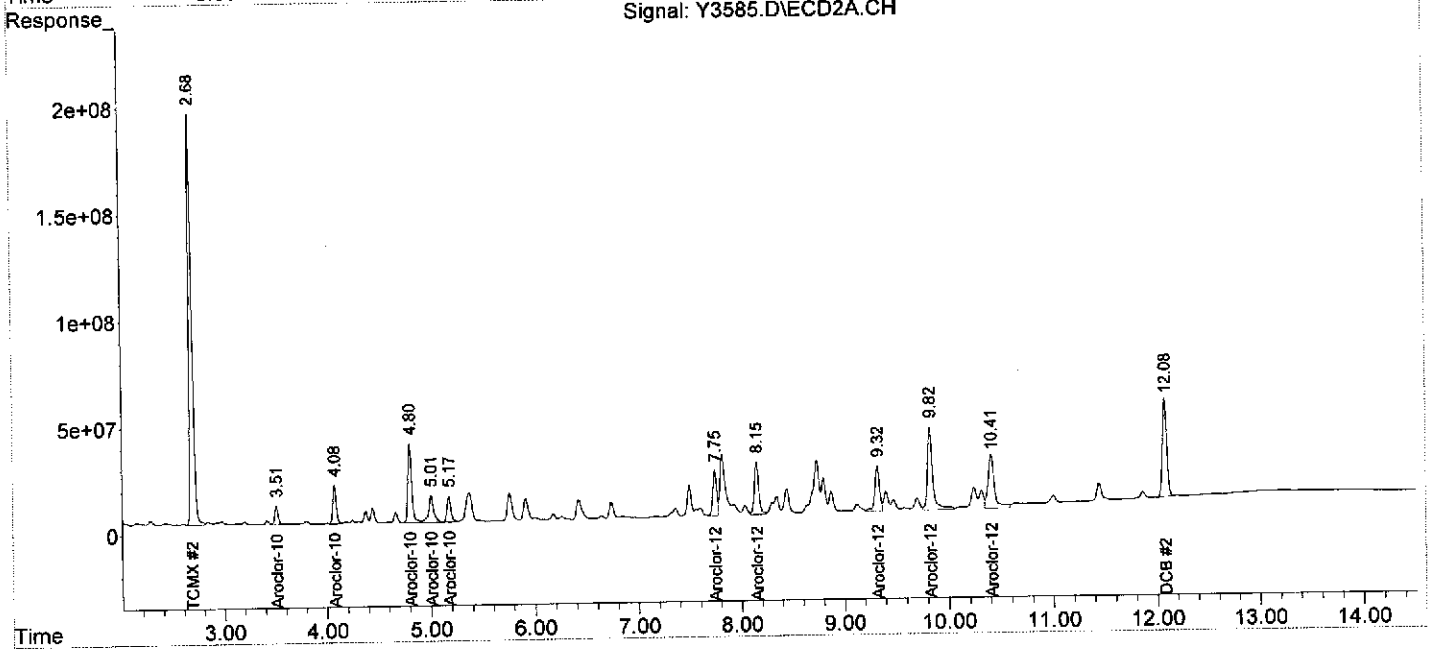
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





PCB RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

PCB

DATE	3/12/2012 13:30	**Extra. Batch**	**CURVE**
INSTRUMENT	**Y**		
METHOD	**YPCB0312**		
SYS METHOD	**8082** (eg. 8015B M, 3810)		
ANALYST	**YULIYA**		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist	Client ID
1	100	Y3415		HEXANE										PCB
2	99	Y3416		ISOOCTANE										PCB
3	1	Y3417		8082_L5_IAS_4219,2_PPM										PCB
4	2	Y3418		8082_L4_IAS_4220,1_PPM										PCB
5	3	Y3419		8082_L3_IAS_4221,0.5_PPM										PCB
6	4	Y3420		8082_L2_IAS_4222,0.05_PPM										PCB
7	5	Y3421		8082_L1_IAS_4223,0.01_PPM										PCB
8	6	Y3422		8082_1221_IAS_4224,0.5_PPM										PCB
9	7	Y3423		8082_1232_IAS_4225,0.5_PPM										PCB
10	8	Y3424		8082_1242_IAS_4226,0.5_PPM										PCB
11	9	Y3425		8082_1248_IAS_4227,0.5_PPM										PCB
12	10	Y3426		8082_1254_IAS_4228,0.5_PPM										PCB
13	11	Y3427		8082_1262_IAS_4229,0.5_PPM										PCB
14	12	Y3428		8082_1268_IAS_4230,0.5_PPM										PCB
15	3	Y3429		8082_C_IAS_4221,0.5_PPM										PCB

LABORATORY CHRONICLE - GC

PCB

DATE 3/16/2012 0:00 **Extra. Batch** 031512-10 BA

INSTRUMENT Y

METHOD YPCB0312

SYS METHOD 8082 (eg. 8015B M, 3810)

ANALYST Yuliya

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Y3573	8082_C_IAS_4221,0.5_PPM										
2	2	Y3574	0315-BLK10			1	1000	3/15/12	A	1			100
3	3	Y3575		02492	1	1	200	3/15/12	A	1	3/12/12	3/12/12	100
4	4	Y3576		02492	2	1	200	3/15/12	A	1	3/12/12	3/12/12	100
5	5	Y3577		02492	3	1	200	3/15/12	A	1	3/12/12	3/12/12	100
6	6	Y3578		02492	4	1	200	3/15/12	A	1	3/12/12	3/12/12	100
7	7	Y3579		02492	5	1	200	3/15/12	A	1	3/12/12	3/12/12	100
8	8	Y3580		02492	6	1	200	3/15/12	A	1	3/12/12	3/12/12	100
9	9	Y3581		02493	1	1	200	3/15/12	A	1	3/12/12	3/13/12	100
10	10	Y3582		02494	1	1	200	3/15/12	A	1	3/13/12	3/13/12	100
11	11	Y3583		02579	1	1	1000	3/15/12	A	1	3/14/12	3/14/12	100
12	12	Y3584	02579-001-MS10			1	200	3/15/12	A	1			100
13	13	Y3585	02579-001-MSD10			1	200	3/15/12	A	1			100
14	14	Y3586	PBA0315-MS10			1	1000	3/15/12	A	1			100
15	1	Y3587	8082_C_IAS_4221,0.5_PPM										

STANDARD IAS#	STANDARD NAME:	Pest + Mirex + Aldrin L-2		
IB 4266 4270				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/06/12	IAS# 4266	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/06/12	1:20			50 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K087J06	

STANDARD IAS#	STANDARD NAME:	Pest + Mirex + Aldrin L-1		
4271				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/06/12	IAS# 4266	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/06/13	1:50			2 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K087J06	

STANDARD IAS#	STANDARD NAME:	QAM Surrogate (1)		
4272				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
3/12/12	Aldrich GTP Mallinckrodt Chlorobenzene	T-280-0 4919	13213 MG 4919 KXHM	neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/12/13	1.0539 GTP 1.42 mL Chlorobenzene → 35mL volume			2,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	DK

STANDARD IAS#	STANDARD NAME:	PCB Spike		
4273				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/12/12	Chem Service	F11285 1260 F10745 1016	45E-133B 1260 45E-124D 1016	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/12/12	5mL 1016 + 5mL 1260			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

F112BS EXP:01/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution
1000ug/ml In Hexane
Lot: 456-138B

FLAMMABLE-REPRODUCTIVE HAZARD
WARNING!: READ your MSDS before HANDLING chemical.

F107AS EXP:12/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution
1000ug/ml In Hexane
Lot: 456-124D

FLAMMABLE-REPRODUCTIVE HAZARD
WARNING!: READ your MSDS before HANDLING chemical

F2170S EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution
1000ug/ml In Hexane
Lot: 463-21A

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:05/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 456-39B

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:05/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 456-39B

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-2		
4255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS#4250	—	—	2ppm + 0.8 ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1:100			0.02ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-3		
4256				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS#4250	—	—	2ppm + 0.8ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1:4			0.5 ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-4		
4256 (4256)				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS# 4250	—	—	2ppm + 0.8ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1: 2.67 (375 µL → 1mL)			0.75 ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB/PEST Surrogate		
4257				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
08/08/12	Chem Service	F-21705 DCB F-90345 TCMX	463-21A DCB 456-39B TCMX	1000 PPM DCB 500 PPM TCMX
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/08/12	5mL (DCB) + 10 ml (TCMX) → 50ml Hexane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	KB

NOTEBOOK INSERT LABEL

Aroclor 1016
Lot: LB79830 EXP: OCT/2013 STORAGE: ROOM TEMP. 4-8097 1 x 1ml

DATE RECEIVED: 04/07/11 MB
1000 ppm

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260
Lot: LB80264 EXP: DEC/2013 STORAGE: ROOM TEMP. 4-4809 1 x 1.0ml

DATE RECEIVED: 04/07/11 MB
1000 ppm

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	PCB Stock		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-8097 (1016) 4-4869 (1260)	LB 79830 (1016) LB 80264 (1260)	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:10 (1mL of each → 10mL)			100 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB Working Standard		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4053	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10 stock (1016/1260) + 40mL IAS#4000 (50ng) → 10mL			10ppm + Surrg (4ppm)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-5 (1016/1260)		
4055				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—	—	10ppm + Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:5			2ppm + Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-4 (1016/1260)		
4056				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—	—	10ppm + Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10			1ppm + Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB World Standard		
4218				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4053	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:10 (Stock 1016/1260) + 400 µL IAS #4184 → 10mL			10ppm + surrog (4ppm)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-5 (1016/1260)		
4219				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:5			2ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-4 (1016/1260)		
4220				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:10			1ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-3 (1016/1260)		
4221				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10 ppm + Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:20			0.5ppm + Surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-2 (1016/1260)		
4222				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4221	–	–	0.5ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:10			0.05 ppm + Surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	PCB - L1 (1016/1260)		
4223				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS #4221	–	–	0.5ppm + surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:50			0.01ppm + surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1221 WORKING STANDARD		
4224				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4067	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:20			0.5ppm + 0.2ppm (surrog.)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1232 WORKING STANDARD		
4225				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4068	–	–	10ppm + 4ppm (surrog)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:20			YB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	05ppm + 0.2ppm (surrog)

YB

STANDARD IAS#	STANDARD NAME:	1242 WORKING STANDARD		
4226				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4069	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1248 WORKING STANDARD		
4227				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4070	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1254 WORKING STANDARD		
4228				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4071	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog.)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

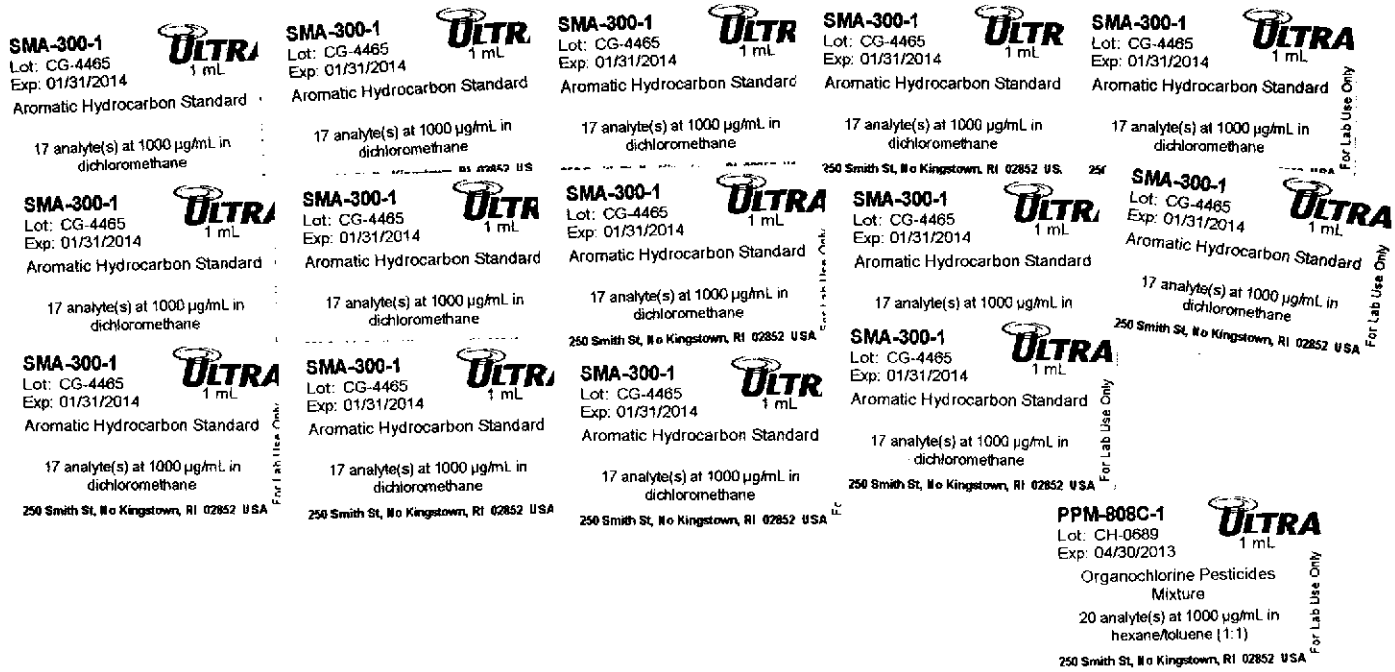
STANDARD IAS#	STANDARD NAME:	1262 WORKING STANDARD		
4229				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS # 4072	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1268 WORKING STANDARD		
4230				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4013	—	—	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	L-5 504.1		
4231				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4042	—	—	3PPM EDB/DBCP 4PPM 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	10µl of IAS# 4042 → 10ml Hexane			2PPB EDB/DBCP 4PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB

STANDARD IAS#	STANDARD NAME:	L-4 504.1		
4232				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4231	—	—	2PPB EDB/DBCP 4PPB 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	750µl of IAS# 4231 → ~~10ml~~ 1ml Hexane			1.5PPB EDB/DBCP 3PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB

STANDARD IAS#	STANDARD NAME:	L-3 504.1		
4233				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4231	—	—	2PPB EDB/DBCP 4PPB 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	500µl of IAS# 4231 → 1ml Hexane			1PPB EDB/DBCP 2PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB



F2170S EXP:10/11 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution
1000ug/ml In Hexane
Lot: 431-70A

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 467-155A

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 467-155A

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	ARO SPIKE		
4182				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-04-12	ULTRA SCIENTIFIC ALDRICH (1,2,3 TRIMETHYL Benzene	SMA-800-1 T-75202	CG-4465 03919 JA	1000 ppm / neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-04-12	1 ml of mix + 1.1 µl of 1,2,3-Trimethylbenzene			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	SH

STANDARD IAS#	STANDARD NAME:	Pest Stock + Mirex		
4183				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ULTRA - Pest ChemService - Mirex	PPM-308C-1 F212RP5	CH-0689 466-109B	1000 PPM (Pest) 100 PPM (Mirex) surrogate-100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/05/13	10µl(ULTRA) + 100µl(ChemService) + 200µl(surrogate) → 10ml(Isooctane)			1000 PPB (Pest) 1000 PPB (Mirex) surrogate-2000 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K089J06	

STANDARD IAS#	STANDARD NAME:	PCB/Pest Surrogate		
4184				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ChemService			1000 PPM DCB 500 PPM TCMX
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/05/12	5ml(DCB) + 10ml(TCMX) → 50ml(Hexane)			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
07/06/21	Hexane		107825	

STANDARD IAS#	STANDARD NAME:	FR. SURROGATE STOCK		
4185				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ALDRICH 2-FBP ALDRICH 2-SNP	102741-25G 103644-5G	09506 PH 12418 HG	neat neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/05/13	1g of each → 10 ml volume			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB64213 EXP: JAN/2012 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 10/6/10 YS
1000ppm

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	PCB L-3 (1016/1260)		
4057				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—		10ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-2 (1016/1260)		
4058				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4057	—	—	0.5ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10			0.05ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-1 (1016/1260)		
4059				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4057	—	—	0.5ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:50			0.01ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1221 Stock 1		
4060				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-8098	LB64213	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	—

NOTEBOOK INSERT LABEL

Aroclor 1232
Lot: LB57806 EXP: APR/2013 STORAGE: ROOM TEMP. 4-4805 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

SUPELCO
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1242
Lot: LB71718 EXP: NOV/2012 STORAGE: ROOM TEMP. 4-4806 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1248
Lot: LB73022 EXP: JAN/2013 STORAGE: ROOM TEMP. 4-4807 1 x 1.0ml

DATE RECEIVED: 05/20/11 YP
1000ppm

SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1254
Lot: LB64150 EXP: JAN/2012 STORAGE: ROOM TEMP. 4-4808 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

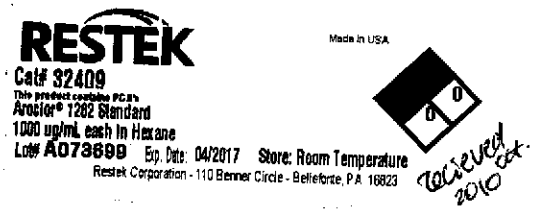
SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

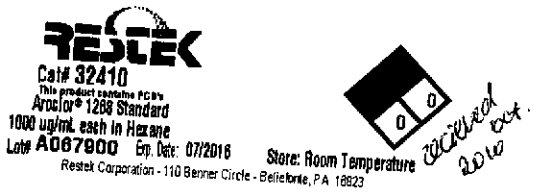
STANDARD IAS#	STANDARD NAME:	1232 Stock 1		
4061				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4805	LB357808	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	~~YB~~

STANDARD IAS#	STANDARD NAME:	1242 Stock 2 1 YB		
4062				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4806	LB 77718	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB

STANDARD IAS#	STANDARD NAME:	1248 Stock 1		
4063				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4807	~~LB~~ LB73022 YB	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB

STANDARD IAS#	STANDARD NAME:	1254 Stock 1		
4064				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/11	Supelco	4-4808	LB64150	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB


RESTEK
Made in USA
Cat# 32409
This product contains PCB's
Aroclor® 1262 Standard
1000 ug/mL each in Hexane
Lot# A073699 Exp. Date: 04/2017 Store: Room Temperature
Restek Corporation - 110 Benner Circle - Bellefonte, PA 16823
0
0
received oct. 2010


RESTEK
Cat# 32410
This product contains PCB's
Aroclor® 1268 Standard
1000 ug/mL each in Hexane
Lot# A067900 Exp. Date: 07/2016 Store: Room Temperature
Restek Corporation - 110 Benner Circle - Bellefonte, PA 16823
0
0
received oct. 2010

STANDARD IAS#	STANDARD NAME:	1262 Stock 1		
4065				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Restek	32409	A073699	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	LG

STANDARD IAS#	STANDARD NAME:	1268 Stock 1		
4066				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Restek	32410	A067900	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YG

STANDARD IAS#	STANDARD NAME:	1221 Stock 2		
4067				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4060	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1221) + 1:25 (IAS# 4000 50ppm) → 1ML			10ppm + 4ppm 50ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1232 Stock 2		
4068				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4061	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1232) + 1:25 (IAS# 4000) → 1ML			10 ppm + 4ppm 50ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1242 Stock 2		
4069				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4062	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1242) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1248 Stock 2		
4070				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4063	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1248) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1254 Stock 2		
4071				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4064	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1254) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1262 Stock 2		
4072				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4065	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1262) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1268 Stock 2		
4073				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4066	—	—	10000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1262) + 1:25 (IAS#4000) = 1ML			10ppm + 4ppm (surrg)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1221 Working Standard		
4044				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4067	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2 ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1232 Working Standard		
4075				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4068	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1242 Working Standard		
4076				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4069	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

INTEGRATED ANALYTICAL LABORATORIES, LLC

Extraction Log - GC
(PCB/Pest)

Extraction Date/Time: 3/15/2012 4:19:00 PM
Technician: A. DelMundo

Tray ID:
Batch ID: 031512-10
Matrix: Aqueous
Factor: 1

Sample ID #	Vap Cell #	Funnel	Test	% Moist	Initial (g/ml)	Final (ml)	Surrogate IAS #:µl	Spike IAS #:µl	Color	%SED	pH	Comments	Done DateTime
BLANK	BLK		PCB	-	1000	5.00	4257 : 10						3/15 18:17
02492-001	01		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-002	02		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-003	03		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-004	04		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-005	05		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-006	06		PCB	100	200	5.00	4257 : 10						3/15 18:17
02493-001	07		PCB	100	200	5.00	4257 : 10						3/15 18:49
02494-001	08		PCB	100	200	5.00	4257 : 10						3/15 18:49
02579-001	09		PCB	100	1000	5.00	4257 : 10					R-48	3/15 18:49
02579-001-MS	10		PCB	-	200	5.00	4257 : 10	4273 : 5					3/15 18:49
02579-001-MSD	11		PCB	-	200	5.00	4257 : 10	4273 : 5					3/15 18:49
BLK-SPK	BSPK		PCB	-	1000	5.00	4257 : 10	4273 : 5					3/15 18:49

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

Color: 1 = Clear; 2 = Light Yellow;
3 = Yellow - Gold; 4 = Brown; 5 = Black

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:
DBC 4.96

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
DRO	0315-BLK01	SOIL	03/15/2012	12:45	73	4.96	
SS-1	02576-001	SOIL	03/15/2012	12:56	82	4.96	
GPEC-MP1	02579-002	SOIL	03/15/2012	13:06	69	4.96	
GPEC-MP2	02579-003	SOIL	03/15/2012	13:17	70	4.96	
GPEC-MP3	02579-004	SOIL	03/15/2012	13:28	70	4.96	
CONC_031	02531-001	SOIL	03/15/2012	13:38	63	4.96	
SOIL_031	02531-003	SOIL	03/15/2012	13:49	77	4.96	
CARTERET	02524-001	SOIL	03/15/2012	13:59	91	4.96	
PRAISE_P	02538-001	SOIL	03/15/2012	14:20	73	4.96	
WC-1	02562-001	SOIL	03/15/2012	14:31	89	4.96	
STOCKPIL	02507-001	SOIL	03/15/2012	14:42	72	4.96	
DRO	02579-002-MS01	SOIL	03/15/2012	14:52	76	4.96	
DRO	02579-002-MSD01	SOIL	03/15/2012	15:03	78	4.96	
DRO	DBS0315-MS01	SOIL	03/15/2012	15:25	66	4.96	
WC-1	02550-001	SOIL	03/15/2012	15:35	75	4.96	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	54 - 168	± 0.080 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: DBS0315-MS01

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	770	77.0		70 - 130

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 02579-002-MSD01

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	47.2	603	55.6		24 - 158

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	47.2	674	62.7		12.0		30	24 - 158

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: Q9971.D

Date Extracted: 03/15/2012

Date Analyzed: 03/15/2012

Instrument ID: GC-Q

Matrix: SOIL

Time Analyzed: 12:45

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SS-1	02576-001	03/15/2012	12:56
GPEC-MP1	02579-002	03/15/2012	13:06
GPEC-MP2	02579-003	03/15/2012	13:17
GPEC-MP3	02579-004	03/15/2012	13:28
CONC_031	02531-001	03/15/2012	13:38
SOIL_031	02531-003	03/15/2012	13:49
CARTERET	02524-001	03/15/2012	13:59
PRAISE_P	02538-001	03/15/2012	14:20
WC-1	02562-001	03/15/2012	14:31
STOCKPIL	02507-001	03/15/2012	14:42
DRO	02579-002-MS01	03/15/2012	14:52
DRO	02579-002-MSD01	03/15/2012	15:03
DRO	DBS0315-MS01	03/15/2012	15:25
WC-1	02550-001	03/15/2012	15:35

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9973.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:06 pm
Operator : JS
Sample : GPEC-MP1,02579-002,S,10.50g,7.00,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	11335663	69.237 ng m
Spiked Amount 100.000		Recovery =	69.24%
Target Compounds			
3) H TPH-DRO	3.300	21822651	47.202 ng

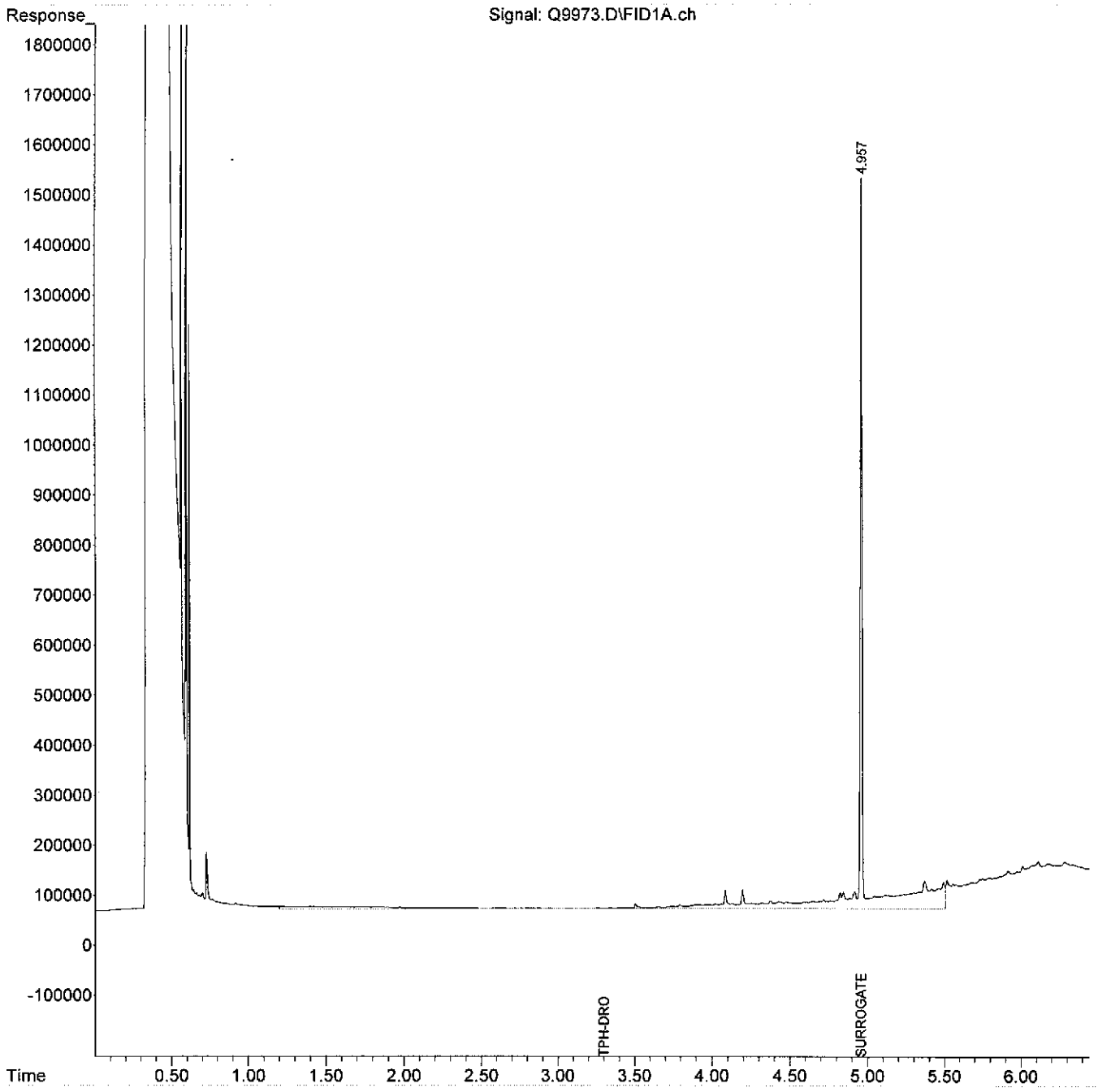
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9973.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:06 pm
Operator : JS
Sample : GPEC-MP1,02579-002,S,10.50g,7.00,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9974.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:17 pm
Operator : JS
Sample : GPEC-MP2,02579-003,S,10.02g,7.50,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	11404279	69.656 ng m
Spiked Amount 100.000		Recovery =	69.66%
Target Compounds			
3) H TPH-DRO	3.300	40989663	88.660 ng

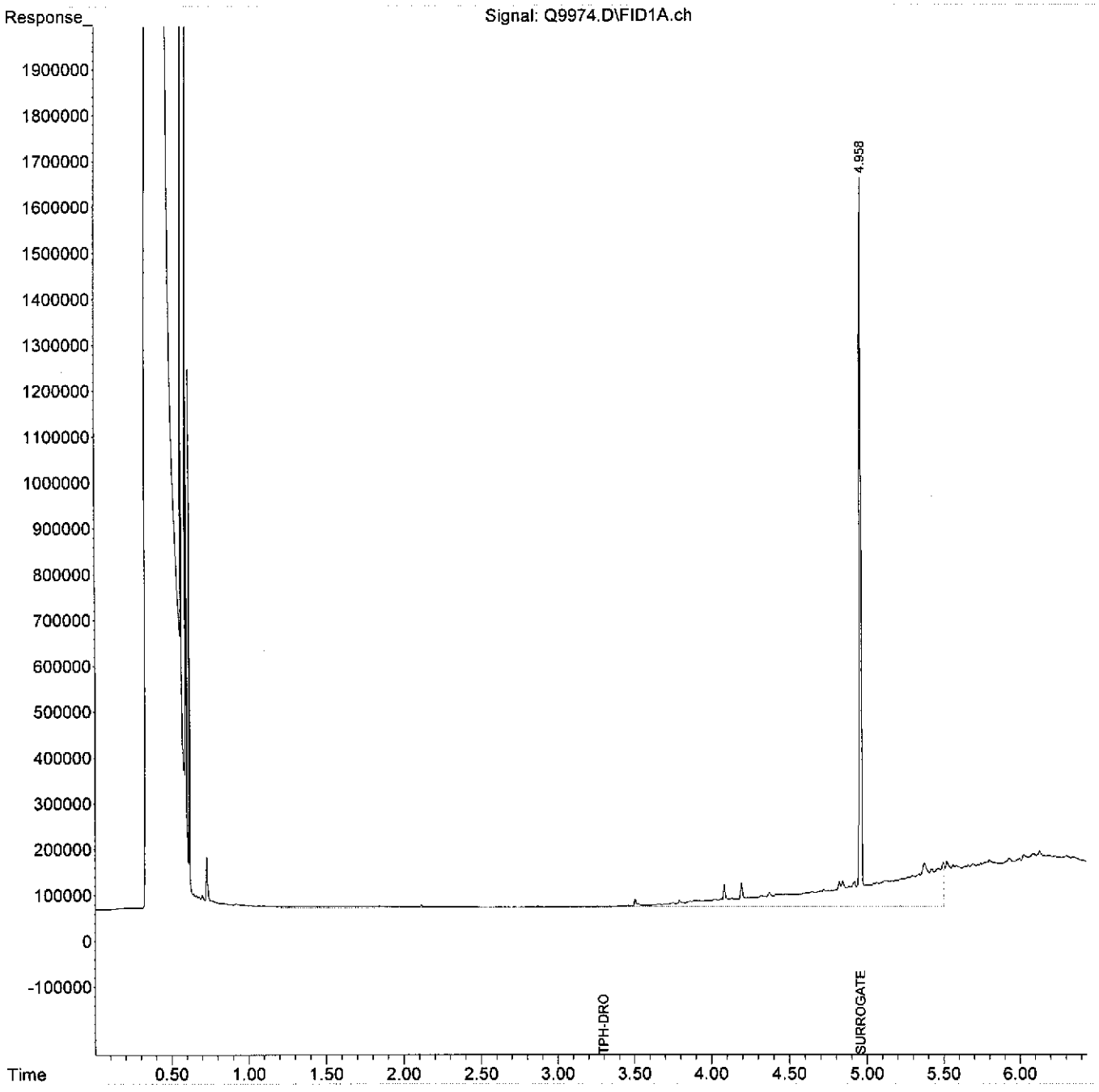
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9974.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:17 pm
Operator : JS
Sample : GPEC-MP2,02579-003,S,10.02g,7.50,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9975.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:28 pm
Operator : JS
Sample : GPEC-MP3,02579-004,S,10.55g,6.70,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	11417174	69.735 ng m
Spiked Amount 100.000		Recovery =	69.73%
Target Compounds			
3) H TPH-DRO	3.300	37621187	81.374 ng

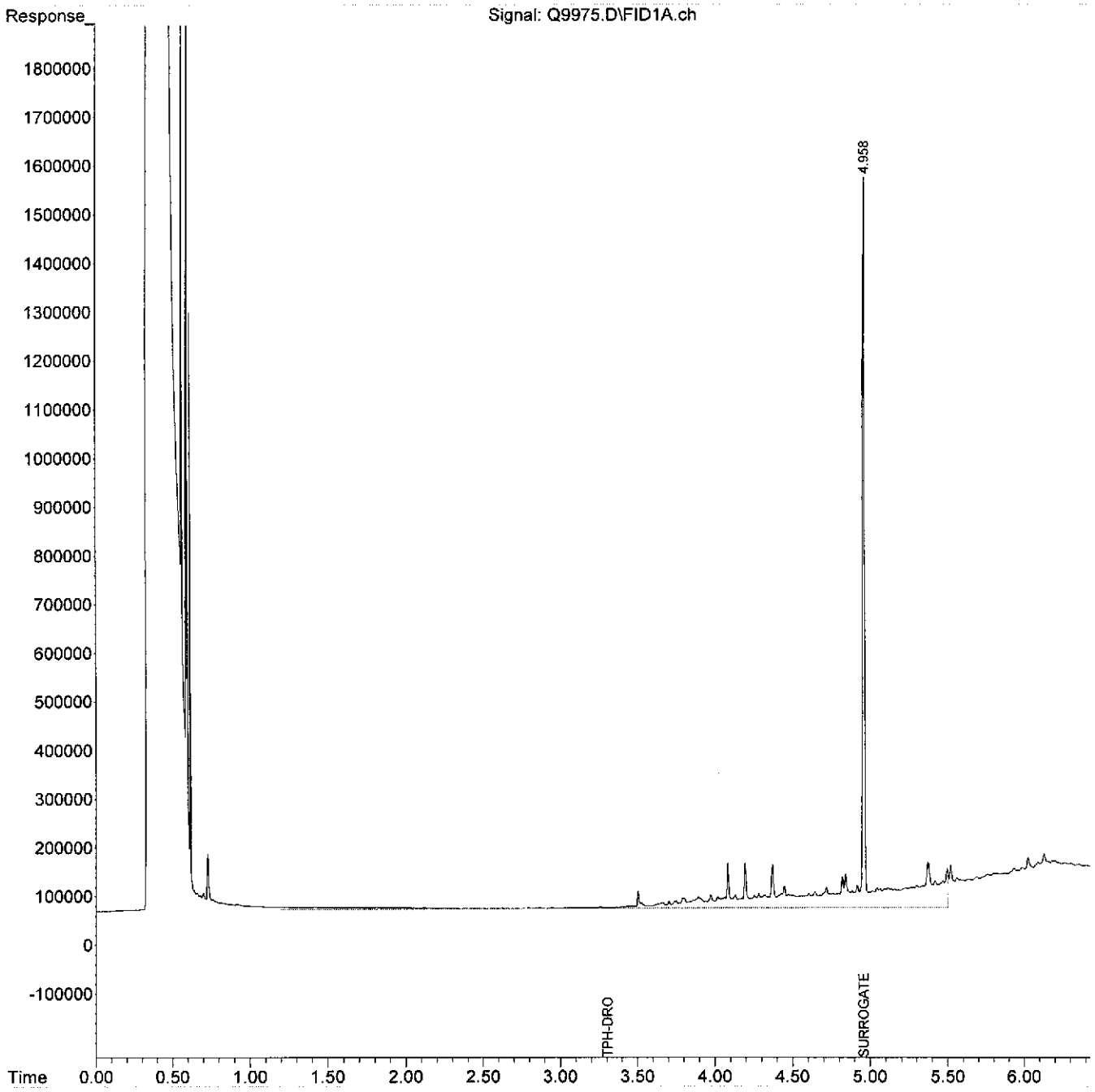
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9975.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:28 pm
Operator : JS
Sample : GPEC-MP3,02579-004,S,10.55g,6.70,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/14/2012 Instrument ID: GC-Q

Date File: Q9957.D Q9956.D Q9955.D Q9954.D Q9953.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.23	3.37

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RF	%RSD
TPH-DRO	52.4	44.0	42.7	52.3	39.7	46.2	12.6

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 03/15/2012 12:35

Date File: Q9970.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		46.2	43.0	6.93

Date Analyzed: 03/15/2012 15:46

Date File: Q9987.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		46.2	42.4	8.23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9953.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:25 pm
Operator : JS
Sample : DRO/GRO_L5_IAS_4213,4000_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:39 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	56455190	344.822 ng
Spiked Amount 100.000		Recovery = 344.82%	
Target Compounds			
3) H TPH-DRO	3.300	1586403342	3431.371 ng

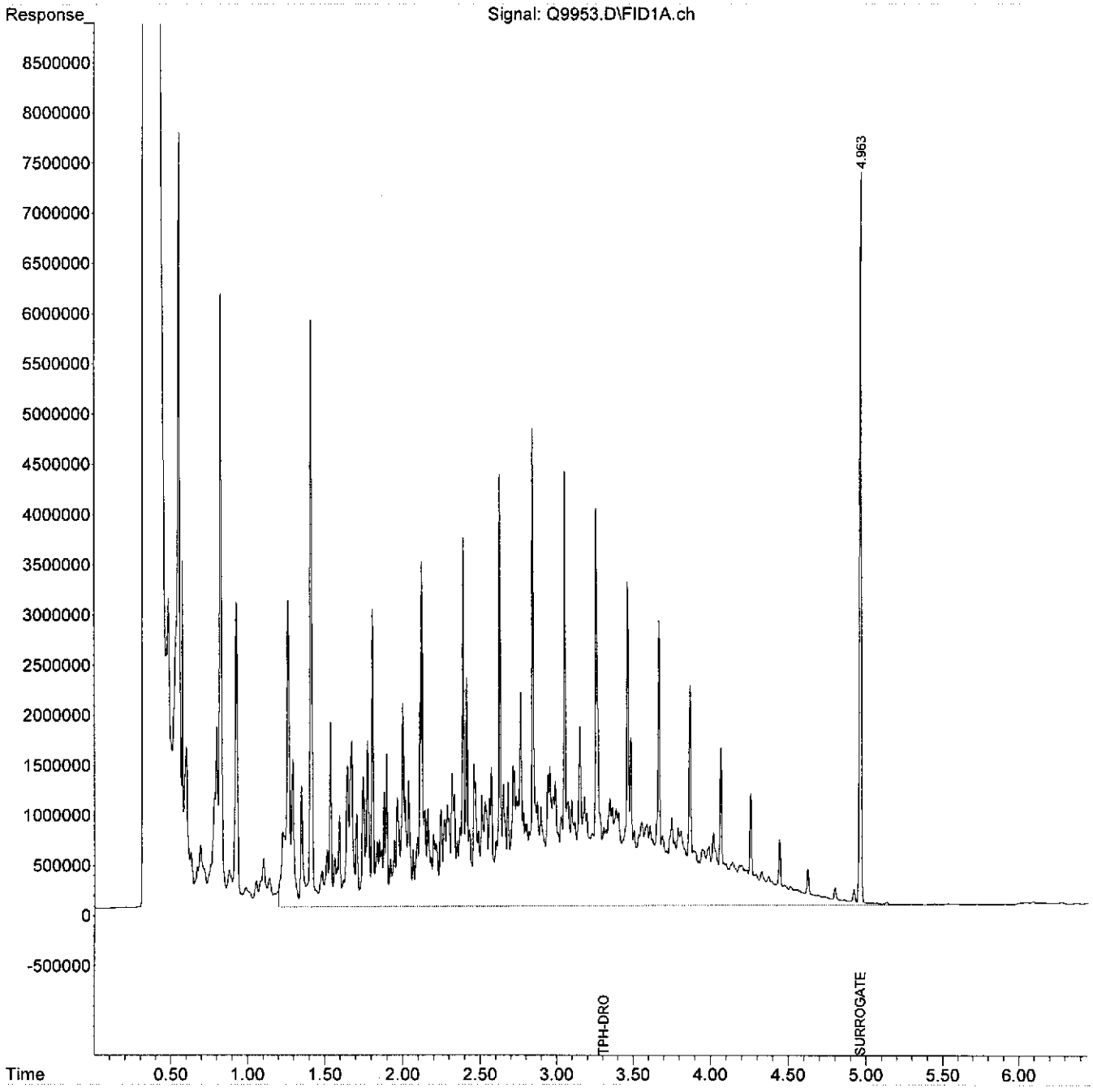
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9953.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:25 pm
Operator : JS
Sample : DRO/GRO_L5_IAS_4213,4000_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:39 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9954.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:36 pm
Operator : JS
Sample : DRO/GRO_L4_IAS_4214,2000_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.959	36672715	223.993 ng
Spiked Amount 100.000		Recovery = 223.99%	
Target Compounds			
3) H TPH-DRO	3.300	1046550950	2263.677 ng

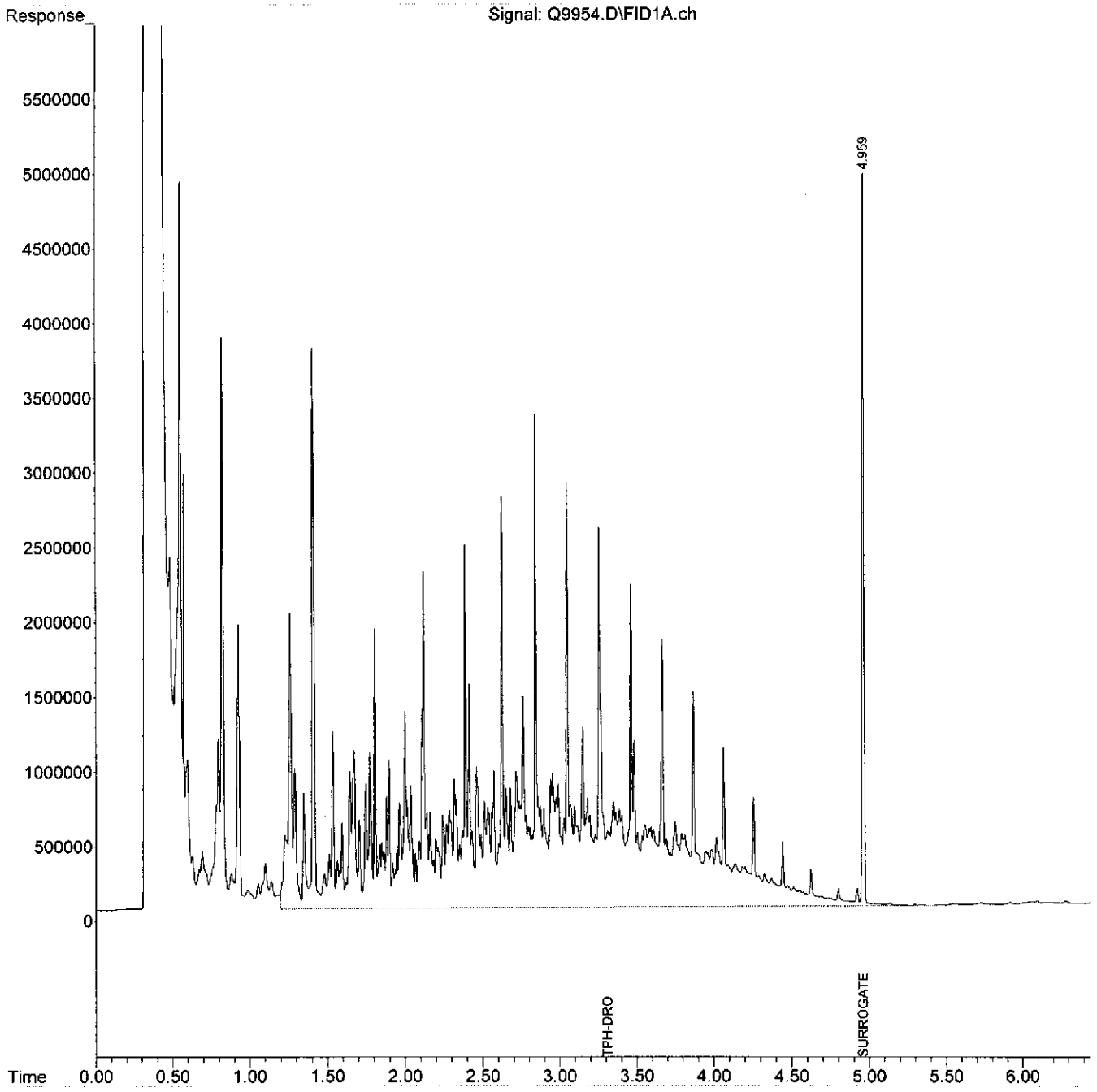
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9954.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:36 pm
Operator : JS
Sample : DRO/GRO_L4_IAS_4214,2000_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9955.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_L3_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	15071783	92.057 ng m
Spiked Amount 100.000		Recovery =	92.06%
Target Compounds			
3) H TPH-DRO	3.300	427351253	924.356 ng

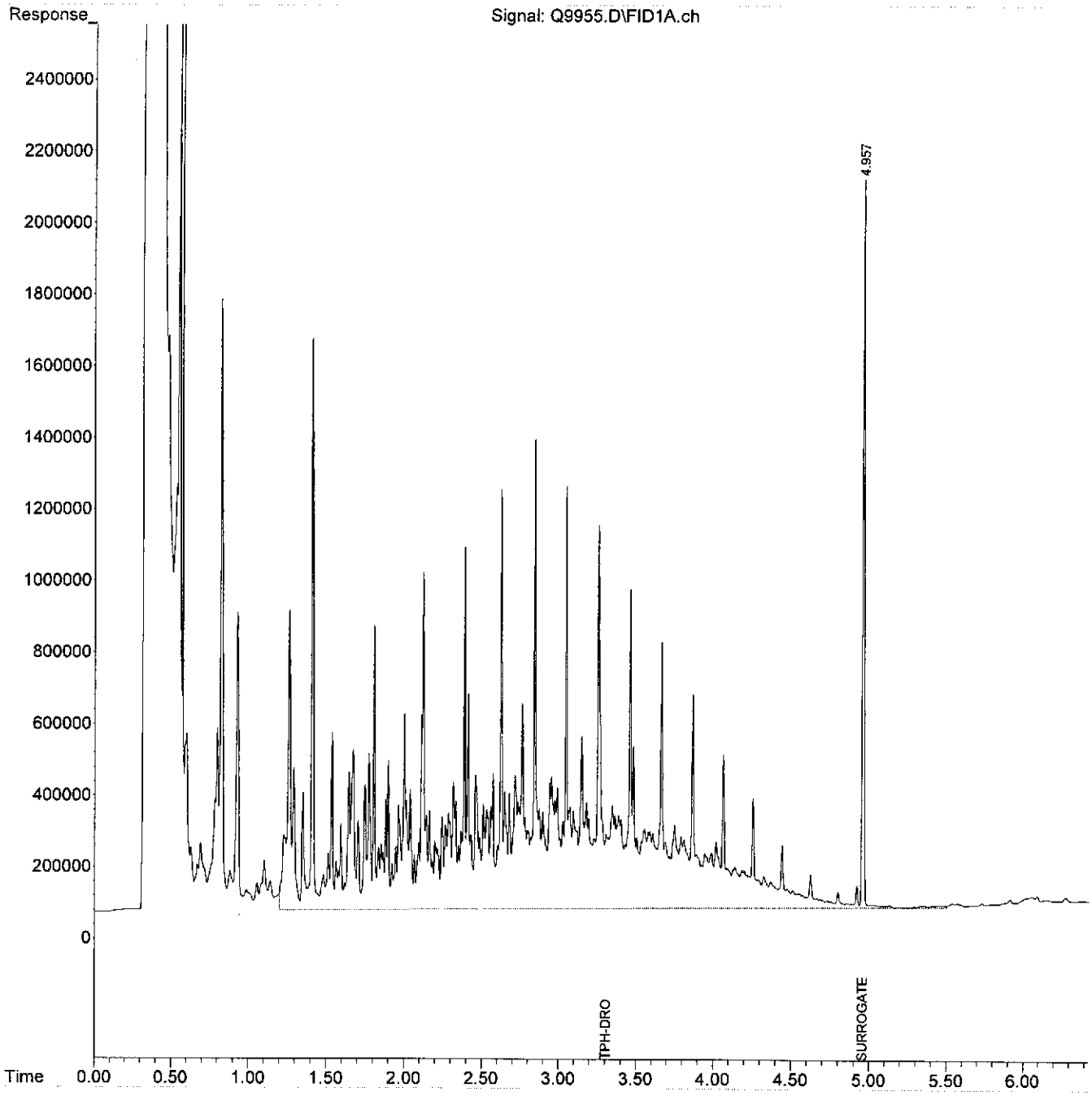
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9955.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_L3_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9956.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:57 pm
Operator : JS
Sample : DRO/GRO_L2_IAS_4216,500_PPM
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	7771740	47.469 ng m
Spiked Amount 100.000		Recovery =	47.47%
Target Compounds			
3) H TPH-DRO	3.300	219970607	475.794 ng

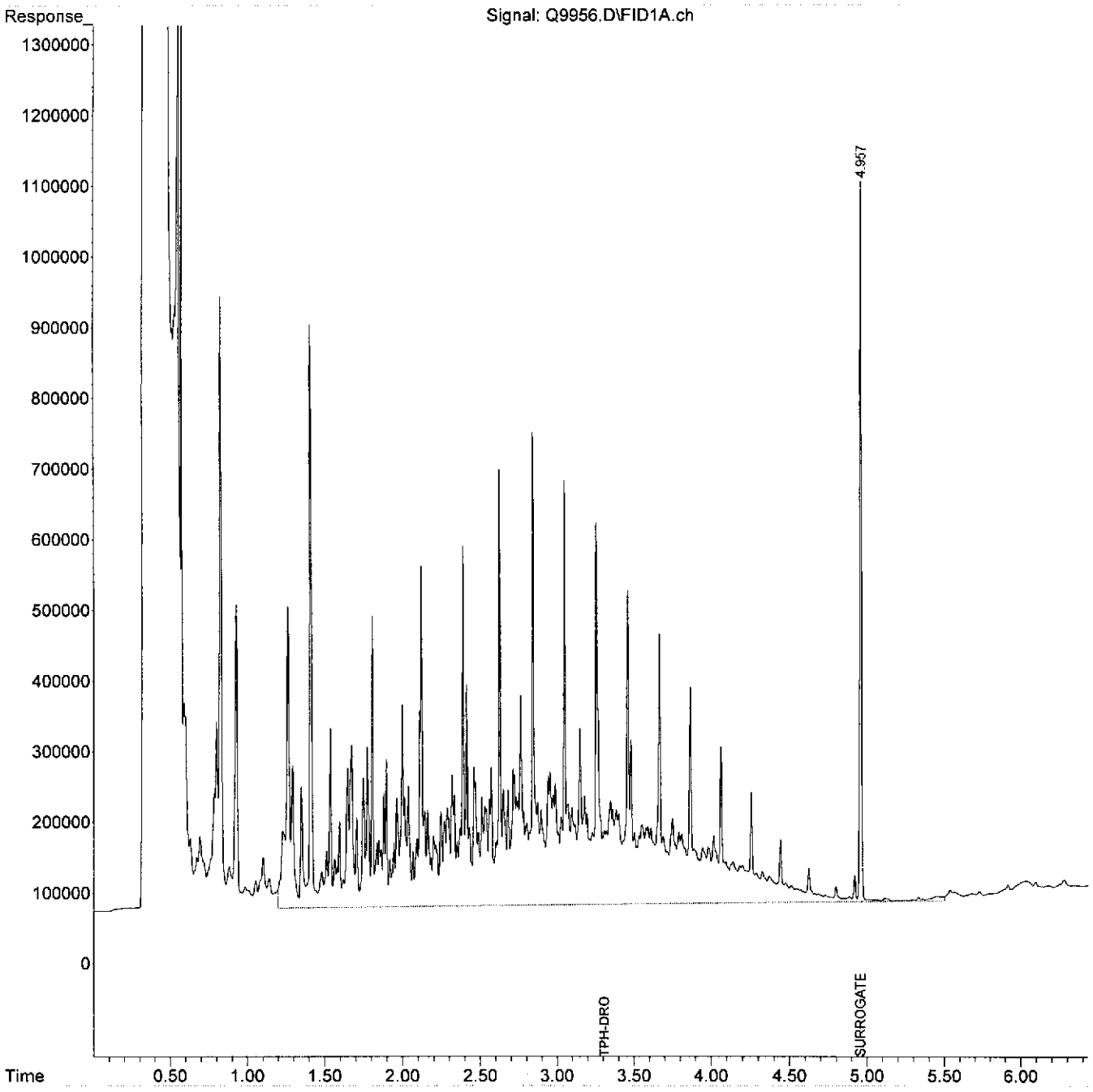
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9956.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:57 pm
Operator : JS
Sample : DRO/GRO_L2_IAS_4216,500_PPM
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9957.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 4:07 pm
Operator : JS
Sample : DRO/GRO_L1_IAS_4217,40_PPM
Misc : NA,NA,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:18:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.956	750535	4.584 ng m
Spiked Amount 100.000		Recovery =	4.58%
Target Compounds			
3) H TPH-DRO	3.300	20979251	45.378 ng

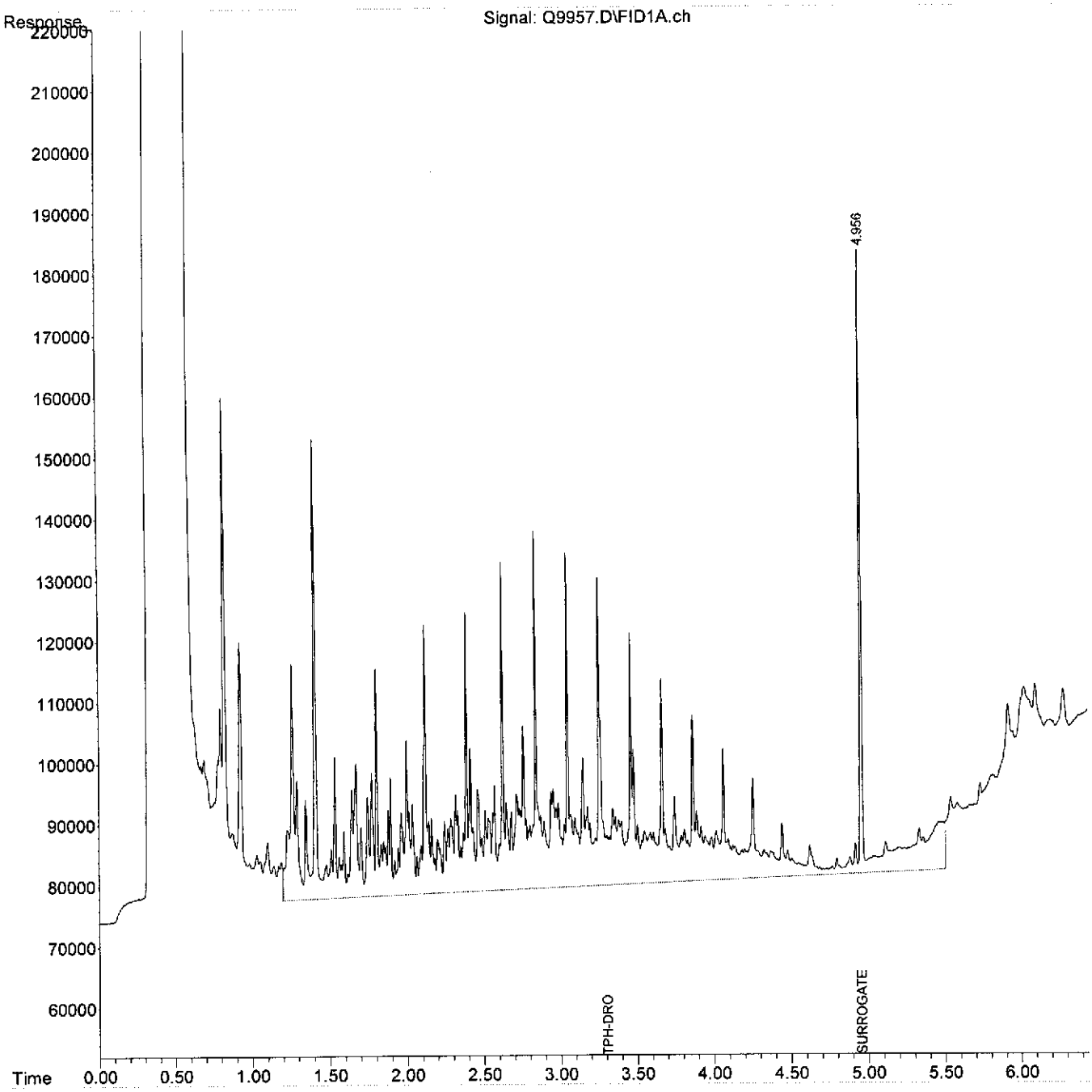
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9957.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 4:07 pm
Operator : JS
Sample : DRO/GRO_L1_IAS_4217,40_PPM
Misc : NA,NA,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:18:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9970.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:35 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	16473499	100.618	ng	m
Spiked Amount 100.000		Recovery = 100.62%			
Target Compounds					
3) H TPH-DRO	3.300	430078790	930.255	ng	

(f)=RT Delta > 1/2 Window (m)=manual int.

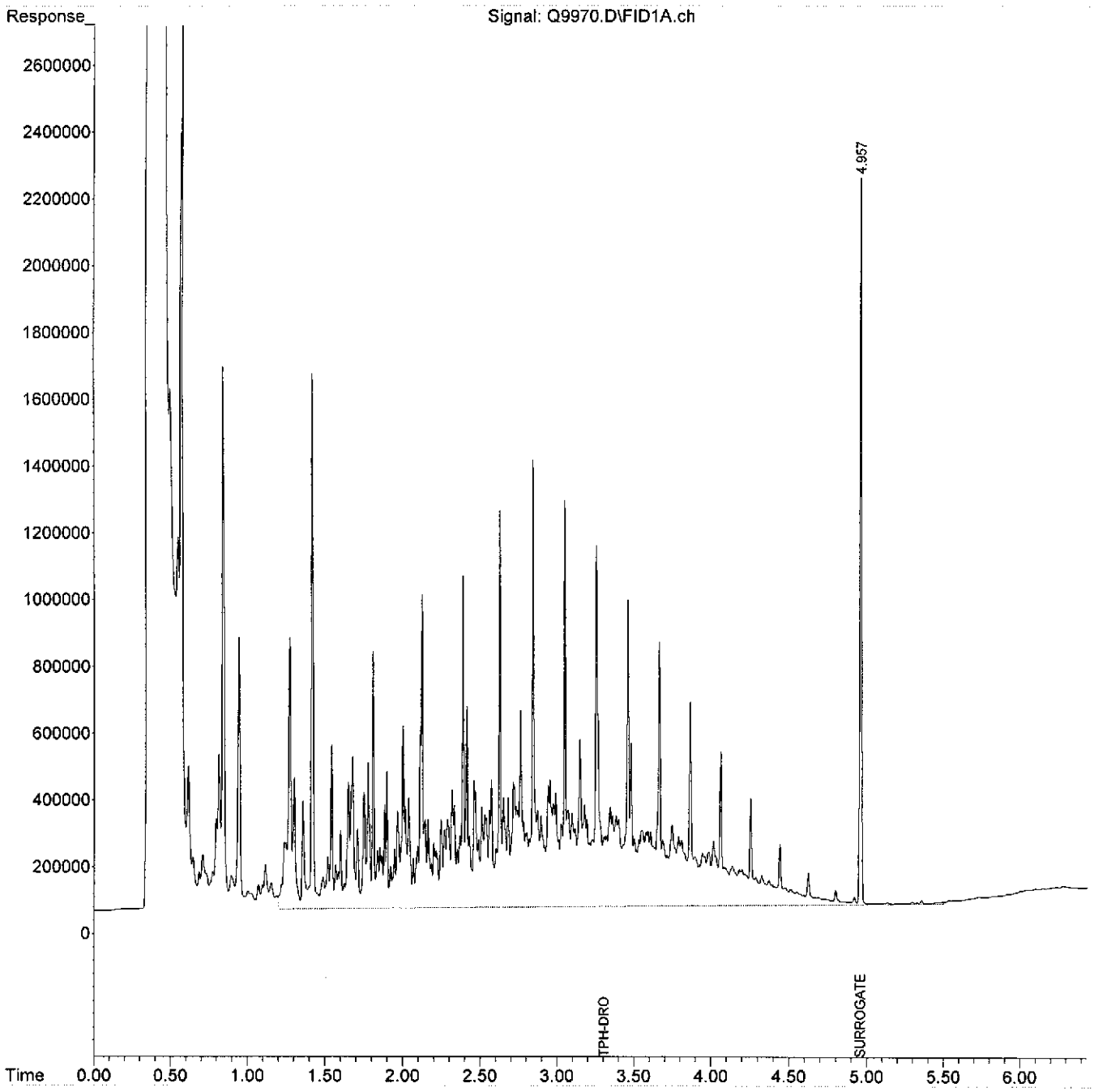
JS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9970.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:35 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9987.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:54:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	15902866	97.133	ng	m
Spiked Amount 100.000		Recovery = 97.13%			
Target Compounds					
3) H TPH-DRO	3.300	424466494	918.116	ng	

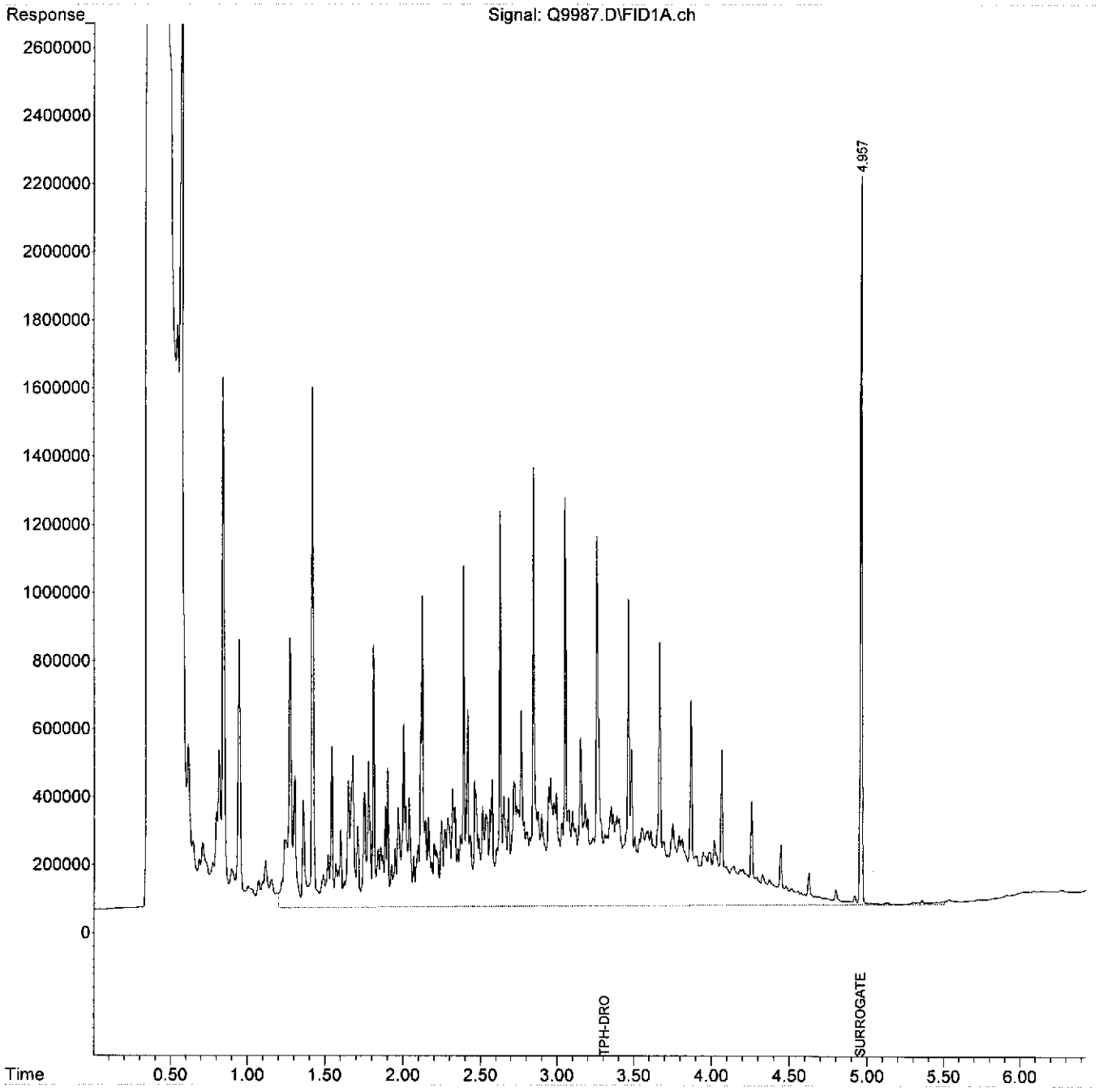
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9987.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:54:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	0315-BLK01	GC Column:	RTX-5
Client ID:	DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	% Moisture:	0
Data File:	Q9971.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9971.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:45 pm
Operator : JS
Sample : DRO,0315-BLK01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	11905811	72.719	ng	m
Spiked Amount 100.000		Recovery = 72.72%			
Target Compounds					

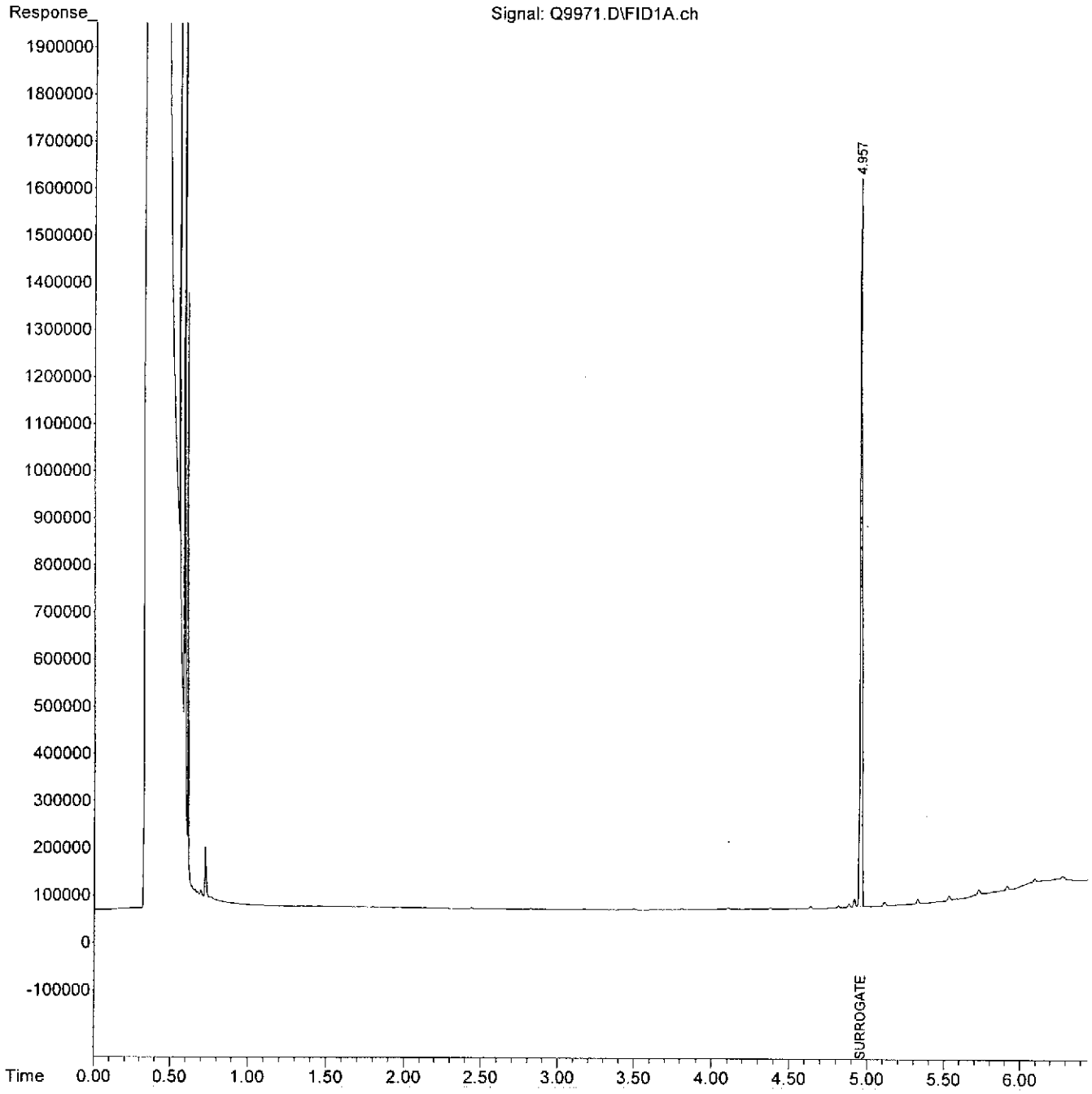
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9971.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:45 pm
Operator : JS
Sample : DRO,0315-BLK01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9985.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:25 pm
Operator : JS
Sample : DRO,DBS0315-MS01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:33:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	10826158	66.125	ng	m
Spiked Amount 100.000		Recovery = 66.13%			
Target Compounds					
3) H TPH-DRO	3.300	356110847	770.263	ng	

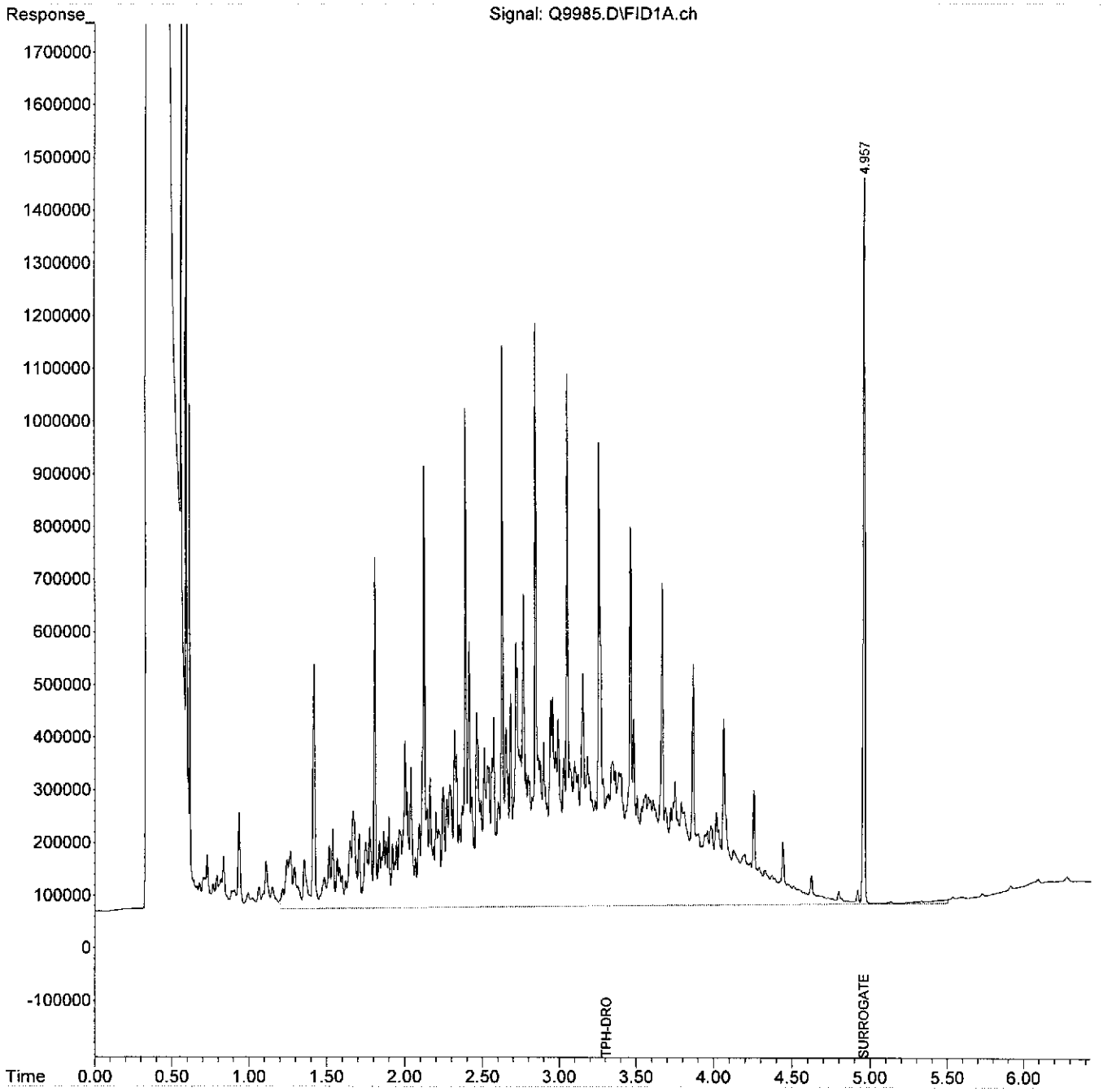
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9985.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:25 pm
Operator : JS
Sample : DRO,DBS0315-MS01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:33:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9983.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 2:52 pm
Operator : JS
Sample : DRO,02579-002-MS01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	12418075	75.848 ng m
Spiked Amount 100.000		Recovery =	75.85%
Target Compounds			
3) H TPH-DRO	3.300	278895105	603.247 ng

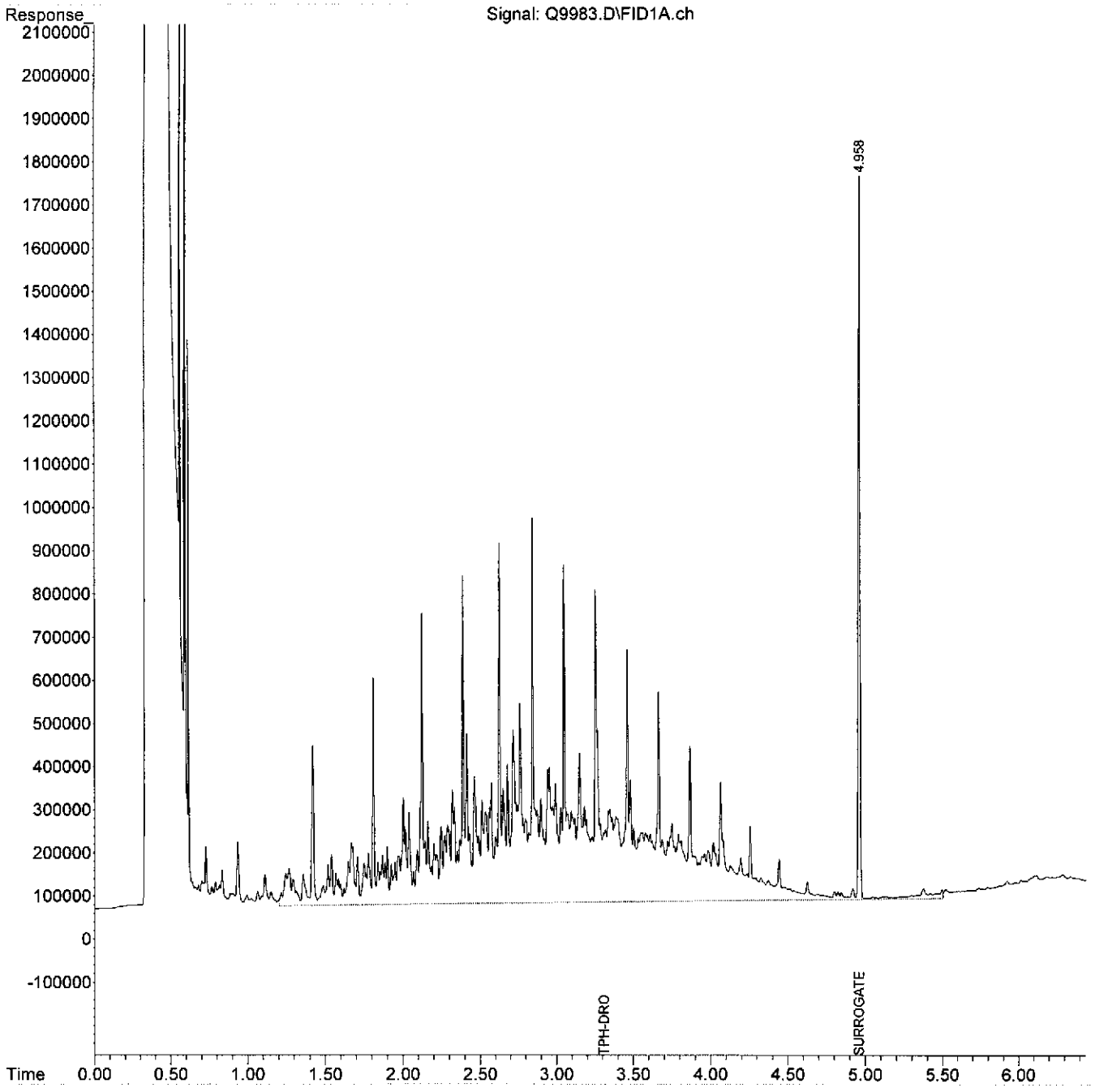
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9983.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 2:52 pm
Operator : JS
Sample : DRO,02579-002-MS01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9984.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:03 pm
Operator : JS
Sample : DRO,02579-002-MSD01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	12758656	77.928	ng	m
Spiked Amount 100.000		Recovery = 77.93%			
Target Compounds					
3) H TPH-DRO	3.300	311637617	674.068	ng	

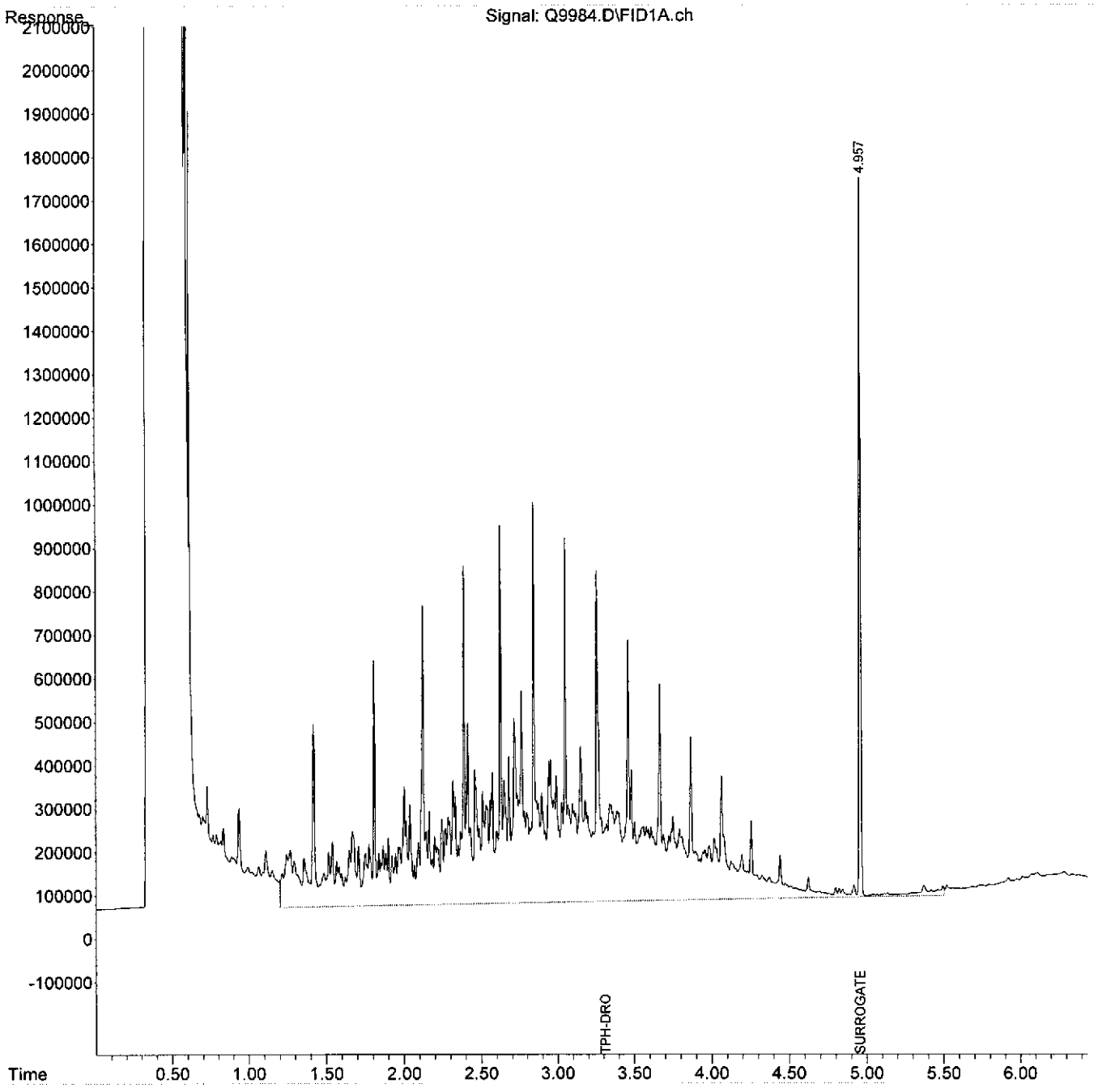
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9984.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:03 pm
Operator : JS
Sample : DRO,02579-002-MSD01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

DATE: 3/14/2012 0:00 **CURVE**

INSTRUMENT: Q DRO/ DRO

TEST GROUP: DRO/GRO

METHOD QDRO0314

System Method: Method 10/08 Rev (eg. 8015B M, 3810, QAM-025)

ANALYST: Justyna DRO/ NJ-EPH-DRO

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Q9951		CH2CL2									
2	2	Q9952		DRO/GRO_RT_IAS_4168,100_PPM									
3	11	Q9953		DRO/GRO_L5_IAS_4213,4000_PPM									
4	12	Q9954		DRO/GRO_L4_IAS_4214,2000_PPM									
5	13	Q9955		DRO/GRO_L3_IAS_4215,1000_PPM									
6	14	Q9956		DRO/GRO_L2_IAS_4216,500_PPM									
7	15	Q9957		DRO/GRO_L1_IAS_4217,40_PPM									
8	13	Q9958		DRO/GRO_L3_IAS_4215,1000_PPM									

LABORATORY CHRONICLE - GC

DATE: 3/15/2012 15:39 **031512-01** BS
INSTRUMENT: Q DRO/ DRO

TEST GROUP: DRO/GRO
METHOD QDRO0314
System Method: /ethod 10/08 Rev (eg. 8015B M, 3810, QAM-025)

ANALYST: Justyna DRO/ NJ-EPH-DRO
Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Q9968		CH2CL2									
2	2	Q9969		DRO/GRO_RT_IAS_4168,100_PPM									
3	3	Q9970		DRO/GRO_IAS_4215,1000_PPM									
4	4	Q9971		0315-BLK01		1	10.0	3/15/12	S	15			0
5	5	Q9972		02576	1	1	10.09	3/15/12	S	15	3/13/12	3/14/12	20.1
6	6	Q9973		02579	2	1	10.50	3/15/12	S	15	3/14/12	3/14/12	7.00
7	7	Q9974		02579	3	1	10.02	3/15/12	S	15	3/14/12	3/14/12	7.50
8	8	Q9975		02579	4	1	10.55	3/15/12	S	15	3/14/12	3/14/12	6.70
9	9	Q9976		02531	1	1	10.31	3/15/12	Xs	15	3/14/12	3/14/12	0
10	10	Q9977		02531	3	1	10.60	3/15/12	S	15	3/14/12	3/14/12	14.4
11	11	Q9978		02524	1	1	10.07	3/15/12	S	15	3/14/12	3/14/12	23.4
12	12	Q9979	5X	02550	1	1	10.19	3/15/12	S	15	3/13/12	3/14/12	14.0
13	13	Q9980		02538	1	1	10.14	3/15/12	S	15	3/13/12	3/14/12	12.5
14	14	Q9981		02562	1	1	10.40	3/15/12	S	15	3/13/12	3/14/12	15.6
15	15	Q9982		02507	1	1	10.05	3/15/12	S	15	3/13/12	3/13/12	10.4
16	16	Q9983		02579-002-MS01		1	10.34	3/15/12	S	15			0
17	17	Q9984		02579-002-MSD01		1	10.34	3/15/12	S	15			0
18	18	Q9985		DBS0315-MS01		1	10.0	3/15/12	S	15			0
12	12	Q9986	RR	02550	1	5	10.19	3/15/12	S	15	3/13/12	3/14/12	14.0
19	3	Q9987		DRO/GRO_IAS_4215,1000_PPM									

STANDARD IAS#	STANDARD NAME:	EPH-DRO FO#2 250ppm		
4210				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/11	IAS 4148 IAS 4180	—	—	10,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/19/12	1:40 (10ml IAS 4180)			250 ppm & 100 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/2/21	Hexane		107925	DK

STANDARD IAS#	STANDARD NAME:	QAM-025 spike		
4211				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12-8-11	Accustandard	S-9310	20712115	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6-8-12	no dilution			2000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	—		—	DK

STANDARD IAS#	STANDARD NAME:	TPH - QAM 025 Ver Std		
4212				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/6/12	Restek	31059	A0476171	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/6/12	1:100 (surr 1:100)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	DK

STANDARD IAS#	STANDARD NAME:	DRO L5		
4213				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	AccuStandard	DRX-TX-002-D 40X	B9020237	20 000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:5 (1ml of stock + 200 µL of surrogate + 3800µl CH_2Cl_2)			4 000 ppm
SOLVENT EXP.DATE	SOLVENT USED: 10 000ppm		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

AccuStandard®
125 Market St. · New Haven, CT 06513 · USA
Tel. 203-786-5290 · www.accustandard.com

DRH-TX-002-D-40X 1 mL
Stock Gasoline & Diesel Calibration Solution
20000 µg/mL in CH2Cl2
Lot: B9020237 2 comps.
Exp: **Mar 4, 2019**

FOR LABORATORY USE ONLY

WARNING: This product contains chemicals known to the State of California to cause cancer and bi defects or other reproductive harm

STORAGE Ambient

POISON

DRH-TX-002-D-40X
Lot: B9020237
Exp: Mar 4, 2019

Date opened: 1-18-12

20000 µg/mL in CH2Cl2

STORAGE Ambient

AccuStandard® 203-786-5290 www.accustandard.com

E12-02579 0157

STANDARD IAS#	STANDARD NAME:	DRO L4		
4214				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4 000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:2			2000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L3		
4215				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:4			1 000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L2		
4216				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:8			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L1		
4217				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1400			40 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Extraction Log - GC
(DRO/GRO)

Extraction Date/Time: 3/15/2012 8:35:00 AM
Technician: J. Liu

Tray ID:
Batch ID: 031512-01
Matrix: Soil
Factor: 15

Sample ID #	Vap Cell #	Funnel	Test	% Moist	Initial (g/ml)	Final (ml)	Surrogate IAS #:µl	Spike IAS #:µl	Color	%SED	pH	Comments	Done DateTime
BLANK	BLK		DRO	-	10.0	15.00	4161 : 15						3/15 11:29
02576-001	01		DRO	20.1	10.09	15.00	4161 : 15		2			R-24	3/15 11:29
02579-002	02		DRO	7.00	10.50	15.00	4161 : 15		4			R-48; R-24	3/15 11:29
02579-003	03		DRO	7.50	10.02	15.00	4161 : 15		3			R-48; R-24	3/15 11:29
02579-004	04		DRO	6.70	10.55	15.00	4161 : 15		4			R-48; R-24	3/15 11:29
02531-001	05		DRO	0	10.31	15.00	4161 : 15		3			R-48	3/15 11:29
02531-003	06		DRO	14.4	10.60	15.00	4161 : 15		4			R-48	3/15 11:29
02524-001	07		DRO	23.4	10.07	15.00	4161 : 15		3				3/15 11:29
02550-001	08		DRO	14.0	10.19	15.00	4161 : 15		2				3/15 11:29
02538-001	09		DRO	12.5	10.14	15.00	4161 : 15		1				3/15 11:29
02562-001	10		DRO	15.6	10.40	15.00	4161 : 15		2				3/15 11:29
02507-001	11		DRO	10.4	10.05	15.00	4161 : 15		1				3/15 11:29
02579-002-MS			DRO	-	10.34	15.00	4161 : 15	4169 : 150					3/15 11:29
02579-002-MSD			DRO	-	10.34	15.00	4161 : 15	4169 : 150					3/15 11:29
BLK-SPK			DRO	-	10.0	15.00	4161 : 15	4169 : 150					3/15 11:29

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

Color: 1 = Clear; 2 = Light Yellow;
3 = Yellow - Gold; 4 = Brown; 5 = Black

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 026(
02602

Matrix: Leachate Method: 6020 Concentration/Units: ppm (mg/L)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Antimony	0.00025	ND	ND	ND	ND	ND	ND
Arsenic	0.0005	ND	ND	ND	ND	ND	ND
Barium	0.0025	ND	ND	ND	ND	ND	ND
Beryllium	0.00025	ND	ND	ND	ND	ND	ND
Cadmium	0.000125	ND	ND	ND	ND	ND	ND
Chromium	0.0005	ND	ND	ND	ND	ND	ND
Copper	0.0005	ND	ND	ND	ND	ND	ND
Lead	0.00025	ND	ND	ND	ND	ND	ND
Mercury	0.00015	ND	ND	ND	ND	ND	
Nickel	0.0005	ND	ND	ND	ND	ND	ND
Selenium	0.001	ND	ND	ND	ND	ND	ND
Silver	0.000125	ND	ND	ND	ND	ND	ND
Thallium	0.000125	ND	ND	ND	ND	ND	ND
Vanadium	0.0005	ND	ND	ND	ND	ND	ND
Zinc	0.001	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601 02602

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Antimony	0.250	50.0	47.1	94.2	46.5	93.0	46.7	93.4	48.0	96.0
Arsenic	0.500	50.0	52.4	105	54.0	108	53.7	107	54.4	109
Barium	2.50	50.0	49.2	98.4	49.1	98.2	49.3	98.6	50.4	101
Beryllium	0.250	50.0	49.7	99.4	53.8	108	51.5	103	52.4	105
Cadmium	0.125	50.0	50.0	100	50.4	101	49.9	99.8	52.0	104
Chromium	0.500	50.0	50.8	102	45.1	90.2	46.9	93.8	49.0	98.0
Copper	0.500	50.0	48.4	96.8	50.9	102	50.3	101	51.8	104
Lead	0.250	50.0	45.5	91.0	45.0	90.0	48.0	96.0	48.5	97.0
Mercury	0.150	5.00	5.23	105	5.26	105	5.38	108	5.52	110
Nickel	0.500	50.0	48.2	96.4	50.5	101	49.6	99.2	50.9	102
Selenium	1.00	50.0	48.9	97.8	49.5	99.0	48.8	97.6	50.3	101
Silver	0.125	10.0	10.8	108	10.7	107	10.2	102	10.3	103
Thallium	0.125	50.0	46.0	92.0	46.3	92.6	51.0	102	51.4	103
Vanadium	0.500	50.0	49.7	99.4	50.8	102	50.2	100	52.2	104
Zinc	1.00	50.0	50.7	101	52.5	105	52.1	104	54.1	108

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601
02602

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R	CCV FOUND	CCV % R				
Antimony	0.250	50.0	49.3	98.6	48.6	97.2				
Arsenic	0.500	50.0	53.5	107	53.9	108				
Barium	2.50	50.0	52.1	104	50.8	102				
Beryllium	0.250	50.0	48.4	96.8	54.4	109				
Cadmium	0.125	50.0	51.5	103	51.9	104				
Chromium	0.500	50.0	47.3	94.6	47.7	95.4				
Copper	0.500	50.0	49.8	99.6	50.0	100				
Lead	0.250	50.0	49.4	98.8	49.0	98.0				
Mercury	0.150	5.00	5.48	110						
Nickel	0.500	50.0	49.2	98.4	49.1	98.2				
Selenium	1.00	50.0	50.0	100	51.2	102				
Silver	0.125	10.0	10.8	108	10.6	106				
Thallium	0.125	50.0	50.6	101	50.2	100				
Vanadium	0.500	50.0	50.0	100	50.9	102				
Zinc	1.00	50.0	52.3	105	52.9	106				

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

Batch (Page) #: 117
Associated Lab Case for Blank 1: 02521, 02541, 02552, 02553, 02556, 02579, 02580

Matrix: Leachate Unit: ppm (mg/L) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Arsenic	0.100	ND
Barium	0.500	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Copper	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.200	ND
Silver	0.025	ND
Zinc	0.200	ND

Associated Sample for Blank 1:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601
02602

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	> LRG	> LRG	NA	NA
Calcium	100000	-	107000	113000	113	NA
Iron	100000	-	92800	97200	97.2	NA
Potassium	100000	-	> LRG	> LRG	NA	NA
Magnesium	100000	-	> LRG	> LRG	NA	NA
Sodium	100000	-	> LRG	> LRG	NA	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	-	-	-	NA
Titanium	2000	-	2680	2800	140	NA
Silver	-	20.0	-	18.9	94.5	80-120
Arsenic	-	20.0	-	19.1	95.5	80-120
Cadmium	-	20.0	-	20.8	104	80-120
Cobalt	-	20.0	-	16.9	84.5	80-120
Chromium	-	20.0	-	19.0	95.0	80-120
Copper	-	20.0	-	17.0	85.0	80-120
Manganese	-	20.0	-	18.2	91.0	80-120
Nickel	-	20.0	-	16.9	84.5	80-120
Zinc	-	20.0	-	16.7	83.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Unit: ppm (mg/L)

ANALYTE	BST1			BST2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Antimony				4.00	3.67	91.8
Arsenic	4.00	4.02	101	4.00	3.90	97.5
Barium	4.00	4.14	104	4.00	3.88	97.0
Beryllium				4.00	3.94	98.5
Cadmium	4.00	4.03	101	4.00	3.95	98.8
Chromium	4.00	3.72	93.0	4.00	3.57	89.3
Copper	4.00	4.06	102	4.00	3.93	98.3
Lead	4.00	3.69	92.3	4.00	3.65	91.3
Mercury	0.010	0.011	110	0.010	0.011	110
Nickel	4.00	4.04	101	4.00	3.90	97.5
Selenium	4.00	3.95	98.8	4.00	3.90	97.5
Silver	4.00	4.53	113	4.00	4.50	113
Thallium				4.00	3.47	86.8
Vanadium				4.00	3.53	88.3
Zinc	4.00	4.05	101	4.00	3.93	98.3

(1) Control Limits % Recovery = 85-115%

BST1

02521-001~003; 02541-001~003; 02552-001~002
2553-001~003; 02556-001~002; 02579-005; 02580-001~006

BST2

02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Antimony					3.79	ND	94.8	4.00	75-125
Arsenic	4.07	ND	102	4.00	3.99	ND	99.8	4.00	75-125
Barium	5.34	1.28	102	4.00	4.44	ND	111	4.00	75-125
Beryllium					4.08	ND	102	4.00	75-125
Cadmium	4.01	ND	100	4.00	4.10	ND	103	4.00	75-125
Chromium	3.75	ND	93.8	4.00	3.72	ND	93.0	4.00	75-125
Copper	4.19	0.163	101	4.00	4.00	ND	100	4.00	75-125
Lead	3.78	ND	94.5	4.00	3.80	ND	95.0	4.00	75-125
Mercury	0.011	ND	110	0.010	0.00984	ND	98.4	0.010	75-125
Nickel	4.09	ND	102	4.00	3.97	ND	99.3	4.00	75-125
Selenium	3.96	ND	99.0	4.00	4.03	ND	101	4.00	75-125
Silver	4.62	ND	116	4.00	4.54	ND	114	4.00	75-125
Thallium					3.57	ND	89.3	4.00	75-125
Vanadium					3.64	ND	91.0	4.00	75-125
Zinc	5.27	1.23	101	4.00	4.20	0.211	99.7	4.00	75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

QC Sample 2 02111-001
QC Sample 2 for following samples:
02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Antimony					NA	ND	ND	NC
Arsenic	NA	ND	ND	NC	NA	ND	ND	NC
Barium	20	1.28	1.44	11.8	NA	ND	ND	NC
Beryllium					NA	ND	ND	NC
Cadmium	NA	ND	ND	NC	NA	ND	ND	NC
Chromium	NA	ND	ND	NC	NA	ND	ND	NC
Copper	20	0.163	0.167	2.42	NA	ND	ND	NC
Lead	NA	ND	ND	NC	NA	ND	ND	NC
Mercury	NA	ND	ND	NC	NA	ND	ND	NC
Nickel	NA	ND	ND	NC	NA	ND	ND	NC
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Thallium					NA	ND	ND	NC
Vanadium					NA	ND	ND	NC
Zinc	20	1.23	1.23	0	20	0.211	0.210	0.475

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

QC Sample 2 02111-001
QC Sample 2 for following samples:
02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Arsenic	ND			4.10	4.00	103
Barium	1.28			5.64	4.00	109.0
Cadmium	ND			4.15	4.00	104
Chromium	ND			3.77	4.00	94.3
Copper	0.163			4.28	4.00	103.0
Lead	ND			3.84	4.00	96.0
Nickel	ND			4.18	4.00	105
Selenium	ND			4.02	4.00	101
Silver	ND			4.65	4.00	116
Zinc	1.23			5.36	4.00	103.0

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1 : 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

Instrument Tuning Report

File Name: default.tun
File Path: C:\Elandata\Tuning\default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Mg	23.985	24.028	5669	2079	0.709	
Ar2	75.930	75.929	18288	2135	0.690	
In	114.904	114.928	27769	2178	0.690	
Ce	139.905	139.878	33867	2211	0.703	
Pb	207.977	207.929	50436	2296	0.695	
U	238.050	238.076	57770	2343	0.698	

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Friday, March 16, 2012 14:31:41
Sample Description:
Method File: C:\Elandata\Method\Daily Performance.mth
Dataset File: C:\Elandata\Dataset\Default\Daily Performance Check.166
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 60
Current Dead Time (ns): 60

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	44011.2	44011.249	241.218	0.5
	In	114.9	583326.5	583326.490	1943.862	0.3
	U	238.1	568598.7	568598.655	3085.216	0.5
⌈>	Ce	139.9	489756.8	489756.817	3062.934	0.6
⌊	CeO	155.9	14467.8	0.030	0.000	0.9
⌈>	Ba	137.9	403833.0	403833.033	2360.966	0.6
⌊	Ba++	69.0	4561.2	0.011	0.000	2.5
	220	220.0	0.8	0.833	0.236	28.3
	8.5	8.5	4.4	4.433	1.601	36.1

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow [NEB]
1.50	Auxiliary Gas Flow
17.00	Plasma Gas Flow
6.50	Lens Voltage
1270.00	ICP RF Power
-1750.00	Analog Stage Voltage
800.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset Std [QRO]
-19.00	Cell Rod Offset Std [CRO]
35.00	Discriminator Threshold
-10.00	Cell Path Voltage Std [CPV]
0.00	RPa
0.25	RPq
0.83	DRC Mode NEB
2.00	DRC Mode QRO
-1.00	DRC Mode CRO
-10.00	DRC Mode CPV
0.00	Cell Gas A
225.00	RF Voltage
0.00	DC Voltage
60.00	Service DAC 1
250.00	Axial Field Voltage

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	53	4.5	7379.3
Co	59	53	5.5	180522.3

In	115	53	6.3	705320.8
U	238	53	8.3	641569.2

TCLP
METALS RAW DATA

Run List

Sample File Name: 117.SAM

AS Loc.	Sample ID	Batch Index	Sample Type	Method
10	rinse	1	Sample	6020m_ial_20120104.mth
10	rinse	2	Sample	6020m_ial_20120104.mth
1	L1		Blank	6020m_ial_20120104.mth
2	L2		Standard	6020m_ial_20120104.mth
3	L3		Standard	6020m_ial_20120104.mth
4	L4		Standard	6020m_ial_20120104.mth
5	L5		Standard	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
6	ICV		QC Std	6020m_ial_20120104.mth
7	ICB		QC Std	6020m_ial_20120104.mth
8	ICSA		QC Std	6020m_ial_20120104.mth
9	ICSAB		QC Std	6020m_ial_20120104.mth
10	rinse	3	Sample	6020m_ial_20120104.mth
10	rinse	4	Sample	6020m_ial_20120104.mth
11	BMT1	5	Sample	6020m_ial_20120104.mth
13	02579-005	6	Sample	6020m_ial_20120104.mth
14	02579-005R	7	Sample	6020m_ial_20120104.mth
15	02579-005SD	8	Sample	6020m_ial_20120104.mth
12	BST1	9	Sample	6020m_ial_20120104.mth
16	02579-005RS	10	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
17	02579-005PS	11	Sample	6020m_ial_20120104.mth
10	rinse	12	Sample	6020m_ial_20120104.mth
18	02521-001	13	Sample	6020m_ial_20120104.mth
19	02521-002	14	Sample	6020m_ial_20120104.mth
20	02521-003	15	Sample	6020m_ial_20120104.mth
21	02541-001	16	Sample	6020m_ial_20120104.mth
22	02541-002	17	Sample	6020m_ial_20120104.mth
23	02541-003	18	Sample	6020m_ial_20120104.mth
24	02552-001	19	Sample	6020m_ial_20120104.mth
25	02552-002	20	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
26	02553-001	21	Sample	6020m_ial_20120104.mth
27	02553-002	22	Sample	6020m_ial_20120104.mth
28	02553-003	23	Sample	6020m_ial_20120104.mth
29	02556-001	24	Sample	6020m_ial_20120104.mth
30	02556-002	25	Sample	6020m_ial_20120104.mth
31	02580-001	26	Sample	6020m_ial_20120104.mth
32	02580-002	27	Sample	6020m_ial_20120104.mth
33	02580-003	28	Sample	6020m_ial_20120104.mth

34	02580-004	29	Sample	6020m_ial_20120104.mth
35	02580-005	30	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
36	02580-006	31	Sample	6020m_ial_20120104.mth
37	BMT2	32	Sample	6020m_ial_20120104.mth
39	02111-001	33	Sample	6020m_ial_20120104.mth
40	02111-001R	34	Sample	6020m_ial_20120104.mth
41	02111-001SD	35	Sample	6020m_ial_20120104.mth
38	BST2	36	Sample	6020m_ial_20120104.mth
42	02111-001RS	37	Sample	6020m_ial_20120104.mth
43	02111-001PS	38	Sample	6020m_ial_20120104.mth
10	rinse	39	Sample	6020m_ial_20120104.mth
44	02554-001	40	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
45	02599-001	41	Sample	6020m_ial_20120104.mth
46	02600-001	42	Sample	6020m_ial_20120104.mth
47	02600-002	43	Sample	6020m_ial_20120104.mth
48	02601-001	44	Sample	6020m_ial_20120104.mth
49	02602-001	45	Sample	6020m_ial_20120104.mth
10	rinse	46	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L1

Analyzed Date/Time: Friday, March 16, 2012 14:53:38
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L1.003
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84867.589	6.756
	Be	9		ppb		3.333	45.826
	B	11		ppb		2310.654	4.501
	Na	23		ppm		193885.766	2.876
	Mg	24		ppm		2384.341	2.177
	Al	27		ppb		7667.528	2.863
	K	39		ppm		341224.487	0.776
	Ca	44		ppm		22454.213	0.933
	Sc	45		ppb		1695360.715	1.670
	Ti	47		ppb		128.001	15.606
	V	51		ppb		1971.089	6.080
	Cr	52		ppb		13192.103	1.984
	Fe	54		ppm		53383.600	3.484
	Mn	55		ppb		3171.937	2.595
	Co	59		ppb		196.336	14.137
	Ni	60		ppb		1273.431	0.640
	Cu	65		ppb		2823.478	1.296
	Zn	66		ppb		567.686	2.366
>	Ge	72		ppb		449451.350	0.552
	As	75		ppb		45.585	58.990
	Se	82		ppb		91.667	6.008
	Y	89		ppb		5084916.654	1.812
	Cd	111		ppb		7.333	56.773
	Mo	98		ppb		445.505	2.169
>	Rh	103		ppb		4372957.776	0.478
	Ag	107		ppb		322.673	11.864
	Sn	118		ppb		3495.066	2.234
	In	115		ppb		7319845.944	1.352
	Sb	121		ppb		69.000	11.594
	Ba	137		ppb		164.668	12.887
>	Tb	159		ppb		8748032.043	2.420
	Ho	165		ppb		8864035.347	1.055
	Tl	205		ppb		3675.811	1.942
	Pb	208		ppb		1206.034	2.464
>	Bi	209		ppb		6040741.061	1.311
	Kr	83		ppb		73.334	7.873

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L2

Analyzed Date/Time: Friday, March 16, 2012 14:59:07
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L2.004
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		91633.415	20.121
	Be	9	0.500	ppb	17.172	339.007	3.684
	B	11	0.500	ppb	141.775	2779.464	2.738
	Na	23	0.005	ppm	7.772	221886.379	0.963
	Mg	24	0.005	ppm	0.747	25878.127	1.754
	Al	27	0.500	ppb	7.107	12442.284	1.781
	K	39	0.005	ppm	13.664	401630.950	1.233
	Ca	44	0.005	ppm	25.074	23983.466	1.100
	Sc	45		ppb		1702254.210	1.705
	Ti	47	0.500	ppb	5.740	574.353	3.863
	V	51	0.500	ppb	7.693	8679.132	5.443
	Cr	52	0.500	ppb	12.965	18233.611	3.678
	Fe	54	0.005	ppm	446.937	51626.669	2.193
	Mn	55	0.500	ppb	3.074	13074.917	1.270
	Co	59	0.500	ppb	3.104	8524.695	3.494
	Ni	60	0.500	ppb	2.675	3123.252	0.952
	Cu	65	0.500	ppb	9.015	4681.649	2.601
	Zn	66	0.500	ppb	6.747	1852.539	3.616
>	Ge	72		ppb		437689.444	1.139
	As	75	0.500	ppb	3.712	1336.495	2.575
	Se	82	0.500	ppb	14.552	231.003	8.840
	Y	89		ppb		5109421.905	0.650
	Cd	111	0.500	ppb	1.367	2390.009	1.193
	Mo	98	0.500	ppb	3.680	5047.204	1.957
>	Rh	103		ppb		4382598.049	1.437
	Ag	107	0.500	ppb	1.279	8049.219	0.684
	Sn	118	0.500	ppb	3.529	9959.949	1.443
	In	115		ppb		7198318.482	0.783
	Sb	121	0.500	ppb	1.194	8140.308	1.390
	Ba	137	0.500	ppb	2.896	3860.561	3.073
>	Tb	159		ppb		8611066.069	0.296
	Ho	165		ppb		8980039.854	2.244
	Tl	205	0.500	ppb	2.060	30499.061	2.207
	Pb	208	0.500	ppb	0.413	35452.815	0.218
>	Bi	209		ppb		6056414.285	0.467
	Kr	83		ppb		79.667	8.070

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message Analyte Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L3

Analyzed Date/Time: Friday, March 16, 2012 15:04:37
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L3.005
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		98032.953	13.643
	Be	9	50.000	ppb	14.521	33430.942	2.022
	B	11	50.001	ppb	16.153	46257.374	1.167
	Na	23	0.500	ppm	3.900	4188180.992	1.674
	Mg	24	0.500	ppm	2.279	2672071.514	2.987
	Al	27	49.998	ppb	4.367	360554.434	0.779
	K	39	0.500	ppm	5.641	6637630.796	3.994
	Ca	44	0.500	ppm	4.034	210088.760	1.697
	Sc	45		ppb		1650644.376	5.485
	Ti	47	50.000	ppb	2.317	46338.921	3.547
	V	51	50.000	ppb	6.051	662428.424	2.747
	Cr	52	50.001	ppb	4.805	597510.942	3.119
	Fe	54	0.500	ppm	3.762	534247.514	2.500
	Mn	55	50.000	ppb	3.874	960557.799	2.828
	Co	59	50.000	ppb	3.134	809981.202	4.519
	Ni	60	50.000	ppb	3.121	177855.695	1.900
	Cu	65	50.000	ppb	4.793	200856.896	0.845
	Zn	66	49.999	ppb	5.069	109166.895	1.906
>	Ge	72		ppb		423616.859	4.798
	As	75	50.000	ppb	1.954	130446.913	3.950
	Se	82	50.000	ppb	4.529	15117.369	1.569
	Y	89		ppb		4904216.501	2.668
	Cd	111	50.000	ppb	3.949	226572.328	1.017
	Mo	98	50.000	ppb	3.321	461208.891	1.019
>	Rh	103		ppb		4134874.587	2.412
	Ag	107	50.000	ppb	3.110	765852.438	0.817
	Sn	118	50.001	ppb	2.129	741693.075	0.651
	In	115		ppb		6967061.391	3.003
	Sb	121	50.000	ppb	0.153	790732.165	0.871
	Ba	137	50.000	ppb	1.631	349840.690	2.260
>	Tb	159		ppb		8529993.595	0.719
	Ho	165		ppb		8682320.648	0.754
	Tl	205	50.001	ppb	0.454	2892885.268	1.925
	Pb	208	50.000	ppb	1.151	3372916.328	1.078
>	Bi	209		ppb		5871443.468	2.225
	Kr	83		ppb		90.000	1.925

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L4

Analyzed Date/Time: Friday, March 16, 2012 15:10:08
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L4.006
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		88731.095	6.234
	Be	9	102.494	ppb	6.663	69604.149	0.592
	B	11	102.884	ppb	4.888	95353.504	1.401
	Na	23	0.999	ppm	2.392	8381026.501	1.095
	Mg	24	1.004	ppm	1.804	5594497.678	2.218
	Al	27	100.232	ppb	1.837	741846.685	0.701
	K	39	0.997	ppm	4.860	13084498.184	3.468
	Ca	44	1.002	ppm	1.713	413528.592	1.012
	Sc	45		ppb		1723330.296	1.606
	Ti	47	100.084	ppb	0.614	95411.129	1.074
	V	51	102.439	ppb	4.132	1542682.887	3.035
	Cr	52	102.059	ppb	2.222	1349422.604	1.395
	Fe	54	1.016	ppm	7.736	1131729.974	6.491
	Mn	55	101.974	ppb	2.638	2180326.317	2.008
	Co	59	101.662	ppb	2.283	1810370.375	1.838
	Ni	60	100.198	ppb	1.361	367686.601	1.463
	Cu	65	99.745	ppb	3.832	404765.370	2.564
	Zn	66	100.070	ppb	3.132	224523.536	1.979
>	Ge	72		ppb		434621.883	1.285
	As	75	100.012	ppb	2.364	267870.783	2.314
	Se	82	99.626	ppb	2.684	30398.350	1.456
	Y	89		ppb		5019297.254	2.368
	Cd	111	99.727	ppb	2.631	459124.431	1.517
	Mo	98	99.965	ppb	1.766	933777.154	1.261
>	Rh	103		ppb		4193180.147	0.988
	Ag	107	100.189	ppb	5.178	1568825.382	5.760
	Sn	118	99.890	ppb	0.393	1493218.085	0.597
	In	115		ppb		7025750.052	1.471
	Sb	121	99.458	ppb	0.671	1577385.277	0.390
	Ba	137	99.971	ppb	2.164	715581.293	1.223
>	Tb	159		ppb		8740475.959	1.060
	Ho	165		ppb		8881570.912	1.765
	Tl	205	99.945	ppb	1.753	5786058.639	0.640
	Pb	208	100.910	ppb	1.128	7088727.675	0.783
>	Bi	209		ppb		5892265.005	1.587
	Kr	83		ppb		99.334	0.581

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
[>	Li	6		
|	Be	9		
L	B	11		
[	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Fe	54		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
|	Zn	66		
|>	Ge	72		
|	As	75		
|	Se	82		
|	Y	89		
L	Cd	111		
[	Mo	98		
|>	Rh	103		
|	Ag	107		
|	Sn	118		
L	In	115		
[	Sb	121		
|	Ba	137		
|>	Tb	159		
L	Ho	165		
[	Tl	205		
|	Pb	208		
L>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L5

Analyzed Date/Time: Friday, March 16, 2012 15:15:39
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L5.007
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		88972.173	7.455
	Be	9	199.798	ppb	8.067	135449.485	1.801
	B	11	199.496	ppb	10.536	181098.977	3.223
	Na	23	1.990	ppm	2.990	15979651.235	1.957
	Mg	24	1.993	ppm	0.870	10794691.354	1.606
	Al	27	203.641	ppb	2.567	1565463.841	2.404
	K	39	1.979	ppm	3.899	24445862.892	2.430
	Ca	44	1.984	ppm	2.520	765588.625	2.234
	Sc	45		ppb		1722786.484	0.950
	Ti	47	198.852	ppb	2.111	182919.226	1.872
	V	51	200.803	ppb	2.823	3010616.436	1.306
	Cr	52	200.145	ppb	3.487	2595833.666	2.372
	Fe	54	2.004	ppm	3.227	2158802.266	2.311
	Mn	55	200.006	ppb	3.581	4202179.927	2.611
	Co	59	199.779	ppb	1.948	3485678.052	0.963
	Ni	60	197.407	ppb	2.153	682896.387	2.362
	Cu	65	197.736	ppb	3.897	758977.960	2.423
	Zn	66	199.599	ppb	3.483	437007.540	2.097
>	Ge	72		ppb		427391.448	1.566
	As	75	198.987	ppb	0.902	515684.233	0.670
	Se	82	200.444	ppb	2.935	60484.106	2.152
	Y	89		ppb		5008145.194	0.549
	Cd	111	198.838	ppb	2.115	883764.457	1.203
	Mo	98	204.122	ppb	2.715	1985421.570	2.547
>	Rh	103		ppb		4079123.986	0.311
	Ag	107	129.068	ppb	3.802	1965480.981	3.501
	Sn	118	203.690	ppb	0.486	3144185.372	0.743
	In	115		ppb		6958552.308	1.379
	Sb	121	202.579	ppb	2.506	3354410.435	1.061
	Ba	137	197.094	ppb	2.546	1349414.769	1.006
>	Tb	159		ppb		8750997.089	1.528
	Ho	165		ppb		8944294.279	2.254
	Tl	205	198.903	ppb	1.330	11176857.835	0.758
	Pb	208	200.520	ppb	0.788	14031745.312	0.762
>	Bi	209		ppb		5820750.702	0.823
	Kr	83		ppb		113.334	12.520

E12-02579 0185

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message Analyte Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICV

Analyzed Date/Time: Friday, March 16, 2012 15:37:54
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICV.011
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85868.049	9.426
	Be	9	49.740	ppb	8.961	32493.229	0.927
	B	11	47.612	ppb	10.310	43443.970	1.691
	Na	23	0.496	ppm	1.897	3887465.273	2.047
	Mg	24	0.491	ppm	1.754	2508640.858	1.420
	Al	27	54.906	ppb	4.786	403014.108	3.663
	K	39	0.493	ppm	1.534	5973918.107	0.479
	Ca	44	0.468	ppm	1.683	185622.748	2.506
	Sc	45		ppb		1550215.090	1.917
	Ti	47	204.556	ppb	3.328	177446.680	2.354
	V	51	49.720	ppb	1.143	704538.698	0.109
	Cr	52	50.838	ppb	2.054	630880.626	2.216
	Fe	54	0.457	ppm	1.059	501820.807	0.366
	Mn	55	48.656	ppb	1.650	966600.948	2.070
	Co	59	49.189	ppb	0.642	809687.106	0.423
	Ni	60	48.170	ppb	3.823	157992.026	2.751
	Cu	65	48.359	ppb	1.134	177035.810	0.782
	Zn	66	50.655	ppb	0.732	105021.093	1.787
>	Ge	72		ppb		403094.233	1.068
	As	75	52.428	ppb	1.781	128172.128	0.855
	Se	82	48.878	ppb	0.819	13975.377	1.180
	Y	89		ppb		4639035.095	1.512
	Cd	111	50.049	ppb	0.810	209837.404	0.295
	Mo	98	45.948	ppb	5.574	413804.618	2.435
>	Rh	103		ppb		3778807.879	3.671
	Ag	107	10.782	ppb	1.835	152316.905	2.549
	Sn	118	46.617	ppb	2.101	668583.786	1.573
	In	115		ppb		6659221.916	2.114
	Sb	121	47.124	ppb	4.205	736900.105	1.510
	Ba	137	49.169	ppb	2.438	318120.522	0.740
>	Tb	159		ppb		8268561.466	3.099
	Ho	165		ppb		8438730.154	1.980
	Tl	205	45.959	ppb	1.996	2531335.554	1.736
	Pb	208	45.515	ppb	1.377	3119369.337	1.133
>	Bi	209		ppb		5699315.092	0.840
	Kr	83		ppb		87.000	9.195

E12-02579 0187

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.179
	Be	9	99.480	
	B	11	95.224	
	Na	23	99.191	
	Mg	24	98.152	
	Al	27	109.811	
	K	39	98.606	
	Ca	44	93.537	
	Sc	45		
	Ti	47	102.278	
	V	51	99.439	
	Cr	52	101.676	
	Fe	54	91.491	
	Mn	55	97.312	
	Co	59	98.378	
	Ni	60	96.340	
	Cu	65	96.718	
	Zn	66	101.310	
>	Ge	72		89.686
	As	75	104.856	
	Se	82	97.755	
	Y	89		
	Cd	111	100.099	
	Mo	98	91.897	
>	Rh	103		86.413
	Ag	107	107.819	
	Sn	118	93.233	
	In	115		
	Sb	121	94.248	
	Ba	137	98.338	
>	Tb	159		94.519
	Ho	165		
	Tl	205	91.917	
	Pb	208	91.030	
>	Bi	209		94.348
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICB

Analyzed Date/Time: Friday, March 16, 2012 15:43:26
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\ICB.012
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		100433.074	14.050
	Be	9	0.000	ppb	19914.647	4.000	66.144
	B	11	0.390	ppb	130.718	3083.571	3.167
	Na	23	0.000	ppm	439.933	176484.756	1.261
	Mg	24	-0.000	ppm	13.553	1621.158	5.375
	Al	27	-0.069	ppb	5.040	6437.820	1.723
	K	39	0.001	ppm	41.221	322066.012	0.429
	Ca	44	0.006	ppm	9.968	22429.481	1.204
	Sc	45		ppb		1562328.296	3.825
	Ti	47	0.154	ppb	8.429	250.337	4.995
	V	51	0.002	ppb	472.496	1812.403	8.389
	Cr	52	-0.020	ppb	142.349	11701.551	3.825
	Fe	54	-0.000	ppm	239.012	47921.684	1.233
	Mn	55	-0.004	ppb	133.705	2785.799	3.242
	Co	59	0.004	ppb	11.968	241.003	4.332
	Ni	60	-0.002	ppb	994.599	1146.746	4.995
	Cu	65	-0.037	ppb	62.714	2421.352	3.497
	Zn	66	-0.001	ppb	764.069	510.682	3.644
>	Ge	72		ppb		406795.824	1.330
	As	75	0.035	ppb	68.329	126.767	45.741
	Se	82	0.064	ppb	49.569	101.334	9.169
	Y	89		ppb		4695877.172	1.085
	Cd	111	0.001	ppb	41.544	11.333	18.368
	Mo	98	0.122	ppb	12.493	1539.929	10.875
>	Rh	103		ppb		3919922.068	1.801
	Ag	107	0.010	ppb	26.752	435.678	10.669
	Sn	118	0.491	ppb	9.552	10422.210	8.355
	In	115		ppb		6627705.841	2.448
	Sb	121	0.015	ppb	13.382	294.672	12.058
	Ba	137	-0.004	ppb	44.073	127.001	8.183
>	Tb	159		ppb		8024605.771	2.584
	Ho	165		ppb		8188774.587	1.086
	Tl	205	-0.006	ppb	15.572	3106.579	0.934
	Pb	208	0.000	ppb	223.923	1144.031	5.128
>	Bi	209		ppb		5613317.816	0.621
	Kr	83		ppb		81.334	2.559

E12-02579 0189

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		118.341
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		90.509
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		89.640
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		91.730
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		92.924
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICSA

Analyzed Date/Time: Friday, March 16, 2012 15:48:59
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICSA.013
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 8

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		80347.058	2.142
	Be	9	0.005	ppb	76.686	6.333	39.736
	B	11	-0.400	ppb	18.554	1861.541	1.272
	Na	23	S	ppm	S	S	S
	Mg	24	S	ppm	S	S	S
	Al	27	S	ppb	S	S	S
	K	39	S	ppm	S	S	S
	Ca	44	106.801	ppm	2.023	36880548.758	3.254
	Sc	45		ppb		1559837.678	2.577
	Ti	47	2682.263	ppb	1.036	2268626.383	1.826
	V	51	-0.228	ppb	94.336	-1455.040	208.184
	Cr	52	1.344	ppb	2.331	27503.005	3.083
	Fe	54	92.754	ppm	1.738	89813942.941	0.776
	Mn	55	0.771	ppb	39.510	17578.174	31.768
	Co	59	0.412	ppb	14.197	6773.283	12.443
	Ni	60	-0.155	ppb	185.691	605.829	148.909
	Cu	65	1.004	ppb	22.328	5993.293	10.764
	Zn	66	-0.262	ppb	304.080	-56.539	2876.591
>	Ge	72		ppb		393216.878	2.477
	As	75	0.061	ppb	96.405	187.598	78.095
	Se	82	0.289	ppb	16.048	160.668	10.495
	Y	89		ppb		4216491.500	0.805
	Cd	111	0.018	ppb	2181.606	54.836	3018.884
	Mo	98	2149.714	ppb	1.843	18202551.209	1.394
>	Rh	103		ppb		3552250.509	2.027
	Ag	107	0.073	ppb	2.967	1233.091	2.669
	Sn	118	0.434	ppb	2.848	8661.166	0.953
	In	115		ppb		6004631.810	1.870
	Sb	121	0.135	ppb	1.297	1905.885	1.294
	Ba	137	0.461	ppb	2.440	2753.788	2.367
>	Tb	159		ppb		7256268.922	0.307
	Ho	165		ppb		7145887.212	0.106
	Tl	205	-0.040	ppb	2.329	1078.403	3.851
	Pb	208	0.361	ppb	2.685	22426.688	1.096
>	Bi	209		ppb		4945543.642	1.903
	Kr	83		ppb		227.003	5.359

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		94.673
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		87.488
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		81.232
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		82.947
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		81.870
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICSAB

Analyzed Date/Time: Friday, March 16, 2012 15:54:33
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICSAB.014
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85880.157	11.768
	Be	9	0.013	ppb	71.988	11.667	40.507
	B	11	-0.503	ppb	51.578	1883.546	0.412
	Na	23	S	ppm	S	S	S
	Mg	24	S	ppm	S	S	S
	Al	27	S	ppb	S	S	S
	K	39	S	ppm	S	S	S
	Ca	44	113.416	ppm	1.288	39411389.306	1.842
	Sc	45		ppb		1566736.745	2.955
	Ti	47	2800.310	ppb	2.195	2383389.853	1.267
	V	51	-0.435	ppb	39.668	-4330.917	56.426
	Cr	52	19.002	ppb	1.331	238750.698	1.590
	Fe	54	97.238	ppm	2.185	94758391.807	0.720
	Mn	55	18.221	ppb	2.029	357072.169	2.082
	Co	59	16.887	ppb	0.693	273006.894	1.416
	Ni	60	16.914	ppb	2.027	55196.781	1.628
	Cu	65	16.976	ppb	2.519	62616.798	1.678
	Zn	66	16.727	ppb	2.370	34383.743	3.510
>	Ge	72		ppb		395721.015	1.630
	As	75	19.068	ppb	1.450	45787.011	0.723
	Se	82	0.334	ppb	15.123	173.668	6.821
	Y	89		ppb		4186083.742	0.916
	Cd	111	20.795	ppb	2.001	85581.217	0.672
	Mo	98	2178.411	ppb	3.103	18407715.461	1.756
>	Rh	103		ppb		3545376.858	1.545
	Ag	107	18.880	ppb	0.522	250124.858	1.081
	Sn	118	0.533	ppb	2.624	9981.975	0.800
	In	115		ppb		5852312.031	0.941
	Sb	121	0.130	ppb	3.537	1910.219	3.147
	Ba	137	0.437	ppb	1.016	2702.105	1.436
>	Tb	159		ppb		7495414.832	0.697
	Ho	165		ppb		6924466.080	1.269
	Tl	205	-0.040	ppb	0.357	1077.736	0.862
	Pb	208	0.364	ppb	2.741	22274.598	1.315
>	Bi	209		ppb		4866735.155	1.374
	Kr	83		ppb		256.671	8.663

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.193
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52	95.008	
	Fe	54		
	Mn	55	91.105	
	Co	59	84.436	
	Ni	60	84.571	
	Cu	65	84.882	
	Zn	66	83.637	
>	Ge	72		88.045
	As	75	95.338	
	Se	82		
	Y	89		
	Cd	111	103.975	
	Mo	98		
>	Rh	103		81.075
	Ag	107	94.402	
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		85.681
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		80.565
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: BMT1

Analyzed Date/Time: Friday, March 16, 2012 16:10:33
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\BMT1.017
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 11
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
[>	Li	6		ppb		86205.268	6.787
|	Be	9	0.917	ppb	62.447	6.333	24.119
|	B	11	115.914	ppb	44.891	2843.152	2.907
[	Na	23	1186.413	ppm	3.621	52119051.812	1.184
|	Mg	24	0.003	ppm	341.958	2588.071	10.002
|	Al	27	237.550	ppb	4.403	18060.550	0.570
|	K	39	0.424	ppm	32.064	386267.111	1.394
|	Ca	44	1.607	ppm	16.826	26866.910	1.026
|	Sc	45		ppb		1897547.615	2.212
|	Ti	47	20.847	ppb	16.858	239.670	5.013
|	V	51	0.819	ppb	389.198	2133.399	11.438
|	Cr	52	15.361	ppb	41.989	14924.355	1.681
|	Fe	54	-0.027	ppm	759.083	55832.075	2.892
|	Mn	55	1.419	ppb	95.175	3488.730	2.136
|	Co	59	-0.178	ppb	77.649	188.669	5.862
|	Ni	60	0.414	ppb	145.184	1343.442	2.128
|	Cu	65	23.629	ppb	35.176	3457.384	2.982
|	Zn	66	37.374	ppb	3.335	1046.066	1.086
|>	Ge	72		ppb		471416.889	2.465
|	As	75	0.583	ppb	258.562	56.374	39.314
|	Se	82	2.731	ppb	54.479	100.667	2.500
|	Y	89		ppb		5397239.089	2.936
[	Cd	111	0.216	ppb	12.925	13.000	7.692
[	Mo	98	52.762	ppb	5.638	3279.624	6.303
|>	Rh	103		ppb		4485505.178	1.535
|	Ag	107	2.149	ppb	10.938	511.016	5.084
|	Sn	118	2.033	ppb	64.294	3758.182	4.181
[	In	115		ppb		7451750.167	1.293
[	Sb	121	0.180	ppb	6.731	84.667	1.804
|	Ba	137	4.338	ppb	26.718	315.673	11.441
|>	Tb	159		ppb		8828693.536	1.389
[	Ho	165		ppb		9039583.695	0.644
[	Tl	205	4.891	ppb	9.212	4999.499	0.791
|	Pb	208	0.946	ppb	16.291	1519.387	4.707
[>	Bi	209		ppb		5921859.139	1.883
	Kr	83		ppb		83.334	10.889

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.576
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		104.887
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		102.574
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		100.922
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.032
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005

Analyzed Date/Time: Friday, March 16, 2012 16:15:43
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005.018
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 13
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84708.329	8.362
	Be	9	-0.185	ppb	361.533	2.667	78.062
	B	11	224.183	ppb	20.838	3256.637	3.027
	Na	23	1307.665	ppm	3.958	56960252.654	3.156
	Mg	24	15.653	ppm	3.871	466119.610	4.638
	Al	27	465.181	ppb	17.368	27428.879	11.766
	K	39	6.133	ppm	24.658	763265.363	12.594
	Ca	44	649.308	ppm	2.122	1355240.219	1.960
	Sc	45		ppb		1881148.541	5.198
	Ti	47	19.522	ppb	41.051	231.003	16.519
	V	51	65.335	ppb	7.382	7403.282	4.832
	Cr	52	21.715	ppb	23.244	15251.614	1.976
	Fe	54	0.360	ppm	101.037	57577.470	2.756
	Mn	55	1522.094	ppb	2.340	178081.369	1.742
	Co	59	2.106	ppb	6.176	405.010	1.781
	Ni	60	52.825	ppb	6.991	2321.657	2.520
	Cu	65	163.266	ppb	10.179	6349.755	4.288
	Zn	66	1228.156	ppb	3.777	15277.330	2.472
>	Ge	72		ppb		467440.073	1.312
	As	75	1.423	ppb	178.983	67.363	52.812
	Se	82	-4.400	ppb	134.261	88.000	9.841
	Y	89		ppb		5523456.354	1.632
	Cd	111	14.766	ppb	10.510	366.341	9.367
	Mo	98	35.696	ppb	3.272	2368.944	3.054
>	Rh	103		ppb		4491507.561	0.421
	Ag	107	1.061	ppb	14.644	420.344	2.706
	Sn	118	2.273	ppb	55.968	3782.525	2.465
	In	115		ppb		7445937.387	1.246
	Sb	121	2.871	ppb	8.971	312.339	7.673
	Ba	137	1279.834	ppb	2.742	44757.249	2.386
>	Tb	159		ppb		8905848.982	0.996
	Ho	165		ppb		9103270.554	1.231
	Tl	205	3.687	ppb	4.042	4667.307	1.942
	Pb	208	17.102	ppb	2.176	7284.244	0.699
>	Bi	209		ppb		5934545.713	1.265
	Kr	83		ppb		94.001	9.456

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		99.812
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		104.002
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		102.711
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		101.804
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.242
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005R

Analyzed Date/Time: Friday, March 16, 2012 16:20:53
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\DataSet\pg117\02579-005R.019
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 14
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
[>	Li	6		ppb		85106.143	7.871
|	Be	9	0.914	ppb	32.157	6.333	18.232
|	B	11	240.367	ppb	28.431	3337.669	2.732
[	Na	23	1327.051	ppm	2.291	57301305.479	1.871
|	Mg	24	16.162	ppm	0.431	476864.988	0.443
|	Al	27	438.873	ppb	18.476	26124.891	13.701
|	K	39	6.739	ppm	17.028	796857.529	9.195
|	Ca	44	650.385	ppm	4.450	1345626.202	4.583
|	Sc	45		ppb		1863327.530	0.541
|	Ti	47	17.829	ppb	27.307	220.670	10.238
|	V	51	64.423	ppb	0.709	7265.385	0.704
|	Cr	52	18.402	ppb	11.105	14886.954	1.338
|	Fe	54	0.316	ppm	104.540	56823.832	2.680
|	Mn	55	1530.437	ppb	5.332	177462.993	4.943
|	Co	59	2.108	ppb	6.350	401.676	2.506
|	Ni	60	53.656	ppb	15.408	2316.323	6.006
|	Cu	65	166.529	ppb	9.093	6362.625	4.163
|	Zn	66	1232.617	ppb	3.932	15198.859	3.563
|>	Ge	72		ppb		463315.477	0.790
|	As	75	5.204	ppb	38.502	120.050	23.114
|	Se	82	7.671	ppb	94.892	107.001	10.778
|	Y	89		ppb		5420494.138	1.674
|	Cd	111	13.883	ppb	9.302	342.007	8.718
[	Mo	98	27.351	ppb	3.092	1897.782	3.268
|>	Rh	103		ppb		4436003.204	3.383
|	Ag	107	1.171	ppb	29.553	423.677	3.423
|	Sn	118	-0.416	ppb	152.252	3509.406	1.933
|	In	115		ppb		7439258.198	1.633
[	Sb	121	2.905	ppb	12.045	314.006	8.492
|	Ba	137	1436.468	ppb	3.464	50066.033	2.955
|>	Tb	159		ppb		8880215.685	1.395
|	Ho	165		ppb		9065501.645	0.615
[	Tl	205	2.843	ppb	11.268	4434.180	1.621
|	Pb	208	17.925	ppb	3.546	7592.692	1.826
[>	Bi	209		ppb		5946805.623	1.157
	Kr	83		ppb		83.000	8.688

E12-02579 0199

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		100.281
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		103.085
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		101.442
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		101.511
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.445
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005SD

Analyzed Date/Time: Friday, March 16, 2012 16:26:03
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005SD.020
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 500
Autosampler Position: 15
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84771.391	6.144
	Be	9	4.604	ppb	83.128	6.333	39.736
	B	11	706.449	ppb	23.712	2908.174	1.170
	Na	23	1300.666	ppm	6.332	11391003.262	3.007
	Mg	24	15.758	ppm	4.956	94978.304	1.828
	Al	27	1591.445	ppb	8.015	21106.033	1.847
	K	39	7.168	ppm	16.766	446628.437	1.265
	Ca	44	556.089	ppm	5.215	249298.244	1.530
	Sc	45		ppb		1822295.299	1.961
	Ti	47	36.826	ppb	38.616	168.668	7.318
	V	51	66.986	ppb	18.831	3119.487	3.706
	Cr	52	53.443	ppb	46.725	14355.021	1.117
	Fe	54	1.922	ppm	36.209	57271.807	2.516
	Mn	55	1698.255	ppb	4.414	41940.949	0.812
	Co	59	2.697	ppb	35.468	253.337	4.575
	Ni	60	40.270	ppb	15.574	1465.129	3.888
	Cu	65	275.692	ppb	23.401	4052.986	3.638
	Zn	66	1475.753	ppb	2.314	4087.336	1.393
>	Ge	72		ppb		463810.084	3.247
	As	75	-0.632	ppb	3956.763	46.074	156.284
	Se	82	5.865	ppb	637.365	96.667	14.860
	Y	89		ppb		5456138.493	3.551
	Cd	111	14.340	ppb	5.479	76.667	1.992
	Mo	98	97.124	ppb	10.088	1518.595	7.079
>	Rh	103		ppb		4554835.967	2.100
	Ag	107	1.899	ppb	85.397	368.008	5.549
	Sn	118	-1.886	ppb	190.308	3607.114	0.551
	In	115		ppb		7572531.789	2.974
	Sb	121	2.560	ppb	13.144	114.667	6.995
	Ba	137	1276.259	ppb	2.514	9153.691	0.249
>	Tb	159		ppb		8999965.266	2.358
	Ho	165		ppb		9161080.109	2.531
	Tl	205	14.635	ppb	9.022	4578.591	1.747
	Pb	208	22.073	ppb	2.372	2839.525	0.808
>	Bi	209		ppb		6106856.721	0.677
	Kr	83		ppb		91.334	4.937

E12-02579 0201

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		99.887
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		103.195
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		104.159
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		102.880
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		101.094
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: BST1

Analyzed Date/Time: Friday, March 16, 2012 16:31:13
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\BST1.021
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 12
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		82687.590	7.158
	Be	9	4363.870	ppb	7.916	13756.018	3.091
	B	11	146.428	ppb	46.059	2850.488	3.100
	Na	23	1354.138	ppm	4.429	58134804.751	3.164
	Mg	24	16.643	ppm	1.501	488331.798	1.638
	Al	27	18901.669	ppb	8.141	788341.359	9.727
	K	39	22.602	ppm	4.901	1834719.946	2.907
	Ca	44	19.859	ppm	4.330	63166.172	0.839
	Sc	45		ppb		1874744.254	2.984
	Ti	47	4063.835	ppb	3.006	20268.625	1.844
	V	51	3629.046	ppb	6.420	295042.192	4.613
	Cr	52	3724.050	ppb	4.936	272585.766	2.653
	Fe	54	18.687	ppm	3.620	160733.275	2.517
	Mn	55	3703.430	ppb	3.852	422413.951	2.531
	Co	59	3729.169	ppb	4.193	350887.018	2.829
	Ni	60	4036.017	ppb	2.850	76437.091	2.408
	Cu	65	4064.960	ppb	2.981	86719.231	0.822
	Zn	66	4046.996	ppb	2.384	48299.922	1.495
>	Ge	72		ppb		460880.830	2.289
	As	75	4020.798	ppb	2.271	56210.661	0.051
	Se	82	3945.388	ppb	5.479	6500.203	3.414
	Y	89		ppb		5439213.481	2.019
	Cd	111	4025.824	ppb	3.059	96462.513	1.584
	Mo	98	3649.822	ppb	1.465	197751.986	2.533
>	Rh	103		ppb		4534185.429	1.072
	Ag	107	4534.036	ppb	2.086	384003.782	1.459
	Sn	118	-2.993	ppb	81.398	3366.348	5.515
	In	115		ppb		7465892.723	1.464
	Sb	121	3856.835	ppb	2.408	329555.919	1.437
	Ba	137	4138.294	ppb	2.036	146340.587	1.427
>	Tb	159		ppb		9029233.134	1.347
	Ho	165		ppb		9251166.664	1.164
	Tl	205	3547.374	ppb	1.348	1043859.735	0.497
	Pb	208	3688.526	ppb	2.226	1348232.639	1.011
>	Bi	209		ppb		6076911.494	1.310
	Kr	83		ppb		97.667	8.946

E12-02579 0203

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		97.431
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		102.543
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		103.687
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		103.214
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		100.599
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005RS

Analyzed Date/Time: Friday, March 16, 2012 16:36:23
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005RS.022
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 16
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		83197.676	5.281
	Be	9	4461.468	ppb	4.540	14177.717	0.714
	B	11	255.540	ppb	18.443	3334.000	1.134
	Na	23	1343.785	ppm	1.605	59359303.508	1.870
	Mg	24	38.019	ppm	1.318	1144357.065	2.689
	Al	27	20050.102	ppb	11.135	858117.061	9.872
	K	39	28.215	ppm	5.766	2266009.468	3.335
	Ca	44	669.495	ppm	1.204	1416367.882	2.239
	Sc	45		ppb		1909673.079	3.717
	Ti	47	4097.745	ppb	3.252	21018.478	1.729
	V	51	3704.080	ppb	2.279	309950.003	3.181
	Cr	52	3753.411	ppb	2.953	282701.268	4.207
	Fe	54	19.010	ppm	6.325	167145.150	2.725
	Mn	55	5224.686	ppb	0.960	611740.403	1.154
	Co	59	3738.028	ppb	1.581	361957.224	3.036
	Ni	60	4085.092	ppb	3.418	79543.588	1.938
	Cu	65	4185.849	ppb	3.031	91762.196	1.532
	Zn	66	5270.694	ppb	0.842	64525.187	0.674
>	Ge	72		ppb		473983.703	1.483
	As	75	4073.610	ppb	1.371	58581.452	0.951
	Se	82	3964.638	ppb	0.150	6722.377	1.601
	Y	89		ppb		5609199.469	1.756
	Cd	111	4010.209	ppb	1.179	98849.153	0.415
	Mo	98	3778.818	ppb	2.572	205660.799	1.704
>	Rh	103		ppb		4556361.051	1.669
	Ag	107	4620.825	ppb	2.712	393189.170	1.148
	Sn	118	-2.732	ppb	83.030	3404.363	4.271
	In	115		ppb		7647554.347	0.718
	Sb	121	3827.011	ppb	1.044	334990.281	1.091
	Ba	137	5338.967	ppb	2.352	193344.983	2.305
>	Tb	159		ppb		9248168.270	0.925
	Ho	165		ppb		9431339.776	1.795
	Tl	205	3578.672	ppb	1.438	1065118.058	1.251
	Pb	208	3781.296	ppb	1.630	1397997.259	0.662
>	Bi	209		ppb		6147032.447	2.189
	Kr	83		ppb		99.334	12.095

E12-02579 0205

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		98.032
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		105.458
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		104.194
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		105.717
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		101.760
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCV

Analyzed Date/Time: Friday, March 16, 2012 16:41:35
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCV.023
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		82740.508	7.316
	Be	9	53.783	ppb	7.566	33923.927	1.929
	B	11	53.226	ppb	9.315	46627.817	2.748
	Na	23	0.495	ppm	4.354	4330017.206	1.739
	Mg	24	0.496	ppm	3.307	2828750.895	0.491
	Al	27	54.954	ppb	5.067	451287.393	7.657
	K	39	0.535	ppm	2.137	7217119.641	3.004
	Ca	44	0.489	ppm	3.584	215874.503	2.530
	Sc	45		ppb		1852101.363	2.594
	Ti	47	213.876	ppb	2.086	207276.610	0.873
	V	51	50.841	ppb	4.676	804333.154	1.771
	Cr	52	45.143	ppb	3.805	627042.793	1.045
	Fe	54	0.466	ppm	3.337	569755.449	3.214
	Mn	55	45.587	ppb	3.068	1011588.161	0.254
	Co	59	46.028	ppb	1.358	846454.547	1.627
	Ni	60	50.516	ppb	2.516	185126.550	3.715
	Cu	65	50.926	ppb	3.454	208078.499	2.094
	Zn	66	52.509	ppb	3.611	121540.279	0.829
>	Ge	72		ppb		450425.887	2.821
	As	75	53.995	ppb	1.722	147492.217	2.334
	Se	82	49.514	ppb	4.789	15804.643	1.871
	Y	89		ppb		5471869.012	3.154
	Cd	111	50.418	ppb	5.326	235990.806	2.760
	Mo	98	45.275	ppb	1.396	469178.469	1.920
>	Rh	103		ppb		4342468.121	1.036
	Ag	107	10.678	ppb	1.309	173423.655	2.179
	Sn	118	45.490	ppb	0.613	750178.778	0.446
	In	115		ppb		7556076.810	1.086
	Sb	121	46.465	ppb	2.243	812128.638	1.179
	Ba	137	49.144	ppb	2.821	355250.643	1.566
>	Tb	159		ppb		9235829.854	1.289
	Ho	165		ppb		9400411.664	1.108
	Tl	205	46.322	ppb	0.704	2798944.427	0.575
	Pb	208	45.042	ppb	1.224	3386394.806	0.279
>	Bi	209		ppb		6252494.120	1.251
	Kr	83		ppb		90.000	11.277

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		97.494
	Be	9	107.565	
	B	11	106.453	
	Na	23	98.934	
	Mg	24	99.101	
	Al	27	109.909	
	K	39	107.041	
	Ca	44	97.868	
	Sc	45		
	Ti	47	106.938	
	V	51	101.681	
	Cr	52	90.286	
	Fe	54	93.134	
	Mn	55	91.175	
	Co	59	92.055	
	Ni	60	101.033	
	Cu	65	101.851	
	Zn	66	105.019	
>	Ge	72		100.217
	As	75	107.990	
	Se	82	99.029	
	Y	89		
	Cd	111	100.835	
	Mo	98	90.551	
>	Rh	103		99.303
	Ag	107	106.780	
	Sn	118	90.980	
	In	115		
	Sb	121	92.929	
	Ba	137	98.289	
>	Tb	159		105.576
	Ho	165		
	Tl	205	92.644	
	Pb	208	90.084	
>	Bi	209		103.505
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCB

Analyzed Date/Time: Friday, March 16, 2012 16:47:07
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\CCB.024
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		78387.831	7.985
	Be	9	0.007	ppb	16.042	7.000	14.286
	B	11	1.161	ppb	25.329	3042.889	1.081
	Na	23	-0.000	ppm	77.465	185295.521	1.819
	Mg	24	-0.000	ppm	4.683	1707.508	3.112
	Al	27	-0.078	ppb	51.726	6870.500	3.710
	K	39	0.002	ppm	31.989	357771.001	0.903
	Ca	44	-0.001	ppm	93.107	21418.491	0.688
	Sc	45		ppb		1756087.213	1.301
	Ti	47	0.139	ppb	10.825	256.004	7.042
	V	51	-0.004	ppb	167.754	1858.259	5.934
	Cr	52	0.012	ppb	45.056	13034.188	1.901
	Fe	54	-0.000	ppm	97.903	51868.990	1.240
	Mn	55	-0.001	ppb	182.764	3070.566	0.751
	Co	59	0.002	ppb	78.062	230.003	13.825
	Ni	60	0.001	ppb	2190.874	1245.426	4.151
	Cu	65	-0.004	ppb	630.338	2738.784	3.207
	Zn	66	0.004	ppb	179.944	563.019	3.318
>	Ge	72		ppb		438679.150	1.634
	As	75	0.008	ppb	175.820	65.139	54.823
	Se	82	0.047	ppb	73.271	104.001	9.470
	Y	89		ppb		5095449.442	1.198
	Cd	111	0.002	ppb	36.448	18.333	22.709
	Mo	98	0.158	ppb	9.091	2038.378	6.664
>	Rh	103		ppb		4260701.513	3.002
	Ag	107	0.012	ppb	10.341	500.348	2.401
	Sn	118	0.416	ppb	15.044	10102.157	9.654
	In	115		ppb		7211489.069	2.657
	Sb	121	0.016	ppb	13.843	333.007	11.727
	Ba	137	-0.003	ppb	39.371	144.001	5.424
>	Tb	159		ppb		8597482.753	0.785
	Ho	165		ppb		8783865.238	1.813
	Tl	205	0.014	ppb	9.966	4404.164	0.545
	Pb	208	0.000	ppb	669.585	1180.699	0.636
>	Bi	209		ppb		5903777.071	1.291
	Kr	83		ppb		97.001	6.186

E12-02579 0209

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		92.365
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		97.603
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		97.433
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		98.279
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		97.733
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005PS

Analyzed Date/Time: Friday, March 16, 2012 16:52:38
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005PS.025
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 17
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85148.640	21.748
	Be	9	4286.918	ppb	19.215	13580.062	2.852
	B	11	260.733	ppb	66.744	3333.000	2.836
	Na	23	1369.626	ppm	2.207	56493297.418	0.293
	Mg	24	38.337	ppm	1.418	1077593.489	1.752
	Al	27	19575.704	ppb	7.230	783971.782	8.760
	K	39	29.193	ppm	2.250	2178755.455	0.066
	Ca	44	677.879	ppm	3.416	1338813.408	2.601
	Sc	45		ppb		1801358.509	1.677
	Ti	47	4233.407	ppb	2.315	20280.989	1.993
	V	51	3749.954	ppb	1.047	293017.152	1.524
	Cr	52	3773.961	ppb	2.227	265400.781	3.577
	Fe	54	19.352	ppm	4.398	157990.461	1.083
	Mn	55	5296.513	ppb	2.859	579078.799	1.844
	Co	59	3771.773	ppb	0.233	341085.828	2.015
	Ni	60	4180.154	ppb	4.261	76026.083	4.805
	Cu	65	4283.673	ppb	0.765	87674.272	2.189
	Zn	66	5362.867	ppb	3.210	61322.031	3.970
>	Ge	72		ppb		442721.866	1.923
	As	75	4104.919	ppb	2.505	55139.040	2.732
	Se	82	4019.301	ppb	2.029	6365.432	3.619
	Y	89		ppb		5323269.895	0.602
	Cd	111	4153.630	ppb	1.775	95649.462	3.037
	Mo	98	3846.987	ppb	5.231	197125.449	1.474
>	Rh	103		ppb		4294930.878	3.895
	Ag	107	4652.278	ppb	2.864	372988.998	1.239
	Sn	118	29.629	ppb	2.195	5837.379	3.604
	In	115		ppb		7194663.564	2.922
	Sb	121	3931.321	ppb	3.189	324773.424	0.377
	Ba	137	5641.188	ppb	2.118	192852.083	1.724
>	Tb	159		ppb		8733398.109	2.904
	Ho	165		ppb		8988711.287	0.639
	Tl	205	3651.205	ppb	1.144	1040226.654	1.562
	Pb	208	3835.538	ppb	1.708	1357449.302	1.294
>	Bi	209		ppb		5883314.500	0.429
	Kr	83		ppb		98.667	4.220

E12-02579 0211

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		100.331
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		98.503
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		98.216
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		99.833
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		97.394
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCV

Analyzed Date/Time: Friday, March 16, 2012 17:44:31
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCV.035
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85736.899	5.046
	Be	9	51.468	ppb	6.028	33690.638	1.033
	B	11	51.744	ppb	5.776	47148.385	2.367
	Na	23	0.527	ppm	1.765	4489349.856	2.984
	Mg	24	0.516	ppm	0.983	2868868.389	0.628
	Al	27	54.894	ppb	4.661	438551.635	3.093
	K	39	0.536	ppm	2.582	7040609.498	2.083
	Ca	44	0.474	ppm	3.078	204606.018	3.798
	Sc	45		ppb		1880191.297	0.388
	Ti	47	208.145	ppb	2.986	196532.880	1.595
	V	51	50.181	ppb	1.095	774090.146	1.935
	Cr	52	46.873	ppb	1.504	634286.901	2.957
	Fe	54	0.463	ppm	4.095	552124.203	2.950
	Mn	55	46.855	ppb	2.098	1013454.005	3.086
	Co	59	46.127	ppb	2.116	826382.388	0.620
	Ni	60	49.631	ppb	3.436	177144.790	1.904
	Cu	65	50.309	ppb	1.691	200348.789	0.337
	Zn	66	52.061	ppb	0.838	117480.569	2.211
>	Ge	72		ppb		438789.532	1.548
	As	75	53.659	ppb	3.002	142771.589	1.610
	Se	82	48.830	ppb	2.897	15202.539	4.358
	Y	89		ppb		5498585.759	1.687
	Cd	111	49.850	ppb	0.346	227522.373	1.663
	Mo	98	53.310	ppb	5.980	533538.333	4.899
>	Rh	103		ppb		4196936.309	2.210
	Ag	107	10.193	ppb	3.016	159952.680	2.210
	Sn	118	45.648	ppb	1.407	727433.934	0.883
	In	115		ppb		7648311.145	1.611
	Sb	121	46.689	ppb	1.441	794208.788	0.475
	Ba	137	49.319	ppb	0.934	347030.794	1.504
>	Tb	159		ppb		8987882.246	0.983
	Ho	165		ppb		9673272.762	1.191
	Tl	205	50.991	ppb	0.978	2856772.562	1.771
	Pb	208	48.025	ppb	1.150	3347927.311	0.125
>	Bi	209		ppb		5797546.186	1.033
	Kr	83		ppb		88.667	11.127

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.024
	Be	9	102.936	
	B	11	103.488	
	Na	23	105.499	
	Mg	24	103.122	
	Al	27	109.788	
	K	39	107.203	
	Ca	44	94.853	
	Sc	45		
	Ti	47	104.073	
	V	51	100.361	
	Cr	52	93.747	
	Fe	54	92.596	
	Mn	55	93.711	
	Co	59	92.253	
	Ni	60	99.261	
	Cu	65	100.617	
	Zn	66	104.122	
>	Ge	72		97.628
	As	75	107.318	
	Se	82	97.660	
	Y	89		
	Cd	111	99.699	
	Mo	98	106.620	
>	Rh	103		95.975
	Ag	107	101.929	
	Sn	118	91.297	
	In	115		
	Sb	121	93.378	
	Ba	137	98.639	
>	Tb	159		102.742
	Ho	165		
	Tl	205	101.981	
	Pb	208	96.050	
>	Bi	209		95.974
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCB

Analyzed Date/Time: Friday, March 16, 2012 17:50:03
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCB.036
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		81548.108	3.800
	Be	9	0.001	ppb	448.023	3.667	56.773
	B	11	1.384	ppb	14.503	3362.346	6.002
	Na	23	-0.000	ppm	536.172	195998.532	0.656
	Mg	24	-0.000	ppm	42.877	2101.266	6.514
	Al	27	-0.052	ppb	67.030	7353.913	3.846
	K	39	0.001	ppm	10.876	360240.177	0.643
	Ca	44	-0.008	ppm	0.869	19744.364	1.036
	Sc	45		ppb		1902207.912	2.048
	Ti	47	0.151	ppb	46.476	278.005	24.945
	V	51	-0.011	ppb	63.973	1821.542	5.132
	Cr	52	-0.018	ppb	181.704	13120.325	2.541
	Fe	54	-0.002	ppm	34.707	52367.402	2.224
	Mn	55	-0.005	ppb	21.783	3111.914	1.244
	Co	59	0.002	ppb	25.406	242.670	3.505
	Ni	60	-0.003	ppb	897.507	1281.432	6.091
	Cu	65	-0.048	ppb	26.043	2665.760	1.298
	Zn	66	0.043	ppb	27.482	677.028	4.941
>	Ge	72		ppb		455779.180	1.071
	As	75	0.008	ppb	201.202	66.898	62.424
	Se	82	-0.002	ppb	647.595	92.334	4.377
	Y	89		ppb		5496950.780	2.383
	Cd	111	0.012	ppb	29.413	62.334	26.132
	Mo	98	0.123	ppb	105.670	1856.953	79.039
>	Rh	103		ppb		4650758.455	1.842
	Ag	107	0.004	ppb	26.407	417.677	6.431
	Sn	118	0.388	ppb	15.472	10545.725	11.250
	In	115		ppb		7758071.078	0.951
	Sb	121	0.014	ppb	11.190	317.006	8.049
	Ba	137	-0.003	ppb	37.079	155.668	4.906
>	Tb	159		ppb		9474946.429	0.686
	Ho	165		ppb		9640899.411	1.193
	Tl	205	0.006	ppb	55.508	4194.056	2.895
	Pb	208	-0.000	ppb	2519.660	1261.704	4.421
>	Bi	209		ppb		6340558.593	1.931
	Kr	83		ppb		86.000	2.014

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		96.089
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		101.408
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		106.353
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		108.309
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		104.963
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Analytical Sequence

Method : 7470A TCLP

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		BMT1-117
10	10		BST1-117
11	11		02579-005
12	12		02579-005R
13	13		02579-005RS
14	14		02521-001
15	15		02521-002
16	16		02521-003
17	17		02541-001
18	18		02541-002
19	2	QC	CCV
20	1	QC	CCB
21	19		02541-003
22	20		02552-001
23	21		02552-002
24	22		02553-001
25	23		02553-002
26	24		02553-003
27	25		02556-001
28	26		02556-002
29	27		02580-001
30	28		02580-002
31	2	QC	CCV
32	1	QC	CCB
33	29		02580-003
34	30		02580-004
35	31		02580-005
36	32		02580-006
37	33		BMT2-117
38	34		BST2-117
39	35		02111-001
40	36		02111-001R
41	37		02111-001RS
42	38		02554-001
43	2	QC	CCV
44	1	QC	CCB
45	39		02599-001
46	40		02600-001
47	41		02600-002
48	42		02601-001
49	43		02602-001
50	2	QC	CCV
51	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\117.SIF
Batch ID: 117TCLP
Results Data Set: pg117ahg
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Method Loaded
Method Name: 7470A TCLP
Method Last Saved: 4/15/2011 1:57:25 PM
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 3/16/2012 1:15:10 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0014	0.0014	0.0003	13:16:03	Yes
2		[0.00]	0.0014	0.0014	0.0003	13:16:36	Yes
3		[0.00]	0.0010	0.0010	0.0003	13:17:09	Yes
Mean:		[0.00]	0.0013				
SD:		0.00	0.0002				
%RSD:		0.00	16.85				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 3/16/2012 1:17:28 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0207	0.0220	0.0043	13:18:22	Yes
2		[0.25]	0.0208	0.0221	0.0042	13:18:54	Yes
3		[0.25]	0.0211	0.0224	0.0043	13:19:27	Yes
Mean:		[0.25]	0.0209				
SD:		0.00	0.0002				
%RSD:		0.00	1.06				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.08353 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 3/16/2012 1:19:47 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.2153	0.2165	0.0406	13:20:42	Yes
2		[2.500]	0.2113	0.2126	0.0400	13:21:15	Yes
3		[2.500]	0.2112	0.2124	0.0400	13:21:48	Yes
Mean:		[2.500]	0.2126				
SD:		0.000	0.0023				
%RSD:		0.000	1.09				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999996 Slope: 0.08502 Intercept: 0.00000

Sequence No.: 4
Autosampler Location: 5

Sample ID: Calib Std 3 Date Collected: 3/16/2012 1:22:08 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.4238	0.4251	0.0796	13:23:02	Yes
2		[5.000]	0.4144	0.4157	0.0783	13:23:35	Yes
3		[5.000]	0.4130	0.4143	0.0783	13:24:07	Yes
Mean:		[5.000]	0.4171				
SD:		0.000	0.0059				
%RSD:		0.000	1.41				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999918 Slope: 0.08374 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 6
Sample ID: Calib Std 4 Date Collected: 3/16/2012 1:24:28 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.6248	0.6260	0.1172	13:25:23	Yes
2		[7.500]	0.6209	0.6222	0.1168	13:25:56	Yes
3		[7.500]	0.6153	0.6166	0.1162	13:26:29	Yes
Mean:		[7.500]	0.6203				
SD:		0.000	0.0048				
%RSD:		0.000	0.77				

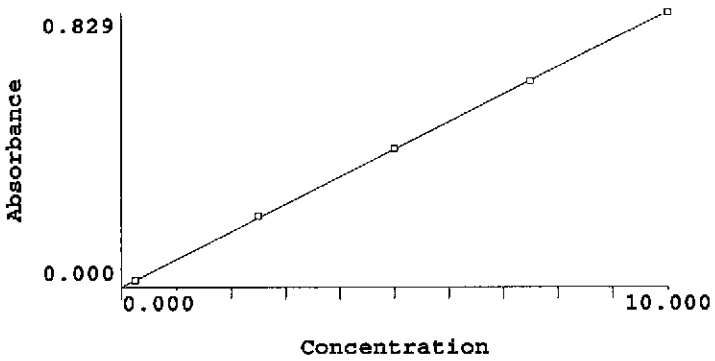
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999915 Slope: 0.08308 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 7
Sample ID: Calib Std 5 Date Collected: 3/16/2012 1:26:51 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.8392	0.8405	0.1559	13:27:46	Yes
2		[10.000]	0.8238	0.8251	0.1535	13:28:19	Yes
3		[10.000]	0.8232	0.8244	0.1542	13:28:52	Yes
Mean:		[10.000]	0.8287				
SD:		0.000	0.0091				
%RSD:		0.000	1.10				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999956 Slope: 0.08297 Intercept: 0.00000



Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

Calib Blank 1	0.0000	0	0.00000	0.00	16.9
Calib Std 1	0.0209	0.25	0.25169	0.00	1.1
Calib Std 2	0.2126	2.500	2.56202	0.00	1.1
Calib Std 3	0.4171	5.000	5.02676	0.01	1.4
Calib Std 4	0.6203	7.500	7.47626	0.00	0.8
Calib Std 5	0.8287	10.000	9.98835	0.01	1.1

Correlation Coef.: 0.999956 Slope: 0.08297 Intercept: 0.00000

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 3/16/2012 1:29:14 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00528	5.2828	0.4383	0.4396	0.0822	13:30:08	Yes
2	0.00522	5.2194	0.4331	0.4343	0.0818	13:30:41	Yes
3	0.00520	5.1987	0.4313	0.4326	0.0818	13:31:13	Yes
Mean:	0.00523	5.2336	0.4342				
SD:	0.00004	0.04379	0.0036				
%RSD:	0.83675	0.83675	0.84				

QC value within limits for Hg 253.7 Recovery = 104.67%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 3/16/2012 1:31:33 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00128	0.0001	0.0014	0.0003	13:32:26	Yes
2	0.00000	-0.00056	-0.0000	0.0012	0.0003	13:32:59	Yes
3	0.00000	-0.00071	-0.0001	0.0012	0.0003	13:33:32	Yes
Mean:	0.00000	0.00000	0.0000				
SD:	0.00000	0.00111	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BMT1-117 **Date Collected: 3/16/2012 1:33:51 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BMT1-117

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.00755	-0.0006	0.0007	0.0002	13:34:43	Yes
2	-0.00002	-0.00838	-0.0007	0.0006	0.0002	13:35:16	Yes
3	-0.00001	-0.00307	-0.0003	0.0010	0.0002	13:35:49	Yes
Mean:	-0.00001	-0.00633	-0.0005				
SD:	0.00001	0.00286	0.0002				
%RSD:	45.131	45.131	45.13				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: BST1-117 **Date Collected: 3/16/2012 1:36:08 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BST1-117

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01097	5.4844	0.4550	0.4563	0.0859	13:37:00	Yes
2	0.01083	5.4166	0.4494	0.4507	0.0852	13:37:33	Yes
3	0.01082	5.4103	0.4489	0.4502	0.0854	13:38:06	Yes

Mean:	0.01087	5.4371	0.4511
SD:	0.00008	0.04110	0.0034
%RSD:	0.75595	0.75595	0.76

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: 02579-005 **Date Collected: 3/16/2012 1:38:25 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00003	0.01684	0.0014	0.0027	0.0006	13:39:19	Yes
2	0.00003	0.01566	0.0013	0.0026	0.0005	13:39:51	Yes
3	0.00004	0.01864	0.0015	0.0028	0.0005	13:40:24	Yes
Mean:	0.00003	0.01705	0.0014				
SD:	0.00000	0.00150	0.0001				
%RSD:	8.8009	8.8009	8.80				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 02579-005R **Date Collected: 3/16/2012 1:40:43 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005R

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00003	0.01416	0.0012	0.0025	0.0005	13:41:36	Yes
2	0.00003	0.01473	0.0012	0.0025	0.0005	13:42:09	Yes
3	0.00003	0.01621	0.0013	0.0026	0.0005	13:42:42	Yes
Mean:	0.00003	0.01504	0.0012				
SD:	0.00000	0.00106	0.0001				
%RSD:	7.0562	7.0562	7.06				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 02579-005RS **Date Collected: 3/16/2012 1:43:01 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005RS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01080	5.4015	0.4482	0.4495	0.0834	13:43:55	Yes
2	0.01065	5.3244	0.4418	0.4431	0.0825	13:44:28	Yes
3	0.01049	5.2449	0.4352	0.4365	0.0819	13:45:01	Yes
Mean:	0.01065	5.3236	0.4417				
SD:	0.00016	0.07831	0.0065				
%RSD:	1.4711	1.4711	1.47				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 02521-001 **Date Collected: 3/16/2012 1:45:21 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02521-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00001	0.00604	0.0005	0.0018	0.0003	13:46:14	Yes
2	0.00000	0.00137	0.0001	0.0014	0.0003	13:46:47	Yes
3	0.00000	-0.00060	-0.0000	0.0012	0.0003	13:47:20	Yes
Mean:	0.00000	0.00227	0.0002				
SD:	0.00001	0.00341	0.0003				
%RSD:	149.94	149.94	149.94				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 02521-002 **Date Collected: 3/16/2012 1:47:40 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02521-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00028	-0.0000	0.0013	0.0002	13:48:34	Yes
2	-0.00001	-0.00539	-0.0004	0.0008	0.0002	13:49:07	Yes
3	-0.00002	-0.00869	-0.0007	0.0006	0.0002	13:49:40	Yes
Mean:	-0.00001	-0.00478	-0.0004				
SD:	0.00001	0.00424	0.0004				
%RSD:	88.632	88.632	88.63				

Sequence No.: 16 Autosampler Location: 16
Sample ID: 02521-003 Date Collected: 3/16/2012 1:50:01 PM
Analyst: Rob Data Type: Original

Replicate Data: 02521-003

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00141	-0.0001	0.0012	0.0002	13:50:55	Yes
2	-0.00002	-0.00753	-0.0006	0.0007	0.0002	13:51:27	Yes
3	-0.00001	-0.00517	-0.0004	0.0009	0.0002	13:52:00	Yes
Mean:	-0.00001	-0.00470	-0.0004				
SD:	0.00001	0.00309	0.0003				
%RSD:	65.652	65.652	65.65				

Sequence No.: 17 Autosampler Location: 17
Sample ID: 02541-001 Date Collected: 3/16/2012 1:52:21 PM
Analyst: Rob Data Type: Original

Replicate Data: 02541-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00333	-0.0003	0.0010	0.0002	13:53:15	Yes
2	0.00000	-0.00212	-0.0002	0.0011	0.0002	13:53:48	Yes
3	-0.00001	-0.00356	-0.0003	0.0010	0.0002	13:54:21	Yes
Mean:	-0.00001	-0.00300	-0.0002				
SD:	0.00000	0.00078	0.0001				
%RSD:	25.838	25.838	25.84				

Sequence No.: 18 Autosampler Location: 18
Sample ID: 02541-002 Date Collected: 3/16/2012 1:54:41 PM
Analyst: Rob Data Type: Original

Replicate Data: 02541-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00497	-0.0004	0.0009	0.0002	13:55:36	Yes
2	-0.00001	-0.00376	-0.0003	0.0010	0.0002	13:56:09	Yes
3	-0.00001	-0.00539	-0.0004	0.0008	0.0002	13:56:42	Yes
Mean:	-0.00001	-0.00471	-0.0004				
SD:	0.00000	0.00084	0.0001				
%RSD:	17.941	17.941	17.94				

Sequence No.: 19 Autosampler Location: 2
Sample ID: CCV Date Collected: 3/16/2012 1:57:03 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00532	5.3238	0.4417	0.4430	0.0825	13:57:56	Yes
2	0.00525	5.2506	0.4356	0.4369	0.0818	13:58:29	Yes
3	0.00521	5.2112	0.4324	0.4337	0.0814	13:59:02	Yes

Mean:	0.00526	5.2619	0.4366
SD:	0.00006	0.05716	0.0047
%RSD:	1.0863	1.0863	1.09

QC value within limits for Hg 253.7 Recovery = 105.24%
All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/16/2012 1:59:21 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00122	-0.0001	0.0012	0.0003	14:00:14	Yes
2	0.00000	0.00301	0.0002	0.0015	0.0003	14:00:47	Yes
3	0.00000	0.00306	0.0003	0.0015	0.0003	14:01:20	Yes
Mean:	0.00000	0.00162	0.0001				
SD:	0.00000	0.00245	0.0002				
%RSD:	151.82	151.82	151.82				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 19**
Sample ID: 02541-003 **Date Collected: 3/16/2012 2:01:39 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02541-003

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00217	0.0002	0.0015	0.0003	14:02:34	Yes
2	0.00001	0.00278	0.0002	0.0015	0.0003	14:03:06	Yes
3	-0.00001	-0.00431	-0.0004	0.0009	0.0003	14:03:39	Yes
Mean:	0.00000	0.00022	0.0000				
SD:	0.00001	0.00393	0.0003				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: 02552-001 **Date Collected: 3/16/2012 2:04:01 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02552-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00119	-0.0001	0.0012	0.0003	14:04:56	Yes
2	0.00001	0.00381	0.0003	0.0016	0.0003	14:05:29	Yes
3	0.00000	0.00213	0.0002	0.0015	0.0003	14:06:02	Yes
Mean:	0.00000	0.00158	0.0001				
SD:	0.00001	0.00254	0.0002				
%RSD:	160.65	160.65	160.65				

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: 02552-002 **Date Collected: 3/16/2012 2:06:23 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02552-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00117	0.0001	0.0014	0.0003	14:07:18	Yes
2	0.00001	0.00355	0.0003	0.0016	0.0003	14:07:52	Yes
3	0.00000	0.00081	0.0001	0.0014	0.0003	14:08:24	Yes
Mean:	0.00000	0.00184	0.0002				
SD:	0.00000	0.00149	0.0001				
%RSD:	80.837	80.837	80.84				

TCLP METALS
PREP LOGS
STANDARD PREP LOGS

2012 PG: 117 METALS'S DIGESTION LOG

Date: 03/16/12 08:00

MATRIX: LEACHATE | **PREP. SOLUTION** | **DATE** | **LOT #** | **ANALYSIS METHOD:** 6020 | **Hg DIG. DATE:** 3/16/12

DIGESTION METHOD: 3005A | NaCl: | 2/24/12 | 096144 | **Hg ANAL. METHOD:** 1311/7470A

SPIKES: 1.00ml M359 | Hydroxylamine: | 2/24/12 | 108224 | **LOT# HNO3:** 114927 | **ICPMS ICV:** M331

Hg DIGESTION METHOD: 7470A | KMnO4: | 3/13/12 | 104702 | **LOT# H2SO4:** 104256 | **ICPMS Cal. Stds.:** M327,M361

Hg SPIKE: 2.50 PPB M326-8 | K2S2O8: | 2/8/12 | 084163 | **LOT# HCL:** 115830

Hg ICV: 2.50 PPB M344-1

TEST REQUESTED	SAMPLE #	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M326-8		
Hg	STD2 2.50 PPB						25	50			M326-8		
Hg	STD3 5.00 PPB						25	50			M326-8		
Hg	STD4 7.50 PPB						25	50			M326-8		
Hg	STD5 10.0 PPB						25	50			M326-8		
Hg	ICV 5.00 PPB						25	50			M344-1		
	BMT1				25	50	25	50					
	BST1				25	50	25	50					
TCLP	02579-005	*	R		25	50	25	50	U1-LM	3/19	R-48(3/19 11:00)		
	02579-005R	*	R		25	50	25	50	U1-LM				
	02579-005RS	*	R		25	50	25	50	U1-LM				
TCLP + Cu Ni Zn	02521-001	*	N		25	50	25	50	VS1-LM	3/26	Solid, Cloudy	0.2	
TCLP + Cu Ni Zn	02521-002	*	N		25	50	25	50	VS1-LM		Solid, Cloudy	0.2	
TCLP + Cu Ni Zn	02521-003	*	N		25	50	25	50	VS1-LM		FILT OF 3 RECEIVED IN 2OZ, LIMITED SAMPLE.. TCLP VOA 6.25G, FULL TCLP 50G, ASTM 25G, PCB 5G, TOX 1G, TS/TVS 5G, O&G/SGTHEM 10G, REACTIVITY 10G---DO NOT USE UP THE REST OF SAMPLE.....PAIN T FILTER ND WITH 100G, IGNITABILITY NO 03/14/12; Solid,cloudy	0.2	
TCLP	02541-001	*	Y		25	50	25	50	U1-LM	3/20	R-1WK		
TCLP	02541-002	*	Y		25	50	25	50	U1-LM		R-1WK		
TCLP	02541-003	*	Y		25	50	25	50	U1-LM		R-1WK		
TCLP	02552-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous,light Yellow		
TCLP	02552-002	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	02553-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous,Light Yellow		
TCLP	02553-002	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	02553-003	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Yellow		
TCLP	02556-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous		

E12-02579 0225

2012 PG: 117 METALS'S DIGESTION LOG

Date: 03/16/12 08:00

TCLP	**02556-002**	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Pink		
TCLP	**02580-001**	*	Y		25	50	25	50	U1-LM	**3/21**	R-1WK; Solid		
TCLP	**02580-002**	*	Y		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Yellow		
TCLP	**02580-003**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-004**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-005**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-006**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
	BMT2				25	50	25	50					
	BST2				25	50	25	50					
TCLP As + Ba Cd Cr Pb Hg Se Ag Cu Ni Zn Be Sb Tl V	**02111-001**	*	Y		25	50	25	50	U1-LM	**3/19**	R-48(3/19 16:00); SEE ATTACH FOR METAL LIMIT		*
	02111-001R	*	Y		25	50	25	50	U1-LM				
	02111-001RS	*	Y		25	50	25	50	U1-LM				
TCLP	**02554-001**	*	N		10	20	10	50	U1-LM	**3/20**	R-1WK; IS CLEAR AND BRIGHT RED; Liquid,Red,Ashing		
TCLP	**02599-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02600-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02600-002**	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	**02601-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02602-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		

Standard Preparation Worksheet for ICP-MS

ELAN DRC-e S/N AH12420705

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	Spex	CL-CAL-1	42-504S	M-424	05/30/2013	
Instrument Check Standard 3	Spex	CL-ICS-3	CL43-142AP	M-417	05/30/2013	
1000 ppm Ti	SCP	140-050-281	SH0720005	M-415	04/17/2013	
1000ppm B	SCP	140-050-051	SH0930007	M-414	04/17/2013	
1000 ppm Sn	I.V.	CGSnC1-1	D2-SN02031	M-373	03/1/2013	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP		511051200	M-396	05/2012	

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	Spex	CL-INT-A2	4-298BD	M-376	05/2012	
Interference Check Solution 2	Spex	CL-INT-B2	CL42-123AD	M-389	06/2012	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	IV	CGGE1-1	D2-GE01084	M-388	05/5/2013	
1000ppm Rh	IV	CGR41-1	D2-R401101	M-383	04/20/2013	
Multi-element Internal Standard 1	Spex	CLISS-1	CL5-152YP	M-419	03/15/2013	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Culligan					
Nitric Acid	Fisher	A200S-212	113723		11/08/2021	

Standard Preparation Worksheet for ICP-MS

ELAN DRC-e S/N AH12420705

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
(trace elem.) *	0	0.5 ppb	50 ppb	100 ppb	200 ppb
(major elem.) **	0	0.005 ppm	0.5 ppm	1 ppm	2 ppm
Calibration Stock	0	0.05ml	5ml	10ml	20ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 030512

Standard Name		030512-1	030512-2	030512-3	030512-4	030512-5
Prepared by:	Initial	RP	RP	RP	RP	RP
	Date	3/5/12	3/5/12	3/5/12	3/5/12	3/5/12
Standard Name		030512-6	030512-7	030512-8	030512-9	030512-10
Prepared by:	Initial	3/12/12 RP	RP	RP	RP	RP
	Date		3/12/12	3/12/12	3/12/12	3/12/12
Standard Name		030512-11	030512-12	030512-13	030512-14	030512-15
Prepared by:	Initial	RP	RP	RP	RP	RP
	Date	3/19/12	3/19/12	3/19/12	3/19/12	3/19/12
Standard Name						
Prepared by:	Initial					
	Date					
Standard Name						
Prepared by:	Initial					
	Date					

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.10 mL ICV custom standard

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05ml 1000ppm Rh

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

GENERAL CHEMISTRY

GENERAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
3/16/2012

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Unit: mg/Kg

Batch ID: AP091-0006

Blank

Parameter	Method Blank	MDL	Analysis Date
Sulfur as S	ND	825	03/16/12

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Sulfur as S	02579-002D	ND	ND	NC	NC

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Sulfur as S	NA	NA	NA	NA	NA	75 - 125

The above blank result applies to the follow samples:

E12-02579-002
E12-02579-002D
E12-02579-003
E12-02579-004
E12-02572-001
E12-02532-002

++ = No Flash - Sample boiled at 100C
NA = Not Applicable
ND = Not Detected
NC = Non calculable RPD due to value less than the detection limit
No = Does Not Ignite
Yes = Sample Ignites

IAL, LLC
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GENERAL CHEMISTRY RAW DATA
INSTRUMENT LOGS

2.1136	2.1136					
0.1147	0.1123					
0.1150	0.1259					
0.1107	0.1152					
0.1135	0.1172					
0.1110	0.7111					
0.1110	ND					
1736	0.0065					
1176	0.0065					
7111	0.1003	(8350)				
	73500					
0.1136	ND					
0.1864	0.0646					
0.1856	0.0647					
0.2111	0.1001					
0.1180	ND					
.1807	0.0631					
.1830	0.0637					
.2174	0.1000					

Hydrid						
7/6/12	10:00	SV	wt1	wt2	diff	
PBS		0.500g	0.1211	0.1211	ND	<825
2579-002		0.508g	0.1203	0.1212	0.0009	<812
-002P		0.510g	0.1198	0.1206	0.0008	<812
-003		0.503g	0.1204	0.1224	0.0020	<820
-004		0.513g	0.1181	0.1196	0.0015	<804
2572-001		0.1729	0.1141	0.1274	0.0133	6720
2532-002		0.1505g	0.1175	0.1200	0.0025	<816
Hulk 8bb		0.05g	0.1111	0.1211	0.1000	75000
Sulforaphane Acid		333000 RA 43-15				(83%)

GENERAL CHEMISTRY STANDARD
PREP LOGS

EMD™ LA-43-15

EMD Chemicals Inc.
480 S. Democrat Road
Gibbstown, NJ 08027
Phone 856-423-6300
Fax 856-423-4389

10/14/03

1cc.

Name: Sulfamic Acid
GR ACS
Meets ACS Specifications

Formula: NH_2SO_3H

Item Number: SX1140/1, SX1140/2, SX1140/3, SX1140/4, SX1140/902

Formula Wt: 97.09

Lot Number: 46250744

Data Order No: 000404701

CHARACTERISTIC	REQUIREMENT		RESULTS	UNITS
	Min.	Max.		
Assay (dried basis)	99.3	100.3	99.33	%
Insoluble matter		0.01	0.002	%
Color			White	
Form			Crystals	
Chloride (Cl)		0.001	< 0.0001	%
Sulfate (SO4)		0.05	0.047	%
Heavy metals (as Pb)		0.001	< 0.0001	%
Iron (Fe)		5	< 0.5	ppm
Residue after ignition		0.01	0.001	%

Charles M. Wilson,
Quality Assurance Manager

Release Date: 9/11/2006

EMD Chemicals Inc.
(Formerly EM Science, A Division of EM Industries, Inc.)
An Affiliate of Merck KGaA, Darmstadt, Germany

E12-02579 0235

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Mike Zukauskas	MJS / KMK	Greenpoint E.C. / 093260-1-1104
Company: GEI Consultants	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program:
Address: 1 Greenwood Ave, Ste 210	Analysis Turnaround Time: Standard ☒	
City: Montclair State: NJ 07042	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 973-873-7110 Fax: 973-509-9625		

ANALYSIS REQUESTED (ENTER BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 460-25837

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	SVOC 8270C	TAL metals (ICP/ICPMS)	PCBs 8082	Hex Chrom 3060A	TOC 9060A	Total CN	Pest/Herb.	Free CN 9013/14	Sample Numbers
GPEC-SB-116(5-6)	4/26/11	8:45	S	3	X	X	X	X	X	X	X	X	X	HOLD #1
GPEC-SB-116(0-2)	4/26/11	8:30	S	3										TCLP Pb & Hg #2
GPEC-SB-117(0-2)	4/26/11	9:05	S	3										#3
GPEC-SB-120(4-5)	4/26/11	8:45	S	3										#4
GPEC-SB-119(0-2)	4/25/11	11:15	S	3										#5
GPEC-SB-121(0-2)	4/25/11	9:40	S											#6
GPEC-SB-121(5-6)	4/25/11	10:05												#7
GPEC-SB-120(0-2)	4/25/11	14:00												#8
GPEC-SB-115(0-2)	4/25/11	15:15												#9
GPEC-SB-115(5-6)	4/25/11	15:35												#10
					X	X	X	X	X	X	X	X	X	
					X	X	X	X	X	X	X	X	X	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:
Water:

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	4/26/11 12:00	1)	TALNX
2)	TALNX	4/26/11 13:40	2)	
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

3.7°C IR#50

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Mike Zukauskas	Samplers Name (Printed)	Site/Project Identification: Greenpoint E.C. / 093260-1-1104
Company: GEI Consultants	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program:
Address	Analysis Turnaround Time: Standard ☒	LAB USE ONLY: Project No:
City: See pg 1 State	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	Job No: 460-25837
Phone Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B										Sample Numbers
GPEC-TB-042611	04/26/11		Aq		X										#11
				Soil:											
				Water:	X										

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	4/26/11 12:00	1)	TAL
2)	TAL	4/26/11 13:40	2)	
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578) 3.7°C IR#50.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-25810-1
Client Project/Site: Greenpoint E.C./093260-1-1104

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
Montclair, New Jersey 07042

Attn: Mr. Matthew Sweet

Authorized for release by:
1/10/2012 3:23:39 PM

Thomas Tanico
Department Manager II
thomas.tanico@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	Recovery or RPD exceeds control limits
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: GPEC-SB-117 (5-6)

Date Collected: 04/26/11 09:50
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-1

Matrix: Solid
Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.1	U	1.1	0.72	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Bromomethane	1.1	U	1.1	0.46	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Vinyl chloride	1.1	U	1.1	0.27	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Chloroethane	1.1	U	1.1	0.45	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Methylene Chloride	1.1	U	1.1	0.53	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Acetone	**13**		11	4.2	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Carbon disulfide	**0.71**	**J**	1.1	0.53	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,1-Dichloroethene	1.1	U	1.1	0.42	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,1-Dichloroethane	1.1	U	1.1	0.29	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
trans-1,2-Dichloroethene	1.1	U	1.1	0.32	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
cis-1,2-Dichloroethene	1.1	U	1.1	0.27	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Chloroform	1.1	U	1.1	0.27	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,2-Dichloroethane	1.1	U	1.1	0.44	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
2-Butanone	11	U	11	0.64	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Carbon tetrachloride	1.1	U	1.1	0.11	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Bromodichloromethane	1.1	U	1.1	0.34	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,2-Dichloropropane	1.1	U	1.1	0.36	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
cis-1,3-Dichloropropene	1.1	U	1.1	0.23	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Trichloroethene	1.1	U	1.1	0.41	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Dibromochloromethane	1.1	U	1.1	0.63	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,1,2-Trichloroethane	1.1	U	1.1	0.67	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Benzene	**2.1**		1.1	0.84	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
trans-1,3-Dichloropropene	1.1	U	1.1	0.25	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Bromoform	1.1	U	1.1	0.79	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
4-Methyl-2-pentanone	11	U	11	0.81	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
2-Hexanone	11	U	11	1.9	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Tetrachloroethene	1.1	U	1.1	0.37	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.86	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Toluene	**0.38**	**J**	1.1	0.34	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Chlorobenzene	1.1	U	1.1	0.55	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Ethylbenzene	**0.34**	**J**	1.1	0.22	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Styrene	1.1	U	1.1	0.39	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1
Xylenes, Total	3.4	U	3.4	0.89	ug/Kg	☼	04/27/11 22:28	04/28/11 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 138*	*04/27/11 22:28*	*04/28/11 11:12*	*1*
Toluene-d8 (Surr)	*101*		*66 - 126*	*04/27/11 22:28*	*04/28/11 11:12*	*1*
Bromofluorobenzene	*100*		*72 - 132*	*04/27/11 22:28*	*04/28/11 11:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	420	U	420	51	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Chlorophenol	420	U	420	56	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Methylphenol	420	U	420	60	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Methylphenol	420	U	420	69	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Nitrophenol	420	U	420	69	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,4-Dimethylphenol	420	U	420	67	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,4-Dichlorophenol	420	U	420	67	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Chloro-3-methylphenol	420	U	420	70	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-117 (5-6)
Date Collected: 04/26/11 09:50
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-1
Matrix: Solid
Percent Solids: 78.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	420	U	420	75	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,4,5-Trichlorophenol	420	U	420	81	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,4-Dinitrophenol	1300	U	1300	89	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4,6-Dinitro-2-methylphenol	1300	U	1300	200	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Pentachlorophenol	1300	U	1300	210	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Bis(2-chloroethyl)ether	42	U	42	8.7	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
1,3-Dichlorobenzene	420	U	420	57	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
1,4-Dichlorobenzene	420	U	420	63	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
1,2-Dichlorobenzene	420	U	420	67	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
N-Nitrosodi-n-propylamine	42	U	42	5.5	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Hexachloroethane	42	U	42	7.1	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Nitrobenzene	42	U	42	9.4	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Isophorone	420	U	420	48	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Bis(2-chloroethoxy)methane	420	U	420	60	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
1,2,4-Trichlorobenzene	42	U	42	6.9	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Naphthalene	**150**	**J**	420	61	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Chloroaniline	420	U	420	53	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Hexachlorobutadiene	85	U	85	17	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Methylnaphthalene	420	U	420	61	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Hexachlorocyclopentadiene	420	U	420	120	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Chloronaphthalene	420	U	420	59	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2-Nitroaniline	850	U	850	110	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Dimethyl phthalate	420	U	420	57	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Acenaphthylene	**63**	**J**	420	60	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,6-Dinitrotoluene	85	U	85	11	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
3-Nitroaniline	850	U	850	95	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Acenaphthene	**260**	**J**	420	60	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Dibenzofuran	**160**	**J**	420	63	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
2,4-Dinitrotoluene	85	U	85	12	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Diethyl phthalate	420	U	420	56	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Chlorophenyl phenyl ether	420	U	420	72	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Fluorene	**270**	**J**	420	71	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Nitroaniline	850	U	850	87	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
N-Nitrosodiphenylamine	420	U	420	68	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
4-Bromophenyl phenyl ether	420	U	420	75	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Hexachlorobenzene	42	U	42	5.8	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Phenanthrene	**900**		420	73	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Anthracene	**270**	**J**	420	74	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Carbazole	**90**	**J**	420	67	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Di-n-butyl phthalate	420	U	420	64	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Fluoranthene	**1200**		420	70	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Pyrene	**1000**		420	73	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Butyl benzyl phthalate	420	U	420	49	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
3,3'-Dichlorobenzidine	850	U	850	93	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Benzo[a]anthracene	**360**		42	7.8	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Chrysene	**410**	**J**	420	61	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Bis(2-ethylhexyl) phthalate	420	U	420	56	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Di-n-octyl phthalate	420	U	420	50	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Benzo[b]fluoranthene	**450**		42	6.2	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-117 (5-6)
Date Collected: 04/26/11 09:50
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-1
Matrix: Solid
Percent Solids: 78.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	170		42	5.9	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Benzo[a]pyrene	360		42	5.2	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Indeno[1,2,3-cd]pyrene	250		42	6.7	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Dibenz(a,h)anthracene	49		42	5.0	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
Benzo[g,h,i]perylene	260	J	420	44	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1
bis (2-chloroisopropyl) ether	420	U	420	55	ug/Kg	☼	05/09/11 11:00	05/12/11 07:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*58*		*38 - 105*	*05/09/11 11:00*	*05/12/11 07:44*	*1*
Phenol-d5	*56*		*41 - 118*	*05/09/11 11:00*	*05/12/11 07:44*	*1*
Terphenyl-d14	*89*		*16 - 151*	*05/09/11 11:00*	*05/12/11 07:44*	*1*
2,4,6-Tribromophenol	*52*		*10 - 120*	*05/09/11 11:00*	*05/12/11 07:44*	*1*
2-Fluorophenol	*52*		*37 - 125*	*05/09/11 11:00*	*05/12/11 07:44*	*1*
2-Fluorobiphenyl	*68*		*40 - 109*	*05/09/11 11:00*	*05/12/11 07:44*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.5	U	8.5	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
alpha-BHC	8.5	U	8.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
beta-BHC	8.5	U	8.5	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
delta-BHC	8.5	U	8.5	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
gamma-BHC (Lindane)	8.5	U	8.5	0.99	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Chlordane	85	U	85	18	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
4,4'-DDD	8.5	U	8.5	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
4,4'-DDE	8.5	U	8.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
4,4'-DDT	8.5	U	8.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Dieldrin	8.5	U	8.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endosulfan I	8.5	U	8.5	1.8	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endosulfan II	8.5	U	8.5	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endosulfan sulfate	8.5	U	8.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endrin	8.5	U	8.5	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endrin aldehyde	8.5	U	8.5	2.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Endrin ketone	8.5	U	8.5	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Heptachlor	8.5	U	8.5	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Heptachlor epoxide	8.5	U	8.5	1.7	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Methoxychlor	8.5	U	8.5	0.95	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1
Toxaphene	85	U	85	18	ug/Kg	☼	05/06/11 04:26	05/09/11 09:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:02*	*1*
Tetrachloro-m-xylene	*105*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:02*	*1*
DCB Decachlorobiphenyl	*118*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:02*	*1*
DCB Decachlorobiphenyl	*119*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:02*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	85	U	85	16	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1
Aroclor 1221	85	U	85	26	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1
Aroclor 1232	85	U	85	48	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1
Aroclor 1242	85	U	85	16	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1
Aroclor 1248	85	U	85	23	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1

Client Sample ID: GPEC-SB-117 (5-6)
Date Collected: 04/26/11 09:50
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-1
Matrix: Solid
Percent Solids: 78.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	85	U	85	29	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1
Aroclor 1260	85	U	85	9.5	ug/Kg	☼	05/03/11 04:10	05/04/11 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*30 - 150*	*05/03/11 04:10*	*05/04/11 11:29*	*1*
DCB Decachlorobiphenyl	*70*		*30 - 150*	*05/03/11 04:10*	*05/04/11 11:29*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	22	U	22	4.0	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
Dicamba	22	U	22	2.2	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
Dichlorprop	22	U	22	3.5	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
2,4-D	22	U	22	2.7	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
2,4-DB	22	U	22	5.6	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
Silvex (2,4,5-TP)	22	U	22	2.3	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
2,4,5-T	22	U	22	4.3	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
Dinoseb	22	U	22	13	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
MCPA	2200	U	2200	460	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1
Mecoprop	2200	U	2200	1400	ug/Kg	☼	05/03/11 06:00	05/04/11 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*140*		*101 - 150*	*05/03/11 06:00*	*05/04/11 16:18*	*1*
2,4-Dichlorophenylacetic acid	*146*		*101 - 150*	*05/03/11 06:00*	*05/04/11 16:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6400**		48.4	17.7	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Antimony	2.4	U	2.4	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Arsenic	**23.3**		1.2	0.84	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Barium	**94.3**		48.4	1.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Beryllium	**0.41**	**J**	0.48	0.21	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Cadmium	**0.59**	**J**	1.2	0.19	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Calcium	**2990**		1210	31.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Chromium	**18.6**		2.4	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Cobalt	**6.0**	**J**	12.1	1.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Copper	**108**		6.0	0.99	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Iron	**15700**		36.3	12.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Lead	**158**		1.2	0.60	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Magnesium	**2340**		1210	12.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Manganese	**336**		3.6	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Nickel	**16.5**		9.7	0.65	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Potassium	**1300**		1210	54.6	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Selenium	**2.1**	**J**	2.4	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Silver	2.4	U	2.4	0.18	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Sodium	1210	U	1210	74.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Thallium	2.4	U	2.4	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Vanadium	**181**		12.1	0.63	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4
Zinc	**282**		7.3	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:25	4

Client Sample ID: GPEC-SB-117 (5-6)

Date Collected: 04/26/11 09:50
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-1

Matrix: Solid
Percent Solids: 78.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.60**		0.041	0.027	mg/Kg	☼	04/29/11 09:44	04/29/11 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.70**	**J**	2.5	0.63	mg/Kg	☼	05/09/11 17:17	05/10/11 14:50	1
Cr (VI)	2.5	U	2.5	0.61	mg/Kg	☼	05/11/11 11:13	05/12/11 09:56	1
Cyanide, Total	0.63	U	0.63	0.14	mg/Kg	☼	05/07/11 10:58	05/09/11 12:24	1
Cyanide, Free	2.9	U	2.9	0.78	mg/Kg	☼	05/04/11 10:00	05/04/11 16:12	1
Total Organic Carbon	**33700**		100	30.0	mg/Kg			05/03/11 23:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.2**		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	**78.8**		1.0	1.0	%			04/27/11 16:10	1

Client Sample ID: GPEC-XX-042611

Date Collected: 04/26/11 07:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-2

Matrix: Solid
Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.65	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Bromomethane	1.0	U	1.0	0.42	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Vinyl chloride	**1.3**		1.0	0.24	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Chloroethane	**1.7**		1.0	0.41	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Methylene Chloride	1.0	U	1.0	0.48	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Acetone	**18**		10	3.8	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Carbon disulfide	1.0	U	1.0	0.47	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,1-Dichloroethene	**0.66**	**J**	1.0	0.38	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,1-Dichloroethane	**5.1**		1.0	0.26	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Chloroform	1.0	U	1.0	0.24	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,2-Dichloroethane	1.0	U	1.0	0.40	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
2-Butanone	10	U	10	0.58	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Carbon tetrachloride	1.0	U	1.0	0.10	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Bromodichloromethane	1.0	U	1.0	0.31	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,2-Dichloropropane	1.0	U	1.0	0.32	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.20	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Trichloroethene	1.0	U	1.0	0.37	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Dibromochloromethane	1.0	U	1.0	0.57	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.60	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Benzene	1.0	U	1.0	0.75	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Bromoform	1.0	U	1.0	0.71	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
4-Methyl-2-pentanone	10	U	10	0.73	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
2-Hexanone	10	U	10	1.7	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Tetrachloroethene	1.0	U	1.0	0.34	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.77	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Toluene	1.0	U	1.0	0.30	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-XX-042611
Date Collected: 04/26/11 07:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-2
Matrix: Solid
Percent Solids: 88.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1.0	U	1.0	0.49	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Ethylbenzene	1.0	U	1.0	0.19	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Styrene	1.0	U	1.0	0.35	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1
Xylenes, Total	3.1	U	3.1	0.80	ug/Kg	☼	04/27/11 22:31	04/28/11 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 138*	*04/27/11 22:31*	*04/28/11 11:37*	*1*
Toluene-d8 (Surr)	*102*		*66 - 126*	*04/27/11 22:31*	*04/28/11 11:37*	*1*
Bromofluorobenzene	*102*		*72 - 132*	*04/27/11 22:31*	*04/28/11 11:37*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	3700	U	3700	460	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Chlorophenol	3700	U	3700	500	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Methylphenol	3700	U	3700	540	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Methylphenol	3700	U	3700	620	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Nitrophenol	3700	U	3700	620	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4-Dimethylphenol	3700	U	3700	600	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4-Dichlorophenol	3700	U	3700	600	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Chloro-3-methylphenol	3700	U	3700	630	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4,6-Trichlorophenol	3700	U	3700	670	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4,5-Trichlorophenol	3700	U	3700	720	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4-Dinitrophenol	11000	U	11000	800	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Nitrophenol	11000	U	11000	970	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4,6-Dinitro-2-methylphenol	11000	U	11000	1800	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Pentachlorophenol	11000	U	11000	1800	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Bis(2-chloroethyl)ether	370	U	370	78	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
1,3-Dichlorobenzene	3700	U	3700	510	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
1,4-Dichlorobenzene	3700	U	3700	560	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
1,2-Dichlorobenzene	3700	U	3700	600	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
N-Nitrosodi-n-propylamine	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Hexachloroethane	370	U	370	63	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Nitrobenzene	370	U	370	84	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Isophorone	3700	U	3700	430	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Bis(2-chloroethoxy)methane	3700	U	3700	540	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
1,2,4-Trichlorobenzene	370	U	370	61	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Naphthalene	3700	U	3700	550	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Chloroaniline	3700	U	3700	470	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Hexachlorobutadiene	760	U	760	150	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Methylnaphthalene	3700	U	3700	550	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Hexachlorocyclopentadiene	3700	U	3700	1100	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Chloronaphthalene	3700	U	3700	530	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2-Nitroaniline	7600	U	7600	1000	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Dimethyl phthalate	3700	U	3700	510	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Acenaphthylene	3700	U	3700	540	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,6-Dinitrotoluene	760	U	760	96	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
3-Nitroaniline	7600	U	7600	850	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Acenaphthene	**3500**	**J**	3700	540	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Dibenzofuran	**2100**	**J**	3700	560	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
2,4-Dinitrotoluene	760	U	760	110	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Diethyl phthalate	3700	U	3700	500	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-XX-042611
Date Collected: 04/26/11 07:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-2
Matrix: Solid
Percent Solids: 88.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	3700	U	3700	650	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Fluorene	**4600**		3700	640	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Nitroaniline	7600	U	7600	780	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
N-Nitrosodiphenylamine	3700	U	3700	610	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
4-Bromophenyl phenyl ether	3700	U	3700	670	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Hexachlorobenzene	370	U	370	52	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Phenanthrene	**40000**		3700	660	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Anthracene	**11000**		3700	660	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Carbazole	**2600**	**J**	3700	600	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Di-n-butyl phthalate	3700	U	3700	570	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Fluoranthene	**45000**		3700	620	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Pyrene	**42000**		3700	650	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Butyl benzyl phthalate	3700	U	3700	440	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
3,3'-Dichlorobenzidine	7600	U	7600	830	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Benzo[a]anthracene	**22000**		370	70	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Chrysene	**21000**		3700	550	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Bis(2-ethylhexyl) phthalate	3700	U	3700	500	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Di-n-octyl phthalate	3700	U	3700	450	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Benzo[b]fluoranthene	**24000**		370	56	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Benzo[k]fluoranthene	**10000**		370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Benzo[a]pyrene	**23000**		370	46	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Indeno[1,2,3-cd]pyrene	**15000**		370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Dibenz(a,h)anthracene	**3200**		370	45	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
Benzo[g,h,i]perylene	**14000**		3700	400	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10
bis (2-chloroisopropyl) ether	3700	U	3700	490	ug/Kg	☼	05/09/11 11:00	05/12/11 08:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*38 - 105*	*05/09/11 11:00*	*05/12/11 08:12*	*10*
Phenol-d5	*91*		*41 - 118*	*05/09/11 11:00*	*05/12/11 08:12*	*10*
Terphenyl-d14	*120*		*16 - 151*	*05/09/11 11:00*	*05/12/11 08:12*	*10*
2,4,6-Tribromophenol	*54*		*10 - 120*	*05/09/11 11:00*	*05/12/11 08:12*	*10*
2-Fluorophenol	*90*		*37 - 125*	*05/09/11 11:00*	*05/12/11 08:12*	*10*
2-Fluorobiphenyl	*106*		*40 - 109*	*05/09/11 11:00*	*05/12/11 08:12*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.6	U	7.6	1.7	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
alpha-BHC	7.6	U	7.6	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
beta-BHC	7.6	U	7.6	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
delta-BHC	7.6	U	7.6	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
gamma-BHC (Lindane)	7.6	U	7.6	0.89	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Chlordane	76	U	76	16	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
4,4'-DDD	7.6	U	7.6	0.91	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
4,4'-DDE	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
4,4'-DDT	7.6	U	7.6	0.95	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Dieldrin	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Endosulfan I	7.6	U	7.6	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Endosulfan II	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Endosulfan sulfate	7.6	U	7.6	0.98	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Endrin	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Endrin aldehyde	7.6	U	7.6	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1

Client Sample ID: GPEC-XX-042611
Date Collected: 04/26/11 07:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-2
Matrix: Solid
Percent Solids: 88.1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Heptachlor	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Heptachlor epoxide	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Methoxychlor	7.6	U	7.6	0.85	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1
Toxaphene	76	U	76	16	ug/Kg	☼	05/06/11 04:26	05/09/11 08:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*40 - 150*	*05/06/11 04:26*	*05/09/11 08:34*	*1*
Tetrachloro-m-xylene	*93*		*40 - 150*	*05/06/11 04:26*	*05/09/11 08:34*	*1*
DCB Decachlorobiphenyl	*180*	*X*	*53 - 150*	*05/06/11 04:26*	*05/09/11 08:34*	*1*
DCB Decachlorobiphenyl	*125*		*53 - 150*	*05/06/11 04:26*	*05/09/11 08:34*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	76	U	76	14	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1221	76	U	76	23	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1232	76	U	76	43	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1242	76	U	76	14	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1248	76	U	76	20	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1254	76	U	76	26	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1
Aroclor 1260	76	U	76	8.5	ug/Kg	☼	05/03/11 04:10	05/04/11 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*128*		*30 - 150*	*05/03/11 04:10*	*05/04/11 11:44*	*1*
DCB Decachlorobiphenyl	*91*		*30 - 150*	*05/03/11 04:10*	*05/04/11 11:44*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	19	U	19	3.6	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
Dicamba	19	U	19	2.0	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
Dichlorprop	19	U	19	3.1	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
2,4-D	19	U	19	2.5	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
2,4-DB	19	U	19	5.1	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
Silvex (2,4,5-TP)	19	U	19	2.1	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
2,4,5-T	19	U	19	3.9	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
Dinoseb	19	U	19	12	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
MCPA	1900	U *	1900	410	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1
Mecoprop	1900	U	1900	1300	ug/Kg	☼	04/28/11 10:30	04/29/11 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*114*		*101 - 150*	*04/28/11 10:30*	*04/29/11 17:40*	*1*
2,4-Dichlorophenylacetic acid	*127*		*101 - 150*	*04/28/11 10:30*	*04/29/11 17:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5420**		44.5	16.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Antimony	2.2	U	2.2	0.98	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Arsenic	**6.7**		1.1	0.77	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Barium	**234**		44.5	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Beryllium	0.45	U	0.45	0.20	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Cadmium	**0.92**	**J**	1.1	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Calcium	**7120**		1110	29.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4

Client Sample ID: GPEC-XX-042611

Date Collected: 04/26/11 07:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-2

Matrix: Solid
Percent Solids: 88.1

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	17.3		2.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Cobalt	7.3	J	11.1	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Copper	286		5.6	0.91	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Iron	18000		33.4	11.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Lead	462		1.1	0.56	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Magnesium	1780		1110	11.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Manganese	581		3.3	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Nickel	18.4		8.9	0.60	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Potassium	963	J	1110	50.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Selenium	2.6		2.2	1.0	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Sodium	1110	U	1110	68.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Thallium	2.2	U	2.2	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Vanadium	1070		11.1	0.58	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4
Zinc	837		6.7	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.96		0.034	0.022	mg/Kg	☼	04/29/11 09:44	04/29/11 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.2	J	2.3	0.56	mg/Kg	☼	05/09/11 17:17	05/10/11 14:50	1
Cr (VI)	1.4	J	2.3	0.56	mg/Kg	☼	05/11/11 11:13	05/12/11 09:56	1
Cyanide, Total	0.57	U	0.57	0.13	mg/Kg	☼	05/07/11 10:58	05/09/11 12:25	1
Cyanide, Free	0.70	J	2.6	0.70	mg/Kg	☼	05/04/11 10:00	05/04/11 16:16	1
Total Organic Carbon	35200		100	30.0	mg/Kg			05/04/11 00:17	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.9		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	88.1		1.0	1.0	%			04/27/11 16:10	1

Client Sample ID: GPEC-SB-118 (0-2)

Date Collected: 04/26/11 11:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-3

Matrix: Solid
Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.98	U	0.98	0.62	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Bromomethane	0.98	U	0.98	0.40	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Vinyl chloride	1.8		0.98	0.23	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Chloroethane	1.8		0.98	0.39	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Methylene Chloride	0.98	U	0.98	0.46	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Acetone	16		9.8	3.6	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Carbon disulfide	0.98	U	0.98	0.46	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,1-Dichloroethene	0.86	J	0.98	0.36	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,1-Dichloroethane	6.7		0.98	0.25	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
trans-1,2-Dichloroethene	0.98	U	0.98	0.28	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
cis-1,2-Dichloroethene	0.98	U	0.98	0.23	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Chloroform	0.98	U	0.98	0.23	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,2-Dichloroethane	0.98	U	0.98	0.38	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (0-2)
Date Collected: 04/26/11 11:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-3
Matrix: Solid
Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	9.8	U	9.8	0.56	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,1,1-Trichloroethane	0.98	U	0.98	0.18	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Carbon tetrachloride	0.98	U	0.98	0.099	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Bromodichloromethane	0.98	U	0.98	0.30	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,2-Dichloropropane	0.98	U	0.98	0.31	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
cis-1,3-Dichloropropene	0.98	U	0.98	0.20	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Trichloroethene	0.98	U	0.98	0.36	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Dibromochloromethane	0.98	U	0.98	0.55	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,1,2-Trichloroethane	0.98	U	0.98	0.58	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Benzene	0.98	U	0.98	0.73	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
trans-1,3-Dichloropropene	0.98	U	0.98	0.22	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Bromoform	0.98	U	0.98	0.69	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
4-Methyl-2-pentanone	9.8	U	9.8	0.70	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
2-Hexanone	9.8	U	9.8	1.6	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Tetrachloroethene	0.98	U	0.98	0.32	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
1,1,2,2-Tetrachloroethane	0.98	U	0.98	0.75	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Toluene	0.98	U	0.98	0.29	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Chlorobenzene	0.98	U	0.98	0.47	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Ethylbenzene	0.98	U	0.98	0.19	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Styrene	0.98	U	0.98	0.34	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1
Xylenes, Total	2.9	U	2.9	0.77	ug/Kg	☼	04/27/11 22:34	04/28/11 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 138*	*04/27/11 22:34*	*04/28/11 12:02*	*1*
Toluene-d8 (Surr)	*101*		*66 - 126*	*04/27/11 22:34*	*04/28/11 12:02*	*1*
Bromofluorobenzene	*100*		*72 - 132*	*04/27/11 22:34*	*04/28/11 12:02*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	370	U	370	45	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Chlorophenol	370	U	370	49	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Methylphenol	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Methylphenol	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Nitrophenol	370	U	370	61	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4-Dimethylphenol	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4-Dichlorophenol	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Chloro-3-methylphenol	370	U	370	62	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4,6-Trichlorophenol	370	U	370	66	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4,5-Trichlorophenol	370	U	370	71	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4-Dinitrophenol	1100	U	1100	78	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Nitrophenol	1100	U	1100	95	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4,6-Dinitro-2-methylphenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Pentachlorophenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Bis(2-chloroethyl)ether	37	U	37	7.7	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
1,3-Dichlorobenzene	370	U	370	51	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
1,4-Dichlorobenzene	370	U	370	55	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
1,2-Dichlorobenzene	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
N-Nitrosodi-n-propylamine	37	U	37	4.9	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Hexachloroethane	37	U	37	6.2	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Nitrobenzene	37	U	37	8.3	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Isophorone	370	U	370	42	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (0-2)
Date Collected: 04/26/11 11:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-3
Matrix: Solid
Percent Solids: 89.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
1,2,4-Trichlorobenzene	37	U	37	6.0	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Naphthalene	**73**	**J**	370	54	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Chloroaniline	370	U	370	46	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Hexachlorobutadiene	75	U	75	15	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Methylnaphthalene	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Hexachlorocyclopentadiene	370	U	370	110	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Chloronaphthalene	370	U	370	52	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2-Nitroaniline	750	U	750	100	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Dimethyl phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Acenaphthylene	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,6-Dinitrotoluene	75	U	75	9.4	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
3-Nitroaniline	750	U	750	83	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Acenaphthene	**77**	**J**	370	53	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Dibenzofuran	**65**	**J**	370	55	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
2,4-Dinitrotoluene	75	U	75	11	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Diethyl phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Chlorophenyl phenyl ether	370	U	370	63	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Fluorene	**78**	**J**	370	62	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Nitroaniline	750	U	750	76	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
N-Nitrosodiphenylamine	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
4-Bromophenyl phenyl ether	370	U	370	66	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Hexachlorobenzene	37	U	37	5.1	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Phenanthrene	**1000**		370	64	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Anthracene	**240**	**J**	370	65	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Carbazole	**92**	**J**	370	59	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Di-n-butyl phthalate	370	U	370	56	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Fluoranthene	**1300**		370	61	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Pyrene	**1500**		370	64	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Butyl benzyl phthalate	370	U	370	43	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
3,3'-Dichlorobenzidine	750	U	750	82	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Benzo[a]anthracene	**750**		37	6.8	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Chrysene	**870**		370	54	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Bis(2-ethylhexyl) phthalate	370	U	370	49	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Di-n-octyl phthalate	370	U	370	44	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Benzo[b]fluoranthene	**940**		37	5.5	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Benzo[k]fluoranthene	**400**		37	5.2	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Benzo[a]pyrene	**880**		37	4.5	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Indeno[1,2,3-cd]pyrene	**660**		37	5.9	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Dibenz(a,h)anthracene	**140**		37	4.4	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
Benzo[g,h,i]perylene	**680**		370	39	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1
bis (2-chloroisopropyl) ether	370	U	370	48	ug/Kg	☼	05/09/11 11:00	05/10/11 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*91*		*38 - 105*	*05/09/11 11:00*	*05/10/11 16:28*	*1*
Phenol-d5	*74*		*41 - 118*	*05/09/11 11:00*	*05/10/11 16:28*	*1*
Terphenyl-d14	*97*		*16 - 151*	*05/09/11 11:00*	*05/10/11 16:28*	*1*
2,4,6-Tribromophenol	*54*		*10 - 120*	*05/09/11 11:00*	*05/10/11 16:28*	*1*
2-Fluorophenol	*75*		*37 - 125*	*05/09/11 11:00*	*05/10/11 16:28*	*1*
2-Fluorobiphenyl	*88*		*40 - 109*	*05/09/11 11:00*	*05/10/11 16:28*	*1*

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (0-2)
Date Collected: 04/26/11 11:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-3
Matrix: Solid
Percent Solids: 89.5

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.5	U	7.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
alpha-BHC	7.5	U	7.5	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
beta-BHC	7.5	U	7.5	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
delta-BHC	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
gamma-BHC (Lindane)	7.5	U	7.5	0.87	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Chlordane	75	U	75	16	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
4,4'-DDD	7.5	U	7.5	0.89	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
4,4'-DDE	7.5	U	7.5	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
4,4'-DDT	7.5	U	7.5	0.94	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Dieldrin	7.5	U	7.5	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endosulfan I	7.5	U	7.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endosulfan II	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endosulfan sulfate	7.5	U	7.5	0.96	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endrin	7.5	U	7.5	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endrin aldehyde	7.5	U	7.5	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Endrin ketone	**9.9**	**p**	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Heptachlor	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Heptachlor epoxide	7.5	U	7.5	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Methoxychlor	7.5	U	7.5	0.84	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1
Toxaphene	75	U	75	16	ug/Kg	☼	05/06/11 04:26	05/09/11 07:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*40 - 150*	*05/06/11 04:26*	*05/09/11 07:52*	*1*
Tetrachloro-m-xylene	*88*		*40 - 150*	*05/06/11 04:26*	*05/09/11 07:52*	*1*
DCB Decachlorobiphenyl	*188*	*X*	*53 - 150*	*05/06/11 04:26*	*05/09/11 07:52*	*1*
DCB Decachlorobiphenyl	*123*	*p*	*53 - 150*	*05/06/11 04:26*	*05/09/11 07:52*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	75	U	75	14	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1221	75	U	75	23	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1232	75	U	75	42	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1242	75	U	75	14	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1248	75	U	75	20	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1254	75	U	75	26	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1
Aroclor 1260	75	U	75	8.3	ug/Kg	☼	05/03/11 04:10	05/04/11 09:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*30 - 150*	*05/03/11 04:10*	*05/04/11 09:41*	*1*
DCB Decachlorobiphenyl	*106*		*30 - 150*	*05/03/11 04:10*	*05/04/11 09:41*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	19	U	19	3.5	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
Dicamba	19	U	19	1.9	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
Dichlorprop	19	U	19	3.1	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
2,4-D	19	U	19	2.4	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
2,4-DB	19	U	19	5.0	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
Silvex (2,4,5-TP)	19	U	19	2.1	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
2,4,5-T	19	U	19	3.8	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
Dinoseb	19	U	19	11	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1

Client Sample ID: GPEC-SB-118 (0-2)
Date Collected: 04/26/11 11:00
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-3
Matrix: Solid
Percent Solids: 89.5

Method: 8151A - Herbicides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MCPA	1900	U *	1900	400	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1
Mecoprop	1900	U	1900	1300	ug/Kg	☼	04/28/11 10:30	04/29/11 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*148*		*101 - 150*	*04/28/11 10:30*	*04/29/11 12:02*	*1*
2,4-Dichlorophenylacetic acid	*188*	*X*	*101 - 150*	*04/28/11 10:30*	*04/29/11 12:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5960**		44.7	16.4	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Antimony	2.2	U	2.2	0.98	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Arsenic	**6.4**		1.1	0.78	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Barium	**167**		44.7	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Beryllium	0.45	U	0.45	0.20	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Cadmium	**1.2**		1.1	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Calcium	**12000**		1120	29.4	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Chromium	**18.6**		2.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Cobalt	**6.4**	**J**	11.2	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Copper	**267**		5.6	0.91	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Iron	**17300**		33.5	11.9	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Lead	**534**		1.1	0.56	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Magnesium	**3810**		1120	11.8	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Manganese	**472**		3.4	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Nickel	**18.8**		8.9	0.60	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Potassium	**1080**	**J**	1120	50.4	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Selenium	**1.8**	**J**	2.2	1.0	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Sodium	1120	U	1120	68.6	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Thallium	2.2	U	2.2	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Vanadium	**1050**		11.2	0.58	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4
Zinc	**921**		6.7	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 16:15	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.76**		0.037	0.025	mg/Kg	☼	05/04/11 18:15	05/04/11 21:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**1.1**	**J**	2.2	0.55	mg/Kg	☼	05/09/11 17:17	05/10/11 14:50	1
Cr (VI)	**1.3**	**J**	2.2	0.55	mg/Kg	☼	05/11/11 11:13	05/12/11 09:56	1
Cyanide, Total	**0.32**	**J**	0.56	0.12	mg/Kg	☼	05/07/11 10:58	05/09/11 12:23	1
Cyanide, Free	2.5	U	2.5	0.68	mg/Kg	☼	05/04/11 10:00	05/04/11 16:19	1
Total Organic Carbon	**26800**		100	30.0	mg/Kg			05/04/11 00:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.5**		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	**89.5**		1.0	1.0	%			04/27/11 16:10	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (5-6)
Date Collected: 04/26/11 11:35
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-4
Matrix: Solid
Percent Solids: 75.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.2	U	1.2	0.74	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Bromomethane	1.2	U	1.2	0.47	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Vinyl chloride	**0.87**	**J**	1.2	0.27	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Chloroethane	**34**		1.2	0.46	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Methylene Chloride	1.2	U	1.2	0.55	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Acetone	**24**		12	4.3	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Carbon disulfide	**0.63**	**J**	1.2	0.54	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,1-Dichloroethene	1.2	U	1.2	0.43	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,1-Dichloroethane	**2.2**		1.2	0.29	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
trans-1,2-Dichloroethene	1.2	U	1.2	0.33	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
cis-1,2-Dichloroethene	1.2	U	1.2	0.27	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Chloroform	1.2	U	1.2	0.27	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,2-Dichloroethane	1.2	U	1.2	0.45	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
2-Butanone	12	U	12	0.66	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,1,1-Trichloroethane	1.2	U	1.2	0.22	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Carbon tetrachloride	1.2	U	1.2	0.12	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Bromodichloromethane	1.2	U	1.2	0.35	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,2-Dichloropropane	1.2	U	1.2	0.37	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
cis-1,3-Dichloropropene	1.2	U	1.2	0.23	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Trichloroethene	1.2	U	1.2	0.42	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Dibromochloromethane	1.2	U	1.2	0.65	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,1,2-Trichloroethane	1.2	U	1.2	0.69	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Benzene	**1.4**		1.2	0.86	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
trans-1,3-Dichloropropene	1.2	U	1.2	0.26	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Bromoform	1.2	U	1.2	0.81	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
4-Methyl-2-pentanone	12	U	12	0.83	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
2-Hexanone	12	U	12	1.9	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Tetrachloroethene	1.2	U	1.2	0.38	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.88	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Toluene	1.2	U	1.2	0.35	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Chlorobenzene	1.2	U	1.2	0.56	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Ethylbenzene	1.2	U	1.2	0.22	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Styrene	1.2	U	1.2	0.40	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1
Xylenes, Total	3.5	U	3.5	0.91	ug/Kg	☼	04/27/11 22:42	04/28/11 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 138*	*04/27/11 22:42*	*04/28/11 13:41*	*1*
Toluene-d8 (Surr)	*103*		*66 - 126*	*04/27/11 22:42*	*04/28/11 13:41*	*1*
Bromofluorobenzene	*105*		*72 - 132*	*04/27/11 22:42*	*04/28/11 13:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	440	U	440	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Chlorophenol	440	U	440	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Methylphenol	440	U	440	63	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Methylphenol	440	U	440	72	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Nitrophenol	440	U	440	72	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,4-Dimethylphenol	440	U	440	70	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,4-Dichlorophenol	440	U	440	70	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Chloro-3-methylphenol	440	U	440	74	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,4,6-Trichlorophenol	440	U	440	78	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (5-6)
Date Collected: 04/26/11 11:35
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-4
Matrix: Solid
Percent Solids: 75.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	440	U	440	84	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,4-Dinitrophenol	1300	U	1300	93	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4,6-Dinitro-2-methylphenol	1300	U	1300	210	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Pentachlorophenol	1300	U	1300	210	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Bis(2-chloroethyl)ether	44	U	44	9.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
1,3-Dichlorobenzene	440	U	440	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
1,4-Dichlorobenzene	440	U	440	65	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
1,2-Dichlorobenzene	440	U	440	70	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
N-Nitrosodi-n-propylamine	44	U	44	5.8	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Hexachloroethane	44	U	44	7.4	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Nitrobenzene	44	U	44	9.8	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Isophorone	440	U	440	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Bis(2-chloroethoxy)methane	440	U	440	63	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
1,2,4-Trichlorobenzene	44	U	44	7.2	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Naphthalene	**140**	**J**	440	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Chloroaniline	440	U	440	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Hexachlorobutadiene	89	U	89	18	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Methylnaphthalene	440	U	440	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Hexachlorocyclopentadiene	440	U	440	130	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Chloronaphthalene	440	U	440	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2-Nitroaniline	890	U	890	120	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Dimethyl phthalate	440	U	440	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Acenaphthylene	440	U	440	63	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,6-Dinitrotoluene	89	U	89	11	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
3-Nitroaniline	890	U	890	99	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Acenaphthene	**96**	**J**	440	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Dibenzofuran	**94**	**J**	440	66	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
2,4-Dinitrotoluene	89	U	89	13	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Diethyl phthalate	440	U	440	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Chlorophenyl phenyl ether	440	U	440	75	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Fluorene	**110**	**J**	440	74	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Nitroaniline	890	U	890	90	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
N-Nitrosodiphenylamine	440	U	440	71	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
4-Bromophenyl phenyl ether	440	U	440	78	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Hexachlorobenzene	44	U	44	6.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Phenanthrene	**1200**		440	76	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Anthracene	**320**	**J**	440	77	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Carbazole	**120**	**J**	440	70	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Di-n-butyl phthalate	440	U	440	67	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Fluoranthene	**2100**		440	73	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Pyrene	**1800**		440	76	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Butyl benzyl phthalate	440	U	440	51	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
3,3'-Dichlorobenzidine	890	U	890	97	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Benzo[a]anthracene	**1000**		44	8.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Chrysene	**1200**		440	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Bis(2-ethylhexyl) phthalate	440	U	440	58	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Di-n-octyl phthalate	440	U	440	52	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Benzo[b]fluoranthene	**1300**		44	6.5	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Benzo[k]fluoranthene	**570**		44	6.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1

Client Sample ID: GPEC-SB-118 (5-6)
Date Collected: 04/26/11 11:35
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-4
Matrix: Solid
Percent Solids: 75.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	1300		44	5.4	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Indeno[1,2,3-cd]pyrene	830		44	7.0	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Dibenz(a,h)anthracene	110		44	5.3	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
Benzo[g,h,i]perylene	870		440	46	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1
bis (2-chloroisopropyl) ether	440	U	440	57	ug/Kg	☼	05/09/11 11:00	05/12/11 11:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*38 - 105*	*05/09/11 11:00*	*05/12/11 11:28*	*1*
Phenol-d5	*89*		*41 - 118*	*05/09/11 11:00*	*05/12/11 11:28*	*1*
Terphenyl-d14	*88*		*16 - 151*	*05/09/11 11:00*	*05/12/11 11:28*	*1*
2,4,6-Tribromophenol	*82*		*10 - 120*	*05/09/11 11:00*	*05/12/11 11:28*	*1*
2-Fluorophenol	*64*		*37 - 125*	*05/09/11 11:00*	*05/12/11 11:28*	*1*
2-Fluorobiphenyl	*84*		*40 - 109*	*05/09/11 11:00*	*05/12/11 11:28*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.9	U	8.9	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
alpha-BHC	8.9	U	8.9	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
beta-BHC	8.9	U	8.9	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
delta-BHC	8.9	U	8.9	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
gamma-BHC (Lindane)	8.9	U	8.9	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Chlordane	89	U	89	19	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
4,4'-DDD	8.9	U	8.9	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
4,4'-DDE	8.9	U	8.9	1.7	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
4,4'-DDT	8.9	U	8.9	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Dieldrin	8.9	U	8.9	1.7	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endosulfan I	8.9	U	8.9	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endosulfan II	8.9	U	8.9	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endosulfan sulfate	8.9	U	8.9	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endrin	8.9	U	8.9	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endrin aldehyde	8.9	U	8.9	2.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Endrin ketone	8.9	U	8.9	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Heptachlor	8.9	U	8.9	1.3	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Heptachlor epoxide	8.9	U	8.9	1.8	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Methoxychlor	8.9	U	8.9	0.99	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1
Toxaphene	89	U	89	19	ug/Kg	☼	05/06/11 04:26	05/09/11 09:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:16*	*1*
Tetrachloro-m-xylene	*94*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:16*	*1*
DCB Decachlorobiphenyl	*114*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:16*	*1*
DCB Decachlorobiphenyl	*117*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:16*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	89	U	89	17	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1
Aroclor 1221	89	U	89	27	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1
Aroclor 1232	89	U	89	50	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1
Aroclor 1242	89	U	89	17	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1
Aroclor 1248	89	U	89	24	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1
Aroclor 1254	89	U	89	30	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (5-6)
Date Collected: 04/26/11 11:35
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-4
Matrix: Solid
Percent Solids: 75.4

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1260	89	U	89	9.9	ug/Kg	☼	05/03/11 04:10	05/04/11 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:00*	*1*
DCB Decachlorobiphenyl	*65*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:00*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	23	U	23	4.2	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
Dicamba	23	U	23	2.3	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
Dichlorprop	23	U	23	3.7	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
2,4-D	23	U	23	2.9	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
2,4-DB	23	U	23	5.9	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
Silvex (2,4,5-TP)	23	U	23	2.5	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
2,4,5-T	23	U	23	4.5	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
Dinoseb	23	U	23	14	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
MCPA	2300	U *	2300	480	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1
Mecoprop	2300	U	2300	1500	ug/Kg	☼	04/28/11 10:30	04/29/11 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*144*		*101 - 150*	*04/28/11 10:30*	*04/29/11 18:10*	*1*
2,4-Dichlorophenylacetic acid	*125*		*101 - 150*	*04/28/11 10:30*	*04/29/11 18:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5490**		51.0	18.7	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Antimony	2.6	U	2.6	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Arsenic	**19.0**		1.3	0.89	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Barium	**193**		51.0	1.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Beryllium	**0.33**	**J**	0.51	0.22	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Cadmium	**5.5**		1.3	0.20	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Calcium	**8620**		1280	33.6	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Chromium	**19.0**		2.6	1.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Cobalt	**5.3**	**J**	12.8	1.6	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Copper	**2210**		6.4	1.0	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Iron	**15300**		38.3	13.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Lead	**1010**		1.3	0.64	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Magnesium	**1530**		1280	13.5	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Manganese	**398**		3.8	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Nickel	**19.9**		10.2	0.68	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Potassium	**1470**		1280	57.6	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Selenium	**2.9**		2.6	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Silver	2.6	U	2.6	0.19	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Sodium	1280	U	1280	78.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Thallium	2.6	U	2.6	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Vanadium	**221**		12.8	0.66	mg/Kg	☼	05/03/11 07:00	05/06/11 17:44	4
Zinc	**1950**		19.1	3.1	mg/Kg	☼	05/03/11 07:00	05/06/11 22:37	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.1**		0.088	0.058	mg/Kg	☼	04/29/11 09:44	04/29/11 14:03	2

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-118 (5-6)

Date Collected: 04/26/11 11:35
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-4

Matrix: Solid
Percent Solids: 75.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.6	U	2.6	0.64	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	2.6	U	2.6	0.65	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.66	U	0.66	0.15	mg/Kg	☼	05/07/11 10:58	05/09/11 12:26	1
Cyanide, Free	3.0	U	3.0	0.82	mg/Kg	☼	05/04/11 10:00	05/04/11 16:35	1
Total Organic Carbon	**68200**		100	30.0	mg/Kg			05/04/11 02:06	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24.6**		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	**75.4**		1.0	1.0	%			04/27/11 16:10	1

Client Sample ID: GPEC-SB-122 (0.2)

Date Collected: 04/26/11 13:07
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-5

Matrix: Solid
Percent Solids: 89.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.95	U	0.95	0.60	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Bromomethane	0.95	U	0.95	0.39	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Vinyl chloride	0.95	U	0.95	0.22	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Chloroethane	0.95	U	0.95	0.38	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Methylene Chloride	0.95	U	0.95	0.45	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Acetone	9.5	U	9.5	3.5	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Carbon disulfide	0.95	U	0.95	0.44	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,1-Dichloroethene	0.95	U	0.95	0.35	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,1-Dichloroethane	0.95	U	0.95	0.24	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
trans-1,2-Dichloroethene	0.95	U	0.95	0.27	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
cis-1,2-Dichloroethene	0.95	U	0.95	0.22	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Chloroform	0.95	U	0.95	0.23	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,2-Dichloroethane	0.95	U	0.95	0.37	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
2-Butanone	9.5	U	9.5	0.54	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,1,1-Trichloroethane	0.95	U	0.95	0.18	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Carbon tetrachloride	0.95	U	0.95	0.096	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Bromodichloromethane	0.95	U	0.95	0.29	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,2-Dichloropropane	0.95	U	0.95	0.30	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
cis-1,3-Dichloropropene	0.95	U	0.95	0.19	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Trichloroethene	0.95	U	0.95	0.34	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Dibromochloromethane	0.95	U	0.95	0.53	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,1,2-Trichloroethane	0.95	U	0.95	0.56	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Benzene	0.95	U	0.95	0.70	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
trans-1,3-Dichloropropene	0.95	U	0.95	0.21	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Bromoform	0.95	U	0.95	0.67	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
4-Methyl-2-pentanone	9.5	U	9.5	0.68	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
2-Hexanone	9.5	U	9.5	1.6	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Tetrachloroethene	0.95	U	0.95	0.31	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
1,1,2,2-Tetrachloroethane	0.95	U	0.95	0.72	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Toluene	0.95	U	0.95	0.28	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Chlorobenzene	0.95	U	0.95	0.46	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Ethylbenzene	0.95	U	0.95	0.18	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Styrene	0.95	U	0.95	0.33	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1
Xylenes, Total	2.8	U	2.8	0.75	ug/Kg	☼	04/27/11 22:44	04/28/11 14:06	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-122 (0.2)
Date Collected: 04/26/11 13:07
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-5
Matrix: Solid
Percent Solids: 89.7

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 138*	*04/27/11 22:44*	*04/28/11 14:06*	*1*
Toluene-d8 (Surr)	*101*		*66 - 126*	*04/27/11 22:44*	*04/28/11 14:06*	*1*
Bromofluorobenzene	*102*		*72 - 132*	*04/27/11 22:44*	*04/28/11 14:06*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	370	U	370	45	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Chlorophenol	370	U	370	49	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Methylphenol	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Methylphenol	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Nitrophenol	370	U	370	61	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4-Dimethylphenol	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4-Dichlorophenol	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Chloro-3-methylphenol	370	U	370	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4,6-Trichlorophenol	370	U	370	66	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4,5-Trichlorophenol	370	U	370	71	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4-Dinitrophenol	1100	U	1100	78	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Nitrophenol	1100	U	1100	95	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4,6-Dinitro-2-methylphenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Pentachlorophenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Bis(2-chloroethyl)ether	37	U	37	7.7	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
1,3-Dichlorobenzene	370	U	370	51	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
1,4-Dichlorobenzene	370	U	370	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
1,2-Dichlorobenzene	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
N-Nitrosodi-n-propylamine	37	U	37	4.9	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Hexachloroethane	37	U	37	6.2	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Nitrobenzene	37	U	37	8.3	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Isophorone	370	U	370	42	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Bis(2-chloroethoxy)methane	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
1,2,4-Trichlorobenzene	37	U	37	6.0	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Naphthalene	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Chloroaniline	370	U	370	46	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Hexachlorobutadiene	75	U	75	15	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Methylnaphthalene	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Hexachlorocyclopentadiene	370	U	370	110	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Chloronaphthalene	370	U	370	52	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2-Nitroaniline	750	U	750	100	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Dimethyl phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Acenaphthylene	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,6-Dinitrotoluene	75	U	75	9.4	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
3-Nitroaniline	750	U	750	83	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Acenaphthene	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Dibenzofuran	370	U	370	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
2,4-Dinitrotoluene	75	U	75	11	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Diethyl phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Chlorophenyl phenyl ether	370	U	370	63	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Fluorene	370	U	370	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Nitroaniline	750	U	750	76	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
N-Nitrosodiphenylamine	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
4-Bromophenyl phenyl ether	370	U	370	66	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Hexachlorobenzene	37	U	37	5.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-122 (0.2)
Date Collected: 04/26/11 13:07
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-5
Matrix: Solid
Percent Solids: 89.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**400**		370	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Anthracene	**80**	**J**	370	65	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Carbazole	370	U	370	59	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Di-n-butyl phthalate	370	U	370	56	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Fluoranthene	**670**		370	61	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Pyrene	**600**		370	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Butyl benzyl phthalate	370	U	370	43	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
3,3'-Dichlorobenzidine	750	U	750	82	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Benzo[a]anthracene	**350**		37	6.8	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Chrysene	**390**		370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Bis(2-ethylhexyl) phthalate	370	U	370	49	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Di-n-octyl phthalate	370	U	370	44	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Benzo[b]fluoranthene	**470**		37	5.5	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Benzo[k]fluoranthene	**170**		37	5.2	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Benzo[a]pyrene	**390**		37	4.5	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Indeno[1,2,3-cd]pyrene	**260**		37	5.9	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Dibenz(a,h)anthracene	**51**		37	4.4	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
Benzo[g,h,i]perylene	**280**	**J**	370	39	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1
bis (2-chloroisopropyl) ether	370	U	370	48	ug/Kg	☼	05/09/11 11:00	05/12/11 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*38 - 105*	*05/09/11 11:00*	*05/12/11 11:51*	*1*
Phenol-d5	*89*		*41 - 118*	*05/09/11 11:00*	*05/12/11 11:51*	*1*
Terphenyl-d14	*91*		*16 - 151*	*05/09/11 11:00*	*05/12/11 11:51*	*1*
2,4,6-Tribromophenol	*63*		*10 - 120*	*05/09/11 11:00*	*05/12/11 11:51*	*1*
2-Fluorophenol	*62*		*37 - 125*	*05/09/11 11:00*	*05/12/11 11:51*	*1*
2-Fluorobiphenyl	*82*		*40 - 109*	*05/09/11 11:00*	*05/12/11 11:51*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.5	U	7.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
alpha-BHC	7.5	U	7.5	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
beta-BHC	7.5	U	7.5	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
delta-BHC	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
gamma-BHC (Lindane)	7.5	U	7.5	0.87	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Chlordane	75	U	75	16	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
4,4'-DDD	**6.4**	**J**	7.5	0.89	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
4,4'-DDE	7.5	U	7.5	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
4,4'-DDT	**7.1**	**J p**	7.5	0.93	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Dieldrin	7.5	U	7.5	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endosulfan I	7.5	U	7.5	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endosulfan II	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endosulfan sulfate	7.5	U	7.5	0.96	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endrin	7.5	U	7.5	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endrin aldehyde	7.5	U	7.5	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Endrin ketone	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Heptachlor	7.5	U	7.5	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Heptachlor epoxide	7.5	U	7.5	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Methoxychlor	7.5	U	7.5	0.83	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1
Toxaphene	75	U	75	16	ug/Kg	☼	05/06/11 04:26	05/09/11 08:48	1

Client Sample ID: GPEC-SB-122 (0.2)
Date Collected: 04/26/11 13:07
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-5
Matrix: Solid
Percent Solids: 89.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		40 - 150	05/06/11 04:26	05/09/11 08:48	1
Tetrachloro-m-xylene	100		40 - 150	05/06/11 04:26	05/09/11 08:48	1
DCB Decachlorobiphenyl	239	X	53 - 150	05/06/11 04:26	05/09/11 08:48	1
DCB Decachlorobiphenyl	132	p	53 - 150	05/06/11 04:26	05/09/11 08:48	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	75	U	75	14	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1221	75	U	75	23	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1232	75	U	75	42	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1242	75	U	75	14	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1248	75	U	75	20	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1254	75	U	75	26	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1
Aroclor 1260	75	U	75	8.3	ug/Kg	☼	05/03/11 04:10	05/04/11 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	99		30 - 150	05/03/11 04:10	05/04/11 12:15	1
DCB Decachlorobiphenyl	83		30 - 150	05/03/11 04:10	05/04/11 12:15	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	19	U	19	3.5	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
Dicamba	19	U	19	1.9	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
Dichlorprop	19	U	19	3.1	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
2,4-D	19	U	19	2.4	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
2,4-DB	19	U	19	5.0	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
Silvex (2,4,5-TP)	19	U	19	2.1	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
2,4,5-T	19	U	19	3.8	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
Dinoseb	19	U	19	11	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
MCPA	1900	U *	1900	400	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1
Mecoprop	1900	U	1900	1300	ug/Kg	☼	04/28/11 10:30	04/29/11 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	110		101 - 150	04/28/11 10:30	04/29/11 18:40	1
2,4-Dichlorophenylacetic acid	142		101 - 150	04/28/11 10:30	04/29/11 18:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5680**		44.2	16.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Antimony	2.2	U	2.2	0.97	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Arsenic	**7.0**		1.1	0.77	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Barium	**147**		44.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Beryllium	0.44	U	0.44	0.19	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Cadmium	**0.62**	**J**	1.1	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Calcium	**5150**		1100	29.0	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Chromium	**19.0**		2.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Cobalt	**5.1**	**J**	11.0	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Copper	**135**		5.5	0.90	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Iron	**19000**		33.1	11.7	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Lead	**221**		1.1	0.55	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Magnesium	**2340**		1100	11.7	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Manganese	**521**		3.3	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4

Client Sample ID: GPEC-SB-122 (0.2)

Date Collected: 04/26/11 13:07
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-5

Matrix: Solid
Percent Solids: 89.7

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	17.2		8.8	0.59	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Potassium	1290		1100	49.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Selenium	2.9		2.2	1.0	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Sodium	1100	U	1100	67.8	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Thallium	2.2	U	2.2	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4
Vanadium	1670		27.6	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 17:57	10
Zinc	447		6.6	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 17:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.1		0.034	0.023	mg/Kg	☼	04/29/11 09:44	04/29/11 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.67	J	2.2	0.55	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	0.64	J	2.2	0.55	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.56	U	0.56	0.12	mg/Kg	☼	05/07/11 10:58	05/09/11 12:27	1
Cyanide, Free	2.5	U	2.5	0.67	mg/Kg	☼	05/04/11 10:00	05/04/11 16:38	1
Total Organic Carbon	25000		100	30.0	mg/Kg			05/04/11 02:13	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	89.7		1.0	1.0	%			04/27/11 16:10	1

Client Sample ID: GPEC-SB-122 (5.6)

Date Collected: 04/26/11 13:15
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-6

Matrix: Solid
Percent Solids: 87.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.65	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Bromomethane	1.0	U	1.0	0.42	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Vinyl chloride	1.0	U	1.0	0.24	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Chloroethane	1.0	U	1.0	0.41	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Methylene Chloride	1.0	U	1.0	0.48	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Acetone	14		10	3.8	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Carbon disulfide	1.0	U	1.0	0.48	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,1-Dichloroethene	1.0	U	1.0	0.38	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Chloroform	1.0	U	1.0	0.24	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,2-Dichloroethane	1.0	U	1.0	0.40	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
2-Butanone	10	U	10	0.58	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Carbon tetrachloride	1.0	U	1.0	0.10	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Bromodichloromethane	1.0	U	1.0	0.31	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,2-Dichloropropane	1.0	U	1.0	0.33	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.21	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Trichloroethene	1.0	U	1.0	0.37	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1

Client Sample ID: GPEC-SB-122 (5.6)
Date Collected: 04/26/11 13:15
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-6
Matrix: Solid
Percent Solids: 87.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	1.0	U	1.0	0.57	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.61	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Benzene	1.0	U	1.0	0.76	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.23	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Bromoform	1.0	U	1.0	0.72	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
4-Methyl-2-pentanone	10	U	10	0.73	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
2-Hexanone	10	U	10	1.7	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Tetrachloroethene	1.0	U	1.0	0.34	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.78	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Toluene	1.0	U	1.0	0.31	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Chlorobenzene	1.0	U	1.0	0.49	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Ethylbenzene	1.0	U	1.0	0.20	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Styrene	**1.1**		1.0	0.36	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1
Xylenes, Total	3.1	U	3.1	0.81	ug/Kg	☼	04/27/11 22:47	04/28/11 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 138*	*04/27/11 22:47*	*04/28/11 14:31*	*1*
Toluene-d8 (Surr)	*99*		*66 - 126*	*04/27/11 22:47*	*04/28/11 14:31*	*1*
Bromofluorobenzene	*99*		*72 - 132*	*04/27/11 22:47*	*04/28/11 14:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	370	U	370	46	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2-Chlorophenol	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2-Methylphenol	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Methylphenol	370	U	370	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2-Nitrophenol	370	U	370	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4-Dimethylphenol	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4-Dichlorophenol	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Chloro-3-methylphenol	370	U	370	63	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4,6-Trichlorophenol	370	U	370	67	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4,5-Trichlorophenol	370	U	370	72	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4-Dinitrophenol	1100	U	1100	80	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Nitrophenol	1100	U	1100	97	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4,6-Dinitro-2-methylphenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Pentachlorophenol	1100	U	1100	180	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Bis(2-chloroethyl)ether	37	U	37	7.8	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
1,3-Dichlorobenzene	370	U	370	51	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
1,4-Dichlorobenzene	370	U	370	56	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
1,2-Dichlorobenzene	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
N-Nitrosodi-n-propylamine	37	U	37	5.0	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Hexachloroethane	37	U	37	6.3	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Nitrobenzene	37	U	37	8.4	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Isophorone	370	U	370	43	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Bis(2-chloroethoxy)methane	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
1,2,4-Trichlorobenzene	37	U	37	6.1	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Naphthalene	**97**	**J**	370	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Chloroaniline	370	U	370	47	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Hexachlorobutadiene	76	U	76	15	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2-Methylnaphthalene	370	U	370	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Hexachlorocyclopentadiene	370	U	370	110	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-SB-122 (5.6)
Date Collected: 04/26/11 13:15
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-6
Matrix: Solid
Percent Solids: 87.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	370	U	370	53	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2-Nitroaniline	760	U	760	100	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Dimethyl phthalate	370	U	370	51	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Acenaphthylene	370	U	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,6-Dinitrotoluene	76	U	76	9.6	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
3-Nitroaniline	760	U	760	85	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Acenaphthene	**100**	**J**	370	54	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Dibenzofuran	370	U	370	56	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
2,4-Dinitrotoluene	76	U	76	11	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Diethyl phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Chlorophenyl phenyl ether	370	U	370	65	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Fluorene	370	U	370	64	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Nitroaniline	760	U	760	78	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
N-Nitrosodiphenylamine	370	U	370	61	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
4-Bromophenyl phenyl ether	370	U	370	67	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Hexachlorobenzene	37	U	37	5.2	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Phenanthrene	**110**	**J**	370	66	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Anthracene	370	U	370	66	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Carbazole	370	U	370	60	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Di-n-butyl phthalate	370	U	370	57	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Fluoranthene	**220**	**J**	370	62	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Pyrene	**200**	**J**	370	65	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Butyl benzyl phthalate	370	U	370	44	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
3,3'-Dichlorobenzidine	760	U	760	83	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Benzo[a]anthracene	**80**		37	7.0	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Chrysene	**100**	**J**	370	55	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Bis(2-ethylhexyl) phthalate	370	U	370	50	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Di-n-octyl phthalate	370	U	370	45	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Benzo[b]fluoranthene	**100**		37	5.6	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Benzo[k]fluoranthene	**44**		37	5.3	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Benzo[a]pyrene	**88**		37	4.6	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Indeno[1,2,3-cd]pyrene	**45**		37	6.0	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Dibenz(a,h)anthracene	37	U	37	4.5	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
Benzo[g,h,i]perylene	**52**	**J**	370	40	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1
bis (2-chloroisopropyl) ether	370	U	370	49	ug/Kg	☼	05/09/11 11:00	05/12/11 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*74*		*38 - 105*	*05/09/11 11:00*	*05/12/11 11:05*	*1*
Phenol-d5	*95*		*41 - 118*	*05/09/11 11:00*	*05/12/11 11:05*	*1*
Terphenyl-d14	*90*		*16 - 151*	*05/09/11 11:00*	*05/12/11 11:05*	*1*
2,4,6-Tribromophenol	*77*		*10 - 120*	*05/09/11 11:00*	*05/12/11 11:05*	*1*
2-Fluorophenol	*64*		*37 - 125*	*05/09/11 11:00*	*05/12/11 11:05*	*1*
2-Fluorobiphenyl	*79*		*40 - 109*	*05/09/11 11:00*	*05/12/11 11:05*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.6	U	7.6	1.7	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
alpha-BHC	7.6	U	7.6	1.4	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
beta-BHC	7.6	U	7.6	1.0	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
delta-BHC	7.6	U	7.6	1.2	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
gamma-BHC (Lindane)	7.6	U	7.6	0.88	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1

Client Sample ID: GPEC-SB-122 (5.6)
Date Collected: 04/26/11 13:15
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-6
Matrix: Solid
Percent Solids: 87.9

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane	76	U	76	16	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
4,4'-DDD	7.6	U	7.6	0.91	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
4,4'-DDE	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
4,4'-DDT	7.6	U	7.6	0.95	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Dieldrin	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endosulfan I	7.6	U	7.6	1.6	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endosulfan II	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endosulfan sulfate	7.6	U	7.6	0.98	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endrin	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endrin aldehyde	7.6	U	7.6	1.9	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Endrin ketone	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Heptachlor	7.6	U	7.6	1.1	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Heptachlor epoxide	7.6	U	7.6	1.5	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Methoxychlor	7.6	U	7.6	0.85	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1
Toxaphene	76	U	76	16	ug/Kg	☼	05/06/11 04:26	05/09/11 09:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*109*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:29*	*1*
Tetrachloro-m-xylene	*109*		*40 - 150*	*05/06/11 04:26*	*05/09/11 09:29*	*1*
DCB Decachlorobiphenyl	*129*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:29*	*1*
DCB Decachlorobiphenyl	*131*		*53 - 150*	*05/06/11 04:26*	*05/09/11 09:29*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	76	U	76	15	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1221	76	U	76	23	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1232	76	U	76	43	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1242	76	U	76	14	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1248	76	U	76	20	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1254	76	U	76	26	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1
Aroclor 1260	76	U	76	8.5	ug/Kg	☼	05/03/11 04:10	05/04/11 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*112*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:31*	*1*
DCB Decachlorobiphenyl	*100*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:31*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	19	U	19	3.6	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
Dicamba	19	U	19	2.0	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
Dichlorprop	19	U	19	3.2	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
2,4-D	19	U	19	2.5	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
2,4-DB	19	U	19	5.1	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
Silvex (2,4,5-TP)	19	U	19	2.1	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
2,4,5-T	19	U	19	3.9	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
Dinoseb	19	U	19	12	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
MCPA	1900	U *	1900	410	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1
Mecoprop	1900	U	1900	1300	ug/Kg	☼	04/28/11 10:30	04/29/11 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*105*		*101 - 150*	*04/28/11 10:30*	*04/29/11 19:10*	*1*

Client Sample ID: GPEC-SB-122 (5.6)

Date Collected: 04/26/11 13:15
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-6

Matrix: Solid
Percent Solids: 87.9

Method: 8151A - Herbicides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	117		101 - 150	04/28/11 10:30	04/29/11 19:10	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5470**		44.2	16.2	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Antimony	2.2	U	2.2	0.97	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Arsenic	**12.6**		1.1	0.77	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Barium	**45.8**		44.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Beryllium	**0.27**	**J**	0.44	0.19	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Cadmium	1.1	U	1.1	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Calcium	**4100**		1100	29.0	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Chromium	**36.0**		2.2	1.3	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Cobalt	**7.3**	**J**	11.0	1.4	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Copper	**39.1**		5.5	0.90	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Iron	**16700**		33.1	11.7	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Lead	**46.9**		1.1	0.55	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Magnesium	**2500**		1100	11.7	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Manganese	**243**		3.3	1.2	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Nickel	**19.5**		8.8	0.59	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Potassium	**1270**		1100	49.9	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Selenium	**2.5**		2.2	1.0	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Sodium	1100	U	1100	67.8	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Thallium	2.2	U	2.2	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Vanadium	**201**		11.0	0.57	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4
Zinc	**67.2**		6.6	1.1	mg/Kg	☼	05/03/11 07:00	05/06/11 18:04	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**		0.033	0.022	mg/Kg	☼	04/29/11 09:44	04/29/11 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.3	U	2.3	0.57	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	2.2	U	2.2	0.55	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.57	U	0.57	0.13	mg/Kg	☼	05/07/11 10:58	05/09/11 12:28	1
Cyanide, Free	2.6	U	2.6	0.69	mg/Kg	☼	05/04/11 10:00	05/04/11 16:41	1
Total Organic Carbon	**8860**		100	30.0	mg/Kg			05/04/11 02:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.1**		1.0	1.0	%			04/27/11 16:10	1
Percent Solids	**87.9**		1.0	1.0	%			04/27/11 16:10	1

Client Sample ID: GPEC-FB-042611

Date Collected: 04/26/11 13:55
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.21	ug/L			04/28/11 02:53	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-FB-042611
Date Collected: 04/26/11 13:55
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.31	ug/L			04/28/11 02:53	1
Vinyl chloride	1.0	U	1.0	0.13	ug/L			04/28/11 02:53	1
Chloroethane	1.0	U	1.0	0.45	ug/L			04/28/11 02:53	1
Methylene Chloride	1.0	U	1.0	0.19	ug/L			04/28/11 02:53	1
Acetone	10	U	10	2.5	ug/L			04/28/11 02:53	1
Carbon disulfide	1.0	U	1.0	0.15	ug/L			04/28/11 02:53	1
1,1-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 02:53	1
1,1-Dichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 02:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 02:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 02:53	1
Chloroform	1.0	U	1.0	0.15	ug/L			04/28/11 02:53	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/28/11 02:53	1
2-Butanone	10	U	10	0.82	ug/L			04/28/11 02:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.25	ug/L			04/28/11 02:53	1
Carbon tetrachloride	1.0	U	1.0	0.19	ug/L			04/28/11 02:53	1
Bromodichloromethane	1.0	U	1.0	0.093	ug/L			04/28/11 02:53	1
1,2-Dichloropropane	1.0	U	1.0	0.090	ug/L			04/28/11 02:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			04/28/11 02:53	1
Trichloroethene	1.0	U	1.0	0.18	ug/L			04/28/11 02:53	1
Dibromochloromethane	1.0	U	1.0	0.11	ug/L			04/28/11 02:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 02:53	1
Benzene	1.0	U	1.0	0.13	ug/L			04/28/11 02:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.12	ug/L			04/28/11 02:53	1
Bromoform	1.0	U	1.0	0.10	ug/L			04/28/11 02:53	1
4-Methyl-2-pentanone	10	U	10	0.68	ug/L			04/28/11 02:53	1
2-Hexanone	10	U	10	0.55	ug/L			04/28/11 02:53	1
Tetrachloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 02:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.090	ug/L			04/28/11 02:53	1
Toluene	1.0	U	1.0	0.090	ug/L			04/28/11 02:53	1
Chlorobenzene	1.0	U	1.0	0.16	ug/L			04/28/11 02:53	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/28/11 02:53	1
Styrene	1.0	U	1.0	0.13	ug/L			04/28/11 02:53	1
Xylenes, Total	3.0	U	3.0	0.43	ug/L			04/28/11 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 122*		*04/28/11 02:53*	*1*
Toluene-d8 (Surr)	*94*		*69 - 125*		*04/28/11 02:53*	*1*
Bromofluorobenzene	*102*		*69 - 135*		*04/28/11 02:53*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	10	U	10	0.90	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Chlorophenol	10	U	10	2.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Methylphenol	10	U	10	1.7	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Methylphenol	10	U	10	1.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Nitrophenol	10	U	10	3.4	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,4-Dimethylphenol	10	U	10	2.5	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,4-Dichlorophenol	10	U	10	2.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Chloro-3-methylphenol	10	U	10	2.0	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,4,6-Trichlorophenol	10	U	10	3.2	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,4,5-Trichlorophenol	10	U	10	2.5	ug/L		05/03/11 23:57	05/04/11 16:32	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-FB-042611
Date Collected: 04/26/11 13:55
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	30	U	30	4.9	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Nitrophenol	30	U	30	2.3	ug/L		05/03/11 23:57	05/04/11 16:32	1
4,6-Dinitro-2-methylphenol	30	U	30	5.3	ug/L		05/03/11 23:57	05/04/11 16:32	1
Pentachlorophenol	30	U	30	5.2	ug/L		05/03/11 23:57	05/04/11 16:32	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.41	ug/L		05/03/11 23:57	05/04/11 16:32	1
1,3-Dichlorobenzene	10	U	10	3.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
1,4-Dichlorobenzene	10	U	10	4.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
1,2-Dichlorobenzene	10	U	10	3.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.32	ug/L		05/03/11 23:57	05/04/11 16:32	1
Hexachloroethane	1.0	U	1.0	0.51	ug/L		05/03/11 23:57	05/04/11 16:32	1
Nitrobenzene	1.0	U	1.0	0.41	ug/L		05/03/11 23:57	05/04/11 16:32	1
Isophorone	10	U	10	3.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
Bis(2-chloroethoxy)methane	10	U	10	3.5	ug/L		05/03/11 23:57	05/04/11 16:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.53	ug/L		05/03/11 23:57	05/04/11 16:32	1
Naphthalene	10	U	10	3.7	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Chloroaniline	10	U	10	2.1	ug/L		05/03/11 23:57	05/04/11 16:32	1
Hexachlorobutadiene	2.0	U	2.0	0.95	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Methylnaphthalene	10	U	10	3.1	ug/L		05/03/11 23:57	05/04/11 16:32	1
Hexachlorocyclopentadiene	10	U	10	4.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Chloronaphthalene	10	U	10	3.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
2-Nitroaniline	20	U	20	5.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
Dimethyl phthalate	10	U	10	3.3	ug/L		05/03/11 23:57	05/04/11 16:32	1
Acenaphthylene	10	U	10	4.1	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,6-Dinitrotoluene	2.0	U	2.0	0.60	ug/L		05/03/11 23:57	05/04/11 16:32	1
3-Nitroaniline	20	U	20	4.4	ug/L		05/03/11 23:57	05/04/11 16:32	1
Acenaphthene	10	U	10	3.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
Dibenzofuran	10	U	10	3.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
2,4-Dinitrotoluene	2.0	U	2.0	0.43	ug/L		05/03/11 23:57	05/04/11 16:32	1
Diethyl phthalate	10	U	10	3.9	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Chlorophenyl phenyl ether	10	U	10	4.0	ug/L		05/03/11 23:57	05/04/11 16:32	1
Fluorene	10	U	10	3.3	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Nitroaniline	20	U	20	4.0	ug/L		05/03/11 23:57	05/04/11 16:32	1
N-Nitrosodiphenylamine	10	U	10	3.9	ug/L		05/03/11 23:57	05/04/11 16:32	1
4-Bromophenyl phenyl ether	10	U	10	4.0	ug/L		05/03/11 23:57	05/04/11 16:32	1
Hexachlorobenzene	1.0	U	1.0	0.27	ug/L		05/03/11 23:57	05/04/11 16:32	1
Phenanthrene	10	U	10	3.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
Anthracene	10	U	10	3.6	ug/L		05/03/11 23:57	05/04/11 16:32	1
Carbazole	10	U	10	3.1	ug/L		05/03/11 23:57	05/04/11 16:32	1
Di-n-butyl phthalate	10	U	10	2.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
Fluoranthene	10	U	10	2.7	ug/L		05/03/11 23:57	05/04/11 16:32	1
Pyrene	10	U	10	4.3	ug/L		05/03/11 23:57	05/04/11 16:32	1
Butyl benzyl phthalate	10	U	10	2.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
3,3'-Dichlorobenzidine	20	U	20	7.0	ug/L		05/03/11 23:57	05/04/11 16:32	1
Benzo[a]anthracene	1.0	U	1.0	0.27	ug/L		05/03/11 23:57	05/04/11 16:32	1
Chrysene	10	U	10	3.8	ug/L		05/03/11 23:57	05/04/11 16:32	1
Bis(2-ethylhexyl) phthalate	10	U	10	2.4	ug/L		05/03/11 23:57	05/04/11 16:32	1
Di-n-octyl phthalate	10	U	10	1.9	ug/L		05/03/11 23:57	05/04/11 16:32	1
Benzo[b]fluoranthene	1.0	U	1.0	0.21	ug/L		05/03/11 23:57	05/04/11 16:32	1
Benzo[k]fluoranthene	1.0	U	1.0	0.30	ug/L		05/03/11 23:57	05/04/11 16:32	1
Benzo[a]pyrene	1.0	U	1.0	0.18	ug/L		05/03/11 23:57	05/04/11 16:32	1

Client Sample ID: GPEC-FB-042611
Date Collected: 04/26/11 13:55
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	1.0	U	1.0	0.12	ug/L		05/03/11 23:57	05/04/11 16:32	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.16	ug/L		05/03/11 23:57	05/04/11 16:32	1
Benzo[g,h,i]perylene	10	U	10	2.7	ug/L		05/03/11 23:57	05/04/11 16:32	1
bis (2-chloroisopropyl) ether	10	U	10	3.2	ug/L		05/03/11 23:57	05/04/11 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*56 - 112*	*05/03/11 23:57*	*05/04/11 16:32*	*1*
Phenol-d5	*19*		*10 - 48*	*05/03/11 23:57*	*05/04/11 16:32*	*1*
Terphenyl-d14	*109*		*50 - 122*	*05/03/11 23:57*	*05/04/11 16:32*	*1*
2,4,6-Tribromophenol	*88*		*46 - 122*	*05/03/11 23:57*	*05/04/11 16:32*	*1*
2-Fluorophenol	*37*		*10 - 65*	*05/03/11 23:57*	*05/04/11 16:32*	*1*
2-Fluorobiphenyl	*87*		*53 - 108*	*05/03/11 23:57*	*05/04/11 16:32*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.050	U *	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
alpha-BHC	0.050	U	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
beta-BHC	0.050	U *	0.050	0.011	ug/L		04/28/11 09:37	04/29/11 10:46	1
delta-BHC	0.050	U *	0.050	0.0090	ug/L		04/28/11 09:37	04/29/11 10:46	1
gamma-BHC (Lindane)	0.050	U	0.050	0.012	ug/L		04/28/11 09:37	04/29/11 10:46	1
Chlordane	0.50	U	0.50	0.33	ug/L		04/28/11 09:37	04/29/11 10:46	1
4,4'-DDD	0.050	U *	0.050	0.011	ug/L		04/28/11 09:37	04/29/11 10:46	1
4,4'-DDE	0.050	U *	0.050	0.0090	ug/L		04/28/11 09:37	04/29/11 10:46	1
4,4'-DDT	0.050	U *	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
Dieldrin	0.050	U	0.050	0.0050	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endosulfan I	0.050	U	0.050	0.0090	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endosulfan II	0.050	U	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endosulfan sulfate	0.050	U	0.050	0.016	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endrin	0.050	U	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endrin aldehyde	0.050	U	0.050	0.0090	ug/L		04/28/11 09:37	04/29/11 10:46	1
Endrin ketone	0.050	U	0.050	0.011	ug/L		04/28/11 09:37	04/29/11 10:46	1
Heptachlor	0.050	U	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
Heptachlor epoxide	0.050	U	0.050	0.010	ug/L		04/28/11 09:37	04/29/11 10:46	1
Methoxychlor	0.050	U *	0.050	0.013	ug/L		04/28/11 09:37	04/29/11 10:46	1
Toxaphene	0.50	U	0.50	0.20	ug/L		04/28/11 09:37	04/29/11 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*49 - 132*	*04/28/11 09:37*	*04/29/11 10:46*	*1*
Tetrachloro-m-xylene	*85*		*49 - 132*	*04/28/11 09:37*	*04/29/11 10:46*	*1*
DCB Decachlorobiphenyl	*60*		*37 - 144*	*04/28/11 09:37*	*04/29/11 10:46*	*1*
DCB Decachlorobiphenyl	*60*		*37 - 144*	*04/28/11 09:37*	*04/29/11 10:46*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.51	U	0.51	0.13	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1221	0.51	U	0.51	0.28	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1232	0.51	U	0.51	0.12	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1242	0.51	U	0.51	0.12	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1248	0.51	U	0.51	0.24	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1254	0.51	U	0.51	0.17	ug/L		04/28/11 10:01	04/29/11 14:38	1
Aroclor 1260	0.51	U	0.51	0.15	ug/L		04/28/11 10:01	04/29/11 14:38	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-FB-042611
Date Collected: 04/26/11 13:55
Date Received: 04/27/11 07:30

Lab Sample ID: 460-25810-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*53*		*37 - 150*	*04/28/11 10:01*	*04/29/11 14:38*	*1*
DCB Decachlorobiphenyl	*53*		*37 - 150*	*04/28/11 10:01*	*04/29/11 14:38*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	0.61	U	0.61	0.13	ug/L		04/28/11 20:59	04/29/11 14:38	1
Dicamba	0.61	U	0.61	0.15	ug/L		04/28/11 20:59	04/29/11 14:38	1
Dichlorprop	0.61	U	0.61	0.12	ug/L		04/28/11 20:59	04/29/11 14:38	1
2,4-D	0.61	U *	0.61	0.12	ug/L		04/28/11 20:59	04/29/11 14:38	1
2,4-DB	0.61	U	0.61	0.16	ug/L		04/28/11 20:59	04/29/11 14:38	1
Silvex (2,4,5-TP)	0.61	U	0.61	0.11	ug/L		04/28/11 20:59	04/29/11 14:38	1
2,4,5-T	0.61	U	0.61	0.15	ug/L		04/28/11 20:59	04/29/11 14:38	1
Dinoseb	0.61	U	0.61	0.15	ug/L		04/28/11 20:59	04/29/11 14:38	1
MCPA	61	U	61	19	ug/L		04/28/11 20:59	04/29/11 14:38	1
Mecoprop	61	U *	61	27	ug/L		04/28/11 20:59	04/29/11 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*147*		*63 - 150*	*04/28/11 20:59*	*04/29/11 14:38*	*1*
2,4-Dichlorophenylacetic acid	*132*		*63 - 150*	*04/28/11 20:59*	*04/29/11 14:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	87.0	ug/L		05/03/11 11:54	05/04/11 18:13	1
Antimony	10.0	U	10.0	4.6	ug/L		05/03/11 11:54	05/04/11 18:13	1
Arsenic	5.0	U	5.0	3.8	ug/L		05/03/11 11:54	05/04/11 18:13	1
Barium	200	U	200	3.2	ug/L		05/03/11 11:54	05/04/11 18:13	1
Beryllium	2.0	U	2.0	0.94	ug/L		05/03/11 11:54	05/04/11 18:13	1
Cadmium	5.0	U	5.0	0.92	ug/L		05/03/11 11:54	05/04/11 18:13	1
Calcium	5000	U	5000	72.2	ug/L		05/03/11 11:54	05/04/11 18:13	1
Chromium	10.0	U	10.0	3.2	ug/L		05/03/11 11:54	05/04/11 18:13	1
Cobalt	50.0	U	50.0	2.8	ug/L		05/03/11 11:54	05/04/11 18:13	1
Copper	25.0	U	25.0	3.6	ug/L		05/03/11 11:54	05/04/11 18:13	1
Iron	150	U	150	40.2	ug/L		05/03/11 11:54	05/04/11 18:13	1
Lead	5.0	U	5.0	2.8	ug/L		05/03/11 11:54	05/04/11 18:13	1
Magnesium	5000	U	5000	56.9	ug/L		05/03/11 11:54	05/04/11 18:13	1
Manganese	15.0	U	15.0	2.5	ug/L		05/03/11 11:54	05/04/11 18:13	1
Nickel	40.0	U	40.0	3.5	ug/L		05/03/11 11:54	05/04/11 18:13	1
Potassium	5000	U	5000	209	ug/L		05/03/11 11:54	05/04/11 18:13	1
Selenium	10.0	U	10.0	4.8	ug/L		05/03/11 11:54	05/04/11 18:13	1
Silver	10.0	U	10.0	0.97	ug/L		05/03/11 11:54	05/04/11 18:13	1
Sodium	5000	U	5000	341	ug/L		05/03/11 11:54	05/04/11 18:13	1
Thallium	10.0	U	10.0	4.6	ug/L		05/03/11 11:54	05/04/11 18:13	1
Vanadium	50.0	U	50.0	2.0	ug/L		05/03/11 11:54	05/04/11 18:13	1
Zinc	30.0	U	30.0	5.8	ug/L		05/03/11 11:54	05/04/11 18:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.18	ug/L		05/02/11 18:15	05/02/11 22:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	10.0	U	10.0	1.5	ug/L			04/27/11 12:11	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-FB-042611

Lab Sample ID: 460-25810-7

Date Collected: 04/26/11 13:55
Matrix: Water
Date Received: 04/27/11 07:30

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	10.0	U	10.0	2.9	ug/L		05/04/11 09:55	05/04/11 16:17	1
Cyanide, Free	5.0	U	5.0	1.1	ug/L		05/04/11 09:00	05/04/11 15:59	1
Total Organic Carbon	**0.41**	**J**	1.0	0.32	mg/L			05/10/11 15:28	1

Client Sample ID: Trip Blank

Lab Sample ID: 460-25810-8

Date Collected: 04/26/11 00:00
Matrix: Water
Date Received: 04/27/11 07:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.21	ug/L			04/28/11 03:18	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/28/11 03:18	1
Vinyl chloride	1.0	U	1.0	0.13	ug/L			04/28/11 03:18	1
Chloroethane	1.0	U	1.0	0.45	ug/L			04/28/11 03:18	1
Methylene Chloride	1.0	U	1.0	0.19	ug/L			04/28/11 03:18	1
Acetone	10	U	10	2.5	ug/L			04/28/11 03:18	1
Carbon disulfide	1.0	U	1.0	0.15	ug/L			04/28/11 03:18	1
1,1-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 03:18	1
1,1-Dichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 03:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 03:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 03:18	1
Chloroform	1.0	U	1.0	0.15	ug/L			04/28/11 03:18	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/28/11 03:18	1
2-Butanone	10	U	10	0.82	ug/L			04/28/11 03:18	1
1,1,1-Trichloroethane	1.0	U	1.0	0.25	ug/L			04/28/11 03:18	1
Carbon tetrachloride	1.0	U	1.0	0.19	ug/L			04/28/11 03:18	1
Bromodichloromethane	1.0	U	1.0	0.093	ug/L			04/28/11 03:18	1
1,2-Dichloropropane	1.0	U	1.0	0.090	ug/L			04/28/11 03:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			04/28/11 03:18	1
Trichloroethene	1.0	U	1.0	0.18	ug/L			04/28/11 03:18	1
Dibromochloromethane	1.0	U	1.0	0.11	ug/L			04/28/11 03:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 03:18	1
Benzene	1.0	U	1.0	0.13	ug/L			04/28/11 03:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.12	ug/L			04/28/11 03:18	1
Bromoform	1.0	U	1.0	0.10	ug/L			04/28/11 03:18	1
4-Methyl-2-pentanone	10	U	10	0.68	ug/L			04/28/11 03:18	1
2-Hexanone	10	U	10	0.55	ug/L			04/28/11 03:18	1
Tetrachloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 03:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.090	ug/L			04/28/11 03:18	1
Toluene	1.0	U	1.0	0.090	ug/L			04/28/11 03:18	1
Chlorobenzene	1.0	U	1.0	0.16	ug/L			04/28/11 03:18	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/28/11 03:18	1
Styrene	1.0	U	1.0	0.13	ug/L			04/28/11 03:18	1
Xylenes, Total	3.0	U	3.0	0.43	ug/L			04/28/11 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 122*		*04/28/11 03:18*	*1*
Toluene-d8 (Surr)	*94*		*69 - 125*		*04/28/11 03:18*	*1*
Bromofluorobenzene	*101*		*69 - 135*		*04/28/11 03:18*	*1*

Client Sample ID: GPEC-SB-117 (5-6)

Lab Sample ID: 460-25810-1

Date Collected: 04/26/11 09:50

Matrix: Solid

Date Received: 04/27/11 07:30

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:28	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 11:12	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73450	05/12/11 07:44	AAA	TAL EDI
Total/NA	Prep	8151A			72548	05/03/11 06:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72789	05/04/11 16:18	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 11:29	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 09:02	FM	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:35	RBS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI
Total/NA	Analysis	6010B		4	73082	05/06/11 17:25	VD	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:12	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 23:51	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:24	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 14:50	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 09:56	RK	TAL EDI

Client Sample ID: GPEC-XX-042611

Lab Sample ID: 460-25810-2

Date Collected: 04/26/11 07:00

Matrix: Solid

Date Received: 04/27/11 07:30

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:31	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 11:37	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		10	73450	05/12/11 08:12	AAA	TAL EDI
Total/NA	Prep	8151A			72096	04/28/11 10:30	ME	TAL EDI
Total/NA	Analysis	8151A		1	72381	04/29/11 17:40	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 11:44	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 08:34	FM	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:37	RBS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI
Total/NA	Analysis	6010B		4	73082	05/06/11 17:31	VD	TAL EDI

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-XX-042611

Lab Sample ID: 460-25810-2

Date Collected: 04/26/11 07:00
Matrix: Solid
Date Received: 04/27/11 07:30
Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:16	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/04/11 00:17	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:25	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 14:50	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 09:56	RK	TAL EDI

Client Sample ID: GPEC-SB-118 (0-2)

Lab Sample ID: 460-25810-3

Date Collected: 04/26/11 11:00
Matrix: Solid
Date Received: 04/27/11 07:30
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:34	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 12:02	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73208	05/10/11 16:28	CZ	TAL EDI
Total/NA	Prep	8151A			72096	04/28/11 10:30	ME	TAL EDI
Total/NA	Analysis	8151A		1	72219	04/29/11 12:02	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 09:41	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 07:52	FM	TAL EDI
Total/NA	Prep	7471A			72670	05/04/11 18:15	TS	TAL EDI
Total/NA	Analysis	7471A		1	72682	05/04/11 21:30	TS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI
Total/NA	Analysis	6010B		4	73082	05/06/11 16:15	VD	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:19	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/04/11 00:58	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:23	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 14:50	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 09:56	RK	TAL EDI

Client Sample ID: GPEC-SB-118 (5-6)

Lab Sample ID: 460-25810-4

Date Collected: 04/26/11 11:35

Matrix: Solid

Date Received: 04/27/11 07:30

Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:42	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 13:41	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73479	05/12/11 11:28	CZ	TAL EDI
Total/NA	Prep	8151A			72096	04/28/11 10:30	ME	TAL EDI
Total/NA	Analysis	8151A		1	72381	04/29/11 18:10	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 12:00	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 09:16	FM	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		2	72223	04/29/11 14:03	RBS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI
Total/NA	Analysis	6010B		4	73082	05/06/11 17:44	VD	TAL EDI
Total/NA	Analysis	6010B		10	73082	05/06/11 22:37	VD	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:35	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/04/11 02:06	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:26	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-122 (0.2)

Lab Sample ID: 460-25810-5

Date Collected: 04/26/11 13:07

Matrix: Solid

Date Received: 04/27/11 07:30

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:44	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 14:06	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73479	05/12/11 11:51	CZ	TAL EDI
Total/NA	Prep	8151A			72096	04/28/11 10:30	ME	TAL EDI
Total/NA	Analysis	8151A		1	72381	04/29/11 18:40	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 12:15	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 08:48	FM	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 14:05	RBS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI

Client Sample ID: GPEC-SB-122 (0.2)

Lab Sample ID: 460-25810-5

Date Collected: 04/26/11 13:07
Matrix: Solid
Date Received: 04/27/11 07:30
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	73082	05/06/11 17:51	VD	TAL EDI
Total/NA	Analysis	6010B		10	73082	05/06/11 17:57	VD	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:38	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/04/11 02:13	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:27	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-122 (5.6)

Lab Sample ID: 460-25810-6

Date Collected: 04/26/11 13:15
Matrix: Solid
Date Received: 04/27/11 07:30
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71974	04/27/11 22:47	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72055	04/28/11 14:31	AT	TAL EDI
Total/NA	Prep	3541			73077	05/09/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73479	05/12/11 11:05	CZ	TAL EDI
Total/NA	Prep	8151A			72096	04/28/11 10:30	ME	TAL EDI
Total/NA	Analysis	8151A		1	72381	04/29/11 19:10	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 12:31	SD	TAL EDI
Total/NA	Prep	3541			72845	05/06/11 04:26	ARA	TAL EDI
Total/NA	Analysis	8081A		1	73055	05/09/11 09:29	FM	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:42	RBS	TAL EDI
Total/NA	Prep	3050B			72437	05/03/11 07:00	MC	TAL EDI
Total/NA	Analysis	6010B		4	73082	05/06/11 18:04	VD	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:41	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/04/11 02:27	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 16:10	CR	TAL EDI
Total/NA	Prep	9012A			72970	05/07/11 10:58	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:28	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Client Sample ID: GPEC-FB-042611

Lab Sample ID: 460-25810-7

Date Collected: 04/26/11 13:55

Matrix: Water

Date Received: 04/27/11 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	71972	04/28/11 02:53	EM	TAL EDI
Total/NA	Prep	3510C			72552	05/03/11 23:57	JH	TAL EDI
Total/NA	Analysis	8270C		1	72806	05/04/11 16:32	MC	TAL EDI
Total/NA	Prep	8151A			72128	04/28/11 20:59	JS	TAL EDI
Total/NA	Analysis	8151A		1	72219	04/29/11 14:38	SK	TAL EDI
Total/NA	Prep	3510C			72026	04/28/11 09:37	HW	TAL EDI
Total/NA	Analysis	8081A		1	72312	04/29/11 10:46	FM	TAL EDI
Total/NA	Prep	3510C			72032	04/28/11 10:01	HW	TAL EDI
Total/NA	Analysis	8082		1	72490	04/29/11 14:38	SD	TAL EDI
Total/NA	Prep	7470A			72418	05/02/11 18:15	TS	TAL EDI
Total/NA	Analysis	7470A		1	72427	05/02/11 22:26	TS	TAL EDI
Total/NA	Prep	3010A			72487	05/03/11 11:54	QY	TAL EDI
Total/NA	Analysis	6010B		1	72698	05/04/11 18:13	CDC	TAL EDI
Total/NA	Prep	9016			50485	05/04/11 09:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 15:59	JM	TAL CT
Total/NA	Prep	9012B			50410	05/04/11 09:55	RN	TAL CT
Total/NA	Analysis	9012B		1	50440	05/04/11 16:17	RN	TAL CT
Total/NA	Analysis	7196A		1	72000	04/27/11 12:11	JC	TAL EDI
Total/NA	Analysis	9060		1	73229	05/10/11 15:28	HV	TAL EDI

Client Sample ID: Trip Blank

Lab Sample ID: 460-25810-8

Date Collected: 04/26/11 00:00

Matrix: Water

Date Received: 04/27/11 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	71972	04/28/11 03:18	EM	TAL EDI

Laboratory References:

TAL CT = TestAmerica Connecticut, 128 Long Hill Cross Road, Shelton, CT 06484, TEL (203)929-8140

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Edison	Connecticut	State Program	1	PH-0200
TestAmerica Edison	Delaware	Delaware DNREC	3	N/A
TestAmerica Edison	New Jersey	NELAC	2	12028
TestAmerica Edison	New York	NELAC	2	11452
TestAmerica Edison	Pennsylvania	NELAC	3	68-00522
TestAmerica Edison	Rhode Island	State Program	1	LAO00132
TestAmerica Edison	USDA	USDA		NJCA-003-08
TestAmerica Connecticut	NRC	NRC		06-30139-01
TestAmerica Connecticut	USDA	USDA		P330-11-00082

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081A	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
8151A	Herbicides (GC)	SW846	TAL EDI
6010B	Metals (ICP)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
7471A	Mercury (CVAA)	SW846	TAL EDI
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012A	Cyanide, Total and/or Amenable	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL CT
9016	Cyanide, Free	SW846	TAL CT
9060	Organic Carbon, Total (TOC)	SW846	TAL CT
9060	Organic Carbon, Total (TOC)	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CT = TestAmerica Connecticut, 128 Long Hill Cross Road, Shelton, CT 06484, TEL (203)929-8140

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25810-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-25810-1	GPEC-SB-117 (5-6)	Solid	04/26/11 09:50	04/27/11 07:30
460-25810-2	GPEC-XX-042611	Solid	04/26/11 07:00	04/27/11 07:30
460-25810-3	GPEC-SB-118 (0-2)	Solid	04/26/11 11:00	04/27/11 07:30
460-25810-4	GPEC-SB-118 (5-6)	Solid	04/26/11 11:35	04/27/11 07:30
460-25810-5	GPEC-SB-122 (0.2)	Solid	04/26/11 13:07	04/27/11 07:30
460-25810-6	GPEC-SB-122 (5.6)	Solid	04/26/11 13:15	04/27/11 07:30
460-25810-7	GPEC-FB-042611	Water	04/26/11 13:55	04/27/11 07:30
460-25810-8	Trip Blank	Water	04/26/11 00:00	04/27/11 07:30

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice): Mike Zukauskas	Samplers Name (Printed): MJS / KMK	Site/Project Identification: Greenpoint E.C. / 093260-1-11004
Company: GEI Consultants	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program:
Address: 1 Greenwood Ave, Ste 210	Analysis Turnaround Time: Standard ☒	
City: Montclair State: NJ 07042	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 973-873-7110 Fax: 973-509-9625		

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	SVOC 8270C	TAL Metals 6010/7000	PCBs 8082	Hex Chrome 3060A	TOC 9060	Total CN	Pest. / Herb.	Free CN 9013/14		LAB USE ONLY Sample Numbers
GPEC-SB-117 (5-6)	4/26/11	9:50	S	3	X	X	X	X	X	X	X	X	X	1	HOLD
GPEC-XX-042611	4/26/11	7:00	S	3	X	X	X	X	X	X	X	X	X	2	TCLP Pb & Hg
GPEC-SB-118(0-2)	4/26/11	11:00	S	3										3	
GPEC-SB-118(0-2) MS	4/26/11	11:00	S	3										11	
GPEC-SB-118(0-2) MSD	4/26/11	11:00	S	3										11	
GPEC-SB-119(5-6)	4/26/11	11:35	S	3										4	
GPEC-SB-122(0-2)	4/26/11	13:07	S	3										5	
GPEC-SB-127(5-6)	4/26/11	13:15	S	3										6	
GPEC-FB-042611	4/26/11	13:35	AQ	12										7	
Trip Blank				1										8	
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:					1	1	1	1	1	1	1	1	1		
6 = Other _____, 7 = Other _____ — Water:					2	1	4	1	1	3	5	1	5		

1 cooler not on COC

CM 4/27/11

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	4/26/11 15:07	1)	TA NYC
Relinquished by 2)	TA NYC	4/26/11 16:00	Received by 2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3) 2.5 / 3.0	Company 4/27/11 7:30
Relinquished by 4)	Company	SHORT HOLD	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

TestAmerica Edison
Sample pH Receipt Log

Job No. 28810

page 1 of 1

Sample No.	Ammonia (pH<2)	COD (pH<2)	Metals (pH<2)	Nitrate Nitrite (pH<2)	O & G (pH<2)	Pest (pH 5-9)	PHC (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other
7			<2								<2	>12		

Initials: CM

Date: 4/27/11

EDS-WI-038, Rev 1, 11/21/07

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25810-1

Login Number: 25810

List Source: TestAmerica Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5/3.0 ° C IR #50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25810-1

Login Number: 25810
List Number: 1
Creator: Teixeira, Maria L

List Source: TestAmerica Connecticut
List Creation: 05/02/11 09:12 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	5/2/11
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	gun#3 2.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25810-1

Login Number: 25810
List Number: 2
Creator: Teixeira, Maria L

List Source: TestAmerica Connecticut
List Creation: 05/02/11 09:15 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	5/2/11
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	gun#3 2.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25810-1

Login Number: 25810
List Number: 3
Creator: Teixeira, Maria L

List Source: TestAmerica Connecticut
List Creation: 05/07/11 12:24 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	5/7/11
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	gun#4 1.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25810-1

Login Number: 25810
List Number: 4
Creator: Blocker, Kristina

List Source: TestAmerica Connecticut
List Creation: 05/09/11 12:01 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	recvd #3 ms/msd on 5/7/11
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.6c gun4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-25837-1
Client Project/Site: Greenpoint E.C./093260-1-1104

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
Montclair, New Jersey 07042

Attn: Mr. Matthew Sweet

Authorized for release by:
1/10/2012 3:32:40 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: GPEC-SB-116 (5-6)
Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-1
Matrix: Solid
Percent Solids: 78.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.2	U	1.2	0.73	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Bromomethane	1.2	U	1.2	0.47	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Vinyl chloride	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Chloroethane	1.2	U	1.2	0.46	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Methylene Chloride	**1.5**		1.2	0.54	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Acetone	**24**		12	4.3	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Carbon disulfide	**0.64**	**J**	1.2	0.54	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,1-Dichloroethene	1.2	U	1.2	0.43	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,1-Dichloroethane	1.2	U	1.2	0.29	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
trans-1,2-Dichloroethene	1.2	U	1.2	0.33	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
cis-1,2-Dichloroethene	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Chloroform	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,2-Dichloroethane	1.2	U	1.2	0.45	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
2-Butanone	12	U	12	0.66	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,1,1-Trichloroethane	1.2	U	1.2	0.22	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Carbon tetrachloride	1.2	U	1.2	0.12	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Bromodichloromethane	1.2	U	1.2	0.35	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,2-Dichloropropane	1.2	U	1.2	0.37	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
cis-1,3-Dichloropropene	1.2	U	1.2	0.23	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Trichloroethene	1.2	U	1.2	0.42	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Dibromochloromethane	1.2	U	1.2	0.65	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,1,2-Trichloroethane	1.2	U	1.2	0.68	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Benzene	**70**		1.2	0.85	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
trans-1,3-Dichloropropene	1.2	U	1.2	0.25	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Bromoform	1.2	U	1.2	0.81	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
4-Methyl-2-pentanone	12	U	12	0.82	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
2-Hexanone	12	U	12	1.9	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Tetrachloroethene	1.2	U	1.2	0.38	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.88	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Toluene	**3.5**		1.2	0.34	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Chlorobenzene	1.2	U	1.2	0.56	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Ethylbenzene	**6.0**		1.2	0.22	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Styrene	1.2	U	1.2	0.40	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1
Xylenes, Total	**11**		3.5	0.91	ug/Kg	☼	04/28/11 00:23	04/28/11 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 138*	*04/28/11 00:23*	*04/28/11 22:45*	*1*
Toluene-d8 (Surr)	*98*		*66 - 126*	*04/28/11 00:23*	*04/28/11 22:45*	*1*
Bromofluorobenzene	*98*		*72 - 132*	*04/28/11 00:23*	*04/28/11 22:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	420	U	420	51	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Chlorophenol	420	U	420	56	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Methylphenol	420	U	420	60	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Methylphenol	420	U	420	69	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Nitrophenol	420	U	420	69	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,4-Dimethylphenol	420	U	420	67	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,4-Dichlorophenol	420	U	420	67	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Chloro-3-methylphenol	420	U	420	70	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1

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Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-1
Matrix: Solid
Percent Solids: 78.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	420	U	420	75	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,4,5-Trichlorophenol	420	U	420	81	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,4-Dinitrophenol	1300	U	1300	89	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4,6-Dinitro-2-methylphenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Pentachlorophenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Bis(2-chloroethyl)ether	42	U	42	8.7	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
1,3-Dichlorobenzene	420	U	420	57	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
1,4-Dichlorobenzene	420	U	420	62	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
1,2-Dichlorobenzene	420	U	420	67	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
N-Nitrosodi-n-propylamine	42	U	42	5.5	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Hexachloroethane	42	U	42	7.1	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Nitrobenzene	42	U	42	9.4	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Isophorone	420	U	420	48	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Bis(2-chloroethoxy)methane	420	U	420	60	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
1,2,4-Trichlorobenzene	42	U	42	6.8	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Naphthalene	**1300**		420	61	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Chloroaniline	420	U	420	53	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Hexachlorobutadiene	85	U	85	17	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Methylnaphthalene	**570**		420	61	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Hexachlorocyclopentadiene	420	U	420	120	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Chloronaphthalene	420	U	420	59	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2-Nitroaniline	850	U	850	110	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Dimethyl phthalate	420	U	420	57	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Acenaphthylene	**88**	**J**	420	60	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,6-Dinitrotoluene	85	U	85	11	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
3-Nitroaniline	850	U	850	95	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Acenaphthene	**1700**		420	60	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Dibenzofuran	**940**		420	63	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
2,4-Dinitrotoluene	85	U	85	12	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Diethyl phthalate	420	U	420	56	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Chlorophenyl phenyl ether	420	U	420	72	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Fluorene	**1200**		420	71	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Nitroaniline	850	U	850	86	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
N-Nitrosodiphenylamine	420	U	420	68	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
4-Bromophenyl phenyl ether	420	U	420	75	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Hexachlorobenzene	42	U	42	5.8	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Phenanthrene	**7200**		420	73	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Anthracene	**1900**		420	74	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Carbazole	**1000**		420	67	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Di-n-butyl phthalate	420	U	420	64	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Fluoranthene	**6900**		420	70	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Pyrene	**5600**		420	72	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Butyl benzyl phthalate	420	U	420	49	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
3,3'-Dichlorobenzidine	850	U	850	93	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Benzo[a]anthracene	**2900**		42	7.7	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Chrysene	**3000**		420	61	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Bis(2-ethylhexyl) phthalate	420	U	420	56	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Di-n-octyl phthalate	420	U	420	50	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Benzo[b]fluoranthene	**3200**		42	6.2	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1

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Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-1
Matrix: Solid
Percent Solids: 78.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	**1100**		42	5.9	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Benzo[a]pyrene	**2700**		42	5.1	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Indeno[1,2,3-cd]pyrene	**1800**		42	6.7	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Dibenz(a,h)anthracene	**380**		42	5.0	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
Benzo[g,h,i]perylene	**1700**		420	44	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1
bis (2-chloroisopropyl) ether	420	U	420	55	ug/Kg	☼	05/05/11 11:00	05/07/11 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*77*		*38 - 105*	*05/05/11 11:00*	*05/07/11 00:22*	*1*
Phenol-d5	*62*		*41 - 118*	*05/05/11 11:00*	*05/07/11 00:22*	*1*
Terphenyl-d14	*93*		*16 - 151*	*05/05/11 11:00*	*05/07/11 00:22*	*1*
2,4,6-Tribromophenol	*51*		*10 - 120*	*05/05/11 11:00*	*05/07/11 00:22*	*1*
2-Fluorophenol	*61*		*37 - 125*	*05/05/11 11:00*	*05/07/11 00:22*	*1*
2-Fluorobiphenyl	*84*		*40 - 109*	*05/05/11 11:00*	*05/07/11 00:22*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.5	U	8.5	1.9	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
alpha-BHC	8.5	U	8.5	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
beta-BHC	8.5	U	8.5	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
delta-BHC	8.5	U	8.5	1.3	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
gamma-BHC (Lindane)	8.5	U	8.5	0.99	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Chlordane	85	U	85	18	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
4,4'-DDD	**6.6**	**J**	8.5	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
4,4'-DDE	8.5	U	8.5	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
4,4'-DDT	**6.9**	**J**	8.5	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Dieldrin	8.5	U	8.5	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endosulfan I	8.5	U	8.5	1.8	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endosulfan II	8.5	U	8.5	1.3	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endosulfan sulfate	8.5	U	8.5	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endrin	8.5	U	8.5	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endrin aldehyde	8.5	U	8.5	2.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Endrin ketone	8.5	U	8.5	1.3	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Heptachlor	8.5	U	8.5	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Heptachlor epoxide	8.5	U	8.5	1.7	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Methoxychlor	8.5	U	8.5	0.95	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1
Toxaphene	85	U	85	18	ug/Kg	☼	05/03/11 04:23	05/05/11 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*40 - 150*	*05/03/11 04:23*	*05/05/11 09:33*	*1*
Tetrachloro-m-xylene	*53*		*40 - 150*	*05/03/11 04:23*	*05/05/11 09:33*	*1*
DCB Decachlorobiphenyl	*97*		*53 - 150*	*05/03/11 04:23*	*05/05/11 09:33*	*1*
DCB Decachlorobiphenyl	*107*		*53 - 150*	*05/03/11 04:23*	*05/05/11 09:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	85	U	85	16	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1
Aroclor 1221	85	U	85	26	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1
Aroclor 1232	85	U	85	48	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1
Aroclor 1242	85	U	85	16	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1
Aroclor 1248	85	U	85	22	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1

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Date Collected: 04/26/11 08:45
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Lab Sample ID: 460-25837-1
Matrix: Solid
Percent Solids: 78.9

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1254	85	U	85	29	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1
Aroclor 1260	85	U	85	9.5	ug/Kg	☼	05/03/11 04:10	05/04/11 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*112*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:46*	*1*
DCB Decachlorobiphenyl	*96*		*30 - 150*	*05/03/11 04:10*	*05/04/11 12:46*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	22	U	22	2.7	ug/Kg	☼	05/04/11 21:55	05/05/11 12:09	1
Silvex (2,4,5-TP)	22	U	22	2.3	ug/Kg	☼	05/04/11 21:55	05/05/11 12:09	1
2,4,5-T	22	U	22	4.3	ug/Kg	☼	05/04/11 21:55	05/05/11 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*112*		*101 - 150*	*05/04/11 21:55*	*05/05/11 12:09*	*1*
2,4-Dichlorophenylacetic acid	*131*		*101 - 150*	*05/04/11 21:55*	*05/05/11 12:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8730**		50.7	18.6	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Antimony	**1.4**	**J**	2.5	1.1	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Arsenic	**13.1**		1.3	0.88	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Barium	**1390**		50.7	1.5	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Beryllium	**0.76**		0.51	0.22	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Cadmium	**2.7**		1.3	0.20	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Calcium	**7320**		1270	33.3	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Chromium	**23.8**		2.5	1.5	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Cobalt	**8.5**	**J**	12.7	1.6	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Copper	**281**		6.3	1.0	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Iron	**22300**		38.0	13.4	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Lead	**499**		1.3	0.63	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Magnesium	**3040**		1270	13.4	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Manganese	**630**		3.8	1.4	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Nickel	**42.7**		10.1	0.68	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Potassium	**2280**		1270	57.2	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Selenium	2.5	U	2.5	1.2	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Silver	2.5	U	2.5	0.19	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Sodium	**279**	**J**	1270	77.8	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Thallium	2.5	U	2.5	1.2	mg/Kg	☼	05/02/11 07:18	05/03/11 15:36	4
Vanadium	**129**		12.7	0.66	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4
Zinc	**873**		7.6	1.2	mg/Kg	☼	05/02/11 07:18	05/03/11 01:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.94**		0.038	0.025	mg/Kg	☼	04/29/11 08:32	04/29/11 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.5	U	2.5	0.61	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	2.5	U	2.5	0.62	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.63	U	0.63	0.14	mg/Kg	☼	05/07/11 09:32	05/09/11 12:36	1
Cyanide, Free	2.8	U	2.8	0.76	mg/Kg	☼	05/04/11 10:00	05/04/11 16:44	1

Client Sample ID: GPEC-SB-116 (5-6)

Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-1
Matrix: Solid

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**19700**		100	30.0	mg/Kg			05/03/11 20:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.1**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**78.9**		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-116 (0-2)

Date Collected: 04/26/11 08:30
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-2
Matrix: Solid
Percent Solids: 90.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.96	U	0.96	0.61	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Bromomethane	0.96	U	0.96	0.39	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Vinyl chloride	0.96	U	0.96	0.23	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Chloroethane	0.96	U	0.96	0.38	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Methylene Chloride	**1.4**		0.96	0.45	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Acetone	**34**		9.6	3.6	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Carbon disulfide	0.96	U	0.96	0.45	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,1-Dichloroethene	0.96	U	0.96	0.36	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,1-Dichloroethane	0.96	U	0.96	0.24	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
trans-1,2-Dichloroethene	0.96	U	0.96	0.27	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
cis-1,2-Dichloroethene	0.96	U	0.96	0.23	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Chloroform	0.96	U	0.96	0.23	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,2-Dichloroethane	0.96	U	0.96	0.38	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
2-Butanone	**2.1**	**J**	9.6	0.55	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,1,1-Trichloroethane	0.96	U	0.96	0.18	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Carbon tetrachloride	0.96	U	0.96	0.097	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Bromodichloromethane	0.96	U	0.96	0.29	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,2-Dichloropropane	0.96	U	0.96	0.31	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
cis-1,3-Dichloropropene	0.96	U	0.96	0.19	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Trichloroethene	0.96	U	0.96	0.35	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Dibromochloromethane	0.96	U	0.96	0.54	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,1,2-Trichloroethane	0.96	U	0.96	0.57	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Benzene	**2.4**		0.96	0.71	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
trans-1,3-Dichloropropene	0.96	U	0.96	0.21	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Bromoform	0.96	U	0.96	0.68	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
4-Methyl-2-pentanone	9.6	U	9.6	0.69	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
2-Hexanone	9.6	U	9.6	1.6	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Tetrachloroethene	0.96	U	0.96	0.32	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
1,1,2,2-Tetrachloroethane	0.96	U	0.96	0.73	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Toluene	0.96	U	0.96	0.29	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Chlorobenzene	0.96	U	0.96	0.46	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Ethylbenzene	0.96	U	0.96	0.18	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Styrene	0.96	U	0.96	0.33	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1
Xylenes, Total	2.9	U	2.9	0.76	ug/Kg	☼	04/28/11 00:25	04/29/11 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 138*	*04/28/11 00:25*	*04/29/11 12:10*	*1*
Toluene-d8 (Surr)	*96*		*66 - 126*	*04/28/11 00:25*	*04/29/11 12:10*	*1*

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-116 (0-2)
Date Collected: 04/26/11 08:30
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-2
Matrix: Solid
Percent Solids: 90.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		72 - 132	04/28/11 00:25	04/29/11 12:10	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	370	U	370	45	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Chlorophenol	370	U	370	49	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Methylphenol	370	U	370	53	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Methylphenol	370	U	370	60	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Nitrophenol	370	U	370	60	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4-Dimethylphenol	370	U	370	59	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4-Dichlorophenol	370	U	370	59	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Chloro-3-methylphenol	370	U	370	61	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4,6-Trichlorophenol	370	U	370	66	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4,5-Trichlorophenol	370	U	370	71	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4-Dinitrophenol	1100	U	1100	78	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Nitrophenol	1100	U	1100	94	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4,6-Dinitro-2-methylphenol	1100	U	1100	180	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Pentachlorophenol	1100	U	1100	180	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Bis(2-chloroethyl)ether	37	U	37	7.6	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
1,3-Dichlorobenzene	370	U	370	50	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
1,4-Dichlorobenzene	370	U	370	55	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
1,2-Dichlorobenzene	370	U	370	59	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
N-Nitrosodi-n-propylamine	37	U	37	4.8	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Hexachloroethane	37	U	37	6.2	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Nitrobenzene	37	U	37	8.2	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Isophorone	370	U	370	42	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Bis(2-chloroethoxy)methane	370	U	370	52	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
1,2,4-Trichlorobenzene	37	U	37	6.0	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Naphthalene	**200**	**J**	370	54	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Chloroaniline	370	U	370	46	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Hexachlorobutadiene	74	U	74	15	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Methylnaphthalene	370	U	370	54	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Hexachlorocyclopentadiene	370	U	370	110	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Chloronaphthalene	370	U	370	52	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2-Nitroaniline	740	U	740	100	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Dimethyl phthalate	370	U	370	50	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Acenaphthylene	**52**	**J**	370	52	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,6-Dinitrotoluene	74	U	74	9.3	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
3-Nitroaniline	740	U	740	83	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Acenaphthene	370	U	370	52	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Dibenzofuran	370	U	370	55	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
2,4-Dinitrotoluene	74	U	74	11	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Diethyl phthalate	370	U	370	49	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Chlorophenyl phenyl ether	370	U	370	63	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Fluorene	370	U	370	62	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Nitroaniline	740	U	740	76	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
N-Nitrosodiphenylamine	370	U	370	60	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
4-Bromophenyl phenyl ether	370	U	370	65	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Hexachlorobenzene	37	U	37	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Phenanthrene	**390**		370	64	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-116 (0-2)
Date Collected: 04/26/11 08:30
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-2
Matrix: Solid
Percent Solids: 90.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**91**	**J**	370	65	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Carbazole	370	U	370	58	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Di-n-butyl phthalate	370	U	370	56	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Fluoranthene	**550**		370	61	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Pyrene	**620**		370	63	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Butyl benzyl phthalate	370	U	370	43	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
3,3'-Dichlorobenzidine	740	U	740	81	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Benzo[a]anthracene	**320**		37	6.8	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Chrysene	**320**	**J**	370	53	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Bis(2-ethylhexyl) phthalate	370	U	370	49	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Di-n-octyl phthalate	370	U	370	44	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Benzo[b]fluoranthene	**400**		37	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Benzo[k]fluoranthene	**170**		37	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Benzo[a]pyrene	**370**		37	4.5	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Indeno[1,2,3-cd]pyrene	**250**		37	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Dibenz(a,h)anthracene	**48**		37	4.4	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
Benzo[g,h,i]perylene	**270**	**J**	370	39	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1
bis (2-chloroisopropyl) ether	370	U	370	48	ug/Kg	☼	05/05/11 11:00	05/06/11 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*90*		*38 - 105*	*05/05/11 11:00*	*05/06/11 11:23*	*1*
Phenol-d5	*78*		*41 - 118*	*05/05/11 11:00*	*05/06/11 11:23*	*1*
Terphenyl-d14	*103*		*16 - 151*	*05/05/11 11:00*	*05/06/11 11:23*	*1*
2,4,6-Tribromophenol	*42*		*10 - 120*	*05/05/11 11:00*	*05/06/11 11:23*	*1*
2-Fluorophenol	*76*		*37 - 125*	*05/05/11 11:00*	*05/06/11 11:23*	*1*
2-Fluorobiphenyl	*90*		*40 - 109*	*05/05/11 11:00*	*05/06/11 11:23*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.4	U	7.4	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
alpha-BHC	7.4	U	7.4	1.4	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
beta-BHC	7.4	U	7.4	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
delta-BHC	7.4	U	7.4	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
gamma-BHC (Lindane)	7.4	U	7.4	0.86	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Chlordane	74	U	74	16	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
4,4'-DDD	**20**		7.4	0.88	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
4,4'-DDE	7.4	U	7.4	1.4	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
4,4'-DDT	**5.9**	**J**	7.4	0.93	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Dieldrin	7.4	U	7.4	1.4	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endosulfan I	7.4	U	7.4	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endosulfan II	7.4	U	7.4	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endosulfan sulfate	7.4	U	7.4	0.95	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endrin	7.4	U	7.4	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endrin aldehyde	7.4	U	7.4	1.8	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Endrin ketone	7.4	U	7.4	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Heptachlor	7.4	U	7.4	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Heptachlor epoxide	7.4	U	7.4	1.5	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Methoxychlor	7.4	U	7.4	0.83	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1
Toxaphene	74	U	74	15	ug/Kg	☼	05/03/11 04:23	05/05/11 09:47	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-116 (0-2)
Date Collected: 04/26/11 08:30
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-2
Matrix: Solid
Percent Solids: 90.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	48		40 - 150	05/03/11 04:23	05/05/11 09:47	1
Tetrachloro-m-xylene	52		40 - 150	05/03/11 04:23	05/05/11 09:47	1
DCB Decachlorobiphenyl	83		53 - 150	05/03/11 04:23	05/05/11 09:47	1
DCB Decachlorobiphenyl	88		53 - 150	05/03/11 04:23	05/05/11 09:47	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	74	U	74	14	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1221	74	U	74	22	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1232	74	U	74	42	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1242	74	U	74	14	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1248	74	U	74	20	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1254	74	U	74	25	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1
Aroclor 1260	74	U	74	8.3	ug/Kg	☼	05/03/11 04:10	05/04/11 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		30 - 150	05/03/11 04:10	05/04/11 13:02	1
DCB Decachlorobiphenyl	92		30 - 150	05/03/11 04:10	05/04/11 13:02	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	19	U	19	2.4	ug/Kg	☼	05/04/11 21:55	05/05/11 12:40	1
Silvex (2,4,5-TP)	19	U	19	2.0	ug/Kg	☼	05/04/11 21:55	05/05/11 12:40	1
2,4,5-T	19	U	19	3.8	ug/Kg	☼	05/04/11 21:55	05/05/11 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	126		101 - 150	05/04/11 21:55	05/05/11 12:40	1
2,4-Dichlorophenylacetic acid	143		101 - 150	05/04/11 21:55	05/05/11 12:40	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4740**		40.3	14.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Antimony	**2.1**		2.0	0.89	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Arsenic	**4.9**		1.0	0.70	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Barium	**122**		40.3	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Beryllium	**2.9**		0.40	0.18	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Cadmium	**0.18**	**J**	1.0	0.16	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Calcium	**3720**		1010	26.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Chromium	**19.0**		2.0	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Cobalt	**4.9**	**J**	10.1	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Copper	**66.8**		5.0	0.82	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Iron	**20800**		30.2	10.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Lead	**124**		1.0	0.50	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Magnesium	**2390**		1010	10.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Manganese	**379**		3.0	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Nickel	**14.1**		8.1	0.54	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Potassium	**1200**		1010	45.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Selenium	2.0	U	2.0	0.94	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Silver	2.0	U	2.0	0.15	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Sodium	**240**	**J**	1010	61.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4
Thallium	5.0	U	5.0	2.4	mg/Kg	☼	04/29/11 22:01	05/03/11 15:43	10
Vanadium	**1100**		25.2	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 15:43	10

Client Sample ID: GPEC-SB-116 (0-2)

Date Collected: 04/26/11 08:30
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-2

Matrix: Solid
Percent Solids: 90.3

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**165**		6.0	0.99	mg/Kg	☼	04/29/11 22:01	05/03/11 03:26	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.034	0.022	mg/Kg	☼	04/29/11 08:32	04/29/11 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.2	U	2.2	0.55	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	**0.99**	**J**	2.2	0.54	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	**0.18**	**J**	0.55	0.12	mg/Kg	☼	05/07/11 09:32	05/09/11 12:11	1
Cyanide, Free	2.5	U	2.5	0.66	mg/Kg	☼	05/04/11 10:00	05/04/11 16:48	1
Total Organic Carbon	**10900**		100	30.0	mg/Kg			05/03/11 20:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.7**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**90.3**		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-117 (0-2)

Date Collected: 04/26/11 09:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-3

Matrix: Solid
Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.1	U	1.1	0.72	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Bromomethane	1.1	U	1.1	0.46	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Vinyl chloride	1.1	U	1.1	0.26	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Chloroethane	1.1	U	1.1	0.45	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Methylene Chloride	**0.95**	**J**	1.1	0.53	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Acetone	11	U	11	4.2	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Carbon disulfide	1.1	U	1.1	0.53	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,1-Dichloroethene	1.1	U	1.1	0.42	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,1-Dichloroethane	1.1	U	1.1	0.28	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
trans-1,2-Dichloroethene	1.1	U	1.1	0.32	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
cis-1,2-Dichloroethene	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Chloroform	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,2-Dichloroethane	1.1	U	1.1	0.44	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
2-Butanone	11	U	11	0.64	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Carbon tetrachloride	1.1	U	1.1	0.11	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Bromodichloromethane	1.1	U	1.1	0.34	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,2-Dichloropropane	1.1	U	1.1	0.36	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
cis-1,3-Dichloropropene	1.1	U	1.1	0.23	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Trichloroethene	1.1	U	1.1	0.41	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Dibromochloromethane	1.1	U	1.1	0.63	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,1,2-Trichloroethane	1.1	U	1.1	0.67	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Benzene	1.1	U	1.1	0.84	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
trans-1,3-Dichloropropene	1.1	U	1.1	0.25	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Bromoform	1.1	U	1.1	0.79	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
4-Methyl-2-pentanone	11	U	11	0.81	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
2-Hexanone	11	U	11	1.9	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-117 (0-2)
Date Collected: 04/26/11 09:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-3
Matrix: Solid
Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.1	U	1.1	0.37	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.86	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Toluene	1.1	U	1.1	0.34	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Chlorobenzene	1.1	U	1.1	0.54	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Ethylbenzene	1.1	U	1.1	0.22	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Styrene	1.1	U	1.1	0.39	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1
Xylenes, Total	3.4	U	3.4	0.89	ug/Kg	☼	04/28/11 00:27	04/29/11 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 138*	*04/28/11 00:27*	*04/29/11 11:46*	*1*
Toluene-d8 (Surr)	*97*		*66 - 126*	*04/28/11 00:27*	*04/29/11 11:46*	*1*
Bromofluorobenzene	*97*		*72 - 132*	*04/28/11 00:27*	*04/29/11 11:46*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	400	U	400	49	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Chlorophenol	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Methylphenol	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Methylphenol	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Nitrophenol	400	U	400	66	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4-Dimethylphenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4-Dichlorophenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Chloro-3-methylphenol	400	U	400	67	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4,6-Trichlorophenol	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4,5-Trichlorophenol	400	U	400	77	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4-Dinitrophenol	1200	U	1200	85	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Nitrophenol	1200	U	1200	100	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4,6-Dinitro-2-methylphenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Pentachlorophenol	1200	U	1200	200	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Bis(2-chloroethyl)ether	40	U	40	8.3	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
1,3-Dichlorobenzene	400	U	400	55	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
1,4-Dichlorobenzene	400	U	400	60	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
1,2-Dichlorobenzene	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
N-Nitrosodi-n-propylamine	40	U	40	5.3	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Hexachloroethane	40	U	40	6.7	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Nitrobenzene	40	U	40	8.9	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Isophorone	400	U	400	46	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Bis(2-chloroethoxy)methane	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
1,2,4-Trichlorobenzene	40	U	40	6.5	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Naphthalene	**60**	**J**	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Chloroaniline	400	U	400	50	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Hexachlorobutadiene	81	U	81	16	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Methylnaphthalene	400	U	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Hexachlorocyclopentadiene	400	U	400	120	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Chloronaphthalene	400	U	400	56	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2-Nitroaniline	810	U	810	110	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Dimethyl phthalate	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Acenaphthylene	**150**	**J**	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,6-Dinitrotoluene	81	U	81	10	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
3-Nitroaniline	810	U	810	90	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Acenaphthene	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-117 (0-2)
Date Collected: 04/26/11 09:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-3
Matrix: Solid
Percent Solids: 82.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	400	U	400	60	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
2,4-Dinitrotoluene	81	U	81	12	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Diethyl phthalate	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Chlorophenyl phenyl ether	400	U	400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Fluorene	400	U	400	68	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Nitroaniline	810	U	810	82	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
N-Nitrosodiphenylamine	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
4-Bromophenyl phenyl ether	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Hexachlorobenzene	40	U	40	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Phenanthrene	**500**		400	70	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Anthracene	**160**	**J**	400	70	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Carbazole	400	U	400	63	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Di-n-butyl phthalate	400	U	400	61	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Fluoranthene	**1200**		400	66	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Pyrene	**1100**		400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Butyl benzyl phthalate	400	U	400	47	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
3,3'-Dichlorobenzidine	810	U	810	88	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Benzo[a]anthracene	**720**		40	7.4	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Chrysene	**710**		400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Bis(2-ethylhexyl) phthalate	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Di-n-octyl phthalate	400	U	400	47	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Benzo[b]fluoranthene	**1000**		40	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Benzo[k]fluoranthene	**480**		40	5.6	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Benzo[a]pyrene	**880**		40	4.9	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Indeno[1,2,3-cd]pyrene	**740**		40	6.4	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Dibenz(a,h)anthracene	**160**		40	4.8	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
Benzo[g,h,i]perylene	**720**		400	42	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1
bis (2-chloroisopropyl) ether	400	U	400	52	ug/Kg	☼	05/05/11 11:00	05/06/11 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*38 - 105*	*05/05/11 11:00*	*05/06/11 23:53*	*1*
Phenol-d5	*73*		*41 - 118*	*05/05/11 11:00*	*05/06/11 23:53*	*1*
Terphenyl-d14	*94*		*16 - 151*	*05/05/11 11:00*	*05/06/11 23:53*	*1*
2,4,6-Tribromophenol	*33*		*10 - 120*	*05/05/11 11:00*	*05/06/11 23:53*	*1*
2-Fluorophenol	*73*		*37 - 125*	*05/05/11 11:00*	*05/06/11 23:53*	*1*
2-Fluorobiphenyl	*87*		*40 - 109*	*05/05/11 11:00*	*05/06/11 23:53*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.1	U	8.1	1.8	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
alpha-BHC	8.1	U	8.1	1.5	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
beta-BHC	8.1	U	8.1	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
delta-BHC	8.1	U	8.1	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
gamma-BHC (Lindane)	8.1	U	8.1	0.94	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Chlordane	81	U	81	17	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
4,4'-DDD	8.1	U	8.1	0.97	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
4,4'-DDE	8.1	U	8.1	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
4,4'-DDT	8.1	U	8.1	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Dieldrin	8.1	U	8.1	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Endosulfan I	8.1	U	8.1	1.7	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Endosulfan II	8.1	U	8.1	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1

Client Sample ID: GPEC-SB-117 (0-2)
Date Collected: 04/26/11 09:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-3
Matrix: Solid
Percent Solids: 82.9

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	8.1	U	8.1	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Endrin	8.1	U	8.1	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Endrin aldehyde	8.1	U	8.1	2.0	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Endrin ketone	8.1	U	8.1	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Heptachlor	8.1	U	8.1	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Heptachlor epoxide	8.1	U	8.1	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Methoxychlor	8.1	U	8.1	0.90	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1
Toxaphene	81	U	81	17	ug/Kg	☼	05/03/11 04:23	05/05/11 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*40 - 150*	*05/03/11 04:23*	*05/05/11 11:11*	*1*
Tetrachloro-m-xylene	*62*		*40 - 150*	*05/03/11 04:23*	*05/05/11 11:11*	*1*
DCB Decachlorobiphenyl	*140*		*53 - 150*	*05/03/11 04:23*	*05/05/11 11:11*	*1*
DCB Decachlorobiphenyl	*93*	*p*	*53 - 150*	*05/03/11 04:23*	*05/05/11 11:11*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	81	U	81	15	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1221	81	U	81	24	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1232	81	U	81	46	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1242	81	U	81	15	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1248	81	U	81	21	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1254	81	U	81	28	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1
Aroclor 1260	81	U	81	9.0	ug/Kg	☼	05/03/11 04:10	05/04/11 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*30 - 150*	*05/03/11 04:10*	*05/04/11 13:17*	*1*
DCB Decachlorobiphenyl	*128*		*30 - 150*	*05/03/11 04:10*	*05/04/11 13:17*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	21	U	21	2.6	ug/Kg	☼	05/04/11 21:55	05/05/11 10:07	1
Silvex (2,4,5-TP)	21	U	21	2.2	ug/Kg	☼	05/04/11 21:55	05/05/11 10:07	1
2,4,5-T	21	U	21	4.1	ug/Kg	☼	05/04/11 21:55	05/05/11 10:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*124*		*101 - 150*	*05/04/11 21:55*	*05/05/11 10:07*	*1*
2,4-Dichlorophenylacetic acid	*146*		*101 - 150*	*05/04/11 21:55*	*05/05/11 10:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3600**		48.3	17.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Antimony	2.4	U	2.4	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Arsenic	**4.4**		1.2	0.84	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Barium	**37.6**	**J**	48.3	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Beryllium	**0.42**	**J**	0.48	0.21	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Cadmium	1.2	U	1.2	0.19	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Calcium	**1400**		1210	31.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Chromium	**13.5**		2.4	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Cobalt	**3.4**	**J**	12.1	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Copper	**33.4**		6.0	0.98	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Iron	**11700**		36.2	12.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4

Client Sample ID: GPEC-SB-117 (0-2)

Date Collected: 04/26/11 09:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-3

Matrix: Solid
Percent Solids: 82.9

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41.3		1.2	0.60	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Magnesium	1230		1210	12.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Manganese	160		3.6	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Nickel	8.7	J	9.7	0.65	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Potassium	671	J	1210	54.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Selenium	1.2	J	2.4	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Silver	2.4	U	2.4	0.18	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Sodium	107	J	1210	74.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Thallium	2.4	U	2.4	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Vanadium	50.4		12.1	0.63	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4
Zinc	101		7.2	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.035	0.023	mg/Kg	☼	04/29/11 09:44	04/29/11 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.64	J	2.3	0.58	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	2.3	U	2.3	0.58	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.60	U	0.60	0.13	mg/Kg	☼	05/07/11 09:32	05/09/11 12:12	1
Cyanide, Free	2.7	U	2.7	0.72	mg/Kg	☼	05/04/11 10:00	05/04/11 16:51	1
Total Organic Carbon	15300		100	30.0	mg/Kg			05/03/11 20:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.1		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	82.9		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-120 (4-5)

Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-4

Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.2	U	1.2	0.74	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Bromomethane	1.2	U	1.2	0.48	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Vinyl chloride	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Chloroethane	1.2	U	1.2	0.46	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Methylene Chloride	1.2	U	1.2	0.55	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Acetone	11	J	12	4.3	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Carbon disulfide	0.66	J	1.2	0.54	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,1-Dichloroethene	1.2	U	1.2	0.43	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,1-Dichloroethane	1.2	U	1.2	0.29	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
trans-1,2-Dichloroethene	1.2	U	1.2	0.33	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
cis-1,2-Dichloroethene	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Chloroform	1.2	U	1.2	0.28	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,2-Dichloroethane	1.2	U	1.2	0.45	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
2-Butanone	12	U	12	0.66	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,1,1-Trichloroethane	1.2	U	1.2	0.22	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Carbon tetrachloride	1.2	U	1.2	0.12	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Bromodichloromethane	1.2	U	1.2	0.35	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (4-5)
Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-4
Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.2	U	1.2	0.37	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
cis-1,3-Dichloropropene	1.2	U	1.2	0.23	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Trichloroethene	1.2	U	1.2	0.42	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Dibromochloromethane	1.2	U	1.2	0.65	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,1,2-Trichloroethane	1.2	U	1.2	0.69	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Benzene	**1.3**		1.2	0.86	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
trans-1,3-Dichloropropene	1.2	U	1.2	0.26	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Bromoform	1.2	U	1.2	0.82	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
4-Methyl-2-pentanone	12	U	12	0.83	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
2-Hexanone	12	U	12	1.9	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Tetrachloroethene	1.2	U	1.2	0.38	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.89	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Toluene	**1.2**		1.2	0.35	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Chlorobenzene	1.2	U	1.2	0.56	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Ethylbenzene	**0.50**	**J**	1.2	0.22	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Styrene	1.2	U	1.2	0.40	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1
Xylenes, Total	**1.5**	**J**	3.5	0.92	ug/Kg	☼	04/28/11 00:28	04/28/11 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 138*	*04/28/11 00:28*	*04/28/11 23:57*	*1*
Toluene-d8 (Surr)	*97*		*66 - 126*	*04/28/11 00:28*	*04/28/11 23:57*	*1*
Bromofluorobenzene	*99*		*72 - 132*	*04/28/11 00:28*	*04/28/11 23:57*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	400	U	400	49	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Chlorophenol	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Methylphenol	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Methylphenol	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Nitrophenol	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4-Dimethylphenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4-Dichlorophenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Chloro-3-methylphenol	400	U	400	67	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4,6-Trichlorophenol	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4,5-Trichlorophenol	400	U	400	76	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4-Dinitrophenol	1200	U	1200	84	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Nitrophenol	1200	U	1200	100	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4,6-Dinitro-2-methylphenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Pentachlorophenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Bis(2-chloroethyl)ether	40	U	40	8.3	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
1,3-Dichlorobenzene	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
1,4-Dichlorobenzene	400	U	400	59	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
1,2-Dichlorobenzene	400	U	400	63	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
N-Nitrosodi-n-propylamine	40	U	40	5.2	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Hexachloroethane	40	U	40	6.7	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Nitrobenzene	40	U	40	8.9	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Isophorone	400	U	400	46	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Bis(2-chloroethoxy)methane	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
1,2,4-Trichlorobenzene	40	U	40	6.5	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Naphthalene	**120**	**J**	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Chloroaniline	400	U	400	50	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (4-5)
Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-4
Matrix: Solid
Percent Solids: 83.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	80	U	80	16	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Methylnaphthalene	400	U	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Hexachlorocyclopentadiene	400	U	400	120	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Chloronaphthalene	400	U	400	56	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2-Nitroaniline	800	U	800	110	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Dimethyl phthalate	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Acenaphthylene	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,6-Dinitrotoluene	80	U	80	10	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
3-Nitroaniline	800	U	800	90	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Acenaphthene	400	U	400	56	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Dibenzofuran	400	U	400	60	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
2,4-Dinitrotoluene	80	U	80	12	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Diethyl phthalate	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Chlorophenyl phenyl ether	400	U	400	68	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Fluorene	400	U	400	67	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Nitroaniline	800	U	800	82	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
N-Nitrosodiphenylamine	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
4-Bromophenyl phenyl ether	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Hexachlorobenzene	40	U	40	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Phenanthrene	400	U	400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Anthracene	400	U	400	70	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Carbazole	400	U	400	63	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Di-n-butyl phthalate	400	U	400	61	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Fluoranthene	400	U	400	66	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Pyrene	400	U	400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Butyl benzyl phthalate	400	U	400	46	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
3,3'-Dichlorobenzidine	800	U	800	88	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Benzo[a]anthracene	**38**	**J**	40	7.3	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Chrysene	400	U	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Bis(2-ethylhexyl) phthalate	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Di-n-octyl phthalate	400	U	400	47	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Benzo[b]fluoranthene	**43**		40	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Benzo[k]fluoranthene	**17**	**J**	40	5.6	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Benzo[a]pyrene	**34**	**J**	40	4.9	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Indeno[1,2,3-cd]pyrene	**21**	**J**	40	6.3	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Dibenz(a,h)anthracene	40	U	40	4.8	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
Benzo[g,h,i]perylene	400	U	400	42	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1
bis (2-chloroisopropyl) ether	400	U	400	52	ug/Kg	☼	05/05/11 11:00	05/06/11 07:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*38 - 105*	*05/05/11 11:00*	*05/06/11 07:51*	*1*
Phenol-d5	*72*		*41 - 118*	*05/05/11 11:00*	*05/06/11 07:51*	*1*
Terphenyl-d14	*94*		*16 - 151*	*05/05/11 11:00*	*05/06/11 07:51*	*1*
2,4,6-Tribromophenol	*66*		*10 - 120*	*05/05/11 11:00*	*05/06/11 07:51*	*1*
2-Fluorophenol	*74*		*37 - 125*	*05/05/11 11:00*	*05/06/11 07:51*	*1*
2-Fluorobiphenyl	*89*		*40 - 109*	*05/05/11 11:00*	*05/06/11 07:51*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.0	U	8.0	1.8	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
alpha-BHC	8.0	U	8.0	1.5	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (4-5)
Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-4
Matrix: Solid
Percent Solids: 83.2

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	8.0	U	8.0	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
delta-BHC	8.0	U	8.0	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
gamma-BHC (Lindane)	8.0	U	8.0	0.94	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Chlordane	80	U	80	17	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
4,4'-DDD	8.0	U	8.0	0.96	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
4,4'-DDE	8.0	U	8.0	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
4,4'-DDT	8.0	U	8.0	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Dieldrin	8.0	U	8.0	1.5	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endosulfan I	8.0	U	8.0	1.7	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endosulfan II	8.0	U	8.0	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endosulfan sulfate	8.0	U	8.0	1.0	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endrin	8.0	U	8.0	1.1	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endrin aldehyde	8.0	U	8.0	2.0	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Endrin ketone	8.0	U	8.0	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Heptachlor	8.0	U	8.0	1.2	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Heptachlor epoxide	8.0	U	8.0	1.6	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Methoxychlor	8.0	U	8.0	0.90	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1
Toxaphene	80	U	80	17	ug/Kg	☼	05/03/11 04:23	05/05/11 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*40 - 150*	*05/03/11 04:23*	*05/05/11 10:29*	*1*
Tetrachloro-m-xylene	*79*		*40 - 150*	*05/03/11 04:23*	*05/05/11 10:29*	*1*
DCB Decachlorobiphenyl	*106*		*53 - 150*	*05/03/11 04:23*	*05/05/11 10:29*	*1*
DCB Decachlorobiphenyl	*104*		*53 - 150*	*05/03/11 04:23*	*05/05/11 10:29*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	80	U	80	15	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1221	80	U	80	24	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1232	80	U	80	46	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1242	80	U	80	15	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1248	80	U	80	21	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1254	80	U	80	27	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1
Aroclor 1260	80	U	80	9.0	ug/Kg	☼	05/03/11 04:10	05/04/11 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*30 - 150*	*05/03/11 04:10*	*05/04/11 13:33*	*1*
DCB Decachlorobiphenyl	*114*		*30 - 150*	*05/03/11 04:10*	*05/04/11 13:33*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	20	U	20	2.6	ug/Kg	☼	05/04/11 21:55	05/05/11 11:39	1
Silvex (2,4,5-TP)	20	U	20	2.2	ug/Kg	☼	05/04/11 21:55	05/05/11 11:39	1
2,4,5-T	20	U	20	4.1	ug/Kg	☼	05/04/11 21:55	05/05/11 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*119*		*101 - 150*	*05/04/11 21:55*	*05/05/11 11:39*	*1*
2,4-Dichlorophenylacetic acid	*132*		*101 - 150*	*05/04/11 21:55*	*05/05/11 11:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4190**		44.5	16.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4

Client Sample ID: GPEC-SB-120 (4-5)

Date Collected: 04/26/11 08:45
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-4

Matrix: Solid
Percent Solids: 83.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2	U	2.2	0.98	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Arsenic	**4.6**		1.1	0.77	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Barium	**45.9**		44.5	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Beryllium	**0.54**		0.45	0.20	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Cadmium	1.1	U	1.1	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Calcium	**6500**		1110	29.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Chromium	**16.5**		2.2	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Cobalt	**4.2**	**J**	11.1	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Copper	**36.0**		5.6	0.91	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Iron	**15000**		33.4	11.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Lead	**44.8**		1.1	0.56	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Magnesium	**2290**		1110	11.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Manganese	**271**		3.3	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Nickel	**33.2**		8.9	0.60	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Potassium	**1540**		1110	50.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Selenium	2.2	U	2.2	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Sodium	**98.7**	**J**	1110	68.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Thallium	2.2	U	2.2	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Vanadium	**93.3**		11.1	0.58	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4
Zinc	**62.9**		6.7	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.34**		0.038	0.026	mg/Kg	☼	04/29/11 09:44	04/29/11 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.4	U	2.4	0.58	mg/Kg	☼	05/09/11 17:17	05/10/11 15:42	1
Cr (VI)	2.4	U	2.4	0.60	mg/Kg	☼	05/11/11 11:13	05/12/11 10:55	1
Cyanide, Total	0.60	U	0.60	0.13	mg/Kg	☼	05/07/11 09:32	05/09/11 12:13	1
Cyanide, Free	**0.86**	**J**	2.7	0.74	mg/Kg	☼	05/04/11 10:00	05/04/11 16:54	1
Total Organic Carbon	**7040**		100	30.0	mg/Kg			05/03/11 21:12	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.8**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**83.2**		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-119 (0-2)

Date Collected: 04/25/11 11:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-5

Matrix: Solid
Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.1	U	1.1	0.69	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Bromomethane	1.1	U	1.1	0.45	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Vinyl chloride	1.1	U	1.1	0.26	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Chloroethane	1.1	U	1.1	0.43	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Methylene Chloride	1.1	U	1.1	0.51	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Acetone	11	U	11	4.0	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Carbon disulfide	1.1	U	1.1	0.51	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1

Client Sample ID: GPEC-SB-119 (0-2)
Date Collected: 04/25/11 11:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-5
Matrix: Solid
Percent Solids: 79.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.1	U	1.1	0.40	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,1-Dichloroethane	**0.75**	**J**	1.1	0.27	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
trans-1,2-Dichloroethene	1.1	U	1.1	0.31	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
cis-1,2-Dichloroethene	1.1	U	1.1	0.26	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Chloroform	1.1	U	1.1	0.26	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,2-Dichloroethane	1.1	U	1.1	0.43	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
2-Butanone	11	U	11	0.62	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,1,1-Trichloroethane	**0.70**	**J**	1.1	0.20	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Carbon tetrachloride	1.1	U	1.1	0.11	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Bromodichloromethane	1.1	U	1.1	0.33	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,2-Dichloropropane	1.1	U	1.1	0.35	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
cis-1,3-Dichloropropene	1.1	U	1.1	0.22	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Trichloroethene	1.1	U	1.1	0.40	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Dibromochloromethane	1.1	U	1.1	0.61	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,1,2-Trichloroethane	1.1	U	1.1	0.65	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Benzene	1.1	U	1.1	0.81	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
trans-1,3-Dichloropropene	1.1	U	1.1	0.24	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Bromoform	1.1	U	1.1	0.76	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
4-Methyl-2-pentanone	11	U	11	0.78	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
2-Hexanone	11	U	11	1.8	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Tetrachloroethene	1.1	U	1.1	0.36	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.83	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Toluene	1.1	U	1.1	0.33	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Chlorobenzene	1.1	U	1.1	0.53	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Ethylbenzene	1.1	U	1.1	0.21	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Styrene	1.1	U	1.1	0.38	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1
Xylenes, Total	3.3	U	3.3	0.86	ug/Kg	☼	04/28/11 00:29	04/29/11 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 138*	*04/28/11 00:29*	*04/29/11 00:21*	*1*
Toluene-d8 (Surr)	*99*		*66 - 126*	*04/28/11 00:29*	*04/29/11 00:21*	*1*
Bromofluorobenzene	*96*		*72 - 132*	*04/28/11 00:29*	*04/29/11 00:21*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	410	U	410	51	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Chlorophenol	410	U	410	55	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Methylphenol	410	U	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Methylphenol	410	U	410	68	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Nitrophenol	410	U	410	68	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4-Dimethylphenol	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4-Dichlorophenol	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Chloro-3-methylphenol	410	U	410	69	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4,6-Trichlorophenol	410	U	410	74	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4,5-Trichlorophenol	410	U	410	80	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4-Dinitrophenol	1300	U	1300	88	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4,6-Dinitro-2-methylphenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Pentachlorophenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Bis(2-chloroethyl)ether	41	U	41	8.6	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
1,3-Dichlorobenzene	410	U	410	57	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-119 (0-2)
Date Collected: 04/25/11 11:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-5
Matrix: Solid
Percent Solids: 79.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	410	U	410	62	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
1,2-Dichlorobenzene	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
N-Nitrosodi-n-propylamine	41	U	41	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Hexachloroethane	41	U	41	7.0	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Nitrobenzene	41	U	41	9.3	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Isophorone	410	U	410	48	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Bis(2-chloroethoxy)methane	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
1,2,4-Trichlorobenzene	41	U	41	6.8	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Naphthalene	**68**	**J**	410	61	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Chloroaniline	410	U	410	52	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Hexachlorobutadiene	84	U	84	17	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Methylnaphthalene	410	U	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Hexachlorocyclopentadiene	410	U	410	120	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Chloronaphthalene	410	U	410	58	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2-Nitroaniline	840	U	840	110	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Dimethyl phthalate	410	U	410	56	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Acenaphthylene	**59**	**J**	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,6-Dinitrotoluene	84	U	84	11	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
3-Nitroaniline	840	U	840	94	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Acenaphthene	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Dibenzofuran	410	U	410	62	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
2,4-Dinitrotoluene	84	U	84	12	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Diethyl phthalate	410	U	410	56	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Chlorophenyl phenyl ether	410	U	410	71	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Fluorene	410	U	410	70	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Nitroaniline	840	U	840	85	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
N-Nitrosodiphenylamine	410	U	410	67	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
4-Bromophenyl phenyl ether	410	U	410	74	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Hexachlorobenzene	41	U	41	5.7	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Phenanthrene	**180**	**J**	410	72	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Anthracene	410	U	410	73	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Carbazole	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Di-n-butyl phthalate	410	U	410	63	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Fluoranthene	**330**	**J**	410	69	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Pyrene	**360**	**J**	410	72	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Butyl benzyl phthalate	410	U	410	48	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
3,3'-Dichlorobenzidine	840	U	840	92	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Benzo[a]anthracene	**200**		41	7.7	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Chrysene	**230**	**J**	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Bis(2-ethylhexyl) phthalate	410	U	410	55	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Di-n-octyl phthalate	410	U	410	49	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Benzo[b]fluoranthene	**320**		41	6.2	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Benzo[k]fluoranthene	**130**		41	5.8	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Benzo[a]pyrene	**230**		41	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Indeno[1,2,3-cd]pyrene	**190**		41	6.6	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Dibenz(a,h)anthracene	**42**		41	5.0	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
Benzo[g,h,i]perylene	**200**	**J**	410	44	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1
bis (2-chloroisopropyl) ether	410	U	410	54	ug/Kg	☼	05/05/11 11:00	05/06/11 10:55	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-119 (0-2)
Date Collected: 04/25/11 11:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-5
Matrix: Solid
Percent Solids: 79.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		38 - 105	05/05/11 11:00	05/06/11 10:55	1
Phenol-d5	71		41 - 118	05/05/11 11:00	05/06/11 10:55	1
Terphenyl-d14	95		16 - 151	05/05/11 11:00	05/06/11 10:55	1
2,4,6-Tribromophenol	33		10 - 120	05/05/11 11:00	05/06/11 10:55	1
2-Fluorophenol	71		37 - 125	05/05/11 11:00	05/06/11 10:55	1
2-Fluorobiphenyl	85		40 - 109	05/05/11 11:00	05/06/11 10:55	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.4	U	8.4	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
alpha-BHC	8.4	U	8.4	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
beta-BHC	8.4	U	8.4	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
delta-BHC	8.4	U	8.4	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
gamma-BHC (Lindane)	8.4	U	8.4	0.98	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Chlordane	84	U	84	18	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
4,4'-DDD	8.4	U	8.4	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
4,4'-DDE	8.4	U	8.4	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
4,4'-DDT	**8.5**		8.4	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Dieldrin	8.4	U	8.4	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endosulfan I	8.4	U	8.4	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endosulfan II	8.4	U	8.4	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endosulfan sulfate	8.4	U	8.4	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endrin	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endrin aldehyde	8.4	U	8.4	2.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Endrin ketone	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Heptachlor	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Heptachlor epoxide	8.4	U	8.4	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Methoxychlor	8.4	U	8.4	0.94	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1
Toxaphene	84	U	84	18	ug/Kg	☼	05/04/11 05:44	05/05/11 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		40 - 150	05/04/11 05:44	05/05/11 16:20	1
Tetrachloro-m-xylene	122		40 - 150	05/04/11 05:44	05/05/11 16:20	1
DCB Decachlorobiphenyl	127		53 - 150	05/04/11 05:44	05/05/11 16:20	1
DCB Decachlorobiphenyl	139		53 - 150	05/04/11 05:44	05/05/11 16:20	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	84	U	84	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1221	84	U	84	25	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1232	84	U	84	48	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1242	84	U	84	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1248	84	U	84	22	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1254	84	U	84	29	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1
Aroclor 1260	84	U	84	9.4	ug/Kg	☼	05/04/11 05:17	05/05/11 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		30 - 150	05/04/11 05:17	05/05/11 15:00	1
DCB Decachlorobiphenyl	108		30 - 150	05/04/11 05:17	05/05/11 15:00	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-119 (0-2)
Date Collected: 04/25/11 11:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-5
Matrix: Solid
Percent Solids: 79.6

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	21	U	21	2.7	ug/Kg	☼	05/04/11 11:00	05/05/11 14:22	1
Silvex (2,4,5-TP)	21	U	21	2.3	ug/Kg	☼	05/04/11 11:00	05/05/11 14:22	1
2,4,5-T	21	U	21	4.3	ug/Kg	☼	05/04/11 11:00	05/05/11 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*119*		*101 - 150*	*05/04/11 11:00*	*05/05/11 14:22*	*1*
2,4-Dichlorophenylacetic acid	*151*	*X*	*101 - 150*	*05/04/11 11:00*	*05/05/11 14:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4760**		44.8	16.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Antimony	2.2	U	2.2	0.99	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Arsenic	**2.3**		1.1	0.78	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Barium	**70.2**		44.8	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Beryllium	**5.2**		0.45	0.20	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Cadmium	**0.96**	**J**	1.1	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Calcium	**2340**		1120	29.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Chromium	**18.2**		2.2	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Cobalt	**5.3**	**J**	11.2	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Copper	**40.3**		5.6	0.91	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Iron	**17600**		33.6	11.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Lead	**64.2**		1.1	0.56	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Magnesium	**2030**		1120	11.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Manganese	**332**		3.4	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Nickel	**19.4**		9.0	0.60	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Potassium	**1350**		1120	50.6	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Selenium	2.2	U	2.2	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Silver	2.2	U	2.2	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Sodium	**102**	**J**	1120	68.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4
Thallium	5.6	U	5.6	2.7	mg/Kg	☼	04/29/11 22:01	05/03/11 15:47	10
Vanadium	**2000**		28.0	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 15:47	10
Zinc	**99.3**		6.7	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:37	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.18**		0.036	0.024	mg/Kg	☼	04/29/11 09:44	04/29/11 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	12.5	U	12.5	3.1	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	5
Cr (VI)	**1.7**	**J**	2.5	0.62	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	**0.22**	**J**	0.63	0.14	mg/Kg	☼	05/07/11 09:32	05/09/11 12:01	1
Cyanide, Free	2.8	U	2.8	0.76	mg/Kg	☼	05/04/11 10:00	05/04/11 16:57	1
Total Organic Carbon	**12200**		100	30.0	mg/Kg			05/03/11 21:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.4**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**79.6**		1.0	1.0	%			04/27/11 18:31	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (0-2)
Date Collected: 04/25/11 09:40
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-6
Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.64	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Bromomethane	1.0	U	1.0	0.41	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Vinyl chloride	1.0	U	1.0	0.24	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Chloroethane	1.0	U	1.0	0.40	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Methylene Chloride	1.0	U	1.0	0.48	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Acetone	**43**		10	3.7	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Carbon disulfide	**0.86**	**J**	1.0	0.47	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,1-Dichloroethene	1.0	U	1.0	0.37	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.29	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Chloroform	1.0	U	1.0	0.24	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,2-Dichloroethane	1.0	U	1.0	0.40	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
2-Butanone	**3.4**	**J**	10	0.58	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,1,1-Trichloroethane	1.0	U	1.0	0.19	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Carbon tetrachloride	1.0	U	1.0	0.10	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Bromodichloromethane	1.0	U	1.0	0.31	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,2-Dichloropropane	1.0	U	1.0	0.32	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.20	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Trichloroethene	1.0	U	1.0	0.37	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Dibromochloromethane	1.0	U	1.0	0.57	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.60	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Benzene	1.0	U	1.0	0.75	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Bromoform	1.0	U	1.0	0.71	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
4-Methyl-2-pentanone	10	U	10	0.72	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
2-Hexanone	10	U	10	1.7	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.77	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Toluene	1.0	U	1.0	0.30	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Chlorobenzene	1.0	U	1.0	0.49	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Ethylbenzene	1.0	U	1.0	0.19	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Styrene	1.0	U	1.0	0.35	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1
Xylenes, Total	3.0	U	3.0	0.80	ug/Kg	☼	04/28/11 00:31	04/29/11 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 138*	*04/28/11 00:31*	*04/29/11 00:45*	*1*
Toluene-d8 (Surr)	*97*		*66 - 126*	*04/28/11 00:31*	*04/29/11 00:45*	*1*
Bromofluorobenzene	*97*		*72 - 132*	*04/28/11 00:31*	*04/29/11 00:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	400	U	400	49	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Chlorophenol	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Methylphenol	400	U	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Methylphenol	400	U	400	66	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Nitrophenol	400	U	400	66	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,4-Dimethylphenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,4-Dichlorophenol	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Chloro-3-methylphenol	400	U	400	67	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,4,6-Trichlorophenol	400	U	400	72	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (0-2)
Date Collected: 04/25/11 09:40
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-6
Matrix: Solid
Percent Solids: 82.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	400	U	400	77	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,4-Dinitrophenol	1200	U	1200	85	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Nitrophenol	1200	U	1200	100	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4,6-Dinitro-2-methylphenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Pentachlorophenol	1200	U	1200	200	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Bis(2-chloroethyl)ether	40	U	40	8.3	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
1,3-Dichlorobenzene	400	U	400	55	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
1,4-Dichlorobenzene	400	U	400	60	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
1,2-Dichlorobenzene	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
N-Nitrosodi-n-propylamine	40	U	40	5.3	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Hexachloroethane	40	U	40	6.8	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Nitrobenzene	40	U	40	9.0	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Isophorone	400	U	400	46	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Bis(2-chloroethoxy)methane	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
1,2,4-Trichlorobenzene	40	U	40	6.6	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Naphthalene	400	U	400	59	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Chloroaniline	400	U	400	50	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Hexachlorobutadiene	81	U	81	16	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Methylnaphthalene	400	U	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Hexachlorocyclopentadiene	400	U	400	120	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Chloronaphthalene	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2-Nitroaniline	810	U	810	110	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Dimethyl phthalate	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Acenaphthylene	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,6-Dinitrotoluene	81	U	81	10	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
3-Nitroaniline	810	U	810	91	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Acenaphthene	400	U	400	57	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Dibenzofuran	400	U	400	60	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
2,4-Dinitrotoluene	81	U	81	12	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Diethyl phthalate	400	U	400	54	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Chlorophenyl phenyl ether	400	U	400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Fluorene	400	U	400	68	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Nitroaniline	810	U	810	83	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
N-Nitrosodiphenylamine	400	U	400	65	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
4-Bromophenyl phenyl ether	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Hexachlorobenzene	40	U	40	5.6	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Phenanthrene	**220**	**J**	400	70	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Anthracene	400	U	400	71	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Carbazole	400	U	400	64	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Di-n-butyl phthalate	400	U	400	61	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Fluoranthene	**290**	**J**	400	67	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Pyrene	**290**	**J**	400	69	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Butyl benzyl phthalate	400	U	400	47	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
3,3'-Dichlorobenzidine	810	U	810	89	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Benzo[a]anthracene	**150**		40	7.4	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Chrysene	**170**	**J**	400	58	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Bis(2-ethylhexyl) phthalate	**91**	**J**	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Di-n-octyl phthalate	400	U	400	48	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Benzo[b]fluoranthene	**210**		40	6.0	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Benzo[k]fluoranthene	**80**		40	5.6	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (0-2)
Date Collected: 04/25/11 09:40
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-6
Matrix: Solid
Percent Solids: 82.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	180		40	4.9	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Indeno[1,2,3-cd]pyrene	110		40	6.4	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Dibenz(a,h)anthracene	20	J	40	4.8	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
Benzo[g,h,i]perylene	120	J	400	42	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1
bis (2-chloroisopropyl) ether	400	U	400	53	ug/Kg	☼	05/05/11 11:00	05/06/11 07:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*38 - 105*	*05/05/11 11:00*	*05/06/11 07:23*	*1*
Phenol-d5	*77*		*41 - 118*	*05/05/11 11:00*	*05/06/11 07:23*	*1*
Terphenyl-d14	*97*		*16 - 151*	*05/05/11 11:00*	*05/06/11 07:23*	*1*
2,4,6-Tribromophenol	*73*		*10 - 120*	*05/05/11 11:00*	*05/06/11 07:23*	*1*
2-Fluorophenol	*78*		*37 - 125*	*05/05/11 11:00*	*05/06/11 07:23*	*1*
2-Fluorobiphenyl	*94*		*40 - 109*	*05/05/11 11:00*	*05/06/11 07:23*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.1	U	8.1	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
alpha-BHC	8.1	U	8.1	1.5	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
beta-BHC	8.1	U	8.1	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
delta-BHC	8.1	U	8.1	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
gamma-BHC (Lindane)	8.1	U	8.1	0.95	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Chlordane	81	U	81	18	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
4,4'-DDD	8.1	U	8.1	0.97	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
4,4'-DDE	8.1	U	8.1	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
4,4'-DDT	8.1	U	8.1	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Dieldrin	8.1	U	8.1	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endosulfan I	8.1	U	8.1	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endosulfan II	8.1	U	8.1	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endosulfan sulfate	8.1	U	8.1	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endrin	8.1	U	8.1	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endrin aldehyde	8.1	U	8.1	2.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Endrin ketone	8.1	U	8.1	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Heptachlor	8.1	U	8.1	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Heptachlor epoxide	8.1	U	8.1	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Methoxychlor	8.1	U	8.1	0.91	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1
Toxaphene	81	U	81	17	ug/Kg	☼	05/04/11 05:44	05/05/11 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*40 - 150*	*05/04/11 05:44*	*05/05/11 16:34*	*1*
Tetrachloro-m-xylene	*119*		*40 - 150*	*05/04/11 05:44*	*05/05/11 16:34*	*1*
DCB Decachlorobiphenyl	*123*		*53 - 150*	*05/04/11 05:44*	*05/05/11 16:34*	*1*
DCB Decachlorobiphenyl	*128*		*53 - 150*	*05/04/11 05:44*	*05/05/11 16:34*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	81	U	81	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1
Aroclor 1221	81	U	81	24	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1
Aroclor 1232	81	U	81	46	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1
Aroclor 1242	81	U	81	15	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1
Aroclor 1248	81	U	81	22	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1
Aroclor 1254	81	U	81	28	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (0-2)
Date Collected: 04/25/11 09:40
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-6
Matrix: Solid
Percent Solids: 82.5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1260	81	U	81	9.1	ug/Kg	☼	05/04/11 05:17	05/05/11 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:15*	*1*
DCB Decachlorobiphenyl	*109*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:15*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	21	U	21	2.6	ug/Kg	☼	05/04/11 11:00	05/05/11 15:54	1
Silvex (2,4,5-TP)	21	U	21	2.2	ug/Kg	☼	05/04/11 11:00	05/05/11 15:54	1
2,4,5-T	21	U	21	4.1	ug/Kg	☼	05/04/11 11:00	05/05/11 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*111*		*101 - 150*	*05/04/11 11:00*	*05/05/11 15:54*	*1*
2,4-Dichlorophenylacetic acid	*144*		*101 - 150*	*05/04/11 11:00*	*05/05/11 15:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5560**		48.5	17.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Antimony	**4.8**		2.4	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Arsenic	**5.7**		1.2	0.84	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Barium	**105**		48.5	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Beryllium	**0.37**	**J**	0.48	0.21	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Cadmium	**0.35**	**J**	1.2	0.19	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Calcium	**4900**		1210	31.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Chromium	**16.1**		2.4	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Cobalt	**8.0**	**J**	12.1	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Copper	**193**		6.1	0.99	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Iron	**19600**		36.4	12.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Lead	**588**		1.2	0.61	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Magnesium	**2260**		1210	12.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Manganese	**380**		3.6	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Nickel	**16.1**		9.7	0.65	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Potassium	**2200**		1210	54.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Selenium	**1.8**	**J**	2.4	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Silver	2.4	U	2.4	0.18	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Sodium	**110**	**J**	1210	74.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Thallium	2.4	U	2.4	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Vanadium	**23.7**		12.1	0.63	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4
Zinc	**252**		7.3	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**27.4**		0.72	0.48	mg/Kg	☼	04/29/11 09:44	04/29/11 13:59	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.5	U	2.5	0.61	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	1
Cr (VI)	2.3	U	2.3	0.58	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	0.61	U	0.61	0.13	mg/Kg	☼	05/07/11 09:32	05/09/11 12:02	1
Cyanide, Free	2.7	U	2.7	0.73	mg/Kg	☼	05/04/11 10:00	05/04/11 17:01	1
Total Organic Carbon	**17600**		100	30.0	mg/Kg			05/03/11 21:55	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (0-2)

Lab Sample ID: 460-25837-6

Date Collected: 04/25/11 09:40

Matrix: Solid

Date Received: 04/26/11 13:40

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.5		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	82.5		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-121 (5-6)

Lab Sample ID: 460-25837-7

Date Collected: 04/25/11 10:05

Matrix: Solid

Date Received: 04/26/11 13:40

Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.1	U	1.1	0.72	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Bromomethane	1.1	U	1.1	0.46	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Vinyl chloride	1.1	U	1.1	0.26	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Chloroethane	1.1	U	1.1	0.45	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Methylene Chloride	1.1	U	1.1	0.53	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Acetone	12		11	4.2	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Carbon disulfide	1.1	U	1.1	0.53	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,1-Dichloroethene	1.1	U	1.1	0.42	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,1-Dichloroethane	1.1	U	1.1	0.29	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
trans-1,2-Dichloroethene	1.1	U	1.1	0.32	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
cis-1,2-Dichloroethene	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Chloroform	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,2-Dichloroethane	1.1	U	1.1	0.44	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
2-Butanone	11	U	11	0.64	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Carbon tetrachloride	1.1	U	1.1	0.11	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Bromodichloromethane	1.1	U	1.1	0.34	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,2-Dichloropropane	1.1	U	1.1	0.36	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
cis-1,3-Dichloropropene	1.1	U	1.1	0.23	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Trichloroethene	1.1	U	1.1	0.41	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Dibromochloromethane	1.1	U	1.1	0.63	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,1,2-Trichloroethane	1.1	U	1.1	0.67	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Benzene	1.1	U	1.1	0.84	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
trans-1,3-Dichloropropene	1.1	U	1.1	0.25	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Bromoform	1.1	U	1.1	0.79	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
4-Methyl-2-pentanone	11	U	11	0.81	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
2-Hexanone	11	U	11	1.9	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Tetrachloroethene	1.1	U	1.1	0.37	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.86	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Toluene	1.1	U	1.1	0.34	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Chlorobenzene	1.1	U	1.1	0.55	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Ethylbenzene	1.1	U	1.1	0.22	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Styrene	1.1	U	1.1	0.39	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1
Xylenes, Total	3.4	U	3.4	0.89	ug/Kg	☼	04/28/11 00:33	04/29/11 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 138*	*04/28/11 00:33*	*04/29/11 01:09*	*1*
Toluene-d8 (Surr)	*96*		*66 - 126*	*04/28/11 00:33*	*04/29/11 01:09*	*1*
Bromofluorobenzene	*95*		*72 - 132*	*04/28/11 00:33*	*04/29/11 01:09*	*1*

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (5-6)
Date Collected: 04/25/11 10:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-7
Matrix: Solid
Percent Solids: 80.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	410	U	410	50	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Chlorophenol	410	U	410	55	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Methylphenol	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Methylphenol	410	U	410	67	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Nitrophenol	410	U	410	68	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4-Dimethylphenol	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4-Dichlorophenol	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Chloro-3-methylphenol	410	U	410	69	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4,6-Trichlorophenol	410	U	410	74	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4,5-Trichlorophenol	410	U	410	79	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4-Dinitrophenol	1200	U	1200	87	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Nitrophenol	1200	U	1200	110	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4,6-Dinitro-2-methylphenol	1200	U	1200	200	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Pentachlorophenol	1200	U	1200	200	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Bis(2-chloroethyl)ether	41	U	41	8.6	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
1,3-Dichlorobenzene	410	U	410	56	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
1,4-Dichlorobenzene	410	U	410	62	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
1,2-Dichlorobenzene	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
N-Nitrosodi-n-propylamine	41	U	41	5.4	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Hexachloroethane	41	U	41	6.9	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Nitrobenzene	41	U	41	9.2	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Isophorone	410	U	410	47	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Bis(2-chloroethoxy)methane	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
1,2,4-Trichlorobenzene	41	U	41	6.7	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Naphthalene	410	U	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Chloroaniline	410	U	410	52	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Hexachlorobutadiene	83	U	83	17	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Methylnaphthalene	410	U	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Hexachlorocyclopentadiene	410	U	410	120	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Chloronaphthalene	410	U	410	58	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2-Nitroaniline	830	U	830	110	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Dimethyl phthalate	410	U	410	56	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Acenaphthylene	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,6-Dinitrotoluene	83	U	83	10	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
3-Nitroaniline	830	U	830	93	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Acenaphthene	410	U	410	59	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Dibenzofuran	410	U	410	62	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
2,4-Dinitrotoluene	83	U	83	12	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Diethyl phthalate	410	U	410	55	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Chlorophenyl phenyl ether	410	U	410	71	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Fluorene	410	U	410	70	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Nitroaniline	830	U	830	85	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
N-Nitrosodiphenylamine	410	U	410	67	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
4-Bromophenyl phenyl ether	410	U	410	73	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Hexachlorobenzene	41	U	41	5.7	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Phenanthrene	410	U	410	72	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Anthracene	410	U	410	73	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Carbazole	410	U	410	66	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Di-n-butyl phthalate	410	U	410	63	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Fluoranthene	410	U	410	68	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (5-6)
Date Collected: 04/25/11 10:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-7
Matrix: Solid
Percent Solids: 80.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	410	U	410	71	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Butyl benzyl phthalate	410	U	410	48	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
3,3'-Dichlorobenzidine	830	U	830	91	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Benzo[a]anthracene	41	U	41	7.6	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Chrysene	410	U	410	60	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Bis(2-ethylhexyl) phthalate	410	U	410	55	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Di-n-octyl phthalate	410	U	410	49	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Benzo[b]fluoranthene	41	U	41	6.1	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Benzo[k]fluoranthene	41	U	41	5.8	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Benzo[a]pyrene	41	U	41	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Indeno[1,2,3-cd]pyrene	41	U	41	6.6	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Dibenz(a,h)anthracene	41	U	41	5.0	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
Benzo[g,h,i]perylene	410	U	410	43	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1
bis (2-chloroisopropyl) ether	410	U	410	54	ug/Kg	☼	05/05/11 11:00	05/06/11 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*81*		*38 - 105*	*05/05/11 11:00*	*05/06/11 04:05*	*1*
Phenol-d5	*73*		*41 - 118*	*05/05/11 11:00*	*05/06/11 04:05*	*1*
Terphenyl-d14	*93*		*16 - 151*	*05/05/11 11:00*	*05/06/11 04:05*	*1*
2,4,6-Tribromophenol	*68*		*10 - 120*	*05/05/11 11:00*	*05/06/11 04:05*	*1*
2-Fluorophenol	*73*		*37 - 125*	*05/05/11 11:00*	*05/06/11 04:05*	*1*
2-Fluorobiphenyl	*80*		*40 - 109*	*05/05/11 11:00*	*05/06/11 04:05*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.4	U	8.4	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
alpha-BHC	8.4	U	8.4	1.5	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
beta-BHC	8.4	U	8.4	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
delta-BHC	8.4	U	8.4	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
gamma-BHC (Lindane)	8.4	U	8.4	0.97	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Chlordane	84	U	84	18	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
4,4'-DDD	8.4	U	8.4	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
4,4'-DDE	8.4	U	8.4	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
4,4'-DDT	**7.4**	**J**	8.4	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Dieldrin	8.4	U	8.4	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endosulfan I	8.4	U	8.4	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endosulfan II	8.4	U	8.4	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endosulfan sulfate	8.4	U	8.4	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endrin	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endrin aldehyde	8.4	U	8.4	2.1	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Endrin ketone	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Heptachlor	8.4	U	8.4	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Heptachlor epoxide	8.4	U	8.4	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Methoxychlor	8.4	U	8.4	0.94	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1
Toxaphene	84	U	84	17	ug/Kg	☼	05/04/11 05:44	05/05/11 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*40 - 150*	*05/04/11 05:44*	*05/05/11 16:48*	*1*
Tetrachloro-m-xylene	*98*		*40 - 150*	*05/04/11 05:44*	*05/05/11 16:48*	*1*
DCB Decachlorobiphenyl	*114*		*53 - 150*	*05/04/11 05:44*	*05/05/11 16:48*	*1*
DCB Decachlorobiphenyl	*107*		*53 - 150*	*05/04/11 05:44*	*05/05/11 16:48*	*1*

Client Sample ID: GPEC-SB-121 (5-6)

Date Collected: 04/25/11 10:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-7

Matrix: Solid
Percent Solids: 80.1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	83	U	83	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1221	83	U	83	25	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1232	83	U	83	47	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1242	83	U	83	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1248	83	U	83	22	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1254	83	U	83	29	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1
Aroclor 1260	83	U	83	9.3	ug/Kg	☼	05/04/11 05:17	05/05/11 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*115*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:31*	*1*
DCB Decachlorobiphenyl	*115*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:31*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	21	U	21	2.7	ug/Kg	☼	05/04/11 11:00	05/05/11 16:25	1
Silvex (2,4,5-TP)	21	U	21	2.3	ug/Kg	☼	05/04/11 11:00	05/05/11 16:25	1
2,4,5-T	21	U	21	4.3	ug/Kg	☼	05/04/11 11:00	05/05/11 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*113*		*101 - 150*	*05/04/11 11:00*	*05/05/11 16:25*	*1*
2,4-Dichlorophenylacetic acid	*149*		*101 - 150*	*05/04/11 11:00*	*05/05/11 16:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4920**		45.8	16.8	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Antimony	2.3	U	2.3	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Arsenic	**3.2**		1.1	0.80	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Barium	**54.0**		45.8	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Beryllium	**0.38**	**J**	0.46	0.20	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Cadmium	1.1	U	1.1	0.18	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Calcium	**9440**		1150	30.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Chromium	**15.5**		2.3	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Cobalt	**7.4**	**J**	11.5	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Copper	**27.4**		5.7	0.93	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Iron	**17900**		34.4	12.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Lead	**20.8**		1.1	0.57	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Magnesium	**3320**		1150	12.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Manganese	**423**		3.4	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Nickel	**122**		9.2	0.61	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Potassium	**2860**		1150	51.7	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Selenium	2.3	U	2.3	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Silver	2.3	U	2.3	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Sodium	**126**	**J**	1150	70.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Thallium	2.3	U	2.3	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Vanadium	**31.0**		11.5	0.60	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4
Zinc	**51.5**		6.9	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:44	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.028**	**J**	0.039	0.026	mg/Kg	☼	04/29/11 09:44	04/29/11 14:01	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (5-6)

Date Collected: 04/25/11 10:05
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-7

Matrix: Solid
Percent Solids: 80.1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.5	U	2.5	0.62	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	1
Cr (VI)	2.5	U	2.5	0.61	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	0.62	U	0.62	0.14	mg/Kg	☼	05/07/11 09:32	05/09/11 12:06	1
Cyanide, Free	2.8	U	2.8	0.76	mg/Kg	☼	05/04/11 10:00	05/04/11 17:10	1
Total Organic Carbon	**1360**		100	30.0	mg/Kg			05/03/11 22:47	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.9**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**80.1**		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-120 (0-2)

Date Collected: 04/25/11 14:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-8

Matrix: Solid
Percent Solids: 77.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.2	U	1.2	0.73	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Bromomethane	1.2	U	1.2	0.47	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Vinyl chloride	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Chloroethane	1.2	U	1.2	0.46	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Methylene Chloride	1.2	U	1.2	0.54	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Acetone	**13**		12	4.3	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Carbon disulfide	1.2	U	1.2	0.54	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,1-Dichloroethene	1.2	U	1.2	0.43	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,1-Dichloroethane	1.2	U	1.2	0.29	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
trans-1,2-Dichloroethene	1.2	U	1.2	0.33	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
cis-1,2-Dichloroethene	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Chloroform	1.2	U	1.2	0.27	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,2-Dichloroethane	1.2	U	1.2	0.45	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
2-Butanone	12	U	12	0.66	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,1,1-Trichloroethane	1.2	U	1.2	0.22	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Carbon tetrachloride	1.2	U	1.2	0.12	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Bromodichloromethane	1.2	U	1.2	0.35	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,2-Dichloropropane	1.2	U	1.2	0.37	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
cis-1,3-Dichloropropene	1.2	U	1.2	0.23	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Trichloroethene	1.2	U	1.2	0.42	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Dibromochloromethane	1.2	U	1.2	0.65	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,1,2-Trichloroethane	1.2	U	1.2	0.68	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Benzene	1.2	U	1.2	0.85	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
trans-1,3-Dichloropropene	1.2	U	1.2	0.26	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Bromoform	1.2	U	1.2	0.81	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
4-Methyl-2-pentanone	12	U	12	0.83	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
2-Hexanone	12	U	12	1.9	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Tetrachloroethene	1.2	U	1.2	0.38	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
1,1,2,2-Tetrachloroethane	1.2	U	1.2	0.88	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Toluene	1.2	U	1.2	0.35	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Chlorobenzene	1.2	U	1.2	0.56	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Ethylbenzene	1.2	U	1.2	0.22	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Styrene	1.2	U	1.2	0.40	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1
Xylenes, Total	3.5	U	3.5	0.91	ug/Kg	☼	04/28/11 00:34	04/29/11 01:32	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (0-2)
Date Collected: 04/25/11 14:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-8
Matrix: Solid
Percent Solids: 77.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 138*	*04/28/11 00:34*	*04/29/11 01:32*	*1*
Toluene-d8 (Surr)	*98*		*66 - 126*	*04/28/11 00:34*	*04/29/11 01:32*	*1*
Bromofluorobenzene	*95*		*72 - 132*	*04/28/11 00:34*	*04/29/11 01:32*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	430	U	430	52	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Chlorophenol	430	U	430	57	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Methylphenol	430	U	430	62	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Methylphenol	430	U	430	70	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Nitrophenol	430	U	430	70	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4-Dimethylphenol	430	U	430	69	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4-Dichlorophenol	430	U	430	69	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Chloro-3-methylphenol	430	U	430	72	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4,6-Trichlorophenol	430	U	430	77	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4,5-Trichlorophenol	430	U	430	82	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4-Dinitrophenol	1300	U	1300	91	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4,6-Dinitro-2-methylphenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Pentachlorophenol	1300	U	1300	210	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Bis(2-chloroethyl)ether	43	U	43	8.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
1,3-Dichlorobenzene	430	U	430	59	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
1,4-Dichlorobenzene	430	U	430	64	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
1,2-Dichlorobenzene	430	U	430	68	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
N-Nitrosodi-n-propylamine	43	U	43	5.7	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Hexachloroethane	43	U	43	7.2	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Nitrobenzene	43	U	43	9.6	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Isophorone	430	U	430	49	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Bis(2-chloroethoxy)methane	430	U	430	61	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
1,2,4-Trichlorobenzene	43	U	43	7.0	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Naphthalene	430	U	430	63	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Chloroaniline	430	U	430	54	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Hexachlorobutadiene	87	U	87	17	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Methylnaphthalene	430	U	430	62	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Hexachlorocyclopentadiene	430	U	430	130	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Chloronaphthalene	430	U	430	60	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2-Nitroaniline	870	U	870	120	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Dimethyl phthalate	430	U	430	58	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Acenaphthylene	430	U	430	61	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,6-Dinitrotoluene	87	U	87	11	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
3-Nitroaniline	870	U	870	97	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Acenaphthene	430	U	430	61	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Dibenzofuran	430	U	430	64	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
2,4-Dinitrotoluene	87	U	87	12	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Diethyl phthalate	430	U	430	57	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Chlorophenyl phenyl ether	430	U	430	74	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Fluorene	430	U	430	72	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Nitroaniline	870	U	870	88	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
N-Nitrosodiphenylamine	430	U	430	70	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
4-Bromophenyl phenyl ether	430	U	430	76	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Hexachlorobenzene	43	U	43	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (0-2)
Date Collected: 04/25/11 14:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-8
Matrix: Solid
Percent Solids: 77.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	**89**	**J**	430	75	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Anthracene	430	U	430	76	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Carbazole	430	U	430	68	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Di-n-butyl phthalate	430	U	430	65	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Fluoranthene	**150**	**J**	430	71	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Pyrene	**160**	**J**	430	74	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Butyl benzyl phthalate	430	U	430	50	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
3,3'-Dichlorobenzidine	870	U	870	95	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Benzo[a]anthracene	**77**		43	7.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Chrysene	**82**	**J**	430	62	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Bis(2-ethylhexyl) phthalate	430	U	430	57	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Di-n-octyl phthalate	430	U	430	51	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Benzo[b]fluoranthene	**110**		43	6.4	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Benzo[k]fluoranthene	**46**		43	6.0	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Benzo[a]pyrene	**96**		43	5.3	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Indeno[1,2,3-cd]pyrene	**63**		43	6.8	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Dibenz(a,h)anthracene	**17**	**J**	43	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
Benzo[g,h,i]perylene	**62**	**J**	430	45	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1
bis (2-chloroisopropyl) ether	430	U	430	56	ug/Kg	☼	05/05/11 11:00	05/06/11 08:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*87*		*38 - 105*	*05/05/11 11:00*	*05/06/11 08:20*	*1*
Phenol-d5	*76*		*41 - 118*	*05/05/11 11:00*	*05/06/11 08:20*	*1*
Terphenyl-d14	*92*		*16 - 151*	*05/05/11 11:00*	*05/06/11 08:20*	*1*
2,4,6-Tribromophenol	*72*		*10 - 120*	*05/05/11 11:00*	*05/06/11 08:20*	*1*
2-Fluorophenol	*78*		*37 - 125*	*05/05/11 11:00*	*05/06/11 08:20*	*1*
2-Fluorobiphenyl	*88*		*40 - 109*	*05/05/11 11:00*	*05/06/11 08:20*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.7	U	8.7	1.9	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
alpha-BHC	8.7	U	8.7	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
beta-BHC	8.7	U	8.7	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
delta-BHC	8.7	U	8.7	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
gamma-BHC (Lindane)	8.7	U	8.7	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Chlordane	87	U	87	19	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
4,4'-DDD	8.7	U	8.7	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
4,4'-DDE	8.7	U	8.7	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
4,4'-DDT	8.7	U	8.7	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Dieldrin	8.7	U	8.7	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endosulfan I	8.7	U	8.7	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endosulfan II	8.7	U	8.7	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endosulfan sulfate	8.7	U	8.7	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endrin	8.7	U	8.7	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endrin aldehyde	8.7	U	8.7	2.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Endrin ketone	8.7	U	8.7	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Heptachlor	8.7	U	8.7	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Heptachlor epoxide	8.7	U	8.7	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Methoxychlor	8.7	U	8.7	0.97	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1
Toxaphene	87	U	87	18	ug/Kg	☼	05/04/11 05:44	05/05/11 17:02	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (0-2)
Date Collected: 04/25/11 14:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-8
Matrix: Solid
Percent Solids: 77.2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:02*	*1*
Tetrachloro-m-xylene	*113*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:02*	*1*
DCB Decachlorobiphenyl	*123*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:02*	*1*
DCB Decachlorobiphenyl	*117*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:02*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	87	U	87	17	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1221	87	U	87	26	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1232	87	U	87	49	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1242	87	U	87	16	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1248	87	U	87	23	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1254	87	U	87	30	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1
Aroclor 1260	87	U	87	9.7	ug/Kg	☼	05/04/11 05:17	05/05/11 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:46*	*1*
DCB Decachlorobiphenyl	*105*		*30 - 150*	*05/04/11 05:17*	*05/05/11 15:46*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	22	U	22	2.8	ug/Kg	☼	05/04/11 11:00	05/05/11 16:55	1
Silvex (2,4,5-TP)	22	U	22	2.4	ug/Kg	☼	05/04/11 11:00	05/05/11 16:55	1
2,4,5-T	22	U	22	4.4	ug/Kg	☼	05/04/11 11:00	05/05/11 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*106*		*101 - 150*	*05/04/11 11:00*	*05/05/11 16:55*	*1*
2,4-Dichlorophenylacetic acid	*144*		*101 - 150*	*05/04/11 11:00*	*05/05/11 16:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5080**		50.8	18.6	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Antimony	**2.2**	**J**	2.5	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Arsenic	**24.0**		1.3	0.88	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Barium	**90.1**		50.8	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Beryllium	**0.64**		0.51	0.22	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Cadmium	**0.27**	**J**	1.3	0.20	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Calcium	**4080**		1270	33.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Chromium	**25.6**		2.5	1.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Cobalt	**6.0**	**J**	12.7	1.6	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Copper	**120**		6.3	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Iron	**18000**		38.1	13.5	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Lead	**142**		1.3	0.63	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Magnesium	**2280**		1270	13.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Manganese	**286**		3.8	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Nickel	**24.2**		10.2	0.68	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Potassium	**1660**		1270	57.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Selenium	2.5	U	2.5	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Silver	2.5	U	2.5	0.19	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Sodium	1270	U	1270	78.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Thallium	2.5	U	2.5	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4
Vanadium	**158**		12.7	0.66	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4

Client Sample ID: GPEC-SB-120 (0-2)

Date Collected: 04/25/11 14:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-8

Matrix: Solid
Percent Solids: 77.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	**149**		7.6	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.3**		0.037	0.024	mg/Kg	☼	04/29/11 09:44	04/29/11 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.6	U	2.6	0.65	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	1
Cr (VI)	2.6	U	2.6	0.65	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	0.65	U	0.65	0.14	mg/Kg	☼	05/07/11 09:32	05/09/11 12:07	1
Cyanide, Free	3.0	U	3.0	0.80	mg/Kg	☼	05/04/11 10:00	05/04/11 17:13	1
Total Organic Carbon	**9110**		100	30.0	mg/Kg			05/03/11 23:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22.8**		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	**77.2**		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-115 (0-2)

Date Collected: 04/25/11 15:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-9

Matrix: Solid
Percent Solids: 78.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.3	U	1.3	0.80	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Bromomethane	1.3	U	1.3	0.52	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Vinyl chloride	1.3	U	1.3	0.30	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Chloroethane	1.3	U	1.3	0.51	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Methylene Chloride	**0.62**	**J**	1.3	0.60	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Acetone	**31**		13	4.7	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Carbon disulfide	**1.1**	**J**	1.3	0.59	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,1-Dichloroethene	1.3	U	1.3	0.47	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,1-Dichloroethane	1.3	U	1.3	0.32	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
trans-1,2-Dichloroethene	1.3	U	1.3	0.36	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
cis-1,2-Dichloroethene	1.3	U	1.3	0.30	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Chloroform	1.3	U	1.3	0.30	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,2-Dichloroethane	1.3	U	1.3	0.49	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
2-Butanone	13	U	13	0.72	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,1,1-Trichloroethane	1.3	U	1.3	0.24	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Carbon tetrachloride	1.3	U	1.3	0.13	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Bromodichloromethane	1.3	U	1.3	0.39	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,2-Dichloropropane	1.3	U	1.3	0.40	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
cis-1,3-Dichloropropene	1.3	U	1.3	0.25	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Trichloroethene	1.3	U	1.3	0.46	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Dibromochloromethane	1.3	U	1.3	0.71	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,1,2-Trichloroethane	1.3	U	1.3	0.75	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Benzene	**38**		1.3	0.94	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
trans-1,3-Dichloropropene	1.3	U	1.3	0.28	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Bromoform	1.3	U	1.3	0.89	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
4-Methyl-2-pentanone	13	U	13	0.91	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
2-Hexanone	13	U	13	2.1	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (0-2)
Date Collected: 04/25/11 15:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-9
Matrix: Solid
Percent Solids: 78.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.3	U	1.3	0.42	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
1,1,2,2-Tetrachloroethane	1.3	U	1.3	0.96	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Toluene	**1.2**	**J**	1.3	0.38	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Chlorobenzene	1.3	U	1.3	0.61	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Ethylbenzene	**0.71**	**J**	1.3	0.24	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Styrene	1.3	U	1.3	0.44	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1
Xylenes, Total	**1.1**	**J**	3.8	1.0	ug/Kg	☼	04/28/11 00:36	04/29/11 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 138*	*04/28/11 00:36*	*04/29/11 01:56*	*1*
Toluene-d8 (Surr)	*98*		*66 - 126*	*04/28/11 00:36*	*04/29/11 01:56*	*1*
Bromofluorobenzene	*97*		*72 - 132*	*04/28/11 00:36*	*04/29/11 01:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	420	U	420	52	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Chlorophenol	420	U	420	56	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Methylphenol	420	U	420	61	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Methylphenol	420	U	420	69	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Nitrophenol	420	U	420	69	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4-Dimethylphenol	420	U	420	68	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4-Dichlorophenol	420	U	420	68	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Chloro-3-methylphenol	420	U	420	71	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4,6-Trichlorophenol	420	U	420	76	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4,5-Trichlorophenol	420	U	420	81	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4-Dinitrophenol	1300	U	1300	90	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Nitrophenol	1300	U	1300	110	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4,6-Dinitro-2-methylphenol	1300	U	1300	200	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Pentachlorophenol	1300	U	1300	210	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Bis(2-chloroethyl)ether	42	U	42	8.8	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
1,3-Dichlorobenzene	420	U	420	58	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
1,4-Dichlorobenzene	420	U	420	63	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
1,2-Dichlorobenzene	420	U	420	67	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
N-Nitrosodi-n-propylamine	42	U	42	5.6	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Hexachloroethane	42	U	42	7.1	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Nitrobenzene	42	U	42	9.4	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Isophorone	420	U	420	48	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Bis(2-chloroethoxy)methane	420	U	420	60	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
1,2,4-Trichlorobenzene	42	U	42	6.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Naphthalene	420	U	420	62	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Chloroaniline	420	U	420	53	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Hexachlorobutadiene	85	U	85	17	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Methylnaphthalene	420	U	420	62	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Hexachlorocyclopentadiene	420	U	420	120	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Chloronaphthalene	420	U	420	60	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2-Nitroaniline	850	U	850	120	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Dimethyl phthalate	420	U	420	57	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Acenaphthylene	420	U	420	60	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,6-Dinitrotoluene	85	U	85	11	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
3-Nitroaniline	850	U	850	95	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Acenaphthene	**67**	**J**	420	60	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (0-2)
Date Collected: 04/25/11 15:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-9
Matrix: Solid
Percent Solids: 78.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	420	U	420	63	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
2,4-Dinitrotoluene	85	U	85	12	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Diethyl phthalate	420	U	420	57	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Chlorophenyl phenyl ether	420	U	420	73	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Fluorene	420	U	420	71	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Nitroaniline	850	U	850	87	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
N-Nitrosodiphenylamine	420	U	420	69	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
4-Bromophenyl phenyl ether	420	U	420	75	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Hexachlorobenzene	42	U	42	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Phenanthrene	**420**		420	74	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Anthracene	**120**	**J**	420	74	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Carbazole	420	U	420	67	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Di-n-butyl phthalate	420	U	420	65	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Fluoranthene	**440**		420	70	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Pyrene	**500**		420	73	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Butyl benzyl phthalate	420	U	420	49	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
3,3'-Dichlorobenzidine	850	U	850	93	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Benzo[a]anthracene	**250**		42	7.8	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Chrysene	**350**	**J**	420	61	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Bis(2-ethylhexyl) phthalate	420	U	420	56	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Di-n-octyl phthalate	420	U	420	50	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Benzo[b]fluoranthene	**270**		42	6.3	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Benzo[k]fluoranthene	**110**		42	5.9	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Benzo[a]pyrene	**200**		42	5.2	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Indeno[1,2,3-cd]pyrene	**150**		42	6.7	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Dibenz(a,h)anthracene	**34**	**J**	42	5.1	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
Benzo[g,h,i]perylene	**140**	**J**	420	45	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1
bis (2-chloroisopropyl) ether	420	U	420	55	ug/Kg	☼	05/05/11 11:00	05/06/11 08:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*89*		*38 - 105*	*05/05/11 11:00*	*05/06/11 08:48*	*1*
Phenol-d5	*79*		*41 - 118*	*05/05/11 11:00*	*05/06/11 08:48*	*1*
Terphenyl-d14	*95*		*16 - 151*	*05/05/11 11:00*	*05/06/11 08:48*	*1*
2,4,6-Tribromophenol	*78*		*10 - 120*	*05/05/11 11:00*	*05/06/11 08:48*	*1*
2-Fluorophenol	*78*		*37 - 125*	*05/05/11 11:00*	*05/06/11 08:48*	*1*
2-Fluorobiphenyl	*91*		*40 - 109*	*05/05/11 11:00*	*05/06/11 08:48*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	8.5	U	8.5	1.9	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
alpha-BHC	8.5	U	8.5	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
beta-BHC	8.5	U	8.5	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
delta-BHC	8.5	U	8.5	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
gamma-BHC (Lindane)	8.5	U	8.5	0.99	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Chlordane	85	U	85	18	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
4,4'-DDD	8.5	U	8.5	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
4,4'-DDE	8.5	U	8.5	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
4,4'-DDT	8.5	U	8.5	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Dieldrin	8.5	U	8.5	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Endosulfan I	8.5	U	8.5	1.8	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Endosulfan II	8.5	U	8.5	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (0-2)
Date Collected: 04/25/11 15:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-9
Matrix: Solid
Percent Solids: 78.4

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	8.5	U	8.5	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Endrin	8.5	U	8.5	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Endrin aldehyde	8.5	U	8.5	2.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Endrin ketone	8.5	U	8.5	1.3	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Heptachlor	8.5	U	8.5	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Heptachlor epoxide	8.5	U	8.5	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Methoxychlor	8.5	U	8.5	0.95	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1
Toxaphene	85	U	85	18	ug/Kg	☼	05/04/11 05:44	05/05/11 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:16*	*1*
Tetrachloro-m-xylene	*111*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:16*	*1*
DCB Decachlorobiphenyl	*133*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:16*	*1*
DCB Decachlorobiphenyl	*128*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:16*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	85	U	85	16	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1221	85	U	85	26	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1232	85	U	85	48	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1242	85	U	85	16	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1248	85	U	85	23	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1254	85	U	85	29	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1
Aroclor 1260	85	U	85	9.5	ug/Kg	☼	05/04/11 05:17	05/05/11 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*30 - 150*	*05/04/11 05:17*	*05/05/11 16:01*	*1*
DCB Decachlorobiphenyl	*106*		*30 - 150*	*05/04/11 05:17*	*05/05/11 16:01*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	22	U	22	2.8	ug/Kg	☼	05/04/11 11:00	05/05/11 17:26	1
Silvex (2,4,5-TP)	22	U	22	2.4	ug/Kg	☼	05/04/11 11:00	05/05/11 17:26	1
2,4,5-T	22	U	22	4.3	ug/Kg	☼	05/04/11 11:00	05/05/11 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*141*		*101 - 150*	*05/04/11 11:00*	*05/05/11 17:26*	*1*
2,4-Dichlorophenylacetic acid	*141*		*101 - 150*	*05/04/11 11:00*	*05/05/11 17:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5590**		46.0	16.8	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Antimony	2.3	U	2.3	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Arsenic	**5.7**		1.1	0.80	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Barium	**52.1**		46.0	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Beryllium	**0.35**	**J**	0.46	0.20	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Cadmium	1.1	U	1.1	0.18	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Calcium	**7010**		1150	30.2	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Chromium	**17.3**		2.3	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Cobalt	**6.9**	**J**	11.5	1.4	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Copper	**166**		5.7	0.94	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Iron	**16600**		34.5	12.2	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4

Client Sample ID: GPEC-SB-115 (0-2)

Date Collected: 04/25/11 15:15
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-9

Matrix: Solid
Percent Solids: 78.4

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	104		1.1	0.57	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Magnesium	3480		1150	12.2	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Manganese	227		3.4	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Nickel	21.0		9.2	0.62	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Potassium	2220		1150	51.9	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Selenium	2.3	U	2.3	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Silver	2.3	U	2.3	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Sodium	85.9	J	1150	70.6	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Thallium	2.3	U	2.3	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Vanadium	25.2		11.5	0.60	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4
Zinc	114		6.9	1.1	mg/Kg	☼	04/29/11 22:01	05/03/11 04:02	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.51		0.036	0.024	mg/Kg	☼	04/29/11 09:44	04/29/11 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.5	U	2.5	0.61	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	1
Cr (VI)	2.5	U	2.5	0.63	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	0.64	U	0.64	0.14	mg/Kg	☼	05/07/11 09:32	05/09/11 12:08	1
Cyanide, Free	2.8	U	2.8	0.76	mg/Kg	☼	05/04/11 10:00	05/04/11 17:17	1
Total Organic Carbon	15400		100	30.0	mg/Kg			05/03/11 23:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.6		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	78.4		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-SB-115 (5-6)

Date Collected: 04/25/11 15:35
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-10

Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.1	U	1.1	0.72	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Bromomethane	1.1	U	1.1	0.46	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Vinyl chloride	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Chloroethane	1.1	U	1.1	0.45	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Methylene Chloride	0.71	J	1.1	0.53	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Acetone	15		11	4.2	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Carbon disulfide	0.59	J	1.1	0.53	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,1-Dichloroethene	1.1	U	1.1	0.42	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,1-Dichloroethane	1.1	U	1.1	0.29	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
trans-1,2-Dichloroethene	1.1	U	1.1	0.32	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
cis-1,2-Dichloroethene	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Chloroform	1.1	U	1.1	0.27	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,2-Dichloroethane	1.1	U	1.1	0.44	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
2-Butanone	11	U	11	0.64	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,1,1-Trichloroethane	1.1	U	1.1	0.21	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Carbon tetrachloride	1.1	U	1.1	0.11	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Bromodichloromethane	1.1	U	1.1	0.34	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (5-6)
Date Collected: 04/25/11 15:35
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-10
Matrix: Solid
Percent Solids: 84.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.1	U	1.1	0.36	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
cis-1,3-Dichloropropene	1.1	U	1.1	0.23	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Trichloroethene	1.1	U	1.1	0.41	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Dibromochloromethane	1.1	U	1.1	0.63	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,1,2-Trichloroethane	1.1	U	1.1	0.67	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Benzene	**34**		1.1	0.84	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
trans-1,3-Dichloropropene	1.1	U	1.1	0.25	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Bromoform	1.1	U	1.1	0.79	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
4-Methyl-2-pentanone	11	U	11	0.81	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
2-Hexanone	11	U	11	1.9	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Tetrachloroethene	1.1	U	1.1	0.37	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.86	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Toluene	**1.5**		1.1	0.34	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Chlorobenzene	1.1	U	1.1	0.55	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Ethylbenzene	**1.2**		1.1	0.22	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Styrene	**2.0**		1.1	0.39	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1
Xylenes, Total	**6.7**		3.4	0.89	ug/Kg	☼	04/28/11 00:38	04/29/11 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 138*	*04/28/11 00:38*	*04/29/11 02:20*	*1*
Toluene-d8 (Surr)	*101*		*66 - 126*	*04/28/11 00:38*	*04/29/11 02:20*	*1*
Bromofluorobenzene	*98*		*72 - 132*	*04/28/11 00:38*	*04/29/11 02:20*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	390	U	390	48	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Chlorophenol	390	U	390	53	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Methylphenol	390	U	390	57	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Methylphenol	390	U	390	64	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Nitrophenol	390	U	390	65	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4-Dimethylphenol	390	U	390	63	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4-Dichlorophenol	390	U	390	63	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Chloro-3-methylphenol	390	U	390	66	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4,6-Trichlorophenol	390	U	390	70	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4,5-Trichlorophenol	390	U	390	76	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4-Dinitrophenol	1200	U	1200	83	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Nitrophenol	1200	U	1200	100	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4,6-Dinitro-2-methylphenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Pentachlorophenol	1200	U	1200	190	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Bis(2-chloroethyl)ether	39	U	39	8.2	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
1,3-Dichlorobenzene	390	U	390	54	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
1,4-Dichlorobenzene	390	U	390	59	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
1,2-Dichlorobenzene	390	U	390	63	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
N-Nitrosodi-n-propylamine	39	U	39	5.2	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Hexachloroethane	39	U	39	6.6	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Nitrobenzene	39	U	39	8.8	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Isophorone	390	U	390	45	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Bis(2-chloroethoxy)methane	390	U	390	56	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
1,2,4-Trichlorobenzene	39	U	39	6.4	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Naphthalene	**120**	**J**	390	57	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Chloroaniline	390	U	390	49	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (5-6)
Date Collected: 04/25/11 15:35
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-10
Matrix: Solid
Percent Solids: 84.1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	80	U	80	16	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Methylnaphthalene	390	U	390	57	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Hexachlorocyclopentadiene	390	U	390	110	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Chloronaphthalene	390	U	390	55	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2-Nitroaniline	800	U	800	110	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Dimethyl phthalate	390	U	390	53	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Acenaphthylene	390	U	390	56	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,6-Dinitrotoluene	80	U	80	10	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
3-Nitroaniline	800	U	800	89	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Acenaphthene	**160**	**J**	390	56	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Dibenzofuran	**88**	**J**	390	59	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
2,4-Dinitrotoluene	80	U	80	11	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Diethyl phthalate	390	U	390	53	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Chlorophenyl phenyl ether	390	U	390	68	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Fluorene	**180**	**J**	390	67	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Nitroaniline	800	U	800	81	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
N-Nitrosodiphenylamine	390	U	390	64	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
4-Bromophenyl phenyl ether	390	U	390	70	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Hexachlorobenzene	39	U	39	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Phenanthrene	**900**		390	69	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Anthracene	**290**	**J**	390	69	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Carbazole	**92**	**J**	390	62	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Di-n-butyl phthalate	390	U	390	60	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Fluoranthene	**580**		390	65	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Pyrene	**650**		390	68	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Butyl benzyl phthalate	390	U	390	46	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
3,3'-Dichlorobenzidine	800	U	800	87	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Benzo[a]anthracene	**260**		39	7.3	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Chrysene	**250**	**J**	390	57	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Bis(2-ethylhexyl) phthalate	**110**	**J**	390	52	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Di-n-octyl phthalate	390	U	390	47	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Benzo[b]fluoranthene	**250**		39	5.8	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Benzo[k]fluoranthene	**100**		39	5.5	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Benzo[a]pyrene	**230**		39	4.8	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Indeno[1,2,3-cd]pyrene	**130**		39	6.3	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Dibenz(a,h)anthracene	**16**	**J**	39	4.7	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
Benzo[g,h,i]perylene	**130**	**J**	390	41	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1
bis (2-chloroisopropyl) ether	390	U	390	52	ug/Kg	☼	05/05/11 11:00	05/06/11 09:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*86*		*38 - 105*	*05/05/11 11:00*	*05/06/11 09:16*	*1*
Phenol-d5	*75*		*41 - 118*	*05/05/11 11:00*	*05/06/11 09:16*	*1*
Terphenyl-d14	*94*		*16 - 151*	*05/05/11 11:00*	*05/06/11 09:16*	*1*
2,4,6-Tribromophenol	*67*		*10 - 120*	*05/05/11 11:00*	*05/06/11 09:16*	*1*
2-Fluorophenol	*74*		*37 - 125*	*05/05/11 11:00*	*05/06/11 09:16*	*1*
2-Fluorobiphenyl	*88*		*40 - 109*	*05/05/11 11:00*	*05/06/11 09:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	7.9	U	7.9	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
alpha-BHC	7.9	U	7.9	1.5	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (5-6)
Date Collected: 04/25/11 15:35
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-10
Matrix: Solid
Percent Solids: 84.1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	7.9	U	7.9	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
delta-BHC	7.9	U	7.9	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
gamma-BHC (Lindane)	7.9	U	7.9	0.92	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Chlordane	79	U	79	17	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
4,4'-DDD	7.9	U	7.9	0.95	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
4,4'-DDE	7.9	U	7.9	1.5	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
4,4'-DDT	7.9	U	7.9	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Dieldrin	7.9	U	7.9	1.5	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endosulfan I	7.9	U	7.9	1.7	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endosulfan II	7.9	U	7.9	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endosulfan sulfate	7.9	U	7.9	1.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endrin	7.9	U	7.9	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endrin aldehyde	7.9	U	7.9	2.0	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Endrin ketone	7.9	U	7.9	1.2	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Heptachlor	7.9	U	7.9	1.1	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Heptachlor epoxide	7.9	U	7.9	1.6	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Methoxychlor	7.9	U	7.9	0.89	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1
Toxaphene	79	U	79	17	ug/Kg	☼	05/04/11 05:44	05/05/11 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:30*	*1*
Tetrachloro-m-xylene	*113*		*40 - 150*	*05/04/11 05:44*	*05/05/11 17:30*	*1*
DCB Decachlorobiphenyl	*129*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:30*	*1*
DCB Decachlorobiphenyl	*131*		*53 - 150*	*05/04/11 05:44*	*05/05/11 17:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	80	U	80	15	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1221	80	U	80	24	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1232	80	U	80	45	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1242	80	U	80	15	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1248	80	U	80	21	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1254	80	U	80	27	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1
Aroclor 1260	80	U	80	8.9	ug/Kg	☼	05/04/11 05:17	05/05/11 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*30 - 150*	*05/04/11 05:17*	*05/05/11 16:17*	*1*
DCB Decachlorobiphenyl	*101*		*30 - 150*	*05/04/11 05:17*	*05/05/11 16:17*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	20	U	20	2.6	ug/Kg	☼	05/04/11 11:00	05/05/11 17:56	1
Silvex (2,4,5-TP)	20	U	20	2.2	ug/Kg	☼	05/04/11 11:00	05/05/11 17:56	1
2,4,5-T	20	U	20	4.1	ug/Kg	☼	05/04/11 11:00	05/05/11 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*103*		*101 - 150*	*05/04/11 11:00*	*05/05/11 17:56*	*1*
2,4-Dichlorophenylacetic acid	*115*		*101 - 150*	*05/04/11 11:00*	*05/05/11 17:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3980**		42.5	15.6	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4

Client Sample ID: GPEC-SB-115 (5-6)

Date Collected: 04/25/11 15:35
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-10

Matrix: Solid
Percent Solids: 84.1

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	2.1	0.93	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Arsenic	7.3		1.1	0.74	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Barium	55.5		42.5	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Beryllium	0.22	J	0.42	0.19	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Cadmium	1.1	U	1.1	0.17	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Calcium	5310		1060	27.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Chromium	11.8		2.1	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Cobalt	4.8	J	10.6	1.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Copper	75.8		5.3	0.87	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Iron	16000		31.9	11.3	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Lead	93.7		1.1	0.53	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Magnesium	1970		1060	11.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Manganese	387		3.2	1.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Nickel	11.8		8.5	0.57	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Potassium	1460		1060	47.9	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Selenium	2.1	U	2.1	0.99	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Silver	2.1	U	2.1	0.16	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Sodium	86.7	J	1060	65.2	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Thallium	2.1	U	2.1	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Vanadium	23.5		10.6	0.55	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4
Zinc	85.4		6.4	1.0	mg/Kg	☼	04/29/11 22:01	05/03/11 03:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.1		0.036	0.024	mg/Kg	☼	04/29/11 09:44	04/29/11 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.3	U	2.3	0.58	mg/Kg	☼	05/03/11 10:42	05/05/11 17:15	1
Cr (VI)	2.4	U	2.4	0.58	mg/Kg	☼	05/05/11 13:17	05/09/11 11:46	1
Cyanide, Total	0.59	U	0.59	0.13	mg/Kg	☼	05/07/11 09:32	05/09/11 12:09	1
Cyanide, Free	2.7	U	2.7	0.73	mg/Kg	☼	05/04/11 10:00	05/04/11 17:20	1
Total Organic Carbon	6720		100	30.0	mg/Kg			05/03/11 23:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.9		1.0	1.0	%			04/27/11 18:31	1
Percent Solids	84.1		1.0	1.0	%			04/27/11 18:31	1

Client Sample ID: GPEC-TB-042611

Date Collected: 04/26/11 00:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.21	ug/L			04/28/11 22:21	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/28/11 22:21	1
Vinyl chloride	1.0	U	1.0	0.13	ug/L			04/28/11 22:21	1
Chloroethane	1.0	U	1.0	0.45	ug/L			04/28/11 22:21	1
Methylene Chloride	0.52	J	1.0	0.19	ug/L			04/28/11 22:21	1
Acetone	10	U	10	2.5	ug/L			04/28/11 22:21	1
Carbon disulfide	1.0	U	1.0	0.15	ug/L			04/28/11 22:21	1

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-TB-042611
Date Collected: 04/26/11 00:00
Date Received: 04/26/11 13:40

Lab Sample ID: 460-25837-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 22:21	1
1,1-Dichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 22:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.14	ug/L			04/28/11 22:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 22:21	1
Chloroform	1.0	U	1.0	0.15	ug/L			04/28/11 22:21	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			04/28/11 22:21	1
2-Butanone	10	U	10	0.82	ug/L			04/28/11 22:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.25	ug/L			04/28/11 22:21	1
Carbon tetrachloride	1.0	U	1.0	0.19	ug/L			04/28/11 22:21	1
Bromodichloromethane	1.0	U	1.0	0.093	ug/L			04/28/11 22:21	1
1,2-Dichloropropane	1.0	U	1.0	0.090	ug/L			04/28/11 22:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.11	ug/L			04/28/11 22:21	1
Trichloroethene	1.0	U	1.0	0.18	ug/L			04/28/11 22:21	1
Dibromochloromethane	1.0	U	1.0	0.11	ug/L			04/28/11 22:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.10	ug/L			04/28/11 22:21	1
Benzene	1.0	U	1.0	0.13	ug/L			04/28/11 22:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.12	ug/L			04/28/11 22:21	1
Bromoform	1.0	U	1.0	0.10	ug/L			04/28/11 22:21	1
4-Methyl-2-pentanone	10	U	10	0.68	ug/L			04/28/11 22:21	1
2-Hexanone	10	U	10	0.55	ug/L			04/28/11 22:21	1
Tetrachloroethene	1.0	U	1.0	0.20	ug/L			04/28/11 22:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.090	ug/L			04/28/11 22:21	1
Toluene	1.0	U	1.0	0.090	ug/L			04/28/11 22:21	1
Chlorobenzene	1.0	U	1.0	0.16	ug/L			04/28/11 22:21	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/28/11 22:21	1
Styrene	1.0	U	1.0	0.13	ug/L			04/28/11 22:21	1
Xylenes, Total	3.0	U	3.0	0.43	ug/L			04/28/11 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 122*		*04/28/11 22:21*	*1*
Toluene-d8 (Surr)	*96*		*69 - 125*		*04/28/11 22:21*	*1*
Bromofluorobenzene	*106*		*69 - 135*		*04/28/11 22:21*	*1*

Client Sample ID: GPEC-SB-116 (5-6) — **Lab Sample ID: 460-25837-1**
Date Collected: 04/26/11 08:45 — **Matrix: Solid**
Date Received: 04/26/11 13:40 — **Percent Solids: 78.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:23	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/28/11 22:45	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73027	05/07/11 00:22	AAA	TAL EDI
Total/NA	Prep	3541			72434	05/03/11 04:23	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72766	05/05/11 09:33	FM	TAL EDI
Total/NA	Prep	8151A			72690	05/04/11 21:55	JS	TAL EDI
Total/NA	Analysis	8151A		1	72784	05/05/11 12:09	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 12:46	SD	TAL EDI
Total/NA	Prep	7471A			72142	04/29/11 08:32	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 12:47	RBS	TAL EDI
Total/NA	Prep	3050B			72305	05/02/11 07:18	MC	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 01:34	CDC	TAL EDI
Total/NA	Analysis	6010B		4	72530	05/03/11 15:36	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:44	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 20:21	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:36	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-116 (0-2) — **Lab Sample ID: 460-25837-2**
Date Collected: 04/26/11 08:30 — **Matrix: Solid**
Date Received: 04/26/11 13:40 — **Percent Solids: 90.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:25	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72171	04/29/11 12:10	SD	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 11:23	AAA	TAL EDI
Total/NA	Prep	3541			72434	05/03/11 04:23	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72766	05/05/11 09:47	FM	TAL EDI
Total/NA	Prep	8151A			72690	05/04/11 21:55	JS	TAL EDI
Total/NA	Analysis	8151A		1	72784	05/05/11 12:40	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 13:02	SD	TAL EDI
Total/NA	Prep	7471A			72142	04/29/11 08:32	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 12:49	RBS	TAL EDI

Client Sample ID: GPEC-SB-116 (0-2)

Lab Sample ID: 460-25837-2

Date Collected: 04/26/11 08:30

Matrix: Solid

Date Received: 04/26/11 13:40

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:26	CDC	TAL EDI
Total/NA	Analysis	6010B		10	72530	05/03/11 15:43	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:48	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 20:43	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:11	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-117 (0-2)

Lab Sample ID: 460-25837-3

Date Collected: 04/26/11 09:05

Matrix: Solid

Date Received: 04/26/11 13:40

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:27	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72171	04/29/11 11:46	SD	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	73027	05/06/11 23:53	AAA	TAL EDI
Total/NA	Prep	3541			72434	05/03/11 04:23	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72766	05/05/11 11:11	FM	TAL EDI
Total/NA	Prep	8151A			72690	05/04/11 21:55	JS	TAL EDI
Total/NA	Analysis	8151A		1	72784	05/05/11 10:07	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 13:17	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:06	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:30	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:51	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 20:59	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:12	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-120 (4-5)

Lab Sample ID: 460-25837-4

Date Collected: 04/26/11 08:45

Matrix: Solid

Date Received: 04/26/11 13:40

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:28	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/28/11 23:57	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 07:51	AAA	TAL EDI
Total/NA	Prep	3541			72434	05/03/11 04:23	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72766	05/05/11 10:29	FM	TAL EDI
Total/NA	Prep	8151A			72690	05/04/11 21:55	JS	TAL EDI
Total/NA	Analysis	8151A		1	72784	05/05/11 11:39	SK	TAL EDI
Total/NA	Prep	3541			72433	05/03/11 04:10	ARA	TAL EDI
Total/NA	Analysis	8082		1	72819	05/04/11 13:33	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:08	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:33	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:54	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 21:12	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:13	HV	TAL EDI
Total/NA	Prep	3060A			73097	05/09/11 17:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73282	05/10/11 15:42	RK	TAL EDI
Total/NA	Prep	3060A			73413	05/11/11 11:13	EA	TAL EDI
Total/NA	Analysis	7196A		1	73464	05/12/11 10:55	RK	TAL EDI

Client Sample ID: GPEC-SB-119 (0-2)

Lab Sample ID: 460-25837-5

Date Collected: 04/25/11 11:15

Matrix: Solid

Date Received: 04/26/11 13:40

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:29	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 00:21	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 10:55	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 16:20	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 14:22	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 15:00	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:10	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:37	CDC	TAL EDI

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-119 (0-2)

Lab Sample ID: 460-25837-5

Date Collected: 04/25/11 11:15
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		10	72530	05/03/11 15:47	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 16:57	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 21:41	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		5	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:01	HV	TAL EDI

Client Sample ID: GPEC-SB-121 (0-2)

Lab Sample ID: 460-25837-6

Date Collected: 04/25/11 09:40
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:31	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 00:45	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 07:23	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 16:34	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 15:54	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 15:15	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		20	72223	04/29/11 13:59	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:41	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 17:01	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 21:55	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		1	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:02	HV	TAL EDI

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-121 (5-6)

Lab Sample ID: 460-25837-7

Date Collected: 04/25/11 10:05
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:33	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 01:09	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 04:05	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 16:48	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 16:25	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 15:31	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 14:01	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:44	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 17:10	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 22:47	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		1	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:06	HV	TAL EDI

Client Sample ID: GPEC-SB-120 (0-2)

Lab Sample ID: 460-25837-8

Date Collected: 04/25/11 14:00
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:34	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 01:32	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 08:20	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 17:02	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 16:55	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 15:46	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:19	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:48	CDC	TAL EDI

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-120 (0-2)

Lab Sample ID: 460-25837-8

Date Collected: 04/25/11 14:00
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 17:13	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 23:08	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		1	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:07	HV	TAL EDI

Client Sample ID: GPEC-SB-115 (0-2)

Lab Sample ID: 460-25837-9

Date Collected: 04/25/11 15:15
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:36	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 01:56	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 08:48	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 17:16	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 17:26	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 16:01	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:21	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 04:02	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 17:17	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 23:21	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		1	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:08	HV	TAL EDI

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Client Sample ID: GPEC-SB-115 (5-6)

Lab Sample ID: 460-25837-10

Date Collected: 04/25/11 15:35
Matrix: Solid
Date Received: 04/26/11 13:40
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			71983	04/28/11 00:38	FJ	TAL EDI
Total/NA	Analysis	8260B		1	72178	04/29/11 02:20	KB	TAL EDI
Total/NA	Prep	3541			72755	05/05/11 11:00	CM	TAL EDI
Total/NA	Analysis	8270C		1	72926	05/06/11 09:16	AAA	TAL EDI
Total/NA	Prep	3541			72561	05/04/11 05:44	ARA	TAL EDI
Total/NA	Analysis	8081A		1	72854	05/05/11 17:30	FM	TAL EDI
Total/NA	Prep	8151A			72662	05/04/11 11:00	ME	TAL EDI
Total/NA	Analysis	8151A		1	72856	05/05/11 17:56	SK	TAL EDI
Total/NA	Prep	3541			72560	05/04/11 05:17	ARA	TAL EDI
Total/NA	Analysis	8082		1	72871	05/05/11 16:17	SD	TAL EDI
Total/NA	Prep	7471A			72161	04/29/11 09:44	RBS	TAL EDI
Total/NA	Analysis	7471A		1	72223	04/29/11 13:23	RBS	TAL EDI
Total/NA	Prep	3050B			72254	04/29/11 22:01	TS	TAL EDI
Total/NA	Analysis	6010B		4	72441	05/03/11 03:51	CDC	TAL EDI
Total/NA	Leach	9016			50382	05/03/11 18:00	JM	TAL CT
Total/NA	Prep	9016			50419	05/04/11 10:00	JM	TAL CT
Total/NA	Analysis	9016		1	50421	05/04/11 17:20	JM	TAL CT
Total/NA	Analysis	9060		1	50494	05/03/11 23:41	DM	TAL CT
Total/NA	Analysis	Moisture		1	71930	04/27/11 18:31	CR	TAL EDI
Total/NA	Prep	3060A			72493	05/03/11 10:42	EA	TAL EDI
Total/NA	Analysis	7196A		1	72980	05/05/11 17:15	RK	TAL EDI
Total/NA	Prep	3060A			72822	05/05/11 13:17	EA	TAL EDI
Total/NA	Analysis	7196A		1	73000	05/09/11 11:46	JC	TAL EDI
Total/NA	Prep	9012A			72969	05/07/11 09:32	IA	TAL EDI
Total/NA	Analysis	9012A		1	73064	05/09/11 12:09	HV	TAL EDI

Client Sample ID: GPEC-TB-042611

Lab Sample ID: 460-25837-11

Date Collected: 04/26/11 00:00
Matrix: Water
Date Received: 04/26/11 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72106	04/28/11 22:21	EM	TAL EDI

Laboratory References:

TAL CT = TestAmerica Connecticut, 128 Long Hill Cross Road, Shelton, CT 06484, TEL (203)929-8140

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Edison	Connecticut	State Program	1	PH-0200
TestAmerica Edison	Delaware	Delaware DNREC	3	N/A
TestAmerica Edison	New Jersey	NELAC	2	12028
TestAmerica Edison	New York	NELAC	2	11452
TestAmerica Edison	Pennsylvania	NELAC	3	68-00522
TestAmerica Edison	Rhode Island	State Program	1	LAO00132
TestAmerica Edison	USDA	USDA		NJCA-003-08
TestAmerica Connecticut	NRC	NRC		06-30139-01
TestAmerica Connecticut	USDA	USDA		P330-11-00082

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8081A	Organochlorine Pesticides (GC)	SW846	TAL EDI
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
8151A	Herbicides (GC)	SW846	TAL EDI
6010B	Metals (ICP)	SW846	TAL EDI
7471A	Mercury (CVAA)	SW846	TAL EDI
7196A	Chromium, Hexavalent	SW846	TAL EDI
9012A	Cyanide, Total and/or Amenable	SW846	TAL EDI
9016	Cyanide, Free	SW846	TAL CT
9060	Organic Carbon, Total (TOC)	SW846	TAL CT
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CT = TestAmerica Connecticut, 128 Long Hill Cross Road, Shelton, CT 06484, TEL (203)929-8140

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: GEI Consultants, Inc.
Project/Site: Greenpoint E.C./093260-1-1104

TestAmerica Job ID: 460-25837-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-25837-1	GPEC-SB-116 (5-6)	Solid	04/26/11 08:45	04/26/11 13:40
460-25837-2	GPEC-SB-116 (0-2)	Solid	04/26/11 08:30	04/26/11 13:40
460-25837-3	GPEC-SB-117 (0-2)	Solid	04/26/11 09:05	04/26/11 13:40
460-25837-4	GPEC-SB-120 (4-5)	Solid	04/26/11 08:45	04/26/11 13:40
460-25837-5	GPEC-SB-119 (0-2)	Solid	04/25/11 11:15	04/26/11 13:40
460-25837-6	GPEC-SB-121 (0-2)	Solid	04/25/11 09:40	04/26/11 13:40
460-25837-7	GPEC-SB-121 (5-6)	Solid	04/25/11 10:05	04/26/11 13:40
460-25837-8	GPEC-SB-120 (0-2)	Solid	04/25/11 14:00	04/26/11 13:40
460-25837-9	GPEC-SB-115 (0-2)	Solid	04/25/11 15:15	04/26/11 13:40
460-25837-10	GPEC-SB-115 (5-6)	Solid	04/25/11 15:35	04/26/11 13:40
460-25837-11	GPEC-TB-042611	Water	04/26/11 00:00	04/26/11 13:40

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

1/10/2012

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Mike Zukauskas	MJS / KMK	Greenpoint E.C. / 093260-1-1104
Company: GEI Consultants	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 1 Greenwood Ave, Ste 210	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Montclair State: NJ 07042	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone: 973-873-7110 Fax: 973-509-9625		Job No: 460-25837

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	SVOC 8270C	TAL metals (ICP/ICPMS) 6010B/7000	PCBs 8082	Hex Chrom 3060A/7196A	TOC 9060	Total CN	Pest / Herb	Free CN 9013/14	Sample Numbers
GPEC-SB-116(5-6)	4/26/11	8:45	S	3	X	X	X	X	X	X	X	X	X	HOLD
GPEC-SB-116(0-2)	4/26/11	8:30	S	3										TCLP Pb & Hg
GPEC-SB-117(0-2)	4/26/11	9:05	S	3										
GPEC-SB-120(4-5)	4/26/11	8:45	S	3										
GPEC-SB-119(0-2)	4/25/11	11:15	S	3										
GPEC-SB-121(0-2)	4/25/11	9:40	S											
GPEC-SB-121(5-6)	4/25/11	10:05												
GPEC-SB-120(0-2)	4/25/11	14:00												
GPEC-SB-115(0-2)	4/25/11	15:15												
GPEC-SB-115(5-6)	4/25/11	15:35												
Soil:					X	X	X	X	X	X	X	X	X	
Water:					X	X	X	X	X	X	X	X	X	

#1
#2
#3
#4
#5
#6
#7
#8
#9
#10

Page 57 of 66

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Special Instructions Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	4/26/11 12:00	1)	DLNY
2)	DLNY	4/26/11 13:40	2)	
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

3.7°C IR#50

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) Mike Zukauskas	Samplers Name (Printed)	Site/Project Identification Greenpoint E.C. / 093260-1-1104
Company GEI Consultants	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
Address	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City See pg 1 State	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone Fax		Job No: 460-25837

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	Sample Numbers
GPEC-TB-042611	04/26/11		Aq		X	#11

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil: | Water: X

Special Instructions

Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by 1)	GEI	4/26/11 | 12:00	Received by 1)	TAL
Relinquished by 2)	TAL	4/26/11 | 13:40	Received by 2)	
Relinquished by 3)		|	Received by 3)	
Relinquished by 4)		|	Received by 4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578) 3.7°C IR# 50.

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25837-1

Login Number: 25837

List Source: TestAmerica Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not received
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7°C IR#50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	VOA sample analysis received in a dirt jar containers.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	Sample GPEC-TB-042611 has no sample collection time.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-25837-1

Login Number: 25837
List Number: 1
Creator: Teixeira, Maria L

List Source: TestAmerica Connecticut
List Creation: 05/02/11 09:15 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	5/2/11
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	gun#3 2.1c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-12724-1

Job Description: National Grid- Greenpoint, Brooklyn

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Joan Widomski
Data Review Analyst I
7/23/2010 3:37 PM

Designee for
Erin A Arasate
Project Manager I
erin.arasate@testamericainc.com
07/23/2010
Revision: 1

cc: Mr. Brian Skelly

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Scott R. Hall
Laboratory Director

July 23, 2010
Date

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
220-12724-1	**GPEC-WCB-071210**				
Ignitability		No	2.2	mm/sec	1030
Percent Moisture		8.7	1.0	%	Moisture
Percent Solids		91.3	1.0	%	Moisture
TCLP					
Barium		0.35	0.025	mg/L	6010B
Chromium		0.031	0.025	mg/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
TCLP Extraction	TAL CT		SW846 1311
Purge and Trap	TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
TCLP Extraction	TAL CT		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Metals (ICP)	TAL CT	SW846 6010B	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Total Metals	TAL CT		SW846 3010A
Mercury (CVAA)	TAL CT	SW846 7470A	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Mercury	TAL CT		SW846 7470A
Ignitability, Solids	TAL EDI	SW846 1030	
Cyanide, Reactive	TAL CT	SW846 9012	
Cyanide, Reactive	TAL CT		SW846 7.3.3
Sulfide, Reactive	TAL CT	SW846 9034	
Sulfide, Reactive	TAL CT		SW846 7.3.4
Percent Moisture	TAL EDI	EPA Moisture	

Lab References:

TAL CT = TestAmerica Connecticut

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Jonas, Stephan	SJ
SW846 8082	Diaz, Carol B	CBD
SW846 6010B	Petronchak, Nestor	NP
SW846 7470A	Voytek, Joseph F	JFV
SW846 1030	Cabanganan, Maria	MB
SW846 9012	Natoli, Richard A	RN
SW846 9034	Natoli, Richard A	RN
EPA Moisture	Retana, Camille	CR

SAMPLE SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-12724-1	GPEC-WCB-071210	Solid	07/12/2010 1000	07/13/2010 0950

SAMPLE RESULTS

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid Date Received: 07/13/2010 0950

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-40520		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4486.D
Dilution:	1.0	Leachate Batch: 220-40483		Initial Weight/Volume:	5 mL
Date Analyzed:	07/15/2010 1610			Final Weight/Volume:	5 mL
Date Prepared:	07/15/2010 1610				
Date Leached:	07/14/2010 1642				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	80		65 - 136
4-Bromofluorobenzene	101		51 - 142
Dibromofluoromethane	82		68 - 132
Toluene-d8 (Surr)	89		63 - 127

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid Date Received: 07/13/2010 0950

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-40801		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-40683		Lab File ID:	A12144.D
Dilution:	1.0	Leachate Batch: 220-40552		Initial Weight/Volume:	500 mL
Date Analyzed:	07/22/2010 1657			Final Weight/Volume:	1 mL
Date Prepared:	07/20/2010 1507			Injection Volume:	1 uL
Date Leached:	07/15/2010 2030				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	99		29 - 126
2-Fluorobiphenyl	85		43 - 116
2-Fluorophenol	60		21 - 97
Nitrobenzene-d5	79		38 - 113
Terphenyl-d14	104		10 - 119
Phenol-d5	45		18 - 97

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid % Moisture: 8.7 Date Received: 07/13/2010 0950

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-43213		Instrument ID:	PESTGC7
Preparation:	3541	Prep Batch: 460-43183		Initial Weight/Volume:	14.97 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	07/17/2010 0706			Injection Volume:	
Date Prepared:	07/16/2010 1828			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
PCB-1016		0.074	U	0.014	0.074
PCB-1221		0.074	U	0.022	0.074
PCB-1232		0.074	U	0.042	0.074
PCB-1242		0.074	U	0.014	0.074
PCB-1248		0.074	U	0.020	0.074
PCB-1254		0.074	U	0.025	0.074
PCB-1260		0.074	U	0.0082	0.074

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	118		30 - 150

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid % Moisture: 8.7 Date Received: 07/13/2010 0950

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-43213		Instrument ID:	PESTGC7
Preparation:	3541	Prep Batch: 460-43183		Initial Weight/Volume:	14.97 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	07/17/2010 0706			Injection Volume:	
Date Prepared:	07/16/2010 1828			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	115		30 - 150

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid Date Received: 07/13/2010 0950

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 220-40639		Instrument ID:	ICAP3
Preparation:	3010A	Prep Batch: 220-40615		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40552		Initial Weight/Volume:	20 mL
Date Analyzed:	07/19/2010 1633			Final Weight/Volume:	50 mL
Date Prepared:	07/19/2010 1117				
Date Leached:	07/15/2010 2030				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.35		0.0012	0.025
Cadmium		0.025	U	0.0050	0.025
Chromium		0.031		0.0025	0.025
Lead		0.075	U	0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-40685		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-40655		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40552		Initial Weight/Volume:	5 mL
Date Analyzed:	07/20/2010 1503			Final Weight/Volume:	50 mL
Date Prepared:	07/20/2010 1035				
Date Leached:	07/15/2010 2030				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

General Chemistry

Client Sample ID: **GPEC-WCB-071210**

Lab Sample ID: 220-12724-1 Date Sampled: 07/12/2010 1000
Client Matrix: Solid Date Received: 07/13/2010 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Ignitability	No		mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-42943	Date Analyzed: 07/15/2010 0945						DryWt Corrected: N
Burn Rate	2.2	U	mm/sec	2.2	2.2	1.0	1030
Analysis Batch: 460-42943	Date Analyzed: 07/15/2010 0945						DryWt Corrected: N
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-40754	Date Analyzed: 07/22/2010 1044						DryWt Corrected: N
Prep Batch: 220-40681	Date Prepared: 07/19/2010 1515						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-40758	Date Analyzed: 07/22/2010 1000						DryWt Corrected: N
Prep Batch: 220-40757	Date Prepared: 07/19/2010 1600						
Percent Moisture	8.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-42898	Date Analyzed: 07/14/2010 2115						DryWt Corrected: N
Percent Solids	91.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-42898	Date Analyzed: 07/14/2010 2115						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 220-12724-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
GC Semi VOA		
	U	Analyzed for but not detected.
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
General Chemistry		
	U	Indicates analyzed for but not detected.

220-12724

BO
R2V

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Shelton, CT
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other ~~NYSDEC~~

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: GEI Consultants	Client Project Manager: Joe Chiappetta	Site Contact: M Sweet	Lab Contact: Erin Arasahe	COC No: 002515
Address: 1 Greenwood Ave suite 210	Telephone: 973-666-0694	Telephone: 551-206-4339	Telephone: 203-944-1318	1 of 1 COCs
City/State/Zip: Montclair, NJ 07042	Email: jchiappetta@geiconsultants.com	Analysis Turnaround Time (in BUS days)		For lab use only
Phone: 973-873-7110		TAT if different from below Standard		Walk-in client ☐
Project Name: Greenpoint	Method of Shipment/Carrier: test America courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐
Project Number: 093260-1-1101	Shipping/Tracking No:			Lab sampling ☐
PO#				Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NuOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses: TCLP VO	TCLP SVO	TCLP Metals	PCBs	Ignitability	Reactivity	Sample Specific Notes / Special Instructions:
GPEC-WCB-071210	07/12/10	10:00				X							3				X	X	X	X	X	X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
confirm ASAP w/ Joe Chiappetta (973-666-0694)
GEI 07/12/10 14:12

3,4CGZ

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Pat Gumby	7/12/10 14:12		TDLN	7/12/10 14:12
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	7/12/10 16:10		TAL	7/13/10 0450
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Passed Rad Screen JMD

TAL 0018- 1 (04/10)

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07/23/2010

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12724-1

Login Number: 12724

List Source: TestAmerica Connecticut

Creator: Duhancik, Jill M

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4C G2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12724-1

Login Number: 12724
List Source: TestAmerica Edison
Creator: Villadarez, Gerson Timothy S
List Creation: 07/14/10 03:33 PM
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.3°C, 4.2°C IR#40
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica

07/23/2010

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arasate, Erin A	Carrier Tracking No(s):	COC No: 220-5818.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: erin.arasate@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 220-12724-1
Address: 777 New Durham Road,	Due Date Requested: 7/23/2010			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: National Grid- Greenpoint, Brooklyn	Project #: 22002226			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1030/ 1030 - Ignitability	8082/3541 8082 - Standard Compound List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
GPEC-WCB-071210 (220-12724-1)	7/12/10	10:00 Eastern		Solid			X	X	1	

Page 20 of 20

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7-13-10 1700		fedex		
Relinquished by: fedex	Date/Time: 7/14/2010 1000	Company	Received by: [signature]	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 6.3 / 4.2 Ayo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-12804-1

SDG Number:

Job Description: National Grid- Greenpoint, Brooklyn

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Joan Widomski
Data Review Analyst I
8/6/2010 5:34 PM

Designee for
Erin A Arasate
Project Manager I
erin.arasate@testamericainc.com
08/06/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Scott R. Hall
Laboratory Director

August 5, 2010
Date

Job Narrative
220-12804-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: The continuing calibration verification (CCV) analyzed on 07/30/10 at 20:18 on GC-hp-6890-8 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8082: Surrogate recovery for the following sample was outside control limits: WC1-072010 (220-12804-1). Re-extraction was performed with concurring results. The original analysis has been reported.

Method(s) 8151A: This method incorporates the use of second column confirmation. Corrective action for unacceptable percent recovery is not taken for surrogate or spike compounds unless the results from both columns are outside criteria. Any results which fall outside criteria are qualified and reported. Evidence of matrix intereference was present in the sample.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
Method(s) 1030: The following sample(s) did not ignite: (680-59567-1), (680-59567-1 DU), (MB 680-175283/1), WC1-072010 (220-12804-1), WC2-072010 (220-12804-2); therefore, an ignitability value could not be obtained. The result has been reported as "No Burn" (NB).

Method(s) 9045C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: WC1-072010 (220-12804-1), WC2-072010 (220-12804-2)

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Subcontract Work
Method(s) ASTM D3176, ASTM D4239: The sample has been subcontracted to Texas Oil Tech Laboratories, Inc the subcontract certifications are different from those listed on the TestAmerica cover page of this final report.

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12804-1	**WC1-072010**					
Methylene Chloride		5.2	J B	21	ug/Kg	8260B
Acetone		3.3	J B	21	ug/Kg	8260B
PCB-1254		7.5	J p	18	ug/Kg	8082
PCB-1260		7.7	J	18	ug/Kg	8082
Silver		0.81	J	1.3	mg/Kg	6010B
Aluminum		5060		62.8	mg/Kg	6010B
Arsenic		15.1		5.3	mg/Kg	6010B
Barium		123		1.3	mg/Kg	6010B
Beryllium		0.42	J	1.3	mg/Kg	6010B
Calcium		38600		126	mg/Kg	6010B
Cadmium		1.6		1.3	mg/Kg	6010B
Cobalt		6.3		1.3	mg/Kg	6010B
Chromium		29.4		1.3	mg/Kg	6010B
Copper		269		1.5	mg/Kg	6010B
Iron		21600		31.4	mg/Kg	6010B
Potassium		765		126	mg/Kg	6010B
Magnesium		7810		126	mg/Kg	6010B
Manganese		249		1.9	mg/Kg	6010B
Sodium		623		126	mg/Kg	6010B
Nickel		59.5		1.3	mg/Kg	6010B
Lead		312		3.8	mg/Kg	6010B
Vanadium		97.6		1.3	mg/Kg	6010B
Zinc		363		6.3	mg/Kg	6010B
Mercury		0.66		0.051	mg/Kg	7471A
Ignitability		NB			mm/sec	1030
pH		7.86	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		3.9		0.10	%	Moisture
Percent Solids		96.1		0.10	%	Moisture
TCLP						
Barium		0.77		0.025	mg/L	6010B
Cadmium		0.011	J	0.025	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-12804-2	**WC2-072010**					
Methylene Chloride		7.0	J B	26	ug/Kg	8260B
Acetone		5.7	J B	26	ug/Kg	8260B
PCB-1254		27	p	22	ug/Kg	8082
PCB-1260		28		22	ug/Kg	8082
Silver		0.46	J	1.6	mg/Kg	6010B
Aluminum		4940		77.8	mg/Kg	6010B
Arsenic		10.8		6.5	mg/Kg	6010B
Barium		72.8		1.6	mg/Kg	6010B
Beryllium		0.23	J	1.6	mg/Kg	6010B
Calcium		17500		156	mg/Kg	6010B
Cadmium		0.75	J	1.6	mg/Kg	6010B
Cobalt		5.0		1.6	mg/Kg	6010B
Chromium		17.6		1.6	mg/Kg	6010B
Copper		143		1.9	mg/Kg	6010B
Iron		12500		38.9	mg/Kg	6010B
Potassium		545		156	mg/Kg	6010B
Magnesium		3230		156	mg/Kg	6010B
Manganese		171		2.3	mg/Kg	6010B
Sodium		257		156	mg/Kg	6010B
Nickel		177		1.6	mg/Kg	6010B
Lead		188		4.7	mg/Kg	6010B
Vanadium		81.9		1.6	mg/Kg	6010B
Zinc		239		7.8	mg/Kg	6010B
Mercury		1.7		0.063	mg/Kg	7471A
Ignitability		NB			mm/sec	1030
Cyanide, Total		644	J	647	ug/Kg	9012B
pH		8.80	HF	0.100	SU	9045C
BTU		DNF		2.0	BTU/lb	D240-87
Percent Moisture		22.8		0.10	%	Moisture
Percent Solids		77.2		0.10	%	Moisture
TCLP						
Barium		0.61		0.025	mg/L	6010B
Cadmium		0.0071	J	0.025	mg/L	6010B
Chromium		0.030		0.025	mg/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12804-1

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
TCLP Extraction	TAL CT		SW846 1311
Purge and Trap	TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
TCLP Extraction	TAL CT		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Organochlorine Pesticides (GC)	TAL CT	SW846 8081A	
TCLP Extraction	TAL CT		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Ultrasonic Extraction	TAL CT		SW846 3550B
Herbicides (GC)	TAL SAV	SW846 8151A	
TCLP Extraction	TAL SAV		SW846 1311
Extraction (Herbicides)	TAL SAV		SW846 8151A
Metals (ICP)	TAL CT	SW846 6010B	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Metals	TAL CT		SW846 3050B
Preparation, Total Metals	TAL CT		SW846 3010A
Mercury (CVAA)	TAL CT	SW846 7470A	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Mercury	TAL CT		SW846 7470A
Mercury (CVAA)	TAL CT	SW846 7471A	
Preparation, Mercury	TAL CT		SW846 7471A
Ignitability, Solids	TAL SAV	SW846 1030	
Cyanide, Reactive	TAL CT	SW846 9012	
Cyanide, Reactive	TAL CT		SW846 7.3.3
Cyanide, Total andor Amenable	TAL CT	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL CT		SW846 9012B
Sulfide, Reactive	TAL CT	SW846 9034	
Sulfide, Reactive	TAL CT		SW846 7.3.4
pH	TAL CT	SW846 9045C	
Heat of Combustion	TAL SAV	ASTM D240-87	
Preparation, Heat of Combustion	TAL SAV		ASTM D240-87
Percent Moisture	TAL CT	EPA Moisture	
Geotechnical Analysis	SC0132	TCEQ Various	

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-12804-1

Description	Lab Location	Method	Preparation Method

Lab References:

SC0132 = Texas Oil Tech Laboratories, Inc

TAL CT = TestAmerica Connecticut

TAL SAV = TestAmerica Savannah

Method References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TCEQ = Texas Commission of Environmental Quality

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Method	Analyst	Analyst ID
SW846 8260B	Humbert, Dave	DH
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Szymczuk, Magdalena	MS
SW846 8081A	Szymczuk, Magdalena	MS
SW846 8082	Puccino, Tracy	TP
SW846 8151A	Eason, William T	WTE
SW846 6010B	Petronchak, Nestor	NP
SW846 7470A	Voytek, Joseph F	JFV
SW846 7471A	Voytek, Joseph F	JFV
SW846 1030	Jackson, Michelle S	MSJ
SW846 9012	Natoli, Richard A	RN
SW846 9012B	Natoli, Richard A	RN
SW846 9034	Natoli, Richard A	RN
SW846 9045C	Keene, Angela H	AHK
ASTM D240-87	Nelson, Christopher	CN
EPA Moisture	Culik, Marie E	MEC

SAMPLE SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-12804-1	WC1-072010	Solid	07/20/2010 1536	07/21/2010 1800
220-12804-2	WC2-072010	Solid	07/20/2010 1540	07/21/2010 1800

SAMPLE RESULTS

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4829.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1421			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1421				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		65 - 136
4-Bromofluorobenzene	75		51 - 142
Dibromofluoromethane	85		68 - 132
Toluene-d8 (Surr)	89		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/27/2010 1748
Date Prepared: 07/27/2010 1748

Analysis Batch: 220-41001

Instrument ID: MSN
Lab File ID: N8516.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		5.2	U	0.81	5.2
Vinyl chloride		5.2	U	0.24	5.2
Bromomethane		5.2	U	2.2	5.2
Chloroethane		5.2	U	1.0	5.2
1,1-Dichloroethene		5.2	U	0.60	5.2
Carbon disulfide		5.2	U	0.43	5.2
Methylene Chloride		5.2	J B	1.1	21
Acetone		3.3	J B	2.3	21
trans-1,2-Dichloroethene		5.2	U	0.41	5.2
1,1-Dichloroethane		5.2	U	0.31	5.2
cis-1,2-Dichloroethene		5.2	U	0.38	5.2
Chloroform		5.2	U	0.35	5.2
1,1,1-Trichloroethane		5.2	U	0.55	5.2
Carbon tetrachloride		5.2	U	0.99	5.2
Methyl Ethyl Ketone		10	U	1.7	10
Benzene		5.2	U	0.59	5.2
1,2-Dichloroethane		5.2	U	0.60	5.2
Trichloroethene		5.2	U	0.84	5.2
1,2-Dichloropropane		5.2	U	0.70	5.2
Bromodichloromethane		5.2	U	0.31	5.2
cis-1,3-Dichloropropene		5.2	U	0.58	5.2
trans-1,3-Dichloropropene		5.2	U	0.28	5.2
1,1,2-Trichloroethane		5.2	U	0.38	5.2
Toluene		5.2	U	0.077	5.2
methyl isobutyl ketone		5.2	U	0.57	5.2
Tetrachloroethene		5.2	U	0.84	5.2
Dibromochloromethane		5.2	U	0.36	5.2
2-Hexanone		10	U	1.2	10
Chlorobenzene		5.2	U	0.61	5.2
Ethylbenzene		5.2	U	0.73	5.2
Styrene		5.2	U	0.16	5.2
Bromoform		5.2	U	0.63	5.2
1,1,2,2-Tetrachloroethane		5.2	U	0.54	5.2
Xylenes, Total		5.2	U	0.51	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	105		59 - 123
1,2-Dichloroethane-d4 (Surr)	107		59 - 132
Toluene-d8 (Surr)	102		50 - 118
4-Bromofluorobenzene	95		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-41107		Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L4830.D
Dilution:	1.0	Leachate Batch: 220-41026		Initial Weight/Volume:	5 mL
Date Analyzed:	07/29/2010 1445			Final Weight/Volume:	5 mL
Date Prepared:	07/29/2010 1445				
Date Leached:	07/28/2010 1604				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0050	U	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0050	U	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	78		65 - 136
4-Bromofluorobenzene	71		51 - 142
Dibromofluoromethane	81		68 - 132
Toluene-d8 (Surr)	85		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid
% Moisture: 22.8

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 07/27/2010 1813
Date Prepared: 07/27/2010 1813

Analysis Batch: 220-41001

Instrument ID: MSN
Lab File ID: N8517.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		6.5	U	1.0	6.5
Vinyl chloride		6.5	U	0.30	6.5
Bromomethane		6.5	U	2.7	6.5
Chloroethane		6.5	U	1.3	6.5
1,1-Dichloroethene		6.5	U	0.75	6.5
Carbon disulfide		6.5	U	0.53	6.5
Methylene Chloride		7.0	J B	1.4	26
Acetone		5.7	J B	2.9	26
trans-1,2-Dichloroethene		6.5	U	0.50	6.5
1,1-Dichloroethane		6.5	U	0.39	6.5
cis-1,2-Dichloroethene		6.5	U	0.48	6.5
Chloroform		6.5	U	0.44	6.5
1,1,1-Trichloroethane		6.5	U	0.69	6.5
Carbon tetrachloride		6.5	U	1.2	6.5
Methyl Ethyl Ketone		13	U	2.1	13
Benzene		6.5	U	0.74	6.5
1,2-Dichloroethane		6.5	U	0.75	6.5
Trichloroethene		6.5	U	1.0	6.5
1,2-Dichloropropane		6.5	U	0.87	6.5
Bromodichloromethane		6.5	U	0.39	6.5
cis-1,3-Dichloropropene		6.5	U	0.73	6.5
trans-1,3-Dichloropropene		6.5	U	0.35	6.5
1,1,2-Trichloroethane		6.5	U	0.48	6.5
Toluene		6.5	U	0.096	6.5
methyl isobutyl ketone		6.5	U	0.71	6.5
Tetrachloroethene		6.5	U	1.0	6.5
Dibromochloromethane		6.5	U	0.45	6.5
2-Hexanone		13	U	1.6	13
Chlorobenzene		6.5	U	0.76	6.5
Ethylbenzene		6.5	U	0.91	6.5
Styrene		6.5	U	0.19	6.5
Bromoform		6.5	U	0.79	6.5
1,1,2,2-Tetrachloroethane		6.5	U	0.67	6.5
Xylenes, Total		6.5	U	0.63	6.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane	99		59 - 123
1,2-Dichloroethane-d4 (Surr)	96		59 - 132
Toluene-d8 (Surr)	96		50 - 118
4-Bromofluorobenzene	88		34 - 124

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41140		Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-40996		Lab File ID:	C18525.D
Dilution:	1.0	Leachate Batch: 220-40954		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1822			Final Weight/Volume:	1.00 mL
Date Prepared:	07/28/2010 1438			Injection Volume:	1 uL
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	80		29 - 126
2-Fluorobiphenyl	61		43 - 116
2-Fluorophenol	50		21 - 97
Nitrobenzene-d5	54		38 - 113
Terphenyl-d14	95		10 - 119
Phenol-d5	43		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-41140		Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-40996		Lab File ID:	C18526.D
Dilution:	1.0	Leachate Batch: 220-40954		Initial Weight/Volume:	500 mL
Date Analyzed:	07/30/2010 1852			Final Weight/Volume:	1.00 mL
Date Prepared:	07/28/2010 1438			Injection Volume:	1 uL
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	83		29 - 126
2-Fluorobiphenyl	66		43 - 116
2-Fluorophenol	57		21 - 97
Nitrobenzene-d5	65		38 - 113
Terphenyl-d14	97		10 - 119
Phenol-d5	48		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-40993		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40954		Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1902			Injection Volume:	1 uL
Date Prepared:	07/28/2010 1433			Result Type:	PRIMARY
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U *	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	98		29 - 156
Tetrachloro-m-xylene	97		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-40993		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40954		Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1902			Injection Volume:	1 uL
Date Prepared:	07/28/2010 1433			Result Type:	SECONDARY
Date Leached:	07/26/2010 1900				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	92		29 - 156
Tetrachloro-m-xylene	95		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-40993		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40954		Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1927			Injection Volume:	1 uL
Date Prepared:	07/28/2010 1433			Result Type:	PRIMARY
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane (technical)		0.0025	U	0.00021	0.0025
Endrin		0.00050	U	0.000068	0.00050
Heptachlor		0.00025	U	0.000030	0.00025
Heptachlor epoxide		0.00025	U	0.000028	0.00025
gamma-BHC (Lindane)		0.00025	U	0.000028	0.00025
Methoxychlor		0.0025	U *	0.00041	0.0025
Toxaphene		0.012	U	0.00020	0.012

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	97		29 - 156
Tetrachloro-m-xylene	105		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 220-41139		Instrument ID:	GC8
Preparation:	3510C	Prep Batch: 220-40993		Initial Weight/Volume:	200 mL
Dilution:	1.0	Leachate Batch: 220-40954		Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1927			Injection Volume:	1 uL
Date Prepared:	07/28/2010 1433			Result Type:	SECONDARY
Date Leached:	07/26/2010 1900				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	92		29 - 156
Tetrachloro-m-xylene	103		53 - 144

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-40900		Initial Weight/Volume:	30.03 g
Dilution:	1.0			Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1641			Injection Volume:	1 uL
Date Prepared:	07/26/2010 1315			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		18	U	1.4	18
PCB-1221		18	U	1.4	18
PCB-1232		18	U	1.4	18
PCB-1242		18	U	1.4	18
PCB-1248		18	U	1.4	18
PCB-1254		7.5	J p	1.5	18
PCB-1260		7.7	J	1.5	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	14	*	24 - 150
DCB Decachlorobiphenyl	64		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-40900		Initial Weight/Volume:	30.03 g
Dilution:	1.0			Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1641			Injection Volume:	1 uL
Date Prepared:	07/26/2010 1315			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	11	*	24 - 150
DCB Decachlorobiphenyl	58		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid
% Moisture: 22.8

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-40900		Initial Weight/Volume:	30.02 g
Dilution:	1.0			Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1700			Injection Volume:	1 uL
Date Prepared:	07/26/2010 1315			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		22	U	1.7	22
PCB-1221		22	U	1.7	22
PCB-1232		22	U	1.7	22
PCB-1242		22	U	1.7	22
PCB-1248		22	U	1.7	22
PCB-1254		27	p	1.9	22
PCB-1260		28		1.9	22

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	66		24 - 150
DCB Decachlorobiphenyl	138		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid
% Moisture: 22.8

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-41123		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-40900		Initial Weight/Volume:	30.02 g
Dilution:	1.0			Final Weight/Volume:	10.00 mL
Date Analyzed:	07/30/2010 1700			Injection Volume:	1 uL
Date Prepared:	07/26/2010 1315			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	54		24 - 150
DCB Decachlorobiphenyl	123		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 680-175808		Instrument ID:	SGS
Preparation:	8151A	Prep Batch: 680-175489		Initial Weight/Volume:	10 mL
Dilution:	1.0	Leachate Batch: 680-175458		Final Weight/Volume:	10 mL
Date Analyzed:	07/29/2010 1854			Injection Volume:	1 uL
Date Prepared:	07/28/2010 0922			Result Type:	PRIMARY
Date Leached:	07/26/2010 1911				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.050	U	0.050	0.050
Silvex (2,4,5-TP)		0.050	U	0.050	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	122		50 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 680-175808		Instrument ID:	SGS
Preparation:	8151A	Prep Batch: 680-175489		Initial Weight/Volume:	10 mL
Dilution:	1.0	Leachate Batch: 680-175458		Final Weight/Volume:	10 mL
Date Analyzed:	07/29/2010 1854			Injection Volume:	1 uL
Date Prepared:	07/28/2010 0922			Result Type:	SECONDARY
Date Leached:	07/26/2010 1911				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	91		50 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 680-175808		Instrument ID:	SGS
Preparation:	8151A	Prep Batch: 680-175489		Initial Weight/Volume:	10 mL
Dilution:	1.0	Leachate Batch: 680-175458		Final Weight/Volume:	10 mL
Date Analyzed:	07/29/2010 1910			Injection Volume:	1 uL
Date Prepared:	07/28/2010 0922			Result Type:	PRIMARY
Date Leached:	07/26/2010 1911				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.050	U	0.050	0.050
Silvex (2,4,5-TP)		0.050	U	0.050	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	92	p	50 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 680-175808		Instrument ID:	SGS
Preparation:	8151A	Prep Batch: 680-175489		Initial Weight/Volume:	10 mL
Dilution:	1.0	Leachate Batch: 680-175458		Final Weight/Volume:	10 mL
Date Analyzed:	07/29/2010 1910			Injection Volume:	1 uL
Date Prepared:	07/28/2010 0922			Result Type:	SECONDARY
Date Leached:	07/26/2010 1911				

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	165	*	50 - 150

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/26/2010 1244
Date Prepared: 07/23/2010 1048

Analysis Batch: 220-40889
Prep Batch: 220-40814

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.07 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.81	J	0.063	1.3
Aluminum		5060		2.5	62.8
Arsenic		15.1		1.7	5.3
Barium		123		0.063	1.3
Beryllium		0.42	J	0.063	1.3
Calcium		38600		12.6	126
Cadmium		1.6		0.25	1.3
Cobalt		6.3		0.13	1.3
Chromium		29.4		0.13	1.3
Copper		269		0.48	1.5
Iron		21600		3.8	31.4
Potassium		765		12.6	126
Magnesium		7810		2.3	126
Manganese		249		0.063	1.9
Sodium		623		12.6	126
Nickel		59.5		0.25	1.3
Lead		312		0.78	3.8
Antimony		4.1	U	1.3	4.1
Selenium		9.4	U	3.1	9.4
Thallium		3.8	U	0.88	3.8
Vanadium		97.6		0.25	1.3
Zinc		363		1.3	6.3

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/28/2010 1406
Date Prepared: 07/27/2010 1511
Date Leached: 07/26/2010 1900

Analysis Batch: 220-41018
Prep Batch: 220-40967
Leachate Batch: 220-40954

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.77		0.0012	0.025
Cadmium		0.011	J	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.075	U	0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid

Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41215		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41157		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40954		Initial Weight/Volume:	5 mL
Date Analyzed:	08/03/2010 1322			Final Weight/Volume:	50 mL
Date Prepared:	08/02/2010 1120				
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Date Analyzed:	07/29/2010 1159			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.66		0.0041	0.051

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid
% Moisture: 22.8

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 07/28/2010 1141
Date Prepared: 07/27/2010 0950

Analysis Batch: 220-41018
Prep Batch: 220-40933

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.08 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.46	J	0.078	1.6
Aluminum		4940		3.1	77.8
Arsenic		10.8		2.1	6.5
Barium		72.8		0.078	1.6
Beryllium		0.23	J	0.078	1.6
Calcium		17500		15.6	156
Cadmium		0.75	J	0.31	1.6
Cobalt		5.0		0.16	1.6
Chromium		17.6		0.16	1.6
Copper		143		0.59	1.9
Iron		12500		4.7	38.9
Potassium		545		15.6	156
Magnesium		3230		2.8	156
Manganese		171		0.078	2.3
Sodium		257		15.6	156
Nickel		177		0.31	1.6
Lead		188		0.96	4.7
Antimony		5.1	U	1.6	5.1
Selenium		11.7	U	3.9	11.7
Thallium		4.7	U	1.1	4.7
Vanadium		81.9		0.31	1.6
Zinc		239		1.6	7.8

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 07/28/2010 1410
Date Prepared: 07/27/2010 1511
Date Leached: 07/26/2010 1900

Analysis Batch: 220-41018
Prep Batch: 220-40967
Leachate Batch: 220-40954

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.61		0.0012	0.025
Cadmium		0.0071	J	0.0050	0.025
Chromium		0.030		0.0025	0.025
Lead		0.075	U	0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid

Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-41215		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-41157		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-40954		Initial Weight/Volume:	5 mL
Date Analyzed:	08/03/2010 1323			Final Weight/Volume:	50 mL
Date Prepared:	08/02/2010 1120				
Date Leached:	07/26/2010 1900				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-41053		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-41010		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Date Analyzed:	07/29/2010 1200			Final Weight/Volume:	50 mL
Date Prepared:	07/28/2010 1313				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.7		0.0050	0.063

General Chemistry

Client Sample ID: **WC1-072010**

Lab Sample ID: 220-12804-1
Client Matrix: Solid
% Moisture: 3.9
Date Sampled: 07/20/2010 1536
Date Received: 07/21/2010 1800

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	520	U	ug/Kg	122	520	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1133						DryWt Corrected: Y
Prep Batch: 220-41046	Date Prepared: 07/27/2010 1430						

Analyte	Result	Qual	Units			Dil	Method
Ignitability	NB		mm/sec			1.0	1030
Analysis Batch: 680-175283	Date Analyzed: 07/26/2010 1443						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1259						DryWt Corrected: N
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1800						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200						DryWt Corrected: N
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1800						
pH	7.86	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40763	Date Analyzed: 07/22/2010 1100						DryWt Corrected: N
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425						DryWt Corrected: N
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	3.9		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-40783	Date Analyzed: 07/22/2010 1438						DryWt Corrected: N
Percent Solids	96.1		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-40783	Date Analyzed: 07/22/2010 1438						DryWt Corrected: N

General Chemistry

Client Sample ID: **WC2-072010**

Lab Sample ID: 220-12804-2
Client Matrix: Solid
% Moisture: 22.8
Date Sampled: 07/20/2010 1540
Date Received: 07/21/2010 1800

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	644	J	ug/Kg	151	647	1.0	9012B
Analysis Batch: 220-41058	Date Analyzed: 07/29/2010 1134						DryWt Corrected: Y
Prep Batch: 220-41046	Date Prepared: 07/27/2010 1430						

Analyte	Result	Qual	Units			Dil	Method
Ignitability	NB		mm/sec			1.0	1030
Analysis Batch: 680-175283	Date Analyzed: 07/26/2010 1443						DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-41130	Date Analyzed: 07/31/2010 1303						DryWt Corrected: N
Prep Batch: 220-41125	Date Prepared: 07/29/2010 1845						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-41133	Date Analyzed: 07/31/2010 1200						DryWt Corrected: N
Prep Batch: 220-41131	Date Prepared: 07/29/2010 1845						
pH	8.80	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-40763	Date Analyzed: 07/22/2010 1100						DryWt Corrected: N
BTU	DNF		BTU/lb	2.0	2.0	1.0	D240-87
Analysis Batch: 680-175707	Date Analyzed: 07/29/2010 1425						DryWt Corrected: N
Prep Batch: 680-175706	Date Prepared: 07/29/2010 0700						
Percent Moisture	22.8		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-40783	Date Analyzed: 07/22/2010 1456						DryWt Corrected: N
Percent Solids	77.2		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-40783	Date Analyzed: 07/22/2010 1456						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
Sdg Number:

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	B	The analyte was found in an associated blank, as well as in the sample.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD exceeds the control limits
	*	Surrogate exceeds the control limit
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

SUBCONTRACTED DATA

Certificate of Analysis

SINCE 1985

Quality Controlled Through Analysis

10630 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	WC1-072010	**REPORT DATE:**	August 4, 2010
LABORATORY NO:	60313-01	**PURCHASE ORDER NO:**	Pending

Ultimate Analysis, ASTM D3176

TEST	As Received	Dry
Moisture Content, ASTM D 3302, wt%	2.88	
Ash Content, ASTM D 3174, wt%	73.81	76.0
Sulfur Content, ASTM D 4239, wt%	0.18	0.19

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	Dry
Carbon Content, wt%.....	13.86	14.28
Hydrogen Content, wt%.....	0.22	0.23
Nitrogen Content, wt%.....	0.11	0.12
Oxygen (calc), ASTM D 3176, wt%	8.94	9.18

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

Mitchell D. Martin
Assistant Director of Laboratory Operations

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Certificate of Analysis

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P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	WC2-072010	**REPORT DATE:**	August 4, 2010
LABORATORY NO:	60313-02	**PURCHASE ORDER NO:**	Pending

Ultimate Analysis, ASTM D3176

TEST	As Received	Dry
Moisture Content, ASTM D 3302, wt%	4.47	
Ash Content, ASTM D 3174, wt%	78.25	81.91
Sulfur Content, ASTM D 4239, wt%	0.10	0.10

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

TEST	As Received	Dry
Carbon Content, wt%.....	8.96	9.38
Hydrogen Content, wt%.....	0.11	0.11
Nitrogen Content, wt%.....	0.05	0.05
Oxygen (calc), ASTM D 3176, wt%	8.06	8.45

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

Mitchell D. Martin
Assistant Director of Laboratory Operations

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Cert. No. 5085

Chain of Custody Record

TestAmerica Laboratory location: 128047

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other NYSDEC

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact					
Company Name: GEI Consultants	Client Project Manager: Joe Chiappetta	Site Contact: K. Kucner	Lab Contact: Erin Arasate	COC No: 002516	
Address: 1 Greenwood Ave Suite 210	Telephone: 973-6666-0694	Telephone: 973-303-6602	Telephone:	of COCs	
City/State/Zip: Montclair NJ 07042	Email: JChiappetta@geiconsultants.com	Analysis Turnaround Time (CALENDAR days)	Analyses		
Phone: 973-873-7110		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			
Project Name: Greenpoint S1	Method of Shipment/Carrier:				
Project Number: 093260-1-1103	Shipping/Tracking No:				
PO#					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	VOCs 8260B	Total Metals 6010B	PCBs 8082	ID10	9040/9045	Reactivity 7.3.3.2	Total CN 9010	D3176/4239D	BTU D240-87	FULL TCLP	Sample Specific Notes / Special Instructions:
WC1-072010	7/20/10	15:36				X							2				X	X	X	X	X	X	X	X	X	X	See attached
WC2-072010	7/20/10	15:40				X							2				X	X	X	X	X	X	X	X	X	X	sheet for TCLP

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: Please send data to datamanagement@geiconsultants.com

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	GEI	7/21/10 13:50		TAL/CT	7/21/10 1415
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
					7.21.10 1800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

PASSED RAD SCREEN

PROBE 0.2°C

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08/06/2010

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Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
SDG Number:

Login Number: 12804
List Source: TestAmerica Connecticut
Creator: Teixeira, Maria L
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-12804-1
SDG Number:

Login Number: 12804
List Source: TestAmerica Savannah
Creator: Kicklighter, Marilyn
List Creation: 07/23/10 04:46 PM
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

08/06/2010

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arasate, Erin A	Carrier Tracking No(s):	COC No: 220-5885.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: erin.arasate@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		**Analysis Requested**		Job #: 220-12804-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/2/2010			Preservation Codes:
City: Savannah	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify) Other:
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: National Grid- Greenpoint, Brooklyn	Project #: 22002226			
Site:	SSOW#:			

Sample Identification - Client ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1030/ 1030 - Ignitability	8151A/1311_T 8151A - TCLP Herbicides	D240_87/D240_87_P D240_87 - BTU										Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
WC1-072010	7/20/10	15:36 Eastern		Solid			X	X	X										1	
WC2-072010	7/20/10	15:40 Eastern		Solid			X	X	X										1	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Erin Arasate	Date/Time: 7/22/10	Company: TA	Received by: [signature]	Date/Time: 7/23/10 09:08	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-13272-1

SDG Number:

Job Description: National Grid- Greenpoint, Brooklyn

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Joan Widomski
Data Review Analyst I
10/4/2010 9:44 AM

Designee for
Erin A Arasate
Project Manager I
erin.arasate@testamericainc.com
10/04/2010

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Scott R. Hall
Laboratory Director

October 4, 2010
Date

Job Narrative
220-13272-1

Comments
No additional comments.

Receipt
A revised parameter list was submitted to the laboratory on 09/13/10 from the client via fax. The analyses being requested may not be on the original chain-of-custody (COC).

All samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: GPEC-WC-304 (220-13272-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C: Internal standard (ISTD) response for the following sample was outside control limits: GPEC-WC-304 (220-13272-3). The sample was re-analyzed with concurring results. The original set of data has been reported.

Method(s) 8270C: The laboratory control sample (LCS) for batch 220-42679 was outside control limits for greater that 10% of the target list due to spike failure. An LCSD was extracted the same day with this batch and had improved spike recoveries. Both the LCS and LCSD have been reported.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: The closing calibration verification (CCV) for Heptchlor recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

Metals
Method(s) 7471A: The method spike (MS) sample (220-13272-3 MS) had an analyzed concentration of Hg greater than 4 times the spike amount. The corresponding original and duplicate samples also had Hg concentrations within the same range.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 9045C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: GPEC-WC-304 (220-13272-3), GPEC-WC-30-7 (220-13272-2), GPEC-WC-M20-5 (220-13272-1)

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Subcontract Work
Method(s) ASTM D3176, ASTM D4239: The sample has been subcontracted to Texas Oil Tech Laboratories, Inc the subcontract certifications are different from those listed on the TestAmerica cover page of this final report.

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-13272-1	**GPEC-WC-M20-5**					
Acetone		0.0056	J B	0.022	mg/Kg	8260B
Methylene Chloride		0.0060	J B	0.022	mg/Kg	8260B
Toluene		0.00012	J B	0.0054	mg/Kg	8260B
Acenaphthene		0.24	J	0.29	mg/Kg	8270C
Acenaphthylene		0.14	J	0.29	mg/Kg	8270C
Anthracene		0.54		0.29	mg/Kg	8270C
Benzo[a]anthracene		2.9		0.29	mg/Kg	8270C
Benzo[a]pyrene		3.4		0.29	mg/Kg	8270C
Benzo[b]fluoranthene		3.9		0.29	mg/Kg	8270C
Benzo[g,h,i]perylene		1.5		0.29	mg/Kg	8270C
Benzo[k]fluoranthene		1.2		0.29	mg/Kg	8270C
Bis(2-ethylhexyl) phthalate		0.085	J	0.29	mg/Kg	8270C
Carbazole		0.27	J	0.29	mg/Kg	8270C
Chrysene		3.1		0.29	mg/Kg	8270C
Dibenz(a,h)anthracene		0.72		0.29	mg/Kg	8270C
Dibenzofuran		0.13	J	0.29	mg/Kg	8270C
Fluoranthene		3.5	*	0.29	mg/Kg	8270C
Fluorene		0.19	J *	0.29	mg/Kg	8270C
Indeno[1,2,3-cd]pyrene		1.8		0.29	mg/Kg	8270C
2-Methylnaphthalene		0.14	J	0.29	mg/Kg	8270C
Naphthalene		0.74		0.29	mg/Kg	8270C
Phenanthrene		2.2		0.29	mg/Kg	8270C
Pyrene		3.8		0.29	mg/Kg	8270C
PCB-1254		0.010	J	0.018	mg/Kg	8082
PCB-1260		0.0087	J	0.018	mg/Kg	8082
Silver		0.31	J	1.3	mg/Kg	6010B
Aluminum		5880		66.8	mg/Kg	6010B
Arsenic		9.2		5.6	mg/Kg	6010B
Barium		210		1.3	mg/Kg	6010B
Beryllium		0.39	J	1.3	mg/Kg	6010B
Calcium		12400		134	mg/Kg	6010B
Cadmium		0.78	J	1.3	mg/Kg	6010B
Cobalt		5.5		1.3	mg/Kg	6010B
Chromium		20.5		1.3	mg/Kg	6010B
Copper		193		1.6	mg/Kg	6010B
Iron		16500		33.4	mg/Kg	6010B
Potassium		774		134	mg/Kg	6010B
Magnesium		3000		134	mg/Kg	6010B
Manganese		331		2.0	mg/Kg	6010B
Sodium		289		134	mg/Kg	6010B
Nickel		20.0		1.3	mg/Kg	6010B
Lead		344		4.0	mg/Kg	6010B
Antimony		3.3	J	4.4	mg/Kg	6010B
Vanadium		21.7		1.3	mg/Kg	6010B
Zinc		441		6.7	mg/Kg	6010B
Mercury		1.8		0.052	mg/Kg	7471A
Cyanide, Total		0.62		0.54	mg/Kg	9012B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
pH		7.37	HF	0.100	SU	9045C
BTU		DNF		2.00	BTU/lb	D240-87
Percent Moisture		7.8		0.10	%	Moisture
Percent Solids		92.2		0.10	%	Moisture
TCLP						
Chloroform		0.0018	J B	0.0050	mg/L	8260B
Benzene		0.0027	J	0.0050	mg/L	8260B
Barium		0.55		0.025	mg/L	6010B
Cadmium		0.020	J	0.025	mg/L	6010B
Lead		0.53		0.075	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-13272-2	**GPEC-WC-30-7**					
Acetone		0.0054	J B	0.022	mg/Kg	8260B
Methylene Chloride		0.0060	J B	0.022	mg/Kg	8260B
Acenaphthene		0.65		0.30	mg/Kg	8270C
Acenaphthylene		0.14	J	0.30	mg/Kg	8270C
Anthracene		1.0		0.30	mg/Kg	8270C
Benzo[a]anthracene		3.0		0.30	mg/Kg	8270C
Benzo[a]pyrene		3.3		0.30	mg/Kg	8270C
Benzo[b]fluoranthene		3.5		0.30	mg/Kg	8270C
Benzo[g,h,i]perylene		1.5		0.30	mg/Kg	8270C
Benzo[k]fluoranthene		1.4		0.30	mg/Kg	8270C
Bis(2-ethylhexyl) phthalate		0.092	J	0.30	mg/Kg	8270C
Carbazole		0.42		0.30	mg/Kg	8270C
Chrysene		3.1		0.30	mg/Kg	8270C
Dibenz(a,h)anthracene		0.71		0.30	mg/Kg	8270C
Dibenzofuran		0.22	J	0.30	mg/Kg	8270C
Fluoranthene		4.4	*	0.30	mg/Kg	8270C
Fluorene		0.40	*	0.30	mg/Kg	8270C
Indeno[1,2,3-cd]pyrene		1.7		0.30	mg/Kg	8270C
2-Methylnaphthalene		0.12	J	0.30	mg/Kg	8270C
Naphthalene		0.48		0.30	mg/Kg	8270C
Phenanthrene		3.7		0.30	mg/Kg	8270C
Pyrene		4.4		0.30	mg/Kg	8270C
PCB-1254		0.0095	J	0.018	mg/Kg	8082
PCB-1260		0.0082	J	0.018	mg/Kg	8082
Silver		0.49	J	1.4	mg/Kg	6010B
Aluminum		5260		68.6	mg/Kg	6010B
Arsenic		9.4		5.8	mg/Kg	6010B
Barium		230		1.4	mg/Kg	6010B
Beryllium		0.34	J	1.4	mg/Kg	6010B
Calcium		10100		137	mg/Kg	6010B
Cadmium		0.52	J	1.4	mg/Kg	6010B
Cobalt		4.3		1.4	mg/Kg	6010B
Chromium		19.0		1.4	mg/Kg	6010B
Copper		218		1.6	mg/Kg	6010B
Iron		13200		34.3	mg/Kg	6010B
Potassium		648		137	mg/Kg	6010B
Magnesium		1980		137	mg/Kg	6010B
Manganese		238		2.1	mg/Kg	6010B
Sodium		221		137	mg/Kg	6010B
Nickel		20.2		1.4	mg/Kg	6010B
Lead		285		4.1	mg/Kg	6010B
Antimony		4.6		4.5	mg/Kg	6010B
Selenium		3.7	J	10.3	mg/Kg	6010B
Vanadium		18.1		1.4	mg/Kg	6010B
Zinc		390		6.9	mg/Kg	6010B
Mercury		2.1		0.055	mg/Kg	7471A
Cyanide, Total		0.77		0.55	mg/Kg	9012B
pH		7.54	HF	0.100	SU	9045C

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
BTU		DNF		2.00	BTU/lb	D240-87
Percent Moisture		8.9		0.10	%	Moisture
Percent Solids		91.1		0.10	%	Moisture
TCLP						
Chloroform		0.0017	J B	0.0050	mg/L	8260B
Benzene		0.00094	J	0.0050	mg/L	8260B
Trichloroethene		0.0031	J	0.0050	mg/L	8260B
Barium		0.56		0.025	mg/L	6010B
Cadmium		0.019	J	0.025	mg/L	6010B
Lead		0.60		0.075	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-13272-3	**GPEC-WC-304**					
Acetone		0.017	J B	0.11	mg/Kg	8260B
Benzene		0.011	J	0.029	mg/Kg	8260B
Ethylbenzene		0.023	J	0.029	mg/Kg	8260B
Methylene Chloride		0.023	J B	0.11	mg/Kg	8260B
Xylenes, Total		0.041		0.029	mg/Kg	8260B
Acenaphthene		1.4		1.2	mg/Kg	8270C
Acenaphthylene		0.25	J	1.2	mg/Kg	8270C
Anthracene		0.72	J	1.2	mg/Kg	8270C
Benzo[a]anthracene		2.3		1.2	mg/Kg	8270C
Benzo[a]pyrene		2.6		1.2	mg/Kg	8270C
Benzo[b]fluoranthene		3.3		1.2	mg/Kg	8270C
Benzo[g,h,i]perylene		2.2		1.2	mg/Kg	8270C
Benzo[k]fluoranthene		1.3		1.2	mg/Kg	8270C
Bis(2-ethylhexyl) phthalate		1.5		1.2	mg/Kg	8270C
Carbazole		0.27	J	1.2	mg/Kg	8270C
Chrysene		2.5		1.2	mg/Kg	8270C
Dibenz(a,h)anthracene		1.4		1.2	mg/Kg	8270C
Dibenzofuran		0.38	J	1.2	mg/Kg	8270C
Fluoranthene		4.3	*	1.2	mg/Kg	8270C
Fluorene		0.60	J *	1.2	mg/Kg	8270C
Indeno[1,2,3-cd]pyrene		1.9		1.2	mg/Kg	8270C
2-Methylnaphthalene		4.7		1.2	mg/Kg	8270C
Naphthalene		20		1.2	mg/Kg	8270C
Phenanthrene		3.1		1.2	mg/Kg	8270C
Pyrene		5.0		1.2	mg/Kg	8270C
PCB-1254		0.0092	J	0.019	mg/Kg	8082
PCB-1260		0.0055	J p	0.019	mg/Kg	8082
Silver		0.36	J	1.4	mg/Kg	6010B
Aluminum		5970		71.4	mg/Kg	6010B
Arsenic		8.1		6.0	mg/Kg	6010B
Barium		207		1.4	mg/Kg	6010B
Beryllium		0.37	J	1.4	mg/Kg	6010B
Calcium		11800		143	mg/Kg	6010B
Cadmium		0.57	J	1.4	mg/Kg	6010B
Cobalt		4.5		1.4	mg/Kg	6010B
Chromium		18.7		1.4	mg/Kg	6010B
Copper		220		1.7	mg/Kg	6010B
Iron		14900		35.7	mg/Kg	6010B
Potassium		757		143	mg/Kg	6010B
Magnesium		2160		143	mg/Kg	6010B
Manganese		374		2.1	mg/Kg	6010B
Sodium		320		143	mg/Kg	6010B
Nickel		18.4		1.4	mg/Kg	6010B
Lead		258		4.3	mg/Kg	6010B
Antimony		3.6	J	4.7	mg/Kg	6010B
Vanadium		20.2		1.4	mg/Kg	6010B
Zinc		376		7.1	mg/Kg	6010B
Mercury		2.3		0.056	mg/Kg	7471A

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
Cyanide, Total		0.79		0.57	mg/Kg	9012B
pH		7.53	HF	0.100	SU	9045C
BTU		DNF		2.00	BTU/lb	D240-87
Percent Moisture		12.4		0.10	%	Moisture
Percent Solids		87.6		0.10	%	Moisture
TCLP						
Chloroform		0.0016	J B	0.0050	mg/L	8260B
Benzene		0.0038	J	0.0050	mg/L	8260B
Barium		0.59		0.025	mg/L	6010B
Cadmium		0.020	J	0.025	mg/L	6010B
Lead		0.81		0.075	mg/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-13272-1

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
TCLP Extraction	TAL CT		SW846 1311
Purge and Trap	TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
TCLP Extraction	TAL CT		SW846 1311
Automated Soxhlet Extraction	TAL CT		SW846 3541
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081A	
TCLP Extraction	TAL EDI		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL EDI		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL CT	SW846 8082	
Ultrasonic Extraction	TAL CT		SW846 3550B
Herbicides (GC)	TAL EDI	SW846 8151A	
TCLP Extraction	TAL EDI		SW846 1311
Extraction (Herbicides)	TAL EDI		SW846 8151A
Metals (ICP)	TAL CT	SW846 6010B	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Metals	TAL CT		SW846 3050B
Preparation, Total Metals	TAL CT		SW846 3010A
Mercury (CVAA)	TAL CT	SW846 7470A	
TCLP Extraction	TAL CT		SW846 1311
Preparation, Mercury	TAL CT		SW846 7470A
Mercury (CVAA)	TAL CT	SW846 7471A	
Preparation, Mercury	TAL CT		SW846 7471A
Ignitability, Solids	TAL EDI	SW846 1030	
Cyanide, Reactive	TAL CT	SW846 9012	
Cyanide, Reactive	TAL CT		SW846 7.3.3
Cyanide, Total andor Amenable	TAL CT	SW846 9012B	
Cyanide, Total and/or Amenable, Distillation	TAL CT		SW846 9012B
Sulfide, Reactive	TAL CT	SW846 9034	
Sulfide, Reactive	TAL CT		SW846 7.3.4
pH	TAL CT	SW846 9045C	
Heat of Combustion	TAL SAV	ASTM D240-87	
Preparation, Heat of Combustion	TAL SAV		ASTM D240-87
Percent Moisture	TAL CT	EPA Moisture	
Geotechnical Analysis	SC0132	TCEQ Various	

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 220-13272-1

Description	Lab Location	Method	Preparation Method

Lab References:

SC0132 = Texas Oil Tech Laboratories, Inc

TAL CT = TestAmerica Connecticut

TAL EDI = TestAmerica Edison

TAL SAV = TestAmerica Savannah

Method References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TCEQ = Texas Commission of Environmental Quality

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8260B	Lynch, Eon	EL
SW846 8270C	Jonas, Stephan	SJ
SW846 8081A	Patel, Hemex	HP
SW846 8082	Puccino, Tracy	TP
SW846 8151A	Manlangit, Ferdie	FM
SW846 6010B	Petronchak, Nestor	NP
SW846 7470A	Voytek, Joseph F	JFV
SW846 7471A	Voytek, Joseph F	JFV
SW846 1030	Cabanganan, Maria	MB
SW846 9012	Natoli, Richard A	RN
SW846 9012B	Natoli, Richard A	RN
SW846 9034	Nemeth, Doreen	DN
SW846 9045C	Keene, Angela H	AHK
ASTM D240-87	Nelson, Christopher	CN
EPA Moisture	Voytek, Joseph F	JFV

SAMPLE SUMMARY

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-13272-1	GPEC-WC-M20-5	Solid	09/08/2010 1050	09/08/2010 1930
220-13272-2	GPEC-WC-30-7	Solid	09/08/2010 1115	09/08/2010 1930
220-13272-3	GPEC-WC-304	Solid	09/08/2010 1145	09/08/2010 1930

SAMPLE RESULTS

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/20/2010 1600
Date Prepared: 09/20/2010 1600

Analysis Batch: 220-42818

Instrument ID: MSN
Lab File ID: N9012.D
Initial Weight/Volume: 5.00 g
Final Weight/Volume: 5.00 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acetone		0.0056	J B	0.0024	0.022
Benzene		0.0054	U	0.00062	0.0054
Bromodichloromethane		0.0054	U	0.00033	0.0054
Bromoform		0.0054	U	0.00066	0.0054
Bromomethane		0.0054	U	0.0023	0.0054
Methyl Ethyl Ketone		0.011	U *	0.0017	0.011
Carbon disulfide		0.0054	U	0.00044	0.0054
Carbon tetrachloride		0.0054	U	0.0010	0.0054
Chlorobenzene		0.0054	U	0.00064	0.0054
Chloroethane		0.0054	U	0.0011	0.0054
Chloroform		0.0054	U	0.00037	0.0054
Chloromethane		0.0054	U	0.00085	0.0054
Dibromochloromethane		0.0054	U	0.00038	0.0054
1,1-Dichloroethane		0.0054	U	0.00033	0.0054
1,2-Dichloroethane		0.0054	U	0.00063	0.0054
1,1-Dichloroethene		0.0054	U	0.00063	0.0054
1,2-Dichloropropane		0.0054	U	0.00073	0.0054
cis-1,3-Dichloropropene		0.0054	U	0.00061	0.0054
trans-1,3-Dichloropropene		0.0054	U	0.00029	0.0054
Ethylbenzene		0.0054	U	0.00076	0.0054
2-Hexanone		0.011	U	0.0013	0.011
Methylene Chloride		0.0060	J B	0.0012	0.022
methyl isobutyl ketone		0.0054	U	0.00060	0.0054
Styrene		0.0054	U	0.00016	0.0054
1,1,2,2-Tetrachloroethane		0.0054	U	0.00056	0.0054
Tetrachloroethene		0.0054	U	0.00088	0.0054
Toluene		0.00012	J B	0.000080	0.0054
1,1,1-Trichloroethane		0.0054	U	0.00057	0.0054
1,1,2-Trichloroethane		0.0054	U	0.00040	0.0054
Trichloroethene		0.0054	U	0.00088	0.0054
Vinyl chloride		0.0054	U	0.00025	0.0054
Xylenes, Total		0.0054	U	0.00053	0.0054
cis-1,2-Dichloroethene		0.0054	U	0.00040	0.0054
trans-1,2-Dichloroethene		0.0054	U	0.00042	0.0054

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	81		59 - 132
4-Bromofluorobenzene	89		34 - 124
Dibromofluoromethane	81		59 - 123
Toluene-d8 (Surr)	92		50 - 118

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-42719		Instrument ID:	MSW
Preparation:	5030B			Lab File ID:	W5313.D
Dilution:	1.0	Leachate Batch: 220-42658		Initial Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1852			Final Weight/Volume:	5 mL
Date Prepared:	09/16/2010 1852				
Date Leached:	09/15/2010 1551				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0018	J B	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0027	J	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		65 - 136
4-Bromofluorobenzene	102		51 - 142
Dibromofluoromethane	104		68 - 132
Toluene-d8 (Surr)	102		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-42818	Instrument ID: MSN
Preparation:	5030B		Lab File ID: N9013.D
Dilution:	1.0		Initial Weight/Volume: 5.00 g
Date Analyzed:	09/20/2010 1626		Final Weight/Volume: 5.00 mL
Date Prepared:	09/20/2010 1626		

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acetone		0.0054	J B	0.0025	0.022
Benzene		0.0055	U	0.00063	0.0055
Bromodichloromethane		0.0055	U	0.00033	0.0055
Bromoform		0.0055	U	0.00067	0.0055
Bromomethane		0.0055	U	0.0023	0.0055
Methyl Ethyl Ketone		0.011	U *	0.0017	0.011
Carbon disulfide		0.0055	U	0.00045	0.0055
Carbon tetrachloride		0.0055	U	0.0010	0.0055
Chlorobenzene		0.0055	U	0.00065	0.0055
Chloroethane		0.0055	U	0.0011	0.0055
Chloroform		0.0055	U	0.00037	0.0055
Chloromethane		0.0055	U	0.00086	0.0055
Dibromochloromethane		0.0055	U	0.00038	0.0055
1,1-Dichloroethane		0.0055	U	0.00033	0.0055
1,2-Dichloroethane		0.0055	U	0.00064	0.0055
1,1-Dichloroethene		0.0055	U	0.00064	0.0055
1,2-Dichloropropane		0.0055	U	0.00074	0.0055
cis-1,3-Dichloropropene		0.0055	U	0.00061	0.0055
trans-1,3-Dichloropropene		0.0055	U	0.00030	0.0055
Ethylbenzene		0.0055	U	0.00077	0.0055
2-Hexanone		0.011	U	0.0013	0.011
Methylene Chloride		0.0060	J B	0.0012	0.022
methyl isobutyl ketone		0.0055	U	0.00060	0.0055
Styrene		0.0055	U	0.00016	0.0055
1,1,2,2-Tetrachloroethane		0.0055	U	0.00057	0.0055
Tetrachloroethene		0.0055	U	0.00089	0.0055
Toluene		0.0055	U	0.000081	0.0055
1,1,1-Trichloroethane		0.0055	U	0.00058	0.0055
1,1,2-Trichloroethane		0.0055	U	0.00041	0.0055
Trichloroethene		0.0055	U	0.00089	0.0055
Vinyl chloride		0.0055	U	0.00025	0.0055
Xylenes, Total		0.0055	U	0.00053	0.0055
cis-1,2-Dichloroethene		0.0055	U	0.00041	0.0055
trans-1,2-Dichloroethene		0.0055	U	0.00043	0.0055

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	78		59 - 132
4-Bromofluorobenzene	85		34 - 124
Dibromofluoromethane	76		59 - 123
Toluene-d8 (Surr)	86		50 - 118

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-42719		Instrument ID:	MSW
Preparation:	5030B			Lab File ID:	W5314.D
Dilution:	1.0	Leachate Batch: 220-42658		Initial Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1916			Final Weight/Volume:	5 mL
Date Prepared:	09/16/2010 1916				
Date Leached:	09/15/2010 1553				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0017	J B	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.00094	J	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0031	J	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		65 - 136
4-Bromofluorobenzene	97		51 - 142
Dibromofluoromethane	105		68 - 132
Toluene-d8 (Surr)	103		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 5.0
Date Analyzed: 09/20/2010 2133
Date Prepared: 09/20/2010 2133

Analysis Batch: 220-42818

Instrument ID: MSN
Lab File ID: N9025.D
Initial Weight/Volume: 5.00 g
Final Weight/Volume: 5.00 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acetone		0.017	J B	0.013	0.11
Benzene		0.011	J	0.0033	0.029
Bromodichloromethane		0.029	U	0.0017	0.029
Bromoform		0.029	U	0.0035	0.029
Bromomethane		0.029	U	0.012	0.029
Methyl Ethyl Ketone		0.057	U *	0.0091	0.057
Carbon disulfide		0.029	U	0.0023	0.029
Carbon tetrachloride		0.029	U	0.0054	0.029
Chlorobenzene		0.029	U	0.0034	0.029
Chloroethane		0.029	U	0.0056	0.029
Chloroform		0.029	U	0.0019	0.029
Chloromethane		0.029	U	0.0045	0.029
Dibromochloromethane		0.029	U	0.0020	0.029
1,1-Dichloroethane		0.029	U	0.0017	0.029
1,2-Dichloroethane		0.029	U	0.0033	0.029
1,1-Dichloroethene		0.029	U	0.0033	0.029
1,2-Dichloropropane		0.029	U	0.0038	0.029
cis-1,3-Dichloropropene		0.029	U	0.0032	0.029
trans-1,3-Dichloropropene		0.029	U	0.0015	0.029
Ethylbenzene		0.023	J	0.0040	0.029
2-Hexanone		0.057	U	0.0069	0.057
Methylene Chloride		0.023	J B	0.0062	0.11
methyl isobutyl ketone		0.029	U	0.0031	0.029
Styrene		0.029	U	0.00086	0.029
1,1,2,2-Tetrachloroethane		0.029	U	0.0030	0.029
Tetrachloroethene		0.029	U	0.0046	0.029
Toluene		0.029	U	0.00042	0.029
1,1,1-Trichloroethane		0.029	U	0.0030	0.029
1,1,2-Trichloroethane		0.029	U	0.0021	0.029
Trichloroethene		0.029	U	0.0046	0.029
Vinyl chloride		0.029	U	0.0013	0.029
Xylenes, Total		0.041		0.0028	0.029
cis-1,2-Dichloroethene		0.029	U	0.0021	0.029
trans-1,2-Dichloroethene		0.029	U	0.0022	0.029

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		59 - 132
4-Bromofluorobenzene	97		34 - 124
Dibromofluoromethane	85		59 - 123
Toluene-d8 (Surr)	97		50 - 118

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 220-42719		Instrument ID:	MSW
Preparation:	5030B			Lab File ID:	W5315.D
Dilution:	1.0	Leachate Batch: 220-42658		Initial Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1941			Final Weight/Volume:	5 mL
Date Prepared:	09/16/2010 1941				
Date Leached:	09/15/2010 1549				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Vinyl chloride		0.0050	U	0.00098	0.0050
1,1-Dichloroethene		0.0050	U	0.00083	0.0050
Methyl Ethyl Ketone		0.010	U	0.0011	0.010
Chloroform		0.0016	J B	0.00067	0.0050
Carbon tetrachloride		0.0050	U	0.0011	0.0050
Benzene		0.0038	J	0.00074	0.0050
1,2-Dichloroethane		0.0050	U	0.00072	0.0050
Trichloroethene		0.0050	U	0.00062	0.0050
Tetrachloroethene		0.0050	U	0.00081	0.0050
Chlorobenzene		0.0050	U	0.00072	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		65 - 136
4-Bromofluorobenzene	97		51 - 142
Dibromofluoromethane	103		68 - 132
Toluene-d8 (Surr)	105		63 - 127

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42890		Instrument ID:	MSC
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	C19577.D
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Date Analyzed:	09/22/2010 1140			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acenaphthene		0.24	J	0.017	0.29
Acenaphthylene		0.14	J	0.014	0.29
Anthracene		0.54		0.011	0.29
Benzo[a]anthracene		2.9		0.010	0.29
Benzo[a]pyrene		3.4		0.0079	0.29
Benzo[b]fluoranthene		3.9		0.0078	0.29
Benzo[g,h,i]perylene		1.5		0.019	0.29
Benzo[k]fluoranthene		1.2		0.026	0.29
Bis(2-chloroethoxy)methane		0.29	U	0.014	0.29
Bis(2-chloroethyl)ether		0.29	U	0.015	0.29
Bis(2-ethylhexyl) phthalate		0.085	J	0.028	0.29
Butyl benzyl phthalate		0.29	U	0.016	0.29
Carbazole		0.27	J	0.016	0.29
Chrysene		3.1		0.022	0.29
Di-n-butyl phthalate		0.29	U	0.043	0.29
Di-n-octyl phthalate		0.29	U	0.017	0.29
4-Bromophenyl phenyl ether		0.29	U	0.019	0.29
4-Chloroaniline		0.29	U	0.048	0.29
2-Chloronaphthalene		0.29	U	0.012	0.29
4-Chlorophenyl phenyl ether		0.29	U	0.022	0.29
Dibenz(a,h)anthracene		0.72		0.023	0.29
Dibenzofuran		0.13	J	0.021	0.29
Diethyl phthalate		0.29	U	0.029	0.29
Dimethyl phthalate		0.29	U	0.017	0.29
1,2-Dichlorobenzene		0.29	U	0.017	0.29
1,3-Dichlorobenzene		0.29	U	0.015	0.29
1,4-Dichlorobenzene		0.29	U	0.017	0.29
3,3'-Dichlorobenzidine		0.36	U	0.060	0.36
2,4-Dinitrotoluene		0.29	U *	0.023	0.29
2,6-Dinitrotoluene		0.29	U	0.0086	0.29
Fluoranthene		3.5	*	0.015	0.29
Fluorene		0.19	J *	0.018	0.29
Hexachlorobenzene		0.29	U	0.020	0.29
Hexachlorobutadiene		0.29	U	0.023	0.29
Hexachlorocyclopentadiene		0.73	U *	0.14	0.73
Hexachloroethane		0.29	U	0.017	0.29
Indeno[1,2,3-cd]pyrene		1.8		0.019	0.29
Isophorone		0.29	U	0.016	0.29
2-Methylnaphthalene		0.14	J	0.0083	0.29
Naphthalene		0.74		0.015	0.29
2-Nitroaniline		0.73	U	0.018	0.73
3-Nitroaniline		0.73	U	0.0093	0.73
Nitrobenzene		0.29	U	0.019	0.29
N-Nitrosodi-n-propylamine		0.29	U	0.020	0.29
N-Nitrosodiphenylamine		0.29	U	0.016	0.29
Phenanthrene		2.2		0.014	0.29

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42890		Instrument ID:	MSC
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	C19577.D
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Date Analyzed:	09/22/2010 1140			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Pyrene		3.8		0.014	0.29
1,2,4-Trichlorobenzene		0.29	U	0.019	0.29
4-Chloro-3-methylphenol		0.29	U	0.012	0.29
2-Chlorophenol		0.29	U	0.017	0.29
2-Methylphenol		0.29	U	0.018	0.29
4-Methylphenol		0.29	U	0.019	0.29
2,4-Dichlorophenol		0.29	U	0.016	0.29
2,4-Dimethylphenol		0.29	U	0.014	0.29
2,4-Dinitrophenol		1.8	U *	0.088	1.8
4,6-Dinitro-2-methylphenol		1.8	U *	0.13	1.8
2-Nitrophenol		0.29	U	0.018	0.29
4-Nitrophenol		1.8	U *	0.022	1.8
Pentachlorophenol		0.73	U	0.18	0.73
Phenol		0.29	U	0.019	0.29
2,4,5-Trichlorophenol		1.8	U	0.015	1.8
2,4,6-Trichlorophenol		0.29	U	0.0080	0.29
Benzyl alcohol		0.29	U	0.028	0.29
4-Nitroaniline		0.29	U *	0.022	0.29
2,2'-oxybis[1-chloropropane]		0.29	U	0.015	0.29

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		41 - 120
2-Fluorophenol	70		34 - 120
2,4,6-Tribromophenol	56		37 - 120
Nitrobenzene-d5	71		38 - 120
Phenol-d5	68		36 - 120
Terphenyl-d14	73		32 - 125

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-42777		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-42627		Lab File ID:	A13325.D
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	500 mL
Date Analyzed:	09/17/2010 1447			Final Weight/Volume:	1 mL
Date Prepared:	09/15/2010 0736			Injection Volume:	1 uL
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		29 - 126
2-Fluorobiphenyl	57		43 - 116
2-Fluorophenol	57		21 - 97
Nitrobenzene-d5	57		38 - 113
Terphenyl-d14	70		10 - 119
Phenol-d5	47		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42890		Instrument ID:	MSC
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	C19578.D
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Date Analyzed:	09/22/2010 1209			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acenaphthene		0.65		0.018	0.30
Acenaphthylene		0.14	J	0.014	0.30
Anthracene		1.0		0.011	0.30
Benzo[a]anthracene		3.0		0.011	0.30
Benzo[a]pyrene		3.3		0.0080	0.30
Benzo[b]fluoranthene		3.5		0.0079	0.30
Benzo[g,h,i]perylene		1.5		0.019	0.30
Benzo[k]fluoranthene		1.4		0.026	0.30
Bis(2-chloroethoxy)methane		0.30	U	0.014	0.30
Bis(2-chloroethyl)ether		0.30	U	0.015	0.30
Bis(2-ethylhexyl) phthalate		0.092	J	0.029	0.30
Butyl benzyl phthalate		0.30	U	0.017	0.30
Carbazole		0.42		0.016	0.30
Chrysene		3.1		0.022	0.30
Di-n-butyl phthalate		0.30	U	0.043	0.30
Di-n-octyl phthalate		0.30	U	0.017	0.30
4-Bromophenyl phenyl ether		0.30	U	0.019	0.30
4-Chloroaniline		0.30	U	0.048	0.30
2-Chloronaphthalene		0.30	U	0.013	0.30
4-Chlorophenyl phenyl ether		0.30	U	0.022	0.30
Dibenz(a,h)anthracene		0.71		0.023	0.30
Dibenzofuran		0.22	J	0.021	0.30
Diethyl phthalate		0.30	U	0.030	0.30
Dimethyl phthalate		0.30	U	0.017	0.30
1,2-Dichlorobenzene		0.30	U	0.018	0.30
1,3-Dichlorobenzene		0.30	U	0.015	0.30
1,4-Dichlorobenzene		0.30	U	0.018	0.30
3,3'-Dichlorobenzidine		0.36	U	0.061	0.36
2,4-Dinitrotoluene		0.30	U *	0.024	0.30
2,6-Dinitrotoluene		0.30	U	0.0086	0.30
Fluoranthene		4.4	*	0.015	0.30
Fluorene		0.40	*	0.018	0.30
Hexachlorobenzene		0.30	U	0.020	0.30
Hexachlorobutadiene		0.30	U	0.023	0.30
Hexachlorocyclopentadiene		0.73	U *	0.14	0.73
Hexachloroethane		0.30	U	0.017	0.30
Indeno[1,2,3-cd]pyrene		1.7		0.019	0.30
Isophorone		0.30	U	0.016	0.30
2-Methylnaphthalene		0.12	J	0.0084	0.30
Naphthalene		0.48		0.015	0.30
2-Nitroaniline		0.73	U	0.018	0.73
3-Nitroaniline		0.73	U	0.0094	0.73
Nitrobenzene		0.30	U	0.019	0.30
N-Nitrosodi-n-propylamine		0.30	U	0.020	0.30
N-Nitrosodiphenylamine		0.30	U	0.017	0.30
Phenanthrene		3.7		0.015	0.30

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42890		Instrument ID:	MSC
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	C19578.D
Dilution:	1.0			Initial Weight/Volume:	15.04 g
Date Analyzed:	09/22/2010 1209			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Pyrene		4.4		0.014	0.30
1,2,4-Trichlorobenzene		0.30	U	0.019	0.30
4-Chloro-3-methylphenol		0.30	U	0.012	0.30
2-Chlorophenol		0.30	U	0.017	0.30
2-Methylphenol		0.30	U	0.018	0.30
4-Methylphenol		0.30	U	0.019	0.30
2,4-Dichlorophenol		0.30	U	0.016	0.30
2,4-Dimethylphenol		0.30	U	0.014	0.30
2,4-Dinitrophenol		1.9	U *	0.089	1.9
4,6-Dinitro-2-methylphenol		1.9	U *	0.13	1.9
2-Nitrophenol		0.30	U	0.019	0.30
4-Nitrophenol		1.9	U *	0.022	1.9
Pentachlorophenol		0.73	U	0.18	0.73
Phenol		0.30	U	0.020	0.30
2,4,5-Trichlorophenol		1.9	U	0.015	1.9
2,4,6-Trichlorophenol		0.30	U	0.0081	0.30
Benzyl alcohol		0.30	U	0.028	0.30
4-Nitroaniline		0.30	U *	0.023	0.30
2,2'-oxybis[1-chloropropane]		0.30	U	0.015	0.30

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	86		41 - 120
2-Fluorophenol	77		34 - 120
2,4,6-Tribromophenol	65		37 - 120
Nitrobenzene-d5	77		38 - 120
Phenol-d5	75		36 - 120
Terphenyl-d14	76		32 - 125

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-42777		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-42627		Lab File ID:	A13326.D
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	500 mL
Date Analyzed:	09/17/2010 1515			Final Weight/Volume:	1 mL
Date Prepared:	09/15/2010 0736			Injection Volume:	1 uL
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	36		29 - 126
2-Fluorobiphenyl	37	*	43 - 116
2-Fluorophenol	31		21 - 97
Nitrobenzene-d5	38		38 - 113
Terphenyl-d14	42		10 - 119
Phenol-d5	26		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42898		Instrument ID:	MSZ
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	Z17127.D
Dilution:	4.0			Initial Weight/Volume:	15.05 g
Date Analyzed:	09/22/2010 1205			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Acenaphthene		1.4		0.073	1.2
Acenaphthylene		0.25	J	0.060	1.2
Anthracene		0.72	J	0.048	1.2
Benzo[a]anthracene		2.3		0.044	1.2
Benzo[a]pyrene		2.6		0.033	1.2
Benzo[b]fluoranthene		3.3		0.033	1.2
Benzo[g,h,i]perylene		2.2		0.080	1.2
Benzo[k]fluoranthene		1.3		0.11	1.2
Bis(2-chloroethoxy)methane		1.2	U	0.057	1.2
Bis(2-chloroethyl)ether		1.2	U	0.064	1.2
Bis(2-ethylhexyl) phthalate		1.5		0.12	1.2
Butyl benzyl phthalate		1.2	U	0.069	1.2
Carbazole		0.27	J	0.068	1.2
Chrysene		2.5		0.091	1.2
Di-n-butyl phthalate		1.2	U	0.18	1.2
Di-n-octyl phthalate		1.2	U	0.070	1.2
4-Bromophenyl phenyl ether		1.2	U	0.079	1.2
4-Chloroaniline		1.2	U	0.20	1.2
2-Chloronaphthalene		1.2	U	0.052	1.2
4-Chlorophenyl phenyl ether		1.2	U	0.091	1.2
Dibenz(a,h)anthracene		1.4		0.097	1.2
Dibenzofuran		0.38	J	0.087	1.2
Diethyl phthalate		1.2	U	0.12	1.2
Dimethyl phthalate		1.2	U	0.071	1.2
1,2-Dichlorobenzene		1.2	U	0.073	1.2
1,3-Dichlorobenzene		1.2	U	0.061	1.2
1,4-Dichlorobenzene		1.2	U	0.073	1.2
3,3'-Dichlorobenzidine		1.5	U	0.25	1.5
2,4-Dinitrotoluene		1.2	U *	0.098	1.2
2,6-Dinitrotoluene		1.2	U	0.036	1.2
Fluoranthene		4.3	*	0.061	1.2
Fluorene		0.60	J *	0.074	1.2
Hexachlorobenzene		1.2	U	0.085	1.2
Hexachlorobutadiene		1.2	U	0.095	1.2
Hexachlorocyclopentadiene		3.1	U *	0.58	3.1
Hexachloroethane		1.2	U	0.070	1.2
Indeno[1,2,3-cd]pyrene		1.9		0.080	1.2
Isophorone		1.2	U	0.068	1.2
2-Methylnaphthalene		4.7		0.035	1.2
Naphthalene		20		0.064	1.2
2-Nitroaniline		3.1	U	0.075	3.1
3-Nitroaniline		3.1	U	0.039	3.1
Nitrobenzene		1.2	U	0.078	1.2
N-Nitrosodi-n-propylamine		1.2	U	0.083	1.2
N-Nitrosodiphenylamine		1.2	U	0.069	1.2
Phenanthrene		3.1		0.061	1.2

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-42898		Instrument ID:	MSZ
Preparation:	3541	Prep Batch: 220-42679		Lab File ID:	Z17127.D
Dilution:	4.0			Initial Weight/Volume:	15.05 g
Date Analyzed:	09/22/2010 1205			Final Weight/Volume:	1.0 mL
Date Prepared:	09/16/2010 1002			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Pyrene		5.0		0.058	1.2
1,2,4-Trichlorobenzene		1.2	U	0.081	1.2
4-Chloro-3-methylphenol		1.2	U	0.051	1.2
2-Chlorophenol		1.2	U	0.071	1.2
2-Methylphenol		1.2	U	0.074	1.2
4-Methylphenol		1.2	U	0.081	1.2
2,4-Dichlorophenol		1.2	U	0.066	1.2
2,4-Dimethylphenol		1.2	U	0.060	1.2
2,4-Dinitrophenol		7.7	U *	0.37	7.7
4,6-Dinitro-2-methylphenol		7.7	U *	0.53	7.7
2-Nitrophenol		1.2	U	0.077	1.2
4-Nitrophenol		7.7	U *	0.093	7.7
Pentachlorophenol		3.1	U	0.75	3.1
Phenol		1.2	U	0.081	1.2
2,4,5-Trichlorophenol		7.7	U	0.062	7.7
2,4,6-Trichlorophenol		1.2	U	0.034	1.2
Benzyl alcohol		1.2	U	0.12	1.2
4-Nitroaniline		1.2	U *	0.094	1.2
2,2'-oxybis[1-chloropropane]		1.2	U	0.064	1.2

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76		41 - 120
2-Fluorophenol	72		34 - 120
2,4,6-Tribromophenol	77		37 - 120
Nitrobenzene-d5	75		38 - 120
Phenol-d5	72		36 - 120
Terphenyl-d14	109		32 - 125

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 220-42777		Instrument ID:	MSA
Preparation:	3510C	Prep Batch: 220-42627		Lab File ID:	A13327.D
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	500 mL
Date Analyzed:	09/17/2010 1543			Final Weight/Volume:	1 mL
Date Prepared:	09/15/2010 0736			Injection Volume:	1 uL
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene		0.020	U	0.00062	0.020
2,4-Dinitrotoluene		0.020	U	0.00080	0.020
2,4,5-Trichlorophenol		0.10	U	0.00056	0.10
2,4,6-Trichlorophenol		0.020	U	0.00074	0.020
2-Methylphenol		0.020	U	0.00048	0.020
Hexachlorobenzene		0.020	U	0.00066	0.020
Hexachlorobutadiene		0.020	U	0.00040	0.020
Hexachloroethane		0.020	U	0.00074	0.020
Nitrobenzene		0.020	U	0.00056	0.020
Pentachlorophenol		0.10	U	0.00062	0.10
Pyridine		0.040	U	0.0077	0.040
4-Methylphenol		0.020	U	0.00058	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	91		29 - 126
2-Fluorobiphenyl	83		43 - 116
2-Fluorophenol	70		21 - 97
Nitrobenzene-d5	84		38 - 113
Terphenyl-d14	104		10 - 119
Phenol-d5	54		18 - 97

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1451			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane		0.0050	U	0.00033	0.0050
Endrin		0.00050	U	0.000010	0.00050
gamma-BHC (Lindane)		0.00050	U	0.000012	0.00050
Heptachlor		0.00050	U	0.000010	0.00050
Heptachlor epoxide		0.00050	U	0.000010	0.00050
Methoxychlor		0.00050	U	0.000013	0.00050
Toxaphene		0.0050	U	0.00020	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		51 - 143
DCB Decachlorobiphenyl	105		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1451			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	92		51 - 143
DCB Decachlorobiphenyl	100		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1505			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane		0.0050	U	0.00033	0.0050
Endrin		0.00050	U	0.000010	0.00050
gamma-BHC (Lindane)		0.00050	U	0.000012	0.00050
Heptachlor		0.00050	U	0.000010	0.00050
Heptachlor epoxide		0.00050	U	0.000010	0.00050
Methoxychlor		0.00050	U	0.000013	0.00050
Toxaphene		0.0050	U	0.00020	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		51 - 143
DCB Decachlorobiphenyl	117		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1505			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		51 - 143
DCB Decachlorobiphenyl	113		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1519			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Chlordane		0.0050	U	0.00033	0.0050
Endrin		0.00050	U	0.000010	0.00050
gamma-BHC (Lindane)		0.00050	U	0.000012	0.00050
Heptachlor		0.00050	U	0.000010	0.00050
Heptachlor epoxide		0.00050	U	0.000010	0.00050
Methoxychlor		0.00050	U	0.000013	0.00050
Toxaphene		0.0050	U	0.00020	0.0050

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	105		51 - 143
DCB Decachlorobiphenyl	112		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8081A Organochlorine Pesticides (GC)-TCLP

Method:	8081A	Analysis Batch: 460-49228		Instrument ID:	PESTGC4
Preparation:	3510C	Prep Batch: 460-49063		Initial Weight/Volume:	100 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/17/2010 1519			Injection Volume:	
Date Prepared:	09/16/2010 2135			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	98		51 - 143
DCB Decachlorobiphenyl	108		65 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.33 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0041			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
PCB-1016		0.018	U	0.0014	0.018
PCB-1221		0.018	U	0.0014	0.018
PCB-1232		0.018	U	0.0014	0.018
PCB-1242		0.018	U	0.0014	0.018
PCB-1248		0.018	U	0.0014	0.018
PCB-1254		0.010	J	0.0015	0.018
PCB-1260		0.0087	J	0.0015	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	42		24 - 150
DCB Decachlorobiphenyl	80	p	24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.33 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0041			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	34		24 - 150
DCB Decachlorobiphenyl	133		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.45 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0100			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
PCB-1016		0.018	U	0.0014	0.018
PCB-1221		0.018	U	0.0014	0.018
PCB-1232		0.018	U	0.0014	0.018
PCB-1242		0.018	U	0.0014	0.018
PCB-1248		0.018	U	0.0014	0.018
PCB-1254		0.0095	J	0.0016	0.018
PCB-1260		0.0082	J	0.0016	0.018

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	26		24 - 150
DCB Decachlorobiphenyl	45	p	24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.45 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0100			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	23		24 - 150
DCB Decachlorobiphenyl	87		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.17 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0119			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
PCB-1016		0.019	U	0.0015	0.019
PCB-1221		0.019	U	0.0015	0.019
PCB-1232		0.019	U	0.0015	0.019
PCB-1242		0.019	U	0.0015	0.019
PCB-1248		0.019	U	0.0015	0.019
PCB-1254		0.0092	J	0.0016	0.019
PCB-1260		0.0055	J p	0.0016	0.019

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	34		24 - 150
DCB Decachlorobiphenyl	65	p	24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 220-42839		Instrument ID:	GC9
Preparation:	3550B	Prep Batch: 220-42671		Initial Weight/Volume:	30.17 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	09/21/2010 0119			Injection Volume:	1 uL
Date Prepared:	09/16/2010 0835			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	30		24 - 150
DCB Decachlorobiphenyl	123		24 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1201			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	129		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1201			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	120		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1218			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	131		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1218			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	121		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1235			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	PRIMARY
Date Leached:	09/14/2010 1829				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2,4-D		0.080	U	0.00010	0.080
Silvex (2,4,5-TP)		0.080	U	0.000090	0.080

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	122		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

8151A Herbicides (GC)-TCLP

Method:	8151A	Analysis Batch: 460-49067		Instrument ID:	PESTGC3
Preparation:	8151A	Prep Batch: 460-48893		Initial Weight/Volume:	15 mL
Dilution:	1.0	Leachate Batch: 460-48785		Final Weight/Volume:	5 mL
Date Analyzed:	09/16/2010 1235			Injection Volume:	
Date Prepared:	09/15/2010 2031			Result Type:	SECONDARY
Date Leached:	09/14/2010 1829				

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4-Dichlorophenylacetic acid	109		87 - 150

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 09/20/2010 1230
Date Prepared: 09/17/2010 1047

Analysis Batch: 220-42805
Prep Batch: 220-42727

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.03 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.31	J	0.067	1.3
Aluminum		5880		2.7	66.8
Arsenic		9.2		1.8	5.6
Barium		210		0.067	1.3
Beryllium		0.39	J	0.067	1.3
Calcium		12400		13.4	134
Cadmium		0.78	J	0.27	1.3
Cobalt		5.5		0.13	1.3
Chromium		20.5		0.13	1.3
Copper		193		0.51	1.6
Iron		16500		4.0	33.4
Potassium		774		13.4	134
Magnesium		3000		2.4	134
Manganese		331		0.067	2.0
Sodium		289		13.4	134
Nickel		20.0		0.27	1.3
Lead		344		0.83	4.0
Antimony		3.3	J	1.4	4.4
Selenium		10.0	U	3.3	10.0
Thallium		4.0	U	0.93	4.0
Vanadium		21.7		0.27	1.3
Zinc		441		1.3	6.7

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 09/17/2010 1457
Date Prepared: 09/15/2010 1002
Date Leached: 09/13/2010 1600

Analysis Batch: 220-42754
Prep Batch: 220-42631
Leachate Batch: 220-42574

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.55		0.0012	0.025
Cadmium		0.020	J	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.53		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid

Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-42648		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-42608		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	5 mL
Date Analyzed:	09/15/2010 1316			Final Weight/Volume:	50 mL
Date Prepared:	09/14/2010 1344				
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-42732		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-42703		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Date Analyzed:	09/17/2010 1234			Final Weight/Volume:	50 mL
Date Prepared:	09/16/2010 1526				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.8		0.0041	0.052

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 09/20/2010 1233
Date Prepared: 09/17/2010 1047

Analysis Batch: 220-42805
Prep Batch: 220-42727

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.00 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.49	J	0.069	1.4
Aluminum		5260		2.7	68.6
Arsenic		9.4		1.9	5.8
Barium		230		0.069	1.4
Beryllium		0.34	J	0.069	1.4
Calcium		10100		13.7	137
Cadmium		0.52	J	0.27	1.4
Cobalt		4.3		0.14	1.4
Chromium		19.0		0.14	1.4
Copper		218		0.52	1.6
Iron		13200		4.1	34.3
Potassium		648		13.7	137
Magnesium		1980		2.5	137
Manganese		238		0.069	2.1
Sodium		221		13.7	137
Nickel		20.2		0.27	1.4
Lead		285		0.85	4.1
Antimony		4.6		1.4	4.5
Selenium		3.7	J	3.4	10.3
Thallium		4.1	U	0.96	4.1
Vanadium		18.1		0.27	1.4
Zinc		390		1.4	6.9

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 09/20/2010 1523
Date Prepared: 09/15/2010 1002
Date Leached: 09/13/2010 1600

Analysis Batch: 220-42805
Prep Batch: 220-42631
Leachate Batch: 220-42574

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.56		0.0012	0.025
Cadmium		0.019	J	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.60		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-42648		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-42608		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	5 mL
Date Analyzed:	09/15/2010 1317			Final Weight/Volume:	50 mL
Date Prepared:	09/14/2010 1344				
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-42732		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-42703		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Date Analyzed:	09/17/2010 1238			Final Weight/Volume:	50 mL
Date Prepared:	09/16/2010 1526				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		2.1		0.0044	0.055

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid
% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 09/20/2010 1236
Date Prepared: 09/17/2010 1047

Analysis Batch: 220-42805
Prep Batch: 220-42727

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 2.00 g
Final Weight/Volume: 250 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Silver		0.36	J	0.071	1.4
Aluminum		5970		2.9	71.4
Arsenic		8.1		1.9	6.0
Barium		207		0.071	1.4
Beryllium		0.37	J	0.071	1.4
Calcium		11800		14.3	143
Cadmium		0.57	J	0.29	1.4
Cobalt		4.5		0.14	1.4
Chromium		18.7		0.14	1.4
Copper		220		0.54	1.7
Iron		14900		4.3	35.7
Potassium		757		14.3	143
Magnesium		2160		2.6	143
Manganese		374		0.071	2.1
Sodium		320		14.3	143
Nickel		18.4		0.29	1.4
Lead		258		0.89	4.3
Antimony		3.6	J	1.5	4.7
Selenium		10.7	U	3.6	10.7
Thallium		4.3	U	1.0	4.3
Vanadium		20.2		0.29	1.4
Zinc		376		1.4	7.1

6010B Metals (ICP)-TCLP

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 09/20/2010 1530
Date Prepared: 09/15/2010 1002
Date Leached: 09/13/2010 1600

Analysis Batch: 220-42805
Prep Batch: 220-42631
Leachate Batch: 220-42574

Instrument ID: ICAP3
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.075	U	0.020	0.075
Barium		0.59		0.0012	0.025
Cadmium		0.020	J	0.0050	0.025
Chromium		0.025	U	0.0025	0.025
Lead		0.81		0.012	0.075
Selenium		0.19	U	0.062	0.19
Silver		0.025	U	0.0012	0.025

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 220-42648		Instrument ID:	MERC1
Preparation:	7470A	Prep Batch: 220-42608		Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 220-42574		Initial Weight/Volume:	5 mL
Date Analyzed:	09/15/2010 1320			Final Weight/Volume:	50 mL
Date Prepared:	09/14/2010 1344				
Date Leached:	09/13/2010 1600				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.0020	U	0.0010	0.0020

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 220-42895		Instrument ID:	MERC1
Preparation:	7471A	Prep Batch: 220-42861		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Date Analyzed:	09/22/2010 0913			Final Weight/Volume:	50 mL
Date Prepared:	09/21/2010 1354				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		2.3		0.0045	0.056

General Chemistry

Client Sample ID: **GPEC-WC-M20-5**

Lab Sample ID: 220-13272-1
Client Matrix: Solid
% Moisture: 7.8
Date Sampled: 09/08/2010 1050
Date Received: 09/08/2010 1930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.62		mg/Kg	0.13	0.54	1.0	9012B
Analysis Batch: 220-42745	Date Analyzed: 09/17/2010 1313						DryWt Corrected: Y
Prep Batch: 220-42739	Date Prepared: 09/17/2010 0930						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Burn Rate	2.20	U	mm/sec	2.20	2.20	1.0	1030
Analysis Batch: 460-48831	Date Analyzed: 09/15/2010 0810						DryWt Corrected: N
Cyanide, Reactive	0.50	U	mg/Kg	0.50	0.50	1.0	9012
Analysis Batch: 220-42747	Date Analyzed: 09/17/2010 1330						DryWt Corrected: N
Prep Batch: 220-42744	Date Prepared: 09/16/2010 1225						
Sulfide, Reactive	20.0	U	mg/Kg	20.0	20.0	1.0	9034
Analysis Batch: 220-42717	Date Analyzed: 09/16/2010 1510						DryWt Corrected: N
Prep Batch: 220-42716	Date Prepared: 09/16/2010 1225						
pH	7.37	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-42621	Date Analyzed: 09/14/2010 1645						DryWt Corrected: N
BTU	DNF		BTU/lb	2.00	2.00	1.0	D240-87
Analysis Batch: 680-180557	Date Analyzed: 09/21/2010 1136						DryWt Corrected: N
Prep Batch: 680-180555	Date Prepared: 09/21/2010 1000						
Percent Moisture	7.8		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N
Percent Solids	92.2		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N

General Chemistry

Client Sample ID: **GPEC-WC-30-7**

Lab Sample ID: 220-13272-2
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 09/08/2010 1115
Date Received: 09/08/2010 1930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.77		mg/Kg	0.13	0.55	1.0	9012B
Analysis Batch: 220-42745	Date Analyzed: 09/17/2010 1314						DryWt Corrected: Y
Prep Batch: 220-42739	Date Prepared: 09/17/2010 0930						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Burn Rate	2.20	U	mm/sec	2.20	2.20	1.0	1030
Analysis Batch: 460-48831	Date Analyzed: 09/15/2010 0810						DryWt Corrected: N
Cyanide, Reactive	0.49	U	mg/Kg	0.49	0.49	1.0	9012
Analysis Batch: 220-42747	Date Analyzed: 09/17/2010 1333						DryWt Corrected: N
Prep Batch: 220-42744	Date Prepared: 09/16/2010 1345						
Sulfide, Reactive	19.6	U	mg/Kg	19.6	19.6	1.0	9034
Analysis Batch: 220-42717	Date Analyzed: 09/16/2010 1525						DryWt Corrected: N
Prep Batch: 220-42716	Date Prepared: 09/16/2010 1345						
pH	7.54	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-42621	Date Analyzed: 09/14/2010 1645						DryWt Corrected: N
BTU	DNF		BTU/lb	2.00	2.00	1.0	D240-87
Analysis Batch: 680-180557	Date Analyzed: 09/21/2010 1136						DryWt Corrected: N
Prep Batch: 680-180555	Date Prepared: 09/21/2010 1000						
Percent Moisture	8.9		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N
Percent Solids	91.1		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N

General Chemistry

Client Sample ID: **GPEC-WC-304**

Lab Sample ID: 220-13272-3
Client Matrix: Solid

% Moisture: 12.4

Date Sampled: 09/08/2010 1145
Date Received: 09/08/2010 1930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.79		mg/Kg	0.13	0.57	1.0	9012B
Analysis Batch: 220-42745	Date Analyzed: 09/17/2010 1315						DryWt Corrected: Y
Prep Batch: 220-42739	Date Prepared: 09/17/2010 0930						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Burn Rate	2.20	U	mm/sec	2.20	2.20	1.0	1030
Analysis Batch: 460-48831	Date Analyzed: 09/15/2010 0810						DryWt Corrected: N
Cyanide, Reactive	0.49	U	mg/Kg	0.49	0.49	1.0	9012
Analysis Batch: 220-42747	Date Analyzed: 09/17/2010 1336						DryWt Corrected: N
Prep Batch: 220-42744	Date Prepared: 09/16/2010 1345						
Sulfide, Reactive	19.5	U	mg/Kg	19.5	19.5	1.0	9034
Analysis Batch: 220-42717	Date Analyzed: 09/16/2010 1530						DryWt Corrected: N
Prep Batch: 220-42716	Date Prepared: 09/16/2010 1345						
pH	7.53	HF	SU	0.100	0.100	1.0	9045C
Analysis Batch: 220-42621	Date Analyzed: 09/14/2010 1645						DryWt Corrected: N
BTU	DNF		BTU/lb	2.00	2.00	1.0	D240-87
Analysis Batch: 680-180557	Date Analyzed: 09/21/2010 1136						DryWt Corrected: N
Prep Batch: 680-180555	Date Prepared: 09/21/2010 1000						
Percent Moisture	12.4		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N
Percent Solids	87.6		%	0.10	0.10	1.0	Moisture
Analysis Batch: 220-42559	Date Analyzed: 09/13/2010 1535						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD exceeds the control limits
	B	The analyte was found in an associated blank, as well as in the sample.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	LCS or LCSD exceeds the control limits
	*	Surrogate exceeds the control limit
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Metals		
	*	Duplicate analysis not within control limits.
	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
Sdg Number:

Lab Section	Qualifier	Description
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	U	Indicates analyzed for but not detected.

SUBCONTRACTED DATA

Certificate of Analysis

SINCE 1985

Quality Controlled Through Analysis

10630 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	GPEC-WC-M20-5	**REPORT DATE:**	October 1, 2010
LABORATORY NO:	60906-01	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	*Dry*
Moisture Content, ASTM D 3302, wt%	14.0	-
Ash Content, ASTM D 3174, wt%	80.65	93.78
Sulfur Content, ASTM D 4239, wt%	0.10	0.12

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	*Dry*
Carbon Content, wt%.....	3.11	3.62
Hydrogen Content, wt%.....	0.28	0.33
Nitrogen Content, wt%.....	0.0	0.0
Oxygen (calc), ASTM D 3176, wt%	1.86	2.15

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

Mitchell D. Martin
Assistant Director of Laboratory Operations

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P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	GPEC-WC-30-7	**REPORT DATE:**	October 1, 2010
LABORATORY NO:	60906-02	**PURCHASE ORDER NO:**	Pending

TEST **RESULT**

Ultimate Analysis, ASTM D3176

	As Received	Dry
Moisture Content, ASTM D 3302, wt%	15.07	-
Ash Content, ASTM D 3174, wt%	78.119	92.06
Sulfur Content, ASTM D 4239, wt%	0.11	0.12

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

	As Received	Dry
Carbon Content, wt%.....	4.10	4.83
Hydrogen Content, wt%.....	0.21	0.25
Nitrogen Content, wt%.....	0.0	0.0
Oxygen (calc), ASTM D 3176, wt%	2.32	2.74

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

Mitchell D. Martin
Assistant Director of Laboratory Operations

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TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Test America (Shelton, CT)	**REQUESTED BY:**	Ms. Erin Arasate
SAMPLE:	GPEC-WC-304	**REPORT DATE:**	October 1, 2010
LABORATORY NO:	60906-03	**PURCHASE ORDER NO:**	Pending

Ultimate Analysis, ASTM D3176

TEST	As Received	Dry
Moisture Content, ASTM D 3302, wt%	14.47	-
Ash Content, ASTM D 3174, wt%	78.09	91.29
Sulfur Content, ASTM D 4239, wt%	0.11	0.12

Carbon, Hydrogen, and Nitrogen, ASTM D 5373

TEST	As Received	Dry
Carbon Content, wt%.....	3.68	4.30
Hydrogen Content, wt%.....	0.19	0.22
Nitrogen Content, wt%.....	0.0	0.0
Oxygen (calc), ASTM D 3176, wt%	3.46	4.07

Respectfully submitted,
FOR: TEXAS OILTECH LABORATORIES, L.P.

Mitchell D. Martin
Assistant Director of Laboratory Operations

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Quality Management System Certified to ISO 9001:2000
Cert. No. 5085

Chain of Custody Record

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

13272

TAL-0015 (0508)

Client: GEI Consultants	Project Manager: Michael Zukauskas	Date: 9/8/10	Chain of Custody Number: 013640
Address: 1 Greenwood Ave Ste 210	Telephone Number (Area Code)/Fax Number/e-mail address: 973 873 7110 / 973 509 9625 / mzukauskas@geiconsultants.com	Field Telephone Number: 551 206 4339	Page 8 of 11
City: Montvale / State: NJ / Zip Code: 07642	Site Contact: Matt Sweet	Lab Contact: Erin Arcasate	Analysis (Attach list if more space is needed)
Project Name and Location (State): Greenpoint Brooklyn NY	Sample Disposal: ☒ Disposal By Lab ☐ Return To Client ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		
Contract/Purchase Order/Project No.: 093260-1-1101			

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Solid	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	8260B	8270C	7470A	6010B	9012	9034	8081A	8082	9045C	9012B	1030	8151A	TCLP	7471A	Comments
GPEC-WC-M20-5	9/8/10	10:50		X		5							X	X	X	X	X	X	X	X	X	X	X	X	X	X	
GPEC-WC-30-7	9/8/10	11:15		X		5							X	X	X	X	X	X	X	X	X	X	X	X	X	X	
GPEC-WC-304	9/8/10	11:45		X		5							X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard

State Regulatory QC Requirements: NYSDEC

	Date	Time		Date	Time
1. Relinquished By	9/8/10	1300	1. Received By	9/8/10 1300	1300
2. Relinquished By	9/8/10	1930	2. Received By	9-8-10	1930
3. Received By			Cooler Temps: 2.1 C probe	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: Send results to datagroup@geiconsultants.com

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

10/04/2010

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
SDG Number:

Login Number: 13272
List Source: TestAmerica Connecticut
Creator: Teixeira, Maria L
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
SDG Number:

Login Number: 13272
List Source: TestAmerica Edison
Creator: Retana, Camille
List Creation: 09/14/10 03:00 PM
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C IR # 40
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 220-13272-1
SDG Number:

Login Number: 13272
List Source: TestAmerica Savannah
Creator: Swafford, Frances
List Creation: 09/14/10 12:39 PM
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/04/2010

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arasate, Erin A	Carrier Tracking No(s):	COC No: 220-6212.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: erin.arasate@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 220-13272-1
Address: 777 New Durham Road, ,	Due Date Requested: 9/23/2010			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: National Grid- Greenpoint, Brooklyn	Project #: 22002226			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1030/ 1030 - Ignitability	8081A/1311_T 8081A - TCLP Compound List	8151A/1311_T 8151A - TCLP Herbicides	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
GPEC-WC-M20-5 (220-13272-1)	9/8/10	10:50 Eastern		Solid			X	X	X	1	
GPEC-WC-30-7 (220-13272-2)	9/8/10	11:15 Eastern		Solid			X	X	X	1	
GPEC-WC-304 (220-13272-3)	9/8/10	11:45 Eastern		Solid			X	X	X	1	

Page 68 of 68

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 9/13/10 1330	Company: TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time: 9/14/2010 1050	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 460-18679-1

Job Description: Greenpoint /093260- 1-1101

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
PO BOX 856
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Sherree Baker
10/28/2010 11:50 AM

Sherree Baker
sherree.baker@testamericainc.com
10/28/2010

cc: Mr. Brian Skelly
Mr. Matthew Sweet

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

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ACCREDITED IN ACCORDANCE WITH nelac

CASE NARRATIVE

Client: GEI Consultants, Inc.

Project: Greenpoint /093260- 1-1101

Report Number: 460-18679-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 10/15/2010; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.4 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

IGNITABILITY FOR SOLIDS
Sample 460-18679-1 was analyzed for ignitability for solids in accordance with EPA SW-846 Method 1030. The samples were analyzed on 10/21/2010.

No difficulties were encountered during the ignitability analysis.

All quality control parameters were within the acceptance limits.

TCLP METALS
Sample 460-18679-1 was analyzed for TCLP metals in accordance with EPA SW-846 Methods 1311/ 6010B. The samples were leached on 10/19/2010, and prepared and analyzed on 10/20/2010.

As a standard practice all TCLP samples are diluted 5X prior to analysis. Further dilutions may be required dependent upon analyte levels in the samples. Refer to the analytical results forms for dilutions.

No difficulties were encountered during the TCLP metals analysis.

All quality control parameters were within the acceptance limits.

TOTAL METALS
Sample 460-18679-1 was analyzed for total metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/16/2010 and analyzed on 10/17/2010.

Several analytes failed the recovery criteria low for the MS of sample 460-18685-8 in batch 460-52539. Lead failed the recovery criteria high.

Refer to the QC report for details.

Calcium, Iron and Lead exceeded the rpd limit for the duplicate of sample 460-18685-8. Refer to the QC report for details.

Sample 460-18679-1(4X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Due to the high concentration of Aluminum, Zinc, Iron, and Lead, the matrix spike (MS) for batch 52449 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The matrix spike (MS) recoveries for batch 52449 were outside control limits for Silver, Calcium, Antimony, and Copper. The associated laboratory control sample (LCS) recovery met acceptance criteria.

As a standard practice all soil samples and related QC samples (i.e., MB, LCS, Dup, MS, SD) are diluted 2X-4X prior to analysis. Further dilutions may be required dependent upon analyte levels in the samples. Refer to the analytical results forms for dilutions.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

TCLP MERCURY
Sample 460-18679-1 was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 10/19/2010, and prepared and analyzed on 10/20/2010.

No difficulties were encountered during the TCLP mercury analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Sample 460-18679-1 was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 10/18/2010.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS
Sample 460-18679-1 was analyzed for diesel range organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 10/19/2010 and analyzed on 10/20/2010.

No difficulties were encountered during the DRO analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Sample 460-18679-1 was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 10/16/2010 and analyzed on 10/18/2010.

Aroclor 1260 failed the recovery criteria high for the MSD of sample 460-18633-10 in batch 460-53132. Aroclor 1260 exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the PCBs analysis.

All other quality control parameters were within the acceptance limits.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 460-18679-1 was analyzed for TCLP volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 10/19/2010 and analyzed on 10/21/2010.

Sample 460-18679-1(10X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

All samples and associated QC are diluted 10X prior to TCLP VOA analysis.

No difficulties were encountered during the TCLP volatiles analysis.

All quality control parameters were within the acceptance limits.

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 460-18679-1 was analyzed for TCLP semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8270C. The samples were leached on 10/19/2010, prepared on 10/21/2010 and analyzed on 10/22/2010.

Pentachlorophenol failed the recovery criteria low for the MS of sample 460-18816-1 in batch 460-53132.

2,4,5-Trichlorophenol and Pentachlorophenol failed the recovery criteria low for the MSD of sample 460-18816-1 in batch 460-53132. The presence of the '4' qualifier in the report indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 53020 were outside control limits for Pentachlorophenol and/or 2,4,5-Trichlorophenol. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Refer to the QC report for details.

No other difficulties were encountered during the TCLP semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

REACTIVE CYANIDE
Sample 460-18679-1 was analyzed for reactive cyanide in accordance with EPA SW-846 Method 7.3.3/9014. The samples were prepared and analyzed on 10/19/2010.

Cyanide, Reactive failed the recovery criteria low for LCS 460-52689/2-A. Refer to the QC report for details.

No other difficulties were encountered during the reactive cyanide analysis.

All other quality control parameters were within the acceptance limits.

EXTRACTABLE ORGANIC HALIDES
Sample 460-18679-1 was analyzed for extractable organic halides in accordance with EPA SW-846 Method 9023. The samples were analyzed on 10/22/2010.

No difficulties were encountered during the EOX analysis.

All quality control parameters were within the acceptance limits.

REACTIVE SULFIDE
Sample 460-18679-1 was analyzed for reactive sulfide in accordance with EPA SW-846 Method 7.3.4/9034. The samples were prepared and analyzed on 10/19/2010.

No difficulties were encountered during the reactive sulfide analysis.

All quality control parameters were within the acceptance limits.

CORROSIVITY (PH)
Sample 460-18679-1 was analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045C. The samples were analyzed on 10/20/2010.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: GPEC-WC-A1415 (460-18679-1)

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Sample 460-18679-1 was analyzed for percent solids in accordance with ASTM D2974-87 Modified. The samples were analyzed on 10/18/2010.

No difficulties were encountered during the % solids analysis.

All quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
460-18679-1	**GPEC-WC-A1415**					
Diesel Range Organics (C10-C44)		57		9.7	mg/Kg	8015B
Aluminum		4640		44.2	mg/Kg	6010B
Arsenic		18.9		1.1	mg/Kg	6010B
Barium		97.1		44.2	mg/Kg	6010B
Beryllium		0.30	J	0.44	mg/Kg	6010B
Cadmium		0.96	J	1.1	mg/Kg	6010B
Calcium		7610		1100	mg/Kg	6010B
Chromium		17.0		2.2	mg/Kg	6010B
Cobalt		5.6	J	11.0	mg/Kg	6010B
Copper		180		5.5	mg/Kg	6010B
Iron		22100		33.1	mg/Kg	6010B
Lead		430		1.1	mg/Kg	6010B
Magnesium		3050		1100	mg/Kg	6010B
Manganese		289		3.3	mg/Kg	6010B
Nickel		22.8		8.8	mg/Kg	6010B
Potassium		458	J	1100	mg/Kg	6010B
Selenium		2.4		2.2	mg/Kg	6010B
Sodium		342	J	1100	mg/Kg	6010B
Vanadium		31.6		11.0	mg/Kg	6010B
Zinc		301		6.6	mg/Kg	6010B
Mercury		1.3		0.032	mg/Kg	7471A
Corrosivity		8.37	HF		SU	9045C
Percent Moisture		10.3		1.0	%	Moisture
Percent Solids		89.7		1.0	%	Moisture
TCLP						
Barium		941	J	1000	ug/L	6010B
Cadmium		6.7	J	25.0	ug/L	6010B
Lead		280		25.0	ug/L	6010B
Silver		4.8	J	50.0	ug/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL EDI	SW846 8260B	
TCLP Extraction	TAL EDI		SW846 1311
Purge and Trap	TAL EDI		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL EDI	SW846 8270C	
TCLP Extraction	TAL EDI		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL EDI		SW846 3510C
Diesel Range Organics (DRO) (GC)	TAL EDI	SW846 8015B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Metals (ICP)	TAL EDI	SW846 6010B	
TCLP Extraction	TAL EDI		SW846 1311
Preparation, Metals	TAL EDI		SW846 3050B
Preparation, Total Metals	TAL EDI		SW846 3010A
Mercury (CVAA)	TAL EDI	SW846 7470A	
TCLP Extraction	TAL EDI		SW846 1311
Preparation, Mercury	TAL EDI		SW846 7470A
Mercury (CVAA)	TAL EDI	SW846 7471A	
Preparation, Mercury	TAL EDI		SW846 7471A
Ignitability, Solids	TAL EDI	SW846 1030	
Cyanide, Reactive	TAL EDI	SW846 9014	
Cyanide, Reactive	TAL EDI		SW846 7.3.3
Organic Halides, Extractable (EOX)	TAL SAV	SW846 9023	
Sulfide, Reactive	TAL EDI	SW846 9034	
Sulfide, Reactive	TAL EDI		SW846 7.3.4
pH	TAL EDI	SW846 9045C	
Percent Moisture	TAL EDI	EPA Moisture	

Lab References:

TAL EDI = TestAmerica Edison

TAL SAV = TestAmerica Savannah

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Method	Analyst	Analyst ID
SW846 8260B	Boykin, Kenneth	KB
SW846 8270C	Crocco, Michael	MC
SW846 8015B	Barsoum, Sara	SB
SW846 8082	Manlangit, Ferdie	FM
SW846 6010B	Chang, Churn Der	CDC
SW846 6010B	Dave, Virendra	VD
SW846 7470A	Staib, Thomas	TS
SW846 7471A	Sheikh, Razia B	RBS
SW846 1030	Carlone, John	JC
SW846 9014	Cabanganan, Maria	MB
SW846 9023	Nelson, Christopher	CN
SW846 9034	Cabanganan, Maria	MB
SW846 9045C	Cabanganan, Maria	MB
EPA Moisture	Retana, Camille	CR

SAMPLE SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-18679-1	GPEC-WC-A1415	Solid	10/13/2010 1200	10/15/2010 0204

SAMPLE RESULTS

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid Date Received: 10/15/2010 0204

8260B Volatile Organic Compounds (GC/MS)-TCLP

Method:	8260B	Analysis Batch: 460-53050		Instrument ID:	VOAMS2
Preparation:	5030B			Lab File ID:	b29862.d
Dilution:	10	Leachate Batch: 460-52748		Initial Weight/Volume:	5 mL
Date Analyzed:	10/21/2010 2118			Final Weight/Volume:	5 mL
Date Prepared:	10/21/2010 2118				
Date Leached:	10/19/2010 2200				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Carbon tetrachloride		0.010	U	0.0019	0.010
Chlorobenzene		0.010	U	0.0016	0.010
Chloroform		0.010	U	0.0015	0.010
1,4-Dichlorobenzene		0.010	U	0.0015	0.010
1,2-Dichloroethane		0.010	U	0.0024	0.010
1,1-Dichloroethene		0.010	U	0.0014	0.010
2-Butanone		0.10	U	0.0082	0.10
Tetrachloroethene		0.010	U	0.0020	0.010
Trichloroethene		0.010	U	0.0018	0.010
Vinyl chloride		0.010	U	0.0013	0.010
Benzene		0.010	U	0.0013	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		74 - 131
Bromofluorobenzene	91		73 - 155
Toluene-d8 (Surr)	92		76 - 141

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid Date Received: 10/15/2010 0204

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)-TCLP

Method:	8270C	Analysis Batch: 460-53132		Instrument ID:	BNAMS5
Preparation:	3510C	Prep Batch: 460-53020		Lab File ID:	x9724.d
Dilution:	1.0	Leachate Batch: 460-52687		Initial Weight/Volume:	250 mL
Date Analyzed:	10/22/2010 1253			Final Weight/Volume:	2 mL
Date Prepared:	10/21/2010 2044			Injection Volume:	
Date Leached:	10/19/2010 1707				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Pyridine		0.040	U	0.040	0.040
1,4-Dichlorobenzene		0.040	U	0.040	0.040
Hexachloroethane		0.0040	U	0.0040	0.0040
Nitrobenzene		0.0040	U	0.0040	0.0040
o-Cresol		0.040	U	0.040	0.040
m & p - Cresol		0.040	U	0.040	0.040
Pentachlorophenol		0.12	U	0.12	0.12
Hexachlorobutadiene		0.0080	U	0.0080	0.0080
2,4-Dinitrotoluene		0.0080	U	0.0080	0.0080
Hexachlorobenzene		0.0040	U	0.0040	0.0040
2,4,5-Trichlorophenol		0.040	U	0.040	0.040
2,4,6-Trichlorophenol		0.040	U	0.040	0.040

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		53 - 108
2-Fluorophenol	43		10 - 65
Phenol-d5	28		10 - 48
Nitrobenzene-d5	81		56 - 112
2,4,6-Tribromophenol	76		46 - 122
Terphenyl-d14	75		50 - 122

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid % Moisture: 10.3 Date Received: 10/15/2010 0204

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 460-52810		Instrument ID:	BNAGC1
Preparation:	3546	Prep Batch: 460-52731		Initial Weight/Volume:	15.03 g
Dilution:	1.0			Final Weight/Volume:	1 mL
Date Analyzed:	10/20/2010 1239			Injection Volume:	1 uL
Date Prepared:	10/19/2010 2300			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
Diesel Range Organics (C10-C44)		57		9.7	9.7

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	78		43 - 119

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid % Moisture: 10.3 Date Received: 10/15/2010 0204

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-52541		Instrument ID:	PESTGC7
Preparation:	3541	Prep Batch: 460-52455		Initial Weight/Volume:	15.01 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	10/18/2010 1127			Injection Volume:	
Date Prepared:	10/16/2010 1531			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		75	U	14	75
Aroclor 1221		75	U	23	75
Aroclor 1232		75	U	42	75
Aroclor 1242		75	U	14	75
Aroclor 1248		75	U	20	75
Aroclor 1254		75	U	26	75
Aroclor 1260		75	U	8.3	75
Aroclor 1262		75	U	13	75
Aroclor 1268		75	U	13	75

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	96		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid % Moisture: 10.3 Date Received: 10/15/2010 0204

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-52541		Instrument ID:	PESTGC7
Preparation:	3541	Prep Batch: 460-52455		Initial Weight/Volume:	15.01 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	10/18/2010 1127			Injection Volume:	
Date Prepared:	10/16/2010 1531			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	88		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid % Moisture: 10.3 Date Received: 10/15/2010 0204

6010B Metals (ICP)

Method: 6010B Analysis Batch: 460-52462 Instrument ID: ICP4
Preparation: 3050B Prep Batch: 460-52449 Lab File ID: 10172010.txt
Dilution: 4.0 Initial Weight/Volume: 1.01 g
Date Analyzed: 10/17/2010 0933 Final Weight/Volume: 50 mL
Date Prepared: 10/16/2010 1447

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4640		16.2	44.2
Antimony		2.2	U	0.97	2.2
Arsenic		18.9		0.77	1.1
Barium		97.1		1.3	44.2
Beryllium		0.30	J	0.19	0.44
Cadmium		0.96	J	0.17	1.1
Calcium		7610		29.0	1100
Chromium		17.0		1.3	2.2
Cobalt		5.6	J	1.4	11.0
Copper		180		0.90	5.5
Iron		22100		11.7	33.1
Lead		430		0.55	1.1
Magnesium		3050		11.7	1100
Manganese		289		1.2	3.3
Nickel		22.8		0.59	8.8
Potassium		458	J	49.8	1100
Selenium		2.4		1.0	2.2
Silver		2.2	U	0.17	2.2
Sodium		342	J	67.8	1100
Thallium		2.2	U	1.1	2.2
Vanadium		31.6		0.57	11.0
Zinc		301		1.1	6.6

6010B Metals (ICP)-TCLP

Method: 6010B Analysis Batch: 460-52960 Instrument ID: ICP2
Preparation: 3010A Prep Batch: 460-52823 Lab File ID: 52823V1
Dilution: 5.0 Leachate Batch: 460-52687 Initial Weight/Volume: 100 mL
Date Analyzed: 10/20/2010 1919 Final Weight/Volume: 100 mL
Date Prepared: 10/20/2010 1348
Date Leached: 10/19/2010 1707

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Arsenic		25.0	U	19.2	25.0
Barium		941	J	16.1	1000
Cadmium		6.7	J	4.6	25.0
Chromium		50.0	U	16.0	50.0
Lead		280		13.9	25.0
Selenium		50.0	U	23.8	50.0
Silver		4.8	J	4.8	50.0

7470A Mercury (CVAA)-TCLP

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid Date Received: 10/15/2010 0204

7470A Mercury (CVAA)-TCLP

Method:	7470A	Analysis Batch: 460-52877		Instrument ID:	LEEMAN5
Preparation:	7470A	Prep Batch: 460-52863		Lab File ID:	102010.PRN
Dilution:	1.0	Leachate Batch: 460-52687		Initial Weight/Volume:	30 mL
Date Analyzed:	10/20/2010 2105			Final Weight/Volume:	30 mL
Date Prepared:	10/20/2010 1630				
Date Leached:	10/19/2010 1707				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Mercury		0.20	U	0.18	0.20

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 460-52533		Instrument ID:	LEEMAN3
Preparation:	7471A	Prep Batch: 460-52481		Lab File ID:	52481hg1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Date Analyzed:	10/18/2010 1241			Final Weight/Volume:	100 mL
Date Prepared:	10/18/2010 0912				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		1.3		0.026	0.032

General Chemistry

Client Sample ID: **GPEC-WC-A1415**

Lab Sample ID: 460-18679-1 Date Sampled: 10/13/2010 1200
Client Matrix: Solid % Moisture: 10.3 Date Received: 10/15/2010 0204

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Halogens, Extractable Organic	22.3	U	mg/Kg	11.1	22.3	1.0	9023
Analysis Batch: 680-183808	Date Analyzed: 10/22/2010 0800						DryWt Corrected: Y
Sulfide, Reactive	20.0	U	mg/Kg	6.4	20.0	1.0	9034
Analysis Batch: 460-52695	Date Analyzed: 10/19/2010 1729						DryWt Corrected: N
Prep Batch: 460-52692	Date Prepared: 10/19/2010 0900						

Analyte	Result	Qual	Units	Dil	Method
Corrosivity	8.37	HF	SU	1.0	9045C
Analysis Batch: 460-52850	Date Analyzed: 10/20/2010 1425				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Burn Rate	2.20	U	mm/sec	2.20	2.20	1.0	1030
Analysis Batch: 460-52951	Date Analyzed: 10/21/2010 1141						DryWt Corrected: N
Cyanide, Reactive	25.0	U *	mg/Kg	25.0	25.0	1.0	9014
Analysis Batch: 460-52693	Date Analyzed: 10/19/2010 1721						DryWt Corrected: N
Prep Batch: 460-52689	Date Prepared: 10/19/2010 0900						
Percent Moisture	10.3		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-52510	Date Analyzed: 10/18/2010 1206						DryWt Corrected: N
Percent Solids	89.7		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-52510	Date Analyzed: 10/18/2010 1206						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
Metals		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	HF	Field parameter with a holding time of 15 minutes
	U	Indicates the analyte was analyzed for but not detected.
	*	Recovery or RPD exceeds control limits

QUALITY CONTROL RESULTS

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-52748					
LB 460-52748/1-A	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-18679-1	GPEC-WC-A1415	P	Solid	1311	
460-18679-1MS	Matrix Spike	P	Solid	1311	
460-18679-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Analysis Batch:460-53050					
LB 460-52748/1-A	TCLP SPLPE Leachate Blank	P	Solid	8260B	
LCS 460-53050/3	Lab Control Sample	T	Water	8260B	
MB 460-53050/4	Method Blank	T	Water	8260B	
460-18679-1	GPEC-WC-A1415	P	Solid	8260B	
460-18679-1MS	Matrix Spike	P	Solid	8260B	
460-18679-1MSD	Matrix Spike Duplicate	P	Solid	8260B	

Report Basis
P = TCLP
T = Total

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-52687					
LB 460-52687/1-K	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-18679-1	GPEC-WC-A1415	P	Solid	1311	
Prep Batch: 460-53020					
LCS 460-53020/2-A	Lab Control Sample	T	Water	3510C	
MB 460-53020/1-A	Method Blank	T	Water	3510C	
LB 460-52687/1-K	TCLP SPLPE Leachate Blank	P	Solid	3510C	460-52687
460-18679-1	GPEC-WC-A1415	P	Solid	3510C	460-52687
Analysis Batch:460-53132					
LB 460-52687/1-K	TCLP SPLPE Leachate Blank	P	Solid	8270C	460-53020
LCS 460-53020/2-A	Lab Control Sample	T	Water	8270C	460-53020
MB 460-53020/1-A	Method Blank	T	Water	8270C	460-53020
460-18679-1	GPEC-WC-A1415	P	Solid	8270C	460-53020

Report Basis
P = TCLP
T = Total

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-52455					
LCS 460-52455/2-A	Lab Control Sample	T	Solid	3541	
MB 460-52455/1-A	Method Blank	T	Solid	3541	
460-18679-1	GPEC-WC-A1415	T	Solid	3541	
Analysis Batch:460-52539					
LCS 460-52455/2-A	Lab Control Sample	T	Solid	8082	460-52455
MB 460-52455/1-A	Method Blank	T	Solid	8082	460-52455
Analysis Batch:460-52541					
460-18679-1	GPEC-WC-A1415	T	Solid	8082	460-52455
Prep Batch: 460-52731					
LCS 460-52731/2-A	Lab Control Sample	T	Solid	3546	
MB 460-52731/1-A	Method Blank	T	Solid	3546	
460-18679-1	GPEC-WC-A1415	T	Solid	3546	
Analysis Batch:460-52810					
LCS 460-52731/2-A	Lab Control Sample	T	Solid	8015B	460-52731
MB 460-52731/1-A	Method Blank	T	Solid	8015B	460-52731
460-18679-1	GPEC-WC-A1415	T	Solid	8015B	460-52731

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-52449					
LCSSRM 460-52449/2-A ^4	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-52449/1-A ^2	Method Blank	T	Solid	3050B	
460-18679-1	GPEC-WC-A1415	T	Solid	3050B	
Analysis Batch:460-52462					
LCSSRM 460-52449/2-A ^4	LCS-Certified Reference Material	T	Solid	6010B	460-52449
MB 460-52449/1-A ^2	Method Blank	T	Solid	6010B	460-52449
460-18679-1	GPEC-WC-A1415	T	Solid	6010B	460-52449
Prep Batch: 460-52481					
LCSSRM 460-52481/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	
MB 460-52481/1-A	Method Blank	T	Solid	7471A	
460-18679-1	GPEC-WC-A1415	T	Solid	7471A	
Analysis Batch:460-52533					
LCSSRM 460-52481/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	460-52481
MB 460-52481/1-A	Method Blank	T	Solid	7471A	460-52481
460-18679-1	GPEC-WC-A1415	T	Solid	7471A	460-52481
Prep Batch: 460-52687					
LB 460-52687/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 460-52687/1-E	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-18679-1	GPEC-WC-A1415	P	Solid	1311	
Prep Batch: 460-52823					
LCS 460-52823/2-A	Lab Control Sample	T	Water	3010A	
MB 460-52823/1-A	Method Blank	T	Water	3010A	
LB 460-52687/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-52687
460-18679-1	GPEC-WC-A1415	P	Solid	3010A	460-52687
Analysis Batch:460-52853					
LB 460-52687/1-D ^5	TCLP SPLPE Leachate Blank	P	Solid	6010B	460-52823
LCS 460-52823/2-A	Lab Control Sample	T	Water	6010B	460-52823
MB 460-52823/1-A	Method Blank	T	Water	6010B	460-52823
Prep Batch: 460-52863					
LCS 460-52863/12-A	Lab Control Sample	T	Water	7470A	
MB 460-52863/11-A	Method Blank	T	Water	7470A	
LB 460-52687/1-E	TCLP SPLPE Leachate Blank	P	Solid	7470A	460-52687
460-18679-1	GPEC-WC-A1415	P	Solid	7470A	460-52687

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:460-52877					
LB 460-52687/1-E	TCLP SPLPE Leachate Blank	P	Solid	7470A	460-52863
LCS 460-52863/12-A	Lab Control Sample	T	Water	7470A	460-52863
MB 460-52863/11-A	Method Blank	T	Water	7470A	460-52863
460-18679-1	GPEC-WC-A1415	P	Solid	7470A	460-52863
Analysis Batch:460-52960					
460-18679-1	GPEC-WC-A1415	P	Solid	6010B	460-52823

Report Basis
P = TCLP
T = Total

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-52510					
460-18679-1	GPEC-WC-A1415	T	Solid	Moisture	
Prep Batch: 460-52689					
LCS 460-52689/2-A	Lab Control Sample	T	Solid	7.3.3	
MB 460-52689/1-A	Method Blank	T	Solid	7.3.3	
460-18679-1	GPEC-WC-A1415	T	Solid	7.3.3	
460-18679-1DU	Duplicate	T	Solid	7.3.3	
Prep Batch: 460-52692					
LCS 460-52692/2-A	Lab Control Sample	T	Solid	7.3.4	
MB 460-52692/1-A	Method Blank	T	Solid	7.3.4	
460-18679-1	GPEC-WC-A1415	T	Solid	7.3.4	
460-18679-1MS	Matrix Spike	T	Solid	7.3.4	
460-18679-1MSD	Matrix Spike Duplicate	T	Solid	7.3.4	
Analysis Batch:460-52693					
LCS 460-52689/2-A	Lab Control Sample	T	Solid	9014	460-52689
MB 460-52689/1-A	Method Blank	T	Solid	9014	460-52689
460-18679-1	GPEC-WC-A1415	T	Solid	9014	460-52689
460-18679-1DU	Duplicate	T	Solid	9014	460-52689
Analysis Batch:460-52695					
LCS 460-52692/2-A	Lab Control Sample	T	Solid	9034	460-52692
MB 460-52692/1-A	Method Blank	T	Solid	9034	460-52692
460-18679-1	GPEC-WC-A1415	T	Solid	9034	460-52692
460-18679-1MS	Matrix Spike	T	Solid	9034	460-52692
460-18679-1MSD	Matrix Spike Duplicate	T	Solid	9034	460-52692
Analysis Batch:460-52850					
LCS 460-52850/2	Lab Control Sample	T	Solid	9045C	
MB 460-52850/1	Method Blank	T	Solid	9045C	
460-18679-1	GPEC-WC-A1415	T	Solid	9045C	
460-18679-1DU	Duplicate	T	Solid	9045C	
Analysis Batch:460-52951					
460-18679-1	GPEC-WC-A1415	T	Solid	1030	
460-18679-1DU	Duplicate	T	Solid	1030	
Analysis Batch:680-183808					
LCS 680-183808/2	Lab Control Sample	T	Solid	9023	
MB 680-183808/1	Method Blank	T	Solid	9023	
460-18679-1	GPEC-WC-A1415	T	Solid	9023	

Client: GEI Consultants, Inc. Job Number: 460-18679-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
460-18679-1	GPEC-WC-A1415	108	91	92
MB 460-53050/4		107	90	94
LB 460-52748/1-A		106	91	93
LCS 460-53050/3		101	97	98
460-18679-1 MS	GPEC-WC-A1415 MS	103	98	98
460-18679-1 MSD	GPEC-WC-A1415 MSD	102	99	97

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	74-131
BFB = Bromofluorobenzene	73-155
TOL = Toluene-d8 (Surr)	76-141

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Surrogate Recovery Report

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Client Matrix: Solid TCLP

Lab Sample ID	Client Sample ID	FBP %Rec	2FP %Rec	PHL %Rec	NBZ %Rec	TBP %Rec	TPH %Rec
460-18679-1	GPEC-WC-A1415	81	43	28	81	76	75
MB 460-53020/1-A		86	35	28	87	76	88
LB 460-52687/1-K		86	44	28	87	76	83
LCS 460-53020/2-A		85	37	27	88	86	87

Surrogate	Acceptance Limits
FBP = 2-Fluorobiphenyl	53-108
2FP = 2-Fluorophenol	10-65
PHL = Phenol-d5	10-48
NBZ = Nitrobenzene-d5	56-112
TBP = 2,4,6-Tribromophenol	46-122
TPH = Terphenyl-d14	50-122

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Surrogate Recovery Report

8015B Diesel Range Organics (DRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH2 %Rec
460-18679-1	GPEC-WC-A1415	78
MB 460-52731/1-A		75
LCS 460-52731/2-A		78

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	43-119

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	DCB2 %Rec
460-18679-1	GPEC-WC-A1415	96	88
MB 460-52455/1-A		98	92
LCS 460-52455/2-A		99	94

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	30-150

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-53050

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 460-53050/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1900
Date Prepared: 10/21/2010 1900

Analysis Batch: 460-53050
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS2
Lab File ID: b29858.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Carbon tetrachloride	0.0010	U	0.00019	0.0010
Chlorobenzene	0.0010	U	0.00016	0.0010
Chloroform	0.0010	U	0.00015	0.0010
1,4-Dichlorobenzene	0.0010	U	0.00015	0.0010
1,2-Dichloroethane	0.0010	U	0.00024	0.0010
1,1-Dichloroethene	0.0010	U	0.00014	0.0010
2-Butanone	0.010	U	0.00082	0.010
Tetrachloroethene	0.0010	U	0.00020	0.0010
Trichloroethene	0.0010	U	0.00018	0.0010
Vinyl chloride	0.0010	U	0.00013	0.0010
Benzene	0.0010	U	0.00013	0.0010

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	74 - 131
Bromofluorobenzene	90	73 - 155
Toluene-d8 (Surr)	94	76 - 141

Client: GEI Consultants, Inc. Job Number: 460-18679-1

TCLP SPLPE Leachate Blank - Batch: 460-53050

Method: 8260B
Preparation: 5030B
TCLP

Lab Sample ID:	LB 460-52748/1-A	Analysis Batch:	460-53050	Instrument ID:	VOAMS2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	b29859.d
Dilution:	10	Units:	mg/L	Initial Weight/Volume:	5 mL
Date Analyzed:	10/21/2010 2004			Final Weight/Volume:	5 mL
Date Prepared:	10/21/2010 2004				
Date Leached:	10/19/2010 2200	Leachate Batch:	460-52748		

Analyte	Result	Qual	MDL	RL
Carbon tetrachloride	0.010	U	0.0019	0.010
Chlorobenzene	0.010	U	0.0016	0.010
Chloroform	0.010	U	0.0015	0.010
1,4-Dichlorobenzene	0.010	U	0.0015	0.010
1,2-Dichloroethane	0.010	U	0.0024	0.010
1,1-Dichloroethene	0.010	U	0.0014	0.010
2-Butanone	0.10	U	0.0082	0.10
Tetrachloroethene	0.010	U	0.0020	0.010
Trichloroethene	0.010	U	0.0018	0.010
Vinyl chloride	0.010	U	0.0013	0.010
Benzene	0.010	U	0.0013	0.010

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106	74 - 131
Bromofluorobenzene	91	73 - 155
Toluene-d8 (Surr)	93	76 - 141

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Lab Control Sample - Batch: 460-53050

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 460-53050/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/21/2010 1746
Date Prepared: 10/21/2010 1746

Analysis Batch: 460-53050
Prep Batch: N/A
Units: mg/L

Instrument ID: VOAMS2
Lab File ID: b29855.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Carbon tetrachloride	0.0200	0.0195	98	76 - 116	
Chlorobenzene	0.0200	0.0185	92	85 - 125	
Chloroform	0.0200	0.0189	95	85 - 125	
1,4-Dichlorobenzene	0.0200	0.0179	89	70 - 130	
1,2-Dichloroethane	0.0200	0.0191	95	76 - 116	
1,1-Dichloroethene	0.0200	0.0194	97	61 - 143	
2-Butanone	0.0200	0.0209	105	61 - 108	
Tetrachloroethene	0.0200	0.0190	95	80 - 142	
Trichloroethene	0.0200	0.0190	95	82 - 122	
Vinyl chloride	0.0200	0.0209	104	54 - 138	
Benzene	0.0200	0.0178	89	84 - 124	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101	74 - 131
Bromofluorobenzene	97	73 - 155
Toluene-d8 (Surr)	98	76 - 141

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-53050

Method: 8260B
Preparation: 5030B
TCLP

MS Lab Sample ID:	460-18679-1	Analysis Batch: 460-53050	Instrument ID: VOAMS2
Client Matrix:	Solid	Prep Batch: N/A	Lab File ID: b29866.d
Dilution:	10		Initial Weight/Volume: 5 mL
Date Analyzed:	10/22/2010 0052		Final Weight/Volume: 5 mL
Date Prepared:	10/22/2010 0052		
Date Leached:	10/19/2010 2200	Leachate Batch: 460-52748	
MSD Lab Sample ID:	460-18679-1	Analysis Batch: 460-53050	Instrument ID: VOAMS2
Client Matrix:	Solid	Prep Batch: N/A	Lab File ID: b29867.d
Dilution:	10		Initial Weight/Volume: 5 mL
Date Analyzed:	10/22/2010 0116		Final Weight/Volume: 5 mL
Date Prepared:	10/22/2010 0116		
Date Leached:	10/19/2010 2200	Leachate Batch: 460-52748	

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Carbon tetrachloride	93	99	76 - 116	6	30		
Chlorobenzene	88	96	85 - 125	8	30		
Chloroform	93	99	85 - 125	6	30		
1,4-Dichlorobenzene	87	93	70 - 130	6	30		
1,2-Dichloroethane	95	100	76 - 116	5	30		
1,1-Dichloroethene	91	97	61 - 143	6	30		
2-Butanone	92	100	61 - 108	8	30		
Tetrachloroethene	89	98	80 - 142	10	30		
Trichloroethene	87	95	82 - 122	9	30		
Vinyl chloride	99	105	54 - 138	6	30		
Benzene	86	93	84 - 124	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	102	74 - 131
Bromofluorobenzene	98	99	73 - 155
Toluene-d8 (Surr)	98	97	76 - 141

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-53020

Method: 8270C
Preparation: 3510C

Lab Sample ID: MB 460-53020/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1200
Date Prepared: 10/21/2010 2044

Analysis Batch: 460-53132
Prep Batch: 460-53020
Units: mg/L

Instrument ID: BNAMS5
Lab File ID: x9722.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 2 mL
Injection Volume:

Analyte	Result	Qual	MDL	RL
Pyridine	0.010	U	0.010	0.010
1,4-Dichlorobenzene	0.010	U	0.010	0.010
Hexachloroethane	0.0010	U	0.0010	0.0010
Nitrobenzene	0.0010	U	0.0010	0.0010
o-Cresol	0.010	U	0.010	0.010
m & p - Cresol	0.010	U	0.010	0.010
Pentachlorophenol	0.030	U	0.030	0.030
Hexachlorobutadiene	0.0020	U	0.0020	0.0020
2,4-Dinitrotoluene	0.0020	U	0.0020	0.0020
Hexachlorobenzene	0.0010	U	0.0010	0.0010
2,4,5-Trichlorophenol	0.010	U	0.010	0.010
2,4,6-Trichlorophenol	0.010	U	0.010	0.010

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	86	53 - 108
2-Fluorophenol	35	10 - 65
Phenol-d5	28	10 - 48
Nitrobenzene-d5	87	56 - 112
2,4,6-Tribromophenol	76	46 - 122
Terphenyl-d14	88	50 - 122

Client: GEI Consultants, Inc. Job Number: 460-18679-1

TCLP SPLPE Leachate Blank - Batch: 460-53020

Method: 8270C
Preparation: 3510C
TCLP

Lab Sample ID:	LB 460-52687/1-K	Analysis Batch:	460-53132	Instrument ID:	BNAMS5
Client Matrix:	Solid	Prep Batch:	460-53020	Lab File ID:	x9731.d
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	250 mL
Date Analyzed:	10/22/2010 1559			Final Weight/Volume:	2 mL
Date Prepared:	10/21/2010 2044			Injection Volume:	
Date Leached:	10/19/2010 1707	Leachate Batch:	460-52687		

Analyte	Result	Qual	MDL	RL
Pyridine	0.040	U	0.040	0.040
1,4-Dichlorobenzene	0.040	U	0.040	0.040
Hexachloroethane	0.0040	U	0.0040	0.0040
Nitrobenzene	0.0040	U	0.0040	0.0040
o-Cresol	0.040	U	0.040	0.040
m & p - Cresol	0.040	U	0.040	0.040
Pentachlorophenol	0.12	U	0.12	0.12
Hexachlorobutadiene	0.0080	U	0.0080	0.0080
2,4-Dinitrotoluene	0.0080	U	0.0080	0.0080
Hexachlorobenzene	0.0040	U	0.0040	0.0040
2,4,5-Trichlorophenol	0.040	U	0.040	0.040
2,4,6-Trichlorophenol	0.040	U	0.040	0.040

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	86	53 - 108
2-Fluorophenol	44	10 - 65
Phenol-d5	28	10 - 48
Nitrobenzene-d5	87	56 - 112
2,4,6-Tribromophenol	76	46 - 122
Terphenyl-d14	83	50 - 122

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Lab Control Sample - Batch: 460-53020

Method: 8270C
Preparation: 3510C

Lab Sample ID: LCS 460-53020/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/22/2010 1226
Date Prepared: 10/21/2010 2044

Analysis Batch: 460-53132
Prep Batch: 460-53020
Units: mg/L

Instrument ID: BNAMS5
Lab File ID: x9723.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 2 mL
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Pyridine	0.100	0.0264	26	14 - 55	
1,4-Dichlorobenzene	0.100	0.0795	80	64 - 110	
Hexachloroethane	0.100	0.0799	80	61 - 112	
Nitrobenzene	0.100	0.0670	67	49 - 92	
o-Cresol	0.200	0.132	66	41 - 90	
m & p - Cresol	0.400	0.216	54	30 - 87	
Pentachlorophenol	0.200	0.177	88	50 - 124	
Hexachlorobutadiene	0.100	0.0847	85	56 - 113	
2,4-Dinitrotoluene	0.100	0.0866	87	67 - 126	
Hexachlorobenzene	0.100	0.0376	38	24 - 98	
2,4,5-Trichlorophenol	0.200	0.183	91	66 - 120	
2,4,6-Trichlorophenol	0.200	0.172	86	67 - 115	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	85	53 - 108
2-Fluorophenol	37	10 - 65
Phenol-d5	27	10 - 48
Nitrobenzene-d5	88	56 - 112
2,4,6-Tribromophenol	86	46 - 122
Terphenyl-d14	87	50 - 122

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-52731

Method: 8015B
Preparation: 3546

Lab Sample ID: MB 460-52731/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 0904
Date Prepared: 10/19/2010 2300

Analysis Batch: 460-52810
Prep Batch: 460-52731
Units: mg/Kg

Instrument ID: BNAGC1
Lab File ID: gcr55262.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL	RL
Diesel Range Organics (C10-C44)	8.7	U	8.7	8.7

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	75	43 - 119

Lab Control Sample - Batch: 460-52731

Method: 8015B
Preparation: 3546

Lab Sample ID: LCS 460-52731/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 0924
Date Prepared: 10/19/2010 2300

Analysis Batch: 460-52810
Prep Batch: 460-52731
Units: mg/Kg

Instrument ID: BNAGC1
Lab File ID: gcr55263.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Diesel Range Organics (C10-C44)	217	164	76	51 - 108	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	78	43 - 119

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-52455

Method: 8082
Preparation: 3541

Lab Sample ID: MB 460-52455/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/18/2010 1054
Date Prepared: 10/16/2010 1531

Analysis Batch: 460-52539
Prep Batch: 460-52455
Units: ug/Kg

Instrument ID: PESTGC7
Lab File ID: or11818.d
Initial Weight/Volume: 15.04 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	67	U	13	67
Aroclor 1221	67	U	20	67
Aroclor 1232	67	U	38	67
Aroclor 1242	67	U	13	67
Aroclor 1248	67	U	18	67
Aroclor 1254	67	U	23	67
Aroclor 1260	67	U	7.5	67
Aroclor 1262	67	U	11	67
Aroclor 1268	67	U	11	67

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	98	30 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	92	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Lab Control Sample - Batch: 460-52455

Method: 8082
Preparation: 3541

Lab Sample ID: LCS 460-52455/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/18/2010 1038
Date Prepared: 10/16/2010 1531

Analysis Batch: 460-52539
Prep Batch: 460-52455
Units: ug/Kg

Instrument ID: PESTGC7
Lab File ID: or11817.d
Initial Weight/Volume: 15.03 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	314	94	60 - 144	
Aroclor 1260	333	305	92	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	99	30 - 150

Lab Control Sample - Batch: 460-52455

Method: 8082
Preparation: 3541

Lab Sample ID: LCS 460-52455/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/18/2010 1038
Date Prepared: 10/16/2010 1531

Analysis Batch: 460-52539
Prep Batch: 460-52455
Units: ug/Kg

Instrument ID: PESTGC7
Lab File ID: of11817.d
Initial Weight/Volume: 15.03 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	303	91	60 - 144	
Aroclor 1260	333	286	86	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	94	30 - 150

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-52449

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 460-52449/1-A ^2
Client Matrix: Solid
Dilution: 2.0
Date Analyzed: 10/17/2010 0842
Date Prepared: 10/16/2010 1447

Analysis Batch: 460-52462
Prep Batch: 460-52449
Units: mg/Kg

Instrument ID: ICP4
Lab File ID: 10172010.txt
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Aluminum	20.0	U	7.3	20.0
Antimony	1.0	U	0.44	1.0
Arsenic	0.50	U	0.35	0.50
Barium	20.0	U	0.60	20.0
Beryllium	0.20	U	0.088	0.20
Cadmium	0.50	U	0.078	0.50
Calcium	500	U	13.1	500
Chromium	1.0	U	0.59	1.0
Cobalt	5.0	U	0.61	5.0
Copper	2.5	U	0.41	2.5
Iron	15.0	U	5.3	15.0
Lead	0.50	U	0.25	0.50
Magnesium	500	U	5.3	500
Manganese	1.5	U	0.56	1.5
Nickel	4.0	U	0.27	4.0
Potassium	500	U	22.6	500
Selenium	1.0	U	0.47	1.0
Silver	1.0	U	0.076	1.0
Sodium	500	U	30.7	500
Thallium	1.0	U	0.48	1.0
Vanadium	5.0	U	0.26	5.0
Zinc	3.0	U	0.49	3.0

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

LCS-Certified Reference Material - Batch: 460-52449

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 460-52449/2-A ^4
Client Matrix: Solid
Dilution: 4.0
Date Analyzed: 10/17/2010 0845
Date Prepared: 10/16/2010 1447

Analysis Batch: 460-52462
Prep Batch: 460-52449
Units: mg/Kg

Instrument ID: ICP4
Lab File ID: 10172010.txt
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	10300	7053	69	46.1 - 154	
Antimony	66.1	66.78	101	32.0 - 353	
Arsenic	102	93.96	92	69.7 - 131	
Barium	194	181.1	93	73.2 - 126	
Beryllium	76.1	72.47	95	74.0 - 126	
Cadmium	59.5	56.84	96	73.3 - 127	
Calcium	9680	9263	96	75.4 - 125	
Chromium	231	229.6	99	70.8 - 129	
Cobalt	89.4	90.31	101	74.4 - 126	
Copper	171	165.3	97	75.3 - 124	
Iron	17600	15240	86	42.1 - 158	
Lead	84.3	83.76	99	69.8 - 130	
Magnesium	3920	3363	86	69.5 - 131	
Manganese	547	555.7	102	77.4 - 123	
Nickel	131	133.8	102	73.2 - 127	
Potassium	4220	3549	84	65.3 - 135	
Selenium	280	253.5	90	69.6 - 130	
Silver	29.5	27.22	92	65.1 - 135	
Sodium	1000	897.5	90	60.2 - 139	J
Thallium	119	130.3	110	67.8 - 133	
Vanadium	113	105.4	94	67.6 - 132	
Zinc	582	549.6	94	73.6 - 127	

Method Blank - Batch: 460-52823

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 460-52823/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2010 1538
Date Prepared: 10/20/2010 1348

Analysis Batch: 460-52853
Prep Batch: 460-52823
Units: ug/L

Instrument ID: ICP4
Lab File ID: 10202010B.asc
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Arsenic	5.0	U	3.8	5.0
Barium	200	U	3.2	200
Cadmium	5.0	U	0.92	5.0
Chromium	10.0	U	3.2	10.0
Lead	5.0	U	2.8	5.0
Selenium	10.0	U	4.8	10.0
Silver	10.0	U	0.97	10.0

TCLP SPLPE Leachate Blank - Batch: 460-52823

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID: LB 460-52687/1-D ^5
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 10/20/2010 1612
Date Prepared: 10/20/2010 1348
Date Leached: 10/19/2010 1707

Analysis Batch: 460-52853
Prep Batch: 460-52823
Units: ug/L

Leachate Batch: 460-52687

Instrument ID: ICP4
Lab File ID: 10202010B.asc
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Arsenic	25.0	U	19.2	25.0
Barium	1000	U	16.1	1000
Cadmium	25.0	U	4.6	25.0
Chromium	50.0	U	16.0	50.0
Lead	25.0	U	13.9	25.0
Selenium	50.0	U	23.8	50.0
Silver	50.0	U	4.8	50.0

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Lab Control Sample - Batch: 460-52823

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 460-52823/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2010 1542
Date Prepared: 10/20/2010 1348

Analysis Batch: 460-52853
Prep Batch: 460-52823
Units: ug/L

Instrument ID: ICP4
Lab File ID: 10202010B.asc
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	5000	4701	94	80 - 120	
Barium	10000	10480	105	80 - 120	
Cadmium	1000	1045	104	80 - 120	
Chromium	5000	5204	104	80 - 120	
Lead	5000	5567	111	80 - 120	
Selenium	1000	939.9	94	80 - 120	
Silver	500	492.5	98	80 - 120	

Method Blank - Batch: 460-52863

Method: 7470A
Preparation: 7470A

Lab Sample ID: MB 460-52863/11-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2010 2052
Date Prepared: 10/20/2010 1630

Analysis Batch: 460-52877
Prep Batch: 460-52863
Units: ug/L

Instrument ID: LEEMAN5
Lab File ID: 102010.PRN
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.20	U	0.18	0.20

TCLP SPLPE Leachate Blank - Batch: 460-52863

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID: LB 460-52687/1-E
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 2144
Date Prepared: 10/20/2010 1630
Date Leached: 10/19/2010 1707

Analysis Batch: 460-52877
Prep Batch: 460-52863
Units: ug/L

Leachate Batch: 460-52687

Instrument ID: LEEMAN5
Lab File ID: 102010.PRN
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.20	U	0.18	0.20

Lab Control Sample - Batch: 460-52863

Method: 7470A
Preparation: 7470A

Lab Sample ID: LCS 460-52863/12-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2010 2054
Date Prepared: 10/20/2010 1630

Analysis Batch: 460-52877
Prep Batch: 460-52863
Units: ug/L

Instrument ID: LEEMAN5
Lab File ID: 102010.PRN
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	5.00	5.30	106	80 - 120	

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 460-52481

Method: 7471A
Preparation: 7471A

Lab Sample ID: MB 460-52481/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/18/2010 1226
Date Prepared: 10/18/2010 0912

Analysis Batch: 460-52533
Prep Batch: 460-52481
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 52481hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.033	U	0.026	0.033

LCS-Certified Reference Material - Batch: 460-52481

Method: 7471A
Preparation: 7471A

Lab Sample ID: LCSSRM 460-52481/2-A ^10
Client Matrix: Solid
Dilution: 10
Date Analyzed: 10/18/2010 1228
Date Prepared: 10/18/2010 0912

Analysis Batch: 460-52533
Prep Batch: 460-52481
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 52481hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	8.46	9.22	109	51.3 - 149	

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Duplicate - Batch: 460-52951

Method: 1030
Preparation: N/A

Lab Sample ID: 460-18679-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/21/2010 1141
Date Prepared: N/A

Analysis Batch: 460-52951
Prep Batch: N/A
Units: mm/sec

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Burn Rate	2.20	U	2.20	NC	10	U

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Method Blank - Batch: 460-52689

Method: 9014
Preparation: 7.3.3

Lab Sample ID: MB 460-52689/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1721
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52693
Prep Batch: 460-52689
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Cyanide, Reactive	25.0	U	25.0	25.0

Lab Control Sample - Batch: 460-52689

Method: 9014
Preparation: 7.3.3

Lab Sample ID: LCS 460-52689/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1721
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52693
Prep Batch: 460-52689
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Reactive	40.0	25.0	12	85 - 115	U *

Duplicate - Batch: 460-52689

Method: 9014
Preparation: 7.3.3

Lab Sample ID: 460-18679-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1721
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52693
Prep Batch: 460-52689
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Cyanide, Reactive	25.0	U	25.0	NC	10	U *

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Method Blank - Batch: 680-183808

Method: 9023
Preparation: N/A

Lab Sample ID: MB 680-183808/1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/22/2010 0800
Date Prepared: N/A

Analysis Batch: 680-183808
Prep Batch: N/A
Units: mg/Kg

Instrument ID: EURO1
Lab File ID: N/A
Initial Weight/Volume: 2 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	RL
Halogens, Extractable Organic	20.0	U	10.0	20.0

Lab Control Sample - Batch: 680-183808

Method: 9023
Preparation: N/A

Lab Sample ID: LCS 680-183808/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/22/2010 0800
Date Prepared: N/A

Analysis Batch: 680-183808
Prep Batch: N/A
Units: mg/Kg

Instrument ID: EURO1
Lab File ID: N/A
Initial Weight/Volume: 2 g
Final Weight/Volume: 10 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Halogens, Extractable Organic	50.0	38.38	77	60 - 140	

Client: GEI Consultants, Inc. Job Number: 460-18679-1

Method Blank - Batch: 460-52692

Method: 9034
Preparation: 7.3.4

Lab Sample ID: MB 460-52692/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1729
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52695
Prep Batch: 460-52692
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Sulfide, Reactive	20.0	U	6.4	20.0

Lab Control Sample - Batch: 460-52692

Method: 9034
Preparation: 7.3.4

Lab Sample ID: LCS 460-52692/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1729
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52695
Prep Batch: 460-52692
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfide, Reactive	62.2	76.30	123	70 - 130	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-52692

Method: 9034
Preparation: 7.3.4

MS Lab Sample ID: 460-18679-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1729
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52695
Prep Batch: 460-52692

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 460-18679-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/19/2010 1729
Date Prepared: 10/19/2010 0900

Analysis Batch: 460-52695
Prep Batch: 460-52692

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 g
Final Weight/Volume: 50 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sulfide, Reactive	14	14	3 - 50	0	33		

Method Blank - Batch: 460-52850

Method: 9045C
Preparation: N/A

Lab Sample ID: MB 460-52850/1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 1422
Date Prepared: N/A

Analysis Batch: 460-52850
Prep Batch: N/A
Units: SU

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result	Qual	NONE	NONE
pH	5.860			
Corrosivity	5.860			

Lab Control Sample - Batch: 460-52850

Method: 9045C
Preparation: N/A

Lab Sample ID: LCS 460-52850/2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 1424
Date Prepared: N/A

Analysis Batch: 460-52850
Prep Batch: N/A
Units: SU

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
pH	6.92	6.920	100	95 - 105	
Corrosivity	6.92	6.920	100	95 - 105	

Duplicate - Batch: 460-52850

Method: 9045C
Preparation: N/A

Lab Sample ID: 460-18679-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/20/2010 1426
Date Prepared: N/A

Analysis Batch: 460-52850
Prep Batch: N/A
Units: SU

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 20 g
Final Weight/Volume: 20 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Corrosivity	8.37	8.330	0.5	10	

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Baker, Sherree	Carrier Tracking No(s):	COC No: 460-3885.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sherree.baker@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 460-18679-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/22/2010			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404	PO #:			
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	WO #:			
Email:	Project #: 46006594			
Project Name: Greenpoint /093260- 1-1101	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9023	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GPEC-WC-A1415 (460-18679-1)	10/13/10	12:00 Eastern		Solid			X	1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Cathi A Reitz	10/21/10 1910	TAEK	Beth a Daughtry	10-22-10 0850	TASAV
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

P.G.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Joseph Chiappetta	Samplers Name (Printed) Matthew Sweet	Site/Project Identification Greenpoint / 093260-1-1101
Company GEI Consultants	P. O. # 093260-1-1101	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 1 Greenwood Ave Suite 210	Analysis Turnaround Time: Standard ☐	Regulatory Program: NYSDEC
City Montclair State NJ 07042	Rush Charges Authorized For: 2 Week ☐ 1 Week ☒ Other ☐	LAB USE ONLY Project No:
Phone 973-873-711 Fax		Job No: 18679

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	TPH 8015M	TOX 9020B	Metals 6010	Ignite 1010	Corros 9040C	React Chapter 7 SW846	PCB 8082A	TCLP Metals 6010B	TCLP 1311/8260B	TCLP SVOC 1311/8270C	Sample Numbers
GPEC-WC-A1415	10/13/10	1200	Soil	5	X	X	X	X	X	X	X	X	X	X	1
Soil:					1	1	1	1	1	1	1	1	1	1	
Water:															

5 Day RUSH

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Special Instructions: Send results to datagroup@geiconsultants.com

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	10/15/2010 11:40	1) Tusha Smith	Test America
2) Tusha Smith	Test America	10/15/10 1445	2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

#40
2.4

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Login Number: 18679

List Source: TestAmerica Edison

Creator: Retana, Camille

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	not received
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4° C IR 40
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: GEI Consultants, Inc.

Job Number: 460-18679-1

Login Number: 18679
Creator: Daughtry, Beth
List Number: 1

List Source: TestAmerica Savannah
List Creation: 10/22/10 09:43 AM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

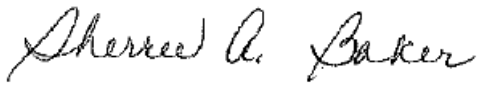
ANALYTICAL REPORT

Job Number: 460-24356-1

Job Description: Greenpoint

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
Montclair, NJ 07042

Attention: Mr. Matthew Sweet



Approved for release.
Sherree Baker
Project Manager II
4/5/2011 10:12 AM

Sherree Baker
Project Manager II
sherree.baker@testamericainc.com
04/05/2011

cc: Mr. Brian Skelly

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

TestAmerica Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: GEI Consultants, Inc.

Project: Greenpoint

Report Number: 460-24356-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 03/21/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.7 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

TOTAL METALS
Sample 460-24356-1 was analyzed for total metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 03/25/2011 and 03/28/2011 and analyzed on 03/28/2011 and 03/29/2011.

Sulfur failed the recovery criteria high for the MS of sample 460-24356-1 in batch 460-68484.

Refer to the QC report for details.

Sulfur exceeded the rpd limit for the duplicate of sample 460-24356-1. Refer to the QC report for details.

Sample 460-24356-1(4X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

As a standard practice all soil samples and related QC samples (i.e., MB, LCS, Dup, MS, SD) are diluted 2X-4X prior to analysis. Further dilutions may be required dependent upon analyte levels in the samples. Refer to the analytical results forms for dilutions.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY
Sample 460-24356-1 was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 03/22/2011.

Sample 460-24356-1(50X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS
Sample 460-24356-1 was analyzed for diesel range organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 03/30/2011 and analyzed on 03/31/2011.

Sample 460-24356-1(2X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the DRO analysis.

All quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS
Sample 460-24356-1 was analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015B - GRO. The samples were prepared on 03/23/2011 and analyzed on 03/28/2011.

No difficulties were encountered during the GRO analysis.

All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Sample 460-24356-1 was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared and analyzed on 03/24/2011.

Aroclor 1260 failed the recovery criteria low for the MS of sample 460-24449-5 in batch 460-68484.

Aroclor 1260 failed the recovery criteria low for the MSD of sample 460-24449-5 in batch 460-68940.

The closing calibration verification (CCV) for analytical batch 68484 exceeded control criteria for DCB . The data have been qualified and reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Aroclor 1260 for batch 68322 were outside control limits due to the presence of target analyte in the sample . The associated laboratory control sample (LCS) recovery met acceptance criteria.

Refer to the QC report for details.

No other difficulties were encountered during the PCBs analysis.

All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 460-24356-1 was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 03/23/2011 and analyzed on 03/25/2011.

Acetone was detected in method blank LB3 460-68295/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Acetone was detected in method blank MB 460-68422/5 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 460-24356-1 was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 03/28/2011 and analyzed on 03/30/2011.

Isophorone failed the recovery criteria low for LCS 460-68798/2-A. Benzo[a]pyrene failed the recovery criteria high.

Several analytes failed the recovery criteria high for the MS and MSD of sample 460-24277-7 in batch 460-68940.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 68798 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS
Sample 460-24356-1 was analyzed for percent solids in accordance with ASTM D2974-87 Modified. The samples were analyzed on 03/21/2011.

No difficulties were encountered during the % solids analysis.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-24356-1	GPEC-WC-031911	Solid	03/19/2011 1645	03/21/2011 1155

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
460-24356-1	**GPEC-WC-031911**					
Methylene Chloride		7.8		1.1	ug/Kg	8260B
Acetone		10	J B	11	ug/Kg	8260B
Carbon disulfide		0.58	J	1.1	ug/Kg	8260B
Tetrachloroethene		0.40	J	1.1	ug/Kg	8260B
Acenaphthene		60	J	400	ug/Kg	8270C
Phenanthrene		790		400	ug/Kg	8270C
Anthracene		180	J	400	ug/Kg	8270C
Fluoranthene		710		400	ug/Kg	8270C
Pyrene		1400		400	ug/Kg	8270C
Benzo[a]anthracene		540		40	ug/Kg	8270C
Chrysene		700		400	ug/Kg	8270C
Benzo[b]fluoranthene		460		40	ug/Kg	8270C
Benzo[a]pyrene		410	*	40	ug/Kg	8270C
Indeno[1,2,3-cd]pyrene		220		40	ug/Kg	8270C
Dibenz(a,h)anthracene		96		40	ug/Kg	8270C
Benzo[g,h,i]perylene		280	J	400	ug/Kg	8270C
Diesel Range Organics [C10-C28]		640		16	mg/Kg	8015B
Arsenic		11.2		1.2	mg/Kg	6010B
Barium		548		47.2	mg/Kg	6010B
Cadmium		0.41	J	1.2	mg/Kg	6010B
Chromium		22.8		2.4	mg/Kg	6010B
Lead		280		1.2	mg/Kg	6010B
Silver		2.2	J	2.4	mg/Kg	6010B
Sulfur		2650		181	mg/Kg	6010B
Mercury		29.8		1.9	mg/Kg	7471A
Percent Moisture		16.9		1.0	%	Moisture
Percent Solids		83.1		1.0	%	Moisture

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL EDI	SW846 8260B	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270C	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Gasoline Range Organics - (GC)	TAL EDI	SW846 8015B	
Closed System Purge and Trap	TAL EDI		SW846 5035
Diesel Range Organics (DRO) (GC)	TAL EDI	SW846 8015B	
Microwave Extraction	TAL EDI		SW846 3546
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Metals (ICP)	TAL EDI	SW846 6010B	
Preparation, Metals	TAL EDI		SW846 3050B
Mercury (CVAA)	TAL EDI	SW846 7471A	
Preparation, Mercury	TAL EDI		SW846 7471A
Percent Moisture	TAL EDI	EPA Moisture	
Metals (ICP)	TAL CT	SW846 6010B	
Preparation, Metals	TAL CT		SW846 3050B

Lab References:

TAL CT = TestAmerica Connecticut

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Method	Analyst	Analyst ID
SW846 8260B	Martinez, Eddie	EM
SW846 8270C	Asfaw, Abebaye A.	AAA
SW846 8015B	Martinez, Eddie	EM
SW846 8015B	Yip, Ming	MY
SW846 8082	Damarapu, Shanthi	SD
SW846 6010B	Dave, Virendra	VD
SW846 6010B	Voytek, Joseph F	JFV
SW846 7471A	Sheikh, Razia B	RBS
EPA Moisture	Hall, Alonzo	ah

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 460-68543		Instrument ID:	VOAMS4
Preparation:	5035	Prep Batch: 460-68295		Lab File ID:	d07626.d
Dilution:	1.0			Initial Weight/Volume:	5.62 g
Date Analyzed:	03/25/2011 2226			Final Weight/Volume:	5 mL
Date Prepared:	03/23/2011 1901				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		1.1	U	0.68	1.1
Bromomethane		1.1	U	0.44	1.1
Vinyl chloride		1.1	U	0.25	1.1
Chloroethane		1.1	U	0.43	1.1
Methylene Chloride		7.8		0.50	1.1
Acetone		10	J B	4.0	11
Carbon disulfide		0.58	J	0.50	1.1
1,1-Dichloroethene		1.1	U	0.39	1.1
1,1-Dichloroethane		1.1	U	0.27	1.1
trans-1,2-Dichloroethene		1.1	U	0.30	1.1
cis-1,2-Dichloroethene		1.1	U	0.25	1.1
Chloroform		1.1	U	0.25	1.1
1,2-Dichloroethane		1.1	U	0.42	1.1
2-Butanone		11	U	0.61	11
1,1,1-Trichloroethane		1.1	U	0.20	1.1
Carbon tetrachloride		1.1	U	0.11	1.1
Bromodichloromethane		1.1	U	0.33	1.1
1,2-Dichloropropane		1.1	U	0.34	1.1
cis-1,3-Dichloropropene		1.1	U	0.22	1.1
Trichloroethene		1.1	U	0.39	1.1
Dibromochloromethane		1.1	U	0.60	1.1
1,1,2-Trichloroethane		1.1	U	0.63	1.1
Benzene		1.1	U	0.79	1.1
trans-1,3-Dichloropropene		1.1	U	0.24	1.1
Bromoform		1.1	U	0.75	1.1
4-Methyl-2-pentanone		11	U	0.77	11
2-Hexanone		11	U	1.8	11
Tetrachloroethene		0.40	J	0.35	1.1
1,1,2,2-Tetrachloroethane		1.1	U	0.81	1.1
Toluene		1.1	U	0.32	1.1
Chlorobenzene		1.1	U	0.52	1.1
Ethylbenzene		1.1	U	0.20	1.1
Styrene		1.1	U	0.37	1.1
Xylenes, Total		3.2	U	0.84	3.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 138
Toluene-d8 (Surr)	102		66 - 126
Bromofluorobenzene	100		72 - 132

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8270C Semivolatile Organic Compounds (GC/MS)

Method:	8270C	Analysis Batch: 460-68940		Instrument ID:	BNAMS4
Preparation:	3541	Prep Batch: 460-68798		Lab File ID:	u66385.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Date Analyzed:	03/30/2011 1309			Final Weight/Volume:	1 mL
Date Prepared:	03/28/2011 2200			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		400	U	49	400
2-Chlorophenol		400	U	53	400
2-Methylphenol		400	U	57	400
4-Methylphenol		400	U	65	400
2-Nitrophenol		400	U	65	400
2,4-Dimethylphenol		400	U	64	400
2,4-Dichlorophenol		400	U	64	400
4-Chloro-3-methylphenol		400	U	67	400
2,4,6-Trichlorophenol		400	U	71	400
2,4,5-Trichlorophenol		400	U	77	400
2,4-Dinitrophenol		1200	U	84	1200
4-Nitrophenol		1200	U	100	1200
4,6-Dinitro-2-methylphenol		1200	U	190	1200
Pentachlorophenol		1200	U	190	1200
Bis(2-chloroethyl)ether		40	U	8.3	40
1,3-Dichlorobenzene		400	U	54	400
1,4-Dichlorobenzene		400	U	59	400
1,2-Dichlorobenzene		400	U	64	400
N-Nitrosodi-n-propylamine		40	U	5.3	40
Hexachloroethane		40	U	6.7	40
Nitrobenzene		40	U	8.9	40
Isophorone		400	U *	46	400
Bis(2-chloroethoxy)methane		400	U	57	400
1,2,4-Trichlorobenzene		40	U	6.5	40
Naphthalene		400	U	58	400
4-Chloroaniline		400	U	50	400
Hexachlorobutadiene		81	U	16	81
2-Methylnaphthalene		400	U	58	400
Hexachlorocyclopentadiene		400	U	120	400
2-Chloronaphthalene		400	U	56	400
2-Nitroaniline		810	U	110	810
Dimethyl phthalate		400	U	54	400
Acenaphthylene		400	U	57	400
2,6-Dinitrotoluene		81	U	10	81
3-Nitroaniline		810	U	90	810
Acenaphthene		60	J	57	400
Dibenzofuran		400	U	60	400
2,4-Dinitrotoluene		81	U	12	81
Diethyl phthalate		400	U	53	400
4-Chlorophenyl phenyl ether		400	U	68	400
Fluorene		400	U	67	400
4-Nitroaniline		810	U	82	810
N-Nitrosodiphenylamine		400	U	65	400
4-Bromophenyl phenyl ether		400	U	71	400
Hexachlorobenzene		40	U	5.5	40
Phenanthrene		790		69	400

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8270C Semivolatile Organic Compounds (GC/MS)

Method:	8270C	Analysis Batch: 460-68940		Instrument ID:	BNAMS4
Preparation:	3541	Prep Batch: 460-68798		Lab File ID:	u66385.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Date Analyzed:	03/30/2011 1309			Final Weight/Volume:	1 mL
Date Prepared:	03/28/2011 2200			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Anthracene		180	J	70	400
Carbazole		400	U	63	400
Di-n-butyl phthalate		400	U	61	400
Fluoranthene		710		66	400
Pyrene		1400		69	400
Butyl benzyl phthalate		400	U	46	400
3,3'-Dichlorobenzidine		810	U	88	810
Benzo[a]anthracene		540		7.4	40
Chrysene		700		58	400
Bis(2-ethylhexyl) phthalate		400	U	53	400
Di-n-octyl phthalate		400	U	47	400
Benzo[b]fluoranthene		460		5.9	40
Benzo[k]fluoranthene		40	U	5.6	40
Benzo[a]pyrene		410	*	4.9	40
Indeno[1,2,3-cd]pyrene		220		6.4	40
Dibenz(a,h)anthracene		96		4.8	40
Benzo[g,h,i]perylene		280	J	42	400
bis (2-chloroisopropyl) ether		400	U	52	400

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	55		38 - 105
Phenol-d5	74		41 - 118
Terphenyl-d14	117		16 - 151
2,4,6-Tribromophenol	51		10 - 120
2-Fluorophenol	62		37 - 125
2-Fluorobiphenyl	64		40 - 109

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8015B Gasoline Range Organics - (GC)

Method:	8015B	Analysis Batch: 460-68719		Instrument ID:	VOAGC3
Preparation:	5035	Prep Batch: 460-68286		Initial Weight/Volume:	5.08 g
Dilution:	50			Final Weight/Volume:	10 mL
Date Analyzed:	03/28/2011 0138			Injection Volume:	
Date Prepared:	03/23/2011 1805			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
GRO		3000	U	3000	3000

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	91		68 - 143

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 460-69165		Instrument ID:	BNAGC1
Preparation:	3546	Prep Batch: 460-68928		Initial Weight/Volume:	15.00 g
Dilution:	2.0			Final Weight/Volume:	1 mL
Date Analyzed:	03/31/2011 1834			Injection Volume:	1 uL
Date Prepared:	03/30/2011 1053			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
Diesel Range Organics [C10-C28]		640		16	16

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	94		43 - 119

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-68484		Instrument ID:	PESTGC8
Preparation:	3541	Prep Batch: 460-68322		Initial Weight/Volume:	15.03 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	03/24/2011 1251			Injection Volume:	
Date Prepared:	03/24/2011 0329			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		80	U	15	80
Aroclor 1221		80	U	24	80
Aroclor 1232		80	U	46	80
Aroclor 1242		80	U	15	80
Aroclor 1248		80	U	21	80
Aroclor 1254		80	U	27	80
Aroclor 1260		80	U	9.0	80
Aroclor 1262		80	U	14	80
Aroclor 1268		80	U	14	80

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	80		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 460-68484		Instrument ID:	PESTGC8
Preparation:	3541	Prep Batch: 460-68322		Initial Weight/Volume:	15.03 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	03/24/2011 1251			Injection Volume:	
Date Prepared:	03/24/2011 0329			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	74		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645
Client Matrix: Solid % Moisture: 16.9 Date Received: 03/21/2011 1155

6010B Metals (ICP)

Method: 6010B Analysis Batch: 220-49146 Instrument ID: ICAP3
Preparation: 3050B Prep Batch: 220-49104 Lab File ID: 032811d.prn
Dilution: 1.0 Initial Weight/Volume: 2.08 g
Date Analyzed: 03/28/2011 1335 Final Weight/Volume: 250 mL
Date Prepared: 03/28/2011 0936

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sulfur		2650		24.6	181

Method: 6010B Analysis Batch: 460-68849 Instrument ID: ICP2
Preparation: 3050B Prep Batch: 460-68537 Lab File ID: 68350V2
Dilution: 4.0 Initial Weight/Volume: 1.02 g
Date Analyzed: 03/29/2011 2049 Final Weight/Volume: 50 mL
Date Prepared: 03/25/2011 1924

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		11.2		0.82	1.2
Barium		548		1.4	47.2
Cadmium		0.41	J	0.18	1.2
Chromium		22.8		1.4	2.4
Lead		280		0.59	1.2
Selenium		2.4	U	1.1	2.4
Silver		2.2	J	0.18	2.4

7471A Mercury (CVAA)

Method: 7471A Analysis Batch: 460-68141 Instrument ID: LEEMAN3
Preparation: 7471A Prep Batch: 460-68108 Lab File ID: 68078hg1.PRN
Dilution: 50 Initial Weight/Volume: 0.64 g
Date Analyzed: 03/22/2011 1430 Final Weight/Volume: 100 mL
Date Prepared: 03/22/2011 1033

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		29.8		1.5	1.9

General Chemistry

Client Sample ID: **GPEC-WC-031911**

Lab Sample ID: 460-24356-1 Date Sampled: 03/19/2011 1645

Client Matrix: Solid Date Received: 03/21/2011 1155

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16.9		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-68037	Date Analyzed: 03/21/2011 2034						DryWt Corrected: N
Percent Solids	83.1		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-68037	Date Analyzed: 03/21/2011 2034						DryWt Corrected: N

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	TOL %Rec	BFB %Rec
460-24356-1	GPEC-WC-031911	84	102	100
MB 460-68422/5		87	91	93
MB 460-68543/5		97	103	99
LB3 460-68295/1-A		92	90	96
LCS 460-68422/3		90	92	96
LCS 460-68543/3		97	102	100
LCSD 460-68543/4		98	102	101

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	70-138
TOL = Toluene-d8 (Surr)	66-126
BFB = Bromofluorobenzene	72-132

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Surrogate Recovery Report

8270C Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
460-24356-1	GPEC-WC-031911	62	74	55	64	51	117
MB 460-68798/1-A		82	86	88	91	90	82
LCS 460-68798/2-A		82	81	76	73	101	92
460-24277-F-7-A MS		88	90	84	77	91	115
460-24277-F-7-B MSD		79	87	80	74	86	107

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol	37-125
PHL = Phenol-d5	41-118
NBZ = Nitrobenzene-d5	38-105
FBP = 2-Fluorobiphenyl	40-109
TBP = 2,4,6-Tribromophenol	10-120
TPH = Terphenyl-d14	16-151

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Surrogate Recovery Report

8015B Gasoline Range Organics - (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TFT1 %Rec
460-24356-1	GPEC-WC-031911	91
MB 460-68719/4		99
LCS 460-68719/2		97
460-24323-A-8-A MS		97
460-24323-A-8-A MSD		94

Surrogate	Acceptance Limits
TFT = a,a,a-Trifluorotoluene	68-143

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Surrogate Recovery Report

8015B Diesel Range Organics (DRO) (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH1 %Rec
460-24356-1	GPEC-WC-031911	94
MB 460-68928/1-A		97
LCS 460-68928/2-A		105
460-24510-A-2-B MS		99
460-24510-A-2-C MSD		100

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	43-119

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	DCB2 %Rec
460-24356-1	GPEC-WC-031911	80	74
MB 460-68322/1-A		108	104
LCS 460-68322/2-A		116	113
460-24449-A-5-A MS		89	77
460-24449-A-5-B MSD		80	70

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	30-150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-68295

Method: 8260B
Preparation: 5035

Lab Sample ID: LB3 460-68295/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 2145
Date Prepared: 03/23/2011 1848

Analysis Batch: 460-68422
Prep Batch: 460-68295
Units: ug/Kg

Instrument ID: VOAMS12
Lab File ID: o46596.d
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	1.0	U	0.63	1.0
Bromomethane	1.0	U	0.41	1.0
Vinyl chloride	1.0	U	0.23	1.0
Chloroethane	1.0	U	0.40	1.0
Methylene Chloride	1.0	U	0.47	1.0
Acetone	4.00	J	3.7	10
Carbon disulfide	1.0	U	0.46	1.0
1,1-Dichloroethene	1.0	U	0.37	1.0
1,1-Dichloroethane	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.28	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
Chloroform	1.0	U	0.24	1.0
1,2-Dichloroethane	1.0	U	0.39	1.0
2-Butanone	10	U	0.57	10
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.10	1.0
Bromodichloromethane	1.0	U	0.30	1.0
1,2-Dichloropropane	1.0	U	0.32	1.0
cis-1,3-Dichloropropene	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.36	1.0
Dibromochloromethane	1.0	U	0.56	1.0
1,1,2-Trichloroethane	1.0	U	0.59	1.0
Benzene	1.0	U	0.74	1.0
trans-1,3-Dichloropropene	1.0	U	0.22	1.0
Bromoform	1.0	U	0.70	1.0
4-Methyl-2-pentanone	10	U	0.72	10
2-Hexanone	10	U	1.7	10
Tetrachloroethene	1.0	U	0.33	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.76	1.0
Toluene	1.0	U	0.30	1.0
Chlorobenzene	1.0	U	0.48	1.0
Ethylbenzene	1.0	U	0.19	1.0
Styrene	1.0	U	0.35	1.0
Xylenes, Total	3.0	U	0.79	3.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	70 - 138
Toluene-d8 (Surr)	90	66 - 126
Bromofluorobenzene	96	72 - 132

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68422

Method: 8260B
Preparation: N/A

Lab Sample ID: MB 460-68422/5
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 2120
Date Prepared: N/A

Analysis Batch: 460-68422
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAMS12
Lab File ID: o46595.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	1.0	U	0.63	1.0
Bromomethane	1.0	U	0.41	1.0
Vinyl chloride	1.0	U	0.23	1.0
Chloroethane	1.0	U	0.40	1.0
Methylene Chloride	1.0	U	0.47	1.0
Acetone	8.89	J	3.7	10
Carbon disulfide	1.0	U	0.46	1.0
1,1-Dichloroethene	1.0	U	0.37	1.0
1,1-Dichloroethane	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.28	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
Chloroform	1.0	U	0.24	1.0
1,2-Dichloroethane	1.0	U	0.39	1.0
2-Butanone	10	U	0.57	10
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.10	1.0
Bromodichloromethane	1.0	U	0.30	1.0
1,2-Dichloropropane	1.0	U	0.32	1.0
cis-1,3-Dichloropropene	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.36	1.0
Dibromochloromethane	1.0	U	0.56	1.0
1,1,2-Trichloroethane	1.0	U	0.59	1.0
Benzene	1.0	U	0.74	1.0
trans-1,3-Dichloropropene	1.0	U	0.22	1.0
Bromoform	1.0	U	0.70	1.0
4-Methyl-2-pentanone	10	U	0.72	10
2-Hexanone	10	U	1.7	10
Tetrachloroethene	1.0	U	0.33	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.76	1.0
Toluene	1.0	U	0.30	1.0
Chlorobenzene	1.0	U	0.48	1.0
Ethylbenzene	1.0	U	0.19	1.0
Styrene	1.0	U	0.35	1.0
Xylenes, Total	3.0	U	0.79	3.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	70 - 138
Toluene-d8 (Surr)	91	66 - 126
Bromofluorobenzene	93	72 - 132

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Lab Control Sample - Batch: 460-68422

Method: 8260B
Preparation: N/A

Lab Sample ID: LCS 460-68422/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 1953
Date Prepared: N/A

Analysis Batch: 460-68422
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAMS12
Lab File ID: o46592.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloromethane	20.0	17.2	86	50 - 151	
Bromomethane	20.0	26.4	132	54 - 142	
Vinyl chloride	20.0	20.3	101	67 - 133	
Chloroethane	20.0	24.3	122	56 - 146	
Methylene Chloride	20.0	20.4	102	74 - 137	
Acetone	20.0	30.0	150	27 - 164	
Carbon disulfide	20.0	19.5	98	72 - 128	
1,1-Dichloroethene	20.0	21.1	105	71 - 126	
1,1-Dichloroethane	20.0	20.3	101	76 - 125	
trans-1,2-Dichloroethene	20.0	20.1	100	75 - 122	
cis-1,2-Dichloroethene	20.0	19.8	99	80 - 120	
Chloroform	20.0	20.1	100	77 - 120	
1,2-Dichloroethane	20.0	19.0	95	76 - 118	
2-Butanone	20.0	19.9	99	77 - 117	
1,1,1-Trichloroethane	20.0	19.9	99	78 - 117	
Carbon tetrachloride	20.0	20.6	103	79 - 118	
Bromodichloromethane	20.0	19.9	100	79 - 119	
1,2-Dichloropropane	20.0	19.8	99	82 - 122	
cis-1,3-Dichloropropene	20.0	19.3	97	80 - 123	
Trichloroethene	20.0	20.2	101	79 - 119	
Dibromochloromethane	20.0	19.6	98	68 - 120	
1,1,2-Trichloroethane	20.0	20.0	100	73 - 118	
Benzene	20.0	20.0	100	77 - 117	
trans-1,3-Dichloropropene	20.0	19.1	95	67 - 121	
Bromoform	20.0	16.5	83	59 - 125	
4-Methyl-2-pentanone	20.0	18.3	91	68 - 120	
2-Hexanone	20.0	17.9	90	70 - 122	
Tetrachloroethene	20.0	21.4	107	80 - 120	
1,1,2,2-Tetrachloroethane	20.0	17.0	85	79 - 122	
Toluene	20.0	19.9	99	75 - 115	
Chlorobenzene	20.0	20.0	100	80 - 120	
Ethylbenzene	20.0	20.2	101	81 - 121	
Styrene	20.0	19.5	98	82 - 122	
Xylenes, Total	60.0	59.8	100	82 - 122	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	70 - 138
Toluene-d8 (Surr)	92	66 - 126
Bromofluorobenzene	96	72 - 132

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68543

Method: 8260B
Preparation: N/A

Lab Sample ID: MB 460-68543/5
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/25/2011 2202
Date Prepared: N/A

Analysis Batch: 460-68543
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAMS4
Lab File ID: d07625.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloromethane	1.0	U	0.63	1.0
Bromomethane	1.0	U	0.41	1.0
Vinyl chloride	1.0	U	0.23	1.0
Chloroethane	1.0	U	0.40	1.0
Methylene Chloride	1.0	U	0.47	1.0
Acetone	10	U	3.7	10
Carbon disulfide	1.0	U	0.46	1.0
1,1-Dichloroethene	1.0	U	0.37	1.0
1,1-Dichloroethane	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.28	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
Chloroform	1.0	U	0.24	1.0
1,2-Dichloroethane	1.0	U	0.39	1.0
2-Butanone	10	U	0.57	10
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.10	1.0
Bromodichloromethane	1.0	U	0.30	1.0
1,2-Dichloropropane	1.0	U	0.32	1.0
cis-1,3-Dichloropropene	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.36	1.0
Dibromochloromethane	1.0	U	0.56	1.0
1,1,2-Trichloroethane	1.0	U	0.59	1.0
Benzene	1.0	U	0.74	1.0
trans-1,3-Dichloropropene	1.0	U	0.22	1.0
Bromoform	1.0	U	0.70	1.0
4-Methyl-2-pentanone	10	U	0.72	10
2-Hexanone	10	U	1.7	10
Tetrachloroethene	1.0	U	0.33	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.76	1.0
Toluene	1.0	U	0.30	1.0
Chlorobenzene	1.0	U	0.48	1.0
Ethylbenzene	1.0	U	0.19	1.0
Styrene	1.0	U	0.35	1.0
Xylenes, Total	3.0	U	0.79	3.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	70 - 138
Toluene-d8 (Surr)	103	66 - 126
Bromofluorobenzene	99	72 - 132

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-68543

Method: 8260B
Preparation: N/A

LCS Lab Sample ID: LCS 460-68543/3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/25/2011 2032
Date Prepared: N/A

Analysis Batch: 460-68543
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAMS4
Lab File ID: d07622.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 460-68543/4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/25/2011 2056
Date Prepared: N/A

Analysis Batch: 460-68543
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAMS4
Lab File ID: d07623.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chloromethane	103	92	50 - 151	11	30		
Bromomethane	102	86	54 - 142	17	30		
Vinyl chloride	106	95	67 - 133	11	30		
Chloroethane	102	89	56 - 146	13	30		
Methylene Chloride	122	109	74 - 137	12	30		
Acetone	111	95	27 - 164	16	30		
Carbon disulfide	95	83	72 - 128	13	30		
1,1-Dichloroethene	98	86	71 - 126	13	30		
1,1-Dichloroethane	107	96	76 - 125	11	30		
trans-1,2-Dichloroethene	107	95	75 - 122	12	30		
cis-1,2-Dichloroethene	105	96	80 - 120	9	30		
Chloroform	103	96	77 - 120	7	30		
1,2-Dichloroethane	101	97	76 - 118	3	30		
2-Butanone	114	112	77 - 117	1	30		
1,1,1-Trichloroethane	97	87	78 - 117	11	30		
Carbon tetrachloride	94	86	79 - 118	10	30		
Bromodichloromethane	104	100	79 - 119	5	30		
1,2-Dichloropropane	104	99	82 - 122	5	30		
cis-1,3-Dichloropropene	100	96	80 - 123	5	30		
Trichloroethene	98	92	79 - 119	6	30		
Dibromochloromethane	105	95	68 - 120	10	30		
1,1,2-Trichloroethane	108	97	73 - 118	10	30		
Benzene	105	96	77 - 117	9	30		
trans-1,3-Dichloropropene	105	95	67 - 121	10	30		
Bromoform	104	98	59 - 125	5	30		
4-Methyl-2-pentanone	95	97	68 - 120	1	30		
2-Hexanone	106	111	70 - 122	5	30		
Tetrachloroethene	101	92	80 - 120	10	30		
1,1,2,2-Tetrachloroethane	100	95	79 - 122	4	30		
Toluene	106	96	75 - 115	10	30		
Chlorobenzene	105	98	80 - 120	7	30		
Ethylbenzene	100	94	81 - 121	6	30		
Styrene	104	97	82 - 122	7	30		
Xylenes, Total	103	96	82 - 122	7	30		

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-68543

Method: 8260B
Preparation: N/A

LCS Lab Sample ID:	LCS 460-68543/3	Analysis Batch:	460-68543	Instrument ID:	VOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	d07622.d
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	5 mL
Date Analyzed:	03/25/2011 2032			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

LCSD Lab Sample ID:	LCSD 460-68543/4	Analysis Batch:	460-68543	Instrument ID:	VOAMS4
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	d07623.d
Dilution:	1.0	Units:	ug/Kg	Initial Weight/Volume:	5 mL
Date Analyzed:	03/25/2011 2056			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	98	70 - 138
Toluene-d8 (Surr)	102	102	66 - 126
Bromofluorobenzene	100	101	72 - 132

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 460-68543

Method: 8260B
Preparation: N/A

LCS Lab Sample ID:	LCS 460-68543/3	Units:	ug/Kg	LCSD Lab Sample ID:	LCSD 460-68543/4
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Date Analyzed:	03/25/2011 2032			Date Analyzed:	03/25/2011 2056
Date Prepared:	N/A			Date Prepared:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloromethane	20.0	20.0	20.6	18.5
Bromomethane	20.0	20.0	20.5	17.2
Vinyl chloride	20.0	20.0	21.1	18.9
Chloroethane	20.0	20.0	20.3	17.8
Methylene Chloride	20.0	20.0	24.5	21.7
Acetone	20.0	20.0	22.2	18.9
Carbon disulfide	20.0	20.0	19.0	16.7
1,1-Dichloroethene	20.0	20.0	19.6	17.2
1,1-Dichloroethane	20.0	20.0	21.3	19.2
trans-1,2-Dichloroethene	20.0	20.0	21.4	19.0
cis-1,2-Dichloroethene	20.0	20.0	21.0	19.2
Chloroform	20.0	20.0	20.6	19.3
1,2-Dichloroethane	20.0	20.0	20.2	19.5
2-Butanone	20.0	20.0	22.8	22.5
1,1,1-Trichloroethane	20.0	20.0	19.4	17.4
Carbon tetrachloride	20.0	20.0	18.9	17.1
Bromodichloromethane	20.0	20.0	20.9	19.9
1,2-Dichloropropane	20.0	20.0	20.7	19.7
cis-1,3-Dichloropropene	20.0	20.0	20.1	19.1
Trichloroethene	20.0	20.0	19.6	18.4
Dibromochloromethane	20.0	20.0	21.0	19.1
1,1,2-Trichloroethane	20.0	20.0	21.6	19.5
Benzene	20.0	20.0	21.0	19.2
trans-1,3-Dichloropropene	20.0	20.0	21.0	19.0
Bromoform	20.0	20.0	20.8	19.7
4-Methyl-2-pentanone	20.0	20.0	19.1	19.3
2-Hexanone	20.0	20.0	21.2	22.3
Tetrachloroethene	20.0	20.0	20.2	18.3
1,1,2,2-Tetrachloroethane	20.0	20.0	19.9	19.1
Toluene	20.0	20.0	21.2	19.3
Chlorobenzene	20.0	20.0	21.1	19.6
Ethylbenzene	20.0	20.0	20.1	18.9
Styrene	20.0	20.0	20.9	19.5
Xylenes, Total	60.0	60.0	61.8	57.7

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68798

Method: 8270C
Preparation: 3541

Lab Sample ID: MB 460-68798/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/30/2011 0527
Date Prepared: 03/28/2011 2200

Analysis Batch: 460-68940
Prep Batch: 460-68798
Units: ug/Kg

Instrument ID: BNAMS4
Lab File ID: u66362.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
Phenol	330	U	41	330
2-Chlorophenol	330	U	44	330
2-Methylphenol	330	U	48	330
4-Methylphenol	330	U	54	330
2-Nitrophenol	330	U	54	330
2,4-Dimethylphenol	330	U	53	330
2,4-Dichlorophenol	330	U	53	330
4-Chloro-3-methylphenol	330	U	56	330
2,4,6-Trichlorophenol	330	U	59	330
2,4,5-Trichlorophenol	330	U	64	330
2,4-Dinitrophenol	1000	U	70	1000
4-Nitrophenol	1000	U	85	1000
4,6-Dinitro-2-methylphenol	1000	U	160	1000
Pentachlorophenol	1000	U	160	1000
Bis(2-chloroethyl)ether	33	U	6.9	33
1,3-Dichlorobenzene	330	U	45	330
1,4-Dichlorobenzene	330	U	49	330
1,2-Dichlorobenzene	330	U	53	330
N-Nitrosodi-n-propylamine	33	U	4.4	33
Hexachloroethane	33	U	5.6	33
Nitrobenzene	33	U	7.4	33
Isophorone	330	U	38	330
Bis(2-chloroethoxy)methane	330	U	47	330
1,2,4-Trichlorobenzene	33	U	5.4	33
Naphthalene	330	U	48	330
4-Chloroaniline	330	U	42	330
Hexachlorobutadiene	67	U	13	67
2-Methylnaphthalene	330	U	48	330
Hexachlorocyclopentadiene	330	U	97	330
2-Chloronaphthalene	330	U	47	330
2-Nitroaniline	670	U	91	670
Dimethyl phthalate	330	U	45	330
Acenaphthylene	330	U	47	330
2,6-Dinitrotoluene	67	U	8.4	67
3-Nitroaniline	670	U	75	670
Acenaphthene	330	U	47	330
Dibenzofuran	330	U	50	330
2,4-Dinitrotoluene	67	U	9.7	67
Diethyl phthalate	330	U	44	330
4-Chlorophenyl phenyl ether	330	U	57	330
Fluorene	330	U	56	330
4-Nitroaniline	670	U	68	670
N-Nitrosodiphenylamine	330	U	54	330

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Method Blank - Batch: 460-68798

Method: 8270C
Preparation: 3541

Lab Sample ID: MB 460-68798/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/30/2011 0527
Date Prepared: 03/28/2011 2200

Analysis Batch: 460-68940
Prep Batch: 460-68798
Units: ug/Kg

Instrument ID: BNAMS4
Lab File ID: u66362.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
4-Bromophenyl phenyl ether	330	U	59	330
Hexachlorobenzene	33	U	4.6	33
Phenanthrene	330	U	58	330
Anthracene	330	U	58	330
Carbazole	330	U	53	330
Di-n-butyl phthalate	330	U	51	330
Fluoranthene	330	U	55	330
Pyrene	330	U	57	330
Butyl benzyl phthalate	330	U	39	330
3,3'-Dichlorobenzidine	670	U	73	670
Benzo[a]anthracene	33	U	6.1	33
Chrysene	330	U	48	330
Bis(2-ethylhexyl) phthalate	330	U	44	330
Di-n-octyl phthalate	330	U	39	330
Benzo[b]fluoranthene	33	U	4.9	33
Benzo[k]fluoranthene	33	U	4.6	33
Benzo[a]pyrene	33	U	4.1	33
Indeno[1,2,3-cd]pyrene	33	U	5.3	33
Dibenz(a,h)anthracene	33	U	4.0	33
Benzo[g,h,i]perylene	330	U	35	330
bis (2-chloroisopropyl) ether	330	U	43	330

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5	88	38 - 105
Phenol-d5	86	41 - 118
Terphenyl-d14	82	16 - 151
2,4,6-Tribromophenol	90	10 - 120
2-Fluorophenol	82	37 - 125
2-Fluorobiphenyl	91	40 - 109

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Lab Control Sample - Batch: 460-68798

Method: 8270C
Preparation: 3541

Lab Sample ID: LCS 460-68798/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/30/2011 0424
Date Prepared: 03/28/2011 2200

Analysis Batch: 460-68940
Prep Batch: 460-68798
Units: ug/Kg

Instrument ID: BNAMS4
Lab File ID: u66359.d
Initial Weight/Volume: 15.03 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenol	6650	4870	73	54 - 115	
2-Chlorophenol	6650	5280	79	56 - 110	
2-Methylphenol	6650	5220	78	54 - 117	
4-Methylphenol	6650	5490	83	47 - 103	
2-Nitrophenol	6650	5330	80	55 - 101	
2,4-Dimethylphenol	6650	5430	82	56 - 112	
2,4-Dichlorophenol	6650	5900	89	58 - 115	
4-Chloro-3-methylphenol	6650	5560	84	55 - 117	
2,4,6-Trichlorophenol	6650	6080	91	53 - 118	
2,4,5-Trichlorophenol	6650	5620	84	50 - 115	
2,4-Dinitrophenol	6650	2990	45	10 - 129	
4-Nitrophenol	6650	5890	89	45 - 114	
4,6-Dinitro-2-methylphenol	6650	3660	55	10 - 110	
Pentachlorophenol	6650	5200	78	19 - 113	
Bis(2-chloroethyl)ether	3330	3180	96	44 - 101	
1,3-Dichlorobenzene	3330	2350	71	47 - 84	
1,4-Dichlorobenzene	3330	2410	72	47 - 85	
1,2-Dichlorobenzene	3330	2460	74	48 - 87	
N-Nitrosodi-n-propylamine	3330	2980	90	42 - 107	
Hexachloroethane	3330	2270	68	45 - 90	
Nitrobenzene	3330	2470	74	42 - 106	
Isophorone	3330	365	11	48 - 97	*
Bis(2-chloroethoxy)methane	3330	2700	81	51 - 100	
1,2,4-Trichlorobenzene	3330	2580	78	48 - 94	
Naphthalene	3330	2490	75	53 - 94	
4-Chloroaniline	3330	1660	50	10 - 96	
Hexachlorobutadiene	3330	2560	77	45 - 98	
2-Methylnaphthalene	3330	2640	79	51 - 98	
Hexachlorocyclopentadiene	3330	2750	83	24 - 98	
2-Chloronaphthalene	3330	2820	85	51 - 102	
2-Nitroaniline	3330	2750	83	51 - 109	
Dimethyl phthalate	3330	3060	92	52 - 112	
Acenaphthylene	3330	2690	81	51 - 103	
2,6-Dinitrotoluene	3330	3490	105	51 - 115	
3-Nitroaniline	3330	1710	51	32 - 104	
Acenaphthene	3330	2940	88	46 - 100	
Dibenzofuran	3330	2610	78	52 - 106	
2,4-Dinitrotoluene	3330	3130	94	53 - 110	
Diethyl phthalate	3330	3050	92	52 - 114	
4-Chlorophenyl phenyl ether	3330	3290	99	50 - 106	
Fluorene	3330	2770	83	51 - 108	
4-Nitroaniline	3330	2800	84	45 - 106	
N-Nitrosodiphenylamine	3330	2540	76	49 - 106	
4-Bromophenyl phenyl ether	3330	2980	90	44 - 102	

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Lab Control Sample - Batch: 460-68798

Method: 8270C
Preparation: 3541

Lab Sample ID: LCS 460-68798/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/30/2011 0424
Date Prepared: 03/28/2011 2200

Analysis Batch: 460-68940
Prep Batch: 460-68798
Units: ug/Kg

Instrument ID: BNAMS4
Lab File ID: u66359.d
Initial Weight/Volume: 15.03 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hexachlorobenzene	3330	2720	82	43 - 104	
Phenanthrene	3330	2580	78	48 - 108	
Anthracene	3330	2840	85	50 - 107	
Carbazole	3330	2590	78	49 - 104	
Di-n-butyl phthalate	3330	2720	82	50 - 108	
Fluoranthene	3330	2650	80	49 - 108	
Pyrene	3330	3080	93	49 - 116	
Butyl benzyl phthalate	3330	2990	90	49 - 117	
3,3'-Dichlorobenzidine	3330	1620	49	24 - 105	
Benzo[a]anthracene	3330	2850	86	46 - 112	
Chrysene	3330	2800	84	45 - 114	
Bis(2-ethylhexyl) phthalate	3330	2970	89	49 - 119	
Di-n-octyl phthalate	3330	3180	96	40 - 106	
Benzo[b]fluoranthene	3330	3030	91	33 - 96	
Benzo[k]fluoranthene	3330	3310	99	35 - 115	
Benzo[a]pyrene	3330	3150	95	36 - 89	*
Indeno[1,2,3-cd]pyrene	3330	3280	99	43 - 109	
Dibenz(a,h)anthracene	3330	3270	98	43 - 107	
Benzo[g,h,i]perylene	3330	3240	97	43 - 106	
bis (2-chloroisopropyl) ether	3330	2560	77	45 - 102	

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5	76	38 - 105
Phenol-d5	81	41 - 118
Terphenyl-d14	92	16 - 151
2,4,6-Tribromophenol	101	10 - 120
2-Fluorophenol	82	37 - 125
2-Fluorobiphenyl	73	40 - 109

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68798

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-24277-F-7-A MS	Analysis Batch: 460-68940	Instrument ID: BNAMS4
Client Matrix:	Solid	Prep Batch: 460-68798	Lab File ID: u66382.d
Dilution:	1.0		Initial Weight/Volume: 15.02 g
Date Analyzed:	03/30/2011 1210		Final Weight/Volume: 1 mL
Date Prepared:	03/28/2011 2200		Injection Volume: 1 uL

MSD Lab Sample ID:	460-24277-F-7-B MSD	Analysis Batch: 460-68940	Instrument ID: BNAMS4
Client Matrix:	Solid	Prep Batch: 460-68798	Lab File ID: u66383.d
Dilution:	1.0		Initial Weight/Volume: 15.04 g
Date Analyzed:	03/30/2011 1230		Final Weight/Volume: 1 mL
Date Prepared:	03/28/2011 2200		Injection Volume: 1 uL

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenol	86	80	54 - 115	7	30		
2-Chlorophenol	88	83	56 - 110	6	30		
2-Methylphenol	87	83	54 - 117	4	30		
4-Methylphenol	92	86	47 - 103	7	30		
2-Nitrophenol	81	79	55 - 101	2	30		
2,4-Dimethylphenol	85	91	56 - 112	7	30		
2,4-Dichlorophenol	97	84	58 - 115	15	30		
4-Chloro-3-methylphenol	90	87	55 - 117	4	30		
2,4,6-Trichlorophenol	92	88	53 - 118	5	30		
2,4,5-Trichlorophenol	91	87	50 - 115	5	30		
2,4-Dinitrophenol	23	17	10 - 129	29	30		
4-Nitrophenol	80	74	45 - 114	8	30		
4,6-Dinitro-2-methylphenol	38	29	10 - 110	26	30		
Pentachlorophenol	38	31	19 - 113	23	30		
Bis(2-chloroethyl)ether	105	107	44 - 101	2	30	F	F
1,3-Dichlorobenzene	73	70	47 - 84	5	30		
1,4-Dichlorobenzene	77	72	47 - 85	7	30		
1,2-Dichlorobenzene	78	77	48 - 87	3	30		
N-Nitrosodi-n-propylamine	99	94	42 - 107	5	30		
Hexachloroethane	69	69	45 - 90	1	30		
Nitrobenzene	79	76	42 - 106	4	30		
Isophorone	89	88	48 - 97	1	30		
Bis(2-chloroethoxy)methane	89	89	51 - 100	0	30		
1,2,4-Trichlorobenzene	78	77	48 - 94	2	30		
Naphthalene	81	81	53 - 94	1	30		
4-Chloroaniline	54	56	10 - 96	5	30		
Hexachlorobutadiene	80	80	45 - 98	0	30		
2-Methylnaphthalene	87	88	51 - 98	2	30		
Hexachlorocyclopentadiene	50	51	24 - 98	1	30		
2-Chloronaphthalene	88	87	51 - 102	2	30		
2-Nitroaniline	100	98	51 - 109	2	30		
Dimethyl phthalate	98	94	52 - 112	5	30		

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68798

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-24277-F-7-A MS	Analysis Batch: 460-68940	Instrument ID: BNAMS4
Client Matrix:	Solid	Prep Batch: 460-68798	Lab File ID: u66382.d
Dilution:	1.0		Initial Weight/Volume: 15.02 g
Date Analyzed:	03/30/2011 1210		Final Weight/Volume: 1 mL
Date Prepared:	03/28/2011 2200		Injection Volume: 1 uL

MSD Lab Sample ID:	460-24277-F-7-B MSD	Analysis Batch: 460-68940	Instrument ID: BNAMS4
Client Matrix:	Solid	Prep Batch: 460-68798	Lab File ID: u66383.d
Dilution:	1.0		Initial Weight/Volume: 15.04 g
Date Analyzed:	03/30/2011 1230		Final Weight/Volume: 1 mL
Date Prepared:	03/28/2011 2200		Injection Volume: 1 uL

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthylene	83	82	51 - 103	1	30		
2,6-Dinitrotoluene	103	102	51 - 115	1	30		
3-Nitroaniline	67	68	32 - 104	1	30		
Acenaphthene	89	85	46 - 100	4	30		
Dibenzofuran	84	79	52 - 106	6	30		
2,4-Dinitrotoluene	102	90	53 - 110	12	30		
Diethyl phthalate	93	94	52 - 114	1	30		
4-Chlorophenyl phenyl ether	99	97	50 - 106	2	30		
Fluorene	83	88	51 - 108	5	30		
4-Nitroaniline	92	89	45 - 106	3	30		
N-Nitrosodiphenylamine	85	81	49 - 106	5	30		
4-Bromophenyl phenyl ether	95	85	44 - 102	11	30		
Hexachlorobenzene	86	83	43 - 104	4	30		
Phenanthrene	85	85	48 - 108	0	30		
Anthracene	92	80	50 - 107	14	30		
Carbazole	87	80	49 - 104	9	30		
Di-n-butyl phthalate	92	83	50 - 108	11	30		
Fluoranthene	82	73	49 - 108	11	30		
Pyrene	117	106	49 - 116	10	30	F	
Butyl benzyl phthalate	119	113	49 - 117	5	30	F	
3,3'-Dichlorobenzidine	76	75	24 - 105	1	30		
Benzo[a]anthracene	94	91	46 - 112	3	30		
Chrysene	101	97	45 - 114	4	30		
Bis(2-ethylhexyl) phthalate	116	108	49 - 119	7	30		
Di-n-octyl phthalate	106	105	40 - 106	2	30		
Benzo[b]fluoranthene	95	91	33 - 96	4	30		
Benzo[k]fluoranthene	97	100	35 - 115	3	30		
Benzo[a]pyrene	93	96	36 - 89	3	30	F	F
Indeno[1,2,3-cd]pyrene	119	112	43 - 109	7	30	F	F
Dibenz(a,h)anthracene	112	113	43 - 107	1	30	F	F
Benzo[g,h,i]perylene	121	126	43 - 106	4	30	F	F
bis (2-chloroisopropyl) ether	87	80	45 - 102	9	30		

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Nitrobenzene-d5	84	80	38 - 105
Phenol-d5	90	87	41 - 118
Terphenyl-d14	115	107	16 - 151
2,4,6-Tribromophenol	91	86	10 - 120
2-Fluorophenol	88	79	37 - 125
2-Fluorobiphenyl	77	74	40 - 109

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68798

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-24277-F-7-A MS	Units: ug/Kg	MSD Lab Sample ID:	460-24277-F-7-B MSD	
Client Matrix:	Solid		Client Matrix:	Solid	
Dilution:	1.0		Dilution:	1.0	
Date Analyzed:	03/30/2011 1210		Date Analyzed:	03/30/2011 1230	
Date Prepared:	03/28/2011 2200		Date Prepared:	03/28/2011 2200	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Phenol	340	U	6930	6920	5970		5550	
2-Chlorophenol	340	U	6930	6920	6080		5750	
2-Methylphenol	340	U	6930	6920	6010		5750	
4-Methylphenol	340	U	6930	6920	6400		5950	
2-Nitrophenol	340	U	6930	6920	5580		5500	
2,4-Dimethylphenol	340	U	6930	6920	5900		6330	
2,4-Dichlorophenol	340	U	6930	6920	6750		5790	
4-Chloro-3-methylphenol	340	U	6930	6920	6240		6010	
2,4,6-Trichlorophenol	340	U	6930	6920	6390		6060	
2,4,5-Trichlorophenol	340	U	6930	6920	6310		5990	
2,4-Dinitrophenol	1000	U	6930	6920	1560		1170	
4-Nitrophenol	1000	U	6930	6920	5570		5160	
4,6-Dinitro-2-methylphenol	1000	U	6930	6920	2630		2020	
Pentachlorophenol	1000	U	6930	6920	2670		2110	
Bis(2-chloroethyl)ether	34	U	3470	3460	3640	F	3690	F
1,3-Dichlorobenzene	340	U	3470	3460	2540		2420	
1,4-Dichlorobenzene	340	U	3470	3460	2670		2490	
1,2-Dichlorobenzene	340	U	3470	3460	2720		2650	
N-Nitrosodi-n-propylamine	34	U	3470	3460	3430		3270	
Hexachloroethane	34	U	3470	3460	2410		2380	
Nitrobenzene	34	U	3470	3460	2740		2640	
Isophorone	340	U	3470	3460	3100		3060	
Bis(2-chloroethoxy)methane	340	U	3470	3460	3070		3080	
1,2,4-Trichlorobenzene	34	U	3470	3460	2710		2650	
Naphthalene	340	U	3470	3460	2790		2810	
4-Chloroaniline	340	U	3470	3460	1860		1950	
Hexachlorobutadiene	70	U	3470	3460	2780		2770	
2-Methylnaphthalene	340	U	3470	3460	3000		3060	
Hexachlorocyclopentadiene	340	U	3470	3460	1740		1770	
2-Chloronaphthalene	340	U	3470	3460	3050		3000	
2-Nitroaniline	700	U	3470	3460	3450		3380	
Dimethyl phthalate	340	U	3470	3460	3390		3240	
Acenaphthylene	340	U	3470	3460	2880		2850	
2,6-Dinitrotoluene	70	U	3470	3460	3570		3540	
3-Nitroaniline	700	U	3470	3460	2320		2340	
Acenaphthene	340	U	3470	3460	3070		2960	
Dibenzofuran	340	U	3470	3460	2900		2730	
2,4-Dinitrotoluene	70	U	3470	3460	3530		3120	
Diethyl phthalate	340	U	3470	3460	3220		3240	
4-Chlorophenyl phenyl ether	340	U	3470	3460	3450		3370	
Fluorene	340	U	3470	3460	2890		3040	

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68798

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-24277-F-7-A MS	Units: ug/Kg	MSD Lab Sample ID:	460-24277-F-7-B MSD	
Client Matrix:	Solid		Client Matrix:	Solid	
Dilution:	1.0		Dilution:	1.0	
Date Analyzed:	03/30/2011 1210		Date Analyzed:	03/30/2011 1230	
Date Prepared:	03/28/2011 2200		Date Prepared:	03/28/2011 2200	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
4-Nitroaniline	700	U	3470	3460	3180		3100	
N-Nitrosodiphenylamine	340	U	3470	3460	2960		2820	
4-Bromophenyl phenyl ether	340	U	3470	3460	3290		2950	
Hexachlorobenzene	34	U	3470	3460	2990		2870	
Phenanthrene	340	U	3470	3460	2940		2950	
Anthracene	340	U	3470	3460	3180		2760	
Carbazole	340	U	3470	3460	3020		2770	
Di-n-butyl phthalate	340	U	3470	3460	3190		2870	
Fluoranthene	340	U	3470	3460	2830		2540	
Pyrene	340	U	3470	3460	4050	F	3660	
Butyl benzyl phthalate	340	U	3470	3460	4120	F	3910	
3,3'-Dichlorobenzidine	700	U	3470	3460	2630		2610	
Benzo[a]anthracene	34	U	3470	3460	3250		3150	
Chrysene	340	U	3470	3460	3490		3340	
Bis(2-ethylhexyl) phthalate	340	U	3470	3460	4020		3750	
Di-n-octyl phthalate	340	U	3470	3460	3690		3630	
Benzo[b]fluoranthene	34	U	3470	3460	3280		3160	
Benzo[k]fluoranthene	34	U	3470	3460	3370		3460	
Benzo[a]pyrene	34	U	3470	3460	3210	F	3310	F
Indeno[1,2,3-cd]pyrene	34	U	3470	3460	4140	F	3880	F
Dibenz(a,h)anthracene	34	U	3470	3460	3880	F	3910	F
Benzo[g,h,i]perylene	340	U	3470	3460	4200	F	4350	F
bis (2-chloroisopropyl) ether	340	U	3470	3460	3010		2760	

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68431

Method: 8015B
Preparation: 5035

MS Lab Sample ID:	460-24323-A-8-A MS	Analysis Batch: 460-68719	Instrument ID: VOAGC3
Client Matrix:	Solid	Prep Batch: 460-68431	Lab File ID: ifid7871.d
Dilution:	50		Initial Weight/Volume: 5.23 g
Date Analyzed:	03/27/2011 2336		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 2128		Injection Volume:
			Column ID: PRIMARY

MSD Lab Sample ID:	460-24323-A-8-A MSD	Analysis Batch: 460-68719	Instrument ID: VOAGC3
Client Matrix:	Solid	Prep Batch: 460-68431	Lab File ID: ifid7872.d
Dilution:	50		Initial Weight/Volume: 5.23 g
Date Analyzed:	03/28/2011 0001		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 2128		Injection Volume:
			Column ID: PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
GRO	100	102	26 - 123	2	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	97	94	68 - 143

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68431

Method: 8015B
Preparation: 5035

MS Lab Sample ID:	460-24323-A-8-A MS	Units: ug/Kg	MSD Lab Sample ID: 460-24323-A-8-A MSD
Client Matrix:	Solid		Client Matrix: Solid
Dilution:	50		Dilution: 50
Date Analyzed:	03/27/2011 2336		Date Analyzed: 03/28/2011 0001
Date Prepared:	03/24/2011 2128		Date Prepared: 03/24/2011 2128

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
GRO	5800	20700	20700	26400	26900

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68719

Method: 8015B
Preparation: N/A

Lab Sample ID: MB 460-68719/4
Client Matrix: Solid
Dilution: 50
Date Analyzed: 03/27/2011 1955
Date Prepared: N/A

Analysis Batch: 460-68719
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAGC3
Lab File ID: ifid7862.d
Initial Weight/Volume: 2.5 mL
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL	RL
GRO	2500	U	2500	2500

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	99	68 - 143

Lab Control Sample - Batch: 460-68719

Method: 8015B
Preparation: N/A

Lab Sample ID: LCS 460-68719/2
Client Matrix: Solid
Dilution: 50
Date Analyzed: 03/27/2011 1842
Date Prepared: N/A

Analysis Batch: 460-68719
Prep Batch: N/A
Units: ug/Kg

Instrument ID: VOAGC3
Lab File ID: ifid7859.d
Initial Weight/Volume: 2.5 mL
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
GRO	20000	19200	96	26 - 123	

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	97	68 - 143

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68928

Method: 8015B
Preparation: 3546

Lab Sample ID: MB 460-68928/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/31/2011 1040
Date Prepared: 03/30/2011 1053

Analysis Batch: 460-69165
Prep Batch: 460-68928
Units: mg/Kg

Instrument ID: BNAGC1
Lab File ID: gcf44208.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL	RL
Diesel Range Organics [C10-C28]	6.7	U	6.7	6.7

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	97	43 - 119

Lab Control Sample - Batch: 460-68928

Method: 8015B
Preparation: 3546

Lab Sample ID: LCS 460-68928/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/31/2011 1055
Date Prepared: 03/30/2011 1053

Analysis Batch: 460-69165
Prep Batch: 460-68928
Units: mg/Kg

Instrument ID: BNAGC1
Lab File ID: gcf44209.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Diesel Range Organics [C10-C28]	167	180	108	62 - 116	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	105	43 - 119

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68928

Method: 8015B
Preparation: 3546

MS Lab Sample ID:	460-24510-A-2-B MS	Analysis Batch: 460-69165	Instrument ID: BNAGC1
Client Matrix:	Solid	Prep Batch: 460-68928	Lab File ID: gcf44230.d
Dilution:	1.0		Initial Weight/Volume: 15.02 g
Date Analyzed:	03/31/2011 1613		Final Weight/Volume: 1 mL
Date Prepared:	03/30/2011 1053		Injection Volume: 1 uL
			Column ID: PRIMARY

MSD Lab Sample ID:	460-24510-A-2-C MSD	Analysis Batch: 460-69165	Instrument ID: BNAGC1
Client Matrix:	Solid	Prep Batch: 460-68928	Lab File ID: gcf44232.d
Dilution:	1.0		Initial Weight/Volume: 15.00 g
Date Analyzed:	03/31/2011 1639		Final Weight/Volume: 1 mL
Date Prepared:	03/30/2011 1053		Injection Volume: 1 uL
			Column ID: PRIMARY

	% Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Diesel Range Organics [C10-C28]	92	90	62 - 116	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	99	100	43 - 119

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68928

Method: 8015B
Preparation: 3546

MS Lab Sample ID:	460-24510-A-2-B MS	Units: mg/Kg	MSD Lab Sample ID: 460-24510-A-2-C MSD
Client Matrix:	Solid		Client Matrix: Solid
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	03/31/2011 1613		Date Analyzed: 03/31/2011 1639
Date Prepared:	03/30/2011 1053		Date Prepared: 03/30/2011 1053

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Diesel Range Organics [C10-C28]	190	203	203	381	378

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Method Blank - Batch: 460-68322

Method: 8082
Preparation: 3541

Lab Sample ID: MB 460-68322/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 1131
Date Prepared: 03/24/2011 0329

Analysis Batch: 460-68484
Prep Batch: 460-68322
Units: ug/Kg

Instrument ID: PESTGC8
Lab File ID: qr082242.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	67	U	13	67
Aroclor 1221	67	U	20	67
Aroclor 1232	67	U	38	67
Aroclor 1242	67	U	13	67
Aroclor 1248	67	U	18	67
Aroclor 1254	67	U	23	67
Aroclor 1260	67	U	7.5	67
Aroclor 1262	67	U	12	67
Aroclor 1268	67	U	12	67

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	108	30 - 150

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	104	30 - 150

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Lab Control Sample - Batch: 460-68322

Method: 8082
Preparation: 3541

Lab Sample ID: LCS 460-68322/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 1147
Date Prepared: 03/24/2011 0329

Analysis Batch: 460-68484
Prep Batch: 460-68322
Units: ug/Kg

Instrument ID: PESTGC8
Lab File ID: qr082243.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	341	102	60 - 144	
Aroclor 1260	333	336	101	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	116	30 - 150

Lab Control Sample - Batch: 460-68322

Method: 8082
Preparation: 3541

Lab Sample ID: LCS 460-68322/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/24/2011 1147
Date Prepared: 03/24/2011 0329

Analysis Batch: 460-68484
Prep Batch: 460-68322
Units: ug/Kg

Instrument ID: PESTGC8
Lab File ID: qf082243.d
Initial Weight/Volume: 15.00 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	329	99	60 - 144	
Aroclor 1260	333	333	100	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	113	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68322

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-24449-A-5-A MS	Analysis Batch: 460-68484	Instrument ID: PESTGC8
Client Matrix:	Solid	Prep Batch: 460-68322	Lab File ID: qr082245.d
Dilution:	1.0		Initial Weight/Volume: 15.02 g
Date Analyzed:	03/24/2011 1219		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 0329		Injection Volume:
			Column ID: PRIMARY

MSD Lab Sample ID:	460-24449-A-5-B MSD	Analysis Batch: 460-68484	Instrument ID: PESTGC8
Client Matrix:	Solid	Prep Batch: 460-68322	Lab File ID: qr082246.d
Dilution:	1.0		Initial Weight/Volume: 15.04 g
Date Analyzed:	03/24/2011 1235		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 0329		Injection Volume:
			Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	83	76	60 - 144	9	30		
Aroclor 1260	-126	-144	63 - 143	9	30	F	F

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	89	80	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68322

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-24449-A-5-A MS	Analysis Batch: 460-68484	Instrument ID: PESTGC8
Client Matrix:	Solid	Prep Batch: 460-68322	Lab File ID: qf082245.d
Dilution:	1.0		Initial Weight/Volume: 15.02 g
Date Analyzed:	03/24/2011 1219		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 0329		Injection Volume:
			Column ID: SECONDARY

MSD Lab Sample ID:	460-24449-A-5-B MSD	Analysis Batch: 460-68484	Instrument ID: PESTGC8
Client Matrix:	Solid	Prep Batch: 460-68322	Lab File ID: qf082246.d
Dilution:	1.0		Initial Weight/Volume: 15.04 g
Date Analyzed:	03/24/2011 1235		Final Weight/Volume: 10 mL
Date Prepared:	03/24/2011 0329		Injection Volume:
			Column ID: SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	76	71	60 - 144	6	30		
Aroclor 1260	-97	-122	63 - 143	13	30	F	F

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	77	70	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68322

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-24449-A-5-A MS	Units: ug/Kg	MSD Lab Sample ID: 460-24449-A-5-B MSD
Client Matrix:	Solid		Client Matrix: Solid
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	03/24/2011 1219		Date Analyzed: 03/24/2011 1235
Date Prepared:	03/24/2011 0329		Date Prepared: 03/24/2011 0329

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Aroclor 1016	81	U	401	401	334		306	
Aroclor 1260	1400		401	401	875	F	802	F

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-68322

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-24449-A-5-A MS	Units: ug/Kg	MSD Lab Sample ID: 460-24449-A-5-B MSD
Client Matrix:	Solid		Client Matrix: Solid
Dilution:	1.0		Dilution: 1.0
Date Analyzed:	03/24/2011 1219		Date Analyzed: 03/24/2011 1235
Date Prepared:	03/24/2011 0329		Date Prepared: 03/24/2011 0329

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Aroclor 1016	81	U	401	401	305		286	
Aroclor 1260	1200		401	401	817	F	717	F

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Method Blank - Batch: 220-49104

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 220-49104/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/28/2011 1328
Date Prepared: 03/28/2011 0936

Analysis Batch: 220-49146
Prep Batch: 220-49104
Units: mg/Kg

Instrument ID: ICAP3
Lab File ID: 032811d.prn
Initial Weight/Volume: 2.0 g
Final Weight/Volume: 250 mL

Analyte	Result	Qual	MDL	RL
Sulfur	156	U	21.2	156

Lab Control Sample - Batch: 220-49104

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCS 220-49104/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/28/2011 1331
Date Prepared: 03/28/2011 0936

Analysis Batch: 220-49146
Prep Batch: 220-49104
Units: mg/Kg

Instrument ID: ICAP3
Lab File ID: 032811d.prn
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 250 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfur	2000	2182	109	80 - 120	

Matrix Spike - Batch: 220-49104

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24356-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/28/2011 1348
Date Prepared: 03/28/2011 0936

Analysis Batch: 220-49146
Prep Batch: 220-49104
Units: mg/Kg

Instrument ID: ICAP3
Lab File ID: 032811d.prn
Initial Weight/Volume: 2.10 g
Final Weight/Volume: 250 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Sulfur	2650	1150	4858	192	75 - 125	F

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Duplicate - Batch: 220-49104

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24356-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/28/2011 1345
Date Prepared: 03/28/2011 0936

Analysis Batch: 220-49146
Prep Batch: 220-49104
Units: mg/Kg

Instrument ID: ICAP3
Lab File ID: 032811d.prn
Initial Weight/Volume: 2.10 g
Final Weight/Volume: 250 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Sulfur	2650	3550	29	20	F

Serial Dilution - Batch: 220-49104

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24356-1
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 03/28/2011 1354
Date Prepared: 03/28/2011 0936

Analysis Batch: 220-49146
Prep Batch: 220-49104
Units: mg/Kg

Instrument ID: ICAP3
Lab File ID: 032811d.prn
Initial Weight/Volume: 2.08 g
Final Weight/Volume: 250 mL

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Sulfur	2650	2801	5.5	10	

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68537

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 460-68537/1-A ^2
Client Matrix: Solid
Dilution: 2.0
Date Analyzed: 03/29/2011 2004
Date Prepared: 03/25/2011 1924

Analysis Batch: 460-68849
Prep Batch: 460-68537
Units: mg/Kg

Instrument ID: ICP2
Lab File ID: 68350V2
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Arsenic	0.50	U	0.35	0.50
Barium	20.0	U	0.60	20.0
Cadmium	0.50	U	0.078	0.50
Chromium	1.0	U	0.59	1.0
Lead	0.50	U	0.25	0.50
Selenium	1.0	U	0.47	1.0
Silver	1.0	U	0.076	1.0

LCS-Certified Reference Material - Batch:

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 460-68537/2-A
Client Matrix: Solid
Dilution: 4.0
Date Analyzed: 03/29/2011 2011
Date Prepared: 03/25/2011 1924

Analysis Batch: 460-68849
Prep Batch: 460-68537
Units: mg/Kg

Instrument ID: ICP2
Lab File ID: 68350V2
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	104	108.6	104	69.7 - 131	
Barium	198	202.6	102	73.2 - 126	
Cadmium	60.7	62.42	103	73.3 - 127	
Chromium	236	241.2	102	70.8 - 129	
Lead	86.0	91.17	106	69.8 - 130	
Selenium	286	290.0	101	69.6 - 130	
Silver	30.1	30.76	102	65.1 - 135	

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Matrix Spike - Batch: 460-68537

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24285-E-1-D MS ^4
Client Matrix: Solid
Dilution: 4.0
Date Analyzed: 03/30/2011 0200
Date Prepared: 03/25/2011 1924

Analysis Batch: 460-68849
Prep Batch: 460-68537
Units: mg/Kg

Instrument ID: ICP2
Lab File ID: 68350V2
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	3.3		211	215.3	100	75 - 125	
Barium	20.2	J	211	231.7	100	75 - 125	
Cadmium	1.1	U	5.28	5.17	98	75 - 125	
Chromium	11.3		21.1	34.28	109	75 - 125	
Lead	34.6		52.8	86.73	99	75 - 125	
Selenium	2.1	U	211	200.3	95	75 - 125	
Silver	2.1	U	5.28	5.22	99	75 - 125	

Duplicate - Batch: 460-68537

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24285-E-1-C DU ^4
Client Matrix: Solid
Dilution: 4.0
Date Analyzed: 03/30/2011 0141
Date Prepared: 03/25/2011 1924

Analysis Batch: 460-68849
Prep Batch: 460-68537
Units: mg/Kg

Instrument ID: ICP2
Lab File ID: 68350V2
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	3.3		3.23	0.6	20	
Barium	20.2	J	22.16	9	20	J
Cadmium	1.1	U	1.1	NC	20	U
Chromium	11.3		11.88	5	20	
Lead	34.6		38.32	10	20	
Selenium	2.1	U	2.1	NC	20	U
Silver	2.1	U	2.1	NC	20	U

Serial Dilution - Batch: 460-68537

Method: 6010B
Preparation: 3050B

Lab Sample ID: 460-24285-E-1-B SD ^5
Client Matrix: Solid
Dilution: 20
Date Analyzed: 03/30/2011 0154
Date Prepared: 03/25/2011 1924

Analysis Batch: 460-68849
Prep Batch: 460-68537
Units: mg/Kg

Instrument ID: ICP2
Lab File ID: 68350V2
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Arsenic	3.3		5.3	NC	10	U
Barium	20.2	J	20.31	NC	10	J
Cadmium	1.1	U	5.3	NC	10	U
Chromium	11.3		11.22	NC	10	
Lead	34.6		35.20	1.7	10	
Selenium	2.1	U	10.7	NC	10	U
Silver	2.1	U	10.7	NC	10	U

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Method Blank - Batch: 460-68108

Method: 7471A
Preparation: 7471A

Lab Sample ID: MB 460-68108/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/22/2011 1334
Date Prepared: 03/22/2011 1033

Analysis Batch: 460-68141
Prep Batch: 460-68108
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 68078hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.033	U	0.026	0.033

LCS-Certified Reference Material - Batch:

Method: 7471A
Preparation: 7471A

Lab Sample ID: LCSSRM 460-68108/2-A ^10
Client Matrix: Solid
Dilution: 10
Date Analyzed: 03/22/2011 1336
Date Prepared: 03/22/2011 1033

Analysis Batch: 460-68141
Prep Batch: 460-68108
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 68078hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	8.46	9.12	108	51.3 - 149	

Matrix Spike - Batch: 460-68108

Method: 7471A
Preparation: 7471A

Lab Sample ID: 460-24285-E-4-C MS
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/22/2011 1341
Date Prepared: 03/22/2011 1033

Analysis Batch: 460-68141
Prep Batch: 460-68108
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 68078hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.035	U	0.179	0.199	111	75 - 125	

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Duplicate - Batch: 460-68108

Method: 7471A
Preparation: 7471A

Lab Sample ID: 460-24285-E-4-B DU
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/22/2011 1339
Date Prepared: 03/22/2011 1033

Analysis Batch: 460-68141
Prep Batch: 460-68108
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 68078hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.035	U	0.035	NC	20	U

Serial Dilution - Batch: 460-68108

Method: 7471A
Preparation: 7471A

Lab Sample ID: 460-24285-E-4-A SD ^5
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 03/22/2011 1425
Date Prepared: 03/22/2011 1033

Analysis Batch: 460-68141
Prep Batch: 460-68108
Units: mg/Kg

Instrument ID: LEEMAN3
Lab File ID: 68078hg1.PRN
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Mercury	0.035	U	0.18	NC		U

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Duplicate - Batch: 460-68037

Method: Moisture
Preparation: N/A

Lab Sample ID: 460-24364-A-4 DU
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/21/2011 2034
Date Prepared: N/A

Analysis Batch: 460-68037
Prep Batch: N/A
Units: %

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	16.2	16.0	1	20	
Percent Solids	83.8	84.0	0.2	20	

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	*	Recovery or RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
Metals		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: GEI Consultants, Inc. Job Number: 460-24356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-68295					
LB3 460-68295/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-24356-1	GPEC-WC-031911	T	Solid	5035	
Analysis Batch:460-68422					
LCS 460-68422/3	Lab Control Sample	T	Solid	8260B	
MB 460-68422/5	Method Blank	T	Solid	8260B	
LB3 460-68295/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260B	460-68295
Analysis Batch:460-68543					
LCS 460-68543/3	Lab Control Sample	T	Solid	8260B	
LCSD 460-68543/4	Lab Control Sample Duplicate	T	Solid	8260B	
MB 460-68543/5	Method Blank	T	Solid	8260B	
460-24356-1	GPEC-WC-031911	T	Solid	8260B	460-68295

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 460-68798					
LCS 460-68798/2-A	Lab Control Sample	T	Solid	3541	
MB 460-68798/1-A	Method Blank	T	Solid	3541	
460-24277-F-7-A MS	Matrix Spike	T	Solid	3541	
460-24277-F-7-B MSD	Matrix Spike Duplicate	T	Solid	3541	
460-24356-1	GPEC-WC-031911	T	Solid	3541	
Analysis Batch:460-68940					
LCS 460-68798/2-A	Lab Control Sample	T	Solid	8270C	460-68798
MB 460-68798/1-A	Method Blank	T	Solid	8270C	460-68798
460-24277-F-7-A MS	Matrix Spike	T	Solid	8270C	460-68798
460-24277-F-7-B MSD	Matrix Spike Duplicate	T	Solid	8270C	460-68798
460-24356-1	GPEC-WC-031911	T	Solid	8270C	460-68798

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-24356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Prep Batch: 460-68286					
460-24356-1	GPEC-WC-031911	T	Solid	5035	
Prep Batch: 460-68431					
460-24323-A-8-A MS	Matrix Spike	T	Solid	5035	
460-24323-A-8-A MSD	Matrix Spike Duplicate	T	Solid	5035	
Analysis Batch:460-68719					
LCS 460-68719/2	Lab Control Sample	T	Solid	8015B	
MB 460-68719/4	Method Blank	T	Solid	8015B	
460-24323-A-8-A MS	Matrix Spike	T	Solid	8015B	460-68431
460-24323-A-8-A MSD	Matrix Spike Duplicate	T	Solid	8015B	460-68431
460-24356-1	GPEC-WC-031911	T	Solid	8015B	460-68286

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-24356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-68322					
LCS 460-68322/2-A	Lab Control Sample	T	Solid	3541	
MB 460-68322/1-A	Method Blank	T	Solid	3541	
460-24356-1	GPEC-WC-031911	T	Solid	3541	
460-24449-A-5-A MS	Matrix Spike	T	Solid	3541	
460-24449-A-5-B MSD	Matrix Spike Duplicate	T	Solid	3541	
Analysis Batch:460-68484					
LCS 460-68322/2-A	Lab Control Sample	T	Solid	8082	460-68322
MB 460-68322/1-A	Method Blank	T	Solid	8082	460-68322
460-24356-1	GPEC-WC-031911	T	Solid	8082	460-68322
460-24449-A-5-A MS	Matrix Spike	T	Solid	8082	460-68322
460-24449-A-5-B MSD	Matrix Spike Duplicate	T	Solid	8082	460-68322
Prep Batch: 460-68928					
LCS 460-68928/2-A	Lab Control Sample	T	Solid	3546	
MB 460-68928/1-A	Method Blank	T	Solid	3546	
460-24356-1	GPEC-WC-031911	T	Solid	3546	
460-24510-A-2-B MS	Matrix Spike	T	Solid	3546	
460-24510-A-2-C MSD	Matrix Spike Duplicate	T	Solid	3546	
Analysis Batch:460-69165					
LCS 460-68928/2-A	Lab Control Sample	T	Solid	8015B	460-68928
MB 460-68928/1-A	Method Blank	T	Solid	8015B	460-68928
460-24356-1	GPEC-WC-031911	T	Solid	8015B	460-68928
460-24510-A-2-B MS	Matrix Spike	T	Solid	8015B	460-68928
460-24510-A-2-C MSD	Matrix Spike Duplicate	T	Solid	8015B	460-68928

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-24356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 220-49104					
LCS 220-49104/2-A	Lab Control Sample	T	Solid	3050B	
MB 220-49104/1-A	Method Blank	T	Solid	3050B	
460-24356-1	GPEC-WC-031911	T	Solid	3050B	
460-24356-1DU	Duplicate	T	Solid	3050B	
460-24356-1MS	Matrix Spike	T	Solid	3050B	
Analysis Batch:220-49146					
LCS 220-49104/2-A	Lab Control Sample	T	Solid	6010B	220-49104
MB 220-49104/1-A	Method Blank	T	Solid	6010B	220-49104
460-24356-1	GPEC-WC-031911	T	Solid	6010B	220-49104
460-24356-1DU	Duplicate	T	Solid	6010B	220-49104
460-24356-1MS	Matrix Spike	T	Solid	6010B	220-49104
Prep Batch: 460-68108					
LCSSRM 460-68108/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	
MB 460-68108/1-A	Method Blank	T	Solid	7471A	
460-24285-E-4-B DU	Duplicate	T	Solid	7471A	
460-24285-E-4-C MS	Matrix Spike	T	Solid	7471A	
460-24356-1	GPEC-WC-031911	T	Solid	7471A	
Analysis Batch:460-68141					
LCSSRM 460-68108/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	460-68108
MB 460-68108/1-A	Method Blank	T	Solid	7471A	460-68108
460-24285-E-4-B DU	Duplicate	T	Solid	7471A	460-68108
460-24285-E-4-C MS	Matrix Spike	T	Solid	7471A	460-68108
460-24356-1	GPEC-WC-031911	T	Solid	7471A	460-68108
Prep Batch: 460-68537					
LCSSRM 460-68537/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-68537/1-A ^2	Method Blank	T	Solid	3050B	
460-24285-E-1-C DU ^4	Duplicate	T	Solid	3050B	
460-24285-E-1-D MS ^4	Matrix Spike	T	Solid	3050B	
460-24356-1	GPEC-WC-031911	T	Solid	3050B	
Analysis Batch:460-68849					
LCSSRM 460-68537/2-A	LCS-Certified Reference Material	T	Solid	6010B	460-68537
MB 460-68537/1-A ^2	Method Blank	T	Solid	6010B	460-68537
460-24285-E-1-C DU ^4	Duplicate	T	Solid	6010B	460-68537
460-24285-E-1-D MS ^4	Matrix Spike	T	Solid	6010B	460-68537
460-24356-1	GPEC-WC-031911	T	Solid	6010B	460-68537

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-24356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-68037					
460-24356-1	GPEC-WC-031911	T	Solid	Moisture	
460-24364-A-4 DU	Duplicate	T	Solid	Moisture	

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Laboratory Chronicle

Lab ID: 460-24356-1 **Client ID:** GPEC-WC-031911

Sample Date/Time: 03/19/2011 16:45 Received Date/Time: 03/21/2011 11:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5035	460-24356-A-1-B		460-68543	460-68295	03/23/2011 19:01	1	TAL EDI	FJ
A:8260B	460-24356-A-1-B		460-68543	460-68295	03/25/2011 22:26	1	TAL EDI	EM
P:3541	460-24356-A-1-G		460-68940	460-68798	03/28/2011 22:00	1	TAL EDI	cm
A:8270C	460-24356-A-1-G		460-68940	460-68798	03/30/2011 13:09	1	TAL EDI	AAA
P:5035	460-24356-A-1-D		460-68719	460-68286	03/23/2011 18:05	50	TAL EDI	FJ
A:8015B	460-24356-A-1-D		460-68719	460-68286	03/28/2011 01:38	50	TAL EDI	EM
P:3546	460-24356-A-1-H		460-69165	460-68928	03/30/2011 10:53	2	TAL EDI	hp
A:8015B	460-24356-A-1-H		460-69165	460-68928	03/31/2011 18:34	2	TAL EDI	MY
P:3541	460-24356-A-1-E		460-68484	460-68322	03/24/2011 03:29	1	TAL EDI	ARA
A:8082	460-24356-A-1-E		460-68484	460-68322	03/24/2011 12:51	1	TAL EDI	SD
P:3050B	460-24356-B-1-A		220-49146	220-49104	03/28/2011 09:36	1	TAL CT	MH
A:6010B	460-24356-B-1-A		220-49146	220-49104	03/28/2011 13:35	1	TAL CT	JFV
P:3050B	460-24356-A-1-F ^4		460-68849	460-68537	03/25/2011 19:24	4	TAL EDI	TS
A:6010B	460-24356-A-1-F ^4		460-68849	460-68537	03/29/2011 20:49	4	TAL EDI	VD
P:7471A	460-24356-C-1-A ^50		460-68141	460-68108	03/22/2011 10:33	50	TAL EDI	RBS
A:7471A	460-24356-C-1-A ^50		460-68141	460-68108	03/22/2011 14:30	50	TAL EDI	RBS
A:Moisture	460-24356-A-1		460-68037		03/21/2011 20:34	1	TAL EDI	ah

Lab ID: 460-24356-1 MS **Client ID:** GPEC-WC-031911

Sample Date/Time: 03/19/2011 16:45 Received Date/Time: 03/21/2011 11:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	460-24356-B-1-C MS		220-49146	220-49104	03/28/2011 09:36	1	TAL CT	MH
A:6010B	460-24356-B-1-C MS		220-49146	220-49104	03/28/2011 13:48	1	TAL CT	JFV

Lab ID: 460-24356-1 DU **Client ID:** GPEC-WC-031911

Sample Date/Time: 03/19/2011 16:45 Received Date/Time: 03/21/2011 11:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	460-24356-B-1-B DU		220-49146	220-49104	03/28/2011 09:36	1	TAL CT	MH
A:6010B	460-24356-B-1-B DU		220-49146	220-49104	03/28/2011 13:45	1	TAL CT	JFV

Lab ID: 460-24356-1 SD **Client ID:** GPEC-WC-031911

Sample Date/Time: 03/19/2011 16:45 Received Date/Time: 03/21/2011 11:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	460-24356-B-1-A SD ^5		220-49146	220-49104	03/28/2011 09:36	5	TAL CT	MH
A:6010B	460-24356-B-1-A SD ^5		220-49146	220-49104	03/28/2011 13:54	5	TAL CT	JFV

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B	MB 460-68422/5		460-68422		03/24/2011 21:20	1	TAL EDI	EM
A:8260B	MB 460-68543/5		460-68543		03/25/2011 22:02	1	TAL EDI	EM
P:3541	MB 460-68798/1-A		460-68940	460-68798	03/28/2011 22:00	1	TAL EDI	cm
A:8270C	MB 460-68798/1-A		460-68940	460-68798	03/30/2011 05:27	1	TAL EDI	AAA
A:8015B	MB 460-68719/4		460-68719		03/27/2011 19:55	50	TAL EDI	EM
P:3546	MB 460-68928/1-A		460-69165	460-68928	03/30/2011 10:53	1	TAL EDI	hp
A:8015B	MB 460-68928/1-A		460-69165	460-68928	03/31/2011 10:40	1	TAL EDI	MY
P:3541	MB 460-68322/1-A		460-68484	460-68322	03/24/2011 03:29	1	TAL EDI	ARA
A:8082	MB 460-68322/1-A		460-68484	460-68322	03/24/2011 11:31	1	TAL EDI	SD
P:3050B	MB 220-49104/1-A		220-49146	220-49104	03/28/2011 09:36	1	TAL CT	MH
A:6010B	MB 220-49104/1-A		220-49146	220-49104	03/28/2011 13:28	1	TAL CT	JFV
P:3050B	MB 460-68537/1-A ^2		460-68849	460-68537	03/25/2011 19:24	2	TAL EDI	TS
A:6010B	MB 460-68537/1-A ^2		460-68849	460-68537	03/29/2011 20:04	2	TAL EDI	VD
P:7471A	MB 460-68108/1-A		460-68141	460-68108	03/22/2011 10:33	1	TAL EDI	RBS
A:7471A	MB 460-68108/1-A		460-68141	460-68108	03/22/2011 13:34	1	TAL EDI	RBS

Lab ID: LB3 **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5035	LB3 460-68295/1-A		460-68422	460-68295	03/23/2011 18:48	1	TAL EDI	FJ
A:8260B	LB3 460-68295/1-A		460-68422	460-68295	03/24/2011 21:45	1	TAL EDI	EM

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B	LCS 460-68422/3		460-68422		03/24/2011 19:53	1	TAL EDI	EM
A:8260B	LCS 460-68543/3		460-68543		03/25/2011 20:32	1	TAL EDI	EM
P:3541	LCS 460-68798/2-A		460-68940	460-68798	03/28/2011 22:00	1	TAL EDI	cm
A:8270C	LCS 460-68798/2-A		460-68940	460-68798	03/30/2011 04:24	1	TAL EDI	AAA
A:8015B	LCS 460-68719/2		460-68719		03/27/2011 18:42	50	TAL EDI	EM
P:3546	LCS 460-68928/2-A		460-69165	460-68928	03/30/2011 10:53	1	TAL EDI	hp
A:8015B	LCS 460-68928/2-A		460-69165	460-68928	03/31/2011 10:55	1	TAL EDI	MY
P:3541	LCS 460-68322/2-A		460-68484	460-68322	03/24/2011 03:29	1	TAL EDI	ARA
A:8082	LCS 460-68322/2-A		460-68484	460-68322	03/24/2011 11:47	1	TAL EDI	SD
P:3050B	LCS 220-49104/2-A		220-49146	220-49104	03/28/2011 09:36	1	TAL CT	MH
A:6010B	LCS 220-49104/2-A		220-49146	220-49104	03/28/2011 13:31	1	TAL CT	JFV

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Laboratory Chronicle

Lab ID: LCSD **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:8260B	LCSD 460-68543/4		460-68543		03/25/2011 20:56	1	TAL EDI	EM

Lab ID: LCSSRM **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	LCSSRM 460-68537/2-A		460-68849	460-68537	03/25/2011 19:24	4	TAL EDI	TS
A:6010B	LCSSRM 460-68537/2-A		460-68849	460-68537	03/29/2011 20:11	4	TAL EDI	VD
P:7471A	LCSSRM 460-68108/2-A ^10		460-68141	460-68108	03/22/2011 10:33	10	TAL EDI	RBS
A:7471A	LCSSRM 460-68108/2-A ^10		460-68141	460-68108	03/22/2011 13:36	10	TAL EDI	RBS

Lab ID: MS **Client ID:** N/A

Sample Date/Time: 03/17/2011 14:30 Received Date/Time: 03/18/2011 16:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3541	460-24277-F-7-A MS		460-68940	460-68798	03/28/2011 22:00	1	TAL EDI	cm
A:8270C	460-24277-F-7-A MS		460-68940	460-68798	03/30/2011 12:10	1	TAL EDI	AAA
P:5035	460-24323-A-8-A MS		460-68719	460-68431	03/24/2011 21:28	50	TAL EDI	FJ
A:8015B	460-24323-A-8-A MS		460-68719	460-68431	03/27/2011 23:36	50	TAL EDI	EM
P:3546	460-24510-A-2-B MS		460-69165	460-68928	03/30/2011 10:53	1	TAL EDI	hp
A:8015B	460-24510-A-2-B MS		460-69165	460-68928	03/31/2011 16:13	1	TAL EDI	MY
P:3541	460-24449-A-5-A MS		460-68484	460-68322	03/24/2011 03:29	1	TAL EDI	ARA
A:8082	460-24449-A-5-A MS		460-68484	460-68322	03/24/2011 12:19	1	TAL EDI	SD
P:3050B	460-24285-E-1-D MS ^4		460-68849	460-68537	03/25/2011 19:24	4	TAL EDI	TS
A:6010B	460-24285-E-1-D MS ^4		460-68849	460-68537	03/30/2011 02:00	4	TAL EDI	VD
P:7471A	460-24285-E-4-C MS		460-68141	460-68108	03/22/2011 10:33	1	TAL EDI	RBS
A:7471A	460-24285-E-4-C MS		460-68141	460-68108	03/22/2011 13:41	1	TAL EDI	RBS

Client: GEI Consultants, Inc. Job Number: 460-24356-1

Laboratory Chronicle

Lab ID: MSD **Client ID: N/A**

Sample Date/Time: 03/17/2011 14:30 Received Date/Time: 03/18/2011 16:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3541	460-24277-F-7-B MSD		460-68940	460-68798	03/28/2011 22:00	1	TAL EDI	cm
A:8270C	460-24277-F-7-B MSD		460-68940	460-68798	03/30/2011 12:30	1	TAL EDI	AAA
P:5035	460-24323-A-8-A MSD		460-68719	460-68431	03/24/2011 21:28	50	TAL EDI	FJ
A:8015B	460-24323-A-8-A MSD		460-68719	460-68431	03/28/2011 00:01	50	TAL EDI	EM
P:3546	460-24510-A-2-C MSD		460-69165	460-68928	03/30/2011 10:53	1	TAL EDI	hp
A:8015B	460-24510-A-2-C MSD		460-69165	460-68928	03/31/2011 16:39	1	TAL EDI	MY
P:3541	460-24449-A-5-B MSD		460-68484	460-68322	03/24/2011 03:29	1	TAL EDI	ARA
A:8082	460-24449-A-5-B MSD		460-68484	460-68322	03/24/2011 12:35	1	TAL EDI	SD

Lab ID: DU **Client ID: N/A**

Sample Date/Time: 03/17/2011 13:07 Received Date/Time: 03/18/2011 19:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	460-24285-E-1-C DU ^4		460-68849	460-68537	03/25/2011 19:24	4	TAL EDI	TS
A:6010B	460-24285-E-1-C DU ^4		460-68849	460-68537	03/30/2011 01:41	4	TAL EDI	VD
P:7471A	460-24285-E-4-B DU		460-68141	460-68108	03/22/2011 10:33	1	TAL EDI	RBS
A:7471A	460-24285-E-4-B DU		460-68141	460-68108	03/22/2011 13:39	1	TAL EDI	RBS
A:Moisture	460-24364-A-4 DU		460-68037		03/21/2011 20:34	1	TAL EDI	ah

Lab ID: SD **Client ID: N/A**

Sample Date/Time: 03/17/2011 13:07 Received Date/Time: 03/18/2011 19:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3050B	460-24285-E-1-B SD ^5		460-68849	460-68537	03/25/2011 19:24	20	TAL EDI	TS
A:6010B	460-24285-E-1-B SD ^5		460-68849	460-68537	03/30/2011 01:54	20	TAL EDI	VD
P:7471A	460-24285-E-4-A SD ^5		460-68141	460-68108	03/22/2011 10:33	5	TAL EDI	RBS
A:7471A	460-24285-E-4-A SD ^5		460-68141	460-68108	03/22/2011 14:25	5	TAL EDI	RBS

Lab References:

TAL CT = TestAmerica Connecticut

TAL EDI = TestAmerica Edison

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DCA #	TOL #	BFB #
GPEC-WC-031911	460-24356-1	84	102	100
	MB 460-68422/5	87	91	93
	MB 460-68543/5	97	103	99
	LB3 460-68295/1-A	92	90	96
	LCS 460-68422/3	90	92	96
	LCS 460-68543/3	97	102	100
	LCSD 460-68543/4	98	102	101

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	70-138
TOL = Toluene-d8 (Surr)	66-126
BFB = Bromofluorobenzene	72-132

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: o46592.d

Lab ID: LCS 460-68422/3 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Chloromethane	20.0	17.2	86	50-151	
Bromomethane	20.0	26.4	132	54-142	
Vinyl chloride	20.0	20.3	101	67-133	
Chloroethane	20.0	24.3	122	56-146	
Methylene Chloride	20.0	20.4	102	74-137	
Acetone	20.0	30.0	150	27-164	
Carbon disulfide	20.0	19.5	98	72-128	
1,1-Dichloroethene	20.0	21.1	105	71-126	
1,1-Dichloroethane	20.0	20.3	101	76-125	
trans-1,2-Dichloroethene	20.0	20.1	100	75-122	
cis-1,2-Dichloroethene	20.0	19.8	99	80-120	
Chloroform	20.0	20.1	100	77-120	
1,2-Dichloroethane	20.0	19.0	95	76-118	
2-Butanone	20.0	19.9	99	77-117	
1,1,1-Trichloroethane	20.0	19.9	99	78-117	
Carbon tetrachloride	20.0	20.6	103	79-118	
Bromodichloromethane	20.0	19.9	100	79-119	
1,2-Dichloropropane	20.0	19.8	99	82-122	
cis-1,3-Dichloropropene	20.0	19.3	97	80-123	
Trichloroethene	20.0	20.2	101	79-119	
Dibromochloromethane	20.0	19.6	98	68-120	
1,1,2-Trichloroethane	20.0	20.0	100	73-118	
Benzene	20.0	20.0	100	77-117	
trans-1,3-Dichloropropene	20.0	19.1	95	67-121	
Bromoform	20.0	16.5	83	59-125	
4-Methyl-2-pentanone	20.0	18.3	91	68-120	
2-Hexanone	20.0	17.9	90	70-122	
Tetrachloroethene	20.0	21.4	107	80-120	
1,1,2,2-Tetrachloroethane	20.0	17.0	85	79-122	
Toluene	20.0	19.9	99	75-115	
Chlorobenzene	20.0	20.0	100	80-120	
Ethylbenzene	20.0	20.2	101	81-121	
Styrene	20.0	19.5	98	82-122	
Xylenes, Total	60.0	59.8	100	82-122	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: d07622.d

Lab ID: LCS 460-68543/3 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Chloromethane	20.0	20.6	103	50-151	
Bromomethane	20.0	20.5	102	54-142	
Vinyl chloride	20.0	21.1	106	67-133	
Chloroethane	20.0	20.3	102	56-146	
Methylene Chloride	20.0	24.5	122	74-137	
Acetone	20.0	22.2	111	27-164	
Carbon disulfide	20.0	19.0	95	72-128	
1,1-Dichloroethene	20.0	19.6	98	71-126	
1,1-Dichloroethane	20.0	21.3	107	76-125	
trans-1,2-Dichloroethene	20.0	21.4	107	75-122	
cis-1,2-Dichloroethene	20.0	21.0	105	80-120	
Chloroform	20.0	20.6	103	77-120	
1,2-Dichloroethane	20.0	20.2	101	76-118	
2-Butanone	20.0	22.8	114	77-117	
1,1,1-Trichloroethane	20.0	19.4	97	78-117	
Carbon tetrachloride	20.0	18.9	94	79-118	
Bromodichloromethane	20.0	20.9	104	79-119	
1,2-Dichloropropane	20.0	20.7	104	82-122	
cis-1,3-Dichloropropene	20.0	20.1	100	80-123	
Trichloroethene	20.0	19.6	98	79-119	
Dibromochloromethane	20.0	21.0	105	68-120	
1,1,2-Trichloroethane	20.0	21.6	108	73-118	
Benzene	20.0	21.0	105	77-117	
trans-1,3-Dichloropropene	20.0	21.0	105	67-121	
Bromoform	20.0	20.8	104	59-125	
4-Methyl-2-pentanone	20.0	19.1	95	68-120	
2-Hexanone	20.0	21.2	106	70-122	
Tetrachloroethene	20.0	20.2	101	80-120	
1,1,2,2-Tetrachloroethane	20.0	19.9	100	79-122	
Toluene	20.0	21.2	106	75-115	
Chlorobenzene	20.0	21.1	105	80-120	
Ethylbenzene	20.0	20.1	100	81-121	
Styrene	20.0	20.9	104	82-122	
Xylenes, Total	60.0	61.8	103	82-122	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: d07623.d

Lab ID: LCSD 460-68543/4 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	20.0	18.5	92	11	30	50-151	
Bromomethane	20.0	17.2	86	17	30	54-142	
Vinyl chloride	20.0	18.9	95	11	30	67-133	
Chloroethane	20.0	17.8	89	13	30	56-146	
Methylene Chloride	20.0	21.7	109	12	30	74-137	
Acetone	20.0	18.9	95	16	30	27-164	
Carbon disulfide	20.0	16.7	83	13	30	72-128	
1,1-Dichloroethene	20.0	17.2	86	13	30	71-126	
1,1-Dichloroethane	20.0	19.2	96	11	30	76-125	
trans-1,2-Dichloroethene	20.0	19.0	95	12	30	75-122	
cis-1,2-Dichloroethene	20.0	19.2	96	9	30	80-120	
Chloroform	20.0	19.3	96	7	30	77-120	
1,2-Dichloroethane	20.0	19.5	97	3	30	76-118	
2-Butanone	20.0	22.5	112	1	30	77-117	
1,1,1-Trichloroethane	20.0	17.4	87	11	30	78-117	
Carbon tetrachloride	20.0	17.1	86	10	30	79-118	
Bromodichloromethane	20.0	19.9	100	5	30	79-119	
1,2-Dichloropropane	20.0	19.7	99	5	30	82-122	
cis-1,3-Dichloropropene	20.0	19.1	96	5	30	80-123	
Trichloroethene	20.0	18.4	92	6	30	79-119	
Dibromochloromethane	20.0	19.1	95	10	30	68-120	
1,1,2-Trichloroethane	20.0	19.5	97	10	30	73-118	
Benzene	20.0	19.2	96	9	30	77-117	
trans-1,3-Dichloropropene	20.0	19.0	95	10	30	67-121	
Bromoform	20.0	19.7	98	5	30	59-125	
4-Methyl-2-pentanone	20.0	19.3	97	1	30	68-120	
2-Hexanone	20.0	22.3	111	5	30	70-122	
Tetrachloroethene	20.0	18.3	92	10	30	80-120	
1,1,2,2-Tetrachloroethane	20.0	19.1	95	4	30	79-122	
Toluene	20.0	19.3	96	10	30	75-115	
Chlorobenzene	20.0	19.6	98	7	30	80-120	
Ethylbenzene	20.0	18.9	94	6	30	81-121	
Styrene	20.0	19.5	97	7	30	82-122	
Xylenes, Total	60.0	57.7	96	7	30	82-122	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: o46595.d Lab Sample ID: MB 460-68422/5

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VOAMS12 Date Analyzed: 03/24/2011 21:20

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-68422/3	o46592.d	03/24/2011 19:53
	LB3 460-68295/1-A	o46596.d	03/24/2011 21:45

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: d07625.d Lab Sample ID: MB 460-68543/5

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VOAMS4 Date Analyzed: 03/25/2011 22:02

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-68543/3	d07622.d	03/25/2011 20:32
	LCSD 460-68543/4	d07623.d	03/25/2011 20:56
GPEC-WC-031911	460-24356-1	d07626.d	03/25/2011 22:26

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: o45212.d BFB Injection Date: 02/14/2011

Instrument ID: VOAMS12 BFB Injection Time: 17:09

Analysis Batch No.: 64630

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.7	(0.7)1
174	50.0 - 120.00 % of mass 95	96.4	
175	5.0 - 9.0 % of mass 174	7.2	(7.5)1
176	95.0 - 101.0 % of mass 174	92.6	(96.1)1
177	5.0 - 9.0 % of mass 176	6.0	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 460-64630/2	o45214.d	02/14/2011	18:17
	IC 460-64630/3	o45218.d	02/14/2011	23:21
	IC 460-64630/4	o45219.d	02/14/2011	23:46
	IC 460-64630/5	o45220.d	02/15/2011	00:11
	IC 460-64630/6	o45226.d	02/15/2011	02:40
	IC 460-64630/7	o45228.d	02/15/2011	03:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: o46588.d BFB Injection Date: 03/24/2011

Instrument ID: VOAMS12 BFB Injection Time: 17:01

Analysis Batch No.: 68422

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.3	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	1.2	(1.2)1
174	50.0 - 120.00 % of mass 95	95.1	
175	5.0 - 9.0 % of mass 174	6.6	(6.9)1
176	95.0 - 101.0 % of mass 174	92.1	(96.8)1
177	5.0 - 9.0 % of mass 176	6.2	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-68422/2	o46590.d	03/24/2011	17:55
	LCS 460-68422/3	o46592.d	03/24/2011	19:53
	MB 460-68422/5	o46595.d	03/24/2011	21:20
	LB3 460-68295/1-A	o46596.d	03/24/2011	21:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: d07572.d BFB Injection Date: 03/24/2011

Instrument ID: VOAMS4 BFB Injection Time: 21:21

Analysis Batch No.: 68467

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.1	
75	30.0 - 60.0 % of mass 95	57.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.7	(0.9)1
174	50.0 - 120.00 % of mass 95	74.5	
175	5.0 - 9.0 % of mass 174	5.9	(8.0)1
176	95.0 - 101.0 % of mass 174	71.2	(95.6)1
177	5.0 - 9.0 % of mass 176	4.9	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 460-68467/2	d07577.d	03/24/2011	23:48
	ICIS 460-68467/3	d07578.d	03/25/2011	00:12
	IC 460-68467/4	d07579.d	03/25/2011	00:36
	IC 460-68467/5	d07580.d	03/25/2011	00:59
	IC 460-68467/6	d07581.d	03/25/2011	01:23
	IC 460-68467/7	d07588.d	03/25/2011	04:11

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: d07618.d BFB Injection Date: 03/25/2011

Instrument ID: VOAMS4 BFB Injection Time: 18:59

Analysis Batch No.: 68543

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.6	
75	30.0 - 60.0 % of mass 95	56.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	81.8	
175	5.0 - 9.0 % of mass 174	7.0	(8.6)1
176	95.0 - 101.0 % of mass 174	79.5	(97.2)1
177	5.0 - 9.0 % of mass 176	4.9	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-68543/6	d07620.d	03/25/2011	19:43
	LCS 460-68543/3	d07622.d	03/25/2011	20:32
	LCSD 460-68543/4	d07623.d	03/25/2011	20:56
	MB 460-68543/5	d07625.d	03/25/2011	22:02
GPEC-WC-031911	460-24356-1	d07626.d	03/25/2011	22:26

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVIS 460-68422/2 Date Analyzed: 03/24/2011 17:55

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): o46590.d Heated Purge: (Y/N) Y

Calibration ID: 9726

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		914560	4.04	638950	7.77	346343	11.48
UPPER LIMIT		1829120	4.54	1277900	8.27	692686	11.98
LOWER LIMIT		457280	3.54	319475	7.27	173172	10.98
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-68422/3		992516	4.04	682447	7.77	365351	11.48
MB 460-68422/5		817719	4.04	567637	7.76	310807	11.48
LB3 460-68295/1-A		797651	4.04	584606	7.76	312530	11.48

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVIS 460-68543/6 Date Analyzed: 03/25/2011 19:43

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): d07620.d Heated Purge: (Y/N) Y

Calibration ID: 10268

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		429233	4.66	277538	8.04	146038	10.00
UPPER LIMIT		858466	5.16	555076	8.54	292076	10.50
LOWER LIMIT		214617	4.16	138769	7.54	73019	9.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-68543/3		425411	4.65	275366	8.04	145276	10.00
LCSD 460-68543/4		488692	4.66	330849	8.04	175702	10.00
MB 460-68543/5		409873	4.66	253075	8.04	126364	10.00
460-24356-1	GPEC-WC-031911	416473	4.66	270121	8.04	131839	10.00

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 | Lab Sample ID: 460-24356-1

Matrix: Solid | Lab File ID: d07626.d

Analysis Method: 8260B | Date Collected: 03/19/2011 16:45

Sample wt/vol: 5.62(g) | Date Analyzed: 03/25/2011 22:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 16.9 | Level: (low/med) Low

Analysis Batch No.: 68543 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.1	U	1.1	0.68
74-83-9	Bromomethane	1.1	U	1.1	0.44
75-01-4	Vinyl chloride	1.1	U	1.1	0.25
75-00-3	Chloroethane	1.1	U	1.1	0.43
75-09-2	Methylene Chloride	7.8		1.1	0.50
67-64-1	Acetone	10	J B	11	4.0
75-15-0	Carbon disulfide	0.58	J	1.1	0.50
75-35-4	1,1-Dichloroethene	1.1	U	1.1	0.39
75-34-3	1,1-Dichloroethane	1.1	U	1.1	0.27
156-60-5	trans-1,2-Dichloroethene	1.1	U	1.1	0.30
156-59-2	cis-1,2-Dichloroethene	1.1	U	1.1	0.25
67-66-3	Chloroform	1.1	U	1.1	0.25
107-06-2	1,2-Dichloroethane	1.1	U	1.1	0.42
78-93-3	2-Butanone	11	U	11	0.61
71-55-6	1,1,1-Trichloroethane	1.1	U	1.1	0.20
56-23-5	Carbon tetrachloride	1.1	U	1.1	0.11
75-27-4	Bromodichloromethane	1.1	U	1.1	0.33
78-87-5	1,2-Dichloropropane	1.1	U	1.1	0.34
10061-01-5	cis-1,3-Dichloropropene	1.1	U	1.1	0.22
79-01-6	Trichloroethene	1.1	U	1.1	0.39
124-48-1	Dibromochloromethane	1.1	U	1.1	0.60
79-00-5	1,1,2-Trichloroethane	1.1	U	1.1	0.63
71-43-2	Benzene	1.1	U	1.1	0.79
10061-02-6	trans-1,3-Dichloropropene	1.1	U	1.1	0.24
75-25-2	Bromoform	1.1	U	1.1	0.75
108-10-1	4-Methyl-2-pentanone	11	U	11	0.77
591-78-6	2-Hexanone	11	U	11	1.8
127-18-4	Tetrachloroethene	0.40	J	1.1	0.35
79-34-5	1,1,2,2-Tetrachloroethane	1.1	U	1.1	0.81
108-88-3	Toluene	1.1	U	1.1	0.32
108-90-7	Chlorobenzene	1.1	U	1.1	0.52
100-41-4	Ethylbenzene	1.1	U	1.1	0.20
100-42-5	Styrene	1.1	U	1.1	0.37
1330-20-7	Xylenes, Total	3.2	U	3.2	0.84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: d07626.d

Analysis Method: 8260B Date Collected: 03/19/2011 16:45

Sample wt/vol: 5.62(g) Date Analyzed: 03/25/2011 22:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 16.9 Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-138
2037-26-5	Toluene-d8 (Surr)	102		66-126
460-00-4	Bromofluorobenzene	100		72-132

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07626.d
Report Date: 28-Mar-2011 07:39

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07626.d
Lab Smp Id: 460-24356-A-1-B Client Smp ID: GPEC-WC-031911
Inj Date : 25-MAR-2011 22:26
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : 460-24356-A-1-B;;;5.62;5
Misc Info : 460-24356-A-1-B
Comment   :
Method   : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/8260L_10.m
Meth Date : 25-Mar-2011 20:13 eddie Quant Type: ISTD
Cal Date : 25-MAR-2011 00:59 Cal File: d07580.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.62000	Weight of sample extracted (g)
M	16.86747	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	7 Acetone	58	2.555	2.569	(0.548)	3115	9.35244	10(a)
	8 Carbon Disulfide	76	2.118	2.154	(0.454)	10641	0.53808	0.58(a)
	6 Methylene Chloride	84	2.512	2.526	(0.539)	23197	7.28911	7.8
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	113319	42.0481	45
*	69 Fluorobenzene	96	4.661	4.661	(1.000)	416473	50.0000	
$	37 Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	341220	51.1463	55
	35 Tetrachloroethene	166	6.903	6.896	(0.858)	989	0.37711	0.40(a)
*	32 Chlorobenzene-d5	117	8.042	8.042	(1.000)	270121	50.0000	
$	41 Bromofluorobenzene (SUR)	174	9.124	9.123	(0.913)	103731	49.9675	53
*	91 1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	131839	50.0000	
	70 Naphthalene	128	11.624	11.623	(1.163)	38559	3.31086	3.5

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07626.d
Report Date: 28-Mar-2011 07:39

QC Flag Legend

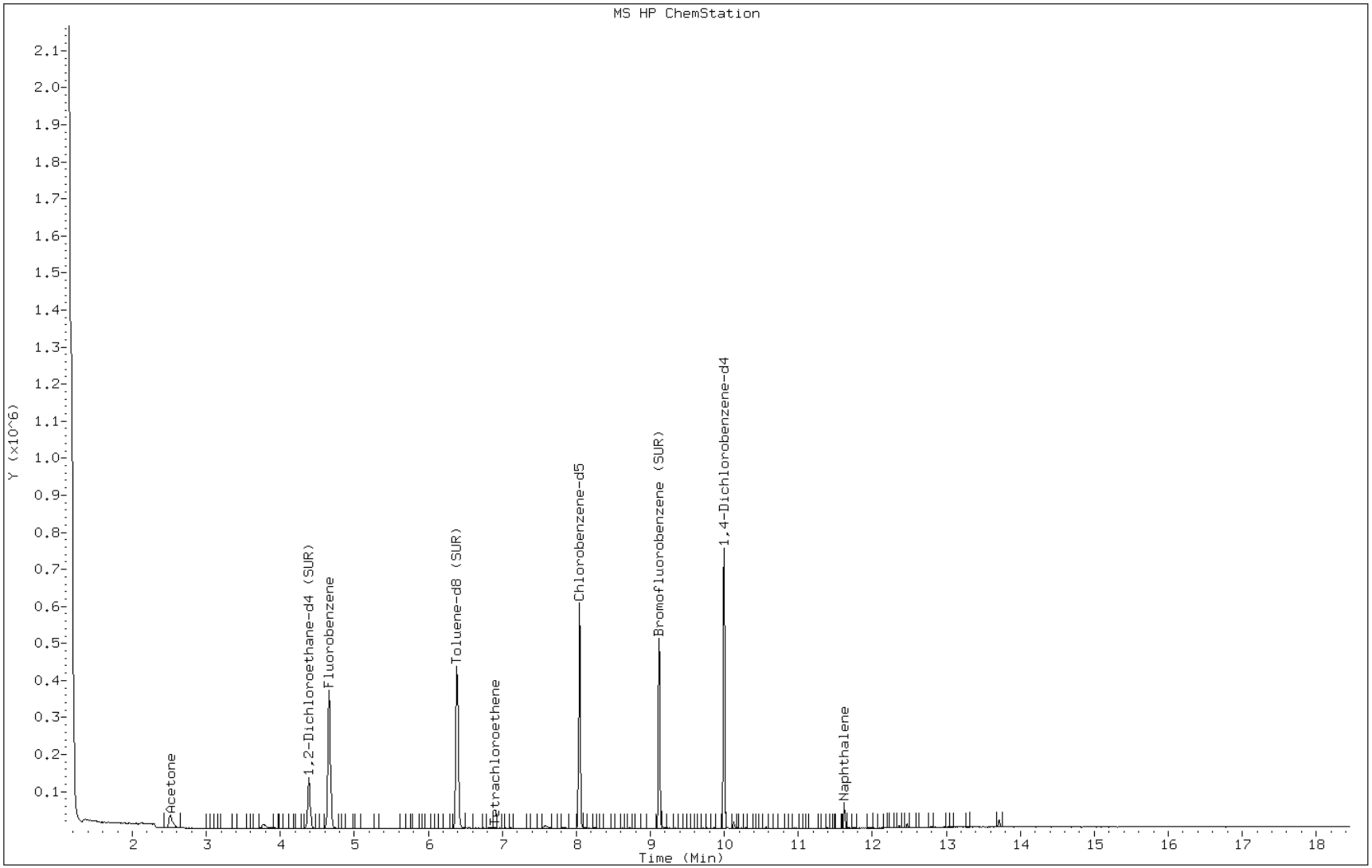
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: d07626.d

Date: 25-MAR-2011 22:26

Client ID: GPEC-WC-031911 Instrument: VOAMS4.i

Sample Info: 460-24356-A-1-B;;;5.62;5 Operator: VOAMS 9



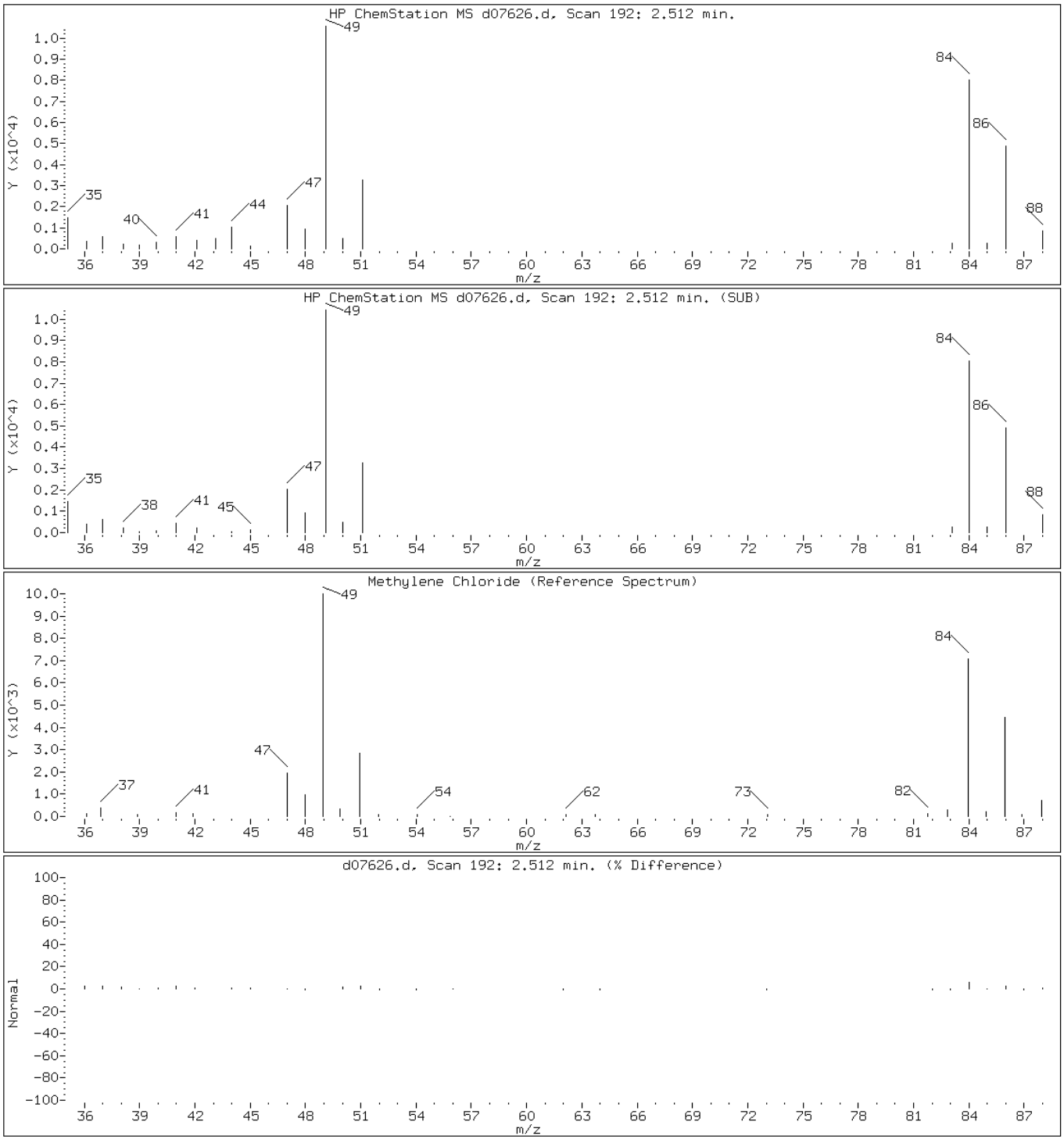
Data File: d07626.d

Date: 25-MAR-2011 22:26

Client ID: GPEC-WC-031911 Instrument: VOAMS4.i

Sample Info: 460-24356-A-1-B;;;5.62;5 Operator: VOAMS 9

6 Methylene Chloride



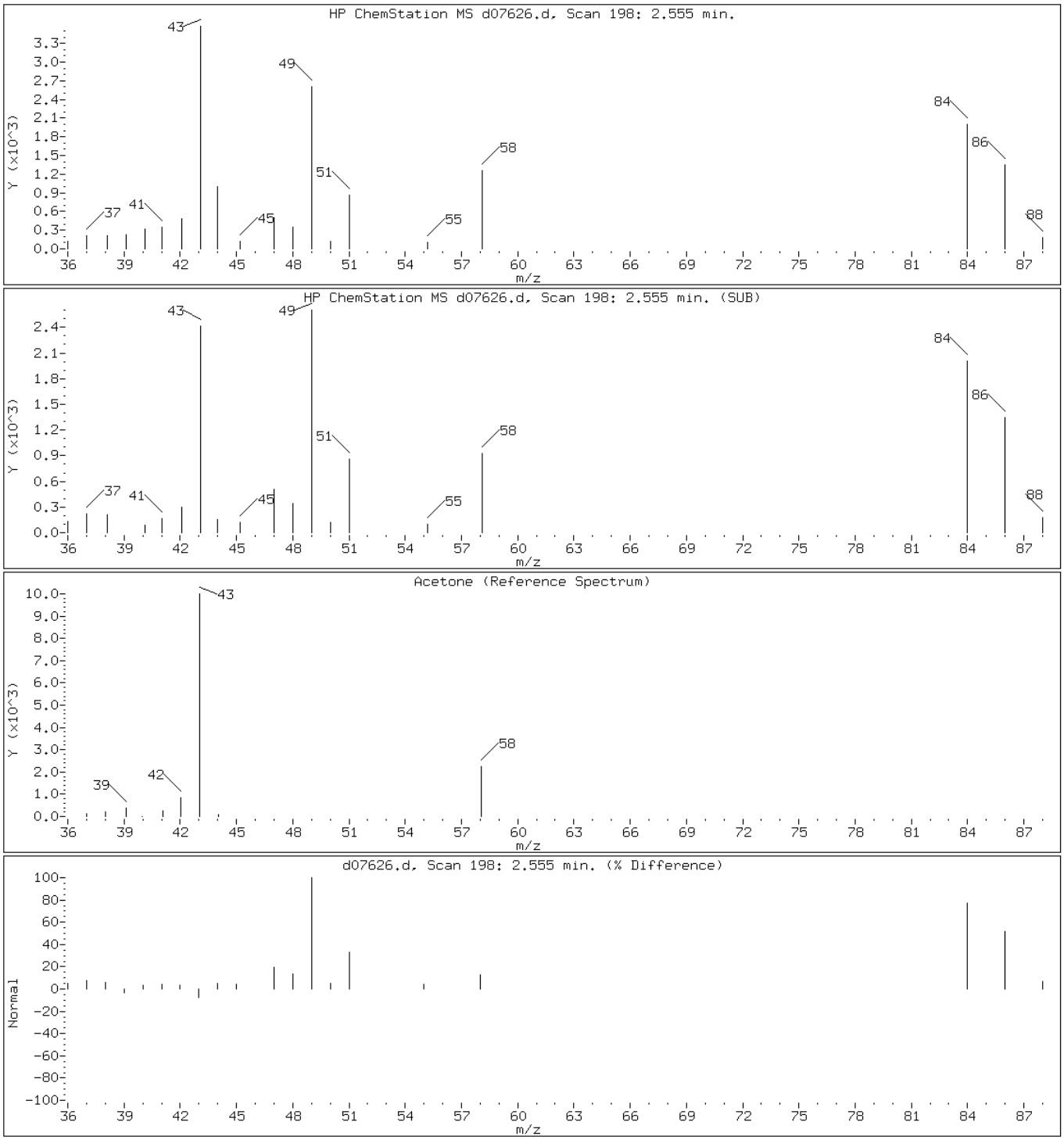
Data File: d07626.d

Date: 25-MAR-2011 22:26

Client ID: GPEC-WC-031911 Instrument: VOAMS4.i

Sample Info: 460-24356-A-1-B;;;5.62;5 Operator: VOAMS 9

7 Acetone



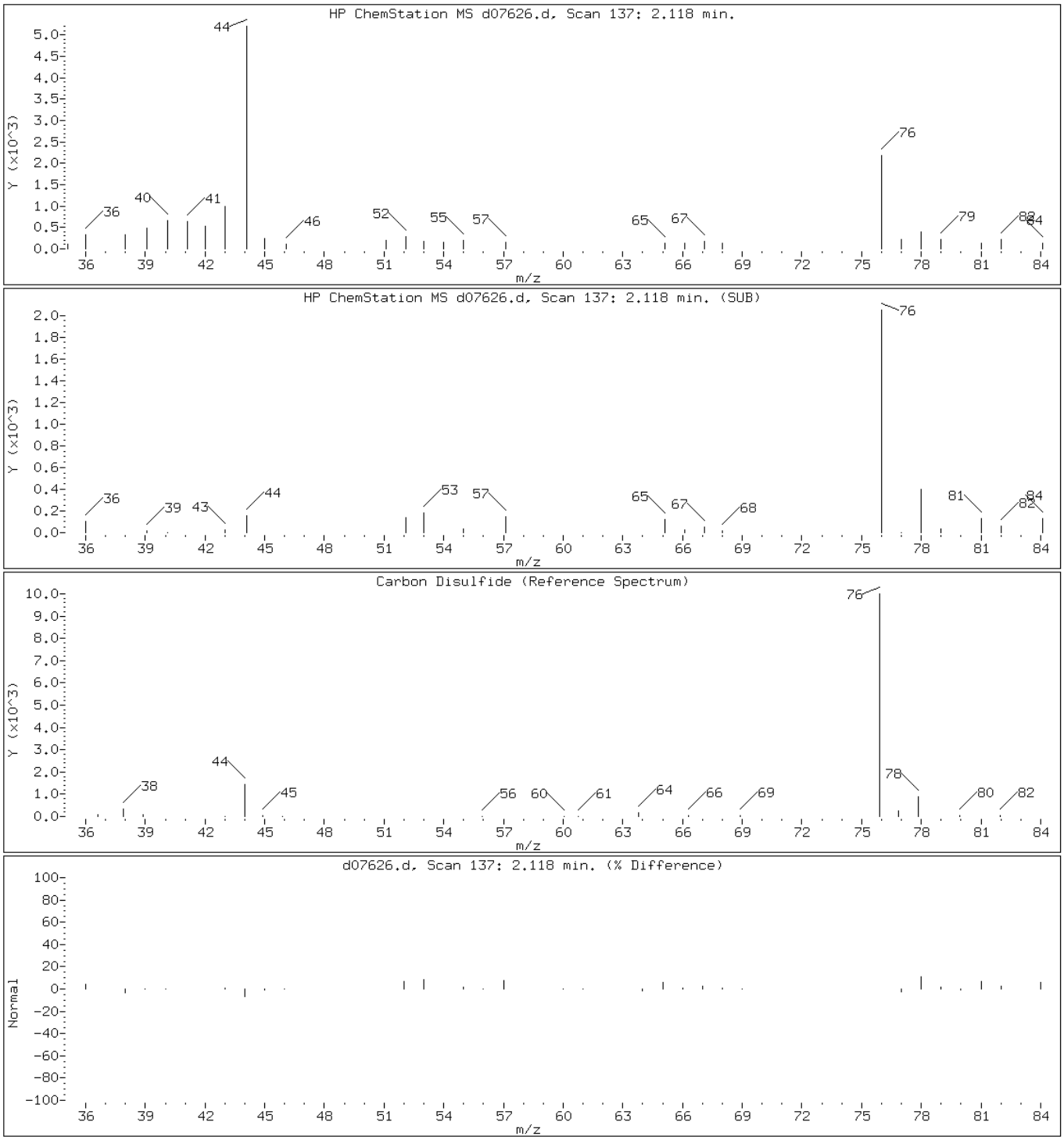
Data File: d07626.d

Date: 25-MAR-2011 22:26

Client ID: GPEC-WC-031911 Instrument: VOAMS4.i

Sample Info: 460-24356-A-1-B;;;5.62;5 Operator: VOAMS 9

8 Carbon Disulfide



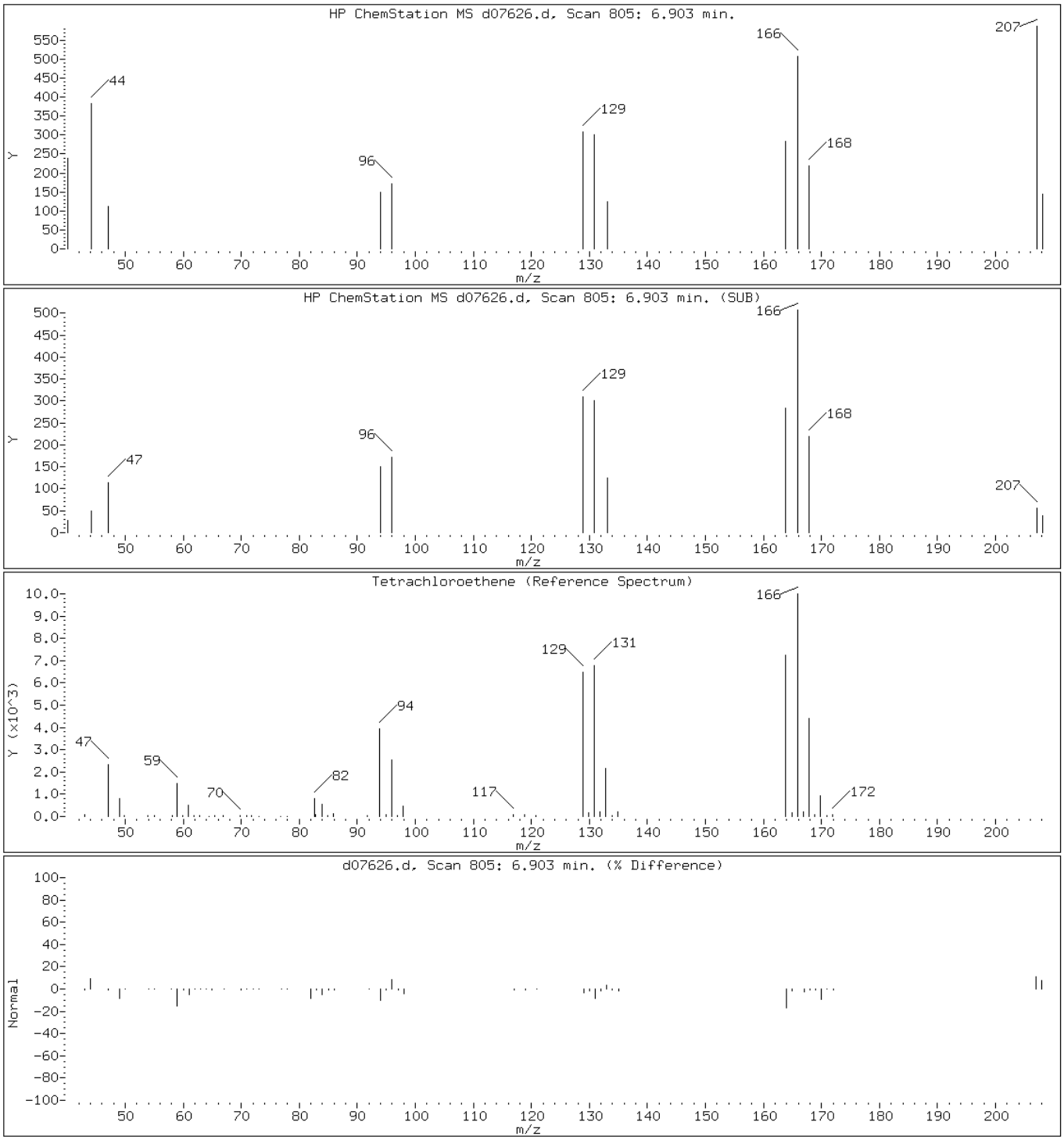
Data File: d07626.d

Date: 25-MAR-2011 22:26

Client ID: GPEC-WC-031911 Instrument: VOAMS4.i

Sample Info: 460-24356-A-1-B;;;5.62;5 Operator: VOAMS 9

35 Tetrachloroethene



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-64630/6	o45226.d
Level 2	IC 460-64630/7	o45228.d
Level 3	ICIS 460-64630/2	o45214.d
Level 4	IC 460-64630/3	o45218.d
Level 5	IC 460-64630/4	o45219.d
Level 6	IC 460-64630/5	o45220.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3361 0.3122	0.3092	0.2468	0.3094	0.3451	Ave		0.3098				11.1		15.0			
Chloromethane	0.3691 0.3371	0.3649	0.2936	0.3030	0.3276	Ave		0.3325			0.1000	9.3		15.0			
Vinyl chloride	0.3233 0.3369	0.3330	0.2698	0.3089	0.3355	Ave		0.3179				8.1		30.0			
Bromomethane	0.1977 0.1503	0.1970	0.1649	0.1759	0.1824	Ave		0.1780				10.4		15.0			
Chloroethane	0.2447 0.1902	0.2489	0.1959	0.2122	0.2260	Ave		0.2196				11.2		15.0			
Trichlorofluoromethane	0.5214 0.4985	0.5131	0.4096	0.5052	0.5360	Ave		0.4973				9.0		15.0			
n-Pentane	0.0560 0.0521	0.0451	0.0503	0.0574	0.0534	Ave		0.0524				8.4		15.0			
Ethanol	0.0010 0.0013	0.0011	0.0010	0.0009	0.0010	Ave		0.0010				11.2		15.0			
Ethyl ether	0.1768 0.1858	0.1825	0.1769	0.1740	0.1818	Ave		0.1796				2.5		15.0			
Isopropene	0.3324 0.4113	0.3144	0.3412	0.4084	0.4107	Ave		0.3697				12.2		15.0			
Acrolein	0.0141 0.0161	0.0153	0.0162	0.0151	0.0157	Ave		0.0154				4.9		15.0			
1,1-Dichloroethene	0.2402 0.2465	0.2324	0.2296	0.2466	0.2597	Ave		0.2425				4.5		30.0			
Freon TF	0.2446 0.2825	0.2276	0.2512	0.3032	0.3027	Ave		0.2686				11.9		15.0			
Acetone	0.0595 0.0429	0.0650	0.0554	0.0439	0.0409	LinF		0.0428							0.9997		0.9900
Iodomethane	0.2948 0.3458	0.2857	0.2708	0.3472	0.3804	Ave		0.3208				13.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.6566 0.8114	0.6681	0.7231	0.8295	0.8407	Ave		0.7549				11.0		15.0			
Isopropanol	0.0105 0.0123	0.0125	0.0111	0.0107	0.0108	Ave		0.0113				7.7		15.0			
Acetonitrile	0.0127 0.0188	0.0164	0.0193	0.0180	0.0191	Ave		0.0174				14.5		15.0			
Methyl acetate	0.0653 0.0469	0.0528	0.0525	0.0467	0.0447	Ave		0.0515				14.6		15.0			
Methylene Chloride	0.3242 0.2601	0.2861	0.2800	0.2674	0.2786	Ave		0.2827				7.9		15.0			
TBA	0.0191 0.0212	0.0191	0.0175	0.0170	0.0189	Ave		0.0188				7.8		15.0			
Acrylonitrile	0.0599 0.0731	0.0651	0.0604	0.0595	0.0649	Ave		0.0638				8.1		15.0			
trans-1,2-Dichloroethene	0.3043 0.2894	0.2825	0.2816	0.2914	0.3087	Ave		0.2930				3.8		15.0			
MTBE	0.6449 0.6768	0.6236	0.6278	0.6296	0.6717	Ave		0.6457				3.6		15.0			
Hexane	0.1791 0.2303	0.1577	0.1816	0.2290	0.2330	LinF		0.2306							0.9999		0.9900
1,1-Dichloroethane	0.4713 0.4554	0.4657	0.4396	0.4528	0.4772	Ave		0.4603			0.1000	3.0		15.0			
Vinyl acetate	0.5197 0.5710	0.4561	0.4533	0.4781	0.5798	Ave		0.5097				11.0		15.0			
DIPE	0.5770 0.7477	0.6831	0.6741	0.6944	0.7518	Ave		0.6880				9.2		15.0			
Tert-butyl ethyl ether	0.6163 0.7847	0.6970	0.7113	0.7383	0.7912	Ave		0.7231				8.9		15.0			
2,2-Dichloropropane	0.4156 0.4801	0.4209	0.4307	0.4651	0.4995	Ave		0.4520				7.6		15.0			
cis-1,2-Dichloroethene	0.3309 0.3233	0.3259	0.3333	0.3281	0.3454	Ave		0.3312				2.4		15.0			
2-Butanone	0.0258 0.0249	0.0286	0.0263	0.0233	0.0259	Ave		0.0258				6.7		15.0			
Ethyl acetate	0.0226 0.0213	0.0200	0.0185	0.0179	0.0200	Ave		0.0200				8.7		15.0			
Bromochloromethane	0.1620 0.1387	0.1491	0.1519	0.1426	0.1492	Ave		0.1489				5.4		15.0			
Chloroform	0.5020 0.4908	0.4957	0.4922	0.4927	0.5172	Ave		0.4984				2.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	0.4359 0.4886	0.4305	0.4420	0.4712	0.5081	Ave		0.4627				6.8		15.0			
Cyclohexane	0.3744 0.4869	0.3397	0.3749	0.4704	0.4957	LinF		0.4879							0.9998		0.9900
Carbon tetrachloride	0.3370 0.4244	0.3435	0.3522	0.4001	0.4376	Ave		0.3825				11.5		15.0			
1,1-Dichloropropene	0.4075 0.4366	0.3877	0.3698	0.4189	0.4488	Ave		0.4115				7.2		15.0			
Benzene	1.1662 1.1558	1.1663	1.1273	1.1552	1.2153	Ave		1.1643				2.5		15.0			
1,2-Dichloroethane	0.3340 0.3116	0.3181	0.3153	0.3093	0.3217	Ave		0.3183				2.8		15.0			
Isopropyl acetate	0.3807 0.4421	0.3573	0.3626	0.3723	0.4156	Ave		0.3885				8.6		15.0			
Tert-amyl methyl ether	0.5521 0.7191	0.6013	0.6361	0.6593	0.7156	Ave		0.6472				10.1		15.0			
2,4,4-Trimethyl-1-pentene	0.1218 0.1430	0.1217	0.1079	0.1407	0.1573	Ave		0.1320				13.7		15.0			
n-Butanol	0.0018 0.0033	0.0024	0.0023	0.0025	0.0030	QuaF		489.17	-958.8						0.9964		0.9900
Trichloroethene	0.3222 0.3239	0.3058	0.2995	0.3124	0.3328	Ave		0.3161				3.9		15.0			
Ethyl acrylate	0.1931 0.2514	0.1782	0.2007	0.2029	0.2606	LinF		0.2523							0.9992		0.9900
Methylcyclohexane	0.3973 0.6095	0.4140	0.4694	0.5893	0.6287	LinF		0.6119							0.9997		0.9900
1,2-Dichloropropane	0.2419 0.2676	0.2567	0.2495	0.2520	0.2732	Ave		0.2568				4.6		30.0			
Dibromomethane	0.1434 0.1430	0.1448	0.1439	0.1386	0.1472	Ave		0.1435				2.0		15.0			
1,4-Dioxane	0.0028 0.0027	0.0030	0.0023	0.0026	0.0032	Ave		0.0028				11.2		15.0			
Methyl methacrylate	0.1339 0.1469	0.1165	0.1190	0.1226	0.1373	Ave		0.1293				9.2		15.0			
Propyl acetate	0.1920 0.2474	0.1970	0.1951	0.2020	0.2276	Ave		0.2102				10.6		15.0			
Bromodichloromethane	0.3016 0.3560	0.3231	0.3329	0.3364	0.3670	Ave		0.3362				6.9		15.0			
2-Chloroethyl vinyl ether	0.0310 0.0505	0.0301	0.0313	0.0353	0.0418	QuaF		26.291	-12.86						0.9999		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Epichlorohydrin	0.0141 0.0194	0.0145	0.0151	0.0158	0.0178	Ave		0.0161				12.9		15.0			
cis-1,3-Dichloropropene	0.3561 0.4333	0.3905	0.4025	0.4023	0.4447	Ave		0.4049				7.8		15.0			
4-Methyl-2-pentanone	0.1218 0.1615	0.1395	0.1241	0.1287	0.1457	Ave		0.1369				11.1		15.0			
Toluene	2.1419 1.8090	2.0242	1.8752	1.9123	1.9597	Ave		1.9537				6.0		30.0			
trans-1,3-Dichloropropene	0.4535 0.5366	0.4594	0.4882	0.4999	0.5479	Ave		0.4976				7.8		15.0			
1,1,2-Trichloroethane	0.2343 0.2402	0.2454	0.2402	0.2342	0.2448	Ave		0.2398				2.0		15.0			
Tetrachloroethene	0.5754 0.5173	0.5065	0.5010	0.5442	0.5566	Ave		0.5335				5.6		15.0			
1,3-Dichloropropane	0.5168 0.5150	0.5229	0.5112	0.4976	0.5245	Ave		0.5147				1.9		15.0			
2-Hexanone	0.1164 0.1600	0.1385	0.1166	0.1241	0.1429	Ave		0.1331				12.9		15.0			
Dibromochloromethane	0.3056 0.3810	0.3115	0.3312	0.3442	0.3840	Ave		0.3429				9.8		15.0			
Butyl acetate	0.3006 0.3798	0.2808	0.2993	0.3101	0.3537	Ave		0.3207				11.8		15.0			
1,2-Dibromoethane	0.2789 0.3000	0.3166	0.2958	0.2912	0.3085	Ave		0.2985				4.4		15.0			
Chlorobenzene	1.2248 1.2082	1.2407	1.2095	1.2253	1.2708	Ave		1.2299			0.3000	1.9		15.0			
1,1,1,2-Tetrachloroethane	0.3546 0.4293	0.3589	0.3935	0.4047	0.4422	Ave		0.3972				9.0		15.0			
Ethylbenzene	0.6089 0.6907	0.6430	0.6429	0.6783	0.7116	Ave		0.6626				5.7		30.0			
m&p-Xylene	0.7643 0.8382	0.8104	0.8188	0.8551	0.9028	Ave		0.8316				5.6		15.0			
o-Xylene	0.7544 0.8278	0.7618	0.7963	0.8217	0.8612	Ave		0.8039				5.1		15.0			
Styrene	1.1258 1.3882	1.2332	1.2786	1.3217	1.4481	Ave		1.2993				8.8		15.0			
Butyl acrylate	0.6469 1.1295	0.7443	0.8894	0.9100	1.0260	LinF		1.1146							0.9979		0.9900
Bromoform	0.1397 0.2457	0.1862	0.1902	0.1972	0.2387	LinF		0.2444			0.1000				0.9993		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isopropylbenzene	1.7737 2.0519	1.8438	1.8468	2.0326	2.2027	Ave		1.9586				8.3		15.0			
Camphene, Total	0.2990 0.3378	0.2335	0.2384	0.3046	0.3229	LinF		0.3355							0.9993		0.9900
Monobromobenzene	1.0646 0.9820	0.9902	1.0030	0.9712	0.9884	Ave		0.9999				3.3		15.0			
1,1,2,2-Tetrachloroethane	0.3850 0.7036	0.6221	0.6443	0.6250	0.6692	LinF		0.6984			0.3000				0.9994		0.9900
1,2,3-Trichloropropane	0.2247 0.2206	0.1995	0.2103	0.1947	0.2099	Ave		0.2100				5.5		15.0			
trans-1,4-Dichloro-2-butene	0.0651 0.0744	0.0554	0.0565	0.0607	0.0724	Ave		0.0641				12.5		15.0			
N-Propylbenzene	4.2332 4.6124	4.3957	4.5535	4.9518	5.2294	Ave		4.6626				7.9		15.0			
2-Chlorotoluene	2.6504 2.8999	2.6637	2.7294	2.7562	2.8681	Ave		2.7613				3.7		15.0			
4-Chlorotoluene	3.0901 3.0163	2.6816	2.8242	2.8642	3.0445	Ave		2.9202				5.4		15.0			
1,3,5-Trimethylbenzene	3.0733 3.6390	3.1951	3.3778	3.5158	3.7436	Ave		3.4241				7.6		15.0			
Butyl Methacrylate	0.6507 1.1430	0.7174	0.8291	0.9668	1.1095	LinF		1.1369							0.9994		0.9900
tert-Butylbenzene	2.7128 3.3005	2.9149	3.0171	3.1984	3.4126	Ave		3.0927				8.4		15.0			
1,2,4-Trimethylbenzene	3.0505 3.6407	3.3341	3.4765	3.5930	3.8516	Ave		3.4911				7.9		15.0			
sec-Butylbenzene	4.0731 4.3209	4.2158	4.4127	4.8784	5.2260	Ave		4.5211				9.7		15.0			
1,3-Dichlorobenzene	2.1887 1.9720	2.0117	2.0123	1.9869	2.0626	Ave		2.0390				3.9		15.0			
1,4-Dichlorobenzene	2.1447 1.8413	1.9567	1.9585	1.9712	2.0373	Ave		1.9849				5.1		15.0			
p-Isopropyltoluene	3.5820 3.6274	3.6383	3.8244	4.2343	4.4865	Ave		3.8988				9.6		15.0			
Benzyl chloride	0.8873 1.5858	0.8740	1.1573	1.3029	1.5334	LinF		1.5764							0.9992		0.9900
1,2-Dichlorobenzene	1.9422 1.7408	1.8288	1.8116	1.7946	1.8392	Ave		1.8262				3.6		15.0			
n-Butylbenzene	3.0523 3.2611	3.1487	3.4366	3.8476	4.0593	Ave		3.4676				11.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromo-3-Chloropropane	0.1189 0.1297	0.1302	0.1090	0.1123	0.1201	Ave		0.1200				7.3		15.0			
Camphor	0.0597 0.0768	0.0625	0.0552	0.0662	0.0713	Ave		0.0653				12.1		15.0			
1,2,4-Trichlorobenzene	1.6630 1.3199	1.4408	1.4965	1.5348	1.4839	Ave		1.4898				7.6		15.0			
Hexachlorobutadiene	0.8303 0.7613	0.7714	0.7661	0.8995	0.8814	Ave		0.8184				7.5		15.0			
Naphthalene	3.1184 2.3349	2.6297	2.5615	2.6249	2.6233	Ave		2.6488				9.7		15.0			
1,2,3-Trichlorobenzene	1.5462 1.1833	1.3340	1.3069	1.3538	1.3040	Ave		1.3380				8.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.1813 0.1781	0.1913	0.1806	0.1801	0.1916	Ave		0.1838				3.3		15.0			
Toluene-d8 (Surr)	1.1356 1.1232	1.1786	1.1244	1.1571	1.1906	Ave		1.1516				2.5		15.0			
Bromofluorobenzene	0.7258 0.7467	0.7621	0.7339	0.7356	0.7625	Ave		0.7444				2.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-64630/6	o45226.d
Level 2	IC 460-64630/7	o45228.d
Level 3	ICIS 460-64630/2	o45214.d
Level 4	IC 460-64630/3	o45218.d
Level 5	IC 460-64630/4	o45219.d
Level 6	IC 460-64630/5	o45220.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	8239 4167631	38565	122450	389935	1774265	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	9050 4499136	45501	145632	381894	1684170	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	7926 4497524	41532	133864	389397	1724856	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	4847 2006113	24570	81782	221719	937726	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	5998 2538828	31034	97189	267460	1161742	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	12782 6654297	63992	203169	636769	2755668	1.00 500	5.00	20.0	50.0	200
n-Pentane	FB	Ave	1373 695309	5624	24969	72315	274542	1.00 500	5.00	20.0	50.0	200
Ethanol	FB	Ave	23790 200644	52455	71362	94799	133145	1000 6000	2000	3000	4000	5000
Ethyl ether	FB	Ave	4335 2479953	22761	87738	219311	934774	1.00 500	5.00	20.0	50.0	200
Isopropene	FB	Ave	8149 5489709	39210	169238	514831	2111780	1.00 500	5.00	20.0	50.0	200
Acrolein	FB	Ave	34689 257891	76380	120366	151872	202018	100 600	200	300	400	500
1,1-Dichloroethene	FB	Ave	5889 3289900	28978	113895	310828	1335282	1.00 500	5.00	20.0	50.0	200
Freon TF	FB	Ave	5996 3770721	28379	124632	382187	1556527	1.00 500	5.00	20.0	50.0	200
Acetone	FB	LinF	14597 1144753	24321	27460	55383	210250	10.0 1000	15.0	20.0	50.0	200
Iodomethane	FB	Ave	7227 4616107	35632	134329	437617	1955587	1.00 500	5.00	20.0	50.0	200
Carbon disulfide	FB	Ave	16097 10830911	83312	358700	1045513	4322447	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Isopropanol	FB	Ave	257590 1970338	625295	824747	1074196	1393413	1000 6000	2000	3000	4000	5000
Acetonitrile	FB	Ave	6224 5010266	40841	191381	453647	1961529	20.0 10000	100	400	1000	4000
Methyl acetate	FB	Ave	1600 626668	6580	26032	58901	230037	1.00 500	5.00	20.0	50.0	200
Methylene Chloride	FB	Ave	7949 3471644	35680	138877	337097	1432331	1.00 500	5.00	20.0	50.0	200
TBA	FB	Ave	9380 5650062	47665	174044	428063	1947680	20.0 10000	100	400	1000	4000
Acrylonitrile	FB	Ave	73482 585701	162474	224698	299971	417323	50.0 300	100	150	200	250
trans-1,2-Dichloroethene	FB	Ave	7459 3862755	35231	139703	367257	1587330	1.00 500	5.00	20.0	50.0	200
MTBE	FB	Ave	15810 9034509	77773	311430	793605	3453422	1.00 500	5.00	20.0	50.0	200
Hexane	FB	LinF	4390 3074076	19666	90088	288703	1197788	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	11555 6079191	58075	218082	570680	2453584	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	FB	Ave	12742 7621843	56877	224890	602652	2981233	1.00 500	5.00	20.0	50.0	200
DIPE	FB	Ave	14145 9980853	85186	334419	875218	3865181	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	15109 10473640	86925	352868	930662	4067878	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	10190 6408717	52490	213650	586239	2568229	1.00 500	5.00	20.0	50.0	200
cis-1,2-Dichloroethene	FB	Ave	8113 4316046	40644	165350	413515	1776029	1.00 500	5.00	20.0	50.0	200
2-Butanone	FB	Ave	6330 665416	10689	13060	29323	133131	10.0 1000	15.0	20.0	50.0	200
Ethyl acetate	FB	Ave	1108 567563	4989	18325	45008	205970	2.00 1000	10.0	40.0	100	400
Bromochloromethane	FB	Ave	3972 1852028	18589	75365	179800	767286	1.00 500	5.00	20.0	50.0	200
Chloroform	FB	Ave	12306 6551000	61823	244160	621010	2659261	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	10687 6521750	53689	219277	593973	2612417	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	LinF	9179 6499306	42364	185972	592881	2548618	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Carbon tetrachloride	FB	Ave	8262 5665179	42842	174710	504327	2249756	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	9989 5827070	48346	183433	528038	2307636	1.00 500	5.00	20.0	50.0	200
Benzene	FB	Ave	28590 15428185	145445	559222	1456045	6248177	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	8189 4159277	39664	156399	389876	1654052	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	18668 11802868	89126	359739	938657	4273661	2.00 1000	10.0	40.0	100	400
Tert-amyl methyl ether	FB	Ave	13534 9598236	74986	315539	830997	3679272	1.00 500	5.00	20.0	50.0	200
2,4,4-Trimethyl-1-pentene	FB	Ave	2987 1908272	15171	53520	177289	808590	1.00 500	5.00	20.0	50.0	200
n-Butanol	FB	QuaF	21878 266312	59476	84074	127996	189686	500 3000	1000	1500	2000	2500
Trichloroethene	FB	Ave	7900 4322952	38135	148565	393717	1711164	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	LinF	4734 3355058	22229	99563	255701	1339996	1.00 500	5.00	20.0	50.0	200
Methylcyclohexane	FB	LinF	9741 8135616	51635	232865	742735	3232607	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	5930 3572551	32013	123767	317589	1404670	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	3516 1909138	18052	71369	174755	756994	1.00 500	5.00	20.0	50.0	200
1,4-Dioxane	FB	Ave	3436 21355	7385	8692	13226	20859	50.0 300	100	150	200	250
Methyl methacrylate	FB	Ave	3282 1960294	14525	59024	154519	705846	1.00 500	5.00	20.0	50.0	200
Propyl acetate	FB	Ave	9413 6604619	49136	193607	509145	2340534	2.00 1000	10.0	40.0	100	400
Bromodichloromethane	FB	Ave	7395 4752051	40289	165136	423978	1886820	1.00 500	5.00	20.0	50.0	200
2-Chloroethyl vinyl ether	FB	QuaF	759 674059	3755	15520	44518	214791	1.00 500	5.00	20.0	50.0	200
Epichlorohydrin	FB	Ave	6896 5184236	36209	149380	398433	1829192	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	FB	Ave	8730 5783472	48701	199669	507132	2286402	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone	FB	Ave	29872 4311718	52185	61571	162209	749087	10.0 1000	15.0	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene	CBZ	Ave	35654 16927324	171458	633625	1642666	6975020	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBZ	Ave	7549 5020985	38913	164964	429370	1950231	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBZ	Ave	3900 2247582	20783	81168	201148	871147	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBZ	Ave	9578 4840550	42898	169292	467448	1981051	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBZ	Ave	8603 4819042	44289	172746	427398	1866784	1.00 500	5.00	20.0	50.0	200
2-Hexanone	CBZ	Ave	19369 2994401	35199	39401	106599	508681	10.0 1000	15.0	20.0	50.0	200
Dibromochloromethane	CBZ	Ave	5087 3564829	26384	111928	295678	1366744	1.00 500	5.00	20.0	50.0	200
Butyl acetate	CBZ	Ave	10007 7107257	47561	202243	532781	2517868	2.00 1000	10.0	40.0	100	400
1,2-Dibromoethane	CBZ	Ave	4642 2806960	26815	99941	250119	1098066	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBZ	Ave	20387 11306084	105090	408707	1052524	4522983	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBZ	Ave	5903 4017426	30396	132978	347642	1574019	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBZ	Ave	10135 6462965	54463	217243	582688	2532595	1.00 500	5.00	20.0	50.0	200
m&p-Xylene	CBZ	Ave	25444 15687561	137293	553365	1468970	6426595	2.00 1000	10.0	40.0	100	400
o-Xylene	CBZ	Ave	12557 7746258	64529	269065	705788	3065162	1.00 500	5.00	20.0	50.0	200
Styrene	CBZ	Ave	18740 12989554	104452	432031	1135305	5154134	1.00 500	5.00	20.0	50.0	200
Butyl acrylate	DCB	LinF	5604 5548257	33173	153714	413146	2010160	1.00 500	5.00	20.0	50.0	200
Bromoform	CBZ	LinF	2325 2299006	15770	64283	169418	849438	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBZ	Ave	29524 19200888	156177	624033	1745946	7840048	1.00 500	5.00	20.0	50.0	200
Camphene, Total	DCB	LinF	2590 1659376	10408	41211	138269	632641	1.00 500	5.00	20.0	50.0	200
Monobromobenzene	DCB	Ave	9223 4824030	44136	173346	440937	1936549	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCB	LinF	3335 3456205	27727	111365	283733	1311079	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trichloropropane	DCB	Ave	1947 1083875	8892	36353	88389	411186	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	FB	Ave	1595 992567	6905	28041	76497	372034	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCB	Ave	36673 22657456	195918	786992	2248087	10245932	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCB	Ave	22961 14245316	118723	471729	1251308	5619500	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCB	Ave	26770 14817071	119520	488119	1300345	5965171	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCB	Ave	26625 17875539	142409	583797	1596152	7334806	1.00 500	5.00	20.0	50.0	200
Butyl Methacrylate	DCB	LinF	5637 5614522	31975	143304	438898	2173864	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCB	Ave	23502 16212771	129917	521459	1452055	6686358	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCB	Ave	26427 17884172	148604	600861	1631178	7546409	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCB	Ave	35286 21225351	187902	762670	2214749	10239320	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCB	Ave	18961 9686800	89662	347791	902057	4041287	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCB	Ave	18580 9044859	87211	338496	894907	3991671	1.00 500	5.00	20.0	50.0	200
p-Isopropyltoluene	DCB	Ave	31032 17818698	162162	660981	1922328	8790387	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCB	LinF	7687 7789773	38954	200012	591498	3004489	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCB	Ave	16826 8551098	81510	313102	814730	3603632	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCB	Ave	26443 16019592	140338	593964	1746767	7953443	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCB	Ave	1030 637125	5805	18840	50972	235277	1.00 500	5.00	20.0	50.0	200
Camphor	DCB	Ave	2588 1886914	13934	47726	150264	698955	5.00 2500	25.0	100	250	1000
1,2,4-Trichlorobenzene	DCB	Ave	14407 6483499	64218	258649	696797	2907437	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCB	Ave	7193 3739764	34383	132412	408378	1726989	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCB	Ave	27016 11469444	117209	442717	1191705	5139870	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64630

SDG No.:

Instrument ID: VOAMS12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 02/14/2011 18:17 Calibration End Date: 02/15/2011 03:30 Calibration ID: 9726

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trichlorobenzene	DCB	Ave	13395 5812690	59457	225870	614619	2554938	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane-d4 (Surr)	FB	Ave	222244 237782	238559	224010	227021	246277	50.0 50.0	50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBZ	Ave	945167 1051037	998276	949843	993892	1059368	50.0 50.0	50.0	50.0	50.0	50.0
Bromofluorobenzene	DCB	Ave	314391 366798	339666	317099	333952	373472	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero
QuaF = Quadratic ISTD forced zero

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45214.d
Report Date: 15-Feb-2011 12:16

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45214.d
Lab Smp Id: ICIS-VM12LCAL3
Inj Date : 14-FEB-2011 18:17
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : ICIS-VM12LCAL3
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:16 vibha Quant Type: ISTD
Cal Date : 14-FEB-2011 18:17 Cal File: o45214.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				305053	40.0000	39
90	Dichlorodifluoromethane	85	0.930	0.930	(0.229)	122450	20.0000	16
1	Chloromethane	50	1.064	1.064	(0.263)	145632	20.0000	18
4	Vinyl Chloride	62	1.094	1.094	(0.270)	133864	20.0000	17
3	Bromomethane	94	1.271	1.271	(0.314)	81782	20.0000	18
5	Chloroethane	64	1.326	1.326	(0.327)	97189	20.0000	18
9	Trichlorofluoromethane	101	1.472	1.472	(0.363)	203169	20.0000	16
121	n-Pentane	72	1.521	1.521	(0.375)	24969	20.0000	19
127	Ethanol	46	1.600	1.600	(0.395)	71362	3000.00	2800
46	Ethyl Ether	59	1.649	1.649	(0.407)	87738	20.0000	20
119	Isoprene	67	1.655	1.655	(0.409)	169238	20.0000	18
47	Acrolein	56	1.722	1.722	(0.425)	120366	300.000	310
10	1,1-Dichloroethene	96	1.777	1.777	(0.439)	113895	20.0000	19
48	Freon TF	101	1.783	1.783	(0.440)	124632	20.0000	19

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45214.d
Report Date: 15-Feb-2011 12:16

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	==========		====	==	======	======	========	=======	=======
	7	Acetone	43	1.820	1.820	(0.449)	27460	20.0000	26
	142	Iodomethane	142	1.875	1.875	(0.463)	134329	20.0000	17
	8	Carbon Disulfide	76	1.911	1.911	(0.472)	358700	20.0000	19
	50	Acetonitrile	41	2.003	2.003	(0.494)	191381	400.000	440
	125	Methyl acetate	74	2.027	2.027	(0.500)	26032	20.0000	20
	6	Methylene Chloride	84	2.088	2.088	(0.515)	138877	20.0000	20
	51	TBA	59	2.179	2.179	(0.538)	174044	400.000	370
	52	Acrylonitrile	53	2.259	2.259	(0.558)	224698	150.000	140
	12	trans-1,2-Dichloroethene	96	2.271	2.271	(0.561)	139703	20.0000	19
	53	MTBE	73	2.277	2.277	(0.562)	311430	20.0000	19
	49	Isopropanol	45	1.917	1.917	(0.473)	824747	3000.00	2900
	54	Hexane	56	2.466	2.466	(0.609)	90088	20.0000	16
	11	1,1-Dichloroethane	63	2.570	2.570	(0.634)	218082	20.0000	19
	57	Vinyl Acetate	43	2.631	2.631	(0.649)	224890	20.0000	18
	55	DIPE	45	2.631	2.631	(0.649)	334419	20.0000	20
	132	1-Chloropropane	63	1.655	1.655	(0.213)	7165	40.0000	37
	149	tert-Butyl ethyl ether	59	2.911	2.911	(0.719)	352868	20.0000	20
	104	2,2-Dichloropropane	77	3.015	3.015	(0.744)	213650	20.0000	19
	13	cis-1,2-Dichloroethene	96	3.021	3.021	(0.746)	165350	20.0000	20
	18	2-Butanone	72	3.045	3.045	(0.752)	13060	20.0000	20
	56	Ethyl Acetate	70	3.100	3.100	(0.765)	18325	40.0000	37
	108	Bromochloromethane	128	3.216	3.216	(0.794)	75365	20.0000	20
	15	Chloroform	83	3.289	3.289	(0.812)	244160	20.0000	20
	20	1,1,1-Trichloroethane	97	3.441	3.441	(0.850)	219277	20.0000	19
	59	Cyclohexane	56	3.484	3.484	(0.860)	185972	20.0000	15
	21	Carbon Tetrachloride	117	3.588	3.588	(0.886)	174710	20.0000	18
	92	1,1-Dichloropropene	75	3.588	3.588	(0.886)	183433	20.0000	18
$	16	1,2-Dichloroethane-d4 (SUR)	65	3.728	3.728	(0.920)	224010	50.0000	49
	28	Benzene	78	3.777	3.777	(0.932)	559222	20.0000	19
	17	1,2-Dichloroethane	62	3.801	3.801	(0.938)	156399	20.0000	20
	61	Isopropyl Acetate	43	3.892	3.892	(0.961)	359739	40.0000	37
	140	tert-Amylmethyl Ether	73	3.905	3.905	(0.964)	315539	20.0000	20
*	69	Fluorobenzene	96	4.051	4.051	(1.000)	1240186	50.0000	
	156	2,4,4-Trimethyl-1-pentene	112	4.386	4.386	(1.083)	53520	20.0000	16
	25	Trichloroethene	95	4.423	4.423	(1.092)	148565	20.0000	19
	63	n-Butanol	43	4.417	4.417	(1.090)	84074	1500.00	1400
	96	Ethyl Acrylate	55	4.581	4.581	(1.131)	99563	20.0000	16
	126	Methyl cyclohexane	83	4.612	4.612	(1.138)	232865	20.0000	15
	23	1,2-Dichloropropane	63	4.655	4.655	(1.149)	123767	20.0000	19
	109	Dibromomethane	93	4.783	4.783	(1.181)	71369	20.0000	20
	95	1,4-Dioxane	88	4.831	4.831	(1.193)	8692	150.000	130
	146	Methyl methacrylate	69	4.831	4.831	(1.193)	59024	20.0000	18
	64	Propyl Acetate	43	4.917	4.917	(1.214)	193607	40.0000	37
	22	Bromodichloromethane	83	4.972	4.972	(1.227)	165136	20.0000	20
	30	2-Chloroethyl Vinyl Ether	63	5.356	5.356	(1.322)	15520	20.0000	16
	118	Epichlorohydrin	57	5.410	5.410	(1.336)	149380	400.000	370
	24	cis-1,3-Dichloropropene	75	5.502	5.502	(1.358)	199669	20.0000	20

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45214.d
Report Date: 15-Feb-2011 12:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	33 4-Methyl-2-Pentanone	43	5.727	5.727	(1.414)	61571	20.0000	18
$	37 Toluene-d8 (SUR)	98	5.825	5.825	(0.749)	949843	50.0000	49
	38 Toluene	91	5.904	5.904	(0.759)	633625	20.0000	19
	29 trans-1,3-Dichloropropene	75	6.221	6.221	(0.800)	164964	20.0000	20
	27 1,1,2-Trichloroethane	83	6.453	6.453	(0.830)	81168	20.0000	20
	35 Tetrachloroethene	166	6.605	6.605	(0.849)	169292	20.0000	19
	103 1,3-Dichloropropane	76	6.666	6.666	(0.857)	172746	20.0000	20
	34 2-Hexanone	43	6.843	6.843	(0.880)	39401	20.0000	18
	26 Dibromochloromethane	129	6.965	6.965	(0.896)	111928	20.0000	19
	65 Butyl Acetate	43	7.063	7.063	(0.908)	202243	40.0000	37
	66 1,2-Dibromoethane	107	7.087	7.087	(0.911)	99941	20.0000	20
*	32 Chlorobenzene-d5	117	7.776	7.776	(1.000)	844754	50.0000	
	39 Chlorobenzene	112	7.819	7.819	(1.005)	408707	20.0000	20
	97 1,1,1,2-Tetrachloroethane	131	7.965	7.965	(1.024)	132978	20.0000	20
	40 Ethylbenzene	106	8.020	8.020	(1.031)	217243	20.0000	19
	43 m+p-Xylene	106	8.209	8.209	(1.056)	553365	40.0000	39
	44 o-Xylene	106	8.800	8.800	(1.132)	269065	20.0000	20
	42 Styrene	104	8.831	8.831	(1.136)	432031	20.0000	20
	147 Butyl Acrylate	55	8.885	8.885	(0.773)	153714	20.0000	16
	31 Bromoform	173	9.068	9.068	(1.166)	64283	20.0000	16
	110 Isopropylbenzene	105	9.416	9.416	(1.211)	624033	20.0000	19
$	41 Bromofluorobenzene (SUR)	174	9.623	9.623	(0.838)	317099	50.0000	49
	150 Camphene	41	9.769	9.769	(0.850)	41211	20.0000	14
	107 Bromobenzene	156	9.812	9.812	(0.854)	173346	20.0000	20
	36 1,1,2,2-Tetrachloroethane	83	9.940	9.940	(0.865)	111365	20.0000	18
	99 1,2,3-Trichloropropane	110	9.958	9.958	(0.867)	36353	20.0000	20
	143 trans-1,4-Dichloro-2-butene	53	10.038	10.038	(2.478)	28041	20.0000	18
	112 n-Propylbenzene	91	10.086	10.086	(0.878)	786992	20.0000	20
	105 2-Chlorotoluene	91	10.166	10.166	(0.885)	471729	20.0000	20
	106 4-Chlorotoluene	91	10.355	10.355	(0.901)	488119	20.0000	19
	102 1,3,5-Trimethylbenzene	105	10.409	10.409	(0.906)	583797	20.0000	20
	148 Butyl methacrylate	69	10.690	10.690	(0.930)	143304	20.0000	14
	115 tert-Butylbenzene	119	10.928	10.928	(0.951)	521459	20.0000	20
	100 1,2,4-Trimethylbenzene	105	11.013	11.013	(0.959)	600861	20.0000	20
	114 sec-Butylbenzene	105	11.287	11.287	(0.982)	762670	20.0000	20
	67 1,3-Dichlorobenzene	146	11.379	11.379	(0.990)	347791	20.0000	20
*	91 1,4-Dichlorobenzene-d4	152	11.489	11.489	(1.000)	432084	50.0000	
	68 1,4-Dichlorobenzene	146	11.519	11.519	(1.003)	338496	20.0000	20
	113 p-Isopropyltoluene	119	11.531	11.531	(1.004)	660981	20.0000	20
	69 1,2-Dichlorobenzene	146	11.988	11.988	(1.044)	313102	20.0000	20
	117 Benzyl chloride	91	11.732	11.732	(1.021)	200012	20.0000	15
	111 n-Butylbenzene	91	12.062	12.062	(1.050)	593964	20.0000	20
	101 1,2-Dibromo-3-chloropropane	75	12.872	12.872	(1.120)	18840	20.0000	18
	152 Camphor	95	13.561	13.561	(1.180)	47726	100.000	84
	93 1,2,4-Trichlorobenzene	180	13.647	13.647	(1.188)	258649	20.0000	20
	94 Hexachlorobutadiene	225	13.823	13.823	(1.203)	132412	20.0000	19
	70 Naphthalene	128	13.848	13.848	(1.205)	442717	20.0000	19

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45214.d
Report Date: 15-Feb-2011 12:16

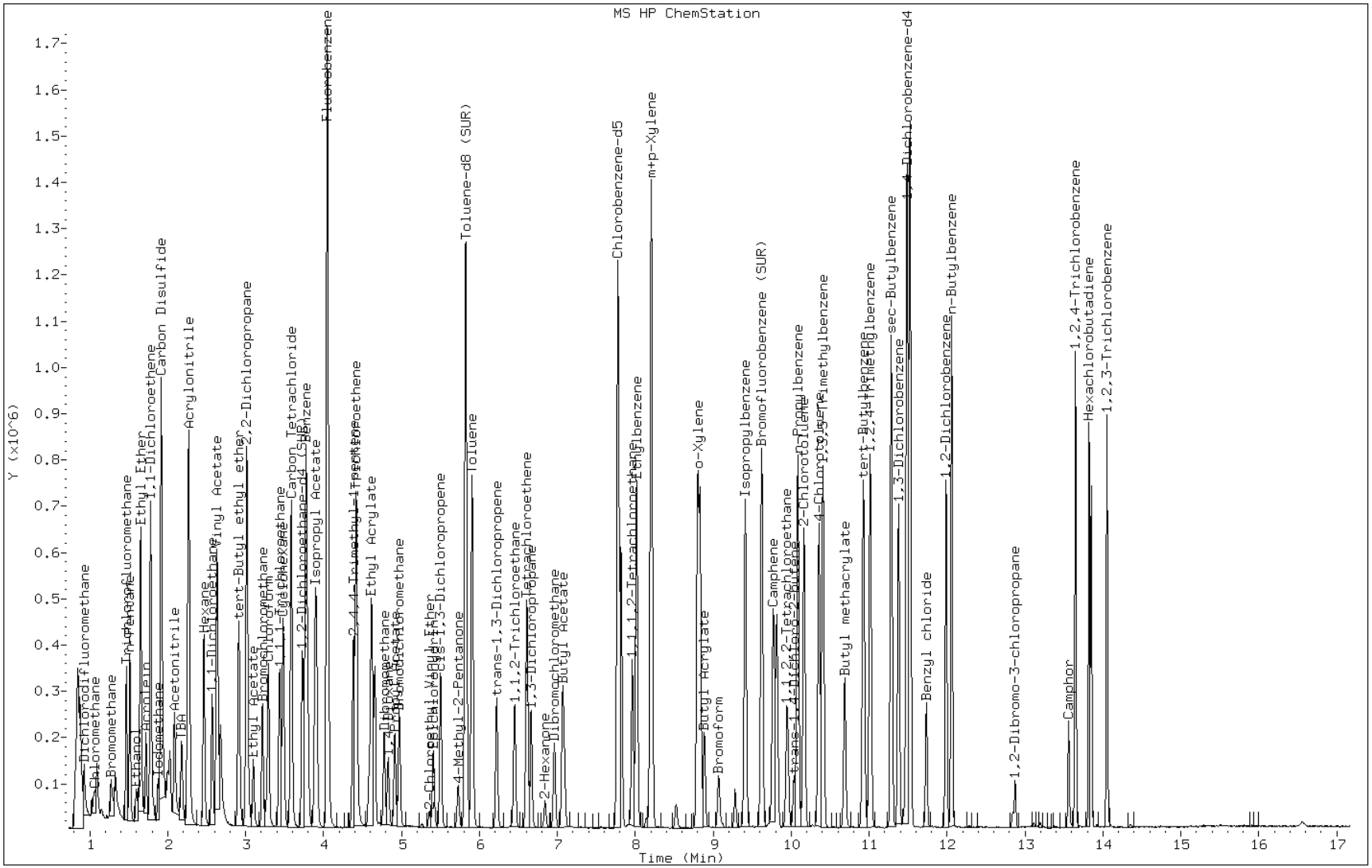
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	==========	====	==	======	======	========	=======	=======
	98 1,2,3-Trichlorobenzene	180	14.055	14.055	(1.223)	225870	20.0000	20
M	45 Xylene (Total)	100				822430	60.0000	59

Data File: o45214.d

Date: 14-FEB-2011 18:17

Client ID: Instrument: VOAMS12.i

Sample Info: ICIS-VM12LCAL3 Operator: VOAMS 9



Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45218.d
Report Date: 15-Feb-2011 12:17

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45218.d
Lab Smp Id: IC-VM12LCAL4
Inj Date : 14-FEB-2011 23:21
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : IC-VM12LCAL4
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:17 vibha Quant Type: ISTD
Cal Date : 14-FEB-2011 23:21 Cal File: o45218.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				780772	100.000	99
90	Dichlorodifluoromethane	85	0.930	0.930	(0.230)	389935	50.0000	50
1	Chloromethane	50	1.058	1.064	(0.262)	381894	50.0000	46
4	Vinyl Chloride	62	1.088	1.094	(0.269)	389397	50.0000	48
3	Bromomethane	94	1.271	1.271	(0.315)	221719	50.0000	49
5	Chloroethane	64	1.326	1.326	(0.328)	267460	50.0000	48
9	Trichlorofluoromethane	101	1.466	1.472	(0.363)	636769	50.0000	51
121	n-Pentane	72	1.515	1.521	(0.375)	72315	50.0000	55
127	Ethanol	46	1.594	1.600	(0.395)	94799	4000.00	3600
46	Ethyl Ether	59	1.643	1.649	(0.407)	219311	50.0000	48
119	Isoprene	67	1.655	1.655	(0.410)	514831	50.0000	55
47	Acrolein	56	1.716	1.722	(0.425)	151872	400.000	390
10	1,1-Dichloroethene	96	1.777	1.777	(0.440)	310828	50.0000	51
48	Freon TF	101	1.777	1.783	(0.440)	382187	50.0000	56

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45218.d
Report Date: 15-Feb-2011 12:17

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	7	Acetone	43	1.814	1.820	(0.449)	55383	50.0000	51
	142	Iodomethane	142	1.869	1.875	(0.463)	437617	50.0000	54
	8	Carbon Disulfide	76	1.911	1.911	(0.473)	1045513	50.0000	55
	50	Acetonitrile	41	1.990	2.003	(0.493)	453647	1000.00	1000
	125	Methyl acetate	74	2.021	2.027	(0.500)	58901	50.0000	45
	6	Methylene Chloride	84	2.082	2.088	(0.515)	337097	50.0000	47
	51	TBA	59	2.173	2.179	(0.538)	428063	1000.00	900
	52	Acrylonitrile	53	2.253	2.259	(0.558)	299971	200.000	190
	12	trans-1,2-Dichloroethene	96	2.265	2.271	(0.561)	367257	50.0000	50
	53	MTBE	73	2.271	2.277	(0.562)	793605	50.0000	49
	49	Isopropanol	45	1.911	1.917	(0.473)	1074196	4000.00	3800
	54	Hexane	56	2.460	2.466	(0.609)	288703	50.0000	50
	11	1,1-Dichloroethane	63	2.564	2.570	(0.635)	570680	50.0000	49
	57	Vinyl Acetate	43	2.625	2.631	(0.650)	602652	50.0000	47
	55	DIPE	45	2.625	2.631	(0.650)	875218	50.0000	50
	132	1-Chloropropane	63	1.655	1.655	(0.213)	19689	100.000	100
	149	tert-Butyl ethyl ether	59	2.905	2.911	(0.719)	930662	50.0000	51
	104	2,2-Dichloropropane	77	3.009	3.015	(0.745)	586239	50.0000	51
	13	cis-1,2-Dichloroethene	96	3.009	3.021	(0.745)	413515	50.0000	50
	18	2-Butanone	72	3.033	3.045	(0.751)	29323	50.0000	45
	56	Ethyl Acetate	70	3.094	3.100	(0.766)	45008	100.000	89
	108	Bromochloromethane	128	3.204	3.216	(0.793)	179800	50.0000	48
	15	Chloroform	83	3.283	3.289	(0.813)	621010	50.0000	49
	20	1,1,1-Trichloroethane	97	3.429	3.441	(0.849)	593973	50.0000	51
	59	Cyclohexane	56	3.478	3.484	(0.861)	592881	50.0000	48
	21	Carbon Tetrachloride	117	3.576	3.588	(0.885)	504327	50.0000	52
	92	1,1-Dichloropropene	75	3.582	3.588	(0.887)	528038	50.0000	51
$	16	1,2-Dichloroethane-d4 (SUR)	65	3.716	3.728	(0.920)	227021	50.0000	49
	28	Benzene	78	3.771	3.777	(0.934)	1456045	50.0000	50
	17	1,2-Dichloroethane	62	3.789	3.801	(0.938)	389876	50.0000	48
	61	Isopropyl Acetate	43	3.880	3.892	(0.961)	938657	100.000	96
	140	tert-Amylmethyl Ether	73	3.899	3.905	(0.965)	830997	50.0000	51
*	69	Fluorobenzene	96	4.039	4.051	(1.000)	1260462	50.0000	
	156	2,4,4-Trimethyl-1-pentene	112	4.374	4.386	(1.083)	177289	50.0000	53
	25	Trichloroethene	95	4.411	4.423	(1.092)	393717	50.0000	49
	63	n-Butanol	43	4.411	4.417	(1.092)	127996	2000.00	2000
	96	Ethyl Acrylate	55	4.575	4.581	(1.133)	255701	50.0000	40
	126	Methyl cyclohexane	83	4.606	4.612	(1.140)	742735	50.0000	48
	23	1,2-Dichloropropane	63	4.649	4.655	(1.151)	317589	50.0000	49
	109	Dibromomethane	93	4.770	4.783	(1.181)	174755	50.0000	48
	95	1,4-Dioxane	88	4.819	4.831	(1.193)	13226	200.000	190
	146	Methyl methacrylate	69	4.819	4.831	(1.193)	154519	50.0000	47
	64	Propyl Acetate	43	4.905	4.917	(1.214)	509145	100.000	96
	22	Bromodichloromethane	83	4.966	4.972	(1.229)	423978	50.0000	50
	30	2-Chloroethyl Vinyl Ether	63	5.350	5.356	(1.325)	44518	50.0000	46
	118	Epichlorohydrin	57	5.398	5.410	(1.337)	398433	1000.00	980
	24	cis-1,3-Dichloropropene	75	5.496	5.502	(1.361)	507132	50.0000	50

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45218.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
33	4-Methyl-2-Pentanone	43	5.715	5.727	(1.415)	162209	50.0000	47
$ 37	Toluene-d8 (SUR)	98	5.813	5.825	(0.749)	993892	50.0000	50
38	Toluene	91	5.892	5.904	(0.759)	1642666	50.0000	49
29	trans-1,3-Dichloropropene	75	6.209	6.221	(0.800)	429370	50.0000	50
27	1,1,2-Trichloroethane	83	6.441	6.453	(0.830)	201148	50.0000	49
35	Tetrachloroethene	166	6.593	6.605	(0.849)	467448	50.0000	51
103	1,3-Dichloropropane	76	6.654	6.666	(0.857)	427398	50.0000	48
34	2-Hexanone	43	6.831	6.843	(0.880)	106599	50.0000	47
26	Dibromochloromethane	129	6.953	6.965	(0.896)	295678	50.0000	50
65	Butyl Acetate	43	7.057	7.063	(0.909)	532781	100.000	97
66	1,2-Dibromoethane	107	7.075	7.087	(0.911)	250119	50.0000	49
* 32	Chlorobenzene-d5	117	7.764	7.776	(1.000)	858981	50.0000	
39	Chlorobenzene	112	7.806	7.819	(1.005)	1052524	50.0000	50
97	1,1,1,2-Tetrachloroethane	131	7.953	7.965	(1.024)	347642	50.0000	51
40	Ethylbenzene	106	8.008	8.020	(1.031)	582688	50.0000	51
43	m+p-Xylene	106	8.197	8.209	(1.056)	1468970	100.000	100
44	o-Xylene	106	8.788	8.800	(1.132)	705788	50.0000	51
42	Styrene	104	8.818	8.831	(1.136)	1135305	50.0000	51
147	Butyl Acrylate	55	8.873	8.885	(0.773)	413146	50.0000	41
31	Bromoform	173	9.056	9.068	(1.166)	169418	50.0000	40
110	Isopropylbenzene	105	9.404	9.416	(1.211)	1745946	50.0000	52
$ 41	Bromofluorobenzene (SUR)	174	9.611	9.623	(0.837)	333952	50.0000	49
150	Camphene	41	9.757	9.769	(0.850)	138269	50.0000	45
107	Bromobenzene	156	9.800	9.812	(0.854)	440937	50.0000	48
36	1,1,2,2-Tetrachloroethane	83	9.928	9.940	(0.865)	283733	50.0000	45
99	1,2,3-Trichloropropane	110	9.946	9.958	(0.867)	88389	50.0000	46
143	trans-1,4-Dichloro-2-butene	53	10.032	10.038	(2.484)	76497	50.0000	47
112	n-Propylbenzene	91	10.074	10.086	(0.878)	2248087	50.0000	53
105	2-Chlorotoluene	91	10.154	10.166	(0.885)	1251308	50.0000	50
106	4-Chlorotoluene	91	10.343	10.355	(0.901)	1300345	50.0000	49
102	1,3,5-Trimethylbenzene	105	10.397	10.409	(0.906)	1596152	50.0000	51
148	Butyl methacrylate	69	10.678	10.690	(0.930)	438898	50.0000	42
115	tert-Butylbenzene	119	10.916	10.928	(0.951)	1452055	50.0000	52
100	1,2,4-Trimethylbenzene	105	11.001	11.013	(0.959)	1631178	50.0000	51
114	sec-Butylbenzene	105	11.275	11.287	(0.982)	2214749	50.0000	54
67	1,3-Dichlorobenzene	146	11.367	11.379	(0.990)	902057	50.0000	49
* 91	1,4-Dichlorobenzene-d4	152	11.476	11.489	(1.000)	453992	50.0000	
68	1,4-Dichlorobenzene	146	11.507	11.519	(1.003)	894907	50.0000	50
113	p-Isopropyltoluene	119	11.519	11.531	(1.004)	1922328	50.0000	54
69	1,2-Dichlorobenzene	146	11.982	11.988	(1.044)	814730	50.0000	49
117	Benzyl chloride	91	11.726	11.732	(1.022)	591498	50.0000	41
111	n-Butylbenzene	91	12.050	12.062	(1.050)	1746767	50.0000	55
101	1,2-Dibromo-3-chloropropane	75	12.866	12.872	(1.121)	50972	50.0000	47
152	Camphor	95	13.549	13.561	(1.181)	150264	250.000	250
93	1,2,4-Trichlorobenzene	180	13.641	13.647	(1.189)	696797	50.0000	52
94	Hexachlorobutadiene	225	13.811	13.823	(1.203)	408378	50.0000	55
70	Naphthalene	128	13.842	13.848	(1.206)	1191705	50.0000	50

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45218.d
Report Date: 15-Feb-2011 12:17

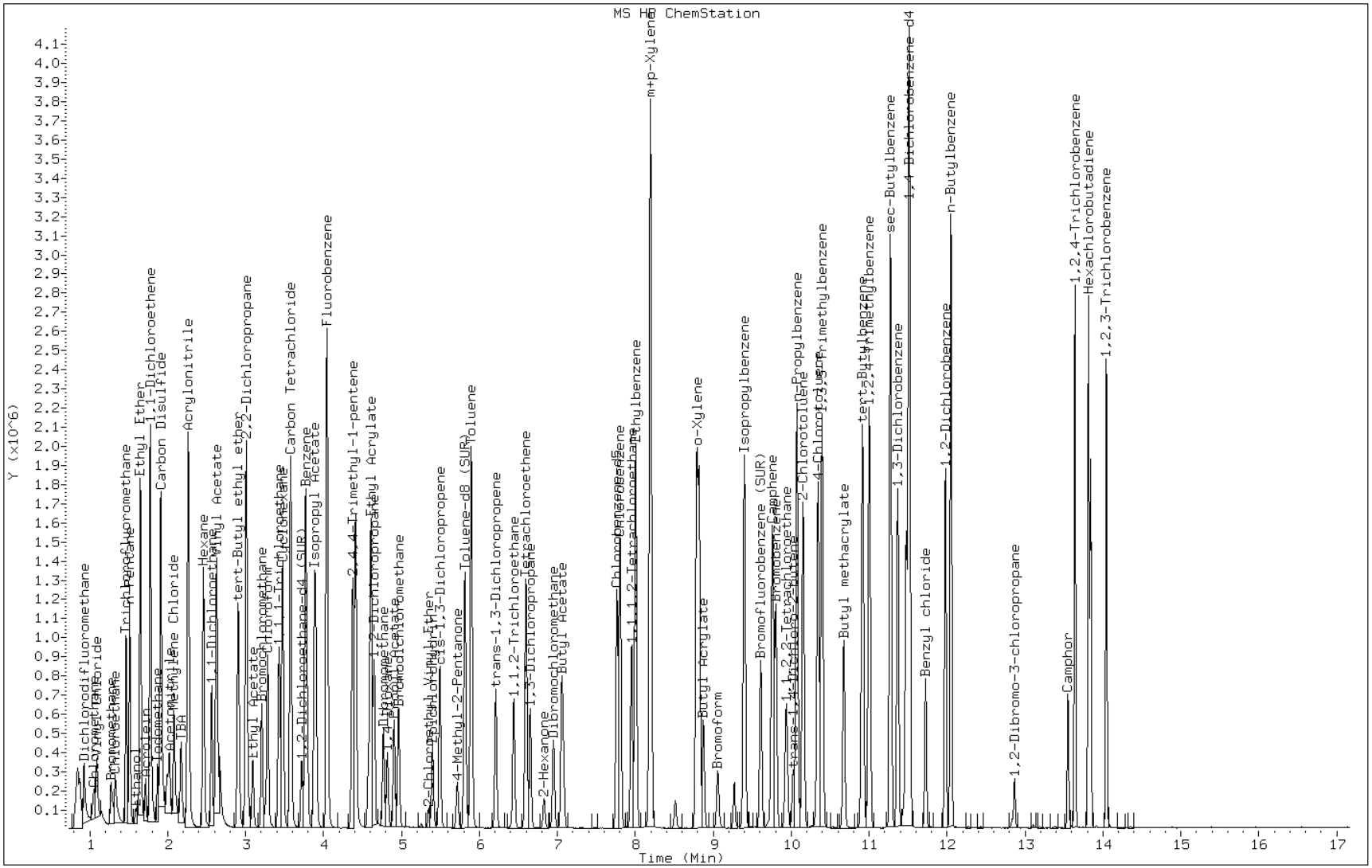
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
98 1,2,3-Trichlorobenzene	180	14.049	14.055	(1.224)	614619	50.0000	50
M 45 Xylene (Total)	100				2174758	150.000	150

Data File: o45218.d

Date: 14-FEB-2011 23:21

Client ID: Instrument: VOAMS12.i

Sample Info: IC-VM12LCAL4 Operator: VOAMS 9



Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45219.d
Report Date: 15-Feb-2011 12:17

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VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45219.d
Lab Smp Id: IC-VM12LCAL5
Inj Date : 14-FEB-2011 23:46
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : IC-VM12LCAL5
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:17 vibha Quant Type: ISTD
Cal Date : 14-FEB-2011 23:46 Cal File: o45219.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				3363359	400.000	420
90 Dichlorodifluoromethane	85	0.930	0.930	(0.230)	1774265	200.000	220
1 Chloromethane	50	1.064	1.064	(0.263)	1684170	200.000	200
4 Vinyl Chloride	62	1.088	1.094	(0.269)	1724856	200.000	210
3 Bromomethane	94	1.271	1.271	(0.314)	937726	200.000	200
5 Chloroethane	64	1.326	1.326	(0.328)	1161742	200.000	200(A)
9 Trichlorofluoromethane	101	1.472	1.472	(0.364)	2755668	200.000	220
121 n-Pentane	72	1.515	1.521	(0.375)	274542	200.000	200
127 Ethanol	46	1.594	1.600	(0.394)	133145	5000.00	5000
46 Ethyl Ether	59	1.643	1.649	(0.406)	934774	200.000	200
119 Isoprene	67	1.655	1.655	(0.409)	2111780	200.000	220
47 Acrolein	56	1.716	1.722	(0.424)	202018	500.000	510
10 1,1-Dichloroethene	96	1.777	1.777	(0.439)	1335282	200.000	210
48 Freon TF	101	1.777	1.783	(0.439)	1556527	200.000	220

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45219.d
Report Date: 15-Feb-2011 12:17

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	==========	====	==	======	======	========	=======	=======
7	Acetone	43	1.814	1.820	(0.448)	210250	200.000	190
142	Iodomethane	142	1.868	1.875	(0.462)	1955587	200.000	240
8	Carbon Disulfide	76	1.911	1.911	(0.472)	4322447	200.000	220
50	Acetonitrile	41	1.990	2.003	(0.492)	1961529	4000.00	4400
125	Methyl acetate	74	2.021	2.027	(0.500)	230037	200.000	170
6	Methylene Chloride	84	2.088	2.088	(0.516)	1432331	200.000	200
51	TBA	59	2.179	2.179	(0.539)	1947680	4000.00	4000
52	Acrylonitrile	53	2.253	2.259	(0.557)	417323	250.000	250
12	trans-1,2-Dichloroethene	96	2.265	2.271	(0.560)	1587330	200.000	210
53	MTBE	73	2.271	2.277	(0.561)	3453422	200.000	210
49	Isopropanol	45	1.911	1.917	(0.472)	1393413	5000.00	4800
54	Hexane	56	2.460	2.466	(0.608)	1197788	200.000	200
11	1,1-Dichloroethane	63	2.563	2.570	(0.634)	2453584	200.000	210
57	Vinyl Acetate	43	2.624	2.631	(0.649)	2981233	200.000	230
55	DIPE	45	2.631	2.631	(0.650)	3865181	200.000	220
132	1-Chloropropane	63	1.655	1.655	(0.208)	81077	400.000	400
149	tert-Butyl ethyl ether	59	2.905	2.911	(0.718)	4067878	200.000	220
104	2,2-Dichloropropane	77	3.009	3.015	(0.744)	2568229	200.000	220
13	cis-1,2-Dichloroethene	96	3.009	3.021	(0.744)	1776029	200.000	210
18	2-Butanone	72	3.039	3.045	(0.751)	133131	200.000	200
56	Ethyl Acetate	70	3.094	3.100	(0.765)	205970	400.000	400(A)
108	Bromochloromethane	128	3.210	3.216	(0.794)	767286	200.000	200
15	Chloroform	83	3.283	3.289	(0.812)	2659261	200.000	210
20	1,1,1-Trichloroethane	97	3.435	3.441	(0.849)	2612417	200.000	220
59	Cyclohexane	56	3.478	3.484	(0.860)	2548618	200.000	200
21	Carbon Tetrachloride	117	3.582	3.588	(0.885)	2249756	200.000	230
92	1,1-Dichloropropene	75	3.582	3.588	(0.885)	2307636	200.000	220
$ 16	1,2-Dichloroethane-d4 (SUR)	65	3.722	3.728	(0.920)	246277	50.0000	52
28	Benzene	78	3.771	3.777	(0.932)	6248177	200.000	210
17	1,2-Dichloroethane	62	3.789	3.801	(0.937)	1654052	200.000	200
61	Isopropyl Acetate	43	3.880	3.892	(0.959)	4273661	400.000	430
140	tert-Amylmethyl Ether	73	3.899	3.905	(0.964)	3679272	200.000	220
* 69	Fluorobenzene	96	4.045	4.051	(1.000)	1285352	50.0000	
156	2,4,4-Trimethyl-1-pentene	112	4.380	4.386	(1.083)	808590	200.000	240
25	Trichloroethene	95	4.411	4.423	(1.090)	1711164	200.000	210
63	n-Butanol	43	4.411	4.417	(1.090)	189686	2500.00	2600(M)
96	Ethyl Acrylate	55	4.575	4.581	(1.131)	1339996	200.000	210
126	Methyl cyclohexane	83	4.606	4.612	(1.139)	3232607	200.000	200
23	1,2-Dichloropropane	63	4.648	4.655	(1.149)	1404670	200.000	210
109	Dibromomethane	93	4.770	4.783	(1.179)	756994	200.000	200
95	1,4-Dioxane	88	4.825	4.831	(1.193)	20859	250.000	290
146	Methyl methacrylate	69	4.825	4.831	(1.193)	705846	200.000	210
64	Propyl Acetate	43	4.911	4.917	(1.214)	2340534	400.000	430
22	Bromodichloromethane	83	4.965	4.972	(1.228)	1886820	200.000	220
30	2-Chloroethyl Vinyl Ether	63	5.350	5.356	(1.323)	214791	200.000	200
118	Epichlorohydrin	57	5.404	5.410	(1.336)	1829192	4000.00	4400
24	cis-1,3-Dichloropropene	75	5.496	5.502	(1.359)	2286402	200.000	220

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45219.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	33 4-Methyl-2-Pentanone	43	5.715	5.727	(1.413)	749087	200.000	210	
$	37 Toluene-d8 (SUR)	98	5.813	5.825	(0.731)	1059368	50.0000	52	
	38 Toluene	91	5.898	5.904	(0.742)	6975020	200.000	200	
	29 trans-1,3-Dichloropropene	75	6.209	6.221	(0.781)	1950231	200.000	220	
	27 1,1,2-Trichloroethane	83	6.441	6.453	(0.810)	871147	200.000	200	
	35 Tetrachloroethene	166	6.599	6.605	(0.830)	1981051	200.000	210	
	103 1,3-Dichloropropane	76	6.654	6.666	(0.837)	1866784	200.000	200	
	34 2-Hexanone	43	6.831	6.843	(0.859)	508681	200.000	210	
	26 Dibromochloromethane	129	6.953	6.965	(0.874)	1366744	200.000	220	
	65 Butyl Acetate	43	7.056	7.063	(0.887)	2517868	400.000	440	
	66 1,2-Dibromoethane	107	7.081	7.087	(0.890)	1098066	200.000	210	
*	32 Chlorobenzene-d5	117	7.764	7.776	(1.000)	889809	50.0000	(H)	
	39 Chlorobenzene	112	7.806	7.819	(0.982)	4522983	200.000	210	
	97 1,1,1,2-Tetrachloroethane	131	7.953	7.965	(1.000)	1574019	200.000	220	
	40 Ethylbenzene	106	8.014	8.020	(1.008)	2532595	200.000	210	
	43 m+p-Xylene	106	8.203	8.209	(1.031)	6426595	400.000	430	
	44 o-Xylene	106	8.794	8.800	(1.106)	3065162	200.000	210	
	42 Styrene	104	8.824	8.831	(1.110)	5154134	200.000	220	
	147 Butyl Acrylate	55	8.879	8.885	(0.774)	2010160	200.000	180	
	31 Bromoform	173	9.062	9.068	(1.140)	849438	200.000	200	
	110 Isopropylbenzene	105	9.404	9.416	(1.182)	7840048	200.000	220	
$	41 Bromofluorobenzene (SUR)	174	9.611	9.623	(0.837)	373472	50.0000	51	
	150 Camphene	41	9.763	9.769	(0.851)	632641	200.000	190	
	107 Bromobenzene	156	9.806	9.812	(0.854)	1936549	200.000	200	
	36 1,1,2,2-Tetrachloroethane	83	9.934	9.940	(0.866)	1311079	200.000	190	
	99 1,2,3-Trichloropropane	110	9.952	9.958	(0.867)	411186	200.000	200	
	143 trans-1,4-Dichloro-2-butene	53	10.032	10.038	(2.480)	372034	200.000	220	
	112 n-Propylbenzene	91	10.080	10.086	(0.878)	10245932	200.000	220	
	105 2-Chlorotoluene	91	10.160	10.166	(0.885)	5619500	200.000	210	
	106 4-Chlorotoluene	91	10.349	10.355	(0.902)	5965171	200.000	210	
	102 1,3,5-Trimethylbenzene	105	10.403	10.409	(0.906)	7334806	200.000	220	
	148 Butyl methacrylate	69	10.684	10.690	(0.931)	2173864	200.000	200	
	115 tert-Butylbenzene	119	10.922	10.928	(0.952)	6686358	200.000	220	
	100 1,2,4-Trimethylbenzene	105	11.007	11.013	(0.959)	7546409	200.000	220	
	114 sec-Butylbenzene	105	11.281	11.287	(0.983)	10239320	200.000	230	
	67 1,3-Dichlorobenzene	146	11.379	11.379	(0.991)	4041287	200.000	200	
*	91 1,4-Dichlorobenzene-d4	152	11.476	11.489	(1.000)	489828	50.0000		
	68 1,4-Dichlorobenzene	146	11.513	11.519	(1.003)	3991671	200.000	200	
	113 p-Isopropyltoluene	119	11.525	11.531	(1.004)	8790387	200.000	230	
	69 1,2-Dichlorobenzene	146	11.982	11.988	(1.044)	3603632	200.000	200	
	117 Benzyl chloride	91	11.726	11.732	(1.022)	3004489	200.000	190	
	111 n-Butylbenzene	91	12.056	12.062	(1.050)	7953443	200.000	230	
	101 1,2-Dibromo-3-chloropropane	75	12.866	12.872	(1.121)	235277	200.000	200	
	152 Camphor	95	13.549	13.561	(1.181)	698955	1000.00	1100	
	93 1,2,4-Trichlorobenzene	180	13.641	13.647	(1.189)	2907437	200.000	200	
	94 Hexachlorobutadiene	225	13.817	13.823	(1.204)	1726989	200.000	220	
	70 Naphthalene	128	13.842	13.848	(1.206)	5139870	200.000	200	

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45219.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	14.049	14.055	(1.224)	2554938	200.000	190
M	45 Xylene (Total)	100				9491757	600.000	650

QC Flag Legend

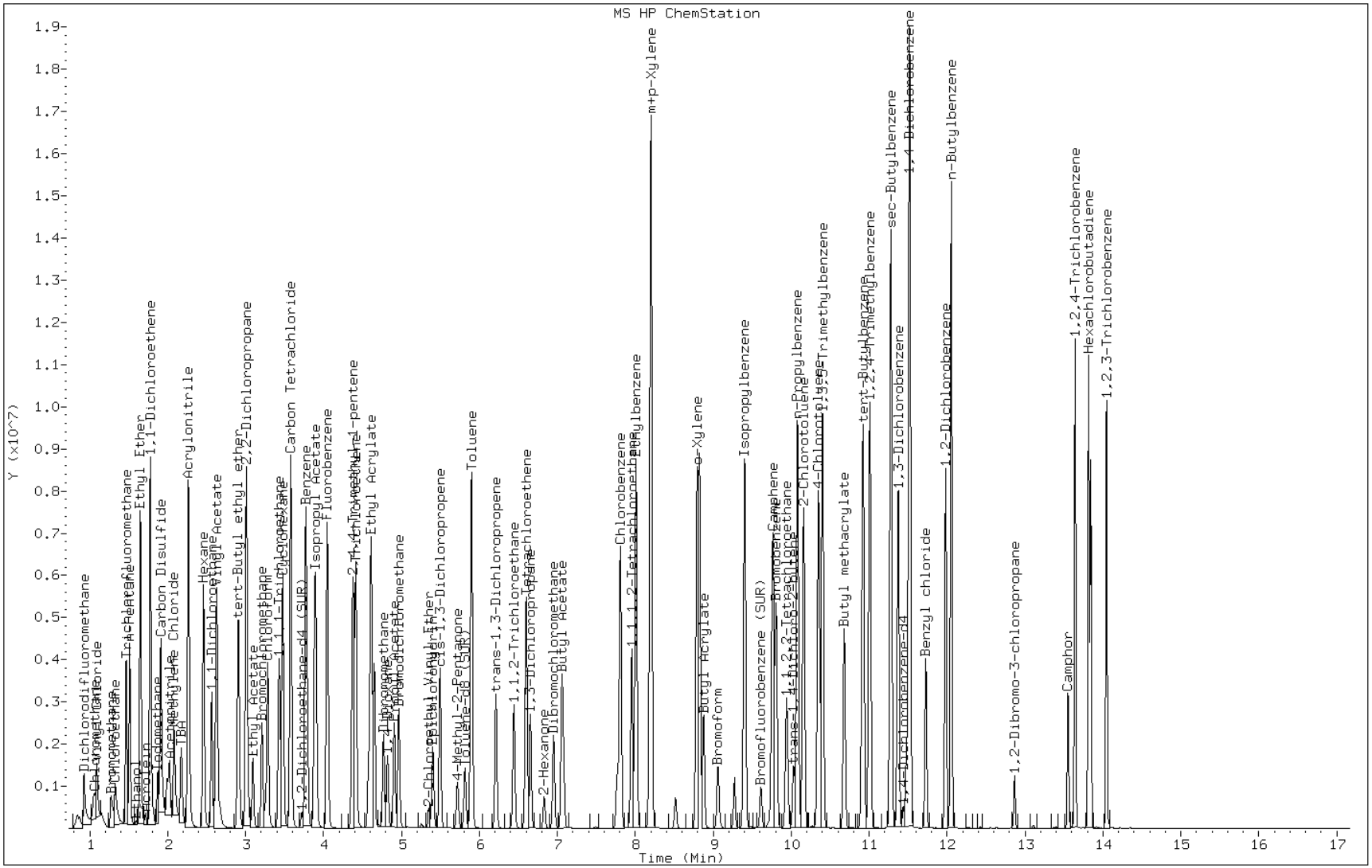
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: o45219.d

Date: 14-FEB-2011 23:46

Client ID: Instrument: VOAMS12.i

Sample Info: IC-VM12LCAL5 Operator: VOAMS 9



Manual Integration Report

Data File: o45219.d
Inj. Date and Time: 14-FEB-2011 23:46
Instrument ID: VOAMS12.i
Client ID:
Compound: 63 n-Butanol
CAS #: 71-36-3
Report Date: 02/15/2011

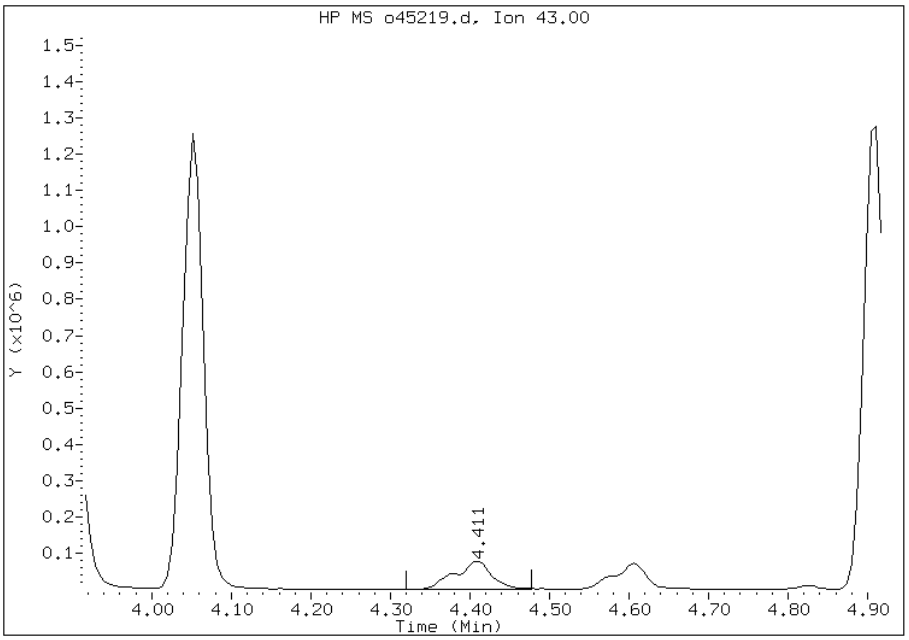
Processing Integration Results

RT: 4.41

Response: 254815

Amount: 2500

Conc: 2500



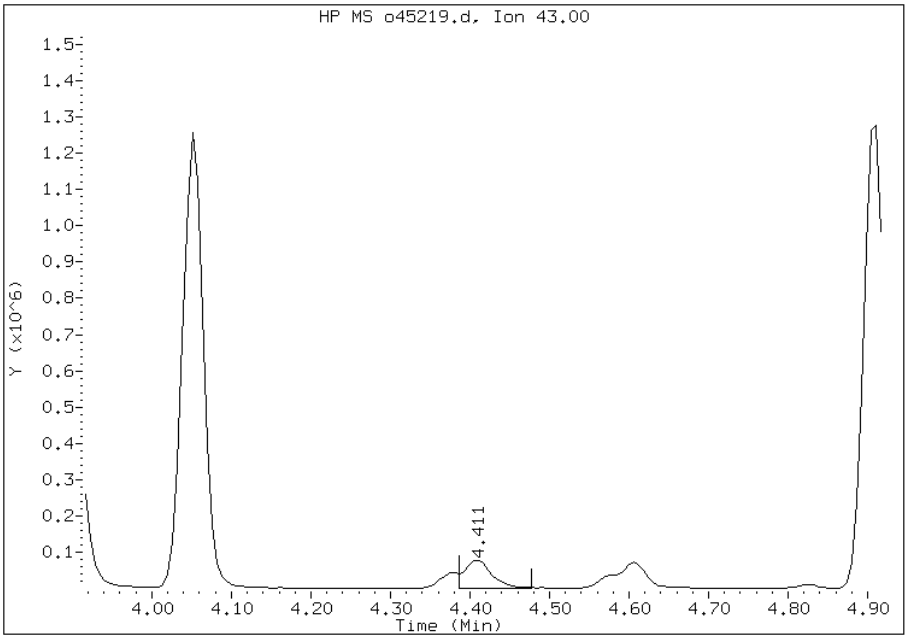
Manual Integration Results

RT: 4.41

Response: 189686

Amount: 2557

Conc: 2557



Manually Integrated By: vibha
Manual Integration Reason: Peak Tailing or Fronting

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45220.d
Report Date: 15-Feb-2011 12:17

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45220.d
Lab Smp Id: IC-VM12LCAL6
Inj Date : 15-FEB-2011 00:11
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : IC-VM12LCAL6
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:17 vibha Quant Type: ISTD
Cal Date : 15-FEB-2011 00:11 Cal File: o45220.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				8178801	1000.00	980
90	Dichlorodifluoromethane	85	0.930	0.930	(0.230)	4167631	500.000	500(A)
1	Chloromethane	50	1.064	1.064	(0.263)	4499136	500.000	510(A)
4	Vinyl Chloride	62	1.088	1.094	(0.269)	4497524	500.000	530(A)
3	Bromomethane	94	1.271	1.271	(0.314)	2006113	500.000	420
5	Chloroethane	64	1.326	1.326	(0.328)	2538828	500.000	430(A)
9	Trichlorofluoromethane	101	1.472	1.472	(0.364)	6654297	500.000	500(A)
121	n-Pentane	72	1.515	1.521	(0.374)	695309	500.000	500
127	Ethanol	46	1.643	1.600	(0.406)	200644	6000.00	7300(A)
46	Ethyl Ether	59	1.643	1.649	(0.406)	2479953	500.000	520(A)
119	Isoprene	67	1.655	1.655	(0.409)	5489709	500.000	560(A)
47	Acrolein	56	1.722	1.722	(0.426)	257891	600.000	630
10	1,1-Dichloroethene	96	1.777	1.777	(0.439)	3289900	500.000	510(A)
48	Freon TF	101	1.777	1.783	(0.439)	3770721	500.000	520(A)

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45220.d
Report Date: 15-Feb-2011 12:17

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	7 Acetone	43	1.820	1.820	(0.450)	1144753	1000.00	1000(A)
	142 Iodomethane	142	1.868	1.875	(0.462)	4616107	500.000	540(A)
	8 Carbon Disulfide	76	1.911	1.911	(0.472)	10830911	500.000	540(A)
	50 Acetonitrile	41	1.996	2.003	(0.494)	5010266	10000.0	11000(A)
	125 Methyl acetate	74	2.021	2.027	(0.500)	626668	500.000	460
	6 Methylene Chloride	84	2.088	2.088	(0.516)	3471644	500.000	460
	51 TBA	59	2.179	2.179	(0.539)	5650062	10000.0	11000(A)
	52 Acrylonitrile	53	2.259	2.259	(0.558)	585701	300.000	340
	12 trans-1,2-Dichloroethene	96	2.265	2.271	(0.560)	3862755	500.000	490
	53 MTBE	73	2.277	2.277	(0.563)	9034509	500.000	520(A)
	49 Isopropanol	45	1.917	1.917	(0.474)	1970338	6000.00	6500(A)
	54 Hexane	56	2.460	2.466	(0.608)	3074076	500.000	500
	11 1,1-Dichloroethane	63	2.563	2.570	(0.634)	6079191	500.000	490
	57 Vinyl Acetate	43	2.624	2.631	(0.649)	7621843	500.000	560(A)
	55 DIPE	45	2.630	2.631	(0.650)	9980853	500.000	540(A)
	132 1-Chloropropane	63	1.649	1.655	(0.207)	211576	1000.00	1000(A)
	149 tert-Butyl ethyl ether	59	2.911	2.911	(0.720)	10473640	500.000	540(A)
	104 2,2-Dichloropropane	77	3.014	3.015	(0.745)	6408717	500.000	530(A)
	13 cis-1,2-Dichloroethene	96	3.014	3.021	(0.745)	4316046	500.000	490
	18 2-Butanone	72	3.039	3.045	(0.751)	665416	1000.00	970
	56 Ethyl Acetate	70	3.094	3.100	(0.765)	567563	1000.00	1100(A)
	108 Bromochloromethane	128	3.210	3.216	(0.794)	1852028	500.000	460
	15 Chloroform	83	3.283	3.289	(0.812)	6551000	500.000	490
	20 1,1,1-Trichloroethane	97	3.435	3.441	(0.849)	6521750	500.000	530(A)
	59 Cyclohexane	56	3.478	3.484	(0.860)	6499306	500.000	500
	21 Carbon Tetrachloride	117	3.581	3.588	(0.885)	5665179	500.000	550(A)
	92 1,1-Dichloropropene	75	3.581	3.588	(0.885)	5827070	500.000	530(A)
$	16 1,2-Dichloroethane-d4 (SUR)	65	3.722	3.728	(0.920)	237782	50.0000	48
	28 Benzene	78	3.770	3.777	(0.932)	15428185	500.000	500
	17 1,2-Dichloroethane	62	3.795	3.801	(0.938)	4159277	500.000	490
	61 Isopropyl Acetate	43	3.886	3.892	(0.961)	11802868	1000.00	1100(A)
	140 tert-Amylmethyl Ether	73	3.905	3.905	(0.965)	9598236	500.000	560(A)
*	69 Fluorobenzene	96	4.045	4.051	(1.000)	1334797	50.0000	
	156 2,4,4-Trimethyl-1-pentene	112	4.380	4.386	(1.083)	1908272	500.000	540(A)
	25 Trichloroethene	95	4.417	4.423	(1.092)	4322952	500.000	510(A)
	63 n-Butanol	43	4.417	4.417	(1.092)	266312	3000.00	3000(M)
	96 Ethyl Acrylate	55	4.581	4.581	(1.133)	3355058	500.000	500
	126 Methyl cyclohexane	83	4.612	4.612	(1.140)	8135616	500.000	500
	23 1,2-Dichloropropane	63	4.654	4.655	(1.151)	3572551	500.000	520(A)
	109 Dibromomethane	93	4.770	4.783	(1.179)	1909138	500.000	500
	95 1,4-Dioxane	88	4.819	4.831	(1.191)	21355	300.000	290
	146 Methyl methacrylate	69	4.825	4.831	(1.193)	1960294	500.000	570(A)
	64 Propyl Acetate	43	4.910	4.917	(1.214)	6604619	1000.00	1200(A)
	22 Bromodichloromethane	83	4.971	4.972	(1.229)	4752051	500.000	530(A)
	30 2-Chloroethyl Vinyl Ether	63	5.356	5.356	(1.324)	674059	500.000	500
	118 Epichlorohydrin	57	5.416	5.410	(1.339)	5184236	10000.0	12000(A)
	24 cis-1,3-Dichloropropene	75	5.502	5.502	(1.360)	5783472	500.000	540(A)

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45220.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
33	4-Methyl-2-Pentanone	43	5.721	5.727	(1.414)	4311718	1000.00	1200(A)
$ 37	Toluene-d8 (SUR)	98	5.813	5.825	(0.730)	1051037	50.0000	49
38	Toluene	91	5.898	5.904	(0.741)	16927324	500.000	460
29	trans-1,3-Dichloropropene	75	6.215	6.221	(0.781)	5020985	500.000	540(A)
27	1,1,2-Trichloroethane	83	6.447	6.453	(0.810)	2247582	500.000	500(A)
35	Tetrachloroethene	166	6.599	6.605	(0.829)	4840550	500.000	480
103	1,3-Dichloropropane	76	6.660	6.666	(0.837)	4819042	500.000	500(A)
34	2-Hexanone	43	6.837	6.843	(0.859)	2994401	1000.00	1200(A)
26	Dibromochloromethane	129	6.959	6.965	(0.874)	3564829	500.000	560(A)
65	Butyl Acetate	43	7.062	7.063	(0.887)	7107257	1000.00	1200(A)
66	1,2-Dibromoethane	107	7.081	7.087	(0.890)	2806960	500.000	500(A)
* 32	Chlorobenzene-d5	117	7.770	7.776	(1.000)	935741	50.0000	(H)
39	Chlorobenzene	112	7.812	7.819	(0.982)	11306084	500.000	490
97	1,1,1,2-Tetrachloroethane	131	7.959	7.965	(1.000)	4017426	500.000	540(A)
40	Ethylbenzene	106	8.020	8.020	(1.008)	6462965	500.000	520(A)
43	m+p-Xylene	106	8.215	8.209	(1.032)	15687561	1000.00	1000(A)
44	o-Xylene	106	8.800	8.800	(1.106)	7746258	500.000	510(A)
42	Styrene	104	8.837	8.831	(1.110)	12989554	500.000	530(A)
147	Butyl Acrylate	55	8.879	8.885	(0.773)	5548257	500.000	510(A)
31	Bromoform	173	9.062	9.068	(1.139)	2299006	500.000	500(A)
110	Isopropylbenzene	105	9.410	9.416	(1.182)	19200888	500.000	520(A)
$ 41	Bromofluorobenzene (SUR)	174	9.617	9.623	(0.838)	366798	50.0000	50
150	Camphene	41	9.769	9.769	(0.851)	1659376	500.000	500(A)
107	Bromobenzene	156	9.812	9.812	(0.855)	4824030	500.000	490
36	1,1,2,2-Tetrachloroethane	83	9.940	9.940	(0.866)	3456205	500.000	500(A)
99	1,2,3-Trichloropropane	110	9.958	9.958	(0.867)	1083875	500.000	520(A)
143	trans-1,4-Dichloro-2-butene	53	10.044	10.038	(2.483)	992567	500.000	580(A)
112	n-Propylbenzene	91	10.086	10.086	(0.878)	22657456	500.000	490
105	2-Chlorotoluene	91	10.172	10.166	(0.886)	14245316	500.000	520(A)
106	4-Chlorotoluene	91	10.361	10.355	(0.902)	14817071	500.000	520(A)
102	1,3,5-Trimethylbenzene	105	10.409	10.409	(0.907)	17875539	500.000	530(A)
148	Butyl methacrylate	69	10.690	10.690	(0.931)	5614522	500.000	500(A)
115	tert-Butylbenzene	119	10.928	10.928	(0.952)	16212771	500.000	530(A)
100	1,2,4-Trimethylbenzene	105	11.019	11.013	(0.960)	17884172	500.000	520(A)
114	sec-Butylbenzene	105	11.281	11.287	(0.982)	21225351	500.000	480(M)
67	1,3-Dichlorobenzene	146	11.385	11.379	(0.992)	9686800	500.000	480
* 91	1,4-Dichlorobenzene-d4	152	11.482	11.489	(1.000)	491227	50.0000	
68	1,4-Dichlorobenzene	146	11.519	11.519	(1.003)	9044859	500.000	460
113	p-Isopropyltoluene	119	11.525	11.531	(1.004)	17818698	500.000	460
69	1,2-Dichlorobenzene	146	11.988	11.988	(1.044)	8551098	500.000	480
117	Benzyl chloride	91	11.732	11.732	(1.022)	7789773	500.000	500(A)
111	n-Butylbenzene	91	12.055	12.062	(1.050)	16019592	500.000	470
101	1,2-Dibromo-3-chloropropane	75	12.866	12.872	(1.121)	637125	500.000	540(A)
152	Camphor	95	13.555	13.561	(1.181)	1886914	2500.00	2900(A)
93	1,2,4-Trichlorobenzene	180	13.647	13.647	(1.188)	6483499	500.000	440
94	Hexachlorobutadiene	225	13.817	13.823	(1.203)	3739764	500.000	460
70	Naphthalene	128	13.842	13.848	(1.205)	11469444	500.000	440

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45220.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	14.049	14.055	(1.224)	5812690	500.000	440
M	45 Xylene (Total)	100				23433819	1500.00	1500(A)

QC Flag Legend

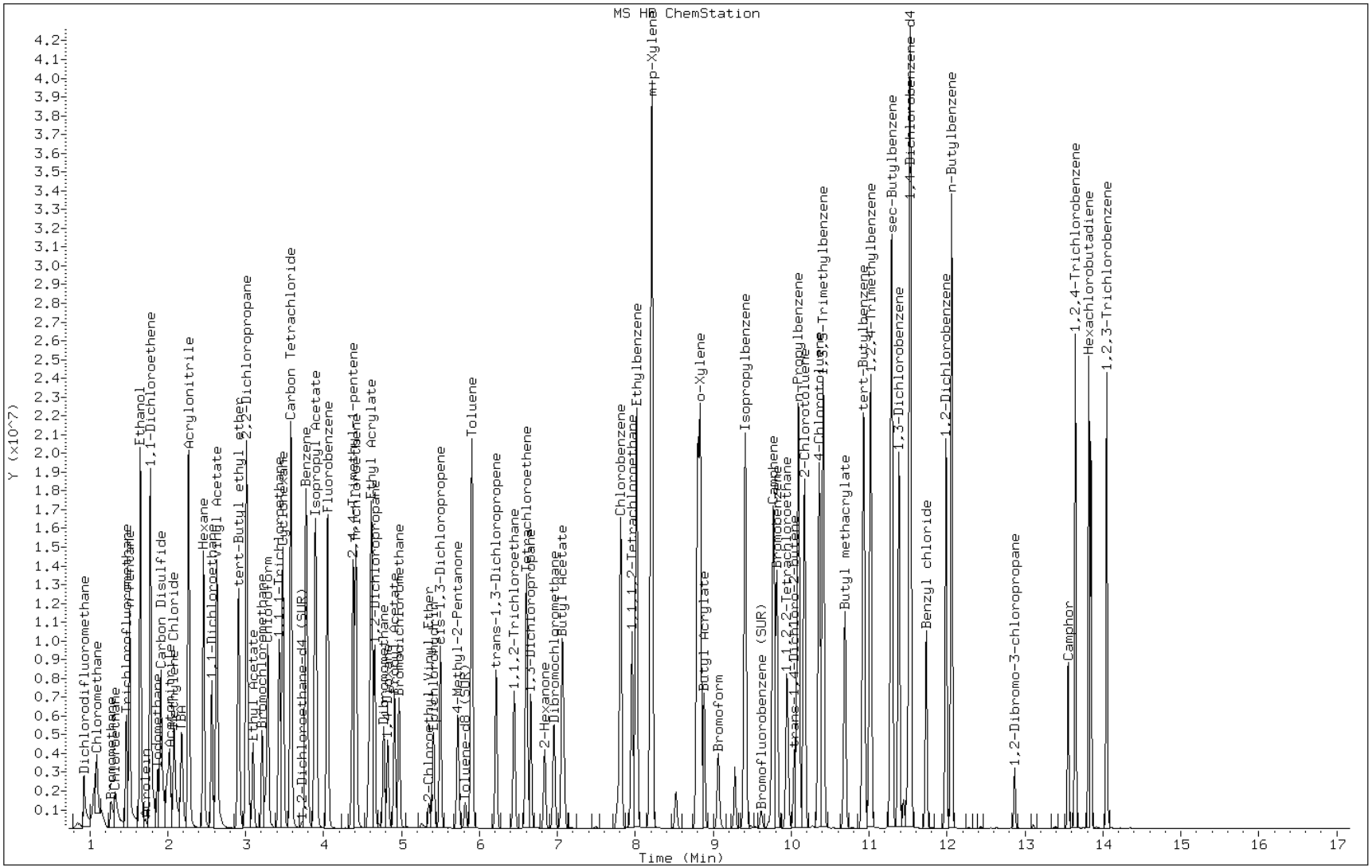
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: o45220.d

Date: 15-FEB-2011 00:11

Client ID: Instrument: VOAMS12.i

Sample Info: IC-VM12LCAL6 Operator: VOAMS 9



Manual Integration Report

Data File: o45220.d
Inj. Date and Time: 15-FEB-2011 00:11
Instrument ID: VOAMS12.i
Client ID:
Compound: 63 n-Butanol
CAS #: 71-36-3
Report Date: 02/15/2011

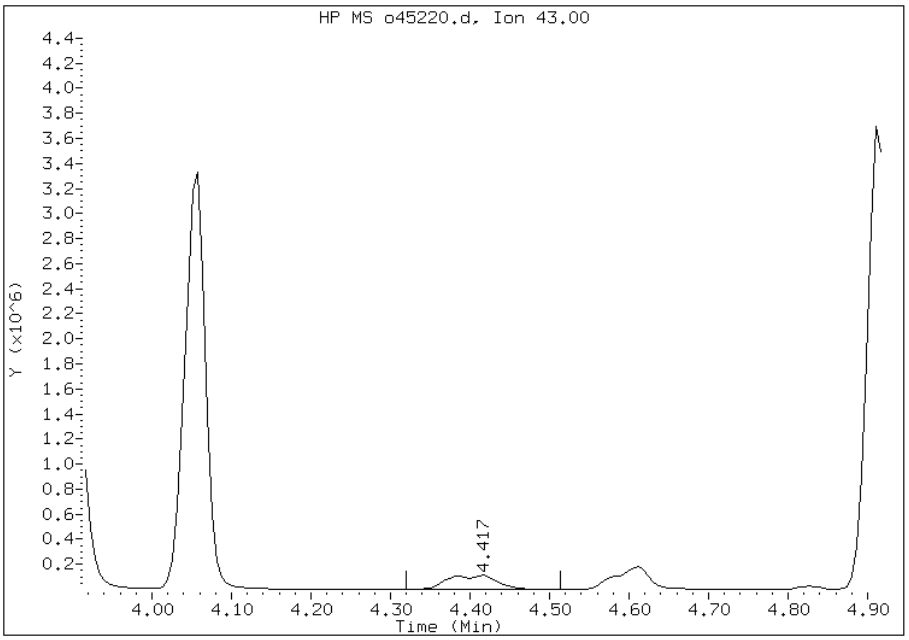
Processing Integration Results

RT: 4.42

Response: 483553

Amount: 448

Conc: 448



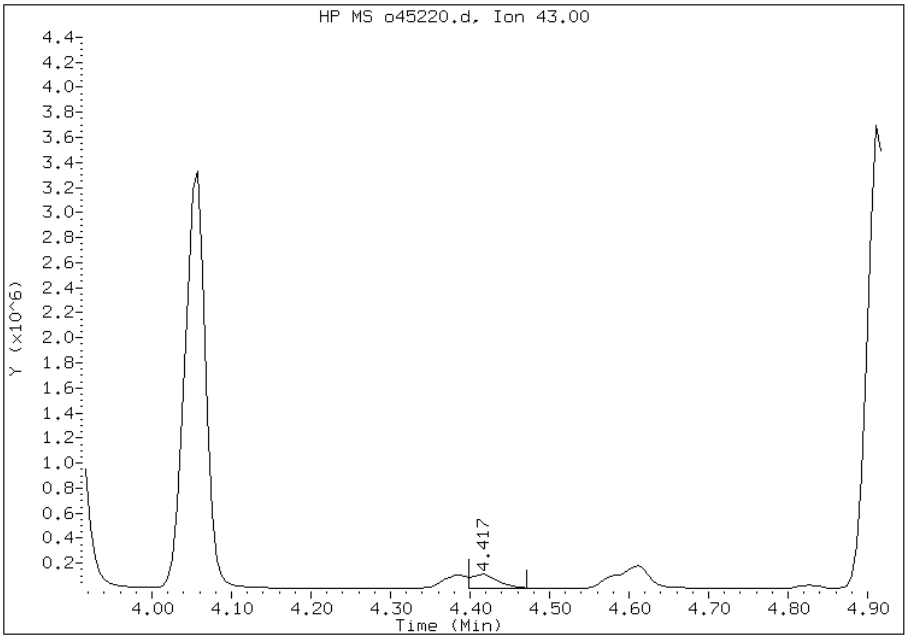
Manual Integration Results

RT: 4.42

Response: 266312

Amount: 2972

Conc: 2972



Manually Integrated By: vibha
Manual Integration Reason: Peak Tailing or Fronting

Manual Integration Report

Data File: o45220.d
Inj. Date and Time: 15-FEB-2011 00:11
Instrument ID: VOAMS12.i
Client ID:
Compound: 114 sec-Butylbenzene
CAS #: 135-98-8
Report Date: 02/15/2011

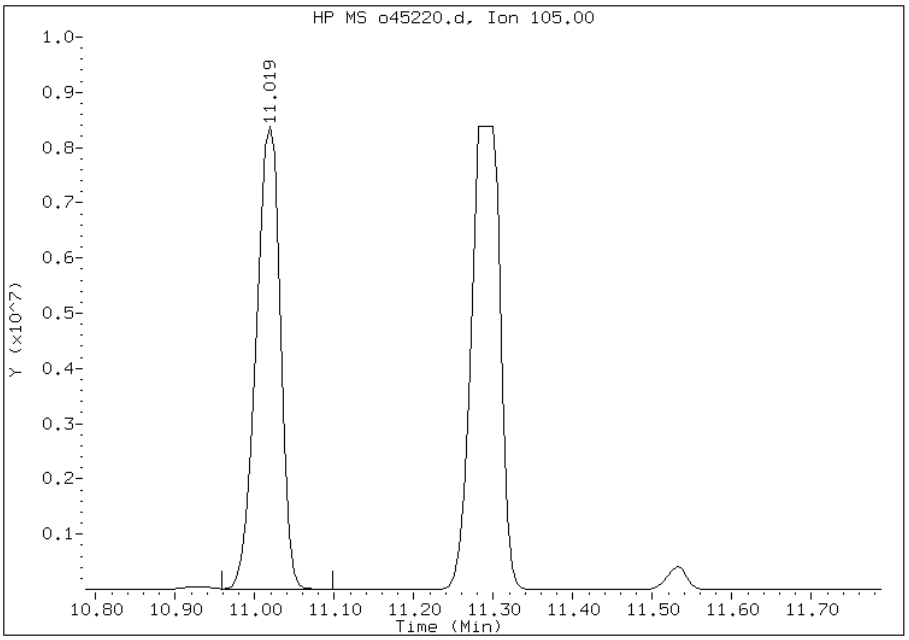
Processing Integration Results

RT: 11.02

Response: 17884177

Amount: 401

Conc: 401



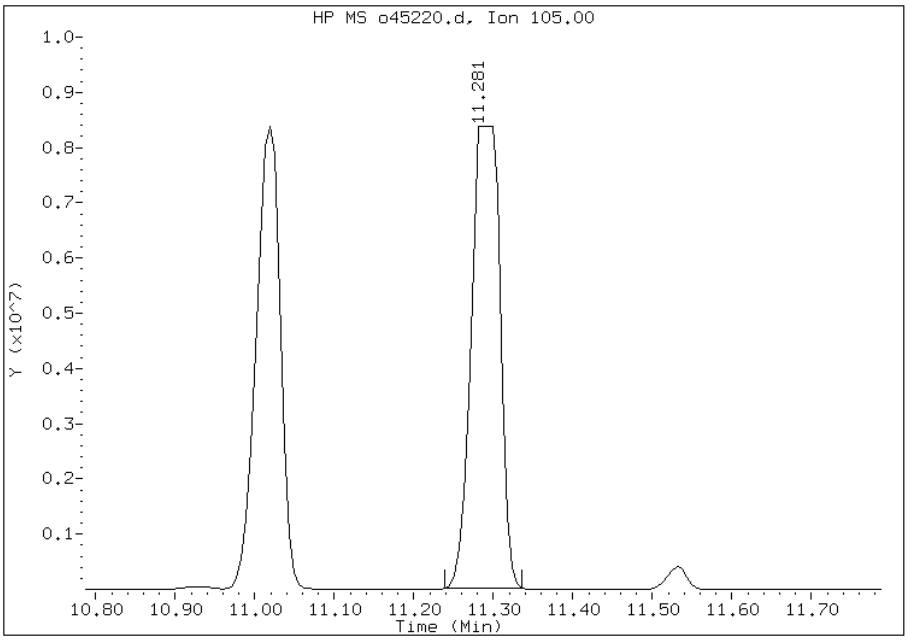
Manual Integration Results

RT: 11.28

Response: 21225351

Amount: 478

Conc: 478



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45226.d
Report Date: 15-Feb-2011 12:17

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45226.d
Lab Smp Id: IC-VM12LCAL1
Inj Date : 15-FEB-2011 02:40
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : IC-VM12LCAL1
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:17 vibha Quant Type: ISTD
Cal Date : 15-FEB-2011 02:40 Cal File: o45226.d
Als bottle: 14 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				15572	2.00000	2.0
90	Dichlorodifluoromethane	85	0.930	0.930	(0.231)	8239	1.00000	1.1
1	Chloromethane	50	1.052	1.064	(0.261)	9050	1.00000	1.1
4	Vinyl Chloride	62	1.088	1.094	(0.270)	7926	1.00000	1.0
3	Bromomethane	94	1.265	1.271	(0.314)	4847	1.00000	1.1
5	Chloroethane	64	1.320	1.326	(0.327)	5998	1.00000	1.1
9	Trichlorofluoromethane	101	1.466	1.472	(0.364)	12782	1.00000	1.0
121	n-Pentane	72	1.515	1.521	(0.376)	1373	1.00000	1.1
127	Ethanol	46	1.588	1.600	(0.394)	23790	1000.00	940(a)
46	Ethyl Ether	59	1.637	1.649	(0.406)	4335	1.00000	0.98(a)
119	Isoprene	67	1.649	1.655	(0.409)	8149	1.00000	0.90(a)
47	Acrolein	56	1.716	1.722	(0.426)	34689	100.000	92(a)
10	1,1-Dichloroethene	96	1.771	1.777	(0.439)	5889	1.00000	0.99(a)
48	Freon TF	101	1.771	1.783	(0.439)	5996	1.00000	0.91(a)

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45226.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
7	Acetone	43	1.808	1.820	(0.448)	14597	10.0000	14
142	Iodomethane	142	1.875	1.875	(0.465)	7227	1.00000	0.92(a)
8	Carbon Disulfide	76	1.905	1.911	(0.472)	16097	1.00000	0.87(a)
125	Methyl acetate	74	2.021	2.027	(0.501)	1600	1.00000	1.3
6	Methylene Chloride	84	2.082	2.088	(0.516)	7949	1.00000	1.1
51	TBA	59	2.173	2.179	(0.539)	9380	20.0000	20
52	Acrylonitrile	53	2.247	2.259	(0.557)	73482	50.0000	47(a)
12	trans-1,2-Dichloroethene	96	2.259	2.271	(0.560)	7459	1.00000	1.0
53	MTBE	73	2.265	2.277	(0.562)	15810	1.00000	1.00
49	Isopropanol	45	1.905	1.917	(0.472)	257590	1000.00	930(a)
11	1,1-Dichloroethane	63	2.557	2.570	(0.634)	11555	1.00000	1.0
57	Vinyl Acetate	43	2.625	2.631	(0.651)	12742	1.00000	1.0
55	DIPE	45	2.625	2.631	(0.651)	14145	1.00000	0.84(a)
132	1-Chloropropane	63	1.643	1.655	(0.212)	508	2.00000	2.7
149	tert-Butyl ethyl ether	59	2.899	2.911	(0.719)	15109	1.00000	0.85(a)
104	2,2-Dichloropropane	77	2.996	3.015	(0.743)	10190	1.00000	0.92(a)
13	cis-1,2-Dichloroethene	96	3.009	3.021	(0.746)	8113	1.00000	1.00
18	2-Butanone	72	3.027	3.045	(0.751)	6330	10.0000	10
56	Ethyl Acetate	70	3.088	3.100	(0.766)	1108	2.00000	2.2
108	Bromochloromethane	128	3.198	3.216	(0.793)	3972	1.00000	1.1
15	Chloroform	83	3.277	3.289	(0.813)	12306	1.00000	1.0
20	1,1,1-Trichloroethane	97	3.423	3.441	(0.849)	10687	1.00000	0.94(a)
59	Cyclohexane	56	3.472	3.484	(0.861)	9179	1.00000	0.77(a)
21	Carbon Tetrachloride	117	3.569	3.588	(0.885)	8262	1.00000	0.88(a)
92	1,1-Dichloropropene	75	3.576	3.588	(0.887)	9989	1.00000	0.99(a)
$ 16	1,2-Dichloroethane-d4 (SUR)	65	3.716	3.728	(0.921)	222244	50.0000	49
28	Benzene	78	3.765	3.777	(0.933)	28590	1.00000	1.0
17	1,2-Dichloroethane	62	3.789	3.801	(0.940)	8189	1.00000	1.0
61	Isopropyl Acetate	43	3.874	3.892	(0.961)	18668	2.00000	2.0
* 69	Fluorobenzene	96	4.033	4.051	(1.000)	1225791	50.0000	
156	2,4,4-Trimethyl-1-pentene	112	4.374	4.386	(1.085)	2987	1.00000	0.92(a)
25	Trichloroethene	95	4.411	4.423	(1.094)	7900	1.00000	1.0
63	n-Butanol	43	4.405	4.417	(1.092)	21878	500.000	420(a)
96	Ethyl Acrylate	55	4.569	4.581	(1.133)	4734	1.00000	0.76(a)
126	Methyl cyclohexane	83	4.600	4.612	(1.141)	9741	1.00000	0.65(a)
23	1,2-Dichloropropane	63	4.636	4.655	(1.150)	5930	1.00000	0.94(a)
109	Dibromomethane	93	4.764	4.783	(1.181)	3516	1.00000	1.00
95	1,4-Dioxane	88	4.813	4.831	(1.193)	3436	50.0000	50
146	Methyl methacrylate	69	4.819	4.831	(1.195)	3282	1.00000	1.0
64	Propyl Acetate	43	4.898	4.917	(1.215)	9413	2.00000	1.8(a)
22	Bromodichloromethane	83	4.959	4.972	(1.230)	7395	1.00000	0.90(a)
118	Epichlorohydrin	57	5.392	5.410	(1.337)	6896	20.0000	17(a)
24	cis-1,3-Dichloropropene	75	5.484	5.502	(1.360)	8730	1.00000	0.88(a)
33	4-Methyl-2-Pentanone	43	5.709	5.727	(1.416)	29872	10.0000	8.9(a)
$ 37	Toluene-d8 (SUR)	98	5.807	5.825	(0.749)	945167	50.0000	49
38	Toluene	91	5.886	5.904	(0.759)	35654	1.00000	1.1
29	trans-1,3-Dichloropropene	75	6.209	6.221	(0.800)	7549	1.00000	0.91(a)

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45226.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	27 1,1,2-Trichloroethane	83	6.441	6.453	(0.830)	3900	1.00000	0.98(a)
	35 Tetrachloroethene	166	6.593	6.605	(0.850)	9578	1.00000	1.1
	103 1,3-Dichloropropane	76	6.654	6.666	(0.858)	8603	1.00000	1.0
	34 2-Hexanone	43	6.831	6.843	(0.881)	19369	10.0000	8.7(a)
	26 Dibromochloromethane	129	6.941	6.965	(0.895)	5087	1.00000	0.89(a)
	65 Butyl Acetate	43	7.051	7.063	(0.909)	10007	2.00000	1.9(a)
	66 1,2-Dibromoethane	107	7.075	7.087	(0.912)	4642	1.00000	0.93(a)
*	32 Chlorobenzene-d5	117	7.758	7.776	(1.000)	832284	50.0000	
	39 Chlorobenzene	112	7.800	7.819	(1.005)	20387	1.00000	1.00
	97 1,1,1,2-Tetrachloroethane	131	7.941	7.965	(1.024)	5903	1.00000	0.89(a)
	40 Ethylbenzene	106	8.002	8.020	(1.031)	10135	1.00000	0.92(a)
	43 m+p-Xylene	106	8.191	8.209	(1.056)	25444	2.00000	1.8(a)
	44 o-Xylene	106	8.782	8.800	(1.132)	12557	1.00000	0.94(a)
	42 Styrene	104	8.818	8.831	(1.137)	18740	1.00000	0.87(a)
	147 Butyl Acrylate	55	8.867	8.885	(0.773)	5604	1.00000	0.58(a)
	110 Isopropylbenzene	105	9.398	9.416	(1.211)	29524	1.00000	0.90(a)
$	41 Bromofluorobenzene (SUR)	174	9.605	9.623	(0.837)	314391	50.0000	49
	150 Camphene	41	9.739	9.769	(0.849)	2590	1.00000	0.89(a)
	107 Bromobenzene	156	9.794	9.812	(0.854)	9223	1.00000	1.1
	99 1,2,3-Trichloropropane	110	9.940	9.958	(0.867)	1947	1.00000	1.1
	143 trans-1,4-Dichloro-2-butene	53	10.013	10.038	(2.483)	1595	1.00000	1.0
	112 n-Propylbenzene	91	10.068	10.086	(0.878)	36673	1.00000	0.91(a)
	105 2-Chlorotoluene	91	10.141	10.166	(0.884)	22961	1.00000	0.96(a)
	106 4-Chlorotoluene	91	10.336	10.355	(0.901)	26770	1.00000	1.0
	102 1,3,5-Trimethylbenzene	105	10.385	10.409	(0.905)	26625	1.00000	0.90(a)
	148 Butyl methacrylate	69	10.666	10.690	(0.930)	5637	1.00000	0.57(a)
	115 tert-Butylbenzene	119	10.903	10.928	(0.951)	23502	1.00000	0.88(a)
	100 1,2,4-Trimethylbenzene	105	11.001	11.013	(0.959)	26427	1.00000	0.87(a)
	114 sec-Butylbenzene	105	11.269	11.287	(0.982)	35286	1.00000	0.90(a)
	67 1,3-Dichlorobenzene	146	11.367	11.379	(0.991)	18961	1.00000	1.1
*	91 1,4-Dichlorobenzene-d4	152	11.470	11.489	(1.000)	433164	50.0000	
	68 1,4-Dichlorobenzene	146	11.501	11.519	(1.003)	18580	1.00000	1.1
	113 p-Isopropyltoluene	119	11.513	11.531	(1.004)	31032	1.00000	0.92(a)
	69 1,2-Dichlorobenzene	146	11.982	11.988	(1.045)	16826	1.00000	1.1
	117 Benzyl chloride	91	11.720	11.732	(1.022)	7687	1.00000	0.56(a)
	111 n-Butylbenzene	91	12.050	12.062	(1.050)	26443	1.00000	0.88(a)
	101 1,2-Dibromo-3-chloropropane	75	12.860	12.872	(1.121)	1030	1.00000	0.99(a)
	152 Camphor	95	13.549	13.561	(1.181)	2588	5.00000	4.6(a)
	93 1,2,4-Trichlorobenzene	180	13.635	13.647	(1.189)	14407	1.00000	1.1
	70 Naphthalene	128	13.836	13.848	(1.206)	27016	1.00000	1.2
	98 1,2,3-Trichlorobenzene	180	14.043	14.055	(1.224)	13395	1.00000	1.2
M	45 Xylene (Total)	100				38001	3.00000	2.8(a)

QC Flag Legend

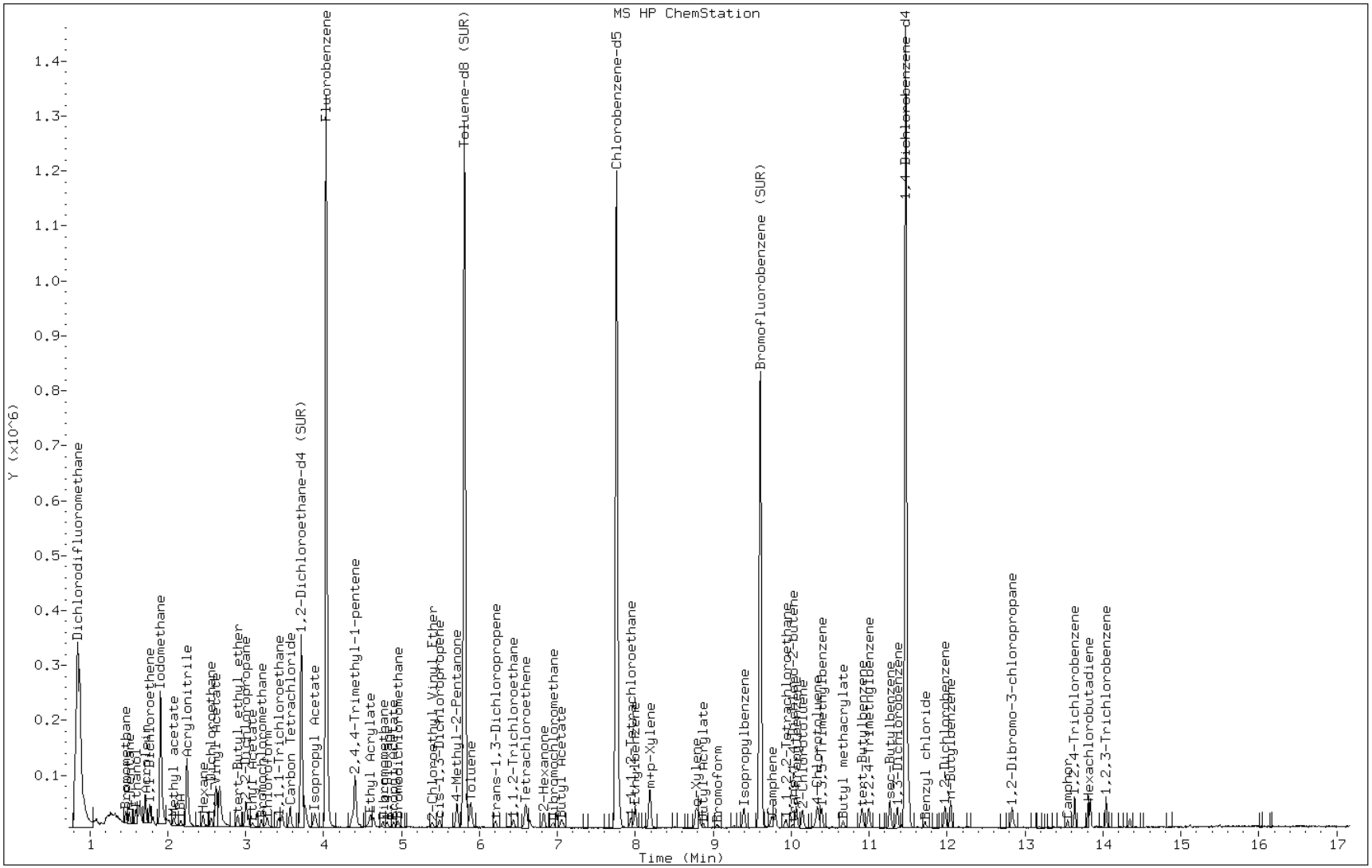
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: o45226.d

Date: 15-FEB-2011 02:40

Client ID: Instrument: VOAMS12.i

Sample Info: IC-VM12LCAL1 Operator: VOAMS 9



Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45228.d
Report Date: 15-Feb-2011 12:17

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45228.d
Lab Smp Id: IC-VM12LCAL2
Inj Date : 15-FEB-2011 03:30
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : IC-VM12LCAL2
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/8260L_10.m
Meth Date : 15-Feb-2011 12:17 vibha Quant Type: ISTD
Cal Date : 15-FEB-2011 03:30 Cal File: o45228.d
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				75875	10.0000	9.7
90 Dichlorodifluoromethane	85	0.924	0.930	(0.229)	38565	5.00000	5.0
1 Chloromethane	50	1.058	1.064	(0.262)	45501	5.00000	5.5
4 Vinyl Chloride	62	1.088	1.094	(0.270)	41532	5.00000	5.2
3 Bromomethane	94	1.265	1.271	(0.314)	24570	5.00000	5.5
5 Chloroethane	64	1.326	1.326	(0.329)	31034	5.00000	5.7
9 Trichlorofluoromethane	101	1.466	1.472	(0.364)	63992	5.00000	5.2
121 n-Pentane	72	1.509	1.521	(0.374)	5624	5.00000	4.3
127 Ethanol	46	1.594	1.600	(0.395)	52455	2000.00	2000
46 Ethyl Ether	59	1.637	1.649	(0.406)	22761	5.00000	5.1
119 Isoprene	67	1.649	1.655	(0.409)	39210	5.00000	4.2
47 Acrolein	56	1.710	1.722	(0.424)	76380	200.000	200
10 1,1-Dichloroethene	96	1.771	1.777	(0.439)	28978	5.00000	4.8
48 Freon TF	101	1.777	1.783	(0.441)	28379	5.00000	4.2

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45228.d
Report Date: 15-Feb-2011 12:17

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	7 Acetone	43	1.808	1.820	(0.448)	24321	15.0000	23
	142 Iodomethane	142	1.869	1.875	(0.463)	35632	5.00000	4.4
	8 Carbon Disulfide	76	1.905	1.911	(0.472)	83312	5.00000	4.4
	50 Acetonitrile	41	1.984	2.003	(0.492)	40841	100.000	94
	125 Methyl acetate	74	2.015	2.027	(0.500)	6580	5.00000	5.1
	6 Methylene Chloride	84	2.082	2.088	(0.516)	35680	5.00000	5.0
	51 TBA	59	2.173	2.179	(0.539)	47665	100.000	100
	52 Acrylonitrile	53	2.247	2.259	(0.557)	162474	100.000	100
	12 trans-1,2-Dichloroethene	96	2.259	2.271	(0.560)	35231	5.00000	4.8
	53 MTBE	73	2.265	2.277	(0.562)	77773	5.00000	4.8
	49 Isopropanol	45	1.905	1.917	(0.472)	625295	2000.00	2200
	11 1,1-Dichloroethane	63	2.558	2.570	(0.634)	58075	5.00000	5.0
	57 Vinyl Acetate	43	2.618	2.631	(0.649)	56877	5.00000	4.5
	55 DIPE	45	2.618	2.631	(0.649)	85186	5.00000	5.0
	132 1-Chloropropane	63	1.649	1.655	(0.213)	1596	10.0000	8.3
	149 tert-Butyl ethyl ether	59	2.899	2.911	(0.719)	86925	5.00000	4.8
	104 2,2-Dichloropropane	77	3.003	3.015	(0.745)	52490	5.00000	4.6
	13 cis-1,2-Dichloroethene	96	3.003	3.021	(0.745)	40644	5.00000	4.9
	18 2-Butanone	72	3.027	3.045	(0.751)	10689	15.0000	17
	56 Ethyl Acetate	70	3.088	3.100	(0.766)	4989	10.0000	10
	108 Bromochloromethane	128	3.198	3.216	(0.793)	18589	5.00000	5.0
	15 Chloroform	83	3.277	3.289	(0.813)	61823	5.00000	5.0
	20 1,1,1-Trichloroethane	97	3.423	3.441	(0.849)	53689	5.00000	4.6
	59 Cyclohexane	56	3.472	3.484	(0.861)	42364	5.00000	3.5
	21 Carbon Tetrachloride	117	3.570	3.588	(0.885)	42842	5.00000	4.5
	92 1,1-Dichloropropene	75	3.576	3.588	(0.887)	48346	5.00000	4.7
$	16 1,2-Dichloroethane-d4 (SUR)	65	3.710	3.728	(0.920)	238559	50.0000	52
	28 Benzene	78	3.759	3.777	(0.932)	145445	5.00000	5.0
	17 1,2-Dichloroethane	62	3.783	3.801	(0.938)	39664	5.00000	5.0
	61 Isopropyl Acetate	43	3.874	3.892	(0.961)	89126	10.0000	9.2
	140 tert-Amylmethyl Ether	73	3.893	3.905	(0.965)	74986	5.00000	4.6
*	69 Fluorobenzene	96	4.033	4.051	(1.000)	1247091	50.0000	
	156 2,4,4-Trimethyl-1-pentene	112	4.374	4.386	(1.085)	15171	5.00000	4.6
	25 Trichloroethene	95	4.405	4.423	(1.092)	38135	5.00000	4.8
	63 n-Butanol	43	4.399	4.417	(1.091)	59476	1000.00	1000
	96 Ethyl Acrylate	55	4.569	4.581	(1.133)	22229	5.00000	3.5
	126 Methyl cyclohexane	83	4.600	4.612	(1.141)	51635	5.00000	3.4
	23 1,2-Dichloropropane	63	4.642	4.655	(1.151)	32013	5.00000	5.0
	109 Dibromomethane	93	4.764	4.783	(1.181)	18052	5.00000	5.0
	95 1,4-Dioxane	88	4.819	4.831	(1.195)	7385	100.000	110
	146 Methyl methacrylate	69	4.819	4.831	(1.195)	14525	5.00000	4.5
	64 Propyl Acetate	43	4.899	4.917	(1.215)	49136	10.0000	9.4
	22 Bromodichloromethane	83	4.959	4.972	(1.230)	40289	5.00000	4.8
	30 2-Chloroethyl Vinyl Ether	63	5.337	5.356	(1.323)	3755	5.00000	4.0
	118 Epichlorohydrin	57	5.392	5.410	(1.337)	36209	100.000	90
	24 cis-1,3-Dichloropropene	75	5.490	5.502	(1.361)	48701	5.00000	4.8
	33 4-Methyl-2-Pentanone	43	5.709	5.727	(1.416)	52185	15.0000	15

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45228.d
Report Date: 15-Feb-2011 12:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	37 Toluene-d8 (SUR)	98	5.807	5.825	(0.749)	998276	50.0000	51
	38 Toluene	91	5.886	5.904	(0.759)	171458	5.00000	5.2
	29 trans-1,3-Dichloropropene	75	6.203	6.221	(0.800)	38913	5.00000	4.6
	27 1,1,2-Trichloroethane	83	6.435	6.453	(0.829)	20783	5.00000	5.1
	35 Tetrachloroethene	166	6.587	6.605	(0.849)	42898	5.00000	4.7
	103 1,3-Dichloropropane	76	6.648	6.666	(0.857)	44289	5.00000	5.1
	34 2-Hexanone	43	6.825	6.843	(0.880)	35199	15.0000	16
	26 Dibromochloromethane	129	6.941	6.965	(0.895)	26384	5.00000	4.5
	65 Butyl Acetate	43	7.044	7.063	(0.908)	47561	10.0000	8.8
	66 1,2-Dibromoethane	107	7.069	7.087	(0.911)	26815	5.00000	5.3
*	32 Chlorobenzene-d5	117	7.758	7.776	(1.000)	847023	50.0000	
	39 Chlorobenzene	112	7.794	7.819	(1.005)	105090	5.00000	5.0
	97 1,1,1,2-Tetrachloroethane	131	7.947	7.965	(1.024)	30396	5.00000	4.5
	40 Ethylbenzene	106	7.995	8.020	(1.031)	54463	5.00000	4.8
	43 m+p-Xylene	106	8.184	8.209	(1.055)	137293	10.0000	9.7
	44 o-Xylene	106	8.782	8.800	(1.132)	64529	5.00000	4.7
	42 Styrene	104	8.812	8.831	(1.136)	104452	5.00000	4.7
	147 Butyl Acrylate	55	8.867	8.885	(0.773)	33173	5.00000	3.3
	31 Bromoform	173	9.050	9.068	(1.167)	15770	5.00000	3.8
	110 Isopropylbenzene	105	9.392	9.416	(1.211)	156177	5.00000	4.7
$	41 Bromofluorobenzene (SUR)	174	9.605	9.623	(0.837)	339666	50.0000	51
	150 Camphene	41	9.751	9.769	(0.850)	10408	5.00000	3.5
	107 Bromobenzene	156	9.794	9.812	(0.854)	44136	5.00000	5.0
	36 1,1,2,2-Tetrachloroethane	83	9.922	9.940	(0.865)	27727	5.00000	4.4
	99 1,2,3-Trichloropropane	110	9.940	9.958	(0.867)	8892	5.00000	4.8
	143 trans-1,4-Dichloro-2-butene	53	10.019	10.038	(2.484)	6905	5.00000	4.3
	112 n-Propylbenzene	91	10.068	10.086	(0.878)	195918	5.00000	4.7
	105 2-Chlorotoluene	91	10.147	10.166	(0.885)	118723	5.00000	4.8
	106 4-Chlorotoluene	91	10.336	10.355	(0.901)	119520	5.00000	4.6
	102 1,3,5-Trimethylbenzene	105	10.385	10.409	(0.905)	142409	5.00000	4.7
	148 Butyl methacrylate	69	10.672	10.690	(0.930)	31975	5.00000	3.2
	115 tert-Butylbenzene	119	10.910	10.928	(0.951)	129917	5.00000	4.7
	100 1,2,4-Trimethylbenzene	105	10.995	11.013	(0.959)	148604	5.00000	4.8
	114 sec-Butylbenzene	105	11.269	11.287	(0.982)	187902	5.00000	4.7
	67 1,3-Dichlorobenzene	146	11.361	11.379	(0.990)	89662	5.00000	4.9
*	91 1,4-Dichlorobenzene-d4	152	11.470	11.489	(1.000)	445706	50.0000	
	68 1,4-Dichlorobenzene	146	11.501	11.519	(1.003)	87211	5.00000	4.9
	113 p-Isopropyltoluene	119	11.513	11.531	(1.004)	162162	5.00000	4.7
	69 1,2-Dichlorobenzene	146	11.976	11.988	(1.044)	81510	5.00000	5.0
	117 Benzyl chloride	91	11.714	11.732	(1.021)	38954	5.00000	2.8
	111 n-Butylbenzene	91	12.043	12.062	(1.050)	140338	5.00000	4.5
	101 1,2-Dibromo-3-chloropropane	75	12.860	12.872	(1.121)	5805	5.00000	5.4
	152 Camphor	95	13.549	13.561	(1.181)	13934	25.0000	24
	93 1,2,4-Trichlorobenzene	180	13.635	13.647	(1.189)	64218	5.00000	4.8
	94 Hexachlorobutadiene	225	13.805	13.823	(1.204)	34383	5.00000	4.7
	70 Naphthalene	128	13.836	13.848	(1.206)	117209	5.00000	5.0
	98 1,2,3-Trichlorobenzene	180	14.043	14.055	(1.224)	59457	5.00000	5.0

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45228.d
Report Date: 15-Feb-2011 12:17

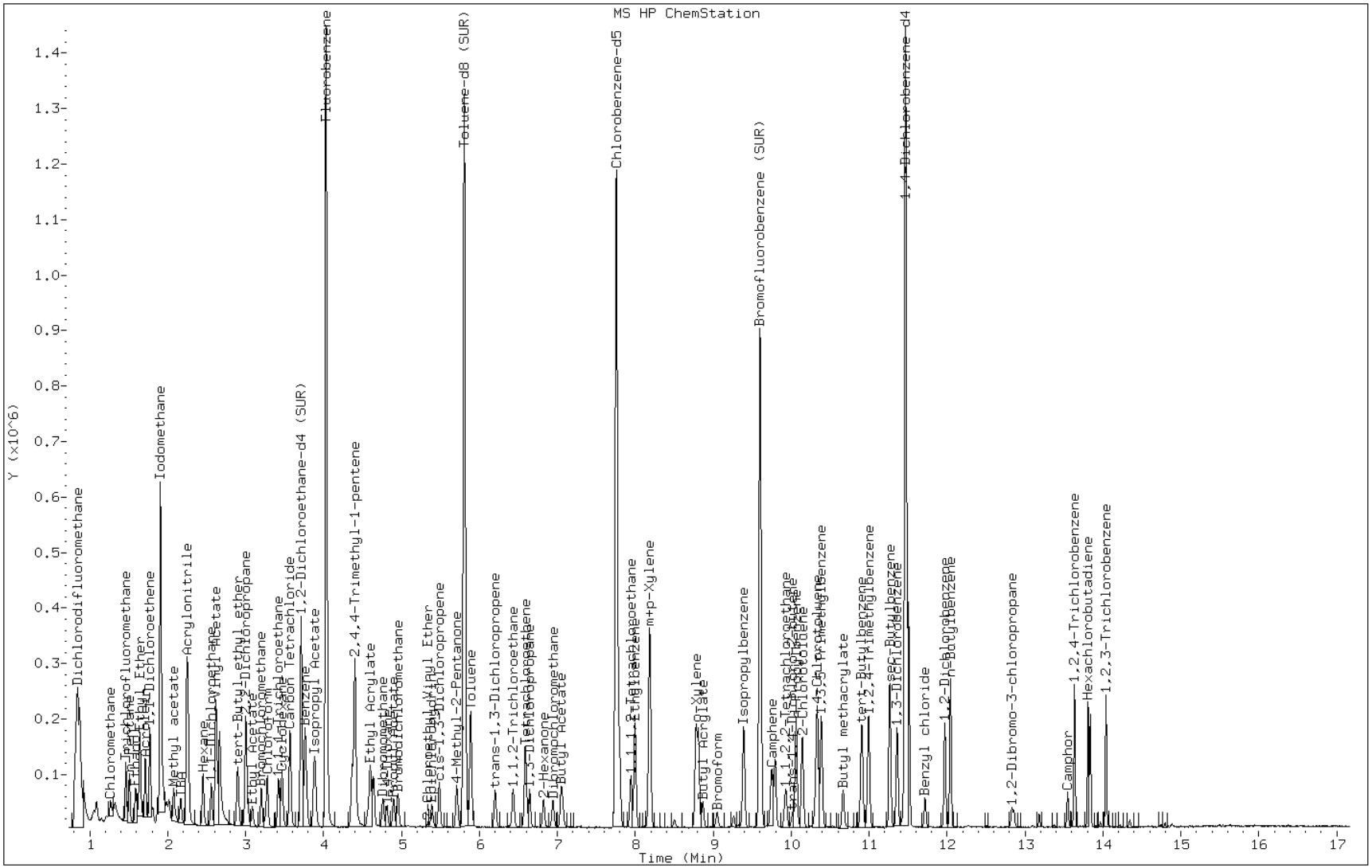
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 45 Xylene (Total)	100				201822	15.0000	14

Data File: o45228.d

Date: 15-FEB-2011 03:30

Client ID: Instrument: VOAMS12.i

Sample Info: IC-VM12LCAL2 Operator: VOAMS 9



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68467/7	d07588.d
Level 2	IC 460-68467/2	d07577.d
Level 3	ICIS 460-68467/3	d07578.d
Level 4	IC 460-68467/4	d07579.d
Level 5	IC 460-68467/5	d07580.d
Level 6	IC 460-68467/6	d07581.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4830 0.4431	0.4861	0.4687	0.4490	0.4522	Ave		0.4637				3.9		15.0			
Chloromethane	0.8443 0.7657	0.7996	0.7564	0.8250	0.7689	Ave		0.7933			0.1000	4.5		15.0			
Vinyl chloride	0.8530 0.7531	0.9514	0.8370	0.8482	0.7841	Ave		0.8378				8.1		30.0			
Bromomethane	0.6434 0.6024	0.6357	0.6568	0.6581	0.6354	Ave		0.6386				3.2		15.0			
Chloroethane	0.7143 0.5278	0.6912	0.6252	0.6107	0.5725	Ave		0.6236				11.3		15.0			
n-Pentane	0.1675 0.0976	0.1932	0.1417	0.1323	0.1059	LinF		0.0993							0.9967		0.9900
Trichlorofluoromethane	1.4704 1.2601	1.7075	1.6199	1.4507	1.2857	Ave		1.4657				12.1		15.0			
Isopropene	0.8014 0.7705	1.0995	0.9479	0.8609	0.7813	LinF		0.7732							0.9997		0.9900
Ethyl ether	0.5529 0.4518	0.6570	0.5686	0.5028	0.4705	Ave		0.5339				14.1		15.0			
1,1-Dichloroethene	0.6694 0.5359	0.6546	0.5509	0.5366	0.4957	Ave		0.5738				12.3		30.0			
Carbon disulfide	2.3755 2.1519	2.8866	2.2618	2.4423	2.1272	Ave		2.3742				11.8		15.0			
Freon TF	0.7017 0.6834	0.9355	0.6992	0.7262	0.6737	Ave		0.7366				13.5		15.0			
Iodomethane	1.1161 1.0493	1.3791	1.0523	1.1300	1.0406	Ave		1.1279				11.4		15.0			
Acrolein	0.0667 0.0601	0.0691	0.0676	0.0627	0.0570	Ave		0.0639				7.4		15.0			
Methylene Chloride	0.7204 0.3842	0.4630	0.3994	0.3977	0.3671	LinF		0.3821							0.9996		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetone	0.0599 0.0324	0.0576	0.0523	0.0418	0.0373	QuaF		24.939	9.2340						0.9999		0.9900
trans-1,2-Dichloroethene	0.3298 0.2966	0.3421	0.3038	0.3069	0.2832	Ave		0.3104				7.0		15.0			
Methyl acetate	0.0952 0.0851	0.1162	0.0851	0.0884	0.0864	Ave		0.0927				13.1		15.0			
Acetonitrile	0.0364 0.0301	0.0439	0.0347	0.0360	0.0336	LinF		0.0306							0.9972		0.9900
Hexane	0.3736 0.2728	0.3908	0.3241	0.3389	0.2968	LinF		0.2771							0.9979		0.9900
MTBE	1.2441 1.0883	1.2902	1.0670	1.1265	1.1523	Ave		1.1614				7.6		15.0			
TBA	0.0628 0.0454	0.0664	0.0544	0.0519	0.0553	Ave		0.0560				13.5		15.0			
DIPE	1.3798 1.2700	1.4984	1.2334	1.3565	1.3441	Ave		1.3470				6.9		15.0			
Vinyl acetate	0.7413 0.6288	0.7654	0.6479	0.6946	0.6482	Ave		0.6877				8.1		15.0			
1,1-Dichloroethane	0.7080 0.5905	0.7177	0.6438	0.6469	0.5903	Ave		0.6495			0.1000	8.5		15.0			
Acrylonitrile	0.1580 0.1418	0.1719	0.1708	0.1580	0.1436	Ave		0.1574				8.2		15.0			
Tert-butyl ethyl ether	1.2573 1.2435	1.3554	1.1544	1.2776	1.2958	Ave		1.2640				5.3		15.0			
cis-1,2-Dichloroethene	0.4342 0.3496	0.4033	0.3577	0.3756	0.3498	Ave		0.3784				9.0		15.0			
2,2-Dichloropropane	0.6632 0.5399	0.6436	0.5783	0.5885	0.5588	Ave		0.5954				8.1		15.0			
Bromochloromethane	0.2216 0.1755	0.2031	0.1843	0.1821	0.1729	Ave		0.1899				9.9		15.0			
Cyclohexane	0.6193 0.6832	0.7895	0.6776	0.7563	0.7243	Ave		0.7084				8.6		15.0			
Chloroform	0.7236 0.6392	0.7504	0.6574	0.6651	0.6183	Ave		0.6757				7.5		30.0			
Carbon tetrachloride	0.6407 0.5829	0.6327	0.5749	0.6050	0.5717	Ave		0.6013				5.0		15.0			
Ethyl acetate	0.0274 0.0384	0.0412	0.0348	0.0389	0.0394	Ave		0.0367				13.7		15.0			
1,1,1-Trichloroethane	0.6327 0.5943	0.6454	0.6089	0.6255	0.5939	Ave		0.6168				3.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.5381 0.4486	0.4939	0.4458	0.4702	0.4497	Ave		0.4744				7.6		15.0			
2-Butanone	0.0451 0.0542	0.0560	0.0662	0.0650	0.0655	Ave		0.0587				14.3		15.0			
n-Heptane	0.3780 0.3858	0.5087	0.4420	0.4779	0.4306	Ave		0.4372				11.7		15.0			
Benzene	1.4361 1.3448	1.4904	1.3758	1.3835	1.2952	Ave		1.3876				4.9		15.0			
Tert-amyl methyl ether	0.9915 1.1051	1.0921	0.9824	1.1066	1.1613	Ave		1.0732				6.6		15.0			
1,2-Dichloroethane	0.5744 0.4803	0.5693	0.5085	0.5053	0.4732	Ave		0.5185				8.4		15.0			
2,4,4-Trimethyl-1-pentene	0.0996 0.1433	0.1049	0.1023	0.1043	0.1141	Ave		0.1114				14.7		15.0			
Isopropyl acetate	0.7237 0.8141	0.8778	0.7627	0.8151	0.8474	Ave		0.8068				6.9		15.0			
Methylcyclohexane	0.5595 0.6783	0.7021	0.6246	0.7170	0.7013	Ave		0.6638				9.1		15.0			
Ethyl acrylate	0.5282 0.6574	0.5877	0.6001	0.6668	0.6774	Ave		0.6196				9.3		15.0			
Trichloroethene	0.3866 0.3493	0.3848	0.3478	0.3633	0.3316	Ave		0.3606				6.1		15.0			
Dibromomethane	0.2561 0.2395	0.2515	0.2339	0.2395	0.2324	Ave		0.2421				4.0		15.0			
1,2-Dichloropropane	0.3986 0.3670	0.3914	0.3583	0.3776	0.3626	Ave		0.3759				4.3		30.0			
Bromodichloromethane	0.4855 0.5167	0.5054	0.4709	0.5049	0.4970	Ave		0.4967				3.3		15.0			
Methyl methacrylate	0.1689 0.2432	0.2120	0.1847	0.2169	0.2474	Ave		0.2122				14.7		15.0			
1,4-Dioxane	0.0018 0.0023	0.0019	0.0021	0.0021	0.0024	Ave		0.0021				11.8		15.0			
Propyl acetate	0.4196 0.5371	0.5229	0.4451	0.5091	0.5584	Ave		0.4987				10.9		15.0			
2-Chloroethyl vinyl ether	0.1391 0.2156	0.1711	0.1542	0.1899	0.2149	QuaF		4.7545	-0.056						0.9998		0.9900
cis-1,3-Dichloropropene	0.4870 0.5876	0.4931	0.4886	0.5415	0.5583	Ave		0.5260				8.1		15.0			
Toluene	2.1440 1.9406	2.1358	2.1081	2.0482	1.9371	Ave		2.0523				4.6		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Epichlorohydrin	0.0328 0.0431	0.0437	0.0375	0.0405	0.0430	Ave		0.0401				10.6		15.0			
Tetrachloroethene	0.5010 0.4617	0.5162	0.4941	0.4802	0.4595	Ave		0.4854				4.6		15.0			
4-Methyl-2-pentanone	0.3138 0.4410	0.3923	0.3511	0.4010	0.4499	Ave		0.3915				13.3		15.0			
trans-1,3-Dichloropropene	0.6733 0.7280	0.6696	0.6845	0.7104	0.7150	Ave		0.6968				3.5		15.0			
1,1,2-Trichloroethane	0.4105 0.3616	0.3940	0.3775	0.3802	0.3662	Ave		0.3817				4.7		15.0			
Dibromochloromethane	0.5291 0.5157	0.4846	0.4842	0.4822	0.4962	Ave		0.4987				3.9		15.0			
1,3-Dichloropropane	0.8003 0.7261	0.7660	0.7381	0.7346	0.7255	Ave		0.7484				3.9		15.0			
1,2-Dibromoethane	0.4434 0.4290	0.4261	0.4252	0.4233	0.4219	Ave		0.4281				1.8		15.0			
Butyl acetate	0.6713 0.8182	0.7851	0.7272	0.8033	0.8649	Ave		0.7783				8.9		15.0			
2-Hexanone	0.2662 0.3888	0.4040	0.3879	0.3836	0.4114	Ave		0.3737				14.4		15.0			
Chlorobenzene	1.3802 1.2706	1.3590	1.2849	1.2594	1.1875	Ave		1.2903			0.3000	5.5		15.0			
Ethylbenzene	0.7771 0.6957	0.6917	0.7061	0.7043	0.6607	Ave		0.7059				5.5		30.0			
1,1,1,2-Tetrachloroethane	0.5811 0.5435	0.5576	0.5615	0.5567	0.5315	Ave		0.5553				3.0		15.0			
m&p-Xylene	0.7753 0.9892	0.8218	0.8681	0.8600	0.8388	Ave		0.8589				8.4		15.0			
o-Xylene	0.7680 0.9182	0.7881	0.8566	0.8984	0.8694	Ave		0.8498				7.1		15.0			
Bromoform	0.3285 0.4165	0.3196	0.3244	0.3332	0.3290	Ave		0.3419			0.1000	10.8		15.0			
Styrene	1.0633 1.5799	1.0981	1.2908	1.3563	1.3181	Ave		1.2844				14.7		15.0			
Butyl acrylate	3.1496 1.9373	2.1847	1.6509	1.8998	2.1405	QuaF		0.4427	0.0038						0.9996		0.9900
Isopropylbenzene	1.8559 2.3460	2.1146	2.3170	2.3363	2.2552	Ave		2.2042				8.7		15.0			
Camphene, Total	0.8177 1.3275	1.2327	1.2313	1.4081	1.4863	LinF		1.3520							0.9975		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Monobromobenzene	1.2551 1.0886	1.1664	1.0733	1.0766	1.0632	Ave		1.1205				6.8		15.0			
N-Propylbenzene	5.4418 5.2137	5.7722	5.7452	6.0143	6.0696	Ave		5.7095				5.8		15.0			
1,1,2,2-Tetrachloroethane	1.4957 1.3305	1.5027	1.4196	1.3436	1.4031	Ave		1.4159			0.3000	5.2		15.0			
2-Chlorotoluene	3.1226 3.4198	3.2634	3.2997	3.4476	3.4537	Ave		3.3345				3.9		15.0			
1,2,3-Trichloropropane	0.3955 0.3859	0.4041	0.3883	0.3807	0.3785	Ave		0.3888				2.5		15.0			
trans-1,4-Dichloro-2-butene	0.0293 +++++	0.0472	0.0461	0.0508	0.0491	LinF		0.0491							0.9998		0.9900
1,3,5-Trimethylbenzene	3.1263 4.3057	3.5176	3.8546	4.0882	4.3723	Ave		3.8774				12.5		15.0			
4-Chlorotoluene	2.9765 3.2323	3.0516	3.1480	3.2120	3.2356	Ave		3.1427				3.4		15.0			
tert-Butylbenzene	2.4271 3.6175	2.6362	2.9167	3.2010	3.5181	LinF		3.6002							0.9996		0.9900
Butyl Methacrylate	0.9183 1.8168	1.3466	1.4204	1.6932	1.9613	LinF		1.8365							0.9987		0.9900
1,2,4-Trimethylbenzene	3.1558 4.4699	3.7759	4.1145	4.2601	4.3497	Ave		4.0210				12.1		15.0			
sec-Butylbenzene	4.2046 5.2253	4.9342	5.3837	5.7029	6.0494	Ave		5.2500				12.2		15.0			
p-Isopropyltoluene	3.0508 4.6014	3.7066	4.1035	4.4497	4.7303	LinF		4.6175							0.9998		0.9900
1,3-Dichlorobenzene	2.2550 2.1028	2.1982	2.0980	2.0949	2.0091	Ave		2.1263				4.1		15.0			
2-Octanol	0.4112 0.5725	0.4521	0.3852	0.4231	0.6621	LinF		0.5853							0.9946		0.9900
1,4-Dichlorobenzene	2.5744 2.1338	2.2584	2.0872	2.0738	1.9901	Ave		2.1863				9.6		15.0			
2-Octanone	1.5635 1.6244	1.5776	1.4113	1.6494	1.8795	Ave		1.6176				9.4		15.0			
Benzyl chloride	5.9226 6.6707	6.8119	6.7323	7.0027	7.2706	Ave		6.7351				6.7		15.0			
n-Butylbenzene	5.9226 6.6707	6.8119	6.7323	7.0027	7.2706	Ave		6.7351				6.7		15.0			
1,2-Dichlorobenzene	2.3651 2.2174	2.2871	2.1855	2.1672	2.1456	Ave		2.2280				3.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromo-3-Chloropropane	0.3212 0.2829	0.2784	0.2611	0.2691	0.2868	Ave		0.2832				7.3		15.0			
Hexachlorobutadiene	0.8629 1.0674	0.8076	0.7806	0.8084	0.9198	Ave		0.8744				12.2		15.0			
1,2,4-Trichlorobenzene	1.9160 2.0316	1.6195	1.5944	1.6798	1.7446	Ave		1.7643				9.9		15.0			
Camphor	0.0978 0.1535	0.1001	0.1019	0.1231	0.1759	LinF		0.1567							0.9955		0.9900
Naphthalene	4.3267 4.4971	3.9752	4.4003	4.5758	4.7259	Ave		4.4168				5.8		15.0			
1,2,3-Trichlorobenzene	1.9696 1.9005	1.7736	1.7681	1.7436	1.8049	Ave		1.8267				4.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3161 0.3194	0.3318	0.3256	0.3232	0.3251	Ave		0.3235				1.7		15.0			
Toluene-d8 (Surr)	1.2401 1.1752	1.2186	1.2956	1.2326	1.2473	Ave		1.2349				3.2		15.0			
Bromofluorobenzene	0.7752 0.7751	0.7730	0.7854	0.7904	0.8247	Ave		0.7873				2.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68467/7	d07588.d
Level 2	IC 460-68467/2	d07577.d
Level 3	ICIS 460-68467/3	d07578.d
Level 4	IC 460-68467/4	d07579.d
Level 5	IC 460-68467/5	d07580.d
Level 6	IC 460-68467/6	d07581.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	4121 2595895	19175	79686	201387	912205	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	7204 4486339	31541	128605	370034	1551268	1.00 500	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	7278 4412111	37530	142324	380468	1581923	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	5490 3529118	25076	111680	295171	1281898	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	6095 3092450	27265	106304	273941	1154900	1.00 500	5.00	20.0	50.0	200
n-Pentane	FB	LinF	1429 571642	7622	24089	59354	213701	1.00 500	5.00	20.0	50.0	200
Trichlorofluoromethane	FB	Ave	12546 7382899	67357	275440	650712	2593815	1.00 500	5.00	20.0	50.0	200
Isopropene	FB	LinF	6838 4514412	43374	161168	386142	1576240	1.00 500	5.00	20.0	50.0	200
Ethyl ether	FB	Ave	4718 2646858	25919	96678	225540	949271	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethene	FB	Ave	5712 3139640	25821	93662	240692	1000098	1.00 500	5.00	20.0	50.0	200
Carbon disulfide	FB	Ave	20269 12607499	113873	384571	1095473	4291484	1.00 500	5.00	20.0	50.0	200
Freon TF	FB	Ave	5987 4003879	36904	118886	325719	1359102	1.00 500	5.00	20.0	50.0	200
Iodomethane	FB	Ave	9523 6147654	54402	178922	506846	2099463	1.00 500	5.00	20.0	50.0	200
Acrolein	FB	Ave	56889 422447	108994	172460	225161	287319	100 600	200	300	400	500
Methylene Chloride	FB	LinF	6147 2250716	18265	67903	178383	740611	1.00 500	5.00	20.0	50.0	200
Acetone	FB	QuaF	5113 379106	6820	8888	18759	75276	10.0 1000	15.0	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
trans-1,2-Dichloroethene	FB	Ave	2814 1737457	13496	51660	137642	571405	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	812 498578	4584	14463	39630	174375	1.00 500	5.00	20.0	50.0	200
Acetonitrile	FB	LinF	6216 3522131	34640	117969	323169	1353748	20.0 10000	100	400	1000	4000
Hexane	FB	LinF	3188 1598575	15415	55101	152030	598836	1.00 500	5.00	20.0	50.0	200
MTBE	FB	Ave	10615 6376318	50896	181415	505294	2324673	1.00 500	5.00	20.0	50.0	200
TBA	FB	Ave	10713 5317782	52403	184891	465671	2231597	20.0 10000	100	400	1000	4000
DIPE	FB	Ave	11773 7440690	59111	209711	608456	2711636	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	FB	Ave	6325 3683789	30192	110158	311548	1307765	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	6041 3459770	28314	109459	290180	1190957	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	FB	Ave	67401 498408	135645	217755	283551	362235	50.0 300	100	150	200	250
Tert-butyl ethyl ether	FB	Ave	10728 7285398	53469	196286	573058	2614306	1.00 500	5.00	20.0	50.0	200
cis-1,2-Dichloroethene	FB	Ave	3705 2048128	15908	60818	168492	705736	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	5659 3162966	25390	98335	263977	1127447	1.00 500	5.00	20.0	50.0	200
Bromochloromethane	FB	Ave	1891 1028085	8010	31337	81660	348841	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	5284 4002770	31143	115208	339247	1461261	1.00 500	5.00	20.0	50.0	200
Chloroform	FB	Ave	6174 3745185	29603	111774	298314	1247403	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	5467 3414991	24958	97754	271386	1153459	1.00 500	5.00	20.0	50.0	200
Ethyl acetate	FB	Ave	467 449929	3252	11834	34934	158927	2.00 1000	10.0	40.0	100	400
1,1,1-Trichloroethane	FB	Ave	5399 3481864	25460	103532	280545	1198266	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	4591 2628143	19482	75808	210920	907352	1.00 500	5.00	20.0	50.0	200
2-Butanone	FB	Ave	3852 635290	6630	11250	29138	132237	10.0 1000	15.0	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Heptane	CBZ	Ave	2047 1672498	13641	48684	148766	610604	1.00 500	5.00	20.0	50.0	200
Benzene	FB	Ave	12254 7879142	58793	233928	620562	2613090	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	8460 6474594	43082	167046	496332	2342974	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	4901 2813831	22456	86459	226646	954670	1.00 500	5.00	20.0	50.0	200
2,4,4-Trimethyl-1-pentene	FB	Ave	850 839297	4139	17388	46763	230165	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	12350 9538912	69256	259373	731218	3419235	2.00 1000	10.0	40.0	100	400
Methylcyclohexane	FB	Ave	4774 3974208	27698	106204	321592	1414873	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	Ave	4507 3851663	23185	102031	299093	1366585	1.00 500	5.00	20.0	50.0	200
Trichloroethene	FB	Ave	3299 2046371	15181	59130	162942	669075	1.00 500	5.00	20.0	50.0	200
Dibromomethane	FB	Ave	2185 1403186	9920	39766	107434	468835	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	3401 2150232	15439	60923	169364	731498	1.00 500	5.00	20.0	50.0	200
Bromodichloromethane	FB	Ave	4143 3027502	19936	80068	226454	1002752	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	1441 1424990	8362	31398	97283	499144	1.00 500	5.00	20.0	50.0	200
1,4-Dioxane	FB	Ave	773 8165	1472	2715	3713	6163	50.0 300	100	150	200	250
Propyl acetate	FB	Ave	7161 6294104	41254	151357	456658	2252980	2.00 1000	10.0	40.0	100	400
2-Chloroethyl vinyl ether	FB	QuaF	1187 1263298	6751	26223	85187	433583	1.00 500	5.00	20.0	50.0	200
cis-1,3-Dichloropropene	FB	Ave	4155 3442656	19451	83071	242880	1126275	1.00 500	5.00	20.0	50.0	200
Toluene	CBZ	Ave	11610 8412685	57278	232204	637562	2746917	1.00 500	5.00	20.0	50.0	200
Epichlorohydrin	FB	Ave	5601 5049011	34516	127413	363007	1734886	20.0 10000	100	400	1000	4000
Tetrachloroethene	CBZ	Ave	2713 2001524	13842	54423	149472	651674	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone	FB	Ave	26779 5167226	46421	59693	179863	907613	10.0 1000	15.0	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
trans-1,3-Dichloropropene	CBZ	Ave	3646 3156156	17957	75402	221133	1013987	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBZ	Ave	2223 1567565	10565	41584	118338	519359	1.00 500	5.00	20.0	50.0	200
Dibromochloromethane	CBZ	Ave	2865 2235815	12995	53335	150088	703594	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBZ	Ave	4334 3147498	20542	81300	228676	1028777	1.00 500	5.00	20.0	50.0	200
1,2-Dibromoethane	CBZ	Ave	2401 1859693	11426	46837	131776	598287	1.00 500	5.00	20.0	50.0	200
Butyl acetate	CBZ	Ave	7270 7093548	42111	160192	500115	2453002	2.00 1000	10.0	40.0	100	400
2-Hexanone	CBZ	Ave	14418 3370656	32504	42731	119401	583460	10.0 1000	15.0	20.0	50.0	200
Chlorobenzene	CBZ	Ave	7474 5508227	36445	141532	392034	1683999	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBZ	Ave	4208 3015873	18551	77777	219236	936899	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBZ	Ave	3147 2356302	14954	61846	173275	753702	1.00 500	5.00	20.0	50.0	200
m&p-Xylene	CBZ	Ave	8397 8576661	44075	191243	535404	2378901	2.00 1000	10.0	40.0	100	400
o-Xylene	CBZ	Ave	4159 3980369	21135	94356	279660	1232877	1.00 500	5.00	20.0	50.0	200
Bromoform	CBZ	Ave	1779 1805714	8570	35728	103732	466568	1.00 500	5.00	20.0	50.0	200
Styrene	CBZ	Ave	5758 6848963	29449	142185	422175	1869128	1.00 500	5.00	20.0	50.0	200
Butyl acrylate	DCB	QuaF	8640 4327497	30475	97071	303998	1453804	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBZ	Ave	10050 10170238	56708	255216	727254	3198086	1.00 500	5.00	20.0	50.0	200
Camphene, Total	DCB	LinF	2243 2965372	17195	72402	225327	1009491	1.00 500	5.00	20.0	50.0	200
Monobromobenzene	DCB	Ave	3443 2431845	16270	63113	172268	722083	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCB	Ave	14928 11646587	80519	337819	962393	4122357	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCB	Ave	4103 2972097	20962	83475	214994	952928	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCB	Ave	8566 7639289	45523	194024	551671	2345667	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trichloropropane	DCB	Ave	1085 861954	5637	22832	60915	257059	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	FB	LinF	250 +++++	1861	7836	22780	99000	1.00 +++++	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCB	Ave	8576 9618193	49069	226652	654178	2969553	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCB	Ave	8165 7220331	42568	185105	513976	2197546	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCB	LinF	6658 8080899	36773	171502	512220	2389382	1.00 500	5.00	20.0	50.0	200
Butyl Methacrylate	DCB	LinF	2519 4058516	18784	83520	270940	1332040	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCB	Ave	8657 9984887	52671	241933	681697	2954178	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCB	Ave	11534 11672325	68829	316565	912566	4108628	1.00 500	5.00	20.0	50.0	200
p-Isopropyltoluene	DCB	LinF	8369 10278822	51705	241289	712027	3212707	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCB	Ave	6186 4697392	30663	123365	335224	1364528	1.00 500	5.00	20.0	50.0	200
2-Octanol	DCB	LinF	1128 1278869	6306	22650	67702	449664	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCB	Ave	7062 4766458	31504	122728	331853	1351617	1.00 500	5.00	20.0	50.0	200
2-Octanone	DCB	Ave	4289 3628527	22007	82986	263935	1276493	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCB	Ave	16247 14901267	95022	395863	1120553	4937994	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCB	Ave	16247 14901267	95022	395863	1120553	4937994	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCB	Ave	6488 4953194	31904	128508	346794	1457264	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCB	Ave	881 632041	3883	15351	43058	194819	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCB	Ave	2367 2384359	11265	45898	129359	624712	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCB	Ave	5256 4538343	22591	93751	268801	1184865	1.00 500	5.00	20.0	50.0	200
Camphor	DCB	LinF	1341 1714614	6984	29955	98463	597446	5.00 2500	25.0	100	250	1000
Naphthalene	DCB	Ave	11869 10045789	55451	258740	732207	3209729	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68467

SDG No.:

Instrument ID: VOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/24/2011 23:48 Calibration End Date: 03/25/2011 04:11 Calibration ID: 10268

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trichlorobenzene	DCB	Ave	5403 4245429	24741	103966	279010	1225813	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane-d4 (Surr)	FB	Ave	134861 187143	130904	138423	144955	163978	50.0 50.0	50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBZ	Ave	335769 509480	326790	356785	383686	442177	50.0 50.0	50.0	50.0	50.0	50.0
Bromofluorobenzene	DCB	Ave	106327 173146	107830	115448	126486	140037	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero
QuaF = Quadratic ISTD forced zero

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07577.d
Report Date: 28-Mar-2011 15:20

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07577.d
Lab Smp Id: IC-VM8LCAL2
Inj Date : 24-MAR-2011 23:48
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : IC-VM8LCAL2
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 24-MAR-2011 23:48 Cal File: d07577.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				29404	10.0000	11
90	Dichlorodifluoromethane	85	1.259	1.266	(0.270)	19175	5.00000	5.2
1	Chloromethane	50	1.352	1.359	(0.290)	31541	5.00000	5.0
4	Vinyl Chloride	62	1.431	1.438	(0.307)	37530	5.00000	5.7
3	Bromomethane	94	1.610	1.624	(0.345)	25076	5.00000	5.0
5	Chloroethane	64	1.674	1.681	(0.359)	27265	5.00000	5.5
9	Trichlorofluoromethane	101	1.803	1.810	(0.387)	67357	5.00000	5.8
121	n-Pentane	72	1.753	1.753	(0.376)	7622	5.00000	9.7
46	Ethyl Ether	59	1.975	1.975	(0.424)	25919	5.00000	6.2
119	Isoprene	67	1.953	1.953	(0.419)	43374	5.00000	7.1
47	Acrolein	56	2.340	2.347	(0.502)	108994	200.000	220
10	1,1-Dichloroethene	96	2.104	2.104	(0.451)	25821	5.00000	5.7
48	Freon TF	101	2.176	2.175	(0.467)	36904	5.00000	6.4
7	Acetone	58	2.555	2.569	(0.548)	6820	15.0000	22

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07577.d
Report Date: 28-Mar-2011 15:20

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	142 Iodomethane	142	2.211	2.211	(0.474)	54402	5.00000	6.1
	8 Carbon Disulfide	76	2.133	2.140	(0.458)	113873	5.00000	6.1
	50 Acetonitrile	41	2.677	2.684	(0.574)	34640	100.000	140
	125 Methyl acetate	74	2.648	2.655	(0.568)	4584	5.00000	6.3
	6 Methylene Chloride	84	2.512	2.512	(0.539)	18265	5.00000	6.0
	155 2-Chloropropane	78	2.147	2.132	(0.461)	13690	5.00000	(a)
	51 TBA	59	2.827	2.834	(0.607)	52403	100.000	120
	52 Acrylonitrile	53	3.135	3.142	(0.673)	135645	100.000	110
	12 trans-1,2-Dichloroethene	96	2.620	2.627	(0.562)	13496	5.00000	5.5
	53 MTBE	73	2.720	2.727	(0.584)	50896	5.00000	5.6
	54 Hexane	56	2.677	2.684	(0.574)	15415	5.00000	7.0
	11 1,1-Dichloroethane	63	3.085	3.085	(0.662)	28314	5.00000	5.5
	57 Vinyl Acetate	43	3.021	3.021	(0.648)	30192	5.00000	5.6
	55 DIPE	45	3.014	3.021	(0.647)	59111	5.00000	5.6
	149 tert-Butyl ethyl ether	59	3.300	3.307	(0.708)	53469	5.00000	5.4
	104 2,2-Dichloropropane	77	3.615	3.615	(0.776)	25390	5.00000	5.4
	13 cis-1,2-Dichloroethene	96	3.522	3.522	(0.756)	15908	5.00000	5.3
	18 2-Butanone	72	4.045	4.038	(0.868)	6630	15.0000	14
	56 Ethyl Acetate	70	3.895	3.887	(0.836)	3252	10.0000	11
	108 Bromochloromethane	128	3.680	3.687	(0.789)	8010	5.00000	5.3
	15 Chloroform	83	3.759	3.766	(0.806)	29603	5.00000	5.6
	20 1,1,1-Trichloroethane	97	3.930	3.930	(0.843)	25460	5.00000	5.2
	59 Cyclohexane	56	3.687	3.687	(0.791)	31143	5.00000	5.6
	21 Carbon Tetrachloride	117	3.873	3.866	(0.831)	24958	5.00000	5.3
	92 1,1-Dichloropropene	75	4.031	4.031	(0.865)	19482	5.00000	5.2
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	130904	50.0000	51
	28 Benzene	78	4.260	4.260	(0.914)	58793	5.00000	5.4
	17 1,2-Dichloroethane	62	4.453	4.453	(0.955)	22456	5.00000	5.5
	61 Isopropyl Acetate	43	4.754	4.754	(1.020)	69256	10.0000	11
	140 tert-Amylmethyl Ether	73	4.403	4.396	(0.945)	43082	5.00000	5.1
*	69 Fluorobenzene	96	4.661	4.661	(1.000)	394483	50.0000	
	62 n-Heptane	57	4.253	4.253	(0.528)	13641	5.00000	5.8
	156 2,4,4-Trimethyl-1-pentene	112	4.711	4.711	(1.011)	4139	5.00000	4.7
	25 Trichloroethene	95	4.826	4.826	(1.035)	15181	5.00000	5.3
	96 Ethyl Acrylate	55	4.819	4.811	(1.034)	23185	5.00000	4.7(M)
	126 Methyl cyclohexane	83	4.804	4.811	(1.031)	27698	5.00000	5.3
	23 1,2-Dichloropropane	63	5.363	5.363	(1.151)	15439	5.00000	5.2
	109 Dibromomethane	93	5.256	5.256	(1.128)	9920	5.00000	5.2
	95 1,4-Dioxane	88	5.678	5.692	(1.218)	1472	100.000	88
	146 Methyl methacrylate	69	5.678	5.671	(1.218)	8362	5.00000	5.0
	64 Propyl Acetate	43	5.850	5.850	(1.255)	41254	10.0000	10
	22 Bromodichloromethane	83	5.456	5.456	(1.171)	19936	5.00000	5.1
	30 2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.318)	6751	5.00000	4.1
	118 Epichlorohydrin	57	6.488	6.488	(1.392)	34516	100.000	110
	24 cis-1,3-Dichloropropene	75	6.173	6.172	(1.324)	19451	5.00000	4.7
	33 4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	46421	15.0000	15
$	37 Toluene-d8 (SUR)	98	6.395	6.387	(0.794)	326790	50.0000	49

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07577.d
Report Date: 28-Mar-2011 15:20

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	==========	====	==	======	======	========	=======	=======
	38 Toluene	91	6.452	6.452	(0.802)	57278	5.00000	5.2
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.866)	17957	5.00000	4.8
	27 1,1,2-Trichloroethane	83	7.140	7.147	(0.887)	10565	5.00000	5.2
	35 Tetrachloroethene	166	6.896	6.896	(0.857)	13842	5.00000	5.3
	103 1,3-Dichloropropane	76	7.419	7.419	(0.922)	20542	5.00000	5.1
	34 2-Hexanone	43	7.834	7.834	(0.973)	32504	15.0000	16
	26 Dibromochloromethane	129	7.319	7.319	(0.909)	12995	5.00000	4.8
	65 Butyl Acetate	43	7.777	7.777	(0.966)	42111	10.0000	10
	66 1,2-Dibromoethane	107	7.526	7.526	(0.935)	11426	5.00000	5.0
*	32 Chlorobenzene-d5	117	8.049	8.049	(1.000)	268176	50.0000	
	39 Chlorobenzene	112	8.064	8.063	(1.002)	36445	5.00000	5.3
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.011)	14954	5.00000	5.0
	40 Ethylbenzene	106	8.114	8.114	(1.008)	18551	5.00000	4.9
	43 m+p-Xylene	106	8.257	8.257	(1.026)	44075	10.0000	9.6
	44 o-Xylene	106	8.629	8.629	(1.072)	21135	5.00000	4.6
	42 Styrene	104	8.680	8.679	(1.078)	29449	5.00000	4.3
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	30475	5.00000	4.8
	31 Bromoform	173	8.680	8.679	(1.078)	8570	5.00000	4.7
	110 Isopropylbenzene	105	8.902	8.909	(1.106)	56708	5.00000	4.8
$	41 Bromofluorobenzene (SUR)	174	9.124	9.124	(0.913)	107830	50.0000	49
	150 Camphene	93	8.980	8.980	(0.898)	17195	5.00000	4.6
	107 Bromobenzene	156	9.195	9.188	(0.920)	16270	5.00000	5.2
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	20962	5.00000	5.3
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	5637	5.00000	5.2
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	1861	5.00000	4.8
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	80519	5.00000	5.0
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	45523	5.00000	4.9
	106 4-Chlorotoluene	91	9.489	9.489	(0.949)	42568	5.00000	4.8
	102 1,3,5-Trimethylbenzene	105	9.417	9.410	(0.942)	49069	5.00000	4.5
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	18784	5.00000	3.7
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	36773	5.00000	3.7
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	52671	5.00000	4.7
	151 2-Octanone	43	10.119	10.119	(1.012)	22007	5.00000	4.9
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	68829	5.00000	4.7
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	30663	5.00000	5.2
	153 2-Octanol	45	10.005	10.005	(1.001)	6306	5.00000	3.9
*	91 1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	139494	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	31504	5.00000	5.2
	113 p-Isopropyltoluene	119	9.912	9.912	(0.991)	51705	5.00000	4.0
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	31904	5.00000	5.1
	117 Benzyl chloride	91	10.227	10.227	(1.023)	95022	5.00000	5.0
	111 n-Butylbenzene	91	10.227	10.227	(1.023)	95022	5.00000	5.0
	101 1,2-Dibromo-3-chloropropane	75	10.914	10.907	(1.092)	3883	5.00000	4.9
	152 Camphor	95	11.595	11.595	(1.160)	6984	25.0000	16
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	22591	5.00000	4.6
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	11265	5.00000	4.6
	70 Naphthalene	128	11.624	11.623	(1.163)	55451	5.00000	4.5

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07577.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	11.753	11.752	(1.176)	24741	5.00000	4.8
M	45 Xylene (Total)	100				65210	15.0000	14

QC Flag Legend

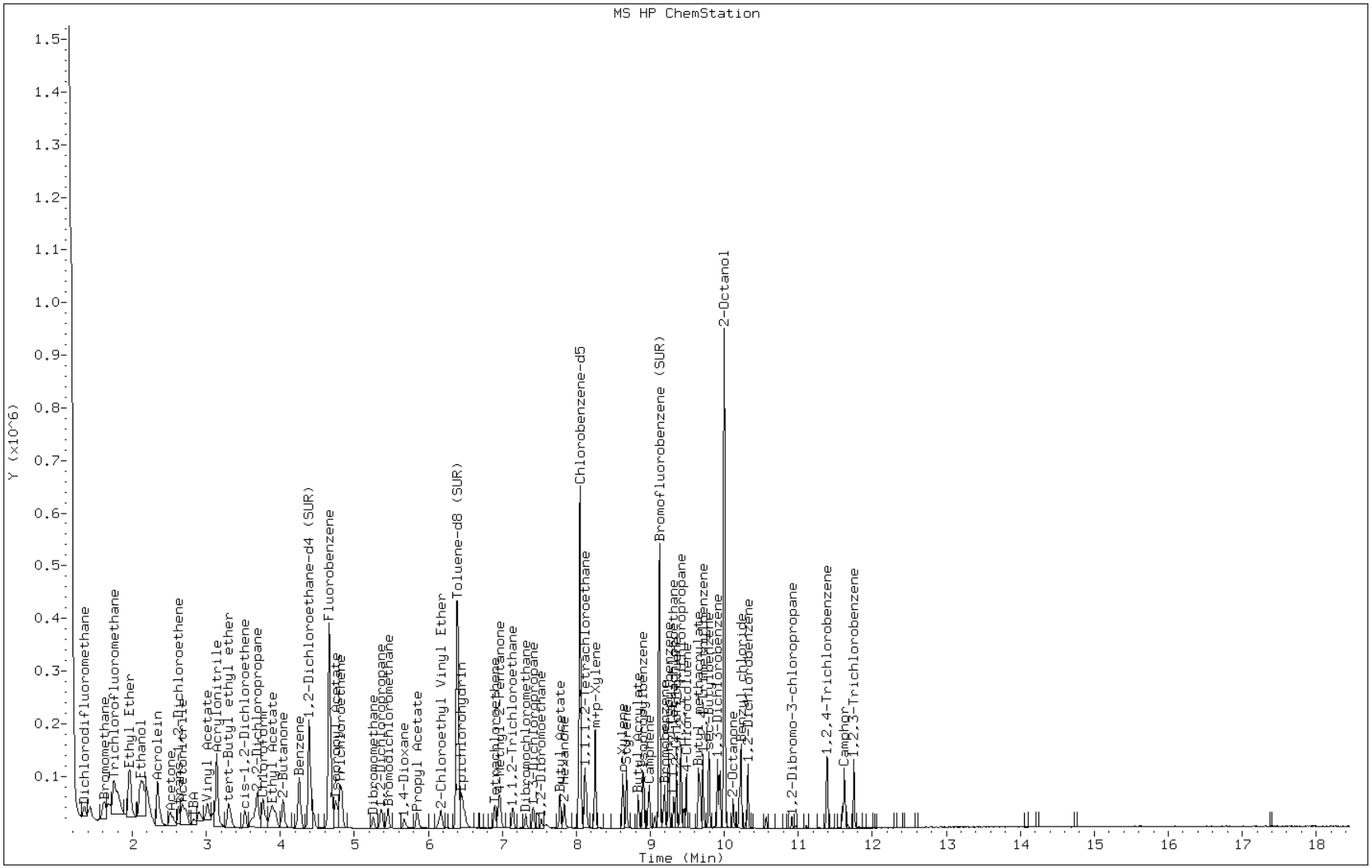
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: d07577.d

Date: 24-MAR-2011 23:48

Client ID: Instrument: VOAMS4.i

Sample Info: IC-VM8LCAL2 Operator: VOAMS 9



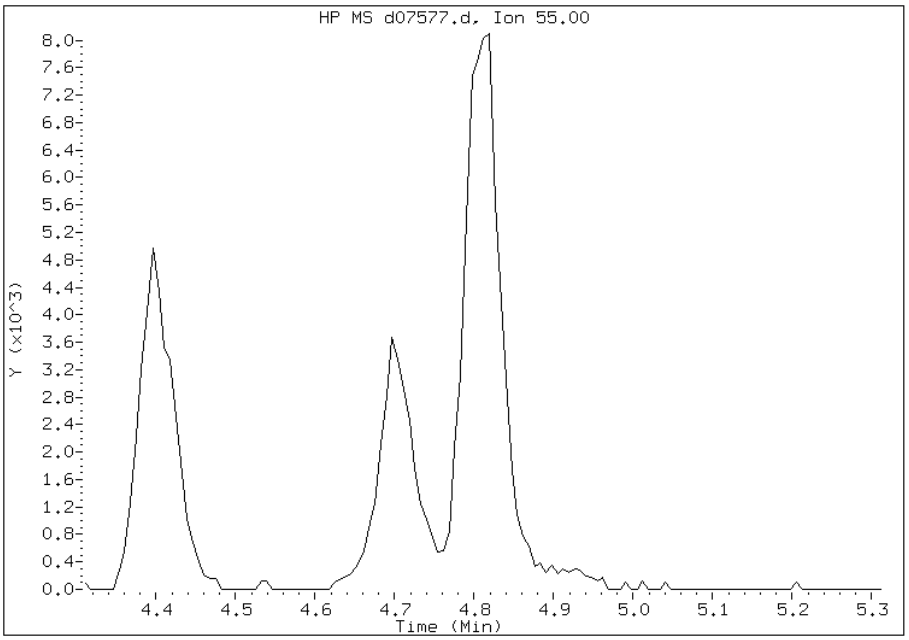
Manual Integration Report

Data File: d07577.d
Inj. Date and Time: 24-MAR-2011 23:48
Instrument ID: VOAMS4.i
Client ID:
Compound: 96 Ethyl Acrylate
CAS #: 140-88-5
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 4.81



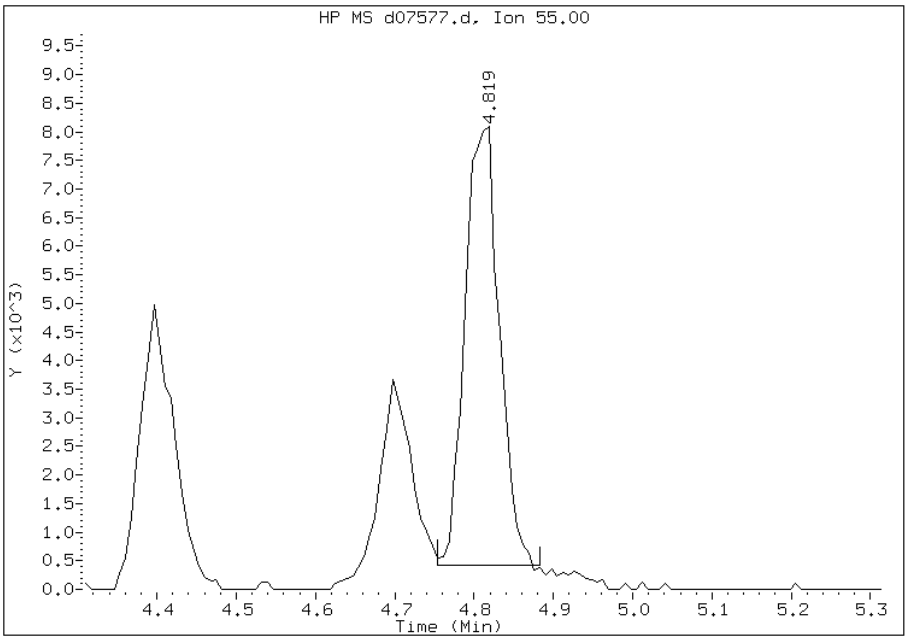
Manual Integration Results

RT: 4.82

Response: 23185

Amount: 5

Conc: 5



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07578.d
Report Date: 28-Mar-2011 15:20

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07578.d
Lab Smp Id: ICIS-VM8LCAL3
Inj Date : 25-MAR-2011 00:12
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : ICIS-VM8LCAL3
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 00:12 Cal File: d07578.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				112478	40.0000	38
90 Dichlorodifluoromethane	85	1.266	1.266	(0.272)	79686	20.0000	20
1 Chloromethane	50	1.359	1.359	(0.292)	128605	20.0000	19
4 Vinyl Chloride	62	1.438	1.438	(0.308)	142324	20.0000	20
3 Bromomethane	94	1.624	1.624	(0.348)	111680	20.0000	20
5 Chloroethane	64	1.681	1.681	(0.361)	106304	20.0000	20
9 Trichlorofluoromethane	101	1.810	1.810	(0.388)	275440	20.0000	22
121 n-Pentane	72	1.753	1.753	(0.376)	24089	20.0000	28
46 Ethyl Ether	59	1.975	1.975	(0.424)	96678	20.0000	21
119 Isoprene	67	1.953	1.953	(0.419)	161168	20.0000	24
47 Acrolein	56	2.347	2.347	(0.504)	172460	300.000	320
10 1,1-Dichloroethene	96	2.104	2.104	(0.451)	93662	20.0000	19
48 Freon TF	101	2.175	2.175	(0.467)	118886	20.0000	19
7 Acetone	58	2.569	2.569	(0.551)	8888	20.0000	26

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07578.d
Report Date: 28-Mar-2011 15:20

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
142	Iodomethane	142	2.211	2.211	(0.474)	178922	20.0000	19
8	Carbon Disulfide	76	2.140	2.140	(0.459)	384571	20.0000	19
50	Acetonitrile	41	2.684	2.684	(0.576)	117969	400.000	450
125	Methyl acetate	74	2.655	2.655	(0.570)	14463	20.0000	18
6	Methylene Chloride	84	2.512	2.512	(0.539)	67903	20.0000	21
155	2-Chloropropane	78	2.132	2.132	(0.458)	38789	20.0000	(a)
51	TBA	59	2.834	2.834	(0.608)	184891	400.000	390
52	Acrylonitrile	53	3.142	3.142	(0.674)	217755	150.000	160
12	trans-1,2-Dichloroethene	96	2.627	2.627	(0.564)	51660	20.0000	20
53	MTBE	73	2.727	2.727	(0.585)	181415	20.0000	18
54	Hexane	56	2.684	2.684	(0.576)	55101	20.0000	23
11	1,1-Dichloroethane	63	3.085	3.085	(0.662)	109459	20.0000	20
57	Vinyl Acetate	43	3.021	3.021	(0.648)	110158	20.0000	19
55	DIPE	45	3.021	3.021	(0.648)	209711	20.0000	18
149	tert-Butyl ethyl ether	59	3.307	3.307	(0.710)	196286	20.0000	18
104	2,2-Dichloropropane	77	3.615	3.615	(0.776)	98335	20.0000	19
13	cis-1,2-Dichloroethene	96	3.522	3.522	(0.756)	60818	20.0000	19
18	2-Butanone	72	4.038	4.038	(0.866)	11250	20.0000	22
56	Ethyl Acetate	70	3.887	3.887	(0.834)	11834	40.0000	38
108	Bromochloromethane	128	3.687	3.687	(0.791)	31337	20.0000	19
15	Chloroform	83	3.766	3.766	(0.808)	111774	20.0000	19
20	1,1,1-Trichloroethane	97	3.930	3.930	(0.843)	103532	20.0000	20
59	Cyclohexane	56	3.687	3.687	(0.791)	115208	20.0000	19
21	Carbon Tetrachloride	117	3.866	3.866	(0.829)	97754	20.0000	19
92	1,1-Dichloropropene	75	4.031	4.031	(0.865)	75808	20.0000	19
$ 16	1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	138423	50.0000	50
28	Benzene	78	4.260	4.260	(0.914)	233928	20.0000	20
17	1,2-Dichloroethane	62	4.453	4.453	(0.955)	86459	20.0000	20
61	Isopropyl Acetate	43	4.754	4.754	(1.020)	259373	40.0000	38
140	tert-Amylmethyl Ether	73	4.396	4.396	(0.943)	167046	20.0000	18
* 69	Fluorobenzene	96	4.661	4.661	(1.000)	425078	50.0000	
62	n-Heptane	57	4.253	4.253	(0.528)	48684	20.0000	20
156	2,4,4-Trimethyl-1-pentene	112	4.711	4.711	(1.011)	17388	20.0000	18
25	Trichloroethene	95	4.826	4.826	(1.035)	59130	20.0000	19
96	Ethyl Acrylate	55	4.811	4.811	(1.032)	102031	20.0000	19
126	Methyl cyclohexane	83	4.811	4.811	(1.032)	106204	20.0000	19
23	1,2-Dichloropropane	63	5.363	5.363	(1.151)	60923	20.0000	19
109	Dibromomethane	93	5.256	5.256	(1.128)	39766	20.0000	19
95	1,4-Dioxane	88	5.692	5.692	(1.221)	2715	150.000	150
146	Methyl methacrylate	69	5.671	5.671	(1.217)	31398	20.0000	17
64	Propyl Acetate	43	5.850	5.850	(1.255)	151357	40.0000	36
22	Bromodichloromethane	83	5.456	5.456	(1.171)	80068	20.0000	19
30	2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.318)	26223	20.0000	15
118	Epichlorohydrin	57	6.488	6.488	(1.392)	127413	400.000	370
24	cis-1,3-Dichloropropene	75	6.172	6.172	(1.324)	83071	20.0000	18
33	4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	59693	20.0000	18
$ 37	Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	356785	50.0000	52

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07578.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	38 Toluene	91	6.452	6.452	(0.802)	232204	20.0000	20
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.866)	75402	20.0000	20
	27 1,1,2-Trichloroethane	83	7.147	7.147	(0.888)	41584	20.0000	20
	35 Tetrachloroethene	166	6.896	6.896	(0.857)	54423	20.0000	20
	103 1,3-Dichloropropane	76	7.419	7.419	(0.922)	81300	20.0000	20
	34 2-Hexanone	43	7.834	7.834	(0.973)	42731	20.0000	21
	26 Dibromochloromethane	129	7.319	7.319	(0.909)	53335	20.0000	19
	65 Butyl Acetate	43	7.777	7.777	(0.966)	160192	40.0000	37
	66 1,2-Dibromoethane	107	7.526	7.526	(0.935)	46837	20.0000	20
*	32 Chlorobenzene-d5	117	8.049	8.049	(1.000)	275374	50.0000	
	39 Chlorobenzene	112	8.063	8.063	(1.002)	141532	20.0000	20
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.011)	61846	20.0000	20
	40 Ethylbenzene	106	8.114	8.114	(1.008)	77777	20.0000	20
	43 m+p-Xylene	106	8.257	8.257	(1.026)	191243	40.0000	40
	44 o-Xylene	106	8.629	8.629	(1.072)	94356	20.0000	20
	42 Styrene	104	8.679	8.679	(1.078)	142185	20.0000	20
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	97071	20.0000	15
	31 Bromoform	173	8.679	8.679	(1.078)	35728	20.0000	19
	110 Isopropylbenzene	105	8.909	8.909	(1.107)	255216	20.0000	21
$	41 Bromofluorobenzene (SUR)	174	9.124	9.124	(0.913)	115448	50.0000	50
	150 Camphene	93	8.980	8.980	(0.898)	72402	20.0000	18
	107 Bromobenzene	156	9.188	9.188	(0.919)	63113	20.0000	19
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	83475	20.0000	20
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	22832	20.0000	20
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	7836	20.0000	19
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	337819	20.0000	20
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	194024	20.0000	20
	106 4-Chlorotoluene	91	9.489	9.489	(0.949)	185105	20.0000	20
	102 1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	226652	20.0000	20
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	83520	20.0000	15
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	171502	20.0000	16
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	241933	20.0000	20
	151 2-Octanone	43	10.119	10.119	(1.012)	82986	20.0000	17
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	316565	20.0000	20
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	123365	20.0000	20
	153 2-Octanol	45	10.005	10.005	(1.001)	22650	20.0000	13
*	91 1,4-Dichlorobenzene-d4	152	9.997	9.997	(1.000)	147001	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	122728	20.0000	19
	113 p-Isopropyltoluene	119	9.912	9.912	(0.991)	241289	20.0000	18
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	128508	20.0000	20
	117 Benzyl chloride	91	10.227	10.227	(1.023)	395863	20.0000	20
	111 n-Butylbenzene	91	10.227	10.227	(1.023)	395863	20.0000	20
	101 1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	15351	20.0000	18
	152 Camphor	95	11.595	11.595	(1.160)	29955	100.000	65
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	93751	20.0000	18
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	45898	20.0000	18
	70 Naphthalene	128	11.623	11.623	(1.163)	258740	20.0000	20

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	11.752	11.752	(1.176)	103966	20.0000	19
M	45 Xylene (Total)	100				285599	60.0000	60

QC Flag Legend

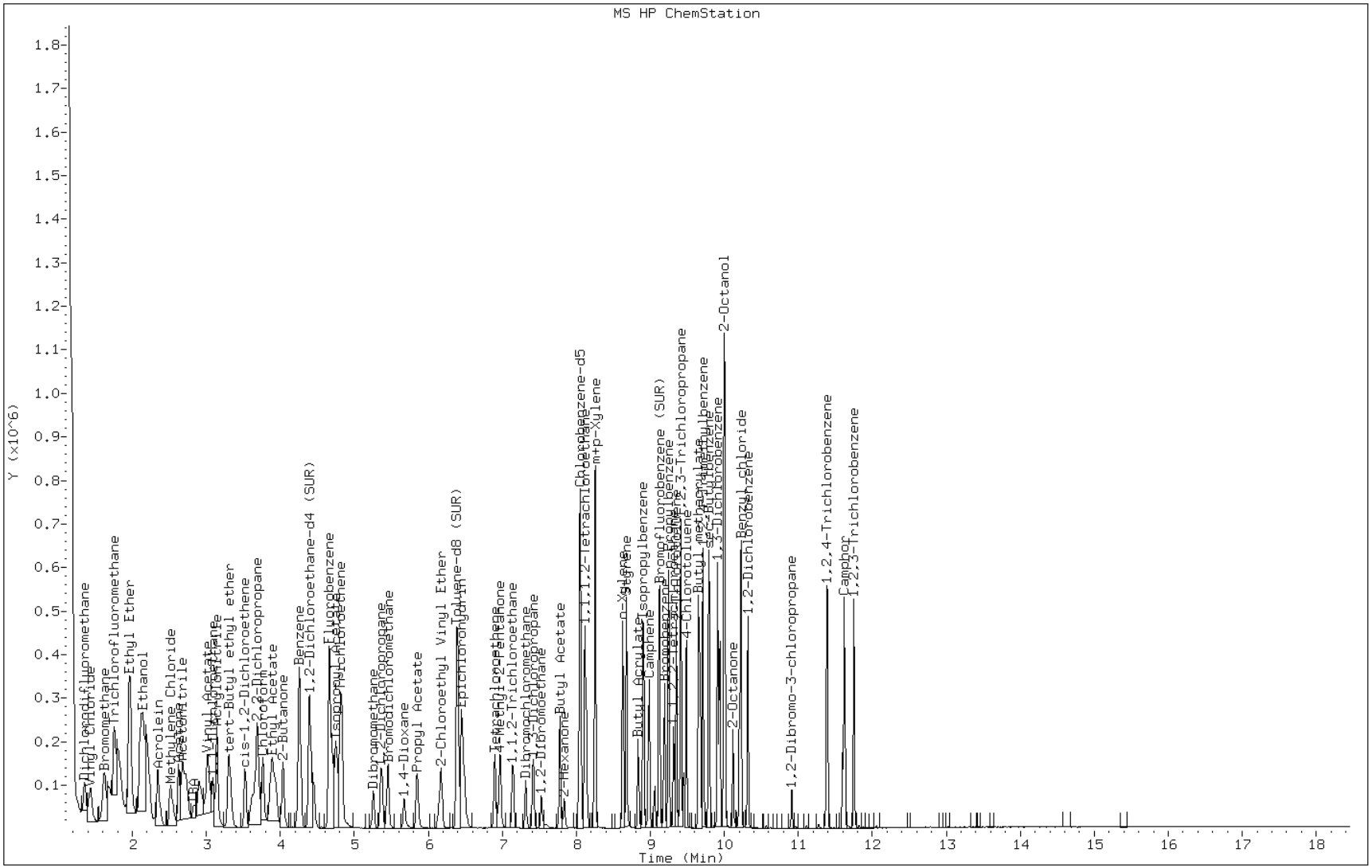
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: d07578.d

Date: 25-MAR-2011 00:12

Client ID: Instrument: VOAMS4.i

Sample Info: ICIS-VM8LCAL3 Operator: VOAMS 9



Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07579.d
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TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07579.d
Lab Smp Id: IC-VM8LCAL4
Inj Date : 25-MAR-2011 00:36
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : IC-VM8LCAL4
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 00:36 Cal File: d07579.d
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				306134	100.000	99
90 Dichlorodifluoromethane	85	1.266	1.266	(0.272)	201387	50.0000	48
1 Chloromethane	50	1.359	1.359	(0.292)	370034	50.0000	52
4 Vinyl Chloride	62	1.438	1.438	(0.308)	380468	50.0000	51
3 Bromomethane	94	1.624	1.624	(0.348)	295171	50.0000	52
5 Chloroethane	64	1.688	1.681	(0.362)	273941	50.0000	49
9 Trichlorofluoromethane	101	1.817	1.810	(0.390)	650712	50.0000	49
121 n-Pentane	72	1.753	1.753	(0.376)	59354	50.0000	67
46 Ethyl Ether	59	1.975	1.975	(0.424)	225540	50.0000	47
119 Isoprene	67	1.954	1.953	(0.419)	386142	50.0000	56
47 Acrolein	56	2.340	2.347	(0.502)	225161	400.000	390
10 1,1-Dichloroethene	96	2.104	2.104	(0.451)	240692	50.0000	47
48 Freon TF	101	2.176	2.175	(0.467)	325719	50.0000	49
7 Acetone	58	2.555	2.569	(0.548)	18759	50.0000	53

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Report Date: 28-Mar-2011 15:20

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	142 Iodomethane	142	2.211	2.211	(0.474)	506846	50.0000	50
	8 Carbon Disulfide	76	2.147	2.140	(0.461)	1095473	50.0000	51
	50 Acetonitrile	41	2.677	2.684	(0.574)	323169	1000.00	1200
	125 Methyl acetate	74	2.648	2.655	(0.568)	39630	50.0000	48
	6 Methylene Chloride	84	2.512	2.512	(0.539)	178383	50.0000	52
	155 2-Chloropropane	78	2.147	2.132	(0.461)	104776	50.0000	(a)
	51 TBA	59	2.835	2.834	(0.608)	465671	1000.00	930
	52 Acrylonitrile	53	3.135	3.142	(0.673)	283551	200.000	200
	12 trans-1,2-Dichloroethene	96	2.627	2.627	(0.564)	137642	50.0000	49
	53 MTBE	73	2.727	2.727	(0.585)	505294	50.0000	48
	54 Hexane	56	2.684	2.684	(0.576)	152030	50.0000	61
	11 1,1-Dichloroethane	63	3.085	3.085	(0.662)	290180	50.0000	50
	57 Vinyl Acetate	43	3.014	3.021	(0.647)	311548	50.0000	50
	55 DIPE	45	3.014	3.021	(0.647)	608456	50.0000	50
	149 tert-Butyl ethyl ether	59	3.300	3.307	(0.708)	573058	50.0000	50
	104 2,2-Dichloropropane	77	3.630	3.615	(0.779)	263977	50.0000	49
	13 cis-1,2-Dichloroethene	96	3.522	3.522	(0.756)	168492	50.0000	50
	18 2-Butanone	72	4.038	4.038	(0.866)	29138	50.0000	55
	56 Ethyl Acetate	70	3.888	3.887	(0.834)	34934	100.000	110
	108 Bromochloromethane	128	3.687	3.687	(0.791)	81660	50.0000	48
	15 Chloroform	83	3.759	3.766	(0.806)	298314	50.0000	49
	20 1,1,1-Trichloroethane	97	3.930	3.930	(0.843)	280545	50.0000	51
	59 Cyclohexane	56	3.687	3.687	(0.791)	339247	50.0000	53
	21 Carbon Tetrachloride	117	3.873	3.866	(0.831)	271386	50.0000	50
	92 1,1-Dichloropropene	75	4.031	4.031	(0.865)	210920	50.0000	50
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	144955	50.0000	50
	28 Benzene	78	4.260	4.260	(0.914)	620562	50.0000	50
	17 1,2-Dichloroethane	62	4.453	4.453	(0.955)	226646	50.0000	49
	61 Isopropyl Acetate	43	4.747	4.754	(1.018)	731218	100.000	100
	140 tert-Amylmethyl Ether	73	4.396	4.396	(0.943)	496332	50.0000	52
*	69 Fluorobenzene	96	4.661	4.661	(1.000)	448537	50.0000	
	62 n-Heptane	57	4.253	4.253	(0.528)	148766	50.0000	55
	156 2,4,4-Trimethyl-1-pentene	112	4.704	4.711	(1.009)	46763	50.0000	47
	25 Trichloroethene	95	4.826	4.826	(1.035)	162942	50.0000	50
	96 Ethyl Acrylate	55	4.812	4.811	(1.032)	299093	50.0000	54
	126 Methyl cyclohexane	83	4.812	4.811	(1.032)	321592	50.0000	54
	23 1,2-Dichloropropane	63	5.363	5.363	(1.151)	169364	50.0000	50
	109 Dibromomethane	93	5.256	5.256	(1.128)	107434	50.0000	49
	95 1,4-Dioxane	88	5.685	5.692	(1.220)	3713	200.000	200
	146 Methyl methacrylate	69	5.671	5.671	(1.217)	97283	50.0000	51
	64 Propyl Acetate	43	5.843	5.850	(1.254)	456658	100.000	100
	22 Bromodichloromethane	83	5.456	5.456	(1.171)	226454	50.0000	51
	30 2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.318)	85187	50.0000	45
	118 Epichlorohydrin	57	6.488	6.488	(1.392)	363007	1000.00	1000
	24 cis-1,3-Dichloropropene	75	6.173	6.172	(1.324)	242880	50.0000	51
	33 4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	179863	50.0000	51
$	37 Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	383686	50.0000	50

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07579.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	38 Toluene	91	6.452	6.452	(0.802)	637562	50.0000	50
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.866)	221133	50.0000	51
	27 1,1,2-Trichloroethane	83	7.140	7.147	(0.887)	118338	50.0000	50
	35 Tetrachloroethene	166	6.896	6.896	(0.857)	149472	50.0000	49
	103 1,3-Dichloropropane	76	7.419	7.419	(0.922)	228676	50.0000	49
	34 2-Hexanone	43	7.834	7.834	(0.973)	119401	50.0000	51
	26 Dibromochloromethane	129	7.319	7.319	(0.909)	150088	50.0000	48
	65 Butyl Acetate	43	7.777	7.777	(0.966)	500115	100.000	100
	66 1,2-Dibromoethane	107	7.526	7.526	(0.935)	131776	50.0000	49
*	32 Chlorobenzene-d5	117	8.049	8.049	(1.000)	311280	50.0000	
	39 Chlorobenzene	112	8.064	8.063	(1.002)	392034	50.0000	49
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.011)	173275	50.0000	50
	40 Ethylbenzene	106	8.114	8.114	(1.008)	219236	50.0000	50
	43 m+p-Xylene	106	8.257	8.257	(1.026)	535404	100.000	100
	44 o-Xylene	106	8.629	8.629	(1.072)	279660	50.0000	53
	42 Styrene	104	8.680	8.679	(1.078)	422175	50.0000	53
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	303998	50.0000	43
	31 Bromoform	173	8.680	8.679	(1.078)	103732	50.0000	49
	110 Isopropylbenzene	105	8.902	8.909	(1.106)	727254	50.0000	53
$	41 Bromofluorobenzene (SUR)	174	9.124	9.124	(0.913)	126486	50.0000	50
	150 Camphene	93	8.980	8.980	(0.898)	225327	50.0000	52
	107 Bromobenzene	156	9.188	9.188	(0.919)	172268	50.0000	48
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	214994	50.0000	47
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	60915	50.0000	49
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	22780	50.0000	52
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	962393	50.0000	53
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	551671	50.0000	52
	106 4-Chlorotoluene	91	9.489	9.489	(0.949)	513976	50.0000	51
	102 1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	654178	50.0000	53
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	270940	50.0000	46
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	512220	50.0000	44
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	681697	50.0000	53
	151 2-Octanone	43	10.119	10.119	(1.012)	263935	50.0000	51
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	912566	50.0000	54
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	335224	50.0000	49
	153 2-Octanol	45	9.998	10.005	(1.000)	67702	50.0000	36
*	91 1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	160018	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	331853	50.0000	47
	113 p-Isopropyltoluene	119	9.912	9.912	(0.991)	712027	50.0000	48
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	346794	50.0000	49
	117 Benzyl chloride	91	10.220	10.227	(1.022)	1120553	50.0000	52
	111 n-Butylbenzene	91	10.220	10.227	(1.022)	1120553	50.0000	52
	101 1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	43058	50.0000	48
	152 Camphor	95	11.595	11.595	(1.160)	98463	250.000	200
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	268801	50.0000	48
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	129359	50.0000	46
	70 Naphthalene	128	11.624	11.623	(1.163)	732207	50.0000	52

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07579.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	11.753	11.752	(1.176)	279010	50.0000	48
M	45 Xylene (Total)	100				815064	150.000	150

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: d07579.d

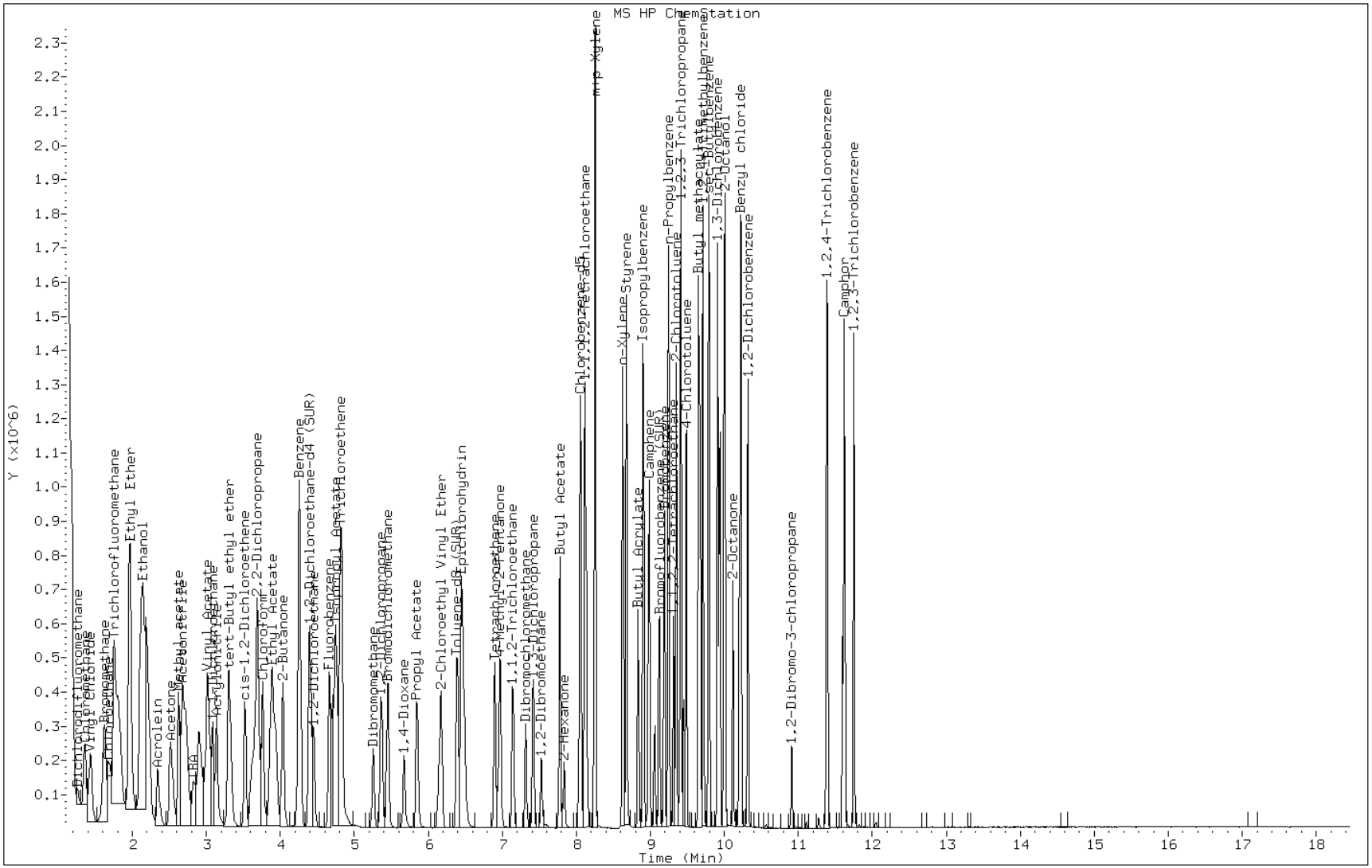
Date: 25-MAR-2011 00:36

Client ID:

Instrument: VOAMS4.i

Sample Info: IC-VM8LCAL4

Operator: VOAMS 9



Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07580.d
Report Date: 28-Mar-2011 15:20

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07580.d
Lab Smp Id: IC-VM8LCAL5
Inj Date : 25-MAR-2011 00:59
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : IC-VM8LCAL5
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 00:59 Cal File: d07580.d
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				1277141	400.000	370
90 Dichlorodifluoromethane	85	1.266	1.266	(0.271)	912205	200.000	200
1 Chloromethane	50	1.373	1.359	(0.294)	1551268	200.000	190
4 Vinyl Chloride	62	1.438	1.438	(0.308)	1581923	200.000	190
3 Bromomethane	94	1.631	1.624	(0.349)	1281898	200.000	200
5 Chloroethane	64	1.703	1.681	(0.365)	1154900	200.000	180
9 Trichlorofluoromethane	101	1.825	1.810	(0.391)	2593815	200.000	180
121 n-Pentane	72	1.753	1.753	(0.375)	213701	200.000	210
46 Ethyl Ether	59	1.975	1.975	(0.423)	949271	200.000	180
119 Isoprene	67	1.961	1.953	(0.420)	1576240	200.000	200
47 Acrolein	56	2.347	2.347	(0.503)	287319	500.000	450
10 1,1-Dichloroethene	96	2.133	2.104	(0.457)	1000098	200.000	170
48 Freon TF	101	2.183	2.175	(0.468)	1359102	200.000	180
7 Acetone	58	2.562	2.569	(0.549)	75276	200.000	200

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07580.d
Report Date: 28-Mar-2011 15:20

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	142 Iodomethane	142	2.226	2.211	(0.477)	2099463	200.000	180
	8 Carbon Disulfide	76	2.154	2.140	(0.461)	4291484	200.000	180
	50 Acetonitrile	41	2.684	2.684	(0.575)	1353748	4000.00	4400
	125 Methyl acetate	74	2.655	2.655	(0.569)	174375	200.000	190
	6 Methylene Chloride	84	2.519	2.512	(0.540)	740611	200.000	190
	155 2-Chloropropane	78	2.154	2.132	(0.461)	425901	200.000	(a)
	51 TBA	59	2.842	2.834	(0.609)	2231597	4000.00	3900
	52 Acrylonitrile	53	3.143	3.142	(0.673)	362235	250.000	230
	12 trans-1,2-Dichloroethene	96	2.627	2.627	(0.563)	571405	200.000	180
	53 MTBE	73	2.727	2.727	(0.584)	2324673	200.000	200
	54 Hexane	56	2.684	2.684	(0.575)	598836	200.000	210
	11 1,1-Dichloroethane	63	3.092	3.085	(0.662)	1190957	200.000	180
	57 Vinyl Acetate	43	3.021	3.021	(0.647)	1307765	200.000	190
	55 DIPE	45	3.021	3.021	(0.647)	2711636	200.000	200
	149 tert-Butyl ethyl ether	59	3.307	3.307	(0.708)	2614306	200.000	200
	104 2,2-Dichloropropane	77	3.637	3.615	(0.779)	1127447	200.000	190
	13 cis-1,2-Dichloroethene	96	3.522	3.522	(0.754)	705736	200.000	180
	18 2-Butanone	72	4.038	4.038	(0.865)	132237	200.000	220
	56 Ethyl Acetate	70	3.888	3.887	(0.833)	158927	400.000	430(A)
	108 Bromochloromethane	128	3.687	3.687	(0.790)	348841	200.000	180
	15 Chloroform	83	3.766	3.766	(0.807)	1247403	200.000	180
	20 1,1,1-Trichloroethane	97	3.938	3.930	(0.843)	1198266	200.000	190
	59 Cyclohexane	56	3.701	3.687	(0.793)	1461261	200.000	200
	21 Carbon Tetrachloride	117	3.873	3.866	(0.830)	1153459	200.000	190
	92 1,1-Dichloropropene	75	4.038	4.031	(0.865)	907352	200.000	190
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.396	4.389	(0.942)	163978	50.0000	50
	28 Benzene	78	4.260	4.260	(0.913)	2613090	200.000	190
	17 1,2-Dichloroethane	62	4.461	4.453	(0.956)	954670	200.000	180
	61 Isopropyl Acetate	43	4.754	4.754	(1.018)	3419235	400.000	420
	140 tert-Amylmethyl Ether	73	4.403	4.396	(0.943)	2342974	200.000	220
*	69 Fluorobenzene	96	4.668	4.661	(1.000)	504366	50.0000	
	62 n-Heptane	57	4.253	4.253	(0.523)	610604	200.000	200
	156 2,4,4-Trimethyl-1-pentene	112	4.726	4.711	(1.012)	230165	200.000	200
	25 Trichloroethene	95	4.833	4.826	(1.035)	669075	200.000	180
	96 Ethyl Acrylate	55	4.819	4.811	(1.032)	1366585	200.000	220
	126 Methyl cyclohexane	83	4.819	4.811	(1.032)	1414873	200.000	210
	23 1,2-Dichloropropane	63	5.370	5.363	(1.150)	731498	200.000	190
	109 Dibromomethane	93	5.256	5.256	(1.126)	468835	200.000	190
	95 1,4-Dioxane	88	5.693	5.692	(1.219)	6163	250.000	290
	146 Methyl methacrylate	69	5.671	5.671	(1.215)	499144	200.000	230
	64 Propyl Acetate	43	5.850	5.850	(1.253)	2252980	400.000	450
	22 Bromodichloromethane	83	5.456	5.456	(1.169)	1002752	200.000	200
	30 2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.316)	433583	200.000	200
	118 Epichlorohydrin	57	6.488	6.488	(1.390)	1734886	4000.00	4300
	24 cis-1,3-Dichloropropene	75	6.173	6.172	(1.322)	1126275	200.000	210
	33 4-Methyl-2-Pentanone	43	6.953	6.953	(1.489)	907613	200.000	230
$	37 Toluene-d8 (SUR)	98	6.395	6.387	(0.786)	442177	50.0000	50

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07580.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	38 Toluene	91	6.452	6.452	(0.793)	2746917	200.000	190
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.857)	1013987	200.000	200
	27 1,1,2-Trichloroethane	83	7.147	7.147	(0.878)	519359	200.000	190
	35 Tetrachloroethene	166	6.903	6.896	(0.849)	651674	200.000	190
	103 1,3-Dichloropropane	76	7.419	7.419	(0.912)	1028777	200.000	190
	34 2-Hexanone	43	7.834	7.834	(0.963)	583460	200.000	220
	26 Dibromochloromethane	129	7.319	7.319	(0.900)	703594	200.000	200
	65 Butyl Acetate	43	7.777	7.777	(0.956)	2453002	400.000	440
	66 1,2-Dibromoethane	107	7.533	7.526	(0.926)	598287	200.000	200
*	32 Chlorobenzene-d5	117	8.049	8.049	(1.000)	354521	50.0000	(H)
	39 Chlorobenzene	112	8.064	8.063	(0.991)	1683999	200.000	180
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.000)	753702	200.000	190
	40 Ethylbenzene	106	8.114	8.114	(0.997)	936899	200.000	190
	43 m+p-Xylene	106	8.257	8.257	(1.015)	2378901	400.000	390
	44 o-Xylene	106	8.629	8.629	(1.061)	1232877	200.000	200
	42 Styrene	104	8.680	8.679	(1.067)	1869128	200.000	200
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	1453804	200.000	200
	31 Bromoform	173	8.680	8.679	(1.067)	466568	200.000	190
	110 Isopropylbenzene	105	8.909	8.909	(1.095)	3198086	200.000	200
$	41 Bromofluorobenzene (SUR)	174	9.124	9.124	(0.913)	140037	50.0000	52
	150 Camphene	93	8.980	8.980	(0.898)	1009491	200.000	220
	107 Bromobenzene	156	9.195	9.188	(0.920)	722083	200.000	190
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	952928	200.000	200
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	257059	200.000	190
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.016)	99000	200.000	200
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	4122357	200.000	210
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	2345667	200.000	210
	106 4-Chlorotoluene	91	9.489	9.489	(0.949)	2197546	200.000	200
	102 1,3,5-Trimethylbenzene	105	9.417	9.410	(0.942)	2969553	200.000	220
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	1332040	200.000	210
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	2389382	200.000	200
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	2954178	200.000	220
	151 2-Octanone	43	10.119	10.119	(1.012)	1276493	200.000	230
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	4108628	200.000	230(A)
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	1364528	200.000	190
	153 2-Octanol	45	10.005	10.005	(1.001)	449664	200.000	230
*	91 1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	169794	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	1351617	200.000	180
	113 p-Isopropyltoluene	119	9.912	9.912	(0.991)	3212707	200.000	200(A)
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	1457264	200.000	190
	117 Benzyl chloride	91	10.227	10.227	(1.023)	4937994	200.000	220
	111 n-Butylbenzene	91	10.227	10.227	(1.023)	4937994	200.000	220
	101 1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	194819	200.000	200
	152 Camphor	95	11.602	11.595	(1.160)	597446	1000.00	1100
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	1184865	200.000	200
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	624712	200.000	210
	70 Naphthalene	128	11.624	11.623	(1.163)	3209729	200.000	210

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07580.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	98 1,2,3-Trichlorobenzene	180	11.753	11.752	(1.176)	1225813	200.000	200
M	45 Xylene (Total)	100				3611778	600.000	600

QC Flag Legend

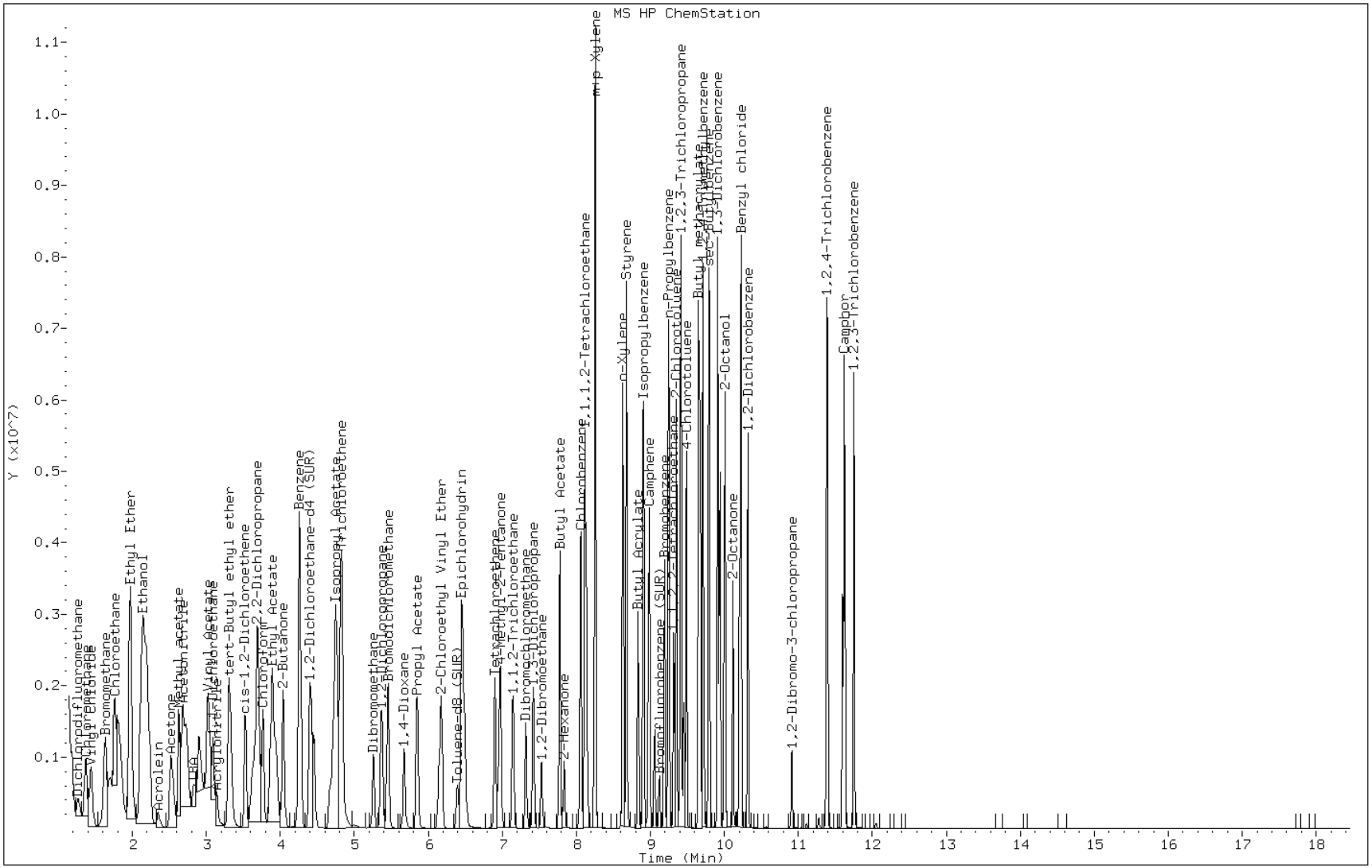
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: d07580.d

Date: 25-MAR-2011 00:59

Client ID: Instrument: VOAMS4.i

Sample Info: IC-VM8LCAL5 Operator: VOAMS 9



Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07581.d
Report Date: 28-Mar-2011 15:20

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07581.d
Lab Smp Id: IC-VM8LCAL6
Inj Date : 25-MAR-2011 01:23
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : IC-VM8LCAL6
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 01:23 Cal File: d07581.d
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14 1,2-Dichloroethene (total)	100				3785585	1000.00	940
90 Dichlorodifluoromethane	85	1.273	1.266	(0.273)	2595895	500.000	480
1 Chloromethane	50	1.380	1.359	(0.296)	4486339	500.000	480
4 Vinyl Chloride	62	1.445	1.438	(0.309)	4412111	500.000	450
3 Bromomethane	94	1.638	1.624	(0.351)	3529118	500.000	470
5 Chloroethane	64	1.710	1.681	(0.366)	3092450	500.000	420(A)
9 Trichlorofluoromethane	101	1.839	1.810	(0.394)	7382899	500.000	430
121 n-Pentane	72	1.760	1.753	(0.377)	571642	500.000	490
46 Ethyl Ether	59	1.975	1.975	(0.423)	2646858	500.000	420
119 Isoprene	67	1.960	1.953	(0.420)	4514412	500.000	500
47 Acrolein	56	2.347	2.347	(0.503)	422447	600.000	560
10 1,1-Dichloroethene	96	2.140	2.104	(0.458)	3139640	500.000	470
48 Freon TF	101	2.183	2.175	(0.468)	4003879	500.000	460
7 Acetone	58	2.562	2.569	(0.549)	379106	1000.00	1000(A)

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07581.d
Report Date: 28-Mar-2011 15:20

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	142	Iodomethane	142	2.233	2.211	(0.478)	6147654	500.000	460
	8	Carbon Disulfide	76	2.168	2.140	(0.464)	12607499	500.000	450
	50	Acetonitrile	41	2.684	2.684	(0.575)	3522131	10000.0	9800
	125	Methyl acetate	74	2.655	2.655	(0.569)	498578	500.000	460
	6	Methylene Chloride	84	2.526	2.512	(0.541)	2250716	500.000	500(A)
	155	2-Chloropropane	78	2.168	2.132	(0.464)	1243055	500.000	(a)
	51	TBA	59	2.841	2.834	(0.609)	5317782	10000.0	8100
	52	Acrylonitrile	53	3.142	3.142	(0.673)	498408	300.000	270
	12	trans-1,2-Dichloroethene	96	2.627	2.627	(0.563)	1737457	500.000	480
	53	MTBE	73	2.734	2.727	(0.586)	6376318	500.000	470
	54	Hexane	56	2.684	2.684	(0.575)	1598575	500.000	490
	11	1,1-Dichloroethane	63	3.092	3.085	(0.662)	3459770	500.000	450
	57	Vinyl Acetate	43	3.028	3.021	(0.649)	3683789	500.000	460
	55	DIPE	45	3.028	3.021	(0.649)	7440690	500.000	470
	149	tert-Butyl ethyl ether	59	3.307	3.307	(0.708)	7285398	500.000	490
	104	2,2-Dichloropropane	77	3.644	3.615	(0.781)	3162966	500.000	450
	13	cis-1,2-Dichloroethene	96	3.529	3.522	(0.756)	2048128	500.000	460
	18	2-Butanone	72	4.045	4.038	(0.866)	635290	1000.00	920
	56	Ethyl Acetate	70	3.894	3.887	(0.834)	449929	1000.00	1000(A)
	108	Bromochloromethane	128	3.694	3.687	(0.791)	1028085	500.000	460
	15	Chloroform	83	3.766	3.766	(0.807)	3745185	500.000	470
	20	1,1,1-Trichloroethane	97	3.945	3.930	(0.845)	3481864	500.000	480
	59	Cyclohexane	56	3.708	3.687	(0.794)	4002770	500.000	480
	21	Carbon Tetrachloride	117	3.880	3.866	(0.831)	3414991	500.000	480
	92	1,1-Dichloropropene	75	4.038	4.031	(0.865)	2628143	500.000	470
$	16	1,2-Dichloroethane-d4 (SUR)	65	4.396	4.389	(0.942)	187143	50.0000	49
	28	Benzene	78	4.267	4.260	(0.914)	7879142	500.000	480
	17	1,2-Dichloroethane	62	4.460	4.453	(0.956)	2813831	500.000	460
	61	Isopropyl Acetate	43	4.754	4.754	(1.018)	9538912	1000.00	1000(A)
	140	tert-Amylmethyl Ether	73	4.410	4.396	(0.945)	6474594	500.000	510(A)
*	69	Fluorobenzene	96	4.668	4.661	(1.000)	585890	50.0000	
	62	n-Heptane	57	4.260	4.253	(0.523)	1672498	500.000	440
	156	2,4,4-Trimethyl-1-pentene	112	4.733	4.711	(1.014)	839297	500.000	640(A)
	25	Trichloroethene	95	4.833	4.826	(1.035)	2046371	500.000	480
	96	Ethyl Acrylate	55	4.826	4.811	(1.034)	3851663	500.000	530(A)
	126	Methyl cyclohexane	83	4.826	4.811	(1.034)	3974208	500.000	510(A)
	23	1,2-Dichloropropane	63	5.370	5.363	(1.150)	2150232	500.000	490
	109	Dibromomethane	93	5.263	5.256	(1.127)	1403186	500.000	490
	95	1,4-Dioxane	88	5.692	5.692	(1.219)	8165	300.000	330(A)
	146	Methyl methacrylate	69	5.678	5.671	(1.216)	1424990	500.000	570(A)
	64	Propyl Acetate	43	5.850	5.850	(1.253)	6294104	1000.00	1100(A)
	22	Bromodichloromethane	83	5.456	5.456	(1.169)	3027502	500.000	520(A)
	30	2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.316)	1263298	500.000	500
	118	Epichlorohydrin	57	6.495	6.488	(1.391)	5049011	10000.0	11000(A)
	24	cis-1,3-Dichloropropene	75	6.179	6.172	(1.324)	3442656	500.000	560(A)
	33	4-Methyl-2-Pentanone	43	6.953	6.953	(1.489)	5167226	1000.00	1100(A)
$	37	Toluene-d8 (SUR)	98	6.394	6.387	(0.785)	509480	50.0000	48

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07581.d
Report Date: 28-Mar-2011 15:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	38 Toluene	91	6.459	6.452	(0.793)	8412685	500.000	470
	29 trans-1,3-Dichloropropene	75	6.982	6.975	(0.857)	3156156	500.000	520(A)
	27 1,1,2-Trichloroethane	83	7.146	7.147	(0.878)	1567565	500.000	470
	35 Tetrachloroethene	166	6.903	6.896	(0.848)	2001524	500.000	480
	103 1,3-Dichloropropane	76	7.419	7.419	(0.911)	3147498	500.000	480
	34 2-Hexanone	43	7.834	7.834	(0.962)	3370656	1000.00	1000(A)
	26 Dibromochloromethane	129	7.318	7.319	(0.899)	2235815	500.000	520(A)
	65 Butyl Acetate	43	7.777	7.777	(0.955)	7093548	1000.00	1000(A)
	66 1,2-Dibromoethane	107	7.533	7.526	(0.925)	1859693	500.000	500(A)
*	32 Chlorobenzene-d5	117	8.049	8.049	(1.000)	433509	50.0000	(H)
	39 Chlorobenzene	112	8.063	8.063	(0.990)	5508227	500.000	490
	97 1,1,1,2-Tetrachloroethane	131	8.142	8.135	(1.000)	2356302	500.000	490
	40 Ethylbenzene	106	8.121	8.114	(0.997)	3015873	500.000	490
	43 m+p-Xylene	106	8.257	8.257	(1.014)	8576661	1000.00	1200(A)
	44 o-Xylene	106	8.629	8.629	(1.060)	3980369	500.000	540(A)
	42 Styrene	104	8.679	8.679	(1.066)	6848963	500.000	620(A)
	147 Butyl Acrylate	55	8.837	8.837	(0.883)	4327497	500.000	500
	31 Bromoform	173	8.679	8.679	(1.066)	1805714	500.000	610(A)
	110 Isopropylbenzene	105	8.909	8.909	(1.094)	10170238	500.000	530(A)
$	41 Bromofluorobenzene (SUR)	174	9.123	9.124	(0.912)	173146	50.0000	49
	150 Camphene	93	8.987	8.980	(0.898)	2965372	500.000	490
	107 Bromobenzene	156	9.195	9.188	(0.919)	2431845	500.000	480
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.931)	2972097	500.000	470
	99 1,2,3-Trichloropropane	110	9.410	9.403	(0.941)	861954	500.000	500
	143 trans-1,4-Dichloro-2-butene	53	9.417	9.410	(2.017)	374783	500.000	650(A)
	112 n-Propylbenzene	91	9.245	9.245	(0.924)	11646587	500.000	460
	105 2-Chlorotoluene	91	9.353	9.353	(0.935)	7639289	500.000	510(A)
	106 4-Chlorotoluene	91	9.489	9.489	(0.948)	7220331	500.000	510(A)
	102 1,3,5-Trimethylbenzene	105	9.417	9.410	(0.941)	9618193	500.000	560(A)
	148 Butyl methacrylate	69	9.675	9.675	(0.967)	4058516	500.000	490
	115 tert-Butylbenzene	119	9.661	9.654	(0.966)	8080899	500.000	500(A)
	100 1,2,4-Trimethylbenzene	105	9.718	9.711	(0.971)	9984887	500.000	560(A)
	151 2-Octanone	43	10.119	10.119	(1.011)	3628527	500.000	500(A)
	114 sec-Butylbenzene	105	9.797	9.790	(0.979)	11672325	500.000	500(A)
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	4697392	500.000	490
	153 2-Octanol	45	10.005	10.005	(1.000)	1278869	500.000	490
*	91 1,4-Dichlorobenzene-d4	152	10.005	9.997	(1.000)	223383	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	4766458	500.000	490
	113 p-Isopropyltoluene	119	9.911	9.912	(0.991)	10278822	500.000	500(A)
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	4953194	500.000	500
	117 Benzyl chloride	91	10.227	10.227	(1.022)	14901267	500.000	500
	111 n-Butylbenzene	91	10.227	10.227	(1.022)	14901267	500.000	500
	101 1,2-Dibromo-3-chloropropane	75	10.914	10.907	(1.091)	632041	500.000	500
	152 Camphor	95	11.602	11.595	(1.160)	1714614	2500.00	2400
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.139)	4538343	500.000	580(A)
	94 Hexachlorobutadiene	225	11.380	11.380	(1.137)	2384359	500.000	610(A)
	70 Naphthalene	128	11.623	11.623	(1.162)	10045789	500.000	510(A)

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07581.d
Report Date: 28-Mar-2011 15:20

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
98 1,2,3-Trichlorobenzene	180	11.752	11.752	(1.175)	4245429	500.000	520(A)
M 45 Xylene (Total)	100				12557030	1500.00	1700(A)

QC Flag Legend

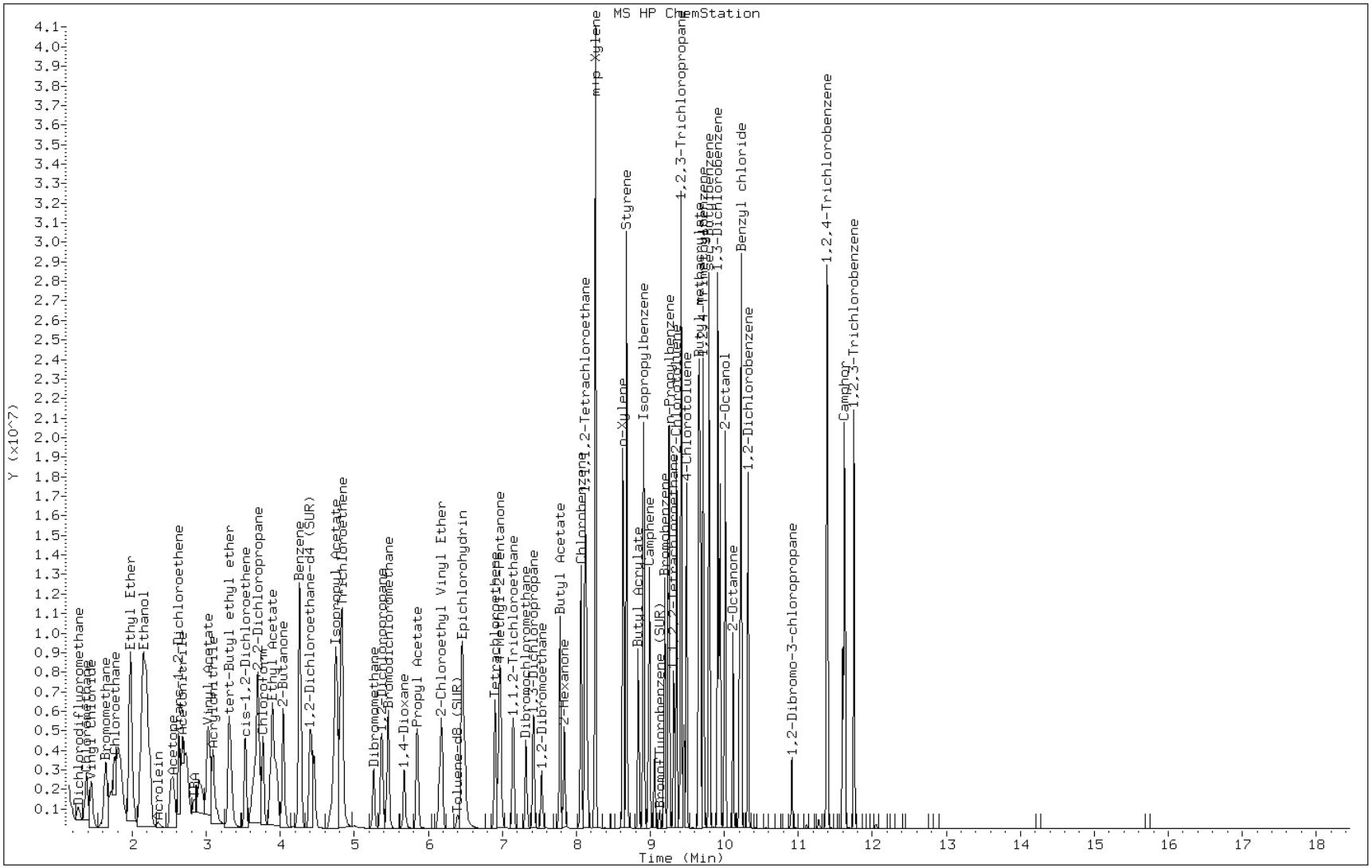
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: d07581.d

Date: 25-MAR-2011 01:23

Client ID: Instrument: VOAMS4.i

Sample Info: IC-VM8LCAL6 Operator: VOAMS 9



Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07588.d
Report Date: 28-Mar-2011 15:20

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07588.d
Lab Smp Id: IC-VM8LCAL1
Inj Date : 25-MAR-2011 04:11
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : IC-VM8LCAL1
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/8260L_10.m
Meth Date : 28-Mar-2011 15:20 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 04:11 Cal File: d07588.d
Als bottle: 16 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				6519	2.00000	2.2
90	Dichlorodifluoromethane	85	1.273	1.266	(0.273)	4121	1.00000	1.0
1	Chloromethane	50	1.352	1.359	(0.290)	7204	1.00000	1.1
4	Vinyl Chloride	62	1.430	1.438	(0.307)	7278	1.00000	1.0
3	Bromomethane	94	1.617	1.624	(0.347)	5490	1.00000	1.0
5	Chloroethane	64	1.674	1.681	(0.359)	6095	1.00000	1.1
9	Trichlorofluoromethane	101	1.810	1.810	(0.388)	12546	1.00000	1.0
121	n-Pentane	72	1.753	1.753	(0.376)	1429	1.00000	1.7
46	Ethyl Ether	59	1.975	1.975	(0.424)	4718	1.00000	1.0
119	Isoprene	67	1.953	1.953	(0.419)	6838	1.00000	1.0
47	Acrolein	56	2.340	2.347	(0.502)	56889	100.000	100
10	1,1-Dichloroethene	96	2.104	2.104	(0.451)	5712	1.00000	1.2
48	Freon TF	101	2.175	2.175	(0.467)	5987	1.00000	0.95(a)
7	Acetone	58	2.555	2.569	(0.548)	5113	10.0000	15

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07588.d
Report Date: 28-Mar-2011 15:20

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	142 Iodomethane	142	2.204	2.211	(0.473)	9523	1.00000	0.99(a)
	8 Carbon Disulfide	76	2.140	2.140	(0.459)	20269	1.00000	1.0
	50 Acetonitrile	41	2.670	2.684	(0.573)	6216	20.0000	24
	125 Methyl acetate	74	2.662	2.655	(0.571)	812	1.00000	1.0
	6 Methylene Chloride	84	2.512	2.512	(0.539)	6147	1.00000	1.9
	155 2-Chloropropane	78	2.118	2.132	(0.454)	1843	1.00000	(a)
	51 TBA	59	2.870	2.834	(0.616)	10713	20.0000	22
	52 Acrylonitrile	53	3.135	3.142	(0.673)	67401	50.0000	50
	12 trans-1,2-Dichloroethene	96	2.620	2.627	(0.562)	2814	1.00000	1.1
	53 MTBE	73	2.727	2.727	(0.585)	10615	1.00000	1.1
	11 1,1-Dichloroethane	63	3.085	3.085	(0.662)	6041	1.00000	1.1
	57 Vinyl Acetate	43	3.013	3.021	(0.647)	6325	1.00000	1.1
	55 DIPE	45	3.021	3.021	(0.648)	11773	1.00000	1.0
	149 tert-Butyl ethyl ether	59	3.293	3.307	(0.706)	10728	1.00000	0.99(a)
	104 2,2-Dichloropropane	77	3.622	3.615	(0.777)	5659	1.00000	1.1
	13 cis-1,2-Dichloroethene	96	3.522	3.522	(0.756)	3705	1.00000	1.1
	18 2-Butanone	72	4.045	4.038	(0.868)	3852	10.0000	7.7(a)
	56 Ethyl Acetate	70	3.895	3.887	(0.836)	467	2.00000	1.5(a)
	108 Bromochloromethane	128	3.687	3.687	(0.791)	1891	1.00000	1.2
	15 Chloroform	83	3.758	3.766	(0.806)	6174	1.00000	1.1
	20 1,1,1-Trichloroethane	97	3.930	3.930	(0.843)	5399	1.00000	1.0
	59 Cyclohexane	56	3.680	3.687	(0.789)	5284	1.00000	0.87(a)
	21 Carbon Tetrachloride	117	3.866	3.866	(0.829)	5467	1.00000	1.1
	92 1,1-Dichloropropene	75	4.031	4.031	(0.865)	4591	1.00000	1.1
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	134861	50.0000	49
	28 Benzene	78	4.260	4.260	(0.914)	12254	1.00000	1.0
	17 1,2-Dichloroethane	62	4.453	4.453	(0.955)	4901	1.00000	1.1
	61 Isopropyl Acetate	43	4.754	4.754	(1.020)	12350	2.00000	1.8(a)
	140 tert-Amylmethyl Ether	73	4.403	4.396	(0.945)	8460	1.00000	0.92(a)
*	69 Fluorobenzene	96	4.661	4.661	(1.000)	426630	50.0000	
	62 n-Heptane	57	4.246	4.253	(0.528)	2047	1.00000	0.86(aM)
	156 2,4,4-Trimethyl-1-pentene	112	4.697	4.711	(1.008)	850	1.00000	0.89(a)
	25 Trichloroethene	95	4.826	4.826	(1.035)	3299	1.00000	1.1
	96 Ethyl Acrylate	55	4.804	4.811	(1.031)	4507	1.00000	0.85(aM)
	126 Methyl cyclohexane	83	4.804	4.811	(1.031)	4774	1.00000	0.84(a)
	23 1,2-Dichloropropane	63	5.363	5.363	(1.151)	3401	1.00000	1.1
	109 Dibromomethane	93	5.255	5.256	(1.128)	2185	1.00000	1.0
	95 1,4-Dioxane	88	5.692	5.692	(1.221)	773	50.0000	43(a)
	146 Methyl methacrylate	69	5.671	5.671	(1.217)	1441	1.00000	0.80(a)
	64 Propyl Acetate	43	5.857	5.850	(1.257)	7161	2.00000	1.7(a)
	22 Bromodichloromethane	83	5.456	5.456	(1.171)	4143	1.00000	0.98(a)
	118 Epichlorohydrin	57	6.488	6.488	(1.392)	5601	20.0000	16(a)
	24 cis-1,3-Dichloropropene	75	6.172	6.172	(1.324)	4155	1.00000	0.92(a)
	33 4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	26779	10.0000	8.0(a)
$	37 Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	335769	50.0000	50
	38 Toluene	91	6.452	6.452	(0.802)	11610	1.00000	1.0
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.867)	3646	1.00000	0.97(a)

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07588.d
Report Date: 28-Mar-2011 15:20

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	27	1,1,2-Trichloroethane	83	7.139	7.147	(0.888)	2223	1.00000	1.1
	35	Tetrachloroethene	166	6.896	6.896	(0.857)	2713	1.00000	1.0
	103	1,3-Dichloropropane	76	7.419	7.419	(0.922)	4334	1.00000	1.1
	34	2-Hexanone	43	7.834	7.834	(0.974)	14418	10.0000	7.1(a)
	26	Dibromochloromethane	129	7.318	7.319	(0.910)	2865	1.00000	1.1
	65	Butyl Acetate	43	7.777	7.777	(0.967)	7270	2.00000	1.7(a)
	66	1,2-Dibromoethane	107	7.533	7.526	(0.937)	2401	1.00000	1.0
*	32	Chlorobenzene-d5	117	8.042	8.049	(1.000)	270761	50.0000	
	39	Chlorobenzene	112	8.056	8.063	(1.002)	7474	1.00000	1.1
	97	1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.012)	3147	1.00000	1.0
	40	Ethylbenzene	106	8.114	8.114	(1.009)	4208	1.00000	1.1
	43	m+p-Xylene	106	8.250	8.257	(1.026)	8397	2.00000	1.8(a)
	44	o-Xylene	106	8.629	8.629	(1.073)	4159	1.00000	0.90(a)
	42	Styrene	104	8.679	8.679	(1.079)	5758	1.00000	0.83(a)
	147	Butyl Acrylate	55	8.837	8.837	(0.884)	8640	1.00000	1.4
	31	Bromoform	173	8.672	8.679	(1.078)	1779	1.00000	0.96(a)
	110	Isopropylbenzene	105	8.909	8.909	(1.108)	10050	1.00000	0.84(a)
$	41	Bromofluorobenzene (SUR)	174	9.124	9.124	(0.913)	106327	50.0000	49
	150	Camphene	93	8.980	8.980	(0.898)	2243	1.00000	0.60(a)
	107	Bromobenzene	156	9.188	9.188	(0.919)	3443	1.00000	1.1
	36	1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	4103	1.00000	1.0(M)
	99	1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	1085	1.00000	1.0
	143	trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	250	1.00000	0.60(a)
	112	n-Propylbenzene	91	9.245	9.245	(0.925)	14928	1.00000	0.95(a)
	105	2-Chlorotoluene	91	9.353	9.353	(0.936)	8566	1.00000	0.94(a)
	106	4-Chlorotoluene	91	9.482	9.489	(0.948)	8165	1.00000	0.95(a)
	102	1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	8576	1.00000	0.81(a)
	148	Butyl methacrylate	69	9.675	9.675	(0.968)	2519	1.00000	0.50(a)
	115	tert-Butylbenzene	119	9.654	9.654	(0.966)	6658	1.00000	0.67(a)
	100	1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	8657	1.00000	0.78(a)
	151	2-Octanone	43	10.119	10.119	(1.012)	4289	1.00000	0.97(a)
	114	sec-Butylbenzene	105	9.790	9.790	(0.979)	11534	1.00000	0.80(a)
	67	1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	6186	1.00000	1.1
	153	2-Octanol	45	10.005	10.005	(1.001)	1128	1.00000	0.70(a)
*	91	1,4-Dichlorobenzene-d4	152	9.997	9.997	(1.000)	137160	50.0000	
	68	1,4-Dichlorobenzene	146	10.005	10.012	(1.001)	7062	1.00000	1.2
	113	p-Isopropyltoluene	119	9.911	9.912	(0.991)	8369	1.00000	0.66(a)
	69	1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	6488	1.00000	1.1
	117	Benzyl chloride	91	10.227	10.227	(1.023)	16247	1.00000	0.88(a)
	111	n-Butylbenzene	91	10.227	10.227	(1.023)	16247	1.00000	0.88(a)
	101	1,2-Dibromo-3-chloropropane	75	10.914	10.907	(1.092)	881	1.00000	1.1
	152	Camphor	95	11.595	11.595	(1.160)	1341	5.00000	3.1(a)
	93	1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	5256	1.00000	1.1
	70	Naphthalene	128	11.623	11.623	(1.163)	11869	1.00000	0.98(a)
	98	1,2,3-Trichlorobenzene	180	11.752	11.752	(1.176)	5403	1.00000	1.1
M	45	Xylene (Total)	100				12556	3.00000	2.7(a)

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07588.d
Report Date: 28-Mar-2011 15:20

QC Flag Legend

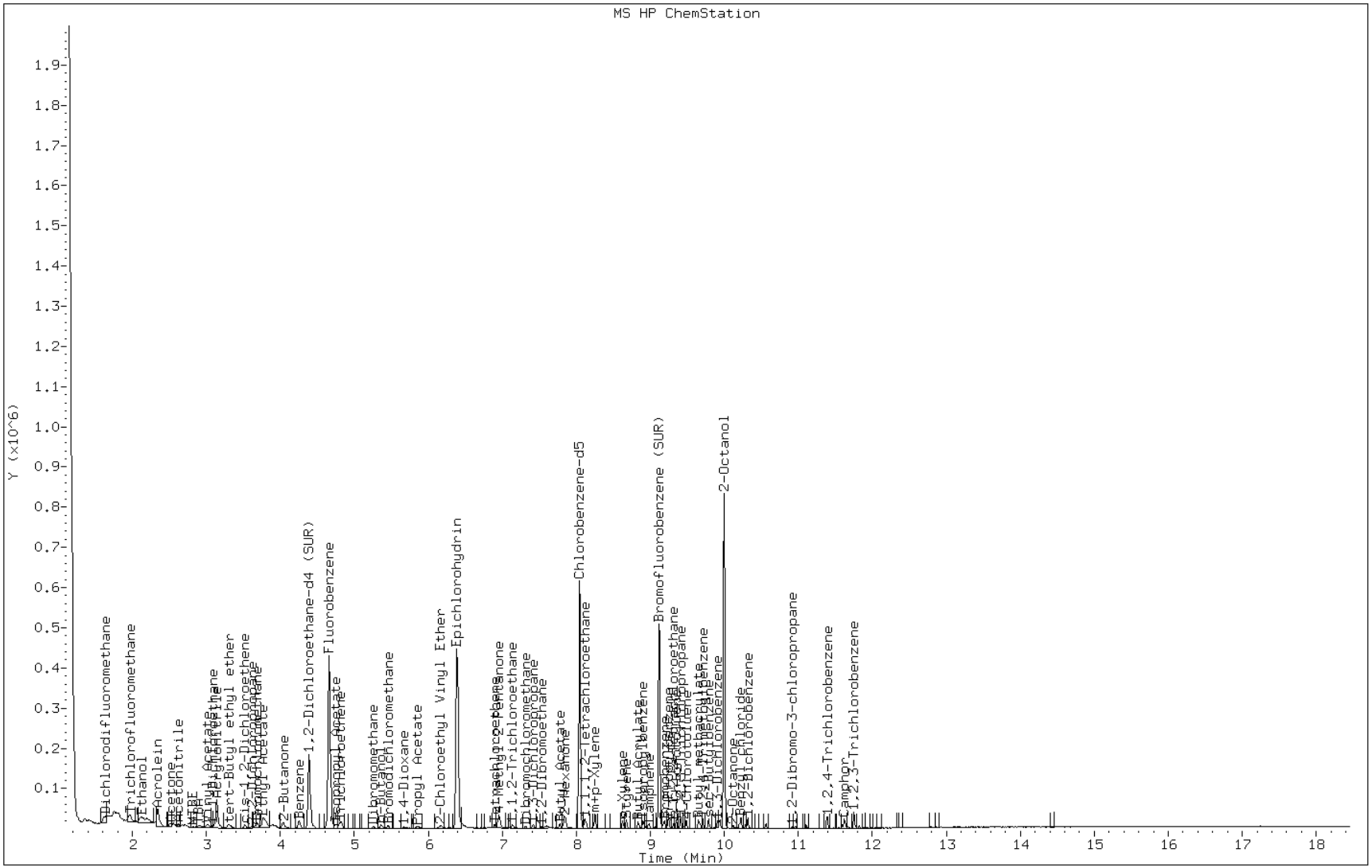
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: d07588.d

Date: 25-MAR-2011 04:11

Client ID: Instrument: VOAMS4.i

Sample Info: IC-VM8LCAL1 Operator: VOAMS 9



Manual Integration Report

Data File: d07588.d
Inj. Date and Time: 25-MAR-2011 04:11
Instrument ID: VOAMS4.i
Client ID:
Compound: 54 Hexane
CAS #: 110-54-3
Report Date: 03/28/2011

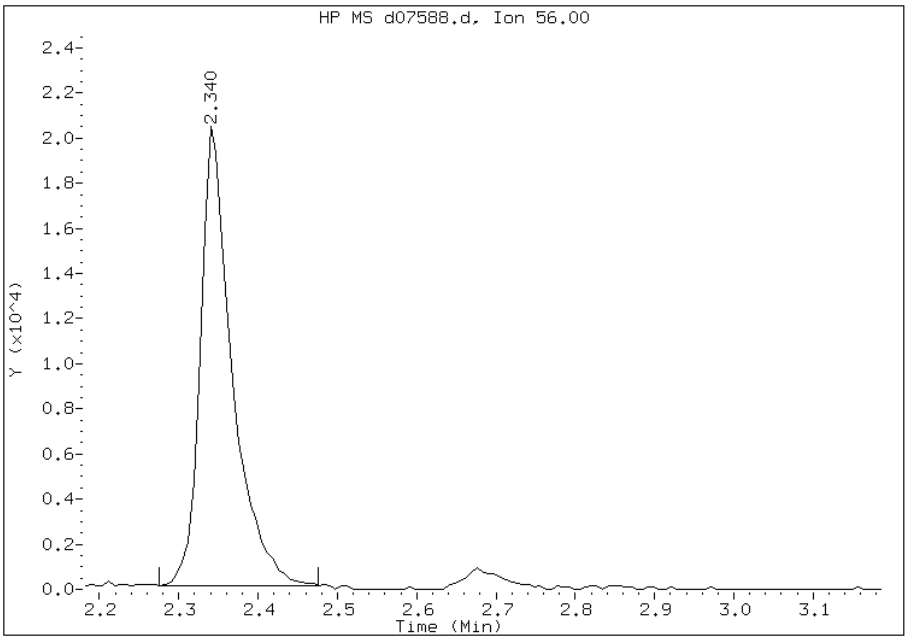
Processing Integration Results

RT: 2.34

Response: 56889

Amount: 24

Conc: 24



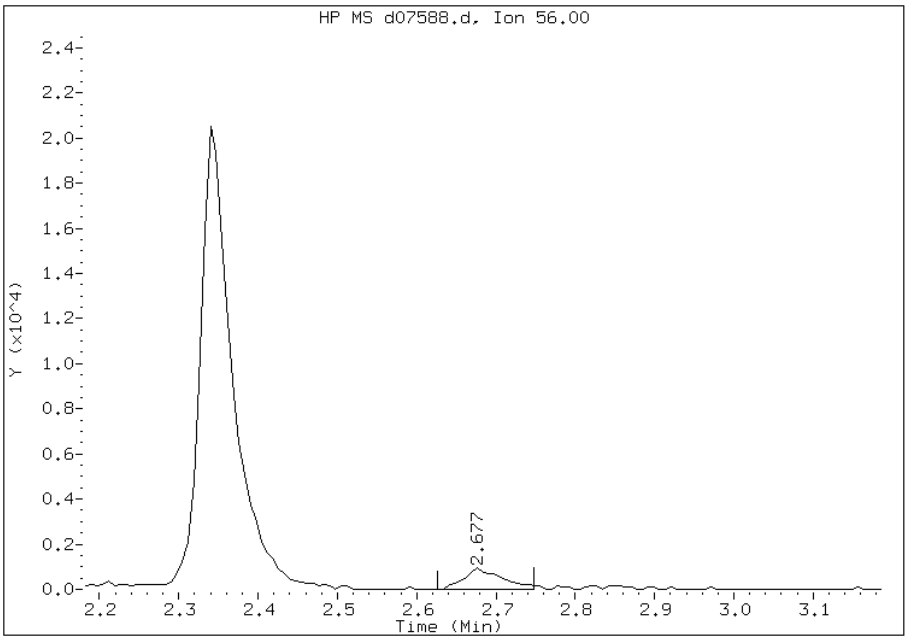
Manual Integration Results

RT: 2.68

Response: 3188

Amount: 1

Conc: 1



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

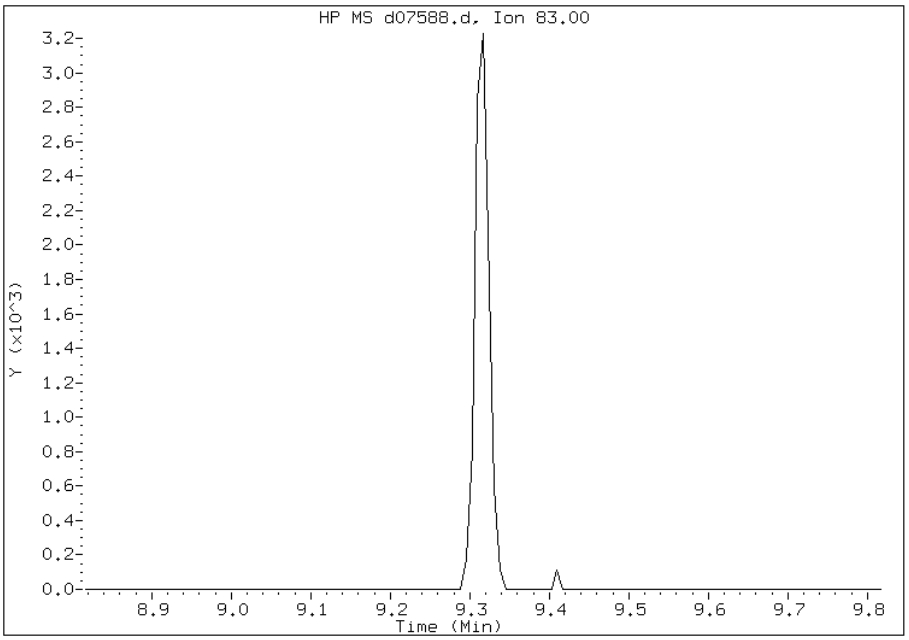
Manual Integration Report

Data File: d07588.d
Inj. Date and Time: 25-MAR-2011 04:11
Instrument ID: VOAMS4.i
Client ID:
Compound: 36 1,1,2,2-Tetrachloroethane
CAS #: 79-34-5
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 9.32



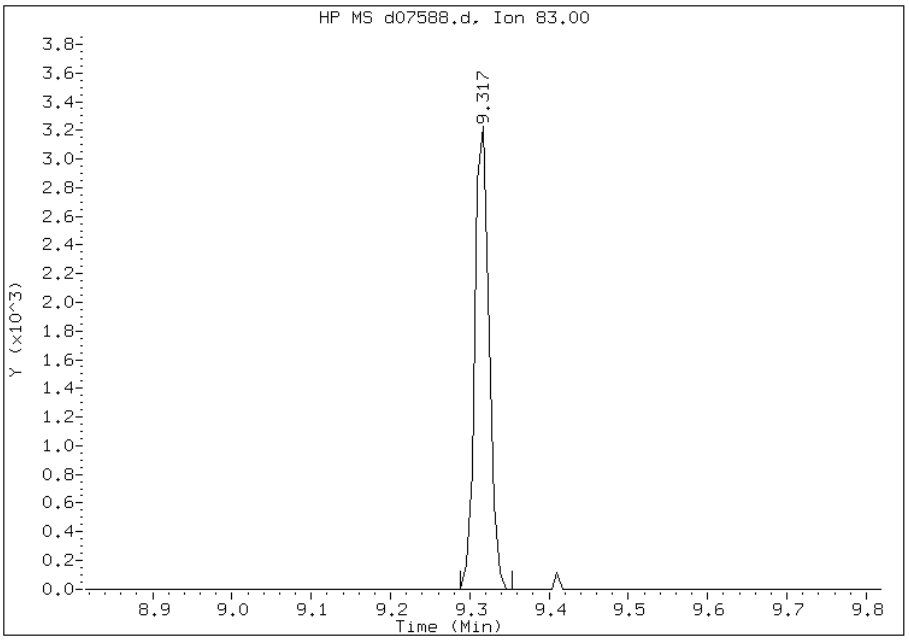
Manual Integration Results

RT: 9.32

Response: 4103

Amount: 1

Conc: 1



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

Manual Integration Report

Data File: d07588.d
Inj. Date and Time: 25-MAR-2011 04:11
Instrument ID: VOAMS4.i
Client ID:
Compound: 62 n-Heptane
CAS #: 142-82-5
Report Date: 03/28/2011

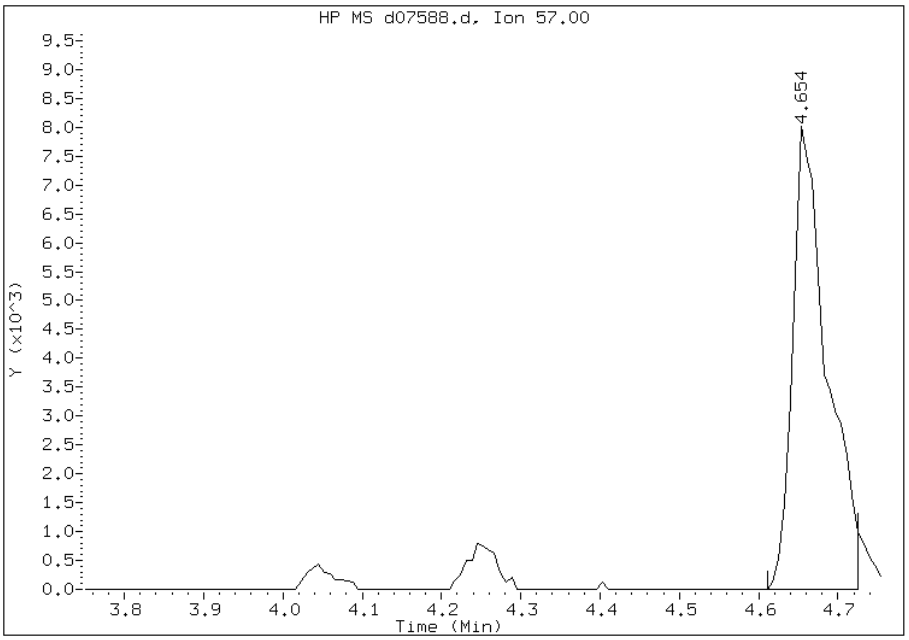
Processing Integration Results

RT: 4.65

Response: 24421

Amount: 4

Conc: 4



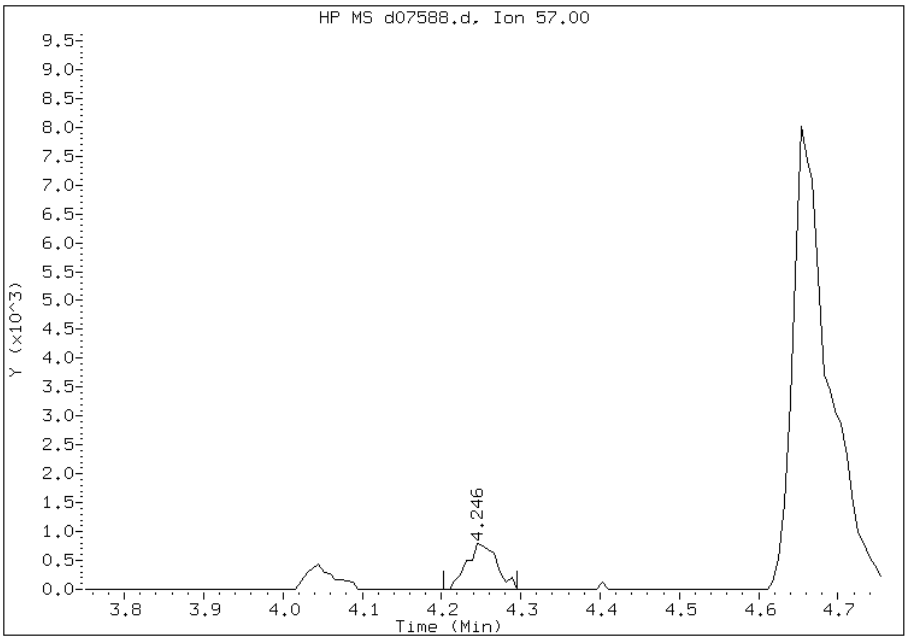
Manual Integration Results

RT: 4.25

Response: 2047

Amount: 1

Conc: 1



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

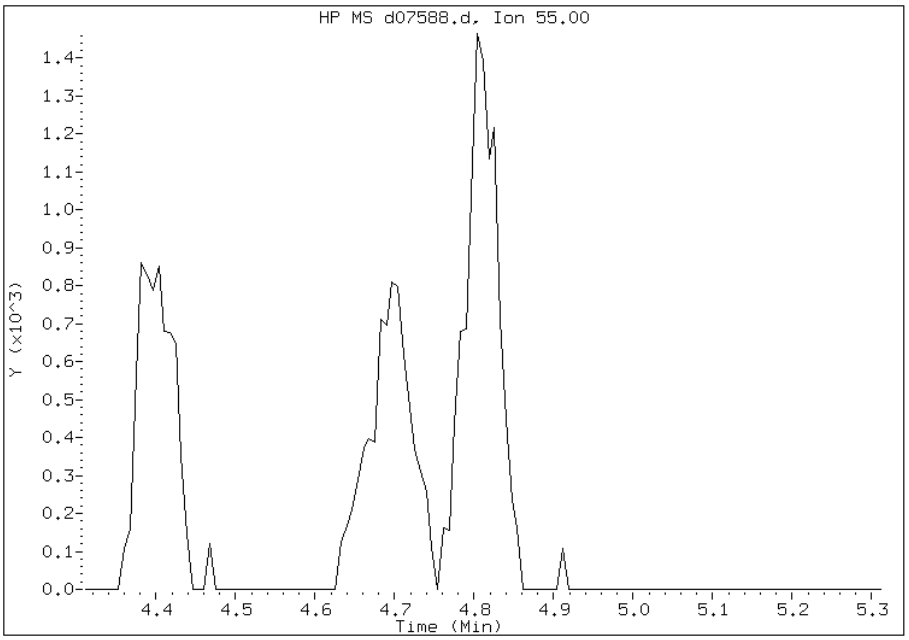
Manual Integration Report

Data File: d07588.d
Inj. Date and Time: 25-MAR-2011 04:11
Instrument ID: VOAMS4.i
Client ID:
Compound: 96 Ethyl Acrylate
CAS #: 140-88-5
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 4.81



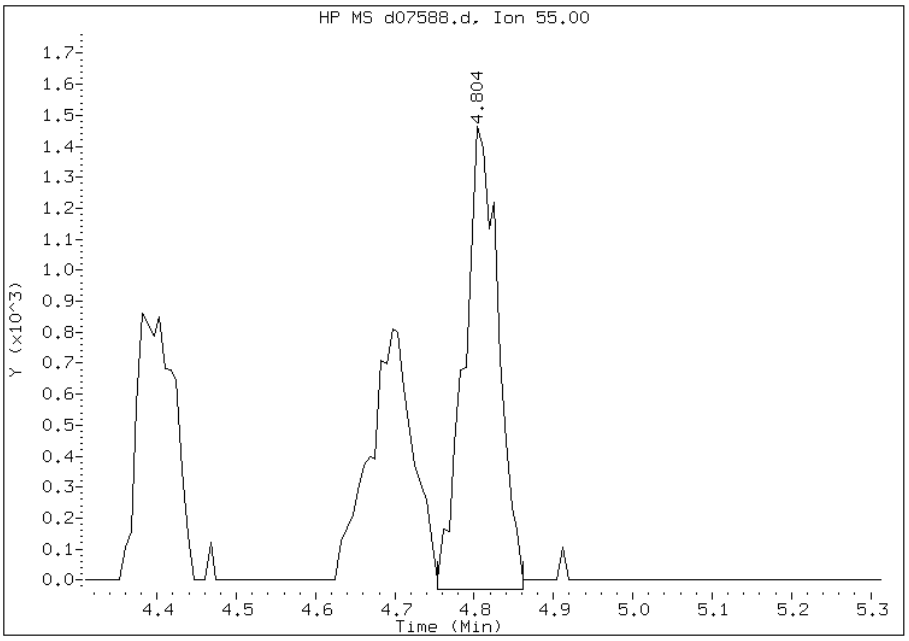
Manual Integration Results

RT: 4.80

Response: 4507

Amount: 1

Conc: 1



Manually Integrated By: vibha
Manual Integration Reason: Analyte Misidentified by the Data System

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68422/2 Calibration Date: 03/24/2011 17:55

Instrument ID: VOAMS12 Calib Start Date: 02/14/2011 18:17

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/15/2011 03:30

Lab File ID: o46590.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3098	0.2377		15.3	20.0	-23.3	50.0
Chloromethane	Ave	0.3325	0.2774	0.1000	16.7	20.0	-16.6	50.0
Vinyl chloride	Ave	0.3179	0.2795		17.6	20.0	-12.1	20.0
Bromomethane	Ave	0.1780	0.2594		29.1	20.0	45.7	50.0
Chloroethane	Ave	0.2196	0.2486		22.6	20.0	13.2	50.0
Trichlorofluoromethane	Ave	0.4973	0.4852		19.5	20.0	-2.4	50.0
n-Pentane	Ave	0.0524	0.0443		16.9	20.0	-15.4	50.0
Ethanol	Ave	0.0010	0.0010		2840	3000	-5.3	50.0
Ethyl ether	Ave	0.1796	0.1747		19.4	20.0	-2.8	50.0
Isopropene	Ave	0.3697	0.3545		19.2	20.0	-4.1	50.0
Acrolein	Ave	0.0154	0.0069		135	300	-55.0	99.0
1,1-Dichloroethene	Ave	0.2425	0.2257		18.6	20.0	-6.9	20.0
Freon TF	Ave	0.2686	0.2840		21.1	20.0	5.7	50.0
Acetone	LinF	0.0513	0.0642		30.0	20.0	50.0	50.0
Iodomethane	Ave	0.3208	0.3197		19.9	20.0	-0.4	50.0
Carbon disulfide	Ave	0.7549	0.6953		18.4	20.0	-7.9	50.0
Isopropanol	Ave	0.0113	0.0114		3030	3000	1.0	50.0
Acetonitrile	Ave	0.0174	0.0214		493	400	23.3	50.0
Methyl acetate	Ave	0.0515	0.0568		22.1	20.0	10.3	50.0
Methylene Chloride	Ave	0.2827	0.2776		19.6	20.0	-1.8	50.0
TBA	Ave	0.0188	0.0189		402	400	0.4	50.0
Acrylonitrile	Ave	0.0638	0.0605		142	150	-5.3	50.0
trans-1,2-Dichloroethene	Ave	0.2930	0.2762		18.9	20.0	-5.7	50.0
MTBE	Ave	0.6457	0.6440		19.9	20.0	-0.3	50.0
Hexane	LinF	0.2018	0.1951		16.9	20.0	-15.4	50.0
1,1-Dichloroethane	Ave	0.4603	0.4385	0.1000	19.0	20.0	-4.8	50.0
DIPE	Ave	0.6880	0.7357		21.4	20.0	6.9	50.0
Vinyl acetate	Ave	0.5097	0.4454		17.5	20.0	-12.6	50.0
Tert-butyl ethyl ether	Ave	0.7231	0.7019	0.0100	19.4	20.0	-2.9	50.0
2,2-Dichloropropane	Ave	0.4520	0.4202		18.6	20.0	-7.0	50.0
cis-1,2-Dichloroethene	Ave	0.3312	0.3210		19.4	20.0	-3.1	50.0
2-Butanone	Ave	0.0258	0.0277		21.4	20.0	7.2	50.0
Ethyl acetate	Ave	0.0200	0.0182		36.2	40.0	-9.4	50.0
Bromochloromethane	Ave	0.1489	0.1467		19.7	20.0	-1.5	50.0
Chloroform	Ave	0.4984	0.4797		19.3	20.0	-3.7	20.0
1,1,1-Trichloroethane	Ave	0.4627	0.4350		18.8	20.0	-6.0	50.0
Cyclohexane	LinF	0.4237	0.4182		17.1	20.0	-14.3	50.0
1,1-Dichloropropene	Ave	0.4115	0.3716		18.1	20.0	-9.7	50.0
Carbon tetrachloride	Ave	0.3825	0.3643		19.0	20.0	-4.8	50.0
Benzene	Ave	1.164	1.112		19.1	20.0	-4.5	50.0
1,2-Dichloroethane	Ave	0.3183	0.2996		18.8	20.0	-5.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68422/2 Calibration Date: 03/24/2011 17:55

Instrument ID: VOAMS12 Calib Start Date: 02/14/2011 18:17

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/15/2011 03:30

Lab File ID: o46590.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isopropyl acetate	Ave	0.3885	0.3721		38.3	40.0	-4.2	50.0
Tert-amyl methyl ether	Ave	0.6472	0.6414		19.8	20.0	-0.9	50.0
2,4,4-Trimethyl-1-pentene	Ave	0.1320	0.1534		23.2	20.0	16.2	50.0
n-Butanol	QuaF	0.0025	0.0024		1500	1500	0.0	50.0
Trichloroethene	Ave	0.3161	0.2993		18.9	20.0	-5.3	50.0
Ethyl acrylate	LinF	0.2145	0.1991		15.8	20.0	-21.1	50.0
Methylcyclohexane	LinF	0.5180	0.5339		17.5	20.0	-12.7	50.0
1,2-Dichloropropane	Ave	0.2568	0.2504		19.5	20.0	-2.5	20.0
Dibromomethane	Ave	0.1435	0.1414		19.7	20.0	-1.5	50.0
Methyl methacrylate	Ave	0.1293	0.1230		19.0	20.0	-4.9	50.0
1,4-Dioxane	Ave	0.0028	0.0029		156	150	3.9	50.0
Propyl acetate	Ave	0.2102	0.2097		39.9	40.0	-0.2	50.0
Bromodichloromethane	Ave	0.3362	0.3303		19.7	20.0	-1.7	50.0
2-Chloroethyl vinyl ether	QuaF	0.0367	0.0541		28.1	20.0	40.7	50.0
Epichlorohydrin	Ave	0.0161	0.0158		393	400	-1.7	50.0
cis-1,3-Dichloropropene	Ave	0.4049	0.3904		19.3	20.0	-3.6	50.0
4-Methyl-2-pentanone	Ave	0.1369	0.1292		18.9	20.0	-5.6	50.0
Toluene	Ave	1.954	1.844		18.9	20.0	-5.6	20.0
trans-1,3-Dichloropropene	Ave	0.4976	0.4550		18.3	20.0	-8.6	50.0
1,1,2-Trichloroethane	Ave	0.2398	0.2345		19.6	20.0	-2.2	50.0
Tetrachloroethene	Ave	0.5335	0.5253		19.7	20.0	-1.5	50.0
1,3-Dichloropropane	Ave	0.5147	0.5025		19.5	20.0	-2.4	50.0
2-Hexanone	Ave	0.1331	0.1193		17.9	20.0	-10.3	50.0
Dibromochloromethane	Ave	0.3429	0.3319		19.4	20.0	-3.2	50.0
Butyl acetate	Ave	0.3207	0.3237		40.4	40.0	0.9	50.0
1,2-Dibromoethane	Ave	0.2985	0.2976		19.9	20.0	-0.3	50.0
Chlorobenzene	Ave	1.230	1.203	0.3000	19.6	20.0	-2.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3972	0.3840		19.3	20.0	-3.3	50.0
Ethylbenzene	Ave	0.6626	0.6321		19.1	20.0	-4.6	20.0
m&p-Xylene	Ave	0.8316	0.8137		39.1	40.0	-2.2	50.0
o-Xylene	Ave	0.8039	0.7834		19.5	20.0	-2.5	50.0
Styrene	Ave	1.299	1.268		19.5	20.0	-2.4	50.0
Butyl acrylate	LinF	0.8910	0.8593		15.4	20.0	-22.9	50.0
Bromoform	LinF	0.1996	0.2014	0.1000	16.5	20.0	-17.6	50.0
Isopropylbenzene	Ave	1.959	1.894		19.3	20.0	-3.3	50.0
Camphene, Total	LinF	0.2894	0.2714		16.2	20.0	-19.1	50.0
Monobromobenzene	Ave	1.000	0.9741		19.5	20.0	-2.6	50.0
1,1,2,2-Tetrachloroethane	LinF	0.6082	0.6198	0.3000	17.7	20.0	-11.3	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.2011		19.2	20.0	-4.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.0641	0.0611		19.1	20.0	-4.6	50.0
N-Propylbenzene	Ave	4.663	4.371		18.7	20.0	-6.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68422/2 Calibration Date: 03/24/2011 17:55

Instrument ID: VOAMS12 Calib Start Date: 02/14/2011 18:17

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/15/2011 03:30

Lab File ID: o46590.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chlorotoluene	Ave	2.761	2.520		18.2	20.0	-8.8	50.0
4-Chlorotoluene	Ave	2.920	2.612		17.9	20.0	-10.6	50.0
1,3,5-Trimethylbenzene	Ave	3.424	3.172		18.5	20.0	-7.4	50.0
Butyl Methacrylate	LinF	0.9027	0.8201		14.4	20.0	-27.9	50.0
tert-Butylbenzene	Ave	3.093	2.918		18.9	20.0	-5.7	50.0
1,2,4-Trimethylbenzene	Ave	3.491	3.279		18.8	20.0	-6.1	50.0
sec-Butylbenzene	Ave	4.521	4.368		19.3	20.0	-3.4	50.0
1,3-Dichlorobenzene	Ave	2.039	1.975		19.4	20.0	-3.1	50.0
1,4-Dichlorobenzene	Ave	1.985	1.959		19.7	20.0	-1.3	50.0
p-Isopropyltoluene	Ave	3.899	3.737		19.2	20.0	-4.1	50.0
Benzyl chloride	LinF	1.223	1.153		14.6	20.0	-26.9	50.0
1,2-Dichlorobenzene	Ave	1.826	1.814		19.9	20.0	-0.7	50.0
n-Butylbenzene	Ave	3.468	3.380		19.5	20.0	-2.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1200	0.1057		17.6	20.0	-12.0	50.0
Camphor	Ave	0.0653	0.0537		82.3	100	-17.8	50.0
1,2,4-Trichlorobenzene	Ave	1.490	1.524		20.5	20.0	2.3	50.0
Hexachlorobutadiene	Ave	0.8184	0.8353		20.4	20.0	2.1	50.0
Naphthalene	Ave	2.649	2.555		19.3	20.0	-3.6	50.0
1,2,3-Trichlorobenzene	Ave	1.338	1.332		19.9	20.0	-0.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1838	0.1645		44.7	50.0	-10.5	50.0
Toluene-d8 (Surr)	Ave	1.152	1.049		45.6	50.0	-8.9	50.0
Bromofluorobenzene	Ave	0.7444	0.6920		46.5	50.0	-7.0	50.0

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46590.d
Report Date: 24-Mar-2011 18:45

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46590.d
Lab Smp Id: CCVIS
Inj Date : 24-MAR-2011 17:55
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : CCVIS
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/8260L_10.m
Meth Date : 24-Mar-2011 18:45 eddie Quant Type: ISTD
Cal Date : 15-FEB-2011 03:30 Cal File: o45228.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				218445	40.0000	38
90	Dichlorodifluoromethane	85	0.929	0.929	(0.230)	86945	20.0000	15
1	Chloromethane	50	1.057	1.057	(0.261)	101462	20.0000	17
4	Vinyl Chloride	62	1.094	1.094	(0.270)	102259	20.0000	18
3	Bromomethane	94	1.270	1.270	(0.314)	94906	20.0000	29
5	Chloroethane	64	1.325	1.325	(0.328)	90957	20.0000	23
9	Trichlorofluoromethane	101	1.472	1.472	(0.364)	177502	20.0000	20
121	n-Pentane	72	1.514	1.514	(0.374)	16205	20.0000	17
127	Ethanol	46	1.593	1.593	(0.394)	53797	3000.00	2800
46	Ethyl Ether	59	1.642	1.642	(0.406)	63904	20.0000	19
119	Isoprene	67	1.654	1.654	(0.409)	129668	20.0000	19
47	Acrolein	56	1.715	1.715	(0.424)	38064	300.000	130
10	1,1-Dichloroethene	96	1.776	1.776	(0.439)	82554	20.0000	19
48	Freon TF	101	1.782	1.782	(0.441)	103881	20.0000	21

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46590.d
Report Date: 24-Mar-2011 18:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	7 Acetone	43	1.813	1.813	(0.448)	23498	20.0000	30
	142 Iodomethane	142	1.874	1.874	(0.463)	116937	20.0000	20
	8 Carbon Disulfide	76	1.911	1.911	(0.472)	254350	20.0000	18
	50 Acetonitrile	41	1.996	1.996	(0.494)	156619	400.000	490
	125 Methyl acetate	74	2.020	2.020	(0.500)	20770	20.0000	22
	6 Methylene Chloride	84	2.087	2.087	(0.516)	101555	20.0000	20
	51 TBA	59	2.179	2.179	(0.539)	138163	400.000	400
	52 Acrylonitrile	53	2.252	2.252	(0.557)	165847	150.000	140
	12 trans-1,2-Dichloroethene	96	2.270	2.270	(0.561)	101031	20.0000	19
	53 MTBE	73	2.276	2.276	(0.563)	235590	20.0000	20
	49 Isopropanol	45	1.911	1.911	(0.472)	627389	3000.00	3000
	54 Hexane	56	2.459	2.459	(0.608)	71377	20.0000	17
	11 1,1-Dichloroethane	63	2.563	2.563	(0.634)	160400	20.0000	19
	57 Vinyl Acetate	43	2.630	2.630	(0.650)	162936	20.0000	17
	55 DIPE	45	2.630	2.630	(0.650)	269146	20.0000	21
	149 tert-Butyl ethyl ether	59	2.910	2.910	(0.720)	256782	20.0000	19
	104 2,2-Dichloropropane	77	3.008	3.008	(0.744)	153734	20.0000	18
	13 cis-1,2-Dichloroethene	96	3.014	3.014	(0.745)	117414	20.0000	19
	18 2-Butanone	72	3.038	3.038	(0.751)	10118	20.0000	21
	56 Ethyl Acetate	70	3.093	3.093	(0.765)	13281	40.0000	36
	108 Bromochloromethane	128	3.209	3.209	(0.793)	53657	20.0000	20
	15 Chloroform	83	3.288	3.288	(0.813)	175500	20.0000	19
	20 1,1,1-Trichloroethane	97	3.435	3.435	(0.849)	159144	20.0000	19
	59 Cyclohexane	56	3.477	3.477	(0.860)	152995	20.0000	17
	21 Carbon Tetrachloride	117	3.581	3.581	(0.885)	133269	20.0000	19
	92 1,1-Dichloropropene	75	3.581	3.581	(0.885)	135952	20.0000	18
$	16 1,2-Dichloroethane-d4 (SUR)	65	3.721	3.721	(0.920)	150469	50.0000	45
	28 Benzene	78	3.770	3.770	(0.932)	406909	20.0000	19
	17 1,2-Dichloroethane	62	3.794	3.794	(0.938)	109582	20.0000	19
	61 Isopropyl Acetate	43	3.886	3.886	(0.961)	272256	40.0000	38
	140 tert-Amylmethyl Ether	73	3.904	3.904	(0.965)	234629	20.0000	20
*	69 Fluorobenzene	96	4.044	4.044	(1.000)	914560	50.0000	
	156 2,4,4-Trimethyl-1-pentene	112	4.380	4.380	(1.083)	56132	20.0000	23
	25 Trichloroethene	95	4.416	4.416	(1.092)	109499	20.0000	19
	63 n-Butanol	43	4.410	4.410	(1.090)	65195	1500.00	1500
	96 Ethyl Acrylate	55	4.575	4.575	(1.131)	72825	20.0000	16
	126 Methyl cyclohexane	83	4.611	4.611	(1.140)	195314	20.0000	17
	23 1,2-Dichloropropane	63	4.654	4.654	(1.151)	91614	20.0000	20
	109 Dibromomethane	93	4.776	4.776	(1.181)	51721	20.0000	20
	95 1,4-Dioxane	88	4.831	4.831	(1.194)	7903	150.000	160
	146 Methyl methacrylate	69	4.825	4.825	(1.193)	44982	20.0000	19
	64 Propyl Acetate	43	4.910	4.910	(1.214)	153427	40.0000	40
	22 Bromodichloromethane	83	4.965	4.965	(1.228)	120824	20.0000	20
	30 2-Chloroethyl Vinyl Ether	63	5.355	5.355	(1.324)	19784	20.0000	28
	118 Epichlorohydrin	57	5.404	5.404	(1.336)	115893	400.000	390
	24 cis-1,3-Dichloropropene	75	5.495	5.495	(1.359)	142804	20.0000	19
	33 4-Methyl-2-Pentanone	43	5.721	5.721	(1.415)	47256	20.0000	19

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46590.d
Report Date: 24-Mar-2011 18:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	37 Toluene-d8 (SUR)	98	5.818	5.818	(0.749)	670630	50.0000	46
	38 Toluene	91	5.898	5.898	(0.759)	471300	20.0000	19
	29 trans-1,3-Dichloropropene	75	6.215	6.215	(0.800)	116289	20.0000	18
	27 1,1,2-Trichloroethane	83	6.440	6.440	(0.829)	59928	20.0000	20
	35 Tetrachloroethene	166	6.599	6.599	(0.849)	134264	20.0000	20
	103 1,3-Dichloropropane	76	6.660	6.660	(0.857)	128432	20.0000	20
	34 2-Hexanone	43	6.836	6.836	(0.880)	30494	20.0000	18
	26 Dibromochloromethane	129	6.952	6.952	(0.895)	84820	20.0000	19
	65 Butyl Acetate	43	7.062	7.062	(0.909)	165443	40.0000	40
	66 1,2-Dibromoethane	107	7.080	7.080	(0.911)	76058	20.0000	20
*	32 Chlorobenzene-d5	117	7.769	7.769	(1.000)	638950	50.0000	
	39 Chlorobenzene	112	7.812	7.812	(1.005)	307500	20.0000	20
	97 1,1,1,2-Tetrachloroethane	131	7.952	7.952	(1.024)	98137	20.0000	19
	40 Ethylbenzene	106	8.013	8.013	(1.031)	161553	20.0000	19
	43 m+p-Xylene	106	8.202	8.202	(1.056)	415922	40.0000	39
	44 o-Xylene	106	8.793	8.793	(1.132)	200228	20.0000	19
	42 Styrene	104	8.824	8.824	(1.136)	324066	20.0000	20
	147 Butyl Acrylate	55	8.879	8.879	(0.773)	119051	20.0000	15
	31 Bromoform	173	9.062	9.062	(1.166)	51474	20.0000	16
	110 Isopropylbenzene	105	9.409	9.409	(1.211)	484125	20.0000	19
$	41 Bromofluorobenzene (SUR)	174	9.616	9.616	(0.838)	239682	50.0000	46
	150 Camphene	41	9.763	9.763	(0.850)	37600	20.0000	16
	107 Bromobenzene	156	9.805	9.805	(0.854)	134943	20.0000	19
	36 1,1,2,2-Tetrachloroethane	83	9.933	9.933	(0.865)	85867	20.0000	18
	99 1,2,3-Trichloropropane	110	9.958	9.958	(0.867)	27864	20.0000	19
	143 trans-1,4-Dichloro-2-butene	53	10.031	10.031	(2.480)	22354	20.0000	19
	112 n-Propylbenzene	91	10.080	10.080	(0.878)	605520	20.0000	19
	105 2-Chlorotoluene	91	10.159	10.159	(0.885)	349048	20.0000	18
	106 4-Chlorotoluene	91	10.348	10.348	(0.901)	361813	20.0000	18
	102 1,3,5-Trimethylbenzene	105	10.403	10.403	(0.906)	439420	20.0000	18
	148 Butyl methacrylate	69	10.683	10.683	(0.930)	113612	20.0000	14
	115 tert-Butylbenzene	119	10.921	10.921	(0.951)	404210	20.0000	19
	100 1,2,4-Trimethylbenzene	105	11.006	11.006	(0.959)	454234	20.0000	19
	114 sec-Butylbenzene	105	11.281	11.281	(0.982)	605086	20.0000	19
	67 1,3-Dichlorobenzene	146	11.372	11.372	(0.990)	273621	20.0000	19
*	91 1,4-Dichlorobenzene-d4	152	11.482	11.482	(1.000)	346343	50.0000	
	68 1,4-Dichlorobenzene	146	11.512	11.512	(1.003)	271399	20.0000	20
	113 p-Isopropyltoluene	119	11.524	11.524	(1.004)	517741	20.0000	19
	69 1,2-Dichlorobenzene	146	11.988	11.988	(1.044)	251248	20.0000	20
	117 Benzyl chloride	91	11.726	11.726	(1.021)	159748	20.0000	15
	111 n-Butylbenzene	91	12.055	12.055	(1.050)	468285	20.0000	19
	101 1,2-Dibromo-3-chloropropane	75	12.872	12.872	(1.121)	14639	20.0000	18
	152 Camphor	95	13.555	13.555	(1.181)	37210	100.000	82
	93 1,2,4-Trichlorobenzene	180	13.646	13.646	(1.188)	211104	20.0000	20
	94 Hexachlorobutadiene	225	13.817	13.817	(1.203)	115720	20.0000	20
	70 Naphthalene	128	13.841	13.841	(1.205)	353893	20.0000	19
	98 1,2,3-Trichlorobenzene	180	14.048	14.048	(1.224)	184580	20.0000	20

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46590.d
Report Date: 24-Mar-2011 18:45

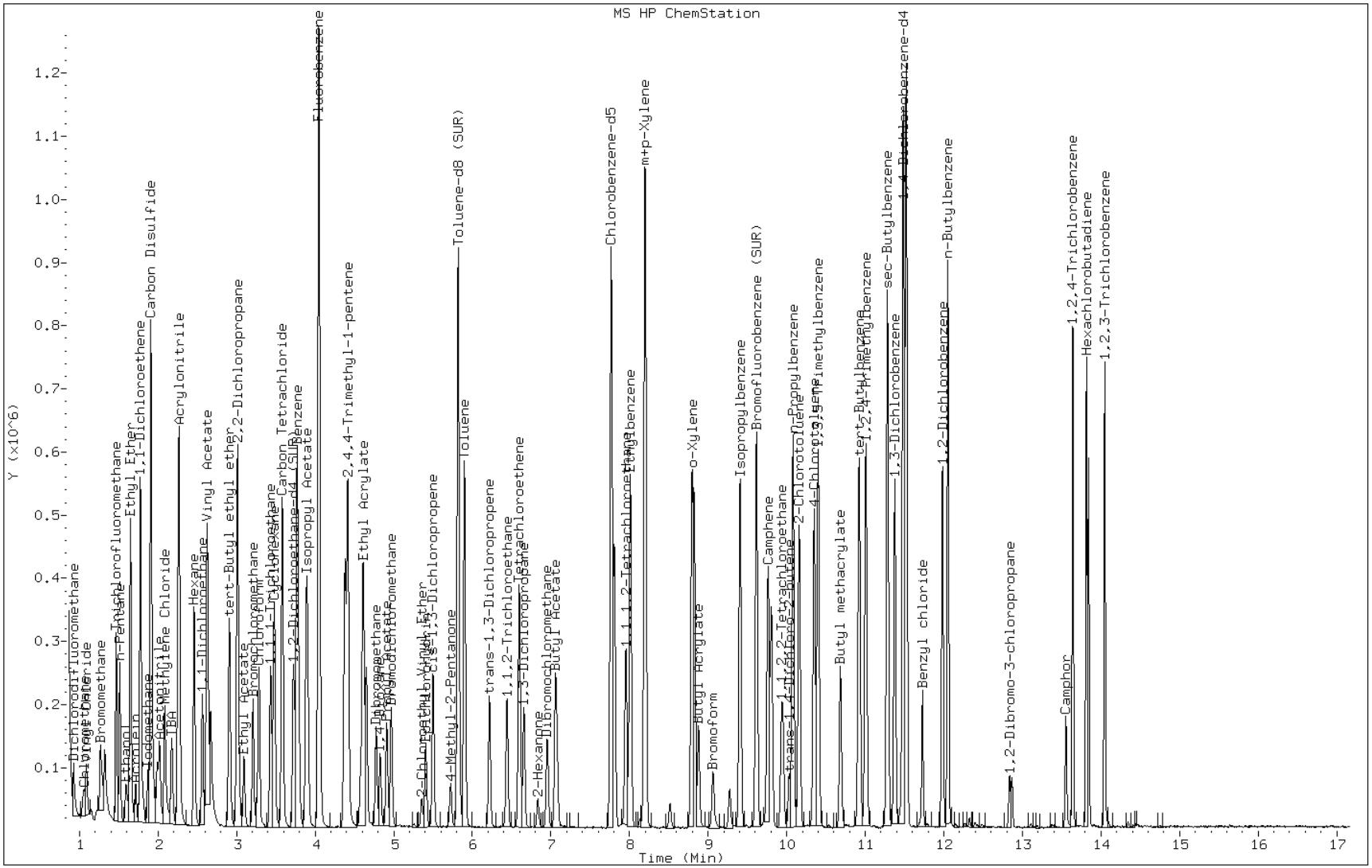
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 45 Xylene (Total)	100				616151	60.0000	59

Data File: o46590.d

Date: 24-MAR-2011 17:55

Client ID: Instrument: VOAMS12.i

Sample Info: CCVIS Operator: VOAMS 9



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68543/6 Calibration Date: 03/25/2011 19:43

Instrument ID: VOAMS4 Calib Start Date: 03/24/2011 23:48

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/25/2011 04:11

Lab File ID: d07620.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4637	0.3995		17.2	20.0	-13.8	50.0
Chloromethane	Ave	0.7933	0.7320	0.1000	18.5	20.0	-7.7	50.0
Vinyl chloride	Ave	0.8378	0.7686		18.3	20.0	-8.3	20.0
Bromomethane	Ave	0.6386	0.6955		21.8	20.0	8.9	50.0
Chloroethane	Ave	0.6236	0.6111		19.6	20.0	-2.0	50.0
n-Pentane	LinF	0.1397	0.1198		24.1	20.0	20.7	50.0
Trichlorofluoromethane	Ave	1.466	1.377		18.8	20.0	-6.1	50.0
Isopropene	LinF	0.8769	0.8469		21.9	20.0	9.5	50.0
Ethyl ether	Ave	0.5339	0.5810		21.8	20.0	8.8	50.0
1,1-Dichloroethene	Ave	0.5738	0.5209		18.2	20.0	-9.2	20.0
Carbon disulfide	Ave	2.374	2.381		20.1	20.0	0.3	50.0
Freon TF	Ave	0.7366	0.6603		17.9	20.0	-10.4	50.0
Iodomethane	Ave	1.128	1.204		21.3	20.0	6.7	50.0
Acrolein	Ave	0.0639	0.0678		319	300	6.2	99.0
Methylene Chloride	LinF	0.4553	0.4649		24.3	20.0	21.7	50.0
Acetone	QuaF	0.0469	0.0538		27.1	20.0	35.3	50.0
trans-1,2-Dichloroethene	Ave	0.3104	0.3363		21.7	20.0	8.4	50.0
Methyl acetate	Ave	0.0927	0.0983		21.2	20.0	6.0	50.0
Acetonitrile	LinF	0.0358	0.0362		472	400	18.0	50.0
Hexane	LinF	0.3328	0.3180		23.0	20.0	14.8	50.0
MTBE	Ave	1.161	1.275		22.0	20.0	9.8	50.0
TBA	Ave	0.0560	0.0604		431	400	7.7	50.0
DIPE	Ave	1.347	1.469		21.8	20.0	9.1	50.0
Vinyl acetate	Ave	0.6877	0.7370		21.4	20.0	7.2	50.0
1,1-Dichloroethane	Ave	0.6495	0.6950	0.1000	21.4	20.0	7.0	50.0
Acrylonitrile	Ave	0.1574	0.1684		161	150	7.0	50.0
Tert-butyl ethyl ether	Ave	1.264	1.351	0.0100	21.4	20.0	6.9	50.0
cis-1,2-Dichloroethene	Ave	0.3784	0.4036		21.3	20.0	6.7	50.0
2,2-Dichloropropane	Ave	0.5954	0.5929		19.9	20.0	-0.4	50.0
Bromochloromethane	Ave	0.1899	0.2029		21.4	20.0	6.8	50.0
Cyclohexane	Ave	0.7084	0.6625		18.7	20.0	-6.5	50.0
Chloroform	Ave	0.6757	0.7075		20.9	20.0	4.7	20.0
Carbon tetrachloride	Ave	0.6013	0.5577		18.5	20.0	-7.3	50.0
Ethyl acetate	Ave	0.0367	0.0395		43.0	40.0	7.6	50.0
1,1,1-Trichloroethane	Ave	0.6168	0.5905		19.1	20.0	-4.3	50.0
1,1-Dichloropropene	Ave	0.4744	0.4413		18.6	20.0	-7.0	50.0
2-Butanone	Ave	0.0587	0.0716		24.4	20.0	22.0	50.0
n-Heptane	Ave	0.4372	0.4205		19.2	20.0	-3.8	50.0
Benzene	Ave	1.388	1.443		20.8	20.0	4.0	50.0
Tert-amyl methyl ether	Ave	1.073	1.179		22.0	20.0	9.9	50.0
1,2-Dichloroethane	Ave	0.5185	0.5277		20.4	20.0	1.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68543/6 Calibration Date: 03/25/2011 19:43

Instrument ID: VOAMS4 Calib Start Date: 03/24/2011 23:48

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/25/2011 04:11

Lab File ID: d07620.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,4-Trimethyl-1-pentene	Ave	0.1114	0.1024		18.4	20.0	-8.1	50.0
Isopropyl acetate	Ave	0.8068	0.8091		40.1	40.0	0.3	50.0
Ethyl acrylate	Ave	0.6196	0.5669		18.3	20.0	-8.5	50.0
Methylcyclohexane	Ave	0.6638	0.6203		18.7	20.0	-6.6	50.0
Trichloroethene	Ave	0.3606	0.3444		19.1	20.0	-4.5	50.0
Dibromomethane	Ave	0.2421	0.2488		20.5	20.0	2.7	50.0
1,2-Dichloropropane	Ave	0.3759	0.3805		20.2	20.0	1.2	20.0
Bromodichloromethane	Ave	0.4967	0.5005		20.2	20.0	0.8	50.0
Methyl methacrylate	Ave	0.2122	0.2116		19.9	20.0	-0.3	50.0
1,4-Dioxane	Ave	0.0021	0.0025		179	150	19.2	50.0
Propyl acetate	Ave	0.4987	0.4901		39.3	40.0	-1.7	50.0
2-Chloroethyl vinyl ether	QuaF	0.1808	0.1813		17.2	20.0	-13.9	50.0
cis-1,3-Dichloropropene	Ave	0.5260	0.5425		20.6	20.0	3.1	50.0
Toluene	Ave	2.052	2.167		21.1	20.0	5.6	20.0
Epichlorohydrin	Ave	0.0401	0.0397		396	400	-1.0	50.0
Tetrachloroethene	Ave	0.4854	0.4808		19.8	20.0	-1.0	50.0
4-Methyl-2-pentanone	Ave	0.3915	0.3831		19.6	20.0	-2.1	50.0
trans-1,3-Dichloropropene	Ave	0.6968	0.7513		21.6	20.0	7.8	50.0
1,1,2-Trichloroethane	Ave	0.3817	0.4086		21.4	20.0	7.0	50.0
Dibromochloromethane	Ave	0.4987	0.5133		20.6	20.0	2.9	50.0
1,3-Dichloropropane	Ave	0.7484	0.7810		20.9	20.0	4.3	50.0
1,2-Dibromoethane	Ave	0.4281	0.4569		21.3	20.0	6.7	50.0
Butyl acetate	Ave	0.7783	0.7833		40.3	40.0	0.6	50.0
2-Hexanone	Ave	0.3737	0.4079		21.8	20.0	9.1	50.0
Chlorobenzene	Ave	1.290	1.345	0.3000	20.9	20.0	4.3	50.0
Ethylbenzene	Ave	0.7059	0.6975		19.8	20.0	-1.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5553	0.5824		21.0	20.0	4.9	50.0
m&p-Xylene	Ave	0.8589	0.8651		40.3	40.0	0.7	50.0
o-Xylene	Ave	0.8498	0.8942		21.0	20.0	5.2	50.0
Bromoform	Ave	0.3419	0.3424	0.1000	20.0	20.0	0.2	50.0
Styrene	Ave	1.284	1.350		21.0	20.0	5.1	50.0
Butyl acrylate	QuaF	2.160	1.947		17.4	20.0	-13.2	50.0
Isopropylbenzene	Ave	2.204	2.257		20.5	20.0	2.4	50.0
Camphene, Total	LinF	1.251	1.201		17.8	20.0	-11.2	50.0
Monobromobenzene	Ave	1.121	1.124		20.1	20.0	0.3	50.0
N-Propylbenzene	Ave	5.709	5.542		19.4	20.0	-2.9	50.0
1,1,2,2-Tetrachloroethane	Ave	1.416	1.413	0.3000	20.0	20.0	-0.2	50.0
2-Chlorotoluene	Ave	3.334	3.385		20.3	20.0	1.5	50.0
1,2,3-Trichloropropane	Ave	0.3888	0.3759		19.3	20.0	-3.3	50.0
1,3,5-Trimethylbenzene	Ave	3.877	3.903		20.1	20.0	0.7	50.0
trans-1,4-Dichloro-2-butene	LinF	0.0445	0.0456		18.5	20.0	-7.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68543/6 Calibration Date: 03/25/2011 19:43

Instrument ID: VOAMS4 Calib Start Date: 03/24/2011 23:48

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 03/25/2011 04:11

Lab File ID: d07620.d Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorotoluene	Ave	3.143	3.289		20.9	20.0	4.7	50.0
tert-Butylbenzene	LinF	3.053	2.957		16.4	20.0	-17.9	50.0
Butyl Methacrylate	LinF	1.526	1.544		16.8	20.0	-15.9	50.0
1,2,4-Trimethylbenzene	Ave	4.021	4.087		20.3	20.0	1.6	50.0
sec-Butylbenzene	Ave	5.250	5.097		19.4	20.0	-2.9	50.0
p-Isopropyltoluene	LinF	4.107	4.012		17.4	20.0	-13.1	50.0
1,3-Dichlorobenzene	Ave	2.126	2.230		21.0	20.0	4.9	50.0
2-Octanol	LinF	0.4844	0.4102		14.0	20.0	-29.9	50.0
1,4-Dichlorobenzene	Ave	2.186	2.268		20.8	20.0	3.8	50.0
2-Octanone	Ave	1.618	1.507		18.6	20.0	-6.9	50.0
Benzyl chloride	Ave	6.735	6.903		20.5	20.0	2.5	50.0
n-Butylbenzene	Ave	6.735	6.903		20.5	20.0	2.5	50.0
1,2-Dichlorobenzene	Ave	2.228	2.286		20.5	20.0	2.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.2832	0.2622		18.5	20.0	-7.4	50.0
Hexachlorobutadiene	Ave	0.8744	0.7566		17.3	20.0	-13.5	50.0
1,2,4-Trichlorobenzene	Ave	1.764	1.821		20.6	20.0	3.2	50.0
Camphor	LinF	0.1254	0.1113		71.0	100	-29.0	50.0
Naphthalene	Ave	4.417	4.752		21.5	20.0	7.6	50.0
1,2,3-Trichlorobenzene	Ave	1.827	1.864		20.4	20.0	2.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3235	0.3282		50.7	50.0	1.4	50.0
Toluene-d8 (Surr)	Ave	1.235	1.272		51.5	50.0	3.0	50.0
Bromofluorobenzene	Ave	0.7873	0.7624		48.4	50.0	-3.2	50.0

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07620.d
Report Date: 29-Mar-2011 10:50

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07620.d
Lab Smp Id: CCVIS
Inj Date : 25-MAR-2011 19:43
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : CCVIS
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/8260L_10.m
Meth Date : 29-Mar-2011 10:50 delpolit Quant Type: ISTD
Cal Date : 25-MAR-2011 04:11 Cal File: d07588.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 14	1,2-Dichloroethene (total)	100				127046	40.0000	43
90	Dichlorodifluoromethane	85	1.280	1.280	(0.275)	68595	20.0000	17
1	Chloromethane	50	1.366	1.366	(0.293)	125673	20.0000	18
4	Vinyl Chloride	62	1.445	1.445	(0.310)	131969	20.0000	18
3	Bromomethane	94	1.631	1.631	(0.350)	119405	20.0000	22
5	Chloroethane	64	1.688	1.688	(0.362)	104922	20.0000	20
9	Trichlorofluoromethane	101	1.824	1.824	(0.391)	236392	20.0000	19
121	n-Pentane	72	1.760	1.760	(0.378)	20574	20.0000	24
46	Ethyl Ether	59	1.982	1.982	(0.425)	99758	20.0000	22
119	Isoprene	67	1.968	1.968	(0.422)	145412	20.0000	22
47	Acrolein	56	2.347	2.347	(0.504)	174642	300.000	320
10	1,1-Dichloroethene	96	2.118	2.118	(0.454)	89428	20.0000	18
48	Freon TF	101	2.183	2.183	(0.468)	113362	20.0000	18
7	Acetone	58	2.569	2.569	(0.551)	9241	20.0000	27

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07620.d
Report Date: 29-Mar-2011 10:50

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
142	Iodomethane	142	2.225	2.225	(0.477)	206685	20.0000	21
8	Carbon Disulfide	76	2.154	2.154	(0.462)	408859	20.0000	20
50	Acetonitrile	41	2.684	2.684	(0.576)	124162	400.000	470
125	Methyl acetate	74	2.655	2.655	(0.570)	16875	20.0000	21
6	Methylene Chloride	84	2.526	2.526	(0.542)	79822	20.0000	24
51	TBA	59	2.842	2.842	(0.610)	207265	400.000	430
52	Acrylonitrile	53	3.142	3.142	(0.674)	216838	150.000	160
12	trans-1,2-Dichloroethene	96	2.627	2.627	(0.564)	57747	20.0000	22
53	MTBE	73	2.734	2.734	(0.587)	218895	20.0000	22
54	Hexane	56	2.684	2.684	(0.576)	54603	20.0000	23
11	1,1-Dichloroethane	63	3.092	3.092	(0.663)	119321	20.0000	21
57	Vinyl Acetate	43	3.021	3.021	(0.648)	126534	20.0000	21
55	DIPE	45	3.021	3.021	(0.648)	252281	20.0000	22
149	tert-Butyl ethyl ether	59	3.307	3.307	(0.710)	232029	20.0000	21
104	2,2-Dichloropropane	77	3.622	3.622	(0.777)	101793	20.0000	20
13	cis-1,2-Dichloroethene	96	3.529	3.529	(0.757)	69299	20.0000	21
18	2-Butanone	72	4.038	4.038	(0.866)	12295	20.0000	24
56	Ethyl Acetate	70	3.894	3.894	(0.836)	13551	40.0000	43
108	Bromochloromethane	128	3.687	3.687	(0.791)	34831	20.0000	21
15	Chloroform	83	3.766	3.766	(0.808)	121468	20.0000	21
20	1,1,1-Trichloroethane	97	3.930	3.930	(0.843)	101376	20.0000	19
59	Cyclohexane	56	3.694	3.694	(0.793)	113750	20.0000	19
21	Carbon Tetrachloride	117	3.873	3.873	(0.831)	95757	20.0000	18
92	1,1-Dichloropropene	75	4.038	4.038	(0.866)	75772	20.0000	19
$ 16	1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	140894	50.0000	51
28	Benzene	78	4.260	4.260	(0.914)	247735	20.0000	21
17	1,2-Dichloroethane	62	4.453	4.453	(0.955)	90596	20.0000	20
61	Isopropyl Acetate	43	4.754	4.754	(1.020)	277821	40.0000	40
140	tert-Amylmethyl Ether	73	4.403	4.403	(0.945)	202458	20.0000	22
* 69	Fluorobenzene	96	4.661	4.661	(1.000)	429233	50.0000	
62	n-Heptane	57	4.253	4.253	(0.529)	46676	20.0000	19
156	2,4,4-Trimethyl-1-pentene	112	4.704	4.704	(1.009)	17574	20.0000	18
25	Trichloroethene	95	4.826	4.826	(1.035)	59129	20.0000	19
96	Ethyl Acrylate	55	4.811	4.811	(1.032)	97340	20.0000	18
126	Methyl cyclohexane	83	4.811	4.811	(1.032)	106496	20.0000	19
23	1,2-Dichloropropane	63	5.363	5.363	(1.151)	65328	20.0000	20
109	Dibromomethane	93	5.255	5.255	(1.128)	42711	20.0000	20
95	1,4-Dioxane	88	5.692	5.692	(1.221)	3233	150.000	180
146	Methyl methacrylate	69	5.671	5.671	(1.217)	36327	20.0000	20
64	Propyl Acetate	43	5.843	5.843	(1.254)	168284	40.0000	39
22	Bromodichloromethane	83	5.456	5.456	(1.171)	85934	20.0000	20
30	2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.318)	31130	20.0000	17
118	Epichlorohydrin	57	6.487	6.487	(1.392)	136348	400.000	400
24	cis-1,3-Dichloropropene	75	6.172	6.172	(1.324)	93135	20.0000	21
33	4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	65776	20.0000	20
$ 37	Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	352971	50.0000	51
38	Toluene	91	6.452	6.452	(0.802)	240578	20.0000	21

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07620.d
Report Date: 29-Mar-2011 10:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.867)	83404	20.0000	22
	27 1,1,2-Trichloroethane	83	7.139	7.139	(0.888)	45355	20.0000	21
	35 Tetrachloroethene	166	6.896	6.896	(0.857)	53371	20.0000	20
	103 1,3-Dichloropropane	76	7.419	7.419	(0.922)	86700	20.0000	21
	34 2-Hexanone	43	7.834	7.834	(0.974)	45277	20.0000	22
	26 Dibromochloromethane	129	7.318	7.318	(0.910)	56989	20.0000	20
	65 Butyl Acetate	43	7.777	7.777	(0.967)	173909	40.0000	40
	66 1,2-Dibromoethane	107	7.526	7.526	(0.936)	50720	20.0000	21
*	32 Chlorobenzene-d5	117	8.042	8.042	(1.000)	277538	50.0000	
	39 Chlorobenzene	112	8.063	8.063	(1.003)	149363	20.0000	21
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.012)	64658	20.0000	21
	40 Ethylbenzene	106	8.114	8.114	(1.009)	77433	20.0000	20
	43 m+p-Xylene	106	8.250	8.250	(1.026)	192078	40.0000	40
	44 o-Xylene	106	8.629	8.629	(1.073)	99267	20.0000	21
	42 Styrene	104	8.679	8.679	(1.079)	149904	20.0000	21
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	113726	20.0000	17
	31 Bromoform	173	8.672	8.672	(1.078)	38011	20.0000	20
	110 Isopropylbenzene	105	8.901	8.901	(1.107)	250530	20.0000	20
$	41 Bromofluorobenzene (SUR)	174	9.123	9.123	(0.913)	111342	50.0000	48
	150 Camphene	93	8.980	8.980	(0.898)	70128	20.0000	18
	107 Bromobenzene	156	9.188	9.188	(0.919)	65645	20.0000	20
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	82545	20.0000	20
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	21960	20.0000	19
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	7825	20.0000	18
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	323725	20.0000	19
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	197706	20.0000	20
	106 4-Chlorotoluene	91	9.489	9.489	(0.949)	192146	20.0000	21
	102 1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	228022	20.0000	20
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	90172	20.0000	17
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	172719	20.0000	16
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	238757	20.0000	20
	151 2-Octanone	43	10.119	10.119	(1.012)	88016	20.0000	19
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	297734	20.0000	19
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	130287	20.0000	21
	153 2-Octanol	45	9.997	9.997	(1.000)	23959	20.0000	14
*	91 1,4-Dichlorobenzene-d4	152	9.997	9.997	(1.000)	146038	50.0000	
	68 1,4-Dichlorobenzene	146	10.012	10.012	(1.001)	132503	20.0000	21
	113 p-Isopropyltoluene	119	9.911	9.911	(0.991)	234349	20.0000	17
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	133551	20.0000	20
	117 Benzyl chloride	91	10.227	10.227	(1.023)	403222	20.0000	20
	111 n-Butylbenzene	91	10.227	10.227	(1.023)	403222	20.0000	20
	101 1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	15315	20.0000	18
	152 Camphor	95	11.595	11.595	(1.160)	32514	100.000	71
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	106345	20.0000	21
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	44196	20.0000	17
	70 Naphthalene	128	11.623	11.623	(1.163)	277592	20.0000	22
	98 1,2,3-Trichlorobenzene	180	11.752	11.752	(1.176)	108914	20.0000	20

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07620.d
Report Date: 29-Mar-2011 10:50

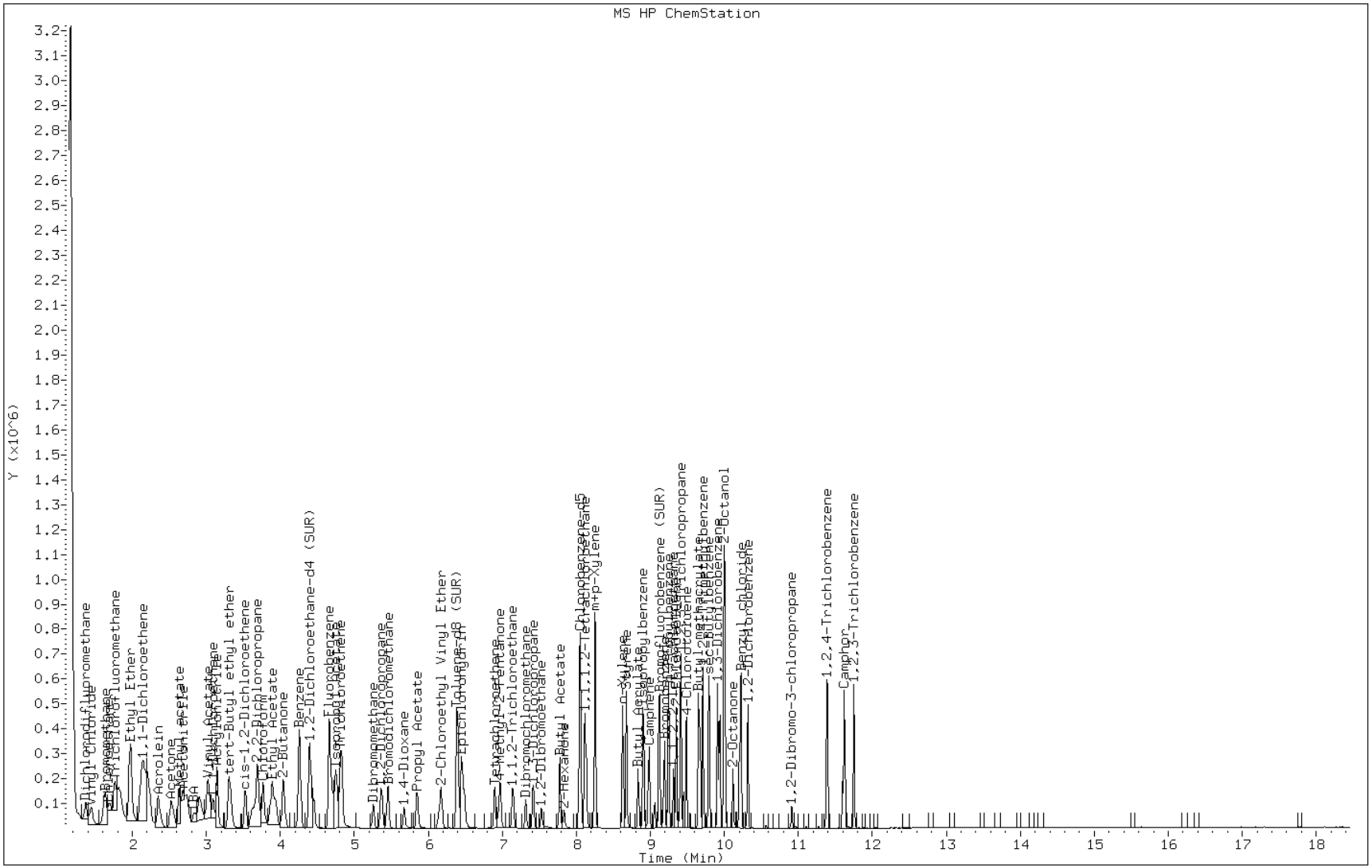
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M 45 Xylene (Total)	100				291345	60.0000	61

Data File: d07620.d

Date: 25-MAR-2011 19:43

Client ID: Instrument: VOAMS4.i

Sample Info: CCVIS Operator: VOAMS 9



Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45212.d
Report Date: 14-Feb-2011 23:26

TestAmerica

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45212.d
Lab Smp Id: BFB
Inj Date : 14-FEB-2011 17:09
Operator : VOAMS 1 Inst ID: VOAMS12.i
Smp Info : BFB
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/VOABFB.m
Meth Date : 29-Oct-2010 21:12 sylvanus Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd2

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

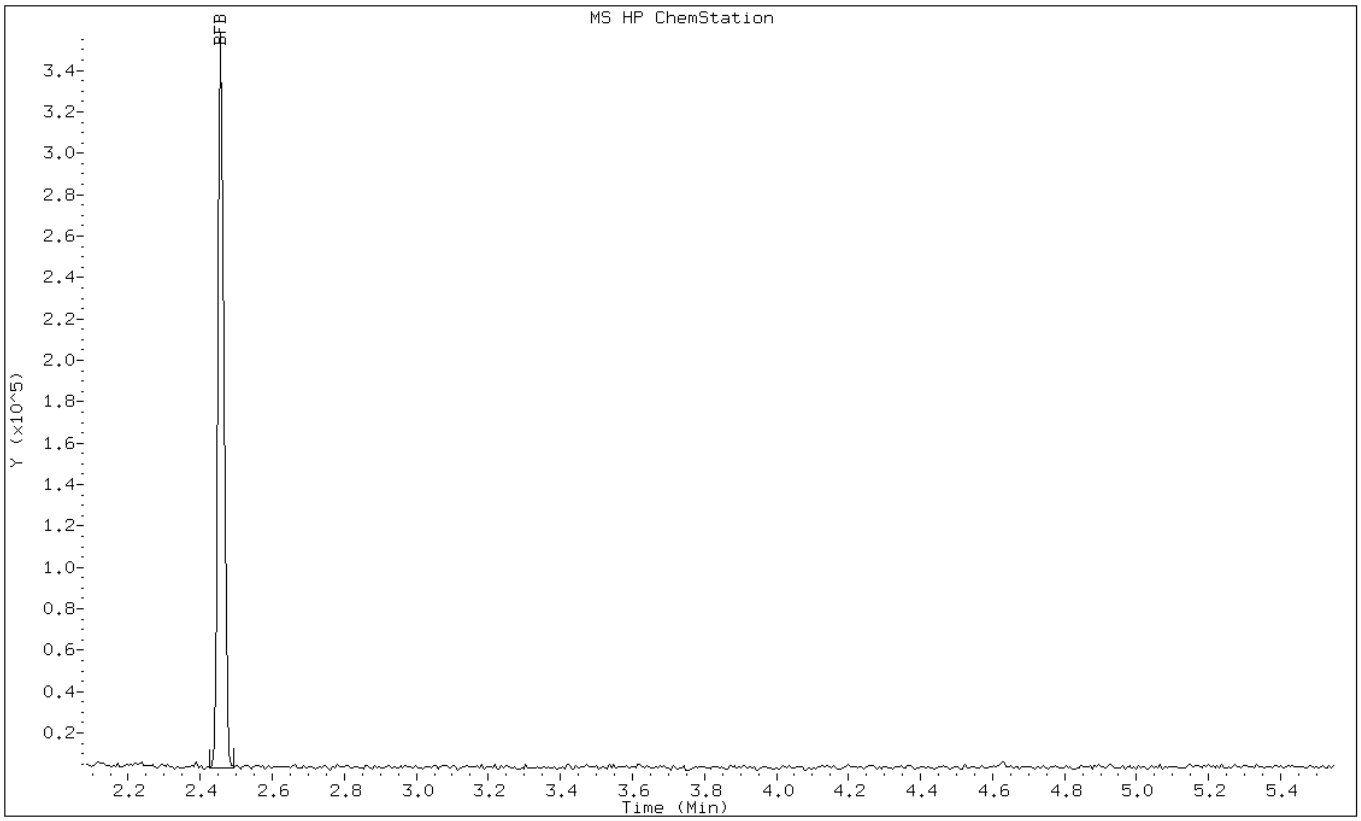
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 BFB					CAS #: 460-00-4		
2.456	2.700 (0.000)	95	57096			0.00- 100.00	100.00
2.456	2.700 (0.000)	50	9278			15.00- 40.00	16.25
2.456	2.700 (0.000)	75	26384			30.00- 60.00	46.21
2.456	2.700 (0.000)	96	3807			5.00- 9.00	6.67
2.456	2.700 (0.000)	173	395			0.00- 2.00	0.72
2.456	2.700 (0.000)	174	55032			50.00- 100.00	96.39
2.456	2.700 (0.000)	175	4138			5.00- 9.00	7.52
2.456	2.700 (0.000)	176	52880			95.00- 101.00	96.09
2.456	2.700 (0.000)	177	3449			5.00- 9.00	6.52

Data File: o45212.d

Date: 14-FEB-2011 17:09

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1



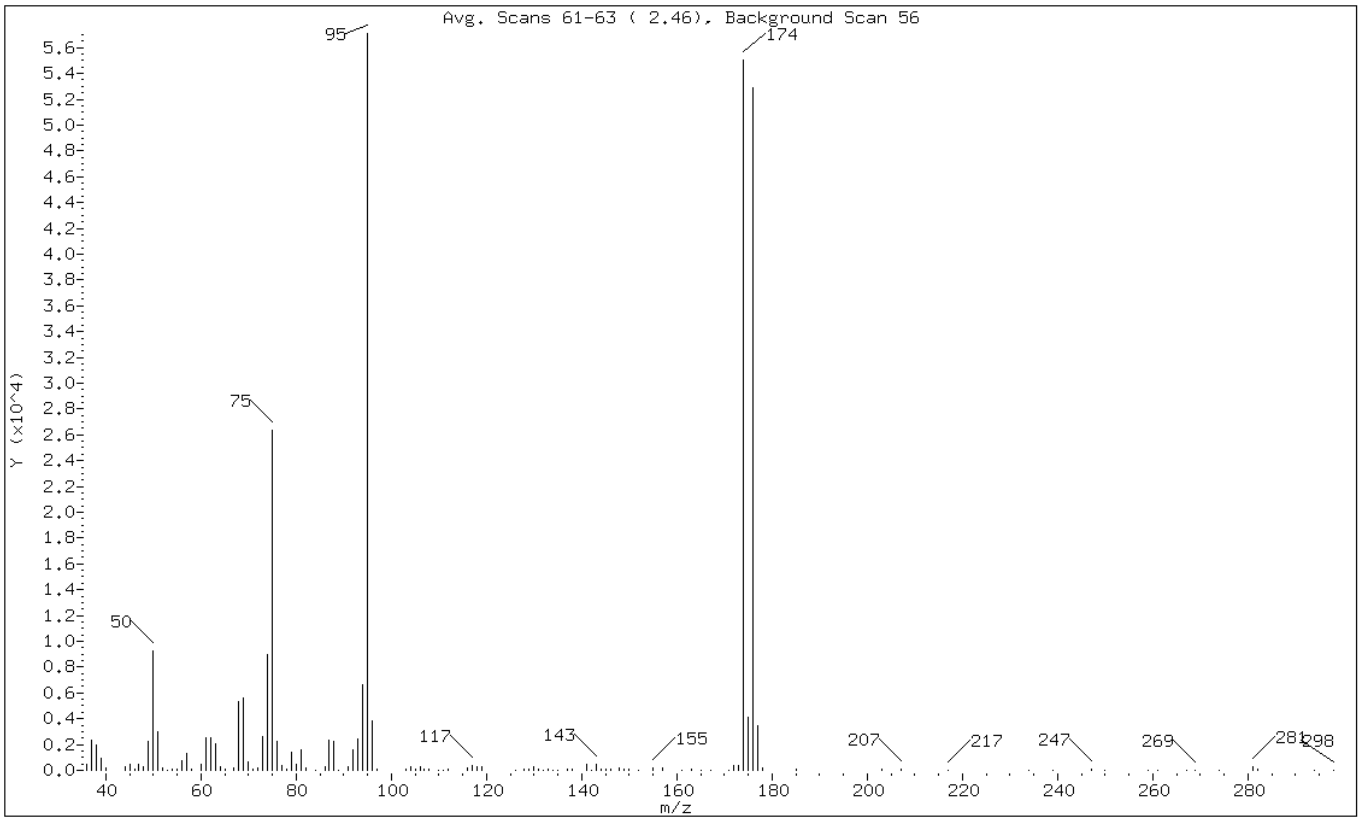
Data File: o45212.d

Date: 14-FEB-2011 17:09

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.25
75	30.00 - 60.00% of mass 95	46.21
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.69 (0.72)
174	50.00 - 100.00% of mass 95	96.39
175	5.00 - 9.00% of mass 174	7.25 (7.52)
176	95.00 - 101.00% of mass 174	92.62 (96.09)
177	5.00 - 9.00% of mass 176	6.04 (6.52)

Data File: o45212.d

Date: 14-FEB-2011 17:09

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b/o45212.d
Spectrum: Avg. Scans 61-63 (2.46), Background Scan 56
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	489	71.00	49	110.00	38	161.00	41
37.00	2324	72.00	159	111.00	40	163.00	79
38.00	1976	73.00	2571	112.00	59	165.00	33
39.00	893	74.00	8960	116.00	200	167.00	35
40.00	215	75.00	26384	117.00	366	171.00	41
44.00	234	76.00	2267	118.00	272	172.00	356
45.00	473	77.00	394	119.00	277	173.00	395
46.00	90	78.00	123	126.00	38	174.00	55032
47.00	446	79.00	1412	128.00	96	175.00	4138
48.00	325	80.00	428	129.00	87	176.00	52880
49.00	2258	81.00	1543	130.00	239	177.00	3449
50.00	9278	82.00	171	131.00	107	178.00	160
51.00	2957	84.00	41	132.00	37	185.00	55
52.00	156	86.00	251	133.00	104	203.00	49
53.00	39	87.00	2311	134.00	33	207.00	97
54.00	90	88.00	2285	135.00	36	217.00	37
55.00	106	89.00	34	137.00	107	234.00	40
56.00	763	91.00	273	138.00	70	239.00	46
57.00	1274	92.00	1568	141.00	432	247.00	72
58.00	95	93.00	2427	142.00	41	250.00	40
60.00	454	94.00	6605	143.00	455	259.00	34
61.00	2548	95.00	57096	144.00	60	261.00	34
62.00	2563	96.00	3807	145.00	60	267.00	33
63.00	2054	97.00	100	146.00	80	269.00	37
64.00	240	103.00	90	148.00	159	274.00	36
65.00	115	104.00	244	149.00	64	281.00	239
67.00	213	105.00	71	150.00	113	282.00	133
68.00	5326	106.00	253	152.00	45	294.00	44
69.00	5579	107.00	76	155.00	220	298.00	44
70.00	617	108.00	89	157.00	181		

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46588.d
Report Date: 24-Mar-2011 17:07

TestAmerica

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46588.d
Lab Smp Id: BFB
Inj Date : 24-MAR-2011 17:01
Operator : VOAMS 1 Inst ID: VOAMS12.i
Smp Info : BFB
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/VOABFB.m
Meth Date : 29-Oct-2010 21:12 sylvanus Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd2

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

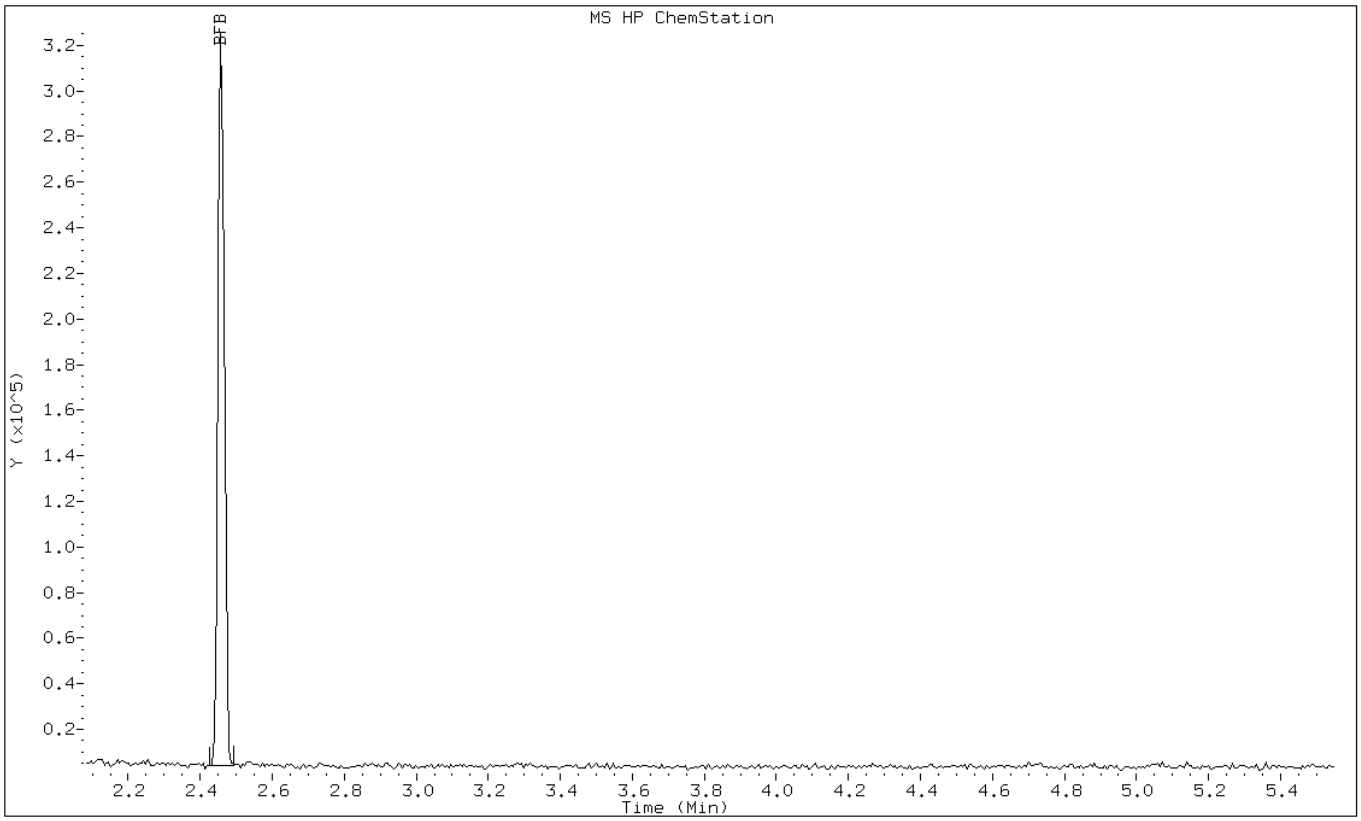
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 BFB					CAS #: 460-00-4		
2.457	2.700 (0.000)	95	52336			0.00- 100.00	100.00
2.457	2.700 (0.000)	50	9035			15.00- 40.00	17.26
2.457	2.700 (0.000)	75	24608			30.00- 60.00	47.02
2.457	2.700 (0.000)	96	3396			5.00- 9.00	6.49
2.457	2.700 (0.000)	173	608			0.00- 2.00	1.22
2.457	2.700 (0.000)	174	49760			50.00- 100.00	95.08
2.457	2.700 (0.000)	175	3438			5.00- 9.00	6.91
2.457	2.700 (0.000)	176	48192			95.00- 101.00	96.85
2.457	2.700 (0.000)	177	3231			5.00- 9.00	6.70

Data File: o46588.d

Date: 24-MAR-2011 17:01

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1



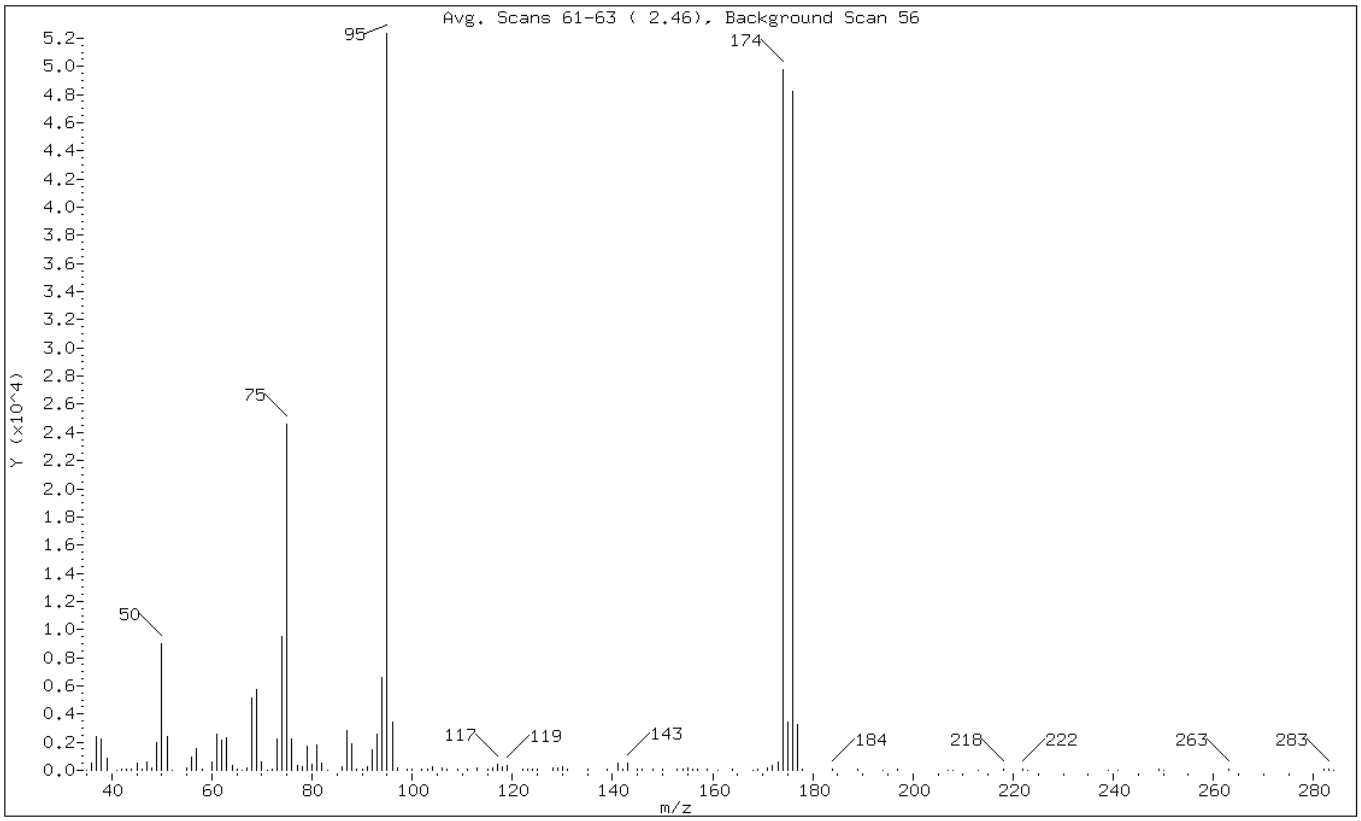
Data File: o46588.d

Date: 24-MAR-2011 17:01

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.26
75	30.00 - 60.00% of mass 95	47.02
96	5.00 - 9.00% of mass 95	6.49
173	Less than 2.00% of mass 174	1.16 (1.22)
174	50.00 - 100.00% of mass 95	95.08
175	5.00 - 9.00% of mass 174	6.57 (6.91)
176	95.00 - 101.00% of mass 174	92.08 (96.85)
177	5.00 - 9.00% of mass 176	6.17 (6.70)

Data File: o46588.d

Date: 24-MAR-2011 17:01

Client ID: Instrument: VOAMS12.i

Sample Info: BFB Operator: VOAMS 1

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46588.d
Spectrum: Avg. Scans 61-63 (2.46), Background Scan 56
Location of Maximum: 95.00
Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	34	71.00	37	109.00	45	164.00	43
36.00	540	72.00	121	111.00	92	168.00	37
37.00	2361	73.00	2211	113.00	154	169.00	44
38.00	2220	74.00	9488	115.00	93	171.00	197
39.00	865	75.00	24608	116.00	193	172.00	328
41.00	34	76.00	2208	117.00	387	173.00	608
42.00	46	77.00	355	118.00	269	174.00	49760
43.00	101	78.00	225	119.00	303	175.00	3438
44.00	122	79.00	1695	122.00	127	176.00	48192
45.00	477	80.00	460	123.00	54	177.00	3231
46.00	78	81.00	1811	124.00	105	178.00	93
47.00	601	82.00	548	125.00	51	184.00	44
48.00	205	83.00	35	128.00	156	189.00	44
49.00	1934	86.00	229	129.00	180	194.00	34
50.00	9035	87.00	2833	130.00	238	197.00	43
51.00	2377	88.00	1852	131.00	83	207.00	36
52.00	12	89.00	77	135.00	105	208.00	34
55.00	162	90.00	49	139.00	119	213.00	33
56.00	981	91.00	222	141.00	497	218.00	52
57.00	1522	92.00	1423	142.00	61	222.00	48
58.00	98	93.00	2541	143.00	512	223.00	41
60.00	576	94.00	6620	145.00	88	239.00	37
61.00	2578	95.00	52336	146.00	78	241.00	39
62.00	2179	96.00	3396	148.00	77	249.00	49
63.00	2305	97.00	195	150.00	100	250.00	34
64.00	357	99.00	55	153.00	59	263.00	51
65.00	108	100.00	81	154.00	71	282.00	59
66.00	34	102.00	57	155.00	208	283.00	104
67.00	157	103.00	43	156.00	119	284.00	38
68.00	5118	104.00	240	157.00	60		
69.00	5739	106.00	202	159.00	74		
70.00	632	107.00	117	161.00	38		

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07572.d
Report Date: 24-Mar-2011 21:18

TestAmerica

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07572.d
Lab Smp Id: BFB
Inj Date : 24-MAR-2011 21:21
Operator : VOAMS 1 Inst ID: VOAMS4.i
Smp Info : BFB
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/VOABFB.m
Meth Date : 10-Jan-2011 17:29 ken Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd2

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

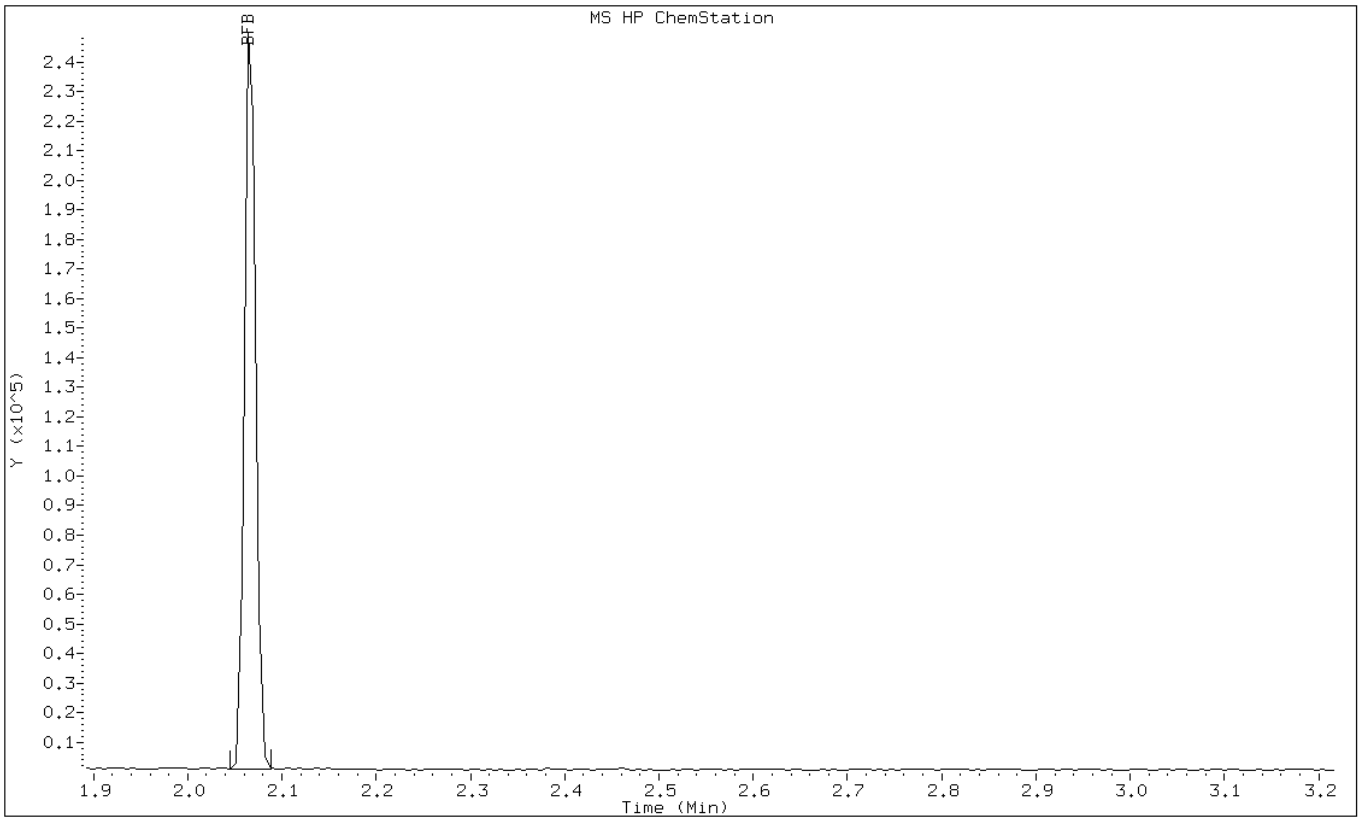
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 BFB					CAS #: 460-00-4		
2.064	2.100 (0.000)	95	33826			0.00- 100.00	100.00
2.064	2.100 (0.000)	50	9156			15.00- 40.00	27.07
2.064	2.100 (0.000)	75	19470			30.00- 60.00	57.56
2.064	2.100 (0.000)	96	2358			5.00- 9.00	6.97
2.064	2.100 (0.000)	173	237			0.00- 2.00	0.94
2.064	2.100 (0.000)	174	25201			50.00- 100.00	74.50
2.064	2.100 (0.000)	175	2006			5.00- 9.00	7.96
2.064	2.100 (0.000)	176	24098			95.00- 101.00	95.62
2.064	2.100 (0.000)	177	1648			5.00- 9.00	6.84

Data File: d07572.d

Date: 24-MAR-2011 21:21

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1



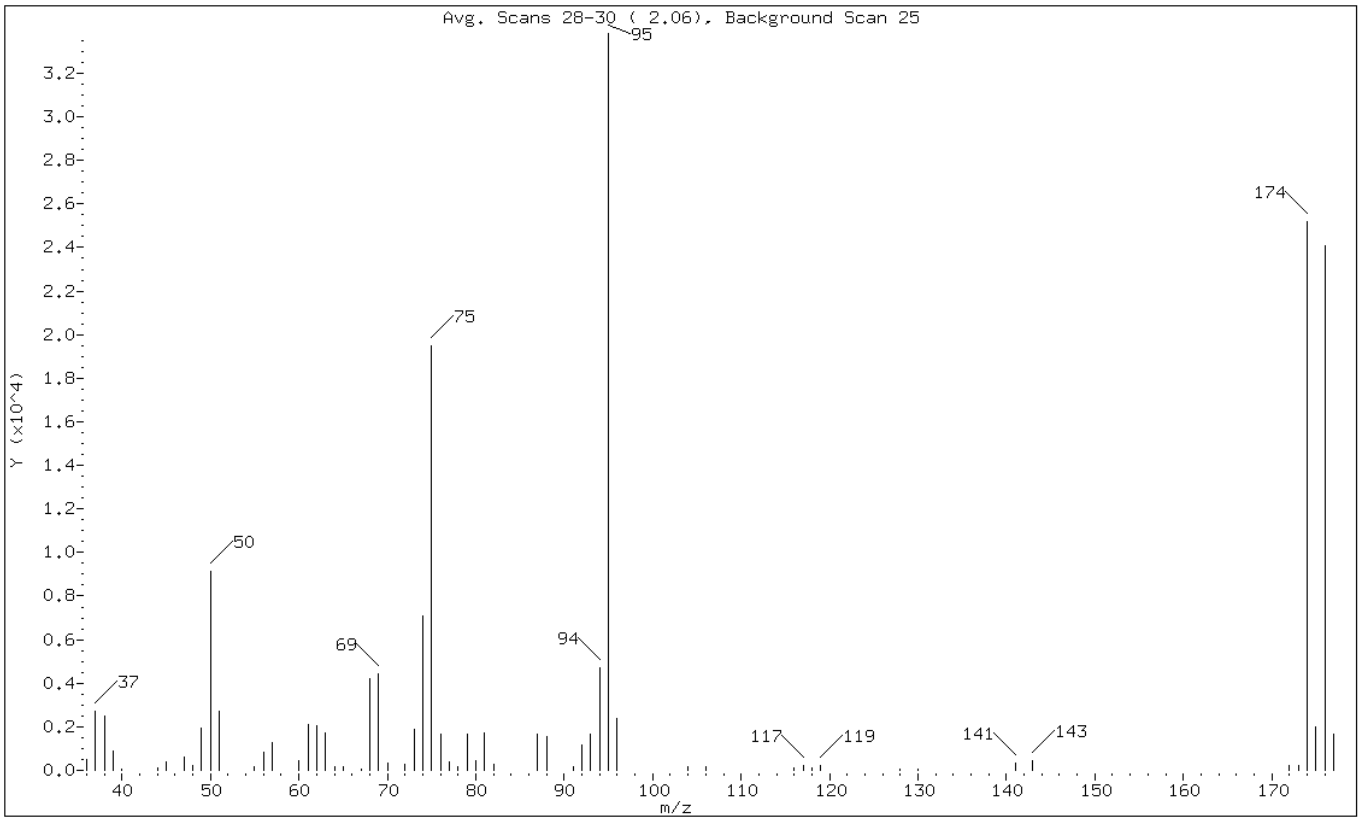
Data File: d07572.d

Date: 24-MAR-2011 21:21

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.07
75	30.00 - 60.00% of mass 95	57.56
96	5.00 - 9.00% of mass 95	6.97
173	Less than 2.00% of mass 174	0.70 (0.94)
174	50.00 - 100.00% of mass 95	74.50
175	5.00 - 9.00% of mass 174	5.93 (7.96)
176	95.00 - 101.00% of mass 174	71.24 (95.62)
177	5.00 - 9.00% of mass 176	4.87 (6.84)

Data File: d07572.d

Date: 24-MAR-2011 21:21

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b/d07572.d
Spectrum: Avg. Scans 28-30 (2.06), Background Scan 25
Location of Maximum: 95.00
Number of points: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	509	61.00	2113	79.00	1667	118.00	110
37.00	2690	62.00	2054	80.00	455	119.00	240
38.00	2503	63.00	1741	81.00	1735	128.00	56
39.00	911	64.00	139	82.00	298	130.00	82
40.00	56	65.00	182	87.00	1664	141.00	358
44.00	126	67.00	77	88.00	1552	143.00	455
45.00	414	68.00	4224	91.00	149	172.00	231
47.00	629	69.00	4440	92.00	1138	173.00	237
48.00	229	70.00	313	93.00	1681	174.00	25200
49.00	1925	72.00	272	94.00	4693	175.00	2006
50.00	9156	73.00	1893	95.00	33824	176.00	24096
51.00	2700	74.00	7078	96.00	2358	177.00	1648
55.00	142	75.00	19464	104.00	181		
56.00	817	76.00	1686	106.00	162		
57.00	1274	77.00	365	116.00	126		
60.00	436	78.00	193	117.00	244		

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07618.d
Report Date: 25-Mar-2011 18:52

TestAmerica

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07618.d
Lab Smp Id: BFB
Inj Date : 25-MAR-2011 18:59
Operator : VOAMS 1 Inst ID: VOAMS4.i
Smp Info : BFB
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/VOABFB.m
Meth Date : 10-Jan-2011 17:29 ken Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd2

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
VI	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

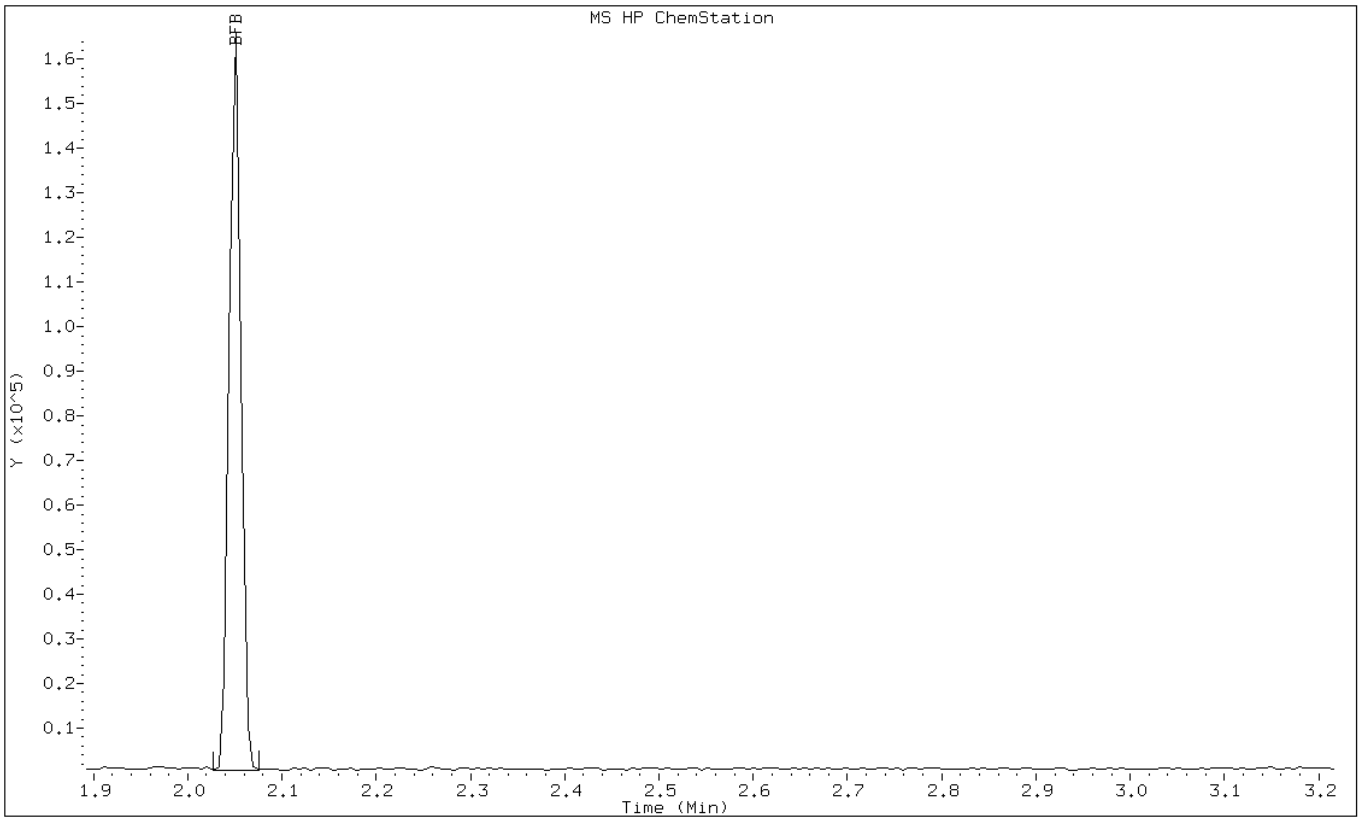
RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 BFB					CAS #: 460-00-4		
2.051	2.100 (0.000)	95	22064			0.00- 100.00	100.00
2.051	2.100 (0.000)	50	5642			15.00- 40.00	25.57
2.051	2.100 (0.000)	75	12446			30.00- 60.00	56.41
2.051	2.100 (0.000)	96	1555			5.00- 9.00	7.05
2.051	2.100 (0.000)	173	0			0.00- 2.00	0.00
2.051	2.100 (0.000)	174	18040			50.00- 100.00	81.76
2.051	2.100 (0.000)	175	1550			5.00- 9.00	8.59
2.051	2.100 (0.000)	176	17536			95.00- 101.00	97.21
2.051	2.100 (0.000)	177	1086			5.00- 9.00	6.19

Data File: d07618.d

Date: 25-MAR-2011 18:59

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1



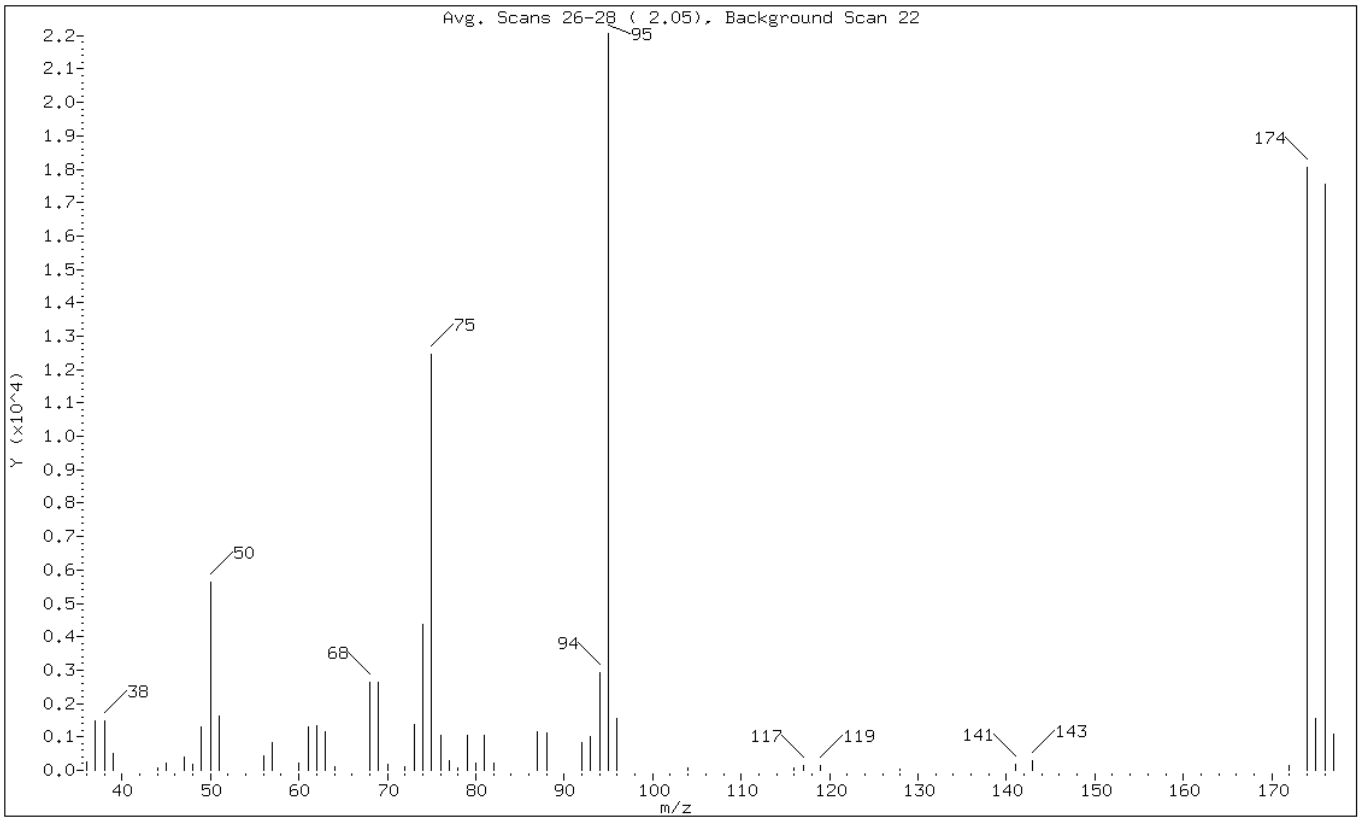
Data File: d07618.d

Date: 25-MAR-2011 18:59

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.57
75	30.00 - 60.00% of mass 95	56.41
96	5.00 - 9.00% of mass 95	7.05
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	81.76
175	5.00 - 9.00% of mass 174	7.03 (8.59)
176	95.00 - 101.00% of mass 174	79.48 (97.21)
177	5.00 - 9.00% of mass 176	4.92 (6.19)

Data File: d07618.d

Date: 25-MAR-2011 18:59

Client ID: Instrument: VOAMS4.i

Sample Info: BFB Operator: VOAMS 1

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07618.d
Spectrum: Avg. Scans 26-28 (2.05), Background Scan 22
Location of Maximum: 95.00
Number of points: 51

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	248	60.00	219	77.00	271	104.00	57
37.00	1478	61.00	1309	78.00	67	116.00	69
38.00	1491	62.00	1322	79.00	1036	117.00	134
39.00	522	63.00	1163	80.00	233	119.00	130
44.00	68	64.00	103	81.00	1053	128.00	54
45.00	229	68.00	2634	82.00	216	141.00	169
47.00	395	69.00	2631	87.00	1143	143.00	298
48.00	170	70.00	166	88.00	1106	172.00	136
49.00	1284	72.00	120	92.00	844	174.00	18040
50.00	5642	73.00	1363	93.00	1021	175.00	1550
51.00	1635	74.00	4365	94.00	2939	176.00	17536
56.00	451	75.00	12446	95.00	22064	177.00	1086
57.00	814	76.00	1047	96.00	1555		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68422/5

Matrix: Solid Lab File ID: o46595.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/24/2011 21:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68422 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.63
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
75-00-3	Chloroethane	1.0	U	1.0	0.40
75-09-2	Methylene Chloride	1.0	U	1.0	0.47
67-64-1	Acetone	8.89	J	10	3.7
75-15-0	Carbon disulfide	1.0	U	1.0	0.46
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.37
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.28
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
67-66-3	Chloroform	1.0	U	1.0	0.24
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.39
78-93-3	2-Butanone	10	U	10	0.57
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.10
75-27-4	Bromodichloromethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.20
79-01-6	Trichloroethene	1.0	U	1.0	0.36
124-48-1	Dibromochloromethane	1.0	U	1.0	0.56
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.59
71-43-2	Benzene	1.0	U	1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-25-2	Bromoform	1.0	U	1.0	0.70
108-10-1	4-Methyl-2-pentanone	10	U	10	0.72
591-78-6	2-Hexanone	10	U	10	1.7
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.76
108-88-3	Toluene	1.0	U	1.0	0.30
108-90-7	Chlorobenzene	1.0	U	1.0	0.48
100-41-4	Ethylbenzene	1.0	U	1.0	0.19
100-42-5	Styrene	1.0	U	1.0	0.35
1330-20-7	Xylenes, Total	3.0	U	3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68422/5

Matrix: Solid Lab File ID: o46595.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/24/2011 21:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68422 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		70-138
2037-26-5	Toluene-d8 (Surr)	91		66-126
460-00-4	Bromofluorobenzene	93		72-132

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46595.d
Report Date: 25-Mar-2011 00:29

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46595.d
Lab Smp Id: MB
Inj Date : 24-MAR-2011 21:20
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : MB
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/8260L_10.m
Meth Date : 24-Mar-2011 18:45 eddie Quant Type: ISTD
Cal Date : 15-FEB-2011 03:30 Cal File: o45228.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	7 Acetone	43	1.813	1.813	(0.448)	6228	8.89202	8.9(a)
$	16 1,2-Dichloroethane-d4 (SUR)	65	3.721	3.721	(0.920)	130371	43.3603	43
*	69 Fluorobenzene	96	4.044	4.044	(1.000)	817719	50.0000	
$	37 Toluene-d8 (SUR)	98	5.812	5.818	(0.749)	594718	45.4904	45
*	32 Chlorobenzene-d5	117	7.763	7.769	(1.000)	567637	50.0000	
$	41 Bromofluorobenzene (SUR)	174	9.610	9.616	(0.837)	216112	46.7026	47
*	91 1,4-Dichlorobenzene-d4	152	11.476	11.482	(1.000)	310807	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: o46595.d

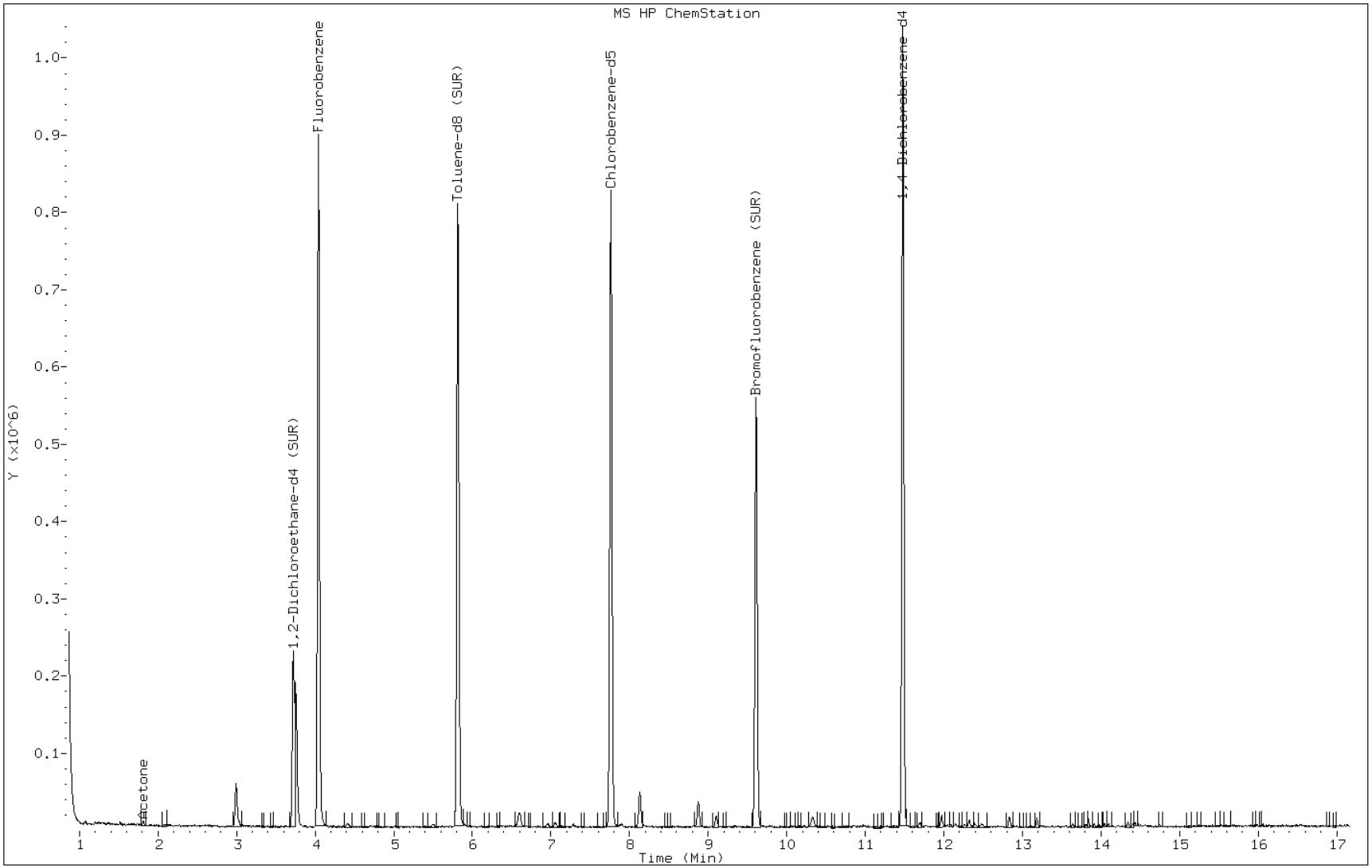
Date: 24-MAR-2011 21:20

Client ID:

Instrument: VOAMS12.i

Sample Info: MB

Operator: VOAMS 9



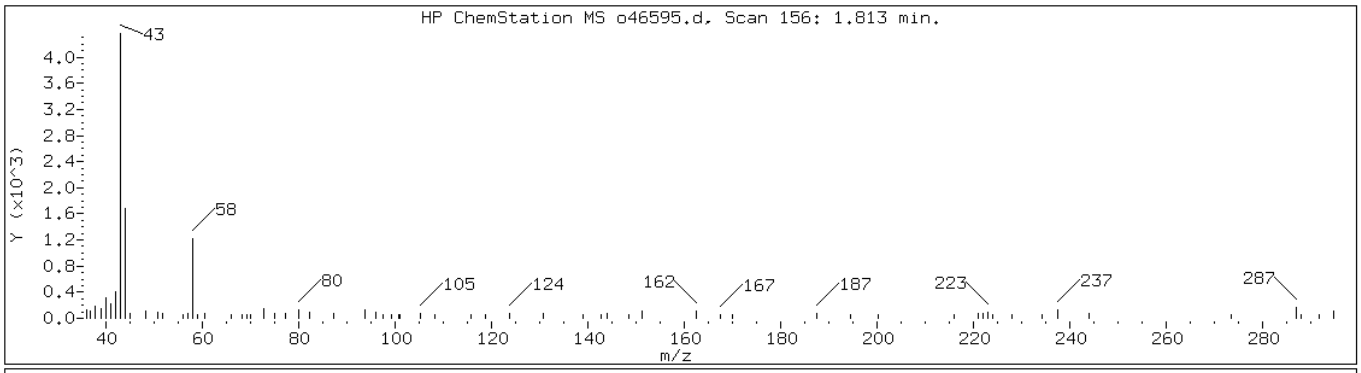
Data File: o46595.d

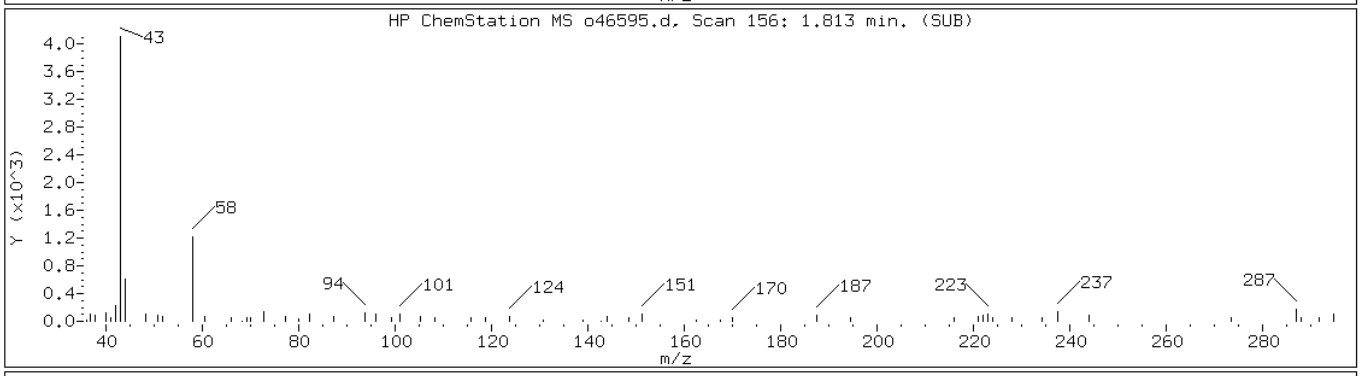
Date: 24-MAR-2011 21:20

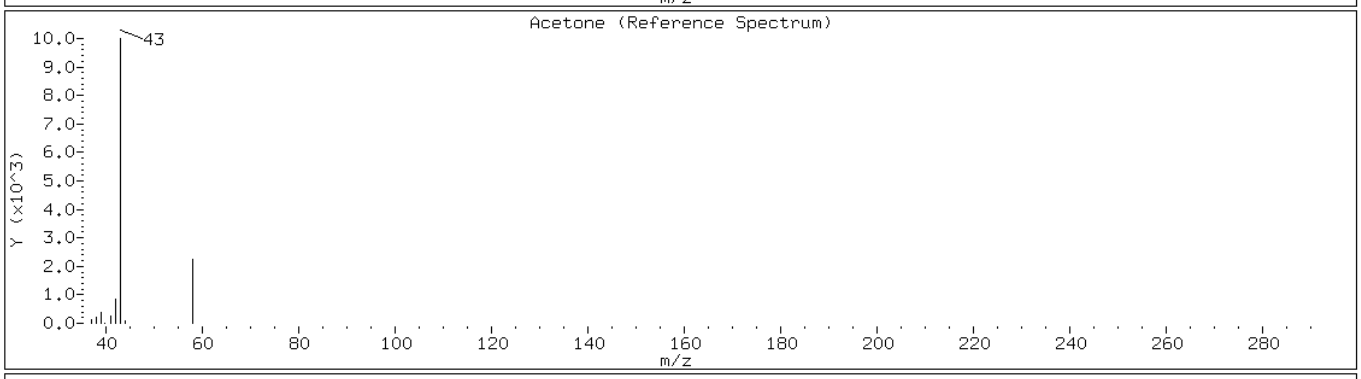
Client ID: Instrument: VOAMS12.i

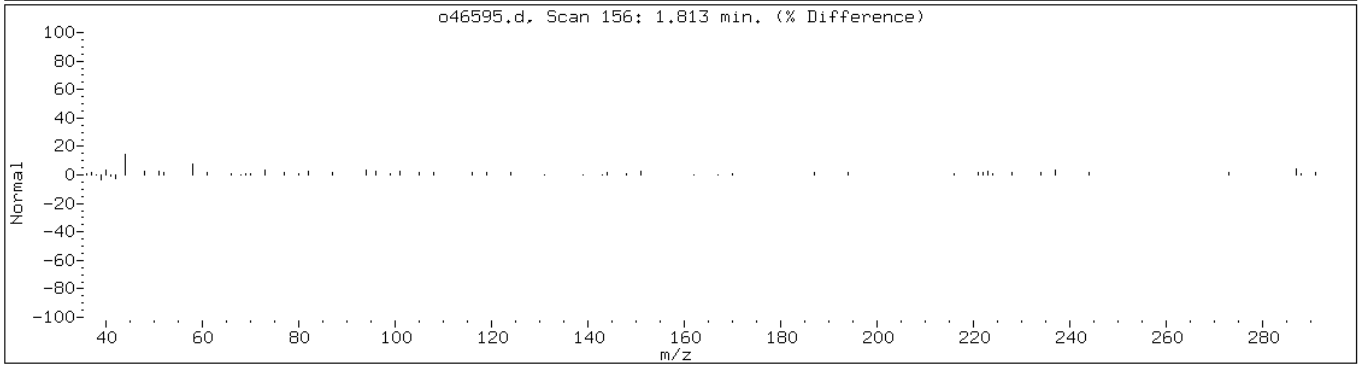
Sample Info: MB Operator: VOAMS 9

7 Acetone









FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-68543/5

Matrix: Solid | Lab File ID: d07625.d

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/25/2011 22:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 68543 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.63
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
75-00-3	Chloroethane	1.0	U	1.0	0.40
75-09-2	Methylene Chloride	1.0	U	1.0	0.47
67-64-1	Acetone	10	U	10	3.7
75-15-0	Carbon disulfide	1.0	U	1.0	0.46
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.37
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.28
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
67-66-3	Chloroform	1.0	U	1.0	0.24
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.39
78-93-3	2-Butanone	10	U	10	0.57
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.10
75-27-4	Bromodichloromethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.20
79-01-6	Trichloroethene	1.0	U	1.0	0.36
124-48-1	Dibromochloromethane	1.0	U	1.0	0.56
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.59
71-43-2	Benzene	1.0	U	1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-25-2	Bromoform	1.0	U	1.0	0.70
108-10-1	4-Methyl-2-pentanone	10	U	10	0.72
591-78-6	2-Hexanone	10	U	10	1.7
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.76
108-88-3	Toluene	1.0	U	1.0	0.30
108-90-7	Chlorobenzene	1.0	U	1.0	0.48
100-41-4	Ethylbenzene	1.0	U	1.0	0.19
100-42-5	Styrene	1.0	U	1.0	0.35
1330-20-7	Xylenes, Total	3.0	U	3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68543/5

Matrix: Solid Lab File ID: d07625.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2011 22:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-138
2037-26-5	Toluene-d8 (Surr)	103		66-126
460-00-4	Bromofluorobenzene	99		72-132

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07625.d
Report Date: 29-Mar-2011 10:25

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07625.d
Lab Smp Id: MB
Inj Date : 25-MAR-2011 22:02
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : MB
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/8260L_10.m
Meth Date : 28-Mar-2011 15:38 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 04:11 Cal File: d07588.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

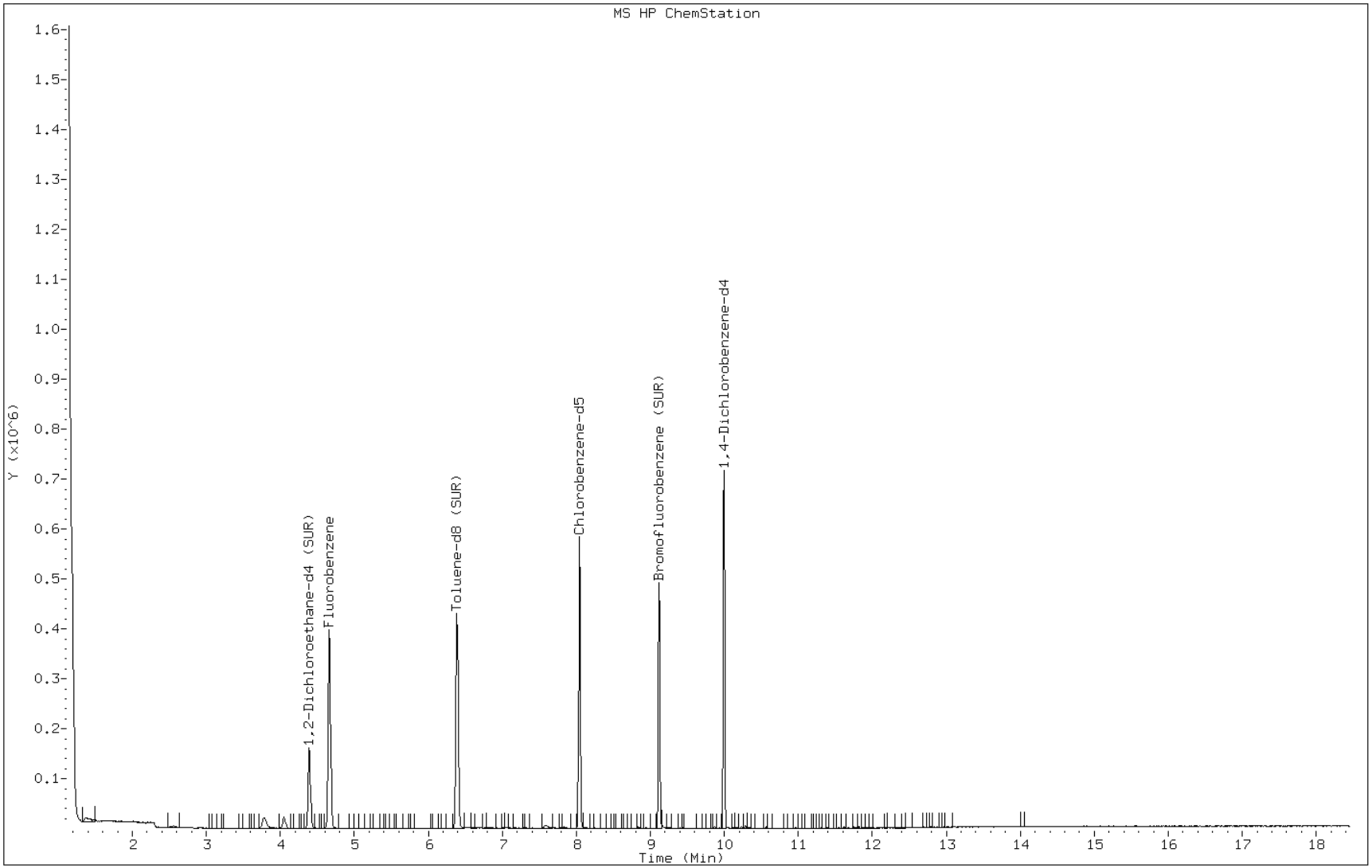
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	16 1,2-Dichloroethane-d4 (SUR)	65	4.389	4.389	(0.942)	128471	48.4380	48
*	69 Fluorobenzene	96	4.661	4.661	(1.000)	409873	50.0000	
$	37 Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	322828	51.6488	52
*	32 Chlorobenzene-d5	117	8.042	8.042	(1.000)	253075	50.0000	
$	41 Bromofluorobenzene (SUR)	174	9.116	9.123	(0.912)	98943	49.7262	50
*	91 1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	126364	50.0000	

Data File: d07625.d

Date: 25-MAR-2011 22:02

Client ID: Instrument: VOAMS4.i

Sample Info: MB Operator: VOAMS 9



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LB3 460-68295/1-A

Matrix: Solid | Lab File ID: o46596.d

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 03/24/2011 21:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 68422 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.63
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
75-00-3	Chloroethane	1.0	U	1.0	0.40
75-09-2	Methylene Chloride	1.0	U	1.0	0.47
67-64-1	Acetone	4.00	J	10	3.7
75-15-0	Carbon disulfide	1.0	U	1.0	0.46
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.37
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.28
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
67-66-3	Chloroform	1.0	U	1.0	0.24
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.39
78-93-3	2-Butanone	10	U	10	0.57
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.19
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.10
75-27-4	Bromodichloromethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.20
79-01-6	Trichloroethene	1.0	U	1.0	0.36
124-48-1	Dibromochloromethane	1.0	U	1.0	0.56
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.59
71-43-2	Benzene	1.0	U	1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-25-2	Bromoform	1.0	U	1.0	0.70
108-10-1	4-Methyl-2-pentanone	10	U	10	0.72
591-78-6	2-Hexanone	10	U	10	1.7
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.76
108-88-3	Toluene	1.0	U	1.0	0.30
108-90-7	Chlorobenzene	1.0	U	1.0	0.48
100-41-4	Ethylbenzene	1.0	U	1.0	0.19
100-42-5	Styrene	1.0	U	1.0	0.35
1330-20-7	Xylenes, Total	3.0	U	3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LB3 460-68295/1-A

Matrix: Solid Lab File ID: o46596.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 03/24/2011 21:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68422 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		70-138
2037-26-5	Toluene-d8 (Surr)	90		66-126
460-00-4	Bromofluorobenzene	96		72-132

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46596.d
Report Date: 25-Mar-2011 00:29

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46596.d
Lab Smp Id: LB3 460-68295/1-A
Inj Date : 24-MAR-2011 21:45
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : LB3 460-68295/1-A
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/8260L_10.m
Meth Date : 24-Mar-2011 18:45 eddie Quant Type: ISTD
Cal Date : 15-FEB-2011 03:30 Cal File: o45228.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	7 Acetone	43	1.819	1.813	(0.450)	2732	3.99875	4.0(a)
$	16 1,2-Dichloroethane-d4 (SUR)	65	3.721	3.721	(0.920)	134543	45.8736	46
*	69 Fluorobenzene	96	4.044	4.044	(1.000)	797651	50.0000	
$	37 Toluene-d8 (SUR)	98	5.812	5.818	(0.749)	607106	45.0900	45
*	32 Chlorobenzene-d5	117	7.763	7.769	(1.000)	584606	50.0000	
$	41 Bromofluorobenzene (SUR)	174	9.610	9.616	(0.837)	222964	47.9177	48
*	91 1,4-Dichlorobenzene-d4	152	11.476	11.482	(1.000)	312530	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: o46596.d

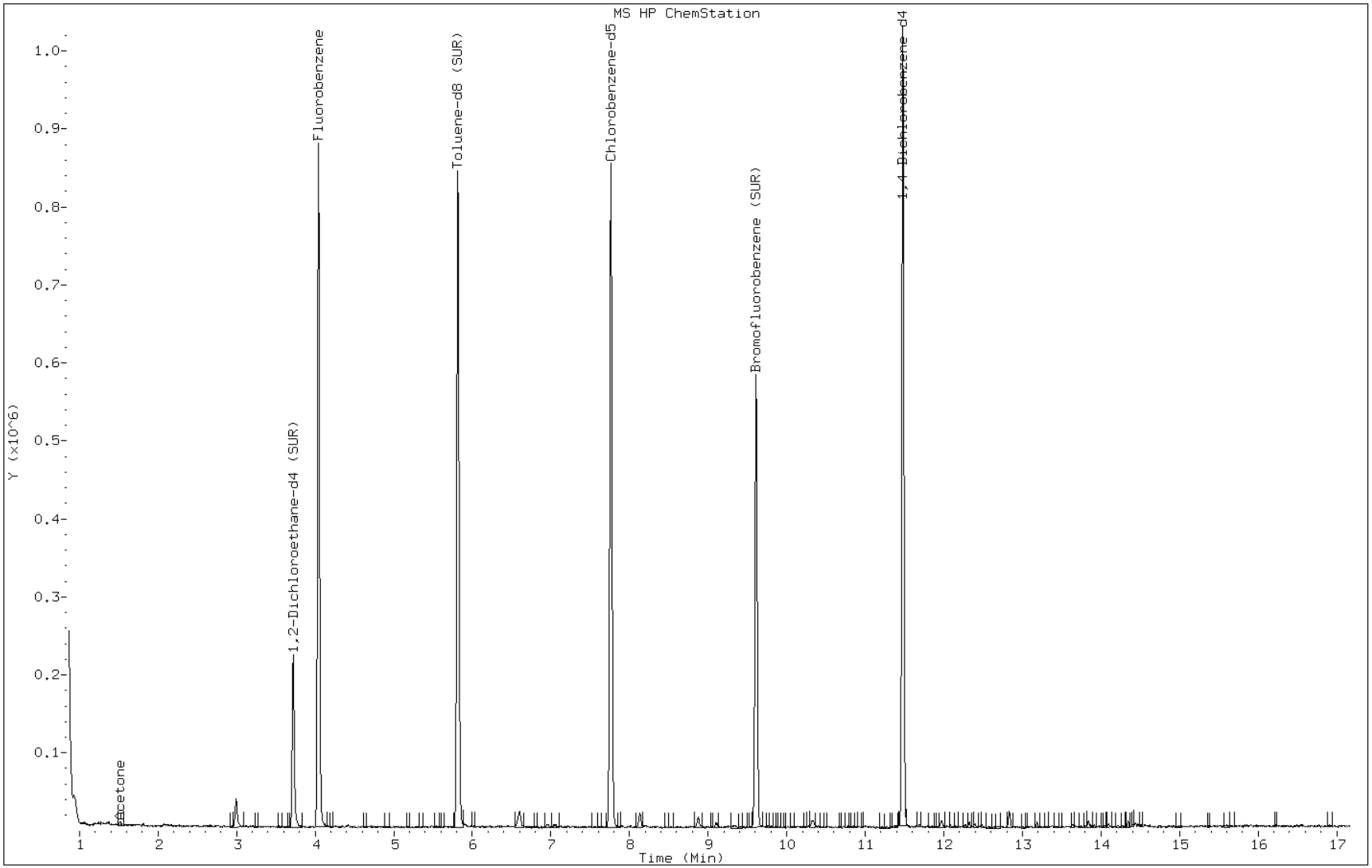
Date: 24-MAR-2011 21:45

Client ID:

Instrument: VOAMS12.i

Sample Info: LB3 460-68295/1-A

Operator: VOAMS 9



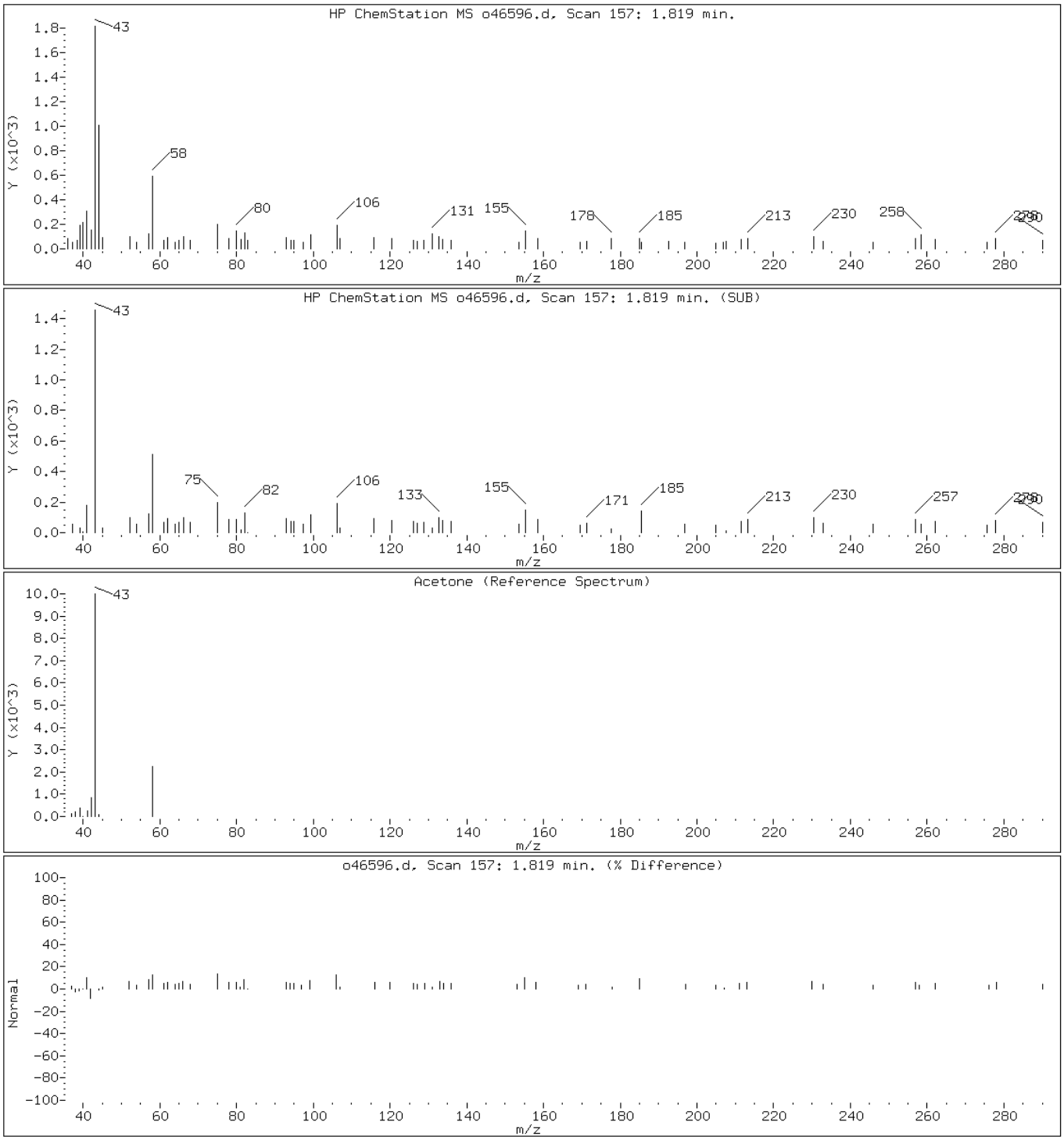
Data File: o46596.d

Date: 24-MAR-2011 21:45

Client ID: Instrument: VOAMS12.i

Sample Info: LB3 460-68295/1-A Operator: VOAMS 9

7 Acetone



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-68422/3

Matrix: Solid | Lab File ID: o46592.d

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 03/24/2011 19:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 68422 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	17.2		1.0	0.63
74-83-9	Bromomethane	26.4		1.0	0.41
75-01-4	Vinyl chloride	20.3		1.0	0.23
75-00-3	Chloroethane	24.3		1.0	0.40
75-09-2	Methylene Chloride	20.4		1.0	0.47
67-64-1	Acetone	30.0		10	3.7
75-15-0	Carbon disulfide	19.5		1.0	0.46
75-35-4	1,1-Dichloroethene	21.1		1.0	0.37
75-34-3	1,1-Dichloroethane	20.3		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	20.1		1.0	0.28
156-59-2	cis-1,2-Dichloroethene	19.8		1.0	0.24
67-66-3	Chloroform	20.1		1.0	0.24
107-06-2	1,2-Dichloroethane	19.0		1.0	0.39
78-93-3	2-Butanone	19.9		10	0.57
71-55-6	1,1,1-Trichloroethane	19.9		1.0	0.19
56-23-5	Carbon tetrachloride	20.6		1.0	0.10
75-27-4	Bromodichloromethane	19.9		1.0	0.30
78-87-5	1,2-Dichloropropane	19.8		1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	19.3		1.0	0.20
79-01-6	Trichloroethene	20.2		1.0	0.36
124-48-1	Dibromochloromethane	19.6		1.0	0.56
79-00-5	1,1,2-Trichloroethane	20.0		1.0	0.59
71-43-2	Benzene	20.0		1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	19.1		1.0	0.22
75-25-2	Bromoform	16.5		1.0	0.70
108-10-1	4-Methyl-2-pentanone	18.3		10	0.72
591-78-6	2-Hexanone	17.9		10	1.7
127-18-4	Tetrachloroethene	21.4		1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	17.0		1.0	0.76
108-88-3	Toluene	19.9		1.0	0.30
108-90-7	Chlorobenzene	20.0		1.0	0.48
100-41-4	Ethylbenzene	20.2		1.0	0.19
100-42-5	Styrene	19.5		1.0	0.35
1330-20-7	Xylenes, Total	59.8		3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68422/3

Matrix: Solid Lab File ID: o46592.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/24/2011 19:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68422 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		70-138
2037-26-5	Toluene-d8 (Surr)	92		66-126
460-00-4	Bromofluorobenzene	96		72-132

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46592.d
Report Date: 24-Mar-2011 20:17

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46592.d
Lab Smp Id: LCS
Inj Date : 24-MAR-2011 19:53
Operator : VOAMS 9 Inst ID: VOAMS12.i
Smp Info : LCS
Misc Info :
Comment :
Method : /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/8260L_10.m
Meth Date : 24-Mar-2011 18:45 eddie Quant Type: ISTD
Cal Date : 15-FEB-2011 03:30 Cal File: o45228.d
Als bottle: 4 QC Sample: BS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
M	14 1,2-Dichloroethene (total)	100				246877	39.8701	40
	90 Dichlorodifluoromethane	85	0.929	0.929	(0.230)	99950	16.2528	16
	1 Chloromethane	50	1.063	1.057	(0.263)	113398	17.1793	17
	4 Vinyl Chloride	62	1.094	1.094	(0.270)	128103	20.2988	20
	3 Bromomethane	94	1.270	1.270	(0.314)	93431	26.4384	26
	5 Chloroethane	64	1.325	1.325	(0.328)	105962	24.3048	24
	9 Trichlorofluoromethane	101	1.472	1.472	(0.364)	206748	20.9442	21
	121 n-Pentane	72	1.514	1.514	(0.374)	24639	23.6956	24
	127 Ethanol	46	1.593	1.593	(0.394)	52111	2536.59	2500
	46 Ethyl Ether	59	1.642	1.642	(0.406)	74582	20.9160	21
	119 Isoprene	67	1.654	1.654	(0.409)	169572	23.1043	23
	47 Acrolein	56	1.715	1.715	(0.424)	33812	110.469	110
	10 1,1-Dichloroethene	96	1.776	1.776	(0.439)	101392	21.0639	21
	48 Freon TF	101	1.776	1.782	(0.439)	123056	23.0764	23

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46592.d
Report Date: 24-Mar-2011 20:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
7	Acetone	43	1.819	1.813	(0.450)	25517	30.0157	30
142	Iodomethane	142	1.874	1.874	(0.463)	141615	22.2401	22
8	Carbon Disulfide	76	1.910	1.911	(0.472)	292505	19.5201	20
50	Acetonitrile	41	1.996	1.996	(0.494)	158164	458.814	460
125	Methyl acetate	74	2.020	2.020	(0.500)	18075	17.6853	18
6	Methylene Chloride	84	2.087	2.087	(0.516)	114465	20.3951	20
51	TBA	59	2.173	2.179	(0.537)	143304	383.766	380
52	Acrylonitrile	53	2.252	2.252	(0.557)	176708	139.441	140
12	trans-1,2-Dichloroethene	96	2.264	2.270	(0.560)	116764	20.0774	20
53	MTBE	73	2.270	2.276	(0.561)	253927	19.8099	20
49	Isopropanol	45	1.910	1.911	(0.472)	627083	2790.67	2800
54	Hexane	56	2.459	2.459	(0.608)	82685	18.0632	18
11	1,1-Dichloroethane	63	2.563	2.563	(0.634)	185271	20.2750	20
57	Vinyl Acetate	43	2.624	2.630	(0.649)	220266	21.7708	22
55	DIPE	45	2.630	2.630	(0.650)	295911	21.6670	22
149	tert-Butyl ethyl ether	59	2.904	2.910	(0.718)	279103	19.4435	19
104	2,2-Dichloropropane	77	3.008	3.008	(0.744)	175200	19.5269	20
13	cis-1,2-Dichloroethene	96	3.014	3.014	(0.745)	130113	19.7927	20
18	2-Butanone	72	3.032	3.038	(0.750)	10185	19.8871	20
56	Ethyl Acetate	70	3.093	3.093	(0.765)	13129	33.0109	33
108	Bromochloromethane	128	3.209	3.209	(0.793)	58912	19.9264	20
15	Chloroform	83	3.282	3.288	(0.812)	198837	20.0967	20
20	1,1,1-Trichloroethane	97	3.435	3.435	(0.849)	182545	19.8734	20
59	Cyclohexane	56	3.477	3.477	(0.860)	177813	18.3608	18
21	Carbon Tetrachloride	117	3.581	3.581	(0.885)	156360	20.5948	20
92	1,1-Dichloropropene	75	3.581	3.581	(0.885)	157297	19.2552	19
$ 16	1,2-Dichloroethane-d4 (SUR)	65	3.721	3.721	(0.920)	165110	45.2429	45
28	Benzene	78	3.770	3.770	(0.932)	463148	20.0389	20
17	1,2-Dichloroethane	62	3.788	3.794	(0.937)	119918	18.9775	19
61	Isopropyl Acetate	43	3.880	3.886	(0.959)	296912	38.5051	38
140	tert-Amylmethyl Ether	73	3.898	3.904	(0.964)	252804	19.6769	20
* 69	Fluorobenzene	96	4.044	4.044	(1.000)	992516	50.0000	
156	2,4,4-Trimethyl-1-pentene	112	4.379	4.380	(1.083)	49796	18.9980	19
25	Trichloroethene	95	4.410	4.416	(1.090)	127006	20.2414	20
63	n-Butanol	43	4.410	4.410	(1.090)	63551	1369.54	1400
96	Ethyl Acrylate	55	4.575	4.575	(1.131)	67519	13.4832	13(R)
126	Methyl cyclohexane	83	4.605	4.611	(1.139)	226508	18.6488	19
23	1,2-Dichloropropane	63	4.648	4.654	(1.149)	101090	19.8298	20
109	Dibromomethane	93	4.770	4.776	(1.179)	55625	19.5289	20
95	1,4-Dioxane	88	4.825	4.831	(1.193)	7934	144.158	140
146	Methyl methacrylate	69	4.825	4.825	(1.193)	48821	19.0149	19
64	Propyl Acetate	43	4.910	4.910	(1.214)	163235	39.1242	39
22	Bromodichloromethane	83	4.965	4.965	(1.228)	132803	19.9019	20
30	2-Chloroethyl Vinyl Ether	63	5.349	5.355	(1.323)	12526	16.4878	16
118	Epichlorohydrin	57	5.404	5.404	(1.336)	120641	377.286	380
24	cis-1,3-Dichloropropene	75	5.495	5.495	(1.359)	155357	19.3290	19
33	4-Methyl-2-Pentanone	43	5.715	5.721	(1.413)	49671	18.2793	18

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46592.d
Report Date: 24-Mar-2011 20:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	37 Toluene-d8 (SUR)	98	5.812	5.818	(0.748)	726575	46.2264	46
	38 Toluene	91	5.897	5.898	(0.759)	529869	19.8703	20
	29 trans-1,3-Dichloropropene	75	6.215	6.215	(0.800)	129711	19.0991	19
	27 1,1,2-Trichloroethane	83	6.446	6.440	(0.830)	65400	19.9789	20
	35 Tetrachloroethene	166	6.599	6.599	(0.849)	155652	21.3761	21
	103 1,3-Dichloropropane	76	6.660	6.660	(0.857)	133787	19.0454	19
	34 2-Hexanone	43	6.836	6.836	(0.880)	32560	17.9250	18
	26 Dibromochloromethane	129	6.952	6.952	(0.895)	91900	19.6347	20
	65 Butyl Acetate	43	7.062	7.062	(0.909)	176623	40.3504	40
	66 1,2-Dibromoethane	107	7.080	7.080	(0.911)	79603	19.5395	20
*	32 Chlorobenzene-d5	117	7.769	7.769	(1.000)	682447	50.0000	
	39 Chlorobenzene	112	7.806	7.812	(1.005)	335415	19.9810	20
	97 1,1,1,2-Tetrachloroethane	131	7.952	7.952	(1.024)	109200	20.1417	20
	40 Ethylbenzene	106	8.013	8.013	(1.031)	182711	20.2041	20
	43 m+p-Xylene	106	8.196	8.202	(1.055)	459014	40.4396	40
	44 o-Xylene	106	8.793	8.793	(1.132)	212686	19.3848	19
	42 Styrene	104	8.824	8.824	(1.136)	345840	19.5022	20
	147 Butyl Acrylate	55	8.879	8.879	(0.773)	128247	15.7463	16
	31 Bromoform	173	9.062	9.062	(1.166)	55075	16.5134	16
	110 Isopropylbenzene	105	9.403	9.409	(1.210)	586056	21.9228	22
$	41 Bromofluorobenzene (SUR)	174	9.610	9.616	(0.837)	262006	48.1674	48
	150 Camphene	41	9.763	9.763	(0.850)	52046	21.2314	21
	107 Bromobenzene	156	9.805	9.805	(0.854)	142550	19.5103	20
	36 1,1,2,2-Tetrachloroethane	83	9.933	9.933	(0.865)	86886	17.0258	17
	99 1,2,3-Trichloropropane	110	9.952	9.958	(0.867)	29578	19.2790	19
	143 trans-1,4-Dichloro-2-butene	53	10.025	10.031	(2.479)	22648	17.8102	18
	112 n-Propylbenzene	91	10.080	10.080	(0.878)	674937	19.8103	20
	105 2-Chlorotoluene	91	10.159	10.159	(0.885)	376096	18.6400	19
	106 4-Chlorotoluene	91	10.348	10.348	(0.901)	392945	18.4156	18
	102 1,3,5-Trimethylbenzene	105	10.397	10.403	(0.905)	482818	19.2973	19
	148 Butyl methacrylate	69	10.683	10.683	(0.930)	120454	14.4999	14(R)
	115 tert-Butylbenzene	119	10.921	10.921	(0.951)	446267	19.7476	20
	100 1,2,4-Trimethylbenzene	105	11.006	11.006	(0.959)	482199	18.9029	19
	114 sec-Butylbenzene	105	11.281	11.281	(0.982)	669044	20.2519	20
	67 1,3-Dichlorobenzene	146	11.372	11.372	(0.990)	296931	19.9293	20
*	91 1,4-Dichlorobenzene-d4	152	11.482	11.482	(1.000)	365351	50.0000	
	68 1,4-Dichlorobenzene	146	11.512	11.512	(1.003)	297390	20.5040	20
	113 p-Isopropyltoluene	119	11.518	11.524	(1.003)	578073	20.2913	20
	69 1,2-Dichlorobenzene	146	11.982	11.988	(1.044)	265930	19.9287	20
	117 Benzyl chloride	91	11.726	11.726	(1.021)	168320	14.6130	15
	111 n-Butylbenzene	91	12.055	12.055	(1.050)	513960	20.2843	20
	101 1,2-Dibromo-3-chloropropane	75	12.866	12.872	(1.121)	14851	16.9322	17
	152 Camphor	95	13.555	13.555	(1.181)	41187	86.3041	86
	93 1,2,4-Trichlorobenzene	180	13.640	13.646	(1.188)	227226	20.8730	21
	94 Hexachlorobutadiene	225	13.817	13.817	(1.203)	124943	20.8945	21
	70 Naphthalene	128	13.841	13.841	(1.205)	375693	19.4108	19
	98 1,2,3-Trichlorobenzene	180	14.048	14.048	(1.224)	195726	20.0191	20

Data File: /chem/VOAMS12.i/8260L_10/02-14-11A/24mar11a.b/o46592.d
Report Date: 24-Mar-2011 20:17

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
M 45 Xylene (Total)	100				671700	59.8431	60

QC Flag Legend

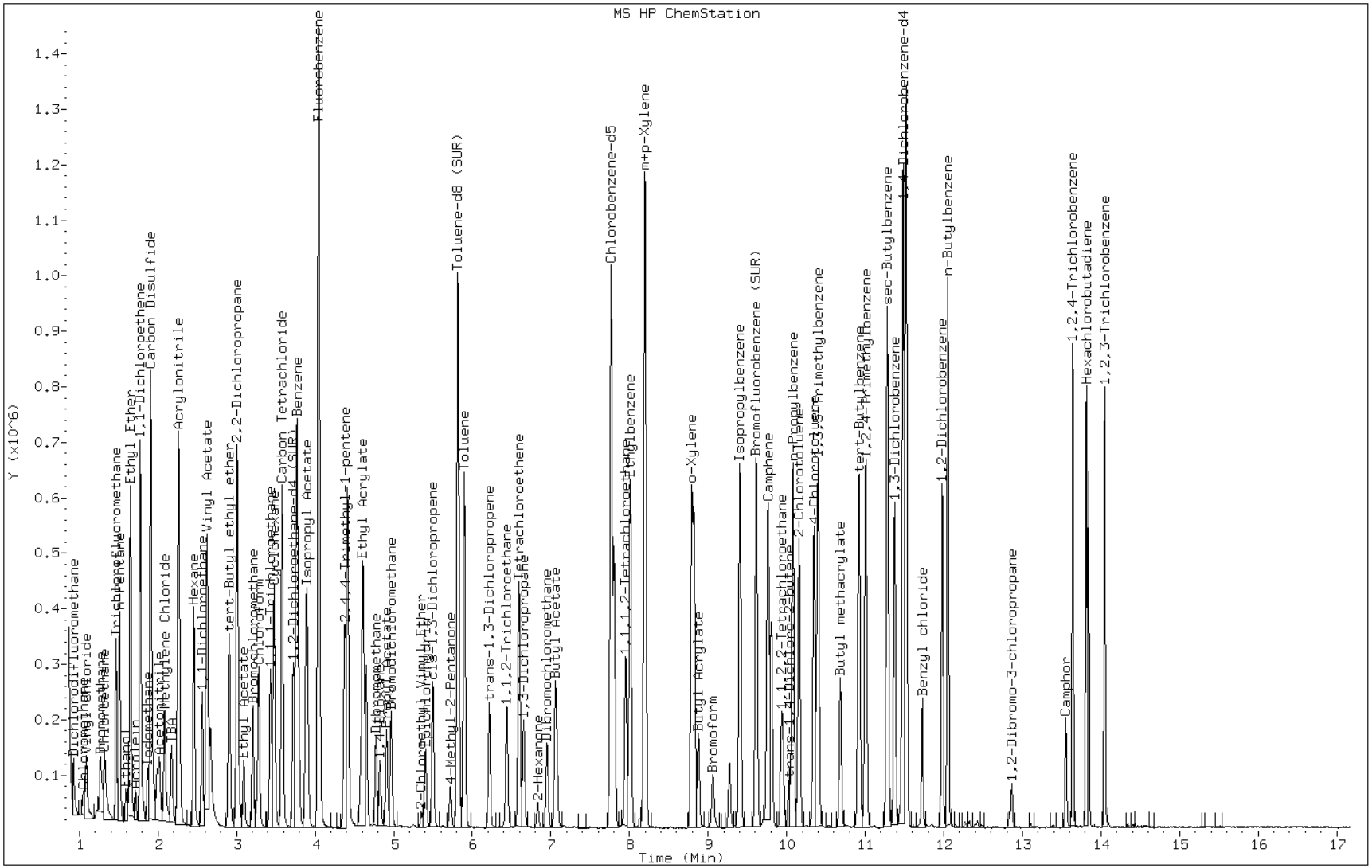
R - Spike/Surrogate failed recovery limits.

Data File: o46592.d

Date: 24-MAR-2011 19:53

Client ID: Instrument: VOAMS12.i

Sample Info: LCS Operator: VOAMS 9



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68543/3

Matrix: Solid Lab File ID: d07622.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2011 20:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20.6		1.0	0.63
74-83-9	Bromomethane	20.5		1.0	0.41
75-01-4	Vinyl chloride	21.1		1.0	0.23
75-00-3	Chloroethane	20.3		1.0	0.40
75-09-2	Methylene Chloride	24.5		1.0	0.47
67-64-1	Acetone	22.2		10	3.7
75-15-0	Carbon disulfide	19.0		1.0	0.46
75-35-4	1,1-Dichloroethene	19.6		1.0	0.37
75-34-3	1,1-Dichloroethane	21.3		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	21.4		1.0	0.28
156-59-2	cis-1,2-Dichloroethene	21.0		1.0	0.24
67-66-3	Chloroform	20.6		1.0	0.24
107-06-2	1,2-Dichloroethane	20.2		1.0	0.39
78-93-3	2-Butanone	22.8		10	0.57
71-55-6	1,1,1-Trichloroethane	19.4		1.0	0.19
56-23-5	Carbon tetrachloride	18.9		1.0	0.10
75-27-4	Bromodichloromethane	20.9		1.0	0.30
78-87-5	1,2-Dichloropropane	20.7		1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	20.1		1.0	0.20
79-01-6	Trichloroethene	19.6		1.0	0.36
124-48-1	Dibromochloromethane	21.0		1.0	0.56
79-00-5	1,1,2-Trichloroethane	21.6		1.0	0.59
71-43-2	Benzene	21.0		1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	21.0		1.0	0.22
75-25-2	Bromoform	20.8		1.0	0.70
108-10-1	4-Methyl-2-pentanone	19.1		10	0.72
591-78-6	2-Hexanone	21.2		10	1.7
127-18-4	Tetrachloroethene	20.2		1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	19.9		1.0	0.76
108-88-3	Toluene	21.2		1.0	0.30
108-90-7	Chlorobenzene	21.1		1.0	0.48
100-41-4	Ethylbenzene	20.1		1.0	0.19
100-42-5	Styrene	20.9		1.0	0.35
1330-20-7	Xylenes, Total	61.8		3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68543/3

Matrix: Solid Lab File ID: d07622.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2011 20:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-138
2037-26-5	Toluene-d8 (Surr)	102		66-126
460-00-4	Bromofluorobenzene	100		72-132

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07622.d
Report Date: 28-Mar-2011 15:27

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07622.d
Lab Smp Id: LCS
Inj Date : 25-MAR-2011 20:32
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : LCS
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/8260L_10.m
Meth Date : 28-Mar-2011 15:26 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 04:11 Cal File: d07588.d
Als bottle: 4 QC Sample: BS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
M 14 1,2-Dichloroethene (total)	100				124197	42.4329	42
90 Dichlorodifluoromethane	85	1.266	1.280	(0.272)	78571	19.9173	20
1 Chloromethane	50	1.359	1.366	(0.292)	139315	20.6404	21
4 Vinyl Chloride	62	1.430	1.445	(0.307)	150602	21.1277	21
3 Bromomethane	94	1.617	1.631	(0.347)	111372	20.4972	20
5 Chloroethane	64	1.674	1.688	(0.360)	107973	20.3498	20
9 Trichlorofluoromethane	101	1.803	1.824	(0.387)	222899	17.8739	18
121 n-Pentane	72	1.753	1.760	(0.377)	22922	27.1345	27(R)
46 Ethyl Ether	59	1.968	1.982	(0.423)	96943	21.3392	21
119 Isoprene	67	1.953	1.968	(0.420)	145673	22.1435	22
47 Acrolein	56	2.340	2.347	(0.503)	82804	152.397	150
10 1,1-Dichloroethene	96	2.104	2.118	(0.452)	95847	19.6312	20
48 Freon TF	101	2.175	2.183	(0.467)	112771	17.9940	18
7 Acetone	58	2.555	2.569	(0.549)	7516	22.1749	22

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07622.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
142	Iodomethane	142	2.211	2.225	(0.475)	204545	21.3148	21
8	Carbon Disulfide	76	2.140	2.154	(0.460)	382839	18.9522	19
50	Acetonitrile	41	2.677	2.684	(0.575)	110036	421.956	420
125	Methyl acetate	74	2.648	2.655	(0.569)	14779	18.7344	19
6	Methylene Chloride	84	2.512	2.526	(0.540)	79642	24.4998	24
155	2-Chloropropane	78	2.154	2.161	(0.463)	39895		(a)
51	TBA	59	2.827	2.842	(0.608)	199919	419.386	420
52	Acrylonitrile	53	3.135	3.142	(0.674)	203617	152.088	150
12	trans-1,2-Dichloroethene	96	2.619	2.627	(0.563)	56647	21.4496	21
53	MTBE	73	2.720	2.734	(0.584)	209026	21.1536	21
54	Hexane	56	2.677	2.684	(0.575)	45875	19.4550	19
11	1,1-Dichloroethane	63	3.085	3.092	(0.663)	117915	21.3363	21
57	Vinyl Acetate	43	3.006	3.021	(0.646)	124381	21.2584	21
55	DIPE	45	3.013	3.021	(0.648)	249553	21.7744	22
149	tert-Butyl ethyl ether	59	3.300	3.307	(0.709)	232044	21.5765	22
104	2,2-Dichloropropane	77	3.615	3.622	(0.777)	104368	20.6024	21
13	cis-1,2-Dichloroethene	96	3.515	3.529	(0.755)	67550	20.9833	21
18	2-Butanone	72	4.031	4.038	(0.866)	11364	22.7631	23
56	Ethyl Acetate	70	3.887	3.894	(0.835)	11806	37.8246	38
108	Bromochloromethane	128	3.680	3.687	(0.791)	34522	21.3661	21
15	Chloroform	83	3.758	3.766	(0.808)	118696	20.6474	21
20	1,1,1-Trichloroethane	97	3.930	3.930	(0.845)	101913	19.4201	19
59	Cyclohexane	56	3.687	3.694	(0.792)	109451	18.1605	18
21	Carbon Tetrachloride	117	3.866	3.873	(0.831)	96487	18.8590	19
92	1,1-Dichloropropene	75	4.031	4.038	(0.866)	77477	19.1956	19
$ 16	1,2-Dichloroethane-d4 (SUR)	65	4.382	4.389	(0.942)	134053	48.6965	49
28	Benzene	78	4.253	4.260	(0.914)	247670	20.9776	21
17	1,2-Dichloroethane	62	4.446	4.453	(0.955)	88980	20.1706	20
61	Isopropyl Acetate	43	4.747	4.754	(1.020)	271775	39.5918	40
140	tert-Amylmethyl Ether	73	4.396	4.403	(0.945)	197381	21.6171	22
* 69	Fluorobenzene	96	4.654	4.661	(1.000)	425411	50.0000	
62	n-Heptane	57	4.246	4.253	(0.528)	44711	18.5710	18
156	2,4,4-Trimethyl-1-pentene	112	4.704	4.704	(1.011)	14260	15.0452	15
25	Trichloroethene	95	4.819	4.826	(1.035)	60079	19.5837	20
96	Ethyl Acrylate	55	4.804	4.811	(1.032)	90730	17.2107	17
126	Methyl cyclohexane	83	4.804	4.811	(1.032)	100619	17.8155	18
23	1,2-Dichloropropane	63	5.363	5.363	(1.152)	66246	20.7129	21
109	Dibromomethane	93	5.248	5.255	(1.128)	41909	20.3426	20
95	1,4-Dioxane	88	5.678	5.692	(1.220)	4652	259.486	260(R)
146	Methyl methacrylate	69	5.671	5.671	(1.219)	36534	20.2381	20
64	Propyl Acetate	43	5.843	5.843	(1.255)	166394	39.2162	39
22	Bromodichloromethane	83	5.449	5.456	(1.171)	88177	20.8633	21
30	2-Chloroethyl Vinyl Ether	63	6.137	6.144	(1.319)	21351	11.9242	12(R)
118	Epichlorohydrin	57	6.488	6.487	(1.394)	133556	391.473	390
24	cis-1,3-Dichloropropene	75	6.165	6.172	(1.325)	89869	20.0814	20
33	4-Methyl-2-Pentanone	43	6.953	6.953	(1.494)	63521	19.0697	19
$ 37	Toluene-d8 (SUR)	98	6.387	6.387	(0.794)	347375	51.0771	51

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07622.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	38 Toluene	91	6.445	6.452	(0.801)	239436	21.1841	21
	29 trans-1,3-Dichloropropene	75	6.975	6.975	(0.867)	80542	20.9876	21
	27 1,1,2-Trichloroethane	83	7.139	7.139	(0.888)	45465	21.6299	22
	35 Tetrachloroethene	166	6.896	6.896	(0.857)	54021	20.2061	20
	103 1,3-Dichloropropane	76	7.412	7.419	(0.922)	86376	20.9557	21
	34 2-Hexanone	43	7.834	7.834	(0.974)	43545	21.1600	21
	26 Dibromochloromethane	129	7.311	7.318	(0.909)	57572	20.9640	21
	65 Butyl Acetate	43	7.777	7.777	(0.967)	176718	41.2270	41
	66 1,2-Dibromoethane	107	7.526	7.526	(0.936)	49138	20.8394	21
*	32 Chlorobenzene-d5	117	8.042	8.042	(1.000)	275366	50.0000	
	39 Chlorobenzene	112	8.056	8.063	(1.002)	149787	21.0791	21
	97 1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.012)	64249	21.0079	21
	40 Ethylbenzene	106	8.106	8.114	(1.008)	77970	20.0551	20
	43 m+p-Xylene	106	8.250	8.250	(1.026)	192795	40.7598	41
	44 o-Xylene	106	8.629	8.629	(1.073)	98399	21.0252	21
	42 Styrene	104	8.672	8.679	(1.078)	147738	20.8856	21
	147 Butyl Acrylate	55	8.837	8.837	(0.884)	111253	17.0612	17
	31 Bromoform	173	8.672	8.672	(1.078)	39102	20.7680	21
	110 Isopropylbenzene	105	8.901	8.901	(1.107)	271824	22.3925	22
$	41 Bromofluorobenzene (SUR)	174	9.124	9.123	(0.913)	113983	49.8275	50
	150 Camphene	93	8.980	8.980	(0.898)	84797	21.5870	22
	107 Bromobenzene	156	9.188	9.188	(0.919)	65771	20.2017	20
	36 1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	81989	19.9302	20
	99 1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	22163	19.6178	20
	143 trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.022)	7747	18.5266	18
	112 n-Propylbenzene	91	9.245	9.245	(0.925)	319623	19.2672	19
	105 2-Chlorotoluene	91	9.353	9.353	(0.936)	193560	19.9786	20
	106 4-Chlorotoluene	91	9.482	9.489	(0.948)	189032	20.7021	21
	102 1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	224042	19.8866	20
	148 Butyl methacrylate	69	9.675	9.675	(0.968)	88172	16.5241	16
	115 tert-Butylbenzene	119	9.654	9.654	(0.966)	173591	16.5948	16
	100 1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	237910	20.3638	20
	151 2-Octanone	43	10.119	10.119	(1.012)	91364	19.4391	19
	114 sec-Butylbenzene	105	9.790	9.790	(0.979)	295060	19.3431	19
	67 1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	130737	21.1612	21
	153 2-Octanol	45	9.997	9.997	(1.000)	23216	13.6520	14(R)
*	91 1,4-Dichlorobenzene-d4	152	9.997	9.997	(1.000)	145276	50.0000	
	68 1,4-Dichlorobenzene	146	10.005	10.012	(1.001)	133922	21.0825	21
	113 p-Isopropyltoluene	119	9.911	9.911	(0.991)	235035	17.5185	18
	69 1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	131039	20.2425	20
	117 Benzyl chloride	91	10.219	10.227	(1.022)	397148	20.2947	20
	111 n-Butylbenzene	91	10.219	10.227	(1.022)	397148	20.2947	20
	101 1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	15860	19.2717	19
	152 Camphor	95	11.595	11.595	(1.160)	32170	70.6543	71
	93 1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	104105	20.3081	20
	94 Hexachlorobutadiene	225	11.380	11.380	(1.138)	42792	16.8427	17
	70 Naphthalene	128	11.623	11.623	(1.163)	274713	21.4065	21

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07622.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	98 1,2,3-Trichlorobenzene	180	11.752	11.752	(1.176)	107925	20.3341	20
M	45 Xylene (Total)	100				291194	61.7805	62

QC Flag Legend

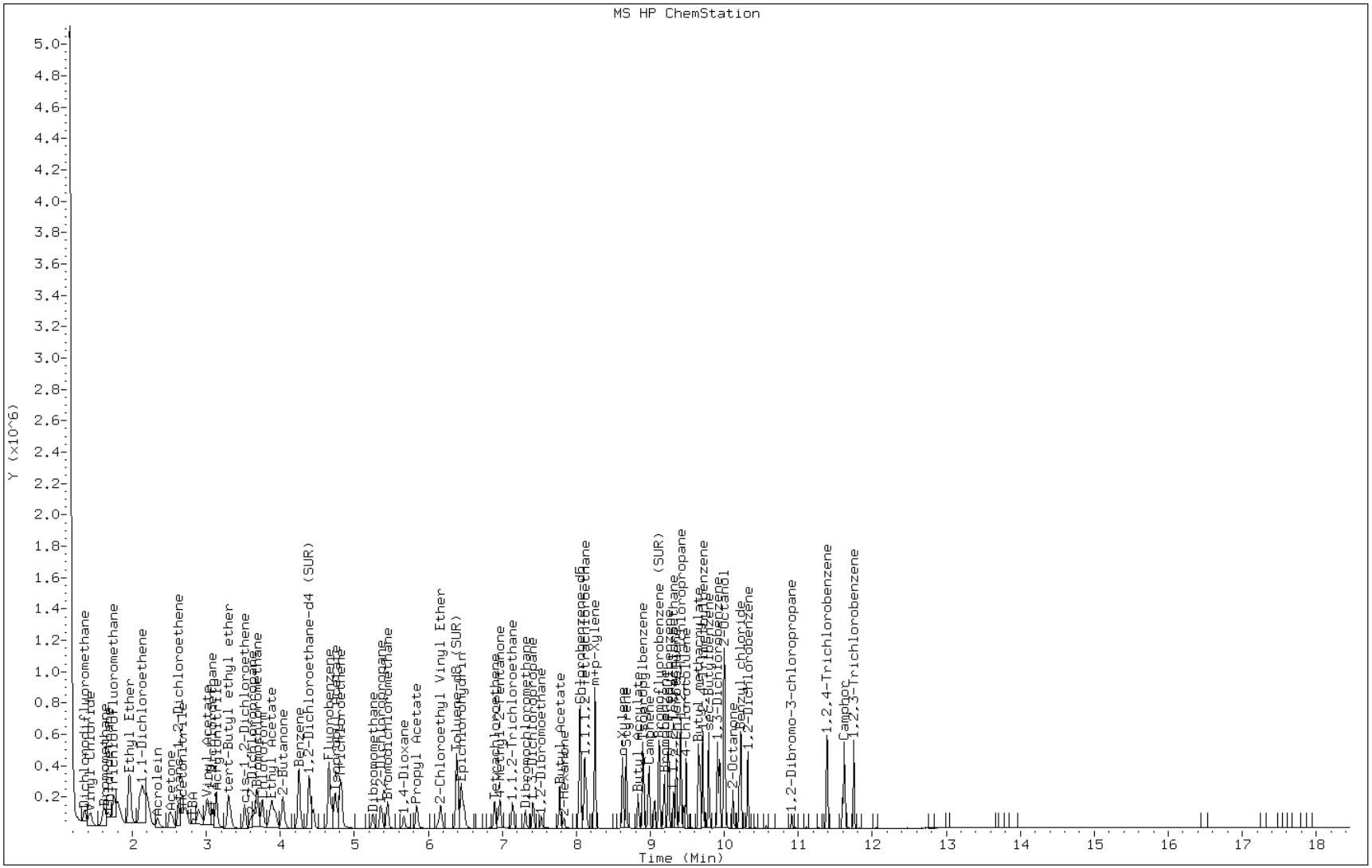
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: d07622.d

Date: 25-MAR-2011 20:32

Client ID: Instrument: VOAMS4.i

Sample Info: LCS Operator: VOAMS 9



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 460-68543/4

Matrix: Solid Lab File ID: d07623.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2011 20:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	18.5		1.0	0.63
74-83-9	Bromomethane	17.2		1.0	0.41
75-01-4	Vinyl chloride	18.9		1.0	0.23
75-00-3	Chloroethane	17.8		1.0	0.40
75-09-2	Methylene Chloride	21.7		1.0	0.47
67-64-1	Acetone	18.9		10	3.7
75-15-0	Carbon disulfide	16.7		1.0	0.46
75-35-4	1,1-Dichloroethene	17.2		1.0	0.37
75-34-3	1,1-Dichloroethane	19.2		1.0	0.25
156-60-5	trans-1,2-Dichloroethene	19.0		1.0	0.28
156-59-2	cis-1,2-Dichloroethene	19.2		1.0	0.24
67-66-3	Chloroform	19.3		1.0	0.24
107-06-2	1,2-Dichloroethane	19.5		1.0	0.39
78-93-3	2-Butanone	22.5		10	0.57
71-55-6	1,1,1-Trichloroethane	17.4		1.0	0.19
56-23-5	Carbon tetrachloride	17.1		1.0	0.10
75-27-4	Bromodichloromethane	19.9		1.0	0.30
78-87-5	1,2-Dichloropropane	19.7		1.0	0.32
10061-01-5	cis-1,3-Dichloropropene	19.1		1.0	0.20
79-01-6	Trichloroethene	18.4		1.0	0.36
124-48-1	Dibromochloromethane	19.1		1.0	0.56
79-00-5	1,1,2-Trichloroethane	19.5		1.0	0.59
71-43-2	Benzene	19.2		1.0	0.74
10061-02-6	trans-1,3-Dichloropropene	19.0		1.0	0.22
75-25-2	Bromoform	19.7		1.0	0.70
108-10-1	4-Methyl-2-pentanone	19.3		10	0.72
591-78-6	2-Hexanone	22.3		10	1.7
127-18-4	Tetrachloroethene	18.3		1.0	0.33
79-34-5	1,1,2,2-Tetrachloroethane	19.1		1.0	0.76
108-88-3	Toluene	19.3		1.0	0.30
108-90-7	Chlorobenzene	19.6		1.0	0.48
100-41-4	Ethylbenzene	18.9		1.0	0.19
100-42-5	Styrene	19.5		1.0	0.35
1330-20-7	Xylenes, Total	57.7		3.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 460-68543/4

Matrix: Solid Lab File ID: d07623.d

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 03/25/2011 20:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 68543 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-138
2037-26-5	Toluene-d8 (Surr)	102		66-126
460-00-4	Bromofluorobenzene	101		72-132

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07623.d
Report Date: 28-Mar-2011 15:27

TestAmerica

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07623.d
Lab Smp Id: LCSD
Inj Date : 25-MAR-2011 20:56
Operator : VOAMS 9 Inst ID: VOAMS4.i
Smp Info : LCSD
Misc Info :
Comment :
Method : /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/8260L_10.m
Meth Date : 28-Mar-2011 15:26 vibha Quant Type: ISTD
Cal Date : 25-MAR-2011 04:11 Cal File: d07588.d
Als bottle: 5 QC Sample: BSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * ((Vt/Ws)/((100-M)/100)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
M	14 1,2-Dichloroethene (total)	100				128621	38.1975	38
	90 Dichlorodifluoromethane	85	1.280	1.280	(0.275)	82302	18.1615	18
	1 Chloromethane	50	1.366	1.366	(0.293)	143324	18.4847	18
	4 Vinyl Chloride	62	1.438	1.445	(0.308)	154913	18.9183	19
	3 Bromomethane	94	1.624	1.631	(0.348)	107352	17.1989	17
	5 Chloroethane	64	1.688	1.688	(0.362)	108796	17.8497	18
	9 Trichlorofluoromethane	101	1.824	1.824	(0.391)	224470	15.6690	16
	121 n-Pentane	72	1.760	1.760	(0.378)	24527	25.2748	25(R)
	46 Ethyl Ether	59	1.982	1.982	(0.425)	100435	19.2451	19
	119 Isoprene	67	1.968	1.968	(0.422)	152024	20.1165	20
	47 Acrolein	56	2.347	2.347	(0.504)	88455	141.717	140
	10 1,1-Dichloroethene	96	2.133	2.118	(0.458)	96392	17.1864	17
	48 Freon TF	101	2.183	2.183	(0.468)	121492	16.8753	17
	7 Acetone	58	2.562	2.569	(0.550)	7382	18.9415	19

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07623.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
142	Iodomethane	142	2.218	2.225	(0.476)	208138	18.8807	19
8	Carbon Disulfide	76	2.154	2.154	(0.462)	386385	16.6509	17
50	Acetonitrile	41	2.684	2.684	(0.576)	121857	406.777	410
125	Methyl acetate	74	2.663	2.655	(0.571)	16631	18.3521	18
6	Methylene Chloride	84	2.519	2.526	(0.540)	81170	21.7365	22
155	2-Chloropropane	78	2.154	2.161	(0.462)	39533		(a)
51	TBA	59	2.849	2.842	(0.611)	178613	326.171	330
52	Acrylonitrile	53	3.143	3.142	(0.674)	219860	142.955	140
12	trans-1,2-Dichloroethene	96	2.627	2.627	(0.564)	57711	19.0228	19
53	MTBE	73	2.734	2.734	(0.587)	221176	19.4848	19
54	Hexane	56	2.684	2.684	(0.576)	54102	19.9729	20
11	1,1-Dichloroethane	63	3.092	3.092	(0.663)	121728	19.1741	19
57	Vinyl Acetate	43	3.021	3.021	(0.648)	132283	19.6813	20
55	DIPE	45	3.021	3.021	(0.648)	260030	19.7506	20
149	tert-Butyl ethyl ether	59	3.307	3.307	(0.710)	253530	20.5217	20
104	2,2-Dichloropropane	77	3.630	3.622	(0.779)	103090	17.7150	18
13	cis-1,2-Dichloroethene	96	3.529	3.529	(0.757)	70910	19.1747	19
18	2-Butanone	72	4.045	4.038	(0.868)	12887	22.4712	22
56	Ethyl Acetate	70	3.895	3.894	(0.836)	13153	36.6834	37
108	Bromochloromethane	128	3.694	3.687	(0.793)	37115	19.9965	20
15	Chloroform	83	3.766	3.766	(0.808)	127422	19.2951	19
20	1,1,1-Trichloroethane	97	3.938	3.930	(0.845)	104714	17.3700	17
59	Cyclohexane	56	3.687	3.694	(0.791)	119325	17.2351	17
21	Carbon Tetrachloride	117	3.866	3.873	(0.829)	100530	17.1048	17
92	1,1-Dichloropropene	75	4.038	4.038	(0.866)	84039	18.1252	18
$ 16	1,2-Dichloroethane-d4 (SUR)	65	4.396	4.389	(0.943)	154489	48.8532	49
28	Benzene	78	4.260	4.260	(0.914)	260724	19.2237	19
17	1,2-Dichloroethane	62	4.453	4.453	(0.955)	98727	19.4821	19
61	Isopropyl Acetate	43	4.754	4.754	(1.020)	306801	38.9068	39
140	tert-Amylmethyl Ether	73	4.403	4.403	(0.945)	208651	19.8923	20
* 69	Fluorobenzene	96	4.661	4.661	(1.000)	488692	50.0000	
62	n-Heptane	57	4.253	4.253	(0.529)	50305	17.3905	17
156	2,4,4-Trimethyl-1-pentene	112	4.704	4.704	(1.009)	15950	14.6491	15
25	Trichloroethene	95	4.826	4.826	(1.035)	64759	18.3758	18
96	Ethyl Acrylate	55	4.811	4.811	(1.032)	98218	16.2186	16
126	Methyl cyclohexane	83	4.811	4.811	(1.032)	111878	17.2439	17
23	1,2-Dichloropropane	63	5.363	5.363	(1.151)	72403	19.7065	20
109	Dibromomethane	93	5.256	5.255	(1.128)	45851	19.3741	19
95	1,4-Dioxane	88	5.693	5.692	(1.221)	2233	108.427	110
146	Methyl methacrylate	69	5.671	5.671	(1.217)	40824	19.6862	20
64	Propyl Acetate	43	5.850	5.843	(1.255)	187394	38.4465	38
22	Bromodichloromethane	83	5.456	5.456	(1.171)	96719	19.9211	20
30	2-Chloroethyl Vinyl Ether	63	6.144	6.144	(1.318)	23949	11.6434	12(R)
118	Epichlorohydrin	57	6.488	6.487	(1.392)	156731	399.915	400
24	cis-1,3-Dichloropropene	75	6.172	6.172	(1.324)	98220	19.1054	19
33	4-Methyl-2-Pentanone	43	6.953	6.953	(1.492)	73924	19.3190	19
$ 37	Toluene-d8 (SUR)	98	6.395	6.387	(0.795)	415204	50.8124	51

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07623.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
38	Toluene	91	6.452	6.452	(0.802)	261515	19.2574	19
29	trans-1,3-Dichloropropene	75	6.975	6.975	(0.867)	87588	18.9961	19
27	1,1,2-Trichloroethane	83	7.139	7.139	(0.888)	49178	19.4728	19
35	Tetrachloroethene	166	6.896	6.896	(0.857)	58932	18.3465	18
103	1,3-Dichloropropane	76	7.419	7.419	(0.922)	94914	19.1655	19
34	2-Hexanone	43	7.834	7.834	(0.974)	55095	22.2828	22
26	Dibromochloromethane	129	7.319	7.318	(0.910)	62868	19.0534	19
65	Butyl Acetate	43	7.777	7.777	(0.967)	209519	40.6822	41
66	1,2-Dibromoethane	107	7.526	7.526	(0.936)	54235	19.1438	19
* 32	Chlorobenzene-d5	117	8.042	8.042	(1.000)	330849	50.0000	
39	Chlorobenzene	112	8.056	8.063	(1.002)	167000	19.5603	20
97	1,1,1,2-Tetrachloroethane	131	8.135	8.135	(1.012)	69688	18.9651	19
40	Ethylbenzene	106	8.114	8.114	(1.009)	88211	18.8843	19
43	m+p-Xylene	106	8.250	8.250	(1.026)	215805	37.9733	38
44	o-Xylene	106	8.629	8.629	(1.073)	111135	19.7642	20
42	Styrene	104	8.672	8.679	(1.078)	165672	19.4933	19
147	Butyl Acrylate	55	8.837	8.837	(0.884)	138423	17.5552	18
31	Bromoform	173	8.672	8.672	(1.078)	44467	19.6569	20
110	Isopropylbenzene	105	8.902	8.901	(1.107)	300820	20.6254	21
$ 41	Bromofluorobenzene (SUR)	174	9.124	9.123	(0.913)	139312	50.3541	50
150	Camphene	93	8.980	8.980	(0.898)	96106	20.2292	20
107	Bromobenzene	156	9.188	9.188	(0.919)	73244	18.6012	19
36	1,1,2,2-Tetrachloroethane	83	9.317	9.317	(0.932)	94893	19.0725	19
99	1,2,3-Trichloropropane	110	9.403	9.403	(0.941)	25909	18.9622	19
143	trans-1,4-Dichloro-2-butene	53	9.410	9.410	(2.019)	7995	16.6438	17
112	n-Propylbenzene	91	9.245	9.245	(0.925)	363370	18.1111	18
105	2-Chlorotoluene	91	9.353	9.353	(0.936)	218656	18.6607	19
106	4-Chlorotoluene	91	9.482	9.489	(0.948)	209969	19.0130	19
102	1,3,5-Trimethylbenzene	105	9.410	9.410	(0.941)	247451	18.1609	18
148	Butyl methacrylate	69	9.675	9.675	(0.968)	107066	16.5903	16
115	tert-Butylbenzene	119	9.654	9.654	(0.966)	182366	14.4147	14(R)
100	1,2,4-Trimethylbenzene	105	9.711	9.711	(0.971)	264613	18.7273	19
151	2-Octanone	43	10.119	10.119	(1.012)	112311	19.7579	20
114	sec-Butylbenzene	105	9.790	9.790	(0.979)	323040	17.5101	18
67	1,3-Dichlorobenzene	146	9.940	9.940	(0.994)	147424	19.7300	20
153	2-Octanol	45	9.998	9.997	(1.000)	25368	12.3343	12(R)
* 91	1,4-Dichlorobenzene-d4	152	9.998	9.997	(1.000)	175702	50.0000	
68	1,4-Dichlorobenzene	146	10.005	10.012	(1.001)	149202	19.4205	19
113	p-Isopropyltoluene	119	9.912	9.911	(0.991)	260748	16.0695	16(R)
69	1,2-Dichlorobenzene	146	10.320	10.320	(1.032)	149373	19.0788	19
117	Benzyl chloride	91	10.220	10.227	(1.022)	444230	18.7696	19
111	n-Butylbenzene	91	10.220	10.227	(1.022)	444230	18.7696	19
101	1,2-Dibromo-3-chloropropane	75	10.907	10.907	(1.091)	18453	18.5396	18
152	Camphor	95	11.595	11.595	(1.160)	36205	65.7466	66
93	1,2,4-Trichlorobenzene	180	11.394	11.394	(1.140)	111783	18.0298	18
94	Hexachlorobutadiene	225	11.380	11.380	(1.138)	43931	14.2968	14(R)
70	Naphthalene	128	11.624	11.623	(1.163)	300593	19.3670	19

Data File: /chem/VOAMS4.i/8260L_10/03-24-11/25mar11a.b/d07623.d
Report Date: 28-Mar-2011 15:27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	98 1,2,3-Trichlorobenzene	180	11.752	11.752	(1.176)	114059	17.7685	18
M	45 Xylene (Total)	100				326940	57.7321	58

QC Flag Legend

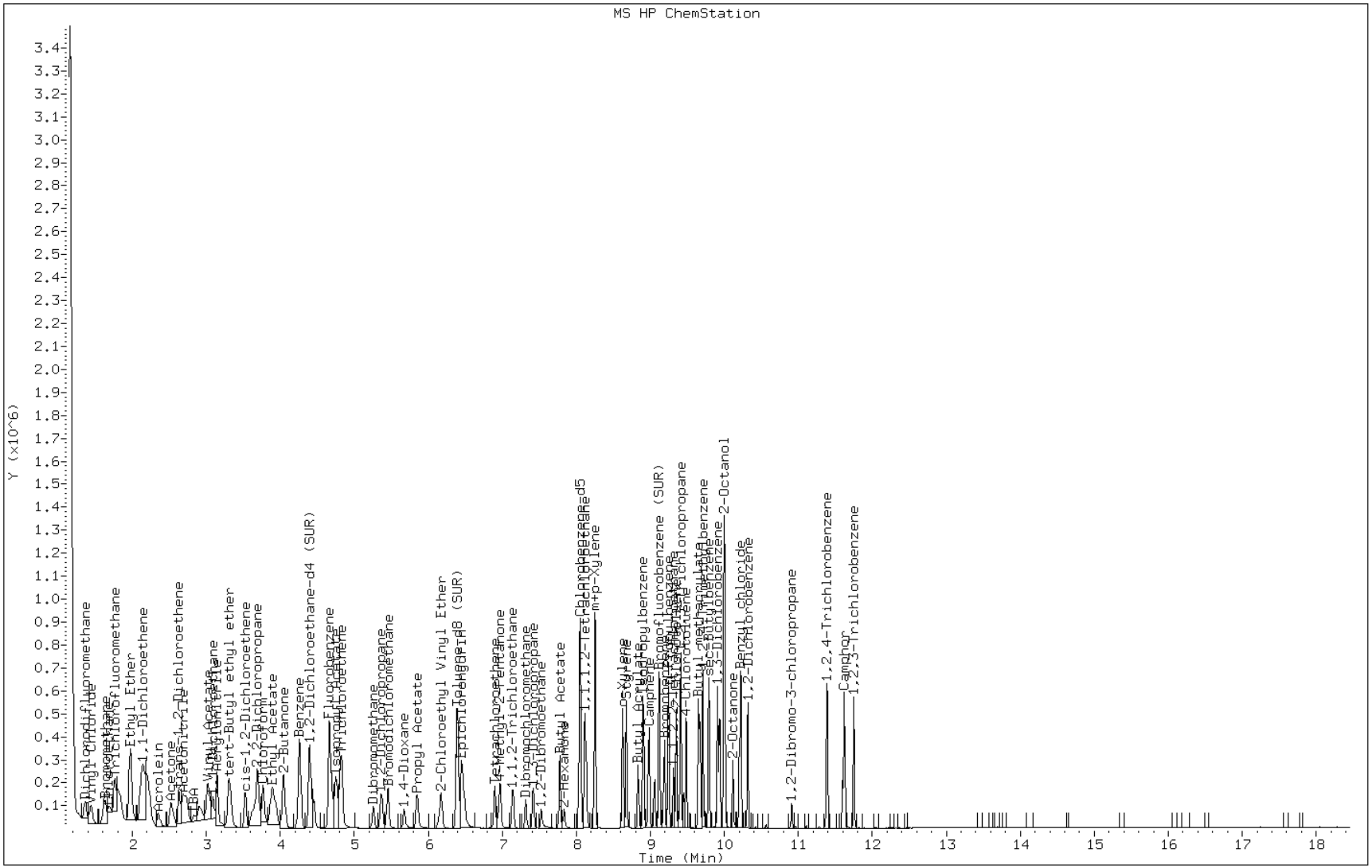
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: d07623.d

Date: 25-MAR-2011 20:56

Client ID: Instrument: VOAMS4.i

Sample Info: LCSD Operator: VOAMS 9



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAMS12 Start Date: 02/14/2011 17:09

Analysis Batch Number: 64630 End Date: 02/15/2011 03:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-64630/1		02/14/2011 17:09	1	o45212.d	DB-624 0.18(mm)
ICIS 460-64630/2		02/14/2011 18:17	1	o45214.d	DB-624 0.18(mm)
IC 460-64630/3		02/14/2011 23:21	1	o45218.d	DB-624 0.18(mm)
IC 460-64630/4		02/14/2011 23:46	1	o45219.d	DB-624 0.18(mm)
IC 460-64630/5		02/15/2011 00:11	1	o45220.d	DB-624 0.18(mm)
IC 460-64630/6		02/15/2011 02:40	1	o45226.d	DB-624 0.18(mm)
IC 460-64630/7		02/15/2011 03:30	1	o45228.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAMS12 Start Date: 03/24/2011 17:01

Analysis Batch Number: 68422 End Date: 03/25/2011 00:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-68422/1		03/24/2011 17:01	1	o46588.d	DB-624 0.18(mm)
CCVIS 460-68422/2		03/24/2011 17:55	1	o46590.d	DB-624 0.18(mm)
LCS 460-68422/3		03/24/2011 19:53	1	o46592.d	DB-624 0.18(mm)
ZZZZZ		03/24/2011 20:18	1		DB-624 0.18(mm)
MB 460-68422/5		03/24/2011 21:20	1	o46595.d	DB-624 0.18(mm)
LB3 460-68295/1-A		03/24/2011 21:45	1	o46596.d	DB-624 0.18(mm)
ZZZZZ		03/24/2011 22:10	1		DB-624 0.18(mm)
ZZZZZ		03/25/2011 00:39	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAMS4 Start Date: 03/24/2011 21:21

Analysis Batch Number: 68467 End Date: 03/25/2011 05:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-68467/1		03/24/2011 21:21	1	d07572.d	Rtx-624 0.25(mm)
IC 460-68467/2		03/24/2011 23:48	1	d07577.d	Rtx-624 0.25(mm)
ICIS 460-68467/3		03/25/2011 00:12	1	d07578.d	Rtx-624 0.25(mm)
IC 460-68467/4		03/25/2011 00:36	1	d07579.d	Rtx-624 0.25(mm)
IC 460-68467/5		03/25/2011 00:59	1	d07580.d	Rtx-624 0.25(mm)
IC 460-68467/6		03/25/2011 01:23	1	d07581.d	Rtx-624 0.25(mm)
IC 460-68467/7		03/25/2011 04:11	1	d07588.d	Rtx-624 0.25(mm)
ZZZZZ		03/25/2011 05:00	1		Rtx-624 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAMS4 Start Date: 03/25/2011 18:59

Analysis Batch Number: 68543 End Date: 03/26/2011 04:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-68543/1		03/25/2011 18:59	1	d07618.d	Rtx-624 0.25(mm)
ZZZZZ		03/25/2011 19:43	1		Rtx-624 0.25(mm)
CCVIS 460-68543/6		03/25/2011 19:43	1	d07620.d	Rtx-624 0.25(mm)
LCS 460-68543/3		03/25/2011 20:32	1	d07622.d	Rtx-624 0.25(mm)
LCSD 460-68543/4		03/25/2011 20:56	1	d07623.d	Rtx-624 0.25(mm)
MB 460-68543/5		03/25/2011 22:02	1	d07625.d	Rtx-624 0.25(mm)
460-24356-1	GPEC-WC-031911	03/25/2011 22:26	1	d07626.d	Rtx-624 0.25(mm)
ZZZZZ		03/25/2011 22:50	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2011 23:15	1		Rtx-624 0.25(mm)
ZZZZZ		03/25/2011 23:39	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 00:03	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 00:27	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 00:51	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 01:14	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 01:38	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 02:02	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 02:26	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 02:50	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 03:14	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 03:38	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 04:02	1		Rtx-624 0.25(mm)
ZZZZZ		03/26/2011 04:26	1		Rtx-624 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68295 Batch Start Date: 03/23/11 18:48 Batch Analyst: Jin, Fangzhou

Batch Method: 5035 Batch End Date: 03/23/11 22:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LB3 460-68295/1		5035, 8260B		5 g	5 mL				
460-24356-A-1	GPEC-WC-031911	5035, 8260B	T	5.62 g	5 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS12.i

Analytical Batch: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b

Date Generated: 02/15/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
02/14/11 1709	o45212.d	2	BFB		0	0	1	all			G
02/14/11 1752	o45213.d	1	CCVIS		5	5	1	all		8260 LOW	NG.
02/14/11 1817	o45214.d	2	ICIS-VM12LCAL3		5	5	1	all		8260 IS: 740210 SURR 250: 740211	G
02/14/11 2116	o45215.d	3	LCS		5	5	1	all		GAS 50: 844198 MIX 1 50: 833744	NG
02/14/11 2141	o45216.d	4	LCS		5	5	1	all		MIX 2 50: 833807 MIX 3: 833747	NG.
02/14/11 2256	o45217.d	5	BLANK		5	5	1	all		AC/AC: 833749 GAS SP:	↓
02/14/11 2321	o45218.d	6	IC-VM12LCAL4		5	5	1	all		844200 8260 SP: 833746	G
02/14/11 2346	o45219.d	7	IC-VM12LCAL5		5	5	1	all		MIX 3 SP: 833748 AC/AC SP: 833750	G
02/15/11 0011	o45220.d	8	IC-VM12LCAL6		5	5	1	all		MISC: 833805 SP 833787	G
02/15/11 0036	o45221.d	9	BLANK		5	5	1	all			NG. 9/0
02/15/11 0100	o45222.d	10	BLANK		5	5	1	all		MeOH	↓
02/15/11 0125	o45223.d	11	BLANK		5	5	1	all		G50E19.	↓
02/15/11 0150	o45224.d	12	IC-VM12LCAL1		5	5	1	all			(N.U.)
02/15/11 0215	o45225.d	13	IC-VM12LCAL1		5	5	1	all			↓

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS12.i

Analytical Batch: /chem/VOAMS12.i/8260L_10/02-14-11A/14feb11a.b

Date Generated: 02/15/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
02/15/11 0240	o45226.d	14	IC-VM12LCAL1		5	5	1	all			G
02/15/11 0305	o45227.d	15	IC-VM12LCAL2		5	5	1	all			(N.U.)
02/15/11 0330	o45228.d	16	IC-VM12LCAL2		5	5	1	all			G

Signed: Audbato for Eddie. Read and Understood by: A. Tupayad.

Date: 2/15/11. Date: 2/15/11.

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS12.i

Analytical Batch: /chem/VOAMS12.i/8260L_10/02-14-11A/24marlla.b

Date Generated: 03/25/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/24/11 1701	o46588.d	2	BFB		0	0	1	all			G
03/24/11 1730	o46589.d	1	CCVIS		5	5	1	all		8260 LOW	NG
03/24/11 1755	o46590.d	2	CCVIS		5	5	1	all		8260 IS: 881572 SURR 250: 881573 GAS 50: 899354 MIX 1 50: 867748 MIX 2 50: 867895 MIX 3: 867784 AC/AC: 867799 GAS SP: 899356 8260 SP: 867751 MIX 3 SP: 867785 AC/AC SP: 867837 MISC: 867899 (SP) 867898	G
03/24/11 1820	o46591.d	3	LCS		5	5	1	all			NG
03/24/11 1953	o46592.d	4	LCS		5	5	1	all			G
03/24/11 2018	o46593.d	5	LCSD		5	5	1	all			G
03/24/11 2056	o46594.d	6	MB		5	5	1	all			NG c/o
03/24/11 2120	o46595.d	7	MB		5	5	1	all			G
03/24/11 2145	o46596.d	8	LB3 460-68295/1-A		5	5	1	all			G
03/24/11 2210	o46597.d	9	460-24142-A-35-D	PDI-B99-COM	5.57	5	1	all			G
03/24/11 2235	o46598.d	10	460-24142-A-29-D	PDI-B100-COM	5.89	5	1	all		MeOH	RR bad inj
03/24/11 2300	o46599.d	11	460-24142-A-19-D	PDI-B87-COM	5.46	5	1	all		G50E19.	RR mL
03/24/11 2325	o46600.d	12	460-24142-A-6-D	PDI-B75-COM	5.71	5	1	all			RR c/o
03/24/11 2350	o46601.d	13	BLANK		5	5	1	all			(N.U.)

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS12.i

Analytical Batch: /chem/VOAMS12.i/8260L_10/02-14-11A/24marlla.b

Date Generated: 03/25/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/25/11 0015	o46602.d	14	460-24230-B-29-A	PMP-19-VD-E (3.5-4.	6.41	5	1	all			RR c/o See 046583
03/25/11 0039	o46603.d	15	460-24230-A-24-A	PMP-29-WT-E (7-7.5)	5.74	5	1	all			RR c/o (G) VDP 3/28/11 ↑ naph
03/25/11 0104	o46604.d	16	460-24230-A-25-A	PMP-27-VD-E (3-5)	6.19	5	1	all			RR c/o
03/25/11 0129	o46605.d	17	460-24232-A-1-A	D2-2C	6.47	5	1	all			RR c/o
03/25/11 0154	o46606.d	18	460-24232-A-5-A	L1-11	6.05	5	1	all			RR c/o
03/25/11 0219	o46607.d	19	460-24232-A-9-A	KS-1B	6.05	5	1	all			RR c/o
03/25/11 0244	o46608.d	20	460-24232-A-10-A	K3-6B	6.32	5	1	all			RR c/o
03/25/11 0309	o46609.d	21	460-24232-C-16-A	K1-1C	6.34	5	1	all			RR c/o
03/25/11 0333	o46610.d	22	460-24232-C-17-A	K2 2B	6.13	5	1	all			RR c/o
03/25/11 0358	o46611.d	23	460-24232-C-18-A	K2-4B	5.89	5	1	all			RR c/o

Signed: Alberto for Eddie Read and Understood by: A. Tupayachi

Date: 3/25/11. Date: 3/25/11.

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS4.i

Analytical Batch: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b

Date Generated: 03/25/2011

68467

Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/24/11 2121	d07572.d	2	BFB		0	0	1	all			G
03/24/11 2201	d07573.d	1	BLK		5	5	1	all		8260 LOW	
03/24/11 2225	d07574.d	2	IC-VM8LCAL1		5	5	1	all		8260 IS: 899133 SURR 250:	Cleanup
03/24/11 2300	d07575.d	3	IC-VM8LCAL1		5	5	1	all		GAS 50: 899354 MIX 1 50:	NG
03/24/11 2324	d07576.d	4	IC-VM8LCAL2		5	5	1	all		867748 MIX 2 50: 867895 MIX 3:	NG
03/24/11 2348	d07577.d	5	IC-VM8LCAL2		5	5	1	all		AC/AC: 867799	Not used
03/25/11 0012	d07578.d	6	ICIS-VM8LCAL3		5	5	1	all		GAS SP: 899356 8260 SP: 867757 MIX 3 SP:	G
03/25/11 0036	d07579.d	7	IC-VM8LCAL4		5	5	1	all		AC/AC SP: 867837 MISC: BFB 676496 MeOH 50349	G
03/25/11 0059	d07580.d	8	IC-VM8LCAL5		5	5	1	all		867898	G
03/25/11 0123	d07581.d	9	IC-VM8LCAL6		5	5	1	all		867838 867839	G
03/25/11 0147	d07582.d	10	BLK		5	5	1	all		867899	Cleanup
03/25/11 0211	d07583.d	11	BLK		5	5	1	all		899355	
03/25/11 0235	d07584.d	12	BLK		5	5	1	all		867750 867896	
03/25/11 0259	d07585.d	13	BLK		5	5	1	all			

ICV Std

ICV Std.

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS4.i

Analytical Batch: /chem/VOAMS4.i/8260L_10/03-24-11/24mar11.b

Date Generated: 03/25/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/25/11 0323	d07586.d	14	IC-VM8LCAL1		5	5	1	all			
03/25/11 0347	d07587.d	15	IC-VM8LCAL1		5	5	1	all			Not used ↓
03/25/11 0411	d07588.d	16	IC-VM8LCAL1		5	5	1	all			G
03/25/11 0436	d07589.d	17	ICV		5	5	1	all			NG- Acrolein ↓
03/25/11 0500	d07590.d	18	ICV		5	5	1	all			NG ↓ for 03/25

Signed: Samath Desai for Kenny Read and Understood by: Samath Desai

Date: 03/25/11 Date: 03/25/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS4.i

Analytical Batch: /chem/VOAMS4.i/8260L_10/03-24-11/25marlla.b

Date Generated: 03/28/2011

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Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/25/11 1859	d07618.d	2	BFB		0	0	1	all			G
03/25/11 1918	d07619.d	1	CCVIS		5	5	1	all		8260 LOW 8260 IS: 899133 SURR 250:	NG. Acetone ↑
03/25/11 1943	d07620.d	2	~~LCS~~ CCV1S fr 03128		5	5	1	all		GAS 50: 899359 MIX 1 50: 867748 MIX 2 50: 867885 MIX 3:	G
03/25/11 2007	d07621.d	3	LCS		5	5	1	all			NG
03/25/11 2032	d07622.d	4	LCS		5	5	1	all		AC/AC: 867790 GAS SP: 899356 8260 SP: 867751 MIX 3 SP: AC/AC SP: 867857 MISC: BFB 676496 Meeh 50349 867898 867899	G
03/25/11 2056	d07623.d	5	LCSD		5	5	1	all			G
03/25/11 2138	d07624.d	6	MB		5	5	1	all			NG
03/25/11 2202	d07625.d	7	MB		5	5	1	all			G
03/25/11 2226	d07626.d	8	460-24356-A-1-B	GPEC-WC-031911	5.62	5	1	all			G
03/25/11 2250	d07627.d	9	460-24400-B-2-A	SNB2/SAK1-S-18	3.91	5	1	all			G
03/25/11 2315	d07628.d	10	460-24402-B-2-A	SNB2/SAK1-S-19	4.12	5	1	all			G
03/25/11 2339	d07629.d	11	460-24225-D-5-A	CW-1	4.29	5	1	all			G
03/26/11 0003	d07630.d	12	460-24225-C-6-A	FD-2	4.4	5	1	all			G
03/26/11 0027	d07631.d	13	460-24298-B-1-A	TP-58 (9)	6.02	5	1	all			G

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAMS4.i

Analytical Batch: /chem/VOAMS4.i/8260L_10/03-24-11/25marlla.b

Date Generated: 03/28/2011

Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS
03/26/11 0051	d07632.d	14	460-24298-B-8-A	TP-56 (7)	5.03	5	1	all			G
03/26/11 0114	d07633.d	15	460-24265-B-1-A	SB-201	5.09	5	1	all			G
03/26/11 0138	d07634.d	16	460-24265-B-2-A	SB-202	5.8	5	1	all			G
03/26/11 0202	d07635.d	17	460-24265-B-3-A	SB-203	5.66	5	1	all			G
03/26/11 0226	d07636.d	18	460-24265-B-4-A	SB-204	5.74	5	1	all			G
03/26/11 0250	d07637.d	19	460-24265-B-5-A	SB-205	5.64	5	1	all			G RR-ML (See also ML 4/3/11)
03/26/11 0314	d07638.d	20	460-24265-B-6-A	SB-206	4.82	5	1	all			G ~~RR - for clo cont.~~ MS 3/30/11
03/26/11 0338	d07639.d	21	460-24265-B-7-A	SB-207	5.24	5	1	all			G
03/26/11 0402	d07640.d	22	460-24265-B-8-A	SB-208	5.32	5	1	all			G
03/26/11 0426	d07641.d	23	460-24299-C-5-A	PDI-JS23-10.0	5.43	5	1	all			G
03/26/11 0449	d07642.d	24	460-24299-C-1-A	PDI-JS28-11.5	4.9	5	1	all			RR-ML

Signed: Saurabh Desai for Eddie Read and Understood by: Saurabh Desai

Date: 03/28/11 Date: 03/28/11

04/05/2011

Method 8270C

Semivolatile Organic Compounds (GC/MS) by Method 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
GPEC-WC-031911	460-24356-1	62	74	55	64	51	117
	MB 460-68798/1-A	82	86	88	91	90	82
	LCS 460-68798/2-A	82	81	76	73	101	92
	460-24277-F-7-A MS	88	90	84	77	91	115
	460-24277-F-7-B MSD	79	87	80	74	86	107

	QC LIMITS
2FP = 2-Fluorophenol	37-125
PHL = Phenol-d5	41-118
NBZ = Nitrobenzene-d5	38-105
FBP = 2-Fluorobiphenyl	40-109
TBP = 2,4,6-Tribromophenol	10-120
TPH = Terphenyl-d14	16-151

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66359.d

Lab ID: LCS 460-68798/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Phenol	6650	4870	73	54-115	
2-Chlorophenol	6650	5280	79	56-110	
2-Methylphenol	6650	5220	78	54-117	
4-Methylphenol	6650	5490	83	47-103	
2-Nitrophenol	6650	5330	80	55-101	
2,4-Dimethylphenol	6650	5430	82	56-112	
2,4-Dichlorophenol	6650	5900	89	58-115	
4-Chloro-3-methylphenol	6650	5560	84	55-117	
2,4,6-Trichlorophenol	6650	6080	91	53-118	
2,4,5-Trichlorophenol	6650	5620	84	50-115	
2,4-Dinitrophenol	6650	2990	45	10-129	
4-Nitrophenol	6650	5890	89	45-114	
4,6-Dinitro-2-methylphenol	6650	3660	55	10-110	
Pentachlorophenol	6650	5200	78	19-113	
Bis(2-chloroethyl)ether	3330	3180	96	44-101	
1,3-Dichlorobenzene	3330	2350	71	47-84	
1,4-Dichlorobenzene	3330	2410	72	47-85	
1,2-Dichlorobenzene	3330	2460	74	48-87	
N-Nitrosodi-n-propylamine	3330	2980	90	42-107	
Hexachloroethane	3330	2270	68	45-90	
Nitrobenzene	3330	2470	74	42-106	
Isophorone	3330	365	11	48-97	*
Bis(2-chloroethoxy)methane	3330	2700	81	51-100	
1,2,4-Trichlorobenzene	3330	2580	78	48-94	
Naphthalene	3330	2490	75	53-94	
4-Chloroaniline	3330	1660	50	10-96	
Hexachlorobutadiene	3330	2560	77	45-98	
2-Methylnaphthalene	3330	2640	79	51-98	
Hexachlorocyclopentadiene	3330	2750	83	24-98	
2-Chloronaphthalene	3330	2820	85	51-102	
2-Nitroaniline	3330	2750	83	51-109	
Dimethyl phthalate	3330	3060	92	52-112	
Acenaphthylene	3330	2690	81	51-103	
2,6-Dinitrotoluene	3330	3490	105	51-115	
3-Nitroaniline	3330	1710	51	32-104	
Acenaphthene	3330	2940	88	46-100	
Dibenzofuran	3330	2610	78	52-106	
2,4-Dinitrotoluene	3330	3130	94	53-110	
Diethyl phthalate	3330	3050	92	52-114	
4-Chlorophenyl phenyl ether	3330	3290	99	50-106	
Fluorene	3330	2770	83	51-108	
4-Nitroaniline	3330	2800	84	45-106	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66359.d

Lab ID: LCS 460-68798/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	3330	2540	76	49-106	
4-Bromophenyl phenyl ether	3330	2980	90	44-102	
Hexachlorobenzene	3330	2720	82	43-104	
Phenanthrene	3330	2580	78	48-108	
Anthracene	3330	2840	85	50-107	
Carbazole	3330	2590	78	49-104	
Di-n-butyl phthalate	3330	2720	82	50-108	
Fluoranthene	3330	2650	80	49-108	
Pyrene	3330	3080	93	49-116	
Butyl benzyl phthalate	3330	2990	90	49-117	
3,3'-Dichlorobenzidine	3330	1620	49	24-105	
Benzo[a]anthracene	3330	2850	86	46-112	
Chrysene	3330	2800	84	45-114	
Bis(2-ethylhexyl) phthalate	3330	2970	89	49-119	
Di-n-octyl phthalate	3330	3180	96	40-106	
Benzo[b]fluoranthene	3330	3030	91	33-96	
Benzo[k]fluoranthene	3330	3310	99	35-115	
Benzo[a]pyrene	3330	3150	95	36-89	*
Indeno[1,2,3-cd]pyrene	3330	3280	99	43-109	
Dibenz(a,h)anthracene	3330	3270	98	43-107	
Benzo[g,h,i]perylene	3330	3240	97	43-106	
bis (2-chloroisopropyl) ether	3330	2560	77	45-102	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66382.d

Lab ID: 460-24277-F-7-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Phenol	6930	340 U	5970	86	54-115	
2-Chlorophenol	6930	340 U	6080	88	56-110	
2-Methylphenol	6930	340 U	6010	87	54-117	
4-Methylphenol	6930	340 U	6400	92	47-103	
2-Nitrophenol	6930	340 U	5580	81	55-101	
2,4-Dimethylphenol	6930	340 U	5900	85	56-112	
2,4-Dichlorophenol	6930	340 U	6750	97	58-115	
4-Chloro-3-methylphenol	6930	340 U	6240	90	55-117	
2,4,6-Trichlorophenol	6930	340 U	6390	92	53-118	
2,4,5-Trichlorophenol	6930	340 U	6310	91	50-115	
2,4-Dinitrophenol	6930	1000 U	1560	23	10-129	
4-Nitrophenol	6930	1000 U	5570	80	45-114	
4,6-Dinitro-2-methylphenol	6930	1000 U	2630	38	10-110	
Pentachlorophenol	6930	1000 U	2670	38	19-113	
Bis(2-chloroethyl)ether	3470	34 U	3640	105	44-101	F
1,3-Dichlorobenzene	3470	340 U	2540	73	47-84	
1,4-Dichlorobenzene	3470	340 U	2670	77	47-85	
1,2-Dichlorobenzene	3470	340 U	2720	78	48-87	
N-Nitrosodi-n-propylamine	3470	34 U	3430	99	42-107	
Hexachloroethane	3470	34 U	2410	69	45-90	
Nitrobenzene	3470	34 U	2740	79	42-106	
Isophorone	3470	340 U	3100	89	48-97	
Bis(2-chloroethoxy)methane	3470	340 U	3070	89	51-100	
1,2,4-Trichlorobenzene	3470	34 U	2710	78	48-94	
Naphthalene	3470	340 U	2790	81	53-94	
4-Chloroaniline	3470	340 U	1860	54	10-96	
Hexachlorobutadiene	3470	70 U	2780	80	45-98	
2-Methylnaphthalene	3470	340 U	3000	87	51-98	
Hexachlorocyclopentadiene	3470	340 U	1740	50	24-98	
2-Chloronaphthalene	3470	340 U	3050	88	51-102	
2-Nitroaniline	3470	700 U	3450	100	51-109	
Dimethyl phthalate	3470	340 U	3390	98	52-112	
Acenaphthylene	3470	340 U	2880	83	51-103	
2,6-Dinitrotoluene	3470	70 U	3570	103	51-115	
3-Nitroaniline	3470	700 U	2320	67	32-104	
Acenaphthene	3470	340 U	3070	89	46-100	
Dibenzofuran	3470	340 U	2900	84	52-106	
2,4-Dinitrotoluene	3470	70 U	3530	102	53-110	
Diethyl phthalate	3470	340 U	3220	93	52-114	
4-Chlorophenyl phenyl ether	3470	340 U	3450	99	50-106	
Fluorene	3470	340 U	2890	83	51-108	
4-Nitroaniline	3470	700 U	3180	92	45-106	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66382.d

Lab ID: 460-24277-F-7-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	3470	340 U	2960	85	49-106	
4-Bromophenyl phenyl ether	3470	340 U	3290	95	44-102	
Hexachlorobenzene	3470	34 U	2990	86	43-104	
Phenanthrene	3470	340 U	2940	85	48-108	
Anthracene	3470	340 U	3180	92	50-107	
Carbazole	3470	340 U	3020	87	49-104	
Di-n-butyl phthalate	3470	340 U	3190	92	50-108	
Fluoranthene	3470	340 U	2830	82	49-108	
Pyrene	3470	340 U	4050	117	49-116	F
Butyl benzyl phthalate	3470	340 U	4120	119	49-117	F
3,3'-Dichlorobenzidine	3470	700 U	2630	76	24-105	
Benzo[a]anthracene	3470	34 U	3250	94	46-112	
Chrysene	3470	340 U	3490	101	45-114	
Bis(2-ethylhexyl) phthalate	3470	340 U	4020	116	49-119	
Di-n-octyl phthalate	3470	340 U	3690	106	40-106	
Benzo[b]fluoranthene	3470	34 U	3280	95	33-96	
Benzo[k]fluoranthene	3470	34 U	3370	97	35-115	
Benzo[a]pyrene	3470	34 U	3210	93	36-89	F
Indeno[1,2,3-cd]pyrene	3470	34 U	4140	119	43-109	F
Dibenz(a,h)anthracene	3470	34 U	3880	112	43-107	F
Benzo[g,h,i]perylene	3470	340 U	4200	121	43-106	F
bis (2-chloroisopropyl) ether	3470	340 U	3010	87	45-102	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66383.d

Lab ID: 460-24277-F-7-B MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Phenol	6920	5550	80	7	30	54-115	
2-Chlorophenol	6920	5750	83	6	30	56-110	
2-Methylphenol	6920	5750	83	4	30	54-117	
4-Methylphenol	6920	5950	86	7	30	47-103	
2-Nitrophenol	6920	5500	79	2	30	55-101	
2,4-Dimethylphenol	6920	6330	91	7	30	56-112	
2,4-Dichlorophenol	6920	5790	84	15	30	58-115	
4-Chloro-3-methylphenol	6920	6010	87	4	30	55-117	
2,4,6-Trichlorophenol	6920	6060	88	5	30	53-118	
2,4,5-Trichlorophenol	6920	5990	87	5	30	50-115	
2,4-Dinitrophenol	6920	1170	17	29	30	10-129	
4-Nitrophenol	6920	5160	74	8	30	45-114	
4,6-Dinitro-2-methylphenol	6920	2020	29	26	30	10-110	
Pentachlorophenol	6920	2110	31	23	30	19-113	
Bis(2-chloroethyl)ether	3460	3690	107	2	30	44-101	F
1,3-Dichlorobenzene	3460	2420	70	5	30	47-84	
1,4-Dichlorobenzene	3460	2490	72	7	30	47-85	
1,2-Dichlorobenzene	3460	2650	77	3	30	48-87	
N-Nitrosodi-n-propylamine	3460	3270	94	5	30	42-107	
Hexachloroethane	3460	2380	69	1	30	45-90	
Nitrobenzene	3460	2640	76	4	30	42-106	
Isophorone	3460	3060	88	1	30	48-97	
Bis(2-chloroethoxy)methane	3460	3080	89	0	30	51-100	
1,2,4-Trichlorobenzene	3460	2650	77	2	30	48-94	
Naphthalene	3460	2810	81	1	30	53-94	
4-Chloroaniline	3460	1950	56	5	30	10-96	
Hexachlorobutadiene	3460	2770	80	0	30	45-98	
2-Methylnaphthalene	3460	3060	88	2	30	51-98	
Hexachlorocyclopentadiene	3460	1770	51	1	30	24-98	
2-Chloronaphthalene	3460	3000	87	2	30	51-102	
2-Nitroaniline	3460	3380	98	2	30	51-109	
Dimethyl phthalate	3460	3240	94	5	30	52-112	
Acenaphthylene	3460	2850	82	1	30	51-103	
2,6-Dinitrotoluene	3460	3540	102	1	30	51-115	
3-Nitroaniline	3460	2340	68	1	30	32-104	
Acenaphthene	3460	2960	85	4	30	46-100	
Dibenzofuran	3460	2730	79	6	30	52-106	
2,4-Dinitrotoluene	3460	3120	90	12	30	53-110	
Diethyl phthalate	3460	3240	94	1	30	52-114	
4-Chlorophenyl phenyl ether	3460	3370	97	2	30	50-106	
Fluorene	3460	3040	88	5	30	51-108	
4-Nitroaniline	3460	3100	89	3	30	45-106	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: u66383.d

Lab ID: 460-24277-F-7-B MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodiphenylamine	3460	2820	81	5	30	49-106	
4-Bromophenyl phenyl ether	3460	2950	85	11	30	44-102	
Hexachlorobenzene	3460	2870	83	4	30	43-104	
Phenanthrene	3460	2950	85	0	30	48-108	
Anthracene	3460	2760	80	14	30	50-107	
Carbazole	3460	2770	80	9	30	49-104	
Di-n-butyl phthalate	3460	2870	83	11	30	50-108	
Fluoranthene	3460	2540	73	11	30	49-108	
Pyrene	3460	3660	106	10	30	49-116	
Butyl benzyl phthalate	3460	3910	113	5	30	49-117	
3,3'-Dichlorobenzidine	3460	2610	75	1	30	24-105	
Benzo[a]anthracene	3460	3150	91	3	30	46-112	
Chrysene	3460	3340	97	4	30	45-114	
Bis(2-ethylhexyl) phthalate	3460	3750	108	7	30	49-119	
Di-n-octyl phthalate	3460	3630	105	2	30	40-106	
Benzo[b]fluoranthene	3460	3160	91	4	30	33-96	
Benzo[k]fluoranthene	3460	3460	100	3	30	35-115	
Benzo[a]pyrene	3460	3310	96	3	30	36-89	F
Indeno[1,2,3-cd]pyrene	3460	3880	112	7	30	43-109	F
Dibenz(a,h)anthracene	3460	3910	113	1	30	43-107	F
Benzo[g,h,i]perylene	3460	4350	126	4	30	43-106	F
bis (2-chloroisopropyl) ether	3460	2760	80	9	30	45-102	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: u66362.d Lab Sample ID: MB 460-68798/1-A

Matrix: Solid Date Extracted: 03/28/2011 22:00

Instrument ID: BNAMS4 Date Analyzed: 03/30/2011 05:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-68798/2-A	u66359.d	03/30/2011 04:24
	460-24277-F-7-A MS	u66382.d	03/30/2011 12:10
	460-24277-F-7-B MSD	u66383.d	03/30/2011 12:30
GPEC-WC-031911	460-24356-1	u66385.d	03/30/2011 13:09

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: u66239.d DFTPP Injection Date: 03/18/2011

Instrument ID: BNAMS4 DFTPP Injection Time: 04:57

Analysis Batch No.: 67964

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	52.4	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	65.9	
70	Less than 2.0 % of mass 69	0.0	(0.0)1
127	40.0 - 60.0 % of mass 198	54.8	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.5	
275	10.0 - 30.0 % of mass 198	26.0	
365	Greater than 1.0 % of mass 198	3.9	
441	Present but less than mass 443	7.4	
442	Greater than 40.0 % of mass 198	48.9	
443	17.0 - 23.0 % of mass 442	9.8	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 460-67964/2	u66240.d	03/18/2011	05:47
	IC 460-67964/3	u66241.d	03/18/2011	06:17
	IC 460-67964/4	u66242.d	03/18/2011	06:37
	IC 460-67964/5	u66243.d	03/18/2011	06:57
	IC 460-67964/6	u66244.d	03/18/2011	07:16
	IC 460-67964/7	u66245.d	03/18/2011	07:36

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab File ID: u66357.d DFTPP Injection Date: 03/30/2011

Instrument ID: BNAMS4 DFTPP Injection Time: 03:28

Analysis Batch No.: 68940

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	44.6	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	59.0	
70	Less than 2.0 % of mass 69	0.1	(0.2)1
127	40.0 - 60.0 % of mass 198	49.6	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.6	
275	10.0 - 30.0 % of mass 198	22.1	
365	Greater than 1.0 % of mass 198	3.3	
441	Present but less than mass 443	9.4	
442	Greater than 40.0 % of mass 198	58.8	
443	17.0 - 23.0 % of mass 442	11.0	(18.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-68940/2	u66358.d	03/30/2011	04:01
	LCS 460-68798/2-A	u66359.d	03/30/2011	04:24
	MB 460-68798/1-A	u66362.d	03/30/2011	05:27
	460-24277-F-7-A MS	u66382.d	03/30/2011	12:10
	460-24277-F-7-B MSD	u66383.d	03/30/2011	12:30
GPEC-WC-031911	460-24356-1	u66385.d	03/30/2011	13:09

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVIS 460-68940/2 Date Analyzed: 03/30/2011 04:01

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm)

Lab File ID (Standard): u66358.d Heated Purge: (Y/N) N

Calibration ID: 10194

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		188162	3.08	601374	4.41	447339	6.16
UPPER LIMIT		376324	3.58	1202748	4.91	894678	6.66
LOWER LIMIT		94081	2.58	300687	3.91	223670	5.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-68798/2-A		210070	3.08	652238	4.41	515807	6.16
MB 460-68798/1-A		153919	3.08	498551	4.40	354708	6.15
460-24277-F-7-A MS		167728	3.09	538119	4.41	430573	6.16
460-24277-F-7-B MSD		180776	3.09	561898	4.41	445784	6.16
460-24356-1	GPEC-WC-031911	188146	3.08	659031	4.41	481883	6.16

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVIS 460-68940/2 Date Analyzed: 03/30/2011 04:01

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm)

Lab File ID (Standard): u66358.d Heated Purge: (Y/N) N

Calibration ID: 10194

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		596939	7.59	466636	10.15	272491	11.66
UPPER LIMIT		1193878	8.09	933272	10.65	544982	12.16
LOWER LIMIT		298470	7.09	233318	9.65	136246	11.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-68798/2-A		738094	7.60	650617	10.15	356005	11.66
MB 460-68798/1-A		551393	7.59	627833	10.13	438212	11.65
460-24277-F-7-A MS		591641	7.60	431690	10.14	257988	11.66
460-24277-F-7-B MSD		644447	7.60	444780	10.14	256481	11.66
460-24356-1	GPEC-WC-031911	629568	7.59	418062	10.14	260962	11.66

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 | Lab Sample ID: 460-24356-1

Matrix: Solid | Lab File ID: u66385.d

Analysis Method: 8270C | Date Collected: 03/19/2011 16:45

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) | Date Analyzed: 03/30/2011 13:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	400	U	400	49
95-57-8	2-Chlorophenol	400	U	400	53
95-48-7	2-Methylphenol	400	U	400	57
106-44-5	4-Methylphenol	400	U	400	65
88-75-5	2-Nitrophenol	400	U	400	65
105-67-9	2,4-Dimethylphenol	400	U	400	64
120-83-2	2,4-Dichlorophenol	400	U	400	64
59-50-7	4-Chloro-3-methylphenol	400	U	400	67
88-06-2	2,4,6-Trichlorophenol	400	U	400	71
95-95-4	2,4,5-Trichlorophenol	400	U	400	77
51-28-5	2,4-Dinitrophenol	1200	U	1200	84
100-02-7	4-Nitrophenol	1200	U	1200	100
534-52-1	4,6-Dinitro-2-methylphenol	1200	U	1200	190
87-86-5	Pentachlorophenol	1200	U	1200	190
111-44-4	Bis(2-chloroethyl)ether	40	U	40	8.3
541-73-1	1,3-Dichlorobenzene	400	U	400	54
106-46-7	1,4-Dichlorobenzene	400	U	400	59
95-50-1	1,2-Dichlorobenzene	400	U	400	64
621-64-7	N-Nitrosodi-n-propylamine	40	U	40	5.3
67-72-1	Hexachloroethane	40	U	40	6.7
98-95-3	Nitrobenzene	40	U	40	8.9
78-59-1	Isophorone	400	U *	400	46
111-91-1	Bis(2-chloroethoxy)methane	400	U	400	57
120-82-1	1,2,4-Trichlorobenzene	40	U	40	6.5
91-20-3	Naphthalene	400	U	400	58
106-47-8	4-Chloroaniline	400	U	400	50
87-68-3	Hexachlorobutadiene	81	U	81	16
91-57-6	2-Methylnaphthalene	400	U	400	58
77-47-4	Hexachlorocyclopentadiene	400	U	400	120
91-58-7	2-Chloronaphthalene	400	U	400	56
88-74-4	2-Nitroaniline	810	U	810	110
131-11-3	Dimethyl phthalate	400	U	400	54
208-96-8	Acenaphthylene	400	U	400	57
606-20-2	2,6-Dinitrotoluene	81	U	81	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 | Lab Sample ID: 460-24356-1

Matrix: Solid | Lab File ID: u66385.d

Analysis Method: 8270C | Date Collected: 03/19/2011 16:45

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) | Date Analyzed: 03/30/2011 13:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-09-2	3-Nitroaniline	810	U	810	90
83-32-9	Acenaphthene	60	J	400	57
132-64-9	Dibenzofuran	400	U	400	60
121-14-2	2,4-Dinitrotoluene	81	U	81	12
84-66-2	Diethyl phthalate	400	U	400	53
7005-72-3	4-Chlorophenyl phenyl ether	400	U	400	68
86-73-7	Fluorene	400	U	400	67
100-01-6	4-Nitroaniline	810	U	810	82
86-30-6	N-Nitrosodiphenylamine	400	U	400	65
101-55-3	4-Bromophenyl phenyl ether	400	U	400	71
118-74-1	Hexachlorobenzene	40	U	40	5.5
85-01-8	Phenanthrene	790		400	69
120-12-7	Anthracene	180	J	400	70
86-74-8	Carbazole	400	U	400	63
84-74-2	Di-n-butyl phthalate	400	U	400	61
206-44-0	Fluoranthene	710		400	66
129-00-0	Pyrene	1400		400	69
85-68-7	Butyl benzyl phthalate	400	U	400	46
91-94-1	3,3'-Dichlorobenzidine	810	U	810	88
56-55-3	Benzo[a]anthracene	540		40	7.4
218-01-9	Chrysene	700		400	58
117-81-7	Bis(2-ethylhexyl) phthalate	400	U	400	53
117-84-0	Di-n-octyl phthalate	400	U	400	47
205-99-2	Benzo[b]fluoranthene	460		40	5.9
207-08-9	Benzo[k]fluoranthene	40	U	40	5.6
50-32-8	Benzo[a]pyrene	410	*	40	4.9
193-39-5	Indeno[1,2,3-cd]pyrene	220		40	6.4
53-70-3	Dibenz(a,h)anthracene	96		40	4.8
191-24-2	Benzo[g,h,i]perylene	280	J	400	42
108-60-1	bis (2-chloroisopropyl) ether	400	U	400	52

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: u66385.d

Analysis Method: 8270C Date Collected: 03/19/2011 16:45

Extract. Method: 3541 Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) Date Analyzed: 03/30/2011 13:09

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 16.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	55		38-105
4165-62-2	Phenol-d5	74		41-118
1718-51-0	Terphenyl-d14	117		16-151
118-79-6	2,4,6-Tribromophenol	51		10-120
367-12-4	2-Fluorophenol	62		37-125
321-60-8	2-Fluorobiphenyl	64		40-109

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66385.d
Report Date: 30-Mar-2011 15:48

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66385.d
Lab Smp Id: 460-24356-A-1-G Client Smp ID: GPEC-WC-031911
Inj Date : 30-MAR-2011 13:09
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : 460-24356-A-1-G
Misc Info : 460-24356-A-1-G
Comment   :
Method   : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	16.86747	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
$ 16 2-Fluorophenol (SUR)	112	1.924	1.911	(0.625)	302257	62.4212	5000
$ 17 Phenol-d5 (SUR)	99	2.800	2.814	(0.910)	460864	74.1620	5900
* 79 1,4-Dichlorobenzene-d4	152	3.079	3.080	(1.000)	188146	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	3.679	3.696	(0.835)	287254	27.2899	2200
* 80 Naphthalene-d8	136	4.407	4.412	(1.000)	659031	40.0000	
31 Naphthalene	128	4.422	4.434	(1.003)	11214	0.66379	53(a)
34 2-Methylnaphthalene	142	5.145	5.137	(1.167)	2277	0.18206	15(a)
120 1-Methylnaphthalene	142	5.231	5.234	(1.187)	1865	0.14628	12(a)
$ 77 2-Fluorobiphenyl (SUR)	172	5.518	5.529	(0.896)	474413	31.7596	2500
125 1,3-Dimethylnaphthalene	156	5.835	5.847	(0.948)	4505	0.43540	35(a)
39 Acenaphthylene	152	6.019	6.019	(0.977)	4071	0.19476	16(a)
* 82 Acenaphthene-d10	164	6.157	6.160	(1.000)	481883	40.0000	
42 Acenaphthene	154	6.180	6.190	(1.004)	8781	0.74437	60(a)

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66385.d
Report Date: 30-Mar-2011 15:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	43 Dibenzofuran	168	6.365	6.362	(1.034)	9086	0.48293	39(a)
	47 Fluorene	166	6.690	6.696	(1.086)	12356	0.78888	63(a)
$	18 2,4,6-Tribromophenol (SUR)	330	6.935	6.941	(1.126)	132088	51.3251	4100
*	83 Phenanthrene-d10	188	7.590	7.592	(1.000)	629568	40.0000	
	52 Phenanthrene	178	7.612	7.621	(1.003)	177785	9.90279	790
	53 Anthracene	178	7.657	7.666	(1.009)	42227	2.27346	180(a)
	54 Carbazole	167	7.848	7.844	(1.034)	7511	0.38058	30(a)
	56 Fluoranthene	202	8.757	8.757	(1.154)	180727	8.88853	710
	57 Pyrene	202	8.964	8.972	(0.884)	214836	17.0364	1400
$	78 Terphenyl-d14	244	9.155	9.156	(0.903)	600470	58.3423	4700
	61 Benzo(a)anthracene	228	10.126	10.132	(0.999)	80418	6.67468	540
*	81 Chrysene-d12	240	10.139	10.146	(1.000)	418062	40.0000	
	62 Chrysene	228	10.161	10.168	(1.002)	79290	8.67732	700
	65 Benzo(b)fluoranthene	252	11.244	11.237	(0.964)	52309	5.72327	460
	67 Benzo(a)pyrene	252	11.598	11.595	(0.995)	34464	5.08084	410
*	84 Perylene-d12	264	11.658	11.655	(1.000)	260962	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	12.927	12.919	(1.109)	16808	2.80342	220
	69 Dibenz(a,h)anthracene	278	12.942	12.933	(1.110)	5800	1.19935	96
	70 Benzo(g,h,i)perylene	276	13.229	13.213	(1.135)	17840	3.53569	280(a)

QC Flag Legend

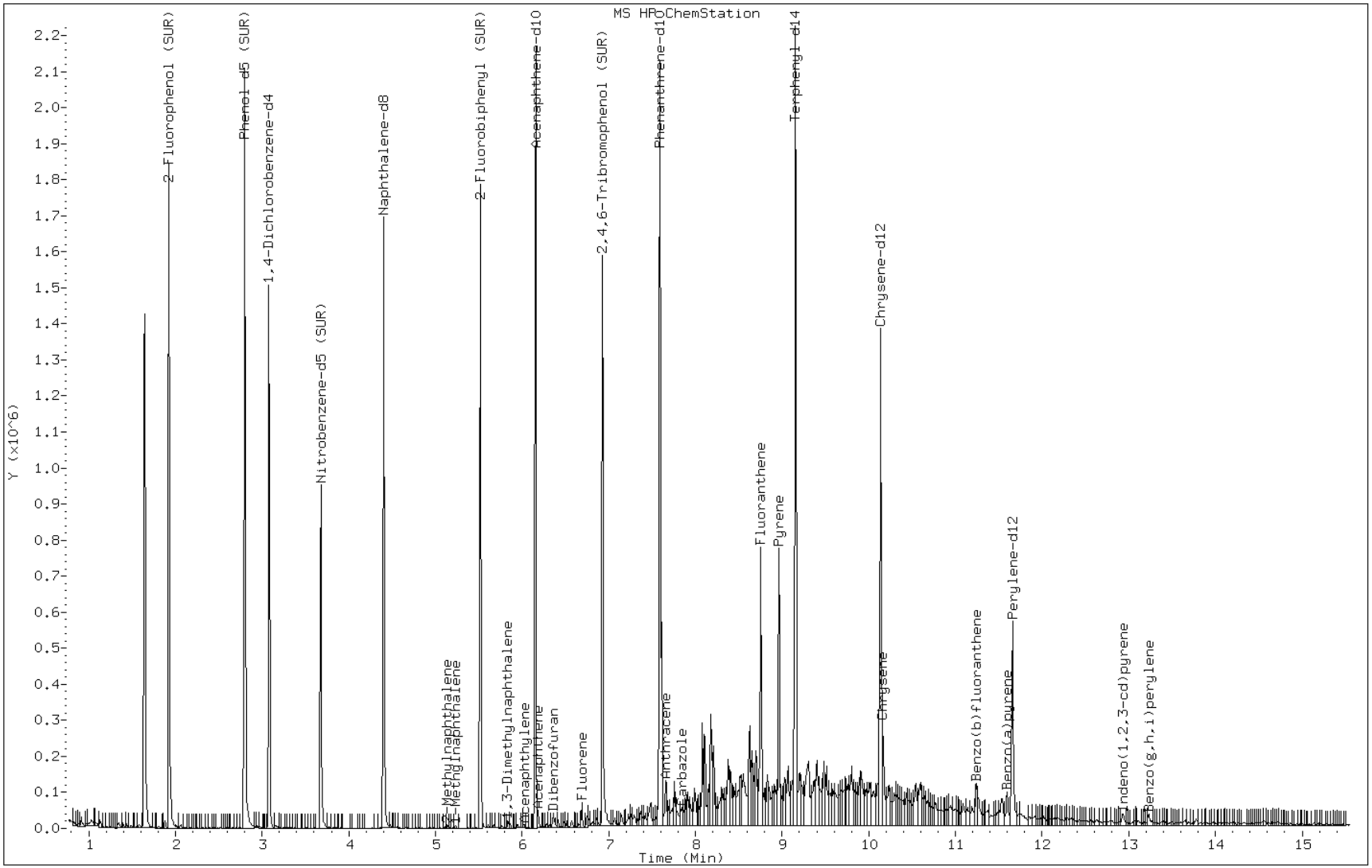
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4



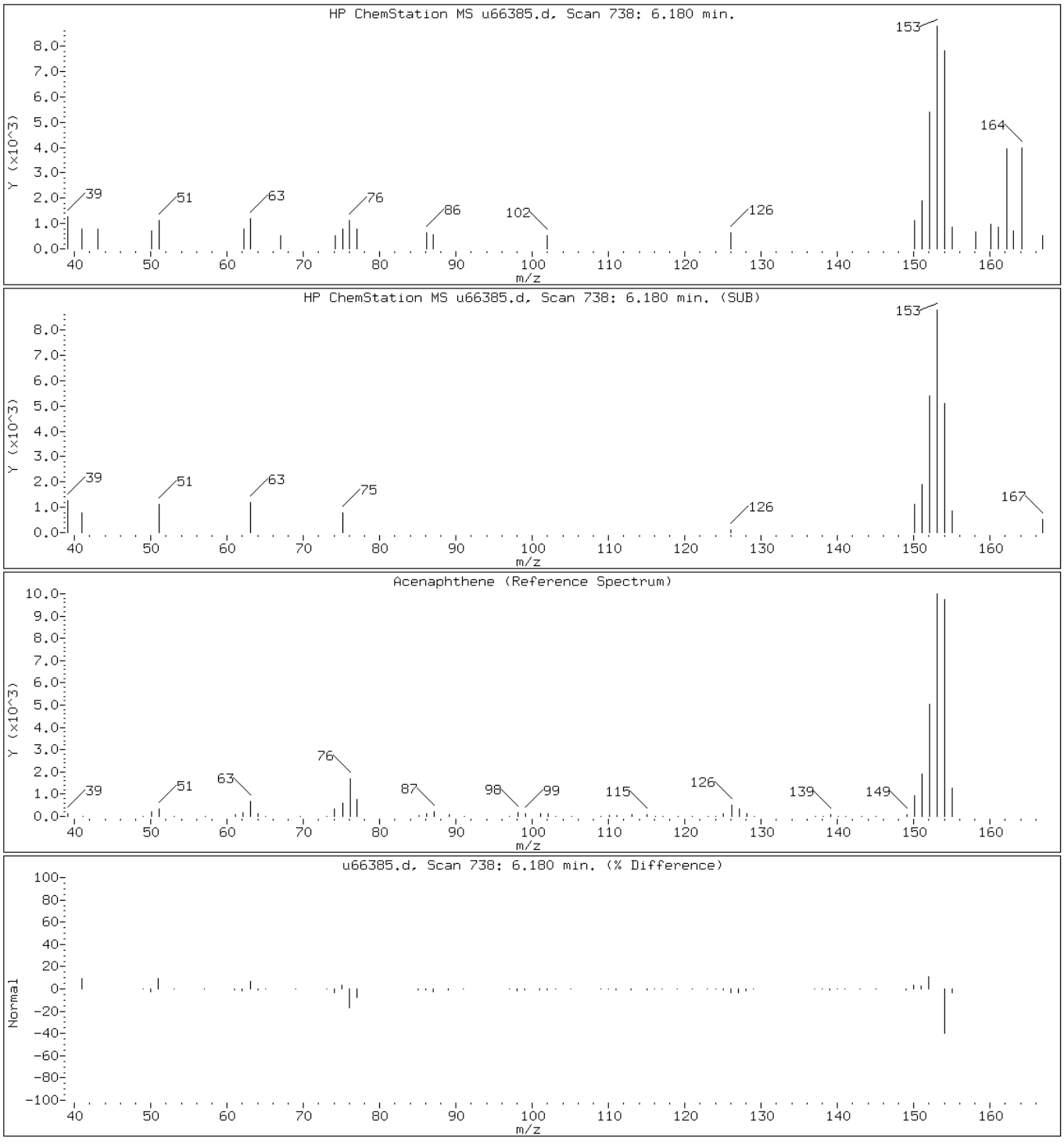
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

42 Acenaphthene



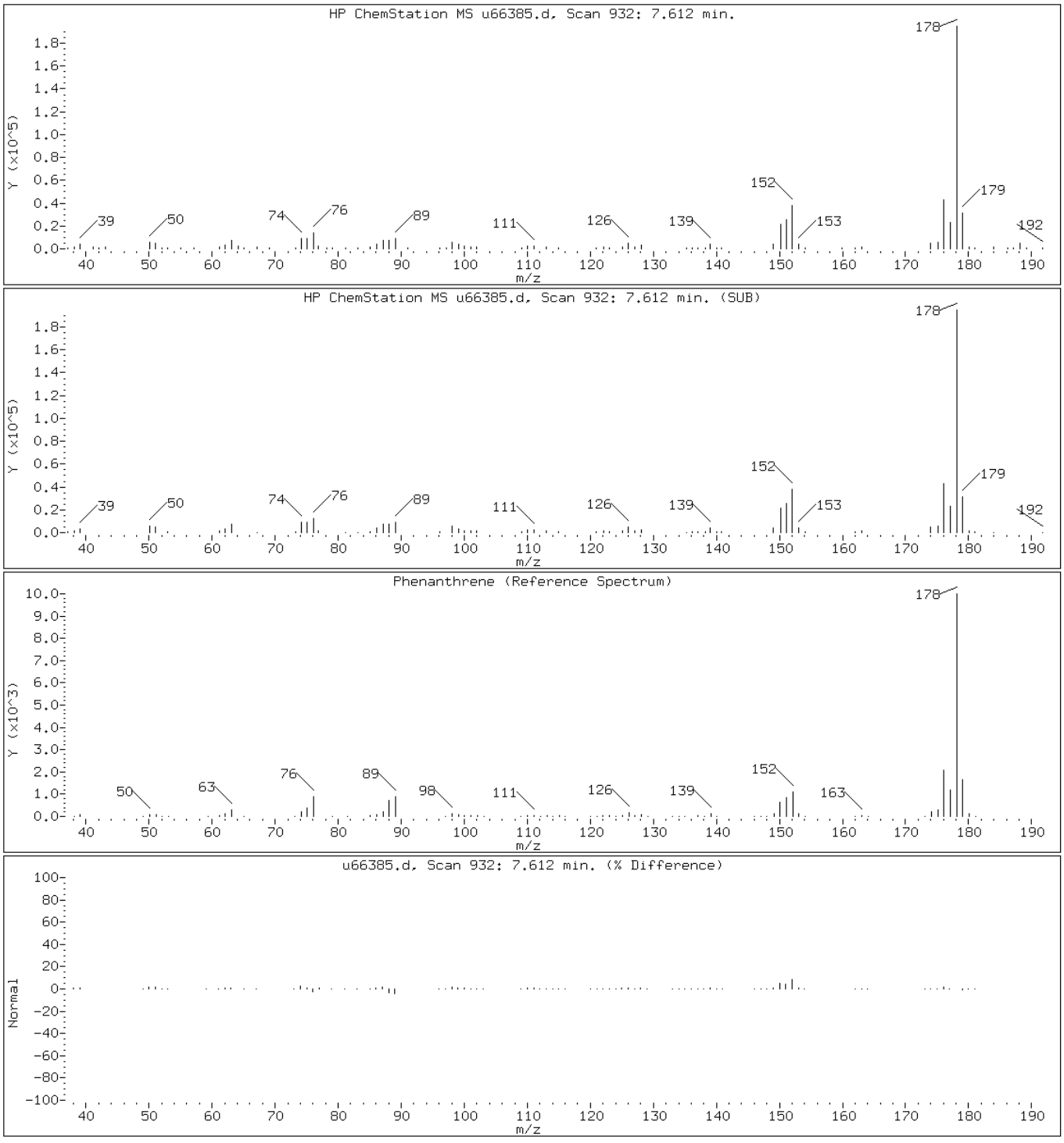
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

52 Phenanthrene



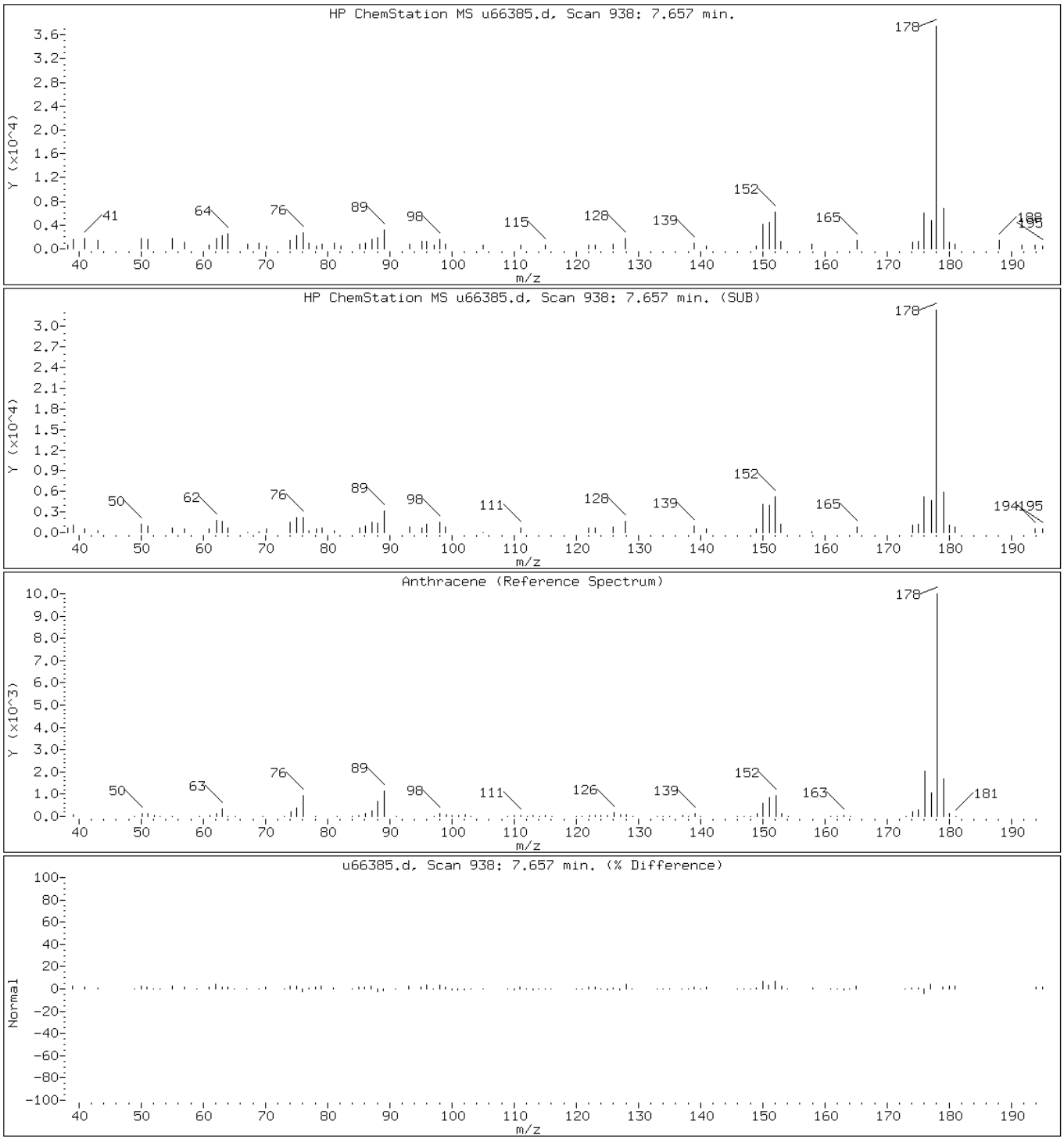
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

53 Anthracene



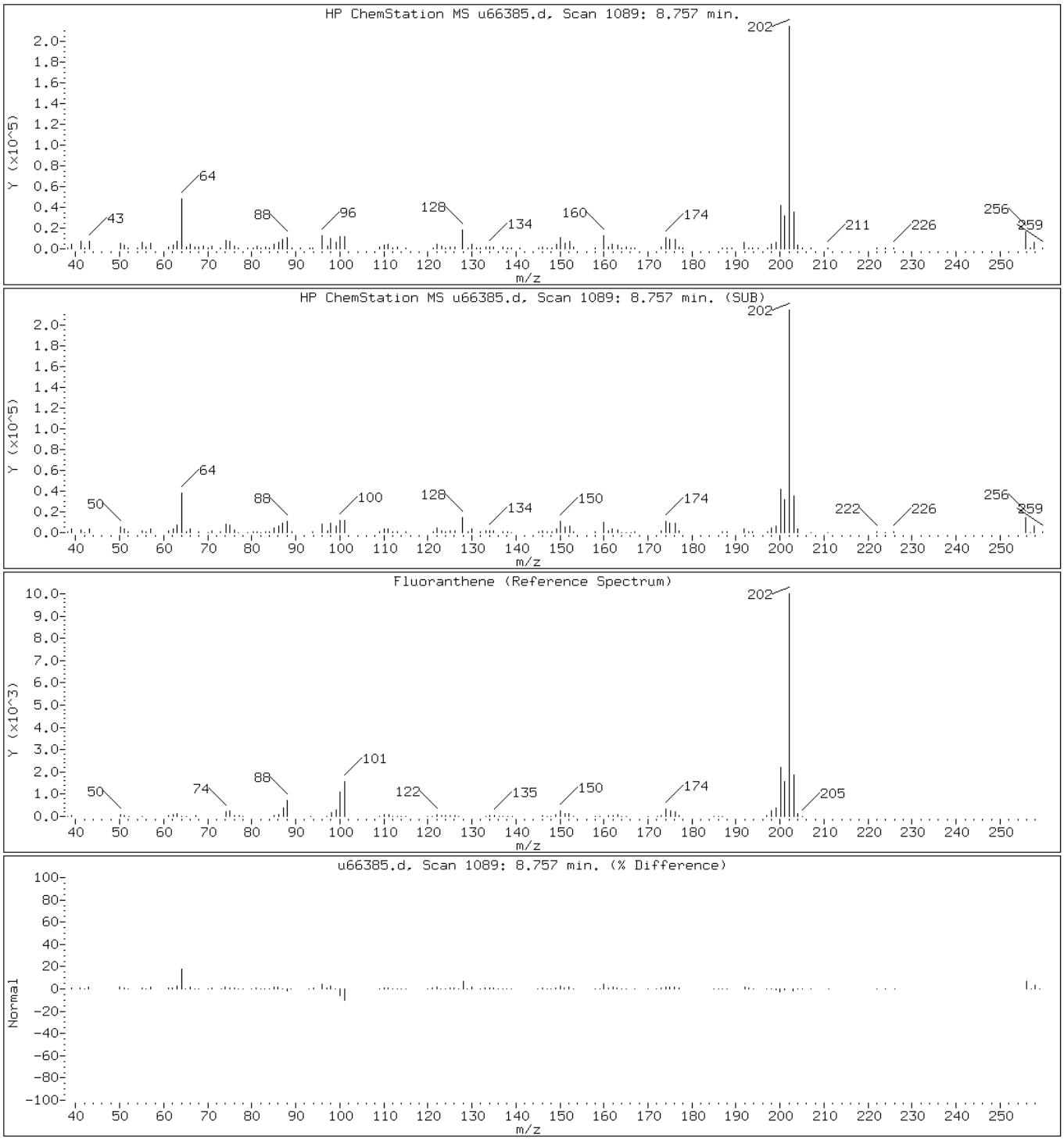
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

56 Fluoranthene



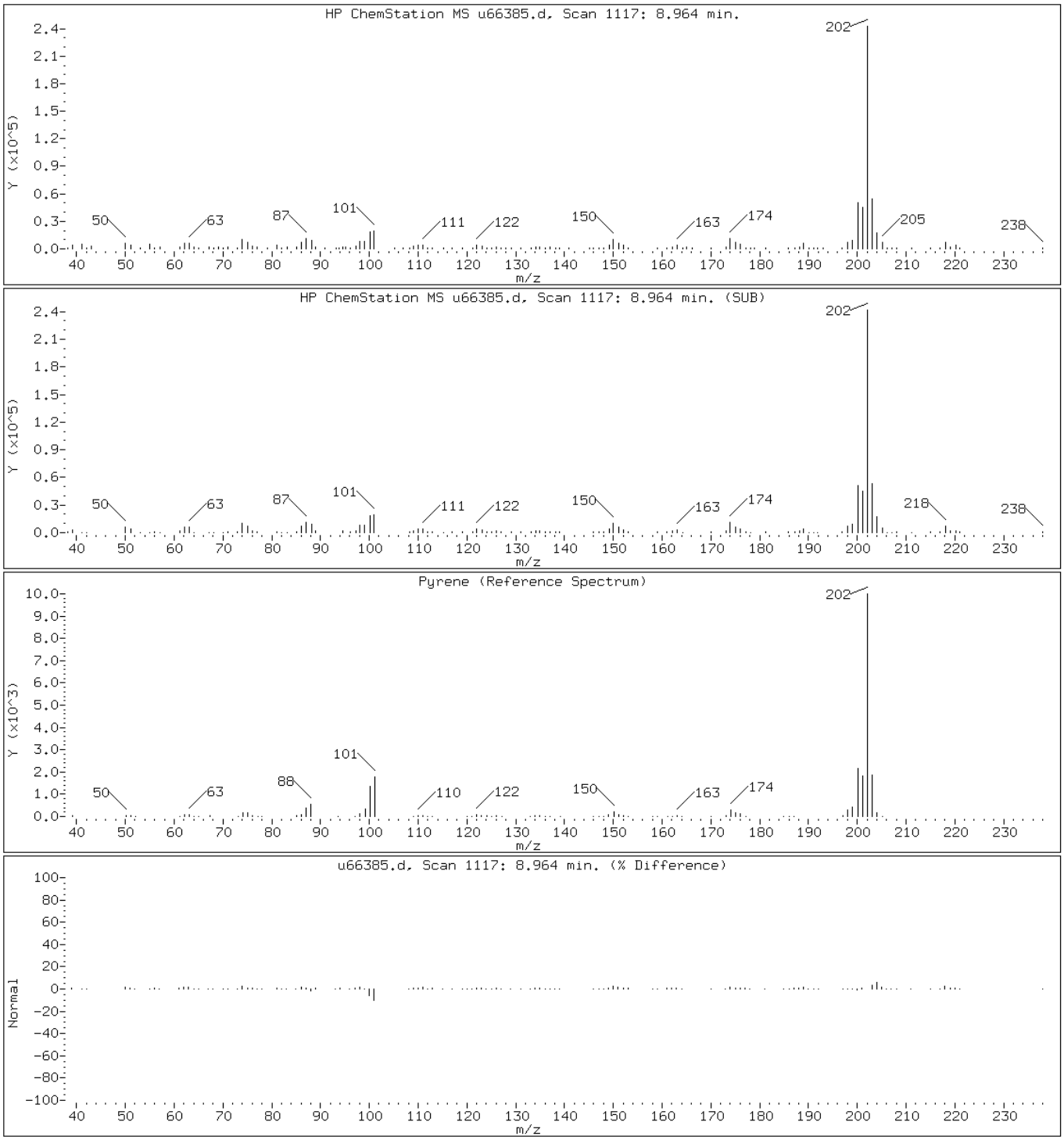
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

57 Pyrene



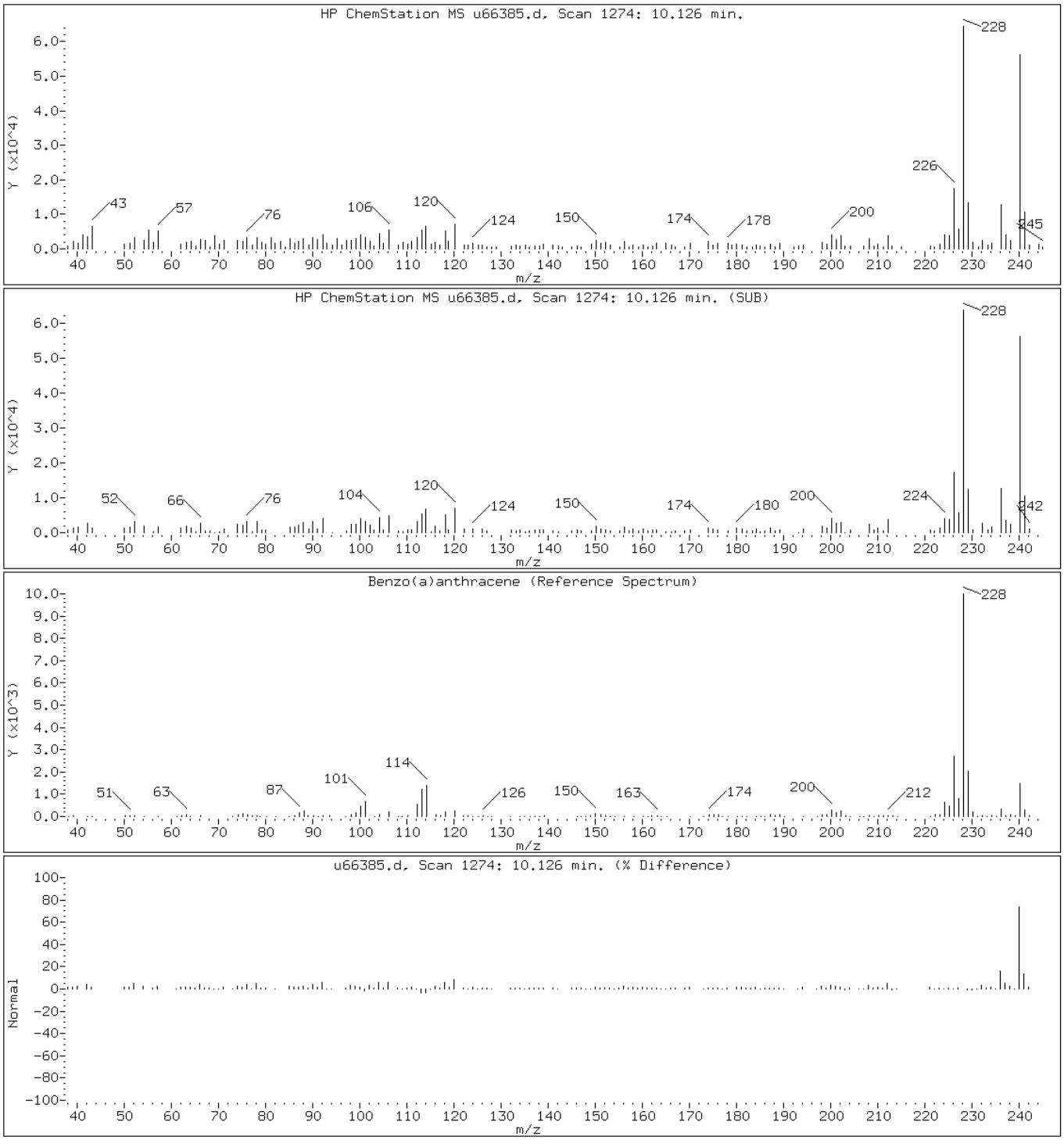
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

61 Benzo(a)anthracene



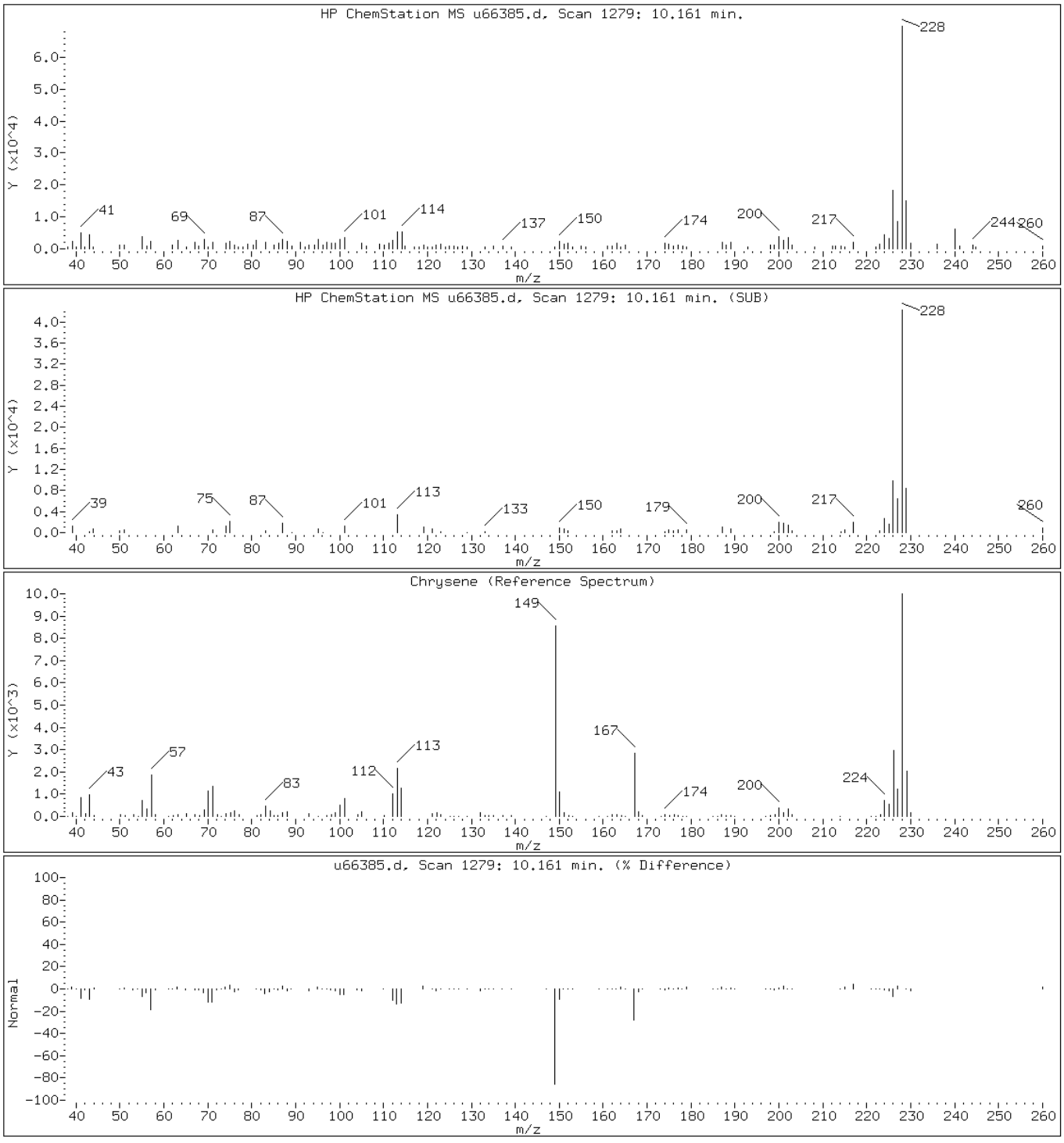
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

62 Chrysene



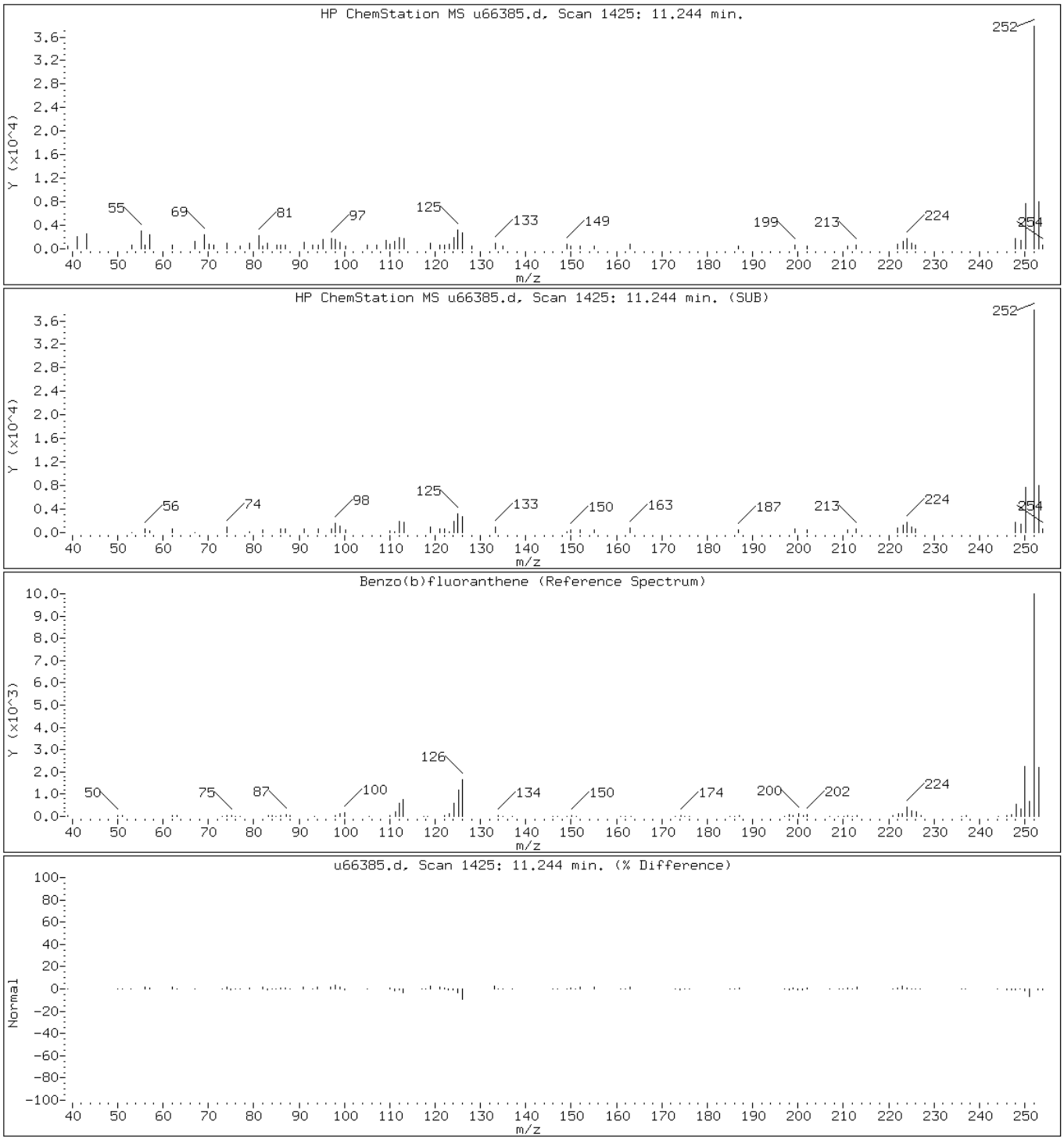
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

65 Benzo(b)fluoranthene



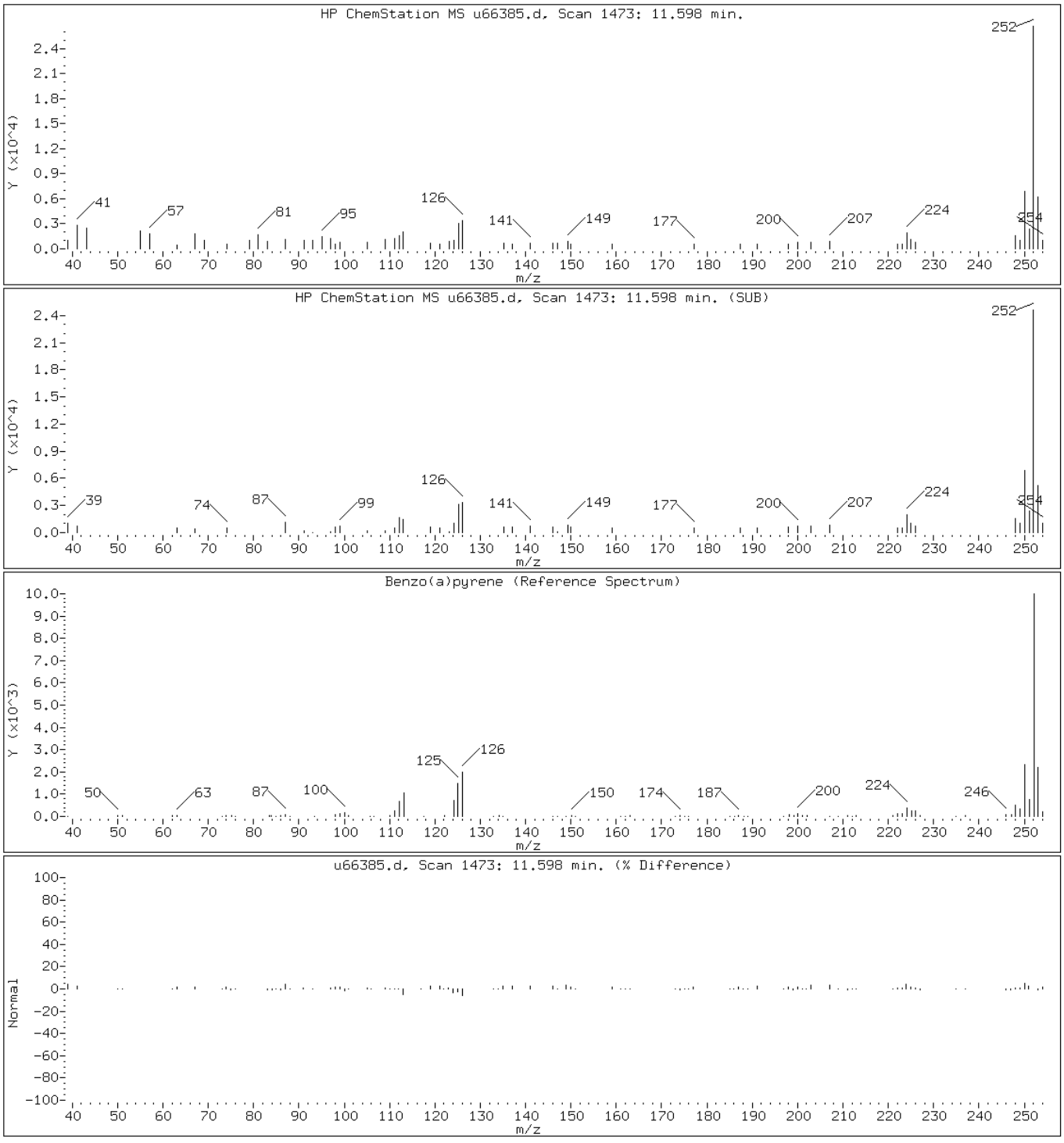
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

67 Benzo(a)pyrene



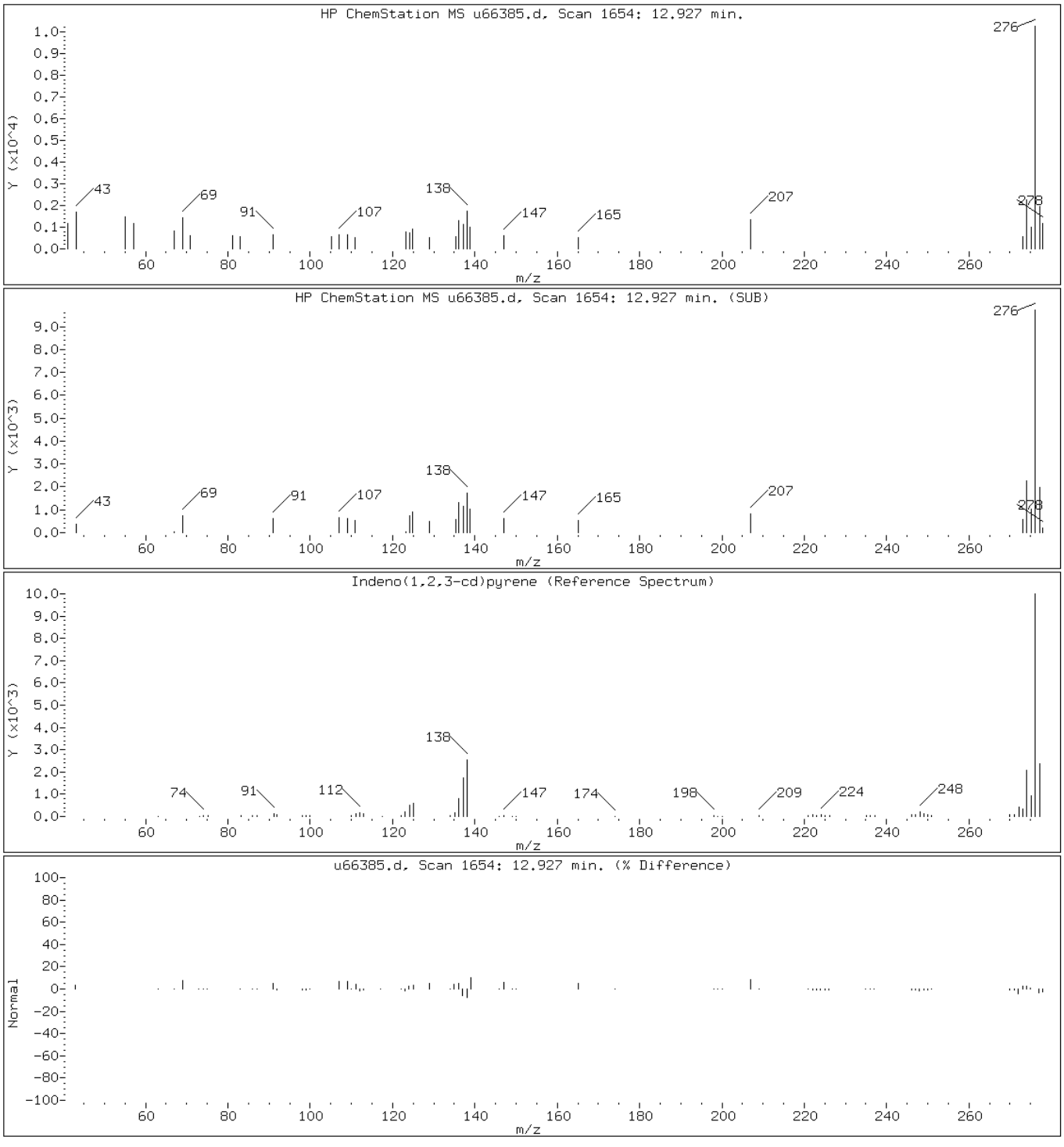
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

68 Indeno(1,2,3-cd)pyrene



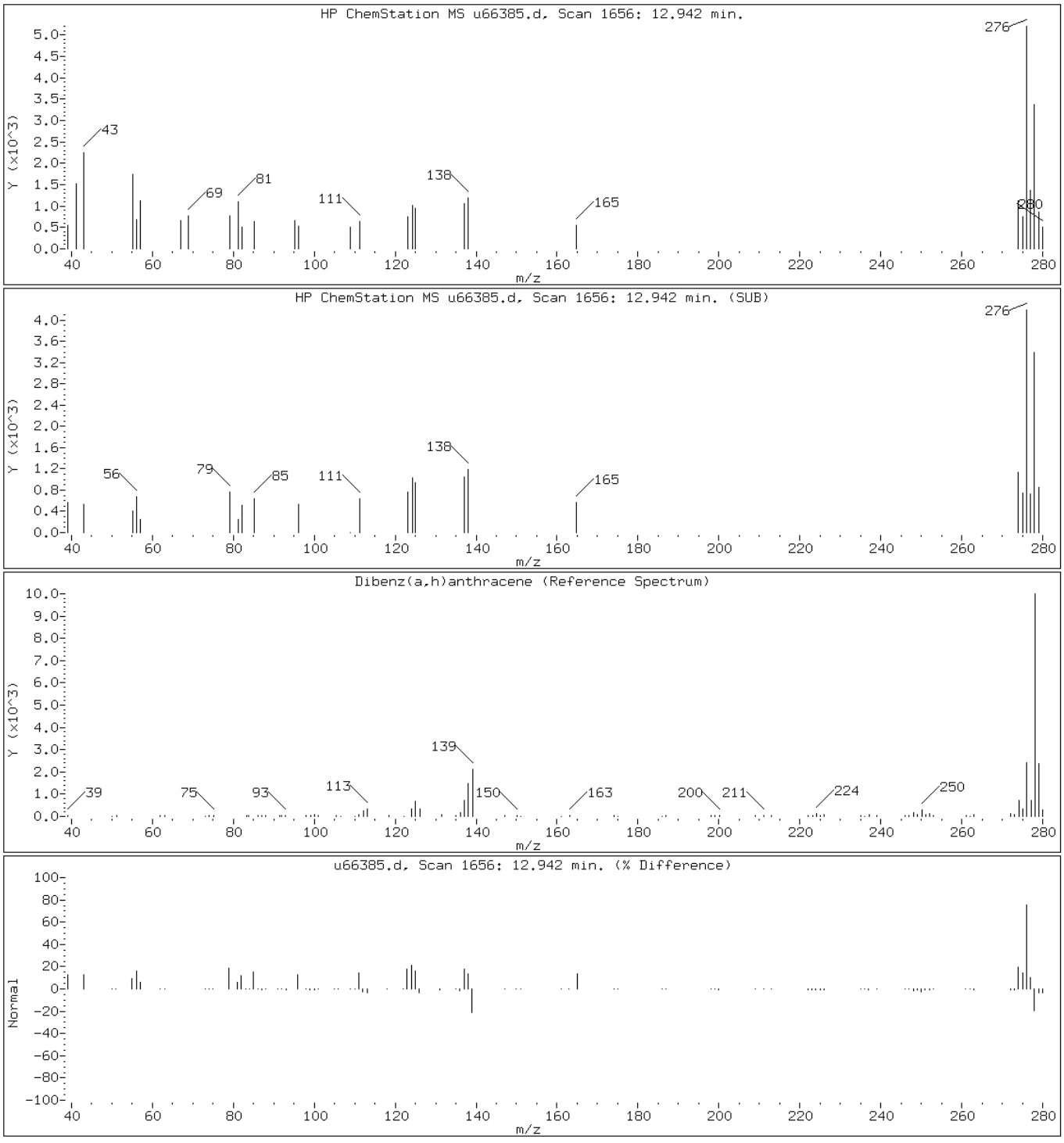
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

69 Dibenz(a,h)anthracene



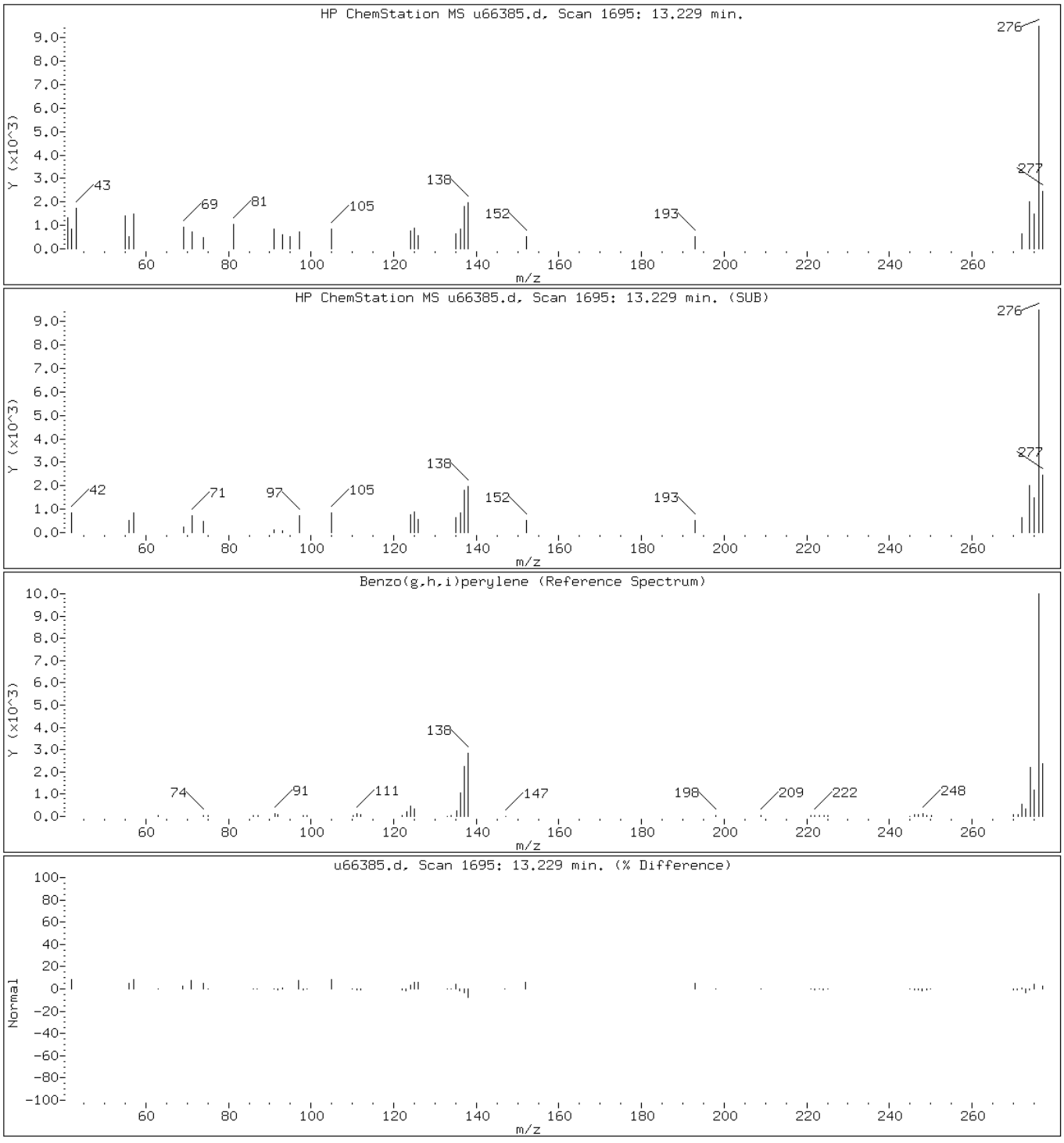
Data File: u66385.d

Date: 30-MAR-2011 13:09

Client ID: GPEC-WC-031911 Instrument: BNAMS4.i

Sample Info: 460-24356-A-1-G Operator: BNAMS 4

70 Benzo(g,h,i)perylene



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-67964/4	u66242.d
Level 2	IC 460-67964/7	u66245.d
Level 3	IC 460-67964/6	u66244.d
Level 4	ICIS 460-67964/2	u66240.d
Level 5	IC 460-67964/5	u66243.d
Level 6	IC 460-67964/3	u66241.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.4599 0.5052	0.4734	0.4125	0.4469	0.4460	Ave		0.4573				6.8		15.0			
N-Nitrosodimethylamine	0.6131 0.7162	0.7688	0.7277	0.6874	0.6551	Ave		0.6947				8.0		15.0			
Pyridine	0.9700 1.0995	1.1579	1.0791	1.0611	1.0464	Ave		1.0690				5.8		15.0			
Benzaldehyde	1.1622 0.0700	0.5839	0.4560	0.3007	0.1239	Ave		0.4495				88.9	*	15.0			
Aniline	1.7231 1.4696	1.8376	1.7107	1.6049	1.5128	Ave		1.6431				8.5		15.0			
Phenol	1.5085 1.4154	1.5684	1.4354	1.2261	1.1674	Ave		1.3869				11.4		30.0			
Bis(2-chloroethyl)ether	1.0110 1.3878	1.0958	1.0514	0.9623	0.9426	QuaF		1.2292	-0.121						0.9961		0.9900
2-Chlorophenol	1.2709 1.1858	1.3240	1.2252	1.1034	1.0252	Ave		1.1891				9.2		15.0			
Decane	1.5236 1.0175	1.4896	1.2760	1.1622	1.1099	QuaF		0.7169	0.0867						0.9997		0.9900
1,3-Dichlorobenzene	1.5866 1.4917	1.6060	1.4917	1.4039	1.3778	Ave		1.4930				6.2		15.0			
1,4-Dichlorobenzene	1.5055 1.5261	1.5306	1.4745	1.3120	1.3898	Ave		1.4564				6.0		30.0			
1,2-Dichlorobenzene	1.5189 1.5044	1.6232	1.4937	1.4086	1.3851	Ave		1.4890				5.7		15.0			
Benzyl alcohol	0.6920 0.6722	0.7585	0.6982	0.6523	0.6288	Ave		0.6837				6.5		15.0			
bis (2-chloroisopropyl) ether	1.8576 1.6862	1.8874	1.8342	1.6304	1.5318	Ave		1.7379				8.2		15.0			
2-Methylphenol	1.0585 0.9330	1.0659	1.0830	0.8535	0.8049	Ave		0.9665				12.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetophenone	1.9760 1.9768	1.9461	1.8776	1.6602	1.5800	Ave		1.8361				9.4		15.0			
N-Nitrosodi-n-propylamine	0.8039 1.0992	1.0477	0.9898	0.8559	0.7848	Ave		0.9302			0.0500	14.3		15.0			
o-Toluidine	1.3228 1.5774	1.2890	1.2643	1.0510	0.9707	QuaF		1.1447	-0.107						0.9912		0.9900
Hexachloroethane	0.7479 0.9025	0.8461	0.7750	0.7191	0.6843	Ave		0.7792				10.5		15.0			
3 & 4 Methylphenol	1.0269 0.8715	1.0112	0.9492	0.8490	0.7913	Ave		0.9165				10.3		15.0			
4-Methylphenol	0.9303 0.8748	0.9476	0.9161	0.8115	0.7679	Ave		0.8747				8.2		15.0			
Nitrobenzene	0.7444 0.7650	0.8134	0.8039	0.7375	0.6817	Ave		0.7576				6.4		15.0			
n,n'-Dimethylaniline	1.4234 1.8504	1.6053	1.4201	1.3311	1.4136	Ave		1.5073				12.7		15.0			
Isophorone	0.9932 1.0565	1.0108	1.0190	1.0464	0.9637	Ave		1.0149				3.4		15.0			
2-Nitrophenol	0.2479 0.2655	0.2749	0.2761	0.2676	0.2580	Ave		0.2650				4.0		30.0			
2,4-Dimethylphenol	0.3215 0.3228	0.3178	0.3508	0.3206	0.2839	Ave		0.3196				6.7		15.0			
Bis(2-chloroethoxy)methane	0.4344 0.4800	0.5044	0.4885	0.4781	0.4065	Ave		0.4653				8.0		15.0			
2,4-Dichlorophenol	0.4183 0.4768	0.3982	0.4622	0.4467	0.4165	Ave		0.4365				6.9		30.0			
1,2,4-Trichlorobenzene	0.4034 0.4263	0.4090	0.4023	0.3711	0.3921	Ave		0.4007				4.6		15.0			
Benzoic acid	0.0782 0.2222	0.1156	0.1901	0.1824	0.1997	Ave		0.1647				33.7	*	15.0			
Naphthalene	0.9494 1.1405	1.0118	1.0256	1.0078	1.0171	Ave		1.0254				6.1		15.0			
4-Chloroaniline	0.4329 0.4557	0.4690	0.4732	0.4288	0.4035	Ave		0.4439				6.1		15.0			
Hexachlorobutadiene	0.3020 0.3523	0.3364	0.3218	0.3282	0.3188	Ave		0.3266				5.2		30.0			
2,3,7,8-TCDD (Screen)	+++++ +++++	+++++	+++++	0.1051	+++++	Ave		0.1051						15.0			
Caprolactam	0.1110 0.1126	0.0891	0.1097	0.1113	0.0959	Ave		0.1049				9.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.4764 0.4803	0.4897	0.4938	0.4584	0.4184	Ave		0.4695				5.9		30.0			
2-Methylnaphthalene	0.7158 0.8344	0.7543	0.7674	0.7305	0.7520	Ave		0.7591				5.4		15.0			
1-Methylnaphthalene	0.7786 0.8367	0.7409	0.7712	0.7663	0.7491	Ave		0.7738				4.4		15.0			
Hexachlorocyclopentadiene	0.2581 0.3881	0.2522	0.2859	0.3645	0.3664	QuaF		3.0195	-0.386		0.0500				0.9989		0.9900
1,2,4,5-Tetrachlorobenzene	0.5240 0.6032	0.5275	0.5068	0.5040	0.5574	Ave		0.5372				7.0		30.0			
2-tertbutyl-4-methylphenol	0.7097 0.7669	0.6945	0.7002	0.6783	0.6137	Ave		0.6939				7.1		15.0			
2,4,6-Trichlorophenol	0.3314 0.3177	0.3306	0.3182	0.3069	0.2846	Ave		0.3149				5.5		30.0			
2,4,5-Trichlorophenol	0.3811 0.4499	0.3349	0.3390	0.3391	0.3374	Ave		0.3636				12.6		15.0			
Diphenyl	1.4599 1.8326	1.2622	1.3484	1.5015	1.6653	Ave		1.5117				13.8		15.0			
2-Chloronaphthalene	1.1932 1.4474	1.1508	1.1015	1.2027	1.3048	Ave		1.2334				10.1		15.0			
Diphenyl ether	0.7618 0.8211	0.7683	0.7668	0.7280	0.7115	Ave		0.7596				5.0		15.0			
2-Nitroaniline	0.4368 0.3867	0.4305	0.4271	0.3894	0.3539	Ave		0.4041				8.1		15.0			
Dimethylnaphthalene, total	0.9008 0.9981	0.8996	0.7829	0.7917	0.7801	Ave		0.8589				10.3		15.0			
Coumarin	0.2950 0.3443	0.2809	0.3267	0.3072	0.2858	Ave		0.3066				8.1		15.0			
Dimethyl phthalate	1.5858 1.5697	1.6238	1.5987	1.4697	1.4015	Ave		1.5416				5.6		15.0			
2,6-Dinitrotoluene	0.2616 0.4974	0.3611	0.3582	0.3677	0.3497	QuaF		3.3024	-0.859						0.9966		0.9900
Acenaphthylene	1.7824 2.0895	1.7454	1.5374	1.5783	1.6777	Ave		1.7351				11.4		15.0			
3-Nitroaniline	0.3042 0.3367	0.2849	0.3054	0.2787	0.2934	Ave		0.3005				6.8		15.0			
Acenaphthene	0.9214 1.1792	0.9543	0.9219	0.9431	0.9553	Ave		0.9792				10.1		30.0			
3,5-di-tert-butyl-4-hydroxytol	0.9286 0.9217	0.8438	0.8402	0.8689	0.8664	Ave		0.8783				4.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,4-Dinitrophenol	0.0902 0.2052	0.1015	0.1441	0.1772	0.1960	QuaF		6.4062	-2.610		0.0500				0.9929		0.9900
Dibenzofuran	1.7382 1.6682	1.5615	1.5276	1.4649	1.4098	Ave		1.5617				7.9		15.0			
4-Nitrophenol	0.2561 0.3184	0.2956	0.3100	0.3173	0.3186	Ave		0.3027			0.0500	8.1		15.0			
2,4-Dinitrotoluene	0.5528 0.4531	0.4953	0.4834	0.4851	0.4133	Ave		0.4805				9.6		15.0			
1-Naphthylamine	1.0372 0.7753	0.9037	0.9264	0.7914	0.7527	Ave		0.8645				12.8		30.0			
2,3,4,6-Tetrachlorophenol	0.3488 0.3779	0.2948	0.3405	0.3424	0.3110	Ave		0.3359				8.7		30.0			
2-Naphthylamine	0.9695 0.8857	0.9276	0.9307	0.7705	0.7837	Ave		0.8779				9.4		15.0			
Diethyl phthalate	1.8527 1.7323	1.8456	1.7319	1.6283	1.5183	Ave		1.7182				7.5		15.0			
Fluorene	1.3809 1.5326	1.2641	1.1903	1.2236	1.2092	Ave		1.3001				10.2		15.0			
4-Chlorophenyl phenyl ether	0.4690 0.7028	0.4825	0.4558	0.4728	0.4777	QuaF		2.5067	-0.512						0.9987		0.9900
4-Nitroaniline	0.3024 0.2780	0.2995	0.3009	0.2855	0.2755	Ave		0.2903				4.2		15.0			
4,6-Dinitro-2-methylphenol	0.1255 0.1919	0.1398	0.1445	0.1595	0.1746	QuaF		6.9111	-3.003						0.9991		0.9900
N-Nitrosodiphenylamine	0.6935 0.7204	0.6560	0.5623	0.5989	0.6524	Ave		0.6472				9.0		30.0			
1,2-Diphenylhydrazine	1.2886 1.3286	1.3371	1.2473	1.1832	1.2230	Ave		1.2680				4.8		15.0			
4-Bromophenyl phenyl ether	0.2537 0.3226	0.2699	0.2872	0.3090	0.3077	Ave		0.2917				9.0		15.0			
Hexachlorobenzene	0.3079 0.3453	0.2691	0.2814	0.2975	0.2917	Ave		0.2988				8.8		15.0			
Atrazine	0.2827 0.2837	0.2508	0.2742	0.2659	0.2543	Ave		0.2686				5.2		15.0			
Pentachlorophenol	0.1610 0.2335	0.1642	0.1653	0.2069	0.2360	QuaF		5.2267	-1.466						0.9935		0.9900
n-Octadecane	0.4786 0.4640	0.4719	0.4509	0.4311	0.4518	Ave		0.4581				3.7		15.0			
Phenanthrene	1.1607 1.2601	1.1515	1.0903	1.0638	1.1176	Ave		1.1407				6.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Anthracene	1.1526 1.3081	1.2156	1.1348	1.1357	1.1338	Ave		1.1801				5.9		15.0			
Carbazole	1.2101 1.3019	1.3363	1.2451	1.2177	1.2125	Ave		1.2539				4.2		15.0			
Di-n-butyl phthalate	2.2019 2.0067	2.2785	2.1952	2.1041	2.0337	Ave		2.1367				5.0		15.0			
Fluoranthene	1.2317 1.3267	1.3193	1.2904	1.3319	1.2511	Ave		1.2918				3.3		30.0			
Benzidine	0.1939 0.0724	0.3777	0.3259	0.1404	0.0983	Ave		0.2014				61.9	*	15.0			
Pyrene	1.0743 1.4169	1.2107	1.0841	1.1867	1.2666	Ave		1.2066				10.5		15.0			
Butyl benzyl phthalate	0.8618 0.8793	1.0320	0.8983	0.8828	0.8565	Ave		0.9018				7.3		15.0			
Carbamazepine	0.4859 0.3908	0.5027	0.4797	0.4873	0.4471	Ave		0.4656				8.8		15.0			
3,3'-Dichlorobenzidine	0.4132 0.3780	0.4154	0.4488	0.4027	0.4105	Ave		0.4114				5.6		15.0			
Benzo[a]anthracene	1.2887 1.1835	1.0569	1.0881	1.1555	1.1438	Ave		1.1528				7.0		15.0			
Chrysene	0.8247 0.8832	0.9309	0.8618	0.8826	0.8625	Ave		0.8743				4.0		15.0			
Bis(2-ethylhexyl) phthalate	1.1589 1.1473	1.1835	1.1150	1.1092	1.1032	Ave		1.1362				2.8		15.0			
Di-n-octyl phthalate	2.5225 3.4132	2.9072	2.8343	3.1623	2.9099	Ave		2.9582				10.2		30.0			
Benzo[b]fluoranthene	1.3059 1.6349	1.3585	1.3552	1.3233	1.4278	Ave		1.4009				8.7		15.0			
Benzo[k]fluoranthene	1.3514 1.1572	1.3260	1.3513	1.3070	1.1820	Ave		1.2791				6.8		15.0			
Benzo[a]pyrene	0.9620 1.1556	1.0652	1.0514	1.0327	0.9713	Ave		1.0397				6.8		30.0			
Indeno[1,2,3-cd]pyrene	0.7979 1.0495	0.8567	0.9395	0.9415	0.9288	Ave		0.9190				9.3		15.0			
Dibenz(a,h)anthracene	0.6375 0.8882	0.6998	0.7240	0.7641	0.7340	Ave		0.7413				11.3		15.0			
Benzo[g,h,i]perylene	0.7607 0.8839	0.6967	0.7458	0.7940	0.7592	Ave		0.7734				8.1		15.0			
2-Fluorophenol	1.0472 1.1055	1.0575	0.9920	0.9746	1.0000	Ave		1.0295				4.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Phenol-d5	1.4396 1.3028	1.4615	1.2724	1.2195	1.2310	Ave		1.3212				7.9		15.0			
Nitrobenzene-d5	0.6309 0.6198	0.6603	0.6715	0.6538	0.5969	Ave		0.6389				4.4		15.0			
2-Fluorobiphenyl	1.3222 1.5062	1.2536	1.1095	1.0865	1.1617	Ave		1.2399				12.7		15.0			
2,4,6-Tribromophenol	0.1744 0.2583	0.1995	0.1999	0.2088	0.2408	Ave		0.2136				14.3		15.0			
Terphenyl-d14	0.9149 1.1504	0.8449	0.9114	1.0173	1.0696	Ave		0.9848				11.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-67964/4	u66242.d
Level 2	IC 460-67964/7	u66245.d
Level 3	IC 460-67964/6	u66244.d
Level 4	ICIS 460-67964/2	u66240.d
Level 5	IC 460-67964/5	u66243.d
Level 6	IC 460-67964/3	u66241.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	10996 246587	24133	36273	99499	172997	5.00 120	10.0	20.0	50.0	80.0
N-Nitrosodimethylamine	DCB	Ave	14657 349575	39187	63989	153034	254110	5.00 120	10.0	20.0	50.0	80.0
Pyridine	DCB	Ave	23190 536664	59022	94888	236214	405865	5.00 120	10.0	20.0	50.0	80.0
Benzaldehyde	DCB	Ave	27786 34190	29764	40100	66940	48062	5.00 120	10.0	20.0	50.0	80.0
Aniline	DCB	Ave	41196 717290	93670	150425	357280	586791	5.00 120	10.0	20.0	50.0	80.0
Phenol	DCB	Ave	36064 690859	79947	126221	272951	452823	5.00 120	10.0	20.0	50.0	80.0
Bis(2-chloroethyl)ether	DCB	QuaF	2417 677340	55857	92455	214227	365596	0.500 120	10.0	20.0	50.0	80.0
2-Chlorophenol	DCB	Ave	30384 578756	67490	107739	245633	397664	5.00 120	10.0	20.0	50.0	80.0
Decane	DCB	QuaF	36425 496638	75931	112204	258720	430488	5.00 120	10.0	20.0	50.0	80.0
1,3-Dichlorobenzene	DCB	Ave	37932 728057	81863	131169	312543	534432	5.00 120	10.0	20.0	50.0	80.0
1,4-Dichlorobenzene	DCB	Ave	35992 744850	78023	129660	292080	539072	5.00 120	10.0	20.0	50.0	80.0
1,2-Dichlorobenzene	DCB	Ave	36314 734255	82743	131344	313584	537245	5.00 120	10.0	20.0	50.0	80.0
Benzyl alcohol	DCB	Ave	16544 328080	38665	61396	145221	243879	5.00 120	10.0	20.0	50.0	80.0
bis (2-chloroisopropyl) ether	DCB	Ave	44410 822985	96207	161289	362969	594136	5.00 120	10.0	20.0	50.0	80.0
2-Methylphenol	DCB	Ave	25306 455389	54334	95228	189998	312208	5.00 120	10.0	20.0	50.0	80.0
Acetophenone	DCB	Ave	47242 964823	99200	165107	369606	612852	5.00 120	10.0	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
N-Nitrosodi-n-propylamine	DCB	Ave	1922 536483	53403	87040	190547	304397	0.500 120	10.0	20.0	50.0	80.0
o-Toluidine	DCB	QuaF	31624 769901	65704	111173	233984	376528	5.00 120	10.0	20.0	50.0	80.0
Hexachloroethane	DCB	Ave	1788 440517	43129	68149	160098	265409	0.500 120	10.0	20.0	50.0	80.0
3 & 4 Methylphenol	DCB	Ave	24551 425366	51544	83469	189016	306913	5.00 120	10.0	20.0	50.0	80.0
4-Methylphenol	DCB	Ave	22241 426989	48302	80553	180651	297838	5.00 120	10.0	20.0	50.0	80.0
Nitrobenzene	NPT	Ave	5734 1162489	127328	210080	462211	748884	0.500 120	10.0	20.0	50.0	80.0
n,n'-Dimethylaniline	DCB	Ave	3403 903164	81831	124872	296330	548306	0.500 120	10.0	20.0	50.0	80.0
Isophorone	NPT	Ave	76507 1605424	158238	266305	655870	1058746	5.00 120	10.0	20.0	50.0	80.0
2-Nitrophenol	NPT	Ave	19097 403434	43033	72146	167740	283463	5.00 120	10.0	20.0	50.0	80.0
2,4-Dimethylphenol	NPT	Ave	24761 490558	49750	91674	200919	311908	5.00 120	10.0	20.0	50.0	80.0
Bis(2-chloroethoxy)methane	NPT	Ave	33464 729459	78961	127654	299674	446591	5.00 120	10.0	20.0	50.0	80.0
2,4-Dichlorophenol	NPT	Ave	32222 724574	62335	120778	279990	457623	5.00 120	10.0	20.0	50.0	80.0
1,2,4-Trichlorobenzene	NPT	Ave	3107 647787	64027	105137	232605	430759	0.500 120	10.0	20.0	50.0	80.0
Benzoic acid	NPT	Ave	6022 337676	18103	49693	114310	219439	5.00 120	10.0	20.0	50.0	80.0
Naphthalene	NPT	Ave	73129 1733156	158395	268014	631675	1117445	5.00 120	10.0	20.0	50.0	80.0
4-Chloroaniline	NPT	Ave	33347 692421	73424	123671	268760	443271	5.00 120	10.0	20.0	50.0	80.0
Hexachlorobutadiene	NPT	Ave	4652 535334	52662	84105	205687	350186	1.00 120	10.0	20.0	50.0	80.0
2,3,7,8-TCDD (Screen)	CRY	Ave	+++++ +++++	+++++	+++++	697	+++++	+++++ +++++	+++++	+++++	0.500	+++++
Caprolactam	NPT	Ave	8551 171169	13955	28656	69766	105334	5.00 120	10.0	20.0	50.0	80.0
4-Chloro-3-methylphenol	NPT	Ave	36693 729830	76664	129045	287338	459614	5.00 120	10.0	20.0	50.0	80.0
2-Methylnaphthalene	NPT	Ave	55139 1267990	118090	200549	457863	826151	5.00 120	10.0	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1-Methylnaphthalene	NPT	Ave	59975 1271418	115985	201552	480309	823001	5.00 120	10.0	20.0	50.0	80.0
Hexachlorocyclopentadiene	ANT	QuaF	13784 488598	28011	58045	177507	301074	5.00 120	10.0	20.0	50.0	80.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	27983 759491	58583	102898	245426	458110	5.00 120	10.0	20.0	50.0	80.0
2-tertbutyl-4-methylphenol	NPT	Ave	54665 1165446	108714	182994	425120	674192	5.00 120	10.0	20.0	50.0	80.0
2,4,6-Trichlorophenol	ANT	Ave	17700 400020	36719	64607	149480	233859	5.00 120	10.0	20.0	50.0	80.0
2,4,5-Trichlorophenol	ANT	Ave	20351 566438	37195	68832	165122	277273	5.00 120	10.0	20.0	50.0	80.0
Diphenyl	ANT	Ave	77969 2307462	140179	273759	731236	1368535	5.00 120	10.0	20.0	50.0	80.0
2-Chloronaphthalene	ANT	Ave	63723 1822394	127803	223634	585718	1072260	5.00 120	10.0	20.0	50.0	80.0
Diphenyl ether	ANT	Ave	40683 1033784	85322	155684	354524	584721	5.00 120	10.0	20.0	50.0	80.0
2-Nitroaniline	ANT	Ave	46654 486867	47811	86719	189657	290807	10.0 120	10.0	20.0	50.0	80.0
Dimethylnaphthalene, total	ANT	Ave	48106 1256733	99907	158941	385576	641091	5.00 120	10.0	20.0	50.0	80.0
Coumarin	NPT	Ave	22722 523185	43975	85381	192572	313932	5.00 120	10.0	20.0	50.0	80.0
Dimethyl phthalate	ANT	Ave	84694 1976433	180338	324575	715747	1151795	5.00 120	10.0	20.0	50.0	80.0
2,6-Dinitrotoluene	ANT	QuaF	2794 626257	40103	72719	179094	287393	1.00 120	10.0	20.0	50.0	80.0
Acenaphthylene	ANT	Ave	95190 2630848	193846	312115	768624	1378760	5.00 120	10.0	20.0	50.0	80.0
3-Nitroaniline	ANT	Ave	32490 423883	31640	62008	135709	241123	10.0 120	10.0	20.0	50.0	80.0
Acenaphthene	ANT	Ave	49211 1484737	105985	187159	459282	785064	5.00 120	10.0	20.0	50.0	80.0
3,5-di-tert-butyl-4-hydroxytol	ANT	Ave	49592 1160564	93711	170577	423148	711982	5.00 120	10.0	20.0	50.0	80.0
2,4-Dinitrophenol	ANT	QuaF	14456 258336	22549	43875	86291	161065	15.0 120	20.0	30.0	50.0	80.0
Dibenzofuran	ANT	Ave	92833 2100467	173424	310142	713418	1158583	5.00 120	10.0	20.0	50.0	80.0
4-Nitrophenol	ANT	Ave	41038 400858	65653	94394	154523	261866	15.0 120	20.0	30.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2,4-Dinitrotoluene	ANT	Ave	5905 570526	55009	98132	236231	339688	1.00 120	10.0	20.0	50.0	80.0
1-Naphthylamine	ANT	Ave	55393 976224	100365	188078	385436	618576	5.00 120	10.0	20.0	50.0	80.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	18628 475823	32738	69135	166768	255552	5.00 120	10.0	20.0	50.0	80.0
2-Naphthylamine	ANT	Ave	51779 1115119	103024	188957	375222	644013	5.00 120	10.0	20.0	50.0	80.0
Diethyl phthalate	ANT	Ave	98943 2181103	204975	351608	792983	1247743	5.00 120	10.0	20.0	50.0	80.0
Fluorene	ANT	Ave	73750 1929623	140390	241661	595908	993733	5.00 120	10.0	20.0	50.0	80.0
4-Chlorophenyl phenyl ether	ANT	QuaF	25049 884870	53588	92532	230266	392568	5.00 120	10.0	20.0	50.0	80.0
4-Nitroaniline	ANT	Ave	32297 350078	33261	61092	139041	226424	10.0 120	10.0	20.0	50.0	80.0
4,6-Dinitro-2-methylphenol	PHN	QuaF	27261 304350	40465	59170	100614	170084	15.0 120	20.0	30.0	50.0	80.0
N-Nitrosodiphenylamine	PHN	Ave	50201 1142240	94940	153481	377737	635629	5.00 120	10.0	20.0	50.0	80.0
1,2-Diphenylhydrazine	PHN	Ave	93282 2106637	193520	340481	746283	1191589	5.00 120	10.0	20.0	50.0	80.0
4-Bromophenyl phenyl ether	PHN	Ave	18364 511503	39062	78407	194917	299777	5.00 120	10.0	20.0	50.0	80.0
Hexachlorobenzene	PHN	Ave	2229 547562	38952	76812	187676	284185	0.500 120	10.0	20.0	50.0	80.0
Atrazine	PHN	Ave	20463 449913	36302	74859	167703	247779	5.00 120	10.0	20.0	50.0	80.0
Pentachlorophenol	PHN	QuaF	34966 370183	47529	67671	130486	229916	15.0 120	20.0	30.0	50.0	80.0
n-Octadecane	PHN	Ave	34645 735761	68298	123083	271920	440234	5.00 120	10.0	20.0	50.0	80.0
Phenanthrene	PHN	Ave	84023 1998086	166658	297618	670960	1088910	5.00 120	10.0	20.0	50.0	80.0
Anthracene	PHN	Ave	83441 2074212	175934	309781	716329	1104634	5.00 120	10.0	20.0	50.0	80.0
Carbazole	PHN	Ave	87599 2064402	193405	339869	768085	1181338	5.00 120	10.0	20.0	50.0	80.0
Di-n-butyl phthalate	PHN	Ave	159401 3181893	329756	599232	1327125	1981448	5.00 120	10.0	20.0	50.0	80.0
Fluoranthene	PHN	Ave	89166 2103665	190937	352248	840081	1218967	5.00 120	10.0	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Benzidine	PHN	Ave	14035 114871	109330	133456	88571	95751	5.00 120	20.0	30.0	50.0	80.0
Pyrene	CRY	Ave	89656 2252968	181488	326608	786984	1244195	5.00 120	10.0	20.0	50.0	80.0
Butyl benzyl phthalate	CRY	Ave	71919 1398140	154703	270628	585449	841317	5.00 120	10.0	20.0	50.0	80.0
Carbamazepine	CRY	Ave	40548 621408	75363	144524	323179	439161	5.00 120	10.0	20.0	50.0	80.0
3,3'-Dichlorobenzidine	CRY	Ave	68967 601082	124543	202820	267046	403258	10.0 120	20.0	30.0	50.0	80.0
Benzo[a]anthracene	CRY	Ave	10755 1881909	158441	327823	766246	1123538	0.500 120	10.0	20.0	50.0	80.0
Chrysene	CRY	Ave	68823 1404333	139552	259633	585270	847259	5.00 120	10.0	20.0	50.0	80.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	96715 1824291	177408	335917	735601	1083686	5.00 120	10.0	20.0	50.0	80.0
Di-n-octyl phthalate	PRY	Ave	159391 2842144	319628	563285	1347932	1788087	5.00 120	10.0	20.0	50.0	80.0
Benzo[b]fluoranthene	PRY	Ave	8252 1361364	149354	269327	564048	877353	0.500 120	10.0	20.0	50.0	80.0
Benzo[k]fluoranthene	PRY	Ave	8539 963629	145787	268550	557093	726303	0.500 120	10.0	20.0	50.0	80.0
Benzo[a]pyrene	PRY	Ave	6079 962309	117107	208953	440182	596862	0.500 120	10.0	20.0	50.0	80.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	5042 873939	94186	186707	401320	570749	0.500 120	10.0	20.0	50.0	80.0
Dibenz(a,h)anthracene	PRY	Ave	4028 739573	76939	143893	325682	451020	0.500 120	10.0	20.0	50.0	80.0
Benzo[g,h,i]perylene	PRY	Ave	48070 736006	76602	148222	338436	466533	5.00 120	10.0	20.0	50.0	80.0
2-Fluorophenol	DCB	Ave	25036 539574	53907	87227	216965	387862	5.00 120	10.0	20.0	50.0	80.0
Phenol-d5	DCB	Ave	34418 635894	74501	111889	271492	477477	5.00 120	10.0	20.0	50.0	80.0
Nitrobenzene-d5	NPT	Ave	48599 941837	103375	175487	409805	655716	5.00 120	10.0	20.0	50.0	80.0
2-Fluorobiphenyl	ANT	Ave	70612 1896479	139228	225246	529109	954650	5.00 120	10.0	20.0	50.0	80.0
2,4,6-Tribromophenol	ANT	Ave	9313 325284	22159	40582	101685	197896	5.00 120	10.0	20.0	50.0	80.0
Terphenyl-d14	CRY	Ave	76352 1829238	126652	274573	674622	1050693	5.00 120	10.0	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 67964

SDG No.:

Instrument ID: BNAMS4 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2011 05:47 Calibration End Date: 03/18/2011 07:36 Calibration ID: 10194

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66240.d
Report Date: 21-Mar-2011 10:45

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66240.d
Lab Smp Id: ICIS-871725
Inj Date : 18-MAR-2011 05:47
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : ICIS-871725
Misc Info : 50 ppm bna 4534
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 21-Mar-2011 10:45 wahied Quant Type: ISTD
Cal Date : 18-MAR-2011 05:47 Cal File: u66240.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	106 1,4-Dioxane	88	0.794	0.794	(0.251)	99499	50.0000	49(M)
	19 N-Nitrosodimethylamine	74	0.978	0.978	(0.308)	153034	50.0000	49
	71 Pyridine	79	0.993	0.993	(0.313)	236214	50.0000	50
$	16 2-Fluorophenol (SUR)	112	1.983	1.983	(0.625)	216965	50.0000	47
	110 Benzaldehyde	77	2.734	2.734	(0.862)	66940	50.0000	33
$	17 Phenol-d5 (SUR)	99	2.889	2.889	(0.911)	271492	50.0000	46
	1 Phenol	94	2.903	2.903	(0.916)	272951	50.0000	44
	73 Aniline	93	2.852	2.852	(0.900)	357280	50.0000	49
	20 bis(2-Chloroethyl)ether	93	2.941	2.941	(0.928)	214227	50.0000	52
	2 2-Chlorophenol	128	2.978	2.978	(0.939)	245633	50.0000	46
	113 n-decane	43	3.045	3.045	(0.960)	258720	50.0000	49
	21 1,3-Dichlorobenzene	146	3.112	3.112	(0.982)	312543	50.0000	47
*	79 1,4-Dichlorobenzene-d4	152	3.170	3.170	(1.000)	178097	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66240.d
Report Date: 21-Mar-2011 10:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.193	3.193	(1.007)	292080	50.0000	45
	74 Benzyl Alcohol	108	3.371	3.371	(1.063)	145221	50.0000	48
	23 1,2-Dichlorobenzene	146	3.348	3.348	(1.056)	313584	50.0000	47
	3 2-Methylphenol	108	3.526	3.526	(1.112)	189998	50.0000	44
	24 bis (2-chloroisopropyl) ether	45	3.496	3.496	(1.103)	362969	50.0000	47
	126 O-Toluidine	107	3.667	3.667	(1.157)	233984	50.0000	53
	104 Acetophenone	105	3.638	3.638	(1.147)	369606	50.0000	45
	4 4-Methylphenol	108	3.696	3.696	(1.166)	180651	50.0000	46
	123 3 & 4 Methylphenol	108	3.696	3.696	(1.166)	189016	50.0000	46
	25 N-Nitroso-di-n-propylamine	70	3.660	3.660	(1.154)	190547	50.0000	46
	26 Hexachloroethane	117	3.689	3.689	(1.164)	160098	50.0000	46
$	76 Nitrobenzene-d5 (SUR)	82	3.778	3.778	(0.840)	409805	50.0000	51
	27 Nitrobenzene	77	3.801	3.801	(0.845)	462211	50.0000	49
	107 N,N-Dimethylaniline	120	3.808	3.808	(1.201)	296330	50.0000	44
	28 Isophorone	82	4.064	4.064	(0.903)	655870	50.0000	52
	5 2-Nitrophenol	139	4.123	4.123	(0.917)	167740	50.0000	50
	6 2,4-Dimethylphenol	122	4.234	4.234	(0.941)	200919	50.0000	50
	29 bis(2-Chloroethoxy)methane	93	4.308	4.308	(0.958)	299674	50.0000	51
	15 Benzoic Acid	122	4.483	4.483	(0.997)	114310	50.0000	55(M)
	7 2,4-Dichlorophenol	162	4.396	4.396	(0.977)	279990	50.0000	51
	30 1,2,4-Trichlorobenzene	180	4.454	4.454	(0.990)	232605	50.0000	46
*	80 Naphthalene-d8	136	4.498	4.498	(1.000)	501415	40.0000	
	31 Naphthalene	128	4.521	4.521	(1.005)	631675	50.0000	49
	32 4-Chloroaniline	127	4.609	4.609	(1.025)	268760	50.0000	48
	33 Hexachlorobutadiene	225	4.668	4.668	(1.038)	205687	50.0000	50
	111 Caprolactam	113	5.052	5.052	(1.123)	69766	50.0000	53
	8 4-Chloro-3-methylphenol	107	5.168	5.168	(1.149)	287338	50.0000	49
	34 2-Methylnaphthalene	142	5.221	5.221	(1.161)	457863	50.0000	48
	120 1-Methylnaphthalene	142	5.317	5.317	(1.182)	480309	50.0000	50
	35 Hexachlorocyclopentadiene	237	5.392	5.392	(0.863)	177507	50.0000	52
	129 1,2,4,5-Tetrachlorobenzene	216	5.399	5.399	(0.865)	245426	50.0000	47
	121 2-tert-Butyl-4-methylphenol	149	5.496	5.496	(1.222)	425120	50.0000	49
	9 2,4,6-Trichlorophenol	196	5.541	5.541	(0.887)	149480	50.0000	49
	10 2,4,5-Trichlorophenol	196	5.592	5.592	(0.896)	165122	50.0000	47
$	77 2-Fluorobiphenyl (SUR)	172	5.607	5.607	(0.898)	529109	50.0000	44
	102 Diphenyl	154	5.696	5.696	(0.912)	731236	50.0000	50
	36 2-Chloronaphthalene	162	5.704	5.704	(0.913)	585718	50.0000	49
	103 Diphenyl Ether	170	5.807	5.807	(0.930)	354524	50.0000	48
	37 2-Nitroaniline	65	5.844	5.844	(0.936)	189657	50.0000	48
	125 1,3-Dimethylnaphthalene	156	5.925	5.925	(0.949)	385576	50.0000	46
	38 Dimethylphthalate	163	6.044	6.044	(0.968)	715747	50.0000	48
	114 Coumarin	146	6.037	6.037	(1.342)	192572	50.0000	50
	40 2,6-Dinitrotoluene	165	6.097	6.097	(0.976)	179094	50.0000	53
	39 Acenaphthylene	152	6.104	6.104	(0.978)	768624	50.0000	45
	41 3-Nitroaniline	138	6.252	6.252	(1.001)	135709	50.0000	46
*	82 Acenaphthene-d10	164	6.244	6.244	(1.000)	389601	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.311	6.311	(1.011)	423148	50.0000	49

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66240.d
Report Date: 21-Mar-2011 10:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
	42 Acenaphthene	154	6.274	6.274	(1.005)	459282	50.0000	48
	11 2,4-Dinitrophenol	184	6.377	6.377	(1.021)	86291	50.0000	52
	12 4-Nitrophenol	65	6.489	6.489	(1.039)	154523	50.0000	52
	44 2,4-Dinitrotoluene	165	6.497	6.497	(1.040)	236231	50.0000	50
	43 Dibenzofuran	168	6.452	6.452	(1.033)	713418	50.0000	47
	127 1-Naphthylamine	143	6.534	6.534	(1.046)	385436	50.0000	46
	130 2,3,4,6-Tetrachlorophenol	232	6.600	6.600	(1.057)	166768	50.0000	51
	128 2-Naphthylamine	143	6.622	6.622	(1.060)	375222	50.0000	44
	45 Diethylphthalate	149	6.734	6.734	(1.078)	792983	50.0000	47
	46 4-Chlorophenyl-phenylether	204	6.801	6.801	(1.089)	230266	50.0000	52
	47 Fluorene	166	6.778	6.778	(1.086)	595908	50.0000	47
	48 4-Nitroaniline	138	6.859	6.859	(1.099)	139041	50.0000	49
	13 4,6-Dinitro-2-methylphenol	198	6.897	6.897	(0.898)	100614	50.0000	50
	49 N-Nitrosodiphenylamine	169	6.933	6.933	(0.903)	377737	50.0000	46
	75 1,2-Diphenylhydrazine	77	6.955	6.955	(0.906)	746283	50.0000	47
$	18 2,4,6-Tribromophenol (SUR)	330	7.022	7.022	(1.125)	101685	50.0000	49
	50 4-Bromophenyl-phenylether	248	7.263	7.263	(0.946)	194917	50.0000	53
	51 Hexachlorobenzene	284	7.322	7.322	(0.954)	187676	50.0000	50
	112 Atrazine	200	7.484	7.484	(0.975)	167703	50.0000	49
	14 Pentachlorophenol	266	7.534	7.534	(0.981)	130486	50.0000	50
	115 n-Octadecane	57	7.656	7.656	(0.997)	271920	50.0000	47
*	83 Phenanthrene-d10	188	7.679	7.679	(1.000)	504598	40.0000	
	52 Phenanthrene	178	7.701	7.701	(1.003)	670960	50.0000	47
	53 Anthracene	178	7.753	7.753	(1.010)	716329	50.0000	48
	54 Carbazole	167	7.931	7.931	(1.033)	768085	50.0000	48
	55 Di-n-butylphthalate	149	8.311	8.311	(1.082)	1327125	50.0000	49
	56 Fluoranthene	202	8.849	8.849	(1.152)	840081	50.0000	52
	58 Benzidine	184	9.011	9.011	(1.174)	88571	50.0000	35
	57 Pyrene	202	9.056	9.056	(0.885)	786984	50.0000	49
$	78 Terphenyl-d14	244	9.240	9.240	(0.903)	674622	50.0000	52
	59 Butylbenzylphthalate	149	9.738	9.738	(0.951)	585449	50.0000	49
	109 2,3,7,8-TCDD (Screen)	320	9.805	9.805	(0.958)	697	0.50000	0.50
	124 Carbamazepine	193	9.825	9.825	(0.960)	323179	50.0000	52
	60 3,3'-Dichlorobenzidine	252	10.222	10.222	(0.999)	267046	50.0000	49
	61 Benzo(a)anthracene	228	10.222	10.222	(0.999)	766246	50.0000	50
*	81 Chrysene-d12	240	10.236	10.236	(1.000)	530523	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.318	10.318	(1.008)	735601	50.0000	49
	62 Chrysene	228	10.266	10.266	(1.003)	585270	50.0000	50
	64 Di-n-octylphthalate	149	11.001	11.001	(0.934)	1347932	50.0000	53
	65 Benzo(b)fluoranthene	252	11.354	11.354	(0.964)	564048	50.0000	47
	66 Benzo(k)fluoranthene	252	11.384	11.384	(0.966)	557093	50.0000	51
	67 Benzo(a)pyrene	252	11.715	11.715	(0.994)	440182	50.0000	50
*	84 Perylene-d12	264	11.781	11.781	(1.000)	340998	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.055	13.055	(1.108)	401320	50.0000	51
	69 Dibenz(a,h)anthracene	278	13.078	13.078	(1.110)	325682	50.0000	52
	70 Benzo(g,h,i)perylene	276	13.365	13.365	(1.134)	338436	50.0000	51

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66240.d
Report Date: 21-Mar-2011 10:45

QC Flag Legend

M - Compound response manually integrated.

Data File: u66240.d

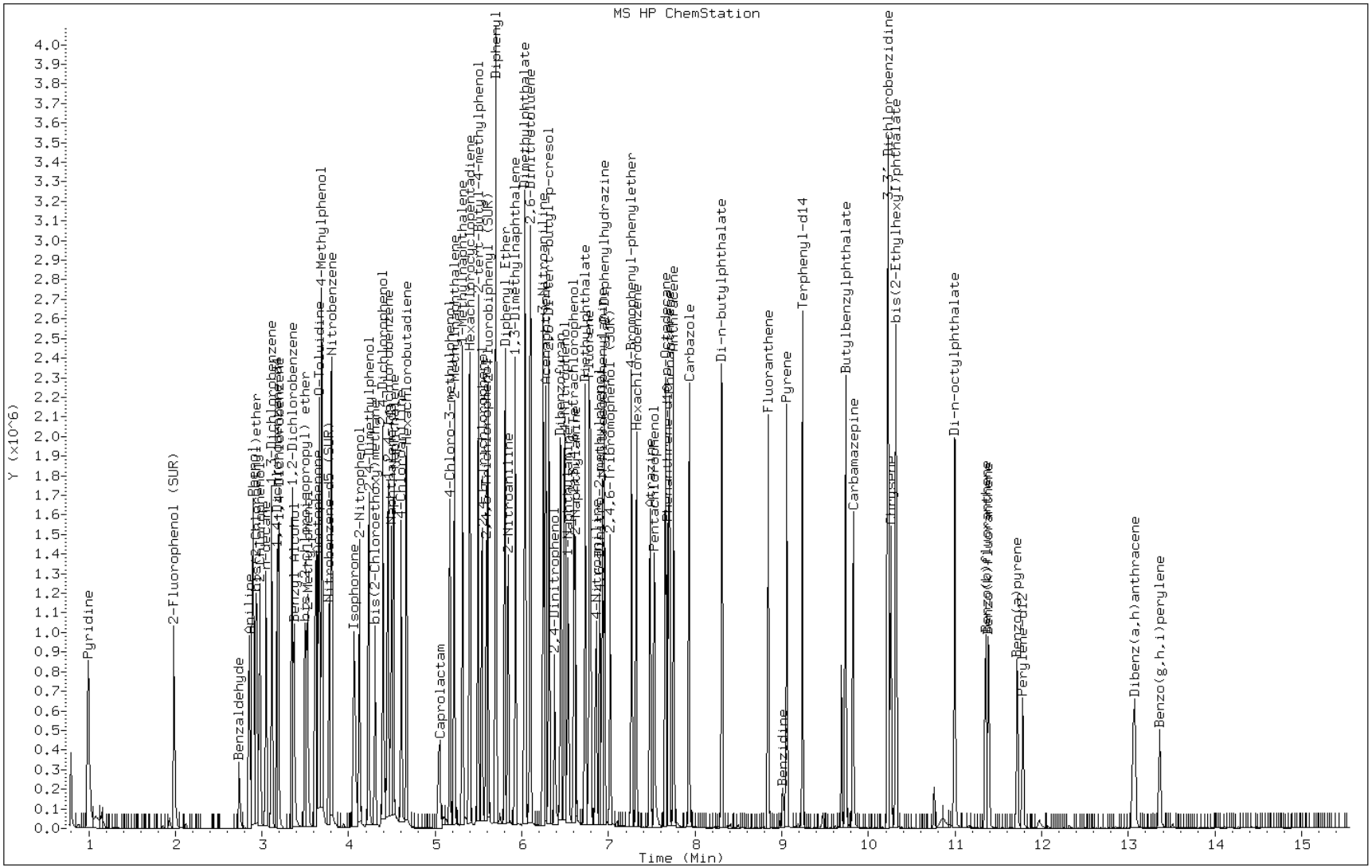
Date: 18-MAR-2011 05:47

Client ID:

Instrument: BNAMS4.i

Sample Info: ICIS-871725

Operator: BNAMS 4



Manual Integration Report

Data File: u66240.d
Inj. Date and Time: 18-MAR-2011 05:47
Instrument ID: BNAMS4.i
Client ID:
Compound: 15 Benzoic Acid
CAS #: 65-85-0
Report Date: 03/21/2011

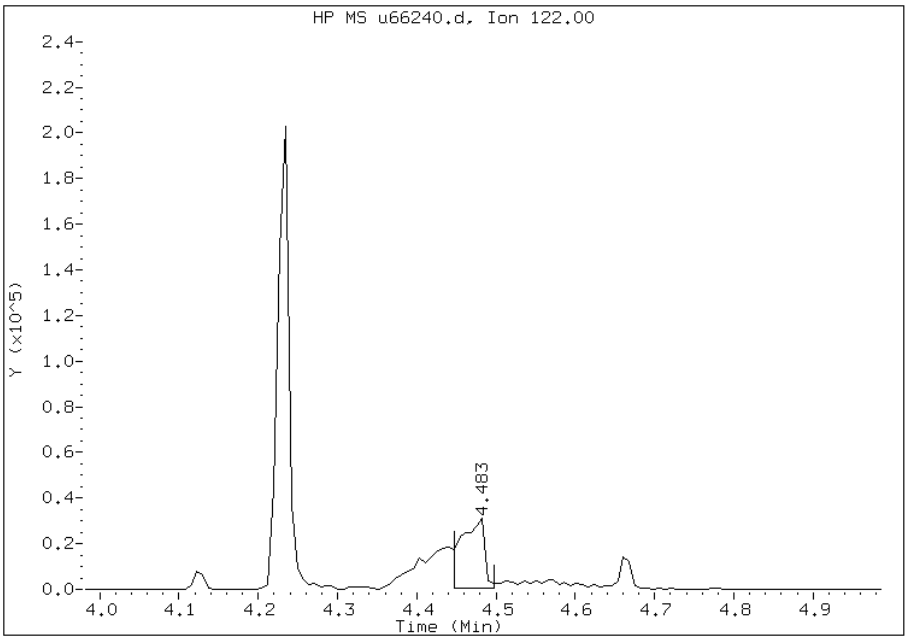
Processing Integration Results

RT: 4.48

Response: 66665

Amount: 26

Conc: 26



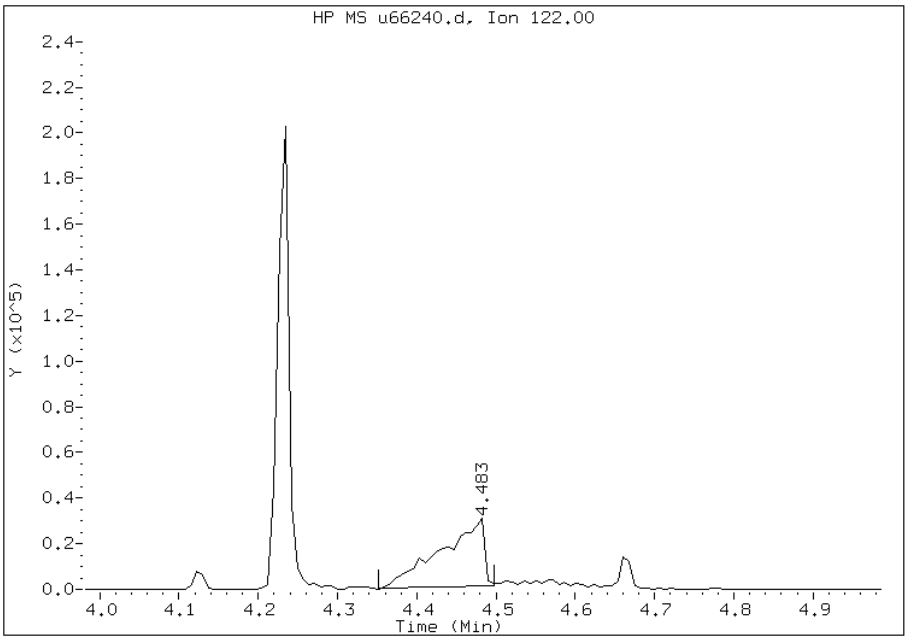
Manual Integration Results

RT: 4.48

Response: 114310

Amount: 55

Conc: 55



Manually Integrated By: wahied
Manual Integration Reason:

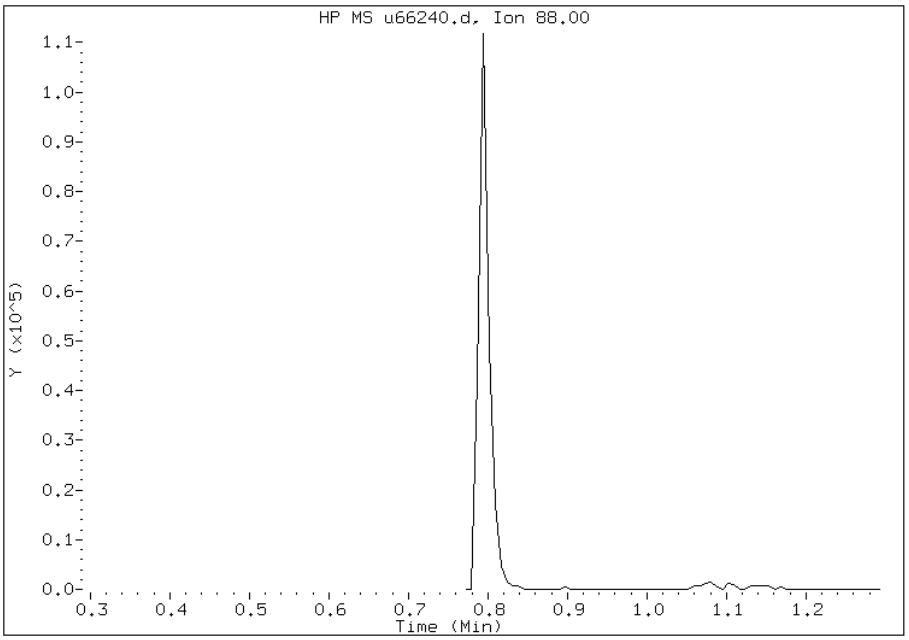
Manual Integration Report

Data File: u66240.d
Inj. Date and Time: 18-MAR-2011 05:47
Instrument ID: BNAMS4.i
Client ID:
Compound: 106 1,4-Dioxane
CAS #: 123-91-1
Report Date: 03/21/2011

Processing Integration Results

Not Detected

Expected RT: 0.79



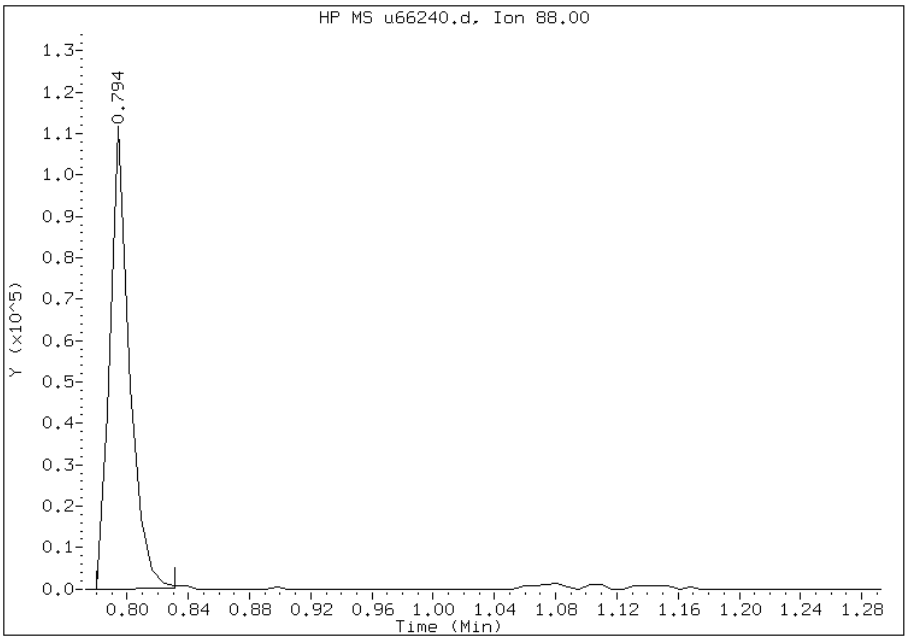
Manual Integration Results

RT: 0.79

Response: 99499

Amount: 49

Conc: 49



Manually Integrated By: wahied
Manual Integration Reason:

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66241.d
Report Date: 18-Mar-2011 11:01

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66241.d
Lab Smp Id: IC-871727
Inj Date : 18-MAR-2011 06:17
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : IC-871727
Misc Info : 120 PPM BNA 4548
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 18-Mar-2011 11:01 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:17 Cal File: u66241.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	106 1,4-Dioxane	88	0.868	0.868	(0.272)	246587	120.000	130(A)
	19 N-Nitrosodimethylamine	74	1.094	1.094	(0.343)	349575	120.000	120(A)
	71 Pyridine	79	1.114	1.114	(0.349)	536664	120.000	120(A)
$	16 2-Fluorophenol (SUR)	112	2.032	2.032	(0.637)	539574	120.000	130(A)
	110 Benzaldehyde	77	2.761	2.761	(0.866)	34190	120.000	45
$	17 Phenol-d5 (SUR)	99	2.923	2.923	(0.916)	635894	120.000	120(A)
	1 Phenol	94	2.938	2.938	(0.921)	690859	120.000	130(A)
	73 Aniline	93	2.871	2.871	(0.900)	717290	120.000	110
	20 bis(2-Chloroethyl)ether	93	2.975	2.975	(0.933)	677340	120.000	120(A)
	2 2-Chlorophenol	128	2.998	2.998	(0.940)	578756	120.000	120(A)
	113 n-decane	43	3.056	3.056	(0.958)	496638	120.000	120
	21 1,3-Dichlorobenzene	146	3.130	3.130	(0.981)	728057	120.000	120(A)
*	79 1,4-Dichlorobenzene-d4	152	3.190	3.190	(1.000)	162695	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66241.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.205	3.205	(1.005)	744850	120.000	130(A)
	74 Benzyl Alcohol	108	3.397	3.397	(1.065)	328080	120.000	120(A)
	23 1,2-Dichlorobenzene	146	3.360	3.360	(1.053)	734255	120.000	120(A)
	3 2-Methylphenol	108	3.551	3.551	(1.113)	455389	120.000	120(A)
	24 bis (2-chloroisopropyl) ether	45	3.514	3.514	(1.102)	822985	120.000	120(A)
	126 O-Toluidine	107	3.693	3.693	(1.158)	769901	120.000	120(A)
	104 Acetophenone	105	3.671	3.671	(1.151)	964823	120.000	130(A)
	4 4-Methylphenol	108	3.737	3.737	(1.172)	426989	120.000	120(A)
	123 3 & 4 Methylphenol	108	3.737	3.737	(1.172)	425366	120.000	120(A)
	25 N-Nitroso-di-n-propylamine	70	3.693	3.693	(1.158)	536483	120.000	130(AM)
	26 Hexachloroethane	117	3.701	3.701	(1.160)	440517	120.000	130(A)
$	76 Nitrobenzene-d5 (SUR)	82	3.812	3.812	(0.846)	941837	120.000	120
	27 Nitrobenzene	77	3.834	3.834	(0.851)	1162489	120.000	120(A)
	107 N,N-Dimethylaniline	120	3.834	3.834	(1.202)	903164	120.000	140(A)
	28 Isophorone	82	4.100	4.100	(0.910)	1605424	120.000	120(A)
	5 2-Nitrophenol	139	4.137	4.137	(0.918)	403434	120.000	120
	6 2,4-Dimethylphenol	122	4.256	4.256	(0.944)	490558	120.000	120(A)
	29 bis(2-Chloroethoxy)methane	93	4.323	4.323	(0.959)	729459	120.000	120(A)
	15 Benzoic Acid	122	4.529	4.529	(1.005)	337676	120.000	130(AM)
	7 2,4-Dichlorophenol	162	4.411	4.411	(0.979)	724574	120.000	120(A)
	30 1,2,4-Trichlorobenzene	180	4.463	4.463	(0.990)	647787	120.000	130(A)
*	80 Naphthalene-d8	136	4.506	4.506	(1.000)	506530	40.0000	
	31 Naphthalene	128	4.529	4.529	(1.005)	1733156	120.000	130(A)
	32 4-Chloroaniline	127	4.625	4.625	(1.026)	692421	120.000	120(A)
	33 Hexachlorobutadiene	225	4.670	4.670	(1.036)	535334	120.000	120(A)
	111 Caprolactam	113	5.148	5.148	(1.142)	171169	120.000	120(A)
	8 4-Chloro-3-methylphenol	107	5.193	5.193	(1.152)	729830	120.000	120(A)
	34 2-Methylnaphthalene	142	5.231	5.231	(1.161)	1267990	120.000	130(A)
	120 1-Methylnaphthalene	142	5.328	5.328	(1.182)	1271418	120.000	120(A)
	35 Hexachlorocyclopentadiene	237	5.393	5.393	(0.862)	488598	120.000	120(A)
	129 1,2,4,5-Tetrachlorobenzene	216	5.408	5.408	(0.865)	759491	120.000	130(A)
	121 2-tert-Butyl-4-methylphenol	149	5.518	5.518	(1.225)	1165446	120.000	130(A)
	9 2,4,6-Trichlorophenol	196	5.556	5.556	(0.888)	400020	120.000	120(A)
	10 2,4,5-Trichlorophenol	196	5.609	5.609	(0.897)	566438	120.000	140(A)
$	77 2-Fluorobiphenyl (SUR)	172	5.623	5.623	(0.899)	1896479	120.000	140(A)
	102 Diphenyl	154	5.712	5.712	(0.913)	2307462	120.000	130(A)
	36 2-Chloronaphthalene	162	5.720	5.720	(0.915)	1822394	120.000	130(A)
	103 Diphenyl Ether	170	5.816	5.816	(0.930)	1033784	120.000	130(A)
	37 2-Nitroaniline	65	5.868	5.868	(0.938)	486867	120.000	120
	125 1,3-Dimethylnaphthalene	156	5.943	5.943	(0.950)	1256733	120.000	130(A)
	38 Dimethylphthalate	163	6.061	6.061	(0.969)	1976433	120.000	120(A)
	114 Coumarin	146	6.061	6.061	(1.345)	523185	120.000	130(A)
	40 2,6-Dinitrotoluene	165	6.121	6.121	(0.979)	626257	120.000	120(A)
	39 Acenaphthylene	152	6.121	6.121	(0.979)	2630848	120.000	140(A)
	41 3-Nitroaniline	138	6.284	6.284	(1.005)	423883	120.000	130(A)
*	82 Acenaphthene-d10	164	6.253	6.253	(1.000)	419696	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.326	6.326	(1.012)	1160564	120.000	120(A)

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66241.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	42 Acenaphthene	154	6.291	6.291	(1.006)	1484737	120.000	130(A)
	11 2,4-Dinitrophenol	184	6.408	6.408	(1.025)	258336	120.000	120(A)
	12 4-Nitrophenol	65	6.525	6.525	(1.043)	400858	120.000	120(AH)
	44 2,4-Dinitrotoluene	165	6.533	6.533	(1.045)	570526	120.000	120(H)
	43 Dibenzofuran	168	6.467	6.467	(1.034)	2100467	120.000	130(A)
	127 1-Naphthylamine	143	6.555	6.555	(1.048)	976224	120.000	120
	130 2,3,4,6-Tetrachlorophenol	232	6.623	6.623	(1.059)	475823	120.000	120(A)
	128 2-Naphthylamine	143	6.652	6.652	(1.064)	1115119	120.000	130(A)
	45 Diethylphthalate	149	6.762	6.762	(1.081)	2181103	120.000	120(A)
	46 4-Chlorophenyl-phenylether	204	6.815	6.815	(1.090)	884870	120.000	120(A)
	47 Fluorene	166	6.800	6.800	(1.087)	1929623	120.000	130(A)
	48 4-Nitroaniline	138	6.911	6.911	(1.105)	350078	120.000	120(H)
	13 4,6-Dinitro-2-methylphenol	198	6.942	6.942	(0.903)	304350	120.000	120(AH)
	49 N-Nitrosodiphenylamine	169	6.955	6.955	(0.905)	1142240	120.000	130(A)
	75 1,2-Diphenylhydrazine	77	6.970	6.970	(0.907)	2106637	120.000	130(A)
$	18 2,4,6-Tribromophenol (SUR)	330	7.037	7.037	(1.125)	325284	120.000	130(A)
	50 4-Bromophenyl-phenylether	248	7.275	7.275	(0.946)	511503	120.000	120(A)
	51 Hexachlorobenzene	284	7.341	7.341	(0.955)	547562	120.000	130(A)
	112 Atrazine	200	7.513	7.513	(0.977)	449913	120.000	120(A)
	14 Pentachlorophenol	266	7.542	7.542	(0.981)	370183	120.000	120(A)
	115 n-Octadecane	57	7.665	7.665	(0.997)	735761	120.000	120(A)
*	83 Phenanthrene-d10	188	7.687	7.687	(1.000)	528550	40.0000	
	52 Phenanthrene	178	7.717	7.717	(1.004)	1998086	120.000	130(A)
	53 Anthracene	178	7.769	7.769	(1.011)	2074212	120.000	130(A)
	54 Carbazole	167	7.948	7.948	(1.034)	2064402	120.000	120(A)
	55 Di-n-butylphthalate	149	8.317	8.317	(1.082)	3181893	120.000	120
	56 Fluoranthene	202	8.859	8.859	(1.152)	2103665	120.000	120
	58 Benzidine	184	9.023	9.023	(1.174)	114871	120.000	82
	57 Pyrene	202	9.074	9.074	(0.885)	2252968	120.000	130(A)
$	78 Terphenyl-d14	244	9.249	9.249	(0.902)	1829238	120.000	130(A)
	59 Butylbenzylphthalate	149	9.751	9.751	(0.951)	1398140	120.000	120
	109 2,3,7,8-TCDD (Screen)	320	9.796	9.796	(0.956)	1236	120.000	0.89
	124 Carbamazepine	193	9.840	9.840	(0.960)	621408	120.000	110
	60 3,3'-Dichlorobenzidine	252	10.235	10.235	(0.999)	601082	120.000	120
	61 Benzo(a)anthracene	228	10.235	10.235	(0.999)	1881909	120.000	120(A)
*	81 Chrysene-d12	240	10.249	10.249	(1.000)	530021	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.328	10.328	(1.008)	1824291	120.000	120(A)
	62 Chrysene	228	10.276	10.276	(1.003)	1404333	120.000	120(A)
	64 Di-n-octylphthalate	149	11.014	11.014	(0.934)	2842144	120.000	120(A)
	65 Benzo(b)fluoranthene	252	11.376	11.376	(0.965)	1361364	120.000	130(A)
	66 Benzo(k)fluoranthene	252	11.406	11.406	(0.968)	963629	120.000	110(H)
	67 Benzo(a)pyrene	252	11.734	11.734	(0.996)	962309	120.000	130(A)
*	84 Perylene-d12	264	11.787	11.787	(1.000)	277567	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.072	13.072	(1.109)	873939	120.000	130(A)
	69 Dibenz(a,h)anthracene	278	13.102	13.102	(1.112)	739573	120.000	130(A)
	70 Benzo(g,h,i)perylene	276	13.380	13.380	(1.135)	736006	120.000	130(A)

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66241.d
Report Date: 18-Mar-2011 11:01

QC Flag Legend

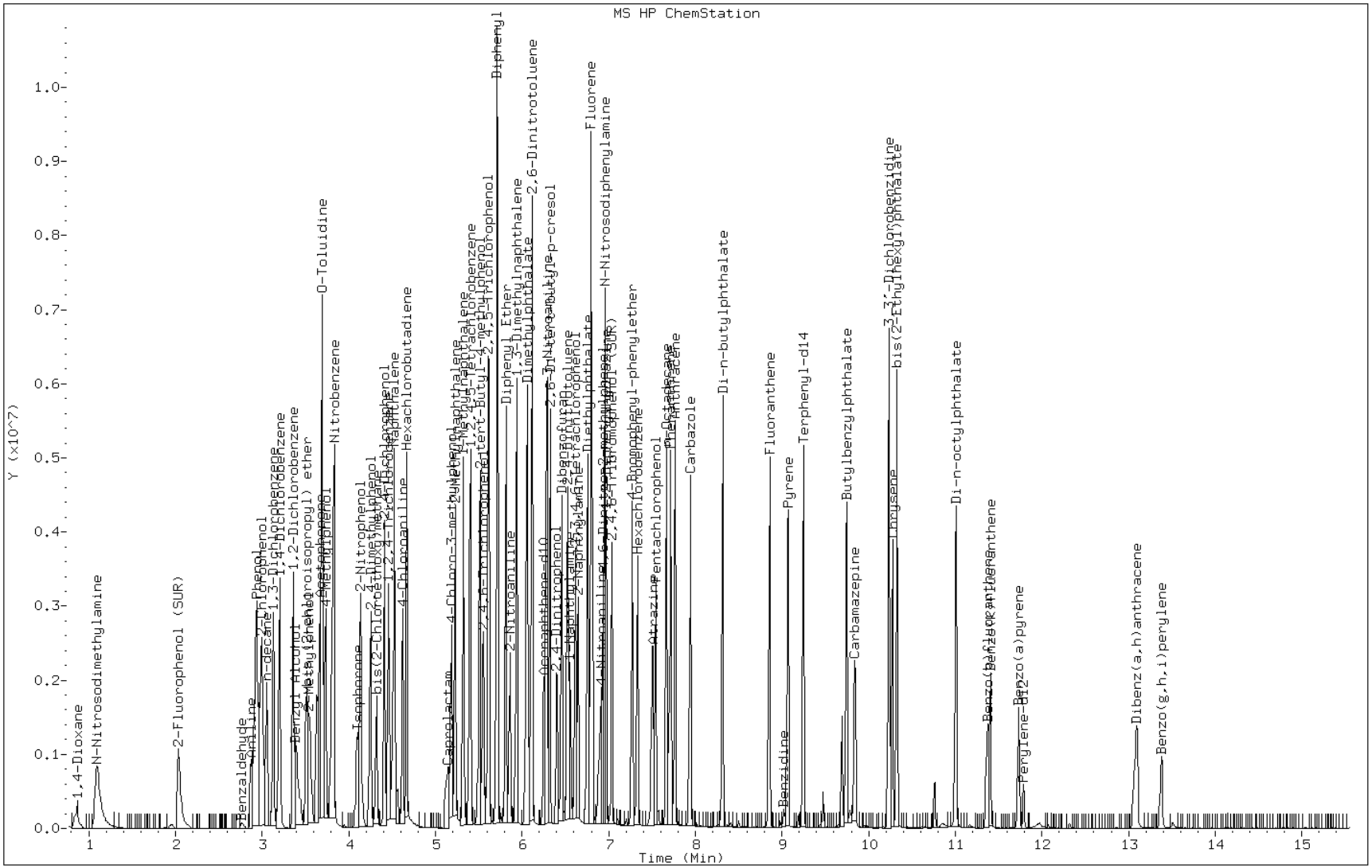
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: u66241.d

Date: 18-MAR-2011 06:17

Client ID: Instrument: BNAMS4.i

Sample Info: IC-871727 Operator: BNAMS 4



Manual Integration Report

Data File: u66241.d
Inj. Date and Time: 18-MAR-2011 06:17
Instrument ID: BNAMS4.i
Client ID:
Compound: 25 N-Nitroso-di-n-propylamine
CAS #: 621-64-7
Report Date: 03/21/2011

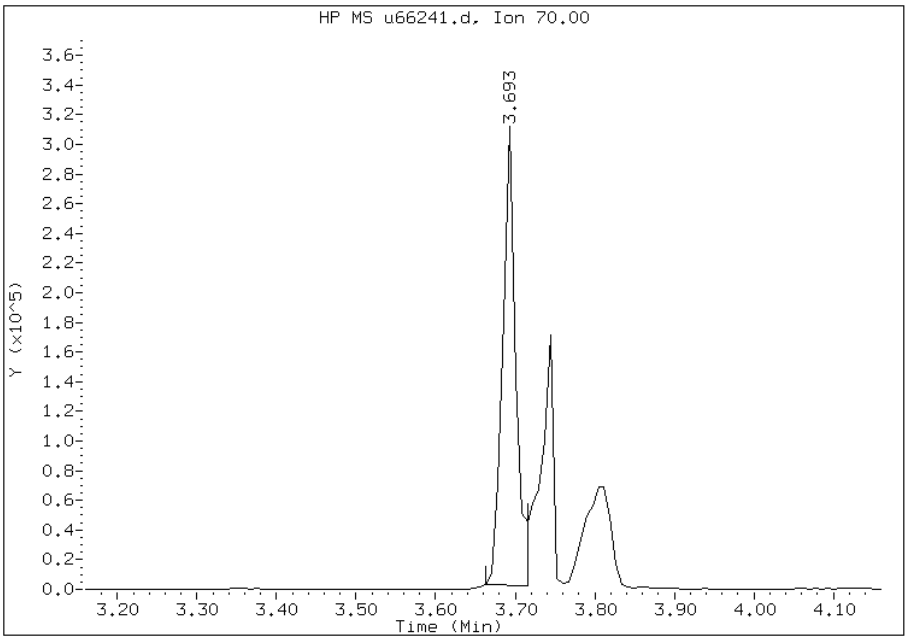
Processing Integration Results

RT: 3.69

Response: 358190

Amount: 111

Conc: 111



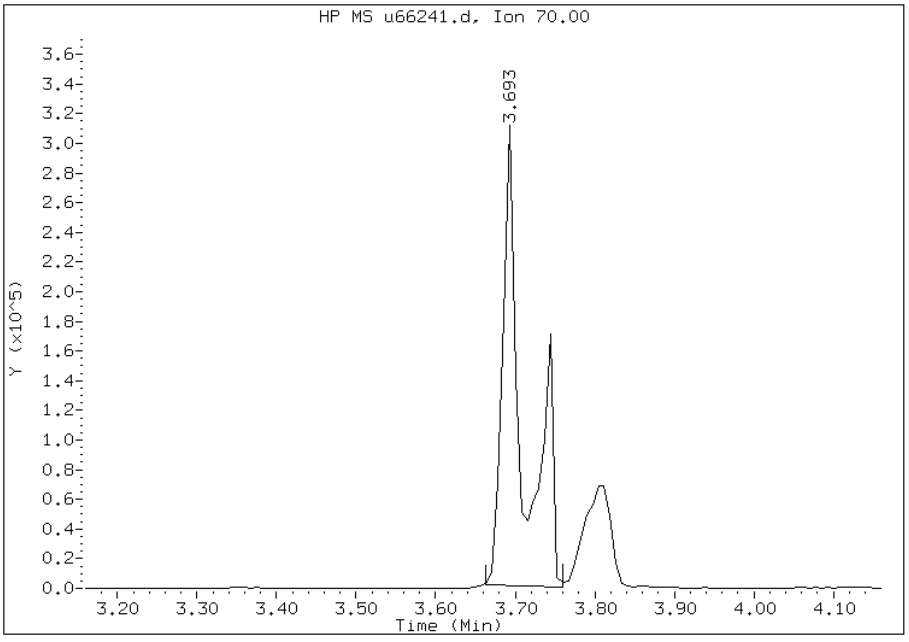
Manual Integration Results

RT: 3.69

Response: 536483

Amount: 135

Conc: 135



Manually Integrated By: wahied
Manual Integration Reason:

Manual Integration Report

Data File: u66241.d
Inj. Date and Time: 18-MAR-2011 06:17
Instrument ID: BNAMS4.i
Client ID:
Compound: 15 Benzoic Acid
CAS #: 65-85-0
Report Date: 03/21/2011

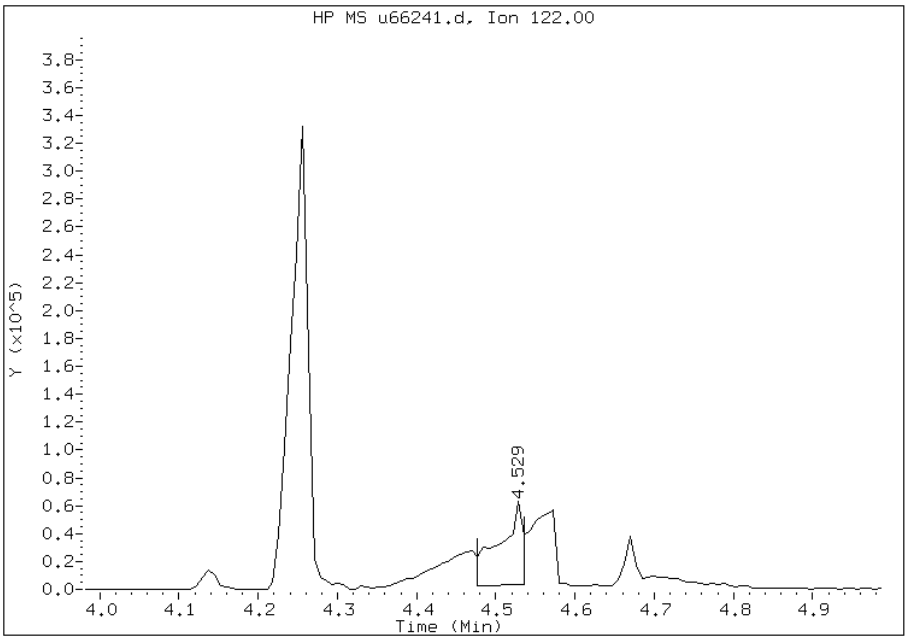
Processing Integration Results

RT: 4.53

Response: 133011

Amount: 78

Conc: 78



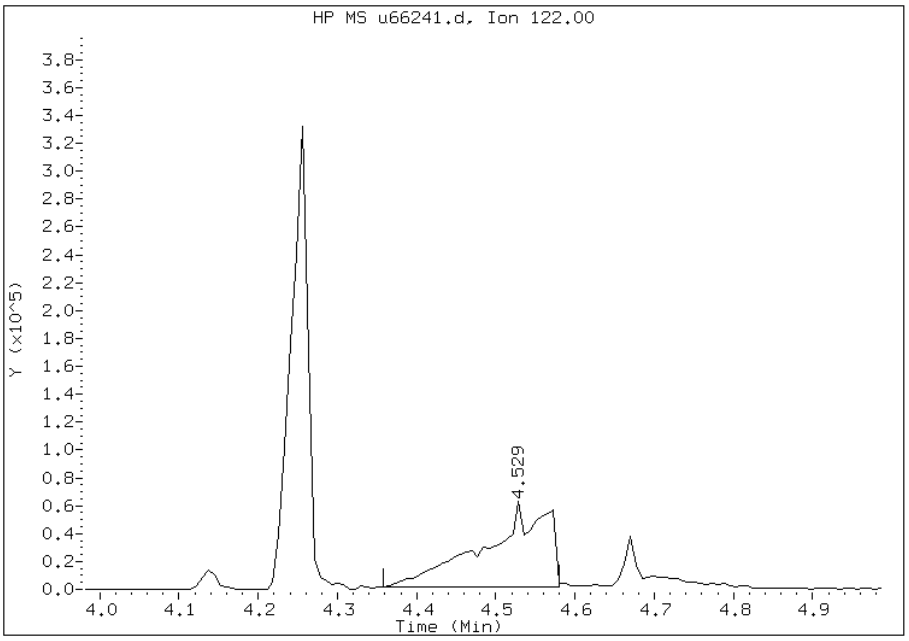
Manual Integration Results

RT: 4.53

Response: 337676

Amount: 132

Conc: 132



Manually Integrated By: wahied
Manual Integration Reason:

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66242.d
Report Date: 18-Mar-2011 12:38

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66242.d
Lab Smp Id: IC-871721
Inj Date : 18-MAR-2011 06:37
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : IC-871721
Misc Info : 5 PPM BNA 4548
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 18-Mar-2011 11:01 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	106 1,4-Dioxane	88	0.802	0.817	(0.253)	10996	5.00000	5.0
	19 N-Nitrosodimethylamine	74	0.985	0.993	(0.311)	14657	5.00000	4.4(a)
	71 Pyridine	79	1.007	1.016	(0.318)	23190	5.00000	4.5(a)
$	16 2-Fluorophenol (SUR)	112	1.992	1.987	(0.629)	25036	5.00000	5.1
	110 Benzaldehyde	77	2.736	2.732	(0.864)	27786	5.00000	13
$	17 Phenol-d5 (SUR)	99	2.876	2.872	(0.909)	34418	5.00000	5.4
	1 Phenol	94	2.884	2.887	(0.911)	36064	5.00000	5.4
	73 Aniline	93	2.846	2.851	(0.899)	41196	5.00000	5.2
	20 bis(2-Chloroethyl)ether	93	2.928	2.923	(0.925)	2417	0.50000	0.62
	2 2-Chlorophenol	128	2.965	2.968	(0.937)	30384	5.00000	5.3
	113 n-decane	43	3.039	3.042	(0.960)	36425	5.00000	5.6
	21 1,3-Dichlorobenzene	146	3.106	3.108	(0.981)	37932	5.00000	5.3
*	79 1,4-Dichlorobenzene-d4	152	3.165	3.173	(1.000)	191261	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66242.d
Report Date: 18-Mar-2011 12:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.187	3.188	(1.007)	35992	5.00000	5.2
	74 Benzyl Alcohol	108	3.354	3.356	(1.060)	16544	5.00000	5.1
	23 1,2-Dichlorobenzene	146	3.347	3.341	(1.058)	36314	5.00000	5.1
	3 2-Methylphenol	108	3.507	3.510	(1.108)	25306	5.00000	5.5
	24 bis (2-chloroisopropyl) ether	45	3.493	3.495	(1.104)	44410	5.00000	5.3
	126 O-Toluidine	107	3.648	3.650	(1.153)	31624	5.00000	7.4
	104 Acetophenone	105	3.618	3.620	(1.143)	47242	5.00000	5.4
	4 4-Methylphenol	108	3.678	3.679	(1.162)	22241	5.00000	5.3
	123 3 & 4 Methylphenol	108	3.678	3.679	(1.162)	24551	5.00000	5.6
	25 N-Nitroso-di-n-propylamine	70	3.648	3.635	(1.153)	1922	0.50000	0.43(aM)
	26 Hexachloroethane	117	3.685	3.686	(1.164)	1788	0.50000	0.48(aM)
$	76 Nitrobenzene-d5 (SUR)	82	3.765	3.767	(0.838)	48599	5.00000	4.9(a)
	27 Nitrobenzene	77	3.788	3.789	(0.843)	5734	0.50000	0.49(aM)
	107 N,N-Dimethylaniline	120	3.788	3.789	(1.197)	3403	0.50000	0.47(a)
	28 Isophorone	82	4.045	4.041	(0.901)	76507	5.00000	4.9(a)
	5 2-Nitrophenol	139	4.118	4.121	(0.917)	19097	5.00000	4.7(a)
	6 2,4-Dimethylphenol	122	4.221	4.224	(0.940)	24761	5.00000	5.0
	29 bis(2-Chloroethoxy)methane	93	4.295	4.296	(0.956)	33464	5.00000	4.7(a)
	15 Benzoic Acid	122	4.381	4.399	(0.976)	6022	5.00000	2.4(aH)
	7 2,4-Dichlorophenol	162	4.395	4.392	(0.979)	32222	5.00000	4.8(a)
	30 1,2,4-Trichlorobenzene	180	4.447	4.450	(0.990)	3107	0.50000	0.50
*	80 Naphthalene-d8	136	4.491	4.494	(1.000)	616217	40.0000	
	31 Naphthalene	128	4.506	4.509	(1.003)	73129	5.00000	4.6(a)
	32 4-Chloroaniline	127	4.601	4.604	(1.024)	33347	5.00000	4.9(a)
	33 Hexachlorobutadiene	225	4.659	4.663	(1.037)	4652	1.00000	0.92(a)
	111 Caprolactam	113	4.954	4.971	(1.103)	8551	5.00000	5.3
	8 4-Chloro-3-methylphenol	107	5.152	5.154	(1.147)	36693	5.00000	5.1
	34 2-Methylnaphthalene	142	5.218	5.213	(1.162)	55139	5.00000	4.7(a)
	120 1-Methylnaphthalene	142	5.313	5.310	(1.183)	59975	5.00000	5.0(a)
	35 Hexachlorocyclopentadiene	237	5.387	5.384	(0.864)	13784	5.00000	3.9(a)
	129 1,2,4,5-Tetrachlorobenzene	216	5.395	5.392	(0.865)	27983	5.00000	4.9(a)
	121 2-tert-Butyl-4-methylphenol	149	5.483	5.481	(1.221)	54665	5.00000	5.1
	9 2,4,6-Trichlorophenol	196	5.535	5.533	(0.888)	17700	5.00000	5.3
	10 2,4,5-Trichlorophenol	196	5.578	5.577	(0.895)	20351	5.00000	5.2
$	77 2-Fluorobiphenyl (SUR)	172	5.600	5.600	(0.898)	70612	5.00000	5.3
	102 Diphenyl	154	5.689	5.688	(0.913)	77969	5.00000	4.8(a)
	36 2-Chloronaphthalene	162	5.689	5.696	(0.913)	63723	5.00000	4.8(a)
	103 Diphenyl Ether	170	5.799	5.798	(0.930)	40683	5.00000	5.0
	37 2-Nitroaniline	65	5.829	5.827	(0.935)	46654	10.0000	11
	125 1,3-Dimethylnaphthalene	156	5.917	5.915	(0.949)	48106	5.00000	5.2
	38 Dimethylphthalate	163	6.027	6.026	(0.967)	84694	5.00000	5.1
	114 Coumarin	146	6.020	6.019	(1.340)	22722	5.00000	4.8(a)
	40 2,6-Dinitrotoluene	165	6.078	6.077	(0.975)	2794	1.00000	0.86(a)
	39 Acenaphthylene	152	6.093	6.092	(0.978)	95190	5.00000	5.1
	41 3-Nitroaniline	138	6.234	6.232	(1.000)	32490	10.0000	10
*	82 Acenaphthene-d10	164	6.234	6.239	(1.000)	427249	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.307	6.306	(1.012)	49592	5.00000	5.3

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66242.d
Report Date: 18-Mar-2011 12:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	42 Acenaphthene	154	6.263	6.262	(1.005)	49211	5.00000	4.7(a)
	11 2,4-Dinitrophenol	184	6.366	6.358	(1.021)	14456	15.0000	8.6(a)
	12 4-Nitrophenol	65	6.476	6.474	(1.039)	41038	15.0000	13(a)
	44 2,4-Dinitrotoluene	165	6.484	6.482	(1.040)	5905	1.00000	1.2(M)
	43 Dibenzofuran	168	6.439	6.438	(1.033)	92833	5.00000	5.6
	127 1-Naphthylamine	143	6.520	6.519	(1.046)	55393	5.00000	6.0
	130 2,3,4,6-Tetrachlorophenol	232	6.593	6.592	(1.058)	18628	5.00000	5.2
	128 2-Naphthylamine	143	6.601	6.600	(1.059)	51779	5.00000	5.5
	45 Diethylphthalate	149	6.719	6.717	(1.078)	98943	5.00000	5.4
	46 4-Chlorophenyl-phenylether	204	6.791	6.790	(1.089)	25049	5.00000	5.8
	47 Fluorene	166	6.769	6.767	(1.086)	73750	5.00000	5.3
	48 4-Nitroaniline	138	6.835	6.834	(1.096)	32297	10.0000	10
	13 4,6-Dinitro-2-methylphenol	198	6.879	6.878	(0.897)	27261	15.0000	13(a)
	49 N-Nitrosodiphenylamine	169	6.908	6.914	(0.901)	50201	5.00000	5.4
	75 1,2-Diphenylhydrazine	77	6.938	6.944	(0.905)	93282	5.00000	5.1
$	18 2,4,6-Tribromophenol (SUR)	330	7.012	7.010	(1.125)	9313	5.00000	4.1(a)
	50 4-Bromophenyl-phenylether	248	7.255	7.253	(0.946)	18364	5.00000	4.3(a)
	51 Hexachlorobenzene	284	7.315	7.313	(0.954)	2229	0.50000	0.52
	112 Atrazine	200	7.462	7.459	(0.973)	20463	5.00000	5.3
	14 Pentachlorophenol	266	7.522	7.525	(0.981)	34966	15.0000	12(a)
	115 n-Octadecane	57	7.653	7.650	(0.998)	34645	5.00000	5.2
*	83 Phenanthrene-d10	188	7.668	7.672	(1.000)	579135	40.0000	
	52 Phenanthrene	178	7.691	7.687	(1.003)	84023	5.00000	5.1
	53 Anthracene	178	7.735	7.739	(1.009)	83441	5.00000	4.9(a)
	54 Carbazole	167	7.919	7.916	(1.033)	87599	5.00000	4.8(a)
	55 Di-n-butylphthalate	149	8.301	8.297	(1.082)	159401	5.00000	5.2
	56 Fluoranthene	202	8.838	8.833	(1.153)	89166	5.00000	4.8(a)
	58 Benzidine	184	8.999	8.994	(1.174)	14035	5.00000	4.8(a)
	57 Pyrene	202	9.044	9.046	(0.885)	89656	5.00000	4.4(a)
$	78 Terphenyl-d14	244	9.234	9.229	(0.903)	76352	5.00000	4.6(a)
	59 Butylbenzylphthalate	149	9.726	9.728	(0.951)	71919	5.00000	4.8(a)
	124 Carbamazepine	193	9.806	9.808	(0.959)	40548	5.00000	5.2
	60 3,3'-Dichlorobenzidine	252	10.210	10.211	(0.999)	68967	10.0000	10
	61 Benzo(a)anthracene	228	10.210	10.211	(0.999)	10755	0.50000	0.56
*	81 Chrysene-d12	240	10.224	10.225	(1.000)	667625	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.312	10.306	(1.009)	96715	5.00000	5.1
	62 Chrysene	228	10.245	10.247	(1.002)	68823	5.00000	4.7(a)
	64 Di-n-octylphthalate	149	10.989	10.983	(0.933)	159391	5.00000	4.3(a)
	65 Benzo(b)fluoranthene	252	11.346	11.342	(0.963)	8252	0.50000	0.47(aMH)
	66 Benzo(k)fluoranthene	252	11.375	11.371	(0.966)	8539	0.50000	0.53(M)
	67 Benzo(a)pyrene	252	11.713	11.707	(0.994)	6079	0.50000	0.46(aM)
*	84 Perylene-d12	264	11.780	11.774	(1.000)	505504	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.065	13.042	(1.109)	5042	0.50000	0.43(a)
	69 Dibenz(a,h)anthracene	278	13.072	13.065	(1.110)	4028	0.50000	0.43(aM)
	70 Benzo(g,h,i)perylene	276	13.352	13.343	(1.133)	48070	5.00000	4.9(a)

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66242.d
Report Date: 18-Mar-2011 12:38

QC Flag Legend

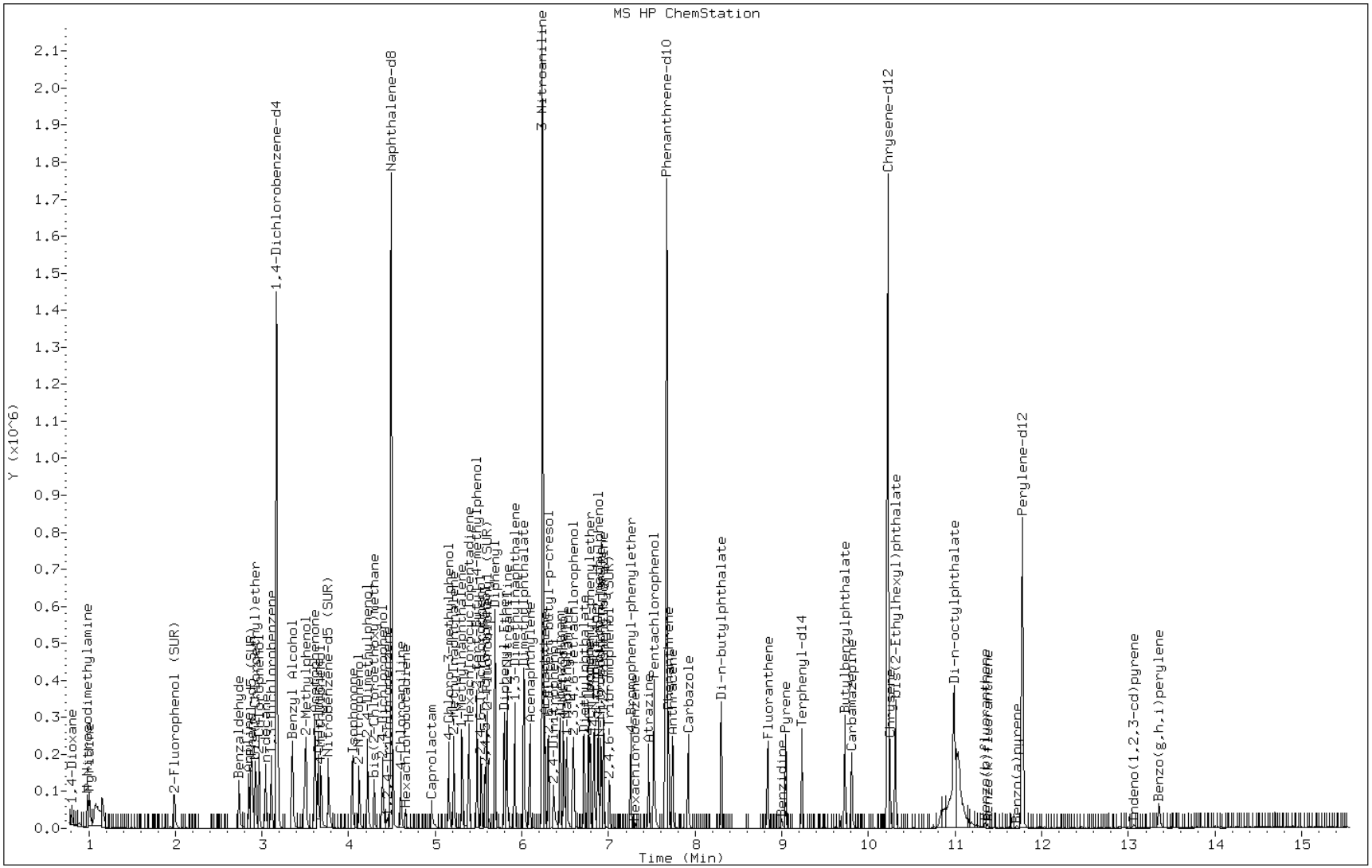
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: u66242.d

Date: 18-MAR-2011 06:37

Client ID: Instrument: BNAMS4.i

Sample Info: IC-871721 Operator: BNAMS 4



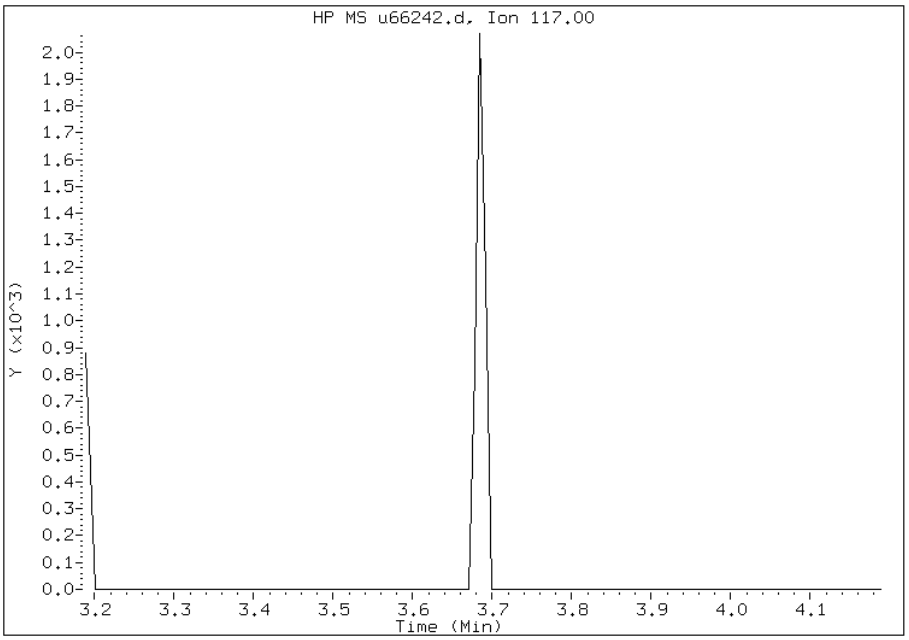
Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 26 Hexachloroethane
CAS #: 67-72-1
Report Date: 03/21/2011

Processing Integration Results

Not Detected

Expected RT: 3.69



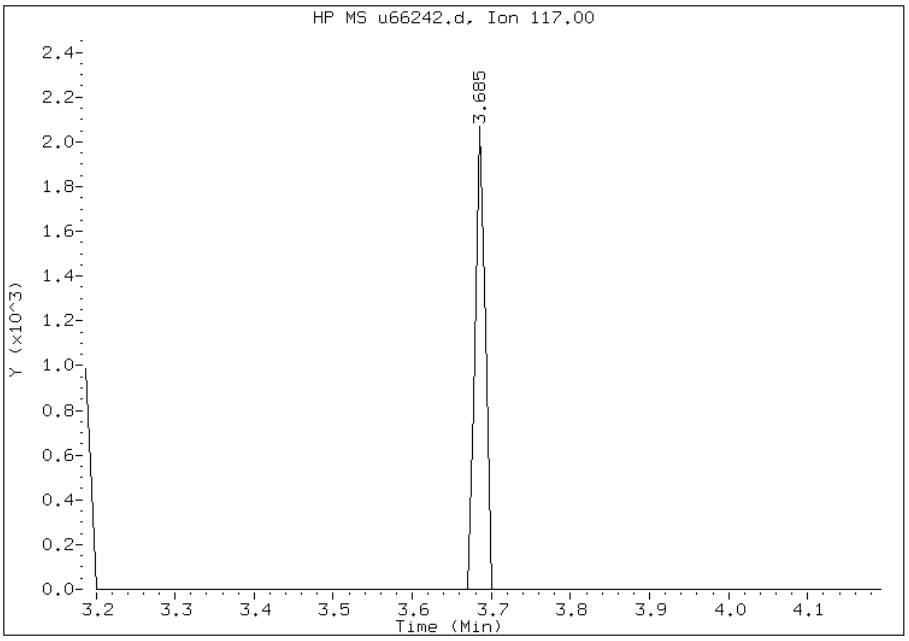
Manual Integration Results

RT: 3.68

Response: 1788

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 66 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 03/21/2011

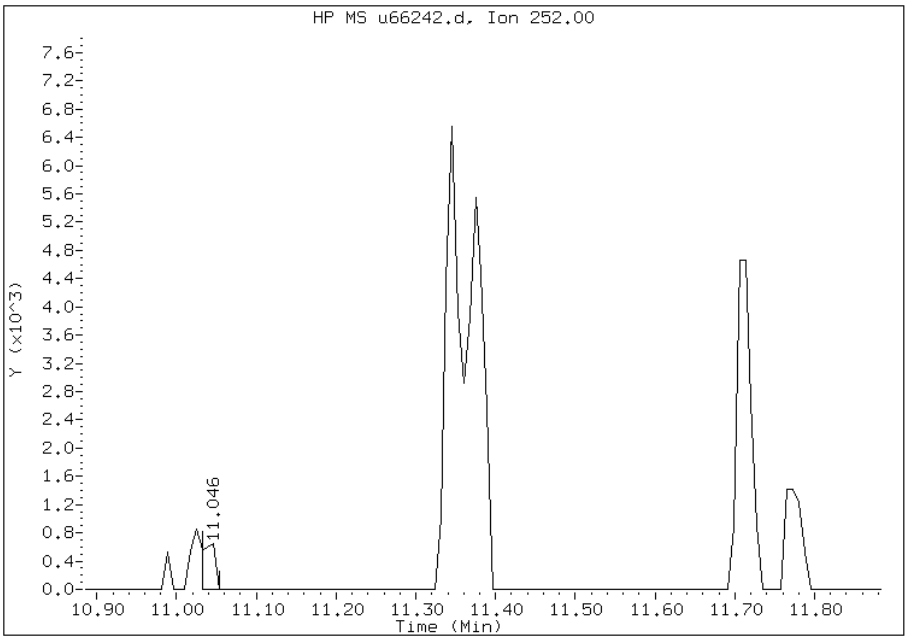
Processing Integration Results

RT: 11.05

Response: 772

Amount: 0

Conc: 0



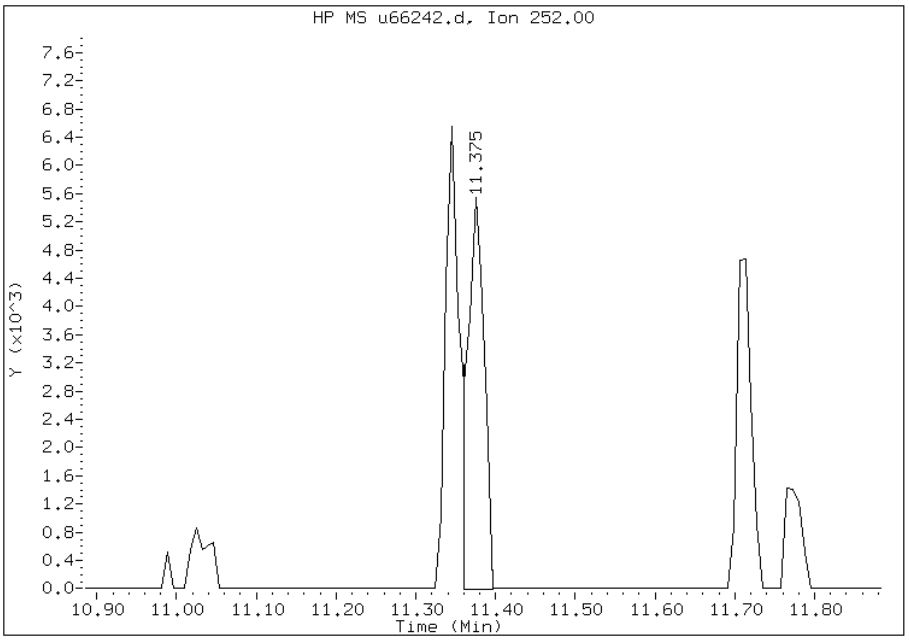
Manual Integration Results

RT: 11.37

Response: 8539

Amount: 1

Conc: 1



Manually Integrated By: wahied
Manual Integration Reason:

Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 65 Benzo(b)fluoranthene
CAS #: 205-99-2
Report Date: 03/21/2011

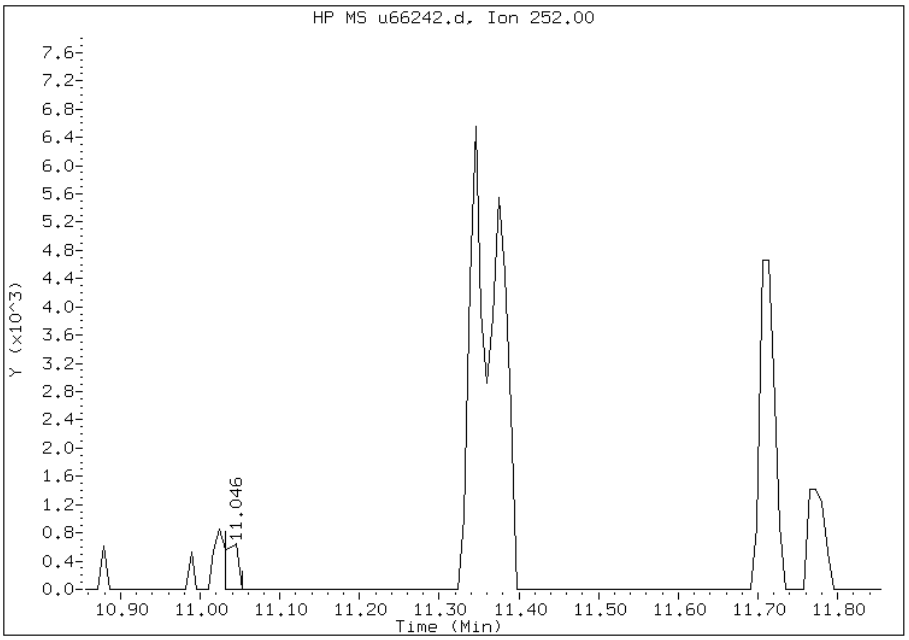
Processing Integration Results

RT: 11.05

Response: 772

Amount: 0

Conc: 0



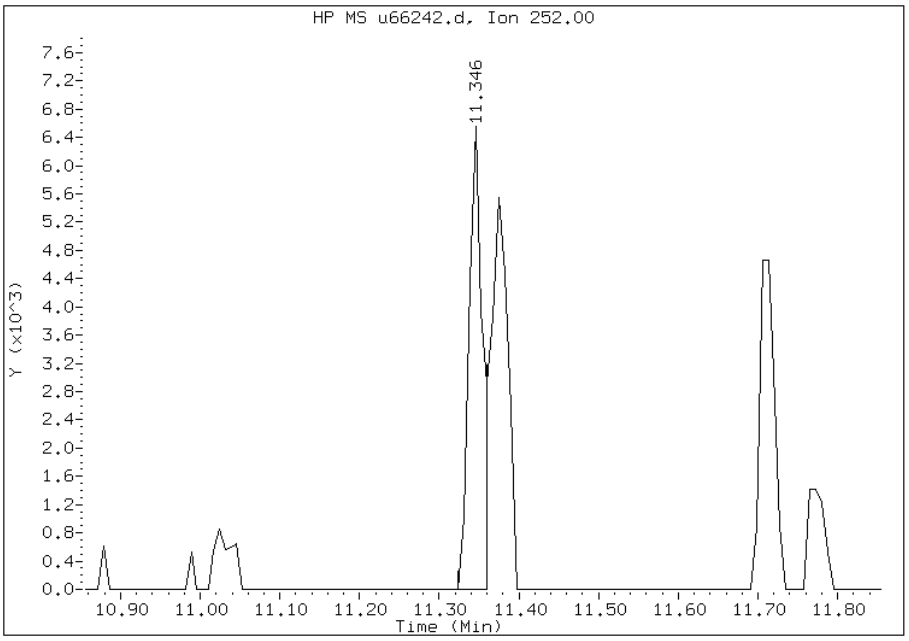
Manual Integration Results

RT: 11.35

Response: 8252

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

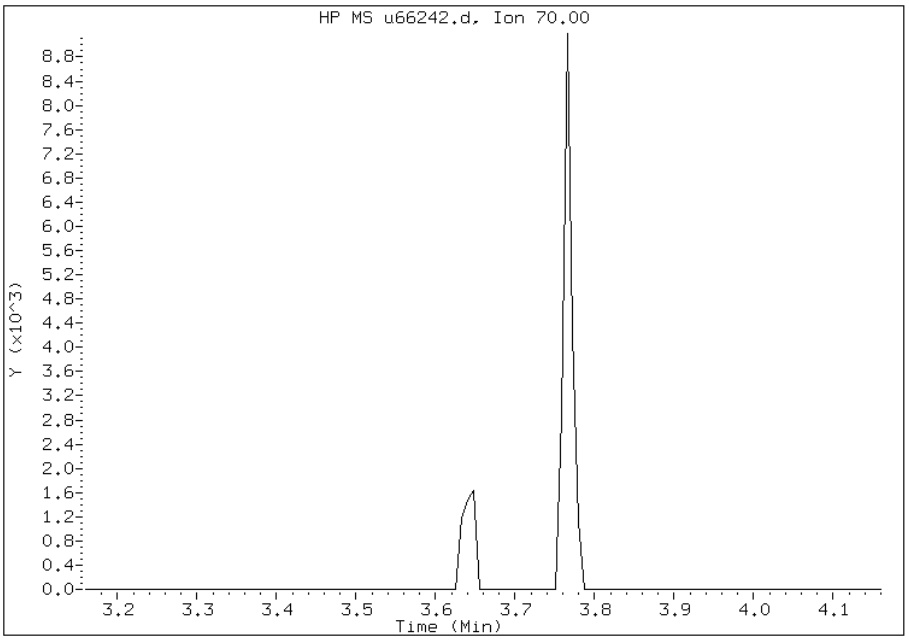
Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 25 N-Nitroso-di-n-propylamine
CAS #: 621-64-7
Report Date: 03/21/2011

Processing Integration Results

Not Detected

Expected RT: 3.66



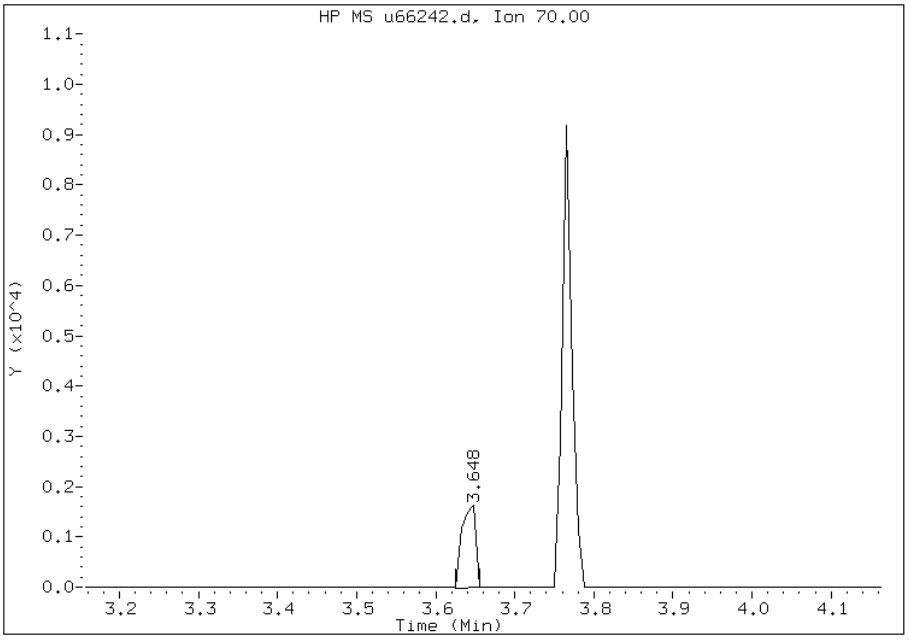
Manual Integration Results

RT: 3.65

Response: 1922

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

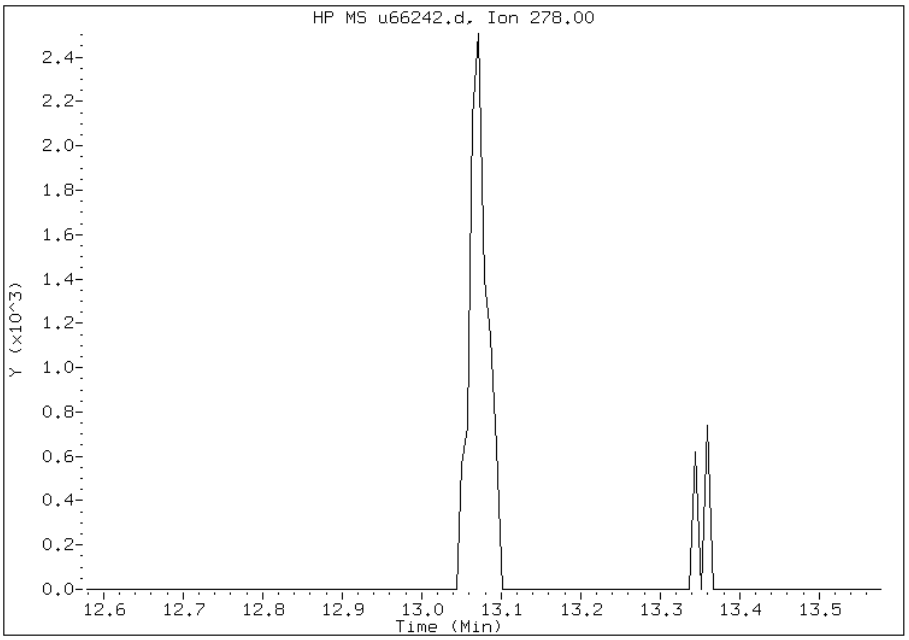
Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 69 Dibenz(a,h)anthracene
CAS #: 53-70-3
Report Date: 03/21/2011

Processing Integration Results

Not Detected

Expected RT: 13.08



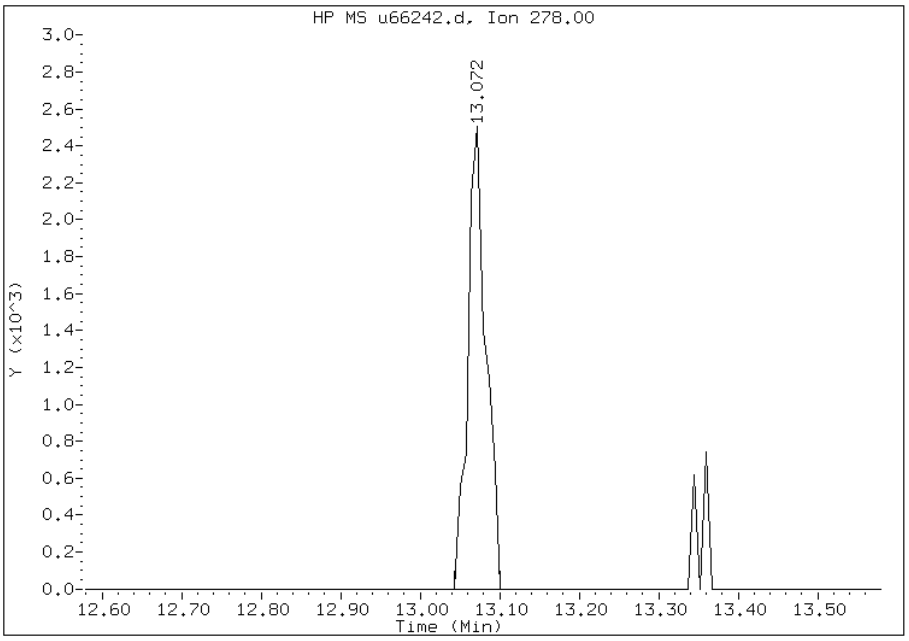
Manual Integration Results

RT: 13.07

Response: 4028

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

Manual Integration Report

Data File: u66242.d
Inj. Date and Time: 18-MAR-2011 06:37
Instrument ID: BNAMS4.i
Client ID:
Compound: 27 Nitrobenzene
CAS #: 98-95-3
Report Date: 03/21/2011

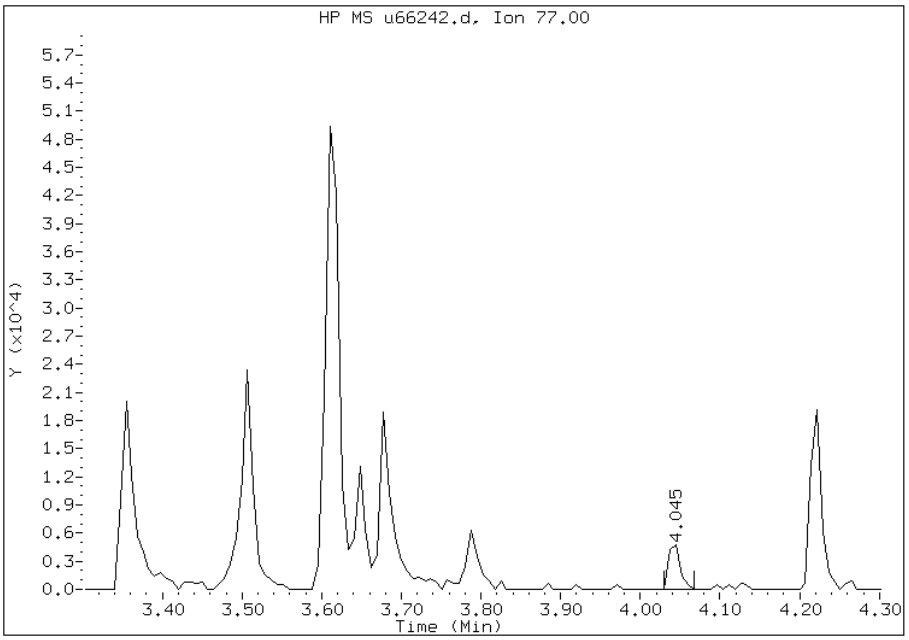
Processing Integration Results

RT: 4.04

Response: 4869

Amount: 0

Conc: 0



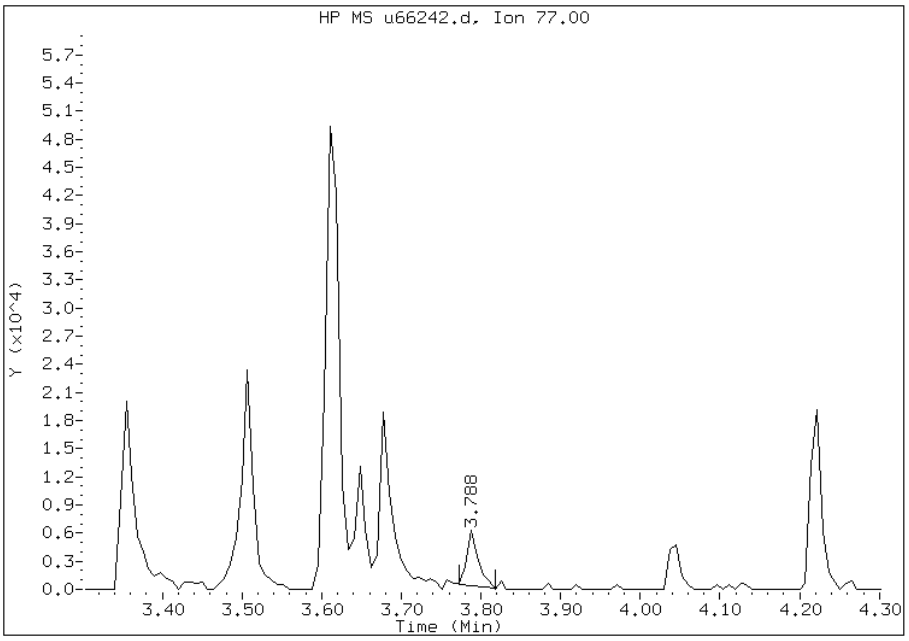
Manual Integration Results

RT: 3.79

Response: 5734

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66243.d
Report Date: 18-Mar-2011 11:01

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66243.d
Lab Smp Id: IC-871726
Inj Date : 18-MAR-2011 06:57
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : IC-871726
Misc Info : 80 PPM BNA 4548
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 18-Mar-2011 11:01 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:57 Cal File: u66243.d
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
106	1,4-Dioxane	88	0.852	0.852	(0.268)	172997	80.0000	77
19	N-Nitrosodimethylamine	74	1.064	1.064	(0.334)	254110	80.0000	78
71	Pyridine	79	1.071	1.071	(0.336)	405865	80.0000	80
$ 16	2-Fluorophenol (SUR)	112	2.018	2.018	(0.634)	387862	80.0000	78
110	Benzaldehyde	77	2.754	2.754	(0.865)	48062	80.0000	24
$ 17	Phenol-d5 (SUR)	99	2.916	2.916	(0.916)	477477	80.0000	76
1	Phenol	94	2.923	2.923	(0.918)	452823	80.0000	70
73	Aniline	93	2.871	2.871	(0.902)	586791	80.0000	77
20	bis(2-Chloroethyl)ether	93	2.961	2.961	(0.930)	365596	80.0000	77
2	2-Chlorophenol	128	2.998	2.998	(0.942)	397664	80.0000	72
113	n-decane	43	3.058	3.058	(0.961)	430488	80.0000	81
21	1,3-Dichlorobenzene	146	3.125	3.125	(0.982)	534432	80.0000	75
* 79	1,4-Dichlorobenzene-d4	152	3.183	3.183	(1.000)	193937	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66243.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.205	3.205	(1.007)	539072	80.0000	78
	74 Benzyl Alcohol	108	3.391	3.391	(1.065)	243879	80.0000	76
	23 1,2-Dichlorobenzene	146	3.353	3.353	(1.053)	537245	80.0000	76
	3 2-Methylphenol	108	3.537	3.537	(1.111)	312208	80.0000	70
	24 bis (2-chloroisopropyl) ether	45	3.507	3.507	(1.102)	594136	80.0000	73
	126 O-Toluidine	107	3.679	3.679	(1.156)	376528	80.0000	75
	104 Acetophenone	105	3.656	3.656	(1.149)	612852	80.0000	70
	4 4-Methylphenol	108	3.716	3.716	(1.167)	297838	80.0000	73
	123 3 & 4 Methylphenol	108	3.716	3.716	(1.167)	306913	80.0000	72
	25 N-Nitroso-di-n-propylamine	70	3.679	3.679	(1.156)	304397	80.0000	71(M)
	26 Hexachloroethane	117	3.694	3.694	(1.160)	265409	80.0000	72
$	76 Nitrobenzene-d5 (SUR)	82	3.791	3.791	(0.843)	655716	80.0000	76
	27 Nitrobenzene	77	3.821	3.821	(0.849)	748884	80.0000	77
	107 N,N-Dimethylaniline	120	3.821	3.821	(1.200)	548306	80.0000	75
	28 Isophorone	82	4.078	4.078	(0.907)	1058746	80.0000	76
	5 2-Nitrophenol	139	4.137	4.137	(0.920)	283463	80.0000	79
	6 2,4-Dimethylphenol	122	4.242	4.242	(0.943)	311908	80.0000	73
	29 bis(2-Chloroethoxy)methane	93	4.315	4.315	(0.959)	446591	80.0000	72
	15 Benzoic Acid	122	4.528	4.528	(1.007)	219439	80.0000	94
	7 2,4-Dichlorophenol	162	4.402	4.402	(0.979)	457623	80.0000	76
	30 1,2,4-Trichlorobenzene	180	4.461	4.461	(0.992)	430759	80.0000	79
*	80 Naphthalene-d8	136	4.498	4.498	(1.000)	549308	40.0000	
	31 Naphthalene	128	4.528	4.528	(1.007)	1117445	80.0000	79
	32 4-Chloroaniline	127	4.616	4.616	(1.026)	443271	80.0000	75
	33 Hexachlorobutadiene	225	4.668	4.668	(1.038)	350186	80.0000	78
	111 Caprolactam	113	5.088	5.088	(1.131)	105334	80.0000	71
	8 4-Chloro-3-methylphenol	107	5.176	5.176	(1.151)	459614	80.0000	73
	34 2-Methylnaphthalene	142	5.228	5.228	(1.162)	826151	80.0000	79
	120 1-Methylnaphthalene	142	5.325	5.325	(1.184)	823001	80.0000	76
	35 Hexachlorocyclopentadiene	237	5.391	5.391	(0.863)	301074	80.0000	79
	129 1,2,4,5-Tetrachlorobenzene	216	5.406	5.406	(0.866)	458110	80.0000	82
	121 2-tert-Butyl-4-methylphenol	149	5.503	5.503	(1.223)	674192	80.0000	71
	9 2,4,6-Trichlorophenol	196	5.547	5.547	(0.888)	233859	80.0000	73
	10 2,4,5-Trichlorophenol	196	5.599	5.599	(0.897)	277273	80.0000	72
$	77 2-Fluorobiphenyl (SUR)	172	5.613	5.613	(0.899)	954650	80.0000	73
	102 Diphenyl	154	5.709	5.709	(0.914)	1368535	80.0000	82
	36 2-Chloronaphthalene	162	5.709	5.709	(0.914)	1072260	80.0000	81
	103 Diphenyl Ether	170	5.813	5.813	(0.931)	584721	80.0000	75
	37 2-Nitroaniline	65	5.850	5.850	(0.937)	290807	80.0000	72
	125 1,3-Dimethylnaphthalene	156	5.931	5.931	(0.950)	641091	80.0000	72
	38 Dimethylphthalate	163	6.050	6.050	(0.969)	1151795	80.0000	74
	114 Coumarin	146	6.043	6.043	(1.343)	313932	80.0000	74
	40 2,6-Dinitrotoluene	165	6.103	6.103	(0.977)	287393	80.0000	76
	39 Acenaphthylene	152	6.110	6.110	(0.979)	1378760	80.0000	75
	41 3-Nitroaniline	138	6.259	6.259	(1.002)	241123	80.0000	77
*	82 Acenaphthene-d10	164	6.244	6.244	(1.000)	410901	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.319	6.319	(1.012)	711982	80.0000	77

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66243.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	42 Acenaphthene	154	6.282	6.282	(1.006)	785064	80.0000	76
	11 2,4-Dinitrophenol	184	6.386	6.386	(1.023)	161065	80.0000	82
	12 4-Nitrophenol	65	6.504	6.504	(1.042)	261866	80.0000	84
	44 2,4-Dinitrotoluene	165	6.511	6.511	(1.043)	339688	80.0000	69
	43 Dibenzofuran	168	6.453	6.453	(1.033)	1158583	80.0000	72
	127 1-Naphthylamine	143	6.541	6.541	(1.048)	618576	80.0000	72
	130 2,3,4,6-Tetrachlorophenol	232	6.607	6.607	(1.058)	255552	80.0000	72
	128 2-Naphthylamine	143	6.628	6.628	(1.062)	644013	80.0000	74
	45 Diethylphthalate	149	6.740	6.740	(1.079)	1247743	80.0000	72
	46 4-Chlorophenyl-phenylether	204	6.800	6.800	(1.089)	392568	80.0000	78
	47 Fluorene	166	6.785	6.785	(1.087)	993733	80.0000	72
	48 4-Nitroaniline	138	6.881	6.881	(1.102)	226424	80.0000	77
	13 4,6-Dinitro-2-methylphenol	198	6.911	6.911	(0.900)	170084	80.0000	81
	49 N-Nitrosodiphenylamine	169	6.941	6.941	(0.903)	635629	80.0000	78
	75 1,2-Diphenylhydrazine	77	6.956	6.956	(0.905)	1191589	80.0000	78
$	18 2,4,6-Tribromophenol (SUR)	330	7.030	7.030	(1.126)	197896	80.0000	87
	50 4-Bromophenyl-phenylether	248	7.267	7.267	(0.946)	299777	80.0000	82
	51 Hexachlorobenzene	284	7.327	7.327	(0.954)	284185	80.0000	75
	112 Atrazine	200	7.491	7.491	(0.975)	247779	80.0000	75
	14 Pentachlorophenol	266	7.536	7.536	(0.981)	229916	80.0000	84
	115 n-Octadecane	57	7.660	7.660	(0.997)	440234	80.0000	79
*	83 Phenanthrene-d10	188	7.683	7.683	(1.000)	487159	40.0000	
	52 Phenanthrene	178	7.705	7.705	(1.003)	1088910	80.0000	78
	53 Anthracene	178	7.757	7.757	(1.010)	1104634	80.0000	77
	54 Carbazole	167	7.933	7.933	(1.033)	1181338	80.0000	78
	55 Di-n-butylphthalate	149	8.310	8.310	(1.082)	1981448	80.0000	78
	56 Fluoranthene	202	8.848	8.848	(1.152)	1218967	80.0000	78
	58 Benzidine	184	9.010	9.010	(1.173)	95751	80.0000	62
	57 Pyrene	202	9.062	9.062	(0.885)	1244195	80.0000	82
$	78 Terphenyl-d14	244	9.245	9.245	(0.903)	1050693	80.0000	82
	59 Butylbenzylphthalate	149	9.739	9.739	(0.952)	841317	80.0000	79
	109 2,3,7,8-TCDD (Screen)	320	9.689	9.689	(0.947)	4779	80.0000	3.7
	124 Carbamazepine	193	9.829	9.829	(0.960)	439161	80.0000	79
	60 3,3'-Dichlorobenzidine	252	10.227	10.227	(0.999)	403258	80.0000	82
	61 Benzo(a)anthracene	228	10.227	10.227	(0.999)	1123538	80.0000	77
*	81 Chrysene-d12	240	10.234	10.234	(1.000)	491145	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.322	10.322	(1.009)	1083686	80.0000	78
	62 Chrysene	228	10.263	10.263	(1.003)	847259	80.0000	80
	64 Di-n-octylphthalate	149	11.000	11.000	(0.934)	1788087	80.0000	78
	65 Benzo(b)fluoranthene	252	11.359	11.359	(0.964)	877353	80.0000	80
	66 Benzo(k)fluoranthene	252	11.389	11.389	(0.967)	726303	80.0000	76
	67 Benzo(a)pyrene	252	11.720	11.720	(0.995)	596862	80.0000	75
*	84 Perylene-d12	264	11.777	11.777	(1.000)	307242	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.058	13.058	(1.109)	570749	80.0000	80
	69 Dibenz(a,h)anthracene	278	13.081	13.081	(1.111)	451020	80.0000	78
	70 Benzo(g,h,i)perylene	276	13.366	13.366	(1.135)	466533	80.0000	76

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66243.d
Report Date: 18-Mar-2011 11:01

QC Flag Legend

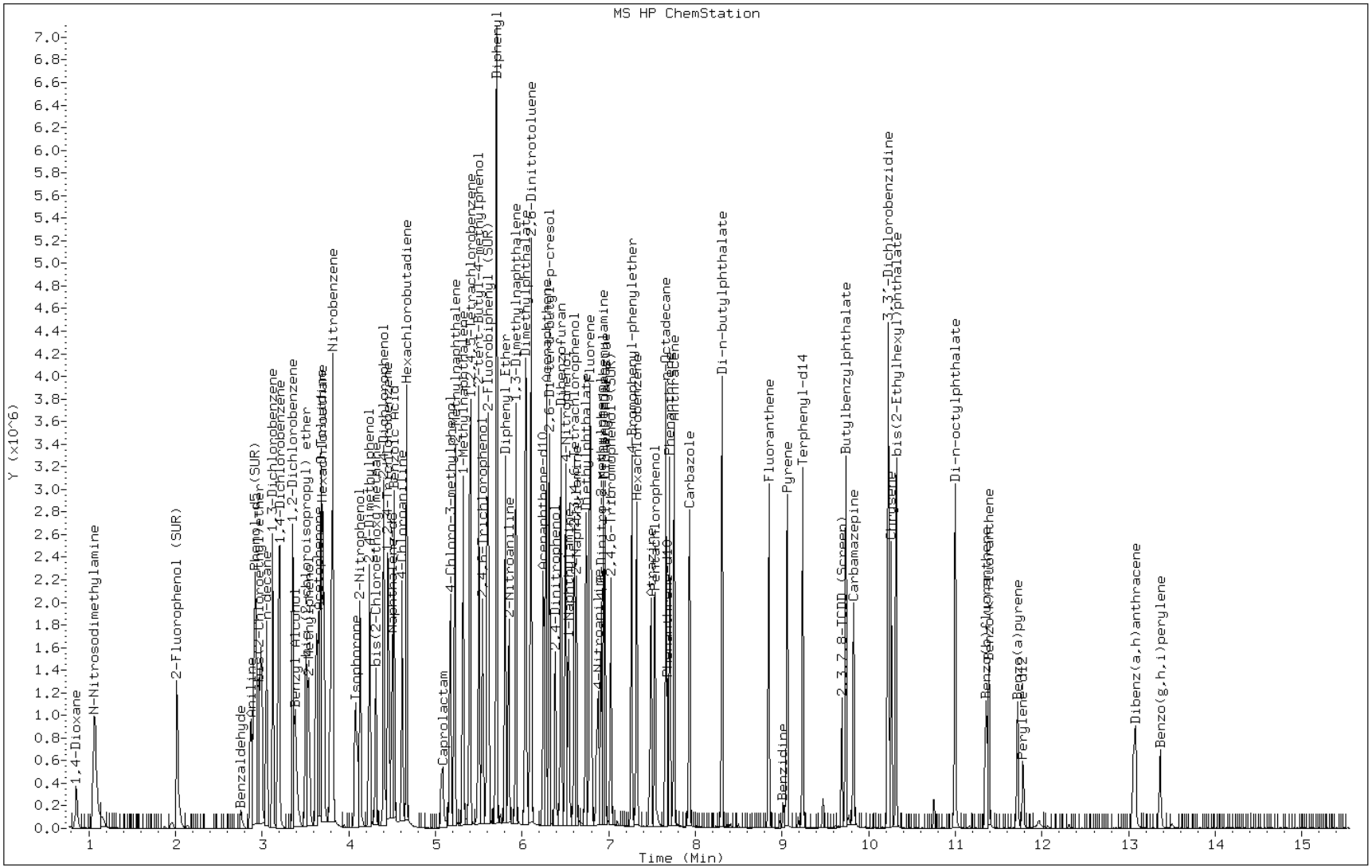
M - Compound response manually integrated.

Data File: u66243.d

Date: 18-MAR-2011 06:57

Client ID: Instrument: BNAMS4.i

Sample Info: IC-871726 Operator: BNAMS 4



Manual Integration Report

Data File: u66243.d
Inj. Date and Time: 18-MAR-2011 06:57
Instrument ID: BNAMS4.i
Client ID:
Compound: 25 N-Nitroso-di-n-propylamine
CAS #: 621-64-7
Report Date: 03/21/2011

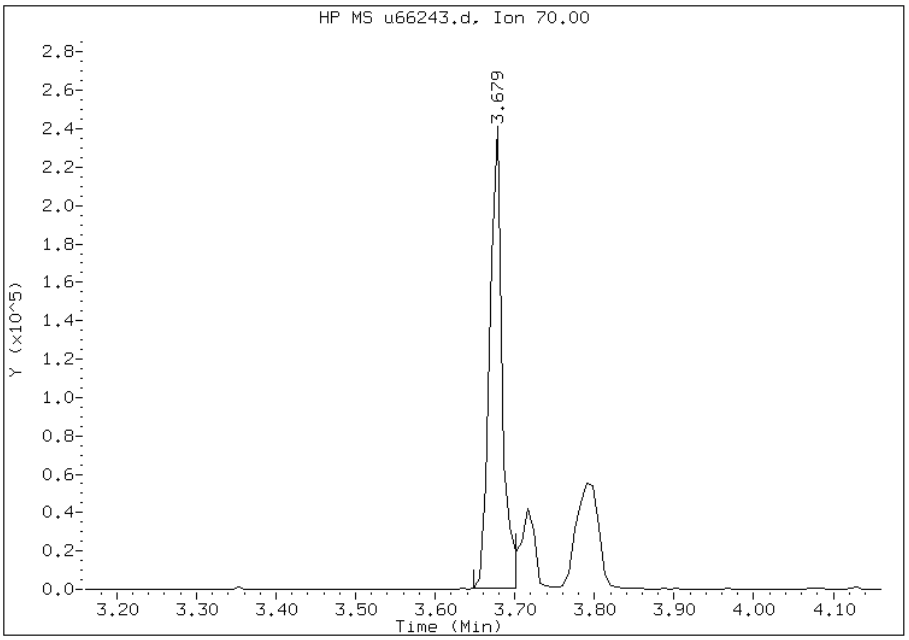
Processing Integration Results

RT: 3.68

Response: 262671

Amount: 63

Conc: 63



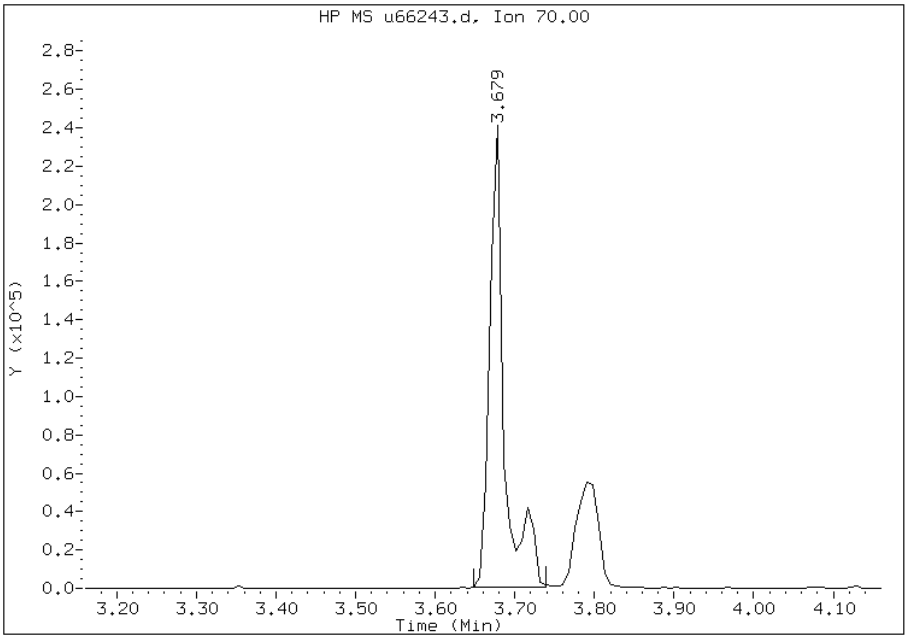
Manual Integration Results

RT: 3.68

Response: 304397

Amount: 71

Conc: 71



Manually Integrated By: wahied
Manual Integration Reason:

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66244.d
Report Date: 18-Mar-2011 11:01

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66244.d
Lab Smp Id: IC-871724
Inj Date : 18-MAR-2011 07:16
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : IC-871724
Misc Info : 20 PPM BNA 4548
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 18-Mar-2011 11:01 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 07:16 Cal File: u66244.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	106 1,4-Dioxane	88	0.795	0.795	(0.250)	36273	20.0000	18(H)
	19 N-Nitrosodimethylamine	74	0.978	0.978	(0.308)	63989	20.0000	21
	71 Pyridine	79	0.992	0.992	(0.313)	94888	20.0000	20
$	16 2-Fluorophenol (SUR)	112	1.978	1.978	(0.624)	87227	20.0000	19
	110 Benzaldehyde	77	2.735	2.735	(0.862)	40100	20.0000	22
$	17 Phenol-d5 (SUR)	99	2.875	2.875	(0.906)	111889	20.0000	20
	1 Phenol	94	2.890	2.890	(0.911)	126221	20.0000	21
	73 Aniline	93	2.845	2.845	(0.897)	150425	20.0000	21
	20 bis(2-Chloroethyl)ether	93	2.927	2.927	(0.923)	92455	20.0000	25
	2 2-Chlorophenol	128	2.965	2.965	(0.935)	107739	20.0000	21
	113 n-decane	43	3.046	3.046	(0.960)	112204	20.0000	20
	21 1,3-Dichlorobenzene	146	3.105	3.105	(0.979)	131169	20.0000	20
*	79 1,4-Dichlorobenzene-d4	152	3.172	3.172	(1.000)	175866	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66244.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.185	3.185	(1.004)	129660	20.0000	20
	74 Benzyl Alcohol	108	3.353	3.353	(1.057)	61396	20.0000	21
	23 1,2-Dichlorobenzene	146	3.346	3.346	(1.055)	131344	20.0000	20
	3 2-Methylphenol	108	3.509	3.509	(1.106)	95228	20.0000	23
	24 bis (2-chloroisopropyl) ether	45	3.494	3.494	(1.101)	161289	20.0000	21
	126 O-Toluidine	107	3.656	3.656	(1.153)	111173	20.0000	28
	104 Acetophenone	105	3.619	3.619	(1.141)	165107	20.0000	21
	4 4-Methylphenol	108	3.679	3.679	(1.160)	80553	20.0000	21
	123 3 & 4 Methylphenol	108	3.679	3.679	(1.160)	83469	20.0000	21
	25 N-Nitroso-di-n-propylamine	70	3.641	3.641	(1.148)	87040	20.0000	22
	26 Hexachloroethane	117	3.686	3.686	(1.162)	68149	20.0000	20
$	76 Nitrobenzene-d5 (SUR)	82	3.768	3.768	(0.839)	175487	20.0000	21
	27 Nitrobenzene	77	3.790	3.790	(0.844)	210080	20.0000	22
	107 N,N-Dimethylaniline	120	3.790	3.790	(1.195)	124872	20.0000	19
	28 Isophorone	82	4.046	4.046	(0.901)	266305	20.0000	20
	5 2-Nitrophenol	139	4.119	4.119	(0.918)	72146	20.0000	21
	6 2,4-Dimethylphenol	122	4.223	4.223	(0.941)	91674	20.0000	22
	29 bis(2-Chloroethoxy)methane	93	4.295	4.295	(0.957)	127654	20.0000	21
	15 Benzoic Acid	122	4.429	4.429	(0.987)	49693	20.0000	22
	7 2,4-Dichlorophenol	162	4.392	4.392	(0.978)	120778	20.0000	21
	30 1,2,4-Trichlorobenzene	180	4.451	4.451	(0.992)	105137	20.0000	20
*	80 Naphthalene-d8	136	4.489	4.489	(1.000)	522672	40.0000	
	31 Naphthalene	128	4.511	4.511	(1.005)	268014	20.0000	20
	32 4-Chloroaniline	127	4.600	4.600	(1.025)	123671	20.0000	22
	33 Hexachlorobutadiene	225	4.659	4.659	(1.038)	84105	20.0000	20
	111 Caprolactam	113	4.990	4.990	(1.112)	28656	20.0000	20
	8 4-Chloro-3-methylphenol	107	5.158	5.158	(1.149)	129045	20.0000	21
	34 2-Methylnaphthalene	142	5.216	5.216	(1.162)	200549	20.0000	20
	120 1-Methylnaphthalene	142	5.311	5.311	(1.183)	201552	20.0000	20
	35 Hexachlorocyclopentadiene	237	5.384	5.384	(0.863)	58045	20.0000	17
	129 1,2,4,5-Tetrachlorobenzene	216	5.392	5.392	(0.864)	102898	20.0000	19
	121 2-tert-Butyl-4-methylphenol	149	5.486	5.486	(1.222)	182994	20.0000	20
	9 2,4,6-Trichlorophenol	196	5.531	5.531	(0.886)	64607	20.0000	20
	10 2,4,5-Trichlorophenol	196	5.575	5.575	(0.893)	68832	20.0000	18
$	77 2-Fluorobiphenyl (SUR)	172	5.598	5.598	(0.897)	225246	20.0000	18
	102 Diphenyl	154	5.694	5.694	(0.912)	273759	20.0000	17
	36 2-Chloronaphthalene	162	5.694	5.694	(0.912)	223634	20.0000	18
	103 Diphenyl Ether	170	5.797	5.797	(0.929)	155684	20.0000	20
	37 2-Nitroaniline	65	5.833	5.833	(0.935)	86719	20.0000	21
	125 1,3-Dimethylnaphthalene	156	5.921	5.921	(0.949)	158941	20.0000	18
	38 Dimethylphthalate	163	6.029	6.029	(0.966)	324575	20.0000	21
	114 Coumarin	146	6.023	6.023	(1.342)	85381	20.0000	21
	40 2,6-Dinitrotoluene	165	6.080	6.080	(0.974)	72719	20.0000	23
	39 Acenaphthylene	152	6.095	6.095	(0.976)	312115	20.0000	18
	41 3-Nitroaniline	138	6.242	6.242	(1.000)	62008	20.0000	20
*	82 Acenaphthene-d10	164	6.242	6.242	(1.000)	406042	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.309	6.309	(1.011)	170577	20.0000	19

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66244.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
	42 Acenaphthene	154	6.264	6.264	(1.004)	187159	20.0000	19
	11 2,4-Dinitrophenol	184	6.360	6.360	(1.019)	43875	30.0000	26
	12 4-Nitrophenol	65	6.479	6.479	(1.038)	94394	30.0000	30
	44 2,4-Dinitrotoluene	165	6.486	6.486	(1.039)	98132	20.0000	20
	43 Dibenzofuran	168	6.442	6.442	(1.032)	310142	20.0000	20
	127 1-Naphthylamine	143	6.524	6.524	(1.045)	188078	20.0000	22
	130 2,3,4,6-Tetrachlorophenol	232	6.591	6.591	(1.056)	69135	20.0000	20
	128 2-Naphthylamine	143	6.606	6.606	(1.058)	188957	20.0000	21
	45 Diethylphthalate	149	6.725	6.725	(1.077)	351608	20.0000	20
	46 4-Chlorophenyl-phenylether	204	6.792	6.792	(1.088)	92532	20.0000	22
	47 Fluorene	166	6.769	6.769	(1.084)	241661	20.0000	18
	48 4-Nitroaniline	138	6.836	6.836	(1.095)	61092	20.0000	21
	13 4,6-Dinitro-2-methylphenol	198	6.881	6.881	(0.897)	59170	30.0000	28
	49 N-Nitrosodiphenylamine	169	6.918	6.918	(0.902)	153481	20.0000	17
	75 1,2-Diphenylhydrazine	77	6.946	6.946	(0.906)	340481	20.0000	20
$	18 2,4,6-Tribromophenol (SUR)	330	7.012	7.012	(1.123)	40582	20.0000	18
	50 4-Bromophenyl-phenylether	248	7.255	7.255	(0.946)	78407	20.0000	19
	51 Hexachlorobenzene	284	7.315	7.315	(0.954)	76812	20.0000	18
	112 Atrazine	200	7.469	7.469	(0.974)	74859	20.0000	20
	14 Pentachlorophenol	266	7.521	7.521	(0.981)	67671	30.0000	25
	115 n-Octadecane	57	7.655	7.655	(0.998)	123083	20.0000	20
*	83 Phenanthrene-d10	188	7.670	7.670	(1.000)	545952	40.0000	
	52 Phenanthrene	178	7.692	7.692	(1.003)	297618	20.0000	19
	53 Anthracene	178	7.744	7.744	(1.010)	309781	20.0000	19
	54 Carbazole	167	7.921	7.921	(1.033)	339869	20.0000	20
	55 Di-n-butylphthalate	149	8.297	8.297	(1.082)	599232	20.0000	21
	56 Fluoranthene	202	8.836	8.836	(1.152)	352248	20.0000	20
	58 Benzidine	184	8.998	8.998	(1.173)	133456	30.0000	59
	57 Pyrene	202	9.050	9.050	(0.885)	326608	20.0000	18
$	78 Terphenyl-d14	244	9.234	9.234	(0.903)	274573	20.0000	18
	59 Butylbenzylphthalate	149	9.734	9.734	(0.951)	270628	20.0000	20
	124 Carbamazepine	193	9.814	9.814	(0.959)	144524	20.0000	21
	60 3,3'-Dichlorobenzidine	252	10.217	10.217	(0.999)	202820	30.0000	33
	61 Benzo(a)anthracene	228	10.217	10.217	(0.999)	327823	20.0000	18
*	81 Chrysene-d12	240	10.231	10.231	(1.000)	602541	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.311	10.311	(1.008)	335917	20.0000	20
	62 Chrysene	228	10.253	10.253	(1.002)	259633	20.0000	20
	64 Di-n-octylphthalate	149	10.990	10.990	(0.933)	563285	20.0000	19
	65 Benzo(b)fluoranthene	252	11.344	11.344	(0.963)	269327	20.0000	19
	66 Benzo(k)fluoranthene	252	11.374	11.374	(0.966)	268550	20.0000	21
	67 Benzo(a)pyrene	252	11.706	11.706	(0.994)	208953	20.0000	20
*	84 Perylene-d12	264	11.779	11.779	(1.000)	397479	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.042	13.042	(1.107)	186707	20.0000	20
	69 Dibenz(a,h)anthracene	278	13.065	13.065	(1.109)	143893	20.0000	19
	70 Benzo(g,h,i)perylene	276	13.344	13.344	(1.133)	148222	20.0000	19

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66244.d
Report Date: 18-Mar-2011 11:01

QC Flag Legend

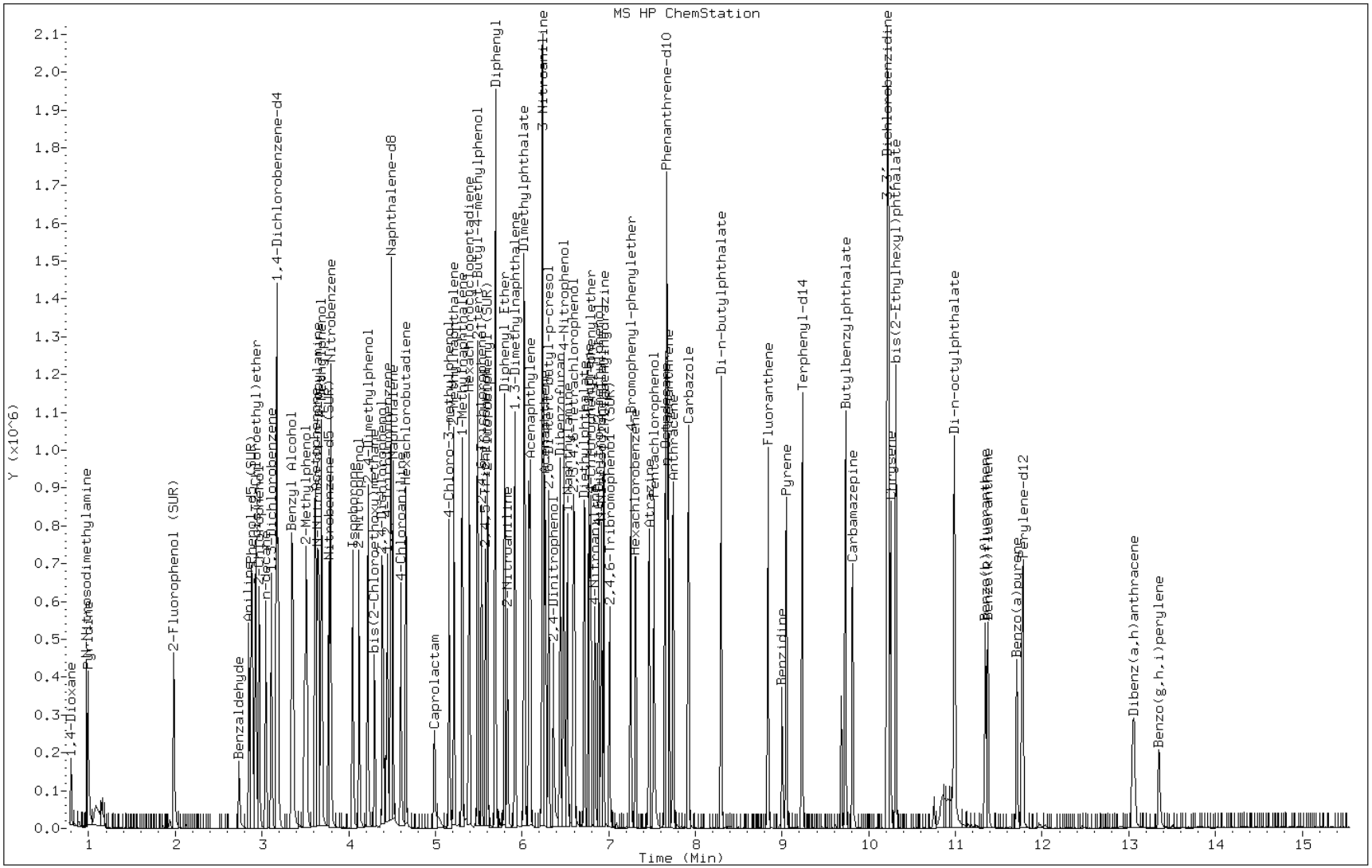
H - Operator selected an alternate compound hit.

Data File: u66244.d

Date: 18-MAR-2011 07:16

Client ID: Instrument: BNAMS4.i

Sample Info: IC-871724 Operator: BNAMS 4



Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66245.d
Report Date: 18-Mar-2011 11:01

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66245.d
Lab Smp Id: IC-871722
Inj Date : 18-MAR-2011 07:36
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : IC-871722
Misc Info : 10 PPM BNA 4548
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/8270C_08SP.m
Meth Date : 18-Mar-2011 11:01 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 07:36 Cal File: u66245.d
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
106	1,4-Dioxane	88	0.817	0.817	(0.257)	24133	10.0000	10
19	N-Nitrosodimethylamine	74	0.993	0.993	(0.313)	39187	10.0000	11
71	Pyridine	79	1.016	1.016	(0.320)	59022	10.0000	11
$ 16	2-Fluorophenol (SUR)	112	1.987	1.987	(0.626)	53907	10.0000	10
110	Benzaldehyde	77	2.732	2.732	(0.861)	29764	10.0000	13
$ 17	Phenol-d5 (SUR)	99	2.872	2.872	(0.905)	74501	10.0000	11
1	Phenol	94	2.887	2.887	(0.910)	79947	10.0000	11
73	Aniline	93	2.851	2.851	(0.898)	93670	10.0000	11
20	bis(2-Chloroethyl)ether	93	2.923	2.923	(0.921)	55857	10.0000	13
2	2-Chlorophenol	128	2.968	2.968	(0.935)	67490	10.0000	11
113	n-decane	43	3.042	3.042	(0.959)	75931	10.0000	11
21	1,3-Dichlorobenzene	146	3.108	3.108	(0.979)	81863	10.0000	11
* 79	1,4-Dichlorobenzene-d4	152	3.173	3.173	(1.000)	203896	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66245.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	22 1,4-Dichlorobenzene	146	3.188	3.188	(1.005)	78023	10.0000	10
	74 Benzyl Alcohol	108	3.356	3.356	(1.058)	38665	10.0000	11
	23 1,2-Dichlorobenzene	146	3.341	3.341	(1.053)	82743	10.0000	11
	3 2-Methylphenol	108	3.510	3.510	(1.106)	54334	10.0000	11
	24 bis (2-chloroisopropyl) ether	45	3.495	3.495	(1.101)	96207	10.0000	11
	126 O-Toluidine	107	3.650	3.650	(1.150)	65704	10.0000	14(H)
	104 Acetophenone	105	3.620	3.620	(1.141)	99200	10.0000	10(H)
	4 4-Methylphenol	108	3.679	3.679	(1.159)	48302	10.0000	11
	123 3 & 4 Methylphenol	108	3.679	3.679	(1.159)	51544	10.0000	11
	25 N-Nitroso-di-n-propylamine	70	3.635	3.635	(1.146)	53403	10.0000	11
	26 Hexachloroethane	117	3.686	3.686	(1.162)	43129	10.0000	11
$	76 Nitrobenzene-d5 (SUR)	82	3.767	3.767	(0.838)	103375	10.0000	10
	27 Nitrobenzene	77	3.789	3.789	(0.843)	127328	10.0000	11
	107 N,N-Dimethylaniline	120	3.789	3.789	(1.194)	81831	10.0000	11
	28 Isophorone	82	4.041	4.041	(0.899)	158238	10.0000	10
	5 2-Nitrophenol	139	4.121	4.121	(0.917)	43033	10.0000	10
	6 2,4-Dimethylphenol	122	4.224	4.224	(0.940)	49750	10.0000	9.9
	29 bis(2-Chloroethoxy)methane	93	4.296	4.296	(0.956)	78961	10.0000	11
	15 Benzoic Acid	122	4.399	4.399	(0.979)	18103	10.0000	7.0(H)
	7 2,4-Dichlorophenol	162	4.392	4.392	(0.977)	62335	10.0000	9.1
	30 1,2,4-Trichlorobenzene	180	4.450	4.450	(0.990)	64027	10.0000	10
*	80 Naphthalene-d8	136	4.494	4.494	(1.000)	626187	40.0000	
	31 Naphthalene	128	4.509	4.509	(1.003)	158395	10.0000	9.9
	32 4-Chloroaniline	127	4.604	4.604	(1.024)	73424	10.0000	10
	33 Hexachlorobutadiene	225	4.663	4.663	(1.038)	52662	10.0000	10
	111 Caprolactam	113	4.971	4.971	(1.106)	13955	10.0000	8.5(H)
	8 4-Chloro-3-methylphenol	107	5.154	5.154	(1.147)	76664	10.0000	10
	34 2-Methylnaphthalene	142	5.213	5.213	(1.160)	118090	10.0000	9.9
	120 1-Methylnaphthalene	142	5.310	5.310	(1.181)	115985	10.0000	9.6(a)
	35 Hexachlorocyclopentadiene	237	5.384	5.384	(0.863)	28011	10.0000	7.6
	129 1,2,4,5-Tetrachlorobenzene	216	5.392	5.392	(0.864)	58583	10.0000	9.8
	121 2-tert-Butyl-4-methylphenol	149	5.481	5.481	(1.219)	108714	10.0000	10
	9 2,4,6-Trichlorophenol	196	5.533	5.533	(0.887)	36719	10.0000	10
	10 2,4,5-Trichlorophenol	196	5.577	5.577	(0.894)	37195	10.0000	9.2
$	77 2-Fluorobiphenyl (SUR)	172	5.600	5.600	(0.897)	139228	10.0000	10
	102 Diphenyl	154	5.688	5.688	(0.912)	140179	10.0000	8.3
	36 2-Chloronaphthalene	162	5.696	5.696	(0.913)	127803	10.0000	9.3
	103 Diphenyl Ether	170	5.798	5.798	(0.929)	85322	10.0000	10
	37 2-Nitroaniline	65	5.827	5.827	(0.934)	47811	10.0000	11
	125 1,3-Dimethylnaphthalene	156	5.915	5.915	(0.948)	99907	10.0000	10
	38 Dimethylphthalate	163	6.026	6.026	(0.966)	180338	10.0000	10
	114 Coumarin	146	6.019	6.019	(1.339)	43975	10.0000	9.2
	40 2,6-Dinitrotoluene	165	6.077	6.077	(0.974)	40103	10.0000	12
	39 Acenaphthylene	152	6.092	6.092	(0.976)	193846	10.0000	10
	41 3-Nitroaniline	138	6.232	6.232	(0.999)	31640	10.0000	9.5(a)
*	82 Acenaphthene-d10	164	6.239	6.239	(1.000)	444237	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.306	6.306	(1.011)	93711	10.0000	9.6

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66245.d
Report Date: 18-Mar-2011 11:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	42 Acenaphthene	154	6.262	6.262	(1.004)	105985	10.0000	9.7
	11 2,4-Dinitrophenol	184	6.358	6.358	(1.019)	22549	20.0000	13(a)
	12 4-Nitrophenol	65	6.474	6.474	(1.038)	65653	20.0000	20
	44 2,4-Dinitrotoluene	165	6.482	6.482	(1.039)	55009	10.0000	10
	43 Dibenzofuran	168	6.438	6.438	(1.032)	173424	10.0000	10
	127 1-Naphthylamine	143	6.519	6.519	(1.045)	100365	10.0000	10
	130 2,3,4,6-Tetrachlorophenol	232	6.592	6.592	(1.057)	32738	10.0000	8.8
	128 2-Naphthylamine	143	6.600	6.600	(1.058)	103024	10.0000	10
	45 Diethylphthalate	149	6.717	6.717	(1.077)	204975	10.0000	11
	46 4-Chlorophenyl-phenylether	204	6.790	6.790	(1.088)	53588	10.0000	12
	47 Fluorene	166	6.767	6.767	(1.085)	140390	10.0000	9.7
	48 4-Nitroaniline	138	6.834	6.834	(1.095)	33261	10.0000	10
	13 4,6-Dinitro-2-methylphenol	198	6.878	6.878	(0.896)	40465	20.0000	19
	49 N-Nitrosodiphenylamine	169	6.914	6.914	(0.901)	94940	10.0000	10(H)
	75 1,2-Diphenylhydrazine	77	6.944	6.944	(0.905)	193520	10.0000	10
$	18 2,4,6-Tribromophenol (SUR)	330	7.010	7.010	(1.124)	22159	10.0000	9.3
	50 4-Bromophenyl-phenylether	248	7.253	7.253	(0.945)	39062	10.0000	9.2
	51 Hexachlorobenzene	284	7.313	7.313	(0.953)	38952	10.0000	9.0
	112 Atrazine	200	7.459	7.459	(0.972)	36302	10.0000	9.3
	14 Pentachlorophenol	266	7.525	7.525	(0.981)	47529	20.0000	17
	115 n-Octadecane	57	7.650	7.650	(0.997)	68298	10.0000	10
*	83 Phenanthrene-d10	188	7.672	7.672	(1.000)	578910	40.0000	
	52 Phenanthrene	178	7.687	7.687	(1.002)	166658	10.0000	10
	53 Anthracene	178	7.739	7.739	(1.009)	175934	10.0000	10
	54 Carbazole	167	7.916	7.916	(1.032)	193405	10.0000	11
	55 Di-n-butylphthalate	149	8.297	8.297	(1.081)	329756	10.0000	11
	56 Fluoranthene	202	8.833	8.833	(1.151)	190937	10.0000	10
	58 Benzidine	184	8.994	8.994	(1.172)	109330	20.0000	38
	57 Pyrene	202	9.046	9.046	(0.885)	181488	10.0000	10
$	78 Terphenyl-d14	244	9.229	9.229	(0.903)	126652	10.0000	8.6
	59 Butylbenzylphthalate	149	9.728	9.728	(0.951)	154703	10.0000	11
	124 Carbamazepine	193	9.808	9.808	(0.959)	75363	10.0000	11
	60 3,3'-Dichlorobenzidine	252	10.211	10.211	(0.999)	124543	20.0000	20
	61 Benzo(a)anthracene	228	10.211	10.211	(0.999)	158441	10.0000	9.2
*	81 Chrysene-d12	240	10.225	10.225	(1.000)	599625	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.306	10.306	(1.008)	177408	10.0000	10
	62 Chrysene	228	10.247	10.247	(1.002)	139552	10.0000	11
	64 Di-n-octylphthalate	149	10.983	10.983	(0.933)	319628	10.0000	9.8
	65 Benzo(b)fluoranthene	252	11.342	11.342	(0.963)	149354	10.0000	9.7
	66 Benzo(k)fluoranthene	252	11.371	11.371	(0.966)	145787	10.0000	10
	67 Benzo(a)pyrene	252	11.707	11.707	(0.994)	117107	10.0000	10
*	84 Perylene-d12	264	11.774	11.774	(1.000)	439771	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	13.042	13.042	(1.108)	94186	10.0000	9.3
	69 Dibenz(a,h)anthracene	278	13.065	13.065	(1.110)	76939	10.0000	9.4
	70 Benzo(g,h,i)perylene	276	13.343	13.343	(1.133)	76602	10.0000	9.0

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66245.d
Report Date: 18-Mar-2011 11:01

QC Flag Legend

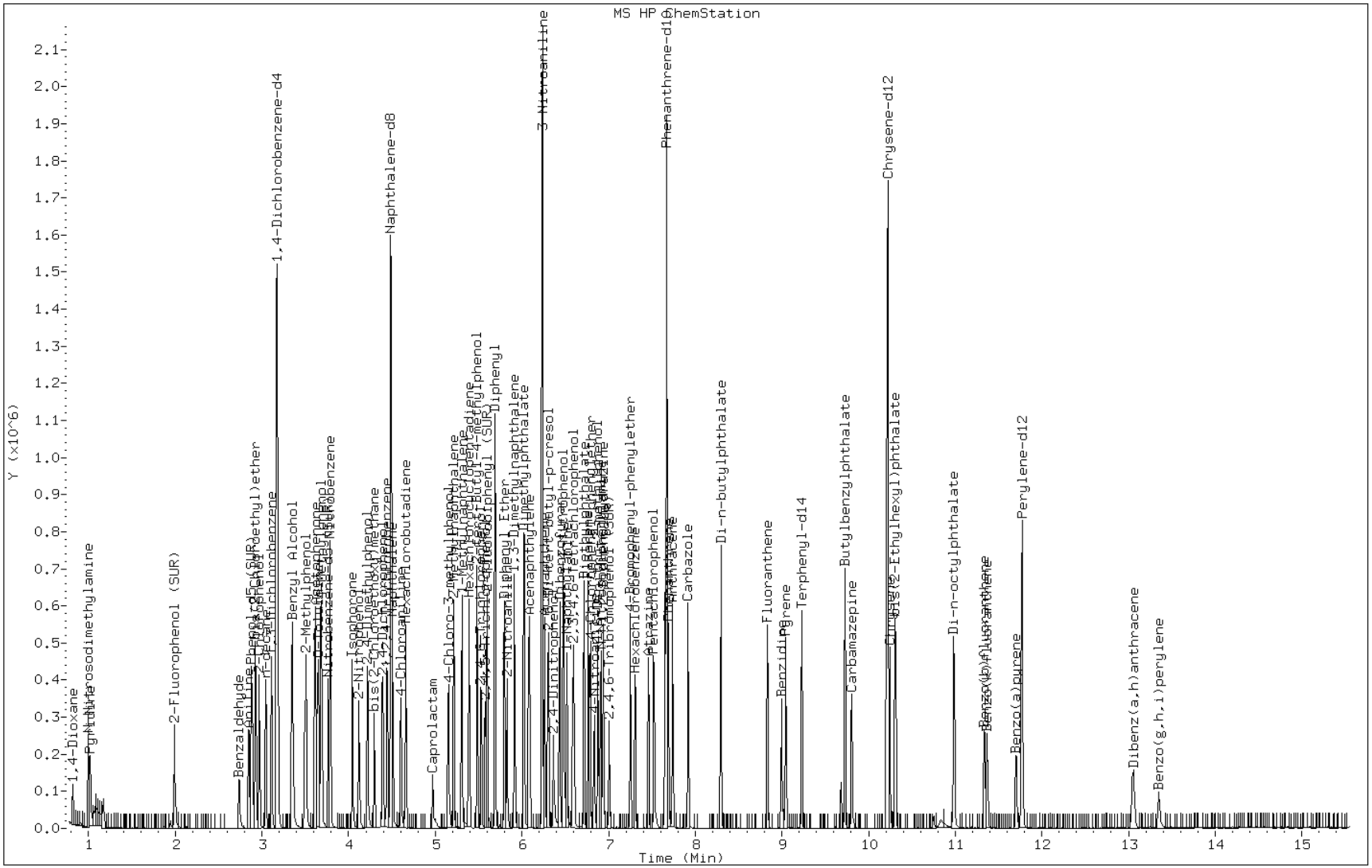
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: u66245.d

Date: 18-MAR-2011 07:36

Client ID: Instrument: BNAMS4.i

Sample Info: IC-871722 Operator: BNAMS 4



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68940/2 Calibration Date: 03/30/2011 04:01

Instrument ID: BNAMS4 Calib Start Date: 03/18/2011 05:47

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/18/2011 07:36

Lab File ID: u66358.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4573	0.0000		10.0	50000	-100.0*	20.0
N-Nitrosodimethylamine	Ave	0.6947	0.7683		55300	50000	10.6	20.0
Pyridine	Ave	1.069	1.163		54400	50000	8.8	20.0
Benzaldehyde	Ave	0.4495	0.3007		33500	50000	-33.1*	20.0
Aniline	Ave	1.643	1.591		48400	50000	-3.2	20.0
Phenol	Ave	1.387	1.248		45000	50000	-10.0	20.0
Bis(2-chloroethyl)ether	QuaF	1.075	0.999		53800	50000	7.7	20.0
2-Chlorophenol	Ave	1.189	1.133		47700	50000	-4.7	20.0
Decane	QuaF	1.263	1.265		54000	50000	8.1	20.0
1,3-Dichlorobenzene	Ave	1.493	1.466		49100	50000	-1.8	20.0
1,4-Dichlorobenzene	Ave	1.456	1.446		49600	50000	-0.7	20.0
1,2-Dichlorobenzene	Ave	1.489	1.450		48700	50000	-2.6	20.0
Benzyl alcohol	Ave	0.6837	0.6483		47400	50000	-5.2	20.0
bis (2-chloroisopropyl) ether	Ave	1.738	1.673		48100	50000	-3.7	20.0
2-Methylphenol	Ave	0.9665	0.9210		47600	50000	-4.7	20.0
Acetophenone	Ave	1.836	1.755		47800	50000	-4.4	20.0
N-Nitrosodi-n-propylamine	Ave	0.9302	0.9242	0.0500	49700	50000	-0.7	20.0
o-Toluidine	QuaF	1.246	1.114		55400	50000	10.9	20.0
Hexachloroethane	Ave	0.7792	0.7271		46700	50000	-6.7	20.0
3 & 4 Methylphenol	Ave	0.9165	0.8594		46900	50000	-6.2	20.0
4-Methylphenol	Ave	0.8747	0.8426		48200	50000	-3.7	20.0
n,n'-Dimethylaniline	Ave	1.507	1.481		49100	50000	-1.7	20.0
Nitrobenzene	Ave	0.7576	0.6747		44500	50000	-10.9	20.0
Isophorone	Ave	1.015	0.9677		47700	50000	-4.7	20.0
2-Nitrophenol	Ave	0.2650	0.2556		48200	50000	-3.5	20.0
2,4-Dimethylphenol	Ave	0.3196	0.3048		47700	50000	-4.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.4653	0.4214		45300	50000	-9.4	20.0
2,4-Dichlorophenol	Ave	0.4365	0.4589		52600	50000	5.1	20.0
1,2,4-Trichlorobenzene	Ave	0.4007	0.3742		46700	50000	-6.6	20.0
Benzoic acid	Ave	0.1647	0.2020		61300	50000	22.6*	20.0
Naphthalene	Ave	1.025	0.8816		43000	50000	-14.0	20.0
4-Chloroaniline	Ave	0.4439	0.4096		46100	50000	-7.7	20.0
Hexachlorobutadiene	Ave	0.3266	0.3036		46500	50000	-7.0	20.0
Caprolactam	Ave	0.1049	0.1052		50100	50000	0.2	20.0
4-Chloro-3-methylphenol	Ave	0.4695	0.4507		48000	50000	-4.0	20.0
2-Methylnaphthalene	Ave	0.7591	0.6860		45200	50000	-9.6	20.0
1-Methylnaphthalene	Ave	0.7738	0.7290		47100	50000	-5.8	20.0
Hexachlorocyclopentadiene	QuaF	0.3192	0.3485	0.0500	49700	50000	-0.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5372	0.5249		48900	50000	-2.3	20.0
2-tertbutyl-4-methylphenol	Ave	0.6939	0.6797		49000	50000	-2.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68940/2 Calibration Date: 03/30/2011 04:01

Instrument ID: BNAMS4 Calib Start Date: 03/18/2011 05:47

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/18/2011 07:36

Lab File ID: u66358.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,6-Trichlorophenol	Ave	0.3149	0.3202		50800	50000	1.7	20.0
2,4,5-Trichlorophenol	Ave	0.3636	0.3462		47600	50000	-4.8	20.0
2-Chloronaphthalene	Ave	1.233	1.282		52000	50000	3.9	20.0
Diphenyl	Ave	1.512	1.633		54000	50000	8.0	20.0
Diphenyl ether	Ave	0.7596	0.6604		43500	50000	-13.1	20.0
2-Nitroaniline	Ave	0.4041	0.3756		46500	50000	-7.1	20.0
Dimethylnaphthalene, total	Ave	0.8589	0.8717		50700	50000	1.5	20.0
Coumarin	Ave	0.3066	0.3126		51000	50000	2.0	20.0
Dimethyl phthalate	Ave	1.542	1.478		47900	50000	-4.1	20.0
2,6-Dinitrotoluene	QuaF	0.3660	0.3956		56900	50000	13.8	20.0
Acenaphthylene	Ave	1.735	1.701		49000	50000	-1.9	20.0
3-Nitroaniline	Ave	0.3005	0.2835		47200	50000	-5.7	20.0
Acenaphthene	Ave	0.9792	0.9233		47100	50000	-5.7	20.0
3,5-di-tert-butyl-4-hydroxytol	Ave	0.8783	0.8044		45800	50000	-8.4	20.0
2,4-Dinitrophenol	QuaF	0.1524	0.1969	0.0500	56700	50000	13.5	20.0
Dibenzofuran	Ave	1.562	1.385		44300	50000	-11.3	20.0
4-Nitrophenol	Ave	0.3027	0.2804	0.0500	46300	50000	-7.4	20.0
2,4-Dinitrotoluene	Ave	0.4805	0.4764		49600	50000	-0.9	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3359	0.3530		52500	50000	5.1	20.0
2-Naphthylamine	Ave	0.8779	0.7453		42400	50000	-15.1	20.0
Diethyl phthalate	Ave	1.718	1.677		48800	50000	-2.4	20.0
Fluorene	Ave	1.300	1.201		46200	50000	-7.6	20.0
4-Chlorophenyl phenyl ether	QuaF	0.5101	0.4673		51600	50000	3.2	20.0
4-Nitroaniline	Ave	0.2903	0.2681		46200	50000	-7.7	20.0
4,6-Dinitro-2-methylphenol	QuaF	0.1560	0.1610		50800	50000	1.5	20.0
N-Nitrosodiphenylamine	Ave	0.6472	0.5766		44500	50000	-10.9	20.0
1,2-Diphenylhydrazine	Ave	1.268	1.183		46600	50000	-6.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2917	0.3024		51800	50000	3.7	20.0
Hexachlorobenzene	Ave	0.2988	0.2854		47800	50000	-4.5	20.0
Atrazine	Ave	0.2686	0.2748		51200	50000	2.3	20.0
Pentachlorophenol	QuaF	0.1945	0.1891		46100	50000	-7.7	20.0
n-Octadecane	Ave	0.4581	0.4061		44300	50000	-11.3	20.0
Phenanthrene	Ave	1.141	1.109		48600	50000	-2.8	20.0
Anthracene	Ave	1.180	1.053		44600	50000	-10.7	20.0
Carbazole	Ave	1.254	1.113		44400	50000	-11.2	20.0
Di-n-butyl phthalate	Ave	2.137	1.900		44500	50000	-11.1	20.0
Fluoranthene	Ave	1.292	1.158		44800	50000	-10.4	20.0
Benzidine	Ave	0.2014	0.0806		20000	50000	-60.0*	20.0
Pyrene	Ave	1.207	1.421		58900	50000	17.8	20.0
Butyl benzyl phthalate	Ave	0.9018	0.9337		51800	50000	3.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVIS 460-68940/2 Calibration Date: 03/30/2011 04:01

Instrument ID: BNAMS4 Calib Start Date: 03/18/2011 05:47

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/18/2011 07:36

Lab File ID: u66358.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,3,7,8-TCDD (Screen)	Ave	0.1051	0.0643		306	500	-38.8*	20.0
Carbamazepine	Ave	0.4656	0.4416		47400	50000	-5.2	20.0
3,3'-Dichlorobenzidine	Ave	0.4114	0.3776		45900	50000	-8.2	20.0
Benzo[a]anthracene	Ave	1.153	1.150		49900	50000	-0.3	20.0
Chrysene	Ave	0.8743	0.8210		47000	50000	-6.1	20.0
Bis(2-ethylhexyl) phthalate	Ave	1.136	1.213		53400	50000	6.8	20.0
Di-n-octyl phthalate	Ave	2.958	3.304		55800	50000	11.7	20.0
Benzo[b]fluoranthene	Ave	1.401	1.313		46800	50000	-6.3	20.0
Benzo[k]fluoranthene	Ave	1.279	1.444		56400	50000	12.9	20.0
Benzo[a]pyrene	Ave	1.040	1.135		54600	50000	9.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.9190	1.008		54800	50000	9.6	20.0
Dibenz(a,h)anthracene	Ave	0.7413	0.7610		51300	50000	2.7	20.0
Benzo[g,h,i]perylene	Ave	0.7734	0.8167		52800	50000	5.6	20.0
2-Fluorophenol	Ave	1.029	1.022		49600	50000	-0.7	20.0
Phenol-d5	Ave	1.321	1.306		49400	50000	-1.2	20.0
Nitrobenzene-d5	Ave	0.6389	0.6073		47500	50000	-4.9	20.0
2-Fluorobiphenyl	Ave	1.240	1.090		44000	50000	-12.1	20.0
2,4,6-Tribromophenol	Ave	0.2136	0.2395		56000	50000	12.1	20.0
Terphenyl-d14	Ave	0.9848	1.158		58800	50000	17.6	20.0

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66358.d
Report Date: 30-Mar-2011 05:29

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66358.d
Lab Smp Id: CCVIS-871725
Inj Date : 30-MAR-2011 04:01
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : CCVIS-871725
Misc Info : 50 ppm bna 4534
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	19 N-Nitrosodimethylamine	74	0.935	0.935	(0.304)	180709	50.0000	55
	71 Pyridine	79	0.942	0.942	(0.306)	273507	50.0000	54
$	16 2-Fluorophenol (SUR)	112	1.911	1.911	(0.621)	240408	50.0000	50
	110 Benzaldehyde	77	2.652	2.652	(0.861)	70728	50.0000	33
$	17 Phenol-d5 (SUR)	99	2.814	2.814	(0.914)	307165	50.0000	49
	1 Phenol	94	2.828	2.828	(0.918)	293557	50.0000	45
	73 Aniline	93	2.770	2.770	(0.899)	374160	50.0000	48
	20 bis(2-Chloroethyl)ether	93	2.850	2.850	(0.925)	234977	50.0000	54
	2 2-Chlorophenol	128	2.887	2.887	(0.938)	266552	50.0000	48
	113 n-decane	43	2.961	2.961	(0.961)	297612	50.0000	54
	21 1,3-Dichlorobenzene	146	3.020	3.020	(0.981)	344810	50.0000	49
*	79 1,4-Dichlorobenzene-d4	152	3.080	3.080	(1.000)	188162	40.0000	
	22 1,4-Dichlorobenzene	146	3.101	3.101	(1.007)	339995	50.0000	50

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66358.d
Report Date: 30-Mar-2011 05:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
	74 Benzyl Alcohol	108	3.284	3.284	(1.066)	152484	50.0000	47
	23 1,2-Dichlorobenzene	146	3.254	3.254	(1.057)	341065	50.0000	49
	3 2-Methylphenol	108	3.445	3.445	(1.119)	216630	50.0000	48
	24 bis (2-chloroisopropyl) ether	45	3.409	3.409	(1.107)	393520	50.0000	48
	126 O-Toluidine	107	3.577	3.577	(1.161)	261919	50.0000	55
	104 Acetophenone	105	3.547	3.547	(1.152)	412795	50.0000	48
	4 4-Methylphenol	108	3.614	3.614	(1.174)	198179	50.0000	48
	123 3 & 4 Methylphenol	108	3.614	3.614	(1.174)	202129	50.0000	47
	25 N-Nitroso-di-n-propylamine	70	3.577	3.577	(1.161)	217362	50.0000	50
	26 Hexachloroethane	117	3.599	3.599	(1.169)	171018	50.0000	47
$	76 Nitrobenzene-d5 (SUR)	82	3.696	3.696	(0.838)	456523	50.0000	48
	27 Nitrobenzene	77	3.718	3.718	(0.843)	507206	50.0000	44
	107 N,N-Dimethylaniline	120	3.718	3.718	(1.207)	348402	50.0000	49
	28 Isophorone	82	3.976	3.976	(0.901)	727414	50.0000	48
	5 2-Nitrophenol	139	4.043	4.043	(0.916)	192162	50.0000	48
	6 2,4-Dimethylphenol	122	4.154	4.154	(0.942)	229123	50.0000	48
	29 bis(2-Chloroethoxy)methane	93	4.221	4.221	(0.957)	316767	50.0000	45
	15 Benzoic Acid	122	4.412	4.412	(1.000)	151865	50.0000	61
	7 2,4-Dichlorophenol	162	4.316	4.316	(0.978)	344926	50.0000	52
	30 1,2,4-Trichlorobenzene	180	4.369	4.369	(0.990)	281288	50.0000	47
*	80 Naphthalene-d8	136	4.412	4.412	(1.000)	601374	40.0000	
	31 Naphthalene	128	4.434	4.434	(1.005)	662704	50.0000	43
	32 4-Chloroaniline	127	4.531	4.531	(1.027)	307873	50.0000	46
	33 Hexachlorobutadiene	225	4.583	4.583	(1.039)	228238	50.0000	46
	111 Caprolactam	113	4.981	4.981	(1.129)	79048	50.0000	50
	8 4-Chloro-3-methylphenol	107	5.092	5.092	(1.154)	338827	50.0000	48
	34 2-Methylnaphthalene	142	5.137	5.137	(1.164)	515681	50.0000	45
	120 1-Methylnaphthalene	142	5.234	5.234	(1.186)	548007	50.0000	47
	35 Hexachlorocyclopentadiene	237	5.308	5.308	(0.862)	194889	50.0000	50
	129 1,2,4,5-Tetrachlorobenzene	216	5.316	5.316	(0.863)	293491	50.0000	49
	121 2-tert-Butyl-4-methylphenol	149	5.420	5.420	(1.228)	510938	50.0000	49
	9 2,4,6-Trichlorophenol	196	5.463	5.463	(0.887)	179034	50.0000	51
	10 2,4,5-Trichlorophenol	196	5.508	5.508	(0.894)	193571	50.0000	48
$	77 2-Fluorobiphenyl (SUR)	172	5.529	5.529	(0.898)	609717	50.0000	44
	102 Diphenyl	154	5.619	5.619	(0.912)	912861	50.0000	54
	36 2-Chloronaphthalene	162	5.619	5.619	(0.912)	716741	50.0000	52
	103 Diphenyl Ether	170	5.722	5.722	(0.929)	369277	50.0000	43
	37 2-Nitroaniline	65	5.766	5.766	(0.936)	210000	50.0000	46
	125 1,3-Dimethylnaphthalene	156	5.847	5.847	(0.949)	487451	50.0000	51
	38 Dimethylphthalate	163	5.959	5.959	(0.967)	826533	50.0000	48
	114 Coumarin	146	5.959	5.959	(1.351)	235014	50.0000	51
	40 2,6-Dinitrotoluene	165	6.019	6.019	(0.977)	221194	50.0000	57
	39 Acenaphthylene	152	6.019	6.019	(0.977)	951406	50.0000	49
	41 3-Nitroaniline	138	6.175	6.175	(1.002)	158528	50.0000	47
*	82 Acenaphthene-d10	164	6.160	6.160	(1.000)	447339	40.0000	
	122 2,6-Di-tert-butyl-p-cresol	205	6.235	6.235	(1.012)	449800	50.0000	46
	42 Acenaphthene	154	6.190	6.190	(1.005)	516277	50.0000	47

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66358.d
Report Date: 30-Mar-2011 05:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	11 2,4-Dinitrophenol	184	6.295	6.295	(1.022)	110080	50.0000	57
	12 4-Nitrophenol	65	6.414	6.414	(1.041)	156769	50.0000	46
	44 2,4-Dinitrotoluene	165	6.422	6.422	(1.042)	266398	50.0000	50
	43 Dibenzofuran	168	6.362	6.362	(1.033)	774232	50.0000	44
	127 1-Naphthylamine	143	6.452	6.452	(1.047)	406829	50.0000	42
	130 2,3,4,6-Tetrachlorophenol	232	6.518	6.518	(1.058)	197390	50.0000	52
	128 2-Naphthylamine	143	6.540	6.540	(1.062)	416754	50.0000	42
	45 Diethylphthalate	149	6.659	6.659	(1.081)	937805	50.0000	49
	46 4-Chlorophenyl-phenylether	204	6.718	6.718	(1.091)	261290	50.0000	52
	47 Fluorene	166	6.696	6.696	(1.087)	671498	50.0000	46
	48 4-Nitroaniline	138	6.786	6.786	(1.101)	149896	50.0000	46
	13 4,6-Dinitro-2-methylphenol	198	6.823	6.823	(0.899)	120144	50.0000	51
	49 N-Nitrosodiphenylamine	169	6.853	6.853	(0.903)	430268	50.0000	44
	75 1,2-Diphenylhydrazine	77	6.875	6.875	(0.906)	882661	50.0000	47
$	18 2,4,6-Tribromophenol (SUR)	330	6.941	6.941	(1.127)	133898	50.0000	56
	50 4-Bromophenyl-phenylether	248	7.184	7.184	(0.946)	225633	50.0000	52
	51 Hexachlorobenzene	284	7.237	7.237	(0.953)	212988	50.0000	48
	112 Atrazine	200	7.408	7.408	(0.976)	205080	50.0000	51
	14 Pentachlorophenol	266	7.445	7.445	(0.981)	141111	50.0000	46
	115 n-Octadecane	57	7.577	7.577	(0.998)	303004	50.0000	44
*	83 Phenanthrene-d10	188	7.592	7.592	(1.000)	596939	40.0000	
	52 Phenanthrene	178	7.621	7.621	(1.004)	827558	50.0000	49
	53 Anthracene	178	7.666	7.666	(1.010)	785940	50.0000	45
	54 Carbazole	167	7.844	7.844	(1.033)	830739	50.0000	44
	55 Di-n-butylphthalate	149	8.227	8.227	(1.084)	1417975	50.0000	44
	56 Fluoranthene	202	8.757	8.757	(1.154)	864112	50.0000	45
	58 Benzidine	184	8.927	8.927	(1.176)	60114	50.0000	20
	57 Pyrene	202	8.972	8.972	(0.884)	828880	50.0000	59
$	78 Terphenyl-d14	244	9.156	9.156	(0.902)	675209	50.0000	59
	59 Butylbenzylphthalate	149	9.654	9.654	(0.952)	544642	50.0000	52
	109 2,3,7,8-TCDD (Screen)	320	9.721	9.721	(0.958)	375	0.50000	0.30(aM)
	124 Carbamazepine	193	9.736	9.736	(0.960)	257579	50.0000	47
	60 3,3'-Dichlorobenzidine	252	10.132	10.132	(0.999)	220278	50.0000	46
	61 Benzo(a)anthracene	228	10.132	10.132	(0.999)	670601	50.0000	50
*	81 Chrysene-d12	240	10.146	10.146	(1.000)	466636	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.234	10.234	(1.009)	707824	50.0000	53
	62 Chrysene	228	10.168	10.168	(1.002)	478889	50.0000	47
	64 Di-n-octylphthalate	149	10.895	10.895	(0.935)	1125254	50.0000	56
	65 Benzo(b)fluoranthene	252	11.237	11.237	(0.964)	447090	50.0000	47
	66 Benzo(k)fluoranthene	252	11.267	11.267	(0.967)	491699	50.0000	56
	67 Benzo(a)pyrene	252	11.595	11.595	(0.995)	386611	50.0000	54
*	84 Perylene-d12	264	11.655	11.655	(1.000)	272491	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	12.919	12.919	(1.108)	343199	50.0000	55
	69 Dibenz(a,h)anthracene	278	12.933	12.933	(1.110)	259200	50.0000	51
	70 Benzo(g,h,i)perylene	276	13.213	13.213	(1.134)	278162	50.0000	53

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66358.d
Report Date: 30-Mar-2011 05:29

QC Flag Legend

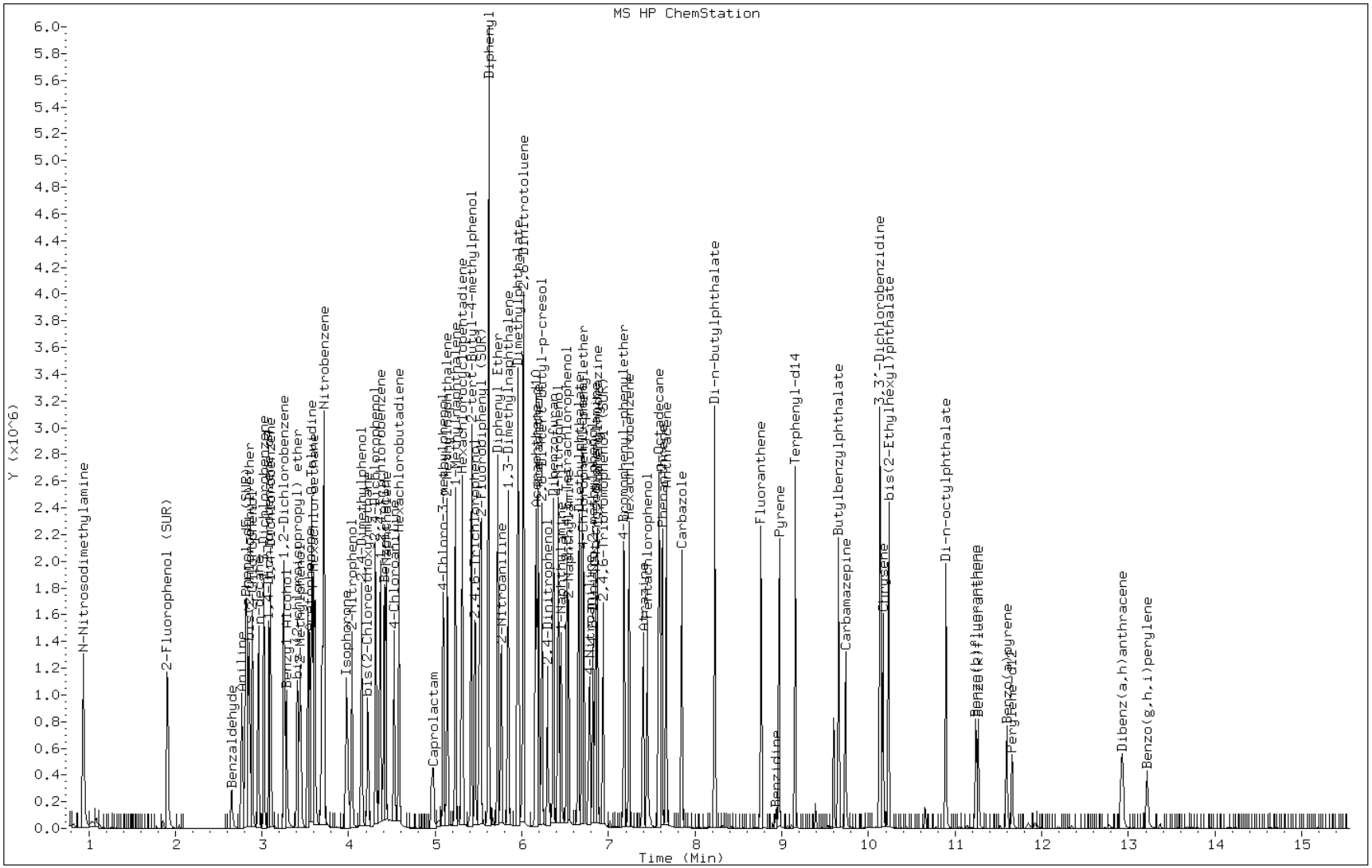
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: u66358.d

Date: 30-MAR-2011 04:01

Client ID: Instrument: BNAMS4.i

Sample Info: CCVIS-871725 Operator: BNAMS 4



Manual Integration Report

Data File: u66358.d
Inj. Date and Time: 30-MAR-2011 04:01
Instrument ID: BNAMS4.i
Client ID:
Compound: 109 2,3,7,8-TCDD (Screen)
CAS #:
Report Date: 03/30/2011

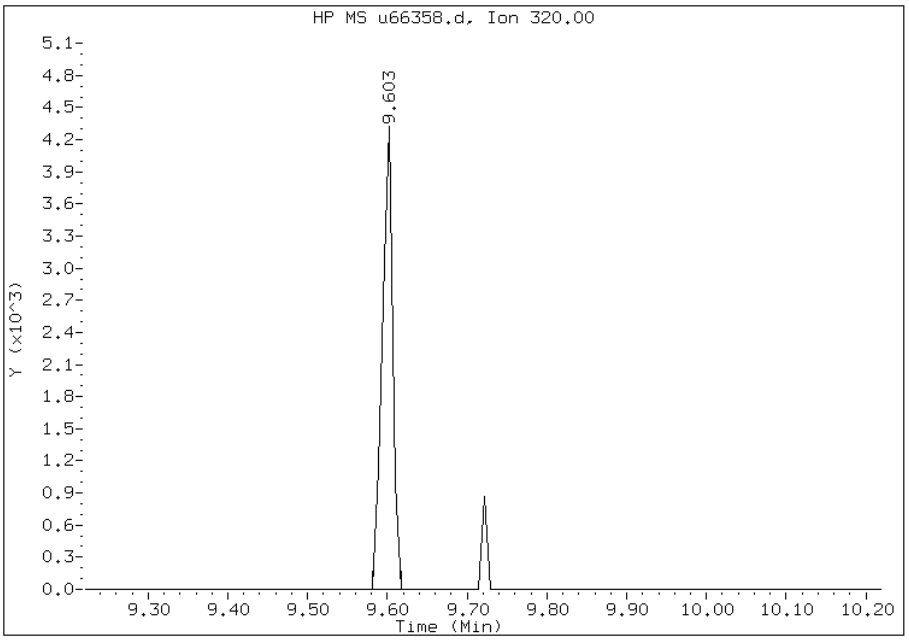
Processing Integration Results

RT: 9.60

Response: 4022

Amount: 3

Conc: 3



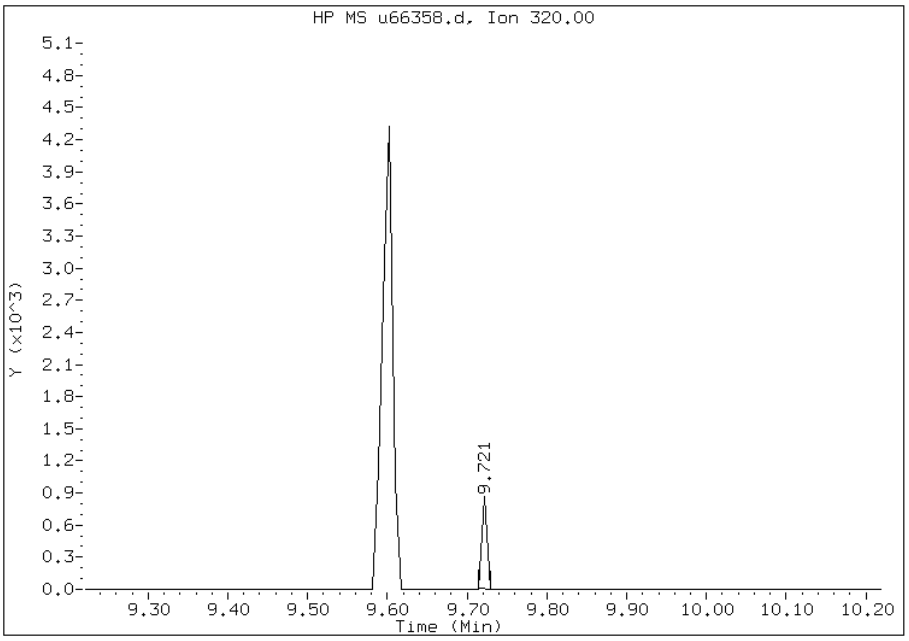
Manual Integration Results

RT: 9.72

Response: 375

Amount: 0

Conc: 0



Manually Integrated By: wahied
Manual Integration Reason:

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66239.d
Report Date: 18-Mar-2011 10:08

TestAmerica

Data file : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66239.d
Lab Smp Id: DFTPP-697155
Inj Date : 18-MAR-2011 04:57
Operator : BNAMS3 Inst ID: BNAMS4.i
Smp Info : DFTPP-697155
Misc Info : 25ng/uL DFTPP Lot 4517
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/BNADFTPP.m
Meth Date : 28-Feb-2011 07:43 asfawa Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 96 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #:		
3.886	4.260	-0.374	198	36170			0.00- 100.00	100.00
3.886	4.260	-0.374	51	18935			30.00- 60.00	52.35
3.886	4.260	-0.374	68	0			0.00- 2.00	0.00
3.886	4.260	-0.374	69	23835			0.00- 0.00	65.90
3.886	4.260	-0.374	70	0			0.00- 2.00	0.00
3.886	4.260	-0.374	127	19821			40.00- 60.00	54.80
3.886	4.260	-0.374	197	0			0.00- 1.00	0.00
3.886	4.260	-0.374	199	2350			5.00- 9.00	6.50
3.886	4.260	-0.374	275	9398			10.00- 30.00	25.98
3.886	4.260	-0.374	365	1411			1.00- 0.00	3.90
3.886	4.260	-0.374	441	2684			0.01- 100.00	76.01
3.886	4.260	-0.374	442	17677			40.00- 110.00	48.87
3.886	4.260	-0.374	443	3531			17.00- 23.00	19.98

Data File: u66239.d

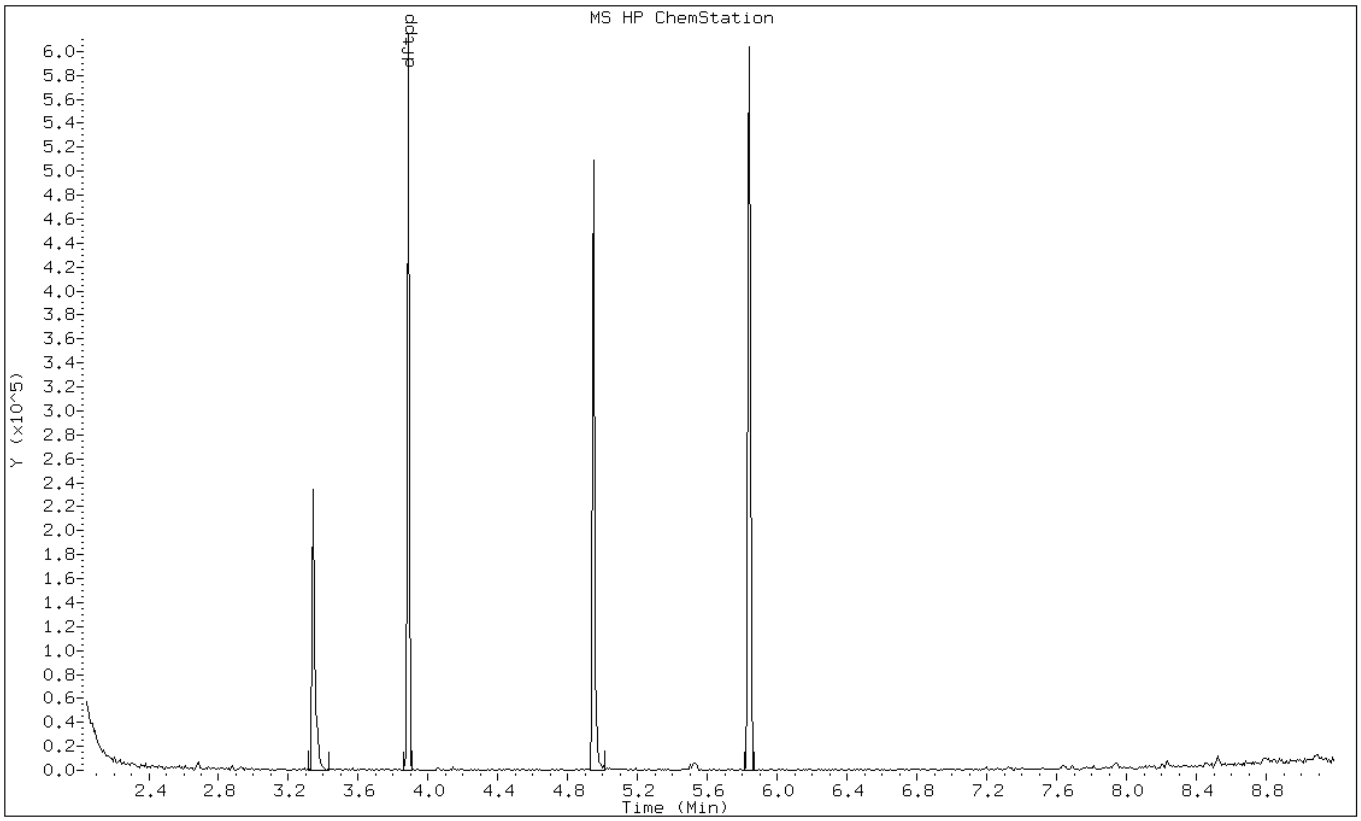
Date: 18-MAR-2011 04:57

Client ID:

Instrument: BNAMS4.i

Sample Info: DFTPP-697155

Operator: BNAMS3



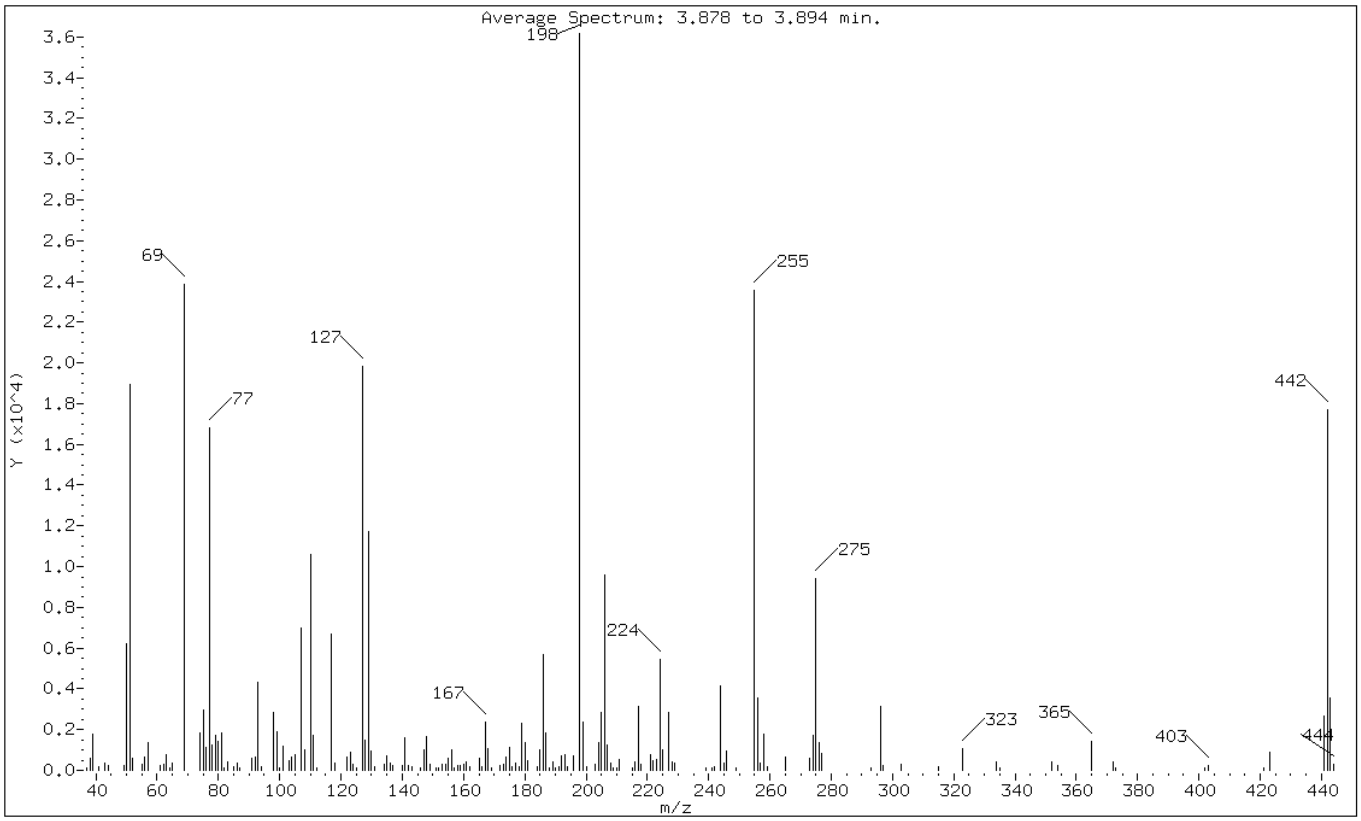
Data File: u66239.d

Date: 18-MAR-2011 04:57

Client ID: Instrument: BNAMS4.i

Sample Info: DFTPP-697155 Operator: BNAMS3

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	52.35
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	65.90
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	54.80
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.50
275	10.00 - 30.00% of mass 198	25.98
365	Greater than 1.00% of mass 198	3.90
441	0.01 - 100.00% of mass 443	7.42 (76.01)
442	40.00 - 110.00% of mass 198	48.87
443	17.00 - 23.00% of mass 442	9.76 (19.98)

Data File: u66239.d

Date: 18-MAR-2011 04:57

Client ID: Instrument: BNAMS4.i

Sample Info: DFTPP-697155 Operator: BNAMS3

Data File: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b/u66239.d
Spectrum: Average Spectrum: 3.878 to 3.894 min.
Location of Maximum: 198.00
Number of points: 173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	135	108.00	983	172.00	259	228.00	435
38.00	597	110.00	10605	173.00	307	229.00	348
39.00	1803	111.00	1695	174.00	645	239.00	106
41.00	174	112.00	114	175.00	1107	241.00	124
43.00	364	117.00	6672	176.00	177	242.00	158
44.00	218	118.00	331	177.00	372	244.00	4128
49.00	252	122.00	637	178.00	190	245.00	327
50.00	6223	123.00	887	179.00	2294	246.00	957
51.00	18928	124.00	290	180.00	1370	249.00	103
52.00	617	125.00	109	181.00	470	255.00	23568
55.00	325	127.00	19816	184.00	196	256.00	3561
56.00	660	128.00	1497	185.00	1009	257.00	351
57.00	1359	129.00	11729	186.00	5702	258.00	1749
61.00	252	130.00	931	187.00	1857	259.00	177
62.00	269	131.00	164	188.00	102	265.00	650
63.00	774	134.00	296	189.00	400	273.00	612
64.00	123	135.00	723	190.00	122	274.00	1720
65.00	332	136.00	350	191.00	188	275.00	9398
69.00	23832	137.00	209	192.00	734	276.00	1344
74.00	1848	140.00	246	193.00	784	277.00	852
75.00	2971	141.00	1569	194.00	157	293.00	143
76.00	1143	142.00	236	196.00	709	296.00	3151
77.00	16832	143.00	191	198.00	36168	297.00	255
78.00	1227	146.00	121	199.00	2350	303.00	311
79.00	1730	147.00	977	200.00	154	315.00	175
80.00	1422	148.00	1679	203.00	319	323.00	1066
81.00	1826	149.00	278	204.00	1371	334.00	423
82.00	137	151.00	121	205.00	2835	335.00	114
83.00	386	152.00	113	206.00	9611	352.00	431
85.00	174	153.00	320	207.00	1270	354.00	239
86.00	373	154.00	295	208.00	350	365.00	1411
87.00	100	155.00	616	209.00	103	372.00	395
91.00	609	156.00	1005	210.00	100	373.00	112
92.00	679	157.00	101	211.00	519	402.00	119
93.00	4339	158.00	253	215.00	108	403.00	220
94.00	159	159.00	227	216.00	387	421.00	107
98.00	2816	160.00	307	217.00	3140	423.00	878
99.00	1892	161.00	421	218.00	290	441.00	2684
100.00	118	162.00	155	221.00	772	442.00	17672
101.00	1161	165.00	608	222.00	459	443.00	3531

103.00	491	166.00	180	223.00	552	444.00	308
104.00	635	167.00	2378	224.00	5417		
105.00	743	168.00	1053	225.00	1035		
107.00	6976	169.00	103	227.00	2860		

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66357.d
Report Date: 30-Mar-2011 05:02

TestAmerica

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66357.d
Lab Smp Id: DFTPP-697155
Inj Date : 30-MAR-2011 03:28
Operator : BNAMS3 Inst ID: BNAMS4.i
Smp Info : DFTPP-697155
Misc Info : 25ng/uL DFTPP Lot 4517
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/BNADFTPP.m
Meth Date : 28-Feb-2011 07:43 asfawa Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 96 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #:		
3.806	4.260	-0.454	198	128936			0.00- 100.00	100.00
3.806	4.260	-0.454	51	57465			30.00- 60.00	44.57
3.806	4.260	-0.454	68	0			0.00- 2.00	0.00
3.806	4.260	-0.454	69	76093			0.00- 0.00	59.02
3.806	4.260	-0.454	70	144			0.00- 2.00	0.19
3.806	4.260	-0.454	127	64008			40.00- 60.00	49.64
3.806	4.260	-0.454	197	0			0.00- 1.00	0.00
3.806	4.260	-0.454	199	8569			5.00- 9.00	6.65
3.806	4.260	-0.454	275	28554			10.00- 30.00	22.15
3.806	4.260	-0.454	365	4252			1.00- 0.00	3.30
3.806	4.260	-0.454	441	12179			0.01- 100.00	86.10
3.806	4.260	-0.454	442	75864			40.00- 110.00	58.84
3.806	4.260	-0.454	443	14145			17.00- 23.00	18.65

Data File: u66357.d

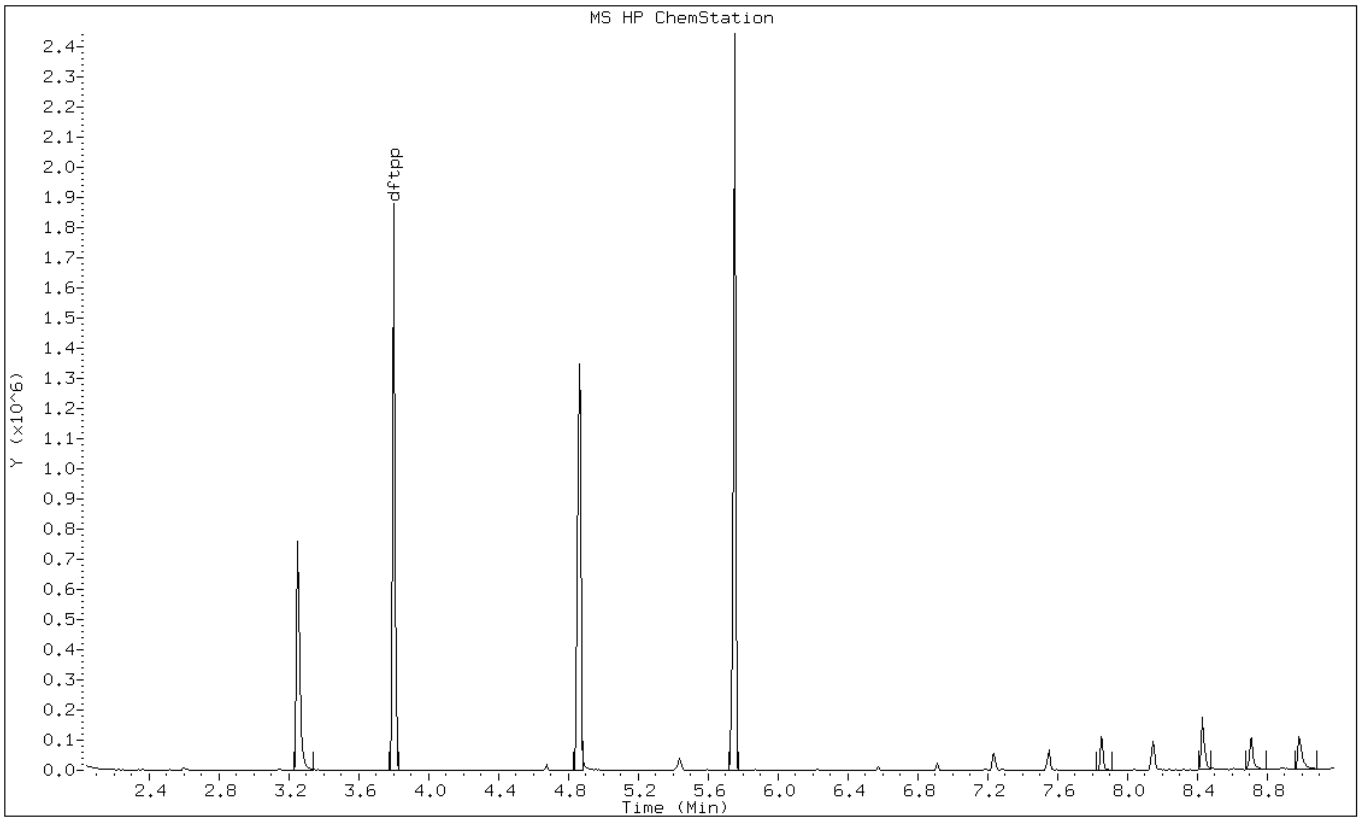
Date: 30-MAR-2011 03:28

Client ID:

Instrument: BNAMS4.i

Sample Info: DFTPP-697155

Operator: BNAMS3



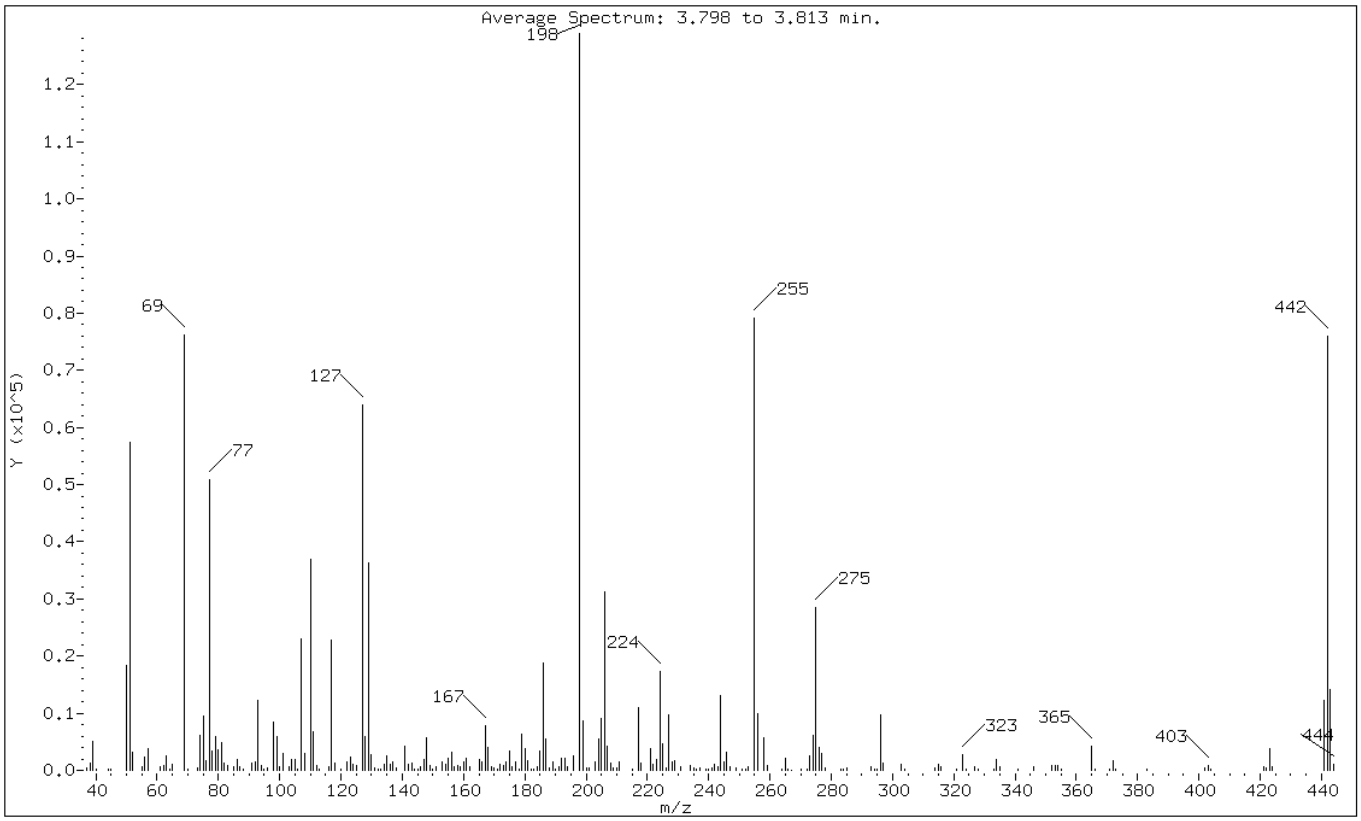
Data File: u66357.d

Date: 30-MAR-2011 03:28

Client ID: Instrument: BNAMS4.i

Sample Info: DFTPP-697155 Operator: BNAMS3

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.57
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	59.02
70	Less than 2.00% of mass 69	0.11 (0.19)
127	40.00 - 60.00% of mass 198	49.64
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.65
275	10.00 - 30.00% of mass 198	22.15
365	Greater than 1.00% of mass 198	3.30
441	0.01 - 100.00% of mass 443	9.45 (86.10)
442	40.00 - 110.00% of mass 198	58.84
443	17.00 - 23.00% of mass 442	10.97 (18.65)

Data File: u66357.d

Date: 30-MAR-2011 03:28

Client ID: Instrument: BNAMS4.i

Sample Info: DFTPP-697155 Operator: BNAMS3

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66357.d
Spectrum: Average Spectrum: 3.798 to 3.813 min.
Location of Maximum: 198.00
Number of points: 229

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	341	122.00	1516	186.00	18720	265.00	2191
38.00	1291	123.00	2329	187.00	5518	266.00	285
39.00	5147	124.00	1045	188.00	480	267.00	102
40.00	278	125.00	884	189.00	1413	270.00	110
44.00	118	127.00	64008	190.00	108	272.00	137
45.00	150	128.00	5969	191.00	699	273.00	2515
50.00	18264	129.00	36376	192.00	2093	274.00	6094
51.00	57464	130.00	2845	193.00	2057	275.00	28552
52.00	3215	131.00	325	194.00	676	276.00	4103
55.00	574	132.00	184	196.00	2599	277.00	2961
56.00	2265	133.00	116	198.00	128936	278.00	327
57.00	3783	134.00	1010	199.00	8569	283.00	285
61.00	559	135.00	2432	200.00	513	284.00	200
62.00	817	136.00	1078	201.00	390	285.00	381
63.00	2461	137.00	1383	203.00	1551	293.00	580
64.00	182	138.00	369	204.00	5425	294.00	144
65.00	1083	141.00	4243	205.00	9081	295.00	251
69.00	76088	142.00	1144	206.00	31256	296.00	9752
70.00	144	143.00	1192	207.00	4152	297.00	1269
73.00	360	144.00	125	208.00	1343	303.00	1147
74.00	6205	145.00	238	209.00	394	304.00	150
75.00	9553	146.00	626	210.00	527	314.00	350
76.00	1759	147.00	1983	211.00	1434	315.00	1115
77.00	50904	148.00	5744	215.00	289	316.00	571
78.00	3334	149.00	771	217.00	10920	321.00	174
79.00	5870	150.00	149	218.00	1354	323.00	2814
80.00	3573	151.00	556	221.00	3844	324.00	289
81.00	4834	153.00	1499	222.00	980	327.00	711
82.00	1163	154.00	1159	223.00	1967	328.00	114
83.00	939	155.00	2170	224.00	17296	333.00	218
85.00	635	156.00	3061	225.00	4637	334.00	1971
86.00	1916	157.00	645	226.00	365	335.00	552
87.00	725	158.00	824	227.00	9679	341.00	148
88.00	221	159.00	723	228.00	1427	346.00	533
91.00	1273	160.00	1531	229.00	1650	352.00	744
92.00	1581	161.00	2183	231.00	602	353.00	744
93.00	12329	162.00	556	234.00	812	354.00	914
94.00	781	165.00	1930	235.00	385	355.00	119
95.00	157	166.00	1575	236.00	220	365.00	4252
96.00	391	167.00	7752	237.00	419	366.00	209

98.00	8530	168.00	4043	239.00	292	371.00	212
99.00	5870	169.00	681	240.00	197	372.00	1600
100.00	588	170.00	364	241.00	352	373.00	186
101.00	2924	171.00	274	242.00	990	383.00	123
103.00	659	172.00	956	243.00	574	402.00	352
104.00	1918	173.00	901	244.00	12997	403.00	945
105.00	1933	174.00	1416	245.00	1528	404.00	309
106.00	176	175.00	3318	246.00	3100	421.00	643
107.00	23000	176.00	539	247.00	668	422.00	335
108.00	3027	177.00	1521	249.00	383	423.00	3852
110.00	37000	178.00	226	251.00	165	424.00	725
111.00	6649	179.00	6311	252.00	292	441.00	12179
112.00	893	180.00	3889	253.00	588	442.00	75864
113.00	110	181.00	1783	255.00	79216	443.00	14145
116.00	662	182.00	132	256.00	9876	444.00	1129
117.00	22760	183.00	118	258.00	5748		
118.00	1280	184.00	585	259.00	811		
120.00	118	185.00	3414	264.00	149		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-68798/1-A

Matrix: Solid | Lab File ID: u66362.d

Analysis Method: 8270C | Date Collected:

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) | Date Analyzed: 03/30/2011 05:27

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	330	U	330	41
95-57-8	2-Chlorophenol	330	U	330	44
95-48-7	2-Methylphenol	330	U	330	48
106-44-5	4-Methylphenol	330	U	330	54
88-75-5	2-Nitrophenol	330	U	330	54
105-67-9	2,4-Dimethylphenol	330	U	330	53
120-83-2	2,4-Dichlorophenol	330	U	330	53
59-50-7	4-Chloro-3-methylphenol	330	U	330	56
88-06-2	2,4,6-Trichlorophenol	330	U	330	59
95-95-4	2,4,5-Trichlorophenol	330	U	330	64
51-28-5	2,4-Dinitrophenol	1000	U	1000	70
100-02-7	4-Nitrophenol	1000	U	1000	85
534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	160
87-86-5	Pentachlorophenol	1000	U	1000	160
111-44-4	Bis(2-chloroethyl)ether	33	U	33	6.9
541-73-1	1,3-Dichlorobenzene	330	U	330	45
106-46-7	1,4-Dichlorobenzene	330	U	330	49
95-50-1	1,2-Dichlorobenzene	330	U	330	53
621-64-7	N-Nitrosodi-n-propylamine	33	U	33	4.4
67-72-1	Hexachloroethane	33	U	33	5.6
98-95-3	Nitrobenzene	33	U	33	7.4
78-59-1	Isophorone	330	U	330	38
111-91-1	Bis(2-chloroethoxy)methane	330	U	330	47
120-82-1	1,2,4-Trichlorobenzene	33	U	33	5.4
91-20-3	Naphthalene	330	U	330	48
106-47-8	4-Chloroaniline	330	U	330	42
87-68-3	Hexachlorobutadiene	67	U	67	13
91-57-6	2-Methylnaphthalene	330	U	330	48
77-47-4	Hexachlorocyclopentadiene	330	U	330	97
91-58-7	2-Chloronaphthalene	330	U	330	47
88-74-4	2-Nitroaniline	670	U	670	91
131-11-3	Dimethyl phthalate	330	U	330	45
208-96-8	Acenaphthylene	330	U	330	47
606-20-2	2,6-Dinitrotoluene	67	U	67	8.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-68798/1-A

Matrix: Solid | Lab File ID: u66362.d

Analysis Method: 8270C | Date Collected:

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) | Date Analyzed: 03/30/2011 05:27

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-09-2	3-Nitroaniline	670	U	670	75
83-32-9	Acenaphthene	330	U	330	47
132-64-9	Dibenzofuran	330	U	330	50
121-14-2	2,4-Dinitrotoluene	67	U	67	9.7
84-66-2	Diethyl phthalate	330	U	330	44
7005-72-3	4-Chlorophenyl phenyl ether	330	U	330	57
86-73-7	Fluorene	330	U	330	56
100-01-6	4-Nitroaniline	670	U	670	68
86-30-6	N-Nitrosodiphenylamine	330	U	330	54
101-55-3	4-Bromophenyl phenyl ether	330	U	330	59
118-74-1	Hexachlorobenzene	33	U	33	4.6
85-01-8	Phenanthrene	330	U	330	58
120-12-7	Anthracene	330	U	330	58
86-74-8	Carbazole	330	U	330	53
84-74-2	Di-n-butyl phthalate	330	U	330	51
206-44-0	Fluoranthene	330	U	330	55
129-00-0	Pyrene	330	U	330	57
85-68-7	Butyl benzyl phthalate	330	U	330	39
91-94-1	3,3'-Dichlorobenzidine	670	U	670	73
56-55-3	Benzo[a]anthracene	33	U	33	6.1
218-01-9	Chrysene	330	U	330	48
117-81-7	Bis(2-ethylhexyl) phthalate	330	U	330	44
117-84-0	Di-n-octyl phthalate	330	U	330	39
205-99-2	Benzo[b]fluoranthene	33	U	33	4.9
207-08-9	Benzo[k]fluoranthene	33	U	33	4.6
50-32-8	Benzo[a]pyrene	33	U	33	4.1
193-39-5	Indeno[1,2,3-cd]pyrene	33	U	33	5.3
53-70-3	Dibenz(a,h)anthracene	33	U	33	4.0
191-24-2	Benzo[g,h,i]perylene	330	U	330	35
108-60-1	bis (2-chloroisopropyl) ether	330	U	330	43

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68798/1-A

Matrix: Solid Lab File ID: u66362.d

Analysis Method: 8270C Date Collected:

Extract. Method: 3541 Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.00(g) Date Analyzed: 03/30/2011 05:27

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	88		38-105
4165-62-2	Phenol-d5	86		41-118
1718-51-0	Terphenyl-d14	82		16-151
118-79-6	2,4,6-Tribromophenol	90		10-120
367-12-4	2-Fluorophenol	82		37-125
321-60-8	2-Fluorobiphenyl	91		40-109

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66362.d
Report Date: 30-Mar-2011 12:14

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66362.d
Lab Smp Id: MB 460-68798/1-A
Inj Date : 30-MAR-2011 05:27
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : MB 460-68798/1-A
Misc Info :
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

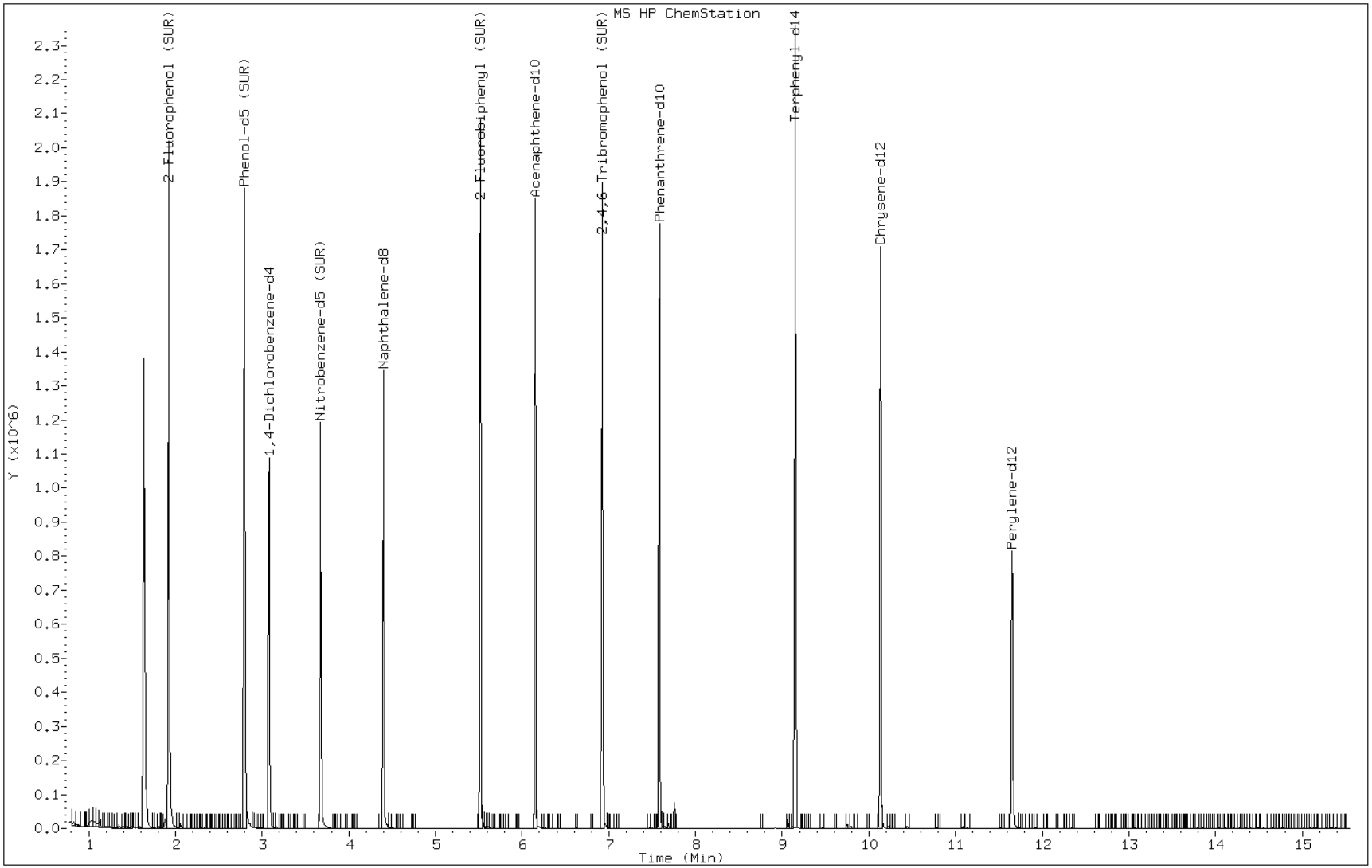
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
$ 16 2-Fluorophenol (SUR)	112	1.920	1.911	(0.623)	323686	81.7113	5400
$ 17 Phenol-d5 (SUR)	99	2.793	2.814	(0.907)	434818	85.5301	5700
* 79 1,4-Dichlorobenzene-d4	152	3.080	3.080	(1.000)	153919	40.0000	
$ 76 Nitrobenzene-d5 (SUR)	82	3.676	3.696	(0.836)	348850	43.8098	2900
* 80 Naphthalene-d8	136	4.398	4.412	(1.000)	498551	40.0000	
$ 77 2-Fluorobiphenyl (SUR)	172	5.519	5.529	(0.898)	500225	45.4940	3000
* 82 Acenaphthene-d10	164	6.150	6.160	(1.000)	354708	40.0000	
$ 18 2,4,6-Tribromophenol (SUR)	330	6.930	6.941	(1.127)	171287	90.4193	6000
* 83 Phenanthrene-d10	188	7.586	7.592	(1.000)	551393	40.0000	
$ 78 Terphenyl-d14	244	9.154	9.156	(0.903)	635668	41.1262	2700
* 81 Chrysene-d12	240	10.134	10.146	(1.000)	627833	40.0000	
* 84 Perylene-d12	264	11.650	11.655	(1.000)	438212	40.0000	

Data File: u66362.d

Date: 30-MAR-2011 05:27

Client ID: Instrument: BNAMS4.i

Sample Info: MB 460-68798/1-A Operator: BNAMS 4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-68798/2-A

Matrix: Solid | Lab File ID: u66359.d

Analysis Method: 8270C | Date Collected:

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.03(g) | Date Analyzed: 03/30/2011 04:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	4870		330	40
95-57-8	2-Chlorophenol	5280		330	44
95-48-7	2-Methylphenol	5220		330	48
106-44-5	4-Methylphenol	5490		330	54
88-75-5	2-Nitrophenol	5330		330	54
105-67-9	2,4-Dimethylphenol	5430		330	53
120-83-2	2,4-Dichlorophenol	5900		330	53
59-50-7	4-Chloro-3-methylphenol	5560		330	55
88-06-2	2,4,6-Trichlorophenol	6080		330	59
95-95-4	2,4,5-Trichlorophenol	5620		330	64
51-28-5	2,4-Dinitrophenol	2990		1000	70
100-02-7	4-Nitrophenol	5890		1000	85
534-52-1	4,6-Dinitro-2-methylphenol	3660		1000	160
87-86-5	Pentachlorophenol	5200		1000	160
111-44-4	Bis(2-chloroethyl)ether	3180		33	6.9
541-73-1	1,3-Dichlorobenzene	2350		330	45
106-46-7	1,4-Dichlorobenzene	2410		330	49
95-50-1	1,2-Dichlorobenzene	2460		330	53
621-64-7	N-Nitrosodi-n-propylamine	2980		33	4.4
67-72-1	Hexachloroethane	2270		33	5.6
98-95-3	Nitrobenzene	2470		33	7.4
78-59-1	Isophorone	365		330	38
111-91-1	Bis(2-chloroethoxy)methane	2700		330	47
120-82-1	1,2,4-Trichlorobenzene	2580		33	5.4
91-20-3	Naphthalene	2490		330	48
106-47-8	4-Chloroaniline	1660		330	42
87-68-3	Hexachlorobutadiene	2560		67	13
91-57-6	2-Methylnaphthalene	2640		330	48
77-47-4	Hexachlorocyclopentadiene	2750		330	97
91-58-7	2-Chloronaphthalene	2820		330	47
88-74-4	2-Nitroaniline	2750		670	90
131-11-3	Dimethyl phthalate	3060		330	45
208-96-8	Acenaphthylene	2690		330	47
606-20-2	2,6-Dinitrotoluene	3490		67	8.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-68798/2-A

Matrix: Solid | Lab File ID: u66359.d

Analysis Method: 8270C | Date Collected:

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.03(g) | Date Analyzed: 03/30/2011 04:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-09-2	3-Nitroaniline	1710		670	75
83-32-9	Acenaphthene	2940		330	47
132-64-9	Dibenzofuran	2610		330	50
121-14-2	2,4-Dinitrotoluene	3130		67	9.6
84-66-2	Diethyl phthalate	3050		330	44
7005-72-3	4-Chlorophenyl phenyl ether	3290		330	57
86-73-7	Fluorene	2770		330	56
100-01-6	4-Nitroaniline	2800		670	68
86-30-6	N-Nitrosodiphenylamine	2540		330	54
101-55-3	4-Bromophenyl phenyl ether	2980		330	59
118-74-1	Hexachlorobenzene	2720		33	4.6
85-01-8	Phenanthrene	2580		330	58
120-12-7	Anthracene	2840		330	58
86-74-8	Carbazole	2590		330	52
84-74-2	Di-n-butyl phthalate	2720		330	50
206-44-0	Fluoranthene	2650		330	55
129-00-0	Pyrene	3080		330	57
85-68-7	Butyl benzyl phthalate	2990		330	39
91-94-1	3,3'-Dichlorobenzidine	1620		670	73
56-55-3	Benzo[a]anthracene	2850		33	6.1
218-01-9	Chrysene	2800		330	48
117-81-7	Bis(2-ethylhexyl) phthalate	2970		330	44
117-84-0	Di-n-octyl phthalate	3180		330	39
205-99-2	Benzo[b]fluoranthene	3030		33	4.9
207-08-9	Benzo[k]fluoranthene	3310		33	4.6
50-32-8	Benzo[a]pyrene	3150		33	4.1
193-39-5	Indeno[1,2,3-cd]pyrene	3280		33	5.3
53-70-3	Dibenz(a,h)anthracene	3270		33	4.0
191-24-2	Benzo[g,h,i]perylene	3240		330	35
108-60-1	bis (2-chloroisopropyl) ether	2560		330	43

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68798/2-A

Matrix: Solid Lab File ID: u66359.d

Analysis Method: 8270C Date Collected:

Extract. Method: 3541 Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.03(g) Date Analyzed: 03/30/2011 04:24

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	76		38-105
4165-62-2	Phenol-d5	81		41-118
1718-51-0	Terphenyl-d14	92		16-151
118-79-6	2,4,6-Tribromophenol	101		10-120
367-12-4	2-Fluorophenol	82		37-125
321-60-8	2-Fluorobiphenyl	73		40-109

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66359.d
Report Date: 30-Mar-2011 06:14

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66359.d
Lab Smp Id: LCS 460-68798/2-A
Inj Date : 30-MAR-2011 04:24
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : LCS 460-68798/2-A
Misc Info :
Comment :
Method : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	106 1,4-Dioxane	88	0.794	0.749	(0.258)	43135	17.9593	1200
	19 N-Nitrosodimethylamine	74	0.970	0.935	(0.315)	136553	37.4276	2500
	71 Pyridine	79	0.977	0.942	(0.317)	142739	25.4253	1700
$	16 2-Fluorophenol (SUR)	112	1.927	1.911	(0.626)	442725	81.8882	5400
	110 Benzaldehyde	77	2.654	2.652	(0.861)	39542	16.7517	1100
$	17 Phenol-d5 (SUR)	99	2.816	2.814	(0.914)	558549	80.5010	5400
	1 Phenol	94	2.830	2.828	(0.919)	533526	73.2511	4900
	73 Aniline	93	2.771	2.770	(0.899)	263213	30.5025	2000
	20 bis(2-Chloroethyl)ether	93	2.859	2.850	(0.928)	228879	47.8140	3200
	2 2-Chlorophenol	128	2.889	2.887	(0.938)	495212	79.3002	5300
	113 n-decane	43	2.963	2.961	(0.962)	204780	31.2491	2100
	21 1,3-Dichlorobenzene	146	3.022	3.020	(0.981)	277179	35.3518	2400
*	79 1,4-Dichlorobenzene-d4	152	3.081	3.080	(1.000)	210070	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66359.d
Report Date: 30-Mar-2011 06:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	22 1,4-Dichlorobenzene	146	3.103	3.101	(1.007)	277227	36.2448	2400
	74 Benzyl Alcohol	108	3.288	3.284	(1.067)	152571	42.4939	2800
	23 1,2-Dichlorobenzene	146	3.251	3.254	(1.055)	289514	37.0234	2500
	3 2-Methylphenol	108	3.437	3.445	(1.115)	398121	78.4381	5200
	24 bis (2-chloroisopropyl) ether	45	3.407	3.409	(1.106)	351174	38.4759	2600
	126 O-Toluidine	107	3.623	3.577	(1.176)	465137	80.4060	5400
	104 Acetophenone	105	3.548	3.547	(1.152)	414486	42.9836	2900
	4 4-Methylphenol	108	3.623	3.614	(1.176)	379266	82.5637	5500
	123 3 & 4 Methylphenol	108	3.623	3.614	(1.176)	379266	78.7947	5200
	25 N-Nitroso-di-n-propylamine	70	3.578	3.577	(1.161)	218681	44.7636	3000
	26 Hexachloroethane	117	3.593	3.599	(1.166)	139721	34.1456	2300
$	76 Nitrobenzene-d5 (SUR)	82	3.690	3.696	(0.837)	397789	38.1846	2500
	27 Nitrobenzene	77	3.712	3.718	(0.842)	457773	37.0550	2500
	107 N,N-Dimethylaniline	120	3.720	3.718	(1.207)	279227	35.2733	2400
	28 Isophorone	82	3.970	3.976	(0.901)	90776	5.48511	360(R)
	5 2-Nitrophenol	139	4.045	4.043	(0.917)	346117	80.0989	5300
	6 2,4-Dimethylphenol	122	4.155	4.154	(0.942)	425283	81.6177	5400
	29 bis(2-Chloroethoxy)methane	93	4.230	4.221	(0.959)	308055	40.5997	2700
	15 Benzoic Acid	122	4.454	4.412	(1.010)	117174	43.6260	2900
	7 2,4-Dichlorophenol	162	4.319	4.316	(0.980)	630604	88.6069	5900
	30 1,2,4-Trichlorobenzene	180	4.371	4.369	(0.992)	253341	38.7746	2600
*	80 Naphthalene-d8	136	4.409	4.412	(1.000)	652238	40.0000	
	31 Naphthalene	128	4.431	4.434	(1.005)	625456	37.4082	2500
	32 4-Chloroaniline	127	4.528	4.531	(1.027)	180283	24.9098	1700
	33 Hexachlorobutadiene	225	4.580	4.583	(1.039)	204576	38.4182	2600
	111 Caprolactam	113	4.990	4.981	(1.132)	47848	27.9630	1900
	8 4-Chloro-3-methylphenol	107	5.102	5.092	(1.157)	639687	83.5589	5600
	34 2-Methylnaphthalene	142	5.138	5.137	(1.165)	491619	39.7184	2600
	120 1-Methylnaphthalene	142	5.226	5.234	(1.185)	8591	0.68087	45(a)
	35 Hexachlorocyclopentadiene	237	5.308	5.308	(0.862)	184926	41.3179	2800
	129 1,2,4,5-Tetrachlorobenzene	216	5.314	5.316	(0.863)	293554	42.3805	2800
	121 2-tert-Butyl-4-methylphenol	149	5.529	5.420	(1.254)	6118	0.54075	36(a)
	9 2,4,6-Trichlorophenol	196	5.462	5.463	(0.887)	371236	91.4177	6100
	10 2,4,5-Trichlorophenol	196	5.515	5.508	(0.896)	395816	84.4293	5600
$	77 2-Fluorobiphenyl (SUR)	172	5.529	5.529	(0.898)	583974	36.5230	2400
	102 Diphenyl	154	5.618	5.619	(0.913)	854372	43.8293	2900
	36 2-Chloronaphthalene	162	5.618	5.619	(0.913)	673213	42.3278	2800
	103 Diphenyl Ether	170	5.720	5.722	(0.929)	383052	39.1080	2600
	37 2-Nitroaniline	65	5.758	5.766	(0.935)	215363	41.3322	2800
	125 1,3-Dimethylnaphthalene	156	5.618	5.847	(0.913)	6680	0.60319	40(a)
	38 Dimethylphthalate	163	5.965	5.959	(0.969)	915018	46.0301	3100
	114 Coumarin	146	6.016	5.959	(1.365)	1063	0.21259	14(a)
	40 2,6-Dinitrotoluene	165	6.016	6.019	(0.977)	232291	52.5195	3500
	39 Acenaphthylene	152	6.016	6.019	(0.977)	906074	40.4958	2700
	41 3-Nitroaniline	138	6.171	6.175	(1.002)	99459	25.6638	1700
*	82 Acenaphthene-d10	164	6.156	6.160	(1.000)	515807	40.0000	
	42 Acenaphthene	154	6.192	6.190	(1.006)	558672	44.2443	2900

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66359.d
Report Date: 30-Mar-2011 06:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	11 2,4-Dinitrophenol	184	6.295	6.295	(1.023)	97903	44.8769	3000
	12 4-Nitrophenol	65	6.426	6.414	(1.044)	345746	88.5865	5900
	44 2,4-Dinitrotoluene	165	6.413	6.422	(1.042)	291209	46.9978	3100
	43 Dibenzofuran	168	6.362	6.362	(1.033)	790204	39.2379	2600
	127 1-Naphthylamine	143	6.515	6.452	(1.058)	9226	0.82764	55(a)
	130 2,3,4,6-Tetrachlorophenol	232	6.515	6.518	(1.058)	191616	44.2376	2900
	128 2-Naphthylamine	143	6.515	6.540	(1.058)	9226	0.81493	54(a)
	45 Diethylphthalate	149	6.665	6.659	(1.083)	1014682	45.7968	3000
	46 4-Chlorophenyl-phenylether	204	6.717	6.718	(1.091)	287036	49.4572	3300
	47 Fluorene	166	6.694	6.696	(1.087)	699101	41.6992	2800
	48 4-Nitroaniline	138	6.790	6.786	(1.103)	157661	42.1153	2800
	13 4,6-Dinitro-2-methylphenol	198	6.827	6.823	(0.899)	162402	55.0103	3700
	49 N-Nitrosodiphenylamine	169	6.850	6.853	(0.902)	455049	38.1027	2500
	75 1,2-Diphenylhydrazine	77	6.872	6.875	(0.905)	896442	38.3148	2600
$	18 2,4,6-Tribromophenol (SUR)	330	6.938	6.941	(1.127)	279047	101.298	6800
	50 4-Bromophenyl-phenylether	248	7.181	7.184	(0.945)	241334	44.8391	3000
	51 Hexachlorobenzene	284	7.241	7.237	(0.953)	225633	40.9192	2700
	112 Atrazine	200	7.405	7.408	(0.975)	172726	34.8486	2300
	14 Pentachlorophenol	266	7.456	7.445	(0.981)	313065	78.1247	5200
	115 n-Octadecane	57	7.583	7.577	(0.998)	316789	37.4801	2500
*	83 Phenanthrene-d10	188	7.597	7.592	(1.000)	738094	40.0000	
	52 Phenanthrene	178	7.620	7.621	(1.003)	817458	38.8382	2600
	53 Anthracene	178	7.672	7.666	(1.010)	928800	42.6531	2800
	54 Carbazole	167	7.847	7.844	(1.033)	898999	38.8538	2600
	55 Di-n-butylphthalate	149	8.231	8.227	(1.083)	1613740	40.9304	2700
	56 Fluoranthene	202	8.760	8.757	(1.153)	948802	39.8028	2600
	58 Benzidine	184	8.924	8.927	(1.175)	8969	2.41306	160(aR)
	57 Pyrene	202	8.968	8.972	(0.884)	909125	46.3242	3100
$	78 Terphenyl-d14	244	9.158	9.156	(0.903)	736422	45.9763	3100
	59 Butylbenzylphthalate	149	9.653	9.654	(0.951)	659351	44.9521	3000
	124 Carbamazepine	193	9.653	9.736	(0.951)	2824	0.37293	25(a)
	60 3,3'-Dichlorobenzidine	252	10.131	10.132	(0.999)	162511	24.2833	1600
	61 Benzo(a)anthracene	228	10.131	10.132	(0.999)	802483	42.7984	2800
*	81 Chrysene-d12	240	10.145	10.146	(1.000)	650617	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.233	10.234	(1.009)	826191	44.7057	3000
	62 Chrysene	228	10.167	10.168	(1.002)	597774	42.0358	2800
	64 Di-n-octylphthalate	149	10.894	10.895	(0.934)	1259802	47.8491	3200
	65 Benzo(b)fluoranthene	252	11.238	11.237	(0.964)	568757	45.6159	3000
	66 Benzo(k)fluoranthene	252	11.267	11.267	(0.967)	566322	49.7449	3300
	67 Benzo(a)pyrene	252	11.599	11.595	(0.995)	437734	47.3044	3200(R)
*	84 Perylene-d12	264	11.657	11.655	(1.000)	356005	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	12.915	12.919	(1.108)	403062	49.2793	3300
	69 Dibenz(a,h)anthracene	278	12.937	12.933	(1.110)	324504	49.1878	3300
	70 Benzo(g,h,i)perylene	276	13.215	13.213	(1.134)	335033	48.6730	3200

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66359.d
Report Date: 30-Mar-2011 06:14

QC Flag Legend

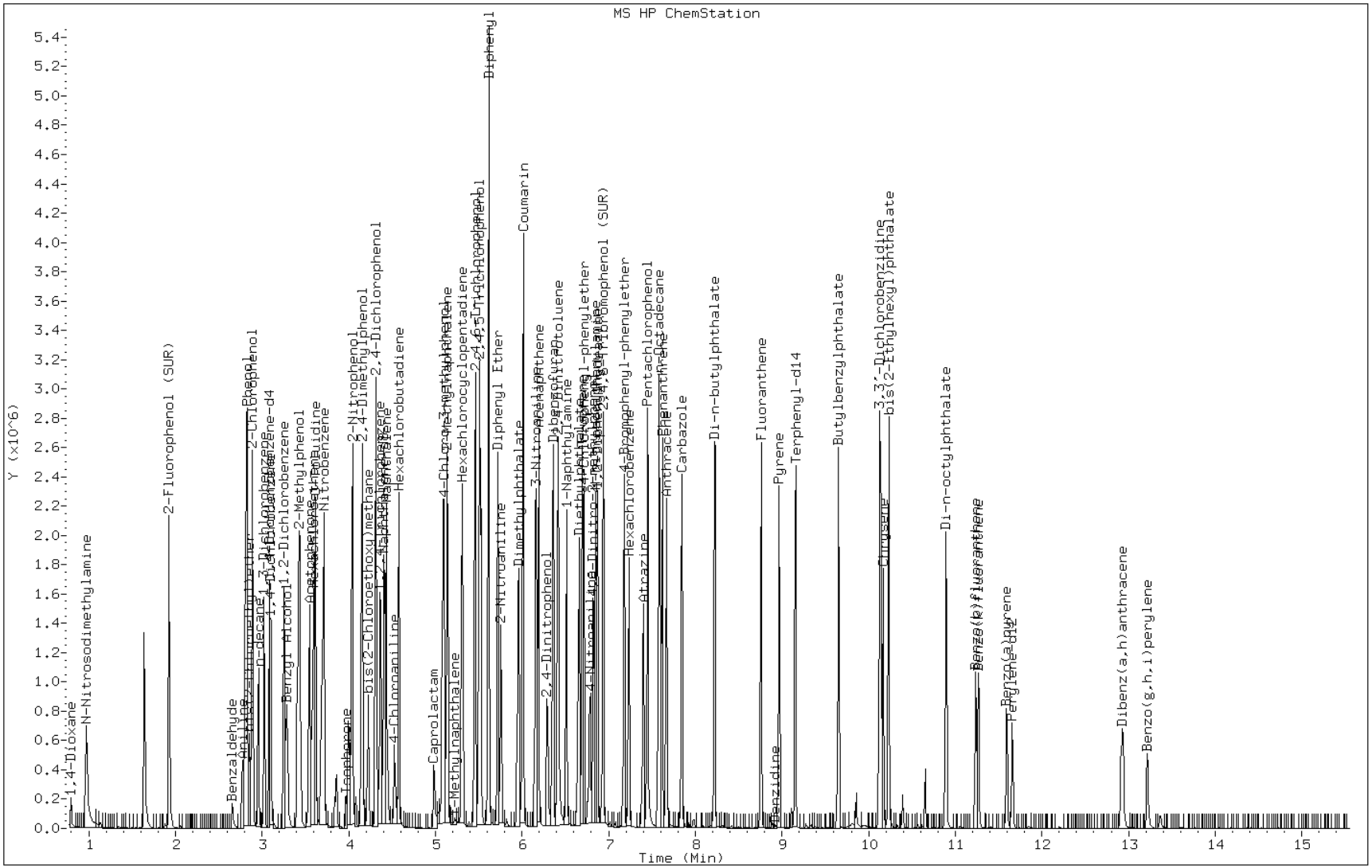
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: u66359.d

Date: 30-MAR-2011 04:24

Client ID: Instrument: BNAMS4.i

Sample Info: LCS 460-68798/2-A Operator: BNAMS 4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-A MS

Matrix: Solid | Lab File ID: u66382.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.02(g) | Date Analyzed: 03/30/2011 12:10

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	5970		340	42
95-57-8	2-Chlorophenol	6080		340	46
95-48-7	2-Methylphenol	6010		340	49
106-44-5	4-Methylphenol	6400		340	56
88-75-5	2-Nitrophenol	5580		340	57
105-67-9	2,4-Dimethylphenol	5900		340	55
120-83-2	2,4-Dichlorophenol	6750		340	55
59-50-7	4-Chloro-3-methylphenol	6240		340	58
88-06-2	2,4,6-Trichlorophenol	6390		340	62
95-95-4	2,4,5-Trichlorophenol	6310		340	66
51-28-5	2,4-Dinitrophenol	1560		1000	73
100-02-7	4-Nitrophenol	5570		1000	88
534-52-1	4,6-Dinitro-2-methylphenol	2630		1000	160
87-86-5	Pentachlorophenol	2670		1000	170
111-44-4	Bis(2-chloroethyl)ether	3640		34	7.2
541-73-1	1,3-Dichlorobenzene	2540		340	47
106-46-7	1,4-Dichlorobenzene	2670		340	51
95-50-1	1,2-Dichlorobenzene	2720		340	55
621-64-7	N-Nitrosodi-n-propylamine	3430		34	4.5
67-72-1	Hexachloroethane	2410		34	5.8
98-95-3	Nitrobenzene	2740		34	7.7
78-59-1	Isophorone	3100		340	40
111-91-1	Bis(2-chloroethoxy)methane	3070		340	49
120-82-1	1,2,4-Trichlorobenzene	2710		34	5.6
91-20-3	Naphthalene	2790		340	50
106-47-8	4-Chloroaniline	1860		340	43
87-68-3	Hexachlorobutadiene	2780		70	14
91-57-6	2-Methylnaphthalene	3000		340	50
77-47-4	Hexachlorocyclopentadiene	1740		340	100
91-58-7	2-Chloronaphthalene	3050		340	49
88-74-4	2-Nitroaniline	3450		700	94
131-11-3	Dimethyl phthalate	3390		340	46
208-96-8	Acenaphthylene	2880		340	49
606-20-2	2,6-Dinitrotoluene	3570		70	8.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-A MS

Matrix: Solid | Lab File ID: u66382.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.02(g) | Date Analyzed: 03/30/2011 12:10

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-09-2	3-Nitroaniline	2320		700	78
83-32-9	Acenaphthene	3070		340	49
132-64-9	Dibenzofuran	2900		340	52
121-14-2	2,4-Dinitrotoluene	3530		70	10
84-66-2	Diethyl phthalate	3220		340	46
7005-72-3	4-Chlorophenyl phenyl ether	3450		340	59
86-73-7	Fluorene	2890		340	58
100-01-6	4-Nitroaniline	3180		700	71
86-30-6	N-Nitrosodiphenylamine	2960		340	56
101-55-3	4-Bromophenyl phenyl ether	3290		340	61
118-74-1	Hexachlorobenzene	2990		34	4.8
85-01-8	Phenanthrene	2940		340	60
120-12-7	Anthracene	3180		340	61
86-74-8	Carbazole	3020		340	55
84-74-2	Di-n-butyl phthalate	3190		340	53
206-44-0	Fluoranthene	2830		340	57
129-00-0	Pyrene	4050		340	59
85-68-7	Butyl benzyl phthalate	4120		340	40
91-94-1	3,3'-Dichlorobenzidine	2630		700	76
56-55-3	Benzo[a]anthracene	3250		34	6.4
218-01-9	Chrysene	3490		340	50
117-81-7	Bis(2-ethylhexyl) phthalate	4020		340	46
117-84-0	Di-n-octyl phthalate	3690		340	41
205-99-2	Benzo[b]fluoranthene	3280		34	5.1
207-08-9	Benzo[k]fluoranthene	3370		34	4.8
50-32-8	Benzo[a]pyrene	3210		34	4.2
193-39-5	Indeno[1,2,3-cd]pyrene	4140		34	5.5
53-70-3	Dibenz(a,h)anthracene	3880		34	4.1
191-24-2	Benzo[g,h,i]perylene	4200		340	36
108-60-1	bis (2-chloroisopropyl) ether	3010		340	45

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-A MS

Matrix: Solid | Lab File ID: u66382.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.02(g) | Date Analyzed: 03/30/2011 12:10

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	84		38-105
4165-62-2	Phenol-d5	90		41-118
1718-51-0	Terphenyl-d14	115		16-151
118-79-6	2,4,6-Tribromophenol	91		10-120
367-12-4	2-Fluorophenol	88		37-125
321-60-8	2-Fluorobiphenyl	77		40-109

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66382.d
Report Date: 30-Mar-2011 14:36

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66382.d
Lab Smp Id: 460-24277-F-7-A MS Client Smp ID: PMP-10-VD-E (3.5-4.
Inj Date : 30-MAR-2011 12:10
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : 460-24277-F-7-A MS
Misc Info : 460-24277-F-7-A MS
Comment   :
Method   : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.02000	Weight of sample extracted (g)
M	3.96040	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
106	1,4-Dioxane	88	0.794	0.749	(0.257)	40903	21.3294	1500(M)
19	N-Nitrosodimethylamine	74	0.962	0.935	(0.312)	144121	49.4736	3400(R)
71	Pyridine	79	0.976	0.942	(0.316)	136888	30.5384	2100
$ 16	2-Fluorophenol (SUR)	112	1.928	1.911	(0.625)	379451	87.9024	6100
110	Benzaldehyde	77	2.649	2.652	(0.859)	171238	90.8564	6300(R)
$ 17	Phenol-d5 (SUR)	99	2.819	2.814	(0.914)	498983	90.0708	6200
1	Phenol	94	2.833	2.828	(0.918)	500807	86.1166	6000
73	Aniline	93	2.774	2.770	(0.899)	205527	29.8300	2100
20	bis(2-Chloroethyl)ether	93	2.863	2.850	(0.928)	203204	52.4503	3600(R)
2	2-Chlorophenol	128	2.893	2.887	(0.938)	437427	87.7297	6100
113	n-decane	43	2.959	2.961	(0.959)	151943	28.8230	2000
21	1,3-Dichlorobenzene	146	3.026	3.020	(0.981)	229325	36.6320	2500
* 79	1,4-Dichlorobenzene-d4	152	3.085	3.080	(1.000)	167728	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66382.d
Report Date: 30-Mar-2011 14:36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
22	1,4-Dichlorobenzene	146	3.100	3.101	(1.005)	235545	38.5693	2700
74	Benzyl Alcohol	108	3.291	3.284	(1.067)	134446	46.8985	3200
23	1,2-Dichlorobenzene	146	3.254	3.254	(1.055)	244943	39.2310	2700
3	2-Methylphenol	108	3.439	3.445	(1.115)	351136	86.6455	6000
24	bis (2-chloroisopropyl) ether	45	3.409	3.409	(1.105)	316054	43.3696	3000
104	Acetophenone	105	3.550	3.547	(1.151)	345360	44.8562	3100
4	4-Methylphenol	108	3.617	3.614	(1.172)	338702	92.3465	6400
123	3 & 4 Methylphenol	108	3.617	3.614	(1.172)	338702	88.1309	6100
25	N-Nitroso-di-n-propylamine	70	3.573	3.577	(1.158)	192794	49.4270	3400
26	Hexachloroethane	117	3.595	3.599	(1.165)	113528	34.7482	2400
$ 76	Nitrobenzene-d5 (SUR)	82	3.692	3.696	(0.837)	362628	42.1915	2900
27	Nitrobenzene	77	3.714	3.718	(0.842)	402478	39.4882	2700
107	N,N-Dimethylaniline	120	3.714	3.718	(1.204)	234150	37.0460	2600
28	Isophorone	82	3.987	3.976	(0.903)	609758	44.6576	3100(MH)
5	2-Nitrophenol	139	4.045	4.043	(0.917)	287178	80.5532	5600
6	2,4-Dimethylphenol	122	4.162	4.154	(0.943)	365876	85.1075	5900
29	bis(2-Chloroethoxy)methane	93	4.228	4.221	(0.958)	277568	44.3396	3100
15	Benzoic Acid	122	4.405	4.412	(0.998)	110981	50.0832	3500(M)
7	2,4-Dichlorophenol	162	4.316	4.316	(0.978)	571861	97.3933	6800
30	1,2,4-Trichlorobenzene	180	4.368	4.369	(0.990)	210533	39.0561	2700
* 80	Naphthalene-d8	136	4.413	4.412	(1.000)	538119	40.0000	
31	Naphthalene	128	4.435	4.434	(1.005)	556101	40.3136	2800
32	4-Chloroaniline	127	4.524	4.531	(1.025)	160377	26.8586	1900
33	Hexachlorobutadiene	225	4.583	4.583	(1.039)	176319	40.1335	2800
111	Caprolactam	113	4.986	4.981	(1.130)	54816	38.8284	2700
8	4-Chloro-3-methylphenol	107	5.104	5.092	(1.157)	568301	89.9770	6200
34	2-Methylnaphthalene	142	5.140	5.137	(1.165)	441952	43.2779	3000
120	1-Methylnaphthalene	142	5.227	5.234	(1.184)	5579	0.53592	37(a)
35	Hexachlorocyclopentadiene	237	5.308	5.308	(0.861)	92185	25.1512	1700
129	1,2,4,5-Tetrachlorobenzene	216	5.315	5.316	(0.862)	242940	42.0162	2900
9	2,4,6-Trichlorophenol	196	5.463	5.463	(0.886)	312555	92.2032	6400
10	2,4,5-Trichlorophenol	196	5.515	5.508	(0.895)	356211	91.0222	6300
$ 77	2-Fluorobiphenyl (SUR)	172	5.530	5.529	(0.897)	511815	38.3465	2600
102	Diphenyl	154	5.620	5.619	(0.912)	755294	46.4166	3200
36	2-Chloronaphthalene	162	5.620	5.619	(0.912)	585020	44.0640	3000
103	Diphenyl Ether	170	5.725	5.722	(0.929)	334731	40.9395	2800
37	2-Nitroaniline	65	5.762	5.766	(0.935)	216768	49.8371	3400
38	Dimethylphthalate	163	5.963	5.959	(0.968)	812165	48.9437	3400
40	2,6-Dinitrotoluene	165	6.016	6.019	(0.976)	189548	51.4920	3600
39	Acenaphthylene	152	6.016	6.019	(0.976)	776801	41.5907	2900
41	3-Nitroaniline	138	6.170	6.175	(1.001)	108135	33.4257	2300
* 82	Acenaphthene-d10	164	6.162	6.160	(1.000)	430573	40.0000	
42	Acenaphthene	154	6.192	6.190	(1.005)	467139	44.3186	3100
11	2,4-Dinitrophenol	184	6.297	6.295	(1.022)	39388	22.5675	1600
12	4-Nitrophenol	65	6.423	6.414	(1.042)	261643	80.3081	5600
44	2,4-Dinitrotoluene	165	6.415	6.422	(1.041)	263464	50.9369	3500
43	Dibenzofuran	168	6.364	6.362	(1.033)	702311	41.7769	2900

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66382.d
Report Date: 30-Mar-2011 14:36

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	130 2,3,4,6-Tetrachlorophenol	232	6.520	6.518	(1.058)	140583	38.8804	2700
	45 Diethylphthalate	149	6.661	6.659	(1.081)	859388	46.4660	3200
	46 4-Chlorophenyl-phenylether	204	6.719	6.718	(1.090)	241201	49.7440	3400
	47 Fluorene	166	6.696	6.696	(1.087)	583680	41.7064	2900
	48 4-Nitroaniline	138	6.785	6.786	(1.101)	143211	45.8281	3200
	13 4,6-Dinitro-2-methylphenol	198	6.822	6.823	(0.898)	86598	37.8893	2600
	49 N-Nitrosodiphenylamine	169	6.852	6.853	(0.902)	408399	42.6613	3000
	75 1,2-Diphenylhydrazine	77	6.873	6.875	(0.905)	828004	44.1500	3100
$	18 2,4,6-Tribromophenol (SUR)	330	6.940	6.941	(1.126)	209578	91.1395	6300
	50 4-Bromophenyl-phenylether	248	7.183	7.184	(0.945)	204819	47.4747	3300
	51 Hexachlorobenzene	284	7.239	7.237	(0.953)	190397	43.0762	3000
	112 Atrazine	200	7.403	7.408	(0.974)	160966	40.5147	2800
	14 Pentachlorophenol	266	7.454	7.445	(0.981)	115097	38.4518	2700
	115 n-Octadecane	57	7.584	7.577	(0.998)	316330	46.6900	3200
*	83 Phenanthrene-d10	188	7.598	7.592	(1.000)	591641	40.0000	
	52 Phenanthrene	178	7.618	7.621	(1.003)	714660	42.3590	2900
	53 Anthracene	178	7.669	7.666	(1.009)	801129	45.8969	3200
	54 Carbazole	167	7.852	7.844	(1.034)	809040	43.6212	3000
	55 Di-n-butylphthalate	149	8.229	8.227	(1.083)	1454657	46.0285	3200
	56 Fluoranthene	202	8.761	8.757	(1.153)	781000	40.8736	2800
	58 Benzidine	184	8.924	8.927	(1.175)	13948	4.68126	320(aR)
	57 Pyrene	202	8.969	8.972	(0.884)	761126	58.4514	4000(R)
$	78 Terphenyl-d14	244	9.161	9.156	(0.903)	613348	57.7122	4000
	59 Butylbenzylphthalate	149	9.659	9.654	(0.952)	578736	59.4658	4100(R)
	60 3,3'-Dichlorobenzidine	252	10.135	10.132	(0.999)	168711	37.9945	2600
	61 Benzo(a)anthracene	228	10.135	10.132	(0.999)	582861	46.8501	3200
*	81 Chrysene-d12	240	10.142	10.146	(1.000)	431690	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.237	10.234	(1.009)	710375	57.9327	4000
	62 Chrysene	228	10.170	10.168	(1.003)	474478	50.2866	3500
	64 Di-n-octylphthalate	149	10.893	10.895	(0.934)	1015872	53.2436	3700(R)
	65 Benzo(b)fluoranthene	252	11.240	11.237	(0.964)	427675	47.3325	3300
	66 Benzo(k)fluoranthene	252	11.270	11.267	(0.967)	400982	48.6035	3400
	67 Benzo(a)pyrene	252	11.594	11.595	(0.994)	310438	46.2938	3200(R)
*	84 Perylene-d12	264	11.660	11.655	(1.000)	257988	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	12.921	12.919	(1.108)	354088	59.7394	4100(R)
	69 Dibenz(a,h)anthracene	278	12.935	12.933	(1.109)	267560	55.9649	3900(R)
	70 Benzo(g,h,i)perylene	276	13.222	13.213	(1.134)	302068	60.5566	4200(R)

QC Flag Legend

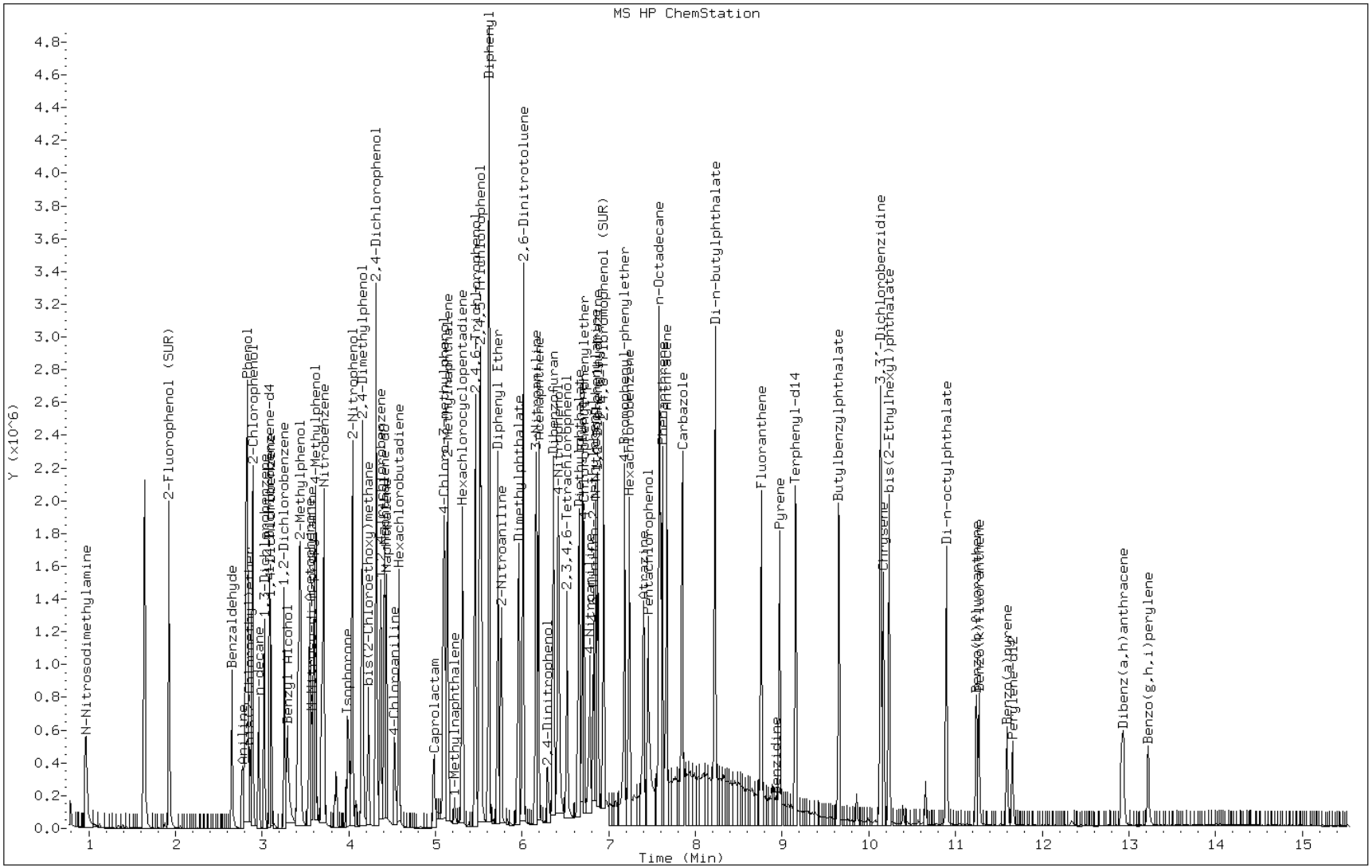
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: u66382.d

Date: 30-MAR-2011 12:10

Client ID: PMP-10-VD-E (3.5-4. Instrument: BNAMS4.i

Sample Info: 460-24277-F-7-A MS Operator: BNAMS 4



Manual Integration Report

Data File: u66382.d
Inj. Date and Time: 30-MAR-2011 12:10
Instrument ID: BNAMS4.i
Client ID: PMP-10-VD-E (3.5-4.
Compound: 28 Isophorone
CAS #: 78-59-1
Report Date: 03/30/2011

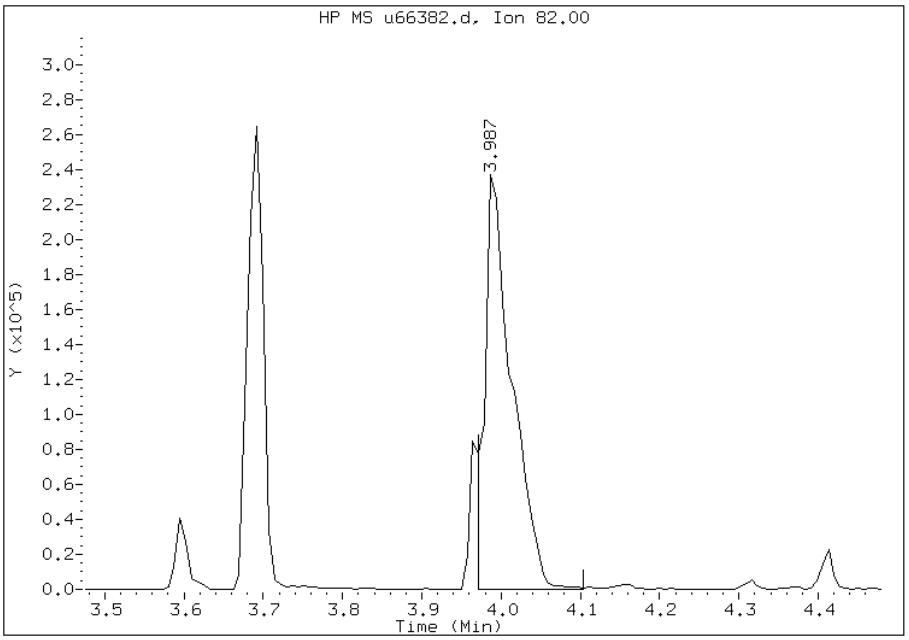
Processing Integration Results

RT: 3.99

Response: 559713

Amount: 41

Conc: 2842



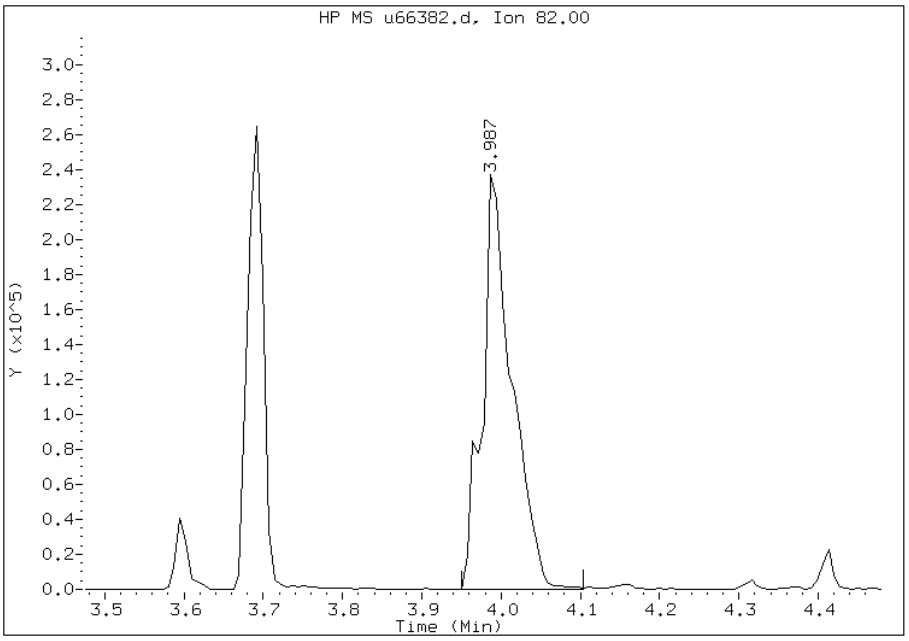
Manual Integration Results

RT: 3.99

Response: 609758

Amount: 45

Conc: 3096



Manually Integrated By: wahied
Manual Integration Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-B MSD

Matrix: Solid | Lab File ID: u66383.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.04(g) | Date Analyzed: 03/30/2011 12:30

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-95-2	Phenol	5550		340	42
95-57-8	2-Chlorophenol	5750		340	46
95-48-7	2-Methylphenol	5750		340	49
106-44-5	4-Methylphenol	5950		340	56
88-75-5	2-Nitrophenol	5500		340	56
105-67-9	2,4-Dimethylphenol	6330		340	55
120-83-2	2,4-Dichlorophenol	5790		340	55
59-50-7	4-Chloro-3-methylphenol	6010		340	58
88-06-2	2,4,6-Trichlorophenol	6060		340	61
95-95-4	2,4,5-Trichlorophenol	5990		340	66
51-28-5	2,4-Dinitrophenol	1170		1000	73
100-02-7	4-Nitrophenol	5160		1000	88
534-52-1	4,6-Dinitro-2-methylphenol	2020		1000	160
87-86-5	Pentachlorophenol	2110		1000	170
111-44-4	Bis(2-chloroethyl)ether	3690		34	7.2
541-73-1	1,3-Dichlorobenzene	2420		340	47
106-46-7	1,4-Dichlorobenzene	2490		340	51
95-50-1	1,2-Dichlorobenzene	2650		340	55
621-64-7	N-Nitrosodi-n-propylamine	3270		34	4.5
67-72-1	Hexachloroethane	2380		34	5.8
98-95-3	Nitrobenzene	2640		34	7.7
78-59-1	Isophorone	3060		340	39
111-91-1	Bis(2-chloroethoxy)methane	3080		340	49
120-82-1	1,2,4-Trichlorobenzene	2650		34	5.6
91-20-3	Naphthalene	2810		340	50
106-47-8	4-Chloroaniline	1950		340	43
87-68-3	Hexachlorobutadiene	2770		70	14
91-57-6	2-Methylnaphthalene	3060		340	50
77-47-4	Hexachlorocyclopentadiene	1770		340	100
91-58-7	2-Chloronaphthalene	3000		340	48
88-74-4	2-Nitroaniline	3380		700	94
131-11-3	Dimethyl phthalate	3240		340	46
208-96-8	Acenaphthylene	2850		340	49
606-20-2	2,6-Dinitrotoluene	3540		70	8.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-B MSD

Matrix: Solid | Lab File ID: u66383.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.04(g) | Date Analyzed: 03/30/2011 12:30

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
99-09-2	3-Nitroaniline	2340		700	78
83-32-9	Acenaphthene	2960		340	49
132-64-9	Dibenzofuran	2730		340	52
121-14-2	2,4-Dinitrotoluene	3120		70	10
84-66-2	Diethyl phthalate	3240		340	46
7005-72-3	4-Chlorophenyl phenyl ether	3370		340	59
86-73-7	Fluorene	3040		340	58
100-01-6	4-Nitroaniline	3100		700	71
86-30-6	N-Nitrosodiphenylamine	2820		340	56
101-55-3	4-Bromophenyl phenyl ether	2950		340	61
118-74-1	Hexachlorobenzene	2870		34	4.8
85-01-8	Phenanthrene	2950		340	60
120-12-7	Anthracene	2760		340	61
86-74-8	Carbazole	2770		340	55
84-74-2	Di-n-butyl phthalate	2870		340	53
206-44-0	Fluoranthene	2540		340	57
129-00-0	Pyrene	3660		340	59
85-68-7	Butyl benzyl phthalate	3910		340	40
91-94-1	3,3'-Dichlorobenzidine	2610		700	76
56-55-3	Benzo[a]anthracene	3150		34	6.4
218-01-9	Chrysene	3340		340	50
117-81-7	Bis(2-ethylhexyl) phthalate	3750		340	46
117-84-0	Di-n-octyl phthalate	3630		340	41
205-99-2	Benzo[b]fluoranthene	3160		34	5.1
207-08-9	Benzo[k]fluoranthene	3460		34	4.8
50-32-8	Benzo[a]pyrene	3310		34	4.2
193-39-5	Indeno[1,2,3-cd]pyrene	3880		34	5.5
53-70-3	Dibenz(a,h)anthracene	3910		34	4.1
191-24-2	Benzo[g,h,i]perylene	4350		340	36
108-60-1	bis (2-chloroisopropyl) ether	2760		340	45

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24277-F-7-B MSD

Matrix: Solid | Lab File ID: u66383.d

Analysis Method: 8270C | Date Collected: 03/17/2011 14:30

Extract. Method: 3541 | Date Extracted: 03/28/2011 22:00

Sample wt/vol: 15.04(g) | Date Analyzed: 03/30/2011 12:30

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 4.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68940 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5	80		38-105
4165-62-2	Phenol-d5	87		41-118
1718-51-0	Terphenyl-d14	107		16-151
118-79-6	2,4,6-Tribromophenol	86		10-120
367-12-4	2-Fluorophenol	79		37-125
321-60-8	2-Fluorobiphenyl	74		40-109

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66383.d
Report Date: 30-Mar-2011 14:37

TestAmerica

SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66383.d
Lab Smp Id: 460-24277-F-7-B MSD Client Smp ID: PMP-10-VD-E (3.5-4.
Inj Date : 30-MAR-2011 12:30
Operator : BNAMS 4 Inst ID: BNAMS4.i
Smp Info : 460-24277-F-7-B MSD
Misc Info : 460-24277-F-7-B MSD
Comment   :
Method   : /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/8270C_08SP.m
Meth Date : 30-Mar-2011 05:28 asfawa Quant Type: ISTD
Cal Date : 18-MAR-2011 06:37 Cal File: u66242.d
Als bottle: 26 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*1000*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.04000	Weight of sample extracted (g)
M	3.96040	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	106 1,4-Dioxane	88	0.794	0.749	(0.257)	38405	18.5809	1300(M)
	19 N-Nitrosodimethylamine	74	0.962	0.935	(0.311)	133848	42.6307	3000(R)
	71 Pyridine	79	0.976	0.942	(0.316)	128369	26.5709	1800
$	16 2-Fluorophenol (SUR)	112	1.930	1.911	(0.625)	367802	79.0540	5500
	110 Benzaldehyde	77	2.649	2.652	(0.858)	176861	87.0668	6000(R)
$	17 Phenol-d5 (SUR)	99	2.818	2.814	(0.913)	522118	87.4443	6000
	1 Phenol	94	2.833	2.828	(0.917)	502092	80.1060	5500
	73 Aniline	93	2.773	2.770	(0.898)	209284	28.1829	2000
	20 bis(2-Chloroethyl)ether	93	2.861	2.850	(0.927)	223416	53.3591	3700(R)
	2 2-Chlorophenol	128	2.891	2.887	(0.936)	446046	83.0014	5700
	113 n-decane	43	2.965	2.961	(0.960)	160749	28.2411	2000
	21 1,3-Dichlorobenzene	146	3.023	3.020	(0.979)	235389	34.8867	2400
*	79 1,4-Dichlorobenzene-d4	152	3.088	3.080	(1.000)	180776	40.0000	

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66383.d
Report Date: 30-Mar-2011 14:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kg)
	22 1,4-Dichlorobenzene	146	3.103	3.101	(1.005)	236275	35.8964	2500
	74 Benzyl Alcohol	108	3.295	3.284	(1.067)	132192	42.7839	3000
	23 1,2-Dichlorobenzene	146	3.258	3.254	(1.055)	257798	38.3097	2600
	3 2-Methylphenol	108	3.435	3.445	(1.113)	363003	83.1085	5800
	24 bis (2-chloroisopropyl) ether	45	3.414	3.409	(1.106)	312609	39.8007	2800
	104 Acetophenone	105	3.554	3.547	(1.151)	350532	42.2419	2900
	4 4-Methylphenol	108	3.622	3.614	(1.173)	339988	86.0064	6000
	123 3 & 4 Methylphenol	108	3.622	3.614	(1.173)	339988	82.0803	5700
	25 N-Nitroso-di-n-propylamine	70	3.577	3.577	(1.158)	198456	47.2063	3300
	26 Hexachloroethane	117	3.599	3.599	(1.166)	120855	34.3209	2400
$	76 Nitrobenzene-d5 (SUR)	82	3.694	3.696	(0.837)	357499	39.8345	2800
	27 Nitrobenzene	77	3.716	3.718	(0.842)	405976	38.1457	2600
	107 N,N-Dimethylaniline	120	3.716	3.718	(1.204)	237524	34.8674	2400
	28 Isophorone	82	3.990	3.976	(0.904)	629739	44.1692	3000
	5 2-Nitrophenol	139	4.049	4.043	(0.918)	295790	79.4577	5500
	6 2,4-Dimethylphenol	122	4.161	4.154	(0.943)	410414	91.4275	6300
	29 bis(2-Chloroethoxy)methane	93	4.227	4.221	(0.958)	290421	44.4295	3100
	15 Benzoic Acid	122	4.406	4.412	(0.998)	107776	46.5784	3200
	7 2,4-Dichlorophenol	162	4.316	4.316	(0.978)	512524	83.5937	5800
	30 1,2,4-Trichlorobenzene	180	4.369	4.369	(0.990)	215522	38.2896	2600
*	80 Naphthalene-d8	136	4.413	4.412	(1.000)	561898	40.0000	
	31 Naphthalene	128	4.436	4.434	(1.005)	584903	40.6072	2800
	32 4-Chloroaniline	127	4.525	4.531	(1.025)	175580	28.1603	1900
	33 Hexachlorobutadiene	225	4.583	4.583	(1.038)	183454	39.9904	2800
	111 Caprolactam	113	4.988	4.981	(1.130)	60202	40.8388	2800
	8 4-Chloro-3-methylphenol	107	5.100	5.092	(1.155)	572758	86.8450	6000
	34 2-Methylnaphthalene	142	5.143	5.137	(1.165)	471202	44.1895	3000
	120 1-Methylnaphthalene	142	5.232	5.234	(1.186)	8007	0.73661	51(a)
	35 Hexachlorocyclopentadiene	237	5.306	5.308	(0.861)	96896	25.5236	1800
	129 1,2,4,5-Tetrachlorobenzene	216	5.320	5.316	(0.863)	259758	43.3919	3000
	9 2,4,6-Trichlorophenol	196	5.467	5.463	(0.887)	307220	87.5370	6100
	10 2,4,5-Trichlorophenol	196	5.511	5.508	(0.894)	350567	86.5233	6000
$	77 2-Fluorobiphenyl (SUR)	172	5.533	5.529	(0.898)	510690	36.9567	2600
	102 Diphenyl	154	5.616	5.619	(0.911)	724362	42.9967	3000
	36 2-Chloronaphthalene	162	5.623	5.619	(0.912)	595453	43.3194	3000
	103 Diphenyl Ether	170	5.728	5.722	(0.929)	346611	40.9460	2800
	37 2-Nitroaniline	65	5.763	5.766	(0.935)	220160	48.8898	3400
	38 Dimethylphthalate	163	5.964	5.959	(0.968)	803787	46.7860	3200
	40 2,6-Dinitrotoluene	165	6.017	6.019	(0.976)	194755	51.1514	3500
	39 Acenaphthylene	152	6.017	6.019	(0.976)	794659	41.0950	2800
	41 3-Nitroaniline	138	6.171	6.175	(1.001)	113240	33.8093	2300
*	82 Acenaphthene-d10	164	6.164	6.160	(1.000)	445784	40.0000	
	42 Acenaphthene	154	6.194	6.190	(1.005)	466043	42.7060	3000
	11 2,4-Dinitrophenol	184	6.297	6.295	(1.022)	30236	16.9002	1200
	12 4-Nitrophenol	65	6.428	6.414	(1.043)	251166	74.4617	5200
	44 2,4-Dinitrotoluene	165	6.413	6.422	(1.040)	241516	45.1003	3100
	43 Dibenzofuran	168	6.363	6.362	(1.032)	687206	39.4835	2700

Data File: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b/u66383.d
Report Date: 30-Mar-2011 14:37

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/Kg)
	130 2,3,4,6-Tetrachlorophenol	232	6.518	6.518	(1.058)	140207	37.4533	2600
	45 Diethylphthalate	149	6.657	6.659	(1.080)	897047	46.8471	3200
	46 4-Chlorophenyl-phenylether	204	6.717	6.718	(1.090)	243247	48.6165	3400
	47 Fluorene	166	6.702	6.696	(1.087)	635504	43.8600	3000
	48 4-Nitroaniline	138	6.784	6.786	(1.101)	144719	44.7305	3100
	13 4,6-Dinitro-2-methylphenol	198	6.822	6.823	(0.898)	71522	29.2006	2000
	49 N-Nitrosodiphenylamine	169	6.851	6.853	(0.902)	424830	40.7414	2800
	75 1,2-Diphenylhydrazine	77	6.874	6.875	(0.905)	808204	39.5631	2700
$	18 2,4,6-Tribromophenol (SUR)	330	6.945	6.941	(1.127)	205055	86.1299	6000
	50 4-Bromophenyl-phenylether	248	7.183	7.184	(0.946)	200205	42.6028	2900
	51 Hexachlorobenzene	284	7.241	7.237	(0.953)	199796	41.4988	2900
	112 Atrazine	200	7.403	7.408	(0.975)	154151	35.6202	2500
	14 Pentachlorophenol	266	7.453	7.445	(0.981)	98302	30.5257	2100
	115 n-Octadecane	57	7.582	7.577	(0.998)	320521	43.4321	3000
*	83 Phenanthrene-d10	188	7.596	7.592	(1.000)	644447	40.0000	
	52 Phenanthrene	178	7.624	7.621	(1.004)	782226	42.5647	2900
	53 Anthracene	178	7.667	7.666	(1.009)	758999	39.9203	2800
	54 Carbazole	167	7.850	7.844	(1.034)	809098	40.0497	2800
	55 Di-n-butylphthalate	149	8.231	8.227	(1.084)	1425483	41.4094	2900
	56 Fluoranthene	202	8.764	8.757	(1.154)	764234	36.7188	2500
	58 Benzidine	184	8.926	8.927	(1.175)	18248	5.62260	390
	57 Pyrene	202	8.971	8.972	(0.884)	708971	52.8438	3600
$	78 Terphenyl-d14	244	9.161	9.156	(0.903)	583312	53.2707	3700
	59 Butylbenzylphthalate	149	9.656	9.654	(0.952)	565900	56.4356	3900
	60 3,3'-Dichlorobenzidine	252	10.137	10.132	(0.999)	172292	37.6590	2600
	61 Benzo(a)anthracene	228	10.130	10.132	(0.999)	583099	45.4899	3100
*	81 Chrysene-d12	240	10.144	10.146	(1.000)	444780	40.0000	
	63 bis(2-Ethylhexyl)phthalate	149	10.232	10.234	(1.009)	684930	54.2137	3800
	62 Chrysene	228	10.172	10.168	(1.003)	469218	48.2656	3300
	64 Di-n-octylphthalate	149	10.900	10.895	(0.935)	995475	52.4811	3600
	65 Benzo(b)fluoranthene	252	11.241	11.237	(0.964)	410376	45.6848	3200
	66 Benzo(k)fluoranthene	252	11.271	11.267	(0.967)	410496	50.0491	3500
	67 Benzo(a)pyrene	252	11.600	11.595	(0.995)	318891	47.8338	3300(R)
*	84 Perylene-d12	264	11.658	11.655	(1.000)	256481	40.0000	
	68 Indeno(1,2,3-cd)pyrene	276	12.919	12.919	(1.108)	329944	55.9930	3900(R)
	69 Dibenz(a,h)anthracene	278	12.942	12.933	(1.110)	268762	56.5466	3900(R)
	70 Benzo(g,h,i)perylene	276	13.222	13.213	(1.134)	311740	62.8628	4400(R)

QC Flag Legend

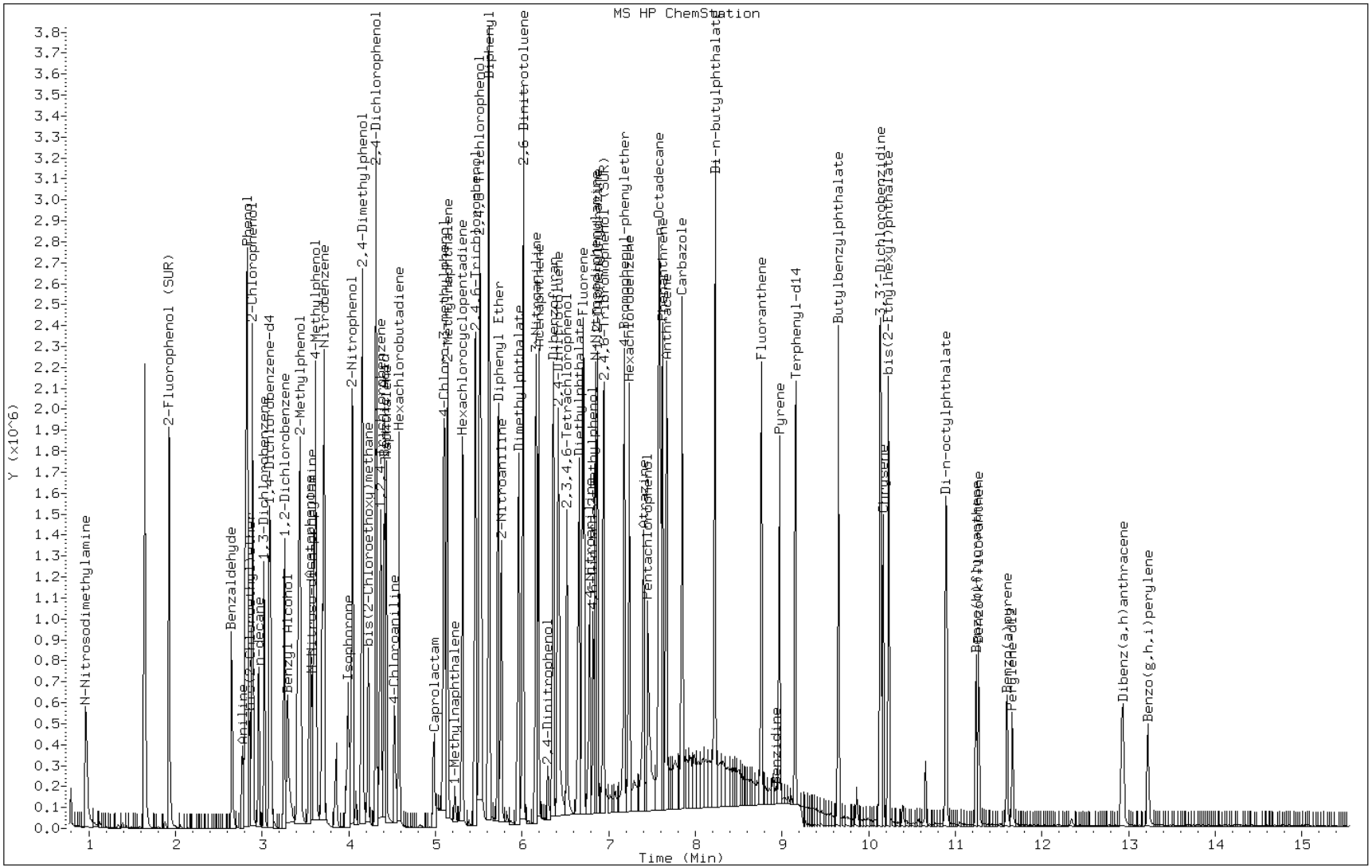
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: u66383.d

Date: 30-MAR-2011 12:30

Client ID: PMP-10-VD-E (3.5-4. Instrument: BNAMS4.i

Sample Info: 460-24277-F-7-B MSD Operator: BNAMS 4



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: BNAMS4 Start Date: 03/18/2011 04:57

Analysis Batch Number: 67964 End Date: 03/18/2011 07:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 460-67964/1		03/18/2011 04:57	1	u66239.d	Rtx-5MS 0.25(mm)
ICIS 460-67964/2		03/18/2011 05:47	1	u66240.d	Rtx-5MS 0.25(mm)
IC 460-67964/3		03/18/2011 06:17	1	u66241.d	Rtx-5MS 0.25(mm)
IC 460-67964/4		03/18/2011 06:37	1	u66242.d	Rtx-5MS 0.25(mm)
IC 460-67964/5		03/18/2011 06:57	1	u66243.d	Rtx-5MS 0.25(mm)
IC 460-67964/6		03/18/2011 07:16	1	u66244.d	Rtx-5MS 0.25(mm)
IC 460-67964/7		03/18/2011 07:36	1	u66245.d	Rtx-5MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: BNAMS4 Start Date: 03/30/2011 03:28

Analysis Batch Number: 68940 End Date: 03/30/2011 13:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 460-68940/1		03/30/2011 03:28	1	u66357.d	Rtx-5MS 0.25(mm)
CCVIS 460-68940/2		03/30/2011 04:01	1	u66358.d	Rtx-5MS 0.25(mm)
LCS 460-68798/2-A		03/30/2011 04:24	1	u66359.d	Rtx-5MS 0.25(mm)
MB 460-68798/1-A		03/30/2011 05:27	1	u66362.d	Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 06:26	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 06:45	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 07:05	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 07:25	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 07:44	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 08:04	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 08:24	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 09:13	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 09:33	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 09:53	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 10:12	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 10:32	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 10:52	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 11:11	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 11:31	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 11:50	1		Rtx-5MS 0.25(mm)
460-24277-F-7-A MS		03/30/2011 12:10	1	u66382.d	Rtx-5MS 0.25(mm)
460-24277-F-7-B MSD		03/30/2011 12:30	1	u66383.d	Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 12:49	1		Rtx-5MS 0.25(mm)
460-24356-1	GPEC-WC-031911	03/30/2011 13:09	1	u66385.d	Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 13:28	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/30/2011 13:48	2		Rtx-5MS 0.25(mm)

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAMS4.i

Analytical Batch: /chem/BNAMS4.i/8270T/03-18-11/18mar11a.b

Date Generated: 03/21/2011

Page 1

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/18/11 0457	u66239.d	96	DFTPP-697155			0	0	1	2.0	all	4577	a 67964
03/18/11 0547	u66240.d	1	ICVIS-871725			15	1	1	1.0	all	4548	a
03/18/11 0617	u66241.d	2	IC-871727			15	1	1	1.0	all	4548	a
03/18/11 0637	u66242.d	3	IC-871721			15	1	1	1.0	all	4548	a
03/18/11 0657	u66243.d	4	IC-871726			15	1	1	1.0	all	4548	a
03/18/11 0716	u66244.d	5	IC-871724			15	1	1	1.0	all	4548	a
03/18/11 0736	u66245.d	6	IC-871722			15	1	1	1.0	all	4548	a
03/18/11 0756	u66246.d	7	ICV	18mar11a		15	1	1	1.0	all	4	a

Signed: W Read and Understood by:

Date: 3/21/11 Date: 3-21-11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAMS4.i

Analytical Batch: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b

Date Generated: 03/30/2011

Page 1

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
												68940
03/30/11 0328	u66357.d	96	DFTPP-697155	—	—	0	0	1	2.0	all	4577	G
03/30/11 0401	u66358.d	1	CCVIS-871725	—	—	15	1	1	1.0	all	4577	no benzaldehyde G benzidine
03/30/11 0424	u66359.d	2	LCS 460-68798/2-A	30mar11a	—	15	1	1	1.0	all	—	G
03/30/11 0444	u66360.d	3	MB 460-68798/1-A	30mar11a	—	15	1	1	1.0	all	—	RR Told high
03/30/11 0503	u66361.d	4	460-24216-A-1-C	460-68798	03/28/11	15	1	1	1.0	all	—	RR Told high
03/30/11 0527	u66362.d	5	MB 460-68798/1-A	30mar11a	—	15	1	1	1.0	all	—	G
03/30/11 0546	u66363.d	6	460-24216-A-1-C	460-68798	03/28/11	15	1	1	1.0	all	—	RR Told high
03/30/11 0606	u66364.d	7	460-24216-A-3-C	460-68798	03/28/11	15.0	1	1	1.0	all	—	RR Told high
03/30/11 0626	u66365.d	8	460-24226-E-1-G	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0645	u66366.d	9	460-24226-E-3-E	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0705	u66367.d	10	460-24277-F-9-A	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0725	u66368.d	11	460-24277-F-10-A	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0744	u66369.d	12	460-24216-A-4-C	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0804	u66370.d	13	460-24689-D-2-B	460-68872	03/29/11	15.0	1	1	1.0	all	—	G

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAMS4.i

Analytical Batch: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b

Date Generated: 03/30/2011

Page 2

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/30/11 0824	u66371.d	14	460-24689-D-3-B	460-68872	03/29/11	15.0	1	1	1.0	all	—	G
03/30/11 0843	u66372.d	15	460-24689-D-1-D	460-68872	03/29/11	15	1	1	1.0	all	—	G
03/30/11 0913	u66373.d	16	460-24277-F-11-A	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0933	u66374.d	17	460-24140-D-6-B	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 0953	u66375.d	18	460-24226-E-6-E	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 1012	u66376.d	19	460-24226-E-13-E	460-68798	03/28/11	15	1	1	1.0	all	—	G
03/30/11 1032	u66377.d	20	460-24216-A-2-C	460-68798	03/28/11	15	1	1	1.0	all	—	G
03/30/11 1052	u66378.d	21	460-24642-B-8-E	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 1111	u66379.d	22	460-24226-E-10-E	460-68798	03/28/11	15.1	1	1	1.0	all	—	G
03/30/11 1131	u66380.d	23	460-24332-A-4-B	460-68798	03/28/11	15	1	1	1.0	all	—	G
03/30/11 1150	u66381.d	24	460-24642-B-9-E	460-68798	03/28/11	15.1	1	1	1.0	all	—	G
03/30/11 1210	u66382.d	25	460-24277-F-7-A MS	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 1230	u66383.d	26	460-24277-F-7-B MSD	460-68798	03/28/11	15.0	1	1	1.0	all	—	G
03/30/11 1249	u66384.d	27	460-24277-F-7-C	460-68798	03/28/11	15.0	1	1	1.0	all	—	G

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAMS4.i

Analytical Batch: /chem/BNAMS4.i/8270T/03-18-11/30mar11a.b

Date Generated: 03/30/2011

Page 3

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/30/11 1309	u66385.d	28	460-24356-A-1-G	460-68798	03/28/11	15	1	1	1.0	all	-	6
03/30/11 1328	u66386.d	29	460-24226-E-15-E	460-68798	03/28/11	15	1	1	1.0	all	-	6
03/30/11 1348	u66387.d	30	460-24277-F-8-A	460-68798	03/28/11	15	1	2	1.0	all	-	6 matrix interference

Signed: Michael Crowe Read and Understood by: [signature]

Date: 3/30/11 Date: 03.30.11

04/05/2011

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GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68798 Batch Start Date: 03/28/11 22:00 Batch Analyst: Masongo, Charles

Batch Method: 3541 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SoxThermPosition	OP_Acid_SU 00013	OP_BN_SU 00015	OP8270SP 00018
MB 460-68798/1		3541, 8270C		15.00 g	1 mL	73	500 uL	500 uL	
LCS 460-68798/2		3541, 8270C		15.03 g	1 mL	74	500 uL	500 uL	500 uL
460-24277-F-7 MS		3541, 8270C	T	15.02 g	1 mL	75	500 uL	500 uL	500 uL
460-24277-F-7 MSD		3541, 8270C	T	15.04 g	1 mL	76	500 uL	500 uL	500 uL
460-24356-A-1	GPEC-WC-031911	3541, 8270C	T	15.00 g	1 mL	85	500 uL	500 uL	

Batch Notes	
Balance ID	28
Batch Comment	BNA 8270C SOIL
Blank Soil Lot Number	J41625
Person's name who did the concentration	CM
Vendor lot number	J42E01
Na2SO4 Lot Number	J41625
Person's name who did the prep	CM
Person's name who witnessed reagent drop	JR
Solvent	MeCl2/Acetone mixture
SOP Number	3541
First Start time	10pm

Basis	Basis Description
T	Total/NA

Method 8015B - GRO

Gasoline Range Organics (GC) by Method 8015B

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Medium

GC Column (1): Rtx-502.2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
GPEC-WC-031911	460-24356-1	91
	MB 460-68719/4	99
	LCS 460-68719/2	97
	460-24323-A-8-A MS	97
	460-24323-A-8-A MSD	94

	QC LIMITS
TFT = a,a,a-Trifluorotoluene	68-143

Column to be used to flag recovery values

FORM II 8015B

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: ifid7859.d

Lab ID: LCS 460-68719/2 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
GRO	20000	19200	96	26-123	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: ifid7871.d

Lab ID: 460-24323-A-8-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
GRO	20700	5800	26400	100	26-123	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: ifid7872.d

Lab ID: 460-24323-A-8-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
GRO	20700	26900	102	2	30	26-123	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: MB 460-68719/4

Matrix: Solid Date Extracted:

Lab File ID:(1) ifid7862.d Lab File ID:(2)

Date Analyzed:(1) 03/27/2011 19:55 Date Analyzed:(2)

Instrument ID:(1) VOAGC3 Instrument ID:(2)

GC Column:(1) Rtx-502.2 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 460-68719/2	03/27/2011 18:42	
	460-24323-A-8-A MS	03/27/2011 23:36	
	460-24323-A-8-A MSD	03/28/2011 00:01	
GPEC-WC-031911	460-24356-1	03/28/2011 01:38	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: ifid7876.d

Analysis Method: 8015B Date Collected: 03/19/2011 16:45

Sample wt/vol: 5.08(g) Date Analyzed: 03/28/2011 01:38

Soil Aliquot Vol: 5 (mL) Dilution Factor: 50

Soil Extract Vol.: 10(mL) GC Column: Rtx-502.2 ID: 0.53(mm)

% Moisture: 16.9 Level: (low/med) Medium

Analysis Batch No.: 68719 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00215	GRO	3000	U	3000	3000

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	91		68-143

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7876.d
Report Date: 29-Mar-2011 08:34

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7876.d
Lab Smp Id: 460-24356-A-1-D Client Smp ID: GPEC-WC-031911
Inj Date : 28-MAR-2011 01:38
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : 460-24356-A-1-D
Misc Info : 460-24356-A-1-D
Comment   :
Method   : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 28-Mar-2011 17:07 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.08000	Weight of sample extracted (g)
M	16.86747	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

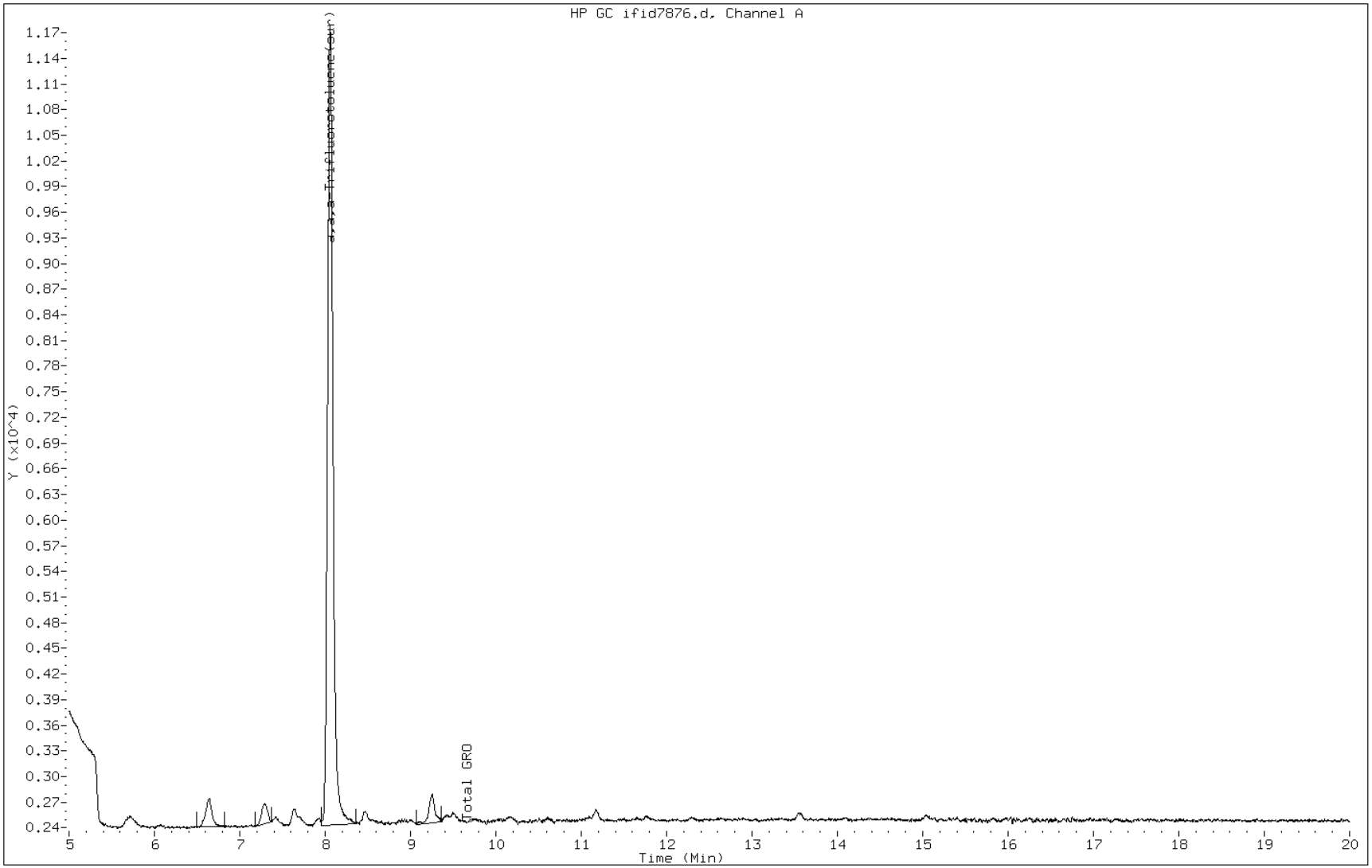
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/kg)	CONCENTRATIONS FINAL (ug/Kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.058	8.054	0.004	207317	22.6925	2700
S 12 Total GRO	Compound Not Detected.					

Data File: ifid7876.d

Date: 28-MAR-2011 01:38

Client ID: GPEC-WC-031911 Instrument: VOAGC3.i

Sample Info: 460-24356-A-1-D Operator: VGC3



FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64052

SDG No.:

Instrument ID: VOAGC3 GC Column: Rtx-502.2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/09/2011 09:03 Calibration End Date: 02/09/2011 10:41 Calibration ID: 9618

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-64052/2	ifid6983.d
Level 2	IC 460-64052/3	ifid6984.d
Level 3	IC 460-64052/4	ifid6985.d
Level 4	IC 460-64052/5	ifid6986.d
Level 5	IC 460-64052/6	ifid6987.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
GRO	11.483	11.483	11.483	11.483	11.483						5.625 - 17.340	11.483
a,a,a-Trifluorotoluene	8.056	8.056	8.051	8.054	8.054						7.954 - 8.154	8.054

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64052

SDG No.:

Instrument ID: VOAGC3 GC Column: Rtx-502.2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/09/2011 09:03 Calibration End Date: 02/09/2011 10:41 Calibration ID: 9618

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-64052/2	ifid6983.d
Level 2	IC 460-64052/3	ifid6984.d
Level 3	IC 460-64052/4	ifid6985.d
Level 4	IC 460-64052/5	ifid6986.d
Level 5	IC 460-64052/6	ifid6987.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
GRO	12084 12374	13159	12623	12342	Ave		12516.3381				3.3					
a,a,a-Trifluorotoluene	8855.0 8995.7	9370.0	9274.8	9184.2	Ave		9135.92928				2.3					

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 64052

SDG No.:

Instrument ID: VOAGC3 GC Column: Rtx-502.2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/09/2011 09:03 Calibration End Date: 02/09/2011 10:41 Calibration ID: 9618

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-64052/2	ifid6983.d
Level 2	IC 460-64052/3	ifid6984.d
Level 3	IC 460-64052/4	ifid6985.d
Level 4	IC 460-64052/5	ifid6986.d
Level 5	IC 460-64052/6	ifid6987.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
GRO	Ave	302102	1315903	2524583	6170949	12373767	25.0	100	200	500	1000
a,a,a-Trifluorotoluene	Ave	8855	46850	92748	183683	359827	1.00	5.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6983.d
Report Date: 09-Feb-2011 09:30

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6983.d
Lab Smp Id: IC
Inj Date : 09-FEB-2011 09:03
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : IC
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/GRO_09.m
Meth Date : 09-Feb-2011 09:30 barsoums Quant Type: ESTD
Cal Date : 09-FEB-2011 09:03 Cal File: ifid6983.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

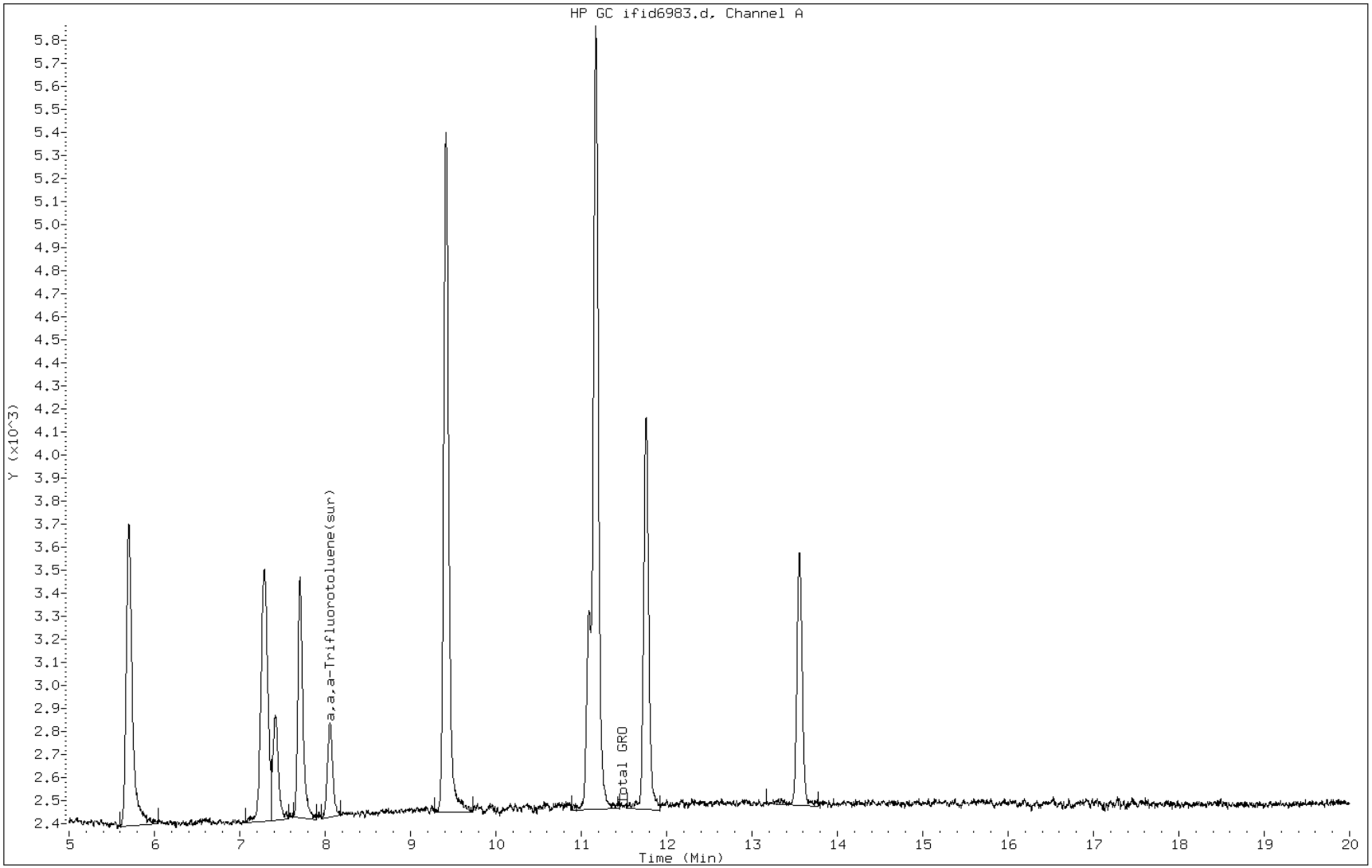
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.056	8.061	-0.005	8855	1.00000	1.0
S 12 Total GRO	5.625-17.340			302102	25.0000	25

Data File: ifid6983.d

Date: 09-FEB-2011 09:03

Client ID: Instrument: VOAGC3.i

Sample Info: IC Operator: VGC3



Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6984.d
Report Date: 09-Feb-2011 09:30

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6984.d
Lab Smp Id: IC
Inj Date : 09-FEB-2011 09:28
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : IC
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/GRO_09.m
Meth Date : 09-Feb-2011 09:30 barsoums Quant Type: ESTD
Cal Date : 09-FEB-2011 09:28 Cal File: ifid6984.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

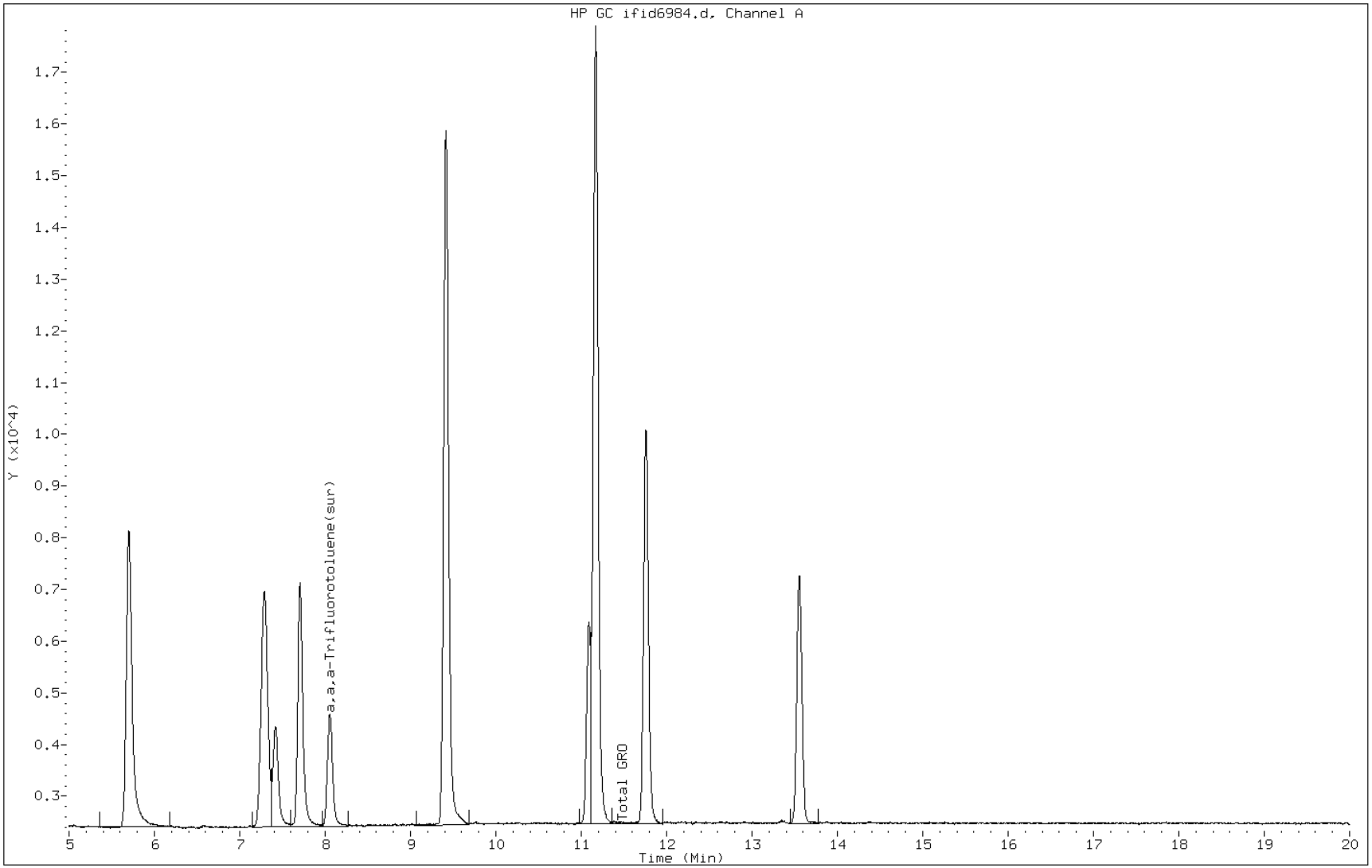
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.056	8.061	-0.005	46850	5.00000	5.1
S 12 Total GRO	5.625-17.340			1315903	100.000	100

Data File: ifid6984.d

Date: 09-FEB-2011 09:28

Client ID: Instrument: VOAGC3.i

Sample Info: IC Operator: VGC3



Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6985.d
Report Date: 09-Feb-2011 09:53

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6985.d
Lab Smp Id: IC
Inj Date : 09-FEB-2011 09:52
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : IC
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/GRO_09.m
Meth Date : 09-Feb-2011 09:53 barsoums Quant Type: ESTD
Cal Date : 09-FEB-2011 09:52 Cal File: ifid6985.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

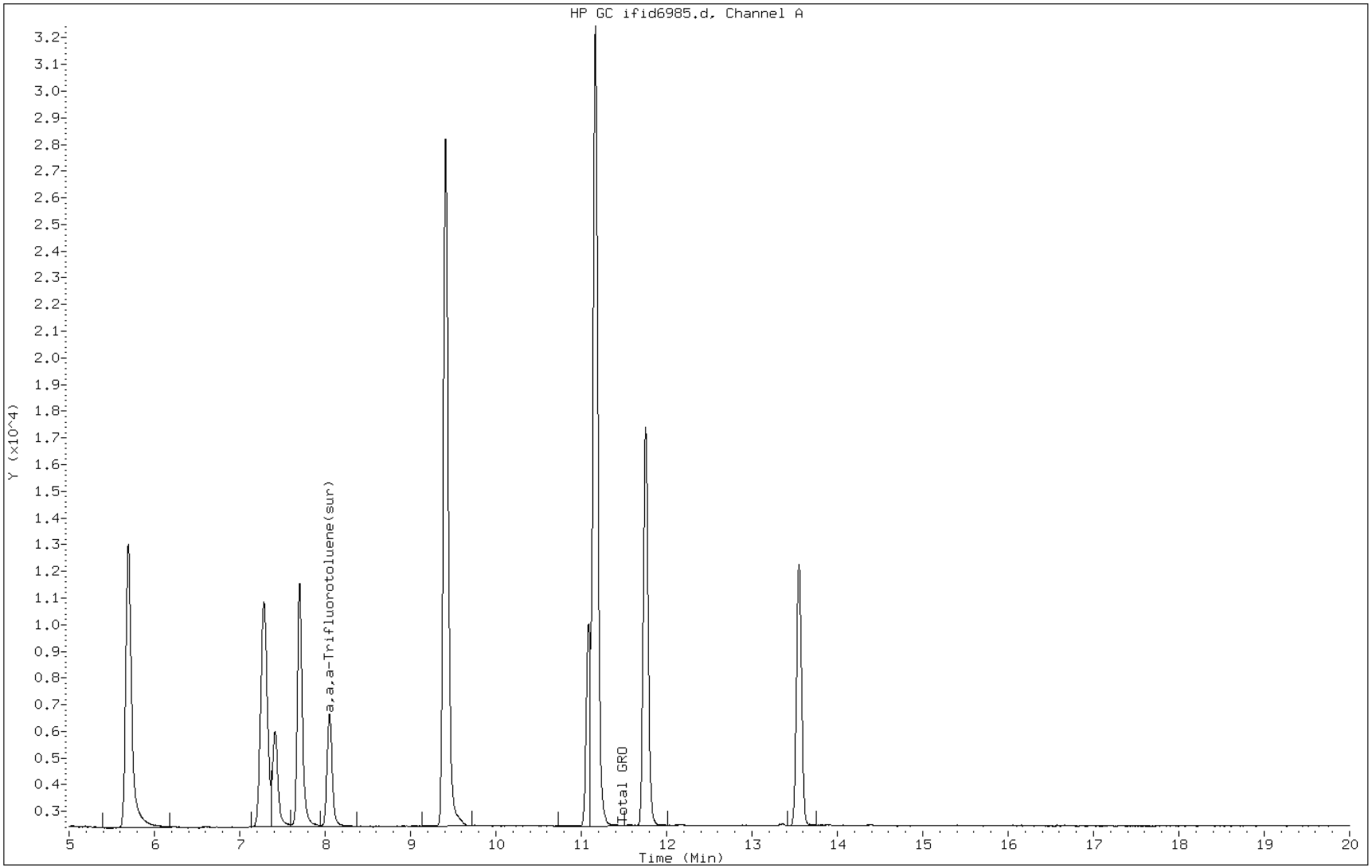
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.051	8.061	-0.010	92748	10.0000	10
S 12 Total GRO	5.625-17.340			2524583	200.000	200

Data File: ifid6985.d

Date: 09-FEB-2011 09:52

Client ID: Instrument: VOAGC3.i

Sample Info: IC Operator: VGC3



Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6986.d
Report Date: 09-Feb-2011 10:18

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6986.d
Lab Smp Id: IC
Inj Date : 09-FEB-2011 10:17
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : IC
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/GRO_09.m
Meth Date : 09-Feb-2011 10:18 barsoums Quant Type: ESTD
Cal Date : 09-FEB-2011 10:17 Cal File: ifid6986.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

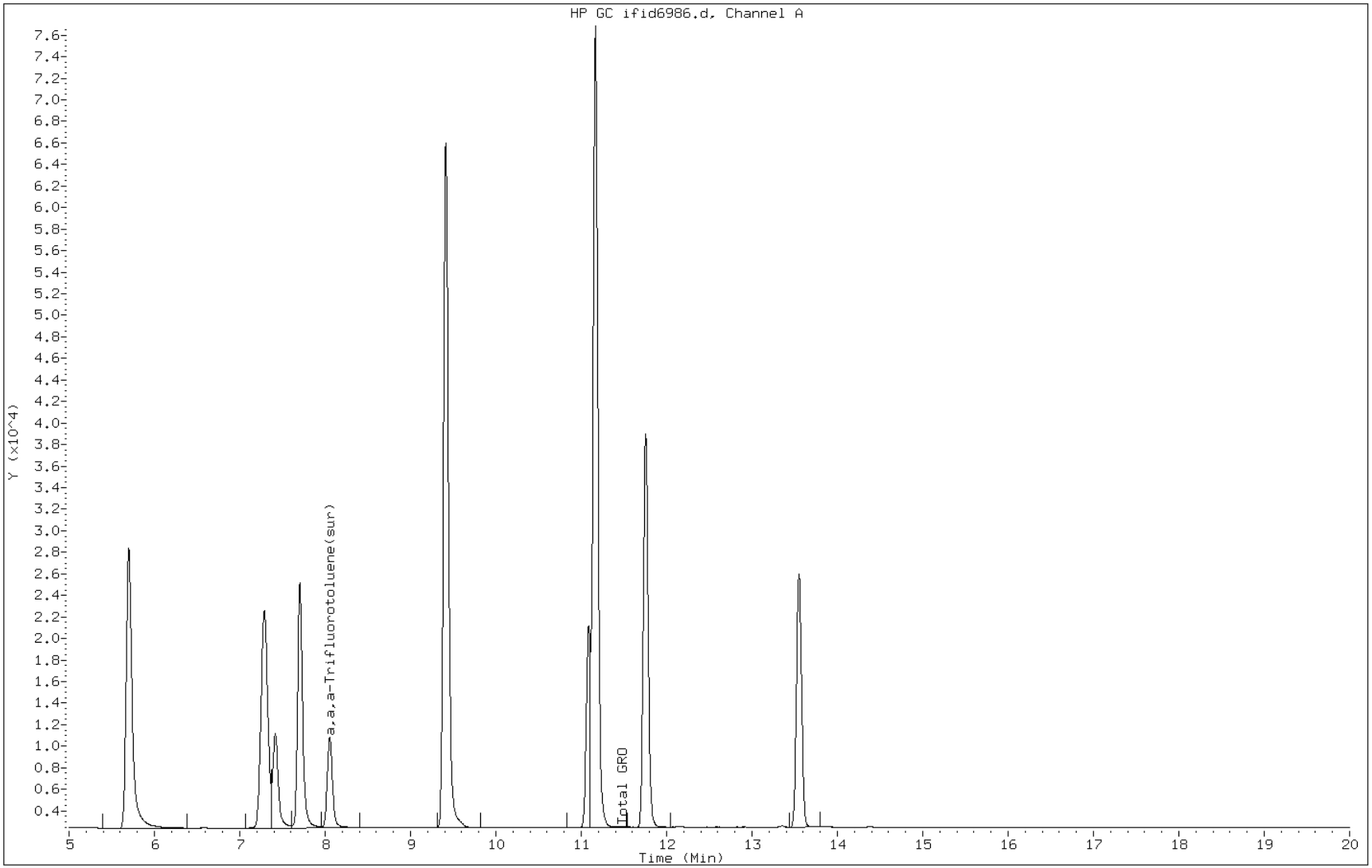
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.054	8.054	0.000	183683	20.0000	20
S 12 Total GRO	5.625-17.340			6170949	500.000	490

Data File: ifid6986.d

Date: 09-FEB-2011 10:17

Client ID: Instrument: VOAGC3.i

Sample Info: IC Operator: VGC3



Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6987.d
Report Date: 09-Feb-2011 10:42

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/ifid6987.d
Lab Smp Id: IC
Inj Date : 09-FEB-2011 10:41
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : IC
Misc Info :
Comment   :
Method   : /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b/GRO_09.m
Meth Date : 09-Feb-2011 10:42 barsoums Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

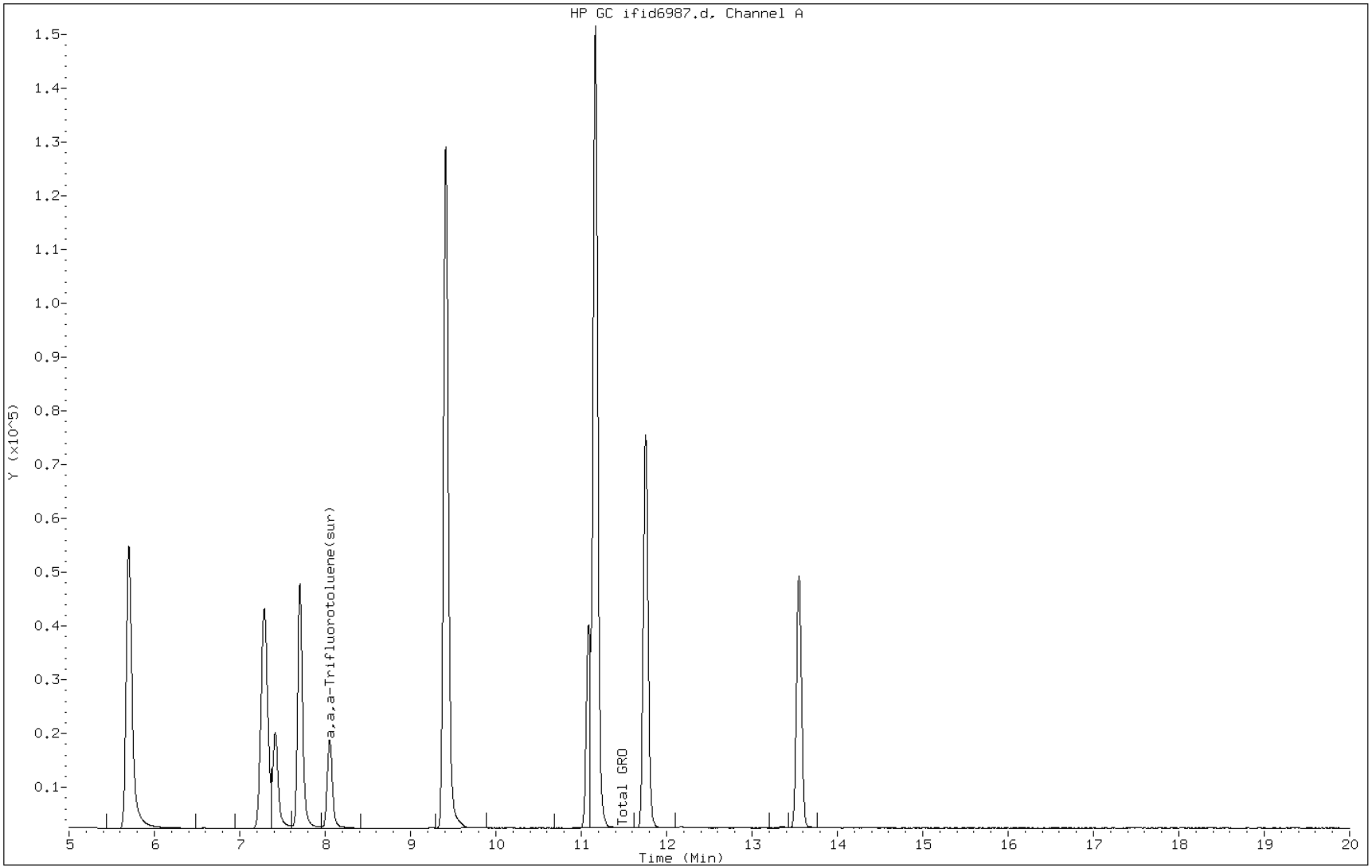
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.053	8.054	-0.001	359827	40.0000	39
S 12 Total GRO	5.625-17.340			12373767	1000.00	990

Data File: ifid6987.d

Date: 09-FEB-2011 10:41

Client ID: Instrument: VOAGC3.i

Sample Info: IC Operator: VGC3



FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/1 Calibration Date: 03/27/2011 18:17

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7858.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
GRO	Ave	12516	12520		500	500	0.0	15.0
a,a,a-Trifluorotoluene	Ave	9136	9799		21.5	20.0	7.3	15.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/1 Calibration Date: 03/27/2011 18:17

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7858.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
GRO	9.66	5.50	13.82
a,a,a-Trifluorotoluene	8.06	7.95	8.15

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7858.d
Report Date: 27-Mar-2011 19:29

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7858.d
Lab Smp Id: CCV
Inj Date : 27-MAR-2011 18:17
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : CCV
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 27-Mar-2011 19:29 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

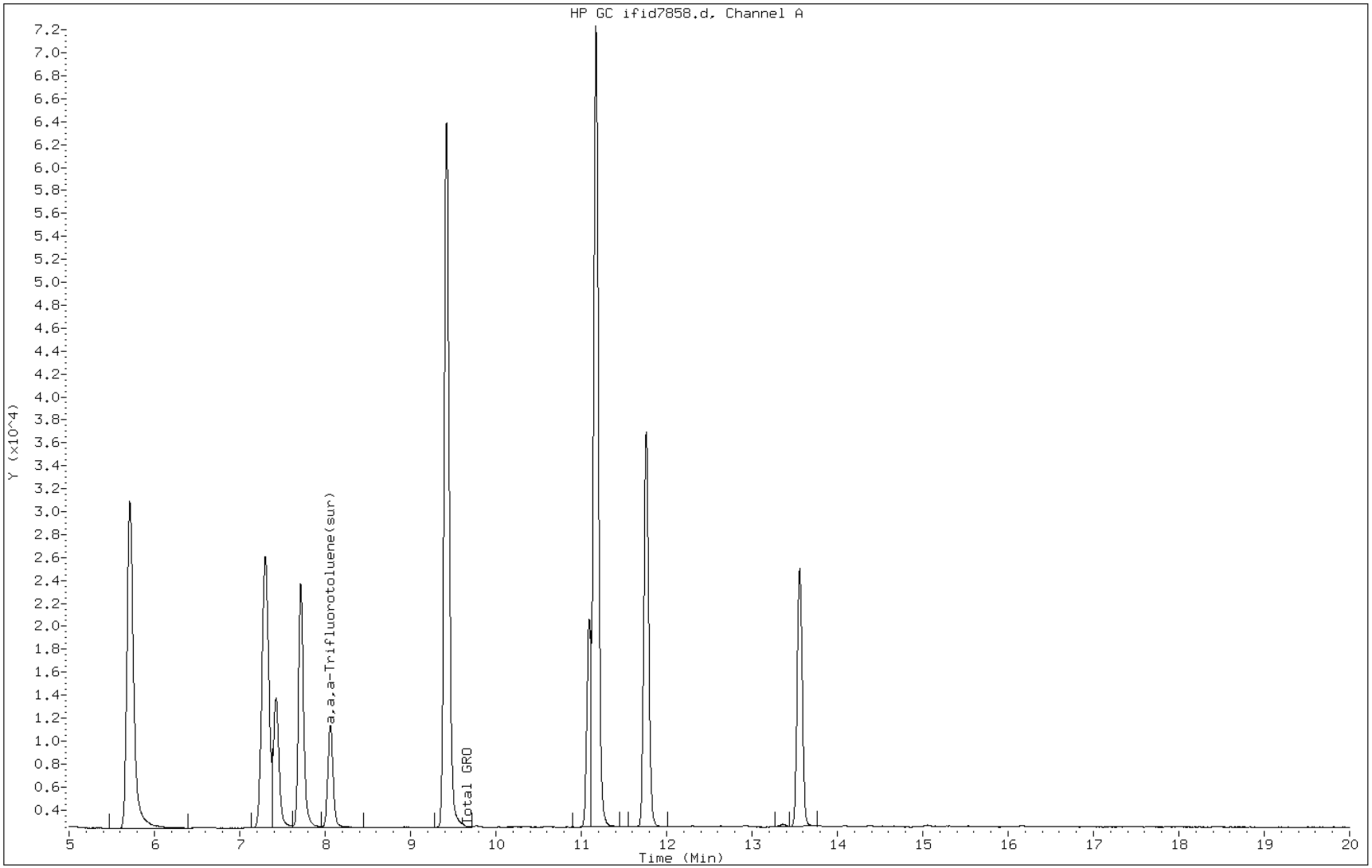
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/kg)	AMOUNTS ON-COL (ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.061	8.061	0.000	195980	20.0000	21
S 12 Total GRO	5.500-13.820			6260021	500.000	500

Data File: ifid7858.d

Date: 27-MAR-2011 18:17

Client ID: Instrument: VOAGC3.i

Sample Info: CCV Operator: VGC3



FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/15 Calibration Date: 03/28/2011 00:50

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7874.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
GRO	Ave	12516	12362		494	500	-1.2	15.0
a,a,a-Trifluorotoluene	Ave	9136	9294		20.3	20.0	1.7	15.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/15 Calibration Date: 03/28/2011 00:50

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7874.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
GRO	9.66	5.50	13.82
a,a,a-Trifluorotoluene	8.05	7.95	8.15

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7874.d
Report Date: 28-Mar-2011 17:07

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7874.d
Lab Smp Id: CCV
Inj Date : 28-MAR-2011 00:50
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : CCV
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 28-Mar-2011 17:07 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

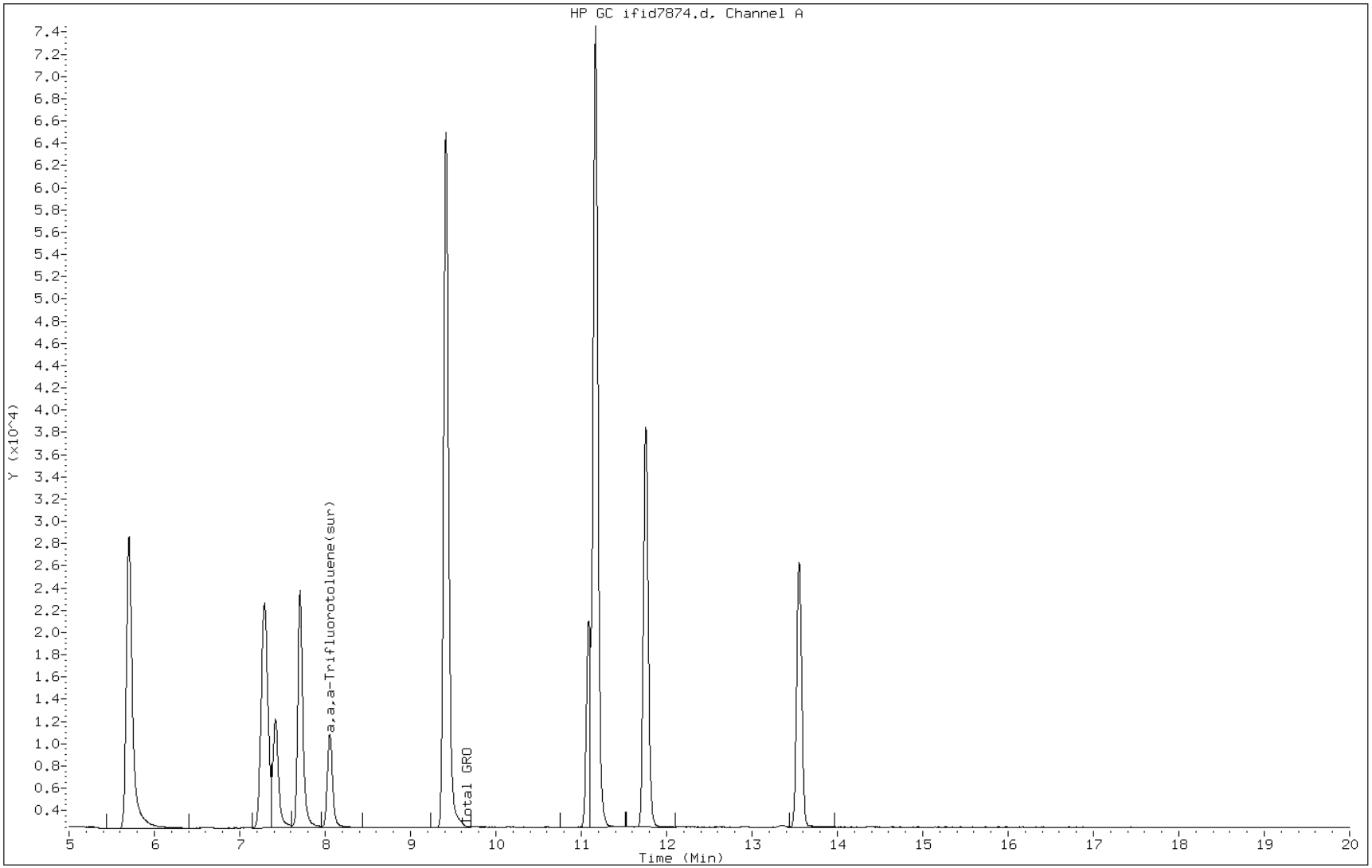
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/kg)	AMOUNTS ON-COL (ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.055	8.055	0.000	185870	20.0000	20
S 12 Total GRO	5.500-13.820			6180915	500.000	490

Data File: ifid7874.d

Date: 28-MAR-2011 00:50

Client ID: Instrument: VOAGC3.i

Sample Info: CCV Operator: VGC3



FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/23 Calibration Date: 03/28/2011 05:18

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7885.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
GRO	Ave	12516	11338		453	500	-9.4	15.0
a,a,a-Trifluorotoluene	Ave	9136	8030		17.6	20.0	-12.1	15.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68719/23 Calibration Date: 03/28/2011 05:18

Instrument ID: VOAGC3 Calib Start Date: 02/09/2011 09:03

GC Column: Rtx-502.2 ID: 0.53(mm) Calib End Date: 02/09/2011 10:41

Lab File ID: ifid7885.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
GRO	9.66	5.50	13.82
a,a,a-Trifluorotoluene	8.05	7.95	8.15

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7885.d
Report Date: 28-Mar-2011 17:07

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7885.d
Lab Smp Id: CCV
Inj Date : 28-MAR-2011 05:18
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : CCV
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 28-Mar-2011 17:07 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

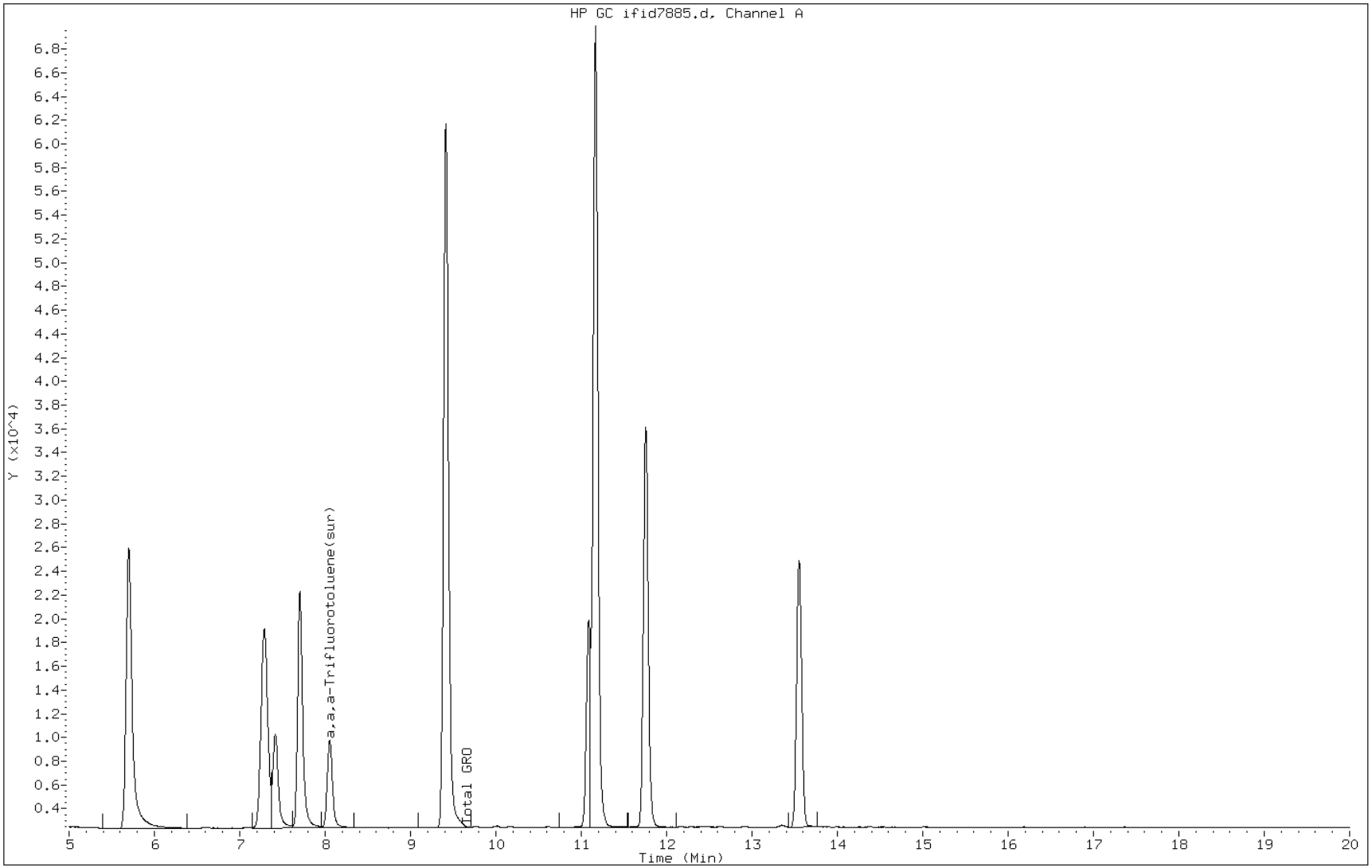
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.054	8.054	0.000	160607	20.0000	18
S 12 Total GRO	5.500-13.820			5669140	500.000	450

Data File: ifid7885.d

Date: 28-MAR-2011 05:18

Client ID: Instrument: VOAGC3.i

Sample Info: CCV Operator: VGC3



FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68719/4

Matrix: Solid Lab File ID: ifid7862.d

Analysis Method: 8015B Date Collected:

Sample wt/vol: 2.5(mL) Date Analyzed: 03/27/2011 19:55

Soil Aliquot Vol: 2.5 (mL) Dilution Factor: 50

Soil Extract Vol.: 5(mL) GC Column: Rtx-502.2 ID: 0.53(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 68719 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00215	GRO	2500	U	2500	2500

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	99		68-143

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7862.d
Report Date: 27-Mar-2011 20:57

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7862.d
Lab Smp Id: MB
Inj Date : 27-MAR-2011 19:55
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : MB
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 27-Mar-2011 19:29 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/kg)	CONCENTRATIONS FINAL (ug/Kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.049	8.061	-0.012	225144	24.6438	2500
S 12 Total GRO	Compound Not Detected.					

Data File: ifid7862.d

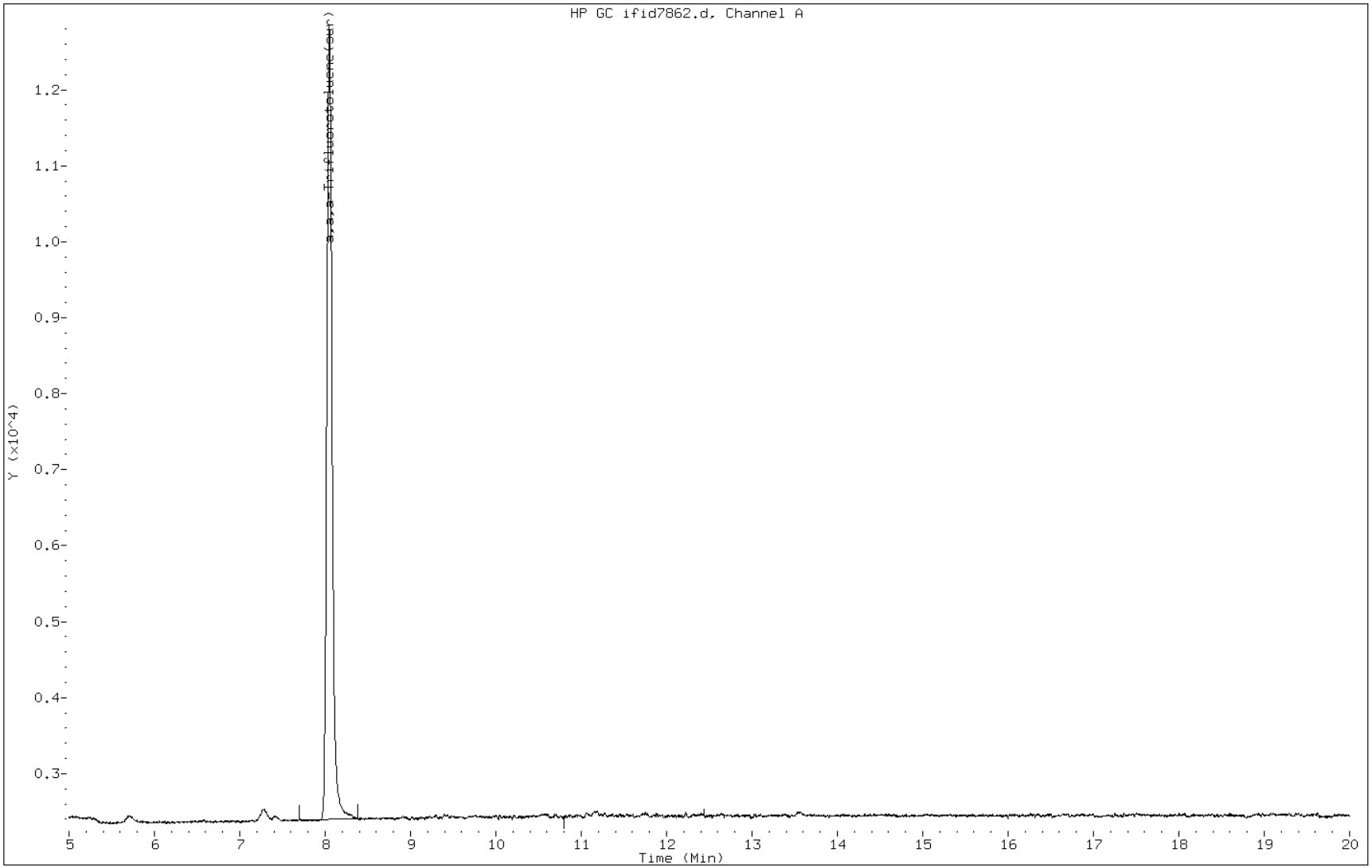
Date: 27-MAR-2011 19:55

Client ID:

Instrument: VOAGC3.i

Sample Info: MB

Operator: VGC3



FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68719/2

Matrix: Solid Lab File ID: ifid7859.d

Analysis Method: 8015B Date Collected:

Sample wt/vol: 2.5(mL) Date Analyzed: 03/27/2011 18:42

Soil Aliquot Vol: 2.5 (mL) Dilution Factor: 50

Soil Extract Vol.: 5(mL) GC Column: Rtx-502.2 ID: 0.53(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 68719 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00215	GRO	19200		2500	2500

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	97		68-143

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7859.d
Report Date: 27-Mar-2011 20:57

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7859.d
Lab Smp Id: LCS
Inj Date : 27-MAR-2011 18:42
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : LCS
Misc Info :
Comment :
Method : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 27-Mar-2011 19:29 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 QC Sample: BS
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

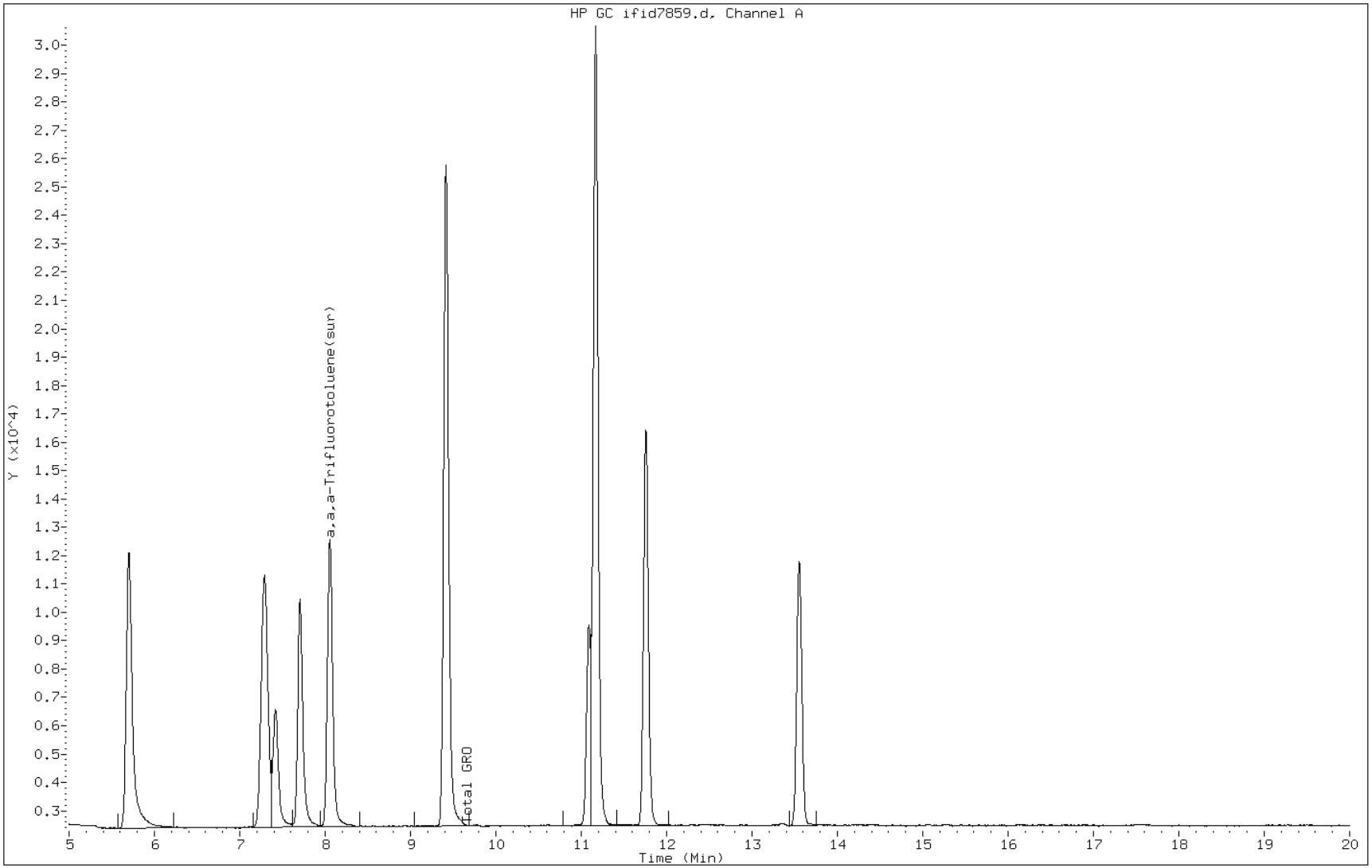
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/kg)	CONCENTRATIONS FINAL (ug/Kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.055	8.061	-0.006	221127	24.2041	2400
S 12 Total GRO	5.500-13.820			2398436	191.624	19000

Data File: ifid7859.d

Date: 27-MAR-2011 18:42

Client ID: Instrument: VOAGC3.i

Sample Info: LCS Operator: VGC3



FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24323-A-8-A MS

Matrix: Solid Lab File ID: ifid7871.d

Analysis Method: 8015B Date Collected: 03/17/2011 13:00

Sample wt/vol: 5.23(g) Date Analyzed: 03/27/2011 23:36

Soil Aliquot Vol: 5 (mL) Dilution Factor: 50

Soil Extract Vol.: 10(mL) GC Column: Rtx-502.2 ID: 0.53(mm)

% Moisture: 7.4 Level: (low/med) Medium

Analysis Batch No.: 68719 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00215	GRO	26400		2600	2600

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	97		68-143

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7871.d
Report Date: 28-Mar-2011 16:55

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7871.d
Lab Smp Id: 460-24323-A-8-A MS Client Smp ID: PDI-JS-32-7.5D
Inj Date : 27-MAR-2011 23:36
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : 460-24323-A-8-A MS
Misc Info : 460-24323-A-8-A
Comment   :
Method   : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 27-Mar-2011 19:29 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 QC Sample: MS
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.23000	Weight of sample extracted (g)
M	7.43134	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/kg)	(ug/Kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.059	8.061	-0.002	220630	24.1498	2500
S 12 Total GRO	5.500-13.820			3204730	256.044	26000(R)

QC Flag Legend

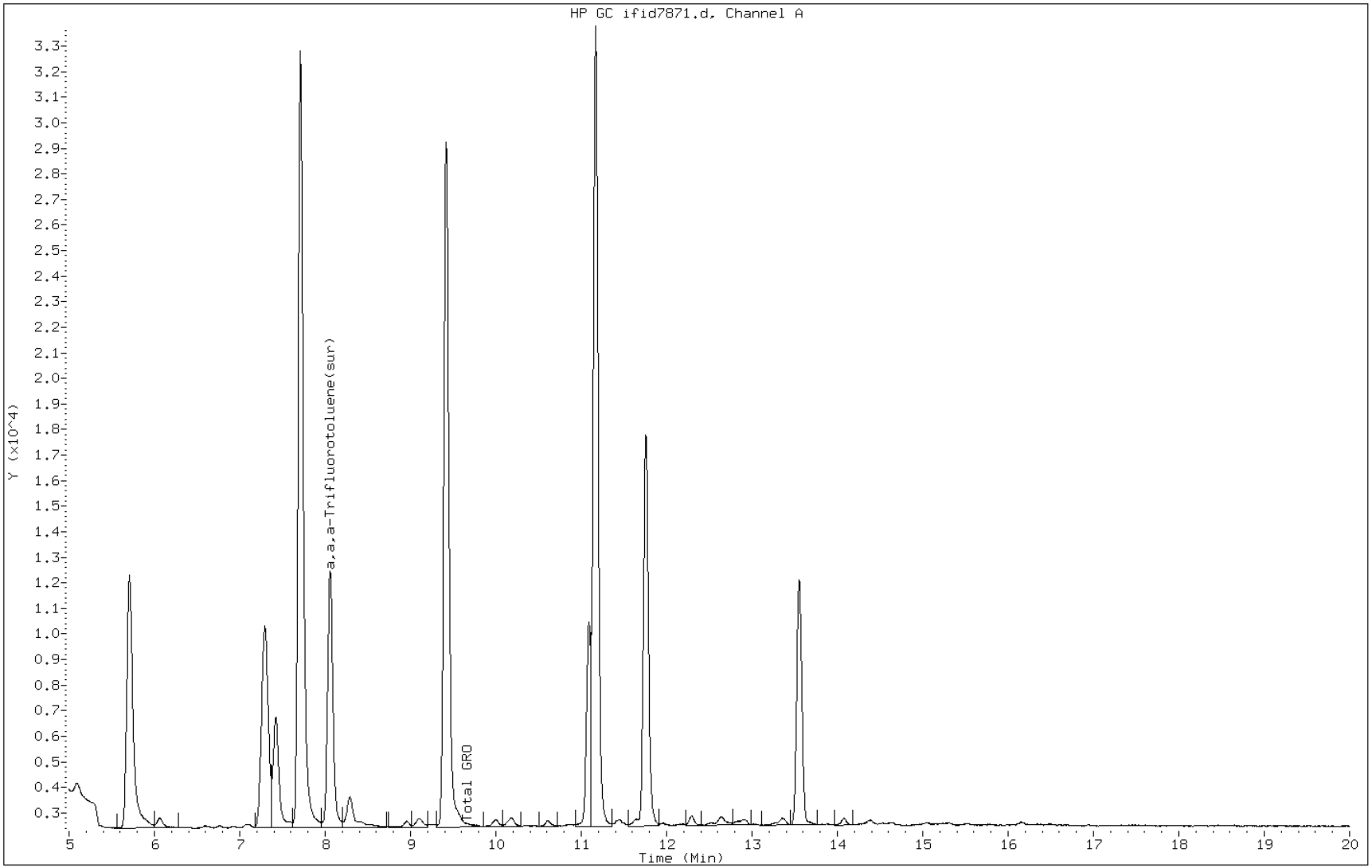
R - Spike/Surrogate failed recovery limits.

Data File: ifid7871.d

Date: 27-MAR-2011 23:36

Client ID: PDI-JS-32-7.5D Instrument: VOAGC3.i

Sample Info: 460-24323-A-8-A MS Operator: VGC3



FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24323-A-8-A MSD

Matrix: Solid Lab File ID: ifid7872.d

Analysis Method: 8015B Date Collected: 03/17/2011 13:00

Sample wt/vol: 5.23(g) Date Analyzed: 03/28/2011 00:01

Soil Aliquot Vol: 5 (mL) Dilution Factor: 50

Soil Extract Vol.: 10(mL) GC Column: Rtx-502.2 ID: 0.53(mm)

% Moisture: 7.4 Level: (low/med) Medium

Analysis Batch No.: 68719 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00215	GRO	26900		2600	2600

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	a,a,a-Trifluorotoluene	94		68-143

Data File: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7872.d
Report Date: 28-Mar-2011 17:01

TestAmerica

Data file : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/ifid7872.d
Lab Smp Id: 460-24323-A-8-A MSD Client Smp ID: PDI-JS-32-7.5D
Inj Date : 28-MAR-2011 00:01
Operator : VGC3 Inst ID: VOAGC3.i
Smp Info : 460-24323-A-8-A MSD
Misc Info : 460-24323-A-8-A
Comment   :
Method   : /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b/GRO_09.m
Meth Date : 27-Mar-2011 19:29 eddie Quant Type: ESTD
Cal Date : 09-FEB-2011 10:41 Cal File: ifid6987.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 50.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * (Vt/Ws)/((100-M)/100) * CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (ml)
Ws	5.23000	Weight of sample extracted (g)
M	7.43134	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/kg)	CONCENTRATIONS FINAL (ug/Kg)
$ 5 a,a,a-Trifluorotoluene(sur)	8.058	8.061	-0.003	214704	23.5011	2400
S 12 Total GRO	5.500-13.820			3254544	260.024	27000(R)

QC Flag Legend

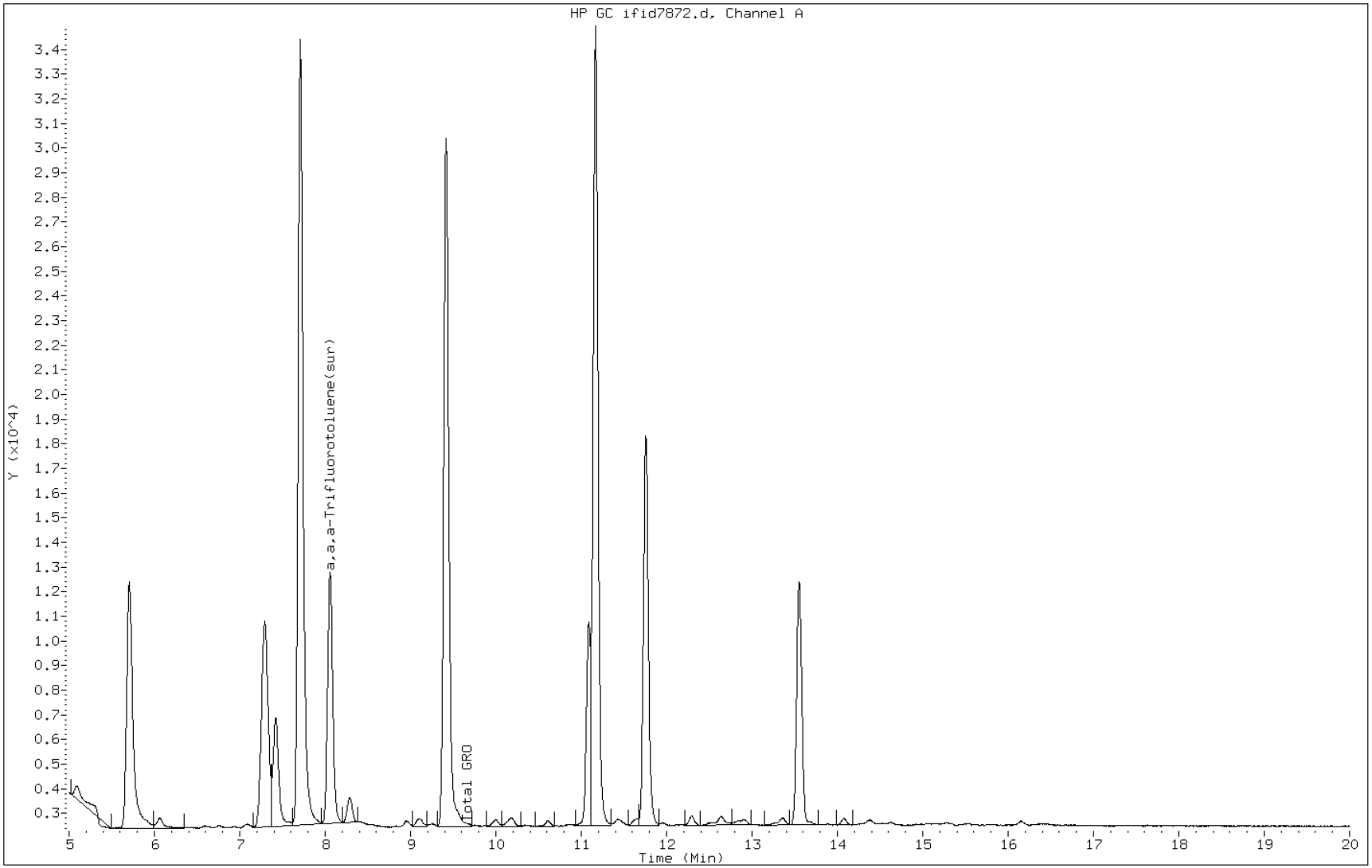
R - Spike/Surrogate failed recovery limits.

Data File: ifid7872.d

Date: 28-MAR-2011 00:01

Client ID: PDI-JS-32-7.5D Instrument: VOAGC3.i

Sample Info: 460-24323-A-8-A MSD Operator: VGC3



GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAGC3 Start Date: 02/09/2011 08:39

Analysis Batch Number: 64052 End Date: 02/09/2011 11:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		02/09/2011 08:39	1		Rtx-502.2 0.53(mm)
IC 460-64052/2		02/09/2011 09:03	1	ifid6983.d	Rtx-502.2 0.53(mm)
IC 460-64052/3		02/09/2011 09:28	1	ifid6984.d	Rtx-502.2 0.53(mm)
IC 460-64052/4		02/09/2011 09:52	1	ifid6985.d	Rtx-502.2 0.53(mm)
IC 460-64052/5		02/09/2011 10:17	1	ifid6986.d	Rtx-502.2 0.53(mm)
IC 460-64052/6		02/09/2011 10:41	1	ifid6987.d	Rtx-502.2 0.53(mm)
ZZZZZ		02/09/2011 11:05	1		Rtx-502.2 0.53(mm)
ZZZZZ		02/09/2011 11:30	1		Rtx-502.2 0.53(mm)

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: VOAGC3 Start Date: 03/27/2011 18:17

Analysis Batch Number: 68719 End Date: 03/28/2011 05:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 460-68719/1		03/27/2011 18:17	1	ifid7858.d	Rtx-502.2 0.53(mm)
LCS 460-68719/2		03/27/2011 18:42	50	ifid7859.d	Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 19:06	50		Rtx-502.2 0.53(mm)
MB 460-68719/4		03/27/2011 19:55	50	ifid7862.d	Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 20:21	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 20:46	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 21:10	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 21:35	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 21:59	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 22:23	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 22:48	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/27/2011 23:12	50		Rtx-502.2 0.53(mm)
460-24323-A-8-A MS		03/27/2011 23:36	50	ifid7871.d	Rtx-502.2 0.53(mm)
460-24323-A-8-A MSD		03/28/2011 00:01	50	ifid7872.d	Rtx-502.2 0.53(mm)
CCV 460-68719/15		03/28/2011 00:50	1	ifid7874.d	Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 01:38	50		Rtx-502.2 0.53(mm)
460-24356-1	GPEC-WC-031911	03/28/2011 01:38	50	ifid7876.d	Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 02:03	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 02:27	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 02:51	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 03:16	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 03:40	50		Rtx-502.2 0.53(mm)
ZZZZZ		03/28/2011 04:05	1000		Rtx-502.2 0.53(mm)
CCV 460-68719/23		03/28/2011 05:18	1	ifid7885.d	Rtx-502.2 0.53(mm)

GASOLINE RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68286 Batch Start Date: 03/23/11 17:45 Batch Analyst: Jin, Fangzhou

Batch Method: 5035 Batch End Date: 03/23/11 18:12

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VGPrepSU 00024			
460-24356-A-1	GPEC-WC-031911	5035, 8015B	T	5.08 g	10 mL	10 mL			

Batch Notes	

Basis	Basis Description
T	Total/NA

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAGC3.i

Analytical Batch: /chem/VOAGC3.i/GROSOIL/02-09-11/09feb11.b

Date Generated: 02/09/2011

Page 1

Calibration ID- 9618

TALS - 64052

Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS/ANALYST
02/09/11 0839	ifid6982	1	BLANK		5	10	1	all		8015	
02/09/11 0903	ifid6983	1	IC		5	10	1	all			not used
02/09/11 0928	ifid6984	1	IC		5	10	1	all		SU: 8142C;	OK
02/09/11 0952	ifid6985	1	IC		5	10	1	all		STD: 814202	OK
02/09/11 1017	ifid6986	1	IC		5	10	1	all		SP: 814204	OK
02/09/11 1041	ifid6987	1	IC		5	10	1	all		iCV: 814204	OK
02/09/11 1105	ifid6988	1	BLANK		5	10	1	all		MeOH: G50E19	OK
02/09/11 1130	ifid6989	1	ICV		5	0	1	all			not used
											OK

Signed: Sara Baisan Read and Understood by: A. Dupayack.

Date: 2/9/11 Date: 02/09/11.

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAGC3.i

Analytical Batch: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b

Date Generated: 03/28/2011

Page 1

68719

Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS/ANALYST
03/27/11 1817	ifid7858	1	CCV		5	10	1	all			G
03/27/11 1842	ifid7859	1	LCS		5	10	50	all		8015	G
03/27/11 1906	ifid7860	1	LCSD		5	10	50	all		SU: 891729	G
03/27/11 1931	ifid7861	1	MB		5	10	50	all		STD: 891766	G
03/27/11 1955	ifid7862	1	MB		5	10	50	all		SP: 891771	NH clean up
03/27/11 2021	ifid7863	1	460-24323-A-8-A	PDI-JS-32-7.5D	5.23	10	50	all		ICV: 891771	G
03/27/11 2046	ifid7864	1	460-24323-A-11-A	PDI-B95-4.5D	5.74	10	50	all		MeOH: 50349	G
03/27/11 2110	ifid7865	1	460-24323-A-47-A	PDI-JS33-7.5D	5.8	10	50	all			G
03/27/11 2135	ifid7866	1	460-24323-A-51-A	PDI-JS29-5.0D	5.51	10	50	all			G
03/27/11 2159	ifid7867	1	460-24325-A-19-A	PDI-B78-9D	5.61	10	50	all			G
03/27/11 2223	ifid7868	1	460-24325-A-2-A	PDI-B79-9D	5.74	10	50	all			G
03/27/11 2248	ifid7869	1	460-24325-A-6-A	PDI-B85-4D	5.15	10	50	all			G
03/27/11 2312	ifid7870	1	460-24325-A-8-A	PDI-B85-18D	5.81	10	50	all			G
03/27/11 2336	ifid7871	1	460-24323-A-8-A MS	PDI-JS-32-7.5D	5.23	10	50	all			G

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: VOAGC3.i

Analytical Batch: /chem/VOAGC3.i/GROSOIL/02-09-11/27mar11.b

Date Generated: 03/28/2011

Page 2

Date	Data File	ALS	Sample ID	Client ID	IV/ IW	FV	Dil Fac	Sublist	PH	STD LOT	COMMENTS/ANALYST
03/28/11 0001	ifid7872	1	460-24323-A-8-A MSD	PDI-JS-32-7.5D	5.23	10	50	all			G
03/28/11 0025	ifid7873	1	CCV		5	10	1	all			
03/28/11 0050	ifid7874	1	CCV		5	10	1	all			NH not uxd
03/28/11 0114	ifid7875	1	BLANK		5	10	1	all			G
03/28/11 0138	ifid7876	1	460-24356-A-1-~~A~~ D (B) 3/29/11	GPSC-WC-031911 (B) 3/29/11	~~5.12~~ 5.08	10	50	all			NH clean up
03/28/11 0203	ifid7877	1	460-24370-A-1-A	PDI-B89-13.5D	5.85	10	50	all			G
03/28/11 0227	ifid7878	1	460-24370-A-4-A	PDI-B83-4.5D	5.88	10	50	all			G
03/28/11 0251	ifid7879	1	460-24325-A-10-A	BDI-B91-4D	5.38	10	50	all			G
03/28/11 0316	ifid7880	1	460-24325-A-4-A	PDI-B79-18D	5.32	10	50	all			G
03/28/11 0340	ifid7881	1	460-24325-A-15-A	PDI-B97-14D	5.84	10	50	all			G
03/28/11 0405	ifid7882	1	460-24324-A-6-A	PDI-B72-18D	5.17	10	1000	all			G
03/28/11 0429	ifid7883	1	BLANK		5	10	1	all			NH clean up
03/28/11 0453	ifid7884	1	BLANK		5	10	1	all			NH clean up
03/28/11 0518	ifid7885	1	CCV		5	10	1	all			G

Signed: Eddie Mu 03/28/11 Read and Understood by: Ken Boyd 03/28/11

Method 8015B - DRO

Diesel Range Organics (DRO) (GC) by Method 8015B

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	OTPH1 #
GPEC-WC-031911	460-24356-1	94
	MB 460-68928/1-A	97
	LCS 460-68928/2-A	105
	460-24510-A-2-B MS	99
	460-24510-A-2-C MSD	100

	QC LIMITS
OTPH = o-Terphenyl	43-119

Column to be used to flag recovery values

FORM II 8015B

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: gcf44209.d

Lab ID: LCS 460-68928/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel Range Organics [C10-C28]	167	180	108	62-116	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: gcf44230.d

Lab ID: 460-24510-A-2-B MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel Range Organics [C10-C28]	203	190	381	92	62-116	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: gcf44232.d

Lab ID: 460-24510-A-2-C MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel Range Organics [C10-C28]	203	378	90	1	30	62-116	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: MB 460-68928/1-A

Matrix: Solid Date Extracted: 03/30/2011 10:53

Lab File ID:(1) gcf44208.d Lab File ID:(2)

Date Analyzed:(1) 03/31/2011 10:40 Date Analyzed:(2)

Instrument ID:(1) BNAGC1 Instrument ID:(2)

GC Column:(1) Rtx-5MS ID: 0.25(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 460-68928/2-A	03/31/2011 10:55	
	460-24510-A-2-B MS	03/31/2011 16:13	
	460-24510-A-2-C MSD	03/31/2011 16:39	
GPEC-WC-031911	460-24356-1	03/31/2011 18:34	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: gcf44240.d

Analysis Method: 8015B Date Collected: 03/19/2011 16:45

Extraction Method: 3546 Date Extracted: 03/30/2011 10:53

Sample wt/vol: 15.00(g) Date Analyzed: 03/31/2011 18:34

Con. Extract Vol.: 1(mL) Dilution Factor: 2

Injection Volume: 1(uL) GC Column: Rtx-5MS ID: 0.25(mm)

% Moisture: 16.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 69165 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00143	Diesel Range Organics [C10-C28]	640		16	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	94		43-119

Data File: gcf44240.d
Report Date: 31-Mar-2011 18:55

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44240.d
Lab Smp Id: 460-24356-A-1-H Client Smp ID: GPEC-WC-031911
Inj Date : 31-MAR-2011 18:34
Operator : 615 Inst ID: BNAGC1.i
Smp Info : 460-24356-A-1-H
Misc Info : 460-24356-A-1-H
Comment   :
Method   : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 16:45 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 24
Dil Factor: 2.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	2.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	16.86747	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (mg/Kg)
	2 Total DRO	5.167	3.051	2.116	242032017	3979.25	638(M)
$	1 O-terphenyl (sur)	3.697	3.696	0.001	649012	9.40106	1.5(M)

QC Flag Legend

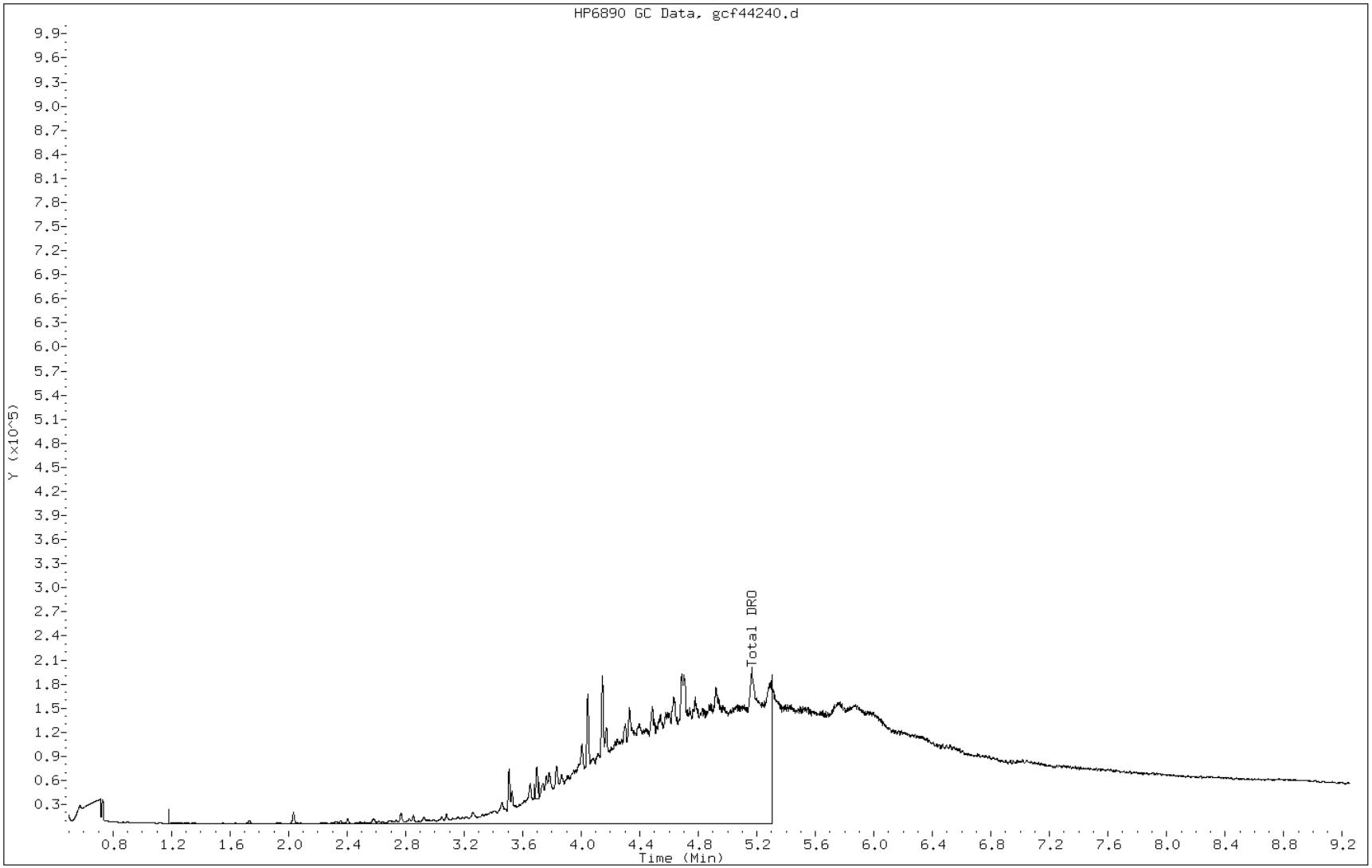
M - Compound response manually integrated.

Data File: gcf44240.d

Date: 31-MAR-2011 18:34

Client ID: GPEC-WC-031911 Instrument: BNAGC1.i

Sample Info: 460-24356-A-1-H Operator: 615



Manual Integration Report

Data File: gcf44240.d
Inj. Date and Time: 31-MAR-2011 18:34
Instrument ID: BNAGC1.i
Client ID: GPEC-WC-031911
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

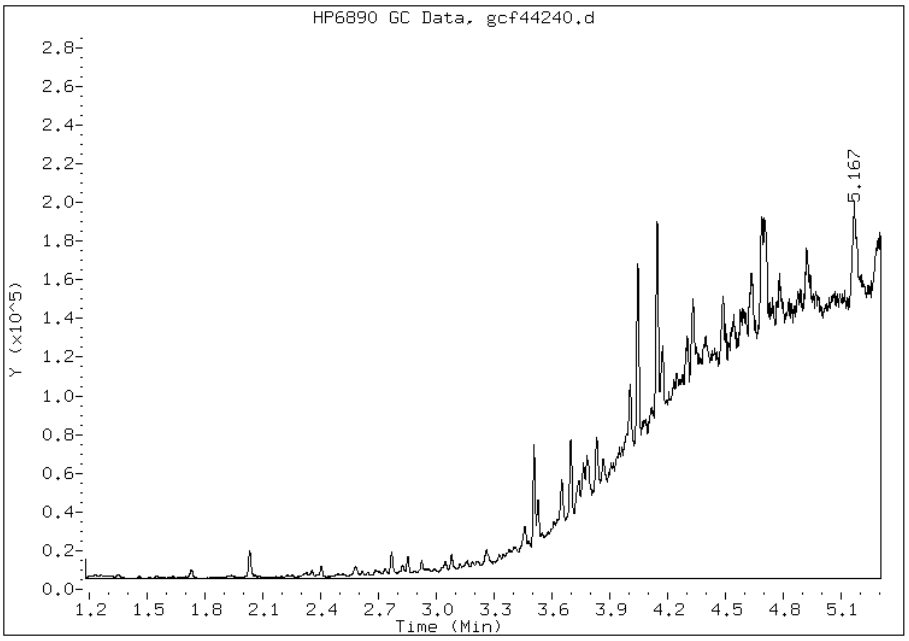
Manual Integration Results

RT: 5.17

Response: 242032017

Amount: 3979.25

Conc: 638.22



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44240.d
Inj. Date and Time: 31-MAR-2011 18:34
Instrument ID: BNAGC1.i
Client ID: GPEC-WC-031911
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

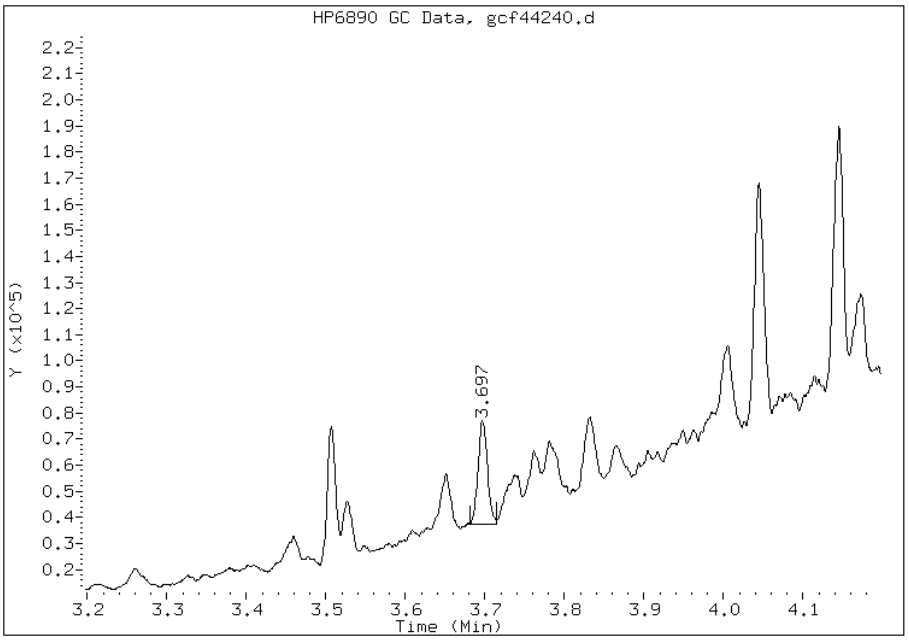
Manual Integration Results

RT: 3.70

Response: 649012

Amount: 9.40

Conc: 1.51



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68681

SDG No.:

Instrument ID: BNAGC1 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/28/2011 11:15 Calibration End Date: 03/28/2011 12:06 Calibration ID: 10286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68681/8	gcf44157.d
Level 2	IC 460-68681/7	gcf44156.d
Level 3	IC 460-68681/6	gcf44155.d
Level 4	IC 460-68681/5	gcf44154.d
Level 5	IC 460-68681/4	gcf44153.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel Range Organics [C10-C28]	3.830	3.046	3.045	2.586	3.462						0.000 - 33.240	3.194
o-Terphenyl	3.695	3.693	3.694	3.696	3.695						3.595 - 3.795	3.695

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68681

SDG No.:

Instrument ID: BNAGC1 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/28/2011 11:15 Calibration End Date: 03/28/2011 12:06 Calibration ID: 10286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68681/8	gcf44157.d
Level 2	IC 460-68681/7	gcf44156.d
Level 3	IC 460-68681/6	gcf44155.d
Level 4	IC 460-68681/5	gcf44154.d
Level 5	IC 460-68681/4	gcf44153.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel Range Organics [C10-C28]	60584 61479	57491	62248	62316	Ave		60823.5402				3.3		20.0			
o-Terphenyl	66938 68501	69905	68428	71409	Ave		69036.0640				2.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68681

SDG No.:

Instrument ID: BNAGC1 GC Column: Rtx-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/28/2011 11:15 Calibration End Date: 03/28/2011 12:06 Calibration ID: 10286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68681/8	gcf44157.d
Level 2	IC 460-68681/7	gcf44156.d
Level 3	IC 460-68681/6	gcf44155.d
Level 4	IC 460-68681/5	gcf44154.d
Level 5	IC 460-68681/4	gcf44153.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10-C28]	Ave	6058387	28745637	62247573	155789545	307395829	100	500	1000	2500	5000
o-Terphenyl	Ave	334689	699047	1368559	3570427	6850133	5.00	10.0	20.0	50.0	100

Curve Type Legend:
Ave = Average

Data File: gcf44153.d
Report Date: 28-Mar-2011 12:46

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/gcf44153.d
Lab Smp Id: IC-SGC28L5_00008
Inj Date : 28-MAR-2011 11:15
Operator : 615 Inst ID: BNAGC1.i
Smp Info : IC-SGC28L5_00008
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/c28DROf2008.m
Meth Date : 28-Mar-2011 12:46 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 11:15 Cal File: gcf44153.d
Als bottle: 81 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	2 Total DRO	3.462	3.462	0.000	307395829	5000.00	5000(M)
$	1 O-terphenyl (sur)	3.695	3.695	0.000	6850133	100.000	100(M)

QC Flag Legend

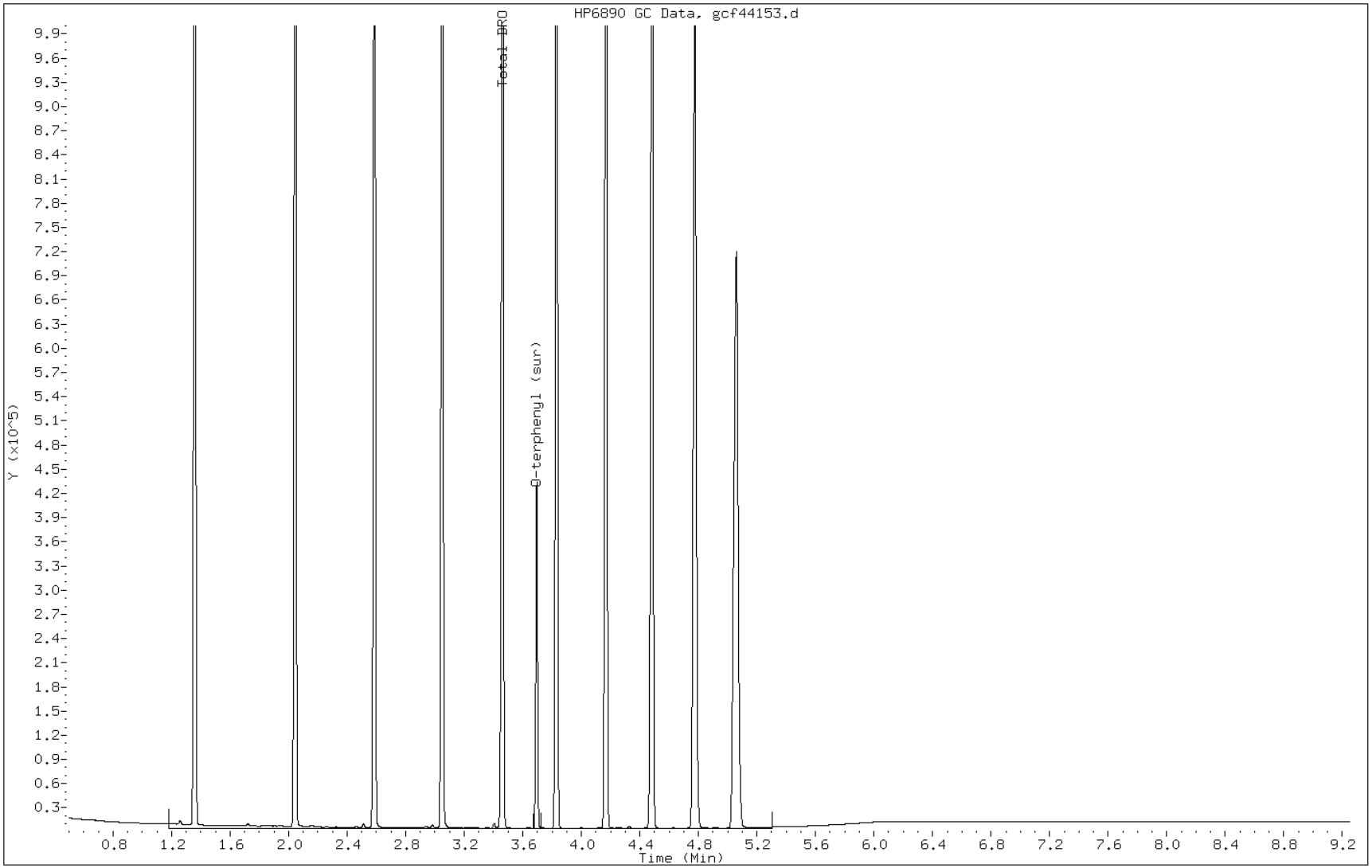
M - Compound response manually integrated.

Data File: gcf44153.d

Date: 28-MAR-2011 11:15

Client ID: Instrument: BNAGC1.i

Sample Info: IC-SGC28L5_00008 Operator: 615



Manual Integration Report

Data File: gcf44153.d
Inj. Date and Time: 28-MAR-2011 11:15
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.24

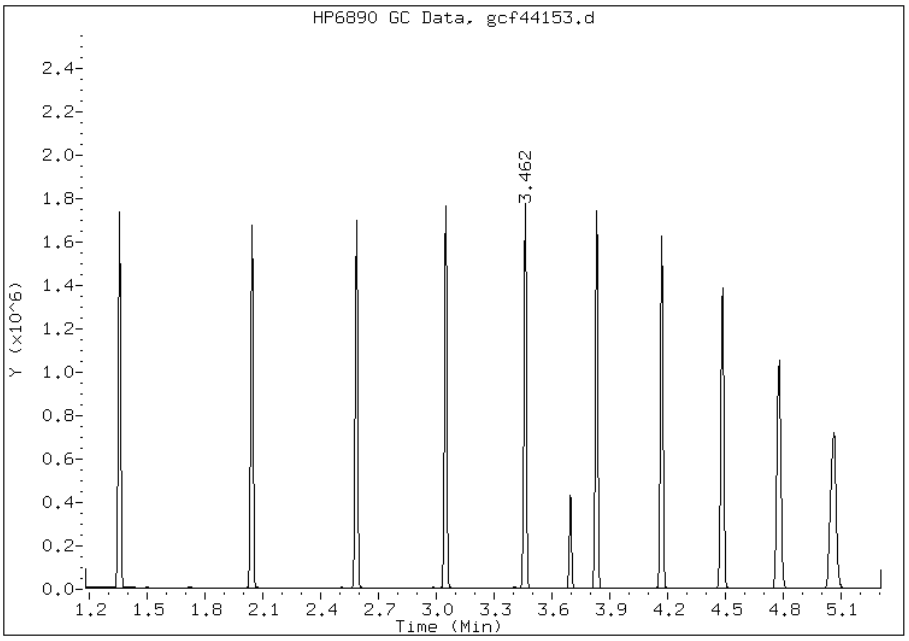
Manual Integration Results

RT: 3.46

Response: 307395829

Amount: 5000.00

Conc: 5000.00



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44153.d
Inj. Date and Time: 28-MAR-2011 11:15
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.69

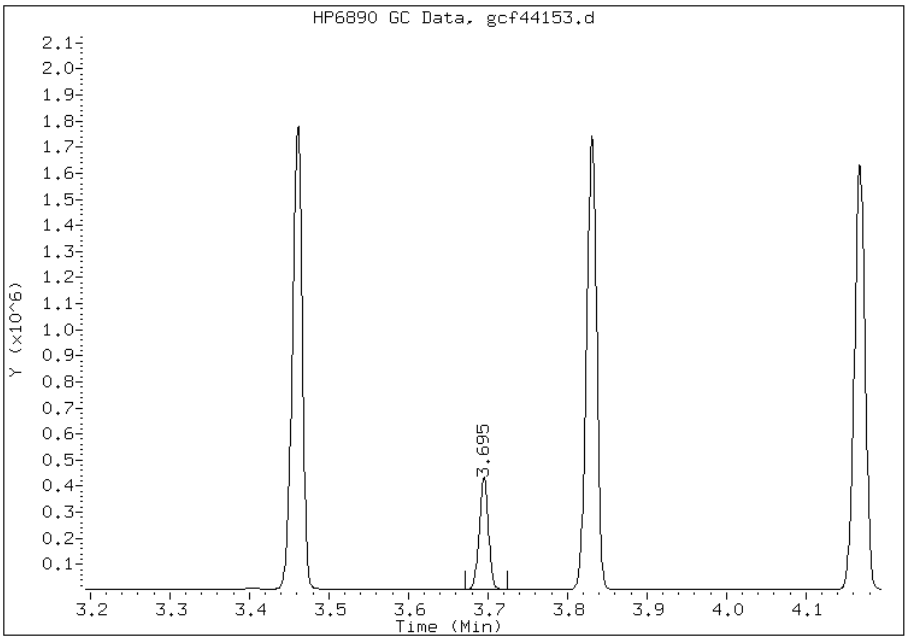
Manual Integration Results

RT: 3.69

Response: 6850133

Amount: 100.00

Conc: 100.00



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Data File: gcf44154.d
Report Date: 28-Mar-2011 12:46

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/gcf44154.d
Lab Smp Id: IC-SGC28L4_00007
Inj Date : 28-MAR-2011 11:25
Operator : 615 Inst ID: BNAGC1.i
Smp Info : IC-SGC28L4_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/c28DROf2008.m
Meth Date : 28-Mar-2011 12:46 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 11:25 Cal File: gcf44154.d
Als bottle: 82 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	2 Total DRO	2.586	2.586	0.000	155789545	2500.00	2520(M)
$	1 O-terphenyl (sur)	3.696	3.696	0.000	3570427	50.0000	51.0(M)

QC Flag Legend

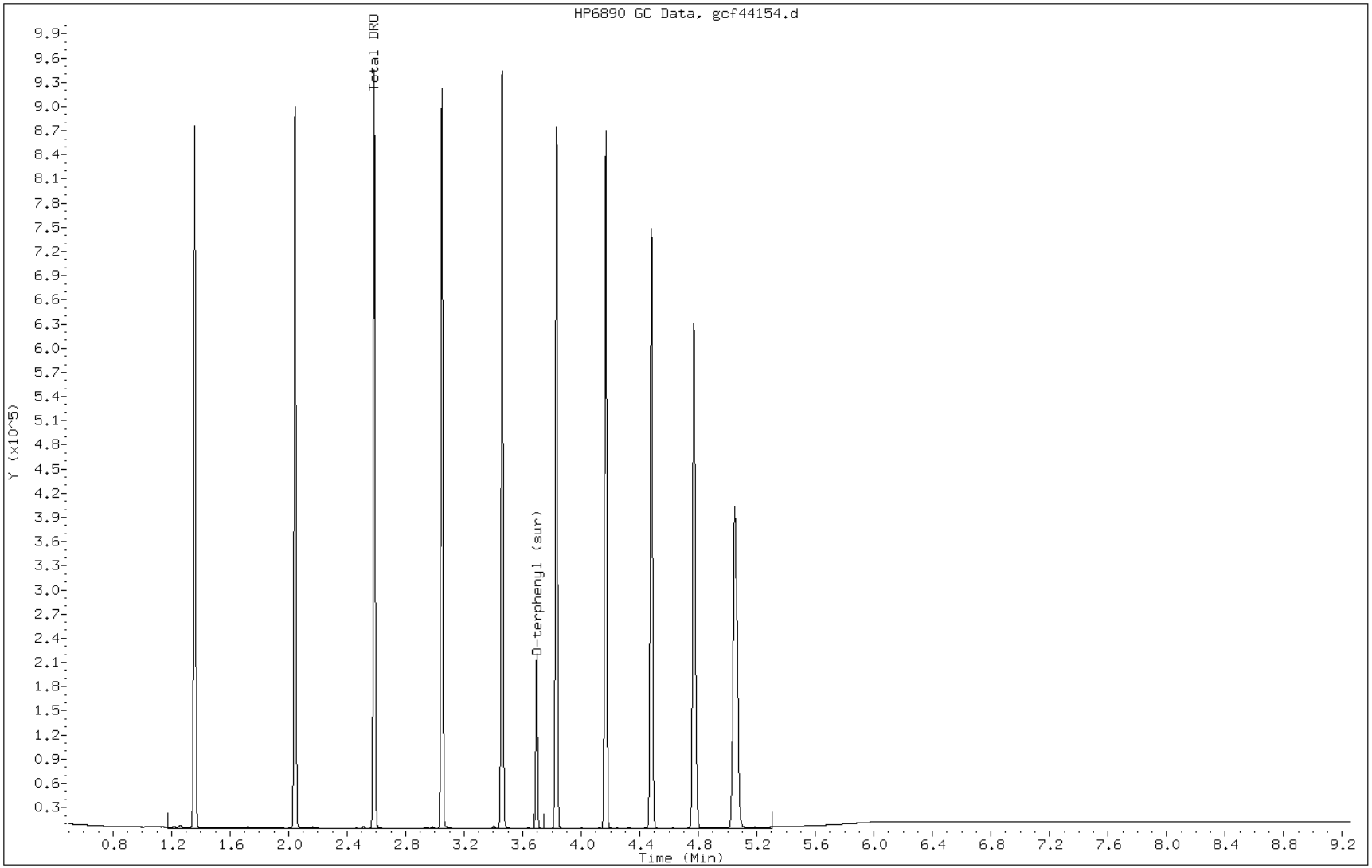
M - Compound response manually integrated.

Data File: gcf44154.d

Date: 28-MAR-2011 11:25

Client ID: Instrument: BNAGC1.i

Sample Info: IC-SGC28L4_00007 Operator: 615



Manual Integration Report

Data File: gcf44154.d
Inj. Date and Time: 28-MAR-2011 11:25
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.69

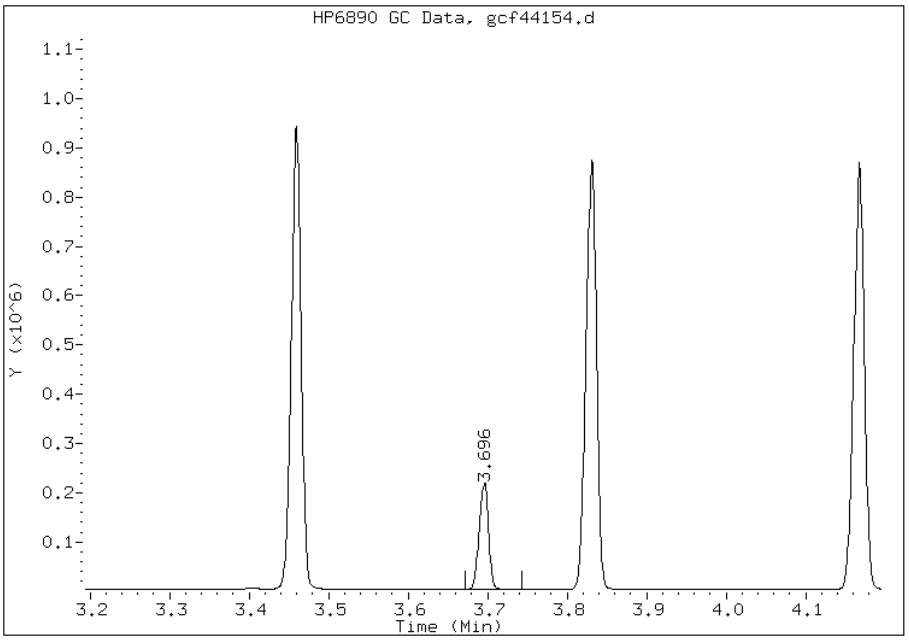
Manual Integration Results

RT: 3.70

Response: 3570427

Amount: 51.04

Conc: 51.04



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: gcf44154.d
Inj. Date and Time: 28-MAR-2011 11:25
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.24

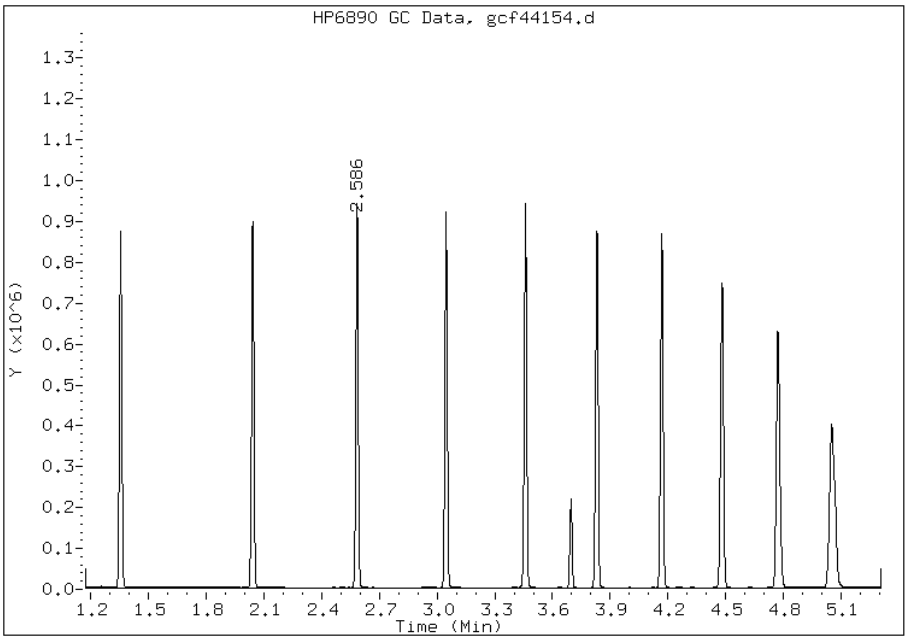
Manual Integration Results

RT: 2.59

Response: 155789545

Amount: 2516.90

Conc: 2516.90



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Data File: gcf44155.d
Report Date: 28-Mar-2011 12:46

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/gcf44155.d
Lab Smp Id: IC-SGC28L3_00007
Inj Date : 28-MAR-2011 11:39
Operator : 615 Inst ID: BNAGC1.i
Smp Info : IC-SGC28L3_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/c28DROf2008.m
Meth Date : 28-Mar-2011 12:46 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 11:39 Cal File: gcf44155.d
Als bottle: 83 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)
	2 Total DRO	3.045	3.045	0.000	62247573	1000.00	1000(M)
$	1 O-terphenyl (sur)	3.694	3.694	0.000	1368559	20.0000	19.7(M)

QC Flag Legend

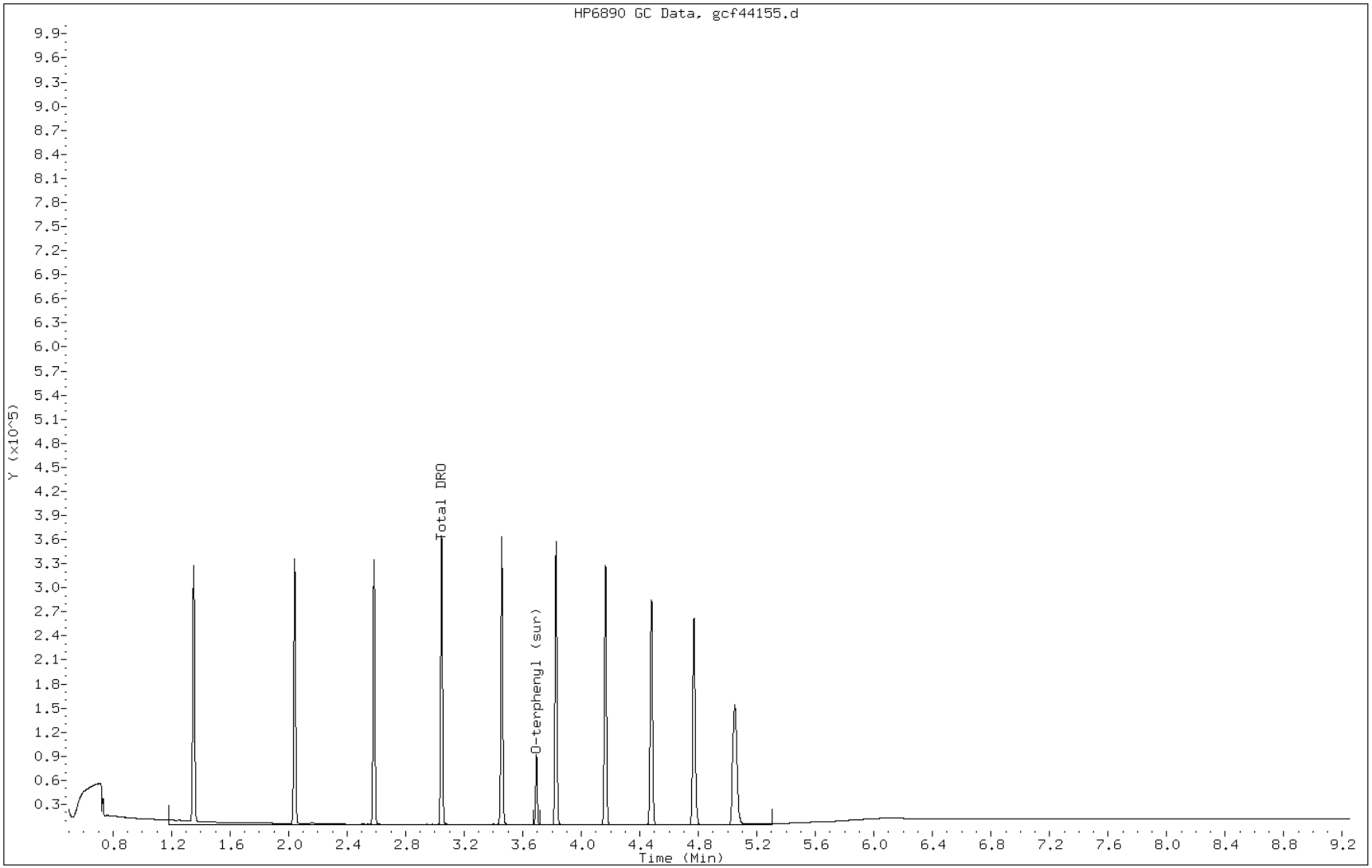
M - Compound response manually integrated.

Data File: gcf44155.d

Date: 28-MAR-2011 11:39

Client ID: Instrument: BNAGC1.i

Sample Info: IC-SGC28L3_00007 Operator: 615



Manual Integration Report

Data File: gcf44155.d
Inj. Date and Time: 28-MAR-2011 11:39
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.24

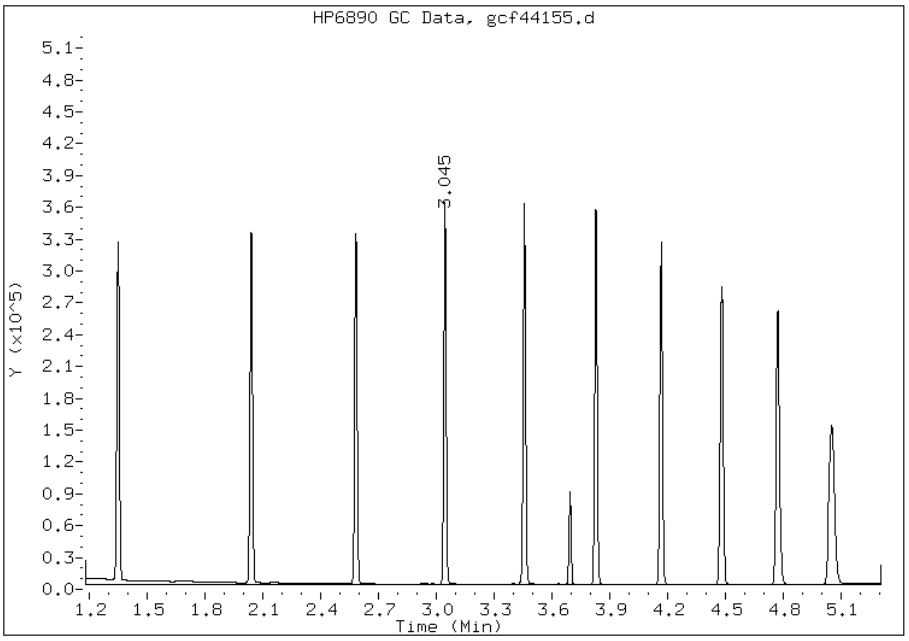
Manual Integration Results

RT: 3.04

Response: 62247573

Amount: 1003.76

Conc: 1003.76



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44155.d
Inj. Date and Time: 28-MAR-2011 11:39
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.69

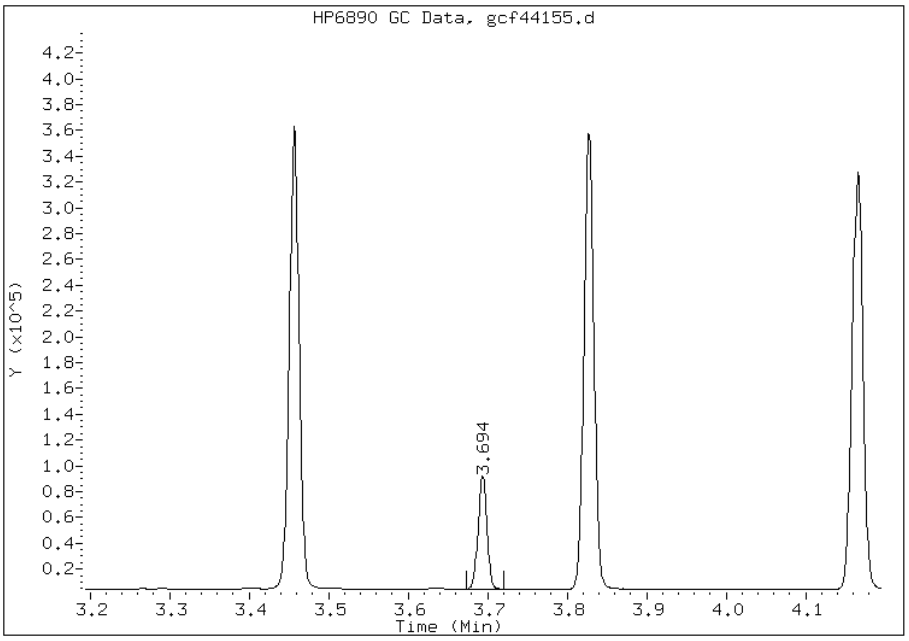
Manual Integration Results

RT: 3.69

Response: 1368559

Amount: 19.71

Conc: 19.71



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Data File: gcf44156.d
Report Date: 28-Mar-2011 12:46

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/gcf44156.d
Lab Smp Id: IC-SGC28L2_00009
Inj Date : 28-MAR-2011 11:54
Operator : 615 Inst ID: BNAGC1.i
Smp Info : IC-SGC28L2_00009
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/c28DROf2008.m
Meth Date : 28-Mar-2011 12:46 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 11:54 Cal File: gcf44156.d
Als bottle: 84 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)
	2 Total DRO	3.046	3.046	0.000	28745637	500.000	472(M)
$	1 O-terphenyl (sur)	3.693	3.693	0.000	699047	10.0000	10.0(M)

QC Flag Legend

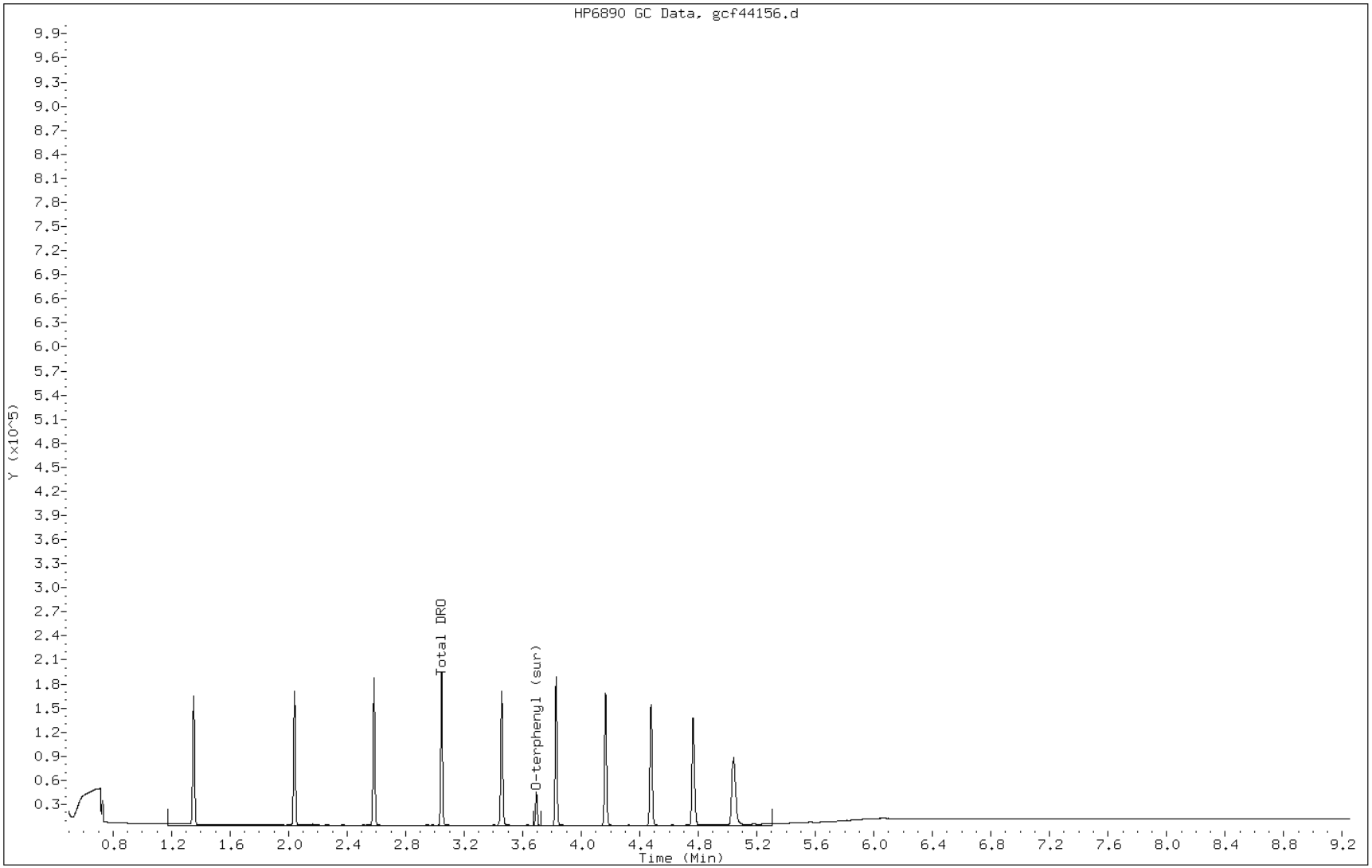
M - Compound response manually integrated.

Data File: gcf44156.d

Date: 28-MAR-2011 11:54

Client ID: Instrument: BNAGC1.i

Sample Info: IC-SGC28L2_00009 Operator: 615



Manual Integration Report

Data File: gcf44156.d
Inj. Date and Time: 28-MAR-2011 11:54
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.69

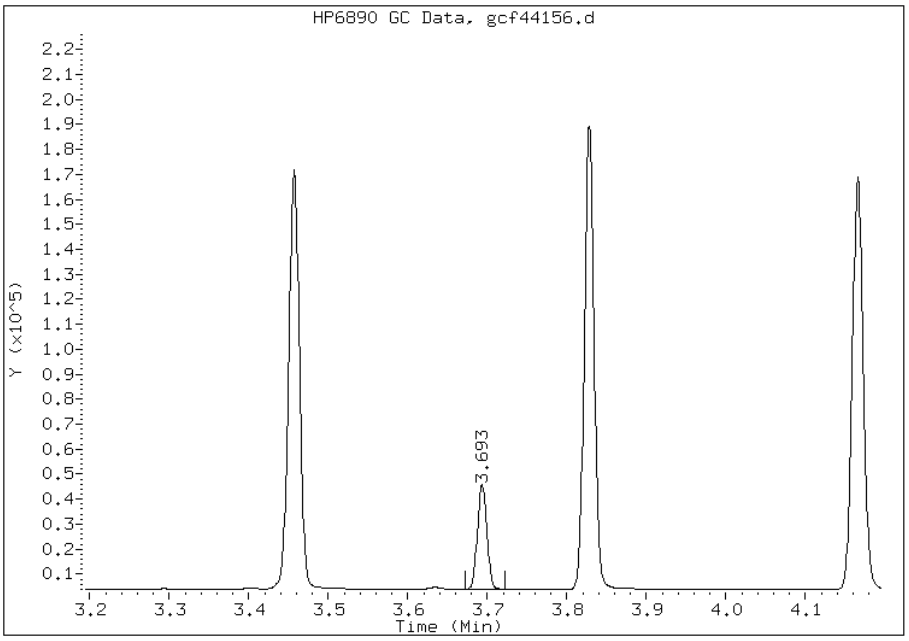
Manual Integration Results

RT: 3.69

Response: 699047

Amount: 10.05

Conc: 10.05



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: gcf44156.d
Inj. Date and Time: 28-MAR-2011 11:54
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.24

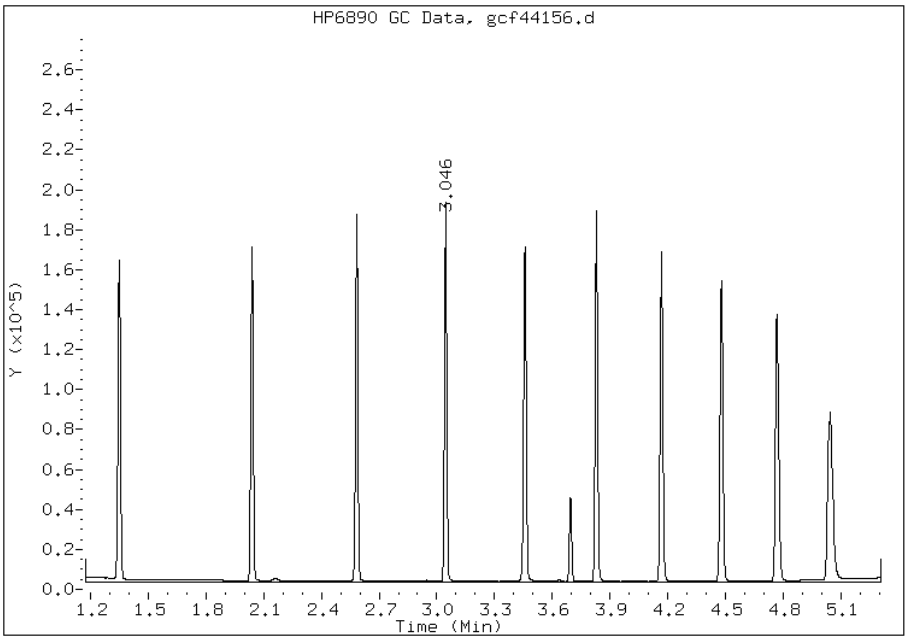
Manual Integration Results

RT: 3.05

Response: 28745637

Amount: 472.14

Conc: 472.14



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Data File: gcf44157.d
Report Date: 28-Mar-2011 12:46

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/gcf44157.d
Lab Smp Id: IC-SGC28L1_00007
Inj Date : 28-MAR-2011 12:06
Operator : 615 Inst ID: BNAGC1.i
Smp Info : IC-SGC28L1_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b/c28DROf2008.m
Meth Date : 28-Mar-2011 12:46 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 85 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/ml)
	2 Total DRO	3.830	3.830	0.000	6058387	100.000	99.6(aM)
$	1 O-terphenyl (sur)	3.695	3.695	0.000	334689	5.00000	4.8(aM)

QC Flag Legend

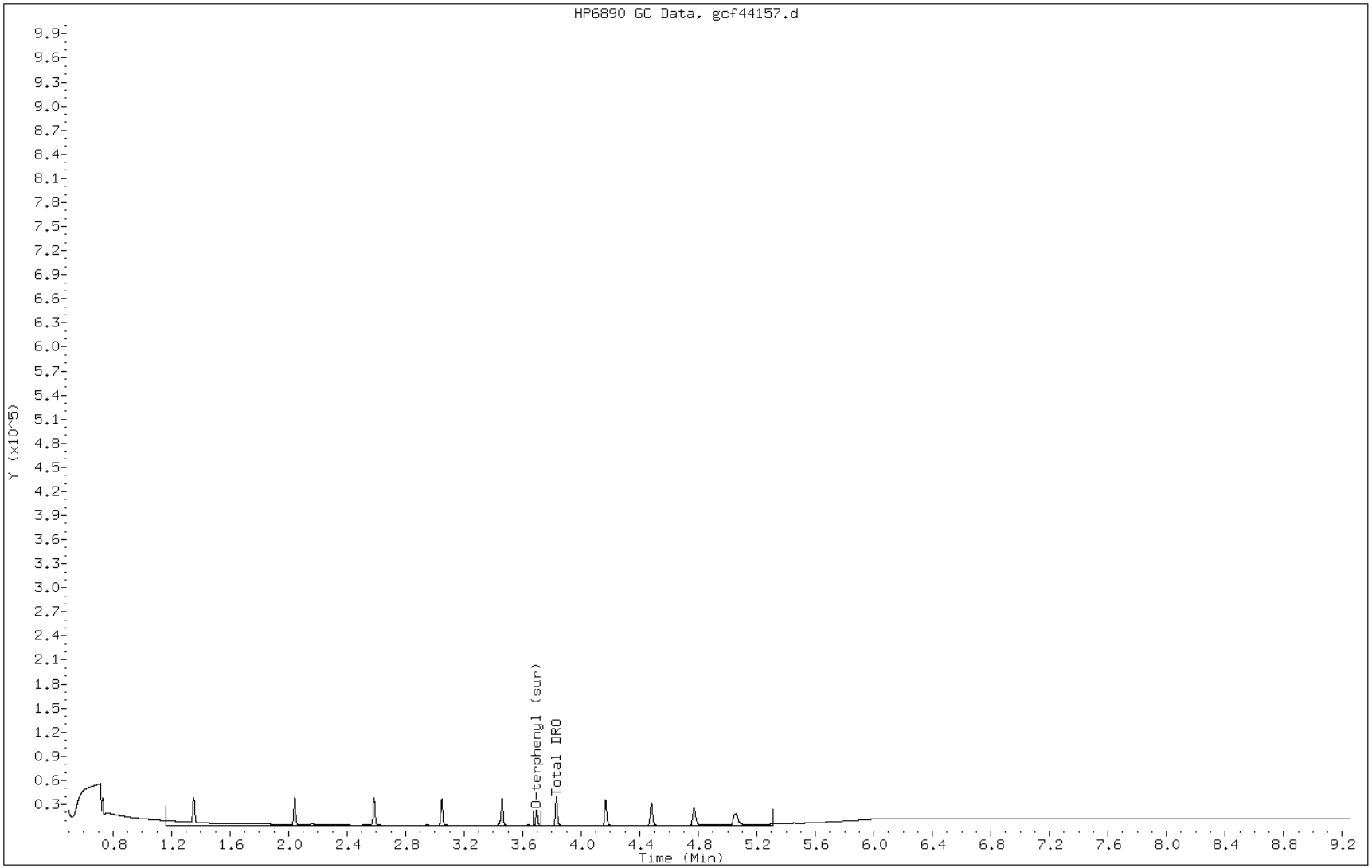
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: gcf44157.d

Date: 28-MAR-2011 12:06

Client ID: Instrument: BNAGC1.i

Sample Info: IC-SGC28L1_00007 Operator: 615



Manual Integration Report

Data File: gcf44157.d
Inj. Date and Time: 28-MAR-2011 12:06
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.69

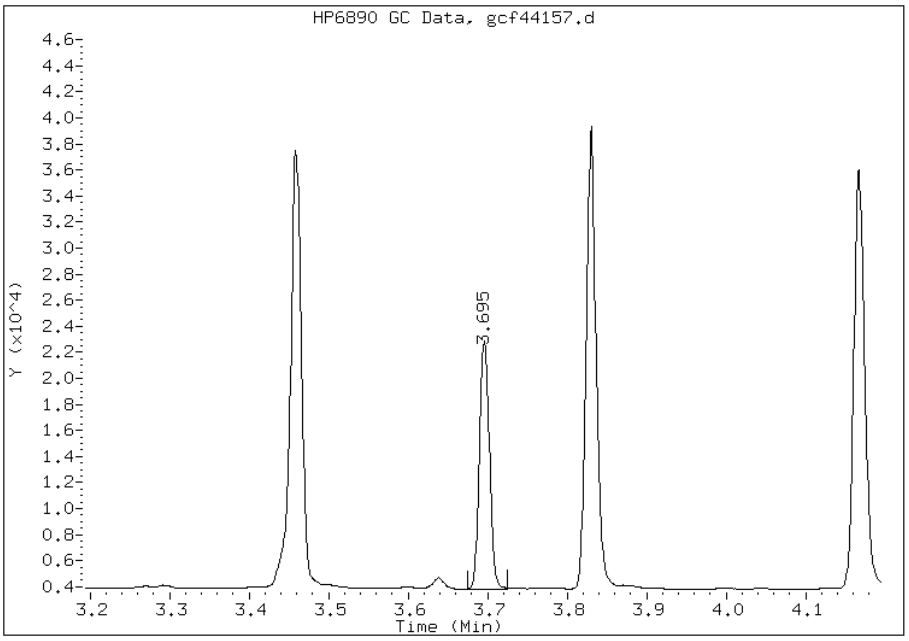
Manual Integration Results

RT: 3.69

Response: 334689

Amount: 4.85

Conc: 4.85



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: gcf44157.d
Inj. Date and Time: 28-MAR-2011 12:06
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 03/28/2011

Processing Integration Results

Not Detected

Expected RT: 3.24

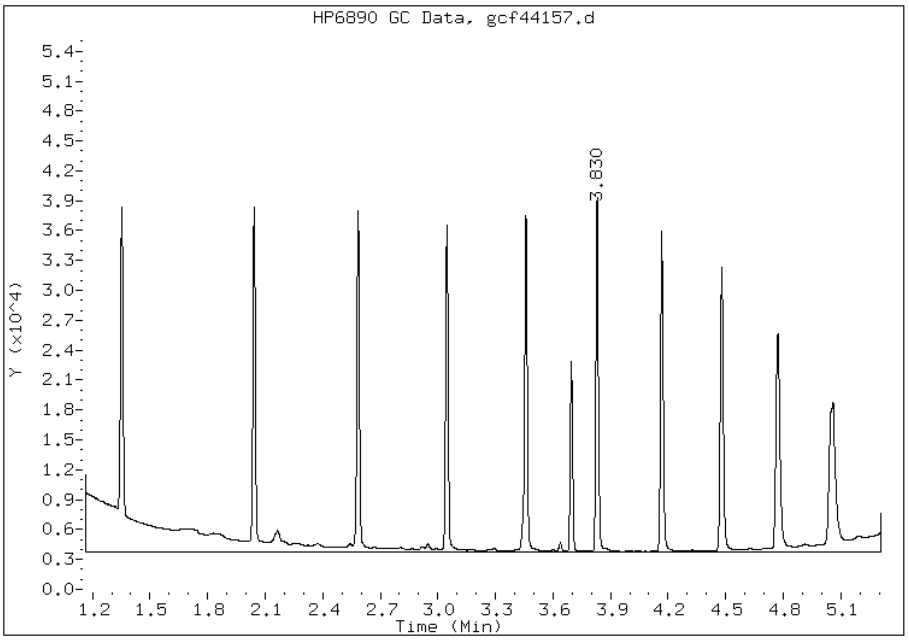
Manual Integration Results

RT: 3.83

Response: 6058387

Amount: 99.61

Conc: 99.61



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/6 Calibration Date: 03/31/2011 10:25

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44207.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10-C28]	Ave	60824	65659		2700	2500	8.0	15.0
o-Terphenyl	Ave	69036	73397		53.2	50.0	6.3	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/6 Calibration Date: 03/31/2011 10:25

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44207.d

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel Range Organics [C10-C28]	3.05	0.00	32.59
o-Terphenyl	3.69	3.60	3.80

Data File: gcf44207.d
Report Date: 31-Mar-2011 10:40

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44207.d
Lab Smp Id: CCV-SGC28L4_00007
Inj Date : 31-MAR-2011 10:25
Operator : 615 Inst ID: BNAGC1.i
Smp Info : CCV-SGC28L4_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 10:40 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 98 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/ml)
	2 Total DRO	3.049	3.049	0.000	164148271	2500.00	2700(M)
$	1 O-terphenyl (sur)	3.693	3.693	0.000	3669840	50.0000	53.2(M)

QC Flag Legend

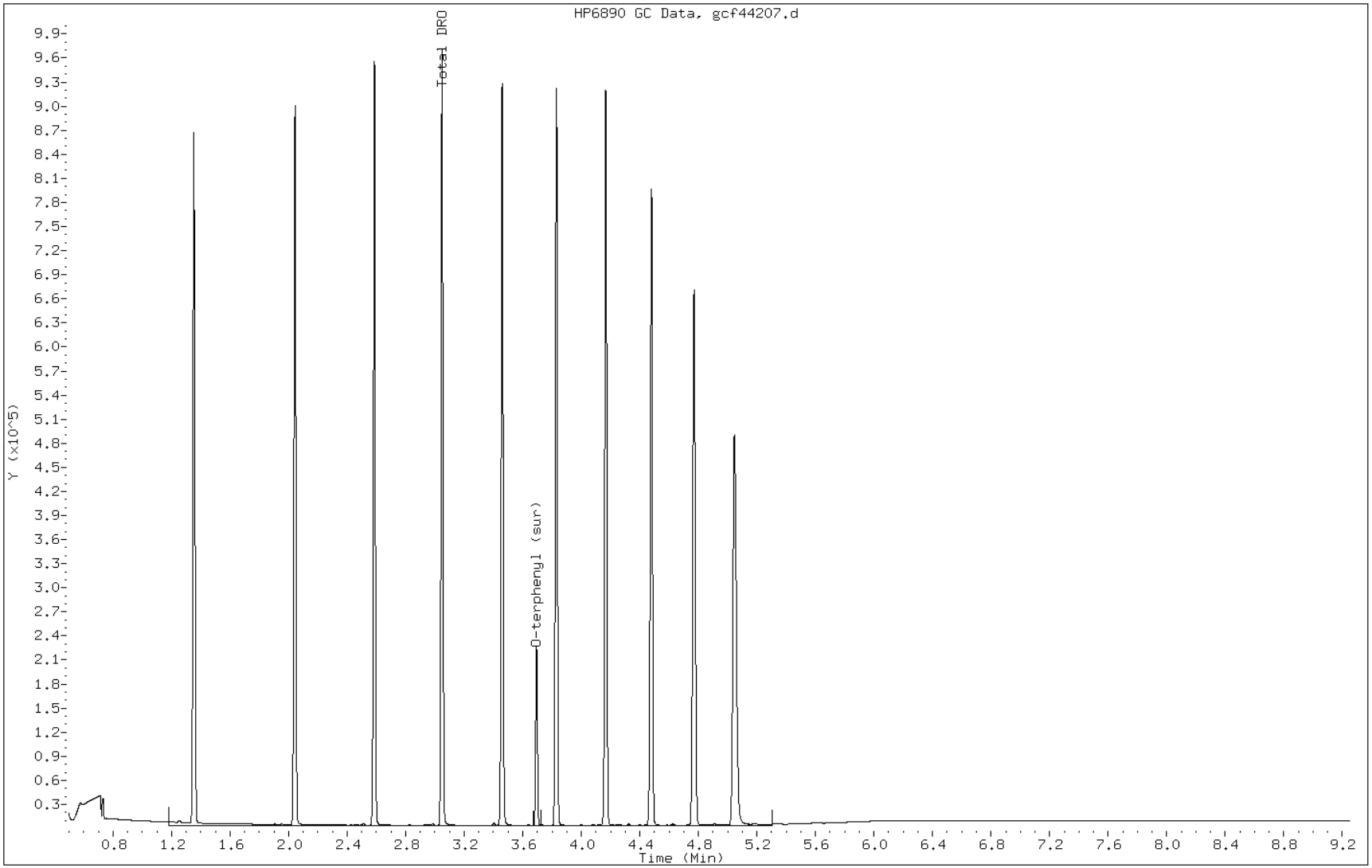
M - Compound response manually integrated.

Data File: gcf44207.d

Date: 31-MAR-2011 10:25

Client ID: Instrument: BNAGC1.i

Sample Info: CCV-SGC28L4_00007 Operator: 615



Manual Integration Report

Data File: gcf44207.d
Inj. Date and Time: 31-MAR-2011 10:25
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

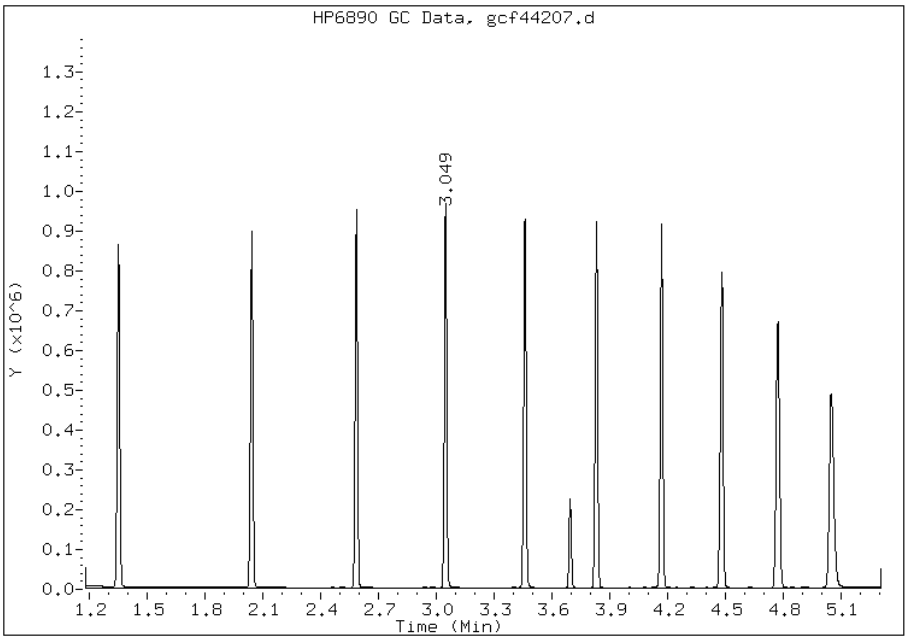
Manual Integration Results

RT: 3.05

Response: 164148271

Amount: 2698.76

Conc: 2698.76



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44207.d
Inj. Date and Time: 31-MAR-2011 10:25
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

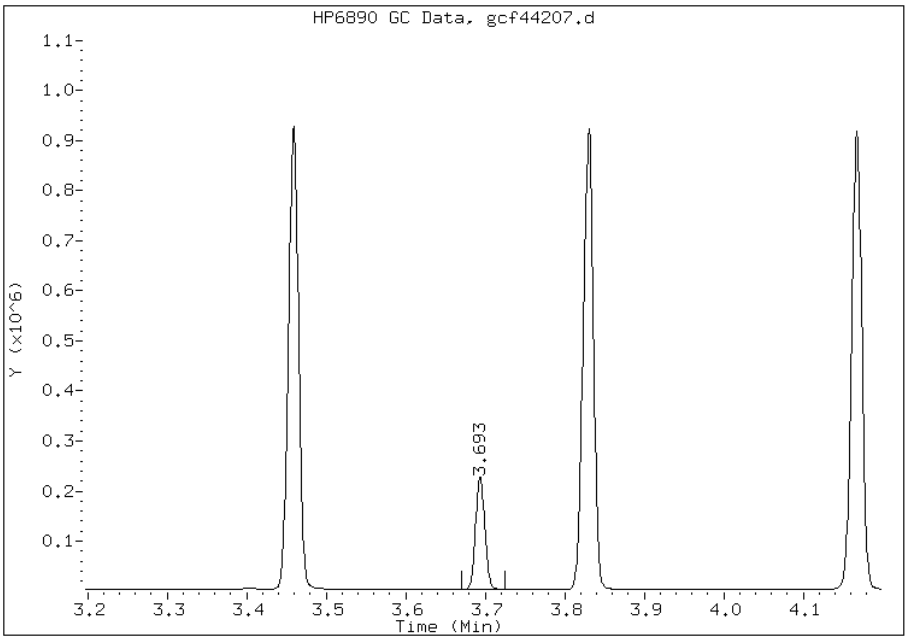
Manual Integration Results

RT: 3.69

Response: 3669840

Amount: 53.16

Conc: 53.16



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/30 Calibration Date: 03/31/2011 16:28

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44231.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10-C28]	Ave	60824	67647		2780	2500	11.2	15.0
o-Terphenyl	Ave	69036	75250		54.5	50.0	9.0	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/30 Calibration Date: 03/31/2011 16:28

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44231.d

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel Range Organics [C10-C28]	3.05	0.00	32.59
o-Terphenyl	3.70	3.60	3.80

Data File: gcf44231.d
Report Date: 31-Mar-2011 16:45

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44231.d
Lab Smp Id: CCV-SGC28L4_00007
Inj Date : 31-MAR-2011 16:28
Operator : 615 Inst ID: BNAGC1.i
Smp Info : CCV-SGC28L4_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 16:45 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 98 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/ml)
	2 Total DRO	3.051	3.051	0.000	169116918	2500.00	2780(M)
$	1 O-terphenyl (sur)	3.696	3.696	0.000	3762499	50.0000	54.5(M)

QC Flag Legend

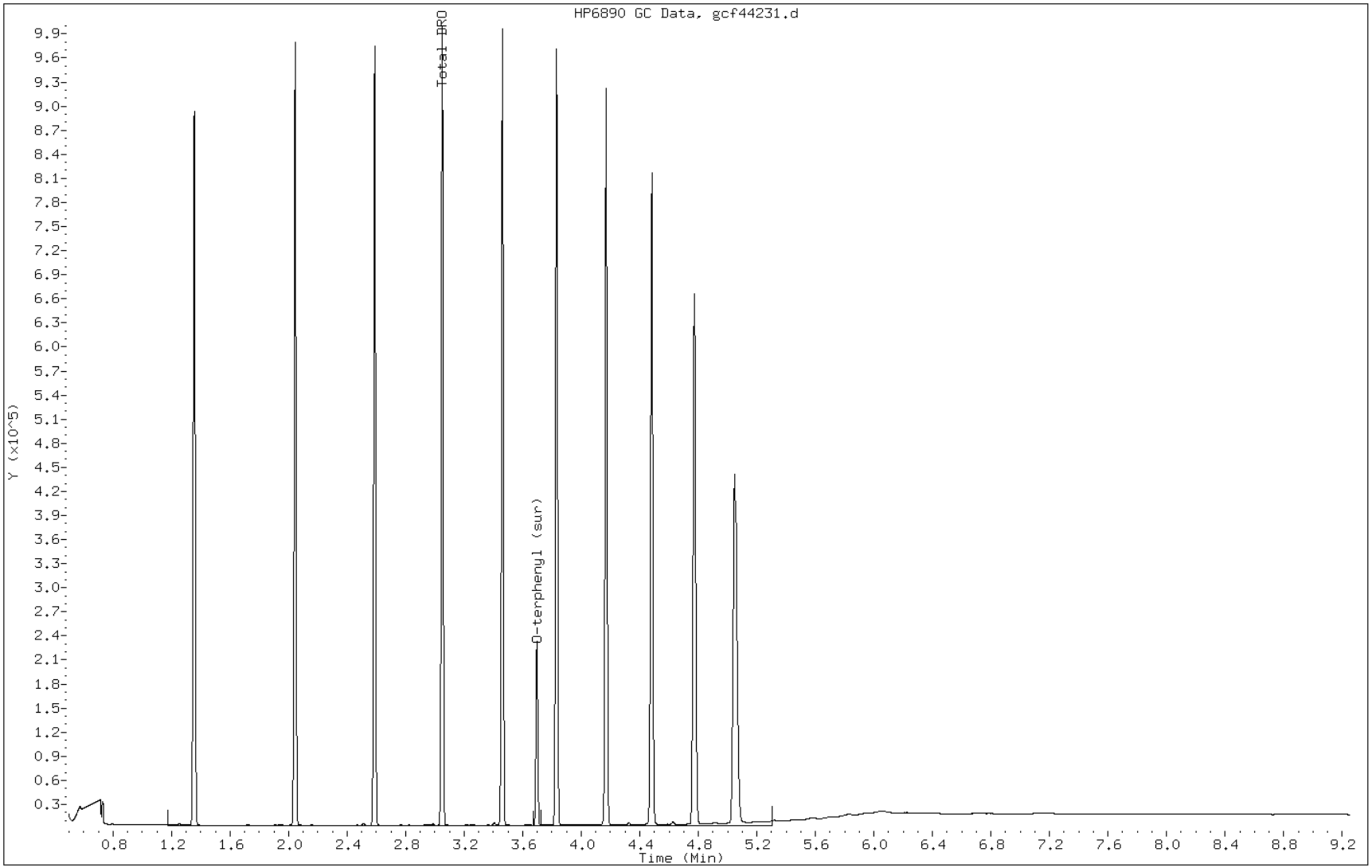
M - Compound response manually integrated.

Data File: gcf44231.d

Date: 31-MAR-2011 16:28

Client ID: Instrument: BNAGC1.i

Sample Info: CCV-SGC28L4_00007 Operator: 615



Manual Integration Report

Data File: gcf44231.d
Inj. Date and Time: 31-MAR-2011 16:28
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

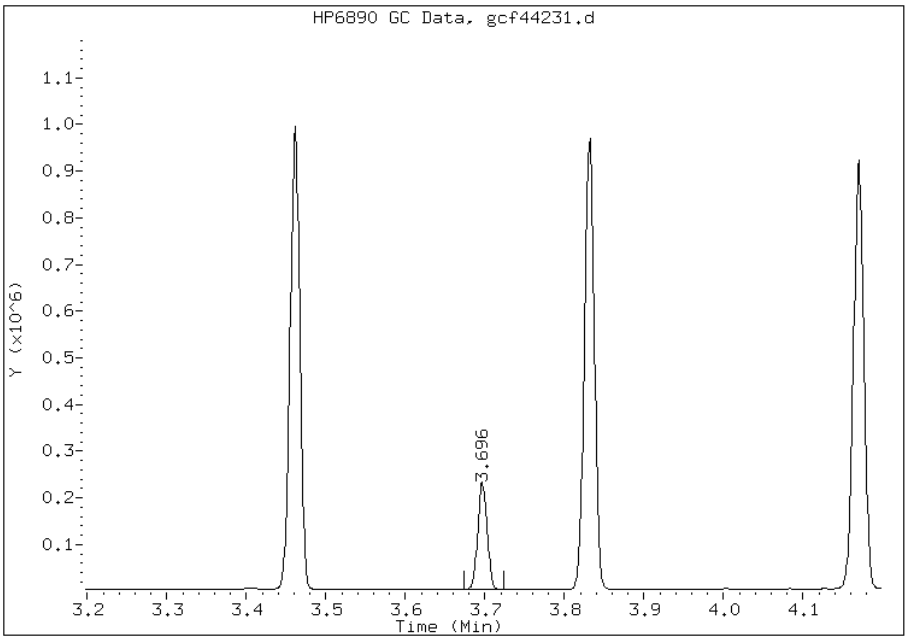
Manual Integration Results

RT: 3.70

Response: 3762499

Amount: 54.50

Conc: 54.50



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: gcf44231.d
Inj. Date and Time: 31-MAR-2011 16:28
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

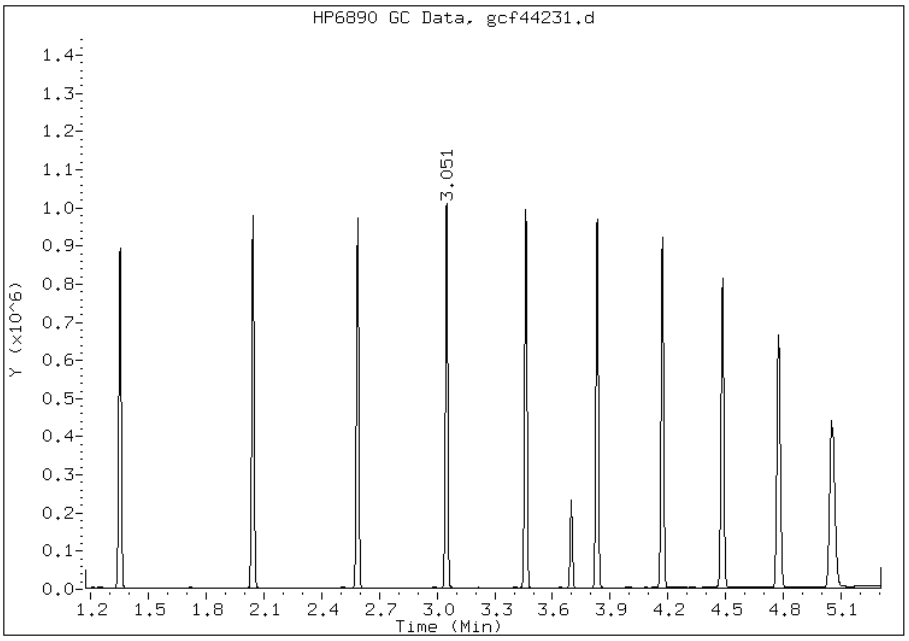
Manual Integration Results

RT: 3.05

Response: 169116918

Amount: 2780.45

Conc: 2780.45



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/40 Calibration Date: 03/31/2011 18:49

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44241.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10-C28]	Ave	60824	68301		2810	2500	12.3	15.0
o-Terphenyl	Ave	69036	70973		51.4	50.0	2.8	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-69165/40 Calibration Date: 03/31/2011 18:49

Instrument ID: BNAGC1 Calib Start Date: 03/28/2011 11:15

GC Column: Rtx-5MS ID: 0.25(mm) Calib End Date: 03/28/2011 12:06

Lab File ID: gcf44241.d

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel Range Organics [C10-C28]	2.59	0.00	32.59
o-Terphenyl	3.70	3.60	3.80

Data File: gcf44241.d
Report Date: 31-Mar-2011 18:59

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44241.d
Lab Smp Id: CCV-SGC28L4_00007
Inj Date : 31-MAR-2011 18:49
Operator : 615 Inst ID: BNAGC1.i
Smp Info : CCV-SGC28L4_00007
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 18:59 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 98 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/ml)
	2 Total DRO	2.588	2.588	0.000	170752015	2500.00	2810(M)
$	1 O-terphenyl (sur)	3.698	3.698	0.000	3548647	50.0000	51.4(M)

QC Flag Legend

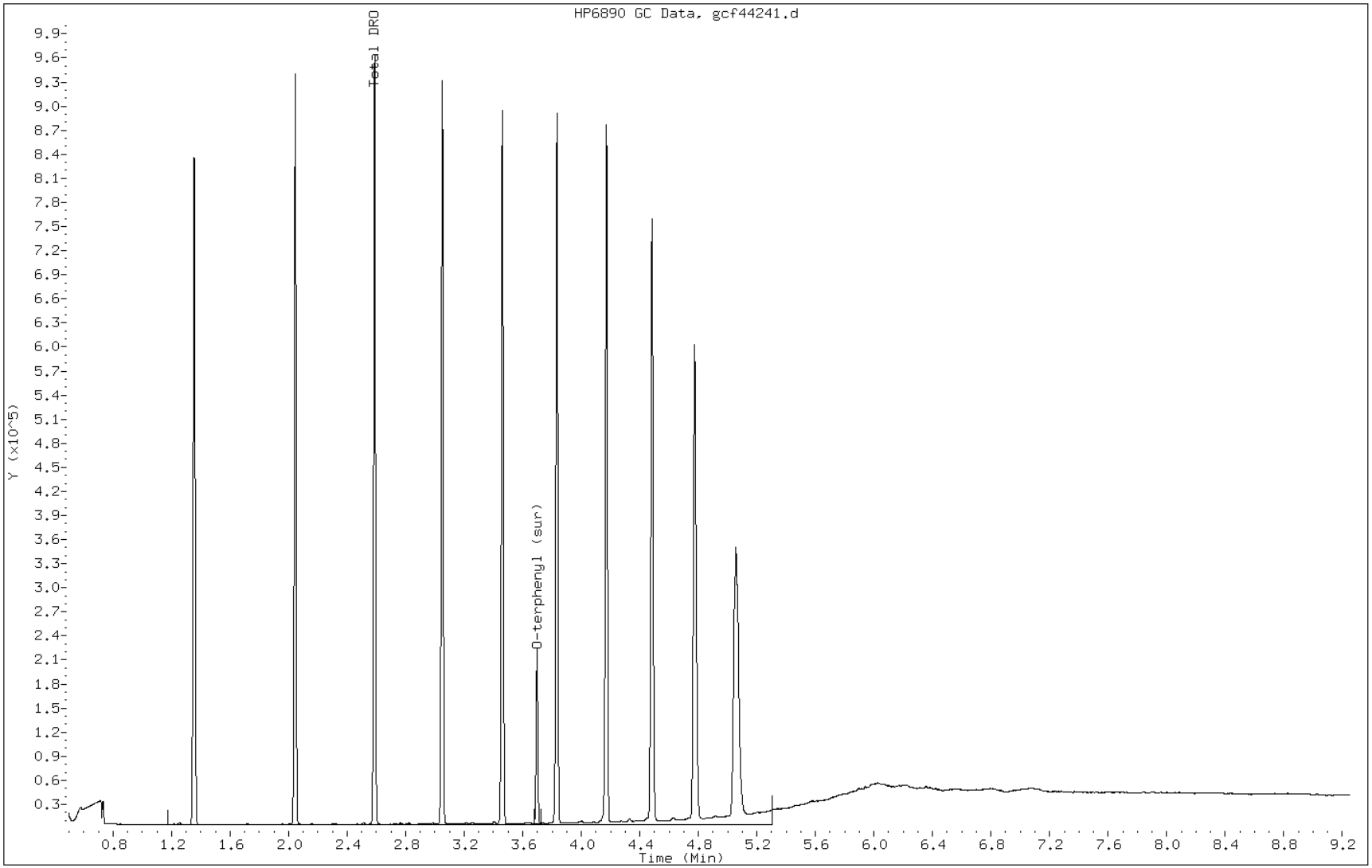
M - Compound response manually integrated.

Data File: gcf44241.d

Date: 31-MAR-2011 18:49

Client ID: Instrument: BNAGC1.i

Sample Info: CCV-SGC28L4_00007 Operator: 615



Manual Integration Report

Data File: gcf44241.d
Inj. Date and Time: 31-MAR-2011 18:49
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

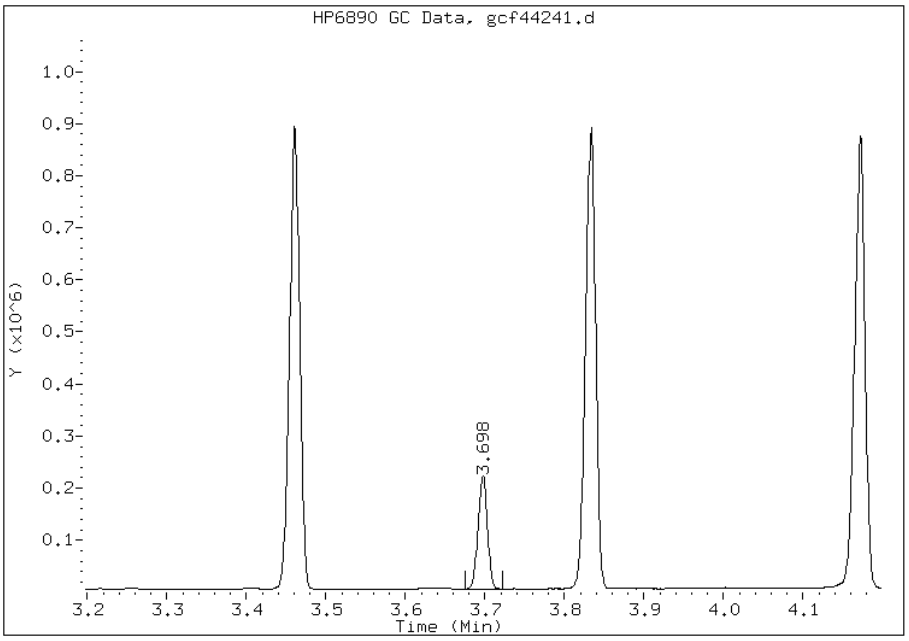
Manual Integration Results

RT: 3.70

Response: 3548647

Amount: 51.40

Conc: 51.40



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: gcf44241.d
Inj. Date and Time: 31-MAR-2011 18:49
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

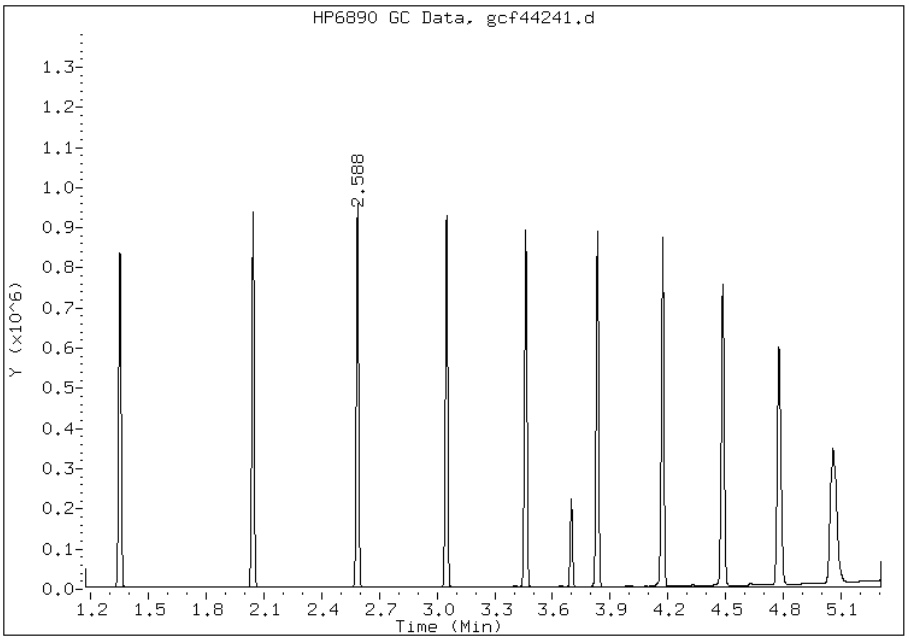
Manual Integration Results

RT: 2.59

Response: 170752015

Amount: 2807.33

Conc: 2807.33



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68928/1-A

Matrix: Solid Lab File ID: gcf44208.d

Analysis Method: 8015B Date Collected:

Extraction Method: 3546 Date Extracted: 03/30/2011 10:53

Sample wt/vol: 15.00(g) Date Analyzed: 03/31/2011 10:40

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: Rtx-5MS ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 69165 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00143	Diesel Range Organics [C10-C28]	6.7	U	6.7	6.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	97		43-119

Data File: gcf44208.d
Report Date: 31-Mar-2011 12:24

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44208.d
Lab Smp Id: MB 460-68928/1-A
Inj Date : 31-MAR-2011 10:40
Operator : 615 Inst ID: BNAGC1.i
Smp Info : MB 460-68928/1-A
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 10:40 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (mg/Kg)
Compounds		RT	EXP RT	DLT RT	RESPONSE		
2 Total DRO		Compound Not Detected.					
$	1 O-terphenyl (sur)	3.696	3.693	0.003	1333701	19.3189	1.3(M)

QC Flag Legend

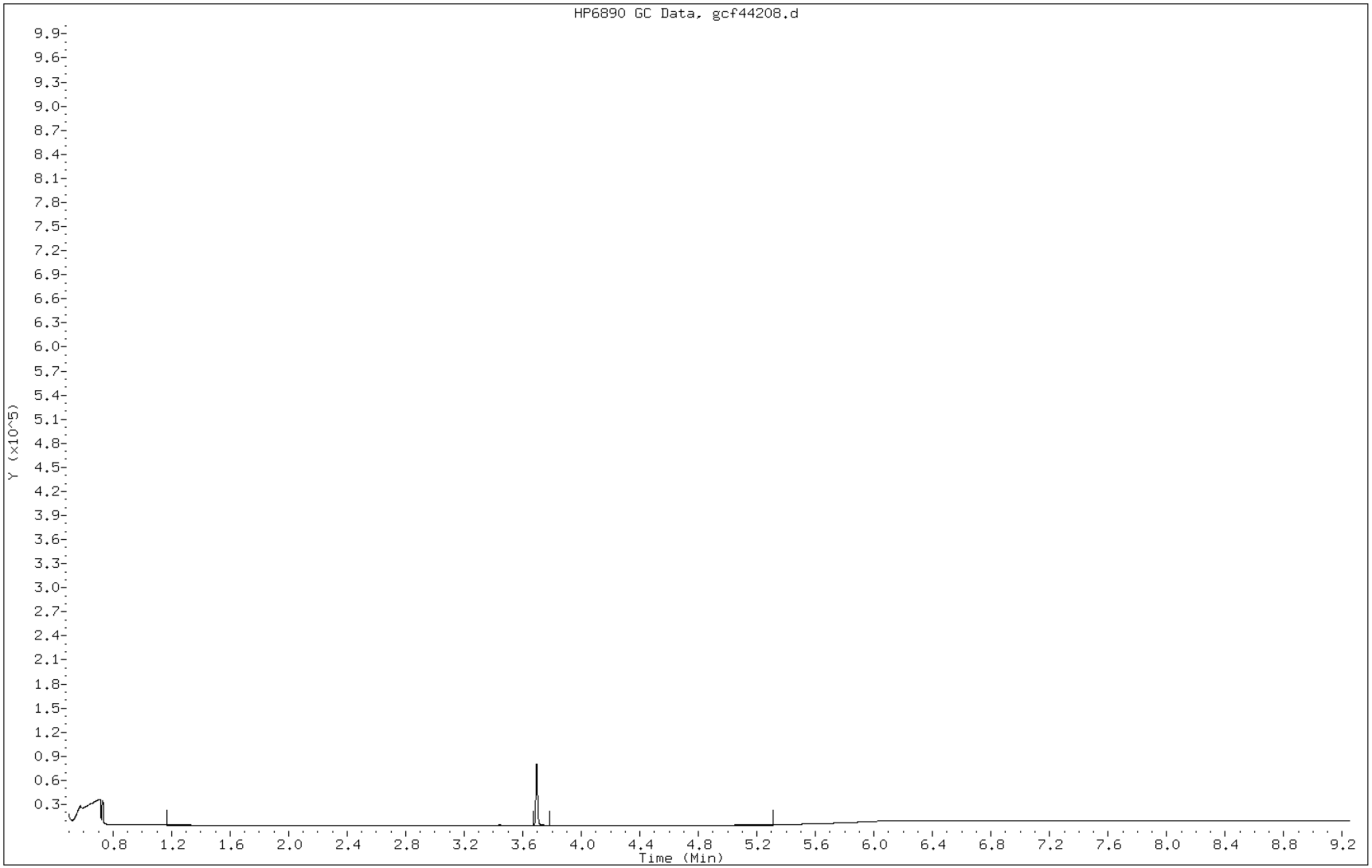
M - Compound response manually integrated.

Data File: gcf44208.d

Date: 31-MAR-2011 10:40

Client ID: Instrument: BNAGC1.i

Sample Info: MB 460-68928/1-A Operator: 615



Manual Integration Report

Data File: gcf44208.d
Inj. Date and Time: 31-MAR-2011 10:40
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

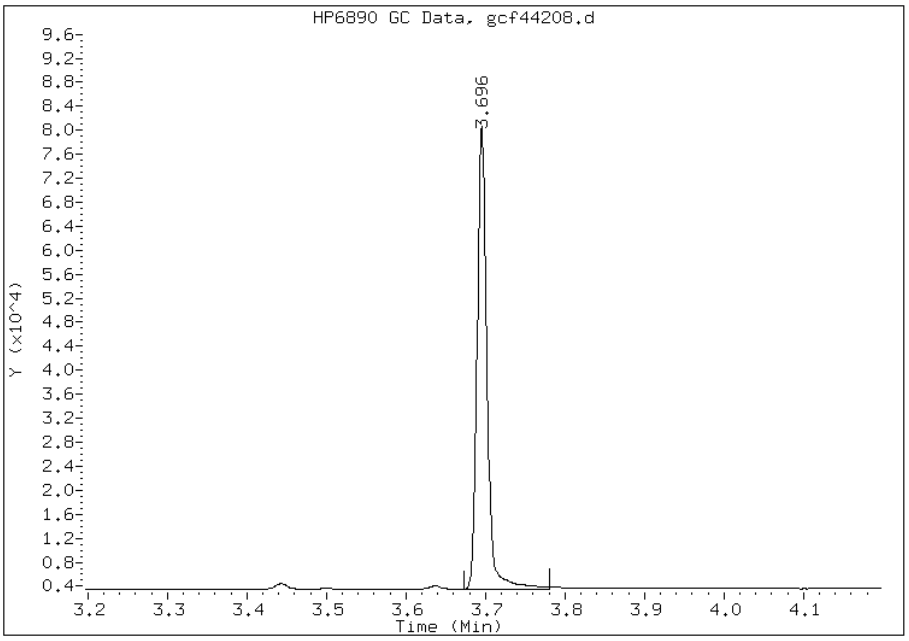
Manual Integration Results

RT: 3.70

Response: 1333701

Amount: 19.32

Conc: 1.29



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68928/2-A

Matrix: Solid Lab File ID: gcf44209.d

Analysis Method: 8015B Date Collected:

Extraction Method: 3546 Date Extracted: 03/30/2011 10:53

Sample wt/vol: 15.00(g) Date Analyzed: 03/31/2011 10:55

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: Rtx-5MS ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 69165 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00143	Diesel Range Organics [C10-C28]	180		6.7	6.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	105		43-119

Data File: gcf44209.d
Report Date: 31-Mar-2011 12:25

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44209.d
Lab Smp Id: LCS 460-68928/2-A
Inj Date : 31-MAR-2011 10:55
Operator : 615 Inst ID: BNAGC1.i
Smp Info : LCS 460-68928/2-A
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 10:40 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 7 QC Sample: BS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (mg/Kg)
	Compounds	RT	EXP RT	DLT RT	RESPONSE		
	2 Total DRO	3.050	3.049	0.001	164277375	2700.88	180(M)
$	1 O-terphenyl (sur)	3.696	3.693	0.003	1449114	20.9907	1.4(M)

QC Flag Legend

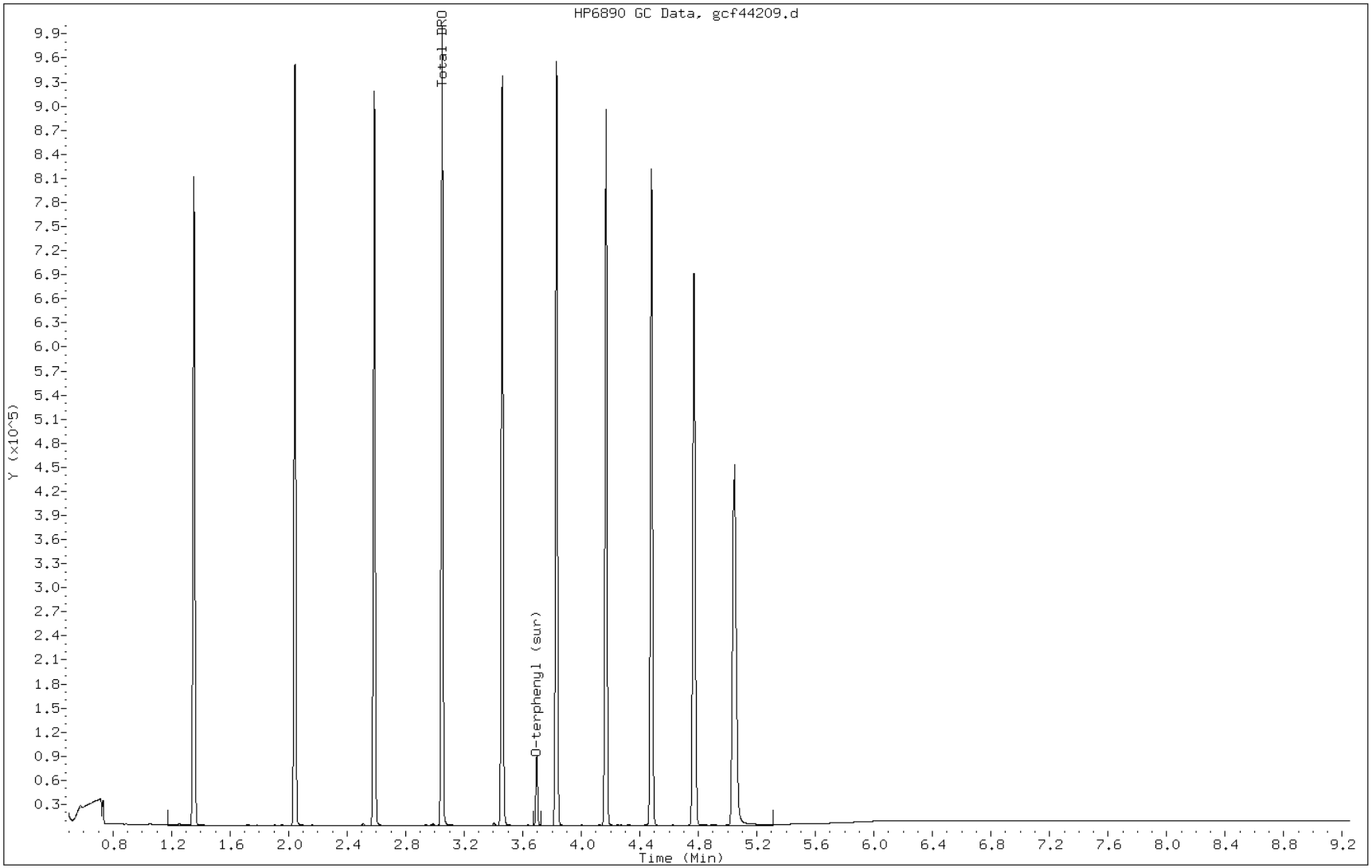
M - Compound response manually integrated.

Data File: gcf44209.d

Date: 31-MAR-2011 10:55

Client ID: Instrument: BNAGC1.i

Sample Info: LCS 460-68928/2-A Operator: 615



Manual Integration Report

Data File: gcf44209.d
Inj. Date and Time: 31-MAR-2011 10:55
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

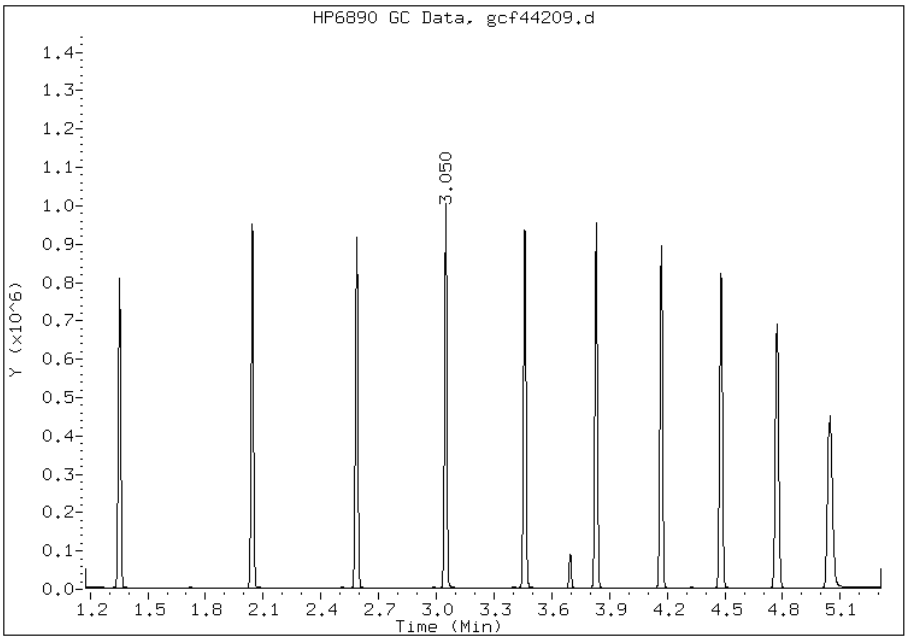
Manual Integration Results

RT: 3.05

Response: 164277375

Amount: 2700.88

Conc: 180.06



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44209.d
Inj. Date and Time: 31-MAR-2011 10:55
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

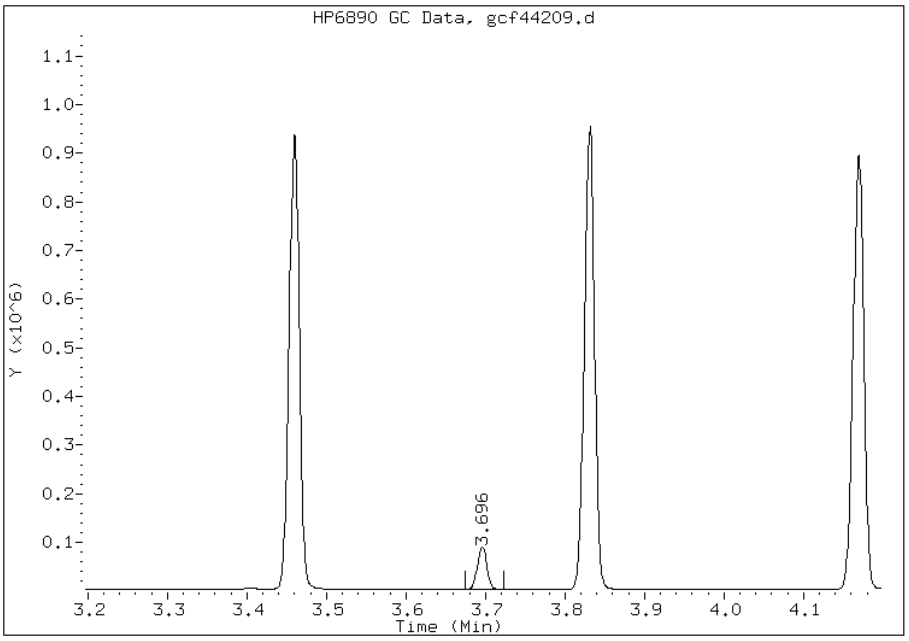
Manual Integration Results

RT: 3.70

Response: 1449114

Amount: 20.99

Conc: 1.40



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24510-A-2-B MS

Matrix: Solid Lab File ID: gcf44230.d

Analysis Method: 8015B Date Collected: 03/24/2011 10:47

Extraction Method: 3546 Date Extracted: 03/30/2011 10:53

Sample wt/vol: 15.02(g) Date Analyzed: 03/31/2011 16:13

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: Rtx-5MS ID: 0.25(mm)

% Moisture: 17.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 69165 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00143	Diesel Range Organics [C10-C28]	381		8.2	8.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	99		43-119

Data File: gcf44230.d
Report Date: 31-Mar-2011 16:28

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44230.d
Lab Smp Id: 460-24510-A-2-B MS
Inj Date : 31-MAR-2011 16:13
Operator : 615 Inst ID: BNAGC1.i
Smp Info : 460-24510-A-2-B MS
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 14:01 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
						ON-COLUMN	FINAL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(mg/Kg)
	2 Total DRO	3.051	2.587	0.464	285760399	4698.19	313(RM)
$	1 O-terphenyl (sur)	3.696	3.694	0.002	1371960	19.8731	1.3(M)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: gcf44230.d

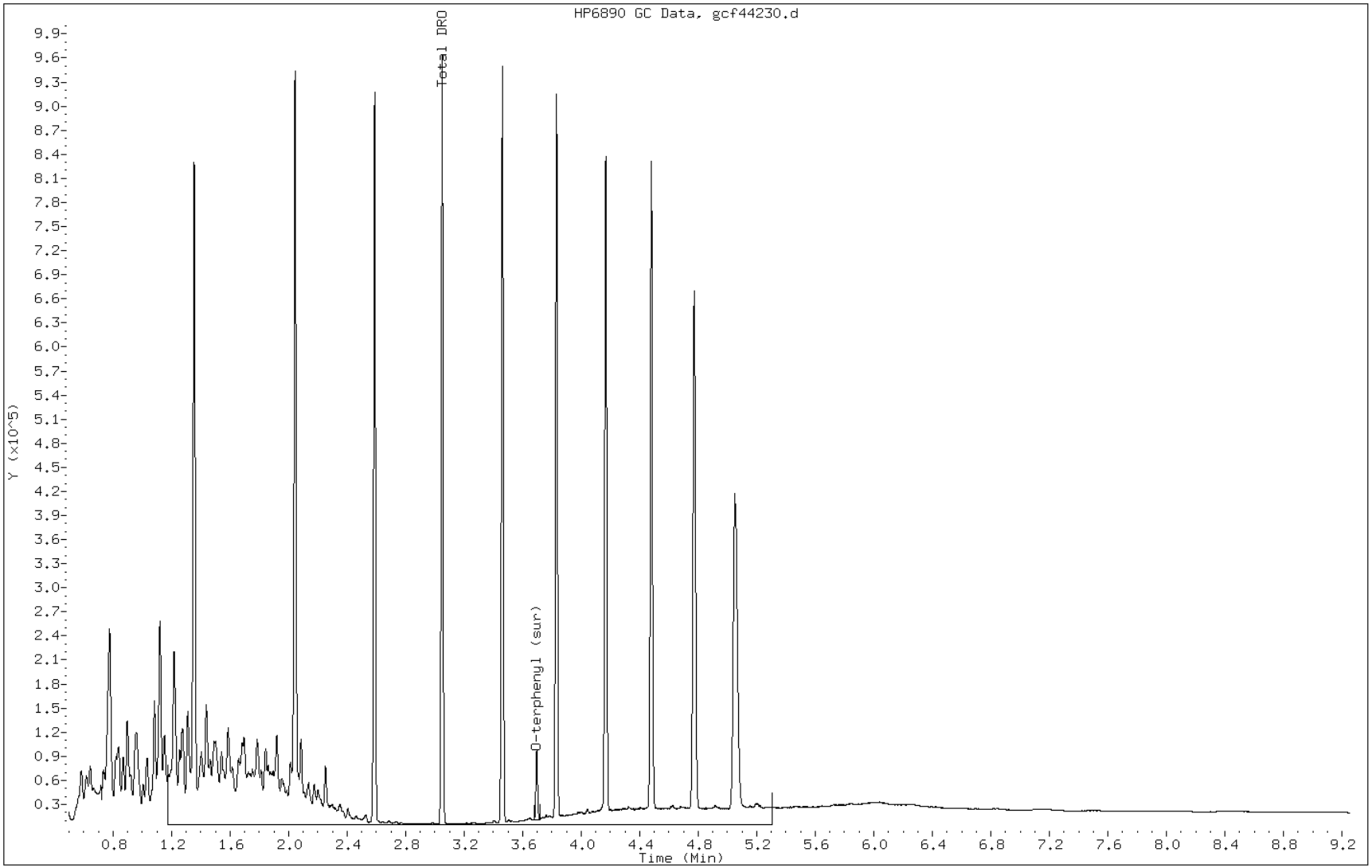
Date: 31-MAR-2011 16:13

Client ID:

Instrument: BNAGC1.i

Sample Info: 460-24510-A-2-B MS

Operator: 615



Manual Integration Report

Data File: gcf44230.d
Inj. Date and Time: 31-MAR-2011 16:13
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

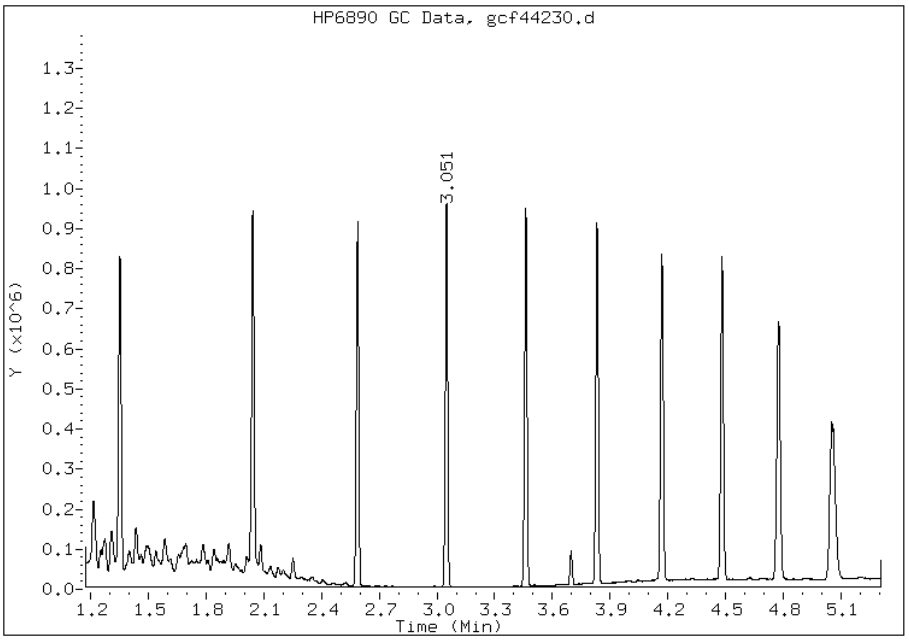
Manual Integration Results

RT: 3.05

Response: 285760399

Amount: 4698.19

Conc: 313.21



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44230.d
Inj. Date and Time: 31-MAR-2011 16:13
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

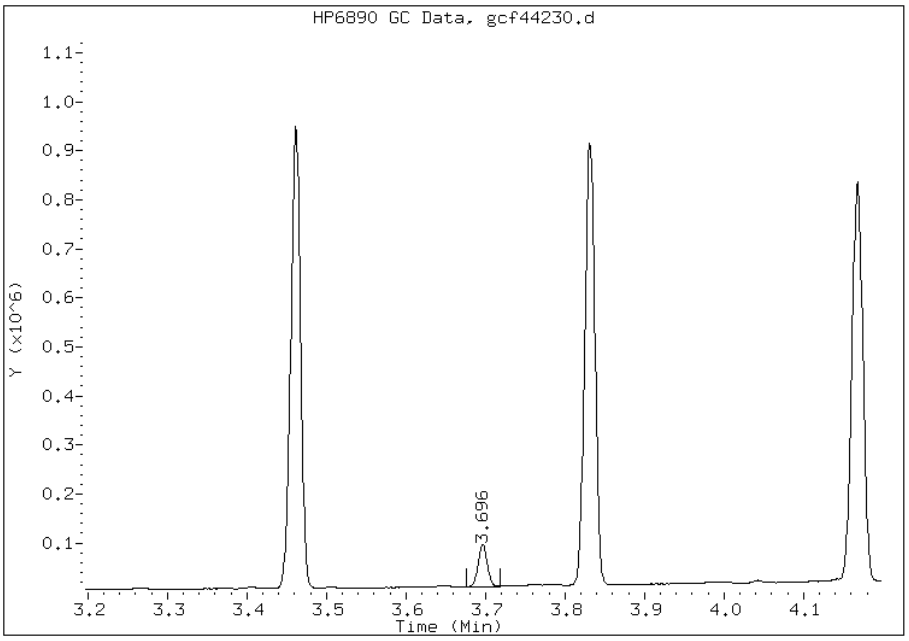
Manual Integration Results

RT: 3.70

Response: 1371960

Amount: 19.87

Conc: 1.32



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24510-A-2-C MSD

Matrix: Solid Lab File ID: gcf44232.d

Analysis Method: 8015B Date Collected: 03/24/2011 10:47

Extraction Method: 3546 Date Extracted: 03/30/2011 10:53

Sample wt/vol: 15.00(g) Date Analyzed: 03/31/2011 16:39

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: Rtx-5MS ID: 0.25(mm)

% Moisture: 17.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 69165 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
STL00143	Diesel Range Organics [C10-C28]	378		8.2	8.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	100		43-119

Data File: gcf44232.d
Report Date: 31-Mar-2011 16:51

TestAmerica

Data file : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/gcf44232.d
Lab Smp Id: 460-24510-A-2-C MSD
Inj Date : 31-MAR-2011 16:39
Operator : 615 Inst ID: BNAGC1.i
Smp Info : 460-24510-A-2-C MSD
Misc Info :
Comment :
Method : /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b/c28DROf2008.m
Meth Date : 31-Mar-2011 16:45 yip Quant Type: ESTD
Cal Date : 28-MAR-2011 12:06 Cal File: gcf44157.d
Als bottle: 26 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: MWDRO.sub
Target Version: 3.50
Processing Host: hpd1

Concentration Formula: Amt * DF * Uf*Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1.00000	Volume of final extract (ml)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

						CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (mg/Kg)
	Compounds	RT	EXP RT	DLT RT	RESPONSE		
	2 Total DRO	2.045	3.051	-1.006	282943501	4651.87	310(RM)
$	1 O-terphenyl (sur)	3.697	3.696	0.001	1377898	19.9591	1.3(M)

QC Flag Legend

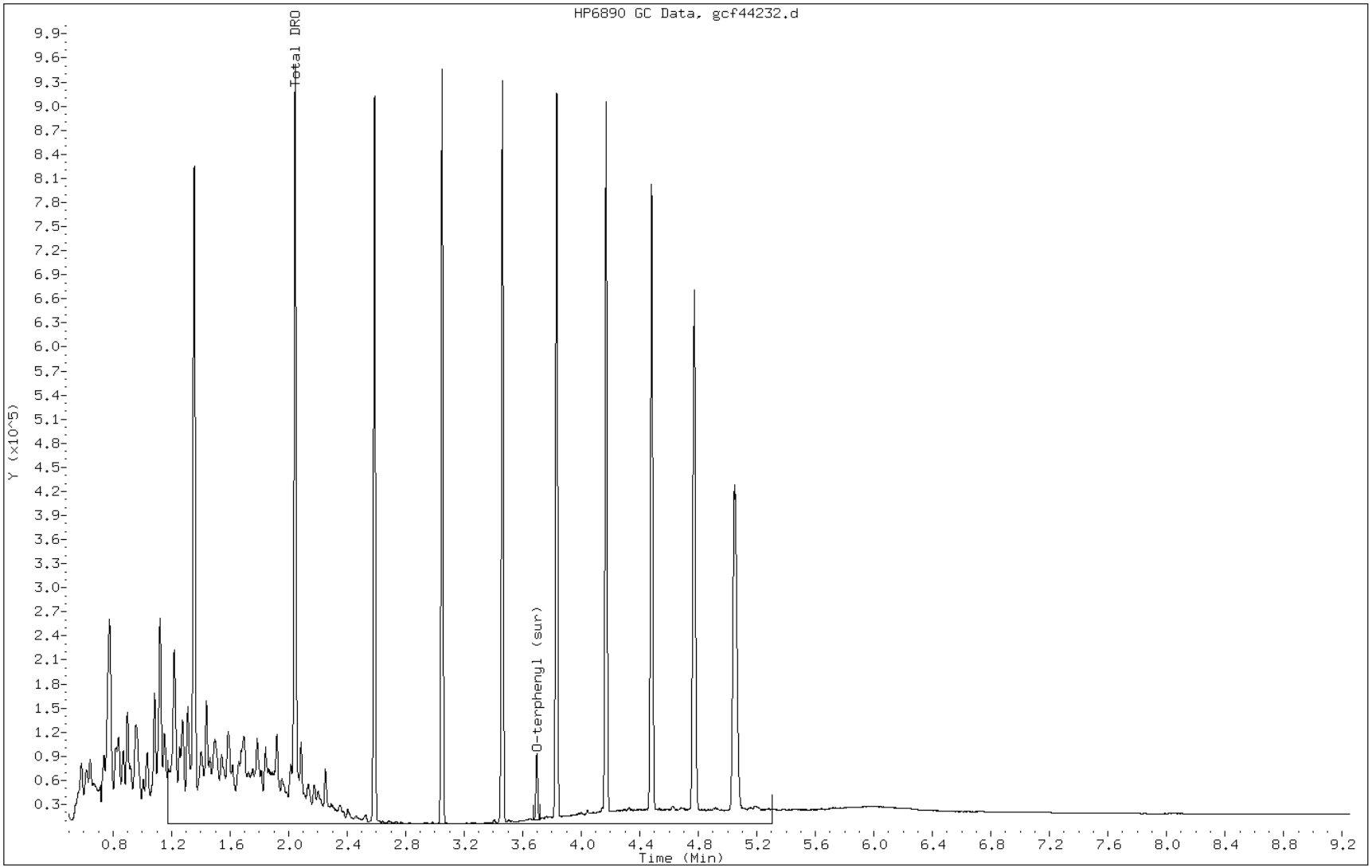
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: gcf44232.d

Date: 31-MAR-2011 16:39

Client ID: Instrument: BNAGC1.i

Sample Info: 460-24510-A-2-C MSD Operator: 615



Manual Integration Report

Data File: gcf44232.d
Inj. Date and Time: 31-MAR-2011 16:39
Instrument ID: BNAGC1.i
Client ID:
Compound: 2 Total DRO
CAS #: DRO
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 2.59

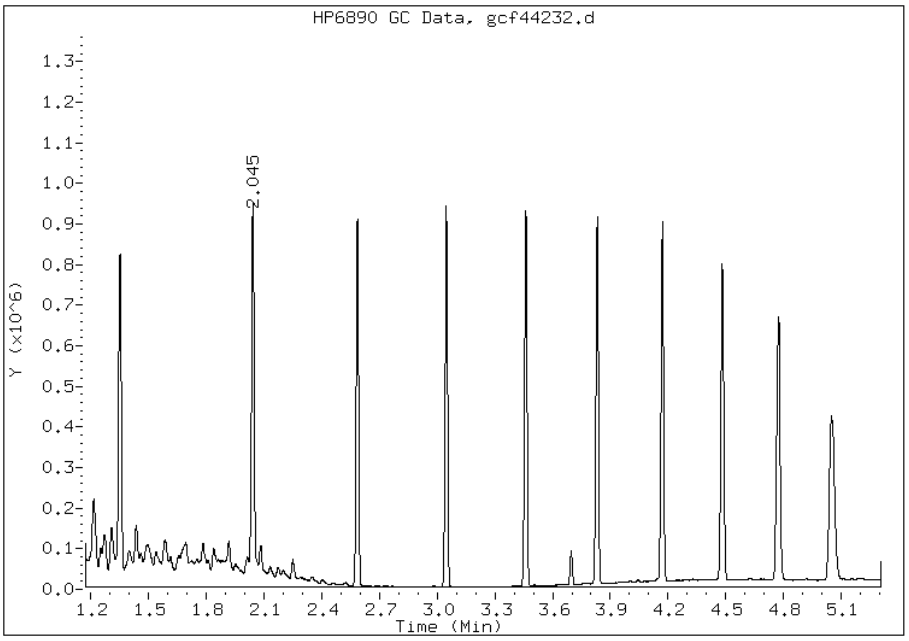
Manual Integration Results

RT: 2.04

Response: 282943501

Amount: 4651.87

Conc: 310.12



Manually Integrated By: yip
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: gcf44232.d
Inj. Date and Time: 31-MAR-2011 16:39
Instrument ID: BNAGC1.i
Client ID:
Compound: 1 O-terphenyl (sur)
CAS #: 84-15-1
Report Date: 04/01/2011

Processing Integration Results

Not Detected

Expected RT: 3.70

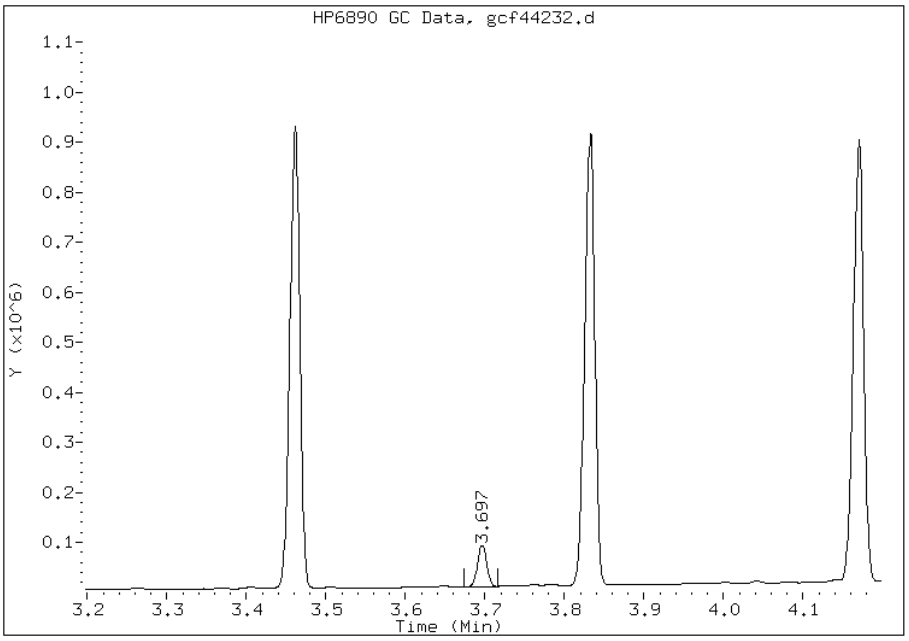
Manual Integration Results

RT: 3.70

Response: 1377898

Amount: 19.96

Conc: 1.33



Manually Integrated By: yip
Manual Integration Reason: Analyte not Identified by the Data System

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: BNAGC1 Start Date: 03/28/2011 10:34

Analysis Batch Number: 68681 End Date: 03/28/2011 12:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RINSE 460-68681/1		03/28/2011 10:34	1		Rtx-5MS 0.25(mm)
RINSE 460-68681/2		03/28/2011 10:46	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/28/2011 11:01	1		Rtx-5MS 0.25(mm)
IC 460-68681/4		03/28/2011 11:15	1	gcf44153.d	Rtx-5MS 0.25(mm)
IC 460-68681/5		03/28/2011 11:25	1	gcf44154.d	Rtx-5MS 0.25(mm)
IC 460-68681/6		03/28/2011 11:39	1	gcf44155.d	Rtx-5MS 0.25(mm)
IC 460-68681/7		03/28/2011 11:54	1	gcf44156.d	Rtx-5MS 0.25(mm)
IC 460-68681/8		03/28/2011 12:06	1	gcf44157.d	Rtx-5MS 0.25(mm)
ICV 460-68681/9		03/28/2011 12:21	1		Rtx-5MS 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: BNAGC1 Start Date: 03/31/2011 09:17

Analysis Batch Number: 69165 End Date: 03/31/2011 18:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RINSE 460-69165/1		03/31/2011 09:17	1		Rtx-5MS 0.25(mm)
RINSE 460-69165/2		03/31/2011 09:30	1		Rtx-5MS 0.25(mm)
RINSE 460-69165/3		03/31/2011 09:45	1		Rtx-5MS 0.25(mm)
RINSE 460-69165/4		03/31/2011 10:00	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 10:15	1		Rtx-5MS 0.25(mm)
CCV 460-69165/6		03/31/2011 10:25	1	gcf44207.d	Rtx-5MS 0.25(mm)
MB 460-68928/1-A		03/31/2011 10:40	1	gcf44208.d	Rtx-5MS 0.25(mm)
LCS 460-68928/2-A		03/31/2011 10:55	1	gcf44209.d	Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 11:08	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 11:23	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 11:38	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 11:51	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 12:06	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 12:20	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 12:34	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 12:52	1		Rtx-5MS 0.25(mm)
CCV 460-69165/17		03/31/2011 13:07	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 13:33	10		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 13:43	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 13:58	10		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 14:13	10		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 14:23	10		Rtx-5MS 0.25(mm)
RINSE 460-69165/23		03/31/2011 14:38	1		Rtx-5MS 0.25(mm)
RINSE 460-69165/24		03/31/2011 15:06	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 15:19	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 15:33	10		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 15:48	10		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 15:59	10		Rtx-5MS 0.25(mm)
460-24510-A-2-B MS		03/31/2011 16:13	1	gcf44230.d	Rtx-5MS 0.25(mm)
CCV 460-69165/30		03/31/2011 16:28	1	gcf44231.d	Rtx-5MS 0.25(mm)
460-24510-A-2-C MSD		03/31/2011 16:39	1	gcf44232.d	Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 16:54	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 17:08	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 17:23	1		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 17:34	2		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 17:49	2		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 18:03	5		Rtx-5MS 0.25(mm)
ZZZZZ		03/31/2011 18:26	5		Rtx-5MS 0.25(mm)
460-24356-1	GPEC-WC-031911	03/31/2011 18:34	2	gcf44240.d	Rtx-5MS 0.25(mm)
CCV 460-69165/40		03/31/2011 18:49	1	gcf44241.d	Rtx-5MS 0.25(mm)

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAGC1.i

Analytical Batch: /chem/BNAGC1.i/C28DRO2010/front/03-28-11aical/28mar11a.b

Date Generated: 03/28/2011

Page 1

ICAL ID - 10286 68681

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/28/11 1034	gcf44150	91	RINSE-J04E23	28mar11a		15	1	1	15	MWDRO		—
03/28/11 1046	gcf44151	92	RINSE-J04E23	28mar11a		15	1	1	15	MWDRO		—
03/28/11 1101	gcf44152	93	SUB BLANK	28mar11a		15	1	1	15	MWDRO		4454528
03/28/11 1115	gcf44153	81	IC-SGC28L5_00008			15	1	1	15	MWDRO		OK
03/28/11 1125	gcf44154	82	IC-SGC28L4_00007			15	1	1	15	MWDRO		OK
03/28/11 1139	gcf44155	83	IC-SGC28L3_00007			15	1	1	15	MWDRO		OK
03/28/11 1154	gcf44156	84	IC-SGC28L2_00009			15	1	1	15	MWDRO		OK
03/28/11 1206	gcf44157	85	IC-SGC28L1_00007			15	1	1	15	MWDRO		OK
03/28/11 1221	gcf44158	86	ICV-SGC28ICV_00002			15	1	1	15	MWDRO		OK

Signed: _____ Read and Understood by: _____

Date: 3/28/11 Date: 3/28/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAGC1.i

Analytical Batch: /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b

Date Generated: 04/01/2011

69165

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/31/11 0917	gcf44202	96	RINSE-K06E10	31mar11a	—	15	1	1	15	MWDRO	—	—
03/31/11 0930	gcf44203	2	RINSE-K06E10	31mar11a		15	1	1	15	MWDRO		—
03/31/11 0945	gcf44204	3	RINSE-K06E10	31mar11a		15	1	1	15	MWDRO		—
03/31/11 1000	gcf44205	4	RINSE-K06E10	31mar11a		15	1	1	15	MWDRO		—
03/31/11 1015	gcf44206	5	SUB BLANK	31mar11a		15	1	1	15	MWDRO		1244819
03/31/11 1025	gcf44207	98	CCV-SGC28L4_00007	—		15	1	1	15	MWDRO		OK
03/31/11 1040	gcf44208	6	MB 460-68928/1-A	31mar11a		15	1	1	15	MWDRO		OK
03/31/11 1055	gcf44209	7	LCS 460-68928/2-A	31mar11a		15	1	1	15	MWDRO		OK
03/31/11 1108	gcf44210	8	460-24510-A-1-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1123	gcf44211	9	460-24510-A-2-D	460-68928	03/30/11	15	1	1	15	MWDRO		OK
03/31/11 1138	gcf44212	10	460-24510-A-3-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1151	gcf44213	11	460-24510-A-4-B	460-68928	03/30/11	15	1	1	15	MWDRO		OK
03/31/11 1206	gcf44214	12	460-24510-A-5-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1220	gcf44215	13	460-24510-A-6-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK

4/1/11

4/1/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAGC1.i

Analytical Batch: /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b

Date Generated: 04/01/2011

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/31/11 1234	gcf44216	14	460-24510-A-7-B	460-68928	03/30/11	15	1	1	15	MWDRO		OK
03/31/11 1252	gcf44217	15	460-24510-A-8-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1307	gcf44218	98	CCV-SGC28L4_00007	—	—	15	1	1	15	MWDRO		OK
03/31/11 1333	gcf44219	16	460-24510-A-9-B	460-68928	03/30/11	15.0	1	10	15.0	MWDRO		RR 1X
03/31/11 1343	gcf44220	17	460-24510-A-10-B	460-68928	03/30/11	15	1	1	15	MWDRO		RR 2X
03/31/11 1358	gcf44221	18	460-24510-A-11-B	460-68928	03/30/11	15.0	1	10	15.0	MWDRO		RR 1X
03/31/11 1413	gcf44222	19	460-24510-A-12-B	460-68928	03/30/11	15.0	1	10	15.0	MWDRO		RR 1X
03/31/11 1423	gcf44223	20	460-24510-A-13-B	460-68928	03/30/11	15	1	10	15	MWDRO		RR 2X
03/31/11 1438	gcf44224	1	RINSE-K06E10	31mar11a		15	1	1	15	MWDRO		—
03/31/11 1506	gcf44225	2	RINSE-K06E10	31mar11a		15	1	1	15	MWDRO		—
03/31/11 1519	gcf44226	21	460-24510-A-14-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1533	gcf44227	22	460-24510-A-15-B	460-68928	03/30/11	15	1	10	15	MWDRO		RR 5X
03/31/11 1548	gcf44228	23	460-24510-A-16-B	460-68928	03/30/11	15.0	1	10	15.0	MWDRO		RR 5X
03/31/11 1559	gcf44229	24	460-24356-A-1-H	460-68928	03/30/11	15	1	10	15	MWDRO		RR 2X

4/1/11

4/1/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: BNAGC1.i

Analytical Batch: /chem/BNAGC1.i/C28DRO2010/front/03-31-11/31mar11a.b

Date Generated: 04/01/2011

Date	Data File	ALS	Sample ID	LPB	EXT DATE	IV/ IW	FV	Dil	Inj Vol	Sublist	LOT	COMMENTS
03/31/11 1613	gcf44230	25	460-24510-A-2-B MS	31mar11a		15	1	1	15	MWDRO		OK
03/31/11 1628	gcf44231	98	CCV-SGC28L4_00007	—		15	1	1	15	MWDRO		OK
03/31/11 1639	gcf44232	26	460-24510-A-2-C MSD	31mar11a		15	1	1	15	MWDRO		OK
03/31/11 1654	gcf44233	16	460-24510-A-9-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1708	gcf44234	18	460-24510-A-11-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1723	gcf44235	19	460-24510-A-12-B	460-68928	03/30/11	15.0	1	1	15.0	MWDRO		OK
03/31/11 1734	gcf44236	17	460-24510-A-10-B	460-68928	03/30/11	15	1	2	15	MWDRO		OK
03/31/11 1749	gcf44237	20	460-24510-A-13-B	460-68928	03/30/11	15	1	2	15	MWDRO		OK
03/31/11 1803	gcf44238	22	460-24510-A-15-B	460-68928	03/30/11	15	1	5	15	MWDRO		OK
03/31/11 1826	gcf44239	23	460-24510-A-16-B	460-68928	03/30/11	15.0	1	5	15.0	MWDRO		OK
03/31/11 1834	gcf44240	24	460-24356-A-1-H	460-68928	03/30/11	15	1	2	15	MWDRO		OK
03/31/11 1849	gcf44241	98	CCV-SGC28L4_00007	—	—	15	1	1	15	MWDRO		OK

Signed: _____ Read and Understood by: _____

Date: 4/1/11 Date: 4/5/11

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68928 Batch Start Date: 03/30/11 10:53 Batch Analyst: Patel, Harsh

Batch Method: 3546 Batch End Date: 03/30/11 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	OPDROSP 00036	OPDROSU 00011		
MB 460-68928/1		3546, 8015B		15.00 g	1 mL		1 mL		
LCS 460-68928/2		3546, 8015B		15.00 g	1 mL	1 mL	1 mL		
460-24510-A-2 MS		3546, 8015B	T	15.02 g	1 mL	1 mL	1 mL		
460-24510-A-2 MSD		3546, 8015B	T	15.00 g	1 mL	1 mL	1 mL		
460-24356-A-1	GPEC-WC-031911	3546, 8015B	T	15.00 g	1 mL		1 mL		

Batch Notes	
Balance ID	28
Batch Comment	DRO C28 soil
Person's name who did the concentration	hp
MeCL2 Lot #	K06E10
Microwave Start Time	10.30am
Microwave Stop Time	11.00am
Na2SO4 Lot Number	J38600
Person's name who did the prep	hp
Person who witnessed spiking	JR

Basis	Basis Description
T	Total/NA

Method 8082

Polychlorinated Biphenyls (PCBs) by Gas Chromatography by Method 8082

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	DCB1 #	DCB2 #
GPEC-WC-031911	460-24356-1	80	74
	MB 460-68322/1-A	108	104
	LCS 460-68322/2-A	116	113
	460-24449-A-5-A MS	89	77
	460-24449-A-5-B MSD	80	70

	QC LIMITS
DCB = DCB Decachlorobiphenyl	30-150

Column to be used to flag recovery values

FORM II 8082

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qf082243.d

Lab ID: LCS 460-68322/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor 1016	333	329	99	60-144	
Aroclor 1260	333	336	101	63-143	

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qr082243.d

Lab ID: LCS 460-68322/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor 1016	333	341	102	60-144	
Aroclor 1260	333	333	100	63-143	

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qf082245.d

Lab ID: 460-24449-A-5-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Aroclor 1016	401	81 U	305	76	60-144	
Aroclor 1260	401	1400	875	-126	63-143	F

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qr082245.d

Lab ID: 460-24449-A-5-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Aroclor 1016	401	81 U	334	83	60-144	
Aroclor 1260	401	1200	817	-97	63-143	F

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qf082246.d

Lab ID: 460-24449-A-5-B MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor 1016	401	286	71	6	30	60-144	
Aroclor 1260	401	802	-144	9	30	63-143	F

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: qr082246.d

Lab ID: 460-24449-A-5-B MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Aroclor 1016	401	306	76	9	30	60-144	
Aroclor 1260	401	717	-122	13	30	63-143	F

Column to be used to flag recovery and RPD values

FORM III 8082

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: MB 460-68322/1-A

Matrix: Solid Date Extracted: 03/24/2011 03:29

Lab File ID:(1) qf082242.d Lab File ID:(2) qr082242.d

Date Analyzed:(1) 03/24/2011 11:31 Date Analyzed:(2) 03/24/2011 11:31

Instrument ID:(1) PESTGC8 Instrument ID:(2) PESTGC8

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 460-68322/2-A	03/24/2011 11:47	03/24/2011 11:47
	460-24449-A-5-A MS	03/24/2011 12:19	03/24/2011 12:19
	460-24449-A-5-B MSD	03/24/2011 12:35	03/24/2011 12:35
GPEC-WC-031911	460-24356-1	03/24/2011 12:51	03/24/2011 12:51

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVRT 460-68484/4 Date Analyzed: 03/24/2011 10:59

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): qf082240.d Heated Purge: (Y/N) N

Calibration ID: 10232

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DCB RT #		
CONTINUING CALIBRATION SURROGATE				10.36		
UPPER LIMIT				10.46		
LOWER LIMIT				10.26		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 460-68484/4		03/24/2011 10:59	qf082240.d	10.36		
MB 460-68322/1-A		03/24/2011 11:31	qf082242.d	10.36		
LCS 460-68322/2-A		03/24/2011 11:47	qf082243.d	10.37		
460-24449-A-5-A MS		03/24/2011 12:19	qf082245.d	10.36		
460-24449-A-5-B MSD		03/24/2011 12:35	qf082246.d	10.36		
460-24356-1	GPEC-WC-031911	03/24/2011 12:51	qf082247.d	10.37		
CCV 460-68484/27		03/24/2011 17:07	qf082263.d	10.37		

DCB = DCB Decachlorobiphenyl

DCB RT Limit = ± 0.10 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Sample No.: CCVRT 460-68484/4 Date Analyzed: 03/24/2011 10:59

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): qr082240.d Heated Purge: (Y/N) N

Calibration ID: 10240

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DCB		
				RT #		
CONTINUING CALIBRATION SURROGATE				9.28		
UPPER LIMIT				9.38		
LOWER LIMIT				9.18		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 460-68484/4		03/24/2011 10:59	qr082240.d	9.28		
MB 460-68322/1-A		03/24/2011 11:31	qr082242.d	9.28		
LCS 460-68322/2-A		03/24/2011 11:47	qr082243.d	9.28		
460-24449-A-5-A MS		03/24/2011 12:19	qr082245.d	9.27		
460-24449-A-5-B MSD		03/24/2011 12:35	qr082246.d	9.27		
460-24356-1	GPEC-WC-031911	03/24/2011 12:51	qr082247.d	9.27		
CCV 460-68484/27		03/24/2011 17:07	qr082263.d	9.28		

DCB = DCB Decachlorobiphenyl

DCB RT Limit = ± 0.10 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 460-68322/2-A

Instrument ID (1): PESTGC8 Instrument ID (2): PESTGC8

Date Analyzed (1): 03/24/2011 11:47 Date Analyzed (2): 03/24/2011 11:47

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1016	1	1	1.58	1.51	1.65	316	329	3.7
		2	1.96	1.89	2.03	348		
		3	2.18	2.11	2.25	315		
		4	2.42	2.35	2.49	343		
		5	2.57	2.50	2.64	342		
		6	2.69	2.61	2.75	331		
		7	3.14	3.07	3.21	328		
		8	3.32	3.24	3.38	307		
	2	1	1.22	1.15	1.29	352	341	
		2	1.47	1.40	1.54	331		
		3	1.62	1.55	1.69	337		
		4	1.85	1.78	1.92	337		
		5	1.97	1.90	2.04	353		
		6	2.16	2.09	2.23	341		
		7	2.36	2.29	2.43	341		
		8	2.75	2.68	2.82	339		
Aroclor 1260	1	1	5.54	5.46	5.60	344	336	0.8
		2	5.94	5.87	6.01	339		
		3	6.61	6.54	6.68	328		
		4	6.82	6.75	6.89	347		
		5	6.94	6.87	7.01	356		
		6	7.50	7.42	7.56	328		
		7	9.00	8.92	9.06	315		
		8	9.79	9.71	9.85	331		
	2	1	4.02	3.95	4.09	339	333	
		2	4.58	4.50	4.64	339		
		3	5.10	5.02	5.16	325		
		4	5.31	5.23	5.37	367		
		5	5.73	5.66	5.80	331		
		7	7.05	6.97	7.11	332		
		8	8.45	8.36	8.50	301		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24449-A-5-A MS

Instrument ID (1): PESTGC8 Instrument ID (2): PESTGC8

Date Analyzed (1): 03/24/2011 12:19 Date Analyzed (2): 03/24/2011 12:19

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1016	1	1	1.59	1.51	1.65	357	305	9.2
		2	1.96	1.89	2.03	310		
		3	2.18	2.11	2.25	287		
		4	2.42	2.35	2.49	310		
		5	2.57	2.50	2.64	294		
		6	2.68	2.61	2.75	285		
		7	3.14	3.07	3.21	311		
		8	3.31	3.24	3.38	283		
	2	1	1.22	1.15	1.29	512	334	
		2	1.47	1.40	1.54	282		
		3	1.62	1.55	1.69	262		
		4	1.85	1.78	1.92	293		
		5	1.97	1.90	2.04	283		
		6	2.15	2.09	2.23	262		
		7	2.36	2.29	2.43	280		
		8	2.75	2.68	2.82	496		
Aroclor 1260	1	1	5.53	5.46	5.60	807	875	6.9
		2	5.94	5.87	6.01	938		
		3	6.60	6.54	6.68	991		
		4	6.82	6.75	6.89	774		
		5	6.94	6.87	7.01	835		
		6	7.49	7.42	7.56	859		
		7	8.98	8.92	9.06	943		
		8	9.77	9.71	9.85	853		
	2	1	4.01	3.95	4.09	807	817	
		2	4.57	4.50	4.64	846		
		3	5.08	5.02	5.16	986		
		4	5.30	5.23	5.37	738		
		5	5.72	5.66	5.80	842		
		7	7.03	6.97	7.11	742		
		8	8.42	8.36	8.50	759		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24449-A-5-B MSD

Instrument ID (1): PESTGC8 Instrument ID (2): PESTGC8

Date Analyzed (1): 03/24/2011 12:35 Date Analyzed (2): 03/24/2011 12:35

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1016	1	1	1.59	1.51	1.65	338	286	6.6
		2	1.96	1.89	2.03	295		
		3	2.18	2.11	2.25	287		
		4	2.42	2.35	2.49	283		
		5	2.57	2.50	2.64	268		
		6	2.68	2.61	2.75	264		
		7	3.13	3.07	3.21	292		
		8	3.31	3.24	3.38	264		
	2	1	1.22	1.15	1.29	621	306	
		2	1.47	1.40	1.54	228		
		3	1.62	1.55	1.69	191		
		4	1.84	1.78	1.92	263		
		5	1.97	1.90	2.04	249		
		6	2.15	2.09	2.23	223		
		7	2.35	2.29	2.43	239		
		8	2.75	2.68	2.82	432		
Aroclor 1260	1	1	5.53	5.46	5.60	742	802	11.1
		2	5.93	5.87	6.01	857		
		3	6.60	6.54	6.68	911		
		4	6.82	6.75	6.89	719		
		5	6.93	6.87	7.01	775		
		6	7.49	7.42	7.56	790		
		7	8.98	8.92	9.06	851		
		8	9.77	9.71	9.85	770		
	2	1	4.01	3.95	4.09	693	717	
		2	4.57	4.50	4.64	747		
		3	5.08	5.02	5.16	871		
		4	5.30	5.23	5.37	648		
		5	5.72	5.66	5.80	755		
		7	7.03	6.97	7.11	616		
		8	8.42	8.36	8.50	691		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: qf082247.d

Analysis Method: 8082 Date Collected: 03/19/2011 16:45

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.03(g) Date Analyzed: 03/24/2011 12:51

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 16.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	80		30-150

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082247.d
Lab Smp Id: 460-24356-A-1-E Client Smp ID: GPEC-WC-031911
Inj Date : 24-MAR-2011 12:51
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24356-A-1-E
Misc Info : 460-24356-A-1-E
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:49 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.03000	Weight of sample extracted (g)
M	16.86747	% Moisture

Cpnd Variable Local Compound Variable

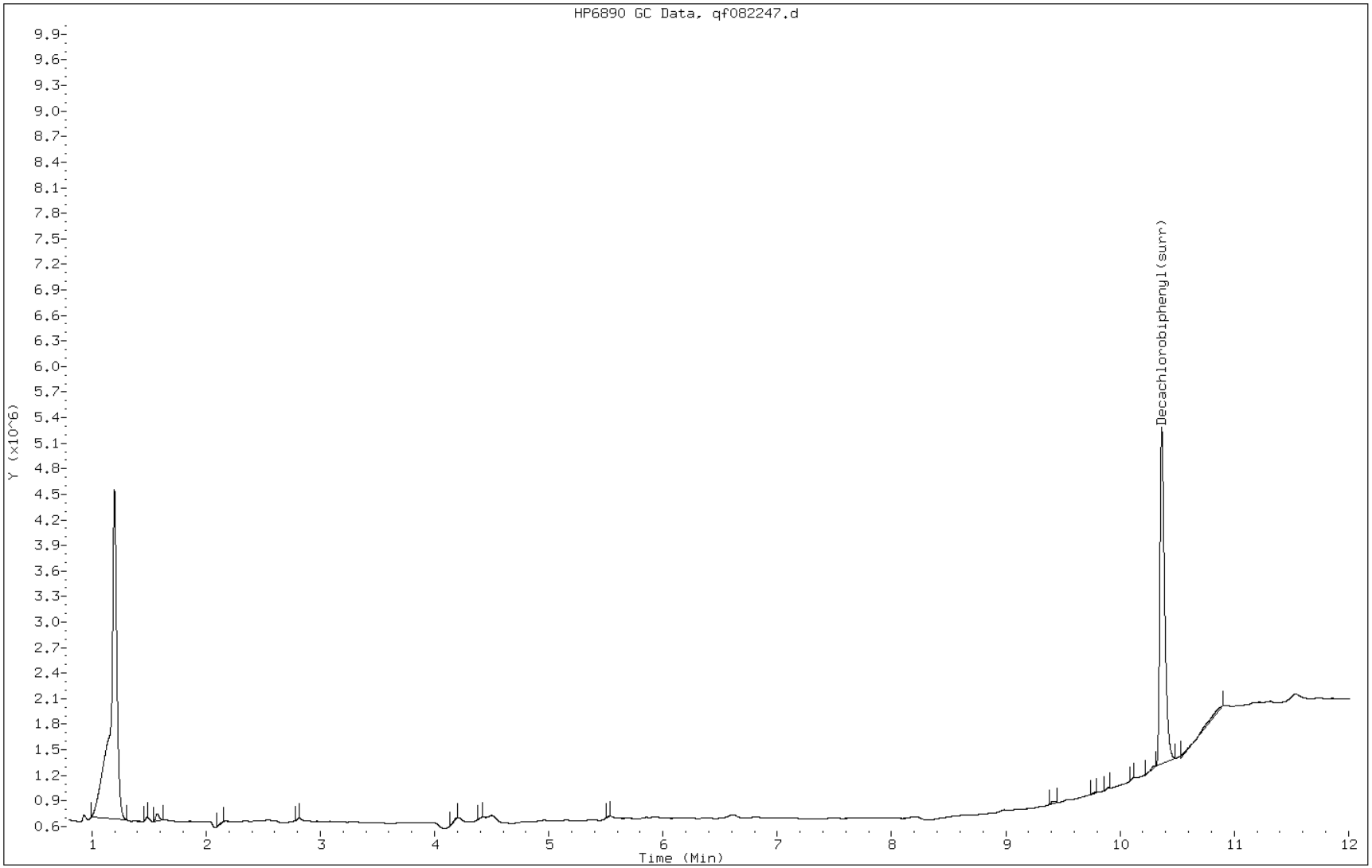
				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/kg)	TARGET RANGE	RATIO
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.365	10.367	-0.002	11329566	40.0075	32	80.00- 120.00	100.00

Data File: qf082247.d

Date: 24-MAR-2011 12:51

Client ID: GPEC-WC-031911 Instrument: PESTGC8.i

Sample Info: 460-24356-A-1-E Operator: 615



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Matrix: Solid Lab File ID: qr082247.d

Analysis Method: 8082 Date Collected: 03/19/2011 16:45

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.03(g) Date Analyzed: 03/24/2011 12:51

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 16.9 GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	80	U	80	15
11104-28-2	Aroclor 1221	80	U	80	24
11141-16-5	Aroclor 1232	80	U	80	46
53469-21-9	Aroclor 1242	80	U	80	15
12672-29-6	Aroclor 1248	80	U	80	21
11097-69-1	Aroclor 1254	80	U	80	27
11096-82-5	Aroclor 1260	80	U	80	9.0
37324-23-5	Aroclor 1262	80	U	80	14
11100-14-4	Aroclor 1268	80	U	80	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	74		30-150

Data File: qr082247.d
Report Date: 25-Mar-2011 09:55

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082247.d
Lab Smp Id: 460-24356-A-1-E Client Smp ID: GPEC-WC-031911
Inj Date : 24-MAR-2011 12:51
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24356-A-1-E
Misc Info : 460-24356-A-1-E
Comment   :
Method   : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.03000	Weight of sample extracted (g)
M	16.86747	% Moisture

Cpnd Variable Local Compound Variable

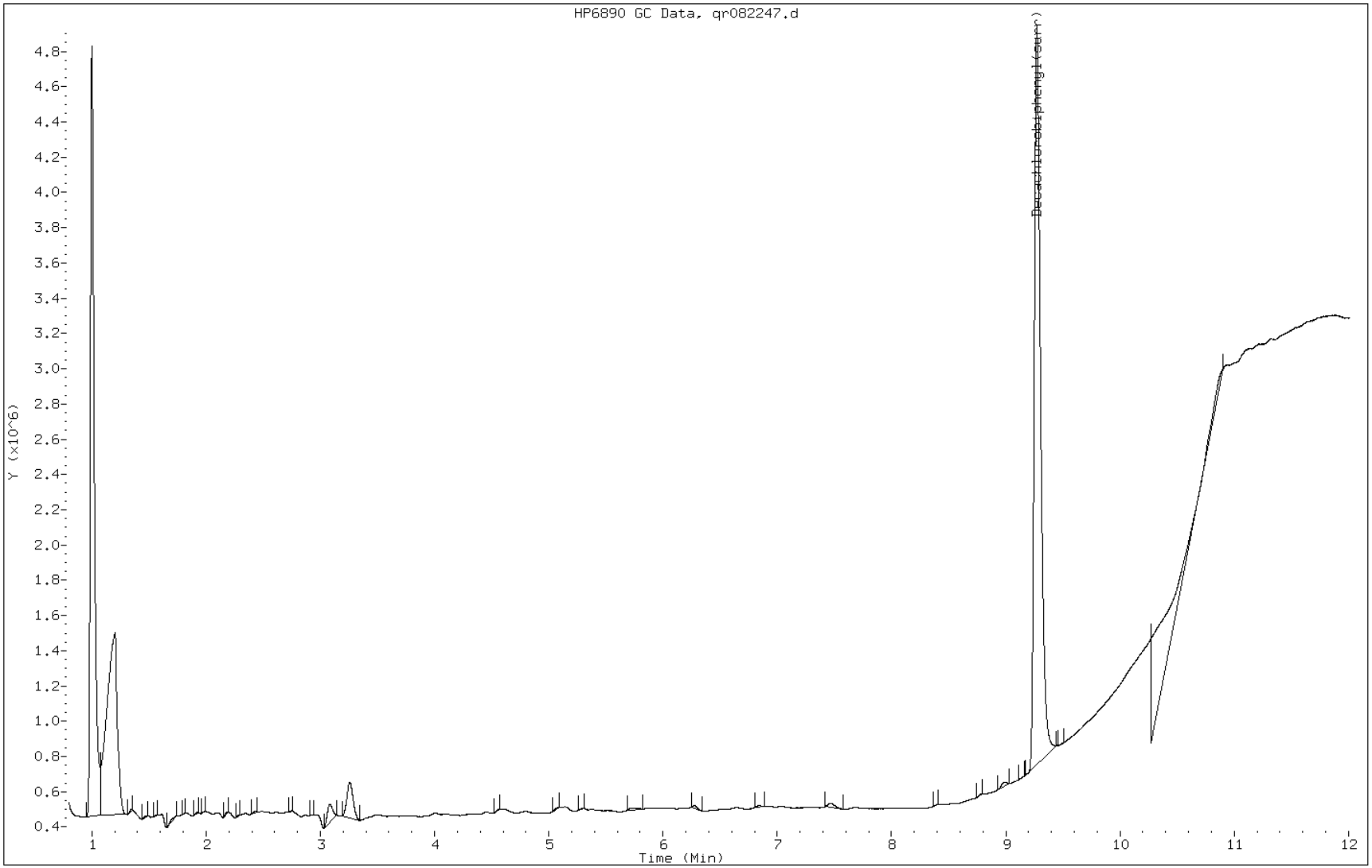
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.272	9.275	-0.003	15962100	37.0245	30	80.00- 120.00	100.00

Data File: qr082247.d

Date: 24-MAR-2011 12:51

Client ID: GPEC-WC-031911 Instrument: PESTGC8.i

Sample Info: 460-24356-A-1-E Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10232

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qf082105.d
Level 2	IC 460-68137/8	qf082106.d
Level 3	IC 460-68137/9	qf082107.d
Level 4	IC 460-68137/10	qf082108.d
Level 5	IC 460-68137/11	qf082109.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1016 Peak 1	1.558	1.580	1.563	1.563	1.562						1.493 - 1.633	1.565
PCB-1016 Peak 2	1.931	1.955	1.935	1.936	1.934						1.865 - 2.005	1.938
PCB-1016 Peak 3	2.154	2.180	2.159	2.159	2.158						2.089 - 2.229	2.162
PCB-1016 Peak 4	2.397	2.422	2.401	2.401	2.399						2.331 - 2.471	2.404
PCB-1016 Peak 5	2.542	2.568	2.547	2.547	2.545						2.477 - 2.617	2.550
PCB-1016 Peak 6	2.658	2.682	2.662	2.662	2.660						2.592 - 2.732	2.665
PCB-1016 Peak 7	3.103	3.135	3.110	3.110	3.108						3.040 - 3.180	3.113
PCB-1016 Peak 8	3.280	3.313	3.287	3.287	3.287						3.217 - 3.357	3.291
PCB-1260 Peak 1	5.495	5.531	5.500	5.500	5.499						5.430 - 5.570	5.505
PCB-1260 Peak 2	5.899	5.935	5.906	5.906	5.905						5.836 - 5.976	5.910
PCB-1260 Peak 3	6.565	6.604	6.572	6.573	6.572						6.502 - 6.642	6.577
PCB-1260 Peak 4	6.777	6.816	6.784	6.785	6.783						6.714 - 6.854	6.789
PCB-1260 Peak 5	6.893	6.931	6.898	6.898	6.898						6.828 - 6.968	6.904
PCB-1260 Peak 6	7.448	7.490	7.455	7.456	7.457						7.385 - 7.525	7.461
PCB-1260 Peak 7	8.963	8.988	8.969	8.969	8.967						8.899 - 9.039	8.971
PCB-1260 Peak 8	9.763	9.781	9.770	9.771	9.770						9.700 - 9.840	9.771
DCB Decachlorobiphenyl	10.355	10.371	10.361	10.363	10.361						10.261 - 10.461	10.362

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10232

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qf082105.d
Level 2	IC 460-68137/8	qf082106.d
Level 3	IC 460-68137/9	qf082107.d
Level 4	IC 460-68137/10	qf082108.d
Level 5	IC 460-68137/11	qf082109.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	5877.4 5682.4	6608.1	6171.0	6056.6	Ave		6079.07829				5.7		20.0			
PCB-1016 Peak 2	14287 10814	13767	11799	11696	Ave		12472.7572				11.9		20.0			
PCB-1016 Peak 3	8950.8 7721.8	9100.9	8051.8	8122.0	Ave		8389.45501				7.2		20.0			
PCB-1016 Peak 4	28662 21156	26689	23099	22912	Ave		24503.5554				12.5		20.0			
PCB-1016 Peak 5	13447 10001	12425	10937	10797	Ave		11521.2735				12.0		20.0			
PCB-1016 Peak 6	10200 8250.1	9786.3	8765.2	8804.9	Ave		9161.29925				8.8		20.0			
PCB-1016 Peak 7	11721 10609	12135	10972	11070	Ave		11301.4522				5.4		20.0			
PCB-1016 Peak 8	7842.3 8366.6	8291.5	8159.5	8409.6	Ave		8213.89685				2.8		20.0			
PCB-1260 Peak 1	22523 16825	20415	17613	18231	Ave		19121.3998				12.1		20.0			
PCB-1260 Peak 2	27835 21909	26045	22861	23392	Ave		24408.3997				10.1		20.0			
PCB-1260 Peak 3	34163 27738	32289	28396	29264	Ave		30370.0177				9.0		20.0			
PCB-1260 Peak 4	20983 16878	20258	17811	17915	Ave		18768.9332				9.4		20.0			
PCB-1260 Peak 5	11424 9834.5	10763	9869.6	10271	Ave		10432.5861				6.4		20.0			
PCB-1260 Peak 6	16663 15089	17579	15152	15733	Ave		16043.2912				6.6		20.0			
PCB-1260 Peak 7	26026 22155	24369	22549	23677	Ave		23755.4510				6.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10232

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1260 Peak 8	8076.9 7933.9	8169.8	7587.3	8029.7	Ave		7959.52149				2.8		20.0			
DCB Decachlorobiphenyl	359964 250382	295465	261054	249064	Ave		283185.753				16.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10232

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qf082105.d
Level 2	IC 460-68137/8	qf082106.d
Level 3	IC 460-68137/9	qf082107.d
Level 4	IC 460-68137/10	qf082108.d
Level 5	IC 460-68137/11	qf082109.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	587735	3304051	6170952	9084844	14206062	100	500	1000	1500	2500
PCB-1016 Peak 2	Ave	1428718	6883382	11799222	17544558	27035620	100	500	1000	1500	2500
PCB-1016 Peak 3	Ave	895075	4550433	8051820	12183058	19304501	100	500	1000	1500	2500
PCB-1016 Peak 4	Ave	2866228	13344617	23099056	34367407	52889006	100	500	1000	1500	2500
PCB-1016 Peak 5	Ave	1344653	6212603	10936905	16195637	25001588	100	500	1000	1500	2500
PCB-1016 Peak 6	Ave	1020007	4893146	8765178	13207297	20625229	100	500	1000	1500	2500
PCB-1016 Peak 7	Ave	1172114	6067674	10972308	16604613	26521808	100	500	1000	1500	2500
PCB-1016 Peak 8	Ave	784225	4145736	8159548	12614419	20916504	100	500	1000	1500	2500
PCB-1260 Peak 1	Ave	2252329	10207433	17613169	27345833	42062797	100	500	1000	1500	2500
PCB-1260 Peak 2	Ave	2783491	13022725	22860561	35088593	54771706	100	500	1000	1500	2500
PCB-1260 Peak 3	Ave	3416319	16144324	28396493	43896119	69344196	100	500	1000	1500	2500
PCB-1260 Peak 4	Ave	2098266	10129062	17811035	26872850	42194034	100	500	1000	1500	2500
PCB-1260 Peak 5	Ave	1142406	5381640	9869635	15407194	24586232	100	500	1000	1500	2500
PCB-1260 Peak 6	Ave	1666346	8789348	15152014	23600102	37722212	100	500	1000	1500	2500
PCB-1260 Peak 7	Ave	2602627	12184708	22549384	35516199	55386797	100	500	1000	1500	2500
PCB-1260 Peak 8	Ave	807694	4084897	7587288	12044590	19834647	100	500	1000	1500	2500
DCB Decachlorobiphenyl	Ave	8999090	14773246	26105410	37359647	50076366	25.0	50.0	100	150	200

Curve Type Legend:
Ave = Average

Data File: qf082105.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082105.d
Lab Smp Id: IC-SG1660L1_00009
Inj Date : 22-MAR-2011 08:49
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L1_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 08:49 Cal File: qf082105.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.558	1.563	-0.005	587735	100.000	97	80.00- 120.00	100.00(M)
1.931	1.935	-0.004	1428718	100.000	110	194.47- 291.71	243.09
2.154	2.159	-0.005	895075	100.000	110	121.83- 182.75	152.29
2.397	2.401	-0.004	2866228	100.000	120	390.14- 585.21	487.67
2.542	2.547	-0.005	1344653	100.000	120	183.03- 274.54	228.79
2.658	2.662	-0.004	1020007	100.000	110	138.84- 208.26	173.55
3.103	3.110	-0.007	1172114	100.000	100	159.54- 239.31	199.43
3.280	3.287	-0.007	784225	100.000	95	106.75- 160.12	133.43
		Average of Peak Amounts =			108		
27 Aroclor-1260					CAS #: 11096-82-5		
5.495	5.500	-0.005	2252329	100.000	120	80.00- 120.00	100.00(M)

Data File: qf082105.d
Report Date: 22-Mar-2011 13:18

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.899	5.906	-0.007	2783491	100.000	110	98.87- 148.30	123.58
6.565	6.572	-0.007	3416319	100.000	110	121.34- 182.02	151.68
6.777	6.784	-0.007	2098266	100.000	110	74.53- 111.79	93.16
6.893	6.898	-0.005	1142406	100.000	110	40.58- 60.87	50.72
7.448	7.455	-0.007	1666346	100.000	100	59.19- 88.78	73.98
8.963	8.969	-0.006	2602627	100.000	110	92.44- 138.66	115.55
9.763	9.770	-0.007	807694	100.000	100	28.69- 43.03	35.86
		Average of Peak Amounts =			110		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.355	10.361	-0.006	8999090	25.0000	32	80.00- 120.00	100.00

QC Flag Legend

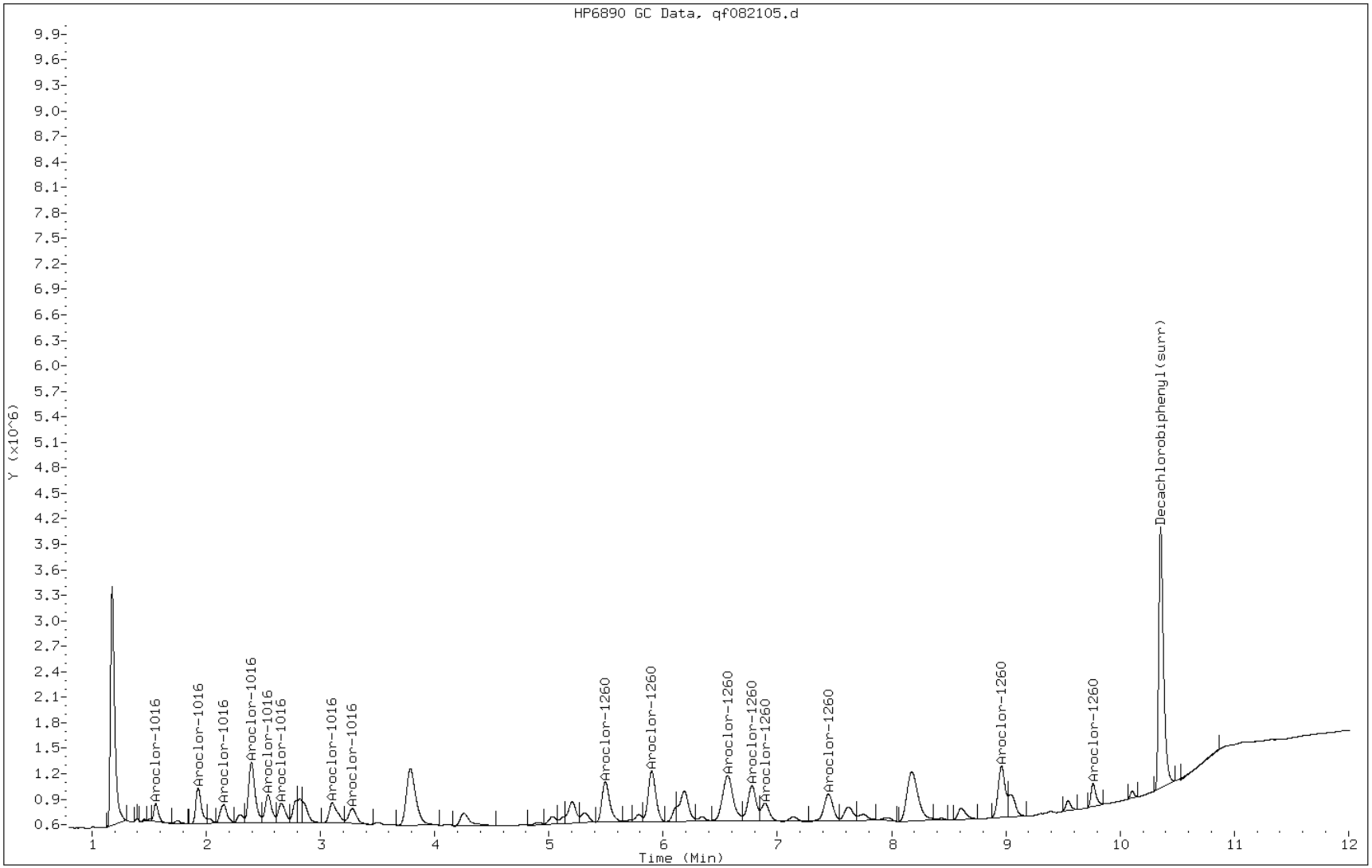
M - Compound response manually integrated.

Data File: qf082105.d

Date: 22-MAR-2011 08:49

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L1_00009 Operator: 615



Data File: qf082106.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082106.d
Lab Smp Id: IC-SG1660L2_00009
Inj Date : 22-MAR-2011 09:08
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L2_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 09:08 Cal File: qf082106.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.580	1.563	0.017	3304051	500.000	540	80.00- 120.00	100.00
1.955	1.935	0.020	6883382	500.000	550	166.67- 250.00	208.33
2.180	2.159	0.021	4550433	500.000	540	110.18- 165.27	137.72
2.422	2.401	0.021	13344617	500.000	540	323.11- 484.66	403.89
2.568	2.547	0.021	6212603	500.000	540	150.42- 225.64	188.03
2.682	2.662	0.020	4893146	500.000	530	118.48- 177.71	148.10
3.135	3.110	0.025	6067674	500.000	540	146.91- 220.37	183.64
3.313	3.287	0.026	4145736	500.000	500	100.38- 150.57	125.47
		Average of Peak Amounts =			537		
27 Aroclor-1260					CAS #: 11096-82-5		
5.531	5.500	0.031	10207433	500.000	530	80.00- 120.00	100.00(M)

Data File: qf082106.d
Report Date: 22-Mar-2011 13:18

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.935	5.906	0.029	13022725	500.000	530	102.06- 153.10	127.58
6.604	6.572	0.032	16144324	500.000	530	126.53- 189.79	158.16
6.816	6.784	0.032	10129062	500.000	540	79.39- 119.08	99.23
6.931	6.898	0.033	5381640	500.000	520	42.18- 63.27	52.72
7.490	7.455	0.035	8789348	500.000	550	68.89- 103.33	86.11
8.988	8.969	0.019	12184708	500.000	510	95.50- 143.25	119.37
9.781	9.770	0.011	4084897	500.000	510	32.02- 48.02	40.02
Average of Peak Amounts =					529		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.371	10.361	0.010	14773246	50.0000	52	80.00- 120.00	100.00

QC Flag Legend

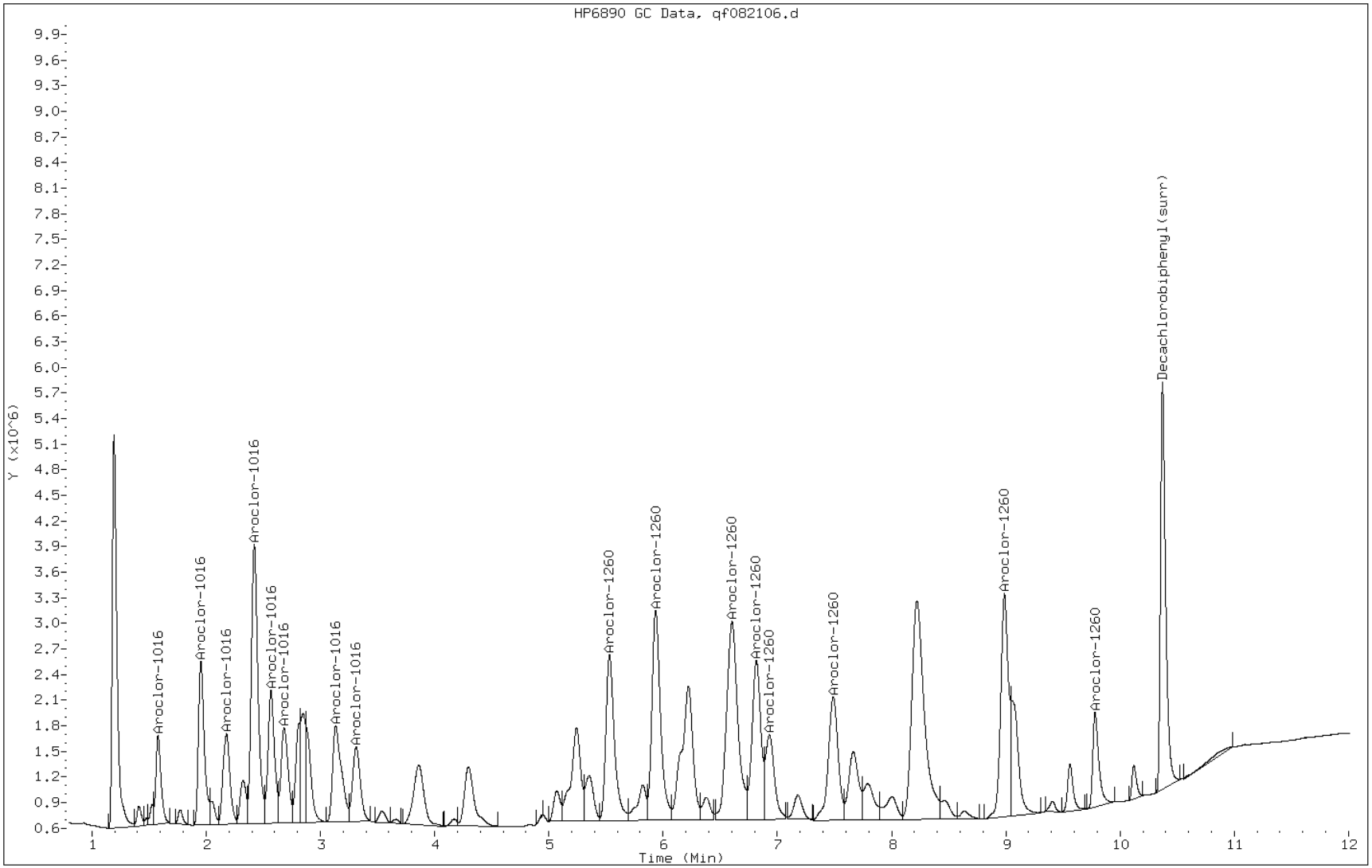
M - Compound response manually integrated.

Data File: qf082106.d

Date: 22-MAR-2011 09:08

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L2_00009 Operator: 615



Data File: qf082107.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082107.d
Lab Smp Id: IC-SG1660L3_00012
Inj Date : 22-MAR-2011 09:24
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.563	1.563	0.000	6170952	1000.00	1000	80.00- 120.00	100.00
1.935	1.935	0.000	11799222	1000.00	940	152.96- 229.45	191.21
2.159	2.159	0.000	8051820	1000.00	960	104.38- 156.58	130.48
2.401	2.401	0.000	23099056	1000.00	940	299.46- 449.18	374.32
2.547	2.547	0.000	10936905	1000.00	950	141.79- 212.68	177.23
2.662	2.662	0.000	8765178	1000.00	960	113.63- 170.45	142.04
3.110	3.110	0.000	10972308	1000.00	970	142.24- 213.37	177.81
3.287	3.287	0.000	8159548	1000.00	990	105.78- 158.67	132.23
Average of Peak Amounts =					967		
27 Aroclor-1260					CAS #: 11096-82-5		
5.500	5.500	0.000	17613169	1000.00	920	80.00- 120.00	100.00(M)

Data File: qf082107.d
Report Date: 22-Mar-2011 13:18

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.906	5.906	0.000	22860561	1000.00	940	103.83- 155.75	129.79
6.572	6.572	0.000	28396493	1000.00	940	128.98- 193.47	161.22
6.784	6.784	0.000	17811035	1000.00	950	80.90- 121.35	101.12
6.898	6.898	0.000	9869635	1000.00	950	44.83- 67.24	56.04
7.455	7.455	0.000	15152014	1000.00	940	68.82- 103.23	86.03
8.969	8.969	0.000	22549384	1000.00	950	102.42- 153.63	128.03
9.770	9.770	0.000	7587288	1000.00	950	34.46- 51.69	43.08
		Average of Peak Amounts =			942		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.361	10.361	0.000	26105410	100.000	92	80.00- 120.00	100.00

QC Flag Legend

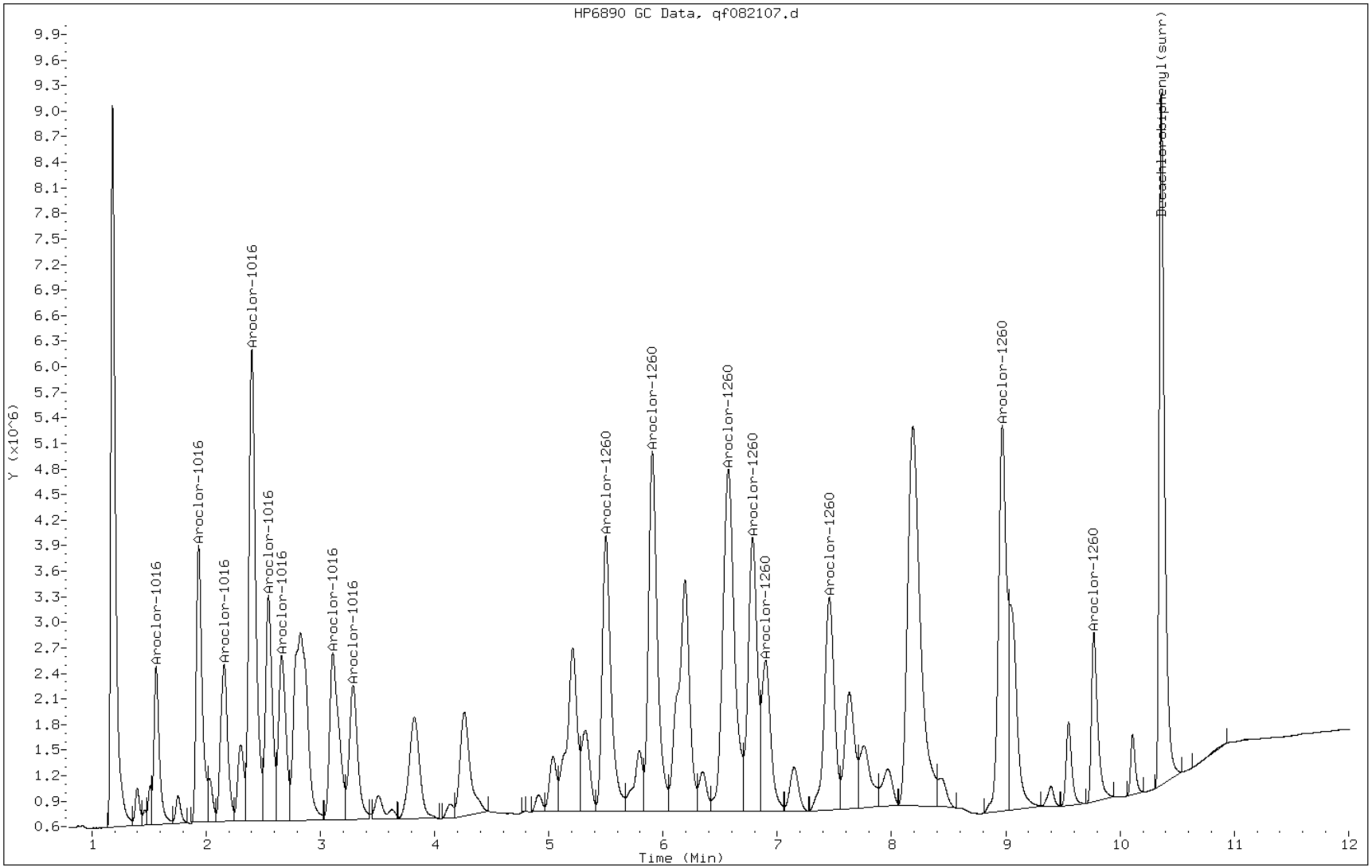
M - Compound response manually integrated.

Data File: qf082107.d

Date: 22-MAR-2011 09:24

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L3_00012 Operator: 615



Data File: qf082108.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082108.d
Lab Smp Id: IC-SG1660L4_00009
Inj Date : 22-MAR-2011 09:40
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L4_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 09:40 Cal File: qf082108.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.563	1.563	0.000	9084844	1500.00	1500	80.00- 120.00	100.00
1.936	1.935	0.001	17544558	1500.00	1400	154.50- 231.74	193.12
2.159	2.159	0.000	12183058	1500.00	1400	107.28- 160.92	134.10
2.401	2.401	0.000	34367407	1500.00	1400	302.64- 453.95	378.29
2.547	2.547	0.000	16195637	1500.00	1400	142.62- 213.93	178.27
2.662	2.662	0.000	13207297	1500.00	1400	116.30- 174.45	145.38
3.110	3.110	0.000	16604613	1500.00	1500	146.22- 219.33	182.77
3.287	3.287	0.000	12614419	1500.00	1500	111.08- 166.62	138.85
Average of Peak Amounts = 1.45e+03							
27 Aroclor-1260					CAS #: 11096-82-5		
5.500	5.500	0.000	27345833	1500.00	1400	80.00- 120.00	100.00(M)

Data File: qf082108.d
Report Date: 22-Mar-2011 13:18

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.906	5.906	0.000	35088593	1500.00	1400	102.65- 153.98	128.31
6.573	6.572	0.001	43896119	1500.00	1400	128.42- 192.63	160.52
6.785	6.784	0.001	26872850	1500.00	1400	78.62- 117.92	98.27
6.898	6.898	0.000	15407194	1500.00	1500	45.07- 67.61	56.34
7.456	7.455	0.001	23600102	1500.00	1500	69.04- 103.56	86.30
8.969	8.969	0.000	35516199	1500.00	1500	103.90- 155.85	129.88
9.771	9.770	0.001	12044590	1500.00	1500	35.24- 52.85	44.05
Average of Peak Amounts =				1.46e+03			
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.363	10.361	0.002	37359647	150.000	130	80.00- 120.00	100.00

QC Flag Legend

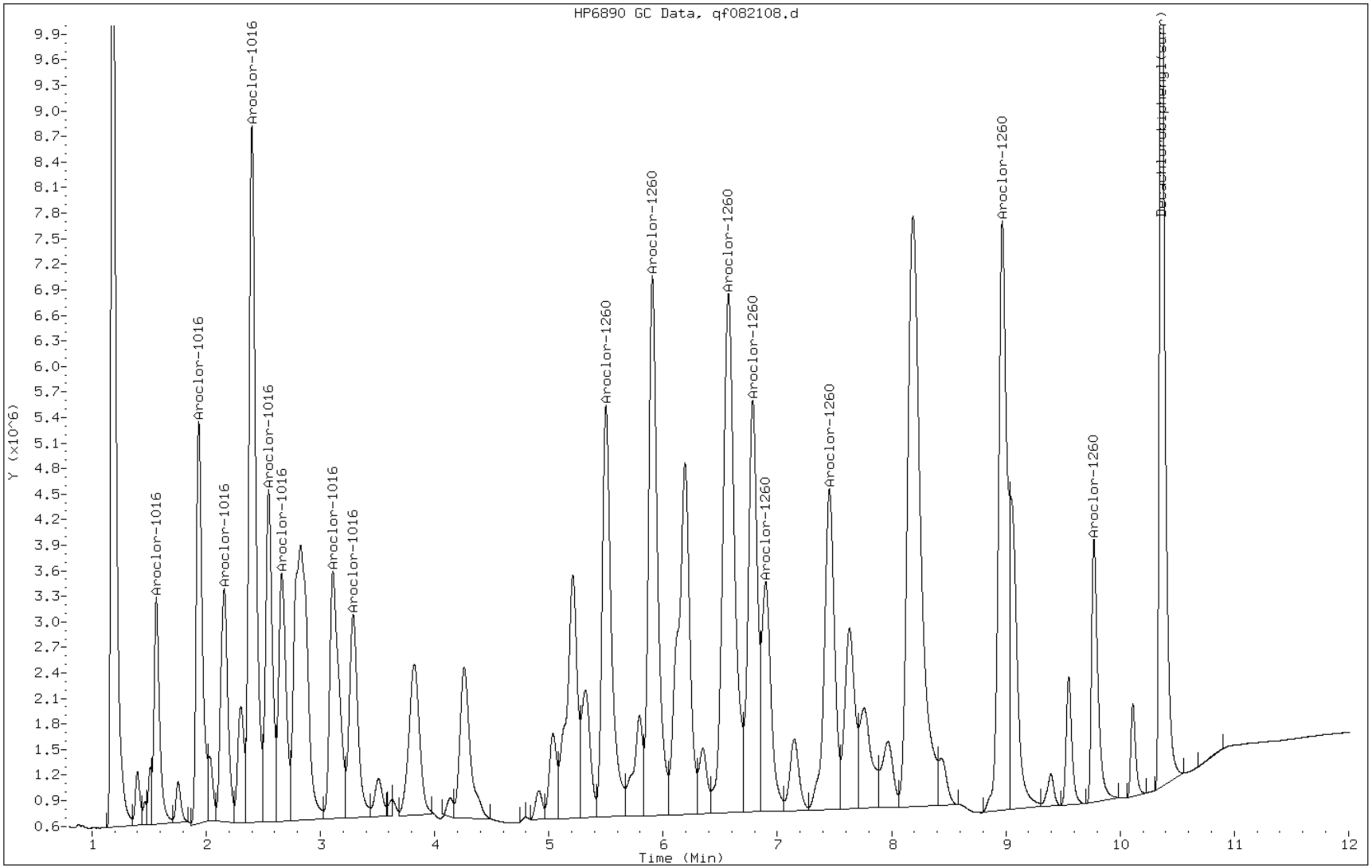
M - Compound response manually integrated.

Data File: qf082108.d

Date: 22-MAR-2011 09:40

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L4_00009 Operator: 615



Data File: qf082109.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082109.d
Lab Smp Id: IC-SG1660L5_00009
Inj Date : 22-MAR-2011 09:56
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L5_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 09:56 Cal File: qf082109.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.562	1.563	-0.001	14206062	2500.00	2300	80.00- 120.00	100.00
1.934	1.935	-0.001	27035620	2500.00	2200	152.25- 228.37	190.31
2.158	2.159	-0.001	19304501	2500.00	2300	108.71- 163.07	135.89
2.399	2.401	-0.002	52889006	2500.00	2200	297.84- 446.76	372.30
2.545	2.547	-0.002	25001588	2500.00	2200	140.79- 211.19	175.99
2.660	2.662	-0.002	20625229	2500.00	2200	116.15- 174.22	145.19
3.108	3.110	-0.002	26521808	2500.00	2300	149.35- 224.03	186.69
3.287	3.287	0.000	20916504	2500.00	2500	117.79- 176.68	147.24
Average of Peak Amounts = 2.28e+03							
27 Aroclor-1260					CAS #: 11096-82-5		
5.499	5.500	-0.001	42062797	2500.00	2200	80.00- 120.00	100.00(M)

Data File: qf082109.d
Report Date: 22-Mar-2011 13:18

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.905	5.906	-0.001	54771706	2500.00	2200	104.17- 156.26	130.21
6.572	6.572	0.000	69344196	2500.00	2300	131.89- 197.83	164.86
6.783	6.784	-0.001	42194034	2500.00	2200	80.25- 120.37	100.31
6.898	6.898	0.000	24586232	2500.00	2400	46.76- 70.14	58.45
7.457	7.455	0.002	37722212	2500.00	2400	71.74- 107.62	89.68
8.967	8.969	-0.002	55386797	2500.00	2300	105.34- 158.01	131.68
9.770	9.770	0.000	19834647	2500.00	2500	37.72- 56.59	47.15
Average of Peak Amounts =				2.31e+03			
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.361	10.361	0.000	50076366	200.000	180	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qf082109.d

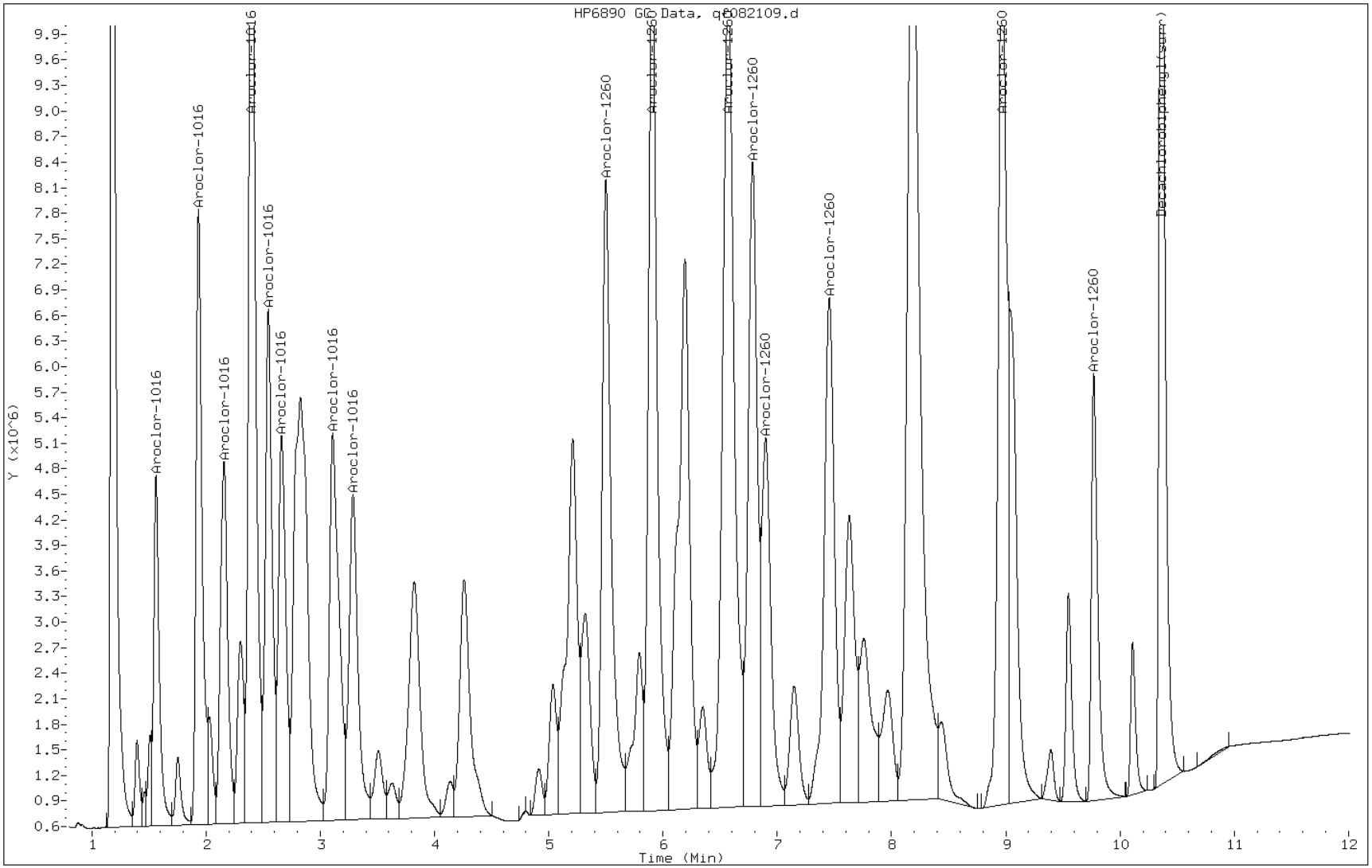
Date: 22-MAR-2011 09:56

Client ID:

Instrument: PESTGC8.i

Sample Info: IC-SG1660L5_00009

Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10240

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qr082105.d
Level 2	IC 460-68137/8	qr082106.d
Level 3	IC 460-68137/9	qr082107.d
Level 4	IC 460-68137/10	qr082108.d
Level 5	IC 460-68137/11	qr082109.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1016 Peak 1	1.207	1.216	1.207	1.208	1.204						1.137 - 1.277	1.208
PCB-1016 Peak 2	1.450	1.466	1.455	1.456	1.453						1.385 - 1.525	1.456
PCB-1016 Peak 3	1.599	1.615	1.603	1.604	1.602						1.533 - 1.673	1.605
PCB-1016 Peak 4	1.821	1.837	1.824	1.825	1.822						1.754 - 1.894	1.826
PCB-1016 Peak 5	1.943	1.959	1.945	1.947	1.943						1.875 - 2.015	1.947
PCB-1016 Peak 6	2.125	2.147	2.134	2.135	2.132						2.064 - 2.204	2.135
PCB-1016 Peak 7	2.329	2.349	2.334	2.335	2.333						2.264 - 2.404	2.336
PCB-1016 Peak 8	2.721	2.741	2.726	2.726	2.724						2.656 - 2.796	2.727
PCB-1260 Peak 1	3.973	4.005	3.977	3.978	3.977						3.907 - 4.047	3.982
PCB-1260 Peak 2	4.534	4.564	4.539	4.538	4.537						4.469 - 4.609	4.542
PCB-1260 Peak 3	5.053	5.081	5.055	5.056	5.053						4.985 - 5.125	5.060
PCB-1260 Peak 4	5.261	5.291	5.268	5.268	5.266						5.198 - 5.338	5.271
PCB-1260 Peak 5	5.690	5.718	5.697	5.697	5.694						5.627 - 5.767	5.699
PCB-1260 Peak 6	6.814	6.851	6.823	6.824	6.821						6.753 - 6.893	6.827
PCB-1260 Peak 7	6.997	7.025	7.002	7.001	6.998						6.932 - 7.072	7.004
PCB-1260 Peak 8	8.388	8.426	8.403	8.403	8.400						8.333 - 8.473	8.404
DCB Decachlorobiphenyl	9.256	9.271	9.260	9.260	9.258						9.160 - 9.360	9.261

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10240

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qr082105.d
Level 2	IC 460-68137/8	qr082106.d
Level 3	IC 460-68137/9	qr082107.d
Level 4	IC 460-68137/10	qr082108.d
Level 5	IC 460-68137/11	qr082109.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	6678.5 6482.0	8403.8	6821.5	7029.6	Ave		7083.07231				10.8		20.0			
PCB-1016 Peak 2	15619 12091	16591	13539	13313	Ave		14230.5168				12.9		20.0			
PCB-1016 Peak 3	10152 9597.4	12784	10538	10555	Ave		10725.3538				11.3		20.0			
PCB-1016 Peak 4	35911 28198	36594	30897	30589	Ave		32437.5650				11.2		20.0			
PCB-1016 Peak 5	13297 9984.6	13284	11185	11048	Ave		11759.8488				12.5		20.0			
PCB-1016 Peak 6	29298 18553	24392	20650	20453	Ave		22669.3144				18.8		20.0			
PCB-1016 Peak 7	14402 10922	14247	11928	11933	Ave		12686.4248				12.2		20.0			
PCB-1016 Peak 8	13427 11221	14685	11894	12640	Ave		12773.3324				10.6		20.0			
PCB-1260 Peak 1	27751 19414	23473	20799	21375	Ave		22562.4655				14.4		20.0			
PCB-1260 Peak 2	49339 39268	45306	44187	40232	Ave		43666.6136				9.3		20.0			
PCB-1260 Peak 3	38046 32317	36542	34254	34729	Ave		35177.6529				6.2		20.0			
PCB-1260 Peak 4	24990 20231	23361	22018	22334	Ave		22586.8292				7.8		20.0			
PCB-1260 Peak 5	20376 14470	17620	16107	16942	Ave		17102.7501				12.7		20.0			
PCB-1260 Peak 6	19272 14684	14174	13138	15131	Ave		15279.9202				15.4		20.0			
PCB-1260 Peak 7	16764 15619	15593	15441	18175	Ave		16318.4660				7.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10240

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1260 Peak 8	12223 11500	11811	10998	11633	Ave		11633.0484				3.8		20.0			
DCB Decachlorobiphenyl	557245 383088	441641	391631	382010	Ave		431122.814				17.3		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 08:49 Calibration End Date: 03/22/2011 09:56 Calibration ID: 10240

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/7	qr082105.d
Level 2	IC 460-68137/8	qr082106.d
Level 3	IC 460-68137/9	qr082107.d
Level 4	IC 460-68137/10	qr082108.d
Level 5	IC 460-68137/11	qr082109.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	667849	4201890	6821495	10544348	16205078	100	500	1000	1500	2500
PCB-1016 Peak 2	Ave	1561879	8295654	13538561	19969919	30226614	100	500	1000	1500	2500
PCB-1016 Peak 3	Ave	1015217	6391967	10538294	15832507	23993416	100	500	1000	1500	2500
PCB-1016 Peak 4	Ave	3591055	18296932	30896944	45883191	70494182	100	500	1000	1500	2500
PCB-1016 Peak 5	Ave	1329689	6642246	11185298	16571970	24961460	100	500	1000	1500	2500
PCB-1016 Peak 6	Ave	2929802	12195997	20650019	30679871	46383229	100	500	1000	1500	2500
PCB-1016 Peak 7	Ave	1440214	7123668	11927679	17899701	27304587	100	500	1000	1500	2500
PCB-1016 Peak 8	Ave	1342656	7342300	11894096	18960156	28053255	100	500	1000	1500	2500
PCB-1260 Peak 1	Ave	2775112	11736723	20799010	32062439	48534480	100	500	1000	1500	2500
PCB-1260 Peak 2	Ave	4933944	22653118	44187479	60347401	98170781	100	500	1000	1500	2500
PCB-1260 Peak 3	Ave	3804620	18271031	34253845	52093276	80793267	100	500	1000	1500	2500
PCB-1260 Peak 4	Ave	2499031	11680660	22017591	33500646	50577903	100	500	1000	1500	2500
PCB-1260 Peak 5	Ave	2037578	8809772	16106826	25412864	36174228	100	500	1000	1500	2500
PCB-1260 Peak 6	Ave	1927225	7086801	13138315	22696516	36711058	100	500	1000	1500	2500
PCB-1260 Peak 7	Ave	1676419	7796354	15441087	27262449	39048448	100	500	1000	1500	2500
PCB-1260 Peak 8	Ave	1222325	5905386	10998134	17449845	28749640	100	500	1000	1500	2500
DCB Decachlorobiphenyl	Ave	13931133	22082049	39163053	57301434	76617536	25.0	50.0	100	150	200

Curve Type Legend:
Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082105.d
Lab Smp Id: IC-SG1660L1_00009
Inj Date : 22-MAR-2011 08:49
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L1_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.207	1.207	0.000	667849	100.000	94	80.00- 120.00	100.00(M)
1.450	1.455	-0.005	1561879	100.000	110	149.22- 223.83	233.87
1.599	1.603	-0.004	1015217	100.000	95	118.45- 177.67	152.01
1.821	1.824	-0.003	3591055	100.000	110	348.01- 522.02	537.70
1.943	1.945	-0.002	1329689	100.000	110	123.23- 184.84	199.10
2.125	2.134	-0.009	2929802	100.000	130	228.98- 343.47	438.69
2.329	2.334	-0.005	1440214	100.000	110	134.80- 202.19	215.65
2.721	2.726	-0.005	1342656	100.000	100	138.49- 207.74	201.04
Average of Peak Amounts =					109		
27 Aroclor-1260					CAS #: 11096-82-5		
3.973	3.977	-0.004	2775112	100.000	120	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.534	4.539	-0.005	4933944	100.000	110	161.82- 242.72	177.79
5.053	5.055	-0.002	3804620	100.000	110	133.17- 199.76	137.10
5.261	5.268	-0.007	2499031	100.000	110	83.37- 125.05	90.05
5.690	5.697	-0.007	2037578	100.000	120	59.63- 89.44	73.42
6.814	6.823	-0.009	1927225	100.000	130	60.51- 90.77	69.45
6.997	7.002	-0.005	1676419	100.000	100	64.36- 96.55	60.41
8.388	8.403	-0.015	1222325	100.000	100	47.39- 71.08	44.05
		Average of Peak Amounts =			113		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.256	9.260	-0.004	13931133	25.0000	32	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qr082105.d

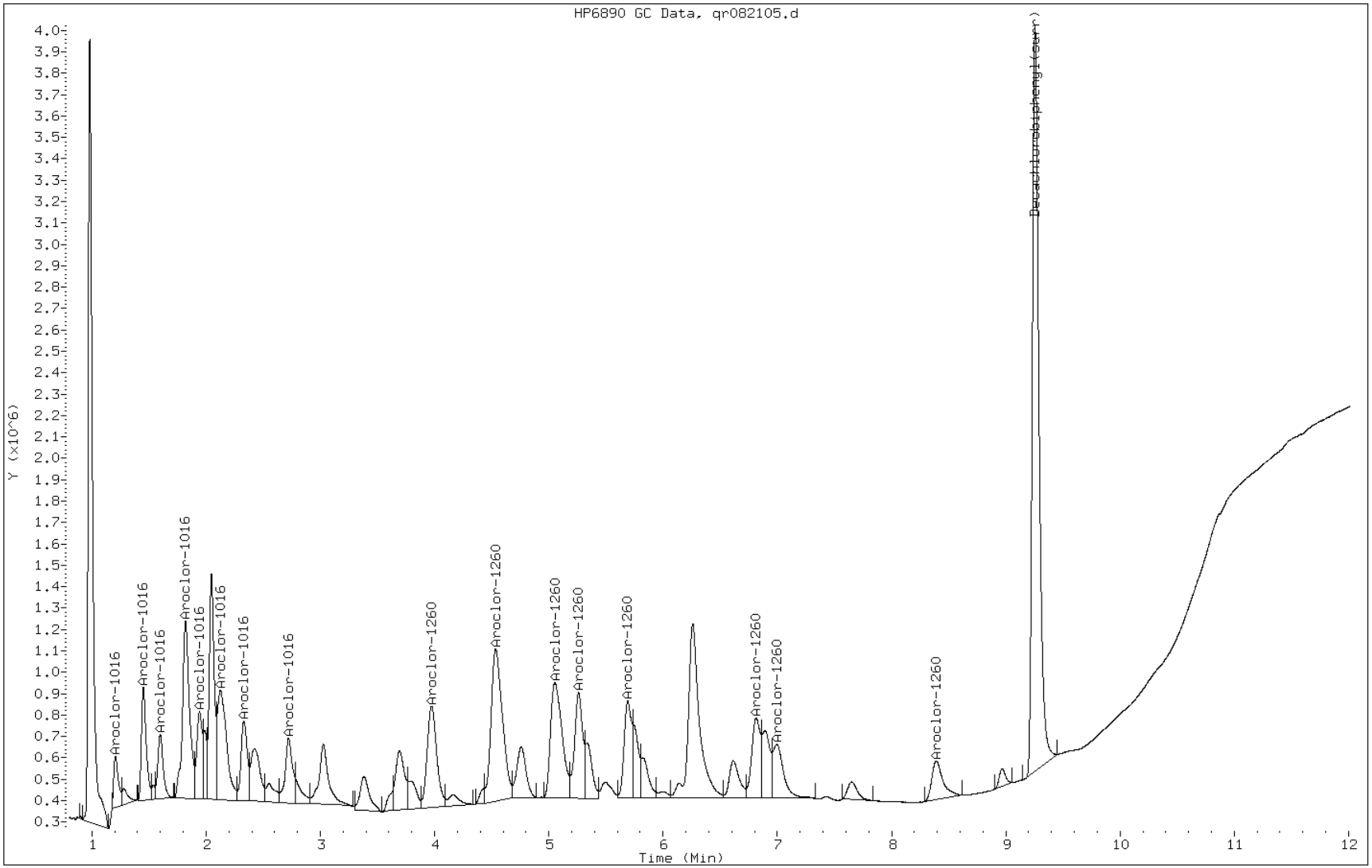
Date: 22-MAR-2011 08:49

Client ID:

Instrument: PESTGC8.i

Sample Info: IC-SG1660L1_00009

Operator: 615



TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082106.d
Lab Smp Id: IC-SG1660L2_00009
Inj Date : 22-MAR-2011 09:08
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L2_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.216	1.207	0.009	4201890	500.000	590	80.00- 120.00	100.00(M)
1.466	1.455	0.011	8295654	500.000	580	149.22- 223.83	197.43
1.615	1.603	0.012	6391967	500.000	600	118.45- 177.67	152.12
1.837	1.824	0.013	18296932	500.000	560	348.01- 522.02	435.45
1.959	1.945	0.014	6642246	500.000	560	123.23- 184.84	158.08
2.147	2.134	0.013	12195997	500.000	540	228.98- 343.47	290.25
2.349	2.334	0.015	7123668	500.000	560	134.80- 202.19	169.53
2.741	2.726	0.015	7342300	500.000	570	138.49- 207.74	174.74
		Average of Peak Amounts =			572		
27 Aroclor-1260					CAS #: 11096-82-5		
4.005	3.977	0.028	11736723	500.000	520	80.00- 120.00	100.00(M)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.564	4.539	0.025	22653118	500.000	520	161.82- 242.72	193.01
5.081	5.055	0.026	18271031	500.000	520	133.17- 199.76	155.67
5.291	5.268	0.023	11680660	500.000	520	83.37- 125.05	99.52
5.718	5.697	0.021	8809772	500.000	520	59.63- 89.44	75.06
6.851	6.823	0.028	7086801	500.000	460	60.51- 90.77	60.38
7.025	7.002	0.023	7796354	500.000	480	64.36- 96.55	66.43
8.426	8.403	0.023	5905386	500.000	510	47.39- 71.08	50.32
Average of Peak Amounts =					505		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.271	9.260	0.011	22082049	50.0000	51	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qr082106.d

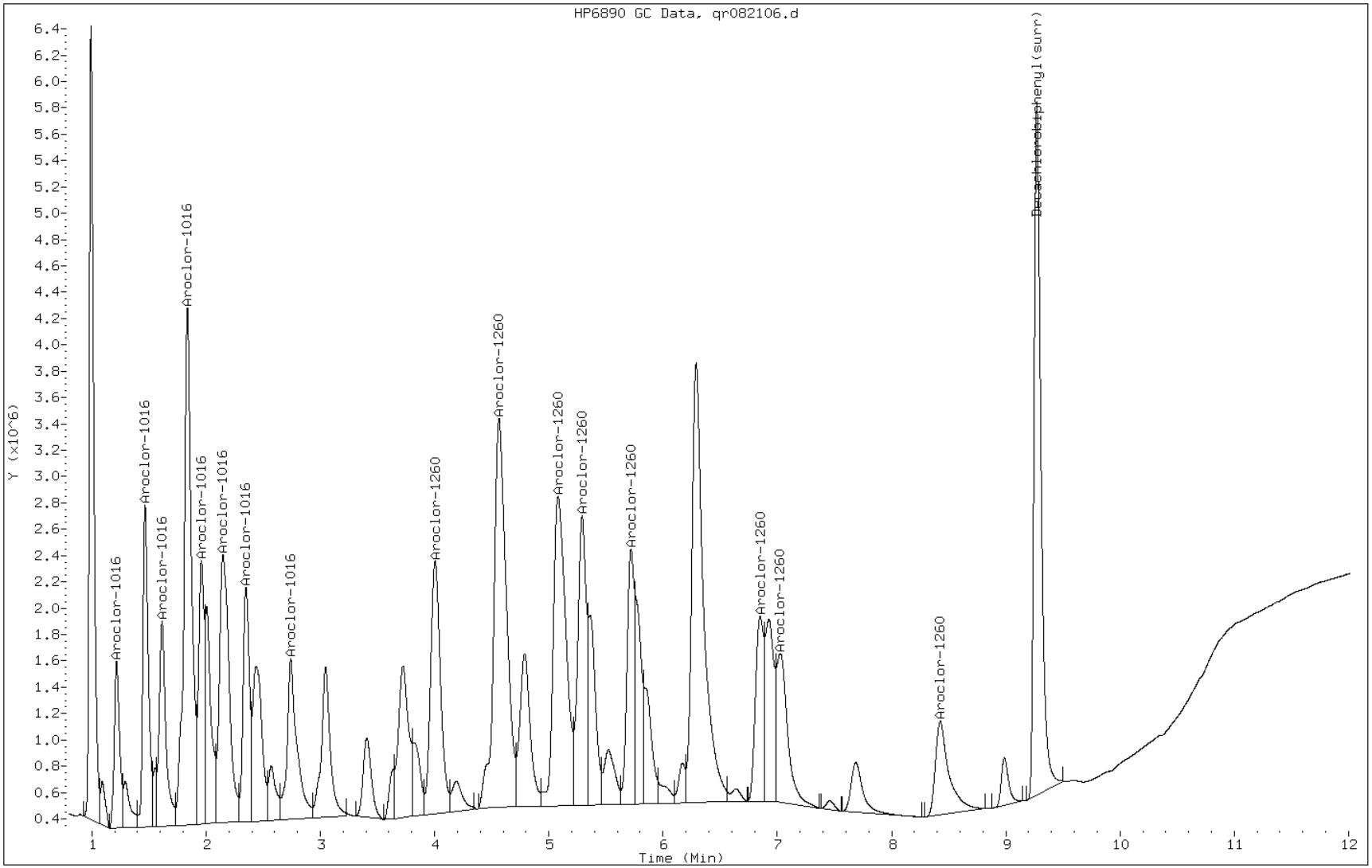
Date: 22-MAR-2011 09:08

Client ID:

Instrument: PESTGC8.i

Sample Info: IC-SG1660L2_00009

Operator: 615



TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082107.d
Lab Smp Id: IC-SG1660L3_00012
Inj Date : 22-MAR-2011 09:24
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.207	1.207	0.000	6821495	1000.00	960	80.00- 120.00	100.00
1.455	1.455	0.000	13538561	1000.00	950	149.22- 223.83	198.47
1.603	1.603	0.000	10538294	1000.00	980	118.45- 177.67	154.49
1.824	1.824	0.000	30896944	1000.00	950	348.01- 522.02	452.94
1.945	1.945	0.000	11185298	1000.00	950	123.23- 184.84	163.97
2.134	2.134	0.000	20650019	1000.00	910	228.98- 343.47	302.72
2.334	2.334	0.000	11927679	1000.00	940	134.80- 202.19	174.85
2.726	2.726	0.000	11894096	1000.00	930	138.49- 207.74	174.36
Average of Peak Amounts =					948		
27 Aroclor-1260					CAS #: 11096-82-5		
3.977	3.977	0.000	20799010	1000.00	920	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.539	4.539	0.000	44187479	1000.00	1000	161.82- 242.72	212.45
5.055	5.055	0.000	34253845	1000.00	970	133.17- 199.76	164.69
5.268	5.268	0.000	22017591	1000.00	970	83.37- 125.05	105.86
5.697	5.697	0.000	16106826	1000.00	940	59.63- 89.44	77.44
6.823	6.823	0.000	13138315	1000.00	860	60.51- 90.77	63.17
7.002	7.002	0.000	15441087	1000.00	950	64.36- 96.55	74.24
8.403	8.403	0.000	10998134	1000.00	940	47.39- 71.08	52.88
Average of Peak Amounts =					947		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.260	9.260	0.000	39163053	100.000	91	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qr082107.d

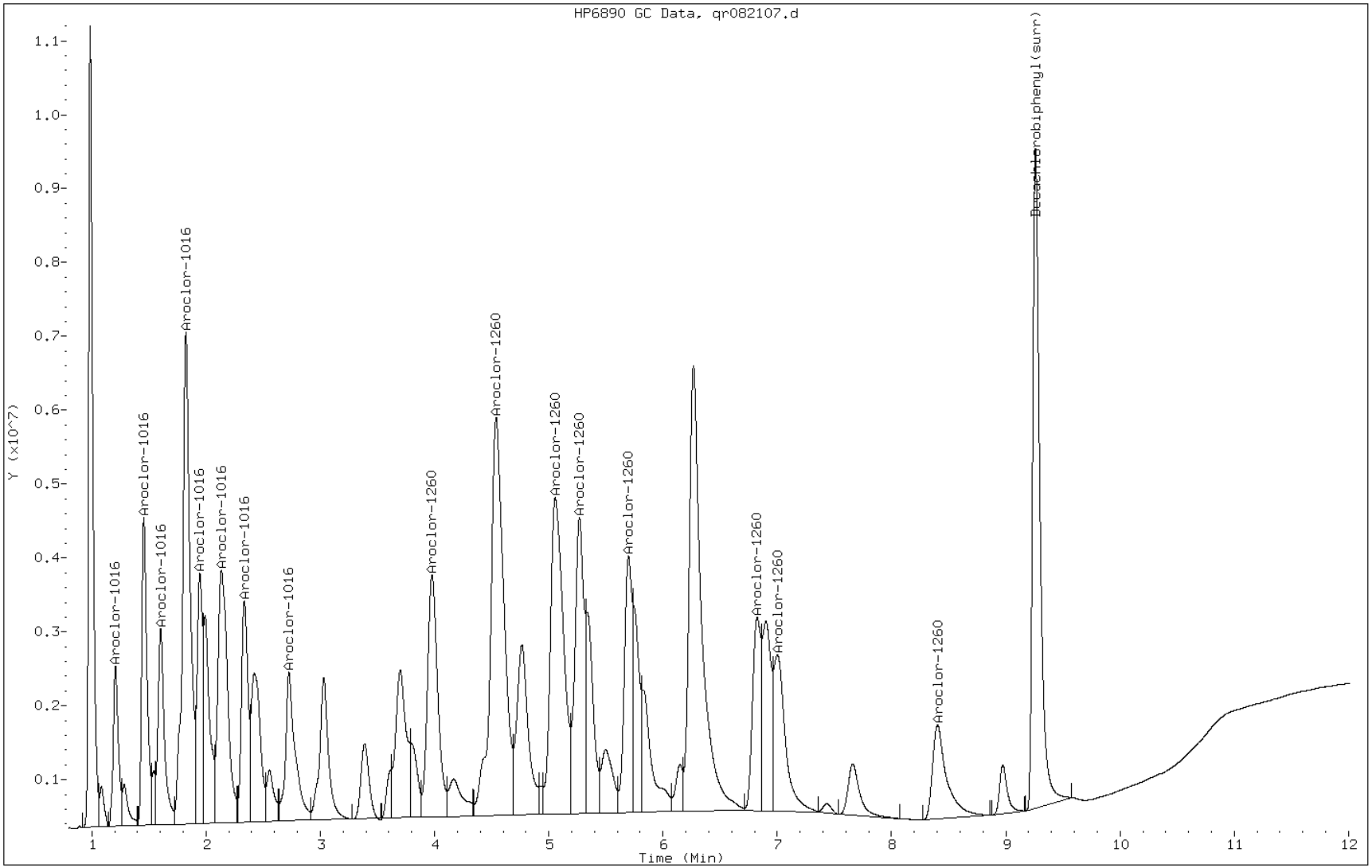
Date: 22-MAR-2011 09:24

Client ID:

Instrument: PESTGC8.i

Sample Info: IC-SG1660L3_00012

Operator: 615



TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082108.d
Lab Smp Id: IC-SG1660L4_00009
Inj Date : 22-MAR-2011 09:40
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L4_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.208	1.207	0.001	10544348	1500.00	1500	80.00- 120.00	100.00(M)
1.456	1.455	0.001	19969919	1500.00	1400	149.22- 223.83	189.39
1.604	1.603	0.001	15832507	1500.00	1500	118.45- 177.67	150.15
1.825	1.824	0.001	45883191	1500.00	1400	348.01- 522.02	435.14
1.947	1.945	0.002	16571970	1500.00	1400	123.23- 184.84	157.16
2.135	2.134	0.001	30679871	1500.00	1400	228.98- 343.47	290.96
2.335	2.334	0.001	17899701	1500.00	1400	134.80- 202.19	169.76
2.726	2.726	0.000	18960156	1500.00	1500	138.49- 207.74	179.81
Average of Peak Amounts = 1.43e+03							
27 Aroclor-1260					CAS #: 11096-82-5		
3.978	3.977	0.001	32062439	1500.00	1400	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.538	4.539	-0.001	60347401	1500.00	1400	161.82- 242.72	188.22
5.056	5.055	0.001	52093276	1500.00	1500	133.17- 199.76	162.47
5.268	5.268	0.000	33500646	1500.00	1500	83.37- 125.05	104.49
5.697	5.697	0.000	25412864	1500.00	1500	59.63- 89.44	79.26
6.824	6.823	0.001	22696516	1500.00	1500	60.51- 90.77	70.79
7.001	7.002	-0.001	27262449	1500.00	1700	64.36- 96.55	85.03
8.403	8.403	0.000	17449845	1500.00	1500	47.39- 71.08	54.42
Average of Peak Amounts =				1.49e+03			
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.260	9.260	0.000	57301434	150.000	130	80.00- 120.00	100.00

QC Flag Legend

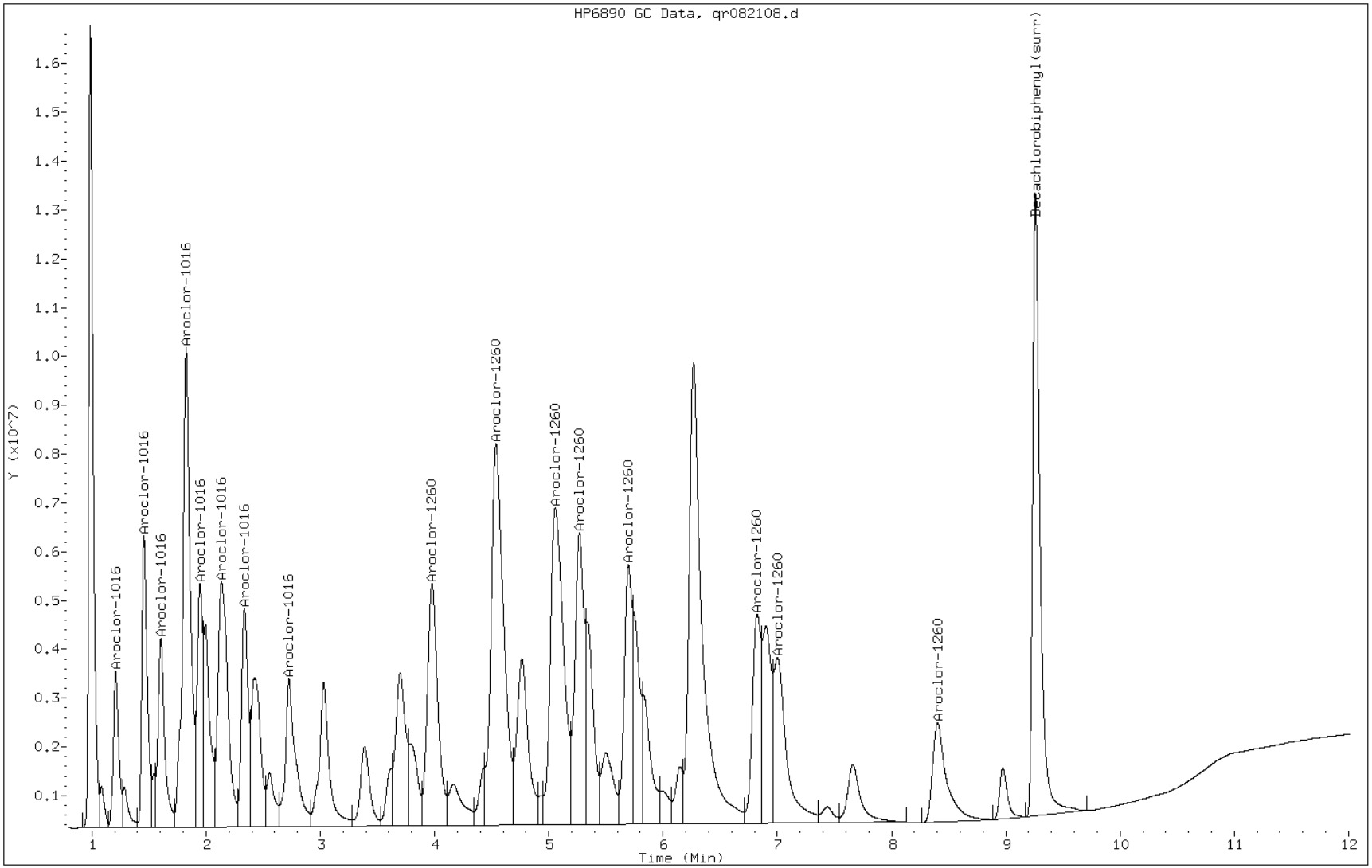
M - Compound response manually integrated.

Data File: qr082108.d

Date: 22-MAR-2011 09:40

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L4_00009 Operator: 615



TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082109.d
Lab Smp Id: IC-SG1660L5_00009
Inj Date : 22-MAR-2011 09:56
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1660L5_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.204	1.207	-0.003	16205078	2500.00	2300	80.00- 120.00	100.00(M)
1.453	1.455	-0.002	30226614	2500.00	2100	149.22- 223.83	186.53
1.602	1.603	-0.001	23993416	2500.00	2200	118.45- 177.67	148.06
1.822	1.824	-0.002	70494182	2500.00	2200	348.01- 522.02	435.01
1.943	1.945	-0.002	24961460	2500.00	2100	123.23- 184.84	154.03
2.132	2.134	-0.002	46383229	2500.00	2000	228.98- 343.47	286.23
2.333	2.334	-0.001	27304587	2500.00	2200	134.80- 202.19	168.49
2.724	2.726	-0.002	28053255	2500.00	2200	138.49- 207.74	173.11
Average of Peak Amounts = 2.17e+03							
27 Aroclor-1260					CAS #: 11096-82-5		
3.977	3.977	0.000	48534480	2500.00	2200	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.537	4.539	-0.002	98170781	2500.00	2200	161.82- 242.72	202.27
5.053	5.055	-0.002	80793267	2500.00	2300	133.17- 199.76	166.47
5.266	5.268	-0.002	50577903	2500.00	2200	83.37- 125.05	104.21
5.694	5.697	-0.003	36174228	2500.00	2100	59.63- 89.44	74.53
6.821	6.823	-0.002	36711058	2500.00	2400	60.51- 90.77	75.64
6.998	7.002	-0.004	39048448	2500.00	2400	64.36- 96.55	80.46
8.400	8.403	-0.003	28749640	2500.00	2500	47.39- 71.08	59.24
Average of Peak Amounts =				2.29e+03			
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.258	9.260	-0.002	76617536	200.000	180	80.00- 120.00	100.00

QC Flag Legend

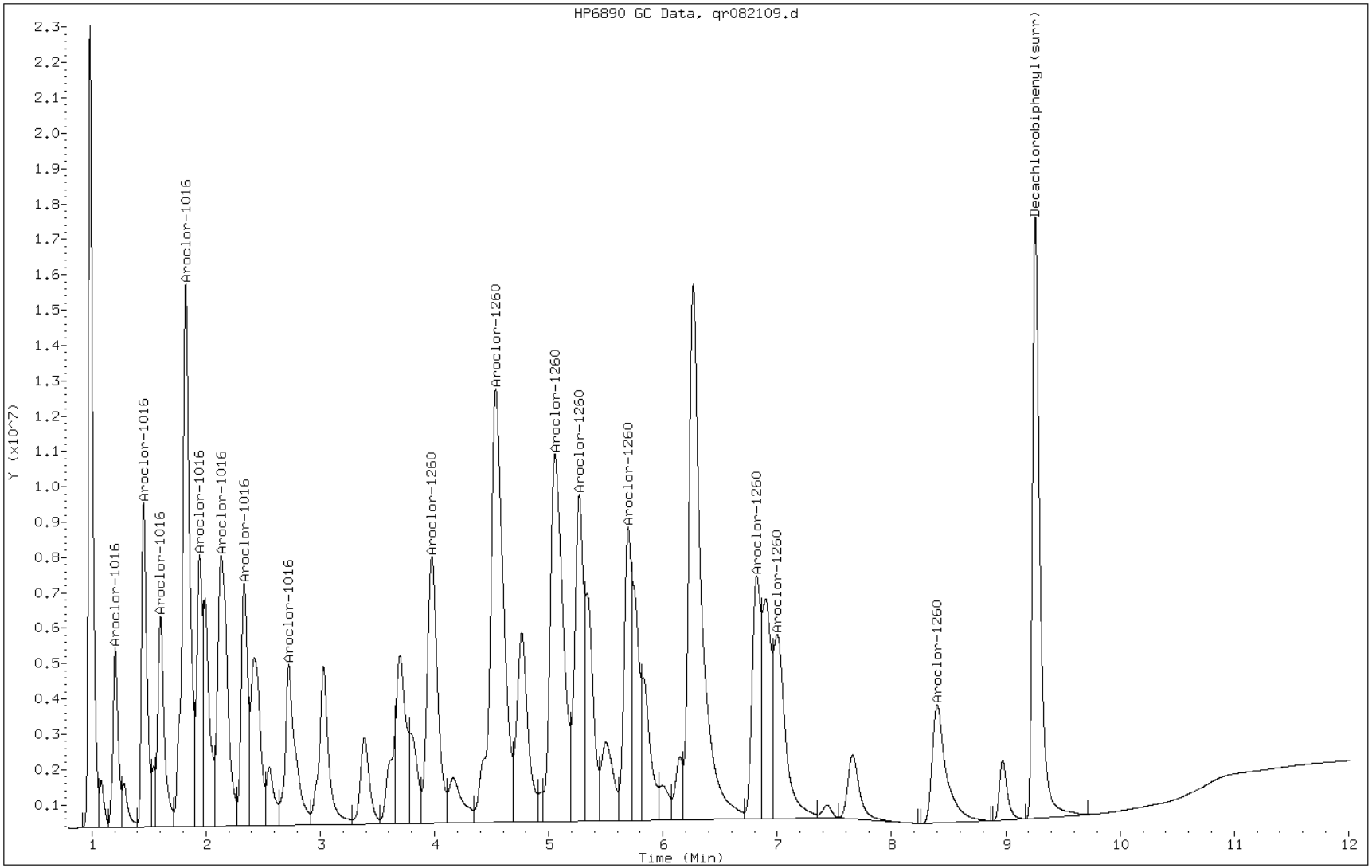
M - Compound response manually integrated.

Data File: qr082109.d

Date: 22-MAR-2011 09:56

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1660L5_00009 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qf082110.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1221 Peak 1	1.399										1.329 - 1.469	1.399
PCB-1221 Peak 2	1.513										1.443 - 1.583	1.513
PCB-1221 Peak 3	1.566										1.496 - 1.636	1.566
PCB-1221 Peak 4	1.933										1.863 - 2.003	1.933
PCB-1221 Peak 5	1.994										1.924 - 2.064	1.994
PCB-1221 Peak 6	2.402										2.332 - 2.472	2.402
PCB-1221 Peak 7	2.548										2.478 - 2.618	2.548
PCB-1221 Peak 8	2.658										2.588 - 2.728	2.658

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qf082110.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1221 Peak 1	3841.9				Ave		3841.94900						20.0			
PCB-1221 Peak 2	1752.7				Ave		1752.71500						20.0			
PCB-1221 Peak 3	9034.0				Ave		9034.03400						20.0			
PCB-1221 Peak 4	1328.0				Ave		1327.98300						20.0			
PCB-1221 Peak 5	1594.1				Ave		1594.05000						20.0			
PCB-1221 Peak 6	1414.4				Ave		1414.41300						20.0			
PCB-1221 Peak 7	643.69				Ave		643.686000						20.0			
PCB-1221 Peak 8	354.71				Ave		354.708000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10233

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qf082110.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1221 Peak 1	Ave	3841949					1000				
PCB-1221 Peak 2	Ave	1752715					1000				
PCB-1221 Peak 3	Ave	9034034					1000				
PCB-1221 Peak 4	Ave	1327983					1000				
PCB-1221 Peak 5	Ave	1594050					1000				
PCB-1221 Peak 6	Ave	1414413					1000				
PCB-1221 Peak 7	Ave	643686					1000				
PCB-1221 Peak 8	Ave	354708					1000				

Curve Type Legend:

Ave = Average

Data File: qf082110.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082110.d
Lab Smp Id: IC-SG1221L3_00011
Inj Date : 22-MAR-2011 10:12
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1221L3_00011
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12210.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

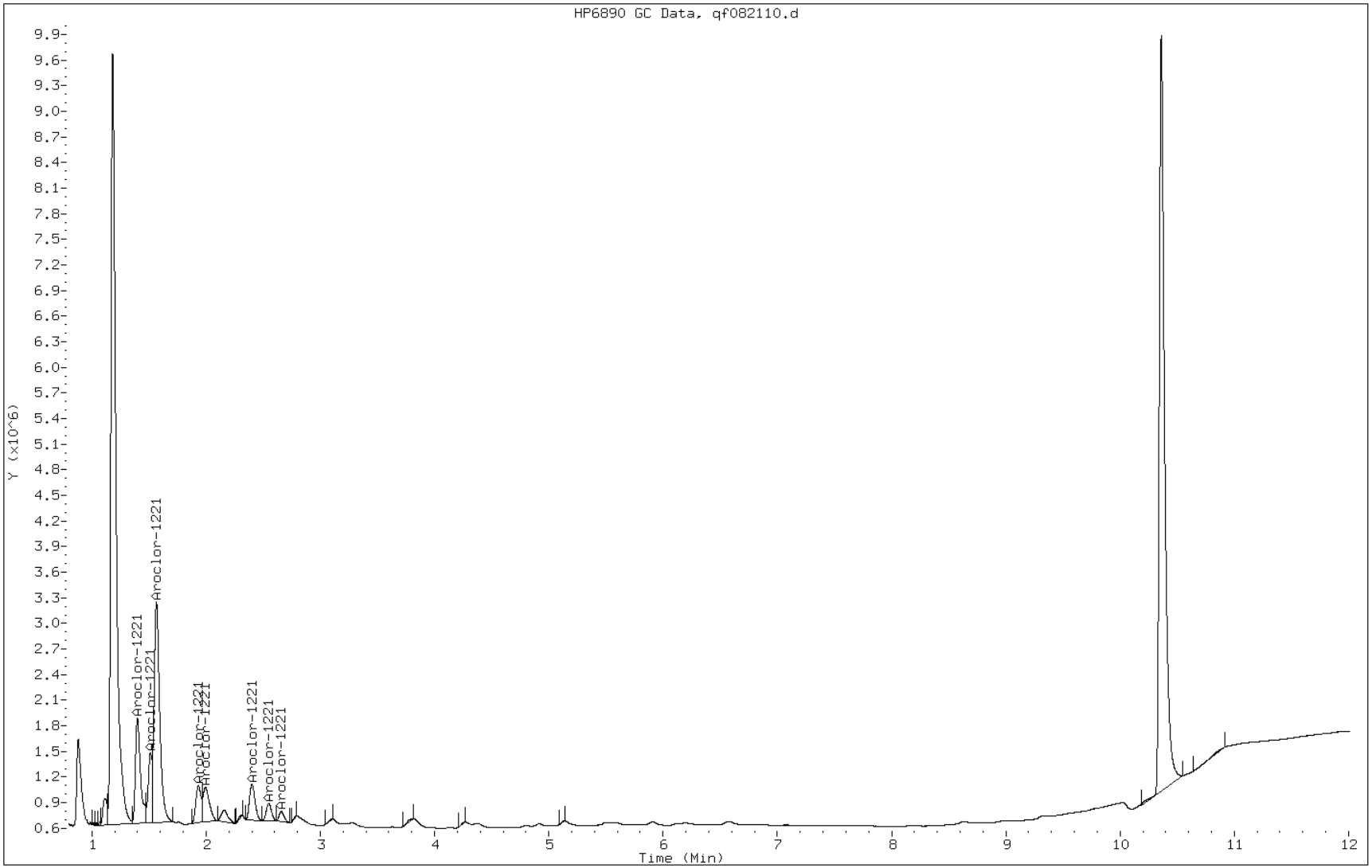
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
22 Aroclor-1221					CAS #: 11104-28-2		
1.399	1.399	0.000	3841949	1000.00	1000	80.00- 120.00	100.00
1.513	1.513	0.000	1752715	1000.00	1000	36.50- 54.74	45.62
1.566	1.566	0.000	9034034	1000.00	1000	188.11- 282.17	235.14
1.933	1.933	0.000	1327983	1000.00	1000	27.65- 41.48	34.57
1.994	1.994	0.000	1594050	1000.00	1000	33.19- 49.79	41.49
2.402	2.402	0.000	1414413	1000.00	1000	29.45- 44.18	36.81
2.548	2.548	0.000	643686	1000.00	1000	13.40- 20.10	16.75
2.658	2.658	0.000	354708	1000.00	1000	7.39- 11.08	9.23
			Average of Peak Amounts =		1e+03		

Data File: qf082110.d

Date: 22-MAR-2011 10:12

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1221L3_00011 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10241

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qr082110.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1221 Peak 1	1.086										1.016 - 1.156	1.086
PCB-1221 Peak 2	1.206										1.136 - 1.276	1.206
PCB-1221 Peak 3	1.457										1.387 - 1.527	1.457
PCB-1221 Peak 4	1.501										1.431 - 1.571	1.501
PCB-1221 Peak 5	1.556										1.486 - 1.626	1.556
PCB-1221 Peak 6	1.826										1.756 - 1.896	1.826
PCB-1221 Peak 7	1.945										1.875 - 2.015	1.945
PCB-1221 Peak 8	1.996										1.926 - 2.066	1.996

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10241

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qr082110.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1221 Peak 1	3947.9				Ave		3947.93300						20.0			
PCB-1221 Peak 2	11274				Ave		11274.1710						20.0			
PCB-1221 Peak 3	807.40				Ave		807.397000						20.0			
PCB-1221 Peak 4	668.46				Ave		668.456000						20.0			
PCB-1221 Peak 5	1375.3				Ave		1375.26600						20.0			
PCB-1221 Peak 6	2085.4				Ave		2085.37900						20.0			
PCB-1221 Peak 7	650.76				Ave		650.758000						20.0			
PCB-1221 Peak 8	428.32				Ave		428.321000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:12 Calibration End Date: 03/22/2011 10:12 Calibration ID: 10241

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/12	qr082110.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1221 Peak 1	Ave	3947933					1000				
PCB-1221 Peak 2	Ave	11274171					1000				
PCB-1221 Peak 3	Ave	807397					1000				
PCB-1221 Peak 4	Ave	668456					1000				
PCB-1221 Peak 5	Ave	1375266					1000				
PCB-1221 Peak 6	Ave	2085379					1000				
PCB-1221 Peak 7	Ave	650758					1000				
PCB-1221 Peak 8	Ave	428321					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082110.d
Lab Smp Id: IC-SG1221L3_00011
Inj Date : 22-MAR-2011 10:12
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1221L3_00011
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12210.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
22 Aroclor-1221						CAS #: 11104-28-2		
1.086	1.086	0.000	3947933	1000.00	1000	80.00-	120.00	100.00(M)
1.206	1.206	0.000	11274171	1000.00	1000	228.46-	342.69	285.57
1.457	1.457	0.000	807397	1000.00	1000	16.36-	24.54	20.45
1.501	1.501	0.000	668456	1000.00	1000	13.55-	20.32	16.93
1.556	1.556	0.000	1375266	1000.00	1000	27.87-	41.80	34.84
1.826	1.826	0.000	2085379	1000.00	1000	42.26-	63.39	52.82
1.945	1.945	0.000	650758	1000.00	1000	13.19-	19.78	16.48
1.996	1.996	0.000	428321	1000.00	1000	8.68-	13.02	10.85
Average of Peak Amounts =					1e+03			

QC Flag Legend

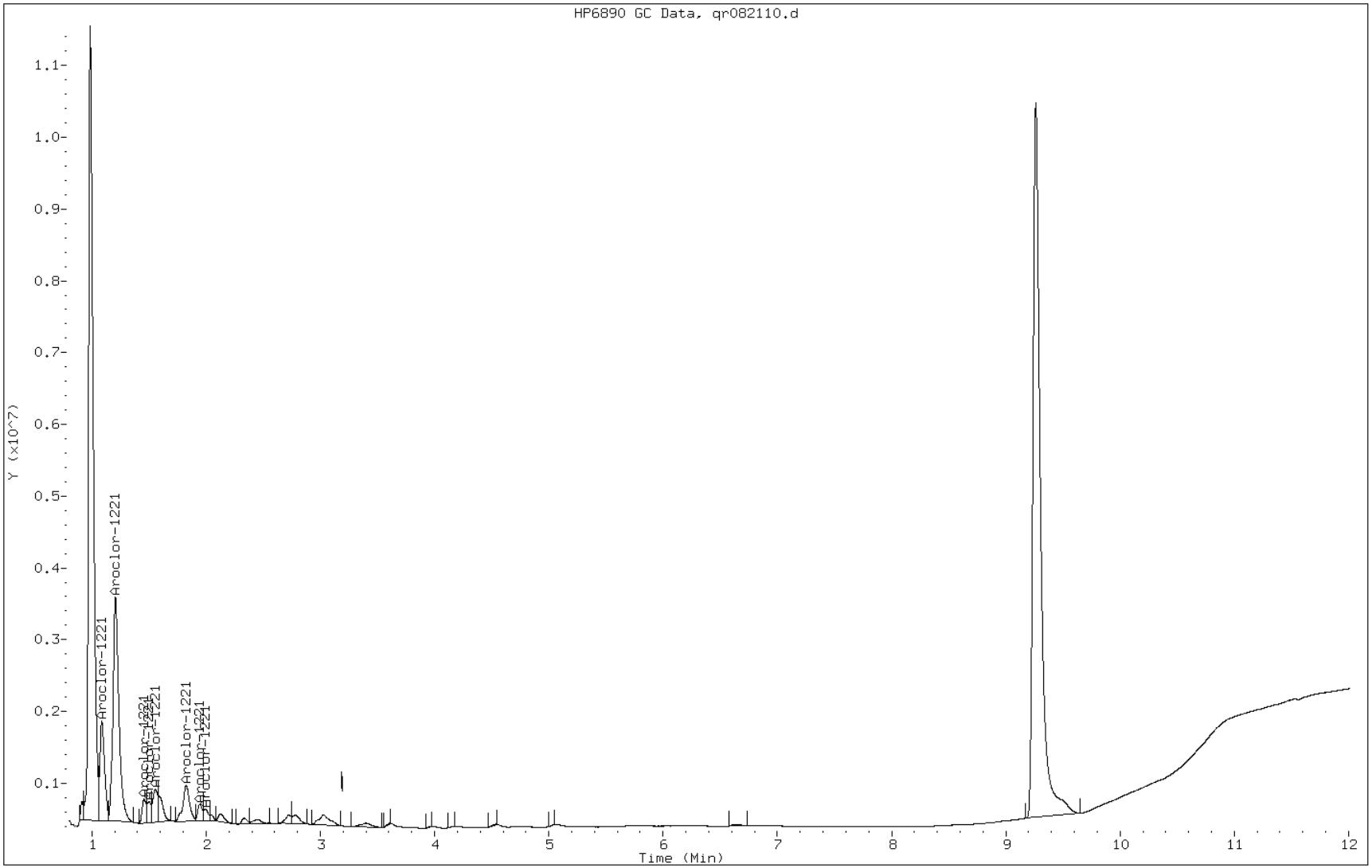
M - Compound response manually integrated.

Data File: qr082110.d

Date: 22-MAR-2011 10:12

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1221L3_00011 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qf082111.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	1.561										1.491 - 1.631	1.561
PCB-1232 Peak 2	1.932										1.862 - 2.002	1.932
PCB-1232 Peak 3	2.157										2.087 - 2.227	2.157
PCB-1232 Peak 4	2.399										2.329 - 2.469	2.399
PCB-1232 Peak 5	2.544										2.474 - 2.614	2.544
PCB-1232 Peak 6	2.659										2.589 - 2.729	2.659
PCB-1232 Peak 7	3.108										3.038 - 3.178	3.108
PCB-1232 Peak 8	3.285										3.215 - 3.355	3.285

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qf082111.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	5641.5				Ave		5641.51700						20.0			
PCB-1232 Peak 2	5722.0				Ave		5721.95600						20.0			
PCB-1232 Peak 3	3567.4				Ave		3567.41900						20.0			
PCB-1232 Peak 4	10447				Ave		10447.2830						20.0			
PCB-1232 Peak 5	4908.3				Ave		4908.25000						20.0			
PCB-1232 Peak 6	3797.0				Ave		3796.98600						20.0			
PCB-1232 Peak 7	5264.8				Ave		5264.82400						20.0			
PCB-1232 Peak 8	3838.0				Ave		3838.04700						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qf082111.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	5641517					1000				
PCB-1232 Peak 2	Ave	5721956					1000				
PCB-1232 Peak 3	Ave	3567419					1000				
PCB-1232 Peak 4	Ave	10447283					1000				
PCB-1232 Peak 5	Ave	4908250					1000				
PCB-1232 Peak 6	Ave	3796986					1000				
PCB-1232 Peak 7	Ave	5264824					1000				
PCB-1232 Peak 8	Ave	3838047					1000				

Curve Type Legend:
Ave = Average

Data File: qf082111.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082111.d
Lab Smp Id: IC-SG1232L3_00010
Inj Date : 22-MAR-2011 10:28
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1232L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12320.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
23 Aroclor-1232					CAS #: 11141-16-5			
1.561	1.561	0.000	5641517	1000.00	1000	80.00- 120.00		100.00(M)
1.932	1.932	0.000	5721956	1000.00	1000	81.14- 121.71		101.43
2.157	2.157	0.000	3567419	1000.00	1000	50.59- 75.88		63.24
2.399	2.399	0.000	10447283	1000.00	1000	148.15- 222.22		185.19
2.544	2.544	0.000	4908250	1000.00	1000	69.60- 104.40		87.00
2.659	2.659	0.000	3796986	1000.00	1000	53.84- 80.77		67.30
3.108	3.108	0.000	5264824	1000.00	1000	74.66- 111.99		93.32
3.285	3.285	0.000	3838047	1000.00	1000	54.43- 81.64		68.03
Average of Peak Amounts =					1e+03			

Data File: qf082111.d
Report Date: 22-Mar-2011 13:18

QC Flag Legend

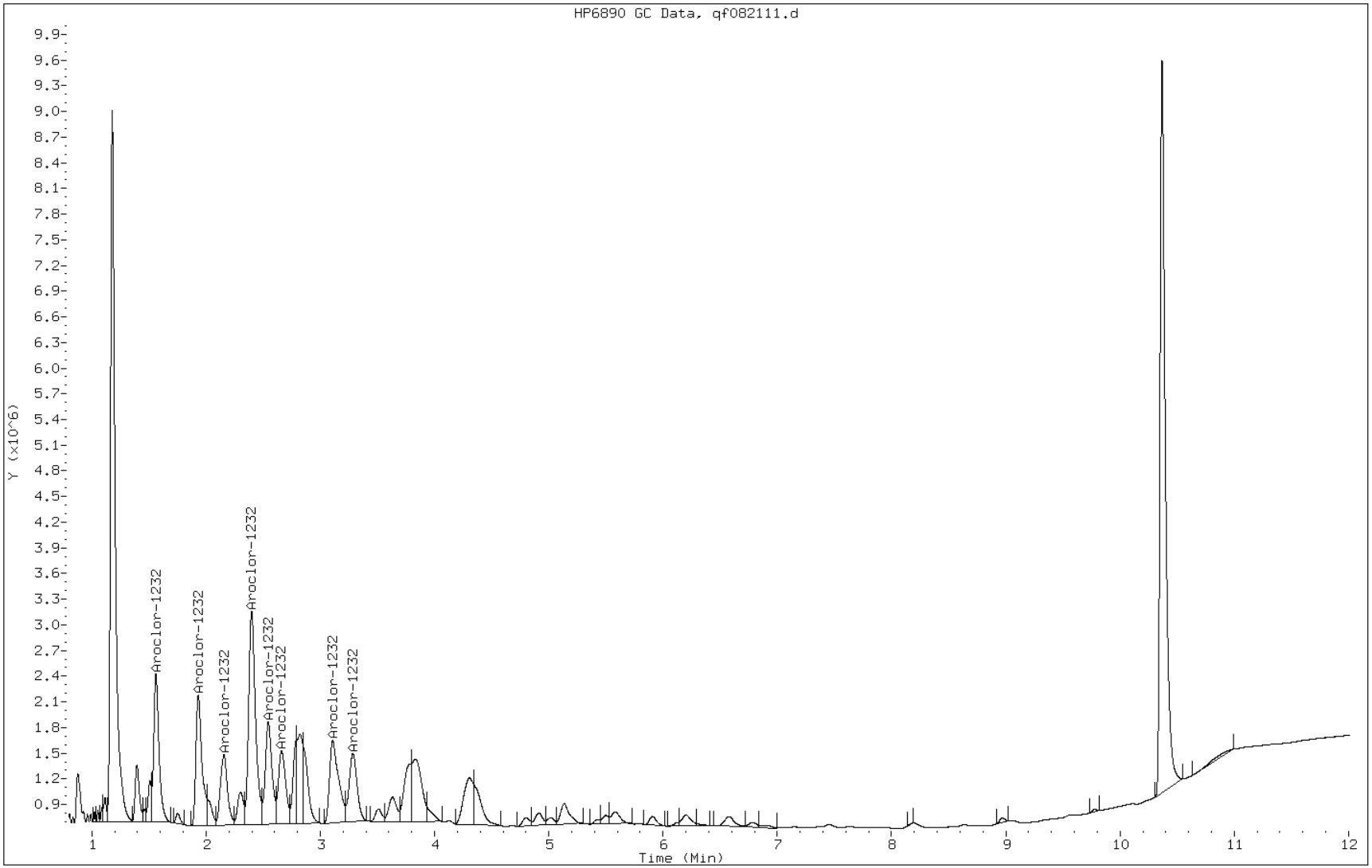
M - Compound response manually integrated.

Data File: qf082111.d

Date: 22-MAR-2011 10:28

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1232L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10242

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qr082111.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	1.202										1.132 - 1.272	1.202
PCB-1232 Peak 2	1.452										1.382 - 1.522	1.452
PCB-1232 Peak 3	1.600										1.530 - 1.670	1.600
PCB-1232 Peak 4	1.822										1.752 - 1.892	1.822
PCB-1232 Peak 5	1.943										1.873 - 2.013	1.943
PCB-1232 Peak 6	1.989										1.919 - 2.059	1.989
PCB-1232 Peak 7	2.331										2.261 - 2.401	2.331
PCB-1232 Peak 8	2.789										2.719 - 2.859	2.789

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10242

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qr082111.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	7711.9				Ave		7711.91900						20.0			
PCB-1232 Peak 2	5924.2				Ave		5924.23900						20.0			
PCB-1232 Peak 3	4594.8				Ave		4594.76600						20.0			
PCB-1232 Peak 4	13553				Ave		13552.9090						20.0			
PCB-1232 Peak 5	4851.9				Ave		4851.91700						20.0			
PCB-1232 Peak 6	4579.7				Ave		4579.66000						20.0			
PCB-1232 Peak 7	5643.9				Ave		5643.87800						20.0			
PCB-1232 Peak 8	9967.4				Ave		9967.42700						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:28 Calibration End Date: 03/22/2011 10:28 Calibration ID: 10242

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/13	qr082111.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	7711919					1000				
PCB-1232 Peak 2	Ave	5924239					1000				
PCB-1232 Peak 3	Ave	4594766					1000				
PCB-1232 Peak 4	Ave	13552909					1000				
PCB-1232 Peak 5	Ave	4851917					1000				
PCB-1232 Peak 6	Ave	4579660					1000				
PCB-1232 Peak 7	Ave	5643878					1000				
PCB-1232 Peak 8	Ave	9967427					1000				

Curve Type Legend:
Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082111.d
Lab Smp Id: IC-SG1232L3_00010
Inj Date : 22-MAR-2011 10:28
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1232L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12320.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
23 Aroclor-1232						CAS #: 11141-16-5		
1.202	1.202	0.000	7711919	1000.00	1000	80.00-	120.00	100.00(M)
1.452	1.452	0.000	5924239	1000.00	1000	61.46-	92.18	76.82
1.600	1.600	0.000	4594766	1000.00	1000	47.66-	71.50	59.58
1.822	1.822	0.000	13552909	1000.00	1000	140.59-	210.89	175.74
1.943	1.943	0.000	4851917	1000.00	1000	50.33-	75.50	62.91
1.989	1.989	0.000	4579660	1000.00	1000	47.51-	71.26	59.38
2.331	2.331	0.000	5643878	1000.00	1000	58.55-	87.82	73.18
2.789	2.789	0.000	9967427	1000.00	1000	103.40-	155.10	129.25
Average of Peak Amounts =					1e+03			

QC Flag Legend

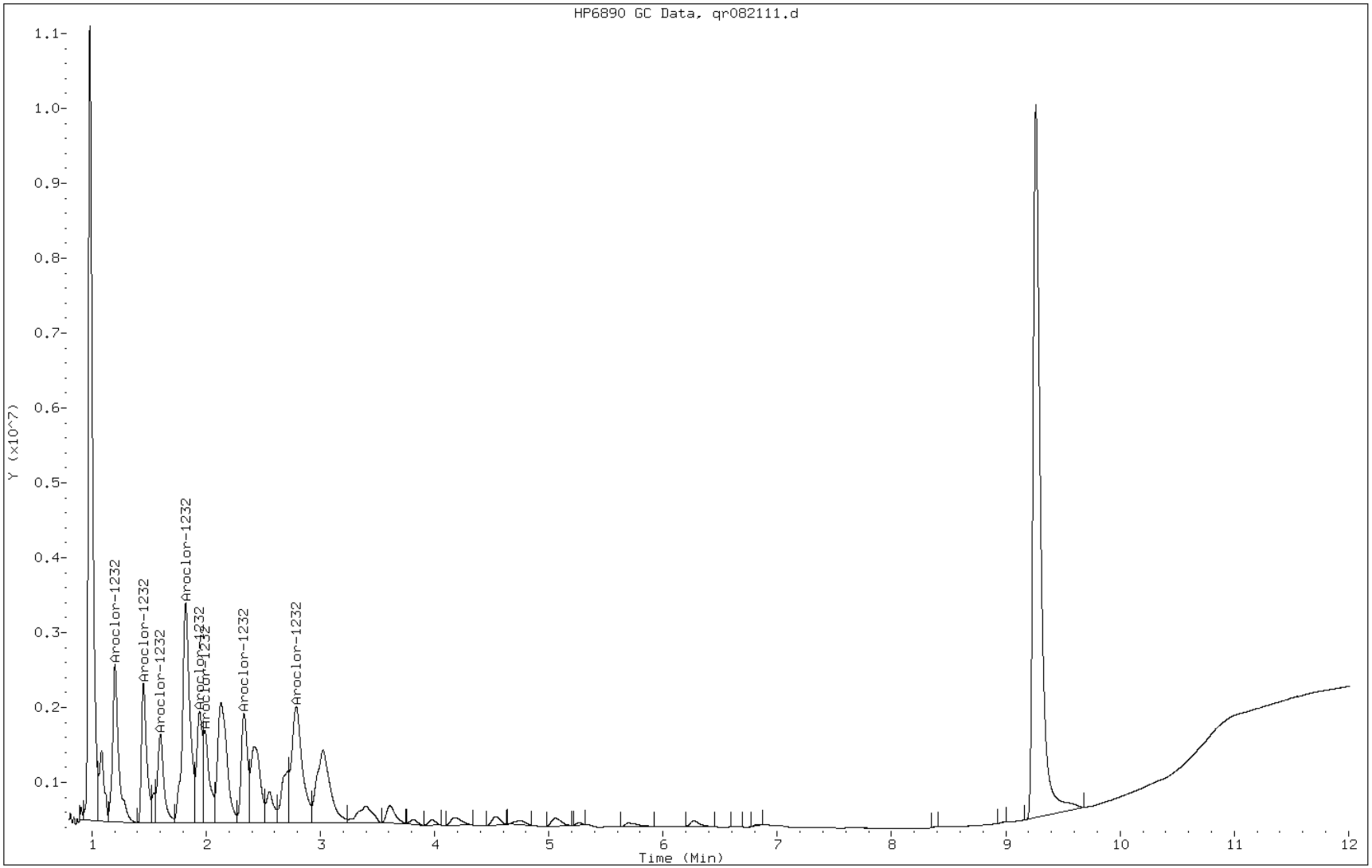
M - Compound response manually integrated.

Data File: qr082111.d

Date: 22-MAR-2011 10:28

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1232L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qf082112.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1242 Peak 1	1.567										1.497 - 1.637	1.567
PCB-1242 Peak 2	1.939										1.869 - 2.009	1.939
PCB-1242 Peak 3	2.163										2.093 - 2.233	2.163
PCB-1242 Peak 4	2.405										2.335 - 2.475	2.405
PCB-1242 Peak 5	2.551										2.481 - 2.621	2.551
PCB-1242 Peak 6	2.665										2.595 - 2.735	2.665
PCB-1242 Peak 7	3.114										3.044 - 3.184	3.114
PCB-1242 Peak 8	3.292										3.222 - 3.362	3.292

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qf082112.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1242 Peak 1	5519.2				Ave		5519.20500						20.0			
PCB-1242 Peak 2	10042				Ave		10041.8470						20.0			
PCB-1242 Peak 3	6729.7				Ave		6729.66100						20.0			
PCB-1242 Peak 4	19526				Ave		19525.8800						20.0			
PCB-1242 Peak 5	9063.6				Ave		9063.58400						20.0			
PCB-1242 Peak 6	7186.2				Ave		7186.19000						20.0			
PCB-1242 Peak 7	9507.2				Ave		9507.24700						20.0			
PCB-1242 Peak 8	7272.3				Ave		7272.27400						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qf082112.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1242 Peak 1	Ave	5519205					1000				
PCB-1242 Peak 2	Ave	10041847					1000				
PCB-1242 Peak 3	Ave	6729661					1000				
PCB-1242 Peak 4	Ave	19525880					1000				
PCB-1242 Peak 5	Ave	9063584					1000				
PCB-1242 Peak 6	Ave	7186190					1000				
PCB-1242 Peak 7	Ave	9507247					1000				
PCB-1242 Peak 8	Ave	7272274					1000				

Curve Type Legend:

Ave = Average

Data File: qf082112.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082112.d
Lab Smp Id: IC-SG1242L3_00010
Inj Date : 22-MAR-2011 10:44
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1242L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12420.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

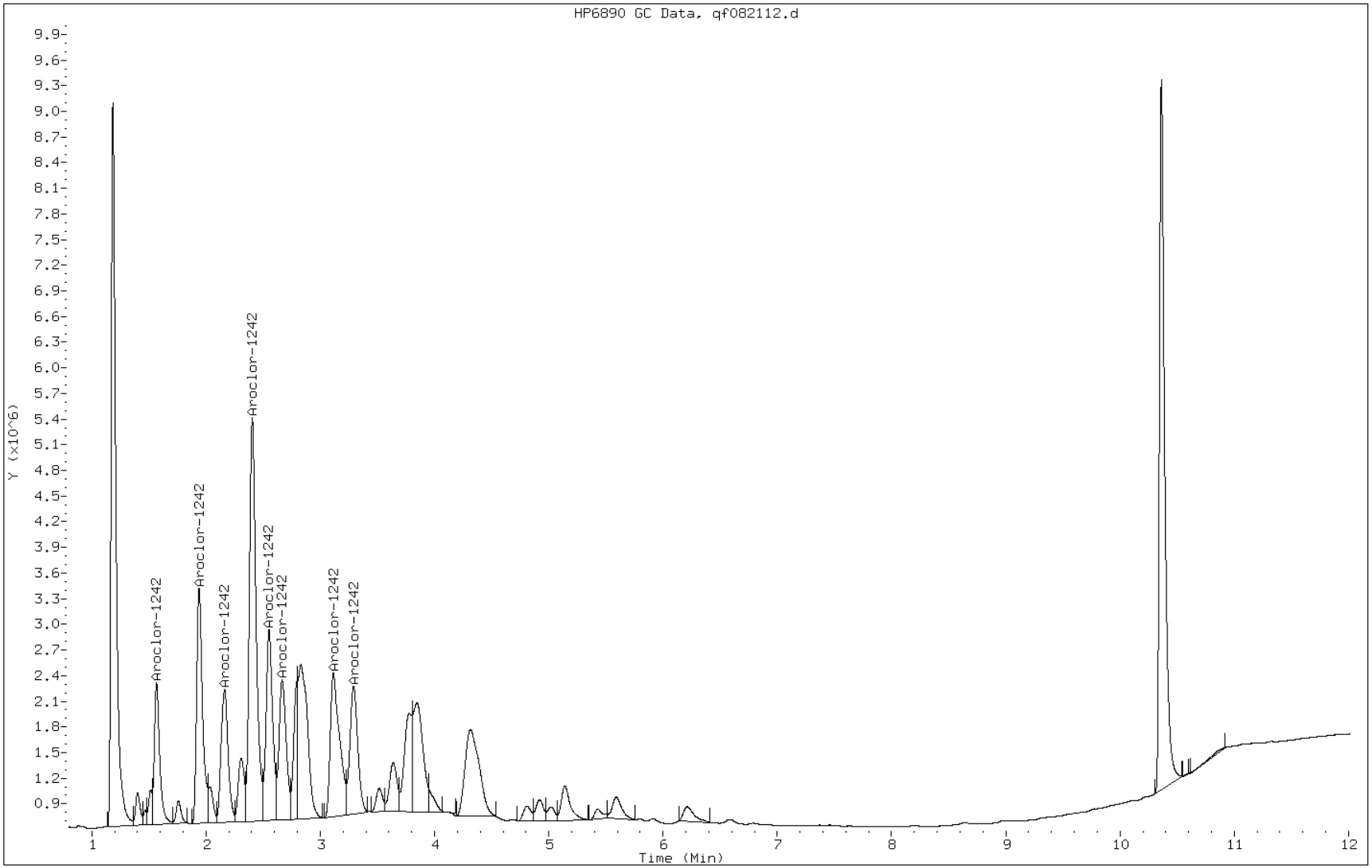
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
24 Aroclor-1242					CAS #: 53469-21-9			
1.567	1.567	0.000	5519205	1000.00	1000	80.00-	120.00	100.00
1.939	1.939	0.000	10041847	1000.00	1000	145.55-	218.33	181.94
2.163	2.163	0.000	6729661	1000.00	1000	97.55-	146.32	121.93
2.405	2.405	0.000	19525880	1000.00	1000	283.02-	424.54	353.78
2.551	2.551	0.000	9063584	1000.00	1000	131.38-	197.06	164.22
2.665	2.665	0.000	7186190	1000.00	1000	104.16-	156.24	130.20
3.114	3.114	0.000	9507247	1000.00	1000	137.81-	206.71	172.26
3.292	3.292	0.000	7272274	1000.00	1000	105.41-	158.12	131.76
Average of Peak Amounts =					1e+03			

Data File: qf082112.d

Date: 22-MAR-2011 10:44

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1242L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qr082112.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1242 Peak 1	1.210										1.140 - 1.280	1.210
PCB-1242 Peak 2	1.458										1.388 - 1.528	1.458
PCB-1242 Peak 3	1.607										1.537 - 1.677	1.607
PCB-1242 Peak 4	1.829										1.759 - 1.899	1.829
PCB-1242 Peak 5	1.950										1.880 - 2.020	1.950
PCB-1242 Peak 6	2.138										2.068 - 2.208	2.138
PCB-1242 Peak 7	2.339										2.269 - 2.409	2.339
PCB-1242 Peak 8	2.797										2.727 - 2.867	2.797

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qr082112.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1242 Peak 1	6300.1				Ave		6300.09900						20.0			
PCB-1242 Peak 2	11545				Ave		11545.1940						20.0			
PCB-1242 Peak 3	9093.0				Ave		9093.03300						20.0			
PCB-1242 Peak 4	26293				Ave		26293.1970						20.0			
PCB-1242 Peak 5	9342.9				Ave		9342.88100						20.0			
PCB-1242 Peak 6	17095				Ave		17094.5780						20.0			
PCB-1242 Peak 7	10407				Ave		10407.3710						20.0			
PCB-1242 Peak 8	18844				Ave		18843.6150						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 10:44 Calibration End Date: 03/22/2011 10:44 Calibration ID: 10243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/14	qr082112.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1242 Peak 1	Ave	6300099					1000				
PCB-1242 Peak 2	Ave	11545194					1000				
PCB-1242 Peak 3	Ave	9093033					1000				
PCB-1242 Peak 4	Ave	26293197					1000				
PCB-1242 Peak 5	Ave	9342881					1000				
PCB-1242 Peak 6	Ave	17094578					1000				
PCB-1242 Peak 7	Ave	10407371					1000				
PCB-1242 Peak 8	Ave	18843615					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082112.d
Lab Smp Id: IC-SG1242L3_00010
Inj Date : 22-MAR-2011 10:44
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1242L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12420.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

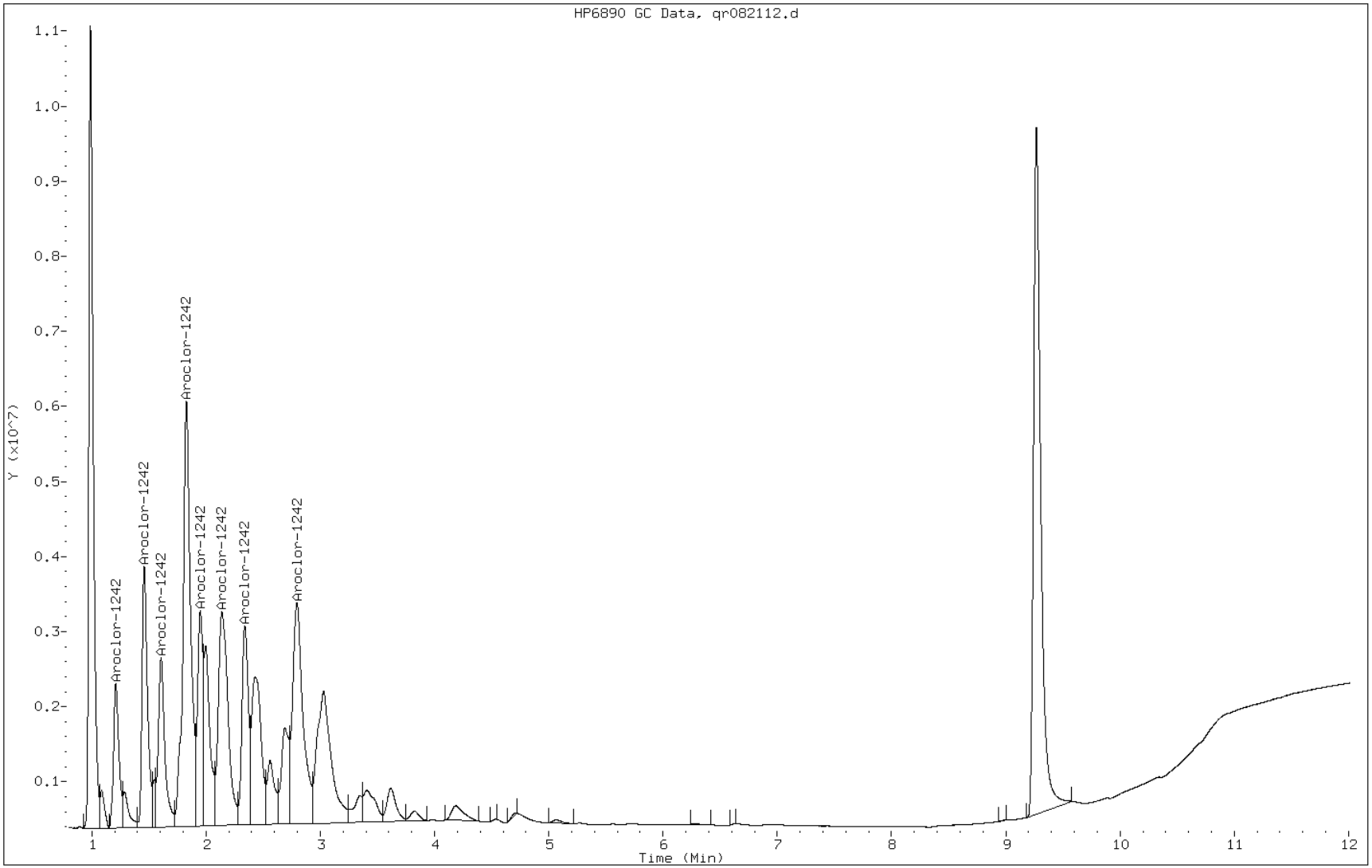
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
24 Aroclor-1242					CAS #: 53469-21-9			
1.210	1.210	0.000	6300099	1000.00	1000	80.00-	120.00	100.00
1.458	1.458	0.000	11545194	1000.00	1000	146.60-	219.91	183.25
1.607	1.607	0.000	9093033	1000.00	1000	115.47-	173.20	144.33
1.829	1.829	0.000	26293197	1000.00	1000	333.88-	500.81	417.35
1.950	1.950	0.000	9342881	1000.00	1000	118.64-	177.96	148.30
2.138	2.138	0.000	17094578	1000.00	1000	217.07-	325.61	271.34
2.339	2.339	0.000	10407371	1000.00	1000	132.16-	198.23	165.19
2.797	2.797	0.000	18843615	1000.00	1000	239.28-	358.92	299.10
Average of Peak Amounts =					1e+03			

Data File: qr082112.d

Date: 22-MAR-2011 10:44

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1242L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10236

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qf082113.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1248 Peak 1	1.943										1.873 - 2.013	1.943
PCB-1248 Peak 2	2.409										2.339 - 2.479	2.409
PCB-1248 Peak 3	2.553										2.483 - 2.623	2.553
PCB-1248 Peak 4	2.684										2.614 - 2.754	2.684
PCB-1248 Peak 5	3.121										3.051 - 3.191	3.121
PCB-1248 Peak 6	3.298										3.228 - 3.368	3.298
PCB-1248 Peak 7	3.648										3.578 - 3.718	3.648
PCB-1248 Peak 8	3.850										3.780 - 3.920	3.850

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10236

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qf082113.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1248 Peak 1	4483.1				Ave		4483.09900						20.0			
PCB-1248 Peak 2	12221				Ave		12221.4480						20.0			
PCB-1248 Peak 3	5448.2				Ave		5448.16000						20.0			
PCB-1248 Peak 4	4654.5				Ave		4654.51200						20.0			
PCB-1248 Peak 5	13732				Ave		13732.0310						20.0			
PCB-1248 Peak 6	11398				Ave		11398.1240						20.0			
PCB-1248 Peak 7	5320.6				Ave		5320.56400						20.0			
PCB-1248 Peak 8	17098				Ave		17097.8770						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10236

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qf082113.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1248 Peak 1	Ave	4483099					1000				
PCB-1248 Peak 2	Ave	12221448					1000				
PCB-1248 Peak 3	Ave	5448160					1000				
PCB-1248 Peak 4	Ave	4654512					1000				
PCB-1248 Peak 5	Ave	13732031					1000				
PCB-1248 Peak 6	Ave	11398124					1000				
PCB-1248 Peak 7	Ave	5320564					1000				
PCB-1248 Peak 8	Ave	17097877					1000				

Curve Type Legend:
Ave = Average

Data File: qf082113.d
Report Date: 22-Mar-2011 13:18

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082113.d
Lab Smp Id: IC-SG1248L3_00010
Inj Date : 22-MAR-2011 11:00
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1248L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:18 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12480.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
==	======	========	========	=======	=======	============		=====
25 Aroclor-1248					CAS #: 12672-29-6			
1.943	1.943	0.000	4483099	1000.00	1000	80.00-	120.00	100.00(M)
2.409	2.409	0.000	12221448	1000.00	1000	218.09-	327.13	272.61
2.553	2.553	0.000	5448160	1000.00	1000	97.22-	145.83	121.53
2.684	2.684	0.000	4654512	1000.00	1000	83.06-	124.59	103.82
3.120	3.120	0.000	13732031	1000.00	1000	245.05-	367.57	306.31
3.298	3.298	0.000	11398124	1000.00	1000	203.40-	305.10	254.25
3.648	3.648	0.000	5320564	1000.00	1000	94.94-	142.42	118.68
3.850	3.850	0.000	17097877	1000.00	1000	305.11-	457.66	381.39
Average of Peak Amounts =					1e+03			

Data File: qf082113.d
Report Date: 22-Mar-2011 13:18

QC Flag Legend

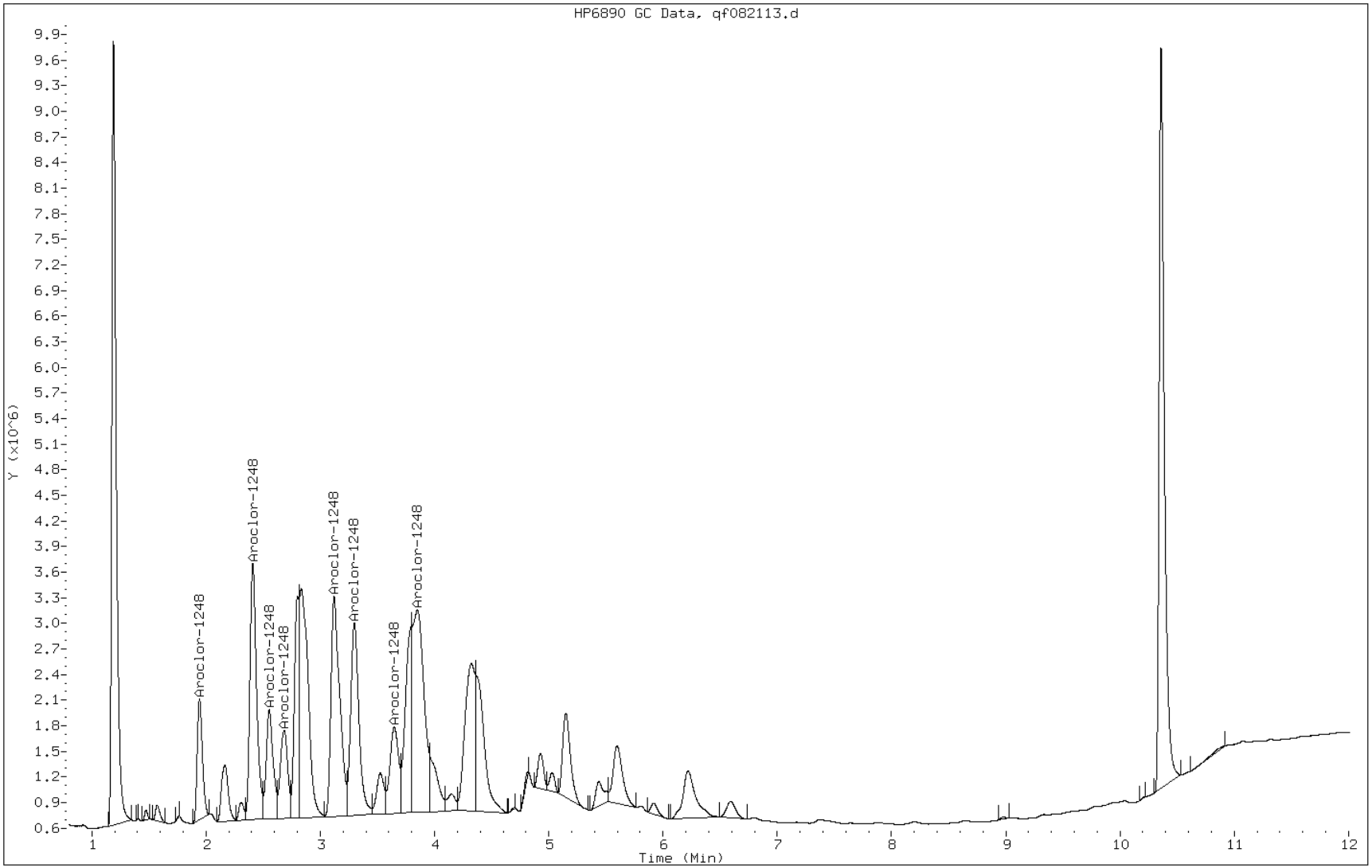
M - Compound response manually integrated.

Data File: qf082113.d

Date: 22-MAR-2011 11:00

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1248L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10244

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qr082113.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1248 Peak 1	1.462										1.392 - 1.532	1.462
PCB-1248 Peak 2	1.611										1.541 - 1.681	1.611
PCB-1248 Peak 3	1.832										1.762 - 1.902	1.832
PCB-1248 Peak 4	2.141										2.071 - 2.211	2.141
PCB-1248 Peak 5	2.343										2.273 - 2.413	2.343
PCB-1248 Peak 6	2.428										2.358 - 2.498	2.428
PCB-1248 Peak 7	2.800										2.730 - 2.870	2.800
PCB-1248 Peak 8	3.035										2.965 - 3.105	3.035

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10244

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qr082113.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1248 Peak 1	5733.1				Ave		5733.09800						20.0			
PCB-1248 Peak 2	3347.2				Ave		3347.21700						20.0			
PCB-1248 Peak 3	15902				Ave		15902.2260						20.0			
PCB-1248 Peak 4	23706				Ave		23706.0650						20.0			
PCB-1248 Peak 5	14331				Ave		14330.9480						20.0			
PCB-1248 Peak 6	14992				Ave		14992.0750						20.0			
PCB-1248 Peak 7	29060				Ave		29059.8090						20.0			
PCB-1248 Peak 8	14640				Ave		14639.7060						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:00 Calibration End Date: 03/22/2011 11:00 Calibration ID: 10244

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/15	qr082113.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1248 Peak 1	Ave	5733098					1000				
PCB-1248 Peak 2	Ave	3347217					1000				
PCB-1248 Peak 3	Ave	15902226					1000				
PCB-1248 Peak 4	Ave	23706065					1000				
PCB-1248 Peak 5	Ave	14330948					1000				
PCB-1248 Peak 6	Ave	14992075					1000				
PCB-1248 Peak 7	Ave	29059809					1000				
PCB-1248 Peak 8	Ave	14639706					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082113.d
Lab Smp Id: IC-SG1248L3_00010
Inj Date : 22-MAR-2011 11:00
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1248L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12480.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
25 Aroclor-1248					CAS #: 12672-29-6			
1.462	1.462	0.000	5733098	1000.00	1000	80.00-	120.00	100.00(M)
1.610	1.610	0.000	3347217	1000.00	1000	46.71-	70.06	58.38
1.832	1.832	0.000	15902226	1000.00	1000	221.90-	332.85	277.38
2.141	2.141	0.000	23706065	1000.00	1000	330.80-	496.19	413.49
2.343	2.343	0.000	14330948	1000.00	1000	199.97-	299.96	249.97
2.428	2.428	0.000	14992075	1000.00	1000	209.20-	313.80	261.50
2.800	2.800	0.000	29059809	1000.00	1000	405.50-	608.25	506.88
3.035	3.035	0.000	14639706	1000.00	1000	204.28-	306.43	255.35
Average of Peak Amounts =					1e+03			

QC Flag Legend

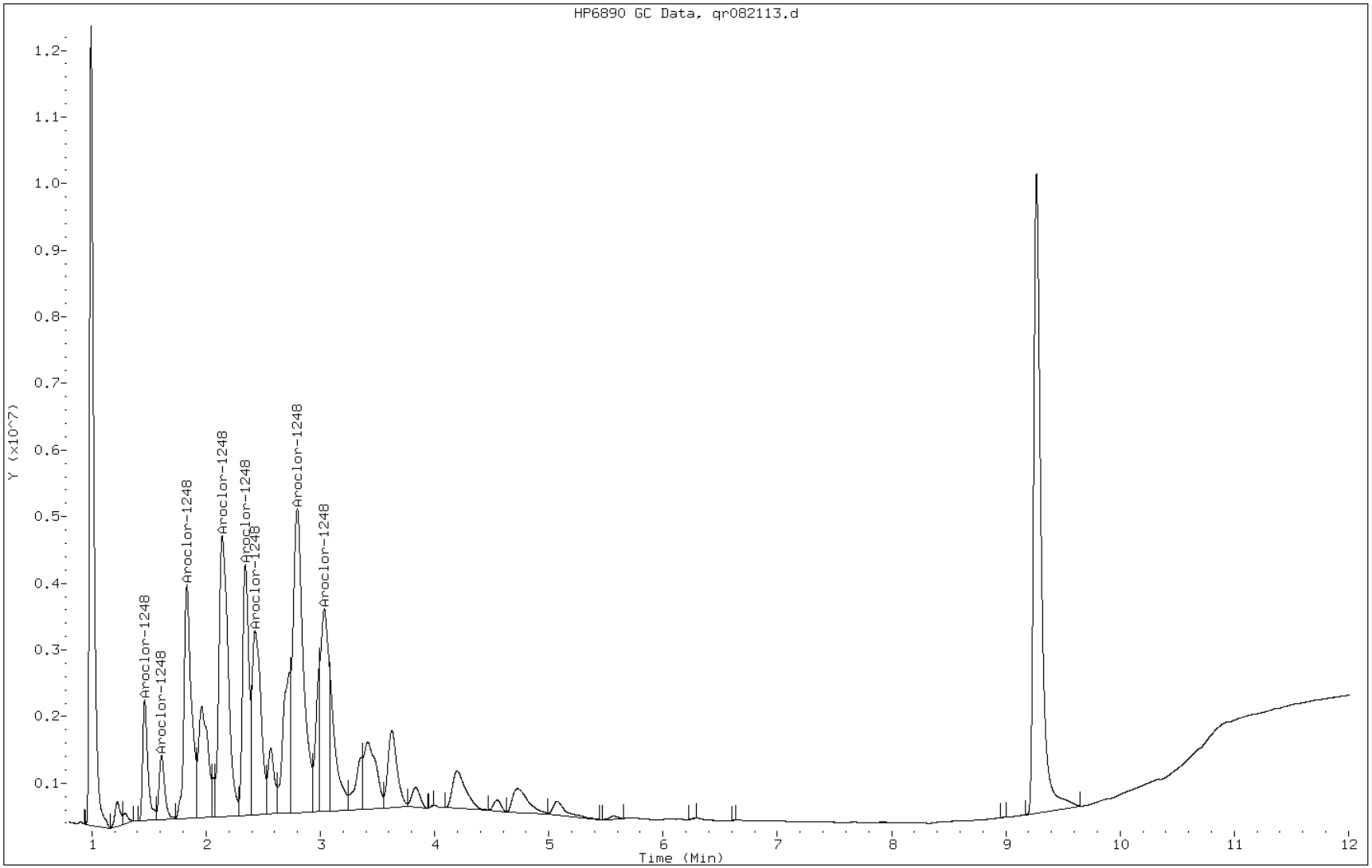
M - Compound response manually integrated.

Data File: qr082113.d

Date: 22-MAR-2011 11:00

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1248L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10237

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qf082114.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1254 Peak 1	2.798										2.728 - 2.868	2.798
PCB-1254 Peak 2	4.281										4.211 - 4.351	4.281
PCB-1254 Peak 3	4.396										4.326 - 4.466	4.396
PCB-1254 Peak 4	4.935										4.865 - 5.005	4.935
PCB-1254 Peak 5	5.155										5.085 - 5.225	5.155
PCB-1254 Peak 6	5.599										5.529 - 5.669	5.599
PCB-1254 Peak 7	5.924										5.854 - 5.994	5.924
PCB-1254 Peak 8	6.215										6.145 - 6.285	6.215

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10237

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qf082114.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1254 Peak 1	8751.7				Ave		8751.74400						20.0			
PCB-1254 Peak 2	14439				Ave		14438.8460						20.0			
PCB-1254 Peak 3	11427				Ave		11427.3390						20.0			
PCB-1254 Peak 4	9258.2				Ave		9258.19400						20.0			
PCB-1254 Peak 5	21582				Ave		21582.0990						20.0			
PCB-1254 Peak 6	18006				Ave		18006.2750						20.0			
PCB-1254 Peak 7	13238				Ave		13238.1670						20.0			
PCB-1254 Peak 8	11338				Ave		11338.0480						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10237

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qf082114.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1254 Peak 1	Ave	8751744					1000				
PCB-1254 Peak 2	Ave	14438846					1000				
PCB-1254 Peak 3	Ave	11427339					1000				
PCB-1254 Peak 4	Ave	9258194					1000				
PCB-1254 Peak 5	Ave	21582099					1000				
PCB-1254 Peak 6	Ave	18006275					1000				
PCB-1254 Peak 7	Ave	13238167					1000				
PCB-1254 Peak 8	Ave	11338048					1000				

Curve Type Legend:

Ave = Average

Data File: qf082114.d
Report Date: 22-Mar-2011 13:19

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082114.d
Lab Smp Id: IC-SG1254L3_00009
Inj Date : 22-MAR-2011 11:16
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1254L3_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:19 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12540.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
26 Aroclor-1254					CAS #: 11097-69-1			
2.798	2.798	0.000	8751744	1000.00	1000	80.00- 120.00		100.00(M)
4.281	4.281	0.000	14438846	1000.00	1000	131.99- 197.98		164.98
4.396	4.396	0.000	11427339	1000.00	1000	104.46- 156.69		130.57
4.935	4.935	0.000	9258194	1000.00	1000	84.63- 126.94		105.79
5.155	5.155	0.000	21582099	1000.00	1000	197.28- 295.92		246.60
5.599	5.599	0.000	18006275	1000.00	1000	164.60- 246.89		205.74
5.924	5.924	0.000	13238167	1000.00	1000	121.01- 181.52		151.26
6.215	6.215	0.000	11338048	1000.00	1000	103.64- 155.46		129.55
Average of Peak Amounts =					1e+03			

Data File: qf082114.d
Report Date: 22-Mar-2011 13:19

QC Flag Legend

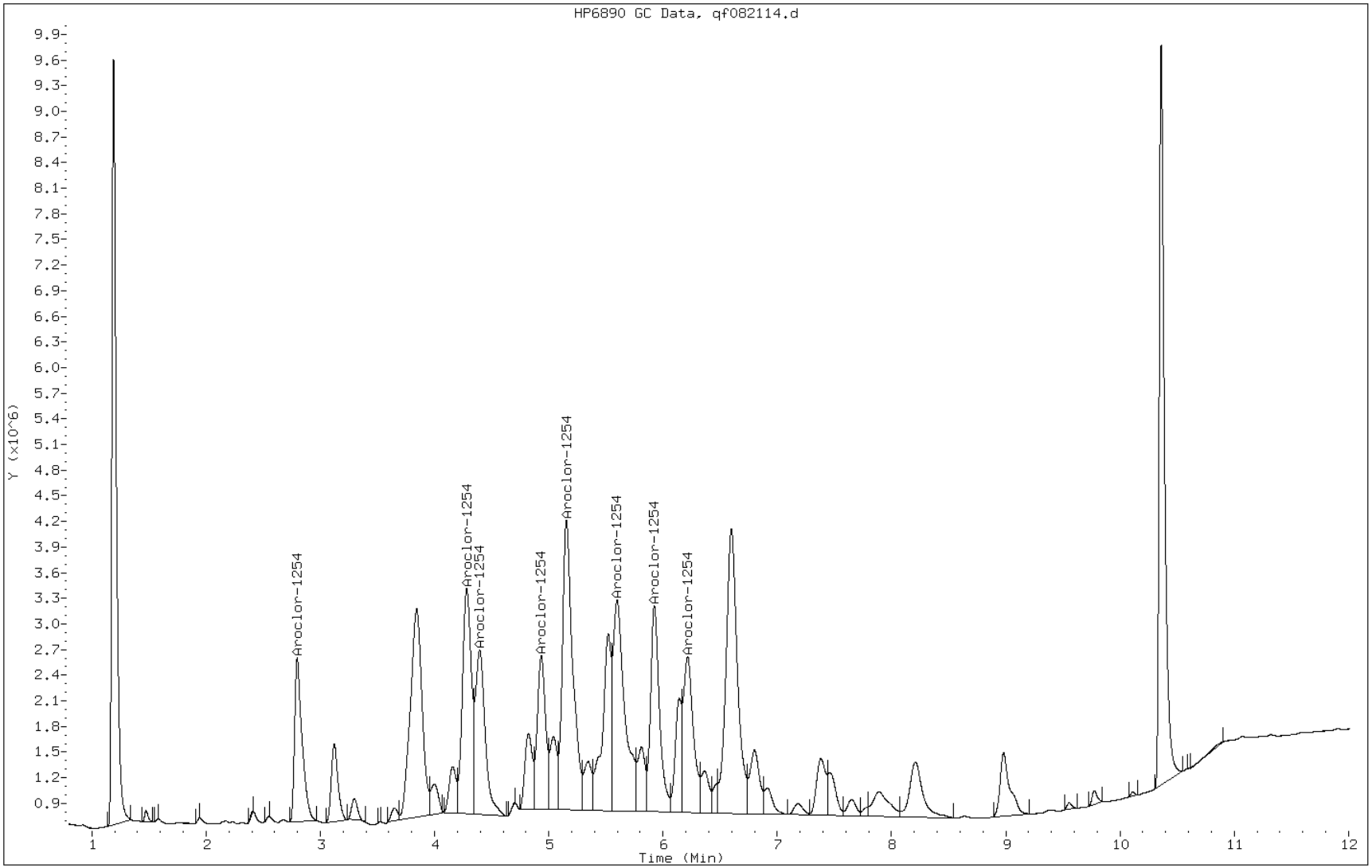
M - Compound response manually integrated.

Data File: qf082114.d

Date: 22-MAR-2011 11:16

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1254L3_00009 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10245

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qr082114.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1254 Peak 1	2.133										2.063 - 2.203	2.133
PCB-1254 Peak 2	2.738										2.668 - 2.808	2.738
PCB-1254 Peak 3	3.043										2.973 - 3.113	3.043
PCB-1254 Peak 4	3.418										3.348 - 3.488	3.418
PCB-1254 Peak 5	3.630										3.560 - 3.700	3.630
PCB-1254 Peak 6	4.199										4.129 - 4.269	4.199
PCB-1254 Peak 7	4.555										4.485 - 4.625	4.555
PCB-1254 Peak 8	5.077										5.007 - 5.147	5.077

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10245

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qr082114.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1254 Peak 1	9771.7				Ave		9771.69000						20.0			
PCB-1254 Peak 2	12983				Ave		12982.6160						20.0			
PCB-1254 Peak 3	33442				Ave		33441.8720						20.0			
PCB-1254 Peak 4	23065				Ave		23065.2170						20.0			
PCB-1254 Peak 5	25129				Ave		25128.6300						20.0			
PCB-1254 Peak 6	19114				Ave		19113.5020						20.0			
PCB-1254 Peak 7	22156				Ave		22155.9680						20.0			
PCB-1254 Peak 8	27523				Ave		27523.1160						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:16 Calibration End Date: 03/22/2011 11:16 Calibration ID: 10245

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/16	qr082114.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1254 Peak 1	Ave	9771690					1000				
PCB-1254 Peak 2	Ave	12982616					1000				
PCB-1254 Peak 3	Ave	33441872					1000				
PCB-1254 Peak 4	Ave	23065217					1000				
PCB-1254 Peak 5	Ave	25128630					1000				
PCB-1254 Peak 6	Ave	19113502					1000				
PCB-1254 Peak 7	Ave	22155968					1000				
PCB-1254 Peak 8	Ave	27523116					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082114.d
Lab Smp Id: IC-SG1254L3_00009
Inj Date : 22-MAR-2011 11:16
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1254L3_00009
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 12 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12540.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
26 Aroclor-1254						CAS #: 11097-69-1		
2.133	2.133	0.000	9771690	1000.00	1000	80.00- 120.00		100.00(M)
2.738	2.738	0.000	12982616	1000.00	1000	106.29- 159.43		132.86
3.043	3.043	0.000	33441872	1000.00	1000	273.79- 410.68		342.23
3.418	3.418	0.000	23065217	1000.00	1000	188.83- 283.25		236.04
3.630	3.630	0.000	25128630	1000.00	1000	205.73- 308.59		257.16
4.199	4.199	0.000	19113502	1000.00	1000	156.48- 234.72		195.60
4.555	4.555	0.000	22155968	1000.00	1000	181.39- 272.08		226.74
5.077	5.077	0.000	27523116	1000.00	1000	225.33- 337.99		281.66
			Average of Peak Amounts =		1e+03			

QC Flag Legend

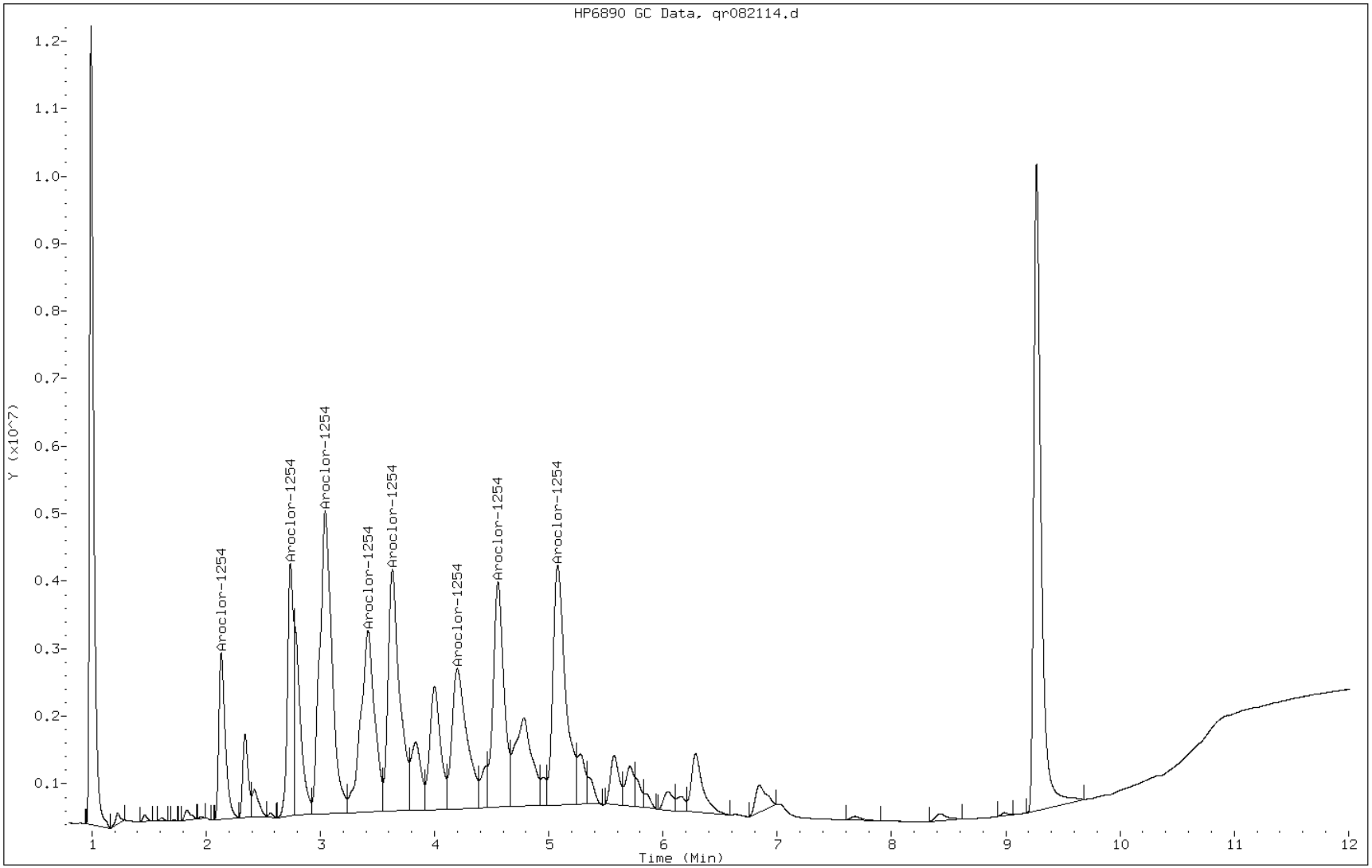
M - Compound response manually integrated.

Data File: qr082114.d

Date: 22-MAR-2011 11:16

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1254L3_00009 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10238

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qf082115.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1262 Peak 1	5.521										5.451 - 5.591	5.521
PCB-1262 Peak 2	5.927										5.857 - 5.997	5.927
PCB-1262 Peak 3	6.213										6.143 - 6.283	6.213
PCB-1262 Peak 4	6.807										6.737 - 6.877	6.807
PCB-1262 Peak 5	7.481										7.411 - 7.551	7.481
PCB-1262 Peak 6	8.979										8.909 - 9.049	8.979
PCB-1262 Peak 7	9.062										8.992 - 9.132	9.062
PCB-1262 Peak 8	9.774										9.704 - 9.844	9.774

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10238

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qf082115.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1262 Peak 1	15062				Ave		15062.1400						20.0			
PCB-1262 Peak 2	19132				Ave		19132.0730						20.0			
PCB-1262 Peak 3	17912				Ave		17911.7460						20.0			
PCB-1262 Peak 4	30062				Ave		30061.5120						20.0			
PCB-1262 Peak 5	22323				Ave		22323.4660						20.0			
PCB-1262 Peak 6	29753				Ave		29752.6230						20.0			
PCB-1262 Peak 7	25217				Ave		25217.0240						20.0			
PCB-1262 Peak 8	15325				Ave		15325.0580						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10238

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qf082115.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1262 Peak 1	Ave	15062140					1000				
PCB-1262 Peak 2	Ave	19132073					1000				
PCB-1262 Peak 3	Ave	17911746					1000				
PCB-1262 Peak 4	Ave	30061512					1000				
PCB-1262 Peak 5	Ave	22323466					1000				
PCB-1262 Peak 6	Ave	29752623					1000				
PCB-1262 Peak 7	Ave	25217024					1000				
PCB-1262 Peak 8	Ave	15325058					1000				

Curve Type Legend:

Ave = Average

Data File: qf082115.d
Report Date: 22-Mar-2011 13:19

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082115.d
Lab Smp Id: IC-SG1262L3_00010
Inj Date : 22-MAR-2011 11:32
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1262L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:19 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12620.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

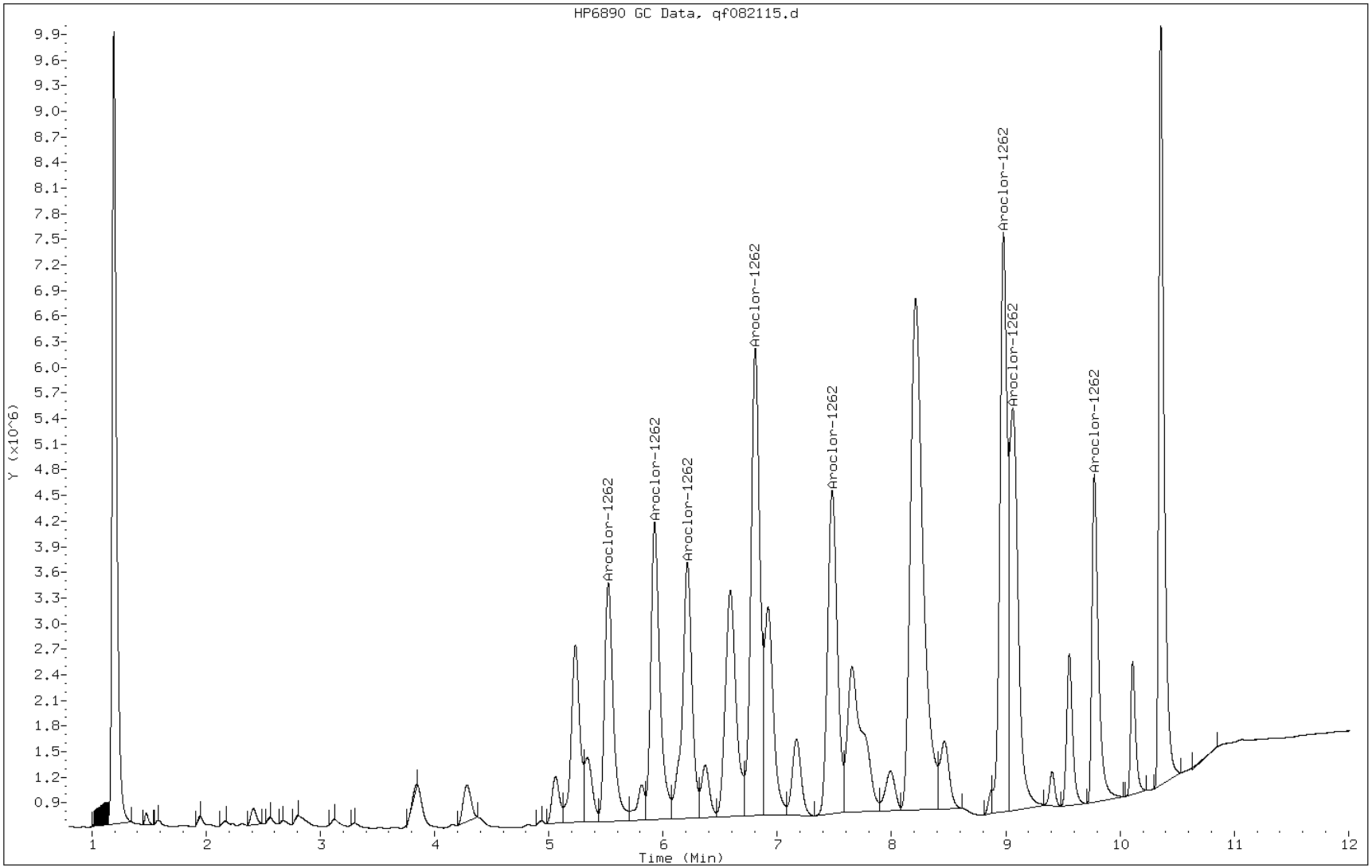
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
53 Aroclor-1262					CAS #: 37324-23-5			
5.521	5.521	0.000	15062140	1000.00	1000	80.00-	120.00	100.00
5.927	5.927	0.000	19132073	1000.00	1000	101.62-	152.43	127.02
6.213	6.213	0.000	17911746	1000.00	1000	95.14-	142.70	118.92
6.807	6.807	0.000	30061512	1000.00	1000	159.67-	239.50	199.58
7.481	7.481	0.000	22323466	1000.00	1000	118.57-	177.85	148.21
8.979	8.979	0.000	29752623	1000.00	1000	158.03-	237.04	197.53
9.062	9.062	0.000	25217024	1000.00	1000	133.94-	200.90	167.42
9.774	9.774	0.000	15325058	1000.00	1000	81.40-	122.09	101.75
Average of Peak Amounts =					1e+03			

Data File: qf082115.d

Date: 22-MAR-2011 11:32

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1262L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10246

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qr082115.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1262 Peak 1	3.722										3.652 - 3.792	3.722
PCB-1262 Peak 2	4.002										3.932 - 4.072	4.002
PCB-1262 Peak 3	4.572										4.502 - 4.642	4.572
PCB-1262 Peak 4	5.289										5.219 - 5.359	5.289
PCB-1262 Peak 5	5.716										5.646 - 5.786	5.716
PCB-1262 Peak 6	6.286										6.216 - 6.356	6.286
PCB-1262 Peak 7	6.931										6.861 - 7.001	6.931
PCB-1262 Peak 8	8.421										8.351 - 8.491	8.421

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10246

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qr082115.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1262 Peak 1	13048				Ave		13047.6210						20.0			
PCB-1262 Peak 2	17812				Ave		17811.9030						20.0			
PCB-1262 Peak 3	35819				Ave		35819.4020						20.0			
PCB-1262 Peak 4	35161				Ave		35161.2340						20.0			
PCB-1262 Peak 5	24480				Ave		24480.2400						20.0			
PCB-1262 Peak 6	62965				Ave		62965.4780						20.0			
PCB-1262 Peak 7	28913				Ave		28913.3170						20.0			
PCB-1262 Peak 8	22138				Ave		22137.6300						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:32 Calibration End Date: 03/22/2011 11:32 Calibration ID: 10246

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/17	qr082115.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1262 Peak 1	Ave	13047621					1000				
PCB-1262 Peak 2	Ave	17811903					1000				
PCB-1262 Peak 3	Ave	35819402					1000				
PCB-1262 Peak 4	Ave	35161234					1000				
PCB-1262 Peak 5	Ave	24480240					1000				
PCB-1262 Peak 6	Ave	62965478					1000				
PCB-1262 Peak 7	Ave	28913317					1000				
PCB-1262 Peak 8	Ave	22137630					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082115.d
Lab Smp Id: IC-SG1262L3_00010
Inj Date : 22-MAR-2011 11:32
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1262L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12620.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
53 Aroclor-1262					CAS #: 37324-23-5		
3.722	3.722	0.000	13047621	1000.00	1000	80.00- 120.00	100.00(M)
4.002	4.002	0.000	17811903	1000.00	1000	109.21- 163.82	136.51
4.572	4.572	0.000	35819402	1000.00	1000	219.62- 329.43	274.53
5.289	5.289	0.000	35161234	1000.00	1000	215.59- 323.38	269.48
5.716	5.716	0.000	24480240	1000.00	1000	150.10- 225.15	187.62
6.286	6.286	0.000	62965478	1000.00	1000	386.07- 579.10	482.58
6.931	6.931	0.000	28913317	1000.00	1000	177.28- 265.92	221.60
8.421	8.421	0.000	22137630	1000.00	1000	135.73- 203.60	169.67
Average of Peak Amounts =					1e+03		

QC Flag Legend

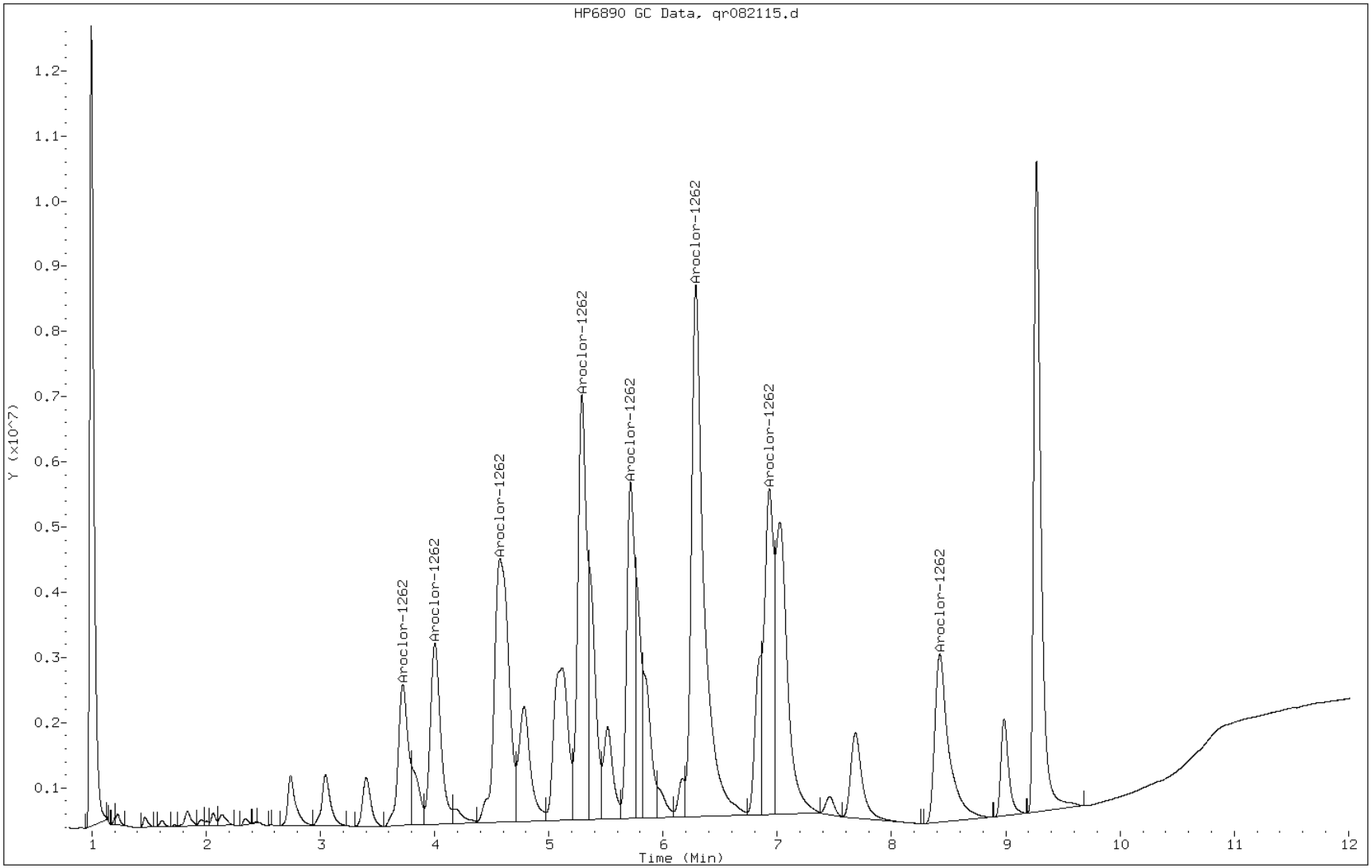
M - Compound response manually integrated.

Data File: qr082115.d

Date: 22-MAR-2011 11:32

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1262L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10239

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qf082116.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1268 Peak 1	6.810										6.740 - 6.880	6.810
PCB-1268 Peak 2	7.496										7.426 - 7.566	7.496
PCB-1268 Peak 3	8.982										8.912 - 9.052	8.982
PCB-1268 Peak 4	9.055										8.985 - 9.125	9.055
PCB-1268 Peak 5	9.412										9.342 - 9.482	9.412
PCB-1268 Peak 6	9.536										9.466 - 9.606	9.536
PCB-1268 Peak 7	9.778										9.708 - 9.848	9.778
PCB-1268 Peak 8	10.117										10.047 - 10.187	10.117

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10239

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qf082116.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1268 Peak 1	18187				Ave		18186.7750						20.0			
PCB-1268 Peak 2	23307				Ave		23306.9450						20.0			
PCB-1268 Peak 3	65565				Ave		65565.0980						20.0			
PCB-1268 Peak 4	80321				Ave		80321.2900						20.0			
PCB-1268 Peak 5	56236				Ave		56235.6170						20.0			
PCB-1268 Peak 6	17479				Ave		17479.3930						20.0			
PCB-1268 Peak 7	23219				Ave		23219.2970						20.0			
PCB-1268 Peak 8	132419				Ave		132418.601						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10239

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qf082116.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1268 Peak 1	Ave	18186775					1000				
PCB-1268 Peak 2	Ave	23306945					1000				
PCB-1268 Peak 3	Ave	65565098					1000				
PCB-1268 Peak 4	Ave	80321290					1000				
PCB-1268 Peak 5	Ave	56235617					1000				
PCB-1268 Peak 6	Ave	17479393					1000				
PCB-1268 Peak 7	Ave	23219297					1000				
PCB-1268 Peak 8	Ave	132418601					1000				

Curve Type Legend:

Ave = Average

Data File: qf082116.d
Report Date: 22-Mar-2011 13:19

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/qf082116.d
Lab Smp Id: IC-SG1268L3_00010
Inj Date : 22-MAR-2011 11:48
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1268L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-22-11aical/22mar11a.b/08Qf8082.m
Meth Date : 22-Mar-2011 13:19 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12680.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

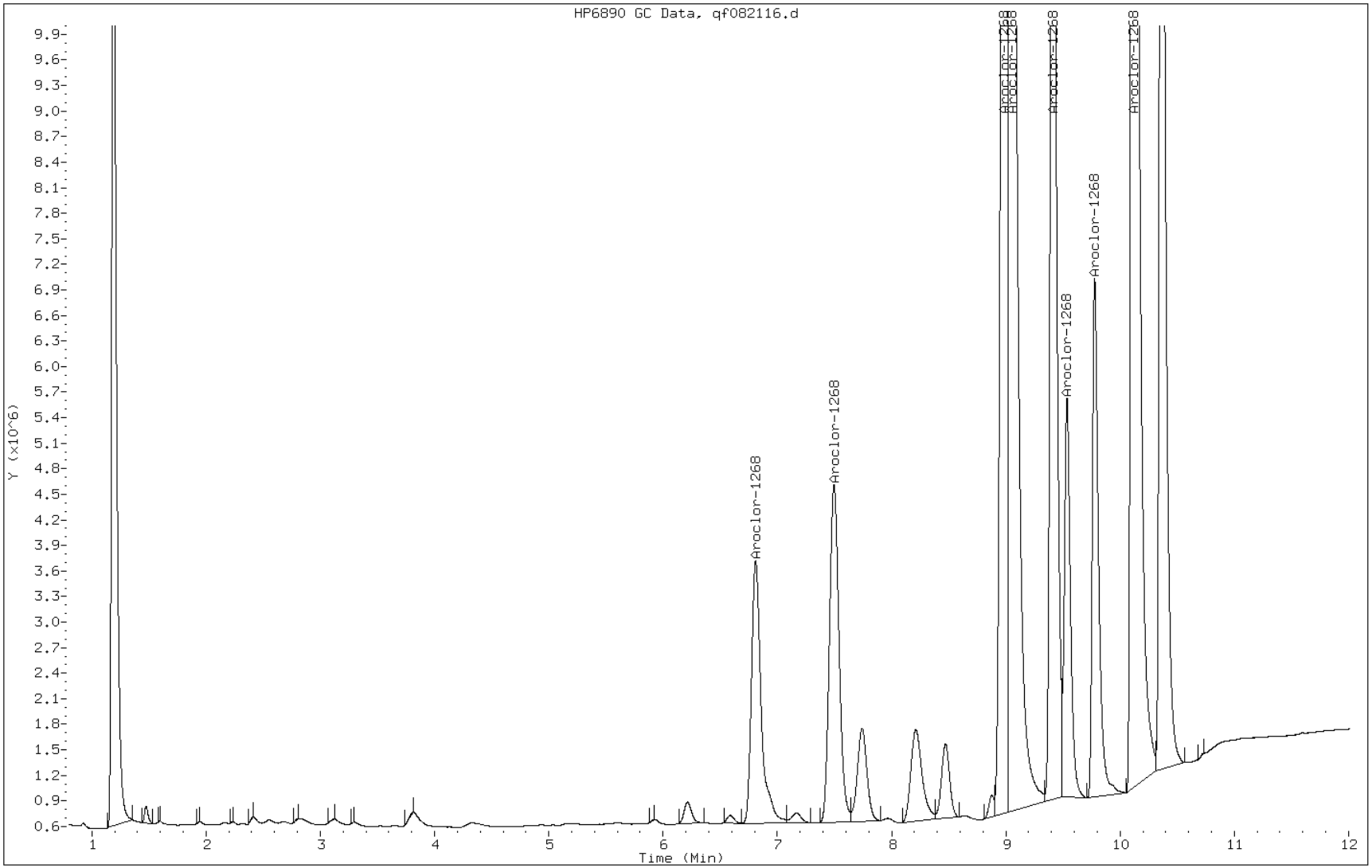
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
54 Aroclor-1268					CAS #: 11100-14-4		
6.810	6.810	0.000	18186775	1000.00	1000	80.00- 120.00	100.00
7.496	7.496	0.000	23306945	1000.00	1000	102.52- 153.78	128.15
8.982	8.982	0.000	65565098	1000.00	1000	288.41- 432.61	360.51
9.055	9.055	0.000	80321290	1000.00	1000	353.32- 529.98	441.65
9.412	9.412	0.000	56235617	1000.00	1000	247.37- 371.05	309.21
9.536	9.536	0.000	17479393	1000.00	1000	76.89- 115.33	96.11
9.778	9.778	0.000	23219297	1000.00	1000	102.14- 153.21	127.67
10.117	10.117	0.000	132418601	1000.00	1000	582.48- 873.72	728.10
Average of Peak Amounts =					1e+03		

Data File: qf082116.d

Date: 22-MAR-2011 11:48

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1268L3_00010 Operator: 615



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10247

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qr082116.d

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1268 Peak 1	5.291										5.221 - 5.361	5.291
PCB-1268 Peak 2	5.711										5.641 - 5.781	5.711
PCB-1268 Peak 3	6.938										6.868 - 7.008	6.938
PCB-1268 Peak 4	7.012										6.942 - 7.082	7.012
PCB-1268 Peak 5	7.467										7.397 - 7.537	7.467
PCB-1268 Peak 6	7.675										7.605 - 7.745	7.675
PCB-1268 Peak 7	8.426										8.356 - 8.496	8.426
PCB-1268 Peak 8	8.988										8.918 - 9.058	8.988

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10247

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qr082116.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1268 Peak 1	20570				Ave		20569.9520						20.0			
PCB-1268 Peak 2	26073				Ave		26073.4150						20.0			
PCB-1268 Peak 3	78438				Ave		78437.6840						20.0			
PCB-1268 Peak 4	105320				Ave		105319.789						20.0			
PCB-1268 Peak 5	79573				Ave		79573.3770						20.0			
PCB-1268 Peak 6	26219				Ave		26218.7490						20.0			
PCB-1268 Peak 7	33500				Ave		33499.8120						20.0			
PCB-1268 Peak 8	199207				Ave		199206.576						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-24356-1 Analy Batch No.: 68137

SDG No.:

Instrument ID: PESTGC8 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/22/2011 11:48 Calibration End Date: 03/22/2011 11:48 Calibration ID: 10247

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-68137/18	qr082116.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1					LVL 1				
PCB-1268 Peak 1	Ave	20569952					1000				
PCB-1268 Peak 2	Ave	26073415					1000				
PCB-1268 Peak 3	Ave	78437684					1000				
PCB-1268 Peak 4	Ave	105319789					1000				
PCB-1268 Peak 5	Ave	79573377					1000				
PCB-1268 Peak 6	Ave	26218749					1000				
PCB-1268 Peak 7	Ave	33499812					1000				
PCB-1268 Peak 8	Ave	199206576					1000				

Curve Type Legend:

Ave = Average

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/qr082116.d
Lab Smp Id: IC-SG1268L3_00010
Inj Date : 22-MAR-2011 11:48
Operator : 615 Inst ID: PESTGC8.i
Smp Info : IC-SG1268L3_00010
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b/08Qr8082.m
Meth Date : 22-Mar-2011 12:59 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR12680.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

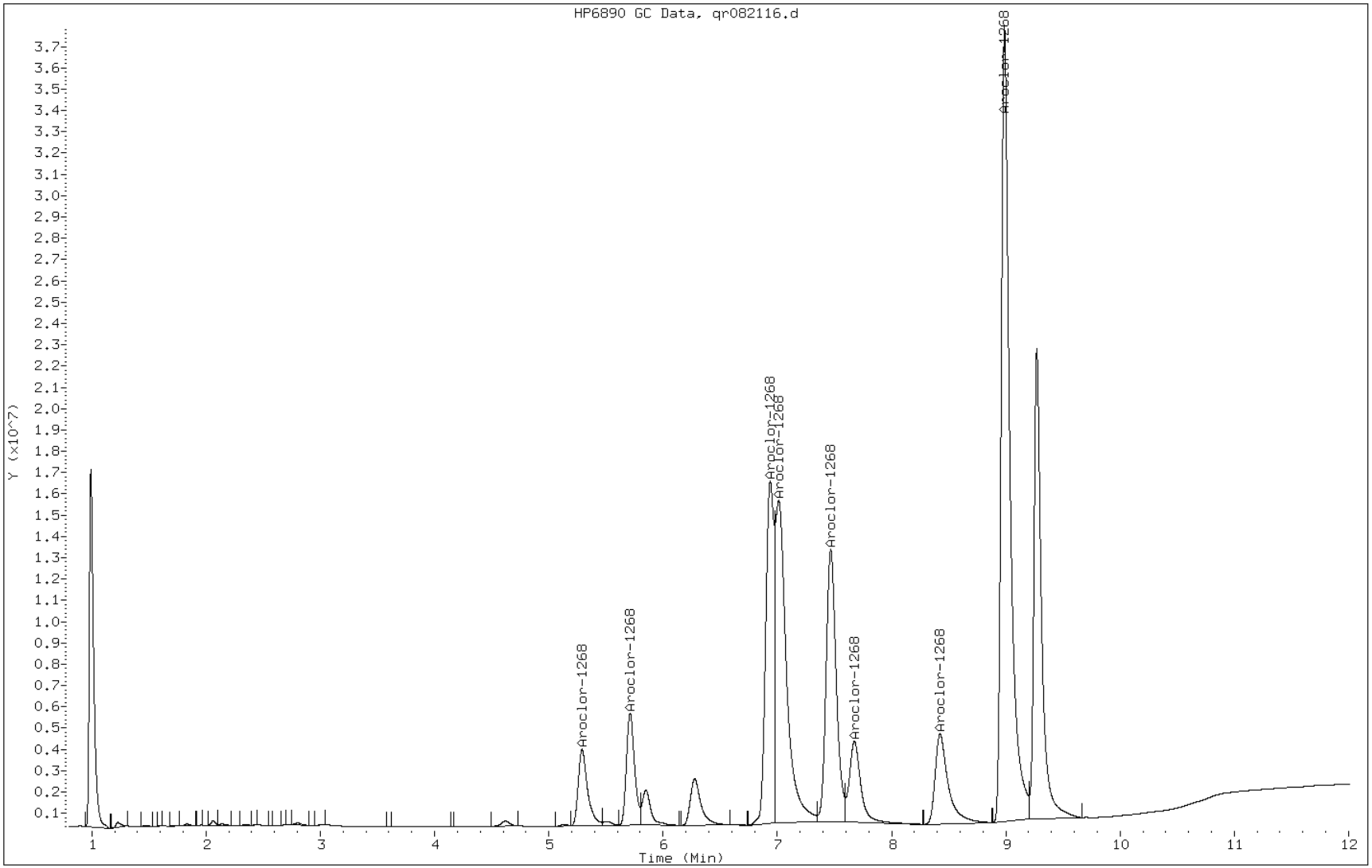
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
54 Aroclor-1268					CAS #: 11100-14-4			
5.291	5.291	0.000	20569952	1000.00	1000	80.00-	120.00	100.00
5.711	5.711	0.000	26073415	1000.00	1000	101.40-	152.11	126.75
6.938	6.938	0.000	78437684	1000.00	1000	305.06-	457.59	381.32
7.012	7.012	0.000	105319789	1000.00	1000	409.61-	614.41	512.01
7.467	7.467	0.000	79573377	1000.00	1000	309.47-	464.21	386.84
7.675	7.675	0.000	26218749	1000.00	1000	101.97-	152.95	127.46
8.426	8.426	0.000	33499812	1000.00	1000	130.29-	195.43	162.86
8.988	8.988	0.000	199206576	1000.00	1000	774.75-	1162.12	968.43
Average of Peak Amounts =					1e+03			

Data File: qr082116.d

Date: 22-MAR-2011 11:48

Client ID: Instrument: PESTGC8.i

Sample Info: IC-SG1268L3_00010 Operator: 615



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVRT 460-68484/4 Calibration Date: 03/24/2011 10:59

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qf082240.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	6079	6055		996	1000	-0.4	15.0
PCB-1016 Peak 2	Ave	12473	11851		950	1000	-5.0	15.0
PCB-1016 Peak 3	Ave	8389	8121		968	1000	-3.2	15.0
PCB-1016 Peak 4	Ave	24504	23061		941	1000	-5.9	15.0
PCB-1016 Peak 5	Ave	11521	10904		946	1000	-5.4	15.0
PCB-1016 Peak 6	Ave	9161	8662		946	1000	-5.4	15.0
PCB-1016 Peak 7	Ave	11301	10340		915	1000	-8.5	15.0
PCB-1016 Peak 8	Ave	8214	7429		904	1000	-9.6	15.0
PCB-1260 Peak 1	Ave	19121	18309		958	1000	-4.2	15.0
PCB-1260 Peak 2	Ave	24408	23289		954	1000	-4.6	15.0
PCB-1260 Peak 3	Ave	30370	28827		949	1000	-5.1	15.0
PCB-1260 Peak 4	Ave	18769	17915		954	1000	-4.6	15.0
PCB-1260 Peak 5	Ave	10433	10589		1010	1000	1.5	15.0
PCB-1260 Peak 6	Ave	16043	15381		959	1000	-4.1	15.0
PCB-1260 Peak 7	Ave	23755	22345		941	1000	-5.9	15.0
PCB-1260 Peak 8	Ave	7960	7749		974	1000	-2.6	15.0
DCB Decachlorobiphenyl	Ave	283186	258438		91.3	100	-8.7	15.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVRT 460-68484/4 Calibration Date: 03/24/2011 10:59

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qf082240.d

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	1.58	1.51	1.65
PCB-1016 Peak 2	1.96	1.89	2.03
PCB-1016 Peak 3	2.18	2.11	2.25
PCB-1016 Peak 4	2.42	2.35	2.49
PCB-1016 Peak 5	2.57	2.50	2.64
PCB-1016 Peak 6	2.69	2.61	2.75
PCB-1016 Peak 7	3.14	3.07	3.21
PCB-1016 Peak 8	3.32	3.24	3.38
PCB-1260 Peak 1	5.54	5.46	5.60
PCB-1260 Peak 2	5.94	5.87	6.01
PCB-1260 Peak 3	6.61	6.54	6.68
PCB-1260 Peak 4	6.82	6.75	6.89
PCB-1260 Peak 5	6.94	6.87	7.01
PCB-1260 Peak 6	7.50	7.42	7.56
PCB-1260 Peak 7	8.99	8.92	9.06
PCB-1260 Peak 8	9.78	9.71	9.85
DCB Decachlorobiphenyl	10.36	10.27	10.47

Data File: qf082240.d
Report Date: 25-Mar-2011 09:47

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082240.d
Lab Smp Id: CCVRTSG1660L3_00012
Inj Date : 24-MAR-2011 10:59
Operator : 615 Inst ID: PESTGC8.i
Smp Info : CCVRT-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:47 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.583	1.583	0.000	6055378	1000.00	1000	80.00- 120.00	100.00
1.957	1.957	0.000	11851384	1000.00	950	156.57- 234.86	195.72
2.182	2.182	0.000	8121436	1000.00	970	107.30- 160.94	134.12
2.424	2.424	0.000	23061318	1000.00	940	304.67- 457.01	380.84
2.570	2.570	0.000	10904089	1000.00	950	144.06- 216.09	180.07
2.686	2.686	0.000	8662259	1000.00	940	114.44- 171.66	143.05
3.136	3.136	0.000	10339820	1000.00	910	136.60- 204.91	170.75
3.316	3.316	0.000	7428767	1000.00	900	98.14- 147.22	122.68
		Average of Peak Amounts =			946		
27 Aroclor-1260					CAS #: 11096-82-5		
5.536	5.536	0.000	18309286	1000.00	960	80.00- 120.00	100.00(M)
5.941	5.941	0.000	23288704	1000.00	950	101.76- 152.64	127.20

Data File: qf082240.d
Report Date: 25-Mar-2011 09:47

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
6.612	6.612	0.000	28826812	1000.00	950	125.95- 188.93	157.44
6.822	6.822	0.000	17914590	1000.00	950	78.28- 117.41	97.84
6.938	6.938	0.000	10588518	1000.00	1000	46.27- 69.40	57.83
7.497	7.497	0.000	15381362	1000.00	960	67.21- 100.81	84.01
8.994	8.994	0.000	22344844	1000.00	940	97.63- 146.45	122.04
9.782	9.782	0.000	7749032	1000.00	970	33.86- 50.79	42.32
		Average of Peak Amounts =			963		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.364	10.364	0.000	25843814	100.000	91	80.00- 120.00	100.00

QC Flag Legend

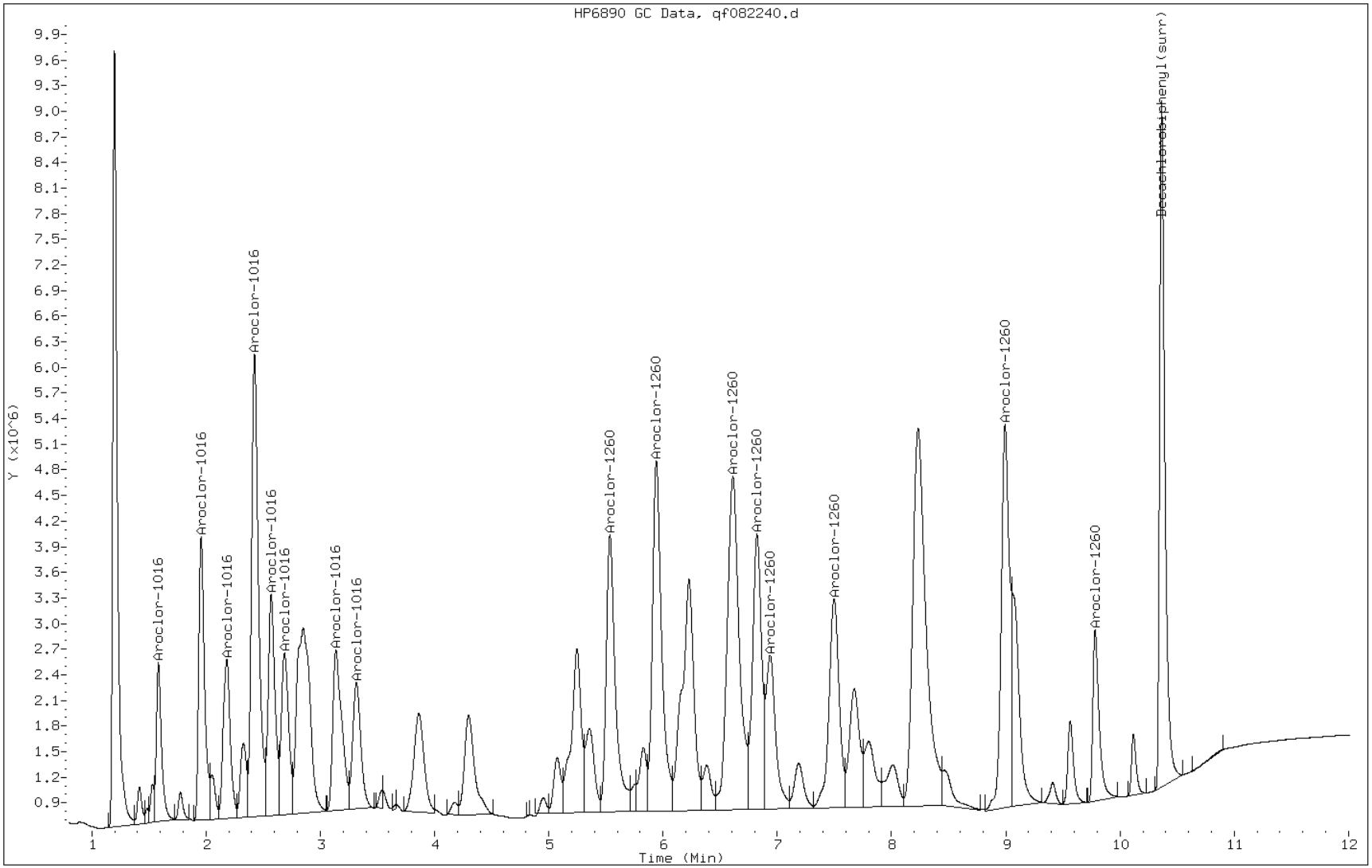
M - Compound response manually integrated.

Data File: qf082240.d

Date: 24-MAR-2011 10:59

Client ID: Instrument: PESTGC8.i

Sample Info: CCVRT-SG1660L3_00012 Operator: 615



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVRT 460-68484/4 Calibration Date: 03/24/2011 10:59

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qr082240.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	7083	6751		953	1000	-4.7	15.0
PCB-1016 Peak 2	Ave	14231	12811		900	1000	-10.0	15.0
PCB-1016 Peak 3	Ave	10725	9800		914	1000	-8.6	15.0
PCB-1016 Peak 4	Ave	32438	29521		910	1000	-9.0	15.0
PCB-1016 Peak 5	Ave	11760	10836		921	1000	-7.9	15.0
PCB-1016 Peak 6	Ave	22669	20132		888	1000	-11.2	15.0
PCB-1016 Peak 7	Ave	12686	11514		908	1000	-9.2	15.0
PCB-1016 Peak 8	Ave	12773	11407		893	1000	-10.7	15.0
PCB-1260 Peak 1	Ave	22562	19917		883	1000	-11.7	15.0
PCB-1260 Peak 2	Ave	43667	39595		907	1000	-9.3	15.0
PCB-1260 Peak 3	Ave	35178	32128		913	1000	-8.7	15.0
PCB-1260 Peak 4	Ave	22587	20770		920	1000	-8.0	15.0
PCB-1260 Peak 5	Ave	17103	15092		882	1000	-11.8	15.0
PCB-1260 Peak 6	Ave	15280	11636		762	1000	-23.8*	15.0
PCB-1260 Peak 7	Ave	16318	15502		950	1000	-5.0	15.0
PCB-1260 Peak 8	Ave	11633	10799		928	1000	-7.2	15.0
DCB Decachlorobiphenyl	Ave	431123	394780		91.6	100	-8.4	15.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCVRT 460-68484/4 Calibration Date: 03/24/2011 10:59

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qr082240.d

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	1.22	1.15	1.29
PCB-1016 Peak 2	1.47	1.40	1.54
PCB-1016 Peak 3	1.62	1.55	1.69
PCB-1016 Peak 4	1.85	1.78	1.92
PCB-1016 Peak 5	1.97	1.90	2.04
PCB-1016 Peak 6	2.16	2.09	2.23
PCB-1016 Peak 7	2.36	2.29	2.43
PCB-1016 Peak 8	2.75	2.68	2.82
PCB-1260 Peak 1	4.02	3.95	4.09
PCB-1260 Peak 2	4.58	4.50	4.64
PCB-1260 Peak 3	5.10	5.02	5.16
PCB-1260 Peak 4	5.30	5.23	5.37
PCB-1260 Peak 5	5.73	5.66	5.80
PCB-1260 Peak 6	6.87	6.78	6.92
PCB-1260 Peak 7	7.04	6.97	7.11
PCB-1260 Peak 8	8.44	8.36	8.50
DCB Decachlorobiphenyl	9.28	9.18	9.38

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082240.d
Lab Smp Id: CCVRTSG1660L3_00012
Inj Date : 24-MAR-2011 10:59
Operator : 615 Inst ID: PESTGC8.i
Smp Info : CCVRT-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.223	1.224	-0.001	6750889	1000.00	950	80.00- 120.00	100.00
1.474	1.475	-0.001	12811048	1000.00	900	152.56- 228.85	189.77
1.624	1.625	-0.001	9799964	1000.00	910	118.97- 178.46	145.17
1.846	1.846	0.000	29520783	1000.00	910	351.28- 526.92	437.29
1.968	1.968	0.000	10835891	1000.00	920	125.30- 187.95	160.51
2.156	2.156	0.000	20132453	1000.00	890	230.28- 345.42	298.22
2.358	2.357	0.001	11514213	1000.00	910	134.41- 201.61	170.56
2.749	2.749	0.000	11407202	1000.00	890	134.14- 201.20	168.97
		Average of Peak Amounts =			911		
27 Aroclor-1260					CAS #: 11096-82-5		
4.019	4.017	0.002	19917013	1000.00	880	80.00- 120.00	100.00(M)
4.580	4.574	0.006	39594906	1000.00	910	152.58- 228.88	198.80

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.100	5.090	0.010	32128173	1000.00	910	131.97- 197.96	161.31
5.304	5.302	0.002	20769596	1000.00	920	83.05- 124.58	104.28
5.731	5.727	0.004	15092107	1000.00	880	64.29- 96.44	75.77
6.867	6.855	0.012	11635908	1000.00	760	62.49- 93.74	58.42
7.042	7.040	0.002	15501695	1000.00	950	63.01- 94.51	77.83
8.441	8.430	0.011	10798750	1000.00	930	41.05- 61.57	54.22
		Average of Peak Amounts =			893		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.277	9.275	0.002	39478039	100.000	92	80.00- 120.00	100.00

QC Flag Legend

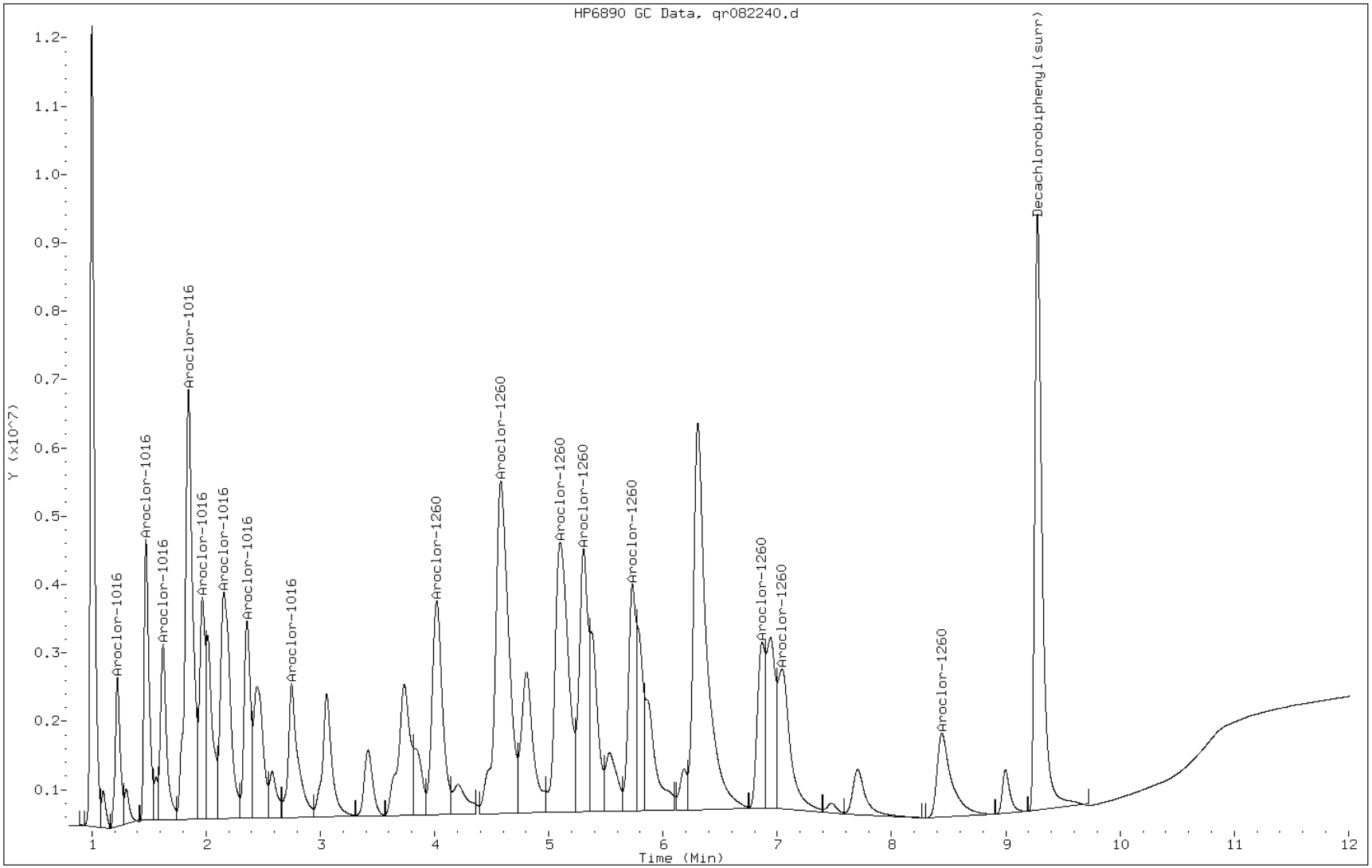
M - Compound response manually integrated.

Data File: qr082240.d

Date: 24-MAR-2011 10:59

Client ID: Instrument: PESTGC8.i

Sample Info: CCVRT-SG1660L3_00012 Operator: 615



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68484/27 Calibration Date: 03/24/2011 17:07

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qf082263.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	6079	5797		954	1000	-4.6	15.0
PCB-1016 Peak 2	Ave	12473	11896		954	1000	-4.6	15.0
PCB-1016 Peak 3	Ave	8389	7948		947	1000	-5.3	15.0
PCB-1016 Peak 4	Ave	24504	23198		947	1000	-5.3	15.0
PCB-1016 Peak 5	Ave	11521	10577		918	1000	-8.2	15.0
PCB-1016 Peak 6	Ave	9161	8382		915	1000	-8.5	15.0
PCB-1016 Peak 7	Ave	11301	10268		909	1000	-9.1	15.0
PCB-1016 Peak 8	Ave	8214	7178		874	1000	-12.6	15.0
PCB-1260 Peak 1	Ave	19121	18140		949	1000	-5.1	15.0
PCB-1260 Peak 2	Ave	24408	23045		944	1000	-5.6	15.0
PCB-1260 Peak 3	Ave	30370	28869		951	1000	-4.9	15.0
PCB-1260 Peak 4	Ave	18769	17589		937	1000	-6.3	15.0
PCB-1260 Peak 5	Ave	10433	9796		939	1000	-6.1	15.0
PCB-1260 Peak 6	Ave	16043	15271		952	1000	-4.8	15.0
PCB-1260 Peak 7	Ave	23755	21521		906	1000	-9.4	15.0
PCB-1260 Peak 8	Ave	7960	7182		902	1000	-9.8	15.0
DCB Decachlorobiphenyl	Ave	283186	234449		82.8	100	-17.2*	15.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68484/27 Calibration Date: 03/24/2011 17:07

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qf082263.d

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	1.58	1.51	1.65
PCB-1016 Peak 2	1.96	1.89	2.03
PCB-1016 Peak 3	2.18	2.11	2.25
PCB-1016 Peak 4	2.42	2.35	2.49
PCB-1016 Peak 5	2.57	2.50	2.64
PCB-1016 Peak 6	2.68	2.61	2.75
PCB-1016 Peak 7	3.14	3.07	3.21
PCB-1016 Peak 8	3.31	3.24	3.38
PCB-1260 Peak 1	5.53	5.46	5.60
PCB-1260 Peak 2	5.94	5.87	6.01
PCB-1260 Peak 3	6.61	6.54	6.68
PCB-1260 Peak 4	6.82	6.75	6.89
PCB-1260 Peak 5	6.94	6.87	7.01
PCB-1260 Peak 6	7.49	7.42	7.56
PCB-1260 Peak 7	8.99	8.92	9.06
PCB-1260 Peak 8	9.78	9.71	9.85
DCB Decachlorobiphenyl	10.37	10.27	10.47

Data File: qf082263.d
Report Date: 25-Mar-2011 09:49

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082263.d
Lab Smp Id: CCV-SG1660L3_00012
Inj Date : 24-MAR-2011 17:07
Operator : 615 Inst ID: PESTGC8.i
Smp Info : CCV-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:49 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.583	1.583	0.000	5797009	1000.00	950	80.00- 120.00	100.00
1.957	1.957	0.000	11895988	1000.00	950	164.17- 246.25	205.21
2.182	2.182	0.000	7947724	1000.00	950	109.68- 164.52	137.10
2.423	2.423	0.000	23197933	1000.00	950	320.14- 480.20	400.17
2.569	2.569	0.000	10576810	1000.00	920	145.96- 218.94	182.45
2.684	2.684	0.000	8381524	1000.00	910	115.67- 173.50	144.58
3.135	3.135	0.000	10267796	1000.00	910	141.70- 212.55	177.12
3.315	3.315	0.000	7177813	1000.00	870	99.06- 148.58	123.82
Average of Peak Amounts =					927		
27 Aroclor-1260					CAS #: 11096-82-5		
5.534	5.534	0.000	18139875	1000.00	950	80.00- 120.00	100.00(M)

Data File: qf082263.d
Report Date: 25-Mar-2011 09:49

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.938	5.938	0.000	23045418	1000.00	940	101.63- 152.45	127.04
6.606	6.606	0.000	28868989	1000.00	950	127.32- 190.98	159.15
6.820	6.820	0.000	17589199	1000.00	940	77.57- 116.36	96.96
6.936	6.936	0.000	9795842	1000.00	940	43.20- 64.80	54.00
7.494	7.494	0.000	15271225	1000.00	950	67.35- 101.02	84.19
8.989	8.989	0.000	21520517	1000.00	900	94.91- 142.36	118.64
9.780	9.780	0.000	7181779	1000.00	900	31.67- 47.51	39.59
Average of Peak Amounts =					935		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.367	10.367	0.000	23444886	100.000	83	80.00- 120.00	100.00

QC Flag Legend

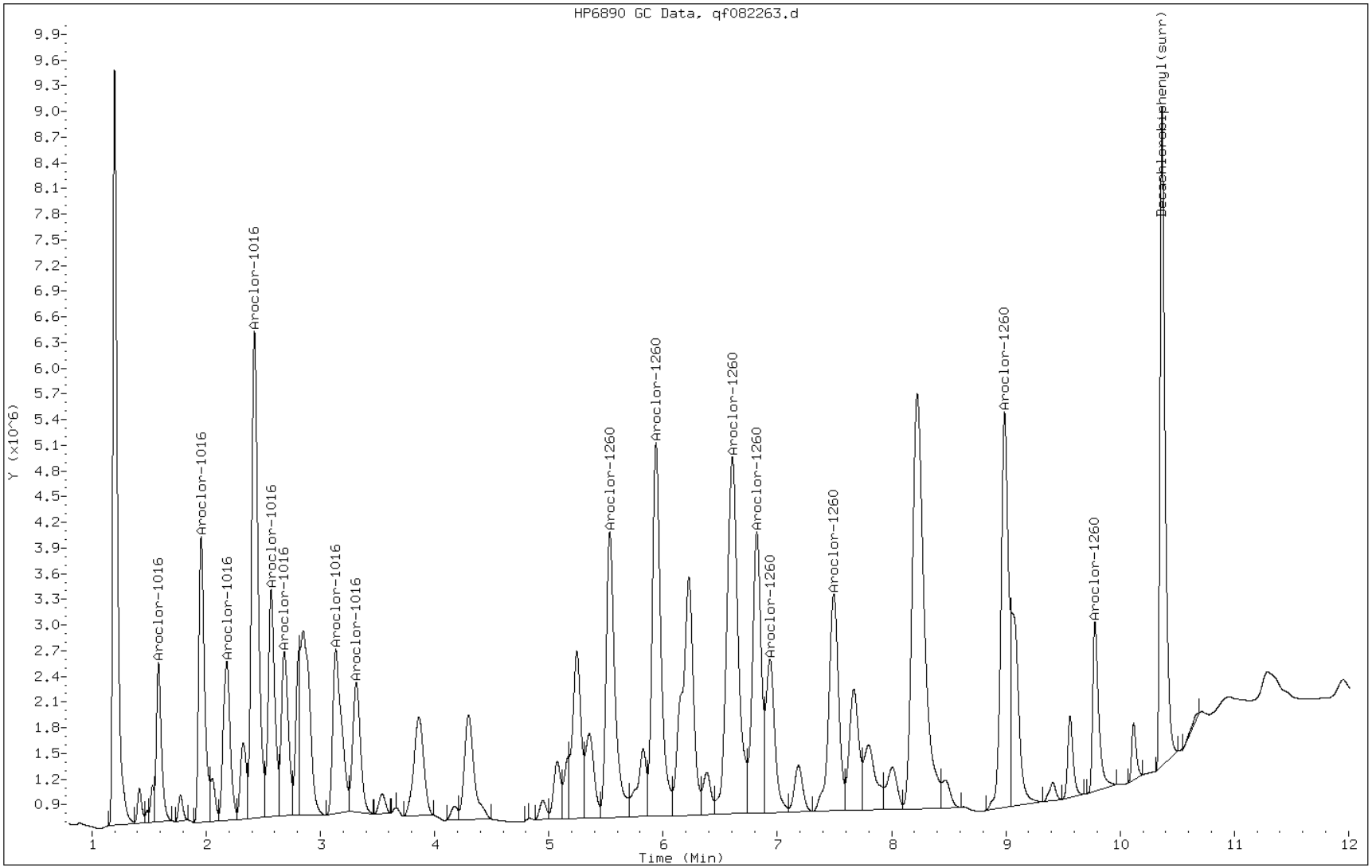
M - Compound response manually integrated.

Data File: qf082263.d

Date: 24-MAR-2011 17:07

Client ID: Instrument: PESTGC8.i

Sample Info: CCV-SG1660L3_00012 Operator: 615



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68484/27 Calibration Date: 03/24/2011 17:07

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qr082263.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	7083	7101		1000	1000	0.3	15.0
PCB-1016 Peak 2	Ave	14231	13542		952	1000	-4.8	15.0
PCB-1016 Peak 3	Ave	10725	10560		985	1000	-1.5	15.0
PCB-1016 Peak 4	Ave	32438	31180		961	1000	-3.9	15.0
PCB-1016 Peak 5	Ave	11760	11122		946	1000	-5.4	15.0
PCB-1016 Peak 6	Ave	22669	20440		902	1000	-9.8	15.0
PCB-1016 Peak 7	Ave	12686	11930		940	1000	-6.0	15.0
PCB-1016 Peak 8	Ave	12773	11906		932	1000	-6.8	15.0
PCB-1260 Peak 1	Ave	22562	20198		895	1000	-10.5	15.0
PCB-1260 Peak 2	Ave	43667	38523		882	1000	-11.8	15.0
PCB-1260 Peak 3	Ave	35178	33320		947	1000	-5.3	15.0
PCB-1260 Peak 4	Ave	22587	20968		928	1000	-7.2	15.0
PCB-1260 Peak 5	Ave	17103	16232		949	1000	-5.1	15.0
PCB-1260 Peak 6	Ave	15280	15777		1030	1000	3.3	15.0
PCB-1260 Peak 7	Ave	16318	15907		975	1000	-2.5	15.0
PCB-1260 Peak 8	Ave	11633	10364		891	1000	-10.9	15.0
DCB Decachlorobiphenyl	Ave	431123	350808		81.4	100	-18.6*	15.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: CCV 460-68484/27 Calibration Date: 03/24/2011 17:07

Instrument ID: PESTGC8 Calib Start Date: 03/22/2011 08:49

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/22/2011 09:56

Lab File ID: qr082263.d

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	1.22	1.15	1.29
PCB-1016 Peak 2	1.47	1.40	1.54
PCB-1016 Peak 3	1.62	1.55	1.69
PCB-1016 Peak 4	1.85	1.78	1.92
PCB-1016 Peak 5	1.97	1.90	2.04
PCB-1016 Peak 6	2.16	2.09	2.23
PCB-1016 Peak 7	2.36	2.29	2.43
PCB-1016 Peak 8	2.75	2.68	2.82
PCB-1260 Peak 1	4.02	3.95	4.09
PCB-1260 Peak 2	4.57	4.50	4.64
PCB-1260 Peak 3	5.09	5.02	5.16
PCB-1260 Peak 4	5.30	5.23	5.37
PCB-1260 Peak 5	5.73	5.66	5.80
PCB-1260 Peak 6	6.85	6.78	6.92
PCB-1260 Peak 7	7.04	6.97	7.11
PCB-1260 Peak 8	8.43	8.36	8.50
DCB Decachlorobiphenyl	9.28	9.18	9.38

Data File: qr082263.d
Report Date: 25-Mar-2011 09:46

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082263.d
Lab Smp Id: CCV-SG1660L3_00012
Inj Date : 24-MAR-2011 17:07
Operator : 615 Inst ID: PESTGC8.i
Smp Info : CCV-SG1660L3_00012
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR16600S.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.224	1.224	0.000	7100956	1000.00	1000	80.00- 120.00	100.00
1.475	1.475	0.000	13541918	1000.00	950	152.56- 228.85	190.71
1.625	1.625	0.000	10560123	1000.00	980	118.97- 178.46	148.71
1.846	1.846	0.000	31180064	1000.00	960	351.28- 526.92	439.10
1.968	1.968	0.000	11121831	1000.00	940	125.30- 187.95	156.62
2.156	2.156	0.000	20440126	1000.00	900	230.28- 345.42	287.85
2.357	2.357	0.000	11930281	1000.00	940	134.41- 201.61	168.01
2.749	2.749	0.000	11906096	1000.00	930	134.14- 201.20	167.67
Average of Peak Amounts =					952		
27 Aroclor-1260					CAS #: 11096-82-5		
4.017	4.017	0.000	20197763	1000.00	900	80.00- 120.00	100.00(M)

Data File: qr082263.d
Report Date: 25-Mar-2011 09:46

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.574	4.574	0.000	38523385	1000.00	880	152.58- 228.88	190.73
5.090	5.090	0.000	33319647	1000.00	950	131.97- 197.96	164.97
5.302	5.302	0.000	20968260	1000.00	930	83.05- 124.58	103.81
5.727	5.727	0.000	16232020	1000.00	950	64.29- 96.44	80.37
6.855	6.855	0.000	15777243	1000.00	1000	62.49- 93.74	78.11
7.040	7.040	0.000	15907261	1000.00	970	63.01- 94.51	78.76
8.430	8.430	0.000	10363876	1000.00	890	41.05- 61.57	51.31
Average of Peak Amounts =					938		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.275	9.275	0.000	35080804	100.000	81	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qr082263.d

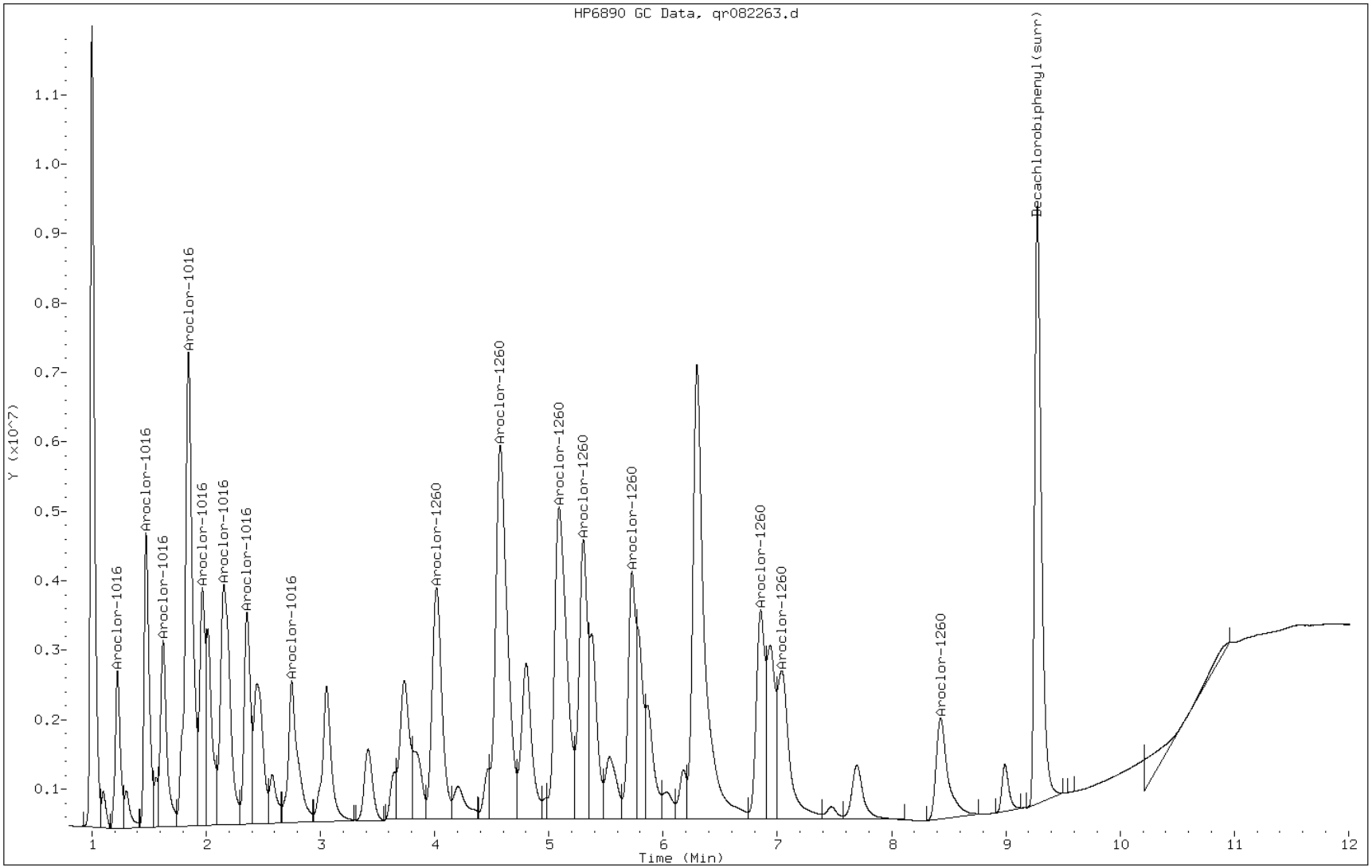
Date: 24-MAR-2011 17:07

Client ID:

Instrument: PESTGC8.i

Sample Info: CCV-SG1660L3_00012

Operator: 615



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68322/1-A

Matrix: Solid Lab File ID: qf082242.d

Analysis Method: 8082 Date Collected:

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.00(g) Date Analyzed: 03/24/2011 11:31

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	108		30-150

Data File: qf082242.d
Report Date: 25-Mar-2011 09:47

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082242.d
Lab Smp Id: MB 460-68322/1-A
Inj Date : 24-MAR-2011 11:31
Operator : 615 Inst ID: PESTGC8.i
Smp Info : MB 460-68322/1-A
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:47 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

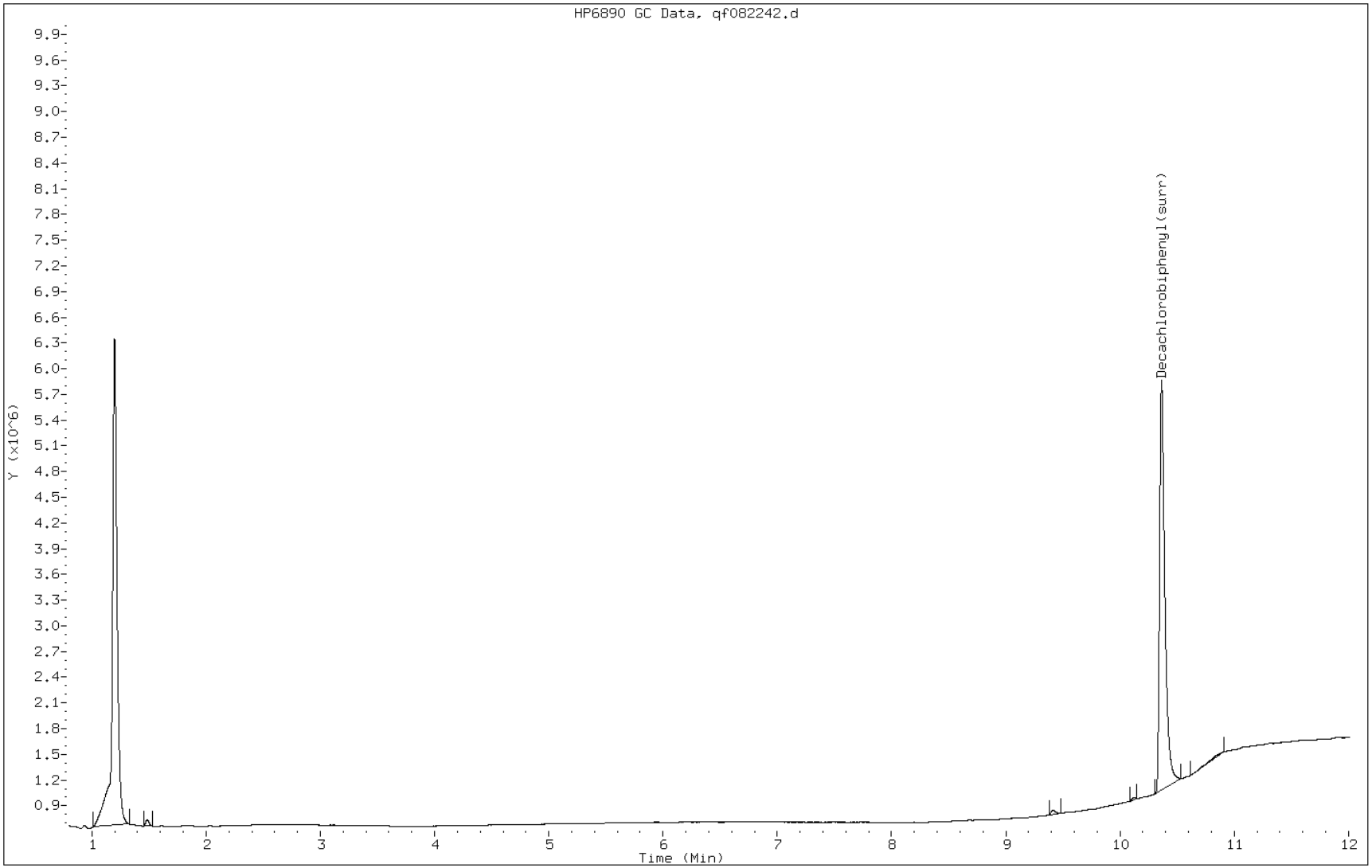
				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.365	10.364	0.001	15345972	54.1905	0.27	80.00- 120.00	100.00

Data File: qf082242.d

Date: 24-MAR-2011 11:31

Client ID: Instrument: PESTGC8.i

Sample Info: MB 460-68322/1-A Operator: 615



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-68322/1-A

Matrix: Solid Lab File ID: qr082242.d

Analysis Method: 8082 Date Collected:

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.00(g) Date Analyzed: 03/24/2011 11:31

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	67	U	67	13
11104-28-2	Aroclor 1221	67	U	67	20
11141-16-5	Aroclor 1232	67	U	67	38
53469-21-9	Aroclor 1242	67	U	67	13
12672-29-6	Aroclor 1248	67	U	67	18
11097-69-1	Aroclor 1254	67	U	67	23
11096-82-5	Aroclor 1260	67	U	67	7.5
37324-23-5	Aroclor 1262	67	U	67	12
11100-14-4	Aroclor 1268	67	U	67	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	104		30-150

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082242.d
Lab Smp Id: MB 460-68322/1-A
Inj Date : 24-MAR-2011 11:31
Operator : 615 Inst ID: PESTGC8.i
Smp Info : MB 460-68322/1-A
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 18 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.279	9.275	0.004	22366265	51.8791	0.26	80.00- 120.00	100.00

Data File: qr082242.d

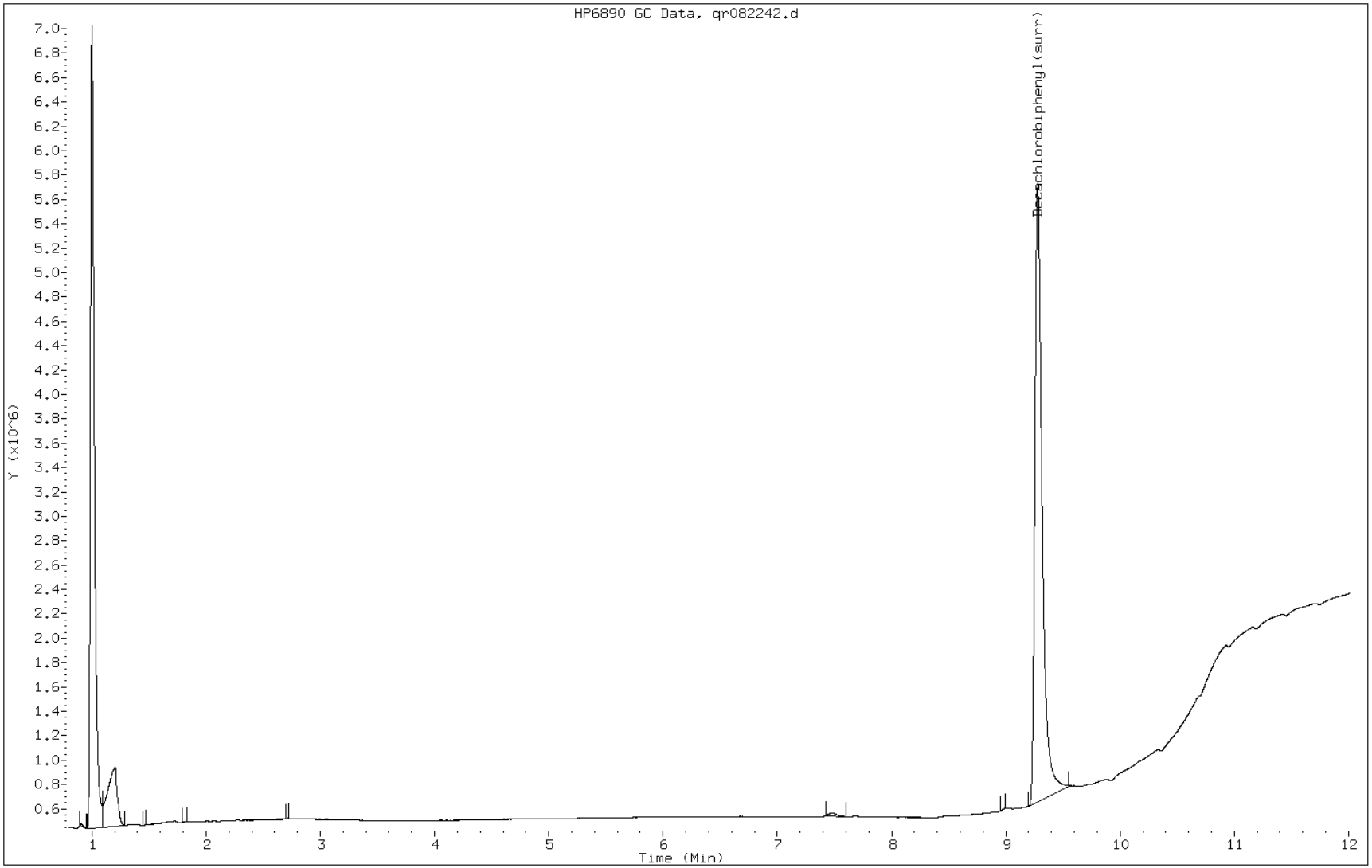
Date: 24-MAR-2011 11:31

Client ID:

Instrument: PESTGC8.i

Sample Info: MB 460-68322/1-A

Operator: 615



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-68322/2-A

Matrix: Solid | Lab File ID: qf082243.d

Analysis Method: 8082 | Date Collected:

Extraction Method: 3541 | Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.00(g) | Date Analyzed: 03/24/2011 11:47

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	*Aroclor 1016*	*329*		*67*	*13*
11104-28-2	*Aroclor 1221*	*67*	*U*	*67*	*20*
11141-16-5	*Aroclor 1232*	*67*	*U*	*67*	*38*
53469-21-9	*Aroclor 1242*	*67*	*U*	*67*	*13*
12672-29-6	*Aroclor 1248*	*67*	*U*	*67*	*18*
11097-69-1	*Aroclor 1254*	*67*	*U*	*67*	*23*
11096-82-5	Aroclor 1260	336		67	7.5
37324-23-5	*Aroclor 1262*	*67*	*U*	*67*	*12*
11100-14-4	*Aroclor 1268*	*67*	*U*	*67*	*12*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	116		30-150

Data File: qf082243.d
Report Date: 25-Mar-2011 09:48

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082243.d
Lab Smp Id: LCS 460-68322/2-A
Inj Date : 24-MAR-2011 11:47
Operator : 615 Inst ID: PESTGC8.i
Smp Info : LCS 460-68322/2-A
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:47 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 19 QC Sample: BS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.584	1.583	0.001	2880424	473.826	320	80.00- 120.00	100.00(M)
1.958	1.957	0.001	6519867	522.729	350	156.57- 234.86	226.35
2.183	2.182	0.001	3959904	472.010	310	107.30- 160.94	137.48
2.425	2.424	0.001	12591938	513.882	340	304.67- 457.01	437.16
2.570	2.570	0.000	5906284	512.642	340	144.06- 216.09	205.05
2.685	2.686	-0.001	4546393	496.261	330	114.44- 171.66	157.84
3.136	3.136	0.000	5567343	492.622	330	136.60- 204.91	193.28
3.315	3.316	-0.001	3785221	460.831	310	98.14- 147.22	131.41
Average of Peak Concentrations =					330		
27 Aroclor-1260					CAS #: 11096-82-5		
5.537	5.536	0.001	9872398	516.301	340	80.00- 120.00	100.00(M)

Data File: qf082243.d
Report Date: 25-Mar-2011 09:48

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.945	5.941	0.004	12424944	509.044	340	101.76- 152.64	125.86
6.613	6.612	0.001	14950374	492.274	330	125.95- 188.93	151.44
6.824	6.822	0.002	9764896	520.269	350	78.28- 117.41	98.91
6.939	6.938	0.001	5564344	533.362	360	46.27- 69.40	56.36
7.500	7.497	0.003	7887346	491.629	330	67.21- 100.81	79.89
8.997	8.994	0.003	11218083	472.232	310	97.63- 146.45	113.63
9.786	9.782	0.004	3951123	496.402	330	33.86- 50.79	40.02
Average of Peak Concentrations =					340		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.365	10.364	0.001	16408196	57.9415	39	80.00- 120.00	100.00

QC Flag Legend

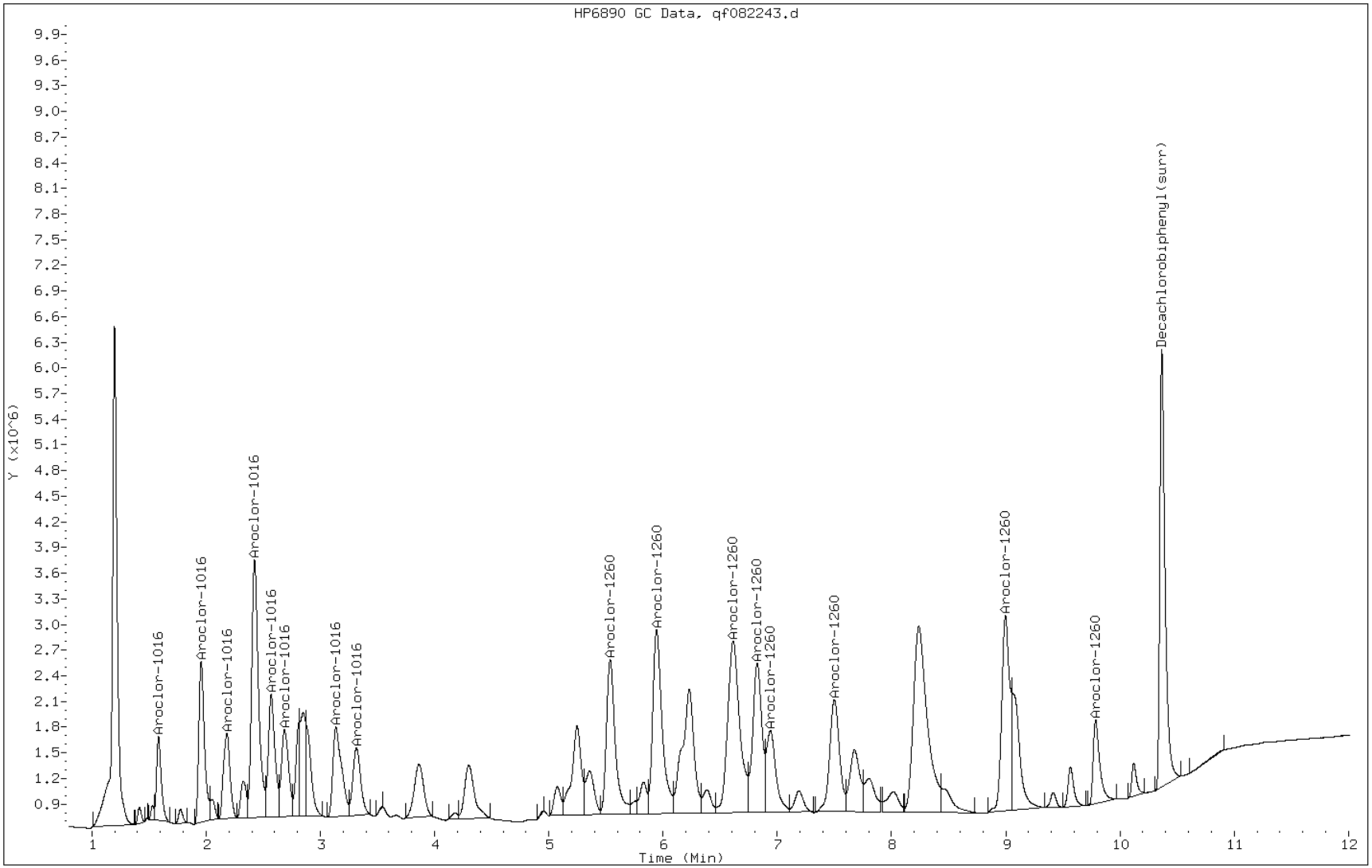
M - Compound response manually integrated.

Data File: qf082243.d

Date: 24-MAR-2011 11:47

Client ID: Instrument: PESTGC8.i

Sample Info: LCS 460-68322/2-A Operator: 615



Manual Integration Report

Data File: qf082243.d
Inj. Date and Time: 24-MAR-2011 11:47
Instrument ID: PESTGC8.i
Client ID:
Compound: 21 Aroclor-1016
CAS #: 12674-11-2
Report Date: 03/25/2011

Processing Integration Results

Not Detected

Expected RT: 1.58

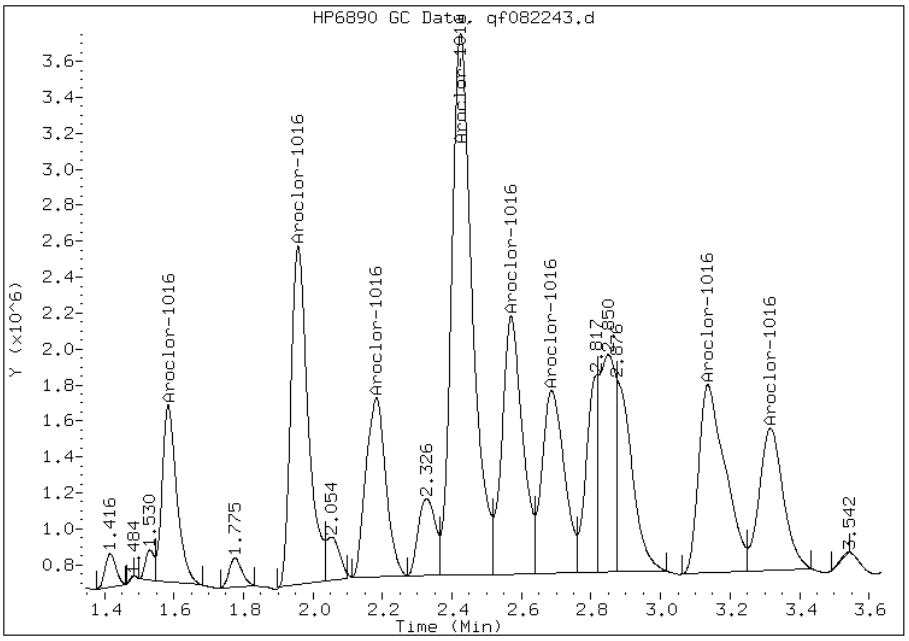
Manual Integration Results

RT: 1.58

Response: 2880424

Amount: 493.10

Conc: 330.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: qf082243.d
Inj. Date and Time: 24-MAR-2011 11:47
Instrument ID: PESTGC8.i
Client ID:
Compound: 27 Aroclor-1260
CAS #: 11096-82-5
Report Date: 03/25/2011

Processing Integration Results

Not Detected

Expected RT: 5.53

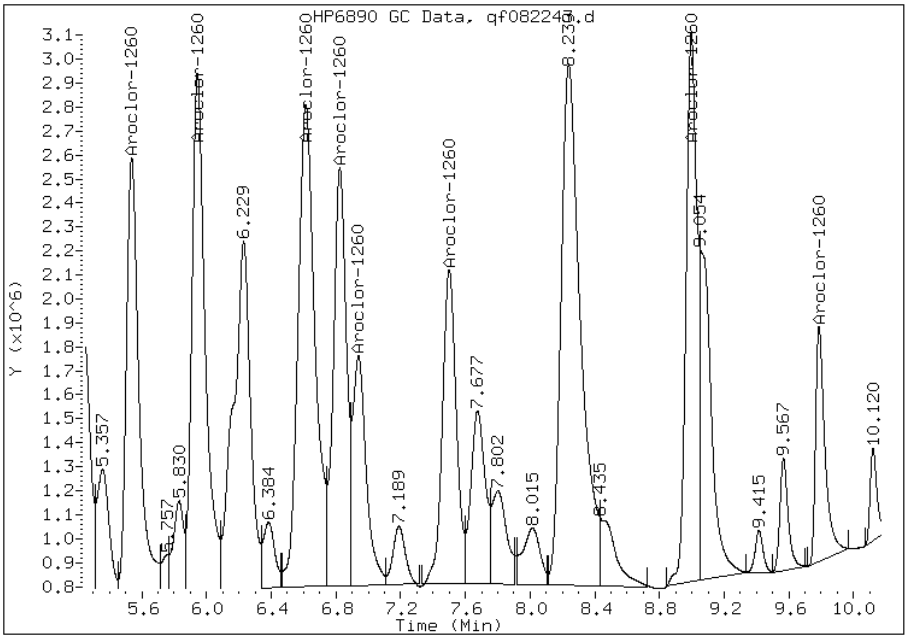
Manual Integration Results

RT: 5.54

Response: 9872398

Amount: 503.94

Conc: 340.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-68322/2-A

Matrix: Solid | Lab File ID: qr082243.d

Analysis Method: 8082 | Date Collected:

Extraction Method: 3541 | Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.00(g) | Date Analyzed: 03/24/2011 11:47

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	341		67	13
11104-28-2	Aroclor 1221	67	U	67	20
11141-16-5	Aroclor 1232	67	U	67	38
53469-21-9	Aroclor 1242	67	U	67	13
12672-29-6	Aroclor 1248	67	U	67	18
11097-69-1	Aroclor 1254	67	U	67	23
11096-82-5	*Aroclor 1260*	*333*		*67*	*7.5*
37324-23-5	Aroclor 1262	67	U	67	12
11100-14-4	Aroclor 1268	67	U	67	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	113		30-150

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082243.d
Lab Smp Id: LCS 460-68322/2-A
Inj Date : 24-MAR-2011 11:47
Operator : 615 Inst ID: PESTGC8.i
Smp Info : LCS 460-68322/2-A
Misc Info :
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 19 QC Sample: BS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.220	1.224	-0.004	3737530	527.671	350	80.00- 120.00	100.00(M)
1.475	1.475	0.000	7064682	496.446	330	152.56- 228.85	189.02
1.625	1.625	0.000	5421996	505.531	340	118.97- 178.46	145.07
1.847	1.846	0.001	16399821	505.581	340	351.28- 526.92	438.79
1.968	1.968	0.000	6229583	529.733	350	125.30- 187.95	166.68
2.157	2.156	0.001	11586477	511.108	340	230.28- 345.42	310.00
2.358	2.357	0.001	6485936	511.250	340	134.41- 201.61	173.54
2.750	2.749	0.001	6486390	507.807	340	134.14- 201.20	173.55
Average of Peak Concentrations =					340		
27 Aroclor-1260					CAS #: 11096-82-5		
4.020	4.017	0.003	11458976	507.878	340	80.00- 120.00	100.00(M)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.582	4.574	0.008	22201124	508.423	340	152.58- 228.88	193.74
5.105	5.090	0.015	17158109	487.756	320	131.97- 197.96	149.74
5.306	5.302	0.004	12434801	550.533	370	83.05- 124.58	108.52
5.735	5.727	0.008	8487577	496.270	330	64.29- 96.44	74.07
6.881	6.855	0.026	0			62.49- 93.74	0.00
7.046	7.040	0.006	8126269	497.980	330	63.01- 94.51	70.92
8.450	8.430	0.020	5252494	451.515	300	41.05- 61.57	45.84
		Average of Peak Concentrations =			330		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.280	9.275	0.005	24383920	56.5591	38	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: qr082243.d

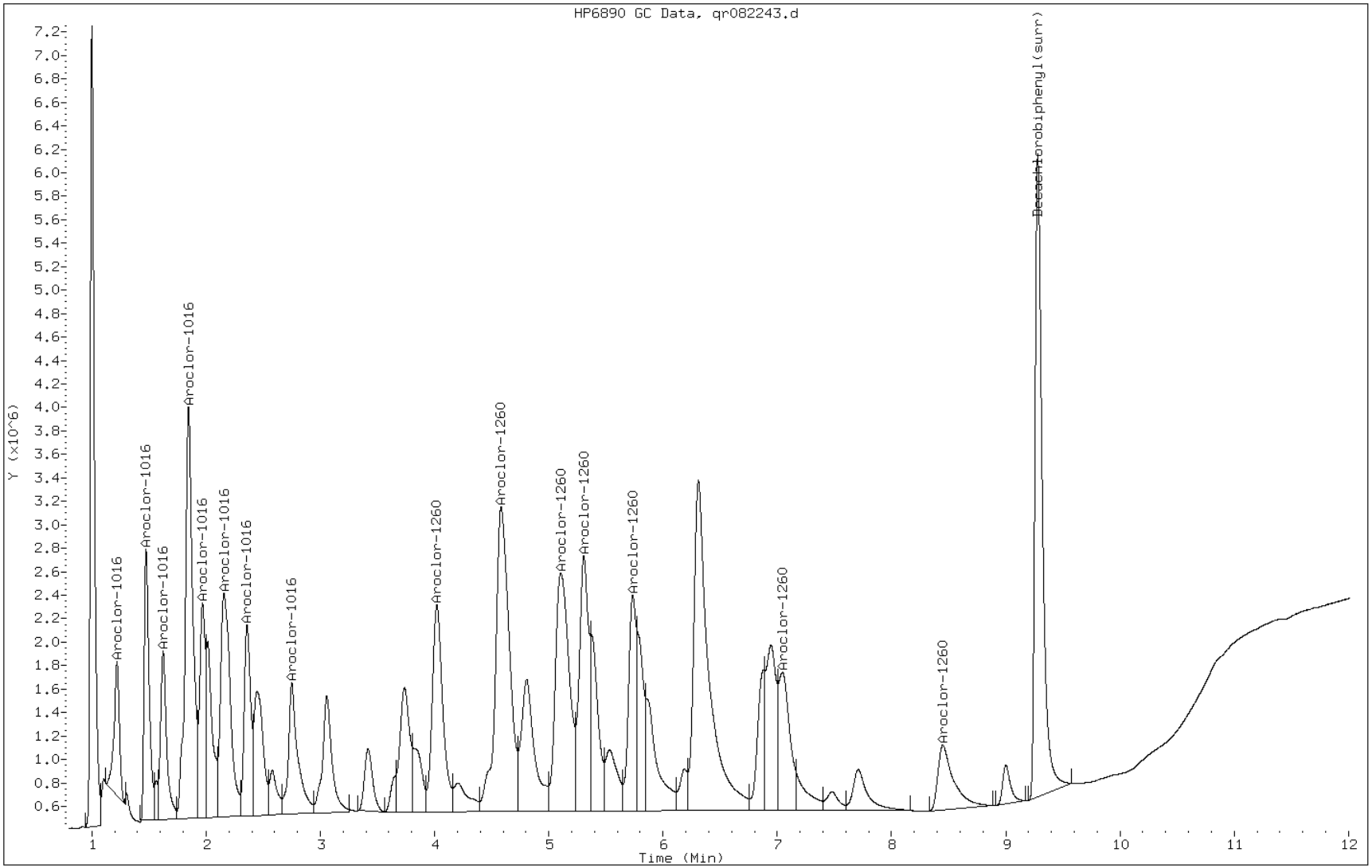
Date: 24-MAR-2011 11:47

Client ID:

Instrument: PESTGC8.i

Sample Info: LCS 460-68322/2-A

Operator: 615



Manual Integration Report

Data File: qr082243.d
Inj. Date and Time: 24-MAR-2011 11:47
Instrument ID: PESTGC8.i
Client ID:
Compound: 21 Aroclor-1016
CAS #: 12674-11-2
Report Date: 03/25/2011

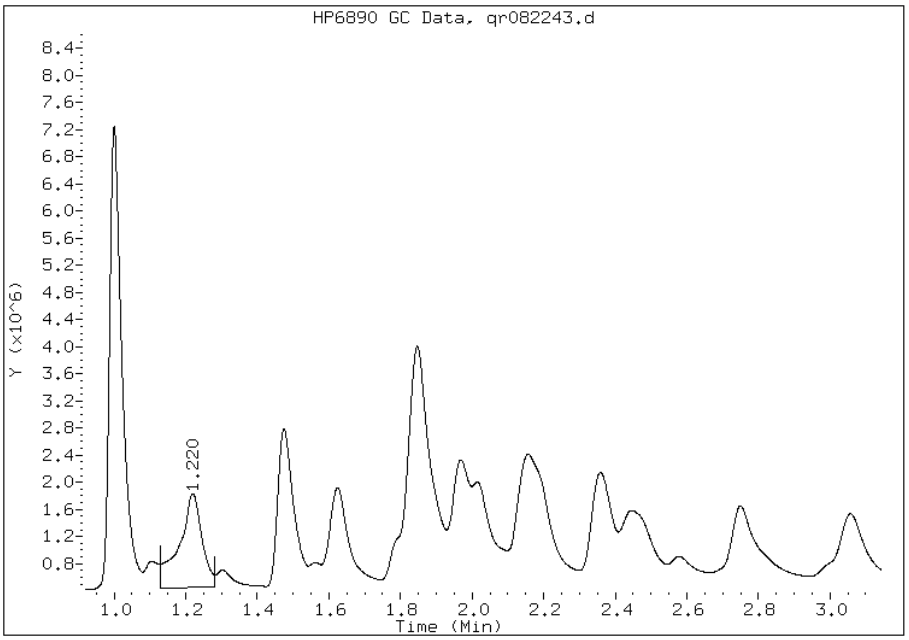
Processing Integration Results

RT: 1.22

Response: 6079837

Amount: 553.23

Conc: 2.80



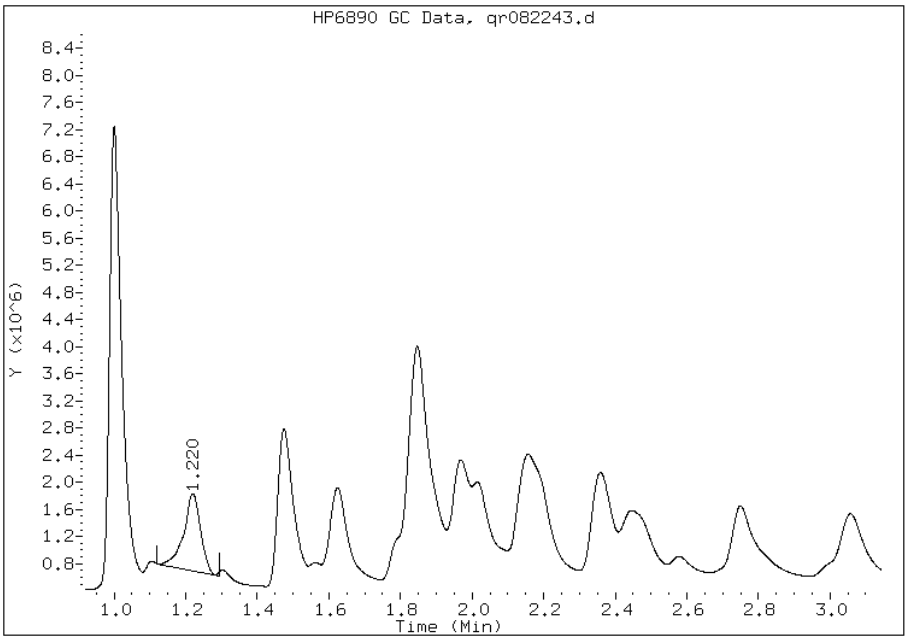
Manual Integration Results

RT: 1.22

Response: 3737530

Amount: 511.89

Conc: 340.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: qr082243.d
Inj. Date and Time: 24-MAR-2011 11:47
Instrument ID: PESTGC8.i
Client ID:
Compound: 27 Aroclor-1260
CAS #: 11096-82-5
Report Date: 03/25/2011

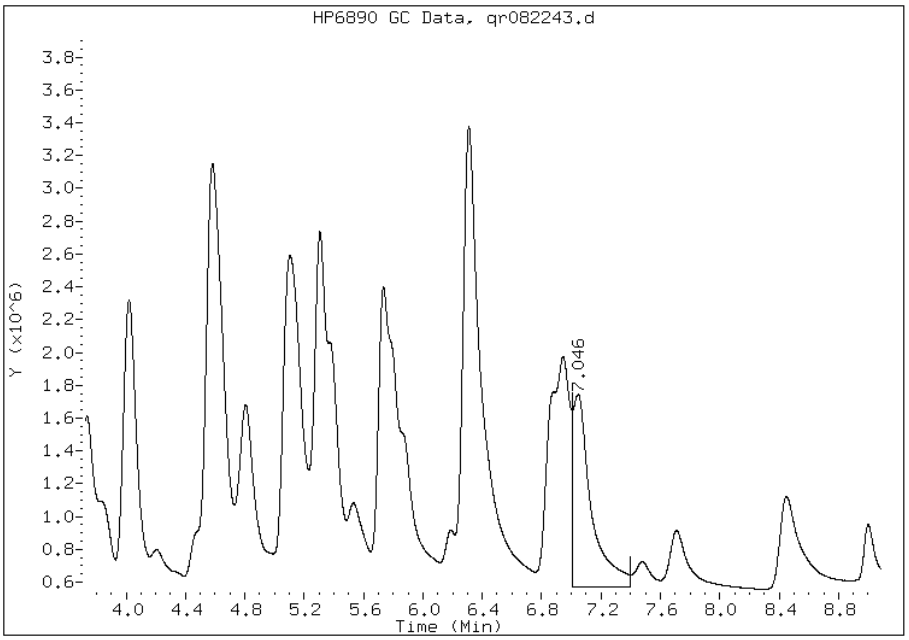
Processing Integration Results

RT: 7.05

Response: 10175345

Amount: 517.99

Conc: 2.60



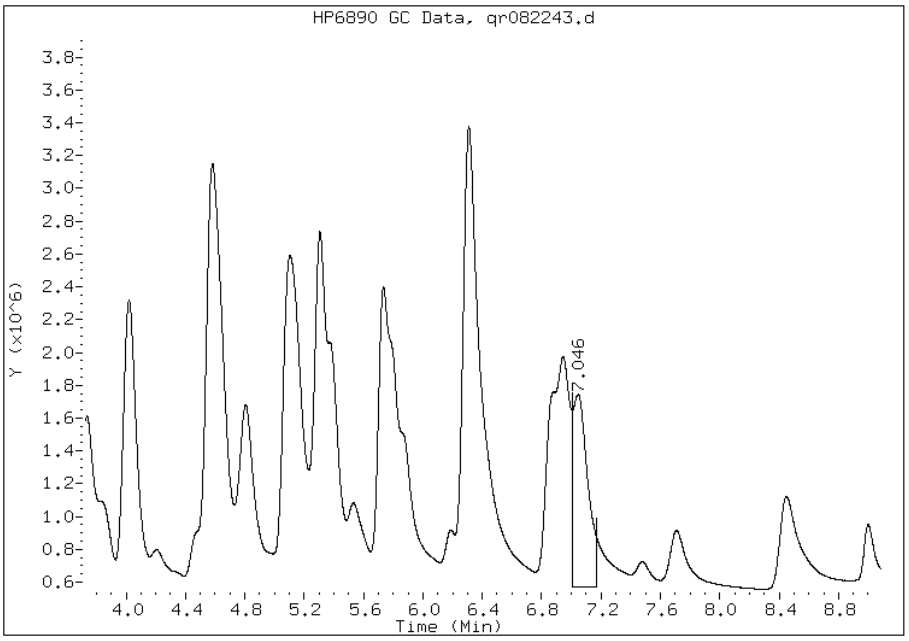
Manual Integration Results

RT: 7.05

Response: 8126269

Amount: 500.05

Conc: 330.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24449-A-5-A MS

Matrix: Solid | Lab File ID: qf082245.d

Analysis Method: 8082 | Date Collected: 03/22/2011 08:03

Extraction Method: 3541 | Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.02(g) | Date Analyzed: 03/24/2011 12:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	*Aroclor 1016*	*305*		*81*	*15*
11104-28-2	*Aroclor 1221*	*81*	*U*	*81*	*24*
11141-16-5	*Aroclor 1232*	*81*	*U*	*81*	*46*
53469-21-9	*Aroclor 1242*	*81*	*U*	*81*	*15*
12672-29-6	*Aroclor 1248*	*81*	*U*	*81*	*21*
11097-69-1	*Aroclor 1254*	*81*	*U*	*81*	*28*
11096-82-5	Aroclor 1260	875		81	9.0
37324-23-5	*Aroclor 1262*	*81*	*U*	*81*	*14*
11100-14-4	*Aroclor 1268*	*81*	*U*	*81*	*14*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	89		30-150

Data File: qf082245.d
Report Date: 25-Mar-2011 09:48

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082245.d
Lab Smp Id: 460-24449-A-5-A MS Client Smp ID: REA25-BS01 (3.0-3.5
Inj Date : 24-MAR-2011 12:19
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24449-A-5-A MS
Misc Info : 460-24449-A-5-A MS
Comment   :
Method   : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:47 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.02000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.586	1.583	0.003	2704367	444.865	300	80.00- 120.00	100.00(M)
1.957	1.957	0.000	4816597	386.169	260	156.57- 234.86	178.10
2.182	2.182	0.000	3002519	357.892	240	107.30- 160.94	111.02
2.423	2.424	-0.001	9463493	386.209	260	304.67- 457.01	349.93
2.569	2.570	-0.001	4223108	366.549	240	144.06- 216.09	156.16
2.683	2.686	-0.003	3252578	355.035	240	114.44- 171.66	120.27
3.136	3.136	0.000	4381308	387.677	260	136.60- 204.91	162.01
3.313	3.316	-0.003	2891878	352.071	230	98.14- 147.22	106.93
Average of Peak Concentrations =					250		
27 Aroclor-1260					CAS #: 11096-82-5		
5.534	5.536	-0.002	19239230	1006.16	670	80.00- 120.00	100.00(R)

Data File: qf082245.d
Report Date: 25-Mar-2011 09:48

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.936	5.941	-0.005	28530566	1168.88	780	101.76- 152.64	148.29
6.605	6.612	-0.007	37517091	1235.33	820	125.95- 188.93	195.00
6.819	6.822	-0.003	18110921	964.941	640	78.28- 117.41	94.14
6.936	6.938	-0.002	10859243	1040.90	690	46.27- 69.40	56.44
7.491	7.497	-0.006	17172140	1070.36	710	67.21- 100.81	89.26
8.985	8.994	-0.009	27912347	1174.99	780	97.63- 146.45	145.08
9.773	9.782	-0.009	8458106	1062.64	710	33.86- 50.79	43.96
		Average of Peak Concentrations =			730		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.357	10.364	-0.007	12623173	44.5756	30	80.00- 120.00	100.00

QC Flag Legend

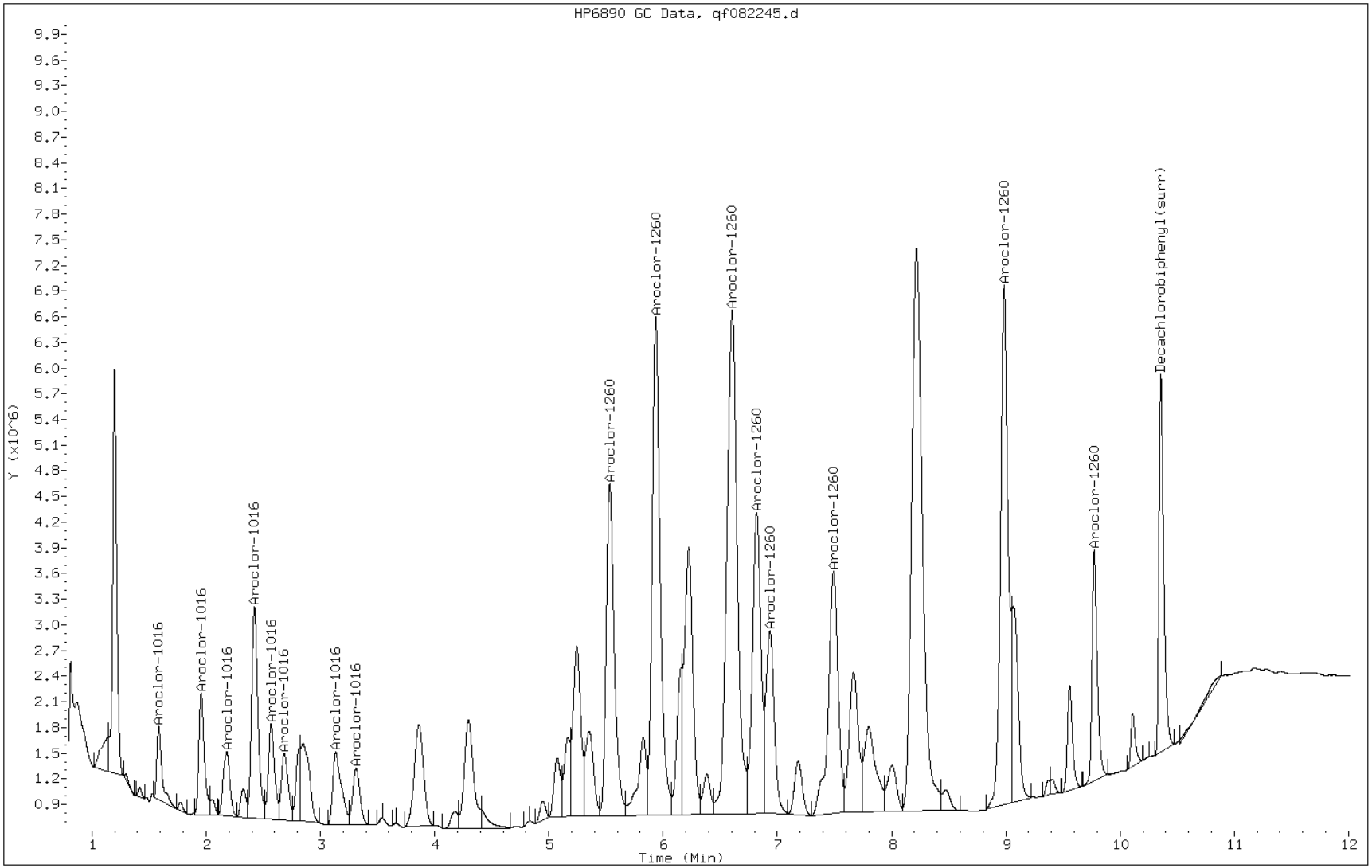
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: qf082245.d

Date: 24-MAR-2011 12:19

Client ID: REA25-BS01 (3.0-3.5 Instrument: PESTGC8.i

Sample Info: 460-24449-A-5-A MS Operator: 615



Manual Integration Report

Data File: qf082245.d
Inj. Date and Time: 24-MAR-2011 12:19
Instrument ID: PESTGC8.i
Client ID: REA25-BS01 (3.0-3.5
Compound: 21 Aroclor-1016
CAS #: 12674-11-2
Report Date: 03/25/2011

Processing Integration Results

Not Detected

Expected RT: 1.58

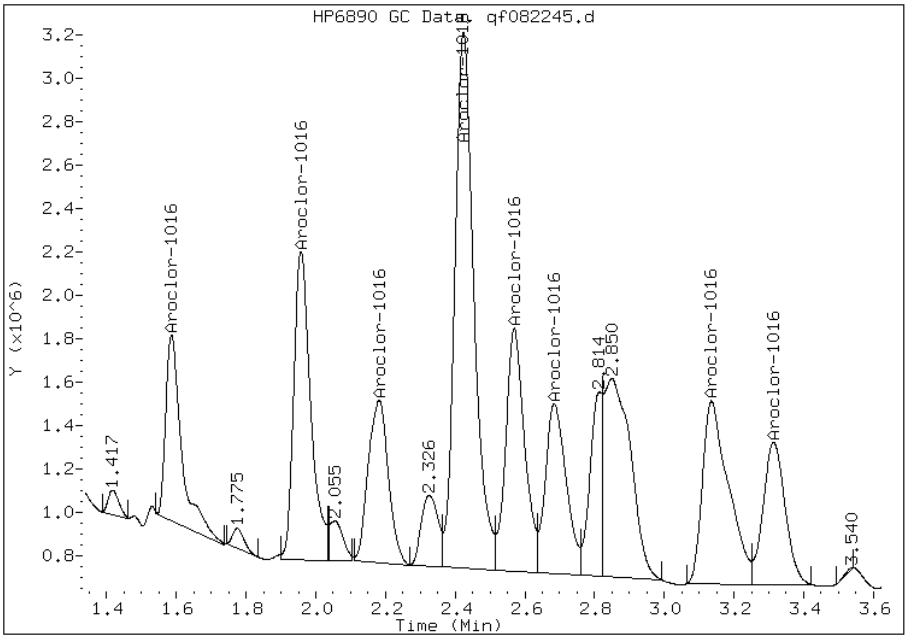
Manual Integration Results

RT: 1.59

Response: 2704367

Amount: 379.56

Conc: 250.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24449-A-5-A MS

Matrix: Solid Lab File ID: qr082245.d

Analysis Method: 8082 Date Collected: 03/22/2011 08:03

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.02(g) Date Analyzed: 03/24/2011 12:19

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 17.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	334		81	15
11104-28-2	Aroclor 1221	81	U	81	24
11141-16-5	Aroclor 1232	81	U	81	46
53469-21-9	Aroclor 1242	81	U	81	15
12672-29-6	Aroclor 1248	81	U	81	21
11097-69-1	Aroclor 1254	81	U	81	28
11096-82-5	*Aroclor 1260*	*817*		*81*	*9.0*
37324-23-5	Aroclor 1262	81	U	81	14
11100-14-4	Aroclor 1268	81	U	81	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	77		30-150

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082245.d
Lab Smp Id: 460-24449-A-5-A MS Client Smp ID: REA25-BS01 (3.0-3.5
Inj Date : 24-MAR-2011 12:19
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24449-A-5-A MS
Misc Info : 460-24449-A-5-A MS
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.02000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.222	1.224	-0.002	4520470	638.208	420	80.00- 120.00	100.00
1.474	1.475	-0.001	5008444	351.951	230	152.56- 228.85	110.79
1.624	1.625	-0.001	3502723	326.583	220	118.97- 178.46	77.49
1.846	1.846	0.000	11854652	365.461	240	351.28- 526.92	262.24
1.967	1.968	-0.001	4146284	352.580	230	125.30- 187.95	91.72
2.155	2.156	-0.001	7395053	326.214	220	230.28- 345.42	163.59
2.356	2.357	-0.001	4432577	349.395	230	134.41- 201.61	98.06
2.749	2.749	0.000	7890160	617.706	410	134.14- 201.20	174.54
Average of Peak Concentrations =					280		
27 Aroclor-1260					CAS #: 11096-82-5		
4.015	4.017	-0.002	22687783	1005.55	670	80.00- 120.00	100.00(RM)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.570	4.574	-0.004	46049675	1054.57	700	152.58- 228.88	202.97
5.082	5.090	-0.008	43204560	1228.18	820	131.97- 197.96	190.43
5.299	5.302	-0.003	20778079	919.920	610	83.05- 124.58	91.58
5.724	5.727	-0.003	17938612	1048.87	700	64.29- 96.44	79.07
6.842	6.855	-0.013	0			62.49- 93.74	0.00
7.035	7.040	-0.005	15082792	924.278	620	63.01- 94.51	66.48
8.418	8.430	-0.012	11001421	945.704	630	41.05- 61.57	48.49
			Average of Peak Concentrations =		680		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.273	9.275	-0.002	16667922	38.6617	26	80.00- 120.00	100.00

QC Flag Legend

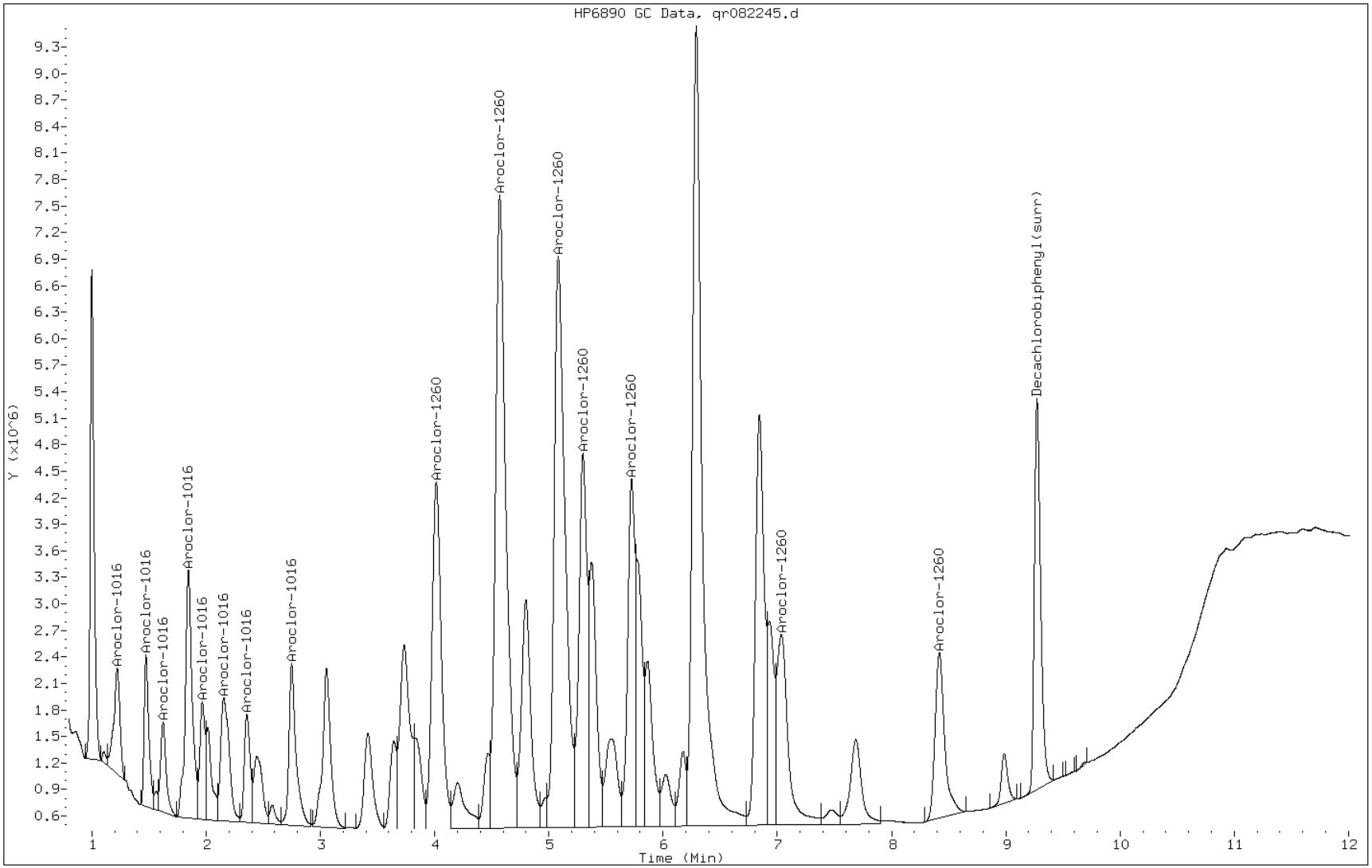
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: qr082245.d

Date: 24-MAR-2011 12:19

Client ID: REA25-BS01 (3.0-3.5 Instrument: PESTGC8.i

Sample Info: 460-24449-A-5-A MS Operator: 615



Manual Integration Report

Data File: qr082245.d
Inj. Date and Time: 24-MAR-2011 12:19
Instrument ID: PESTGC8.i
Client ID: REA25-BS01 (3.0-3.5
Compound: 27 Aroclor-1260
CAS #: 11096-82-5
Report Date: 03/25/2011

Processing Integration Results

Not Detected

Expected RT: 4.02

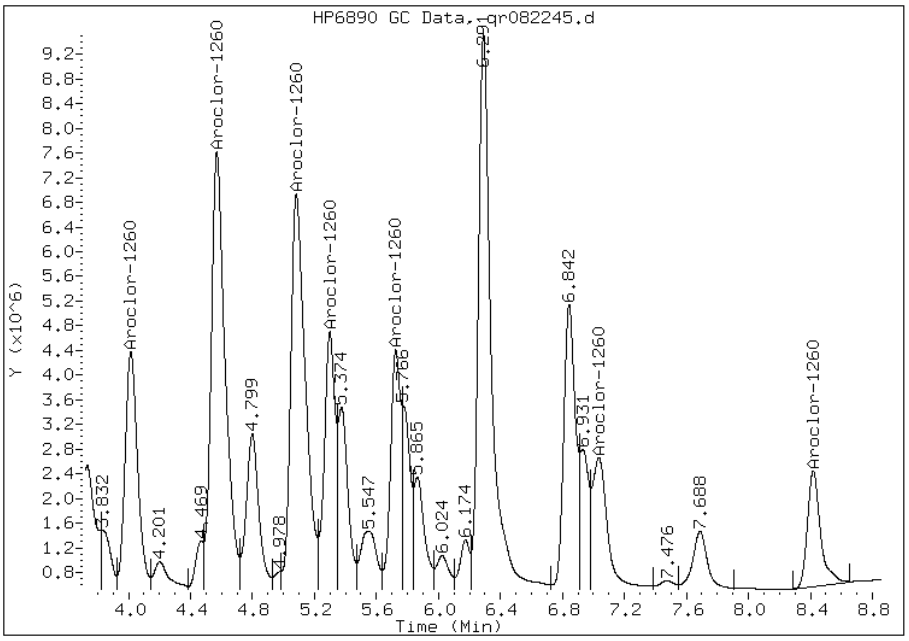
Manual Integration Results

RT: 4.01

Response: 22687783

Amount: 1018.15

Conc: 680.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-24356-1

SDG No.:

Client Sample ID: | Lab Sample ID: 460-24449-A-5-B MSD

Matrix: Solid | Lab File ID: qf082246.d

Analysis Method: 8082 | Date Collected: 03/22/2011 08:03

Extraction Method: 3541 | Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.04(g) | Date Analyzed: 03/24/2011 12:35

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	*Aroclor 1016*	*286*		*81*	*15*
11104-28-2	*Aroclor 1221*	*81*	*U*	*81*	*24*
11141-16-5	*Aroclor 1232*	*81*	*U*	*81*	*46*
53469-21-9	*Aroclor 1242*	*81*	*U*	*81*	*15*
12672-29-6	*Aroclor 1248*	*81*	*U*	*81*	*21*
11097-69-1	*Aroclor 1254*	*81*	*U*	*81*	*28*
11096-82-5	Aroclor 1260	802		81	9.0
37324-23-5	*Aroclor 1262*	*81*	*U*	*81*	*14*
11100-14-4	*Aroclor 1268*	*81*	*U*	*81*	*14*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	80		30-150

Data File: qf082246.d
Report Date: 25-Mar-2011 09:48

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/qf082246.d
Lab Smp Id: 460-24449-A-5-B MSD Client Smp ID: REA25-BS01 (3.0-3.5
Inj Date : 24-MAR-2011 12:35
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24449-A-5-B MSD
Misc Info : 460-24449-A-5-B MSD
Comment   :
Method   : /chem1/PESTGC8.i/8082/front/Mar11/03-24-11/24mar11b.b/08Qf8082.m
Meth Date : 25-Mar-2011 09:47 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qf082116.d
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.04000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.586	1.583	0.003	2561314	421.333	280	80.00- 120.00	100.00(M)
1.957	1.957	0.000	4583312	367.466	240	156.57- 234.86	178.94
2.178	2.182	-0.004	3007536	358.490	240	107.30- 160.94	117.42
2.422	2.424	-0.002	8649313	352.982	230	304.67- 457.01	337.69
2.568	2.570	-0.002	3857260	334.795	220	144.06- 216.09	150.60
2.682	2.686	-0.004	3015602	329.168	220	114.44- 171.66	117.74
3.134	3.136	-0.002	4111271	363.783	240	136.60- 204.91	160.51
3.312	3.316	-0.004	2705865	329.425	220	98.14- 147.22	105.64
Average of Peak Concentrations =					240		
27 Aroclor-1260					CAS #: 11096-82-5		
5.532	5.536	-0.004	17691633	925.227	620	80.00- 120.00	100.00(RH)

Data File: qf082246.d
Report Date: 25-Mar-2011 09:48

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
5.934	5.941	-0.007	26110622	1069.74	710	101.76- 152.64	147.59
6.604	6.612	-0.008	34531405	1137.02	760	125.95- 188.93	195.18
6.817	6.822	-0.005	16841605	897.313	600	78.28- 117.41	95.20
6.932	6.938	-0.006	10087199	966.893	640	46.27- 69.40	57.02
7.491	7.497	-0.006	15820600	986.119	660	67.21- 100.81	89.42
8.984	8.994	-0.010	25232385	1062.17	710	97.63- 146.45	142.62
9.773	9.782	-0.009	7649950	961.107	640	33.86- 50.79	43.24
		Average of Peak Concentrations =			660		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
10.357	10.364	-0.007	11333048	40.0198	27	80.00- 120.00	100.00

QC Flag Legend

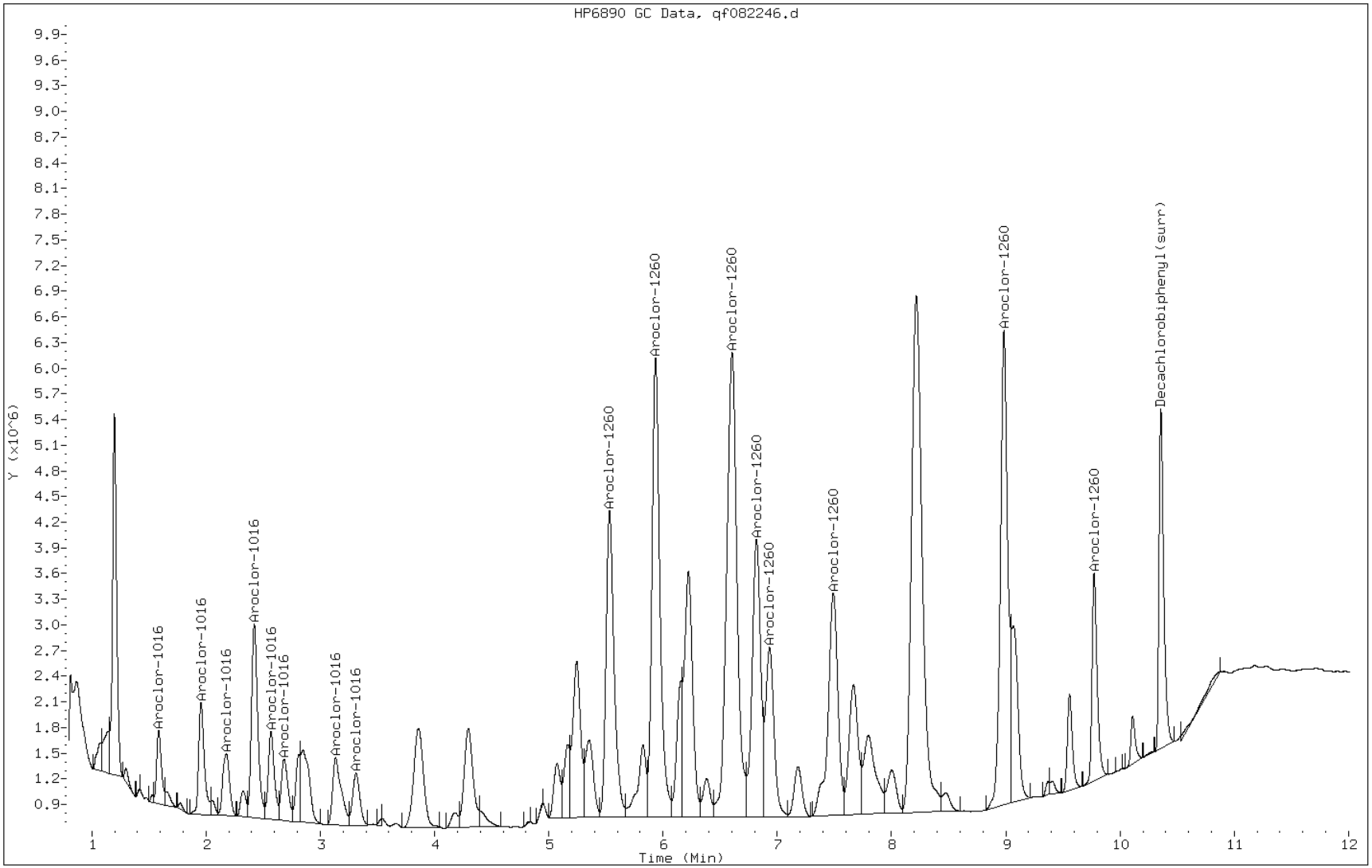
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: qf082246.d

Date: 24-MAR-2011 12:35

Client ID: REA25-BS01 (3.0-3.5 Instrument: PESTGC8.i

Sample Info: 460-24449-A-5-B MSD Operator: 615



Manual Integration Report

Data File: qf082246.d
Inj. Date and Time: 24-MAR-2011 12:35
Instrument ID: PESTGC8.i
Client ID: REA25-BS01 (3.0-3.5
Compound: 21 Aroclor-1016
CAS #: 12674-11-2
Report Date: 03/25/2011

Processing Integration Results

Not Detected

Expected RT: 1.58

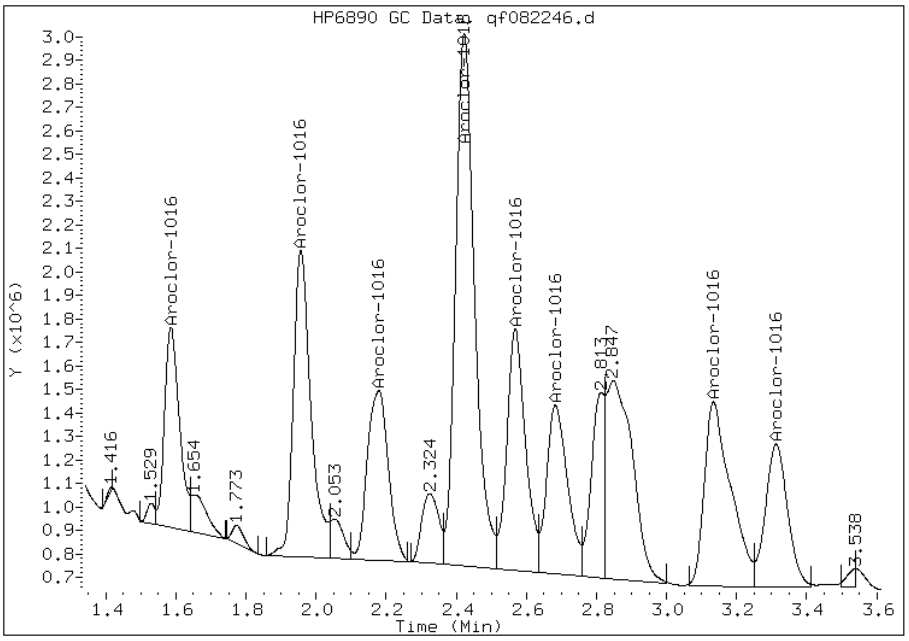
Manual Integration Results

RT: 1.59

Response: 2561314

Amount: 357.18

Conc: 240.00



Manually Integrated By: shanthi
Manual Integration Reason:

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Client Sample ID: Lab Sample ID: 460-24449-A-5-B MSD

Matrix: Solid Lab File ID: qr082246.d

Analysis Method: 8082 Date Collected: 03/22/2011 08:03

Extraction Method: 3541 Date Extracted: 03/24/2011 03:29

Sample wt/vol: 15.04(g) Date Analyzed: 03/24/2011 12:35

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 17.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 68484 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	306		81	15
11104-28-2	Aroclor 1221	81	U	81	24
11141-16-5	Aroclor 1232	81	U	81	46
53469-21-9	Aroclor 1242	81	U	81	15
12672-29-6	Aroclor 1248	81	U	81	21
11097-69-1	Aroclor 1254	81	U	81	28
11096-82-5	*Aroclor 1260*	*717*		*81*	*9.0*
37324-23-5	Aroclor 1262	81	U	81	14
11100-14-4	Aroclor 1268	81	U	81	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	70		30-150

TestAmerica

GC ORGANICS QUANTITATION REPORT

Data file : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/qr082246.d
Lab Smp Id: 460-24449-A-5-B MSD Client Smp ID: REA25-BS01 (3.0-3.5
Inj Date : 24-MAR-2011 12:35
Operator : 615 Inst ID: PESTGC8.i
Smp Info : 460-24449-A-5-B MSD
Misc Info : 460-24449-A-5-B MSD
Comment :
Method : /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b/08Qr8082.m
Meth Date : 25-Mar-2011 09:46 shanthi Quant Type: ESTD
Cal Date : 22-MAR-2011 11:48 Cal File: qr082116.d
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AllPCB.sub
Target Version: 3.50 Sample Matrix: SOLID
Processing Host: hpd3

Concentration Formula: Amt * DF * Vt/(Ws*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	15.04000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/kg)	TARGET RANGE	RATIO
21 Aroclor-1016					CAS #: 12674-11-2		
1.222	1.224	-0.002	5490706	775.187	520	80.00- 120.00	100.00
1.473	1.475	-0.002	4046247	284.336	190	152.56- 228.85	73.69
1.623	1.625	-0.002	2549920	237.747	160	118.97- 178.46	46.44
1.845	1.846	-0.001	10642339	328.087	220	351.28- 526.92	193.82
1.967	1.968	-0.001	3656227	310.908	210	125.30- 187.95	66.59
2.153	2.156	-0.003	6305559	278.154	180	230.28- 345.42	114.84
2.355	2.357	-0.002	3783866	298.261	200	134.41- 201.61	68.91
2.747	2.749	-0.002	6887639	539.220	360	134.14- 201.20	125.44
Average of Peak Concentrations =					250		
27 Aroclor-1260					CAS #: 11096-82-5		
4.012	4.017	-0.005	19519812	865.145	580	80.00- 120.00	100.00(RM)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/kg)	TARGET RANGE	RATIO
27 Aroclor-1260 (continued)							
4.568	4.574	-0.006	40699688	932.055	620	152.58- 228.88	208.50
5.080	5.090	-0.010	38223383	1086.58	720	131.97- 197.96	195.82
5.297	5.302	-0.005	18272456	808.987	540	83.05- 124.58	93.61
5.723	5.727	-0.004	16109682	941.935	630	64.29- 96.44	82.53
6.842	6.855	-0.013	0			62.49- 93.74	0.00
7.033	7.040	-0.007	12538061	768.336	510	63.01- 94.51	64.23
8.417	8.430	-0.013	10031222	862.304	570	41.05- 61.57	51.39
		Average of Peak Concentrations =			600		
$ 30 Decachlorobiphenyl(surr)					CAS #: 2051-24-3		
9.271	9.275	-0.004	15045796	34.8991	23	80.00- 120.00	100.00

QC Flag Legend

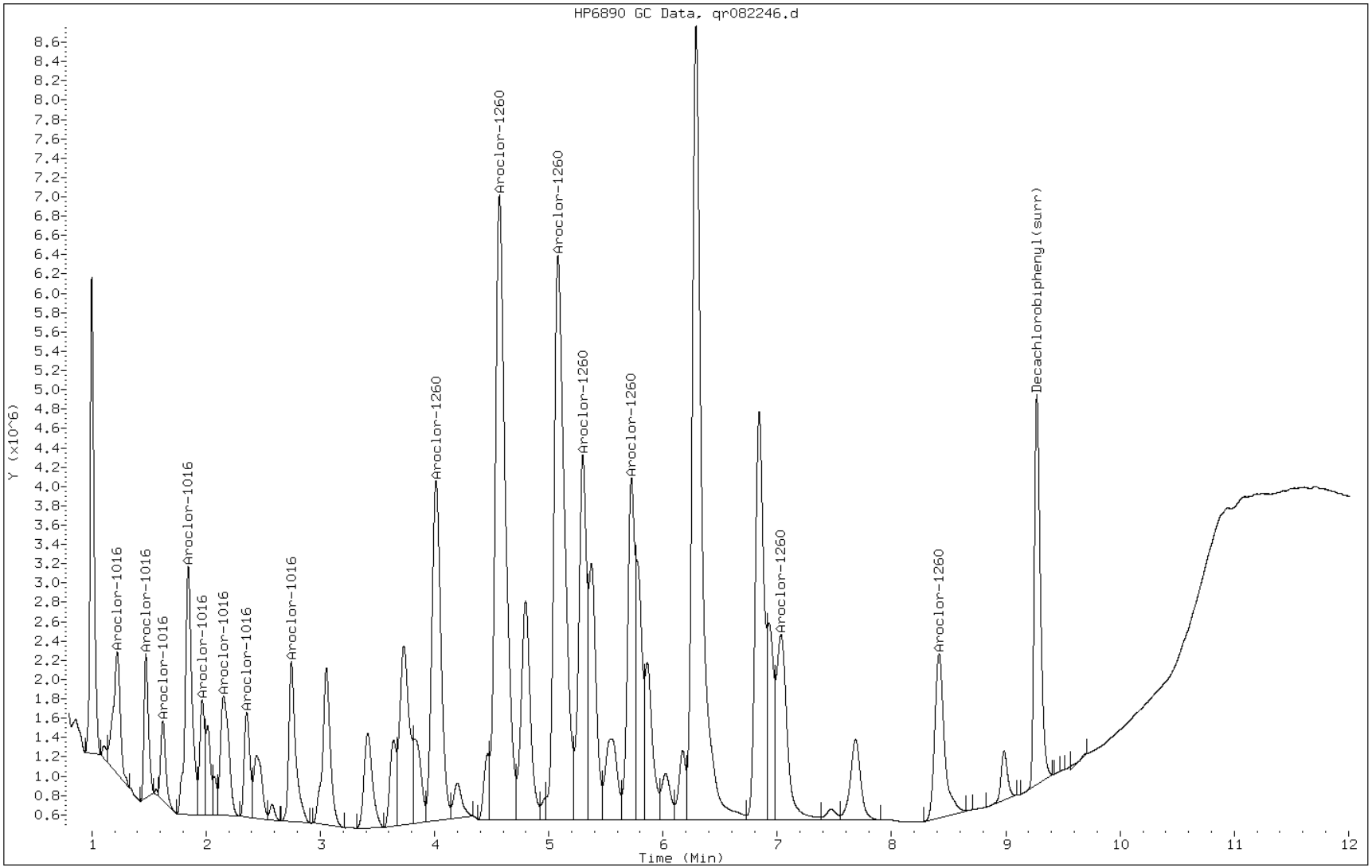
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: qr082246.d

Date: 24-MAR-2011 12:35

Client ID: REA25-BS01 (3.0-3.5 Instrument: PESTGC8.i

Sample Info: 460-24449-A-5-B MSD Operator: 615



Manual Integration Report

Data File: qr082246.d
Inj. Date and Time: 24-MAR-2011 12:35
Instrument ID: PESTGC8.i
Client ID: REA25-BS01 (3.0-3.5
Compound: 27 Aroclor-1260
CAS #: 11096-82-5
Report Date: 03/25/2011

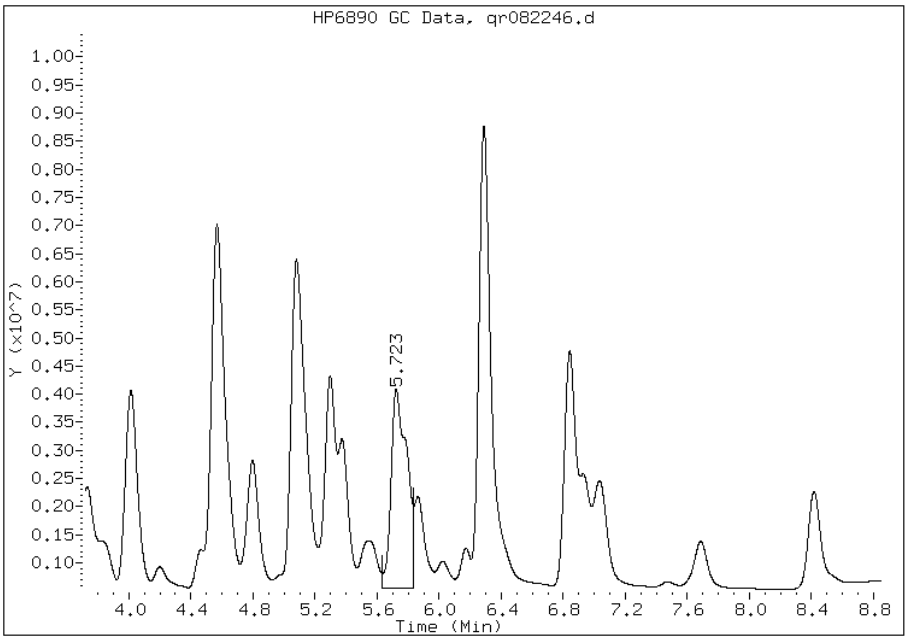
Processing Integration Results

RT: 5.72

Response: 25266214

Amount: 1032.32

Conc: 690.00



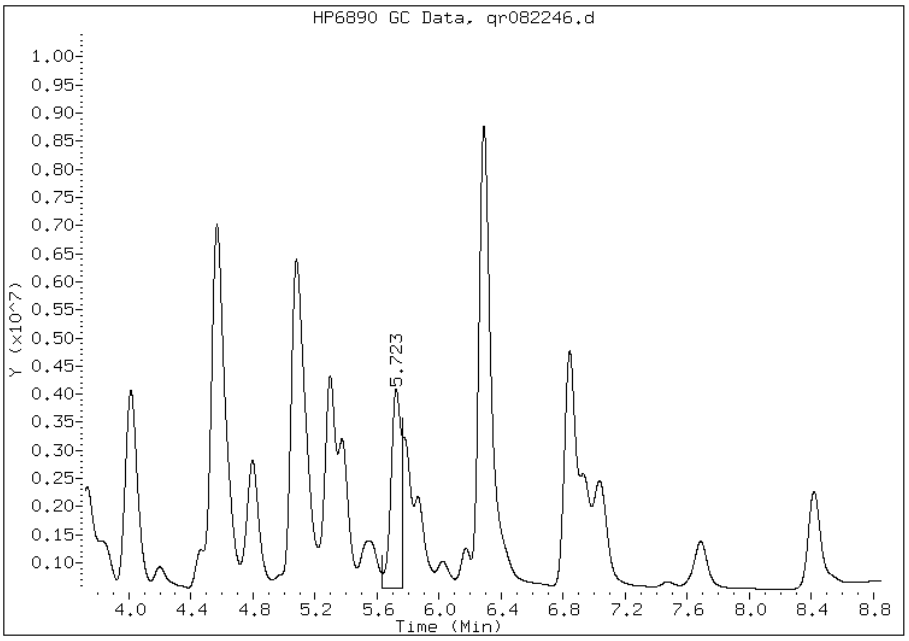
Manual Integration Results

RT: 5.72

Response: 16109682

Amount: 895.05

Conc: 600.00



Manually Integrated By: shanthi
Manual Integration Reason: Baseline Event

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: PESTGC8 Start Date: 03/22/2011 06:39

Analysis Batch Number: 68137 End Date: 03/22/2011 12:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/22/2011 06:39	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 06:39	1		CLP-1 0.53(mm)
ZZZZZ		03/22/2011 06:54	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 06:54	1		CLP-1 0.53(mm)
ZZZZZ		03/22/2011 07:10	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 07:10	1		CLP-1 0.53(mm)
ZZZZZ		03/22/2011 07:27	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 07:27	1		CLP-1 0.53(mm)
ZZZZZ		03/22/2011 08:13	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 08:13	1		CLP-1 0.53(mm)
ZZZZZ		03/22/2011 08:33	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 08:33	1		CLP-1 0.53(mm)
IC 460-68137/7		03/22/2011 08:49	1	qf082105.d	CLP-2 0.53(mm)
IC 460-68137/7		03/22/2011 08:49	1	qr082105.d	CLP-1 0.53(mm)
IC 460-68137/8		03/22/2011 09:08	1	qf082106.d	CLP-2 0.53(mm)
IC 460-68137/8		03/22/2011 09:08	1	qr082106.d	CLP-1 0.53(mm)
IC 460-68137/9		03/22/2011 09:24	1	qf082107.d	CLP-2 0.53(mm)
IC 460-68137/9		03/22/2011 09:24	1	qr082107.d	CLP-1 0.53(mm)
IC 460-68137/10		03/22/2011 09:40	1	qf082108.d	CLP-2 0.53(mm)
IC 460-68137/10		03/22/2011 09:40	1	qr082108.d	CLP-1 0.53(mm)
IC 460-68137/11		03/22/2011 09:56	1	qf082109.d	CLP-2 0.53(mm)
IC 460-68137/11		03/22/2011 09:56	1	qr082109.d	CLP-1 0.53(mm)
IC 460-68137/12		03/22/2011 10:12	1	qf082110.d	CLP-2 0.53(mm)
IC 460-68137/12		03/22/2011 10:12	1	qr082110.d	CLP-1 0.53(mm)
IC 460-68137/13		03/22/2011 10:28	1	qf082111.d	CLP-2 0.53(mm)
IC 460-68137/13		03/22/2011 10:28	1	qr082111.d	CLP-1 0.53(mm)
IC 460-68137/14		03/22/2011 10:44	1	qf082112.d	CLP-2 0.53(mm)
IC 460-68137/14		03/22/2011 10:44	1	qr082112.d	CLP-1 0.53(mm)
IC 460-68137/15		03/22/2011 11:00	1	qf082113.d	CLP-2 0.53(mm)
IC 460-68137/15		03/22/2011 11:00	1	qr082113.d	CLP-1 0.53(mm)
IC 460-68137/16		03/22/2011 11:16	1	qf082114.d	CLP-2 0.53(mm)
IC 460-68137/16		03/22/2011 11:16	1	qr082114.d	CLP-1 0.53(mm)
IC 460-68137/17		03/22/2011 11:32	1	qf082115.d	CLP-2 0.53(mm)
IC 460-68137/17		03/22/2011 11:32	1	qr082115.d	CLP-1 0.53(mm)
IC 460-68137/18		03/22/2011 11:48	1	qf082116.d	CLP-2 0.53(mm)
IC 460-68137/18		03/22/2011 11:48	1	qr082116.d	CLP-1 0.53(mm)
ZZZZZ		03/22/2011 12:04	1		CLP-2 0.53(mm)
ZZZZZ		03/22/2011 12:04	1		CLP-1 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: PESTGC8 Start Date: 03/24/2011 10:11

Analysis Batch Number: 68484 End Date: 03/24/2011 17:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/24/2011 10:11	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 10:11	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 10:27	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 10:27	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 10:43	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 10:43	1		CLP-1 0.53(mm)
CCVRT 460-68484/4		03/24/2011 10:59	1	qf082240.d	CLP-2 0.53(mm)
CCVRT 460-68484/4		03/24/2011 10:59	1	qr082240.d	CLP-1 0.53(mm)
ZZZZZ		03/24/2011 11:15	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 11:15	1		CLP-1 0.53(mm)
MB 460-68322/1-A		03/24/2011 11:31	1	qf082242.d	CLP-2 0.53(mm)
MB 460-68322/1-A		03/24/2011 11:31	1	qr082242.d	CLP-1 0.53(mm)
LCS 460-68322/2-A		03/24/2011 11:47	1	qf082243.d	CLP-2 0.53(mm)
LCS 460-68322/2-A		03/24/2011 11:47	1	qr082243.d	CLP-1 0.53(mm)
ZZZZZ		03/24/2011 12:03	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 12:03	1		CLP-1 0.53(mm)
460-24449-A-5-A MS		03/24/2011 12:19	1	qf082245.d	CLP-2 0.53(mm)
460-24449-A-5-A MS		03/24/2011 12:19	1	qr082245.d	CLP-1 0.53(mm)
460-24449-A-5-B MSD		03/24/2011 12:35	1	qf082246.d	CLP-2 0.53(mm)
460-24449-A-5-B MSD		03/24/2011 12:35	1	qr082246.d	CLP-1 0.53(mm)
460-24356-1	GPEC-WC-031911	03/24/2011 12:51	1	qf082247.d	CLP-2 0.53(mm)
460-24356-1	GPEC-WC-031911	03/24/2011 12:51	1	qr082247.d	CLP-1 0.53(mm)
ZZZZZ		03/24/2011 13:07	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 13:07	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 13:23	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 13:23	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 13:39	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 13:39	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 13:55	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 13:55	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 14:11	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 14:11	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 14:27	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 14:27	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 14:43	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 14:43	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 14:59	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 14:59	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 15:15	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 15:15	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 15:30	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 15:30	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 15:46	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 15:46	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 16:02	1		CLP-2 0.53(mm)

8082

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: PESTGC8 Start Date: 03/24/2011 10:11

Analysis Batch Number: 68484 End Date: 03/24/2011 17:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/24/2011 16:02	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 16:19	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 16:19	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 16:35	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 16:35	1		CLP-1 0.53(mm)
ZZZZZ		03/24/2011 16:51	1		CLP-2 0.53(mm)
ZZZZZ		03/24/2011 16:51	1		CLP-1 0.53(mm)
CCV 460-68484/27		03/24/2011 17:07	1	qf082263.d	CLP-2 0.53(mm)
CCV 460-68484/27		03/24/2011 17:07	1	qr082263.d	CLP-1 0.53(mm)

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: PESTGC8.i

Analytical Batch: /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b

Date Generated: 03/22/2011

Page 1

Tals Batch 68137

Date	Data File	ALS	Sample ID	LPB	Ext. Date	IV/ IW	FV	DIL FAC	SampleType	LOT	COMMENTS
03/22/11 0639	qr082099	1	HEXANE	22mar11a		15	10	1	SAMPLE		
03/22/11 0654	qr082100	2	hexne	22mar11a		15	10	1	SAMPLE		
03/22/11 0710	qr082101	3	SGPIBLK_00007	22mar11a		15	10	1	INSTBLANK		G no
03/22/11 0727	qr082102	4	SG1660L3_00012	22mar11a		15	10	1	SAMPLE		not used
03/22/11 0813	qr082103	1	SGPIBLK_00007	22mar11a		15	10	1	INSTBLANK		G no
03/22/11 0833	qr082104	2	SG1660L3_00012	22mar11a		15	10	1	SAMPLE		not used
03/22/11 0849	qr082105	3	IC-SG1660L1_00009			0	0	1	CALIB_1		updated
03/22/11 0908	qr082106	4	IC-SG1660L2_00009			0	0	1	CALIB_2		
03/22/11 0924	qr082107	5	IC-SG1660L3_00012			0	0	1	CALIB_3		
03/22/11 0940	qr082108	6	IC-SG1660L4_00009			0	0	1	CALIB_4		
03/22/11 0956	qr082109	7	IC-SG1660L5_00009			0	0	1	CALIB_5		
03/22/11 1012	qr082110	8	IC-SG1221L3_00011			0	0	1	CALIB_3		updated
03/22/11 1028	qr082111	9	IC-SG1232L3_00010			0	0	1	CALIB_3		
03/22/11 1044	qr082112	10	IC-SG1242L3_00010			0	0	1	CALIB_3		

P. Shah 3-22-11

3/22/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: PESTGC8.i

Analytical Batch: /chem1/PESTGC8.i/8082/rear/Mar11/03-22-11aical/22mar11a.b

Date Generated: 03/22/2011

Page 2

Tals Batch 85137

Date	Data File	ALS	Sample ID	LPB	Ext. Date	IV/ IW	FV	DIL FAC	SampleType	LOT	COMMENTS
03/22/11 1100	qr082113	11	IC-SG1248L3_00010	—	~	0	0	1	CALIB_3	—	updated
03/22/11 1116	qr082114	12	IC-SG1254L3_00009	—	~	0	0	1	CALIB_3	—	
03/22/11 1132	qr082115	13	IC-SG1262L3_00010	—	~	0	0	1	CALIB_3	—	
03/22/11 1148	qr082116	14	IC-SG1268L3_00010	—	~	0	0	1	CALIB_3	—	
03/22/11 1204	qr082117	15	PCBICV_00004	—	~	1000	5	1	BS	—	4

Signed: D. Fluke Read and Understood by: Smith

Date: 3-22-11 Date: 3-22-11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: PESTGC8.i

Analytical Batch: /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b

Date Generated: 03/25/2011

Tals Batch: 68484

Date	Data File	ALS	Sample ID	LPB	Ext. Date	IV/ IW	FV	DIL FAC	SampleType	LOT	COMMENTS
03/24/11 1011	qr082237	13	HEXANE	24mar11b		1000	5	1	SAMPLE	—	—
03/24/11 1027	qr082238	14	HEXANE	24mar11b	—	1000	5	1	SAMPLE	—	—
03/24/11 1043	qr082239	15	SGPIBLK_00007	24mar11b	—	1000	5	1	INSTBLANK	—	G NO
03/24/11 1059	qr082240	16	CCVRTSG1660L3_00012	24mar11b	—	1000	5	1	SAMPLE	—	G R & F
03/24/11 1115	qr082241	17	HEXANE	24mar11b	—	1000	5	1	SAMPLE	—	—
03/24/11 1131	qr082242	18	MB 460-68322/1-A	24mar11b	—	1000	5	1	BLANK	—	G NO
03/24/11 1147	qr082243	19	LCS 460-68322/2-A		—	15	10	1	BS	—	G
03/24/11 1203	qr082244	20	460-24449-A-5-C	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G
03/24/11 1219	qr082245	21	460-24449-A-5-A MS	460-68322	03/24/11	15.0	10	1	MS	—	G
03/24/11 1235	qr082246	22	460-24449-A-5-B MSD	460-68322	03/24/11	15.0	10	1	MSD	—	G
03/24/11 1251	qr082247	23	460-24356-A-1-E	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G NO
03/24/11 1307	qr082248	24	460-24392-B-1-D	460-68322	03/24/11	15.0	10	1	SAMPLE	—	G NO (C ithL pattern)
03/24/11 1323	qr082249	25	460-24400-A-1-B	460-68322	03/24/11	15.0	10	1	SAMPLE	—	G 12 42
03/24/11 1339	qr082250	26	460-24402-A-1-D	460-68322	03/24/11	15.0	10	1	SAMPLE	—	G 12 42

D. Shell 3-25-11

03/25/11

TESTAMERICA

ANALYTICAL INJECTION LOG SUMMARY

Instrument ID: PESTGC8.i

Analytical Batch: /chem1/PESTGC8.i/8082/rear/Mar11/03-24-11/24mar11b.b

Date Generated: 03/25/2011

Tals Batch: 68484

Date	Data File	ALS	Sample ID	LPB	Ext. Date	IV/ IW	FV	DIL FAC	SampleType	LOT	COMMENTS
03/24/11 1355	qr082251	27	460-24449-A-1-A	460-68322	03/24/11	15	10	1	SAMPLE	-	RRX500, RRX1000
03/24/11 1411	qr082252	28	460-24449-A-2-A	460-68322	03/24/11	15.1	10	1	SAMPLE	-	RRX2
03/24/11 1427	qr082253	29	460-24449-A-3-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	RRX5
03/24/11 1443	qr082254	30	460-24449-A-4-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G1260
03/24/11 1459	qr082255	31	460-24449-A-6-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G1260
03/24/11 1515	qr082256	32	460-24449-A-7-A	460-68322	03/24/11	15.1	10	1	SAMPLE	-	G ND
03/24/11 1530	qr082257	33	460-24449-A-8-A	460-68322	03/24/11	15	10	1	SAMPLE	-	G ND
03/24/11 1546	qr082258	34	460-24449-A-9-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G 1248, 60
03/24/11 1602	qr082259	35	460-24449-A-10-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G 1260
03/24/11 1619	qr082260	36	460-24449-A-11-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	RRX5
03/24/11 1635	qr082261	37	460-24450-B-2-A	460-68322	03/24/11	15.0	10	1	SAMPLE	-	G 1248, 60
03/24/11 1651	qr082262	38	SGPIBLK_00007	24mar11b	-	15	10	1	INSTBLANK	-	G ND
03/24/11 1707	qr082263	39	CCV-SG1660L3_00012	-	-	0	0	1	CCALIB_3	-	GRAB

Signed: D. Shaw It Read and Understood by: JA 03/25/11

Date: 3-25-11 Date:

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68322 Batch Start Date: 03/24/11 03:29 Batch Analyst: Alinea, Archilles R

Batch Method: 3541 Batch End Date: 03/24/11 12:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SoxThermPosition	OP_PCBSP 00015	OPPSTPCBSU 00016	
MB 460-68322/1		3541, 8082		15.00 g	10 mL	73		50 uL	
LCS 460-68322/2		3541, 8082		15.00 g	10 mL	74	50 uL	50 uL	
460-24449-A-5 MS		3541, 8082	T	15.02 g	10 mL	75	50 uL	50 uL	
460-24449-A-5 MSD		3541, 8082	T	15.04 g	10 mL	76	50 uL	50 uL	
460-24356-A-1	GPEC-WC-031911	3541, 8082	T	15.03 g	10 mL	77		50 uL	

Batch Notes	
Balance ID	30
Batch Comment	pcb-soil
Blank Soil Lot Number	j41625
Boiling Chips ID	10013
Person's name who did the concentration	archie
First End time	12pm
Vendor lot number	k05e15
Na2SO4 Lot Number	j41625
Person's name who did the prep	archie
Person's name who witnessed reagent drop	jose s
Solvent	hex./ace. mixed
SOP Number	3541
First Start time	3:29am
TBA Lot #	op 88

Basis	Basis Description
T	Total/NA

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

Project: Greenpoint

Client Sample ID	Lab Sample ID
GPEC-WC-031911	460-24356-1

Comments:

COVER PAGE
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

Project: Greenpoint

Client Sample ID	Lab Sample ID
GPEC-WC-031911	460-24356-1

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG ID.:

Matrix: Solid Date Sampled: 03/19/2011 16:45

Reporting Basis: DRY Date Received: 03/21/2011 11:55

% Solids: 83.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	11.2	1.2	0.82	mg/Kg			4	6010B
7440-39-3	Barium	548	47.2	1.4	mg/Kg			4	6010B
7440-43-9	Cadmium	0.41	1.2	0.18	mg/Kg	J		4	6010B
7440-47-3	Chromium	22.8	2.4	1.4	mg/Kg			4	6010B
7439-92-1	Lead	280	1.2	0.59	mg/Kg			4	6010B
7782-49-2	Selenium	2.4	2.4	1.1	mg/Kg	U		4	6010B
7440-22-4	Silver	2.2	2.4	0.18	mg/Kg	J		4	6010B
7439-97-6	Mercury	29.8	1.9	1.5	mg/Kg			50	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GPEC-WC-031911 Lab Sample ID: 460-24356-1

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG ID.:

Matrix: Solid Date Sampled: 03/19/2011 16:45

Reporting Basis: DRY Date Received: 03/21/2011 11:55

% Solids: 83.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7704-34-9	Sulfur	2650	181	24.6	mg/Kg			1	6010B

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

ICV Source: ME_CCV_T2_00028 Concentration Units: ug/L

CCV Source: ME_CCV_T2_00028

Analyte	ICV 460-68849/5 03/29/2011 14:59				CCV 460-68849/35 03/29/2011 19:10				CCV 460-68849/47 03/29/2011 21:08			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	5241		5000	105	5056		5000	101	5061		5000	101
Barium	10640		10000	106	10290		10000	103	10080		10000	101
Cadmium	2607		2500	104	2499		2500	100	2479		2500	99
Chromium	5256		5000	105	5060		5000	101	5027		5000	101
Lead	10450		10000	104	9895		10000	99	9827		10000	98
Selenium	5131		5000	103	4889		5000	98	4881		5000	98
Silver	1289		1250	103	1260		1250	101	1249		1250	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

ICV Source: ME_CCV_T2_00028 Concentration Units: ug/L

CCV Source: ME_CCV_T2_00028

Analyte	CCV 460-68849/75 03/30/2011 01:28				CCV 460-68849/87 03/30/2011 02:45							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	5099		5000	102	5097		5000	102				
Barium	10010		10000	100	9870		10000	99				
Cadmium	2469		2500	99	2462		2500	98				
Chromium	5053		5000	101	5026		5000	101				
Lead	9743		10000	97	9719		10000	97				
Selenium	4884		5000	98	4877		5000	98				
Silver	1259		1250	101	1251		1250	100				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

ICV Source: ME_DCAL-IN_00502 Concentration Units: ug/L

CCV Source: ME_DCAL-IN_00502

Analyte	ICV 460-68078/31-A 03/22/2011 12:31				CCV 460-68078/33-A 03/22/2011 13:30				CCV 460-68078/33-A 03/22/2011 13:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	870.0		833	104	921.7		833	111	930.0		833	112

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

ICV Source: ME_DCAL-IN_00502 Concentration Units: ug/L

CCV Source: ME_DCAL-IN_00502

Analyte	CCV 460-68078/33-A 03/22/2011 14:06				CCV 460-68078/33-A 03/22/2011 14:26				CCV 460-68078/33-A 03/22/2011 14:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	915.0		833	110	916.7		833	110	920.0		833	110

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

ICV Source: mccvp_00071 Concentration Units: ug/L

CCV Source: mccvp_00071

Analyte	ICV 220-49146/12 03/28/2011 11:22				CCV 220-49146/41 03/28/2011 12:56				CCV 220-49146/53 03/28/2011 13:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sulfur	9462		10000	95	9226		10000	92	9423		10000	94

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

ICV Source: mccvp_00071 Concentration Units: ug/L

CCV Source: mccvp_00071

Analyte	CCV 220-49146/65 03/28/2011 14:34											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sulfur	9265		10000	93								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Analysis Method: 6010B Instrument ID: ICAP3

Lab Sample ID: CRI 220-49146/14 Concentration Units: ug/L

CRQL Check Standard Source: mcri_00048

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Sulfur	1000	914.9	J	91	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 460-68849/6 03/29/2011 15:05		CCB 460-68849/36 03/29/2011 19:16		CCB 460-68849/48 03/29/2011 21:14		CCB 460-68849/76 03/30/2011 01:35	
		Found	C	Found	C	Found	C	Found	C
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	200	3.44	J	200	U	200	U	200	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10.0	10.0	U	10.0	U	10.0	U	10.0	U
Lead	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Selenium	10.0	10.0	U	10.0	U	10.0	U	10.0	U
Silver	10.0	10.0	U	10.0	U	10.0	U	10.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 460-68849/88 03/30/2011 02:52							
		Found	C	Found	C	Found	C	Found	C
Arsenic	5.0	5.0	U						
Barium	200	200	U						
Cadmium	5.0	5.0	U						
Chromium	10.0	10.0	U						
Lead	5.0	5.0	U						
Selenium	10.0	10.0	U						
Silver	10.0	10.0	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 460-68141/8 03/22/2011 12:33		CCB 460-68141/40 03/22/2011 13:32		CCB 460-68141/50 03/22/2011 13:50		CCB 460-68141/60 03/22/2011 14:08	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 460-68141/71 03/22/2011 14:28		CCB 460-68141/76 03/22/2011 14:37					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 220-49146/13 03/28/2011 11:25		CCB 220-49146/42 03/28/2011 13:00		CCB 220-49146/54 03/28/2011 13:41		CCB 220-49146/66 03/28/2011 14:37	
		Found	C	Found	C	Found	C	Found	C
Sulfur	1000	1000	U	1000	U	1000	U	1000	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 460-68537/1-A ^2

Instrument Code: ICP2 Batch No.: 68849

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6010B
7440-39-3	Barium	20.0	U		6010B
7440-43-9	Cadmium	0.50	U		6010B
7440-47-3	Chromium	1.0	U		6010B
7439-92-1	Lead	0.50	U		6010B
7782-49-2	Selenium	1.0	U		6010B
7440-22-4	Silver	1.0	U		6010B

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 460-68108/1-A

Instrument Code: LEEMAN3 Batch No.: 68141

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 220-49104/1-A

Instrument Code: ICAP3 Batch No.: 49146

CAS No.	Analyte	Concentration	C	Q	Method
7704-34-9	Sulfur	156	U		6010B

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSA 460-68849/21 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICSA_00025

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-2.78**	
Barium		**4.90**	
Cadmium		**-2.90**	
Chromium		**6.26**	
Lead		**-2.35**	
Selenium		**2.37**	
Silver		**0.615**	
Aluminum	*500000*	*481345*	*96*
Antimony		*-3.82*	
Beryllium		*0.0890*	
Boron		*-4.16*	
Calcium	*500000*	*462375*	*92*
Cobalt		*-0.199*	
Copper		*-2.86*	
Iron	*200000*	*189661*	*95*
Magnesium	*500000*	*519708*	*104*
Manganese		*-6.55*	
Molybdenum		*6.50*	
Nickel		*-2.61*	
Potassium		*111*	
Sodium		*231*	
Thallium		*-7.31*	
Tin		*0.0730*	
Titanium		*-4.55*	
Vanadium		*2.36*	
Zinc		*-1.69*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSAB 460-68849/22 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICAB_00026

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**100**	**100**	**100**
Barium	**100**	**111**	**111**
Cadmium	**100**	**96.3**	**96**
Chromium	**100**	**106**	**106**
Lead	**100**	**96.5**	**96**
Selenium	**100**	**104**	**104**
Silver	**100**	**106**	**106**
Aluminum	*500000*	*485886*	*97*
Antimony	*100*	*97.9*	*98*
Beryllium	*100*	*97.3*	*97*
Boron	*100*	*97.1*	*97*
Calcium	*500000*	*464491*	*93*
Cobalt	*100*	*99.0*	*99*
Copper	*100*	*102*	*102*
Iron	*200000*	*191307*	*96*
Magnesium	*500000*	*524984*	*105*
Manganese	*100*	*93.8*	*94*
Molybdenum	*100*	*108*	*108*
Nickel	*100*	*95.4*	*95*
Potassium	*10000*	*10476*	*105*
Sodium	*10000*	*9870*	*99*
Thallium	*100*	*95.3*	*95*
Tin	*100*	*90.3*	*90*
Titanium	*100*	*101*	*101*
Vanadium	*100*	*104*	*104*
Zinc	*100*	*97.3*	*97*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSA 460-68849/45 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICSA_00025

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-4.91**	
Barium		**4.93**	
Cadmium		**-2.25**	
Chromium		**6.34**	
Lead		**-1.44**	
Selenium		**-0.0438**	
Silver		**-0.959**	
Aluminum	*500000*	*478161*	*96*
Antimony		*-2.48*	
Beryllium		*0.416*	
Boron		*-5.50*	
Calcium	*500000*	*464920*	*93*
Cobalt		*-0.310*	
Copper		*-3.52*	
Iron	*200000*	*183281*	*92*
Magnesium	*500000*	*516535*	*103*
Manganese		*-6.41*	
Molybdenum		*6.68*	
Nickel		*-2.19*	
Potassium		*119*	
Sodium		*210*	
Thallium		*-9.04*	
Tin		*-2.74*	
Titanium		*-4.63*	
Vanadium		*2.86*	
Zinc		*-0.785*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSAB 460-68849/46 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICAB_00026

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**100**	**95.9**	**96**
Barium	**100**	**107**	**107**
Cadmium	**100**	**94.5**	**94**
Chromium	**100**	**104**	**104**
Lead	**100**	**94.6**	**95**
Selenium	**100**	**100**	**100**
Silver	**100**	**103**	**103**
Aluminum	*500000*	*472694*	*95*
Antimony	*100*	*99.4*	*99*
Beryllium	*100*	*92.9*	*93*
Boron	*100*	*94.6*	*95*
Calcium	*500000*	*458617*	*92*
Cobalt	*100*	*97.5*	*98*
Copper	*100*	*98.2*	*98*
Iron	*200000*	*181567*	*91*
Magnesium	*500000*	*510154*	*102*
Manganese	*100*	*91.1*	*91*
Molybdenum	*100*	*106*	*106*
Nickel	*100*	*93.9*	*94*
Potassium	*10000*	*10287*	*103*
Sodium	*10000*	*9664*	*97*
Thallium	*100*	*89.7*	*90*
Titanium	*100*	*98.0*	*98*
Vanadium	*100*	*100*	*100*
Zinc	*100*	*92.3*	*92*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSA 460-68849/73 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICSA_00025

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**0.936**	
Barium		**4.88**	
Cadmium		**-2.33**	
Chromium		**5.40**	
Lead		**-1.24**	
Selenium		**-1.79**	
Silver		**0.120**	
Aluminum	*500000*	*474855*	*95*
Antimony		*-2.79*	
Beryllium		*0.696*	
Boron		*-4.41*	
Calcium	*500000*	*461374*	*92*
Cobalt		*-0.535*	
Copper		*-4.79*	
Iron	*200000*	*176775*	*88*
Magnesium	*500000*	*510295*	*102*
Manganese		*-6.38*	
Molybdenum		*8.01*	
Nickel		*-3.12*	
Potassium		*84.7*	
Sodium		*136*	
Thallium		*-7.29*	
Tin		*1.62*	
Titanium		*-4.60*	
Vanadium		*3.03*	
Zinc		*-1.50*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSAB 460-68849/74 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICAB_00026

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**100**	**103**	**103**
Barium	**100**	**106**	**106**
Cadmium	**100**	**94.1**	**94**
Chromium	**100**	**105**	**105**
Lead	**100**	**92.6**	**93**
Selenium	**100**	**93.2**	**93**
Silver	**100**	**104**	**104**
Aluminum	*500000*	*471967*	*94*
Antimony	*100*	*100*	*100*
Beryllium	*100*	*90.7*	*91*
Boron	*100*	*92.4*	*92*
Calcium	*500000*	*463023*	*93*
Cobalt	*100*	*99.4*	*99*
Copper	*100*	*96.6*	*97*
Iron	*200000*	*176211*	*88*
Magnesium	*500000*	*506647*	*101*
Manganese	*100*	*90.8*	*91*
Molybdenum	*100*	*104*	*104*
Nickel	*100*	*93.4*	*93*
Potassium	*10000*	*10436*	*104*
Sodium	*10000*	*9846*	*98*
Thallium	*100*	*86.8*	*87*
Tin	*100*	*81.4*	*81*
Titanium	*100*	*98.8*	*99*
Vanadium	*100*	*99.9*	*100*
Zinc	*100*	*92.9*	*93*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSA 460-68849/100 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICSA_00025

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-1.93**	
Barium		**4.84**	
Cadmium		**-2.57**	
Chromium		**5.73**	
Lead		**-2.42**	
Selenium		**-7.44**	
Silver		**0.161**	
Aluminum	*500000*	*471412*	*94*
Antimony		*1.63*	
Beryllium		*0.788*	
Boron		*-5.06*	
Calcium	*500000*	*464541*	*93*
Cobalt		*-0.213*	
Copper		*-5.01*	
Iron	*200000*	*176151*	*88*
Magnesium	*500000*	*506088*	*101*
Manganese		*-6.29*	
Molybdenum		*6.37*	
Nickel		*-3.01*	
Potassium		*102*	
Sodium		*220*	
Thallium		*-7.53*	
Tin		*-1.29*	
Titanium		*-4.60*	
Vanadium		*3.50*	
Zinc		*-0.411*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSAB 460-68849/101 Instrument ID: ICP2

Lab File ID: 68350V2 ICS Source: ME_T2_ICAB_00026

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**100**	**101**	**101**
Barium	**100**	**104**	**104**
Cadmium	**100**	**93.3**	**93**
Chromium	**100**	**104**	**104**
Lead	**100**	**91.9**	**92**
Selenium	**100**	**90.9**	**91**
Silver	**100**	**104**	**104**
Aluminum	*500000*	*468706*	*94*
Antimony	*100*	*106*	*106*
Beryllium	*100*	*89.8*	*90*
Boron	*100*	*92.7*	*93*
Calcium	*500000*	*462980*	*93*
Cobalt	*100*	*99.1*	*99*
Copper	*100*	*95.7*	*96*
Iron	*200000*	*175025*	*87*
Magnesium	*500000*	*502318*	*100*
Manganese	*100*	*90.5*	*91*
Molybdenum	*100*	*104*	*104*
Nickel	*100*	*92.6*	*93*
Potassium	*10000*	*10514*	*105*
Sodium	*10000*	*9839*	*98*
Thallium	*100*	*88.3*	*88*
Tin	*100*	*80.6*	*81*
Titanium	*100*	*98.2*	*98*
Vanadium	*100*	*99.4*	*99*
Zinc	*100*	*91.2*	*91*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSA 220-49146/15 Instrument ID: ICAP3

Lab File ID: 032811d.prn ICS Source: micsa_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Sulfur		**297**	
Aluminum	*500000*	*542520*	*109*
Antimony		*-4.50*	
Arsenic		*36.2*	
Barium		*4.35*	
Beryllium		*-0.440*	
Boron		*-14.7*	
Cadmium		*-1.72*	
Calcium	*500000*	*484503*	*97*
Chromium		*0.0421*	
Cobalt		*-1.36*	
Copper		*1.92*	
Iron	*200000*	*170381*	*85*
Lead		*-1.59*	
Lithium		*5.17*	
Magnesium	*500000*	*462877*	*93*
Manganese		*-24.4*	
Molybdenum		*-7.66*	
Nickel		*-0.655*	
Potassium		*58.2*	
Selenium		*-0.543*	
Silver		*-5.30*	
Sodium		*-12.5*	
Strontium		*15.3*	
Thallium		*-13.8*	
Tin		*-4.77*	
Titanium		*-7.25*	
Vanadium		*-4.51*	
Zinc		*-1.96*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Lab Sample ID: ICSAB 220-49146/16 Instrument ID: ICAP3

Lab File ID: 032811d.prn ICS Source: micsab_00044

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	*500000*	*544022*	*109*
Antimony	*500*	*494*	*99*
Arsenic	*500*	*498*	*100*
Barium	*500*	*484*	*97*
Beryllium	*500*	*469*	*94*
Boron	*500*	*477*	*95*
Cadmium	*500*	*434*	*87*
Calcium	*500000*	*486408*	*97*
Chromium	*500*	*470*	*94*
Cobalt	*500*	*439*	*88*
Copper	*500*	*557*	*111*
Iron	*200000*	*169793*	*85*
Lead	*500*	*455*	*91*
Lithium	*500*	*580*	*116*
Magnesium	*500000*	*459033*	*92*
Manganese	*500*	*445*	*89*
Molybdenum	*500*	*455*	*91*
Nickel	*500*	*431*	*86*
Selenium	*1000*	*967*	*97*
Silver	*100*	*101*	*101*
Strontium	*500*	*483*	*97*
Thallium	*500*	*445*	*89*
Tin	*500*	*457*	*91*
Titanium	*500*	*482*	*96*
Vanadium	*500*	*467*	*93*
Zinc	*500*	*426*	*85*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 460-24285-E-4-C MS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 93.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.199		0.035	U	0.179	111	75-125		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 460-24285-E-1-D MS ^4

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 90.1

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	215.3		3.3		211	100	75-125		6010B
Barium	231.7		20.2	J	211	100	75-125		6010B
Cadmium	5.17		1.1	U	5.28	98	75-125		6010B
Chromium	34.28		11.3		21.1	109	75-125		6010B
Lead	86.73		34.6		52.8	99	75-125		6010B
Selenium	200.3		2.1	U	211	95	75-125		6010B
Silver	5.22		2.1	U	5.28	99	75-125		6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: GPEC-WC-031911 MS
Lab ID: 460-24356-1 MS
Lab Name: TestAmerica Connecticut
Job No.: 460-24356-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 83.1

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Sulfur	4858		2650		1150	192	75-125	F	6010B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: _____ Lab ID: 460-24285-E-4-B DU

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.: _____

% Solids for Sample: 93.0 % Solids for Duplicate: 93.0

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.035	0.035	U	0.035	U	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: Lab ID: 460-24285-E-1-C DU ^4

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

% Solids for Sample: 90.1 % Solids for Duplicate: 90.1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	1.1	3.3		3.23		0.6		6010B
Barium	42.3	20.2	J	22.16	J	9		6010B
Cadmium	1.1	1.1	U	1.1	U	NC		6010B
Chromium	2.1	11.3		11.88		5		6010B
Lead	1.1	34.6		38.32		10		6010B
Selenium	2.1	2.1	U	2.1	U	NC		6010B
Silver	2.1	2.1	U	2.1	U	NC		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: GPEC-WC-031911 DU Lab ID: 460-24356-1 DU

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

% Solids for Sample: 83.1 % Solids for Duplicate: 83.1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Sulfur	179	2650		3550		29	F	6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCSSRM 460-68537/2-A

Lab Name: TestAmerica Edison Job No.: 460-24356-1

Sample Matrix: Solid LCS Source: ME_LCSS_62_00006

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	104	108.6		104	69.7	131		6010B
Barium	198	202.6		102	73.2	126		6010B
Cadmium	60.7	62.42		103	73.3	127		6010B
Chromium	236	241.2		102	70.8	129		6010B
Lead	86.0	91.17		106	69.8	130		6010B
Selenium	286	290.0		101	69.6	130		6010B
Silver	30.1	30.76		102	65.1	135		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCSSRM 460-68108/2-A ^10

Lab Name: TestAmerica Edison Job No.: 460-24356-1

Sample Matrix: Solid LCS Source: ME_LCSS_62_00011

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	8.46	9.12		108	51.3	149		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 220-49104/2-A

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

Sample Matrix: Solid LCS Source: MS_00005

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Sulfur	2000	2182		109	80	120		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 460-24285-E-1-B SD ^5

SDG No:

Lab Name: TestAmerica Edison Job No: 460-24356-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	3.3		5.3	U	NC		6010B
Barium	20.2	J	20.31	J	NC		6010B
Cadmium	1.1	U	5.3	U	NC		6010B
Chromium	11.3		11.22		NC		6010B
Lead	34.6		35.20		1.7		6010B
Selenium	2.1	U	10.7	U	NC		6010B
Silver	2.1	U	10.7	U	NC		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 460-24285-E-4-A SD ^5

SDG No:

Lab Name: TestAmerica Edison Job No: 460-24356-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	0.035	U	0.18	U	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 460-24356-1

SDG No:

Lab Name: TestAmerica Connecticut Job No: 460-24356-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Sulfur	2650		2801		5.5		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: ICP2

Analysis Method: 6010B MDL Date: 12/30/2008 10:24

Prep Method: 3050B

Leach Method:

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Arsenic	189.0	0.25	0.174
Barium	483.4	10	0.302
Cadmium	226.5	0.25	0.039
Chromium	267.7	0.5	0.297
Lead	220.6	0.25	0.125
Selenium	196.0	0.5	0.234
Silver	328.0	0.5	0.038

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: ICP2

Analysis Method: 6010B XMDL Date: 01/01/2009 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Arsenic		5	3.831
Barium		200	3.212
Cadmium		5	0.918
Chromium		10	3.201
Lead		5	2.787
Selenium		10	4.752
Silver		10	0.969

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: LEEMAN3

Analysis Method: 7471A MDL Date: 12/30/2008 14:33

Prep Method: 7471A

Leach Method:

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury		0.033	0.026

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: LEEMAN3

Analysis Method: 7471A XMDL Date: 12/30/2008 14:34

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.185

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: ICAP3

Analysis Method: 6010B MDL Date: 03/15/2009 17:34

Prep Method: 3050B

Leach Method:

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Sulfur	181.975	125	17

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: ICAP3

Analysis Method: 6010B XMDL Date: 04/27/2008 09:20

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Sulfur	181.975	1000	230

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICP2 Date: 04/01/2010

Analyte	Wave Length	Al	B	Ba	Ca	Co	Cr	Fe	K	Mg	Mn	Mo	Ni	Ti	Tl
Aluminum	308.22														
Antimony	206.84														
Arsenic	189.04		0.0001740				0.0001040					0.0004160		0.0001080	0.0001080
Barium	493.40														
Beryllium	313.04													-0.0000510	-0.0000510
Bismuth															
Boron															
Cadmium	226.50							0.0000690							
Calcium	317.93														
Chromium	267.72	0.000020													
Cobalt	228.62											-0.001360		0.0020970	0.0020970
Copper	324.75							0.000005							
Gold			0.0001740				0.0001040					0.0004160		0.0001080	0.0001080
Iron	271.44	0.0000450				0.0871100	0.0022660					0.017630		0.011300	0.011300
Lanthanum															
Lead	220.35	0.0000063			-0.0000043	0.0001306		0.0000635		0.0000083	0.0001164	-0.0007679	0.0002070	-0.0003367	-0.0003367
Lithium															
Lutetium															
Magnesium	383.20														
Manganese	257.61									0.000026					
Molybdenum															
Nickel	231.60					-0.000690									
Palladium															
Phosphorus															
Potassium	766.49														
Selenium	196.03			-0.0000499	0.0000029	-0.0001052		-0.0001964	-0.0000132		0.0004928	0.0000802			
Silicon															
Silver	328.07	0	0	0	0			0.000005			0.0002370				
Sodium	330.22	0.0003150			0.0002630			0.0005540		0.000294				-0.0612380	-0.0612380
Strontium															

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICP2 Date: 04/01/2010

Analyte	Wave Length	Al	B	Ba	Ca	Co	Cr	Fe	K	Mg	Mn	Mo	Ni	Ti	Tl
Sulfur															
Thallium	190.86	-0.0000100			-0.000040	0.0048490	0.0004180	-0.000058			0.0011140	-0.0037500		0.0008000	
Thorium															
Tin															
Titanium															
Tungsten															
Uranium															
Vanadium	292.40						-0.002000							0.0009000	
Yttrium															
Zinc	206.20						-0.0269000								
Zirconium															

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICP2 Date: 04/01/2010

Analyte	Wave Length	V	Zn												
Aluminum	308.22	0.0264690													
Antimony	206.84														
Arsenic	189.04														
Barium	493.40														
Beryllium	313.04	-0.0003240													
Bismuth															
Boron															
Cadmium	226.50														
Calcium	317.93														
Chromium	267.72	-0.0001650													
Cobalt	228.62														
Copper	324.75														
Gold															
Iron	271.44	0.0090183													
Lanthanum															
Lead	220.35	-0.0001350													
Lithium															
Lutetium															
Magnesium	383.20														
Manganese	257.61														
Molybdenum															
Nickel	231.60														
Palladium															
Phosphorus															
Potassium	766.49														
Selenium	196.03	0.0006768													
Silicon															
Silver	328.07														
Sodium	330.22		0.057494												
Strontium															

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICP2 Date: 04/01/2010

Analyte	Wave Length	V	Zn												
Sulfur															
Thallium	190.86	0.0021770													
Thorium															
Tin															
Titanium															
Tungsten															
Uranium															
Vanadium	292.40														
Yttrium															
Zinc	206.20														
Zirconium															

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	396.153	0		0	0	0	0	0	0	0	0	0	0	0	0
Antimony	206.836	0	0.0344154	0	0	0	0	0	0	0	12.3335	0	0	0	0
Arsenic	188.979	0	0.0389934		0	0	0	0	0	0	-4.24241	0	-0.114112	0	0
Barium	233.527	0	0	0	0		0	0	0	0	0	0	0.0190258	0	0
Beryllium	313.107	0	0	0	0	0		0	0	0	0	0	0	0	0
Boron	249.772	0	0	0		0	0	0	0	0	0	0	3.87724	0	0
Cadmium	214.440	0	0	0	0	0	0	0		0	0	0	0.0501292	0	0
Calcium	317.933	0	0	0	0	0	0		0	0	0	0	0	0	0
Chromium	267.716	0	0	0	0	0	0	0	0	0		0	-0.0214458	0	0
Cobalt	228.616	0	0	0	0	0	0	0	0		0	0	0.0362174	0	0
Copper	324.752	0	0	0	0	0	0	0	0	0	0		-0.111226	0	0
Iron	238.204	0	0.783785	0	0	0	0	0	0	0	0	0		0	0
Lead	220.353	0	-0.0737498	0	0	0	0	0	0	0	0	0	0.140441	0	0
Lithium	670.784	0	0.0123614	0	0	0	0	0	0	0	0	0	0	0	
Magnesium	285.213	0	0	0	0	0	0	0	0	0	0	0	-0.735753	0	0
Manganese	257.610	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum	202.031	0	0	0	0	0	0	0	0	1.80218	0	0	-0.0441146	0	0
Nickel	231.604	0	0	0	0	0	0	0	0	-1.07684	0	0	0	0	0
Potassium	766.490	0	0	0	0	0	0	0	0	0	0	0	0		0
Selenium	196.026	0	0	0	0	0	0	0	0	0	0	0	-0.671323	0	0
Silver	328.068		0	0	0	0	0	0	0	0	0	0	-0.0511865	0	0
Sodium	589.592	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strontium	421.552	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfur	181.975	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thallium	190.801	0	0	0	0	0	0	0	0	5.83449	0	0	-0.0704469	0	0
Tin	189.927	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Titanium	334.940	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium	311.071	0	0	0	0	0	0	0	0	0	0	0	0.030099	0	0
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	206.200	0	0.0522543	0	0	0	0	0	0	0	-10.3102	0	0	0	0

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Zirconium	343.823	0	0	0	0	0	0	0	0	0	0	0	0.0257851	0	0

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Sn	Sr	Ti	Tl	V
Aluminum	396.153	0	0	33.7786	0	0	0	0	0	0	0	0	0	0	0
Antimony	206.836	0	0	-8.3581	0	0	0	0		0	0	0	0	0	-2.23647
Arsenic	188.979	0	0	4.14268	0	0	0	0	0	0	0	0	0	0	0
Barium	233.527	0	0	0	0	0	0	0	0	0	0	0	0	0	-2.039
Beryllium	313.107	0	0	0	0	0	0	0	0	0	0	0	-4.93632	0	0
Boron	249.772	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium	214.440	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calcium	317.933	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium	267.716	0	0	0	0	0	0	0	0	0	0	0	0	0	-1.01371
Cobalt	228.616	0	0	-1.30575	0	0	0	0	0	0	0	0	2.17017	0	0
Copper	324.752	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron	238.204	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead	220.353	0	0	-2.74266	0	0		0	0	0	0	0	0	0	0
Lithium	670.784	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	285.213		0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese	257.610	0.0443481		0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum	202.031	0	0		0	0	0	0	0	0	0	0	0	0	0
Nickel	231.604	0	0	0	0		0	0	0	0	0	0	0	0	0
Potassium	766.490	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium	196.026	0	0	0	0	0	0	0	0		0	0	0	0	0
Silver	328.068	0	0	0	0	0	0	0	0	0	0	0	0	0	-2.36663
Sodium	589.592	0	0	0		0	0	0	0	0	0	0	0	0	0
Strontium	421.552	0	0	0	0	0	0	0	0	0	0		0	0	0
Sulfur	181.975	-20.4408	0	0	0	0	0		0	0	0	0	0	0	0
Thallium	190.801	0	0	0	0	0	0	0	0	0	0	0	-12.3032		0
Tin	189.927	0	0	0	0	0	0	0	0	0		0	-5.46899	0	0
Titanium	334.940	0	0	0	0	0	0	0	0	0	0	0		0	0
Vanadium	311.071	0.0171963	0	0	0	0	0	0	0	0	0	0	11.0228	0	
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	206.200	0	0	0	0	0	0	0	0	0	0	0	0	0	0

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Sn	Sr	Ti	Tl	V
Zirconium	343.823	0	0	0	0	0	0	0	0	0	0	0	0	0	0

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Y	Zn	Zr											
Aluminum	396.153	0	0	0											
Antimony	206.836	0	0	0											
Arsenic	188.979	0	0	0											
Barium	233.527	0	0	0											
Beryllium	313.107	0	0	0											
Boron	249.772	0	0	0											
Cadmium	214.440	0	0	0											
Calcium	317.933	0	0	0											
Chromium	267.716	0	0	0											
Cobalt	228.616	0	0	0											
Copper	324.752	0	0	0											
Iron	238.204	0	0	0											
Lead	220.353	0	0	0											
Lithium	670.784	0	0	0											
Magnesium	285.213	0	0	0											
Manganese	257.610	0	0	0											
Molybdenum	202.031	0	0	0											
Nickel	231.604	0	0	0											
Potassium	766.490	0	0	0											
Selenium	196.026	0	0	0											
Silver	328.068	0	0	0											
Sodium	589.592	0	0	0											
Strontium	421.552	0	0	0											
Sulfur	181.975	0	0	0											
Thallium	190.801	0	0	0											
Tin	189.927	0	0	0											
Titanium	334.940	0	0	0											
Vanadium	311.071	0	0	0											
Yttrium	371.029	0	0	0											
Zinc	206.200	0		0											

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Connecticut Job Number: 460-24356-1

SDG No.:

ICP-AES Instrument ID: ICAP3 Date: 03/01/2011

Analyte	Wave Length	Y	Zn	Zr											
Zirconium	343.823	0	0												

11-IN
ICP-AES AND ICP-MS LINEAR RANGES
METALS

Lab Name: TestAmerica Edison Job No: 460-24356-1

SDG No.:

Instrument ID: ICP2 Date: 01/06/2009 11:12

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		10000	6010B
Barium		20000	6010B
Cadmium		5000	6010B
Chromium		10000	6010B
Lead		20000	6010B
Selenium		10000	6010B
Silver		2500	6010B

11-IN
ICP-AES AND ICP-MS LINEAR RANGES
METALS

Lab Name: TestAmerica Connecticut Job No: 460-24356-1

SDG No.:

Instrument ID: ICAP3 Date: 03/09/2011 11:54

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Sulfur		20000	6010B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Preparation Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 460-68537/1-A ^2	03/25/2011 19:24	68537	1.00		50
LCSSRM 460-68537/2-A	03/25/2011 19:24	68537	1.00		50
460-24356-1	03/25/2011 19:24	68537	1.02		50
460-24285-E-1-C DU ^4	03/25/2011 19:24	68537	1.05		50
460-24285-E-1-D MS ^4	03/25/2011 19:24	68537	1.05		50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Preparation Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 460-68108/1-A	03/22/2011 10:33	68108	0.60		100
LCSSRM 460-68108/2-A ^10	03/22/2011 10:33	68108	0.60		100
460-24285-E-4-B DU	03/22/2011 10:33	68108	0.60		100
460-24285-E-4-C MS	03/22/2011 10:33	68108	0.60		100
460-24356-1	03/22/2011 10:33	68108	0.64		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Preparation Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 220-49104/1-A	03/28/2011 09:36	49104	2.0		250
LCS 220-49104/2-A	03/28/2011 09:36	49104	1.0		250
460-24356-1	03/28/2011 09:36	49104	2.08		250
460-24356-1 DU	03/28/2011 09:36	49104	2.10		250
460-24356-1 MS	03/28/2011 09:36	49104	2.10		250

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: ICP2 Method: 6010B

Start Date: 03/29/2011 14:33 End Date: 03/30/2011 04:28

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Cd	Cr	Pb	Se													
ZZZZZZ			14:33																				
ZZZZZZ			14:39																				
ZZZZZZ			14:46																				
ZZZZZZ			14:52																				
ICV 460-68849/5	1		14:59	X	X	X	X	X	X	X													
ICB 460-68849/6	1		15:05	X	X	X	X	X	X	X													
ICSA 460-68849/7			15:12																				
ICSAB 460-68849/8			15:18																				
ZZZZZZ			15:33																				
ZZZZZZ			15:39																				
ZZZZZZ			15:46																				
ZZZZZZ			15:52																				
ZZZZZZ			15:59																				
ZZZZZZ			16:05																				
ZZZZZZ			16:12																				
ZZZZZZ			16:18																				
CCV 460-68849/17			16:25																				
CCB 460-68849/18			16:31																				
ZZZZZZ			16:44																				
ZZZZZZ			16:51																				
ICSA 460-68849/21	1		16:57	X	X	X	X	X	X	X													
ICSAB 460-68849/22	1		17:04	X	X	X	X	X	X	X													
CCV 460-68849/23			17:10																				
CCB 460-68849/24			17:17																				
ZZZZZZ			18:02																				
ZZZZZZ			18:12																				
ZZZZZZ			18:18																				
ZZZZZZ			18:25																				
ZZZZZZ			18:31																				
ZZZZZZ			18:38																				
ZZZZZZ			18:44																				
ZZZZZZ			18:50																				
ZZZZZZ			18:57																				
ZZZZZZ			19:03																				
CCV 460-68849/35	1		19:10	X	X	X	X	X	X	X													
CCB 460-68849/36	1		19:16	X	X	X	X	X	X	X													
MB 460-68537/1-A ^2	2	T	20:04	X	X	X	X	X	X	X													
LCSSRM 460-68537/2-A	4	T	20:11	X	X	X	X	X	X	X													
ZZZZZZ			20:17																				
ZZZZZZ			20:23																				
ZZZZZZ			20:30																				
ZZZZZZ			20:36																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: ICP2 Method: 6010B

Start Date: 03/29/2011 14:33 End Date: 03/30/2011 04:28

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Cd	Cr	Pb	Se													
ZZZZZZ			20:42																				
460-24356-1	4	T	20:49	X	X	X	X	X	X	X													
ICSA 460-68849/45	1		20:55	X	X	X	X	X	X	X													
ICSAB 460-68849/46	1		21:02	X	X	X	X	X	X	X													
CCV 460-68849/47	1		21:08	X	X	X	X	X	X	X													
CCB 460-68849/48	1		21:14	X	X	X	X	X	X	X													
ZZZZZZ			22:23																				
ZZZZZZ			22:29																				
ZZZZZZ			22:35																				
ZZZZZZ			22:42																				
ZZZZZZ			22:48																				
ZZZZZZ			22:55																				
ZZZZZZ			23:01																				
ICSA 460-68849/56			23:07																				
ICSAB 460-68849/57			23:14																				
CCV 460-68849/58			23:20																				
CCB 460-68849/59			23:27																				
ZZZZZZ			23:52																				
ZZZZZZ			23:59																				
ZZZZZZ			00:05																				
ZZZZZZ			00:12																				
ZZZZZZ			00:18																				
ZZZZZZ			00:24																				
ZZZZZZ			00:31																				
ZZZZZZ			00:37																				
ZZZZZZ			00:44																				
ZZZZZZ			00:50																				
CCV 460-68849/70			00:56																				
CCB 460-68849/71			01:03																				
ZZZZZZ			01:09																				
ICSA 460-68849/73	1		01:16	X	X	X	X	X	X	X													
ICSAB 460-68849/74	1		01:22	X	X	X	X	X	X	X													
CCV 460-68849/75	1		01:28	X	X	X	X	X	X	X													
CCB 460-68849/76	1		01:35	X	X	X	X	X	X	X													
460-24285-E-1-C DU ^4	4	T	01:41	X	X	X	X	X	X	X													
ZZZZZZ			01:48																				
460-24285-E-1-B SD ^5	20	T	01:54	X	X	X	X	X	X	X													
460-24285-E-1-D MS ^4	4	T	02:00	X	X	X	X	X	X	X													
ZZZZZZ			02:07																				
ZZZZZZ			02:13																				
ZZZZZZ			02:20																				
ZZZZZZ			02:26																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: ICP2 Method: 6010B

Start Date: 03/29/2011 14:33 End Date: 03/30/2011 04:28

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Cd	Cr	Pb	Se													
ZZZZZZ			02:32																				
ZZZZZZ			02:39																				
CCV 460-68849/87	1		02:45	X	X	X	X	X	X	X													
CCB 460-68849/88	1		02:52	X	X	X	X	X	X	X													
ZZZZZZ			02:58																				
ZZZZZZ			03:05																				
ZZZZZZ			03:11																				
ZZZZZZ			03:17																				
ZZZZZZ			03:24																				
ZZZZZZ			03:30																				
ZZZZZZ			03:37																				
ZZZZZZ			03:43																				
ZZZZZZ			03:49																				
CCV 460-68849/98			03:56																				
CCB 460-68849/99			04:02																				
ICSA 460-68849/100	1		04:09	X	X	X	X	X	X	X													
ICSAB 460-68849/101	1		04:15	X	X	X	X	X	X	X													
CCV 460-68849/102			04:21																				
CCB 460-68849/103			04:28																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: LEEMAN3 Method: 7471A

Start Date: 03/22/2011 12:20 End Date: 03/22/2011 14:37

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
STD01REP1 460-68141/1 IC			12:20	X																				
IC 460-68078/26-A			12:22	X																				
IC 460-68078/27-A			12:24	X																				
IC 460-68078/28-A			12:26	X																				
IC 460-68078/29-A			12:27	X																				
IC 460-68078/30-A			12:29	X																				
ICV 460-68078/31-A	1		12:31	X																				
ICB 460-68141/8	1		12:33	X																				
ZZZZZZ			12:35																					
ZZZZZZ			12:37																					
ZZZZZZ			12:39																					
ZZZZZZ			12:41																					
ZZZZZZ			12:43																					
ZZZZZZ			12:44																					
ZZZZZZ			12:46																					
ZZZZZZ			12:48																					
ZZZZZZ			12:50																					
CCV 460-68078/33-A			12:52																					
CCB 460-68141/19			12:54																					
ZZZZZZ			12:56																					
ZZZZZZ			12:57																					
ZZZZZZ			12:59																					
ZZZZZZ			13:01																					
ZZZZZZ			13:03																					
ZZZZZZ			13:04																					
ZZZZZZ			13:06																					
ZZZZZZ			13:08																					
CCV 460-68078/33-A			13:10																					
CCB 460-68141/29			13:12																					
ZZZZZZ			13:14																					
ZZZZZZ			13:15																					
ZZZZZZ			13:17																					
ZZZZZZ			13:19																					
ZZZZZZ			13:21																					
ZZZZZZ			13:23																					
ZZZZZZ			13:25																					
ZZZZZZ			13:27																					
ZZZZZZ			13:28																					
CCV 460-68078/33-A	1		13:30	X																				
CCB 460-68141/40	1		13:32	X																				
MB 460-68108/1-A	1	T	13:34	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: LEEMAN3 Method: 7471A

Start Date: 03/22/2011 12:20 End Date: 03/22/2011 14:37

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
LCSSRM 460-68108/2-A ^10	10	T	13:36	X																				
ZZZZZZ			13:37																					
460-24285-E-4-B DU	1	T	13:39	X																				
460-24285-E-4-C MS	1	T	13:41	X																				
ZZZZZZ			13:43																					
ZZZZZZ			13:45																					
ZZZZZZ			13:46																					
CCV 460-68078/33-A	1		13:48	X																				
CCB 460-68141/50	1		13:50	X																				
ZZZZZZ			13:52																					
ZZZZZZ			13:54																					
ZZZZZZ			13:55																					
ZZZZZZ			13:57																					
ZZZZZZ			13:59																					
ZZZZZZ			14:01																					
ZZZZZZ			14:03																					
ZZZZZZ			14:04																					
CCV 460-68078/33-A	1		14:06	X																				
CCB 460-68141/60	1		14:08	X																				
ZZZZZZ			14:10																					
ZZZZZZ			14:11																					
ZZZZZZ			14:13																					
ZZZZZZ			14:15																					
ZZZZZZ			14:17																					
ZZZZZZ			14:19																					
ZZZZZZ			14:21																					
ZZZZZZ			14:22																					
460-24285-E-4-A SD ^5	5	T	14:25	X																				
CCV 460-68078/33-A	1		14:26	X																				
CCB 460-68141/71	1		14:28	X																				
460-24356-1	50	T	14:30	X																				
ZZZZZZ			14:32																					
ZZZZZZ			14:34																					
CCV 460-68078/33-A	1		14:36	X																				
CCB 460-68141/76	1		14:37	X																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Instrument ID: ICAP3 Method: 6010B

Start Date: 03/28/2011 10:32 End Date: 03/28/2011 17:53

Lab Sample ID	D / F	Type	Time	Analytes																				
				S																				
ZZZZZZ			10:32																					
ZZZZZZ			10:35																					
ZZZZZZ			10:39																					
ZZZZZZ			10:46																					
ZZZZZZ			10:52																					
ZZZZZZ			10:55																					
ZZZZZZ			10:58																					
ZZZZZZ			11:02																					
ZZZZZZ			11:05																					
STD1 220-49146/10 IC			11:15	X																				
STD2 220-49146/11 IC			11:18	X																				
ICV 220-49146/12	1		11:22	X																				
ICB 220-49146/13	1		11:25	X																				
CRI 220-49146/14	1		11:28	X																				
ICSA 220-49146/15	1		11:32	X																				
ICSAB 220-49146/16	1		11:35																					
CCV 220-49146/17			11:39																					
CCB 220-49146/18			11:42																					
ZZZZZZ			11:45																					
ZZZZZZ			11:49																					
ZZZZZZ			11:52																					
ZZZZZZ			11:55																					
ZZZZZZ			11:58																					
ZZZZZZ			12:01																					
ZZZZZZ			12:04																					
ZZZZZZ			12:07																					
ZZZZZZ			12:10																					
ZZZZZZ			12:13																					
CCV 220-49146/29			12:17																					
CCB 220-49146/30			12:20																					
ZZZZZZ			12:23																					
ZZZZZZ			12:26																					
ZZZZZZ			12:29																					
ZZZZZZ			12:32																					
ZZZZZZ			12:36																					
ZZZZZZ			12:39																					
ZZZZZZ			12:43																					
ZZZZZZ			12:46																					
ZZZZZZ			12:49																					
ZZZZZZ			12:53																					
CCV 220-49146/41	1		12:56	X																				
CCB 220-49146/42	1		13:00	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Instrument ID: ICAP3 Method: 6010B

Start Date: 03/28/2011 10:32 End Date: 03/28/2011 17:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				S																			
ZZZZZZ			13:03																				
ZZZZZZ			13:06																				
ZZZZZZ			13:09																				
ZZZZZZ			13:13																				
ZZZZZZ			13:16																				
ZZZZZZ			13:20																				
ZZZZZZ			13:23																				
MB 220-49104/1-A	1	T	13:28	X																			
LCS 220-49104/2-A	1	T	13:31	X																			
460-24356-1	1	T	13:35	X																			
CCV 220-49146/53	1		13:38	X																			
CCB 220-49146/54	1		13:41	X																			
460-24356-1 DU	1	T	13:45	X																			
460-24356-1 MS	1	T	13:48	X																			
ZZZZZZ			13:51																				
460-24356-1 SD	5	T	13:54	X																			
ZZZZZZ			13:57																				
ZZZZZZ			14:01																				
ZZZZZZ			14:04																				
ZZZZZZ			14:07																				
ZZZZZZ			14:20																				
ZZZZZZ			14:23																				
CCV 220-49146/65	1		14:34	X																			
CCB 220-49146/66	1		14:37	X																			
ZZZZZZ			14:41																				
ZZZZZZ			14:44																				
ZZZZZZ			14:47																				
ZZZZZZ			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			14:58																				
ZZZZZZ			15:01																				
ZZZZZZ			15:05																				
ZZZZZZ			15:09																				
ZZZZZZ			15:13																				
CCV 220-49146/77			15:16																				
CCB 220-49146/78			15:20																				
ZZZZZZ			15:23																				
ZZZZZZ			15:29																				
ZZZZZZ			15:32																				
ZZZZZZ			15:35																				
ZZZZZZ			15:39																				
ZZZZZZ			15:43																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Instrument ID: ICAP3 Method: 6010B

Start Date: 03/28/2011 10:32 End Date: 03/28/2011 17:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				S																			
ZZZZZZ			15:47																				
ZZZZZZ			15:50																				
ZZZZZZ			15:55																				
ZZZZZZ			15:58																				
CCV 220-49146/89			16:02																				
CCB 220-49146/90			16:05																				
ZZZZZZ			16:08																				
ZZZZZZ			16:12																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:22																				
ZZZZZZ			16:25																				
ZZZZZZ			16:28																				
ZZZZZZ			16:32																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
CCV 220-49146/101			16:42																				
CCB 220-49146/102			16:46																				
ZZZZZZ			16:49																				
ZZZZZZ			16:52																				
ZZZZZZ			16:55																				
ZZZZZZ			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:07																				
ZZZZZZ			17:10																				
ZZZZZZ			17:14																				
ZZZZZZ			17:18																				
ZZZZZZ			17:21																				
CCV 220-49146/113			17:24																				
CCB 220-49146/114			17:28																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:38																				
ZZZZZZ			17:42																				
ZZZZZZ			17:46																				
CCV 220-49146/120			17:49																				
CCB 220-49146/121			17:53																				

Prep Types

T = Total/NA

BATCH:68849 68350V2-METHOD:200.7
68542V1-METHOD:6010B
68537V1-METHOD:6010B
68857V1-METHOD:200.7

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Analysis Report Summary 03/30/11 11:14:07 AM page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	ICV 901988	68350V2	SW846	03/29/11	14:59		S	CONC
2	ICB	68350V2	SW846	03/29/11	15:05		S	CONC
3	ICSA 901999	68350V2	SW846	03/29/11	15:12		S	CONC
4	ICSAB 902001	68350V2	SW846	03/29/11	15:18		S	CONC
5	INT-20	68350V2	SW846	03/29/11	15:33		S	CONC
6	REPLIM	68350V2	SW846	03/29/11	15:39		S	CONC
7	460-24413-F-6-A@2	68350V2	SW846	03/29/11	15:46		S	CONC
8	460-24463-A-1-A@2	68350V2	SW846	03/29/11	15:52		S	CONC
9	460-24477-F-4-A@5	68350V2	SW846	03/29/11	15:59		S	CONC
10	MB 460-68542/1-A@2	68350V2	SW846	03/29/11	16:05		S	CONC
11	LCSSRM 460-68542/2-A	68350V2	SW846	03/29/11	16:12		S	CONC
12	460-24354-A-1-A@4	68350V2	SW846	03/29/11	16:18		S	CONC
13	CCV 901988	68350V2	SW846	03/29/11	16:25		S	CONC
14	CCB	68350V2	SW846	03/29/11	16:31		S	CONC
15	MB 460-68350/1-A	68350V2	SW846	03/29/11	16:44		S	CONC
16	460-24354-A-3-A@4	68350V2	SW846	03/29/11	16:51		S	CONC
17	ICSA 901999	68350V2	SW846	03/29/11	16:57		S	CONC
18	ICSAB 902001	68350V2	SW846	03/29/11	17:04		S	CONC
19	CCV 901988	68350V2	SW846	03/29/11	17:10		S	CONC
20	CCB	68350V2	SW846	03/29/11	17:17		S	CONC
21	460-24329-A-14-B DU	68350V2	SW846	03/29/11	18:02		S	CONC
22	460-24329-A-14-A@4	68350V2	SW846	03/29/11	18:12		S	CONC
23	SD 460-24329-A-14-A	68350V2	SW846	03/29/11	18:18		S	CONC
24	460-24329-A-14-C MS	68350V2	SW846	03/29/11	18:25		S	CONC
25	PS 460-24329-A-14-A	68350V2	SW846	03/29/11	18:31		S	CONC
26	460-24329-A-12-A@4	68350V2	SW846	03/29/11	18:38		S	CONC
27	460-24329-A-13-A@4	68350V2	SW846	03/29/11	18:44		S	CONC
28	460-24329-A-15-A@4	68350V2	SW846	03/29/11	18:50		S	CONC
29	460-24329-A-16-A@4	68350V2	SW846	03/29/11	18:57		S	CONC
30	460-24329-A-17-A@4	68350V2	SW846	03/29/11	19:03		S	CONC
31	CCV 901988	68350V2	SW846	03/29/11	19:10		S	CONC
32	CCB	68350V2	SW846	03/29/11	19:16		S	CONC
33	MB 460-68537/1-A@2	68350V2	SW846	03/29/11	20:04		S	CONC
34	LCSSRM 460-68537/2-A	68350V2	SW846	03/29/11	20:11		S	CONC
35	460-24546-A-18-A@4	68350V2	SW846	03/29/11	20:17		S	CONC
36	460-24546-A-17-A@4	68350V2	SW846	03/29/11	20:23		S	CONC
37	460-24464-A-1-A@4	68350V2	SW846	03/29/11	20:30		S	CONC
38	460-24238-A-5-D@4	68350V2	SW846	03/29/11	20:36		S	CONC
39	460-24238-A-7-F@4	68350V2	SW846	03/29/11	20:42		S	CONC
40	460-24356-A-1-F@4	68350V2	SW846	03/29/11	20:49		S	CONC
41	ICSA 901999	68350V2	SW846	03/29/11	20:55		S	CONC
42	ICSAB 902001	68350V2	SW846	03/29/11	21:02		S	CONC
43	CCV 901988	68350V2	SW846	03/29/11	21:08		S	CONC
44	CCB	68350V2	SW846	03/29/11	21:14		S	CONC
45	MB 460-68857/1-A	68350V2	SW846	03/29/11	22:23		S	CONC
46	LCS 460-68857/2-A	68350V2	SW846	03/29/11	22:29		S	CONC
47	460-24122-A-4-D DU	68350V2	SW846	03/29/11	22:35		S	CONC
48	460-24122-A-4-C	68350V2	SW846	03/29/11	22:42		S	CONC
49	SD 460-24122-A-4-C@5	68350V2	SW846	03/29/11	22:48		S	CONC
50	460-24122-A-4-E MS	68350V2	SW846	03/29/11	22:55		S	CONC
51	PS 460-24122-A-4-C	68350V2	SW846	03/29/11	23:01		S	CONC
52	ICSA 901999	68350V2	SW846	03/29/11	23:07		S	CONC
53	ICSAB 902001	68350V2	SW846	03/29/11	23:14		S	CONC

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Analysis Report Summary 03/30/11 11:14:07 AM page 2

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	CCV 901988	68350V2	SW846	03/29/11	23:20		S	CONC
55	CCB	68350V2	SW846	03/29/11	23:27		S	CONC
56	460-24126-F-5-E@4	68350V2	SW846	03/29/11	23:52		S	CONC
57	460-24126-F-17-C@4	68350V2	SW846	03/29/11	23:59		S	CONC
58	460-24126-F-24-C@4	68350V2	SW846	03/30/11	00:05		S	CONC
59	460-24126-F-28-E@4	68350V2	SW846	03/30/11	00:12		S	CONC
60	460-24339-A-1-B@4	68350V2	SW846	03/30/11	00:18		S	CONC

61	460-24339-A-2-B@4	68350V2	SW846	03/30/11	00:24	S	CONC
62	460-24364-A-5-A@4	68350V2	SW846	03/30/11	00:31	S	CONC
63	460-24374-F-1-B@4	68350V2	SW846	03/30/11	00:37	S	CONC
64	460-24374-F-2-B@4	68350V2	SW846	03/30/11	00:44	S	CONC
65	460-24374-F-3-B@4	68350V2	SW846	03/30/11	00:50	S	CONC
66	CCV 901988	68350V2	SW846	03/30/11	00:56	S	CONC
67	CCB	68350V2	SW846	03/30/11	01:03	S	CONC
68	460-24364-A-7-C@4	68350V2	SW846	03/30/11	01:09	S	CONC
69	ICSA 901999	68350V2	SW846	03/30/11	01:16	S	CONC
70	ICSAB 902001	68350V2	SW846	03/30/11	01:22	S	CONC
71	CCV 901988	68350V2	SW846	03/30/11	01:28	S	CONC
72	CCB	68350V2	SW846	03/30/11	01:35	S	CONC
73	460-24285-E-1-C DU@4	68350V2	SW846	03/30/11	01:41	S	CONC
74	460-24285-E-1-B@4	68350V2	SW846	03/30/11	01:48	S	CONC
75	SD 460-24285-E-1-B@5	68350V2	SW846	03/30/11	01:54	S	CONC
76	460-24285-E-1-D MS@4	68350V2	SW846	03/30/11	02:00	S	CONC
77	PS 460-24285-E-1-B@4	68350V2	SW846	03/30/11	02:07	S	CONC
78	460-24256-E-1-B@4	68350V2	SW846	03/30/11	02:13	S	CONC
79	460-24285-E-2-B@4	68350V2	SW846	03/30/11	02:20	S	CONC
80	460-24285-E-3-B@4	68350V2	SW846	03/30/11	02:26	S	CONC
81	460-24285-E-4-D@4	68350V2	SW846	03/30/11	02:32	S	CONC
82	460-24285-E-5-B@4	68350V2	SW846	03/30/11	02:39	S	CONC
83	CCV 901988	68350V2	SW846	03/30/11	02:45	S	CONC
84	CCB	68350V2	SW846	03/30/11	02:52	S	CONC
85	460-24285-E-6-B@4	68350V2	SW846	03/30/11	02:58	S	CONC
86	460-24285-E-7-B@4	68350V2	SW846	03/30/11	03:05	S	CONC
87	460-24285-E-8-B@4	68350V2	SW846	03/30/11	03:11	S	CONC
88	460-24285-E-9-B@4	68350V2	SW846	03/30/11	03:17	S	CONC
89	460-24256-A-2-A@4	68350V2	SW846	03/30/11	03:24	S	CONC
90	460-24256-A-9-A@4	68350V2	SW846	03/30/11	03:30	S	CONC
91	460-24256-A-4-A@4	68350V2	SW846	03/30/11	03:37	S	CONC
92	460-24256-A-5-A@4	68350V2	SW846	03/30/11	03:43	S	CONC
93	460-24374-F-4-B@4	68350V2	SW846	03/30/11	03:49	S	CONC
94	CCV 901988	68350V2	SW846	03/30/11	03:56	S	CONC
95	CCB	68350V2	SW846	03/30/11	04:02	S	CONC
96	ICSA 901999	68350V2	SW846	03/30/11	04:09	S	CONC
97	ICSAB 902001	68350V2	SW846	03/30/11	04:15	S	CONC
98	CCV 901988	68350V2	SW846	03/30/11	04:21	S	CONC
99	CCB	68350V2	SW846	03/30/11	04:28	S	CONC

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#	Sample Name	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265
1	ICV 901988	129000.	H1058.	5241.	H10640.	1040.	2607.
2	ICB	22.57	-.5445	-1.506	3.441	.2181	.4531
3	ICSA 901999	484600.	-.1362	-2.655	5.119	-.0363	-2.936
4	ICSAB 902001	484400.	101.1	101.0	110.2	98.91	95.33
5	INT-20	-26.71	5.975	1.813	19040.	-1.764	-2.017
6	REPLIM	223.4	9.379	3.204	203.1	1.983	3.784
7	460-24413-F-6-A@2	26.94	-2.503	-1.098	923.5	.0211	-1.447
8	460-24463-A-1-A@2	19.05	-.4825	-.8403	11.41	.0152	-.1281
9	460-24477-F-4-A@5	16.10	2.142	-3.186	24.76	.0215	.1524
10	MB 460-68542/1-A@2	15.69	-.1640	-3.980	1.276	.0633	-.2913
11	LCSSRM 460-68542/2-A	45120.	956.3	536.9	1017.	382.6	307.5
12	460-24354-A-1-A@4	37930.	-2.170	37.67	188.1	2.113	-1.664
13	CCV 901988	124900.	1021.	5022.	10320.	977.1	2483.
14	CCB	20.56	.5589	-.3890	1.011	.0604	-.1832
15	MB 460-68350/1-A	7.536	-1.622	-2.350	-.2416	.0476	-.0446
16	460-24354-A-3-A@4	29580.	-.1431	90.24	87.48	2.187	-1.418
17	ICSA 901999	481300.	-3.824	-2.781	4.902	.0890	-2.905
18	ICSAB 902001	485900.	97.88	100.4	110.9	97.35	96.29
19	CCV 901988	125600.	1027.	5028.	10370.	970.0	2484.
20	CCB	50.61	1.035	-1.108	2.522	.1945	.0066
21	460-24329-A-14-B DU	46470.	.2060	33.13	238.2	1.987	-.7383
22	460-24329-A-14-A@4	52120.	1.986	31.78	247.8	2.131	-1.103
23	SD 460-24329-A-14-A	10940.	.5261	5.634	51.81	.5684	-.4633
24	460-24329-A-14-C MS	71420.	230.6	969.9	1205.	24.88	23.18
25	PS 460-24329-A-14-A	54540.	470.5	1951.	2195.	47.82	47.35
26	460-24329-A-12-A@4	34670.	1.921	44.71	192.9	2.469	-.7839
27	460-24329-A-13-A@4	61920.	3.155	34.60	288.9	2.628	-1.049
28	460-24329-A-15-A@4	58060.	1.760	35.80	299.4	3.103	-.9458
29	460-24329-A-16-A@4	25910.	.9169	23.55	139.6	1.415	-.5392
30	460-24329-A-17-A@4	47420.	1.888	47.34	327.1	2.026	-.6790
31	CCV 901988	125000.	1031.	5056.	10290.	958.9	2499.
32	CCB	49.69	-.0027	-1.715	1.502	.3087	.0277
33	MB 460-68537/1-A@2	46.56	.4659	-1.511	.1731	.3322	-.1445

34	LCSSRM 460-68537/2-A	50440.	941.4	542.9	1013.	373.3	312.1
35	460-24546-A-18-A@4	5316.	.0900	-.9981	13.91	.9082	-.6450
36	460-24546-A-17-A@4	5880.	-.1075	2.415	13.49	.6970	-.3199
37	460-24464-A-1-A@4	63210.	.3688	16.24	385.9	2.776	-1.170
38	460-24238-A-5-D@4	10550.	-.4885	55.09	18.55	1.980	-1.474
39	460-24238-A-7-F@4	18330.	-1.965	31.99	45.09	2.693	-1.313
40	460-24356-A-1-F@4	16480.	303.9	47.52	2322.	1.404	1.734
41	ICSA 901999	478200.	-2.482	-4.907	4.935	.4163	-2.249
42	ICSAB 902001	472700.	99.39	95.86	107.1	92.93	94.49
43	CCV 901988	123000.	1034.	5061.	10080.	938.5	2479.
44	CCB	70.12	1.231	.0921	1.769	.4912	.1740
45	MB 460-68857/1-A	60.60	.2069	-.9611	.1917	.4221	.1265
46	LCS 460-68857/2-A	1060.	252.4	1029.	990.7	23.33	25.25
47	460-24122-A-4-D DU	79.01	-2.122	-2.367	190.6	.4016	-.1541
48	460-24122-A-4-C	85.29	2.242	-3.327	186.1	.4162	.0118
49	SD 460-24122-A-4-C@5	58.70	.3720	-2.120	37.07	.3692	-.1785
50	460-24122-A-4-E MS	1085.	253.0	1026.	1185.	23.30	25.06
51	PS 460-24122-A-4-C	1133.	239.5	991.3	1144.	22.52	24.55
52	ICSA 901999	476800.	-2.097	-1.213	4.900	.4131	-1.918
53	ICSAB 902001	507100.	104.3	104.7	113.5	98.55	101.1

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#	Sample Name	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265
54	CCV 901988	124800.	1041.	5104.	10210.	944.1	2506.
55	CCB	65.25	1.715	-1.655	.5174	.4165	-.1765
56	460-24126-F-5-E@4	32100.	.0279	7.609	113.5	2.163	-1.009
57	460-24126-F-17-C@4	30510.	-2.130	16.16	195.8	2.261	-1.490
58	460-24126-F-24-C@4	21700.	-1.570	6.273	87.63	1.834	-.8926
59	460-24126-F-28-E@4	40140.	1.601	8.784	132.9	2.513	-1.463
60	460-24339-A-1-B@4	14320.	2.008	97.60	275.5	1.965	-.4123
61	460-24339-A-2-B@4	15240.	3.288	123.4	537.5	2.038	-.2239
62	460-24364-A-5-A@4	37050.	.0599	11.08	234.6	2.764	-.7153
63	460-24374-F-1-B@4	17270.	1.208	7.735	56.96	1.038	-.4864
64	460-24374-F-2-B@4	9378.	2.167	1.798	29.89	.8082	-.4603
65	460-24374-F-3-B@4	19700.	1.095	2.934	36.73	1.044	-.7866
66	CCV 901988	123200.	1043.	5080.	10030.	913.2	2456.
67	CCB	81.88	.1499	-1.166	1.428	.6526	-.0624
68	460-24364-A-7-C@4	48020.	3.842	22.95	178.8	5.420	-1.496
69	ICSA 901999	474900.	-2.785	.9362	4.882	.6955	-2.327
70	ICSAB 902001	472000.	100.2	103.2	105.7	90.75	94.13
71	CCV 901988	123700.	1048.	5099.	10010.	914.4	2469.
72	CCB	89.25	1.159	-2.895	1.276	.7235	-.2673
73	460-24285-E-1-C DU@4	23050.	2.629	15.30	104.9	2.213	-.3341
74	460-24285-E-1-B@4	22600.	2.638	15.25	94.47	2.185	-.5861
75	SD 460-24285-E-1-B@5	4641.	1.393	2.126	19.04	.9851	-.2827
76	460-24285-E-1-D MS@4	29420.	253.1	1019.	1096.	25.13	24.46
77	PS 460-24285-E-1-B@4	24420.	435.5	1713.	1810.	42.19	42.59
78	460-24256-E-1-B@4	21100.	2.116	8.601	130.7	2.068	-.8446
79	460-24285-E-2-B@4	22670.	8.077	33.02	149.4	2.289	-.5948
80	460-24285-E-3-B@4	23250.	1.604	17.14	106.9	2.244	-.1047
81	460-24285-E-4-D@4	48770.	2.304	13.97	85.03	1.438	-1.233
82	460-24285-E-5-B@4	44270.	.2896	18.40	106.8	1.743	-1.737
83	CCV 901988	122100.	1046.	5097.	9870.	907.7	2462.
84	CCB	94.21	.5704	-3.644	1.848	.7733	.0113
85	460-24285-E-6-B@4	41710.	-.2894	25.03	77.04	1.726	-1.906
86	460-24285-E-7-B@4	19110.	6.621	16.29	128.3	2.213	-.3973
87	460-24285-E-8-B@4	18970.	3.414	15.97	644.3	1.913	.0395
88	460-24285-E-9-B@4	18910.	5.033	15.13	108.0	2.338	-.4113
89	460-24256-A-2-A@4	19510.	1.726	3.743	105.4	1.696	-1.046
90	460-24256-A-9-A@4	43980.	.0366	20.13	151.5	3.159	-1.428
91	460-24256-A-4-A@4	52330.	-1.080	22.58	255.2	3.536	-1.359
92	460-24256-A-5-A@4	30630.	.6019	17.35	121.3	2.254	-1.144
93	460-24374-F-4-B@4	25360.	1.447	5.304	75.74	1.449	-.5454
94	CCV 901988	121600.	1048.	5102.	9835.	904.3	2455.
95	CCB	94.62	.6292	-1.183	2.450	.8008	-.1309
96	ICSA 901999	471400.	1.629	-1.929	4.838	.7879	-2.572
97	ICSAB 902001	468700.	106.4	100.6	104.4	89.79	93.26
98	CCV 901988	122300.	1051.	5123.	9849.	909.9	2468.
99	CCB	104.0	2.006	-1.458	1.656	.8126	-.1114

#	Sample Name	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg3832
1	ICV 901988	129800.	5256.	2589.	12840.	103400.	128700.
2	ICB	25.20	1.199	.2925	4.033	22.70	34.04
3	ICSA 901999	465300.	5.868	-.8595	-3.824	196000.	523300.

4	ICSAB 902001	463400.	104.8	97.78	103.1	195400.	523300.

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#	Sample Name	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg3832
5	INT-20	34.81	20390.	20600.	-1.487	-164.8	32.87
6	REPLIM	5210.	11.18	50.65	24.81	152.4	4848.
7	460-24413-F-6-A@2	41790.	1.071	2.432	-.9791	63680.	20270.
8	460-24463-A-1-A@2	36400.	.4165	.2287	6.137	266.6	2275.
9	460-24477-F-4-A@5	23650.	.0614	5.472	1.352	34.94	7545.
10	MB 460-68542/1-A@2	-3.847	.4528	-.6649	-.4666	-3.169	5.968
11	LCSSRM 460-68542/2-A	51220.	1219.	482.7	886.7	92460.	19240.
12	460-24354-A-1-A@4	32390.	92.97	18.00	60.13	95540.	13740.
13	CCV 901988	124900.	5087.	2506.	12410.	96910.	124400.
14	CCB	-6.201	-.4893	-.9276	-.5713	-16.00	10.37
15	MB 460-68350/1-A	-4.345	-.7436	-.6603	-.9814	-11.46	2.517
16	460-24354-A-3-A@4	3928.	73.93	6.035	21.15	76840.	3817.
17	ICSA 901999	462400.	6.258	-.1994	-2.858	189700.	519700.
18	ICSAB 902001	464500.	106.1	98.97	102.3	191300.	525000.
19	CCV 901988	124500.	5072.	2504.	12470.	96200.	125000.
20	CCB	10.50	.2506	-.2748	.0263	-2.825	28.93
21	460-24329-A-14-B DU	3989.	120.1	8.316	33.16	64990.	2856.
22	460-24329-A-14-A@4	4086.	117.6	8.677	32.17	71860.	2909.
23	SD 460-24329-A-14-A	847.7	24.62	1.253	6.842	15060.	614.3
24	460-24329-A-14-C MS	13850.	199.3	248.0	151.1	61910.	12450.
25	PS 460-24329-A-14-A	24110.	310.4	494.9	271.8	72300.	21790.
26	460-24329-A-12-A@4	6501.	73.12	10.36	60.02	62690.	3624.
27	460-24329-A-13-A@4	6342.	96.19	14.61	56.57	68690.	5833.
28	460-24329-A-15-A@4	7344.	102.9	19.46	49.04	78410.	11020.
29	460-24329-A-16-A@4	1980.	44.02	5.952	25.39	39470.	2235.
30	460-24329-A-17-A@4	1700.	60.67	10.83	36.56	45570.	3223.
31	CCV 901988	124500.	5060.	2509.	12380.	94760.	124500.
32	CCB	-6.558	-.0487	-.4607	-.6372	.3387	3.137
33	MB 460-68537/1-A@2	-9.423	-.2929	-.9568	-1.604	-10.06	1.835
34	LCSSRM 460-68537/2-A	51900.	1206.	486.1	881.6	95960.	19760.
35	460-24546-A-18-A@4	314.2	4.845	3.539	5.598	12540.	570.3
36	460-24546-A-17-A@4	370.8	9.294	4.180	5.305	13020.	883.2
37	460-24464-A-1-A@4	11730.	81.24	34.67	92.78	86090.	11350.
38	460-24238-A-5-D@4	301.8	108.9	13.30	16.05	114000.	2552.
39	460-24238-A-7-F@4	838.2	240.7	17.67	17.89	86170.	3823.
40	460-24356-A-1-F@4	20060.	96.58	15.56	2598.	53420.	8010.
41	ICSA 901999	464900.	6.337	-.3105	-3.523	183300.	516500.
42	ICSAB 902001	458600.	103.8	97.53	98.16	181600.	510200.
43	CCV 901988	124500.	5027.	2502.	12150.	92780.	122400.
44	CCB	3.726	.0587	.2069	-.1522	2.657	21.59
45	MB 460-68857/1-A	-3.265	-.1262	-.1235	-.5673	-.1753	7.390
46	LCS 460-68857/2-A	10300.	98.05	249.1	119.5	442.6	9664.
47	460-24122-A-4-D DU	35920.	-.9900	-.5401	.9261	384.8	17400.
48	460-24122-A-4-C	35250.	-.0226	.2489	1.300	395.6	17010.
49	SD 460-24122-A-4-C@5	6968.	-.2407	.0399	-.5905	67.39	3298.
50	460-24122-A-4-E MS	45930.	98.55	247.8	118.7	866.7	27070.
51	PS 460-24122-A-4-C	44930.	96.24	241.2	117.3	973.7	26390.
52	ICSA 901999	460000.	5.771	-.5200	-4.028	181300.	514200.
53	ICSAB 902001	492700.	111.2	104.9	106.0	192100.	546700.
54	CCV 901988	125800.	5076.	2529.	12300.	93090.	123800.
55	CCB	-9.148	-.1946	-.2174	-1.515	-13.77	12.32
56	460-24126-F-5-E@4	5218.	55.34	30.39	81.42	66990.	14670.
57	460-24126-F-17-C@4	35480.	53.04	45.73	134.4	105000.	31220.
58	460-24126-F-24-C@4	8382.	56.18	27.50	67.90	64720.	10350.

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#	Sample Name	Ca3179	Cr2677	Co2286	Cu3247	Fe2714	Mg3832
59	460-24126-F-28-E@4	8151.	79.20	41.18	83.12	91080.	23650.
60	460-24339-A-1-B@4	28530.	143.0	13.27	79.41	57890.	7651.
61	460-24339-A-2-B@4	35030.	272.2	12.52	112.9	51520.	8414.
62	460-24364-A-5-A@4	12710.	67.87	10.66	61.12	55140.	3982.
63	460-24374-F-1-B@4	1751.	31.93	2.889	54.50	23380.	1148.
64	460-24374-F-2-B@4	273.8	27.91	.5025	3.550	7100.	294.8
65	460-24374-F-3-B@4	215.4	29.68	1.951	8.444	18970.	511.7
66	CCV 901988	124300.	5014.	2505.	12140.	89870.	122100.
67	CCB	-10.14	.1343	-.3655	-.9819	-5.531	20.83
68	460-24364-A-7-C@4	13490.	93.79	30.16	150.2	106400.	5586.
69	ICSA 901999	461400.	5.397	-.5351	-4.790	176800.	510300.
70	ICSAB 902001	463000.	104.8	99.40	96.61	176200.	506600.

71	CCV 901988	125500.	5053.	2524.	12160.	90170.	122500.
72	CCB	-2.715	-.6628	-.9823	-1.222	-37.30	10.75
73	460-24285-E-1-C DU@4	16350.	56.21	22.09	36.85	44930.	6299.
74	460-24285-E-1-B@4	7148.	52.92	16.58	33.97	44960.	6712.
75	SD 460-24285-E-1-B@5	1431.	10.52	2.711	5.850	9044.	1362.
76	460-24285-E-1-D MS@4	16560.	162.2	270.3	159.2	48470.	16190.
77	PS 460-24285-E-1-B@4	25970.	237.8	478.3	252.3	45210.	24150.
78	460-24256-E-1-B@4	2801.	41.07	11.81	31.73	41300.	6752.
79	460-24285-E-2-B@4	44980.	57.48	15.96	382.5	67100.	6533.
80	460-24285-E-3-B@4	14850.	53.40	17.16	44.88	49710.	8085.
81	460-24285-E-4-D@4	1653.	65.49	5.338	16.15	64810.	714.1
82	460-24285-E-5-B@4	4362.	70.21	7.202	26.74	72830.	1815.
83	CCV 901988	124900.	5026.	2514.	12000.	L89430.	120800.
84	CCB	-6.691	-.0855	-.5357	-1.267	-5.080	3.325
85	460-24285-E-6-B@4	2653.	93.20	6.814	16.14	93790.	622.0
86	460-24285-E-7-B@4	17670.	54.58	15.50	64.56	44840.	4662.
87	460-24285-E-8-B@4	71830.	60.88	11.59	47.88	42200.	15620.
88	460-24285-E-9-B@4	189100.	40.12	15.95	110.3	48210.	101200.
89	460-24256-A-2-A@4	3403.	40.46	14.73	31.45	43710.	8363.
90	460-24256-A-9-A@4	7971.	87.97	31.08	44.42	82030.	16750.
91	460-24256-A-4-A@4	8876.	98.02	38.37	52.78	82970.	17170.
92	460-24256-A-5-A@4	7123.	63.52	14.13	36.12	53610.	11420.
93	460-24374-F-4-B@4	340.9	41.12	3.217	9.604	20410.	1134.
94	CCV 901988	124100.	4995.	2502.	11960.	L89310.	120200.
95	CCB	-10.73	-.2282	-.4824	-1.831	-9.640	8.440
96	ICSA 901999	464500.	5.734	-.2126	-5.007	176200.	506100.
97	ICSAB 902001	463000.	104.4	99.12	95.70	175000.	502300.
98	CCV 901988	125700.	5053.	2529.	11990.	89920.	120800.
99	CCB	2.000	-.3262	-.4622	-.9835	-10.54	14.24

#	Sample Name	Mn2576	Ni2316	K_7664	Ag3280	Pb2203	Se1960
1	ICV 901988	5195.	2610.	51110.	1289.	10450.	5131.
2	ICB	1.094	.7662	172.0	.3250	2.764	.8380
3	ICSA 901999	-6.619	-2.901	126.1	.1247	-1.498	8.247
4	ICSAB 902001	94.49	95.38	10350.	104.8	96.66	104.7
5	INT-20	19380.	69.26	129.4	-5.541	8.354	-7.398
6	REPLIM	15.85	40.45	4501.	8.014	6.439	3.228
7	460-24413-F-6-A@2	H10410.	-.5930	5829.	-7.265	3.404	2.916
8	460-24463-A-1-A@2	6.425	3.096	3106.	-.4890	.0399	-.4534
9	460-24477-F-4-A@5	4551.	7.595	1930.	-2.863	-.1407	-.2955

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#	Sample Name	Mn2576	Ni2316	K_7664	Ag3280	Pb2203	Se1960
10	MB 460-68542/1-A@2	-.0478	-.3589	105.6	-.5589	1.123	-.2862
11	LCSSRM 460-68542/2-A	2854.	702.8	20550.	154.7	440.5	1449.
12	460-24354-A-1-A@4	666.3	70.47	4116.	-.6886	88.39	3.010
13	CCV 901988	4970.	2498.	49680.	1254.	10040.	4950.
14	CCB	.0046	-.4225	100.6	-.3597	.3277	-.3889
15	MB 460-68350/1-A	-.2949	.2960	32.73	.3052	-.2263	.1511
16	460-24354-A-3-A@4	234.7	18.73	4241.	-.6349	34.16	4.061
17	ICSA 901999	-6.545	-2.606	111.1	.6149	-2.347	2.375
18	ICSAB 902001	93.83	95.39	10480.	106.0	96.45	104.1
19	CCV 901988	4950.	2498.	50220.	1261.	9973.	4937.
20	CCB	.1782	-.3649	83.66	-.2602	.7884	-.4828
21	460-24329-A-14-B DU	357.6	22.83	1802.	-.8995	83.10	4.228
22	460-24329-A-14-A@4	343.3	25.01	1962.	-.5727	80.79	4.845
23	SD 460-24329-A-14-A	71.19	4.695	474.4	-.5813	17.55	.7796
24	460-24329-A-14-C MS	585.6	268.8	10840.	23.58	313.2	905.1
25	PS 460-24329-A-14-A	822.1	509.6	20460.	52.83	550.6	1846.
26	460-24329-A-12-A@4	509.1	20.49	2204.	-.3994	52.88	4.442
27	460-24329-A-13-A@4	554.8	37.03	2366.	-.9007	87.52	2.780
28	460-24329-A-15-A@4	674.2	46.60	6198.	-.9769	87.69	3.427
29	460-24329-A-16-A@4	284.9	14.23	1203.	-.4128	65.09	2.034
30	460-24329-A-17-A@4	539.5	24.42	1468.	-.4467	80.46	2.730
31	CCV 901988	4911.	2512.	49990.	1260.	9895.	4889.
32	CCB	.1164	.4549	69.86	-.1956	-.4486	.7396
33	MB 460-68537/1-A@2	-.2592	-.8139	93.93	-.2015	1.903	-.2390
34	LCSSRM 460-68537/2-A	2895.	705.7	21550.	153.8	455.9	1450.
35	460-24546-A-18-A@4	376.7	4.523	327.1	-.6867	5.283	.9518
36	460-24546-A-17-A@4	294.6	5.160	476.6	.2364	5.354	-.3567
37	460-24464-A-1-A@4	2173.	56.26	2167.	-2.174	395.5	3.246
38	460-24238-A-5-D@4	230.0	30.85	1390.	-.0310	22.97	2.821
39	460-24238-A-7-F@4	241.8	38.22	3376.	-.8290	20.92	2.446
40	460-24356-A-1-F@4	747.6	389.6	2100.	9.247	1188.	4.254

41	ICSA 901999	-6.406	-2.187	118.7	-.9587	-1.437	-.0438
42	ICSAB 902001	91.14	93.92	10290.	102.8	94.63	100.3
43	CCV 901988	4858.	2491.	49710.	1249.	9827.	4881.
44	CCB	.2102	.5111	108.3	.1897	.7532	-.1949
45	MB 460-68857/1-A	-.1756	.9198	65.98	-.3720	.0985	-2.145
46	LCS 460-68857/2-A	242.8	251.1	10260.	24.72	243.9	1026.
47	460-24122-A-4-D DU	149.3	2.404	4389.	-1.440	.4341	2.602
48	460-24122-A-4-C	146.3	3.061	4275.	-.7520	.9687	2.000
49	SD 460-24122-A-4-C@5	28.57	.5490	757.0	-.1137	.5970	.4179
50	460-24122-A-4-E MS	391.2	250.7	15110.	25.37	243.6	1023.
51	PS 460-24122-A-4-C	382.7	244.3	14650.	26.46	238.4	981.6
52	ICSA 901999	-6.427	-2.146	75.56	-.0366	-2.453	-.5704
53	ICSAB 902001	97.85	99.80	11110.	109.8	101.2	102.9
54	CCV 901988	4896.	2514.	50570.	1262.	9910.	4930.
55	CCB	-.1716	-.0711	74.53	-.7844	1.017	-.9095
56	460-24126-F-5-E@4	1301.	53.42	2783.	-.8785	21.03	.6880
57	460-24126-F-17-C@4	712.9	69.28	15300.	-1.327	35.37	1.645
58	460-24126-F-24-C@4	580.3	50.87	2472.	-.4098	23.08	1.753
59	460-24126-F-28-E@4	1395.	67.16	3216.	-2.752	37.15	.4694
60	460-24339-A-1-B@4	320.1	30.78	1957.	-.3777	161.7	3.517
61	460-24339-A-2-B@4	309.7	31.35	2008.	-1.027	178.4	5.476
62	460-24364-A-5-A@4	432.8	34.28	2942.	-.8479	95.78	-.8898
63	460-24374-F-1-B@4	62.99	9.563	461.2	-.5076	91.32	3.508

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#	Sample Name	Mn2576	Ni2316	K_7664	Ag3280	Pb2203	Se1960
64	460-24374-F-2-B@4	20.37	3.236	320.4	-.7385	37.66	2.228
65	460-24374-F-3-B@4	35.42	6.590	591.7	-.0530	19.13	.0239
66	CCV 901988	4809.	2476.	50680.	1256.	9704.	4875.
67	CCB	.0343	.5480	94.18	-.0201	.7829	1.743
68	460-24364-A-7-C@4	1017.	69.83	3155.	-.5277	126.0	-.0500
69	ICSA 901999	-6.382	-3.118	84.70	.1202	-1.244	-1.790
70	ICSAB 902001	90.77	93.44	10440.	104.2	92.59	93.18
71	CCV 901988	4833.	2488.	50990.	1259.	9743.	4884.
72	CCB	-.0857	-.5652	107.8	-1.438	1.123	1.234
73	460-24285-E-1-C DU@4	453.8	32.12	3691.	-.4692	181.3	1.619
74	460-24285-E-1-B@4	395.4	33.65	3503.	-1.240	162.3	.3807
75	SD 460-24285-E-1-B@5	79.08	6.607	705.6	-.4273	33.00	.1207
76	460-24285-E-1-D MS@4	655.2	287.3	14550.	24.68	410.4	947.8
77	PS 460-24285-E-1-B@4	834.6	473.7	19600.	48.06	573.0	1605.
78	460-24256-E-1-B@4	271.9	33.80	2313.	-.7563	21.68	3.788
79	460-24285-E-2-B@4	381.1	39.66	3671.	-.6111	505.1	1.619
80	460-24285-E-3-B@4	461.6	33.74	3824.	-.7243	198.2	-1.923
81	460-24285-E-4-D@4	77.86	20.89	724.4	-.2121	35.61	-.8345
82	460-24285-E-5-B@4	135.2	25.19	1048.	-1.388	63.85	1.624
83	CCV 901988	4802.	2483.	50560.	1251.	9719.	4877.
84	CCB	.0663	.4185	91.15	-1.009	.3958	.7029
85	460-24285-E-6-B@4	118.7	22.31	403.0	-.2473	42.72	.7387
86	460-24285-E-7-B@4	382.4	27.18	2651.	-.6206	272.1	-.0681
87	460-24285-E-8-B@4	464.2	26.28	4004.	-.3093	344.8	-1.903
88	460-24285-E-9-B@4	700.3	23.75	3129.	-.6465	231.4	.9405
89	460-24256-A-2-A@4	309.4	38.92	2979.	-.5416	32.80	1.070
90	460-24256-A-9-A@4	1206.	72.07	6432.	-1.329	40.92	1.029
91	460-24256-A-4-A@4	972.9	83.95	6577.	.0178	69.49	2.845
92	460-24256-A-5-A@4	868.8	42.29	4838.	-.9740	32.68	1.274
93	460-24374-F-4-B@4	55.14	10.20	859.5	.3631	25.56	2.365
94	CCV 901988	4772.	2475.	50840.	1248.	9644.	4858.
95	CCB	.0330	.3026	62.09	-.3421	1.810	1.606
96	ICSA 901999	-6.285	-3.007	102.1	.1611	-2.415	-7.442
97	ICSAB 902001	90.54	92.60	10510.	103.9	91.91	90.95
98	CCV 901988	4823.	2487.	50840.	1253.	9741.	4898.
99	CCB	-.0244	-.8124	93.40	-2.028	1.846	1.781

#	Sample Name	Na3302	Tl1908	V_2924	Zn2062	B_2496	Mo2020
1	ICV 901988	128300.	5185.	2605.	2607.	1034.	2589.
2	ICB	245.2	7.392	.6598	.9609	2.738	5.107
3	ICSA 901999	219.1	.8661	1.664	-.0382	-4.943	4.818
4	ICSAB 902001	9781.	95.29	103.2	98.82	95.81	105.2
5	INT-20	-1614.	-8.082	20060.	4988.	9812.	5172.
6	REPLIM	4612.	7.842	51.86	36.14	63.17	27.64
7	460-24413-F-6-A@2	121200.	-1.462	1.474	-1.751	71.33	6.663
8	460-24463-A-1-A@2	122000.	1.732	.5108	10.48	10.32	.7836
9	460-24477-F-4-A@5	35400.	-1.064	-.1042	9.441	20.45	1.064
10	MB 460-68542/1-A@2	238.4	-3.642	.3279	.1843	11.43	2.221

11	LCSSRM 460-68542/2-A	4735.	650.4	602.3	3142.	708.9	272.9
12	460-24354-A-1-A@4	1176.	-.3118	145.8	150.5	29.08	11.71
13	CCV 901988	125700.	4955.	2515.	2413.	994.7	2455.
14	CCB	138.6	3.191	-.2866	-.6607	1.451	1.817

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#	Sample Name	Na3302	Tl1908	V_2924	Zn2062	B_2496	Mo2020
15	MB 460-68350/1-A	134.2	.2692	-.3270	-.1747	-.7847	-.2063
16	460-24354-A-3-A@4	265.9	.6919	122.3	80.58	29.28	11.45
17	ICSA 901999	230.9	-7.311	2.361	-1.689	-4.161	6.503
18	ICSAB 902001	9870.	95.34	104.1	97.29	97.08	107.9
19	CCV 901988	126700.	4953.	2504.	2392.	999.7	2457.
20	CCB	192.9	2.830	.3460	-.2474	.1432	1.665
21	460-24329-A-14-B DU	155.2	-1.758	114.7	105.7	17.73	9.153
22	460-24329-A-14-A@4	115.6	-1.987	128.1	113.9	22.25	9.646
23	SD 460-24329-A-14-A	198.7	-2.001	26.62	23.07	4.497	2.947
24	460-24329-A-14-C MS	8825.	937.3	344.8	361.5	248.1	240.8
25	PS 460-24329-A-14-A	18340.	1900.	598.8	598.4	498.5	477.7
26	460-24329-A-12-A@4	198.0	1.118	102.3	126.6	12.39	9.659
27	460-24329-A-13-A@4	237.4	-1.377	125.3	135.0	15.16	9.737
28	460-24329-A-15-A@4	303.8	.4103	138.3	163.6	10.89	11.81
29	460-24329-A-16-A@4	435.7	-.5027	75.02	99.36	8.757	4.847
30	460-24329-A-17-A@4	220.8	-1.990	89.70	111.5	7.709	6.655
31	CCV 901988	126200.	4954.	2474.	2382.	998.5	2439.
32	CCB	212.9	3.132	.1977	-.4067	.1813	2.804
33	MB 460-68537/1-A@2	206.4	-.4009	-.4132	.4363	7.597	.7470
34	LCSSRM 460-68537/2-A	4607.	639.2	607.8	3110.	713.8	272.4
35	460-24546-A-18-A@4	235.7	-.1628	6.565	11.73	6.088	2.640
36	460-24546-A-17-A@4	195.9	-1.488	10.41	13.42	6.509	2.556
37	460-24464-A-1-A@4	718.5	-2.410	194.4	425.8	15.12	11.48
38	460-24238-A-5-D@4	162.8	-.8944	126.6	98.98	11.04	13.44
39	460-24238-A-7-F@4	747.6	-.8098	91.86	100.9	27.27	12.59
40	460-24356-A-1-F@4	5192.	-.6712	61.83	1838.	19.38	7.699
41	ICSA 901999	209.7	-9.039	2.859	-.7848	-5.496	6.677
42	ICSAB 902001	9664.	89.65	100.1	92.35	94.61	106.0
43	CCV 901988	124300.	4914.	2430.	2351.	985.4	2420.
44	CCB	171.1	5.170	.4036	-.2965	.6126	2.484
45	MB 460-68857/1-A	178.4	1.450	.1044	.0576	1.130	1.114
46	LCS 460-68857/2-A	9354.	1005.	238.4	251.2	247.7	242.9
47	460-24122-A-4-D DU	76710.	.4244	.5857	196.4	18.16	.5914
48	460-24122-A-4-C	75090.	.9548	.1345	191.9	18.00	1.790
49	SD 460-24122-A-4-C@5	13920.	-.5186	-.0163	37.15	3.353	.9957
50	460-24122-A-4-E MS	86660.	991.6	238.0	442.8	265.7	240.6
51	PS 460-24122-A-4-C	84550.	960.5	231.1	443.3	257.5	233.7
52	ICSA 901999	195.3	-4.206	2.681	-1.330	-5.408	7.414
53	ICSAB 902001	10400.	94.35	107.9	99.53	99.92	110.5
54	CCV 901988	126000.	4979.	2446.	2354.	997.3	2443.
55	CCB	152.3	3.395	.2396	-.8858	1.321	1.341
56	460-24126-F-5-E@4	891.6	-2.760	111.5	118.4	11.52	8.079
57	460-24126-F-17-C@4	2121.	1.462	200.9	87.62	130.9	12.47
58	460-24126-F-24-C@4	624.2	-2.010	105.9	110.1	10.53	8.058
59	460-24126-F-28-E@4	904.4	-2.195	133.3	214.4	10.56	10.60
60	460-24339-A-1-B@4	196.6	-1.157	67.19	255.3	22.39	11.27
61	460-24339-A-2-B@4	409.0	-1.562	71.51	253.1	23.38	9.731
62	460-24364-A-5-A@4	285.8	-.4699	151.2	183.6	12.26	7.184
63	460-24374-F-1-B@4	147.4	-1.012	61.33	46.32	7.468	5.607
64	460-24374-F-2-B@4	73.80	-.9409	27.50	18.65	6.453	2.855
65	460-24374-F-3-B@4	85.90	-3.566	41.59	13.47	6.087	3.837
66	CCV 901988	125000.	4912.	2396.	2286.	977.0	2406.
67	CCB	135.6	4.940	.2224	-.5039	1.218	1.861
68	460-24364-A-7-C@4	249.1	-2.938	243.6	133.4	14.66	15.22

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#	Sample Name	Na3302	Tl1908	V_2924	Zn2062	B_2496	Mo2020
69	ICSA 901999	135.8	-7.286	3.030	-1.499	-4.407	8.005
70	ICSAB 902001	9846.	86.76	99.90	92.87	92.35	103.8
71	CCV 901988	125600.	4932.	2406.	2305.	976.9	2416.
72	CCB	312.3	3.515	-.0176	-1.271	-1.099	1.505
73	460-24285-E-1-C DU@4	434.3	1.321	65.75	332.6	26.35	7.247
74	460-24285-E-1-B@4	404.5	-2.217	63.35	306.2	22.29	6.746
75	SD 460-24285-E-1-B@5	194.2	-.4316	12.80	60.87	4.040	1.754
76	460-24285-E-1-D MS@4	9608.	987.5	309.4	569.0	272.6	247.3
77	PS 460-24285-E-1-B@4	16820.	1591.	495.5	729.1	428.4	435.2

78	460-24256-E-1-B@4	309.4	.4952	53.40	130.3	16.10	6.193
79	460-24285-E-2-B@4	1757.	-1.732	72.65	351.6	25.52	11.05
80	460-24285-E-3-B@4	442.8	.4898	64.19	250.9	25.74	7.934
81	460-24285-E-4-D@4	1153.	-1.084	62.24	22.60	5.553	10.05
82	460-24285-E-5-B@4	819.1	-3.649	97.26	51.31	4.551	10.50
83	CCV 901988	124200.	4908.	2374.	2308.	969.7	2412.
84	CCB	103.9	4.312	.4456	-.4236	.2893	2.414
85	460-24285-E-6-B@4	536.2	-.0065	107.9	29.46	4.143	15.36
86	460-24285-E-7-B@4	327.7	-.8047	80.82	266.2	17.93	7.379
87	460-24285-E-8-B@4	433.8	-1.189	71.62	368.6	28.32	6.490
88	460-24285-E-9-B@4	327.7	-2.405	60.24	188.8	24.45	5.131
89	460-24256-A-2-A@4	218.3	-.8642	56.08	125.4	20.97	5.469
90	460-24256-A-9-A@4	925.2	-1.606	115.2	203.8	47.49	12.10
91	460-24256-A-4-A@4	1103.	-2.115	118.9	258.5	56.46	12.21
92	460-24256-A-5-A@4	1064.	-1.945	82.30	116.8	77.19	8.468
93	460-24374-F-4-B@4	46.56	-2.276	51.02	27.91	10.70	4.419
94	CCV 901988	123800.	4911.	2358.	2311.	971.9	2420.
95	CCB	139.8	3.931	.0763	-.8471	.3183	2.587
96	ICSA 901999	220.2	-7.532	3.504	-.4112	-5.058	6.374
97	ICSAB 902001	9839.	88.29	99.39	91.24	92.72	103.7
98	CCV 901988	124400.	4926.	2380.	2329.	972.8	2432.
99	CCB	107.8	3.114	.4933	-.5766	1.057	1.712

#	Sample Name	Sn1899	Ti3349	*Y
1	ICV 901988	1040.	10370.	1031.99
2	ICB	2.076	2.118	1107.13
3	ICSA 901999	.8602	-4.430	1021.52
4	ICSAB 902001	91.64	100.2	1013.42
5	INT-20	81.60	19980.	1084.97
6	REPLIM	50.71	21.27	1068.44
7	460-24413-F-6-A@2	.7376	.4753	1089.8
8	460-24463-A-1-A@2	.9863	-.0202	1084.67
9	460-24477-F-4-A@5	.4643	-.0435	1082.32
10	MB 460-68542/1-A@2	.8917	-.5043	1070.87
11	LCSSRM 460-68542/2-A	535.5	2357.	1124.15
12	460-24354-A-1-A@4	6.120	873.0	1108.38
13	CCV 901988	940.6	10060.	1054.97
14	CCB	1.512	.3165	1088.64
15	MB 460-68350/1-A	.3177	-.1861	1149.01
16	460-24354-A-3-A@4	2.989	406.9	1123.15
17	ICSA 901999	.0730	-4.551	1014.25
18	ICSAB 902001	90.30	101.1	1005.13
19	CCV 901988	929.3	10070.	1048.46

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#	Sample Name	Sn1899	Ti3349	*Y
20	CCB	.5443	.4035	1093.09
21	460-24329-A-14-B DU	3.311	794.3	1135.43
22	460-24329-A-14-A@4	4.231	844.0	1147.91
23	SD 460-24329-A-14-A	2.199	175.2	1103.14
24	460-24329-A-14-C MS	220.4	992.2	1131.68
25	PS 460-24329-A-14-A	439.6	1344.	1128.79
26	460-24329-A-12-A@4	4.264	549.9	1136.32
27	460-24329-A-13-A@4	5.074	762.5	1163.13
28	460-24329-A-15-A@4	5.299	966.5	1139.1
29	460-24329-A-16-A@4	2.533	379.8	1142.75
30	460-24329-A-17-A@4	5.249	434.4	1178.85
31	CCV 901988	906.7	10010.	1055.48
32	CCB	1.315	.3600	1100.03
33	MB 460-68537/1-A@2	1.999	-.5354	1086.83
34	LCSSRM 460-68537/2-A	504.3	2668.	1131.84
35	460-24546-A-18-A@4	1.556	145.1	1108.84
36	460-24546-A-17-A@4	1.369	176.2	1107.16
37	460-24464-A-1-A@4	9.016	2004.	1082.32
38	460-24238-A-5-D@4	2.220	278.9	1117.45
39	460-24238-A-7-F@4	2.122	486.0	1090.34
40	460-24356-A-1-F@4	241.7	764.8	1106.03
41	ICSA 901999	-2.739	-4.629	1016.79
42	ICSAB 902001	L78.07	98.03	1018.49
43	CCV 901988	L883.7	9896.	1062.56
44	CCB	1.202	.6654	1088.18
45	MB 460-68857/1-A	3.814	-.2628	1105.81
46	LCS 460-68857/2-A	225.7	254.8	1098.79
47	460-24122-A-4-D DU	.7021	-.4239	1096.52

48	460-24122-A-4-C	1.939	.0334	1101.76	
49	SD 460-24122-A-4-C@5	1.004	-.2829	1092.1	
50	460-24122-A-4-E MS	224.3	255.3	1097.47	
51	PS 460-24122-A-4-C	216.1	249.2	1096.15	
52	ICSA 901999	-3.048	-4.667	1014.82	
53	ICSAB 902001	85.41	105.3	963.927	
54	CCV 901988	L887.8	10020.	1049.19	
55	CCB	1.223	.0117	1089.88	
56	460-24126-F-5-E@4	2.847	1298.	1137.24	
57	460-24126-F-17-C@4	4.036	2639.	1375.16	
58	460-24126-F-24-C@4	3.634	1134.	1128.38	
59	460-24126-F-28-E@4	6.011	1463.	1137.08	
60	460-24339-A-1-B@4	7.691	881.9	1121.77	
61	460-24339-A-2-B@4	8.718	1347.	1136.65	
62	460-24364-A-5-A@4	3.523	519.9	1120.82	
63	460-24374-F-1-B@4	3.085	406.8	1099.06	
64	460-24374-F-2-B@4	1.627	542.9	1088.75	
65	460-24374-F-3-B@4	3.365	400.7	1100.36	
66	CCV 901988	L850.2	9902.	1052.54	
67	CCB	.2852	.3600	1087.51	
68	460-24364-A-7-C@4	10.05	1289.	1137.92	
69	ICSA 901999	1.618	-4.600	1008.37	
70	ICSAB 902001	81.40	98.78	1018.41	
71	CCV 901988	L854.4	9958.	1049.41	
72	CCB	.1979	-.0311	1094.31	
73	460-24285-E-1-C DU@4	6.308	742.0	1113.37	

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#	Sample Name	Sn1899	Ti3349	*Y			
74	460-24285-E-1-B@4	4.830	749.7	1105.95			
75	SD 460-24285-E-1-B@5	3.509	150.3	1093.26			
76	460-24285-E-1-D MS@4	221.3	1047.	1099.84			
77	PS 460-24285-E-1-B@4	382.3	1220.	1093.15			
78	460-24256-E-1-B@4	2.803	662.0	1096.12			
79	460-24285-E-2-B@4	51.50	728.3	1097.69			
80	460-24285-E-3-B@4	7.722	602.7	1105.03			
81	460-24285-E-4-D@4	4.400	456.7	1091.66			
82	460-24285-E-5-B@4	5.081	478.5	1095.39			
83	CCV 901988	L847.3	9865.	1053.41			
84	CCB	1.076	.2720	1082.05			
85	460-24285-E-6-B@4	3.564	420.7	1091.39			
86	460-24285-E-7-B@4	19.89	642.0	1117.94			
87	460-24285-E-8-B@4	9.683	689.3	1093.42			
88	460-24285-E-9-B@4	12.43	632.0	1086.34			
89	460-24256-A-2-A@4	3.525	636.9	1091.02			
90	460-24256-A-9-A@4	4.792	973.7	1134.62			
91	460-24256-A-4-A@4	3.481	1186.	1213.22			
92	460-24256-A-5-A@4	4.068	782.5	1116.72			
93	460-24374-F-4-B@4	2.930	467.8	1096.63			
94	CCV 901988	L858.6	9821.	1050.33			
95	CCB	1.517	.2509	1090.53			
96	ICSA 901999	-1.289	-4.604	1009.37			
97	ICSAB 902001	80.57	98.22	1012.39			
98	CCV 901988	L864.6	9898.	1051.08			
99	CCB	-.2055	.2513	1087.83			

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Method: SW846 Standard: T2CAL-BLK
Run Time: 03/29/11 14:33:04

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	.4525	.0412	-.0506	-.0078	.0211	-.0279	.1981
SDev	.0141	.0126	.0289	.0045	.0015	.0101	.0088
%RSD	3.120	30.65	57.26	57.55	6.966	36.33	4.420
#1	.4425	.0501	-.0301	-.0109	.0201	-.0351	.1919
#2	.4625	.0323	-.0710	-.0046	.0221	-.0208	.2043

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Avge	.0126	.0019	.0312	.0028	-.0119	.0032	-.0279
SDev	.0112	.0024	.0029	.0143	.0168	.0033	.0231

%RSD	89.00	129.3	9.135	508.6	141.4	101.4	82.93
#1	.0047	.0002	.0292	-.0073	-.0237	.0009	-.0442
#2	.0205	.0036	.0332	.0129	.0000	.0055	-.0115

Elem	K_7664	Ag3280	Na3302	Tl1908	V_2924	Zn2062	B_2496
Avge	16.67	-.1554	-.1448	-.1318	.0035	.0738	.0734
SDev	.08	.0059	.0299	.0627	.0041	.0026	.0162
%RSD	.4809	3.770	20.68	47.54	117.1	3.454	22.01
#1	16.61	-.1595	-.1659	-.0875	.0006	.0720	.0620
#2	16.73	-.1513	-.1236	-.1762	.0065	.0756	.0849

Elem	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1	1960/2
Avge	.0382	.0196	-.0124	.2657	-.0268	-.2450	.1111
SDev	.0156	.0020	.0018	.0523	.0653	.0396	.0359
%RSD	40.74	10.23	14.90	19.68	243.7	16.17	32.33
#1	.0492	.0210	-.0137	.3027	-.0729	-.2170	.0857
#2	.0272	.0181	-.0111	.2287	.0194	-.2730	.1365

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1091	--	--	--	--	--	--
SDev	8.934992	--	--	--	--	--	--
%RSD	.8192850	--	--	--	--	--	--
#1	1097	--	--	--	--	--	--
#2	1084	--	--	--	--	--	--

Method: SW846 Standard: T2CAL1
Run Time: 03/29/11 14:39:34

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	53.38	5.272	36.47	12.04	10.22	72.70	74.45
SDev	.21	.090	.02	.02	.00	.01	.18
%RSD	.3928	1.713	.0460	.2002	.0411	.0186	.2428
#1	53.53	5.208	36.46	12.06	10.22	72.70	74.58
#2	53.23	5.336	36.48	12.02	10.22	72.69	74.33

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Avge	19.30	4.278	10.97	20.61	29.01	16.04	15.75
SDev	.04	.003	.03	.02	.06	.03	.05
%RSD	.2016	.0801	.3128	.0814	.2105	.1865	.2946
#1	19.33	4.281	10.99	20.62	29.05	16.07	15.78
#2	19.27	4.276	10.95	20.60	28.97	16.02	15.72

Elem	Ag3280	Tl1908	V_2924	Zn2062	B_2496	Mo2020	Sn1899
Avge	3.721	18.35	4.272	6.082	2.367	32.66	5.112
SDev	.017	.05	.001	.010	.011	.12	.029
%RSD	.4594	.2815	.0144	.1608	.4746	.3664	.5744
#1	3.733	18.31	4.272	6.089	2.359	32.58	5.133
#2	3.709	18.38	4.271	6.075	2.375	32.75	5.091

Elem	Ti3349	2203/1	2203/2	1960/1	1960/2
Avge	42.69	87.63	79.40	15.00	12.99
SDev	.09	.11	.33	.04	.04
%RSD	.2057	.1221	.4148	.2586	.3412
#1	42.75	87.71	79.63	14.97	13.02

#2	42.62	87.56	79.16	15.02	12.96

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1079	--	--	--	--	--	--
SDev	3.245596	--	--	--	--	--	--
%RSD	.3008717	--	--	--	--	--	--
#1	1076	--	--	--	--	--	--

#2	1081	--	--	--	--	--	--

Method: SW846 Standard: T2CAL2
Run Time: 03/29/11 14:46:04

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	268.0	27.42	182.7	63.04	50.22	349.6	358.4
SDev	1.0	.05	1.0	.10	.18	2.0	1.4
%RSD	.3876	.1977	.5419	.1594	.3638	.5857	.3898
#1	268.7	27.39	182.0	63.11	50.09	348.1	357.4
#2	267.2	27.46	183.4	62.97	50.35	351.0	359.4

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Avge	96.56	20.95	55.70	100.5	149.5	78.90	77.09
SDev	.26	.07	.23	.4	.5	.13	.39
%RSD	.2700	.3525	.4108	.3646	.3354	.1653	.5049
#1	96.37	20.90	55.86	100.2	149.8	78.81	76.81
#2	96.74	21.00	55.53	100.8	149.1	79.00	77.36

Elem	Ag3280	Tl1908	V_2924	Zn2062	B_2496	Mo2020	Sn1899
Avge	19.77	90.65	21.38	28.84	11.53	161.2	24.69
SDev	.02	.64	.02	.22	.07	1.0	.10
%RSD	.1015	.7088	.0848	.7606	.5915	.6226	.4028
#1	19.76	90.20	21.36	28.69	11.48	160.5	24.62
#2	19.79	91.11	21.39	29.00	11.58	162.0	24.76

Elem	Ti3349	2203/1	2203/2	1960/1	1960/2
Avge	211.6	434.1	393.1	75.25	63.94
SDev	.0	1.6	1.8	.07	.33
%RSD	.0134	.3707	.4638	.0949	.5223
#1	211.6	435.3	391.9	75.30	63.71
#2	211.6	433.0	394.4	75.20	64.18

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1047	--	--	--	--	--	--
SDev	4.658429	--	--	--	--	--	--
%RSD	.4447221	--	--	--	--	--	--
#1	1044	--	--	--	--	--	--
#2	1051	--	--	--	--	--	--

Method: SW846 Standard: T2CAL3
Run Time: 03/29/11 14:52:34

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	527.2	52.75	354.2	116.4	98.25	675.0	692.5
SDev	.2	.25	2.2	.7	.70	5.2	3.3
%RSD	.0351	.4769	.6268	.5793	.7113	.7658	.4802
#1	527.3	52.57	352.7	115.9	97.76	671.3	694.8
#2	527.0	52.93	355.8	116.9	98.74	678.7	690.1

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Avge	185.4	41.00	110.0	197.1	300.7	151.4	149.2
SDev	.6	.16	.1	1.4	.0	.5	1.1
%RSD	.3335	.3929	.0466	.7320	.0101	.3419	.7390
#1	185.8	41.12	110.0	196.1	300.7	151.8	148.4
#2	184.9	40.89	110.1	198.1	300.7	151.1	150.0

Elem	K_7664	Ag3280	Na3302	Tl1908	V_2924	Zn2062	B_2496
Avge	562.6	39.66	149.2	177.9	41.80	55.90	23.09
SDev	3.4	.03	.1	1.7	.09	.45	.21
%RSD	.6017	.0723	.0594	.9456	.2089	.8030	.8901
#1	560.2	39.68	149.2	176.7	41.87	55.59	22.95
#2	565.0	39.64	149.1	179.1	41.74	56.22	23.24

38350v2

Elem	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1	1960/2
Avge	318.4	49.24	413.8	824.5	754.7	148.2	126.9
SDev	2.9	.54	.6	6.2	6.4	1.3	.8
%RSD	.9129	1.097	.1397	.7560	.8422	.8603	.6136
#1	316.3	48.86	414.2	828.9	750.2	149.1	126.4
#2	320.5	49.62	413.4	820.1	759.2	147.3	127.5

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1030	--	--	--	--	--	--
SDev	5.460225	--	--	--	--	--	--
%RSD	.5303017	--	--	--	--	--	--
#1	1034	--	--	--	--	--	--
#2	1026	--	--	--	--	--	--

Method: SW846 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Al3082	308.215	Multiple	Standards	471.684	-213.206	03/29/11 02:52:34
Sb2068	206.838	Multiple	Standards	38.4350	-1.55681	03/29/11 02:52:34
As1890	189.042	Multiple	Standards	27.6507	1.30054	03/29/11 02:52:34
Ba4934	493.409	Multiple	Standards	165.299	1.27575	03/29/11 02:52:34
Be3130	313.042	Multiple	Standards	19.9724	-.453740	03/29/11 02:52:34
Cd2265	226.502	Multiple	Standards	7.16089	.029346	03/29/11 02:52:34
Ca3179	317.933	Multiple	Standards	348.678	-76.9935	03/29/11 02:52:34
Cr2677	267.716	Multiple	Standards	52.5008	-.788581	03/29/11 02:52:34
Co2286	228.616	Multiple	Standards	120.394	-.319883	03/29/11 02:52:34
Cu3247	324.754	Multiple	Standards	226.811	-6.92607	03/29/11 02:52:34
Fe2714	271.441	Multiple	Standards	995.422	-6.92466	03/29/11 02:52:34
Mg3832	383.231	Multiple	Standards	842.770	14.6287	03/29/11 02:52:34
Mn2576	257.610	Multiple	Standards	63.9113	-.435544	03/29/11 02:52:34
Ni2316	231.604	Multiple	Standards	32.5305	.787810	03/29/11 02:52:34
K_7664	766.491	T2CAL3	T2CAL-BLK	1.06588	4.34935	03/29/11 02:52:34
Ag3280	328.068	Multiple	Standards	63.4443	9.89746	03/29/11 02:52:34
Pb2203	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Na3302	330.232	T2CAL3	T2CAL-BLK	.742405	-.052534	03/29/11 02:52:34
Tl1908	190.864	Multiple	Standards	55.2993	7.12606	03/29/11 02:52:34
V_2924	292.402	Multiple	Standards	118.497	-.451362	03/29/11 02:52:34
Zn2062	206.200	Multiple	Standards	91.3243	-6.92453	03/29/11 02:52:34
B_2496	249.678	Multiple	Standards	87.1396	-6.39571	03/29/11 02:52:34
Mo2020	202.030	Multiple	Standards	15.3871	-.641958	03/29/11 02:52:34
Sn1899	189.989	Multiple	Standards	38.3443	-.785552	03/29/11 02:52:34

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ti3349	334.941	Multiple	Standards	47.4780	.338253	03/29/11 02:52:34
2203/1	220.351	Multiple	Standards	23.5032	-6.66305	03/29/11 02:52:34
2203/2	220.352	Multiple	Standards	25.6002	.303136	03/29/11 02:52:34
1960/1	196.021	Multiple	Standards	66.3035	16.1339	03/29/11 02:52:34
1960/2	196.022	Multiple	Standards	77.8839	-8.72424	03/29/11 02:52:34

Method: SW846

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al3082	308.215	T2CAL-BLK	.000000	.237693	-.237693
		T2CAL1	25000.0	24964.8	35.2129
		T2CAL2	125000.	126190.	-1190.10
		T2CAL3	250000.	248448.	1551.67
CorCoef: 0.99996					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2068	206.838	T2CAL-BLK	.000000	.027123	-.027123
		T2CAL1	200.000	201.065	-1.06482
		T2CAL2	1000.00	1052.52	-52.5198
		T2CAL3	2000.00	2025.94	-25.9425
CorCoef: 0.99977					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	T2CAL-BLK	.000000	-.097207	.097207
		T2CAL1	1000.00	1009.65	-9.64996
		T2CAL2	5000.00	5054.29	-54.2891
		T2CAL3	10000.0	9796.42	203.577
CorCoef: 0.99986					

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba4934	493.409	T2CAL-BLK	.000000	-.009556	.009556
		T2CAL1	2000.00	1991.68	8.31543
		T2CAL2	10000.0	10422.0	-421.973
		T2CAL3	20000.0	19239.2	760.791

CorCoef: 0.99902

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be3130	313.042	T2CAL-BLK	.000000	-.032409	.032409
		T2CAL1	200.000	203.685	-3.68530
		T2CAL2	1000.00	1002.56	-2.55725
		T2CAL3	2000.00	1961.84	38.1575

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd2265	226.502	T2CAL-BLK	.000000	-.170622	.170622
		T2CAL1	500.000	520.591	-20.5911
		T2CAL2	2500.00	2503.26	-3.26318
		T2CAL3	5000.00	4833.61	166.387

CorCoef: 0.99983

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	T2CAL-BLK	.000000	-7.93151	7.93151
		T2CAL1	25000.0	25883.7	-883.697
		T2CAL2	125000.	124891.	108.781
		T2CAL3	250000.	241381.	8619.39

CorCoef: 0.99984

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.716	T2CAL-BLK	.000000	-.127783	.127783
		T2CAL1	1000.00	1012.43	-12.4257
		T2CAL2	5000.00	5068.63	-68.6328
		T2CAL3	10000.0	9731.80	268.198

CorCoef: 0.99976

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	T2CAL-BLK	.000000	-.094657	.094657
		T2CAL1	500.000	514.738	-14.7382
		T2CAL2	2500.00	2521.82	-21.8215
		T2CAL3	5000.00	4936.03	63.9741

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.754	T2CAL-BLK	.000000	.147633	-.147633
		T2CAL1	2500.00	2481.27	18.7290
		T2CAL2	12500.0	12625.6	-125.637
		T2CAL3	25000.0	24948.6	51.3848

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe2714	271.441	T2CAL-BLK	.000000	-4.12817	4.12817
		T2CAL1	20000.0	20508.6	-508.613
		T2CAL2	100000.	100037.	-37.4531
		T2CAL3	200000.	196210.	3790.48

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg3832	383.231	T2CAL-BLK	.000000	4.64059	-4.64059
		T2CAL1	25000.0	24462.7	537.307
		T2CAL2	125000.	125976.	-975.844
		T2CAL3	250000.	253421.	-3421.38

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	T2CAL-BLK	.000000	-.229579	.229579
		T2CAL1	1000.00	1025.01	-25.0094
		T2CAL2	5000.00	5042.47	-42.4731
		T2CAL3	10000.0	9676.96	323.039

CorCoef: 0.99976

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	T2CAL-BLK	.000000	-.118880	.118880
		T2CAL1	500.000	513.153	-13.1532
		T2CAL2	2500.00	2508.56	-8.55737

		T2CAL3	5000.00	4854.98	145.017

CorCoef: 0.99985

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K_7664	766.491	T2CAL-BLK	22.1193	16.6717	5.44767
		T2CAL3	603.999	562.587	41.4120

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag3280	328.068	T2CAL-BLK	.000000	.038387	-.038387
		T2CAL1	250.000	245.948	4.05173
		T2CAL2	1250.00	1264.50	-14.4956
		T2CAL3	2500.00	2525.99	-25.9863

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb2203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Na3302	330.232	T2CAL-BLK	-.160000	-.144754	-.015246
		T2CAL3	110.702	149.184	-38.4815

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	T2CAL-BLK	.000000	-.164473	.164473
		T2CAL1	1000.00	1021.65	-21.6481
		T2CAL2	5000.00	5020.05	-20.0537
		T2CAL3	10000.0	9846.52	153.476

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	T2CAL-BLK	.000000	-.032844	.032844
		T2CAL1	500.000	505.731	-5.73114
		T2CAL2	2500.00	2532.57	-32.5732
		T2CAL3	5000.00	4953.29	46.7051

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn2062	206.200	T2CAL-BLK	.000000	-.182600	.182600
		T2CAL1	500.000	548.482	-48.4821
		T2CAL2	2500.00	2627.16	-127.157
		T2CAL3	5000.00	5098.37	-98.3750

CorCoef: 0.99987

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B_2496	249.678	T2CAL-BLK	.000000	.002205	-.002205
		T2CAL1	200.000	199.834	.166428
		T2CAL2	1000.00	998.388	1.61249
		T2CAL3	2000.00	2006.04	-6.04443

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	T2CAL-BLK	.000000	-.053886	.053886
		T2CAL1	500.000	501.940	-1.93976
		T2CAL2	2500.00	2480.49	19.5090
		T2CAL3	5000.00	4898.63	101.370

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.989	T2CAL-BLK	.000000	-.035802	.035802
		T2CAL1	200.000	195.226	4.77422
		T2CAL2	1000.00	945.849	54.1514
		T2CAL3	2000.00	1887.24	112.755

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

Ti3349	334.941	T2CAL-BLK	.000000	-.249104	.249104
		T2CAL1	2000.00	2027.00	-27.0011
		T2CAL2	10000.0	10047.5	-47.5166
		T2CAL3	20000.0	19645.2	354.814

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/1	220.351	T2CAL-BLK	.000000	-.418283	.418283
		T2CAL1	2000.00	2053.00	-53.0010
		T2CAL2	10000.0	10196.7	-196.707
		T2CAL3	20000.0	19370.8	629.215

CorCoef: 0.99962

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/2	220.352	T2CAL-BLK	.000000	-.382498	.382498
		T2CAL1	2000.00	2032.89	-32.8943
		T2CAL2	10000.0	10064.8	-64.7930
		T2CAL3	20000.0	19321.0	679.002

CorCoef: 0.99976

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/1	196.021	T2CAL-BLK	.000000	-.109516	.109516
		T2CAL1	1000.00	1010.50	-10.5001
		T2CAL2	5000.00	5005.43	-5.43311
		T2CAL3	10000.0	9842.35	157.648

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/2	196.022	T2CAL-BLK	.000000	-.071573	.071573
		T2CAL1	1000.00	1003.01	-3.01373
		T2CAL2	5000.00	4971.44	28.5591
		T2CAL3	10000.0	9876.50	123.501

CorCoef: 0.99999

Method: SW846 Sample Name: ICV 901988 Operator:
Run Time: 03/29/11 14:59:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	129000.	H1058.	5241.	H10640.	1040.	2607.	129800.
SDev	4114.	38.	163.	313.	28.	68.	3083.
%RSD	3.189	3.603	3.110	2.941	2.740	2.605	2.375
#1	H131900.	H1085.	H5356.	H10860.	H1060.	H2655.	H132000.
#2	126100.	1031.	5126.	10420.	1020.	2559.	127600.
Errors	LC Pass	LC High	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	131800.	1054.	5272.	10540.	1054.	2636.	131800.
Low	118200.	946.0	4728.	9455.	946.0	2364.	118200.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5256.	2589.	12840.	103400.	128700.	5195.	2610.
SDev	135.	68.	423.	2826.	4227.	137.	72.
%RSD	2.565	2.631	3.294	2.734	3.284	2.631	2.745
#1	H5351.	H2637.	13140.	105400.	131700.	H5291.	H2661.
#2	5161.	2541.	12540.	101400.	125700.	5098.	2560.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5272.	2636.	13180.	105400.	131800.	5272.	2636.
Low	4728.	2364.	11820.	94560.	118200.	4728.	2364.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	51110.	1289.	10450.	5131.	128300.	5185.	2605.
SDev	1632.	38.	227.	128.	3448.	147.	71.
%RSD	3.193	2.921	2.173	2.501	2.688	2.842	2.715
#1	52260.	1315.	H10610.	5222.	130700.	H5290.	H2655.
#2	49950.	1262.	10290.	5041.	125800.	5081.	2555.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	52720.	1318.	10540.	5272.	131800.	5272.	2636.
Low	47280.	1182.	9455.	4728.	118200.	4728.	2364.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2

Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2607.	1034.	2589.	1040.	10370.	10410.	10470.
SDev	71.	32.	69.	30.	293.	164.	259.
%RSD	2.716	3.129	2.664	2.865	2.823	1.574	2.471
#1	H2657.	H1057.	H2638.	H1061.	H10580.	10530.	10650.
#2	2557.	1011.	2541.	1019.	10160.	10290.	10280.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	2636.	1054.	2636.	1054.	10540.		
Low	2364.	946.0	2364.	946.0	9455.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5103.	5146.
SDev	95.	145.
%RSD	1.864	2.817
#1	5170.	5248.
#2	5035.	5043.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1032	--	--	--	--	--	--
SDev	25.04856	--	--	--	--	--	--
%RSD	2.427200	--	--	--	--	--	--
#1	1014	--	--	--	--	--	--
#2	1050	--	--	--	--	--	--

Method: SW846 Sample Name: ICB Operator:
Run Time: 03/29/11 15:05:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22.57	-.5445	-1.506	3.441	.2181	.4531	25.20
SDev	8.53	1.0105	1.668	.430	.0585	.1185	11.09
%RSD	37.78	185.6	110.7	12.49	26.83	26.16	44.01
#1	28.60	.1700	-.3271	3.745	.2594	.5369	33.05
#2	16.54	-1.259	-2.685	3.137	.1767	.3693	17.36
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.199	.2925	4.033	22.70	34.04	1.094	.7662
SDev	.504	.0165	.396	4.99	2.62	.373	.3219
%RSD	42.07	5.646	9.808	21.98	7.705	34.07	42.01
#1	1.555	.2808	3.753	19.17	32.18	1.358	.9939
#2	.8421	.3041	4.313	26.22	35.89	.8307	.5386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	172.0	.3250	2.764	.8380	245.2	7.392	.6598
SDev	23.4	1.168	.286	.5482	66.2	3.570	1.215
%RSD	13.61	359.4	10.36	65.41	27.02	48.30	184.2

#1	188.5	-.5010	2.966	1.226	292.0	4.867	1.519
#2	155.4	1.151	2.562	.4504	198.3	9.916	-.1996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9609	2.738	5.107	2.076	2.118	2.916	2.686
SDev	.0147	.367	.673	.282	.461	1.127	.135
%RSD	1.528	13.40	13.18	13.57	21.77	38.66	5.043
#1	.9712	2.997	5.583	1.877	2.444	3.713	2.590
#2	.9505	2.479	4.631	2.275	1.792	2.119	2.781
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	3.049	-.2754					
SDev	.005	.8244					
%RSD	.1719	299.4					

#2	3.053	-.8583
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1107	--	--	--	--	--	--
SDev	3.932936	--	--	--	--	--	--
%RSD	.3552355	--	--	--	--	--	--
#1	1104	--	--	--	--	--	--
#2	1110	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/29/11 15:12:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	484600.	-.1362	-2.655	5.119	-.0363	-2.936	465300.
SDev	8458.	2.7224	.635	.003	.0076	.284	7308.
%RSD	1.745	1999.	23.90	.0610	20.90	9.683	1.571
#1	490600.	-2.061	-2.206	5.121	-.0416	-3.137	470400.
#2	478600.	1.789	-3.104	5.117	-.0309	-2.735	460100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.868	-.8595	-3.824	196000.	523300.	-6.619	-2.901

SDev	.518	.1522	.253	819.	8347.	.188	.131
%RSD	8.835	17.71	6.620	.4176	1.595	2.835	4.501
#1	6.234	-.7519	-3.645	196600.	529200.	-6.751	-2.993
#2	5.501	-.9671	-4.003	195400.	517400.	-6.486	-2.808
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00

Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	126.1	.1247	-1.498	8.247	219.1	.8661	1.664
SDev	28.1	.4177	1.724	1.760	9.0	1.924	.268
%RSD	22.25	334.9	115.1	21.34	4.105	222.1	16.11
#1	145.9	.4201	-2.717	9.491	212.8	2.227	1.854
#2	106.3	-.1706	-.2785	7.003	225.5	-.4944	1.475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0382	-4.943	4.818	.8602	-4.430	28.79	-16.62
SDev	1.3257	.383	1.945	1.136	.240	1.33	1.92
%RSD	3468.	7.751	40.37	132.0	5.413	4.630	11.55
#1	-.9757	-4.672	3.443	.0570	-4.600	27.85	-17.98
#2	.8992	-5.214	6.194	1.663	-4.261	29.73	-15.27
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	24.14	.3042
SDev	3.72	.7810
%RSD	15.41	256.7
#1	26.76	.8564
#2	21.51	-.2480
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1022	--	--	--	--	--	--
SDev	16.03718	--	--	--	--	--	--
%RSD	1.569936	--	--	--	--	--	--

#1	1010	--	--	--	--	--	--
#2	1033	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/29/11 15:18:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	484400.	101.1	101.0	110.2	98.91	95.33	463400.
SDev	306.	5.0	5.8	.1	.16	.08	1256.
%RSD	.0631	4.930	5.738	.0606	.1627	.0888	.2710
#1	484200.	104.6	105.1	110.1	99.02	95.27	464300.
#2	484600.	97.56	96.94	110.2	98.79	95.39	462600.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	104.8	97.78	103.1	195400.	523300.	94.49	95.38
SDev	.1	.17	.4	382.	242.	.12	.14
%RSD	.0665	.1742	.3965	.1953	.0463	.1322	.1504

#1	104.8	97.90	102.8	195600.	523200.	94.58	95.48
#2	104.9	97.66	103.4	195100.	523500.	94.40	95.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10350.	104.8	96.66	104.7	9781.	95.29	103.2

SDev	12.	.8	1.50	2.3	61.	1.83	.3
%RSD	.1202	.7454	1.551	2.151	.6257	1.917	.3297
#1	10340.	104.2	95.60	106.3	9824.	94.00	102.9
#2	10360.	105.3	97.72	103.1	9738.	96.58	103.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	98.82	95.81	105.2	91.64	100.2	119.3	85.36
SDev	.35	.04	.1	.60	.1	5.8	.65
%RSD	.3551	.0370	.1250	.6600	.0565	4.859	.7600
#1	99.07	95.78	105.1	91.22	100.1	115.2	85.82
#2	98.57	95.83	105.3	92.07	100.2	123.4	84.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	107.8	103.2
SDev	4.4	5.5
%RSD	4.038	5.379
#1	104.7	107.1
#2	110.8	99.24
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1013	--	--	--	--	--	--
SDev	2.061935	--	--	--	--	--	--
%RSD	.2034634	--	--	--	--	--	--
#1	1012	--	--	--	--	--	--
#2	1015	--	--	--	--	--	--

Method: SW846 Sample Name: INT-20 Operator:
Run Time: 03/29/11 15:33:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-26.71	5.975	1.813	19040.	-1.764	-2.017	34.81
SDev	6.93	.835	3.072	16.	.024	.091	4.51
%RSD	25.93	13.97	169.4	.0831	1.388	4.510	12.96
#1	-31.61	6.565	3.986	19050.	-1.747	-1.952	31.62
#2	-21.81	5.384	-.3591	19020.	-1.781	-2.081	38.00
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	20390.	20600.	-1.487	-164.8	32.87	19380.	69.26
SDev	3.	3.	.013	3.8	8.20	12.	.73
%RSD	.0138	.0162	.8542	2.297	24.93	.0597	1.060
#1	20380.	20590.	-1.478	-167.4	27.08	19390.	68.74
#2	20390.	20600.	-1.496	-162.1	38.67	19380.	69.78

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	129.4	-5.541	8.354	-7.398	-1614.	-8.082	20060.
SDev	2.9	.409	1.011	.476	35.	2.774	17.
%RSD	2.235	7.376	12.10	6.436	2.142	34.32	.0858
#1	131.5	-5.252	9.069	-7.061	-1638.	-6.121	20040.
#2	127.4	-5.830	7.639	-7.735	-1589.	-10.04	20070.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4988.	9812.	5172.	81.60	19980.	29.37	-2.144
SDev	2.	6.	3.	1.97	8.	3.72	.343
%RSD	.0427	.0599	.0516	2.419	.0421	12.68	16.02
#1	4990.	9808.	5170.	83.00	19970.	32.01	-2.387
#2	4987.	9816.	5173.	80.21	19990.	26.74	-1.901

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-2.832	-9.687
SDev	4.157	1.362
%RSD	146.8	14.06
#1	.1077	-10.65
#2	-5.772	-8.725

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1085	--	--	--	--	--	--
SDev	2.520104	--	--	--	--	--	--
%RSD	.2322745	--	--	--	--	--	--

#1	1083	--	--	--	--	--	--
#2	1087	--	--	--	--	--	--

Method: SW846 Sample Name: REPLIM Operator:
Run Time: 03/29/11 15:39:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	223.4	9.379	3.204	203.1	1.983	3.784	5210.
SDev	5.4	.166	2.035	1.1	.063	.315	30.
%RSD	2.435	1.771	63.51	.5347	3.185	8.334	.5708
#1	219.5	9.261	1.765	202.4	1.939	3.561	5189.
#2	227.2	9.496	4.642	203.9	2.028	4.007	5231.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	11.18	50.65	24.81	152.4	4848.	15.85	40.45
SDev	.30	.65	.21	3.0	13.	.16	.24
%RSD	2.649	1.287	.8431	1.997	.2773	.9912	.5814
#1	10.97	50.19	24.66	154.6	4839.	15.74	40.29
#2	11.39	51.11	24.95	150.3	4858.	15.96	40.62

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4501.	8.014	6.439	3.228	4612.	7.842	51.86
SDev	26.	.003	1.256	2.283	89.	1.577	.83
%RSD	.5801	.0398	19.51	70.73	1.923	20.10	1.598
#1	4482.	8.017	5.550	4.842	4549.	8.957	51.28

#2	4519.	8.012	7.327	1.613	4675.	6.727	52.45

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	36.14	63.17	27.64	50.71	21.27	9.813	4.750
SDev	.13	3.39	.79	4.34	.06	1.787	.991
%RSD	.3684	5.366	2.852	8.565	.2607	18.21	20.87
#1	36.05	65.57	28.20	47.64	21.31	8.549	4.049
#2	36.24	60.77	27.08	53.78	21.23	11.08	5.451

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-2.702	6.178
SDev	1.747	2.550
%RSD	64.67	41.28
#1	-1.466	7.981
#2	-3.937	4.374

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED

Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1068	--	--	--	--	--	--
SDev	1.985544	--	--	--	--	--	--
%RSD	.1858351	--	--	--	--	--	--
#1	1070	--	--	--	--	--	--
#2	1067	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24413-F-6-A@2 Operator:
Run Time: 03/29/11 15:46:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	26.94	-2.503	-1.098	923.5	.0211	-1.447	41790.
SDev	.83	.042	1.333	7.2	.0510	.270	180.
%RSD	3.088	1.668	121.4	.7758	241.2	18.65	.4297
#1	27.53	-2.532	-2.040	928.6	-.0149	-1.638	41920.
#2	26.35	-2.473	-.1554	918.4	.0572	-1.256	41670.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.071	2.432	-.9791	63680.	20270.	H10410.	-.5930
SDev	.378	.520	.0106	457.	99.	48.	.1832
%RSD	35.30	21.37	1.079	.7180	.4870	.4596	30.89
#1	1.338	2.800	-.9716	64000.	20340.	H10450.	-.7226
#2	.8034	2.064	-.9866	63360.	20200.	H10380.	-.4635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.

Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5829.	-7.265	3.404	2.916	121200.	-1.462	1.474
SDev	35.	.062	.741	.493	344.	.692	.461
%RSD	.5969	.8499	21.77	16.90	.2835	47.31	31.26
#1	5854.	-7.221	3.928	2.567	121400.	-.9730	1.799
#2	5804.	-7.308	2.880	3.264	121000.	-1.951	1.148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.751	71.33	6.663	.7376	.4753	4.322	2.941
SDev	.111	.28	.037	2.563	.3698	3.495	2.856
%RSD	6.333	.3931	.5513	347.5	77.81	80.86	97.09
#1	-1.672	71.53	6.637	2.550	.7367	1.851	4.961
#2	-1.829	71.14	6.689	-1.075	.2138	6.793	.9220
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	7.326	.7044
SDev	.860	1.168
%RSD	11.74	165.8
#1	7.934	-.1217
#2	6.718	1.531
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1090	--	--	--	--	--	--
SDev	3.016598	--	--	--	--	--	--
%RSD	.2768026	--	--	--	--	--	--
#1	1088	--	--	--	--	--	--
#2	1092	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24463-A-1-A@2 Operator:
Run Time: 03/29/11 15:52:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19.05	-.4825	-.8403	11.41	.0152	-.1281	36400.
SDev	1.51	.8322	.2651	.60	.0105	.1167	286.
%RSD	7.952	172.5	31.55	5.250	69.43	91.13	.7848
#1	20.12	.1059	-1.028	11.84	.0077	-.0455	36600.
#2	17.98	-1.071	-.6529	10.99	.0226	-.2106	36190.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4165	.2287	6.137	266.6	2275.	6.425	3.096
SDev	.5268	.4970	.071	19.8	14.	1.041	.304
%RSD	126.5	217.3	1.149	7.410	.6153	16.20	9.830
#1	.7889	.5801	6.087	280.6	2285.	7.161	2.881
#2	.0440	-.1227	6.187	252.6	2265.	5.689	3.311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3106.	-.4890	.0399	-.4534	122000.	1.732	.5108
SDev	30.	.1444	1.198	.4472	766.	1.044	.3408
%RSD	.9761	29.54	3004.	98.64	.6283	60.28	66.72
#1	3128.	-.3869	.8867	-.7696	122500.	.9937	.7517

#2	3085.	-.5911	-.8069	-.1371	121400.	2.470	.2698
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.

Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.48	10.32	.7836	.9863	-.0202	.8133	-.3504
SDev	.45	1.01	.5639	1.036	.3073	2.097	.7484
%RSD	4.253	9.771	71.97	105.0	1520.	257.9	213.6
#1	10.80	11.03	1.182	1.719	.1971	2.296	.1788
#2	10.17	9.608	.3848	.2538	-.2375	-.6697	-.8796
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.8640	-1.121
SDev	1.812	1.575
%RSD	209.7	140.5
#1	2.145	-2.234
#2	-.4170	-.0070
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1085	--	--	--	--	--	--
SDev	6.453040	--	--	--	--	--	--
%RSD	.5949306	--	--	--	--	--	--
#1	1080	--	--	--	--	--	--
#2	1089	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24477-F-4-A@5 Operator:
Run Time: 03/29/11 15:59:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	16.10	2.142	-3.186	24.76	.0215	.1524	23650.
SDev	4.58	1.418	2.701	.76	.0077	.2319	167.
%RSD	28.46	66.19	84.79	3.071	35.79	152.2	.7056
#1	19.34	1.140	-1.276	25.29	.0161	.3163	23770.
#2	12.86	3.145	-5.096	24.22	.0270	-.0116	23540.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0614	5.472	1.352	34.94	7545.	4551.	7.595
SDev	.4827	1.124	1.352	23.23	19.	22.	.963
%RSD	785.5	20.55	99.96	66.50	.2485	.4865	12.68
#1	.4027	6.267	.3965	51.37	7558.	4566.	8.276
#2	-.2798	4.677	2.308	18.51	7531.	4535.	6.914
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	1930.	-2.863	-.1407	-.2955	35400.	-1.064	-.1042
SDev	20.	1.205	.2704	1.6206	144.	1.746	.2820
%RSD	1.037	42.09	192.1	548.4	.4055	164.2	270.6
#1	1944.	-2.011	-.3319	.8505	35300.	.1710	.0952
#2	1916.	-3.715	.0504	-1.441	35500.	-2.299	-.3036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.441	20.45	1.064	.4643	-.0435	.1258	-.2780
SDev	1.025	.10	.031	.1827	.6209	3.688	1.4359
%RSD	10.86	.4865	2.944	39.34	1426.	2932.	516.6
#1	10.17	20.38	1.086	.3351	.3955	-2.482	.7374
#2	8.716	20.52	1.042	.5934	-.4826	2.734	-1.293
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		

Low	-30.00	-10.00	-10.00	-10.00	-10.00

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.2826	-.5938
SDev	2.839	3.8470
%RSD	1005.	647.9
#1	-1.725	2.126
#2	2.290	-3.314
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1082	--	--	--	--	--	--
SDev	2.291019	--	--	--	--	--	--
%RSD	.2116763	--	--	--	--	--	--
#1	1084	--	--	--	--	--	--
#2	1081	--	--	--	--	--	--

Method: SW846 Sample Name: MB 460-68542/1-A@2 Operator:
Run Time: 03/29/11 16:05:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	15.69	-.1640	-3.980	1.276	.0633	-.2913	-3.847
SDev	2.84	.8448	.153	.000	.0324	.0943	.666
%RSD	18.10	515.2	3.854	.0000	51.24	32.38	17.31

#1	17.70	.4334	-3.871	1.276	.0404	-.2246	-3.376
#2	13.68	-.7613	-4.088	1.276	.0862	-.3580	-4.318
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4528	-.6649	-.4666	-3.169	5.968	-.0478	-.3589
SDev	.1381	.0230	.4358	5.255	3.357	.0413	.1802
%RSD	30.50	3.466	93.41	165.8	56.24	86.58	50.21
#1	.3552	-.6486	-.7747	-6.885	3.595	-.0770	-.2315
#2	.5505	-.6812	-.1584	.5470	8.342	-.0185	-.4863

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	105.6	-.5589	1.123	-.2862	238.4	-3.642	.3279
SDev	2.6	.1881	1.427	.4519	3.2	2.105	.4717
%RSD	2.463	33.66	127.1	157.9	1.329	57.80	143.8
#1	103.7	-.4259	2.131	-.6058	240.6	-5.130	.6615
#2	107.4	-.6920	.1139	.0334	236.2	-2.153	-.0056

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1843	11.43	2.221	.8917	-.5043	8.753	-2.691
SDev	.0790	.27	.569	.1138	.0017	3.989	.147
%RSD	42.86	2.339	25.61	12.76	.3362	45.57	5.477
#1	.2402	11.62	2.623	.8112	-.5055	11.57	-2.587
#2	.1285	11.24	1.819	.9721	-.5031	5.933	-2.795

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-7.147	3.129
SDev	.039	.697
%RSD	.5401	22.27
#1	-7.119	2.636
#2	-7.174	3.622

Errors	NOCHECK	NOCHECK
High		

Low

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1071	--	--	--	--	--	--
SDev	2.214715	--	--	--	--	--	--
%RSD	.2068138	--	--	--	--	--	--
#1	1069	--	--	--	--	--	--
#2	1072	--	--	--	--	--	--

Method: SW846 Sample Name: LCSSRM 460-68542/2-A Operator:
Run Time: 03/29/11 16:12:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	45120.	956.3	536.9	1017.	382.6	307.5	51220.
SDev	18.	5.6	5.6	.	2.8	3.4	303.
%RSD	.0405	.5858	1.051	.0350	.7315	1.119	.5909
#1	45110.	960.2	540.9	1017.	384.6	310.0	51430.
#2	45130.	952.3	532.9	1017.	380.6	305.1	51000.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	81000.	1190.	680.0	1250.	488.5	385.5	61500.
Low	24200.	108.0	362.5	725.0	287.0	222.5	37200.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1219.	482.7	886.7	92460.	19240.	2854.	702.8

SDev	6.	3.2	.8	620.	11.	11.	5.9
%RSD	.5084	.6587	.0912	.6701	.0560	.3756	.8465
#1	1224.	485.0	886.1	92900.	19240.	2862.	707.0

#2	1215.	480.5	887.2	92020.	19230.	2846.	698.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1525.	575.0	1080.	142500.	26150.	3420.	850.0
Low	835.0	339.5	655.0	37850.	13900.	2160.	490.5
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	20550.	154.7	440.5	1449.	4735.	650.4	602.3
SDev	13.	1.4	2.1	7.	16.	2.0	1.6
%RSD	.0628	.9149	.4754	.4991	.3341	.3079	.2588
#1	20540.	155.7	441.9	1454.	4746.	651.8	603.4
#2	20560.	153.7	439.0	1444.	4723.	649.0	601.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	28950.	203.0	560.0	1865.	7100.	805.0	760.0
Low	14050.	98.00	300.0	995.0	3070.	410.5	389.0
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3142.	708.9	272.9	535.5	2357.	442.1	439.7
SDev	37.	4.4	3.0	2.7	2.	3.4	1.4
%RSD	1.171	.6179	1.110	.5097	.0973	.7673	.3292
#1	3168.	712.0	275.1	537.4	2359.	444.5	440.7
#2	3116.	705.8	270.8	533.6	2355.	439.7	438.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	3765.	960.0	325.0	740.0	4220.		
Low	2185.	448.0	161.0	297.0	401.0		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1442.	1453.
SDev	5.	9.
%RSD	.3194	.5881
#1	1445.	1459.
#2	1438.	1447.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1124	--	--	--	--	--	--
SDev	2.252867	--	--	--	--	--	--
%RSD	.2004072	--	--	--	--	--	--
#1	1126	--	--	--	--	--	--
#2	1123	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24354-A-1-A@4 Operator:
Run Time: 03/29/11 16:18:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	37930.	-2.170	37.67	188.1	2.113	-1.664	32390.
SDev	85.	1.152	2.18	.5	.004	.213	128.
%RSD	.2246	53.08	5.785	.2518	.1823	12.83	.3961
#1	37870.	-2.985	39.21	187.8	2.111	-1.513	32300.
#2	37990.	-1.356	36.13	188.4	2.116	-1.815	32480.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	92.97	18.00	60.13	95540.	13740.	666.3	70.47
SDev	.18	.39	.03	80.	27.	2.7	.55
%RSD	.1910	2.185	.0495	.0837	.1960	.4015	.7852
#1	92.85	17.72	60.15	95490.	13720.	664.4	70.08
#2	93.10	18.28	60.11	95600.	13760.	668.2	70.86

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4116.	-.6886	88.39	3.010	1176.	-.3118	145.8
SDev	17.	.1837	.37	1.344	98.	.6807	1.0
%RSD	.4206	26.68	.4242	44.65	8.304	218.3	.6863
#1	4104.	-.8186	88.13	3.960	1245.	-.7931	145.1
#2	4128.	-.5587	88.66	2.060	1107.	.1696	146.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	150.5	29.08	11.71	6.120	873.0	91.65	86.77
SDev	.6	.78	.39	2.037	3.2	.39	.76
%RSD	.3721	2.691	3.319	33.27	.3630	.4273	.8732
#1	150.1	28.53	11.99	7.560	870.8	91.92	86.23
#2	150.9	29.64	11.44	4.680	875.3	91.37	87.30

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	8.614	.2027
SDev	4.719	.3409
%RSD	54.78	168.2
#1	11.95	-.0383
#2	5.277	.4437

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1108	--	--	--	--	--	--
SDev	1.871002	--	--	--	--	--	--
%RSD	.1688055	--	--	--	--	--	--
#1	1110	--	--	--	--	--	--
#2	1107	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/29/11 16:25:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	124900.	1021.	5022.	10320.	977.1	2483.	124900.
SDev	623.	9.	29.	35.	5.0	16.	1668.

%RSD	.4989	.8948	.5700	.3347	.5128	.6440	1.335
#1	124500.	1015.	5002.	10300.	973.6	2472.	123700.
#2	125300.	1028.	5043.	10350.	980.7	2495.	126100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5087.	2506.	12410.	96910.	124400.	4970.	2498.
SDev	55.	28.	55.	467.	749.	53.	15.
%RSD	1.078	1.128	.4423	.4819	.6019	1.057	.6175
#1	5048.	2486.	12370.	96580.	123900.	4932.	2487.
#2	5125.	2526.	12450.	97240.	124900.	5007.	2509.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49680.	1254.	10040.	4950.	125700.	4955.	2515.
SDev	187.	7.	56.	16.	684.	28.	23.
%RSD	.3767	.5687	.5537	.3312	.5441	.5578	.9117
#1	49550.	1248.	10000.	4939.	125200.	4935.	2499.
#2	49810.	1259.	10080.	4962.	126100.	4974.	2531.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2413.	994.7	2455.	940.6	10060.	10030.	10040.
SDev	13.	5.0	23.	6.7	74.	64.	51.
%RSD	.5561	.5044	.9175	.7165	.7373	.6358	.5128
#1	2404.	991.2	2439.	935.8	10010.	9988.	10010.
#2	2423.	998.3	2471.	945.3	10110.	10080.	10080.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4919.	4966.
SDev	8.	20.
%RSD	.1695	.4112
#1	4913.	4951.
#2	4925.	4980.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1055	--	--	--	--	--	--
SDev	.8018826	--	--	--	--	--	--
%RSD	.0760099	--	--	--	--	--	--
#1	1056	--	--	--	--	--	--
#2	1054	--	--	--	--	--	--

••Analysis Report 03/29/11 04:31:34 PM page 24

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/29/11 16:31:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	20.56	.5589	-.3890	1.011	.0604	-.1832	-6.201
SDev	2.97	.4679	.8817	1.557	.0132	.0878	.157
%RSD	14.42	83.73	226.7	154.0	21.89	47.91	2.531
#1	18.47	.2280	.2345	-.0899	.0510	-.2453	-6.090
#2	22.66	.8898	-1.012	2.111	.0697	-.1211	-6.311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4893	-.9276	-.5713	-16.00	10.37	.0046	-.4225
SDev	.3795	.2327	.1412	5.15	1.65	.0420	.1678
%RSD	77.56	25.09	24.71	32.16	15.88	909.2	39.73
#1	-.7576	-1.092	-.4715	-19.63	11.53	-.0251	-.5412
#2	-.2209	-.7630	-.6712	-12.36	9.206	.0343	-.3038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	100.6	-.3597	.3277	-.3889	138.6	3.191	-.2866
SDev	5.2	.0100	.8660	.3953	43.5	1.262	.2303
%RSD	5.144	2.773	264.3	101.6	31.39	39.55	80.35
#1	96.96	-.3527	-.2847	-.1094	169.3	4.084	-.4494
#2	104.3	-.3668	.9400	-.6684	107.8	2.299	-.1238
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6607	1.451	1.817	1.512	.3165	1.176	-.1001
SDev	.5295	.120	.951	.384	.0309	1.627	2.1107
%RSD	80.15	8.268	52.33	25.40	9.777	138.3	2108.
#1	-1.035	1.366	2.490	1.240	.3384	2.327	-1.593
#2	-.2862	1.536	1.145	1.784	.2946	.0257	1.392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1.392	-1.288
SDev	3.028	.919
%RSD	217.6	71.39
#1	3.533	-1.938

#2	-.7495	-.6376
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1089	--	--	--	--	--	--
SDev	1.069119	--	--	--	--	--	--
%RSD	.0982069	--	--	--	--	--	--

#1	1089	--	--	--	--	--	--
#2	1088	--	--	--	--	--	--

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Method: SW846 Sample Name: MB 460-68350/1-A Operator:
Run Time: 03/29/11 16:44:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.536	-1.622	-2.350	-.2416	.0476	-.0446	-4.345
SDev	14.40	1.441	2.020	.2030	.0400	.0935	.720
%RSD	191.0	88.87	85.94	84.02	83.86	209.8	16.58
#1	-2.644	-2.640	-3.778	-.0980	.0194	.0216	-4.854
#2	17.72	-.6026	-.9219	-.3851	.0759	-.1107	-3.835
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7436	-.6603	-.9814	-11.46	2.517	-.2949	.2960
SDev	.1795	.1350	.6757	5.20	.290	.0487	.3132
%RSD	24.13	20.44	68.85	45.35	11.51	16.52	105.8
#1	-.6167	-.7558	-1.459	-15.14	2.722	-.3294	.5174
#2	-.8705	-.5649	-.5036	-7.786	2.312	-.2604	.0745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	32.73	.3052	-.2263	.1511	134.2	.2692	-.3270
SDev	106.6	.3670	.3874	.0516	56.9	2.844	.3801
%RSD	325.7	120.3	171.2	34.16	42.41	1056.	116.2
#1	-42.66	.5648	-.5002	.1876	174.4	-1.742	-.0583
#2	108.1	.0457	.0476	.1146	93.96	2.280	-.5958

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1747	-.7848	-.2063	.3177	-.1861	-.3389	-.1740
SDev	.3975	.0546	.2860	.8059	.2395	1.1259	.0184
%RSD	227.5	6.954	138.6	253.7	128.7	332.2	10.59
#1	-.4558	-.7462	-.4085	-.2521	-.0167	-1.135	-.1870
#2	.1064	-.8233	-.0041	.8875	-.3554	.4572	-.1610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-.5644	.4991
SDev	.6241	.2336
%RSD	110.6	46.80
#1	-.1230	.3339
#2	-1.006	.6643
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7

Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1149	--	--	--	--	--	--
SDev	76.67300	--	--	--	--	--	--
%RSD	6.672951	--	--	--	--	--	--
#1	1203	--	--	--	--	--	--
#2	1095	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24354-A-3-A@4 Operator:
Run Time: 03/29/11 16:51:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29580.	-.1431	90.24	87.48	2.187	-1.418	3928.
SDev	21.	.0779	2.21	.09	.021	.091	8.
%RSD	.0724	54.46	2.447	.0980	.9798	6.444	.2028
#1	29570.	-.0880	88.68	87.42	2.202	-1.354	3922.
#2	29600.	-.1982	91.80	87.54	2.172	-1.483	3933.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	73.93	6.035	21.15	76840.	3817.	234.7	18.73
SDev	.37	.203	.31	32.	3.	.3	.59
%RSD	.4991	3.360	1.462	.0416	.0813	.1412	3.142
#1	73.67	6.178	21.36	76870.	3819.	234.4	19.14
#2	74.20	5.891	20.93	76820.	3815.	234.9	18.31
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4241.	-.6349	34.16	4.061	265.9	.6920	122.3
SDev	17.	.0315	1.04	1.009	6.4	.5979	.4
%RSD	.4084	4.954	3.054	24.84	2.426	86.41	.3439
#1	4229.	-.6127	33.42	4.774	261.3	.2692	122.0
#2	4253.	-.6572	34.90	3.348	270.4	1.115	122.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	80.58	29.28	11.45	2.989	406.9	39.08	31.70
SDev	.43	.85	.00	.081	.5	.74	1.19
%RSD	.5375	2.909	.0111	2.704	.1168	1.901	3.764
#1	80.28	29.88	11.45	3.046	406.6	38.56	30.85
#2	80.89	28.67	11.45	2.932	407.3	39.61	32.54
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.840	3.663
SDev	.864	1.081
%RSD	17.85	29.51
#1	5.451	4.427
#2	4.229	2.898

Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1123	--	--	--	--	--	--
SDev	.9164249	--	--	--	--	--	--
%RSD	.0815944	--	--	--	--	--	--
#1	1122	--	--	--	--	--	--
#2	1124	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/29/11 16:57:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	481300.	-3.824	-2.781	4.902	.0890	-2.905	462400.
SDev	12.	.315	.706	.063	.0201	.258	1380.
%RSD	.0026	8.226	25.40	1.290	22.57	8.881	.2984
#1	481300.	-3.601	-3.281	4.857	.1032	-2.723	461400.
#2	481400.	-4.046	-2.282	4.947	.0748	-3.087	463400.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6.258	-.1994	-2.858	189700.	519700.	-6.545	-2.606
SDev	.161	.6149	.325	182.	405.	.003	.693
%RSD	2.570	308.4	11.37	.0962	.0779	.0470	26.58
#1	6.144	-.6342	-3.088	189500.	519400.	-6.543	-2.116
#2	6.372	.2355	-2.629	189800.	520000.	-6.548	-3.096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00
Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	111.1	.6149	-2.347	2.375	230.9	-7.311	2.361
SDev	11.9	.2953	3.203	.293	38.9	1.200	.058
%RSD	10.70	48.02	136.5	12.33	16.85	16.41	2.441
#1	102.7	.4061	-.0819	2.582	203.4	-8.160	2.320
#2	119.5	.8238	-4.612	2.168	258.4	-6.463	2.401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.689	-4.161	6.503	.0730	-4.551	22.14	-14.57
SDev	.310	2.188	3.310	2.250	.060	2.00	5.80
%RSD	18.34	52.58	50.91	3082.	1.323	9.015	39.78
#1	-1.470	-5.708	8.844	-1.518	-4.593	20.73	-10.47
#2	-1.908	-2.614	4.162	1.664	-4.508	23.55	-18.67
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	11.43	-2.157
SDev	4.60	2.734

%RSD	40.21	126.7
#1	8.181	-.2243
#2	14.68	-4.091
Errors High	NOCHECK	NOCHECK
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1014	--	--	--	--	--	--
SDev	1.565527	--	--	--	--	--	--
%RSD	.1543524	--	--	--	--	--	--
#1	1015	--	--	--	--	--	--
#2	1013	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/29/11 17:04:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	485900.	97.88	100.4	110.9	97.35	96.29	464500.
SDev	6543.	4.08	5.8	1.4	1.15	.68	6242.
%RSD	1.347	4.163	5.800	1.242	1.179	.7025	1.344
#1	481300.	94.99	96.25	109.9	96.54	95.81	460100.
#2	490500.	100.8	104.5	111.9	98.16	96.77	468900.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	106.1	98.97	102.3	191300.	525000.	93.83	95.39
SDev	1.5	2.35	.8	2248.	7745.	1.26	1.36
%RSD	1.454	2.376	.7985	1.175	1.475	1.346	1.423
#1	105.0	97.31	101.8	189700.	519500.	92.94	94.43
#2	107.1	100.6	102.9	192900.	530500.	94.72	96.35
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10480.	106.0	96.45	104.1	9870.	95.34	104.1
SDev	159.	1.1	.11	2.1	73.	.94	1.4
%RSD	1.522	1.031	.1091	2.005	.7413	.9832	1.337
#1	10360.	105.2	96.53	102.6	9819.	94.67	103.1
#2	10590.	106.8	96.38	105.6	9922.	96.00	105.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	97.29	97.08	107.9	90.30	101.1	111.4	88.97
SDev	.68	.15	.1	1.93	1.3	3.3	1.78
%RSD	.7000	.1516	.0805	2.135	1.263	2.919	2.002
#1	96.81	97.19	107.9	88.94	100.2	109.1	90.23
#2	97.77	96.98	108.0	91.66	102.0	113.7	87.71

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	93.73	109.3
SDev	8.06	.9
%RSD	8.595	.8173
#1	88.04	109.9
#2	99.43	108.6

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1005	--	--	--	--	--	--
SDev	10.50052	--	--	--	--	--	--
%RSD	1.044694	--	--	--	--	--	--

#1	1013	--	--	--	--	--	--
#2	998	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/29/11 17:10:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	125600.	1027.	5028.	10370.	970.0	2484.	124500.
SDev	139.	1.	3.	42.	2.7	9.	61.
%RSD	.1107	.0830	.0596	.4066	.2793	.3425	.0489
#1	125700.	1028.	5031.	10400.	971.9	2490.	124500.
#2	125500.	1026.	5026.	10340.	968.1	2478.	124500.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5072.	2504.	12470.	96200.	125000.	4950.	2498.
SDev	2.	3.	16.	327.	124.	4.	5.
%RSD	.0405	.1064	.1271	.3398	.0993	.0848	.2197
#1	5073.	2502.	12480.	96430.	125100.	4953.	2502.
#2	5070.	2506.	12450.	95970.	124900.	4947.	2495.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50220.	1261.	9973.	4937.	126700.	4953.	2504.

SDev	213.	2.	18.	12.	158.	1.	3.
%RSD	.4250	.1257	.1829	.2381	.1244	.0147	.1233
#1	50370.	1262.	9986.	4945.	126900.	4953.	2506.
#2	50070.	1260.	9960.	4929.	126600.	4954.	2502.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

					38350v2		
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2392.	999.7	2457.	929.3	10070.	9816.	10050.
SDev	6.	3.9	8.	1.8	8.	1.	27.
%RSD	.2600	.3930	.3384	.1919	.0808	.0120	.2662
#1	2396.	1003.	2463.	928.0	10080.	9817.	10070.
#2	2387.	997.0	2451.	930.5	10070.	9816.	10030.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4856.	4978.
SDev	12.	12.
%RSD	.2375	.2384
#1	4864.	4986.
#2	4847.	4969.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1048	--	--	--	--	--	--
SDev	1.756460	--	--	--	--	--	--
%RSD	.1675269	--	--	--	--	--	--
#1	1047	--	--	--	--	--	--
#2	1050	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/29/11 17:17:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50.61	1.035	-1.108	2.522	.1945	.0066	10.50
SDev	.03	.111	2.159	.582	.0228	.0090	4.83
%RSD	.0685	10.69	194.8	23.06	11.72	136.8	46.06
#1	50.59	.9572	-2.635	2.111	.1784	.0002	13.91
#2	50.63	1.114	.4184	2.933	.2107	.0130	7.077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2506	-.2748	.0263	-2.825	28.93	.1782	-.3649
SDev	.2063	.0642	.4764	4.491	13.70	.1270	.2991
%RSD	82.33	23.36	1812.	159.0	47.37	71.26	81.97
#1	.1047	-.2294	.3632	-6.001	38.62	.2680	-.1534
#2	.3965	-.3202	-.3106	.3507	19.24	.0884	-.5765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	83.66	-.2602	.7884	-.4828	192.9	2.830	.3460
SDev	9.01	.2170	.7983	.5356	26.9	1.622	.3102
%RSD	10.77	83.38	101.3	110.9	13.97	57.32	89.64
#1	90.03	-.4136	.2239	-.8615	173.8	3.976	.5653
#2	77.29	-.1068	1.353	-.1041	211.9	1.683	.1267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	-.2474	.1432	1.665	.5443	.4035	2.434	-.0372
SDev	.0406	.2594	.228	.3592	.0925	.469	.9624
%RSD	16.40	181.1	13.68	65.99	22.92	19.29	2585.
#1	-.2187	.3267	1.504	.7983	.4689	2.102	-.7178
#2	-.2761	-.0402	1.827	.2904	.3381	2.766	.6433
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1.451	-1.458
SDev	1.278	.165
%RSD	88.08	11.31
#1	.5474	-1.575
#2	2.355	-1.341
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1093	--	--	--	--	--	--
SDev	5.689395	--	--	--	--	--	--
%RSD	.5204850	--	--	--	--	--	--
#1	1089	--	--	--	--	--	--
#2	1097	--	--	--	--	--	--

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Method: SW846 Sample Name: 460-24329-A-14-B DU Operator:
Run Time: 03/29/11 18:02:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46470.	.2060	33.13	238.2	1.987	-.7383	3989.
SDev	29.	.0625	.08	.7	.019	.2293	3.
%RSD	.0627	30.34	.2529	.3058	.9572	31.06	.0665
#1	46490.	.2502	33.19	237.7	2.001	-.5761	3987.
#2	46450.	.1618	33.07	238.7	1.974	-.9004	3991.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	120.1	8.316	33.16	64990.	2856.	357.6	22.83
SDev	.1	.183	.70	254.	1.	.3	.00
%RSD	.1234	2.198	2.118	.3916	.0217	.0813	.0041
#1	120.0	8.187	32.66	64810.	2855.	357.4	22.83
#2	120.2	8.445	33.66	65170.	2856.	357.8	22.83
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1802.	-.8995	83.10	4.228	155.2	-1.758	114.7
SDev	9.	.2768	1.16	.995	29.2	1.982	.6
%RSD	.5031	30.78	1.400	23.53	18.81	112.7	.5327

#1	1795.	-.7037	83.92	3.524	175.9	-3.159	114.3
#2	1808.	-1.095	82.27	4.931	134.6	-.3568	115.1

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Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	105.7	17.73	9.153	3.311	794.3	87.57	80.86
SDev	1.0	.49	.590	1.684	1.1	2.68	.41
%RSD	.9047	2.756	6.443	50.87	.1411	3.059	.5036
#1	105.0	17.39	9.570	4.501	793.5	89.47	81.15
#2	106.4	18.08	8.736	2.120	795.1	85.68	80.57

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	7.685	2.493
SDev	.839	1.910
%RSD	10.91	76.63
#1	8.278	1.142
#2	7.092	3.843

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1135	--	--	--	--	--	--
SDev	.0381520	--	--	--	--	--	--
%RSD	.0033601	--	--	--	--	--	--
#1	1135	--	--	--	--	--	--
#2	1135	--	--	--	--	--	--

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Method: SW846 Sample Name: 460-24329-A-14-A@4 Operator:
Run Time: 03/29/11 18:12:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52120.	1.986	31.78	247.8	2.131	-1.103	4086.
SDev	64.	.742	2.24	.2	.016	.039	9.
%RSD	.1219	37.38	7.045	.0611	.7601	3.512	.2128
#1	52080.	2.510	33.36	247.7	2.119	-1.130	4080.
#2	52170.	1.461	30.19	247.9	2.142	-1.075	4092.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	117.6	8.677	32.17	71860.	2909.	343.3	25.01
SDev	.3	.621	.18	134.	2.	.6	.75
%RSD	.2362	7.153	.5480	.1865	.0600	.1690	3.001
#1	117.4	9.116	32.29	71770.	2908.	342.9	24.48
#2	117.8	8.238	32.04	71960.	2910.	343.7	25.54

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1962.	-.5727	80.79	4.845	115.6	-1.987	128.1
SDev	6.	.4772	1.00	2.626	79.4	.590	.3
%RSD	.3112	83.33	1.236	54.21	68.65	29.67	.2163
#1	1958.	-.9102	80.09	6.702	171.7	-1.570	127.9
#2	1967.	-.2353	81.50	2.988	59.49	-2.404	128.3

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	113.9	22.25	9.646	4.231	844.0	83.46	79.46
SDev	.4	.08	.837	1.516	.8	1.00	1.00
%RSD	.3895	.3411	8.677	35.84	.0936	1.201	1.254
#1	113.6	22.30	9.054	5.303	843.4	82.75	78.75
#2	114.2	22.20	10.24	3.159	844.5	84.17	80.16

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.821	4.349
SDev	2.297	2.790
%RSD	39.47	64.17
#1	7.445	6.322
#2	4.196	2.376

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1148	--	--	--	--	--	--
SDev	.9546632	--	--	--	--	--	--
%RSD	.0831657	--	--	--	--	--	--
#1	1147	--	--	--	--	--	--
#2	1149	--	--	--	--	--	--

Method: SW846 Sample Name: SD 460-24329-A-14-A Operator:
Run Time: 03/29/11 18:18:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10940.	.5261	5.634	51.81	.5684	-.4633	847.7
SDev	21.	.2662	1.144	.16	.0149	.0711	.3
%RSD	.1922	50.60	20.30	.3082	2.616	15.34	.0396
#1	10960.	.7143	6.443	51.92	.5790	-.4131	848.0
#2	10930.	.3378	4.826	51.70	.5579	-.5136	847.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	24.62	1.253	6.842	15060.	614.3	71.19	4.695
SDev	.39	.220	.118	108.	7.4	.11	.398
%RSD	1.597	17.55	1.723	.7157	1.201	.1551	8.484

#1	24.34	1.097	6.758	15130.	609.1	71.27	4.414
#2	24.90	1.408	6.925	14980.	619.6	71.11	4.977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	474.4	-.5813	17.55	.7796	198.7	-2.001	26.62
SDev	.4	.8761	.54	.7068	54.9	2.363	.10
%RSD	.0786	150.7	3.075	90.66	27.61	118.1	.3914
#1	474.7	-1.201	17.17	1.279	159.9	-.3299	26.69
#2	474.2	.0382	17.93	.2798	237.5	-3.672	26.55
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	23.07	4.497	2.947	2.199	175.2	20.73	15.96
SDev	.77	.749	1.540	1.536	.2	1.21	1.41
%RSD	3.358	16.65	52.25	69.87	.1239	5.855	8.866
#1	23.62	5.026	1.858	1.113	175.3	21.58	14.96

#2	22.52	3.967	4.036	3.285	175.0	19.87	16.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1.245	.5376
SDev	5.843	1.857
%RSD	469.2	345.5
#1	5.377	-.7757
#2	-2.886	1.851
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1103	--	--	--	--	--	--
SDev	2.329171	--	--	--	--	--	--
%RSD	.2111403	--	--	--	--	--	--
#1	1101	--	--	--	--	--	--
#2	1105	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-14-C MS Operator:
Run Time: 03/29/11 18:25:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	71420.	230.6	969.9	1205.	24.88	23.18	13850.
SDev	156.	1.5	3.1	5.	.13	.37	5.
%RSD	.2177	.6587	.3194	.3762	.5359	1.594	.0348
#1	71530.	231.6	972.1	1208.	24.97	22.92	13850.
#2	71310.	229.5	967.7	1202.	24.79	23.44	13860.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.

Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	199.3	248.0	151.1	61910.	12450.	585.6	268.8
SDev	.6	.7	.5	321.	4.	.2	2.0
%RSD	.3018	.2750	.3157	.5187	.0325	.0312	.7301
#1	198.9	248.5	151.4	62140.	12450.	585.7	270.2
#2	199.7	247.5	150.8	61690.	12440.	585.4	267.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10840.	23.58	313.2	905.1	8825.	937.3	344.8
SDev	55.	.16	1.3	.9	23.	8.7	.4
%RSD	.5034	.6610	.4124	.0966	.2559	.9335	.1106
#1	10880.	23.47	314.1	905.7	8809.	943.5	345.1
#2	10800.	23.69	312.3	904.5	8841.	931.1	344.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	361.5	248.1	240.8	220.4	992.2	309.1	315.3
SDev	2.2	1.9	.2	.0	.7	4.2	4.0
%RSD	.6011	.7720	.0874	.0117	.0674	1.353	1.276
#1	363.0	249.4	240.6	220.4	992.6	306.2	318.1
#2	359.9	246.7	240.9	220.4	991.7	312.1	312.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	884.6	915.3
SDev	2.5	2.5
%RSD	.2807	.2786
#1	882.9	917.1
#2	886.4	913.5
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1132	--	--	--	--	--	--
SDev	3.436529	--	--	--	--	--	--
%RSD	.3036666	--	--	--	--	--	--
#1	1129	--	--	--	--	--	--
#2	1134	--	--	--	--	--	--

Method: SW846 Sample Name: PS 460-24329-A-14-A Operator:
Run Time: 03/29/11 18:31:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	54540.	470.5	1951.	2195.	47.82	47.35	24110.
SDev	661.	2.4	24.	12.	.53	.79	314.
%RSD	1.211	.5187	1.207	.5357	1.109	1.659	1.304

#1	55010.	472.2	1967.	2204.	48.19	47.90	24330.
#2	54080.	468.8	1934.	2187.	47.44	46.79	23880.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	310.4	494.9	271.8	72300.	21790.	822.1	509.6

SDev	5.2	6.4	3.2	1271.	173.	10.1	7.0
%RSD	1.673	1.293	1.162	1.758	.7927	1.234	1.373

#1	314.1	499.4	274.0	73200.	21920.	829.2	514.6
#2	306.7	490.4	269.5	71400.	21670.	814.9	504.7

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	20460.	52.83	550.6	1846.	18340.	1900.	598.8
SDev	122.	1.09	3.7	5.	162.	17.	8.2
%RSD	.5956	2.070	.6748	.2784	.8849	.8778	1.376

#1	20540.	53.61	553.3	1850.	18450.	1912.	604.6
#2	20370.	52.06	548.0	1843.	18220.	1888.	593.0

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	598.4	498.5	477.7	439.6	1344.	542.5	554.7
SDev	9.1	3.2	4.4	8.2	16.	.3	5.4
%RSD	1.528	.6420	.9133	1.868	1.199	.0611	.9745

#1	604.9	500.7	480.8	445.4	1355.	542.8	558.5
#2	591.9	496.2	474.7	433.8	1332.	542.3	550.9

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1811.	1864.
SDev	13.	1.
%RSD	.7160	.0661

#1	1821.	1865.
#2	1802.	1863.

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1129	--	--	--	--	--	--
SDev	9.965959	--	--	--	--	--	--
%RSD	.8828894	--	--	--	--	--	--

#1	1122	--	--	--	--	--	--
#2	1136	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-12-A@4 Operator:
Run Time: 03/29/11 18:38:06

Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	34670.	1.921	44.71	192.9	2.469	-.7839	6501.
SDev	129.	1.258	1.25	.2	.000	.2008	27.
%RSD	.3711	65.52	2.803	.0867	.0099	25.62	.4088
#1	34580.	1.031	43.82	193.0	2.469	-.9259	6482.
#2	34770.	2.810	45.60	192.8	2.469	-.6419	6520.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	73.12	10.36	60.02	62690.	3624.	509.1	20.49
SDev	.75	.04	.56	21.	17.	2.2	.61
%RSD	1.032	.3432	.9322	.0338	.4564	.4307	2.953
#1	72.58	10.38	59.63	62670.	3613.	507.6	20.06
#2	73.65	10.33	60.42	62700.	3636.	510.7	20.92
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2204.	-.3994	52.88	4.442	198.0	1.118	102.3

SDev	5.	.1982	.47	1.347	28.1	.312	.4
%RSD	.2189	49.62	.8846	30.32	14.18	27.90	.3979
#1	2200.	-.2593	52.55	5.394	217.9	1.338	102.0
#2	2207.	-.5395	53.21	3.490	178.2	.8972	102.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	126.6	12.39	9.659	4.264	549.9	56.05	51.29
SDev	.6	.65	.489	.505	1.9	.59	.41
%RSD	.4697	5.246	5.059	11.84	.3425	1.051	.7941
#1	126.2	11.93	10.00	3.907	548.6	55.63	51.01
#2	127.0	12.85	9.313	4.621	551.3	56.46	51.58
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	2.352	5.476
SDev	2.308	.867
%RSD	98.13	15.84
#1	3.984	6.090
#2	.7199	4.863
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1136	--	--	--	--	--	--
SDev	.0763040	--	--	--	--	--	--
%RSD	.0067150	--	--	--	--	--	--

#1	1136	--	--	--	--	--	--
#2	1136	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-13-A@4 Operator:
Run Time: 03/29/11 18:44:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	61920.	3.155	34.60	288.9	2.628	-1.049	6342.
SDev	364.	.477	.64	.8	.021	.211	24.
%RSD	.5883	15.12	1.843	.2866	.8041	20.14	.3772
#1	61660.	3.492	35.05	288.3	2.613	-1.198	6325.
#2	62180.	2.818	34.15	289.5	2.643	-.8994	6359.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	96.19	14.61	56.57	68690.	5833.	554.8	37.03
SDev	.25	.01	.19	250.	30.	2.3	.05
%RSD	.2614	.0559	.3412	.3643	.5066	.4106	.1357
#1	96.01	14.61	56.43	68510.	5812.	553.2	36.99
#2	96.37	14.60	56.70	68870.	5853.	556.4	37.06
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2366.	-.9007	87.52	2.780	237.4	-1.377	125.3
SDev	19.	.0055	.16	.190	45.9	.076	1.0
%RSD	.8180	.6099	.1868	6.850	19.31	5.535	.7831
#1	2352.	-.9046	87.41	2.646	269.8	-1.430	124.6
#2	2379.	-.8968	87.64	2.915	205.0	-1.323	126.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	135.0	15.16	9.737	5.074	762.5	92.23	85.17
SDev	.7	.75	.143	.751	3.5	3.45	1.48
%RSD	.5262	4.979	1.467	14.80	.4604	3.740	1.734
#1	134.5	14.63	9.636	4.543	760.0	89.79	86.21
#2	135.5	15.70	9.838	5.605	765.0	94.67	84.13
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.762	1.782
SDev	1.340	.384
%RSD	28.14	21.52
#1	3.814	2.053
#2	5.709	1.511
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED

Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1163	--	--	--	--	--	--
SDev	3.551071	--	--	--	--	--	--
%RSD	.3053022	--	--	--	--	--	--
#1	1166	--	--	--	--	--	--
#2	1161	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-15-A@4 Operator:
Run Time: 03/29/11 18:50:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	58060.	1.760	35.80	299.4	3.103	-.9458	7344.
SDev	3056.	2.221	.29	16.1	.171	.0526	384.
%RSD	5.264	126.2	.8144	5.375	5.521	5.558	5.230
#1	60220.	.1899	36.01	310.8	3.224	-.9086	7615.
#2	55900.	3.331	35.59	288.0	2.982	-.9829	7072.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	102.9	19.46	49.04	78410.	11020.	674.2	46.60
SDev	5.2	.58	3.05	4123.	590.	35.3	2.27
%RSD	5.064	2.976	6.221	5.258	5.360	5.236	4.863
#1	106.5	19.87	51.20	81320.	11430.	699.2	48.20
#2	99.18	19.05	46.88	75490.	10600.	649.3	45.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6198.	-.9769	87.69	3.427	303.8	.4103	138.3
SDev	396.	1.0404	3.24	.209	1.8	1.561	7.6
%RSD	6.394	106.5	3.695	6.108	.5837	380.5	5.475
#1	6478.	-1.713	89.98	3.575	305.0	1.514	143.7
#2	5918.	-.2412	85.40	3.279	302.5	-.6937	132.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	163.6	10.89	11.81	5.299	966.5	92.61	85.23
SDev	7.9	.56	.25	1.697	50.4	7.80	.96
%RSD	4.839	5.130	2.149	32.02	5.214	8.424	1.130
#1	169.2	11.29	11.99	4.099	1002.	98.13	85.91
#2	158.0	10.50	11.63	6.499	930.8	87.10	84.55
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Units	ppb	ppb
Avge	1.943	4.159
SDev	1.141	.883
%RSD	58.75	21.24
#1	1.136	4.784
#2	2.750	3.535

Errors	NOCHECK	NOCHECK					
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1139	--	--	--	--	--	--
SDev	50.89891	--	--	--	--	--	--
%RSD	4.468333	--	--	--	--	--	--
#1	1103	--	--	--	--	--	--
#2	1175	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-16-A@4 Operator:
Run Time: 03/29/11 18:57:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	25910.	.9169	23.55	139.6	1.415	-.5392	1980.
SDev	540.	.2531	.18	2.6	.014	.0015	41.
%RSD	2.083	27.61	.7479	1.827	1.016	.2708	2.077
#1	26300.	.7379	23.42	141.4	1.425	-.5382	2009.
#2	25530.	1.096	23.67	137.8	1.405	-.5403	1951.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	44.02	5.952	25.39	39470.	2235.	284.9	14.23
SDev	.94	.200	.46	671.	45.	5.7	.03
%RSD	2.129	3.357	1.820	1.699	2.034	1.994	.2181
#1	44.68	5.811	25.72	39950.	2267.	288.9	14.25
#2	43.36	6.094	25.07	39000.	2203.	280.8	14.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1203.	-.4128	65.09	2.034	435.7	-.5027	75.02
SDev	52.	.4238	.19	3.744	10.4	.6859	1.74
%RSD	4.302	102.7	.2920	184.1	2.397	136.5	2.316
#1	1239.	-.7125	64.95	-.6132	428.3	-.9876	76.25
#2	1166.	-.1132	65.22	4.681	443.1	-.0177	73.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	99.36	8.757	4.847	2.533	379.8	66.44	64.40
SDev	1.68	.543	.586	.294	8.3	2.17	1.37
%RSD	1.695	6.196	12.08	11.63	2.194	3.273	2.128
#1	100.6	9.141	5.261	2.325	385.7	67.98	63.43
#2	98.17	8.374	4.433	2.741	373.9	64.91	65.37
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	1.857	2.113					
SDev	7.169	2.034					
%RSD	386.1	96.25					

#1	-3.212	.6750
#2	6.926	3.552
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1143	--	--	--	--	--	--
SDev	16.41900	--	--	--	--	--	--
%RSD	1.436800	--	--	--	--	--	--
#1	1131	--	--	--	--	--	--
#2	1154	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24329-A-17-A@4 Operator:
Run Time: 03/29/11 19:03:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	47420.	1.888	47.34	327.1	2.026	-.6790	1700.
SDev	205.	1.362	2.61	.2	.008	.0630	9.
%RSD	.4321	72.14	5.516	.0568	.4015	9.276	.5313
#1	47270.	.9250	45.49	327.0	2.021	-.7235	1694.
#2	47560.	2.851	49.19	327.3	2.032	-.6345	1707.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	60.67	10.83	36.56	45570.	3223.	539.5	24.42
SDev	.42	.02	.04	106.	7.	2.0	.56
%RSD	.7001	.1823	.1002	.2316	.2125	.3646	2.278
#1	60.37	10.82	36.54	45500.	3218.	538.1	24.03
#2	60.97	10.84	36.59	45650.	3228.	540.9	24.82

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1468.	-.4467	80.46	2.730	220.8	-1.990	89.70
SDev	12.	.4086	.93	4.519	111.0	2.183	.43
%RSD	.8427	91.49	1.155	165.5	50.25	109.7	.4803
#1	1459.	-.7356	79.81	-.4653	299.3	-3.534	89.40
#2	1476.	-.1577	81.12	5.926	142.4	-.4463	90.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	111.5	7.709	6.655	5.249	434.4	83.69	78.85
SDev	1.4	.379	.666	1.360	2.1	2.34	2.56
%RSD	1.211	4.920	10.01	25.90	.4807	2.795	3.248
#1	110.5	7.441	6.184	4.288	432.9	85.35	77.04
#2	112.4	7.977	7.126	6.211	435.9	82.04	80.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		

Low	-30.00	-10.00	-10.00	-10.00	-10.00

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	6.408	.8852
SDev	3.975	4.790
%RSD	62.04	541.2
#1	3.597	-2.502
#2	9.219	4.273
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1179	--	--	--	--	--	--
SDev	1.030967	--	--	--	--	--	--
%RSD	.0874556	--	--	--	--	--	--
#1	1180	--	--	--	--	--	--
#2	1178	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/29/11 19:10:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	125000.	1031.	5056.	10290.	958.9	2499.	124500.
SDev	2329.	12.	33.	128.	7.0	16.	2122.
%RSD	1.863	1.137	.6458	1.246	.7314	.6487	1.705
#1	123400.	1023.	5033.	10190.	954.0	2488.	123000.
#2	126700.	1039.	5080.	10380.	963.9	2510.	126000.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5060.	2509.	12380.	94760.	124500.	4911.	2512.
SDev	89.	43.	235.	679.	2411.	87.	18.
%RSD	1.763	1.709	1.901	.7170	1.937	1.778	.7004
#1	4997.	2479.	12210.	94280.	122800.	4849.	2499.
#2	5123.	2539.	12550.	95240.	126200.	4973.	2524.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49990.	1260.	9895.	4889.	126200.	4954.	2474.
SDev	649.	22.	122.	73.	2684.	39.	46.
%RSD	1.299	1.716	1.228	1.498	2.126	.7897	1.866
#1	49530.	1244.	9809.	4837.	124300.	4926.	2441.
#2	50450.	1275.	9981.	4940.	128100.	4981.	2506.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2382.	998.5	2439.	906.7	10010.	9601.	10040.
SDev	5.	5.6	23.	1.0	185.	256.	55.
%RSD	.2101	.5620	.9518	.1092	1.844	2.661	.5445

#1	2378.	994.5	2423.	906.0	9880.	9421.	10000.
#2	2385.	1002.	2455.	907.4	10140.	9782.	10080.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4737.	4964.
SDev	129.	45.
%RSD	2.732	.9102
#1	4646.	4932.
#2	4829.	4996.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1055	--	--	--	--	--	--
SDev	20.61926	--	--	--	--	--	--
%RSD	1.953536	--	--	--	--	--	--
#1	1070	--	--	--	--	--	--
#2	1041	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/29/11 19:16:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49.69	-.0027	-1.715	1.502	.3087	.0277	-6.558
SDev	4.93	.2318	.601	1.275	.0264	.1224	5.154
%RSD	9.926	8549.	35.03	84.92	8.541	441.2	78.59
#1	53.18	-.1666	-1.291	2.404	.3273	.1143	-2.913
#2	46.20	.1612	-2.140	.6001	.2900	-.0588	-10.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0487	-.4607	-.6372	.3387	3.137	.1164	.4549
SDev	.0663	.1734	.4445	5.130	.013	.1239	.2192
%RSD	136.1	37.63	69.76	1514.	.4070	106.4	48.18
#1	-.0018	-.3381	-.3229	-3.288	3.128	.2040	.6099
#2	-.0956	-.5833	-.9515	3.966	3.146	.0288	.2999
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	69.86	-.1956	-.4486	.7396	212.9	3.132	.1977
SDev	3.57	.0112	.2876	2.186	20.1	2.305	.2062
%RSD	5.106	5.720	64.10	295.6	9.424	73.58	104.3
#1	72.38	-.2035	-.2453	-.8064	227.1	4.762	.3436
#2	67.34	-.1877	-.6519	2.286	198.7	1.502	.0519
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	-.4067	.1813	2.804	1.315	.3600	-.4540	-.4500
SDev	.8749	.4396	2.342	.139	.3357	1.1871	1.0238
%RSD	215.1	242.5	83.52	10.56	93.25	261.5	227.5
#1	-1.025	-.1296	4.460	1.414	.5974	-1.293	.2739

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#2	.2120	.4921	1.148	1.217	.1226	.3854	-1.174
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	2.662	-.2295
SDev	1.167	2.6954
%RSD	43.84	1174.
#1	1.837	-2.135
#2	3.487	1.676
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1100	--	--	--	--	--	--
SDev	1.221900	--	--	--	--	--	--
%RSD	.1110784	--	--	--	--	--	--
#1	1099	--	--	--	--	--	--
#2	1101	--	--	--	--	--	--

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Method: SW846 Sample Name: MB 460-68537/1-A@2 Operator:
Run Time: 03/29/11 20:04:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46.56	.4659	-1.511	.1731	.3322	-.1445	-9.423
SDev	3.04	1.198	1.349	.4841	.0196	.0287	.407
%RSD	6.534	257.2	89.30	279.7	5.890	19.82	4.315
#1	44.41	1.313	-.5568	-.1692	.3184	-.1648	-9.710
#2	48.72	-.3813	-2.465	.5153	.3461	-.1243	-9.135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2929	-.9568	-1.604	-10.06	1.835	-.2592	-.8139
SDev	.4359	.3968	.148	8.45	11.51	.0830	.1483
%RSD	148.8	41.47	9.222	84.03	627.6	32.03	18.22
#1	-.6011	-1.237	-1.500	-4.082	9.976	-.2005	-.9188
#2	.0153	-.6762	-1.709	-16.03	-6.307	-.3178	-.7090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	93.93	-.2015	1.903	-.2390	206.4	-.4009	-.4132
SDev	4.69	.8245	.542	.2177	156.8	4.4604	.1524
%RSD	4.990	409.2	28.48	91.09	75.97	1113.	36.88
#1	97.25	.3815	1.520	-.3930	317.3	-3.555	-.3054
#2	90.62	-.7845	2.286	-.0851	95.52	2.753	-.5210

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Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4363	7.597	.7470	1.999	-.5354	6.305	-.2987
SDev	.9035	.625	.8441	.866	.0617	.444	1.0345
%RSD	207.1	8.230	113.0	43.32	11.53	7.047	346.3
#1	1.075	8.039	.1501	1.387	-.4917	6.620	-1.030
#2	-.2025	7.155	1.344	2.612	-.5790	5.991	.4328

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-1.558	.4100
SDev	.862	.7569
%RSD	55.33	184.6
#1	-.9487	-.1252
#2	-2.168	.9452

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1087	--	--	--	--	--	--
SDev	.1145423	--	--	--	--	--	--
%RSD	.0105391	--	--	--	--	--	--
#1	1087	--	--	--	--	--	--
#2	1087	--	--	--	--	--	--

Method: SW846 Sample Name: LCSSRM 460-68537/2-A Operator:
Run Time: 03/29/11 20:11:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50440.	941.4	542.9	1013.	373.3	312.1	51900.
SDev	102.	5.3	2.1	2.	.5	.3	82.
%RSD	.2016	.5647	.3948	.1864	.1460	.1024	.1588
#1	50510.	945.1	541.4	1014.	373.7	312.3	51960.
#2	50370.	937.6	544.4	1012.	372.9	311.9	51840.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	81000.	1190.	680.0	1250.	488.5	385.5	61500.
Low	24200.	108.0	362.5	725.0	287.0	222.5	37200.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1206.	486.1	881.6	95960.	19760.	2895.	705.7
SDev	3.	1.7	3.3	151.	18.	7.	2.1
%RSD	.2649	.3508	.3756	.1575	.0886	.2402	.2986
#1	1208.	487.3	883.9	96070.	19770.	2900.	707.2
#2	1204.	484.8	879.3	95850.	19750.	2890.	704.2

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1525.	575.0	1080.	142500.	26150.	3420.	850.0
Low	835.0	339.5	655.0	37850.	13900.	2160.	490.5

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	21550.	153.8	455.9	1450.	4607.	639.2	607.8
SDev	18.	.1	.4	3.	47.	2.5	1.4

%RSD	.0853	.0807	.0959	.2406	1.018	.3925	.2226
#1	21570.	153.7	456.2	1453.	4574.	641.0	608.7
#2	21540.	153.9	455.6	1448.	4641.	637.5	606.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	28950.	203.0	560.0	1865.	7100.	805.0	760.0
Low	14050.	98.00	300.0	995.0	3070.	410.5	389.0
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3110.	713.8	272.4	504.3	2668.	450.1	458.7
SDev	5.	1.8	.4	.2	8.	2.8	.8
%RSD	.1600	.2528	.1550	.0394	.3030	.6284	.1650
#1	3113.	715.1	272.7	504.2	2674.	452.1	458.2

#2	3106.	712.5	272.1	504.5	2662.	448.1	459.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	3765.	960.0	325.0	740.0	4220.		
Low	2185.	448.0	161.0	297.0	401.0		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1414.	1468.
SDev	5.	3.
%RSD	.3556	.1852
#1	1418.	1470.
#2	1411.	1466.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1132	--	--	--	--	--	--
SDev	.6108636	--	--	--	--	--	--
%RSD	.0539708	--	--	--	--	--	--
#1	1131	--	--	--	--	--	--
#2	1132	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24546-A-18-A@4 Operator:
Run Time: 03/29/11 20:17:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	5316.	.0900	-.9981	13.91	.9082	-.6450	314.2
SDev	92.	.0779	.9883	.05	.0557	.3047	8.9
%RSD	1.722	86.56	99.01	.3798	6.130	47.24	2.840
#1	5381.	.1451	-1.697	13.87	.9476	-.4296	320.5
#2	5251.	.0349	-.2993	13.95	.8689	-.8605	307.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.845	3.539	5.598	12540.	570.3	376.7	4.523
SDev	.552	.639	.824	254.	6.8	7.7	1.037
%RSD	11.40	18.05	14.73	2.023	1.189	2.057	22.93
#1	5.236	3.991	6.181	12720.	575.0	382.2	5.256
#2	4.455	3.087	5.015	12360.	565.5	371.3	3.790

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	327.1	-.6867	5.283	.9518	235.7	-.1628	6.565
SDev	42.2	.4151	.745	.0616	57.7	.9743	.582
%RSD	12.90	60.45	14.11	6.467	24.48	598.4	8.866
#1	357.0	-.9802	4.756	.9082	276.5	-.8517	6.976
#2	297.3	-.3932	5.810	.9953	194.9	.5261	6.153

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	11.73	6.088	2.640	1.556	145.1	10.22	2.816
SDev	.54	.494	.058	1.079	2.8	.91	1.571
%RSD	4.628	8.122	2.197	69.35	1.916	8.900	55.80
#1	12.12	6.438	2.681	2.319	147.1	10.86	1.705
#2	11.35	5.739	2.599	.7929	143.1	9.574	3.927

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.1447	1.345
SDev	3.712	1.761
%RSD	2566.	130.9
#1	-2.480	2.591
#2	2.770	.0999

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1109	--	--	--	--	--	--
SDev	9.240466	--	--	--	--	--	--
%RSD	.8333483	--	--	--	--	--	--
#1	1102	--	--	--	--	--	--
#2	1115	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24546-A-17-A@4 Operator:
Run Time: 03/29/11 20:23:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5880.	-.1075	2.415	13.49	.6970	-.3199	370.8
SDev	177.	.4787	2.042	.48	.0743	.0521	12.7
%RSD	3.009	445.3	84.57	3.529	10.65	16.30	3.412
#1	5755.	-.4460	.9707	13.15	.6445	-.2830	361.8
#2	6005.	.2310	3.859	13.82	.7495	-.3567	379.7

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.294	4.180	5.305	13020.	883.2	294.6	5.160

SDev	.821	.319	.607	363.	32.8	9.0	.581
%RSD	8.830	7.628	11.45	2.787	3.715	3.061	11.26
#1	8.714	3.955	4.876	12760.	860.0	288.2	4.749
#2	9.874	4.406	5.734	13270.	906.4	300.9	5.571
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	476.6	.2364	5.354	-.3567	195.9	-1.488	10.41
SDev	82.5	.9636	1.187	1.4330	43.8	1.045	.76
%RSD	17.30	407.7	22.16	401.7	22.37	70.27	7.307
#1	418.3	-.4450	4.515	.6565	226.9	-2.227	9.870
#2	534.9	.9177	6.193	-1.370	164.9	-.7484	10.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	13.42	6.509	2.556	1.369	176.2	8.349	3.855
SDev	2.26	1.115	.771	3.685	5.7	2.922	3.238
%RSD	16.85	17.14	30.16	269.3	3.232	35.00	83.99
#1	11.82	5.721	2.011	-1.237	172.1	10.41	1.565
#2	15.02	7.298	3.102	3.975	180.2	6.282	6.144
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	-4.676	1.790					
SDev	5.960	.827					
%RSD	127.5	46.18					
#1	-.4619	1.206					
#2	-8.890	2.375					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1107	--	--	--	--	--	--
SDev	28.79052	--	--	--	--	--	--
%RSD	2.600389	--	--	--	--	--	--

#1	1128	--	--	--	--	--	--
#2	1087	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24464-A-1-A@4 Operator:
Run Time: 03/29/11 20:30:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	63210.	.3688	16.24	385.9	2.776	-1.170	11730.
SDev	3344.	1.231	1.21	13.9	.137	.170	625.
%RSD	5.291	333.9	7.437	3.610	4.922	14.56	5.327
#1	65570.	-.5019	15.39	395.8	2.873	-1.290	12170.
#2	60840.	1.239	17.10	376.1	2.679	-1.049	11290.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	81.24	34.67	92.78	86090.	11350.	2173.	56.26
SDev	3.87	1.72	4.14	3103.	608.	116.	1.45
%RSD	4.765	4.957	4.461	3.604	5.359	5.357	2.584
#1	83.98	35.89	95.71	88290.	11780.	2256.	57.29
#2	78.51	33.46	89.85	83900.	10920.	2091.	55.24

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2167.	-2.174	395.5	3.246	718.5	-2.410	194.4
SDev	205.	1.597	15.0	.843	37.4	1.833	9.9
%RSD	9.476	73.46	3.790	25.97	5.200	76.07	5.117
#1	2313.	-3.303	406.1	2.650	692.1	-1.114	201.4
#2	2022.	-1.045	384.9	3.842	744.9	-3.706	187.4

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	425.8	15.12	11.48	9.016	2004.	390.2	398.1
SDev	16.2	.05	1.34	.501	106.	7.3	18.8
%RSD	3.804	.3326	11.63	5.556	5.285	1.876	4.727
#1	437.3	15.15	12.43	8.662	2079.	395.4	411.4
#2	414.4	15.08	10.54	9.370	1929.	385.1	384.8

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-.8468	5.279
SDev	9.6499	3.554
%RSD	1140.	67.31
#1	-7.670	7.792
#2	5.977	2.767

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1082	--	--	--	--	--	--
SDev	44.82774	--	--	--	--	--	--
%RSD	4.141811	--	--	--	--	--	--
#1	1051	--	--	--	--	--	--
#2	1114	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24238-A-5-D@4 Operator:
Run Time: 03/29/11 20:36:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	10550.	-.4885	55.09	18.55	1.980	-1.474	301.8
SDev	126.	.1997	.21	.13	.045	.039	3.9
%RSD	1.198	40.89	.3860	.7076	2.255	2.653	1.304
#1	10460.	-.6298	55.24	18.45	1.949	-1.446	299.1
#2	10640.	-.3473	54.94	18.64	2.012	-1.501	304.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	108.9	13.30	16.05	114000.	2552.	230.0	30.85
SDev	1.3	.22	.23	1828.	41.	2.9	.06
%RSD	1.209	1.646	1.441	1.603	1.621	1.276	.2012
#1	107.9	13.14	15.89	112700.	2522.	228.0	30.80
#2	109.8	13.45	16.22	115300.	2581.	232.1	30.89
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1390.	-.0310	22.97	2.821	162.8	-.8944	126.6
SDev	40.	.3466	.58	.448	12.4	1.6789	1.7
%RSD	2.864	1117.	2.530	15.89	7.627	187.7	1.312
#1	1362.	.2140	22.56	2.504	171.6	.2928	125.4
#2	1418.	-.2761	23.38	3.138	154.1	-2.082	127.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	98.98	11.04	13.44	2.220	278.9	29.17	19.87
SDev	1.15	.31	.65	.011	3.8	.67	.54
%RSD	1.165	2.822	4.863	.4743	1.363	2.284	2.711
#1	98.17	11.26	13.90	2.213	276.2	28.70	19.49
#2	99.80	10.82	12.97	2.228	281.6	29.64	20.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	8.119	.1667					
SDev	.237	.5533					
%RSD	2.923	331.9					
#1	7.951	-.2245					
#2	8.287	.5580					
Errors	NOCHECK	NOCHECK					
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1117	--	--	--	--	--	--
SDev	11.87520	--	--	--	--	--	--
%RSD	1.062706	--	--	--	--	--	--
#1	1126	--	--	--	--	--	--
#2	1109	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24238-A-7-F@4 Operator:

Run Time: 03/29/11 20:42:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18330.	-1.965	31.99	45.09	2.693	-1.313	838.2
SDev	324.	.659	.91	.50	.056	.076	11.2
%RSD	1.767	33.51	2.830	1.106	2.061	5.798	1.340
#1	18560.	-2.431	31.35	45.44	2.732	-1.366	846.1
#2	18100.	-1.500	32.64	44.74	2.653	-1.259	830.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	240.7	17.67	17.89	86170.	3823.	241.8	38.22
SDev	3.8	.09	.28	1105.	60.	3.6	.68
%RSD	1.589	.4891	1.564	1.283	1.563	1.483	1.775
#1	243.4	17.61	18.09	86960.	3865.	244.4	38.70
#2	237.9	17.73	17.69	85390.	3781.	239.3	37.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3376.	-.8290	20.92	2.446	747.6	-.8098	91.86
SDev	64.	.6164	.42	2.138	64.2	2.0891	1.07
%RSD	1.907	74.36	1.996	87.41	8.582	258.0	1.169
#1	3421.	-1.265	20.63	.9342	702.2	-2.287	92.62
#2	3330.	-.3931	21.22	3.958	792.9	.6674	91.10
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	100.9	27.27	12.59	2.122	486.0	24.25	19.25
SDev	.5	.44	1.25	1.512	6.9	2.17	.46
%RSD	.5364	1.617	9.958	71.24	1.422	8.937	2.369
#1	101.3	27.58	13.48	3.192	490.9	22.72	19.58
#2	100.5	26.95	11.71	1.053	481.1	25.79	18.93
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem 1960/1 1960/2 ••Analysis Report 03/29/11 08:49:13 PM page 20

Units	ppb	ppb
Avge	5.179	1.072
SDev	6.002	.209
%RSD	115.9	19.52
#1	.9349	.9241
#2	9.423	1.220
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1090	--	--	--	--	--	--
SDev	12.40976	--	--	--	--	--	--
%RSD	1.138154	--	--	--	--	--	--

#1	1082	--	--	--	--	--	--
#2	1099	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24356-A-1-F@4 Operator:
Run Time: 03/29/11 20:49:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	16480.	303.9	47.52	2322.	1.404	1.734	20060.
SDev	230.	8.7	2.00	34.	.021	.026	247.
%RSD	1.396	2.856	4.214	1.453	1.471	1.526	1.232
#1	16650.	310.1	48.94	2346.	1.390	1.753	20230.
#2	16320.	297.8	46.11	2298.	1.419	1.716	19880.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	96.58	15.56	2598.	53420.	8010.	747.6	389.6
SDev	.92	.18	38.	856.	102.	10.4	5.7
%RSD	.9538	1.137	1.458	1.602	1.273	1.385	1.454
#1	97.23	15.43	2625.	54030.	8082.	754.9	393.6
#2	95.92	15.68	2572.	52820.	7938.	740.3	385.6

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2100.	9.247	1188.	4.254	5192.	-.6712	61.83
SDev	50.	.090	19.	.886	11.	.3780	.74
%RSD	2.386	.9696	1.618	20.83	.2164	56.32	1.196
#1	2135.	9.184	1202.	3.627	5200.	-.4039	62.35
#2	2064.	9.311	1175.	4.880	5184.	-.9385	61.30

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1838.	19.38	7.699	241.7	764.8	1162.	1202.
SDev	27.	.65	.690	6.2	10.0	18.	20.
%RSD	1.487	3.359	8.957	2.576	1.310	1.588	1.633
#1	1858.	18.92	7.211	246.1	771.9	1175.	1215.
#2	1819.	19.84	8.186	237.3	757.7	1149.	1188.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.847	3.448
SDev	.115	1.386
%RSD	1.974	40.19
#1	5.929	2.468
#2	5.766	4.428

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1106	--	--	--	--	--	--
SDev	10.23328	--	--	--	--	--	--
%RSD	.9252281	--	--	--	--	--	--
#1	1099	--	--	--	--	--	--
#2	1113	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/29/11 20:55:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	478200.	-2.482	-4.907	4.935	.4163	-2.249	464900.
SDev	7564.	.338	3.399	.169	.0268	.014	5677.
%RSD	1.582	13.61	69.27	3.418	6.449	.6217	1.221
#1	483500.	-2.243	-7.310	5.054	.4353	-2.259	468900.
#2	472800.	-2.721	-2.503	4.816	.3973	-2.239	460900.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6.337	-.3105	-3.523	183300.	516500.	-6.406	-2.187
SDev	.579	.1237	.210	2601.	8398.	.145	.307
%RSD	9.137	39.85	5.948	1.419	1.626	2.265	14.04
#1	5.928	-.2230	-3.375	185100.	522500.	-6.509	-2.404
#2	6.747	-.3980	-3.672	181400.	510600.	-6.303	-1.970

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00
Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	118.7	-.9587	-1.437	-.0438	209.7	-9.039	2.859
SDev	25.2	.7772	1.604	.3632	49.1	.167	.225
%RSD	21.22	81.06	111.7	830.0	23.44	1.853	7.865
#1	136.5	-1.508	-.3022	-.3006	174.9	-9.157	2.700
#2	100.9	-.4092	-2.571	.2131	244.4	-8.921	3.018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7848	-5.496	6.677	-2.739	-4.629	31.38	-17.82
SDev	.3960	.048	.633	1.119	.604	4.35	4.58
%RSD	50.45	.8710	9.485	40.83	13.06	13.87	25.68
#1	-1.065	-5.530	6.229	-1.949	-5.056	28.30	-14.59
#2	-.5049	-5.463	7.125	-3.530	-4.201	34.46	-21.06
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	7.785	-3.963
SDev	14.09	6.491
%RSD	181.0	163.8
#1	-2.180	.6275
#2	17.75	-8.553

Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1017	--	--	--	--	--	--
SDev	14.92982	--	--	--	--	--	--
%RSD	1.468324	--	--	--	--	--	--
#1	1006	--	--	--	--	--	--
#2	1027	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/29/11 21:02:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	472700.	99.39	95.86	107.1	92.93	94.49	458600.
SDev	937.	1.09	1.82	.3	.44	.64	1087.
%RSD	.1981	1.096	1.898	.3199	.4703	.6797	.2371
#1	472000.	100.2	94.57	106.8	92.63	94.04	457800.
#2	473400.	98.62	97.14	107.3	93.24	94.94	459400.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	103.8	97.53	98.16	181600.	510200.	91.14	93.92
SDev	.2	.27	.27	751.	1135.	.43	.65
%RSD	.1884	.2750	.2787	.4137	.2225	.4757	.6969
#1	104.0	97.71	98.35	181000.	509400.	90.84	93.46
#2	103.7	97.34	97.96	182100.	511000.	91.45	94.38
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10290.	102.8	94.63	100.3	9664.	89.65	100.1
SDev	41.	.1	2.84	2.5	80.	1.97	.2
%RSD	.4019	.1242	3.001	2.474	.8319	2.201	.2317
#1	10260.	102.9	92.63	102.0	9720.	91.05	99.92
#2	10320.	102.7	96.64	98.54	9607.	88.26	100.2

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	92.35	94.61	106.0	L78.07	98.03	117.6	83.18
SDev	1.62	.78	.5	1.86	.05	3.7	6.10
%RSD	1.750	.8243	.4775	2.387	.0488	3.144	7.336
#1	91.20	94.06	105.7	L76.75	98.00	120.2	78.87
#2	93.49	95.17	106.4	L79.39	98.06	115.0	87.50
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	97.34	101.8

SDev	2.28	2.6
%RSD	2.346	2.535
#1	98.96	103.6
#2	95.73	99.94
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1018	--	--	--	--	--	--
SDev	.5345596	--	--	--	--	--	--
%RSD	.0524853	--	--	--	--	--	--
#1	1019	--	--	--	--	--	--
#2	1018	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/29/11 21:08:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	123000.	1034.	5061.	10080.	938.5	2479.	124500.
SDev	579.	1.	1.	6.	.8	2.	165.
%RSD	.4706	.1377	.0102	.0642	.0881	.0924	.1329
#1	122600.	1033.	5061.	10080.	939.1	2480.	124400.
#2	123400.	1035.	5061.	10070.	937.9	2477.	124600.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5027.	2502.	12150.	92780.	122400.	4858.	2491.
SDev	6.	2.	47.	51.	532.	7.	2.
%RSD	.1114	.0799	.3869	.0552	.4350	.1454	.0752
#1	5023.	2500.	12120.	92820.	122000.	4853.	2492.
#2	5031.	2503.	12190.	92750.	122700.	4863.	2490.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49710.	1249.	9827.	4881.	124300.	4914.	2430.
SDev	35.	3.	8.	9.	769.	5.	4.
%RSD	.0709	.2109	.0792	.1780	.6187	.0941	.1523
#1	49740.	1247.	9832.	4887.	123800.	4918.	2428.
#2	49690.	1251.	9821.	4875.	124900.	4911.	2433.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2351.	985.4	2420.	L883.7	9896.	9597.	9941.
SDev	2.	.0	2.	1.5	22.	6.	8.
%RSD	.0813	.0002	.1016	.1723	.2230	.0672	.0849
#1	2353.	985.4	2418.	L882.7	9880.	9602.	9947.
#2	2350.	985.4	2422.	L884.8	9912.	9593.	9936.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK

High	2760.	1104.	2760.	1104.	11040.
Low	2239.	896.0	2239.	896.0	8960.

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4749.	4947.
SDev	.	13.
%RSD	.0099	.2586
#1	4749.	4956.
#2	4749.	4938.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1063	--	--	--	--	--	--
SDev	1.680069	--	--	--	--	--	--
%RSD	.1581155	--	--	--	--	--	--
#1	1061	--	--	--	--	--	--
#2	1064	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/29/11 21:14:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	70.12	1.231	.0921	1.769	.4912	.1740	3.726
SDev	.24	1.381	2.212	.054	.0250	.1954	2.011
%RSD	.3394	112.2	2400.	3.071	5.099	112.2	53.96
#1	69.95	2.208	-1.472	1.808	.4735	.3122	5.148
#2	70.29	.2541	1.656	1.731	.5089	.0359	2.304
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0587	.2069	-.1522	2.657	21.59	.2102	.5111
SDev	.0634	.2106	.1387	3.260	8.75	.0010	.2850
%RSD	108.0	101.8	91.11	122.7	40.54	.4658	55.77
#1	.1035	.0580	-.2502	4.962	15.40	.2109	.7126
#2	.0139	.3558	-.0541	.3521	27.78	.2095	.3095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	108.3	.1897	.7532	-.1949	171.1	5.170	.4036
SDev	2.7	.5484	.2428	1.6204	89.1	3.196	.2843
%RSD	2.519	289.1	32.23	831.6	52.06	61.82	70.46
#1	110.2	-.1981	.5815	.9510	234.1	7.430	.6047
#2	106.4	.5775	.9249	-1.341	108.1	2.910	.2025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2965	.6126	2.484	1.202	.6654	2.339	-.0427
SDev	.3493	.1797	.795	.968	.0313	1.363	.3165
%RSD	117.8	29.33	31.99	80.55	4.703	58.27	740.8

#1	-.5435	.7397	3.046	.5173	.6875	1.375	.1811
#2	-.0495	.4855	1.922	1.886	.6433	3.303	-.2665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	2.028	-1.314					
SDev	.284	2.288					
%RSD	13.98	174.1					

#2	1.828	-2.932
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1088	--	--	--	--	--	--
SDev	1.412832	--	--	--	--	--	--
%RSD	.1298343	--	--	--	--	--	--
#1	1087	--	--	--	--	--	--
#2	1089	--	--	--	--	--	--

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Method: SW846 Sample Name: MB 460-68857/1-A Operator:
Run Time: 03/29/11 22:23:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	60.60	.2069	-.9611	.1917	.4221	.1265	-3.265
SDev	3.01	1.444	1.8886	.4772	.0006	.0146	1.492
%RSD	4.967	697.8	196.5	248.9	.1476	11.56	45.70
#1	58.47	-.8139	-2.297	.5291	.4216	.1162	-4.320
#2	62.72	1.228	.3744	-.1457	.4225	.1368	-2.210
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1262	-.1235	-.5673	-.1753	7.390	-.1756	.9198
SDev	.6684	.0949	.5891	9.5490	1.607	.0412	.0418
%RSD	529.6	76.84	103.8	5447.	21.74	23.47	4.541
#1	-.5989	-.1905	-.9839	6.577	6.254	-.2047	.8903
#2	.3464	-.0564	-.1507	-6.927	8.526	-.1464	.9494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	65.98	-.3720	.0985	-2.145	178.4	1.450	.1044
SDev	5.04	.3106	.7225	3.008	60.5	1.602	.5310
%RSD	7.645	83.51	733.5	140.2	33.94	110.5	508.7
#1	62.42	-.5916	.6094	-4.272	135.6	2.583	-.2711
#2	69.55	-.1523	-.4124	-.0186	221.2	.3170	.4799

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0576	1.130	1.114	3.814	-.2628	-.6713	.4788
SDev	.2839	.380	.782	3.300	.0597	.9242	.6218
%RSD	493.0	33.65	70.16	86.54	22.73	137.7	129.9
#1	-.1432	1.399	1.667	1.480	-.3050	-.0178	.9185
#2	.2584	.8614	.5614	6.148	-.2206	-1.325	.0391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1.419	-3.934
SDev	7.229	.900
%RSD	509.5	22.89
#1	-3.693	-4.571
#2	6.530	-3.298
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1106	--	--	--	--	--	--
SDev	1.527289	--	--	--	--	--	--
%RSD	.1381147	--	--	--	--	--	--
#1	1107	--	--	--	--	--	--
#2	1105	--	--	--	--	--	--

Method: SW846 Sample Name: LCS 460-68857/2-A Operator:
Run Time: 03/29/11 22:29:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1060.	252.4	1029.	990.7	23.33	25.25	10300.
SDev	15.	4.9	19.	6.9	.33	.48	136.
%RSD	1.401	1.937	1.804	.6932	1.433	1.883	1.320
#1	1070.	255.8	1042.	995.5	23.57	25.59	10400.
#2	1049.	248.9	1016.	985.8	23.10	24.92	10210.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	98.05	249.1	119.5	442.6	9664.	242.8	251.1
SDev	1.86	3.7	1.3	29.8	101.	2.6	5.2
%RSD	1.895	1.481	1.129	6.732	1.041	1.072	2.087
#1	99.37	251.7	120.5	463.7	9735.	244.6	254.9
#2	96.74	246.5	118.5	421.5	9593.	240.9	247.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10260.	24.72	243.9	1026.	9354.	1005.	238.4
SDev	104.	.67	2.1	13.	154.	13.	3.5
%RSD	1.009	2.720	.8493	1.239	1.650	1.249	1.488
#1	10330.	25.19	245.3	1035.	9463.	1014.	240.9

#2	10180.	24.24	242.4	1017.	9245.	996.4	235.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	251.2	247.7	242.9	225.7	254.8	236.5	247.5
SDev	5.3	3.3	3.1	3.6	2.7	5.3	.5
%RSD	2.114	1.316	1.267	1.582	1.059	2.225	.1929
#1	255.0	250.0	245.0	228.2	256.7	240.3	247.8

#2	247.4	245.4	240.7	223.2	252.9	232.8	247.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1003.	1038.
SDev	19.	10.
%RSD	1.907	.9174
#1	1017.	1045.
#2	989.7	1031.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1099	--	--	--	--	--	--
SDev	10.46237	--	--	--	--	--	--
%RSD	.9521698	--	--	--	--	--	--
#1	1091	--	--	--	--	--	--
#2	1106	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24122-A-4-D DU Operator:
Run Time: 03/29/11 22:35:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	79.01	-2.122	-2.367	190.6	.4016	-.1541	35920.
SDev	1.82	1.138	1.484	.2	.0402	.0315	80.
%RSD	2.308	53.64	62.68	.1199	10.02	20.42	.2225
#1	77.72	-1.317	-3.416	190.5	.4300	-.1319	35980.
#2	80.30	-2.927	-1.318	190.8	.3732	-.1764	35870.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.9900	-.5401	.9261	384.8	17400.	149.3	2.404
SDev	.0540	.1328	.3005	8.8	47.	.5	.526
%RSD	5.457	24.59	32.45	2.279	.2699	.3529	21.88
#1	-1.028	-.6339	1.139	391.0	17440.	149.7	2.776
#2	-.9518	-.4462	.7136	378.6	17370.	148.9	2.032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4389.	-1.440	.4341	2.602	76710.	.4244	.5857
SDev	9.	.724	1.093	1.662	83.	3.632	.6107
%RSD	.1941	50.26	251.6	63.88	.1086	855.9	104.3
#1	4395.	-.9284	-.3383	1.427	76770.	2.993	.1539
#2	4383.	-1.952	1.207	3.777	76650.	-2.144	1.018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	196.4	18.16	.5914	.7021	-.4239	-.2426	.7679
SDev	.4	1.04	.2203	.2983	.0009	2.2220	.5286
%RSD	.2287	5.713	37.24	42.48	.2120	915.8	68.83
#1	196.7	18.89	.4356	.9130	-.4245	-1.814	.3942
#2	196.1	17.42	.7471	.4912	-.4233	1.329	1.142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	6.798	.4971
SDev	3.002	.9927
%RSD	44.16	199.7
#1	4.675	-.2048
#2	8.921	1.199
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1097	--	--	--	--	--	--
SDev	1.145509	--	--	--	--	--	--
%RSD	.1044674	--	--	--	--	--	--
#1	1096	--	--	--	--	--	--
#2	1097	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24122-A-4-C Operator:
Run Time: 03/29/11 22:42:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	85.29	2.242	-3.327	186.1	.4162	.0118	35250.
SDev	2.77	.660	.391	.3	.0096	.1421	158.
%RSD	3.251	29.42	11.74	.1630	2.299	1207.	.4490
#1	87.25	2.708	-3.051	185.9	.4095	.1123	35140.
#2	83.33	1.775	-3.603	186.3	.4230	-.0887	35360.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0226	.2489	1.300	395.6	17010.	146.3	3.061
SDev	.3162	.4792	.031	4.8	14.	.6	.033

%RSD	1401.	192.5	2.407	1.204	.0833	.4016	1.083
#1	-.2461	-.0899	1.322	398.9	17000.	145.9	3.037
#2	.2010	.5877	1.278	392.2	17020.	146.8	3.084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4275.	-.7520	.9687	2.000	75090.	.9548	.1345
SDev	6.	.0397	1.013	.200	220.	1.653	.0780
%RSD	.1497	5.277	104.6	9.978	.2934	173.1	58.02
#1	4270.	-.7801	1.685	1.859	74930.	-.2140	.1897
#2	4279.	-.7239	.2526	2.141	75240.	2.124	.0793
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	191.9	18.00	1.790	1.939	.0334	2.783	.0586
SDev	1.5	1.04	.291	1.226	.0906	1.498	.7704
%RSD	.7915	5.800	16.28	63.23	271.7	53.83	1314.
#1	190.9	18.74	1.996	2.805	.0975	3.843	.6033
#2	193.0	17.26	1.584	1.072	-.0307	1.724	-.4861
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	9.107	-1.558					
SDev	.445	.521					
%RSD	4.885	33.46					
#1	9.422	-1.927					
#2	8.793	-1.189					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1102	--	--	--	--	--	--
SDev	4.200259	--	--	--	--	--	--
%RSD	.3812311	--	--	--	--	--	--

#1	1099	--	--	--	--	--	--
#2	1105	--	--	--	--	--	--

Method: SW846 Sample Name: SD 460-24122-A-4-C@5 Operator:
Run Time: 03/29/11 22:48:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	58.70	.3720	-2.120	37.07	.3692	-.1785	6968.
SDev	3.92	1.726	2.859	.56	.0053	.2018	79.
%RSD	6.679	464.1	134.9	1.521	1.444	113.1	1.132
#1	61.48	1.593	-.0984	37.47	.3730	-.0358	7024.
#2	55.93	-.8488	-4.142	36.68	.3654	-.3212	6913.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.

Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2407	.0399	-.5905	67.39	3298.	28.57	.5490
SDev	.4797	.1349	.7770	10.16	28.	.32	.0438
%RSD	199.3	338.2	131.6	15.08	.8408	1.123	7.970
#1	.0985	.1353	-.0410	74.57	3317.	28.80	.5181
#2	-.5799	-.0555	-1.140	60.20	3278.	28.34	.5800
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	757.0	-.1137	.5970	.4179	13920.	-.5186	-.0163

SDev	22.2	.8359	.7297	.3897	209.	1.4154	.2587
%RSD	2.929	735.4	122.2	93.25	1.501	272.9	1585.
#1	772.7	.4774	1.113	.6934	14070.	.4822	.1666
#2	741.4	-.7047	.0811	.1423	13770.	-1.519	-.1992
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	37.15	3.353	.9957	1.004	-.2829	3.344	-.7787
SDev	.17	.047	.0118	.778	.1801	9.242	3.5204
%RSD	.4502	1.400	1.185	77.50	63.66	276.4	452.1
#1	37.27	3.320	.9874	1.554	-.1556	9.880	-3.268
#2	37.03	3.387	1.004	.4537	-.4103	-3.191	1.711
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	2.077	-.4202
SDev	9.436	4.1267
%RSD	454.2	982.0
#1	8.750	-3.338
#2	-4.595	2.498
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1092	--	--	--	--	--	--
SDev	7.407617	--	--	--	--	--	--
%RSD	.6782935	--	--	--	--	--	--
#1	1087	--	--	--	--	--	--
#2	1097	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24122-A-4-E MS Operator:
Run Time: 03/29/11 22:55:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1085.	253.0	1026.	1185.	23.30	25.06	45930.
SDev	8.	3.7	3.	7.	.08	.13	206.
%RSD	.7403	1.466	.2902	.5732	.3225	.5298	.4486

#1	1080.	250.4	1024.	1181.	23.24	24.97	45780.
#2	1091.	255.6	1028.	1190.	23.35	25.15	46070.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	98.55	247.8	118.7	866.7	27070.	391.2	250.7
SDev	.48	1.2	.7	2.2	198.	1.8	1.9
%RSD	.4906	.4828	.6108	.2484	.7314	.4497	.7447
#1	98.21	246.9	118.2	868.2	26930.	390.0	249.4
#2	98.89	248.6	119.2	865.2	27210.	392.5	252.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	15110.	25.37	243.6	1023.	86660.	991.6	238.0
SDev	121.	.40	.1	1.	464.	4.9	1.1
%RSD	.8004	1.563	.0615	.1428	.5359	.4962	.4529
#1	15020.	25.65	243.5	1022.	86330.	988.1	237.2
#2	15190.	25.09	243.7	1024.	86990.	995.0	238.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	442.8	265.7	240.6	224.3	255.3	235.0	248.0
SDev	1.4	2.1	2.6	4.0	1.1	2.1	.8
%RSD	.3224	.7968	1.064	1.803	.4277	.9077	.3397
#1	441.8	264.2	238.8	221.4	254.5	233.5	248.6
#2	443.8	267.2	242.4	227.2	256.0	236.5	247.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	991.3	1039.					
SDev	6.0	1.					
%RSD	.6059	.0777					
#1	987.0	1040.					
#2	995.5	1039.					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1097	--	--	--	--	--	--
SDev	3.780156	--	--	--	--	--	--
%RSD	.3444430	--	--	--	--	--	--
#1	1100	--	--	--	--	--	--
#2	1095	--	--	--	--	--	--

Method: SW846 Sample Name: PS 460-24122-A-4-C Operator:
Run Time: 03/29/11 23:01:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1133.	239.5	991.3	1144.	22.52	24.55	44930.
SDev	1.	3.9	.1	1.	.01	.32	33.
%RSD	.0510	1.620	.0132	.0491	.0362	1.300	.0745
#1	1133.	236.7	991.4	1143.	22.52	24.78	44960.
#2	1133.	242.2	991.2	1144.	22.51	24.32	44910.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	96.24	241.2	117.3	973.7	26390.	382.7	244.3
SDev	.45	.4	.2	15.7	43.	.1	.9
%RSD	.4720	.1588	.1613	1.615	.1630	.0243	.3869
#1	96.57	241.5	117.4	984.8	26360.	382.8	245.0
#2	95.92	240.9	117.2	962.5	26420.	382.6	243.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	14650.	26.46	238.4	981.6	84550.	960.5	231.1
SDev	13.	.09	.6	3.0	280.	.5	.1
%RSD	.0919	.3308	.2601	.3047	.3311	.0470	.0523
#1	14660.	26.52	237.9	983.7	84360.	960.2	231.0
#2	14640.	26.40	238.8	979.5	84750.	960.9	231.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	443.3	257.5	233.7	216.1	249.2	230.7	242.2
SDev	.9	.1	1.3	.4	.3	1.9	.0
%RSD	.1921	.0576	.5481	.1864	.1249	.8383	.0147
#1	443.9	257.6	234.6	216.4	249.0	229.3	242.3
#2	442.7	257.4	232.8	215.8	249.4	232.0	242.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem 1960/1 1960/2 ••Analysis Report 03/29/11 11:07:46 PM page 20

Units	ppb	ppb
Avge	954.8	995.0
SDev	.1	4.4
%RSD	.0120	.4446
#1	954.9	998.1
#2	954.8	991.9
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1096	--	--	--	--	--	--
SDev	.3818653	--	--	--	--	--	--
%RSD	.0348371	--	--	--	--	--	--
#1	1096	--	--	--	--	--	--
#2	1096	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/29/11 23:07:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	476800.	-2.097	-1.213	4.900	.4131	-1.918	460000.
SDev	225.	1.685	.357	.067	.0373	.265	310.
%RSD	.0471	80.36	29.41	1.376	9.023	13.83	.0673
#1	477000.	-.9054	-.9607	4.948	.4395	-2.105	459800.
#2	476700.	-3.289	-1.465	4.852	.3868	-1.730	460200.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.771	-.5200	-4.028	181300.	514200.	-6.427	-2.146
SDev	.587	.0944	.018	18.	142.	.036	.285
%RSD	10.17	18.15	.4416	.0100	.0276	.5633	13.28
#1	6.185	-.4533	-4.015	181300.	514100.	-6.453	-2.347
#2	5.356	-.5867	-4.040	181200.	514300.	-6.402	-1.944

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00
Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	75.56	-.0366	-2.453	-.5704	195.3	-4.206	2.681
SDev	1.23	.1154	.164	.8721	2.5	2.538	.089
%RSD	1.623	315.2	6.689	152.9	1.273	60.33	3.337
#1	76.43	-.1182	-2.337	-1.187	193.5	-6.000	2.618
#2	74.70	.0450	-2.569	.0463	197.0	-2.412	2.744

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.330	-5.408	7.414	-3.048	-4.667	25.05	-16.19
SDev	.083	.300	1.908	.797	.125	.61	.55
%RSD	6.255	5.548	25.73	26.15	2.673	2.419	3.388
#1	-1.271	-5.620	8.763	-2.484	-4.579	24.62	-15.80
#2	-1.389	-5.196	6.065	-3.612	-4.755	25.48	-16.58

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.617	-3.171
SDev	1.406	2.010
%RSD	30.46	63.38
#1	5.612	-4.592
#2	3.623	-1.750

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--

Wavlen	371.030	--	--	--	--	--	--
Avge	1015	--	--	--	--	--	--
SDev	2.749232	--	--	--	--	--	--
%RSD	.2709077	--	--	--	--	--	--
#1	1013	--	--	--	--	--	--
#2	1017	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/29/11 23:14:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	507100.	104.3	104.7	113.5	98.55	101.1	492700.
SDev	43702.	10.1	13.5	8.2	7.03	7.3	42801.
%RSD	8.618	9.717	12.86	7.201	7.137	7.248	8.686
#1	538000.	111.5	114.2	119.3	103.5	106.3	523000.
#2	476200.	97.17	95.20	107.7	93.58	95.93	462500.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	111.2	104.9	106.0	192100.	546700.	97.85	99.80
SDev	9.7	9.4	10.0	13649.	47972.	8.57	6.59
%RSD	8.766	8.942	9.416	7.106	8.776	8.760	6.604
#1	118.0	111.5	113.1	201700.	580600.	103.9	104.5
#2	104.3	98.22	98.96	182400.	512700.	91.79	95.14

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	11110.	109.8	101.2	102.9	10400.	94.35	107.9
SDev	1023.	8.3	7.4	10.6	1009.	6.91	10.4
%RSD	9.210	7.544	7.300	10.32	9.704	7.323	9.612
#1	11840.	115.7	106.4	110.4	11110.	99.23	115.2
#2	10390.	104.0	95.96	95.35	9684.	89.46	100.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	99.53	99.92	110.5	85.41	105.3	130.9	86.34
SDev	6.84	6.05	9.4	6.35	9.3	17.6	2.30
%RSD	6.870	6.059	8.480	7.434	8.837	13.43	2.662
#1	104.4	104.2	117.1	89.89	111.8	143.3	87.97
#2	94.69	95.64	103.9	80.92	98.69	118.5	84.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	103.5	102.5
SDev	22.3	4.8
%RSD	21.55	4.653
#1	119.3	105.9
#2	87.76	99.13
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	964	--	--	--	--	--	--
SDev	72.28186	--	--	--	--	--	--
%RSD	7.498686	--	--	--	--	--	--
#1	913	--	--	--	--	--	--
#2	1015	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/29/11 23:20:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	124800.	1041.	5104.	10210.	944.1	2506.	125800.
SDev	443.	1.	1.	19.	3.5	6.	291.
%RSD	.3553	.0498	.0238	.1876	.3692	.2268	.2313
#1	124500.	1041.	5103.	10200.	941.6	2502.	125600.
#2	125100.	1041.	5105.	10230.	946.5	2510.	126100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5076.	2529.	12300.	93090.	123800.	4896.	2514.
SDev	11.	5.	43.	285.	479.	12.	6.
%RSD	.2083	.2104	.3511	.3061	.3869	.2547	.2262
#1	5068.	2525.	12270.	92880.	123500.	4888.	2510.
#2	5083.	2532.	12330.	93290.	124200.	4905.	2518.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50570.	1262.	9910.	4930.	126000.	4979.	2446.
SDev	61.	3.	16.	9.	399.	7.	6.
%RSD	.1200	.2448	.1595	.1820	.3170	.1316	.2409
#1	50620.	1260.	9899.	4924.	125700.	4984.	2441.
#2	50530.	1264.	9921.	4937.	126300.	4975.	2450.

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Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2354.	997.3	2443.	L887.8	10020.	9644.	10040.
SDev	8.	5.1	8.	2.1	28.	4.	22.
%RSD	.3553	.5090	.3094	.2374	.2796	.0395	.2170
#1	2348.	993.7	2438.	L889.3	9998.	9642.	10030.
#2	2359.	1001.	2449.	L886.3	10040.	9647.	10060.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4764.	5013.
SDev	5.	11.
%RSD	.1151	.2138

#1	4761.	5005.
#2	4768.	5021.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1049	--	--	--	--	--	--
SDev	.3436270	--	--	--	--	--	--
%RSD	.0327515	--	--	--	--	--	--
#1	1049	--	--	--	--	--	--
#2	1049	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/29/11 23:27:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	65.25	1.715	-1.655	.5174	.4165	-.1765	-9.148
SDev	10.01	.134	.114	.0030	.0290	.0506	6.006
%RSD	15.35	7.797	6.872	.5854	6.963	28.65	65.65
#1	58.17	1.621	-1.735	.5196	.3960	-.2122	-13.40
#2	72.33	1.810	-1.575	.5153	.4370	-.1407	-4.901
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1946	-.2174	-1.515	-13.77	12.32	-.1716	-.0711
SDev	.1968	.5100	.022	3.30	3.27	.1254	.1829
%RSD	101.1	234.6	1.431	23.94	26.56	73.07	257.2
#1	-.3337	-.5780	-1.530	-11.44	10.00	-.2603	.0582
#2	-.0555	.1432	-1.500	-16.10	14.63	-.0829	-.2004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	74.53	-.7844	1.017	-.9095	152.3	3.395	.2396
SDev	5.04	.0837	.915	1.0955	53.5	.413	.3611
%RSD	6.761	10.67	89.94	120.4	35.12	12.15	150.7
#1	70.96	-.7252	1.664	-.1349	114.5	3.687	-.0157
#2	78.09	-.8436	.3704	-1.684	190.1	3.104	.4949
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.8858	1.321	1.341	1.223	.0117	2.294	.3760
SDev	.0996	.200	.457	1.147	.0911	.988	.8782
%RSD	11.24	15.10	34.07	93.80	777.3	43.10	233.6
#1	-.8154	1.180	1.665	2.034	-.0527	2.992	.9970
#2	-.9562	1.462	1.018	.4117	.0761	1.595	-.2450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.7102	-1.728
SDev	.1053	1.590
%RSD	14.83	92.02
#1	.7847	-.6036
#2	.6358	-2.852
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1090	--	--	--	--	--	--
SDev	4.352953	--	--	--	--	--	--
%RSD	.3993968	--	--	--	--	--	--
#1	1093	--	--	--	--	--	--
#2	1087	--	--	--	--	--	--

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Method: SW846 Sample Name: 460-24126-F-5-E@4 Operator:
Run Time: 03/29/11 23:52:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	32100.	.0279	7.609	113.5	2.163	-1.009	5218.
SDev	8.	.3708	.524	.1	.016	.054	9.
%RSD	.0257	1329.	6.882	.0869	.7361	5.363	.1724
#1	32090.	.2901	7.979	113.5	2.175	-.9703	5211.
#2	32100.	-.2343	7.239	113.6	2.152	-1.047	5224.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	55.34	30.39	81.42	66990.	14670.	1301.	53.42
SDev	.46	.13	.15	133.	.	2.	.54
%RSD	.8316	.4165	.1876	.1980	.0020	.1552	1.010
#1	55.01	30.30	81.31	66900.	14670.	1300.	53.80
#2	55.66	30.48	81.52	67080.	14670.	1302.	53.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2783.	-.8785	21.03	.6880	891.6	-2.760	111.5
SDev	2.	.6043	1.02	.9381	11.6	2.295	.4
%RSD	.0600	68.79	4.830	136.4	1.303	83.15	.3339
#1	2784.	-1.306	21.75	.0246	883.4	-4.383	111.2
#2	2782.	-.4512	20.31	1.351	899.8	-1.137	111.7

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	118.4	11.52	8.079	2.847	1298.	24.58	19.25
SDev	.5	.52	.446	.935	2.	.87	1.96
%RSD	.4538	4.499	5.517	32.85	.1342	3.551	10.17
#1	118.0	11.15	7.764	2.186	1297.	23.97	20.64
#2	118.8	11.89	8.394	3.509	1299.	25.20	17.87

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.9740	.5359
SDev	1.076	.8692
%RSD	110.5	162.2
#1	.2131	-.0787
#2	1.735	1.151

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1137	--	--	--	--	--	--
SDev	1.603679	--	--	--	--	--	--
%RSD	.1410150	--	--	--	--	--	--
#1	1136	--	--	--	--	--	--
#2	1138	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24126-F-17-C@4 Operator:
Run Time: 03/29/11 23:59:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	30510.	-2.130	16.16	195.8	2.261	-1.490	35480.
SDev	15.	1.911	1.78	.1	.026	.358	61.
%RSD	.0489	89.75	11.00	.0616	1.159	24.04	.1718
#1	30500.	-.7780	14.90	195.7	2.242	-1.743	35520.
#2	30520.	-3.481	17.42	195.8	2.279	-1.237	35430.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	53.04	45.73	134.4	105000.	31220.	712.9	69.28
SDev	.22	.57	.6	1343.	22.	.9	.94
%RSD	.4102	1.249	.4653	1.280	.0720	.1249	1.357
#1	52.88	46.13	133.9	104000.	31200.	713.5	68.61
#2	53.19	45.33	134.8	105900.	31240.	712.2	69.94

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	15300.	-1.327	35.37	1.645	2121.	1.462	200.9
SDev	66.	1.060	1.51	3.344	286.	4.727	.5
%RSD	.4299	79.94	4.276	203.2	13.47	323.3	.2558
#1	15250.	-2.076	34.30	-.7190	2323.	-1.880	201.3
#2	15340.	-.5768	36.44	4.010	1919.	4.805	200.6

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	87.62	130.9	12.47	4.036	2639.	42.09	32.02
SDev	3.07	3.2	.56	4.838	3.	20.52	12.51
%RSD	3.506	2.429	4.453	119.9	.0961	48.76	39.08

#1	85.44	128.6	12.07	.6152	2640.	56.60	23.17	••Analysis Report

#2	89.79	133.1	12.86	7.458	2637.	27.57	40.87

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	12.50	-3.781
SDev	11.40	10.706
%RSD	91.23	283.2
#1	20.56	-11.35
#2	4.436	3.789
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1375	--	--	--	--	--	--
SDev	6.262107	--	--	--	--	--	--
%RSD	.4553717	--	--	--	--	--	--
#1	1380	--	--	--	--	--	--
#2	1371	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24126-F-24-C@4 Operator:
Run Time: 03/30/11 00:05:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179	
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	••Analysis Report

Avge	21700.	-1.570	6.273	87.63	1.834	-.8926	8382.
SDev	7.	.303	.606	.29	.033	.0012	37.
%RSD	.0315	19.29	9.655	.3268	1.773	.1385	.4449
#1	21700.	-1.784	5.844	87.43	1.811	-.8918	8408.
#2	21690.	-1.356	6.701	87.84	1.857	-.8935	8355.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	56.18	27.50	67.90	64720.	10350.	580.3	50.87
SDev	.71	.36	.25	191.	6.	1.8	.00
%RSD	1.259	1.319	.3662	.2951	.0568	.3098	.0067
#1	56.68	27.76	67.72	64590.	10350.	581.6	50.86
#2	55.68	27.24	68.07	64860.	10340.	579.0	50.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2472.	-.4098	23.08	1.753	624.2	-2.010	105.9
SDev	15.	.3102	.73	1.964	125.3	.117	.6
%RSD	.5990	75.70	3.155	112.0	20.08	5.813	.5909
#1	2462.	-.1905	22.56	.3646	712.9	-2.093	106.4
#2	2483.	-.6291	23.59	3.141	535.6	-1.928	105.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	110.1	10.53	8.058	3.634	1134.	29.44	19.89
SDev	.5	.05	1.148	.713	2.	1.55	.32
%RSD	.4273	.5079	14.24	19.62	.1511	5.263	1.598
#1	109.8	10.57	7.247	4.138	1136.	28.35	19.67
#2	110.4	10.49	8.869	3.130	1133.	30.54	20.12
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	5.841	-.2973					
SDev	.963	2.4631					
%RSD	16.48	828.5					
#1	5.160	-2.039					
#2	6.522	1.444					
Errors	NOCHECK	NOCHECK					
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1128	--	--	--	--	--	--
SDev	3.742004	--	--	--	--	--	--
%RSD	.3316250	--	--	--	--	--	--
#1	1131	--	--	--	--	--	--
#2	1126	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24126-F-28-E@4 Operator:
Run Time: 03/30/11 00:12:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	40140.	1.601	8.784	132.9	2.513	-1.463	8151.
SDev	44.	.136	.736	.2	.007	.457	2.
%RSD	.1108	8.478	8.373	.1626	.2925	31.24	.0243
#1	40100.	1.697	8.264	133.0	2.518	-1.140	8152.
#2	40170.	1.505	9.304	132.7	2.508	-1.786	8149.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	79.20	41.18	83.12	91080.	23650.	1395.	67.16

SDev	.89	.69	.32	142.	20.	.	.32
%RSD	1.127	1.680	.3878	.1564	.0860	.0243	.4839
#1	79.83	41.67	83.34	91180.	23640.	1395.	67.39
#2	78.57	40.70	82.89	90980.	23670.	1395.	66.93
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	3216.	-2.752	37.15	.4694	904.4	-2.195	133.3
SDev	1.	1.257	.51	1.296	83.9	1.963	.0
%RSD	.0303	45.67	1.362	276.1	9.277	89.44	.0248
#1	3217.	-1.863	37.51	-.4472	963.7	-.8067	133.3
#2	3216.	-3.640	36.80	1.386	845.0	-3.582	133.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	214.4	10.56	10.60	6.011	1463.	42.30	34.58
SDev	1.9	.98	.11	1.587	1.	3.24	.86
%RSD	.8834	9.304	1.012	26.41	.0660	7.666	2.488
#1	215.7	11.25	10.67	7.133	1462.	44.60	33.97
#2	213.1	9.863	10.52	4.888	1464.	40.01	35.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	6.729	-2.665					
SDev	.653	1.617					
%RSD	9.703	60.69					
#1	6.267	-3.809					
#2	7.191	-1.521					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1137	--	--	--	--	--	--
SDev	.5345596	--	--	--	--	--	--
%RSD	.0470117	--	--	--	--	--	--

#1	1137	--	--	--	--	--	--
#2	1137	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24339-A-1-B@4 Operator:
Run Time: 03/30/11 00:18:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	14320.	2.008	97.60	275.5	1.965	-.4123	28530.
SDev	92.	1.507	1.65	1.8	.007	.3744	96.
%RSD	.6430	75.06	1.688	.6643	.3749	90.80	.3374
#1	14250.	3.074	98.76	274.2	1.960	-.1476	28470.
#2	14390.	.9425	96.43	276.8	1.970	-.6770	28600.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	143.0	13.27	79.41	57890.	7651.	320.1	30.78
SDev	.5	.40	.75	131.	51.	1.6	.77
%RSD	.3377	3.004	.9458	.2257	.6723	.4973	2.511
#1	142.6	13.55	78.88	57800.	7614.	319.0	31.33
#2	143.3	12.99	79.94	57990.	7687.	321.2	30.23

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1957.	-.3777	161.7	3.517	196.6	-1.157	67.19
SDev	7.	.6150	.0	1.454	103.0	2.557	.14
%RSD	.3757	162.8	.0031	41.33	52.42	221.1	.2034
#1	1952.	.0572	161.7	4.545	123.7	-2.965	67.28
#2	1962.	-.8126	161.7	2.489	269.4	.6514	67.09

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	255.3	22.39	11.27	7.691	881.9	152.3	166.4
SDev	.9	.40	1.50	.630	5.5	5.4	2.7
%RSD	.3469	1.768	13.28	8.187	.6258	3.546	1.616
#1	256.0	22.67	12.33	8.136	878.0	148.5	168.3
#2	254.7	22.11	10.21	7.246	885.8	156.1	164.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-4.032	7.277
SDev	3.425	3.889
%RSD	84.95	53.45
#1	-6.454	10.03
#2	-1.610	4.526

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1122	--	--	--	--	--	--
SDev	5.994871	--	--	--	--	--	--
%RSD	.5344122	--	--	--	--	--	--
#1	1126	--	--	--	--	--	--
#2	1118	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24339-A-2-B@4 Operator:
Run Time: 03/30/11 00:24:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	15240.	3.288	123.4	537.5	2.038	-.2239	35030.
SDev	852.	.095	6.4	29.2	.110	.0899	1828.
%RSD	5.588	2.879	5.167	5.426	5.375	40.14	5.218
#1	15850.	3.221	127.9	558.2	2.115	-.2875	36320.
#2	14640.	3.355	118.9	516.9	1.960	-.1604	33740.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	272.2	12.52	112.9	51520.	8414.	309.7	31.35

SDev	14.7	.39	7.1	2557.	478.	16.5	1.66
%RSD	5.401	3.153	6.258	4.963	5.679	5.314	5.280
#1	282.6	12.80	117.9	53330.	8752.	321.3	32.52
#2	261.8	12.24	107.9	49710.	8076.	298.0	30.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2008.	-1.027	178.4	5.476	409.0	-1.562	71.51
SDev	165.	.749	10.1	1.086	45.1	.393	3.81
%RSD	8.226	72.91	5.676	19.82	11.04	25.17	5.326
#1	2125.	-1.557	185.6	4.709	377.1	-1.284	74.20
#2	1891.	-.4976	171.2	6.244	440.9	-1.840	68.82
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

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Avge	253.1	23.38	9.731	8.718	1347.	175.0	180.1
SDev	11.8	1.28	.617	.370	73.	7.3	11.6
%RSD	4.673	5.479	6.340	4.249	5.423	4.154	6.414
#1	261.5	24.28	9.294	8.980	1399.	180.1	188.3
#2	244.7	22.47	10.17	8.456	1295.	169.8	172.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.132	6.138
SDev	4.496	.617
%RSD	108.8	10.06
#1	.9527	6.574
#2	7.310	5.701
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1137	--	--	--	--	--	--
SDev	36.42731	--	--	--	--	--	--
%RSD	3.204807	--	--	--	--	--	--
#1	1111	--	--	--	--	--	--
#2	1162	--	--	--	--	--	--

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Method: SW846 Sample Name: 460-24364-A-5-A@4 Operator:
Run Time: 03/30/11 00:31:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	37050.	.0599	11.08	234.6	2.764	-.7153	12710.
SDev	65.	.1188	1.02	.7	.004	.0900	5.
%RSD	.1745	198.5	9.244	.3055	.1626	12.59	.0417
#1	37100.	-.0242	11.80	234.0	2.767	-.6517	12720.
#2	37010.	.1439	10.35	235.1	2.760	-.7790	12710.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	67.87	10.66	61.12	55140.	3982.	432.8	34.28
SDev	.19	.34	.24	92.	15.	.5	.14
%RSD	.2818	3.210	.3956	.1665	.3662	.1062	.4175
#1	67.74	10.42	61.29	55200.	3992.	433.1	34.38
#2	68.01	10.91	60.95	55070.	3971.	432.5	34.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2942.	-.8479	95.78	-.8898	285.8	-.4699	151.2
SDev	6.	.1140	1.33	.2484	81.0	2.3915	.1
%RSD	.2034	13.45	1.389	27.91	28.36	508.9	.0469
#1	2938.	-.9285	94.84	-1.065	228.5	-2.161	151.2
#2	2947.	-.7672	96.72	-.7142	343.1	1.221	151.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	183.6	12.26	7.184	3.523	519.9	98.66	94.34
SDev	2.2	.37	1.249	1.384	.6	2.14	.93
%RSD	1.222	3.058	17.39	39.28	.1058	2.165	.9831
#1	185.2	12.52	8.067	2.544	520.3	97.15	93.69
#2	182.0	11.99	6.301	4.502	519.5	100.2	95.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Units	ppb	ppb
Avge	-.7221	-.9829
SDev	1.9836	.6180
%RSD	274.7	62.87
#1	-2.125	-.5459
#2	.6805	-1.420
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1121	--	--	--	--	--	--
SDev	.6873403	--	--	--	--	--	--
%RSD	.0613245	--	--	--	--	--	--
#1	1121	--	--	--	--	--	--
#2	1120	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24374-F-1-B@4 Operator:
Run Time: 03/30/11 00:37:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	17270.	1.208	7.735	56.96	1.038	-.4864	1751.
SDev	137.	.790	1.208	.53	.013	.0016	11.
%RSD	.7922	65.36	15.62	.9221	1.264	.3238	.6371

#1	17370.	.6499	6.880	57.33	1.029	-.4853	1759.
#2	17170.	1.767	8.589	56.59	1.047	-.4876	1743.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	31.93	2.889	54.50	23380.	1148.	62.99	9.563
SDev	.04	.144	.52	210.	6.	.37	.323
%RSD	.1408	5.001	.9550	.9000	.5062	.5926	3.380
#1	31.96	2.786	54.86	23530.	1152.	63.25	9.334
#2	31.90	2.991	54.13	23240.	1144.	62.73	9.791

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	461.2	-.5076	91.32	3.508	147.4	-1.012	61.33
SDev	23.2	.1698	.42	.335	65.3	2.486	.45
%RSD	5.034	33.45	.4562	9.536	44.28	245.6	.7314
#1	477.6	-.6276	91.02	3.744	101.2	-2.770	61.65
#2	444.8	-.3875	91.61	3.271	193.5	.7454	61.01

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46.32	7.468	5.607	3.085	406.8	94.39	89.78
SDev	.10	1.071	.338	.994	2.8	.82	.22
%RSD	.2254	14.34	6.022	32.22	.6893	.8678	.2403
#1	46.39	8.225	5.845	3.787	408.8	93.81	89.63
#2	46.25	6.711	5.368	2.382	404.8	94.96	89.93

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	3.900	3.303
SDev	.913	.957
%RSD	23.40	28.98
#1	3.255	3.979
#2	4.546	2.626

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1099	--	--	--	--	--	--
SDev	9.316857	--	--	--	--	--	--
%RSD	.8477098	--	--	--	--	--	--
#1	1092	--	--	--	--	--	--
#2	1106	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24374-F-2-B@4 Operator:
Run Time: 03/30/11 00:44:08
Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9378.	2.167	1.798	29.89	.8082	-.4603	273.8
SDev	34.	1.091	1.488	.04	.0319	.0141	.4
%RSD	.3586	50.33	82.77	.1176	3.950	3.070	.1613
#1	9402.	2.939	.7457	29.92	.8308	-.4503	274.1
#2	9355.	1.396	2.850	29.87	.7856	-.4702	273.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	27.91	.5025	3.550	7100.	294.8	20.37	3.236
SDev	.80	.1740	.347	32.	2.5	.15	.762
%RSD	2.869	34.62	9.770	.4440	.8446	.7124	23.56
#1	28.48	.3795	3.795	7122.	296.6	20.47	3.775
#2	27.35	.6255	3.305	7078.	293.1	20.27	2.697

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	320.4	-.7385	37.66	2.228	73.80	-.9409	27.50
SDev	11.1	.4238	1.50	1.928	52.28	2.7968	.30
%RSD	3.462	57.38	3.977	86.52	70.84	297.3	1.075
#1	328.3	-1.038	36.60	3.592	36.83	1.037	27.71
#2	312.6	-.4388	38.72	.8651	110.8	-2.919	27.29

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18.65	6.453	2.855	1.627	542.9	39.70	36.63
SDev	.41	.784	.586	.255	2.1	.54	2.52
%RSD	2.177	12.16	20.53	15.69	.3954	1.362	6.866
#1	18.94	5.899	3.270	1.446	544.4	40.08	34.85
#2	18.37	7.008	2.441	1.807	541.3	39.32	38.41
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-1.555	4.108
SDev	4.266	5.020
%RSD	274.2	122.2
#1	-4.572	7.658
#2	1.461	.5582
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1089	--	--	--	--	--	--
SDev	5.422073	--	--	--	--	--	--
%RSD	.4980099	--	--	--	--	--	--
#1	1085	--	--	--	--	--	--

#2	1093	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24374-F-3-B@4 Operator:
Run Time: 03/30/11 00:50:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19700.	1.095	2.934	36.73	1.044	-.7866	215.4
SDev	40.	.840	2.147	.14	.074	.1539	.1
%RSD	.2036	76.73	73.17	.3775	7.054	19.56	.0479
#1	19730.	.5007	1.416	36.63	1.096	-.8954	215.3
#2	19680.	1.688	4.452	36.83	.9916	-.6778	215.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29.68	1.951	8.444	18970.	511.7	35.42	6.590
SDev	.09	.178	.113	15.	1.0	.05	.545
%RSD	.3127	9.106	1.333	.0816	.2022	.1371	8.272
#1	29.75	1.825	8.364	18960.	512.4	35.39	6.976
#2	29.62	2.076	8.524	18980.	511.0	35.46	6.205
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	591.7	-.0530	19.13	.0239	85.90	-3.566	41.59
SDev	.6	.7137	.35	.1734	33.70	.862	.09
%RSD	.1046	1347.	1.822	726.5	39.23	24.17	.2111
#1	591.3	-.5576	19.38	-.0988	109.7	-2.957	41.65
#2	592.2	.4517	18.89	.1465	62.07	-4.176	41.52

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Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	13.47	6.087	3.837	3.365	400.7	21.81	17.79
SDev	.78	.479	1.278	.718	.5	.21	.63
%RSD	5.774	7.862	33.30	21.34	.1166	.9629	3.528
#1	12.92	5.749	2.933	3.873	401.0	21.66	18.23
#2	14.02	6.426	4.740	2.857	400.3	21.96	17.35
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-.1755	.1139
SDev	1.5311	.5044
%RSD	872.5	443.0
#1	-1.258	.4705
#2	.9072	-.2428
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--

Wavlen	371.030	--	--	--	--	--	--
Avge	1100	--	--	--	--	--	--
SDev	2.291019	--	--	--	--	--	--
%RSD	.2082067	--	--	--	--	--	--
#1	1099	--	--	--	--	--	--
#2	1102	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/30/11 00:56:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	123200.	1043.	5080.	10030.	913.2	2456.	124300.
SDev	936.	9.	33.	73.	6.1	14.	878.
%RSD	.7602	.8391	.6547	.7317	.6673	.5734	.7061
#1	122500.	1037.	5056.	9977.	908.9	2446.	123700.
#2	123800.	1050.	5104.	10080.	917.5	2465.	124900.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5014.	2505.	12140.	89870.	122100.	4809.	2476.
SDev	35.	19.	91.	614.	952.	35.	16.
%RSD	.7023	.7453	.7529	.6836	.7798	.7341	.6335
#1	4990.	2492.	12080.	L89440.	121400.	4784.	2465.
#2	5039.	2518.	12210.	90310.	122700.	4834.	2487.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50680.	1256.	9704.	4875.	125000.	4912.	2396.
SDev	355.	8.	74.	40.	627.	47.	18.
%RSD	.7007	.6403	.7577	.8233	.5019	.9470	.7720
#1	50430.	1250.	9652.	4847.	124500.	4879.	2383.
#2	50930.	1262.	9756.	4904.	125400.	4945.	2409.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2286.	977.0	2406.	L850.2	9902.	9442.	9836.
SDev	14.	8.0	16.	4.7	77.	65.	78.
%RSD	.6163	.8199	.6591	.5491	.7764	.6897	.7903
#1	2276.	971.4	2395.	L846.9	9847.	9396.	9781.
#2	2296.	982.7	2417.	L853.5	9956.	9488.	9890.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4686.	4970.
SDev	28.	46.
%RSD	.6038	.9266
#1	4666.	4937.
#2	4706.	5002.
Errors	NOCHECK	NOCHECK
High		

Low

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1053	--	--	--	--	--	--
SDev	6.758515	--	--	--	--	--	--
%RSD	.6421141	--	--	--	--	--	--
#1	1057	--	--	--	--	--	--
#2	1048	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/30/11 01:03:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	81.88	.1499	-1.166	1.428	.6526	-.0624	-10.14
SDev	1.65	.0530	.179	.430	.0199	.0564	.33
%RSD	2.009	35.32	15.32	30.11	3.045	90.30	3.226
#1	80.72	.1874	-1.039	1.124	.6667	-.1023	-10.38
#2	83.05	.1125	-1.292	1.732	.6386	-.0226	-9.913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1343	-.3655	-.9819	-5.531	20.83	.0343	.5480
SDev	.1601	.1562	.1503	5.837	4.38	.0003	.0422
%RSD	119.2	42.74	15.30	105.5	21.03	.8789	7.698
#1	.0211	-.4759	-.8757	-1.403	17.73	.0345	.5778
#2	.2475	-.2550	-1.088	-9.659	23.92	.0341	.5182
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	94.18	-.0201	.7829	1.743	135.6	4.940	.2224
SDev	4.60	.1602	.1017	1.829	77.1	.791	.1288
%RSD	4.880	798.0	12.99	104.9	56.86	16.01	57.90
#1	97.43	.0932	.8548	3.036	190.2	5.499	.3135
#2	90.93	-.1334	.7110	.4495	81.10	4.381	.1314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5039	1.218	1.861	.2852	.3600	3.087	-.3714
SDev	.5272	.223	.223	1.185	.0308	2.007	.8495
%RSD	104.6	18.27	11.96	415.5	8.558	65.02	228.7
#1	-.8767	1.061	2.019	1.123	.3382	4.506	-.9720
#2	-.1311	1.375	1.704	-.5528	.3817	1.668	.2293
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	6.408	-.5964
SDev	.909	3.1959
%RSD	14.19	535.9

#1 5.765 1.663 ••Analysis Report 03/30/11 01:09:39 AM page 34

#2 7.052 -2.856

Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1088	--	--	--	--	--	--
SDev	.5345596	--	--	--	--	--	--
%RSD	.0491546	--	--	--	--	--	--
#1	1087	--	--	--	--	--	--
#2	1088	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24364-A-7-C@4 Operator:
Run Time: 03/30/11 01:09:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	48020.	3.842	22.95	178.8	5.420	-1.496	13490.
SDev	81.	1.951	2.95	.6	.002	.255	10.
%RSD	.1692	50.77	12.86	.3365	.0307	17.05	.0766
#1	47960.	5.222	25.04	178.4	5.419	-1.316	13490.
#2	48070.	2.463	20.87	179.2	5.421	-1.677	13480.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	93.79	30.16	150.2	106400.	5586.	1017.	69.83
SDev	.91	.76	.4	142.	3.	.	.19
%RSD	.9655	2.513	.2638	.1332	.0474	.0084	.2722
#1	94.43	30.69	149.9	106300.	5584.	1017.	69.96
#2	93.15	29.62	150.5	106500.	5588.	1017.	69.69
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

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Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3155.	-.5277	126.0	-.0500	249.1	-2.938	243.6
SDev	18.	.9400	.3	1.0002	133.9	.233	.1
%RSD	.5767	178.1	.2343	2000.	53.77	7.929	.0599
#1	3143.	.1370	125.8	-.7573	343.8	-3.103	243.7
#2	3168.	-1.192	126.2	.6572	154.4	-2.773	243.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	133.4	14.66	15.22	10.05	1289.	132.5	122.8
SDev	.2	1.12	.59	1.92	1.	.8	.8
%RSD	.1222	7.646	3.898	19.12	.0824	.5828	.6744
#1	133.5	15.45	15.64	8.695	1288.	133.0	122.2
#2	133.3	13.87	14.81	11.41	1289.	131.9	123.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		

Low	-30.00	-10.00	-10.00	-10.00	-10.00

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	8.317	-4.236
SDev	.791	1.894
%RSD	9.505	44.71
#1	8.876	-5.576
#2	7.758	-2.897
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1138	--	--	--	--	--	--
SDev	3.856632	--	--	--	--	--	--
%RSD	.3389209	--	--	--	--	--	--

#1	1141	--	--	--	--	--	--
#2	1135	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/30/11 01:16:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	474900.	-2.785	.9362	4.882	.6955	-2.327	461400.
SDev	585.	.957	.6019	.113	.0621	.381	744.
%RSD	.1231	34.37	64.30	2.316	8.921	16.36	.1614
#1	474400.	-3.463	.5106	4.962	.7394	-2.597	460800.
#2	475300.	-2.108	1.362	4.802	.6517	-2.058	461900.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.397	-.5351	-4.790	176800.	510300.	-6.382	-3.118
SDev	.520	.2042	.315	353.	834.	.012	.586
%RSD	9.633	38.15	6.583	.1996	.1635	.1815	18.80
#1	5.764	-.3907	-5.013	176500.	509700.	-6.374	-2.704
#2	5.029	-.6795	-4.567	177000.	510900.	-6.390	-3.533
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00
Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	84.70	.1202	-1.244	-1.790	135.8	-7.286	3.030

SDev	1.73	.3192	2.900	.640	62.6	5.576	.086
%RSD	2.045	265.6	233.1	35.77	46.10	76.54	2.847
#1	83.47	.3459	-3.295	-1.337	91.51	-3.343	3.091
#2	85.92	-.1056	.8064	-2.243	180.0	-11.23	2.969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	-1.499	-4.407	8.005	1.618	-4.600	27.73	-15.72
SDev	.054	.732	1.163	1.452	.172	.26	4.48
%RSD	3.632	16.61	14.53	89.74	3.739	.9532	28.51
#1	-1.460	-3.890	8.828	2.644	-4.478	27.92	-18.88
#2	-1.537	-4.925	7.183	.5912	-4.722	27.55	-12.55
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	7.819	-6.598
SDev	.805	1.362
%RSD	10.30	20.64
#1	7.250	-5.635
#2	8.389	-7.561
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1008	--	--	--	--	--	--
SDev	.8018826	--	--	--	--	--	--
%RSD	.0795227	--	--	--	--	--	--
#1	1009	--	--	--	--	--	--
#2	1008	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/30/11 01:22:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	472000.	100.2	103.2	105.7	90.75	94.13	463000.
SDev	1103.	.4	2.3	.6	.67	1.17	1340.
%RSD	.2338	.3863	2.263	.5887	.7412	1.240	.2894
#1	471200.	100.5	104.8	105.3	90.27	93.30	462100.
#2	472700.	99.92	101.5	106.2	91.22	94.95	464000.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	104.8	99.40	96.61	176200.	506600.	90.77	93.44
SDev	.2	.35	.73	1336.	896.	.21	.90
%RSD	.1556	.3552	.7555	.7581	.1769	.2266	.9659
#1	104.9	99.65	96.09	175300.	506000.	90.62	92.80
#2	104.7	99.15	97.13	177200.	507300.	90.91	94.08
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10440.	104.2	92.59	93.18	9846.	86.76	99.90
SDev	33.	.5	1.77	1.45	1.	6.89	.36
%RSD	.3116	.4354	1.913	1.560	.0149	7.945	.3618
#1	10410.	104.5	91.34	92.15	9845.	81.88	99.65
#2	10460.	103.9	93.84	94.21	9847.	91.63	100.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	92.87	92.35	103.8	81.40	98.78	121.6	78.09
SDev	1.76	1.29	2.7	5.35	.49	4.2	4.73
%RSD	1.898	1.401	2.575	6.576	.5008	3.415	6.056
#1	91.62	91.44	102.0	L77.62	98.43	124.6	74.74
#2	94.11	93.27	105.7	85.19	99.13	118.7	81.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	91.73	93.89
SDev	12.13	8.24
%RSD	13.22	8.771
#1	100.3	88.07
#2	83.15	99.72
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1018	--	--	--	--	--	--
SDev	2.711036	--	--	--	--	--	--
%RSD	.2662021	--	--	--	--	--	--
#1	1020	--	--	--	--	--	--
#2	1016	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/30/11 01:28:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	123700.	1048.	5099.	10010.	914.4	2469.	125500.
SDev	1295.	18.	52.	121.	9.6	28.	1463.
%RSD	1.047	1.742	1.024	1.213	1.047	1.116	1.165
#1	124600.	1060.	5136.	10100.	921.2	2489.	126500.
#2	122800.	1035.	5062.	9926.	907.6	2450.	124500.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5053.	2524.	12160.	90170.	122500.	4833.	2488.
SDev	58.	27.	137.	968.	1360.	57.	25.
%RSD	1.149	1.068	1.128	1.074	1.111	1.188	1.019
#1	5094.	2543.	12260.	90860.	123400.	4874.	2505.
#2	5012.	2505.	12070.	L89490.	121500.	4793.	2470.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50990.	1259.	9743.	4884.	125600.	4932.	2406.
SDev	647.	14.	161.	90.	1226.	43.	28.
%RSD	1.268	1.123	1.651	1.842	.9763	.8799	1.156

#1	51450.	1269.	9857.	4947.	126500.	4963.	2425.
#2	50540.	1249.	9629.	4820.	124700.	4902.	2386.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2305.	976.9	2416.	L854.4	9958.	9540.	9844.
SDev	23.	8.8	21.	4.1	115.	192.	145.
%RSD	1.006	.9009	.8641	.4827	1.154	2.010	1.478
#1	2322.	983.2	2431.	L857.3	10040.	9676.	9947.
#2	2289.	970.7	2402.	L851.4	9877.	9404.	9741.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Units	ppb	ppb
Avge	4724.	4963.
SDev	79.	95.
%RSD	1.679	1.919
#1	4780.	5030.
#2	4668.	4896.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1049	--	--	--	--	--	--
SDev	10.27143	--	--	--	--	--	--
%RSD	.9787827	--	--	--	--	--	--
#1	1042	--	--	--	--	--	--
#2	1057	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/30/11 01:35:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	89.25	1.159	-2.895	1.276	.7235	-.2673	-2.715
SDev	2.33	1.323	.271	.000	.0194	.0555	3.558
%RSD	2.615	114.1	9.373	.0000	2.684	20.78	131.0
#1	90.91	2.095	-2.703	1.276	.7098	-.2280	-.1995
#2	87.60	.2238	-3.087	1.276	.7373	-.3066	-5.231

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6628	-.9823	-1.222	-37.30	10.75	-.0857	-.5652
SDev	.9393	1.2203	1.348	9.59	10.91	.1632	.0771
%RSD	141.7	124.2	110.3	25.71	101.5	190.4	13.65
#1	.0013	-.1194	-2.175	-44.09	18.47	.0297	-.6197
#2	-1.327	-1.845	-.2690	-30.52	3.035	-.2011	-.5106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	107.8	-1.438	1.123	1.234	312.3	3.515	-.0176
SDev	4.3	.427	.316	.794	343.3	.453	.5093
%RSD	3.960	29.69	28.12	64.34	109.9	12.88	2892.
#1	104.8	-1.136	1.347	.6725	555.1	3.194	.3425
#2	110.8	-1.740	.8998	1.795	69.59	3.835	-.3777
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.271	-1.099	1.505	.1979	-.0311	5.473	-1.053
SDev	.467	.478	.260	2.002	.2777	12.36	5.699
%RSD	36.73	43.51	17.31	1012.	892.4	225.9	541.4
#1	-1.601	-.7611	1.689	-1.218	.1653	14.21	-5.082
#2	-.9407	-1.438	1.320	1.614	-.2275	-3.269	2.977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.893	-1.102
SDev	10.80	6.584
%RSD	183.3	597.5
#1	13.53	-5.757
#2	-1.746	3.554
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1094	--	--	--	--	--	--
SDev	5.574853	--	--	--	--	--	--
%RSD	.5094400	--	--	--	--	--	--
#1	1098	--	--	--	--	--	--
#2	1090	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-1-C DU@4 Operator:
Run Time: 03/30/11 01:41:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	23050.	2.629	15.30	104.9	2.213	-.3341	16350.
SDev	29.	.558	.18	.1	.017	.0352	18.
%RSD	.1268	21.24	1.200	.0960	.7676	10.52	.1120
#1	23030.	2.235	15.17	104.9	2.225	-.3589	16340.
#2	23080.	3.024	15.43	104.8	2.201	-.3092	16370.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	56.21	22.09	36.85	44930.	6299.	453.8	32.12
SDev	.40	.01	.17	67.	9.	.7	.73
%RSD	.7185	.0630	.4537	.1492	.1482	.1622	2.263
#1	56.50	22.10	36.73	44890.	6293.	453.3	32.63

#2	55.93	22.08	36.96	44980.	6306.	454.3	31.60

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3691.	-.4692	181.3	1.619	434.3	1.321	65.75
SDev	7.	.0465	.6	.544	116.8	.105	.15
%RSD	.1818	9.901	.3240	33.61	26.90	7.972	.2208
#1	3686.	-.4363	180.9	2.004	351.7	1.247	65.85
#2	3696.	-.5020	181.8	1.234	517.0	1.396	65.65

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	332.6	26.35	7.247	6.308	742.0	181.3	181.4
SDev	.5	.76	1.111	.806	2.1	1.7	1.7
%RSD	.1462	2.873	15.33	12.77	.2824	.9359	.9529
#1	332.2	26.89	8.032	6.877	740.5	182.5	180.1
#2	332.9	25.82	6.461	5.738	743.5	180.1	182.6

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-2.039	3.436
SDev	2.363	.364
%RSD	115.9	10.59
#1	-.3675	3.178
#2	-3.710	3.693

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1113	--	--	--	--	--	--
SDev	.6109499	--	--	--	--	--	--
%RSD	.0548738	--	--	--	--	--	--
#1	1114	--	--	--	--	--	--
#2	1113	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-1-B@4 Operator:
Run Time: 03/30/11 01:48:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22600.	2.638	15.25	94.47	2.185	-.5861	7148.
SDev	53.	.130	1.64	.31	.009	.0704	6.
%RSD	.2348	4.935	10.74	.3304	.4021	12.01	.0796
#1	22560.	2.546	16.40	94.69	2.191	-.6358	7152.
#2	22640.	2.730	14.09	94.25	2.179	-.5363	7144.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	52.92	16.58	33.97	44960.	6712.	395.4	33.65
SDev	.13	.06	.44	87.	12.	.2	.34
%RSD	.2456	.3642	1.301	.1935	.1796	.0461	.9997
#1	53.02	16.53	33.65	45030.	6704.	395.6	33.41
#2	52.83	16.62	34.28	44900.	6721.	395.3	33.89
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3503.	-1.240	162.3	.3807	404.5	-2.217	63.35
SDev	5.	.240	.6	.4472	74.1	1.659	.28
%RSD	.1550	19.32	.3816	117.5	18.32	74.85	.4495
#1	3507.	-1.409	162.7	.6969	456.9	-3.390	63.15
#2	3499.	-1.070	161.8	.0645	352.1	-1.044	63.55

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	306.2	22.29	6.746	4.830	749.7	164.7	161.0
SDev	.1	.57	.066	.455	.3	1.9	.0
%RSD	.0185	2.570	.9770	9.417	.0377	1.146	.0088
#1	306.2	21.89	6.793	5.152	749.5	166.1	161.0
#2	306.3	22.70	6.700	4.509	749.9	163.4	161.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1.316	-.0958
SDev	4.310	1.4815
%RSD	327.5	1547.
#1	4.364	-1.143
#2	-1.732	.9518
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1106	--	--	--	--	--	--
SDev	3.703851	--	--	--	--	--	--
%RSD	.3349031	--	--	--	--	--	--
#1	1103	--	--	--	--	--	--
#2	1109	--	--	--	--	--	--

Method: SW846 Sample Name: SD 460-24285-E-1-B@5 Operator:
Run Time: 03/30/11 01:54:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4641.	1.393	2.126	19.04	.9851	-.2827	1431.
SDev	7.	.098	2.359	.14	.0220	.1872	.
%RSD	.1527	7.008	111.0	.7342	2.233	66.20	.0346
#1	4646.	1.324	.4579	19.14	1.001	-.1504	1431.
#2	4636.	1.462	3.794	18.94	.9696	-.4151	1430.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.52	2.711	5.850	9044.	1362.	79.08	6.607
SDev	.26	.024	.710	44.	11.	.02	.536
%RSD	2.479	.9026	12.14	.4914	.7773	.0296	8.117
#1	10.70	2.728	5.347	9075.	1355.	79.09	6.227
#2	10.34	2.694	6.352	9012.	1370.	79.06	6.986

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	705.6	-.4273	33.00	.1207	194.2	-.4316	12.80
SDev	.5	.0630	1.63	.5087	17.2	2.0146	.00
%RSD	.0683	14.75	4.952	421.3	8.856	466.8	.0070
#1	705.3	-.3827	34.15	-.2390	182.1	-1.856	12.80
#2	706.0	-.4719	31.84	.4805	206.4	.9930	12.81

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	60.87	4.040	1.754	3.509	150.3	33.56	32.71
SDev	.18	.263	.149	1.620	.0	.38	2.26
%RSD	.2906	6.502	8.497	46.18	.0196	1.126	6.912
#1	60.99	3.855	1.649	2.363	150.3	33.83	34.31

#2	60.74	4.226	1.860	4.654	150.4	33.29	31.11

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	1.719	-.6867					
SDev	2.682	.5764					
%RSD	156.1	83.94					
#1	-.1779	-.2791					
#2	3.615	-1.094					

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1093	--	--	--	--	--	--
SDev	2.023696	--	--	--	--	--	--
%RSD	.1851071	--	--	--	--	--	--
#1	1092	--	--	--	--	--	--
#2	1095	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-1-D MS@4 Operator:
Run Time: 03/30/11 02:00:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	29420.	253.1	1019.	1096.	25.13	24.46	16560.
SDev	128.	.5	2.	2.	.04	.05	65.
%RSD	.4342	.2009	.2342	.2080	.1404	.1874	.3907
#1	29510.	252.8	1017.	1098.	25.11	24.43	16600.
#2	29330.	253.5	1021.	1095.	25.16	24.49	16510.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	162.2	270.3	159.2	48470.	16190.	655.2	287.3
SDev	.6	1.5	.8	5.	87.	2.1	.5
%RSD	.3802	.5599	.5245	.0112	.5360	.3237	.1900
#1	162.7	271.3	159.8	48470.	16250.	656.7	287.0
#2	161.8	269.2	158.6	48480.	16130.	653.7	287.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	14550.	24.68	410.4	947.8	9608.	987.5	309.4
SDev	76.	.16	2.1	6.3	113.	8.0	.8
%RSD	.5224	.6369	.5190	.6648	1.172	.8129	.2692
#1	14600.	24.57	411.9	952.2	9687.	981.8	310.0
#2	14490.	24.80	408.9	943.3	9528.	993.1	308.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	569.0	272.6	247.3	221.3	1047.	404.1	413.5
SDev	.5	1.2	1.1	.5	5.	1.7	2.4
%RSD	.0834	.4558	.4621	.2094	.4378	.4178	.5684
#1	568.7	273.5	246.5	221.0	1050.	405.3	415.2
#2	569.4	271.8	248.1	221.6	1044.	402.9	411.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	911.0	966.1					
SDev	11.2	3.8					
%RSD	1.233	.3976					
#1	918.9	968.9					
#2	903.0	963.4					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1100	--	--	--	--	--	--
SDev	6.453126	--	--	--	--	--	--
%RSD	.5867305	--	--	--	--	--	--
#1	1095	--	--	--	--	--	--
#2	1104	--	--	--	--	--	--

Method: SW846 Sample Name: PS 460-24285-E-1-B@4 Operator:

Run Time: 03/30/11 02:07:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	24420.	435.5	1713.	1810.	42.19	42.59	25970.
SDev	440.	190.3	857.	728.	14.71	18.54	6906.
%RSD	1.801	43.69	50.03	40.21	34.86	43.54	26.59
#1	24110.	301.0	1107.	1296.	31.79	29.48	21080.
#2	24740.	570.1	2320.	2325.	52.59	55.70	30850.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	237.8	478.3	252.3	45210.	24150.	834.6	473.7
SDev	51.3	157.9	79.3	109.	6140.	149.7	166.3
%RSD	21.58	33.02	31.42	.2400	25.42	17.94	35.11
#1	201.5	366.6	196.2	45290.	19810.	728.7	356.1
#2	274.1	589.9	308.3	45130.	28500.	940.4	591.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19600.	48.06	573.0	1605.	16820.	1591.	495.5
SDev	11400.	23.48	181.7	817.	8985.	1060.	138.6
%RSD	58.17	48.85	31.71	50.92	53.43	66.58	27.98
#1	11540.	31.46	444.5	1027.	10460.	842.1	397.5
#2	27660.	64.67	701.5	2182.	23170.	2341.	593.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	729.1	428.4	435.2	382.3	1220.	597.1	561.0
SDev	170.3	225.8	163.0	133.7	138.	152.1	196.5
%RSD	23.36	52.71	37.45	34.97	11.27	25.47	35.03
#1	608.6	268.7	320.0	287.8	1123.	489.6	422.0
#2	849.5	588.1	550.5	476.8	1318.	704.7	699.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	1701.	1557.
SDev	685.	883.
%RSD	40.29	56.71
#1	1216.	932.4
#2	2185.	2181.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1093	--	--	--	--	--	--
SDev	1.107271	--	--	--	--	--	--

%RSD	.1012919	--	--	--	--	--	--

#1	1092	--	--	--	--	--	--
#2	1094	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24256-E-1-B@4 Operator:
Run Time: 03/30/11 02:13:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	21100.	2.116	8.601	130.7	2.068	-.8446	2801.
SDev	1.	.876	.528	.1	.028	.0032	4.
%RSD	.0060	41.39	6.141	.0968	1.341	.3798	.1394
#1	21100.	2.735	8.228	130.8	2.088	-.8423	2804.
#2	21110.	1.496	8.975	130.7	2.048	-.8468	2799.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	41.07	11.81	31.73	41300.	6752.	271.9	33.80
SDev	.76	.38	.16	33.	7.	.1	.28
%RSD	1.848	3.177	.4949	.0806	.1106	.0185	.8349
#1	40.53	12.08	31.62	41320.	6757.	271.8	34.00
#2	41.60	11.55	31.84	41280.	6747.	271.9	33.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2313.	-.7563	21.68	3.788	309.4	.4952	53.40

SDev	5.	.0360	1.13	2.920	45.5	.3514	.09
%RSD	.2098	4.765	5.216	77.10	14.71	70.96	.1693
#1	2316.	-.7818	20.88	5.852	341.6	.2467	53.46
#2	2309.	-.7308	22.48	1.723	277.2	.7437	53.33
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	130.3	16.10	6.193	2.803	662.0	27.96	18.54
SDev	.2	.70	1.624	.222	.5	2.10	2.74
%RSD	.1594	4.324	26.22	7.922	.0718	7.493	14.79
#1	130.5	16.59	7.342	2.646	662.4	29.44	16.60
#2	130.2	15.61	5.045	2.960	661.7	26.48	20.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.354	3.495
SDev	3.711	2.526
%RSD	85.22	72.26
#1	6.978	5.281
#2	1.730	1.709
Errors	NOCHECK	NOCHECK
High		

Low

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1096	--	--	--	--	--	--
SDev	3.780156	--	--	--	--	--	--
%RSD	.3448673	--	--	--	--	--	--
#1	1093	--	--	--	--	--	--
#2	1099	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-2-B@4 Operator:
Run Time: 03/30/11 02:20:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22670.	8.077	33.02	149.4	2.289	-.5948	44980.
SDev	90.	.476	1.67	.6	.001	.1691	226.
%RSD	.3980	5.890	5.051	.3886	.0593	28.43	.5027
#1	22740.	7.741	34.20	149.8	2.288	-.7144	45140.
#2	22610.	8.414	31.84	149.0	2.290	-.4753	44820.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	57.48	15.96	382.5	67100.	6533.	381.1	39.66
SDev	.26	.41	2.1	351.	18.	2.0	1.05
%RSD	.4450	2.582	.5498	.5234	.2690	.5148	2.639
#1	57.66	16.25	384.0	67350.	6545.	382.4	40.40
#2	57.30	15.67	381.0	66850.	6520.	379.7	38.92
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3671.	-.6111	505.1	1.619	1757.	-1.732	72.65
SDev	23.	.1593	3.6	.566	32.	2.032	.54
%RSD	.6317	26.06	.7219	34.94	1.808	117.3	.7452
#1	3688.	-.4985	507.7	1.219	1780.	-.2952	73.04
#2	3655.	-.7237	502.5	2.020	1735.	-3.168	72.27
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

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Avge	351.6	25.52	11.05	51.50	728.3	497.8	508.7
SDev	2.1	.14	.99	.37	3.3	3.1	3.9
%RSD	.5861	.5363	9.007	.7278	.4487	.6281	.7677
#1	353.0	25.62	11.75	51.24	730.6	500.1	511.5
#2	350.1	25.43	10.34	51.77	726.0	495.6	506.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	3.132	.8544
SDev	.006	.8452
%RSD	.2062	98.92

#1	3.128	.2568
#2	3.137	1.452
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1098	--	--	--	--	--	--
SDev	4.696580	--	--	--	--	--	--
%RSD	.4278623	--	--	--	--	--	--
#1	1094	--	--	--	--	--	--
#2	1101	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-3-B@4 Operator:
Run Time: 03/30/11 02:26:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	23250.	1.604	17.14	106.9	2.244	-.1047	14850.
SDev	50.	1.241	2.16	.0	.047	.3684	23.
%RSD	.2129	77.37	12.62	.0052	2.083	351.7	.1573
#1	23220.	2.482	15.61	106.9	2.278	.1558	14870.
#2	23290.	.7267	18.67	106.9	2.211	-.3653	14830.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	53.40	17.16	44.88	49710.	8085.	461.6	33.74
SDev	.46	.77	.06	196.	4.	.1	1.00
%RSD	.8599	4.483	.1311	.3941	.0552	.0304	2.964
#1	53.73	17.70	44.92	49840.	8082.	461.7	34.45
#2	53.08	16.61	44.84	49570.	8088.	461.5	33.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3824.	-.7243	198.2	-1.923	442.8	.4898	64.19
SDev	12.	.1378	1.6	.771	143.9	5.054	.22
%RSD	.3044	19.03	.8015	40.07	32.50	1032.	.3471
#1	3832.	-.6268	199.4	-2.468	341.0	4.063	64.34
#2	3816.	-.8218	197.1	-1.378	544.5	-3.084	64.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	250.9	25.74	7.934	7.722	602.7	193.5	200.6
SDev	2.5	1.40	1.096	5.677	.0	5.9	5.4
%RSD	.9942	5.438	13.82	73.51	.0042	3.072	2.668
#1	252.7	26.73	8.710	11.74	602.6	189.3	204.3
#2	249.2	24.75	7.159	3.708	602.7	197.7	196.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2

Units	ppb	ppb
Avge	-5.184	-.3049
SDev	6.725	2.2021
%RSD	129.7	722.3
#1	-9.940	1.252
#2	-.4287	-1.862
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1105	--	--	--	--	--	--
SDev	1.718221	--	--	--	--	--	--
%RSD	.1554910	--	--	--	--	--	--
#1	1106	--	--	--	--	--	--
#2	1104	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-4-D@4 Operator:
Run Time: 03/30/11 02:32:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	48770.	2.304	13.97	85.03	1.438	-1.233	1653.
SDev	641.	.197	.91	2.21	.019	.052	26.
%RSD	1.314	8.570	6.515	2.596	1.290	4.181	1.547
#1	49230.	2.443	14.61	86.59	1.451	-1.196	1671.
#2	48320.	2.164	13.33	83.46	1.425	-1.269	1635.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	65.49	5.338	16.15	64810.	714.1	77.86	20.89
SDev	1.26	1.094	3.09	1665.	10.6	1.19	1.13
%RSD	1.926	20.50	19.12	2.569	1.482	1.524	5.391
#1	66.38	6.112	18.33	65980.	721.6	78.70	21.69
#2	64.59	4.564	13.96	63630.	706.7	77.03	20.10

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	724.4	-.2121	35.61	-.8345	1153.	-1.084	62.24
SDev	38.5	.2602	.65	1.9322	27.	.846	1.50
%RSD	5.314	122.7	1.816	231.5	2.379	78.08	2.411
#1	751.6	-.3961	36.06	-2.201	1173.	-.4856	63.30
#2	697.2	-.0281	35.15	.5318	1134.	-1.683	61.18

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22.60	5.553	10.05	4.400	456.7	40.06	33.38
SDev	1.24	1.250	.95	.284	6.6	1.24	1.59
%RSD	5.509	22.50	9.503	6.451	1.450	3.107	4.766
#1	23.48	4.669	10.72	4.601	461.4	39.18	34.50
#2	21.72	6.437	9.370	4.199	452.0	40.94	32.25

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-1.303	-.6101
SDev	3.712	1.0439
%RSD	284.8	171.1
#1	-3.928	-1.348
#2	1.321	.1280

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1092	--	--	--	--	--	--
SDev	14.81532	--	--	--	--	--	--
%RSD	1.357132	--	--	--	--	--	--
#1	1081	--	--	--	--	--	--
#2	1102	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-5-B@4 Operator:
Run Time: 03/30/11 02:39:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	44270.	.2896	18.40	106.8	1.743	-1.737	4362.
SDev	12.	.4940	2.93	.5	.009	.304	18.
%RSD	.0267	170.6	15.92	.4753	.5207	17.49	.4173
#1	44280.	-.0597	20.48	106.5	1.749	-1.952	4375.
#2	44260.	.6389	16.33	107.2	1.736	-1.522	4349.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	70.21	7.202	26.74	72830.	1815.	135.2	25.19
SDev	.05	.353	.05	43.	6.	.2	.60
%RSD	.0732	4.895	.1685	.0588	.3250	.1260	2.379
#1	70.17	6.952	26.78	72800.	1811.	135.3	24.76
#2	70.25	7.451	26.71	72860.	1820.	135.1	25.61

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1048.	-1.388	63.85	1.624	819.1	-3.649	97.26
SDev	1.	.751	.84	1.929	110.7	.203	.28
%RSD	.1094	54.13	1.312	118.8	13.51	5.557	.2842
#1	1047.	-1.919	63.25	.2599	897.3	-3.793	97.45
#2	1049.	-.8567	64.44	2.988	740.9	-3.506	97.06

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2

Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	51.31	4.551	10.50	5.081	478.5	68.89	61.33
SDev	1.10	.999	1.07	1.057	.8	3.67	3.09
%RSD	2.137	21.95	10.20	20.80	.1703	5.325	5.035
#1	50.53	3.845	9.746	4.333	479.0	71.48	59.14
#2	52.09	5.258	11.26	5.828	477.9	66.29	63.51
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.340	-.2406
SDev	3.823	4.8012
%RSD	71.60	1995.
#1	8.043	-3.636
#2	2.636	3.154
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1095	--	--	--	--	--	--
SDev	1.374680	--	--	--	--	--	--
%RSD	.1254969	--	--	--	--	--	--
#1	1094	--	--	--	--	--	--
#2	1096	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/30/11 02:45:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	122100.	1046.	5097.	9870.	907.7	2462.	124900.
SDev	271.	8.	20.	54.	3.4	8.	378.
%RSD	.2222	.8095	.4003	.5425	.3740	.3189	.3023
#1	121900.	1040.	5083.	9832.	905.3	2457.	124700.
#2	122300.	1052.	5112.	9908.	910.1	2468.	125200.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5026.	2514.	12000.	L89430.	120800.	4802.	2483.
SDev	14.	8.	15.	391.	334.	12.	6.
%RSD	.2708	.3169	.1292	.4375	.2765	.2493	.2476
#1	5016.	2508.	11980.	L89150.	120600.	4793.	2478.
#2	5035.	2520.	12010.	89710.	121100.	4810.	2487.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50560.	1251.	9719.	4877.	124200.	4908.	2374.
SDev	354.	4.	44.	21.	309.	30.	4.
%RSD	.6994	.2924	.4547	.4267	.2490	.6076	.1826
#1	50310.	1248.	9688.	4862.	124000.	4886.	2371.
#2	50810.	1253.	9751.	4892.	124400.	4929.	2377.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2308.	969.7	2412.	L847.3	9865.	9479.	9839.
SDev	7.	7.0	14.	1.8	17.	34.	50.
%RSD	.2984	.7193	.5910	.2155	.1769	.3537	.5033
#1	2303.	964.8	2401.	L846.0	9853.	9455.	9804.
#2	2313.	974.6	2422.	L848.6	9877.	9503.	9874.

Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4685.	4973.
SDev	1.	31.
%RSD	.0173	.6192
#1	4684.	4951.
#2	4685.	4995.

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1053	--	--	--	--	--	--
SDev	4.620190	--	--	--	--	--	--
%RSD	.4385958	--	--	--	--	--	--
#1	1057	--	--	--	--	--	--
#2	1050	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/30/11 02:52:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	94.21	.5704	-3.644	1.848	.7733	.0113	-6.691
SDev	3.56	1.881	.386	.701	.0011	.3176	3.337
%RSD	3.783	329.7	10.60	37.95	.1450	2811.	49.87
#1	96.73	1.900	-3.371	2.344	.7725	.2359	-4.331
#2	91.69	-.7596	-3.917	1.352	.7741	-.2133	-9.051

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0855	-.5357	-1.267	-5.080	3.325	.0663	.4185
SDev	.7964	.4160	.584	37.691	15.99	.2079	.6914
%RSD	931.1	77.66	46.14	742.0	480.9	313.5	165.2
#1	.4776	-.2415	-.8535	21.57	14.63	.2133	.9074
#2	-.6487	-.8299	-1.680	-31.73	-7.980	-.0807	-.0704

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	91.15	-1.009	.3958	.7029	103.9	4.312	.4456
SDev	6.91	.926	2.286	.2245	2.5	6.005	.3365
%RSD	7.585	91.84	577.6	31.94	2.422	139.3	75.51

#1	96.04	-.3537	-1.221	.8616	105.7	8.558	.2077
#2	86.26	-1.664	2.012	.5442	102.1	.0658	.6836

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4236	.2893	2.414	1.076	.2720	-.0950	.6366
SDev	.4456	1.927	1.140	.403	.6514	.5720	3.712
%RSD	105.2	666.2	47.23	37.47	239.5	602.0	583.2

#1	-.1085	1.652	3.220	.7912	.7326	.3094	-1.989	••Analysis Report

#2	-.7386	-1.073	1.608	1.362	-.1886	-.4994	3.262

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.5384	.7753
SDev	.0681	.3026
%RSD	12.64	39.03

#1	.5866	.9892
#2	.4903	.5613

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1082	--	--	--	--	--	--
SDev	1.450984	--	--	--	--	--	--
%RSD	.1340956	--	--	--	--	--	--

#1	1083	--	--	--	--	--	--
#2	1081	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-6-B@4 Operator:
Run Time: 03/30/11 02:58:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179	
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	••Analysis Report

Avge	41710.	-.2894	25.03	77.04	1.726	-1.906	2653.
SDev	61.	.6503	.69	.81	.016	.059	.
%RSD	.1460	224.7	2.766	1.051	.9398	3.110	.0026

#1	41750.	-.7492	25.52	76.47	1.715	-1.948	2653.
#2	41670.	.1704	24.54	77.61	1.738	-1.864	2653.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	93.20	6.814	16.14	93790.	622.0	118.7	22.31
SDev	.44	.048	2.17	278.	.3	.0	.50
%RSD	.4680	.7056	13.41	.2968	.0420	.0061	2.234

#1	93.51	6.848	14.61	93600.	622.1	118.7	21.96
#2	92.89	6.780	17.68	93990.	621.8	118.7	22.66

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass

High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	403.0	-.2473	42.72	.7387	536.2	-.0065	107.9
SDev	.6	.1509	.02	2.333	3.5	.8315	.2
%RSD	.1398	61.01	.0365	315.9	.6531	12890.	.1651
#1	402.6	-.1406	42.71	2.388	538.6	-.5944	107.8
#2	403.4	-.3540	42.73	-.9111	533.7	.5815	108.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29.46	4.143	15.36	3.564	420.7	46.71	40.73
SDev	.06	.155	1.09	1.906	.2	.85	.45
%RSD	.1930	3.739	7.093	53.48	.0524	1.830	1.105
#1	29.50	4.033	16.13	4.912	420.9	47.32	40.41
#2	29.41	4.252	14.59	2.216	420.5	46.11	41.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	4.053	-.9257					
SDev	3.460	1.7707					
%RSD	85.36	191.3					
#1	6.500	.3263					
#2	1.607	-2.178					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1091	--	--	--	--	--	--
SDev	1.450984	--	--	--	--	--	--
%RSD	.1329478	--	--	--	--	--	--
#1	1090	--	--	--	--	--	--
#2	1092	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-7-B@4 Operator:
Run Time: 03/30/11 03:05:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19110.	6.621	16.29	128.3	2.213	-.3973	17670.
SDev	17.	1.059	.32	.5	.027	.0027	2.
%RSD	.0916	16.00	1.994	.3568	1.206	.6869	.0109
#1	19120.	7.370	16.52	128.6	2.194	-.3993	17670.
#2	19090.	5.872	16.07	128.0	2.232	-.3954	17670.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	54.58	15.50	64.56	44840.	4662.	382.4	27.18

SDev	.25	.13	.25	44.	10.	.1	.62
%RSD	.4519	.8387	.3855	.0976	.2111	.0333	2.284
#1	54.41	15.41	64.74	44870.	4655.	382.5	26.74
#2	54.76	15.60	64.39	44810.	4669.	382.3	27.61
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2651.	-.6206	272.1	-.0681	327.7	-.8047	80.82
SDev	1.	.3961	1.3	.5502	47.2	4.8366	.03
%RSD	.0502	63.83	.4801	808.0	14.39	601.1	.0376
#1	2650.	-.9007	271.2	-.4572	361.0	2.615	80.84
#2	2652.	-.3405	273.1	.3210	294.3	-4.225	80.80
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	266.2	17.93	7.379	19.89	642.0	272.0	272.2
SDev	.0	.32	.852	.32	.2	2.0	.9
%RSD	.0080	1.774	11.54	1.617	.0278	.7464	.3473
#1	266.1	18.16	6.777	19.66	641.9	270.5	271.5
#2	266.2	17.71	7.982	20.12	642.2	273.4	272.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	2.189	-1.204
SDev	1.285	.183
%RSD	58.70	15.22
#1	1.280	-1.334
#2	3.098	-1.075
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1118	--	--	--	--	--	--
SDev	.5727980	--	--	--	--	--	--
%RSD	.0512371	--	--	--	--	--	--

#1	1118	--	--	--	--	--	--
#2	1118	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-8-B@4 Operator:
Run Time: 03/30/11 03:11:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18970.	3.414	15.97	644.3	1.913	.0395	71830.
SDev	16.	2.198	1.35	.5	.073	.0458	67.
%RSD	.0856	64.39	8.435	.0801	3.806	116.2	.0930
#1	18960.	1.860	15.01	644.0	1.965	.0719	71790.
#2	18980.	4.968	16.92	644.7	1.862	.0070	71880.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	60.88	11.59	47.88	42200.	15620.	464.2	26.28
SDev	.86	.65	.09	251.	6.	.6	.68
%RSD	1.421	5.614	.1857	.5939	.0384	.1192	2.574
#1	61.49	12.05	47.82	42020.	15610.	463.8	26.75
#2	60.27	11.13	47.95	42370.	15620.	464.6	25.80

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4004.	-.3093	344.8	-1.903	433.8	-1.189	71.62
SDev	8.	.2139	1.7	1.260	118.3	.570	.23
%RSD	.1956	69.16	.4899	66.23	27.27	47.99	.3224
#1	3998.	-.4606	343.6	-2.794	517.4	-1.592	71.79
#2	4009.	-.1581	346.0	-1.012	350.2	-.7852	71.46

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	368.6	28.32	6.490	9.683	689.3	341.8	346.3
SDev	3.1	.26	.589	1.470	.5	8.3	6.7
%RSD	.8359	.9077	9.073	15.18	.0795	2.439	1.934
#1	366.4	28.50	6.906	10.72	688.9	347.7	341.5
#2	370.8	28.14	6.073	8.643	689.7	336.0	351.0

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-2.461	-1.633
SDev	5.739	4.754
%RSD	233.2	291.1
#1	1.597	-4.995
#2	-6.519	1.728

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1093	--	--	--	--	--	--
SDev	1.030967	--	--	--	--	--	--
%RSD	.0942884	--	--	--	--	--	--
#1	1093	--	--	--	--	--	--
#2	1094	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24285-E-9-B@4 Operator:
Run Time: 03/30/11 03:17:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18910.	5.033	15.13	108.0	2.338	-.4113	189100.

SDev	78.	1.482	4.91	.1	.005	.1009	323.
%RSD	.4103	29.44	32.44	.0960	.2244	24.52	.1707
#1	18970.	3.986	11.66	108.1	2.334	-.3400	189300.
#2	18860.	6.081	18.60	107.9	2.341	-.4827	188800.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	40.12	15.95	110.3	48210.	101200.	700.3	23.75
SDev	.15	.35	.8	29.	341.	1.6	1.20
%RSD	.3636	2.191	.7211	.0609	.3372	.2276	5.062
#1	40.02	16.20	110.9	48230.	101400.	701.5	22.90
#2	40.22	15.71	109.8	48190.	100900.	699.2	24.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3129.	-.6465	231.4	.9405	327.7	-2.405	60.24
SDev	1.	.7124	1.3	3.660	40.0	2.307	.52
%RSD	.0385	110.2	.5744	389.2	12.20	95.90	.8599
#1	3129.	-.1427	230.5	3.529	299.4	-4.036	60.60
#2	3130.	-1.150	232.3	-1.648	356.0	-.7741	59.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	188.8	24.45	5.131	12.43	632.0	232.1	231.0
SDev	.2	.08	1.098	1.97	1.0	.6	1.7
%RSD	.1272	.3241	21.40	15.87	.1519	.2466	.7388
#1	188.9	24.39	4.355	13.82	632.7	231.7	229.8
#2	188.6	24.50	5.908	11.03	631.3	232.5	232.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	-1.473	2.136					
SDev	2.051	4.463					
%RSD	139.3	209.0					
#1	-.0221	5.292					
#2	-2.923	-1.020					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1086	--	--	--	--	--	--
SDev	3.245596	--	--	--	--	--	--
%RSD	.2987629	--	--	--	--	--	--
#1	1084	--	--	--	--	--	--
#2	1089	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24256-A-2-A@4 Operator:
Run Time: 03/30/11 03:24:14

Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19510.	1.726	3.743	105.4	1.696	-1.046	3403.
SDev	41.	1.746	1.183	.1	.019	.175	5.
%RSD	.2124	101.2	31.60	.0577	1.146	16.74	.1573
#1	19480.	2.961	4.580	105.4	1.709	-.9224	3400.
#2	19540.	.4911	2.907	105.4	1.682	-1.170	3407.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	40.46	14.73	31.45	43710.	8363.	309.4	38.92
SDev	.00	.25	.30	42.	7.	.2	.13
%RSD	.0113	1.695	.9465	.0964	.0854	.0734	.3446
#1	40.47	14.91	31.66	43680.	8368.	309.2	38.82
#2	40.46	14.55	31.24	43740.	8358.	309.5	39.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2979.	-.5416	32.80	1.070	218.3	-.8642	56.08
SDev	8.	.0005	.64	2.244	21.2	1.6795	.06
%RSD	.2663	.0945	1.946	209.6	9.709	194.4	.1015
#1	2973.	-.5419	33.25	2.657	233.3	.3234	56.12
#2	2984.	-.5412	32.35	-.5163	203.3	-2.052	56.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	125.4	20.97	5.469	3.525	636.9	36.64	30.88
SDev	.1	1.70	.106	3.811	.3	1.53	.19
%RSD	.0561	8.087	1.935	108.1	.0510	4.176	.6245
#1	125.4	22.17	5.543	.8301	636.7	37.72	31.01
#2	125.3	19.77	5.394	6.220	637.1	35.56	30.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem 1960/1 1960/2 ••Analysis Report 03/30/11 03:30:35 AM page 95

Units	ppb	ppb
Avge	1.150	1.021
SDev	6.053	.342
%RSD	526.2	33.52
#1	5.430	1.263
#2	-3.130	.7787
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1091	--	--	--	--	--	--
SDev	.0763903	--	--	--	--	--	--
%RSD	.0070018	--	--	--	--	--	--

#1	1091	--	--	--	--	--	--
#2	1091	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24256-A-9-A@4 Operator:
Run Time: 03/30/11 03:30:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	43980.	.0366	20.13	151.5	3.159	-1.428	7971.
SDev	375.	2.387	.57	.6	.006	.050	49.
%RSD	.8531	6528.	2.837	.4215	.1755	3.537	.6165
#1	44240.	1.724	20.54	152.0	3.155	-1.392	8006.
#2	43710.	-1.651	19.73	151.1	3.163	-1.463	7937.

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	87.97	31.08	44.42	82030.	16750.	1206.	72.07
SDev	.71	.68	.23	586.	127.	8.	.57
%RSD	.8052	2.191	.5116	.7144	.7555	.6606	.7899
#1	88.47	31.56	44.59	82450.	16840.	1212.	71.66
#2	87.46	30.60	44.26	81620.	16660.	1200.	72.47

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6432.	-1.329	40.92	1.029	925.2	-1.606	115.2
SDev	87.	.094	.87	2.071	100.5	.353	1.0
%RSD	1.346	7.065	2.138	201.3	10.86	21.99	.8983
#1	6493.	-1.263	41.53	2.493	996.2	-1.357	115.9
#2	6371.	-1.396	40.30	-.4358	854.1	-1.856	114.5

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	203.8	47.49	12.10	4.792	973.7	46.12	38.31
SDev	.1	.27	1.69	.551	7.0	2.91	.14
%RSD	.0635	.5593	13.93	11.50	.7228	6.307	.3670
#1	203.9	47.68	13.29	4.402	978.7	48.18	38.21
#2	203.7	47.30	10.91	5.182	968.7	44.06	38.41

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.129	-1.028
SDev	4.117	1.050
%RSD	80.26	102.1
#1	8.040	-.2854
#2	2.218	-1.770

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7

Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1135	--	--	--	--	--	--
SDev	2.100173	--	--	--	--	--	--
%RSD	.1850990	--	--	--	--	--	--
#1	1133	--	--	--	--	--	--
#2	1136	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24256-A-4-A@4 Operator:
Run Time: 03/30/11 03:37:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52330.	-1.080	22.58	255.2	3.536	-1.359	8876.
SDev	5064.	.673	4.99	23.5	.325	.115	884.
%RSD	9.677	62.30	22.09	9.196	9.200	8.479	9.960
#1	48750.	-1.556	19.05	238.6	3.306	-1.277	8250.
#2	55910.	-.6043	26.11	271.8	3.766	-1.440	9501.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	98.02	38.37	52.78	82970.	17170.	972.9	83.95
SDev	10.34	4.74	5.90	7835.	1730.	97.4	8.60
%RSD	10.55	12.34	11.17	9.444	10.08	10.01	10.24
#1	90.71	35.02	48.62	77430.	15940.	904.1	77.87
#2	105.3	41.72	56.95	88510.	18390.	1042.	90.03

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6577.	.0178	69.49	2.845	1103.	-2.115	118.9
SDev	712.	.7946	6.11	.035	102.	3.357	12.0
%RSD	10.82	4463.	8.796	1.244	9.282	158.8	10.07
#1	6074.	.5796	65.17	2.820	1030.	-4.488	110.5
#2	7081.	-.5440	73.82	2.870	1175.	.2592	127.4

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	258.5	56.46	12.21	3.481	1186.	74.80	66.84
SDev	24.4	5.38	1.91	2.642	118.	5.89	6.22
%RSD	9.452	9.533	15.63	75.90	9.945	7.874	9.312
#1	241.2	52.66	10.86	1.613	1103.	70.63	62.44
#2	275.8	60.27	13.56	5.348	1269.	78.96	71.24

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	5.992	1.266
SDev	1.035	.464
%RSD	17.27	36.68
#1	5.260	1.594
#2	6.724	.9375

Errors	NOCHECK	NOCHECK

High
Low

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1213	--	--	--	--	--	--
SDev	90.95368	--	--	--	--	--	--
%RSD	7.496895	--	--	--	--	--	--
#1	1278	--	--	--	--	--	--
#2	1149	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24256-A-5-A@4 Operator:
Run Time: 03/30/11 03:43:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	30630.	.6019	17.35	121.3	2.254	-1.144	7123.
SDev	82.	1.115	4.57	.2	.020	.090	.
%RSD	.2665	185.3	26.36	.1320	.9072	7.866	.0056
#1	30680.	1.391	14.12	121.4	2.268	-1.208	7123.
#2	30570.	-.1868	20.58	121.2	2.239	-1.080	7122.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	63.52	14.13	36.12	53610.	11420.	868.8	42.29
SDev	.21	.25	.29	64.	12.	.3	.35
%RSD	.3313	1.775	.8126	.1202	.1064	.0331	.8380
#1	63.37	14.31	35.92	53560.	11430.	869.0	42.54
#2	63.67	13.96	36.33	53650.	11410.	868.6	42.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4838.	-.9740	32.68	1.274	1064.	-1.945	82.30
SDev	6.	.4735	.83	.459	2.	1.461	.26
%RSD	.1163	48.62	2.527	36.04	.1698	75.15	.3204
#1	4834.	-1.309	33.26	1.599	1065.	-.9113	82.49
#2	4842.	-.6391	32.09	.9496	1063.	-2.978	82.11

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Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	116.8	77.19	8.468	4.068	782.5	38.42	29.80
SDev	.3	.08	.298	.318	.0	.38	1.05
%RSD	.2503	.0972	3.514	7.820	.0041	.9916	3.515
#1	116.6	77.14	8.678	4.293	782.5	38.69	30.55
#2	117.0	77.24	8.257	3.843	782.5	38.15	29.06
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		
Low	-30.00	-10.00	-10.00	-10.00	-10.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4.019	-.1054
SDev	1.743	.1815

%RSD	43.36	172.2
#1	5.251	-.2338
#2	2.787	.0230
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1117	--	--	--	--	--	--
SDev	3.436529	--	--	--	--	--	--
%RSD	.3077341	--	--	--	--	--	--
#1	1114	--	--	--	--	--	--
#2	1119	--	--	--	--	--	--

Method: SW846 Sample Name: 460-24374-F-4-B@4 Operator:
Run Time: 03/30/11 03:49:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	25360.	1.447	5.304	75.74	1.449	-.5454	340.9
SDev	61.	.057	.450	.15	.020	.0778	3.3
%RSD	.2422	3.917	8.486	.2016	1.412	14.27	.9777
#1	25410.	1.407	4.986	75.85	1.463	-.6004	338.5
#2	25320.	1.487	5.622	75.63	1.434	-.4904	343.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250000.	2000.	10000.	20000.	2000.	5000.	250000.
Low	-200.0	-10.00	-10.00	-20.00	-5.000	-5.000	-500.0

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	41.12	3.217	9.604	20410.	1134.	55.14	10.20
SDev	1.03	1.204	.525	53.	21.	.38	.64
%RSD	2.505	37.41	5.465	.2582	1.860	.6946	6.258
#1	40.40	2.366	9.233	20370.	1119.	54.87	9.750
#2	41.85	4.068	9.975	20440.	1149.	55.42	10.65
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	5000.	25000.	200000.	250000.	10000.	5000.
Low	-10.00	-10.00	-10.00	-150.0	-500.0	-10.00	-10.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	859.5	.3631	25.56	2.365	46.56	-2.276	51.02
SDev	2.2	2.284	.38	1.279	105.1	.393	1.09
%RSD	.2571	628.9	1.495	54.09	225.6	17.27	2.136
#1	857.9	-1.252	25.83	1.461	-27.73	-1.998	50.25
#2	861.1	1.978	25.29	3.270	120.9	-2.554	51.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100000.	2500.	20000.	10000.	250000.	10000.	5000.
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-10.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	27.91	10.70	4.419	2.930	467.8	20.32	28.17
SDev	.55	.50	.990	.370	.5	2.04	1.59
%RSD	1.965	4.685	22.40	12.64	.1166	10.05	5.654
#1	27.52	10.35	3.719	3.192	467.5	18.87	29.30
#2	28.30	11.06	5.119	2.669	468.2	21.76	27.05
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	5000.	2000.	5000.	2000.	20000.		

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Low	-30.00	-10.00	-10.00	-10.00	-10.00

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	-10.64	8.851
SDev	8.83	2.489
%RSD	82.93	28.13
#1	-16.89	10.61
#2	-4.403	7.090
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1097	--	--	--	--	--	--
SDev	3.818394	--	--	--	--	--	--
%RSD	.3481928	--	--	--	--	--	--
#1	1094	--	--	--	--	--	--
#2	1099	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/30/11 03:56:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	121600.	1048.	5102.	9835.	904.3	2455.	124100.
SDev	247.	2.	9.	42.	2.2	4.	83.
%RSD	.2028	.1758	.1684	.4230	.2432	.1757	.0669
#1	121800.	1046.	5108.	9864.	905.9	2458.	124200.
#2	121500.	1049.	5096.	9805.	902.8	2452.	124100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4995.	2502.	11960.	L89310.	120200.	4772.	2475.
SDev	4.	1.	32.	147.	293.	7.	5.
%RSD	.0887	.0374	.2648	.1642	.2435	.1390	.1840
#1	4998.	2501.	11980.	L89410.	120400.	4777.	2478.
#2	4992.	2502.	11930.	L89210.	120000.	4768.	2472.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50840.	1248.	9644.	4858.	123800.	4911.	2358.
SDev	115.	2.	66.	20.	72.	5.	2.
%RSD	.2266	.1710	.6873	.4183	.0581	.1104	.0828
#1	50920.	1250.	9691.	4873.	123900.	4915.	2359.
#2	50750.	1247.	9597.	4844.	123800.	4908.	2357.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2311.	971.9	2420.	L858.6	9821.	9381.	9775.
SDev	1.	2.2	2.	5.7	10.	7.	96.
%RSD	.0258	.2265	.0776	.6650	.0987	.0733	.9814

#1	2311.	973.5	2421.	L862.7	9828.	9385.	9843.
#2	2310.	970.4	2418.	L854.6	9815.	9376.	9707.

Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	4658.	4958.
SDev	4.	29.
%RSD	.0777	.5780

#1 4661. 4978. ••Analysis Report 03/30/11 04:02:37 AM page 1
09

#2 4655. 4938.

Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1050	--	--	--	--	--	--
SDev	1.412832	--	--	--	--	--	--
%RSD	.1345136	--	--	--	--	--	--

#1	1049	--	--	--	--	--	--
#2	1051	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/30/11 04:02:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	94.62	.6292	-1.183	2.450	.8008	-.1309	-10.73
SDev	3.60	1.577	1.323	.480	.0021	.1716	1.93
%RSD	3.809	250.7	111.8	19.61	.2636	131.0	18.02

#1	97.17	-.4862	-2.119	2.790	.7993	-.0096	-9.359
#2	92.08	1.745	-.2478	2.110	.8023	-.2523	-12.09

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2282	-.4824	-1.831	-9.640	8.440	.0330	.3026

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SDev	.3637	.7615	1.021	6.399	8.753	.2478	.1996
%RSD	159.4	157.9	55.79	66.38	103.7	751.4	65.96

#1	.0290	.0561	-1.109	-5.115	14.63	.2082	.1615
#2	-.4854	-1.021	-2.553	-14.16	2.250	-.1422	.4438

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	62.09	-.3421	1.810	1.606	139.8	3.931	.0763
SDev	11.81	.4271	.498	1.957	97.4	1.221	.2290
%RSD	19.03	124.8	27.53	121.9	69.66	31.06	300.3

#1	53.73	-.0401	2.162	.2222	208.6	4.795	.2382
#2	70.44	-.6441	1.458	2.990	70.93	3.068	-.0857

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00

Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.8471	.3183	2.587	1.517	.2509	2.375	1.524
SDev	.6319	.3276	.203	.128	.3694	.900	.298
%RSD	74.60	102.9	7.854	8.433	147.2	37.89	19.54
#1	-.4003	.5500	2.444	1.608	.5121	3.012	1.734
#2	-1.294	.0867	2.731	1.427	-.0103	1.739	1.313
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	.7540	2.022
SDev	4.533	.671
%RSD	601.2	33.20
#1	-2.451	1.547
#2	3.959	2.497
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1091	--	--	--	--	--	--
SDev	1.680069	--	--	--	--	--	--
%RSD	.1540599	--	--	--	--	--	--

#1	1092	--	--	--	--	--	--
#2	1089	--	--	--	--	--	--

Method: SW846 Sample Name: ICSA 901999 Operator:
Run Time: 03/30/11 04:09:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	471400.	1.629	-1.929	4.838	.7879	-2.572	464500.
SDev	242.	6.149	.246	.047	.0454	.310	1145.
%RSD	.0513	377.5	12.73	.9685	5.766	12.06	.2465
#1	471200.	5.977	-2.103	4.804	.8201	-2.352	463700.
#2	471600.	-2.719	-1.755	4.871	.7558	-2.791	465400.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	20.00	10.00	100.0	5.000	8.000	600000.
Low	400000.	-20.00	-10.00	-100.0	-5.000	-8.000	400000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.734	-.2126	-5.007	176200.	506100.	-6.285	-3.007
SDev	.425	.3828	.336	59.	601.	.028	.386
%RSD	7.411	180.0	6.720	.0338	.1188	.4484	12.83
#1	6.035	.0580	-4.769	176100.	505700.	-6.305	-2.734
#2	5.434	-.4833	-5.245	176200.	506500.	-6.265	-3.280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	20.00	50.00	240000.	600000.	20.00	20.00
Low	-20.00	-20.00	-50.00	160000.	400000.	-20.00	-20.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	102.1	.1612	-2.415	-7.442	220.2	-7.532	3.504

SDev	7.1	.2967	2.025	4.123	65.4	1.650	.386
%RSD	6.950	184.1	83.83	55.41	29.72	21.90	11.00
#1	97.05	-.0486	-.9837	-4.526	266.5	-8.699	3.776
#2	107.1	.3709	-3.847	L-10.36	173.9	-6.366	3.231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	10.00	10.00	10.00	2000.	20.00	20.00
Low	-2000.	-10.00	-10.00	-10.00	-2000.	-20.00	-20.00
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4112	-5.058	6.374	-1.289	-4.604	38.83	-23.01
SDev	1.4368	.301	1.045	.497	.126	4.85	.62
%RSD	349.4	5.951	16.39	38.59	2.743	12.48	2.679
#1	-1.427	-5.271	7.113	-1.641	-4.514	42.26	-22.58
#2	.6048	-4.845	5.635	-.9371	-4.693	35.41	-23.45
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	30.00	30.00	50.00	30.00		
Low	-30.00	-30.00	-30.00	-50.00	-30.00		
Elem	1960/1	1960/2					
Units	ppb	ppb					
Avge	1.505	-11.92					
SDev	1.905	5.23					
%RSD	126.5	43.89					
#1	2.852	-8.220					
#2	.1584	-15.62					
Errors	NOCHECK	NOCHECK					
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1009	--	--	--	--	--	--
SDev	3.131054	--	--	--	--	--	--
%RSD	.3101994	--	--	--	--	--	--
#1	1007	--	--	--	--	--	--
#2	1012	--	--	--	--	--	--

Method: SW846 Sample Name: ICSAB 902001 Operator:
Run Time: 03/30/11 04:15:31
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	468700.	106.4	100.6	104.4	89.79	93.26	463000.
SDev	251.	2.9	.5	.3	.35	.38	2674.
%RSD	.0536	2.721	.5169	.3235	.3908	.4118	.5775
#1	468900.	108.4	101.0	104.2	89.54	92.99	464900.
#2	468500.	104.3	100.2	104.7	90.03	93.53	461100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600000.	120.0	120.0	120.0	120.0	120.0	600000.
Low	400000.	80.00	80.00	80.00	80.00	80.00	400000.
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	104.4	99.12	95.70	175000.	502300.	90.54	92.60
SDev	2.4	1.54	1.47	816.	150.	.49	.38
%RSD	2.269	1.552	1.537	.4663	.0299	.5438	.4140
#1	106.0	100.2	96.74	174400.	502200.	90.89	92.33
#2	102.7	98.03	94.66	175600.	502400.	90.20	92.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	120.0	120.0	120.0	240000.	600000.	120.0	120.0
Low	80.00	80.00	80.00	160000.	400000.	80.00	80.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10510.	103.9	91.91	90.95	9839.	88.29	99.39
SDev	59.	1.3	.94	1.80	194.	2.91	.92
%RSD	.5655	1.204	1.019	1.984	1.968	3.291	.9285
#1	10470.	104.8	91.25	92.22	9976.	90.35	100.0
#2	10560.	103.1	92.58	89.67	9703.	86.24	98.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.	120.0	120.0	120.0	12000.	120.0	120.0
Low	8000.	80.00	80.00	80.00	8000.	80.00	80.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb

Avge	91.24	92.72	103.7	80.57	98.22	129.6	73.07
SDev	.83	.58	.7	4.15	.56	16.4	9.60
%RSD	.9144	.6258	.6519	5.152	.5679	12.66	13.14
#1	90.65	93.13	103.2	L77.64	98.61	141.2	66.29
#2	91.83	92.31	104.2	83.51	97.82	118.0	79.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	120.0	120.0	120.0	120.0	120.0		
Low	80.00	80.00	80.00	80.00	80.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	93.09	89.87
SDev	11.80	3.19
%RSD	12.68	3.546
#1	101.4	87.61
#2	84.75	92.12
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1012	--	--	--	--	--	--
SDev	2.749232	--	--	--	--	--	--
%RSD	.2715580	--	--	--	--	--	--
#1	1014	--	--	--	--	--	--
#2	1010	--	--	--	--	--	--

Method: SW846 Sample Name: CCV 901988 Operator:
Run Time: 03/30/11 04:21:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	122300.	1051.	5123.	9849.	909.9	2468.	125700.
SDev	196.	3.	12.	17.	2.2	9.	235.
%RSD	.1606	.2753	.2386	.1762	.2405	.3510	.1871
#1	122100.	1053.	5114.	9861.	908.3	2461.	125600.
#2	122400.	1049.	5131.	9836.	911.4	2474.	125900.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	138000.	1104.	5520.	11040.	1104.	2760.	138000.
Low	112000.	896.0	4478.	8960.	896.0	2239.	112000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5053.	2529.	11990.	89920.	120800.	4823.	2487.
SDev	12.	7.	19.	220.	168.	9.	6.
%RSD	.2280	.2585	.1586	.2447	.1394	.1959	.2349

#1	5045.	2524.	11980.	89760.	120700.	4817.	2482.
#2	5061.	2533.	12010.	90070.	120900.	4830.	2491.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5520.	2760.	13800.	110400.	138000.	5522.	2760.
Low	4478.	2239.	11200.	89560.	112000.	4478.	2239.
Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50840.	1253.	9741.	4898.	124400.	4926.	2380.
SDev	45.	3.	32.	7.	300.	4.	6.
%RSD	.0880	.2293	.3275	.1411	.2413	.0761	.2610
#1	50870.	1251.	9719.	4893.	124200.	4923.	2376.
#2	50810.	1255.	9764.	4902.	124600.	4929.	2385.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55200.	1380.	11040.	5522.	138000.	5522.	2760.
Low	44780.	1120.	8956.	4478.	112000.	4478.	2239.
Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2329.	972.8	2432.	L864.6	9898.	9534.	9845.
SDev	10.	2.2	7.	.3	15.	13.	41.
%RSD	.4259	.2226	.2987	.0318	.1497	.1406	.4178
#1	2322.	971.3	2427.	L864.8	9888.	9524.	9816.
#2	2336.	974.3	2437.	L864.4	9909.	9543.	9874.
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK	NOCHECK
High	2760.	1104.	2760.	1104.	11040.		
Low	2239.	896.0	2239.	896.0	8960.		

Units	ppb	ppb
Avge	4718.	4987.
SDev	8.	6.
%RSD	.1676	.1286
#1	4713.	4983.
#2	4724.	4992.
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1051	--	--	--	--	--	--
SDev	.8781866	--	--	--	--	--	--
%RSD	.0835506	--	--	--	--	--	--
#1	1052	--	--	--	--	--	--
#2	1050	--	--	--	--	--	--

Method: SW846 Sample Name: CCB Operator:
Run Time: 03/30/11 04:28:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	104.0	2.006	-1.458	1.656	.8126	-.1114	2.000
SDev	4.9	.818	.634	.001	.0164	.0249	2.776
%RSD	4.759	40.77	43.51	.0435	2.024	22.37	138.8
#1	107.5	1.428	-1.907	1.656	.8242	-.1290	3.963
#2	100.5	2.584	-1.009	1.655	.8010	-.0938	.0370

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0	10.00	5.000	200.0	2.000	4.000	1000.
Low	-200.0	-10.00	-5.000	-200.0	-2.000	-4.000	-1000.

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3262	-.4622	-.9835	-10.54	14.24	-.0244	-.8124
SDev	1.0668	.5892	.1583	18.06	.55	.0839	.3564
%RSD	327.0	127.5	16.10	171.4	3.841	343.2	43.88
#1	.4281	-.0456	-.8715	2.231	14.63	.0349	-.5603
#2	-1.081	-.8788	-1.095	-23.31	13.86	-.0837	-1.064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	50.00	25.00	150.0	1000.	15.00	40.00
Low	-10.00	-50.00	-25.00	-150.0	-1000.	-15.00	-40.00

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	93.40	-2.028	1.846	1.781	107.8	3.114	.4933
SDev	3.35	1.090	1.085	1.048	110.1	4.594	.8695
%RSD	3.592	53.76	58.78	58.83	102.2	147.5	176.2
#1	91.03	-1.257	1.078	2.522	185.6	6.363	-.1215
#2	95.77	-2.799	2.613	1.040	29.92	-.1345	1.108
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	10.00	5.000	5.000	1000.	10.00	50.00
Low	-1000.	-10.00	-5.000	-5.000	-1000.	-10.00	-50.00

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5766	1.057	1.712	-.2055	.2513	1.511	2.009
SDev	.3979	.920	1.298	.7247	.3699	1.297	2.274
%RSD	69.01	87.10	75.84	352.7	147.2	85.89	113.2
#1	-.2952	1.707	2.630	-.7179	.5129	2.428	.4006
#2	-.8579	.4058	.7940	.3069	-.0102	.5932	3.617
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	30.00	50.00	20.00	50.00	20.00		
Low	-30.00	-50.00	-20.00	-50.00	-20.00		

Elem	1960/1	1960/2
Units	ppb	ppb
Avge	3.091	1.118
SDev	2.390	.378
%RSD	77.32	33.80
#1	4.782	1.385
#2	1.401	.8506
Errors	NOCHECK	NOCHECK
High		
Low		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1088	--	--	--	--	--	--
SDev	2.061935	--	--	--	--	--	--
%RSD	.1895456	--	--	--	--	--	--
#1	1086	--	--	--	--	--	--
#2	1089	--	--	--	--	--	--

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1		12:20:43 22 Mar 11	HG	
Hg	.000	ppb	1490					
*** Standard: 2 Rep: 1				Seq: 2		12:22:27 22 Mar 11	HG	
Hg	.100	ppb	3835					
*** Standard: 3 Rep: 1				Seq: 3		12:24:22 22 Mar 11	HG	
Hg	1.00	ppb	34701					
*** Standard: 4 Rep: 1				Seq: 4		12:26:08 22 Mar 11	HG	
Hg	2.00	ppb	64779					
*** Standard: 5 Rep: 1				Seq: 5		12:27:53 22 Mar 11	HG	
Hg	5.00	ppb	166544					
*** Standard: 6 Rep: 1				Seq: 6		12:29:41 22 Mar 11	HG	
Hg	10.0	ppb	315978					

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
*** Check Standard: 3 Ck3AICV					Seq: 7	12:31:28 22 Mar 11 HG
Hg		104.	5.22	5.00	ppb	.000

Line	Flag	Found	Range(+/-)	Units	SD/RSD
*** Check Standard: 1 Ck1ICB/CCB					Seq: 8 12:33:22 22 Mar 11 HG
Hg		-.033	.200	ppb	.000

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
*** Check Standard: 4 Ck4QCS					Seq: 9	12:35:29 22 Mar 11 HG
Hg		101.	5.07	5.00	ppb	.000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 10		12:37:17 22 Mar 11	HG	
				MB 460-68078/1-A				
Hg	-.056	ppb	.000	-.056				
*** Sample ID: LCSSRM 460				Seq: 11		12:39:12 22 Mar 11	HG	
				-68078/2-A@10				
Hg	5.32	ppb	.000	5.32				

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 12		12:41:16 22 Mar 11	HG	
				460-24232-E-18-A				
Hg	.034	ppb	.000	.034				
*** Sample ID:				Seq: 13		12:43:00 22 Mar 11	HG	
				460-24232-E-18-B DU				

```
Hg    .044    ppb       .000      .044                                                    =
*** Sample ID:                        Seq:  14     12:44:46 22 Mar 11   HG
                          460-24232-E-18-C MS
Hg    1.11    ppb       .000      1.11                                                    =
*** Sample ID:                        Seq:  15     12:46:42 22 Mar 11   HG
                          460-24108-C-23-B
Hg    .071    ppb       .000      .071                                                    =
*** Sample ID:                        Seq:  16     12:48:27 22 Mar 11   HG
                          460-23836-E-3-E
Hg    1.25    ppb       .000      1.25                                                    =
*** Sample ID:                        Seq:  17     12:50:26 22 Mar 11   HG
                          460-24226-E-13-B
Hg    .070    ppb       .000      .070                                                    =
*** Check Standard: 2  Ck2ACCV       Seq:  18     12:52:13 22 Mar 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          108.     5.41    5.00   ppb        .000                                       =
*** Check Standard: 1  Ck1ICB/CCB    Seq:  19     12:54:08 22 Mar 11   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.052     .200     ppb        .000                                            =
*** Sample ID:                        Seq:  20     12:56:02 22 Mar 11   HG
                          460-24226-E-15-B
Hg    5.24    ppb       .000      5.24                                                    =
*** Sample ID:                        Seq:  21     12:57:49 22 Mar 11   HG
                          460-24232-E-2-A
Hg    1.94    ppb       .000      1.94                                                    =
*** Sample ID:                        Seq:  22     12:59:34 22 Mar 11   HG
                          460-24232-E-3-A
Hg    1.50    ppb       .000      1.50                                                    =
*** Sample ID:                        Seq:  23     13:01:27 22 Mar 11   HG
                          460-24232-E-4-A
Hg    4.03    ppb       .000      4.03                                                    =
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                              ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID:                        Seq:  24     13:03:13 22 Mar 11   HG
                          460-24232-E-5-A
Hg    .349    ppb       .000      .349                                                    =
*** Sample ID:                        Seq:  25     13:04:58 22 Mar 11   HG
                          460-24232-E-6-A
Hg    .968    ppb       .000      .968                                                    =
*** Sample ID:                        Seq:  26     13:06:44 22 Mar 11   HG
                          460-24232-E-7-A
Hg    1.68    ppb       .000      1.68                                                    =
*** Sample ID:                        Seq:  27     13:08:34 22 Mar 11   HG
                          460-24232-E-8-A
Hg    1.52    ppb       .000      1.52                                                    =
```

```
*** Check Standard: 2  Ck2ACCV      Seq:  28      13:10:38 22 Mar 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          116.     5.78    5.00   ppb         .000
                                                                              =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  29      13:12:24 22 Mar 11   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.060     .200     ppb         .000
                                                                              =
*** Sample ID:                      Seq:  30      13:14:09 22 Mar 11   HG
                          460-24232-A-11-A
Hg    .453    ppb       .000       .453
                                                                              =
*** Sample ID:                      Seq:  31      13:15:57 22 Mar 11   HG
                          460-24232-A-12-A
Hg    .380    ppb       .000       .380
                                                                              =
*** Sample ID:                      Seq:  32      13:17:45 22 Mar 11   HG
                          460-24232-A-19-A
Hg    .784    ppb       .000       .784
                                                                              =
*** Sample ID:                      Seq:  33      13:19:43 22 Mar 11   HG
                          460-24232-E-20-A
Hg    1.43    ppb       .000       1.43
                                                                              =
*** Sample ID:                      Seq:  34      13:21:34 22 Mar 11   HG
                          460-24234-A-1-A
Hg    .108    ppb       .000       .108
                                                                              =
*** Sample ID:                      Seq:  35      13:23:24 22 Mar 11   HG
                          460-24237-A-1-B
Hg    .031    ppb       .000       .031
                                                                              =
                              Folder:   68078hg1                      Page 1999
                              Protocol: SW846A
                             ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
------------------------------------------------------------------------------

*** Sample ID:                      Seq:  36      13:25:20 22 Mar 11   HG
                          460-24237-A-4-B
Hg   -.029    ppb       .000      -.029
                                                                              =
*** Sample ID:                      Seq:  37      13:27:06 22 Mar 11   HG
                          460-24237-A-6-B
Hg   -.039    ppb       .000      -.039
                                                                              =
==============================================================================
*** Sample ID: sd 460-242           Seq:  38      13:28:50 22 Mar 11   HG
                          32-E-18-A@5
Hg   -.027    ppb       .000      -.027
                                                                              =
*** Check Standard: 2  Ck2ACCV      Seq:  39      13:30:34 22 Mar 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          111.     5.53    5.00   ppb         .000
                                                                              =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  40      13:32:27 22 Mar 11   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.058     .200     ppb         .000
                                                                              =
*** Sample ID:                      Seq:  41      13:34:15 22 Mar 11   HG
                          MB 460-68108/1-A
Hg   -.053    ppb       .000      -.053
                                                                              =
```

```
*** Sample ID: LCSSRM 460           Seq:  42     13:36:00 22 Mar 11   HG
                          -68108/2-A@10
Hg    5.47    ppb       .000      5.47
                                                                              =
================================================================================
*** Sample ID:                      Seq:  43     13:37:48 22 Mar 11   HG
                            460-24285-E-4-A
Hg    .029    ppb       .000      .029
                                                                              =
*** Sample ID:                      Seq:  44     13:39:33 22 Mar 11   HG
                            460-24285-E-4-B DU
Hg    .020    ppb       .000      .020
                                                                              =
*** Sample ID:                      Seq:  45     13:41:18 22 Mar 11   HG
                            460-24285-E-4-C MS
Hg    1.11    ppb       .000      1.11
                                                                              =
*** Sample ID:                      Seq:  46     13:43:05 22 Mar 11   HG
                            460-24237-A-9-B
Hg   -.025    ppb       .000     -.025
                                                                              =
                               Folder:   68078hg1                    Page 1999
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                              ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID:                      Seq:  47     13:45:00 22 Mar 11   HG
                            460-24238-A-1-A
Hg    .000    ppb       .000      .000
                                                                              =
*** Sample ID:                      Seq:  48     13:46:45 22 Mar 11   HG
                            460-24238-F-2-A
Hg   -.005    ppb       .000     -.005
                                                                              =
*** Check Standard: 2  Ck2ACCV      Seq:  49     13:48:31 22 Mar 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          112.     5.58    5.00   ppb        .000
                                                                              =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  50     13:50:27 22 Mar 11   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.064     .200     ppb        .000
                                                                              =
*** Sample ID:                      Seq:  51     13:52:13 22 Mar 11   HG
                            460-24238-F-3-A
Hg    .061    ppb       .000      .061
                                                                              =
*** Sample ID:                      Seq:  52     13:54:00 22 Mar 11   HG
                            460-24238-F-4-B
Hg   -.018    ppb       .000     -.018
                                                                              =
*** Sample ID:                      Seq:  53     13:55:47 22 Mar 11   HG
                            460-24238-A-5-B
Hg   -.048    ppb       .000     -.048
                                                                              =
*** Sample ID:                      Seq:  54     13:57:33 22 Mar 11   HG
                            460-24238-A-7-B
Hg   -.029    ppb       .000     -.029
                                                                              =
*** Sample ID:                      Seq:  55     13:59:20 22 Mar 11   HG
                            460-24356-C-1-A
Hg    95.0    ppb       .000      95.0
                                                                              =
*** Sample ID:                      Seq:  56     14:01:05 22 Mar 11   HG
```

460-24256-E-1-A
Hg .006 ppb .000 .006
=
*** Sample ID: Seq: 57 14:03:02 22 Mar 11 HG
460-24256-E-3-A
Hg .004 ppb .000 .004
=
*** Sample ID: Seq: 58 14:04:48 22 Mar 11 HG
460-24285-E-1-A
Hg 1.03 ppb .000 1.03
=

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2ACCV Seq: 59 14:06:34 22 Mar 11 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 110. 5.49 5.00 ppb .000
=
*** Check Standard: 1 Ck1ICB/CCB Seq: 60 14:08:20 22 Mar 11 HG
Line Flag Found Range(+/-) Units SD/RSD
Hg -.071 .200 ppb .000
=
*** Sample ID: Seq: 61 14:10:04 22 Mar 11 HG
460-24285-E-2-A
Hg 2.63 ppb .000 2.63
=
*** Sample ID: Seq: 62 14:11:49 22 Mar 11 HG
460-24285-E-3-A
Hg .428 ppb .000 .428
=
*** Sample ID: Seq: 63 14:13:36 22 Mar 11 HG
460-24285-E-5-A
Hg 1.10 ppb .000 1.10
=
*** Sample ID: Seq: 64 14:15:23 22 Mar 11 HG
460-24285-E-6-A
Hg .039 ppb .000 .039
=
*** Sample ID: Seq: 65 14:17:11 22 Mar 11 HG
460-24285-E-7-A
Hg 1.02 ppb .000 1.02
=
*** Sample ID: Seq: 66 14:19:19 22 Mar 11 HG
460-24285-E-8-A
Hg 14.1 ppb .000 14.1
=
*** Sample ID: Seq: 67 14:21:10 22 Mar 11 HG
460-24285-E-9-A
Hg .768 ppb .000 .768
=
*** Sample ID: Seq: 68 14:22:56 22 Mar 11 HG
460-24285-E-10-A
Hg .081 ppb .000 .081
=
*** Sample ID: Seq: 69 14:25:03 22 Mar 11 HG
sd 460-24285-E-4-A@5
Hg -.043 ppb .000 -.043
=
*** Check Standard: 2 Ck2ACCV Seq: 70 14:26:53 22 Mar 11 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 110. 5.50 5.00 ppb .000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1ICB/CCB Seq: 71 14:28:48 22 Mar 11 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.054	.200	ppb	.000

*** Sample ID: Seq: 72 14:30:38 22 Mar 11 HG
460-24356-C-1-A@50

Hg	3.17	ppb	.000	3.17

*** Sample ID: Seq: 73 14:32:23 22 Mar 11 HG
460-24285-E-8-A@2

Hg	7.28	ppb	.000	7.28

*** Sample ID: Seq: 74 14:34:11 22 Mar 11 HG
460-24285-E-9-A

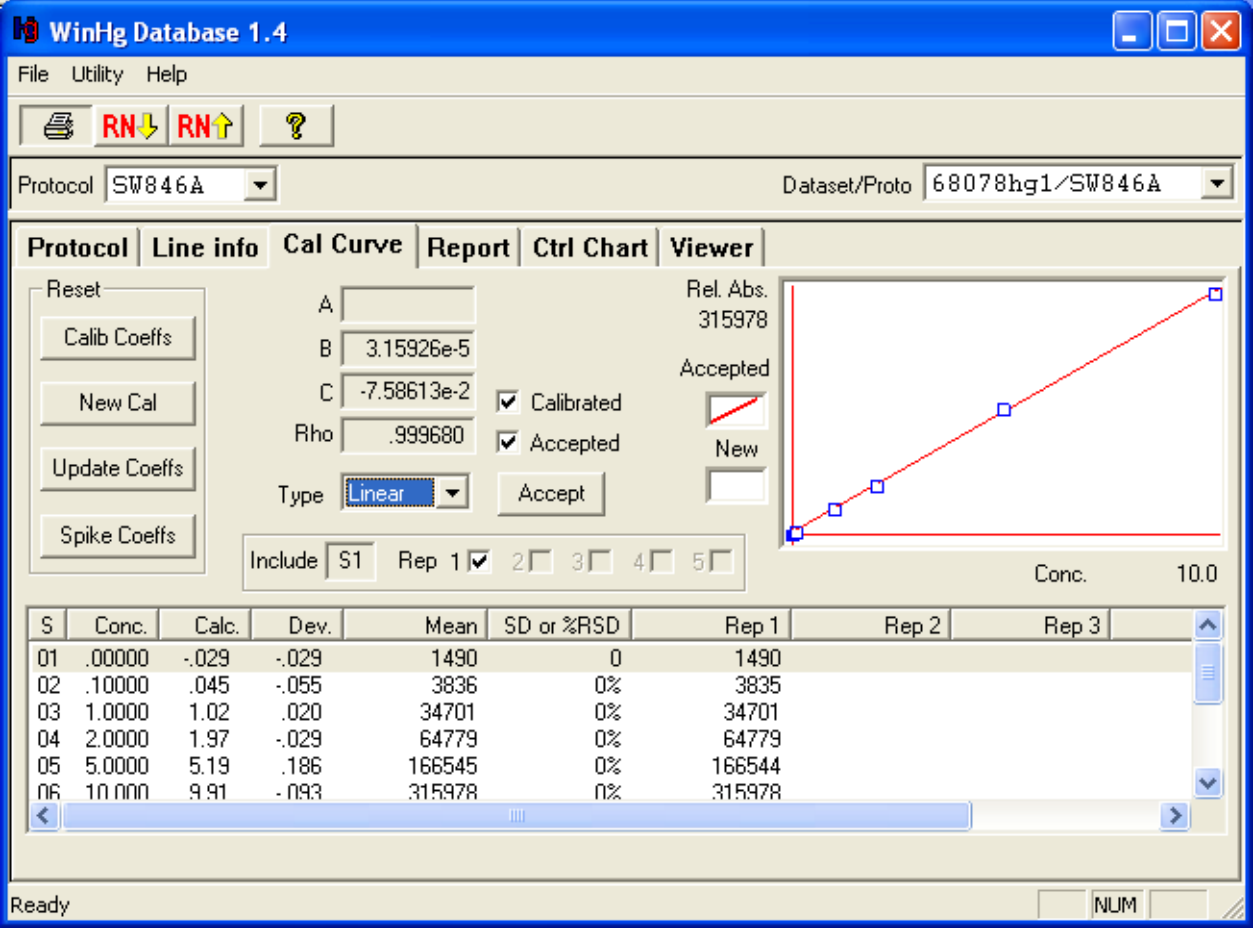
Hg	.744	ppb	.000	.744

*** Check Standard: 2 Ck2ACCV Seq: 75 14:36:01 22 Mar 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		110.	5.52	5.00	ppb	.000

*** Check Standard: 1 Ck1ICB/CCB Seq: 76 14:37:56 22 Mar 11 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.073	.200	ppb	.000


WinHg Database 1.4
File Utility Help
RN RN
Protocol SW846A
Dataset/Proto 68078hg1/SW846A
Protocol Line info Cal Curve Report Ctrl Chart Viewer
Reset
Calib Coeffs
New Cal
Update Coeffs
Spike Coeffs
A
B 3.15926e-5
C -7.58613e-2
Rho .999680
Type Linear
Calibrated
Accepted
Accept
Rel. Abs.
315978
Accepted
New
Include S1 Rep 1 2 3 4 5
Conc. 10.0
S Conc. Calc. Dev. Mean SD or %RSD Rep 1 Rep 2 Rep 3
01 .00000 -.029 -.029 1490 0 1490
02 .10000 .045 -.055 3836 0% 3835
03 1.0000 1.02 .020 34701 0% 34701
04 2.0000 1.97 -.029 64779 0% 64779
05 5.0000 5.19 .186 166545 0% 166544
06 10.000 9.91 -.093 315978 0% 315978
Ready
NUM

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 12:20:43 22 Mar 11 HG

Hg .000 ppb 1490
Bkgd 1 5197588

*** Standard: 2 Rep: 1 Seq: 2 12:22:27 22 Mar 11 HG

Hg .100 ppb 3835
Bkgd 1 5196384

*** Standard: 3 Rep: 1 Seq: 3 12:24:22 22 Mar 11 HG

Hg 1.00 ppb 34701
Bkgd 1 5195767

*** Standard: 4 Rep: 1 Seq: 4 12:26:08 22 Mar 11 HG

Hg 2.00 ppb 64779
Bkgd 1 5195460

*** Standard: 5 Rep: 1 Seq: 5 12:27:53 22 Mar 11 HG

Hg 5.00 ppb 166544
Bkgd 1 5195140

*** Standard: 6 Rep: 1 Seq: 6 12:29:41 22 Mar 11 HG

Hg 10.0 ppb 315978
Bkgd 1 5193337

*** Check Standard: 3 Ck3AICV Seq: 7 12:31:28 22 Mar 11 HG
Line Flag Intensities
Hg 167676
Bkgd 1 5190262

*** Check Standard: 1 Ck1ICB/CCB Seq: 8 12:33:22 22 Mar 11 HG
Line Flag Intensities
Hg 1358
Bkgd 1 5190920

*** Check Standard: 4 Ck4QCS Seq: 9 12:35:29 22 Mar 11 HG
Line Flag Intensities
Hg 162812
Bkgd 1 5190322

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 10 12:37:17 22 Mar 11 HG
MB 460-68078/1-A
Hg -.056 ppb 639
Bkgd 1 5189369

*** Sample ID: LCSSRM 460 Seq: 11 12:39:12 22 Mar 11 HG

-68078/2-A@10
Hg 5.32 ppb 170688
Bkgd 1 5189435 =
=
==========
*** Sample ID: Seq: 12 12:41:16 22 Mar 11 HG
460-24232-E-18-A
Hg .034 ppb 3480
Bkgd 1 5188598 =
=
*** Sample ID: Seq: 13 12:43:00 22 Mar 11 HG
460-24232-E-18-B DU
Hg .044 ppb 3796
Bkgd 1 5189052 =
=
*** Sample ID: Seq: 14 12:44:46 22 Mar 11 HG
460-24232-E-18-C MS
Hg 1.11 ppb 37390
Bkgd 1 5188439 =
=
*** Sample ID: Seq: 15 12:46:42 22 Mar 11 HG
460-24108-C-23-B
Hg .071 ppb 4658
Bkgd 1 5187528 =
=
*** Sample ID: Seq: 16 12:48:27 22 Mar 11 HG
460-23836-E-3-E
Hg 1.25 ppb 41824
Bkgd 1 5186636 =
=
*** Sample ID: Seq: 17 12:50:26 22 Mar 11 HG
460-24226-E-13-B
Hg .070 ppb 4626
Bkgd 1 5185264 =
=
*** Check Standard: 2 Ck2ACCV Seq: 18 12:52:13 22 Mar 11 HG
Line Flag Intensities
Hg 173597
Bkgd 1 5185873 =
=
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Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 1 Ck1ICB/CCB Seq: 19 12:54:08 22 Mar 11 HG
Line Flag Intensities
Hg 766
Bkgd 1 5185246 =
=
*** Sample ID: Seq: 20 12:56:02 22 Mar 11 HG
460-24226-E-15-B
Hg 5.24 ppb 168118
Bkgd 1 5184110 =
=
*** Sample ID: Seq: 21 12:57:49 22 Mar 11 HG
460-24232-E-2-A
Hg 1.94 ppb 63892
Bkgd 1 5183640 =
=
*** Sample ID: Seq: 22 12:59:34 22 Mar 11 HG
460-24232-E-3-A
Hg 1.50 ppb 49853

```
              Bkgd 1   5184270                                                  =
                                                                               =
*** Sample ID:                        Seq:  23     13:01:27 22 Mar 11   HG
                         460-24232-E-4-A
Hg    4.03    ppb      129837
              Bkgd 1   5184896                                                  =
                                                                               =
*** Sample ID:                        Seq:  24     13:03:13 22 Mar 11   HG
                         460-24232-E-5-A
Hg    .349    ppb      13446
              Bkgd 1   5184254                                                  =
                                                                               =
*** Sample ID:                        Seq:  25     13:04:58 22 Mar 11   HG
                         460-24232-E-6-A
Hg    .968    ppb      33026
              Bkgd 1   5184726                                                  =
                                                                               =
*** Sample ID:                        Seq:  26     13:06:44 22 Mar 11   HG
                         460-24232-E-7-A
Hg    1.68    ppb      55548
              Bkgd 1   5184376                                                  =
                                                                               =
*** Sample ID:                        Seq:  27     13:08:34 22 Mar 11   HG
                         460-24232-E-8-A
Hg    1.52    ppb      50624
              Bkgd 1   5184886                                                  =
                                                                               =
                              Folder:   68078hg1                    Page 1999
                              Protocol: SW846A
                             ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Check Standard: 2  Ck2ACCV      Seq:  28      13:10:38 22 Mar 11   HG
Line  Flag             Intensities
Hg                     185361
              Bkgd 1   5184663                                                  =
                                                                               =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  29      13:12:24 22 Mar 11   HG
Line  Flag             Intensities
Hg                     489
              Bkgd 1   5183943                                                  =
                                                                               =
*** Sample ID:                        Seq:  30     13:14:09 22 Mar 11   HG
                         460-24232-A-11-A
Hg    .453    ppb      16753
              Bkgd 1   5184927                                                  =
                                                                               =
*** Sample ID:                        Seq:  31     13:15:57 22 Mar 11   HG
                         460-24232-A-12-A
Hg    .380    ppb      14432
              Bkgd 1   5184644                                                  =
                                                                               =
*** Sample ID:                        Seq:  32     13:17:45 22 Mar 11   HG
                         460-24232-A-19-A
Hg    .784    ppb      27209
              Bkgd 1   5184713                                                  =
                                                                               =
*** Sample ID:                        Seq:  33     13:19:43 22 Mar 11   HG
                         460-24232-E-20-A
Hg    1.43    ppb      47551
              Bkgd 1   5184186                                                  =
                                                                               =
*** Sample ID:                        Seq:  34     13:21:34 22 Mar 11   HG
```

460-24234-A-1-A
Hg .108 ppb 5818
Bkgd 1 5183578 =
=
*** Sample ID: Seq: 35 13:23:24 22 Mar 11 HG
460-24237-A-1-B
Hg .031 ppb 3382
Bkgd 1 5183678 =
=
*** Sample ID: Seq: 36 13:25:20 22 Mar 11 HG
460-24237-A-4-B
Hg -.029 ppb 1470
Bkgd 1 5183267 =
=

Line Conc. Units SD/RSD 1 2 3 4 5

*** Sample ID: Seq: 37 13:27:06 22 Mar 11 HG
460-24237-A-6-B
Hg -.039 ppb 1152
Bkgd 1 5183036 =
=
==========
*** Sample ID: sd 460-242 Seq: 38 13:28:50 22 Mar 11 HG
32-E-18-A@5
Hg -.027 ppb 1543
Bkgd 1 5183428 =
=
*** Check Standard: 2 Ck2ACCV Seq: 39 13:30:34 22 Mar 11 HG
Line Flag Intensities
Hg 177490
Bkgd 1 5183172 =
=
*** Check Standard: 1 Ck1ICB/CCB Seq: 40 13:32:27 22 Mar 11 HG
Line Flag Intensities
Hg 558
Bkgd 1 5181327 =
=
*** Sample ID: Seq: 41 13:34:15 22 Mar 11 HG
MB 460-68108/1-A
Hg -.053 ppb 737
Bkgd 1 5182198 =
=
==========
*** Sample ID: LCSSRM 460 Seq: 42 13:36:00 22 Mar 11 HG
-68108/2-A@10
Hg 5.47 ppb 175442
Bkgd 1 5182418 =
=
==========
*** Sample ID: Seq: 43 13:37:48 22 Mar 11 HG
460-24285-E-4-A
Hg .029 ppb 3311
Bkgd 1 5181569 =
=
*** Sample ID: Seq: 44 13:39:33 22 Mar 11 HG
460-24285-E-4-B DU
Hg .020 ppb 3038
Bkgd 1 5182225 =
=

*** Sample ID: Seq: 45 13:41:18 22 Mar 11 HG

460-24285-E-4-C MS
Hg 1.11 ppb 37609
Bkgd 1 5182688 = =

Line Conc. Units SD/RSD 1 2 3 4 5

*** Sample ID: Seq: 46 13:43:05 22 Mar 11 HG
460-24237-A-9-B
Hg -.025 ppb 1597
Bkgd 1 5182065 = =

*** Sample ID: Seq: 47 13:45:00 22 Mar 11 HG
460-24238-A-1-A
Hg .000 ppb 2403
Bkgd 1 5181689 = =

*** Sample ID: Seq: 48 13:46:45 22 Mar 11 HG
460-24238-F-2-A
Hg -.005 ppb 2246
Bkgd 1 5182434 = =

*** Check Standard: 2 Ck2ACCV Seq: 49 13:48:31 22 Mar 11 HG
Line Flag Intensities
Hg 178976
Bkgd 1 5182340 = =

*** Check Standard: 1 Ck1ICB/CCB Seq: 50 13:50:27 22 Mar 11 HG
Line Flag Intensities
Hg 375
Bkgd 1 5182074 = =

*** Sample ID: Seq: 51 13:52:13 22 Mar 11 HG
460-24238-F-3-A
Hg .061 ppb 4319
Bkgd 1 5182677 = =

*** Sample ID: Seq: 52 13:54:00 22 Mar 11 HG
460-24238-F-4-B
Hg -.018 ppb 1840
Bkgd 1 5182506 = =

*** Sample ID: Seq: 53 13:55:47 22 Mar 11 HG
460-24238-A-5-B
Hg -.048 ppb 895
Bkgd 1 5181846 = =

*** Sample ID: Seq: 54 13:57:33 22 Mar 11 HG
460-24238-A-7-B
Hg -.029 ppb 1486
Bkgd 1 5182258 = =

Folder: 68078hg1 Page 1999
Protocol: SW846A
POST-RUN REPORT
Line Conc. Units SD/RSD 1 2 3 4 5

*** Sample ID: Seq: 55 13:59:20 22 Mar 11 HG
460-24356-C-1-A
Hg 95.0 ppb 3010148

```
              Bkgd 1   5182091                                                  =
                                                                               =
*** Sample ID:                        Seq:  56     14:01:05 22 Mar 11   HG
                          460-24256-E-1-A
Hg    .006    ppb      2597
              Bkgd 1   5154775                                                  =
                                                                               =
*** Sample ID:                        Seq:  57     14:03:02 22 Mar 11   HG
                          460-24256-E-3-A
Hg    .004    ppb      2533
              Bkgd 1   5178186                                                  =
                                                                               =
*** Sample ID:                        Seq:  58     14:04:48 22 Mar 11   HG
                          460-24285-E-1-A
Hg    1.03    ppb      35073
              Bkgd 1   5180277                                                  =
                                                                               =
*** Check Standard: 2  Ck2ACCV      Seq:  59      14:06:34 22 Mar 11   HG
Line  Flag             Intensities
Hg                     176219
              Bkgd 1   5180888                                                  =
                                                                               =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  60      14:08:20 22 Mar 11   HG
Line  Flag             Intensities
Hg                     157
              Bkgd 1   5180317                                                  =
                                                                               =
*** Sample ID:                        Seq:  61     14:10:04 22 Mar 11   HG
                          460-24285-E-2-A
Hg    2.63    ppb      85661
              Bkgd 1   5181576                                                  =
                                                                               =
*** Sample ID:                        Seq:  62     14:11:49 22 Mar 11   HG
                          460-24285-E-3-A
Hg    .428    ppb      15957
              Bkgd 1   5180908                                                  =
                                                                               =
*** Sample ID:                        Seq:  63     14:13:36 22 Mar 11   HG
                          460-24285-E-5-A
Hg    1.10    ppb      37083
              Bkgd 1   5180884                                                  =
                                                                               =
                              Folder:   68078hg1                    Page 1999
                              Protocol: SW846A
                             ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID:                        Seq:  64     14:15:23 22 Mar 11   HG
                          460-24285-E-6-A
Hg    .039    ppb      3651
              Bkgd 1   5180599                                                  =
                                                                               =
*** Sample ID:                        Seq:  65     14:17:11 22 Mar 11   HG
                          460-24285-E-7-A
Hg    1.02    ppb      34778
              Bkgd 1   5180019                                                  =
                                                                               =
*** Sample ID:                        Seq:  66     14:19:19 22 Mar 11   HG
                          460-24285-E-8-A
Hg    14.1    ppb      449943
              Bkgd 1   5179379                                                  =
                                                                               =
*** Sample ID:                        Seq:  67     14:21:10 22 Mar 11   HG
```

```
                          460-24285-E-9-A
Hg    .768    ppb      26713
              Bkgd 1   5177474                                                =
                                                                               =
*** Sample ID:                        Seq:  68     14:22:56 22 Mar 11   HG
                          460-24285-E-10-A
Hg    .081    ppb      4958
              Bkgd 1   5178486                                                =
                                                                               =
*** Sample ID:                        Seq:  69     14:25:03 22 Mar 11   HG
                          sd 460-24285-E-4-A@5
Hg   -.043    ppb      1052
              Bkgd 1   5179110                                                =
                                                                               =
*** Check Standard: 2  Ck2ACCV      Seq:  70     14:26:53 22 Mar 11   HG
Line  Flag             Intensities
Hg                     176639
              Bkgd 1   5179079                                                =
                                                                               =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  71     14:28:48 22 Mar 11   HG
Line  Flag             Intensities
Hg                     702
              Bkgd 1   5178067                                                =
                                                                               =
*** Sample ID:                        Seq:  72     14:30:38 22 Mar 11   HG
                          460-24356-C-1-A@50
Hg    3.17    ppb      102727
              Bkgd 1   5178496                                                =
                                                                               =
                              Folder:   68078hg1                    Page 1999
                              Protocol: SW846A
                             ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID:                        Seq:  73     14:32:23 22 Mar 11   HG
                          460-24285-E-8-A@2
Hg    7.28    ppb      232875
              Bkgd 1   5177952                                                =
                                                                               =
*** Sample ID:                        Seq:  74     14:34:11 22 Mar 11   HG
                          460-24285-E-9-A
Hg    .744    ppb      25950
              Bkgd 1   5177676                                                =
                                                                               =
*** Check Standard: 2  Ck2ACCV      Seq:  75     14:36:01 22 Mar 11   HG
Line  Flag             Intensities
Hg                     177265
              Bkgd 1   5179598                                                =
                                                                               =
*** Check Standard: 1  Ck1ICB/CCB   Seq:  76     14:37:56 22 Mar 11   HG
Line  Flag             Intensities
Hg                     86
              Bkgd 1   5178653                                                =
                                                                               =
```

TestAmerica

128 Long Hill Cross Roads
Shelton, Connecticut, 06484

METALS QUALITY CONTROL APPROVAL REPORT

Batch Number 49146

	1st Level Review	Comments
Chain of Custody forms have been completed.	JV 3/29/11	
Initial Calibration meets the following criteria*: ( )CLP ( )EPA200.7 ( )NYSDEC (✓)SW846 ( )Other		
Continuing calibration meets the following criteria*: ( )CLP ( )EPA200.7 ( )NYSDEC (✓)SW846 ( )Other		
Correct analytical sequence followed (CRI, ICSA,etc.) and criteria* met.		
All blank criteria* met. ( )CLP ( )EPA200.7 ( )NYSDEC (✓)SW846 ( )Other		
IDLs, Linear Range and IECs current.		
LSC, MS,MD, MSD (if required) meet acceptance limits*: ( )CLP ( )EPA200.7 ( )NYSDEC (✓)SW846 ( )Other		
Serial dilution analyzed once per SDG or 20 samples.		
Post digestion spike performed as required.		
Flagging correct.		
All raw data submitted as per deliverable requiements.		
Prep batch completed with proper information.		
All deviations, prep and anlaysis methods noted in NCMs.		

* Reference SOPs for appropriate acceptance criteria.

This data meets the requirements of the Metals SOP's, unless otherwise documented in a NCM.

Nestor Pitre Date 3/29/11

Authorizing Signature (2nd level Review)

TestAmerica Form #MEF01105.CT

Analysis Begun

Start Time: 3/28/2011 11:15:36 AM
Logged In Analyst: ctmetals
Spectrometer Model: Optima 4300 DV, S/N 069N-na
Plasma On Time: 3/28/2011 9:50:51 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d
Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

Sequence No.: 1
Sample ID: STD1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/28/2011 11:15:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	866611.8	25501.94	2.94%	1.000	mg/L
Y (radial)	112030.1	253.38	0.23%	1.000	mg/L
Ag 328.068†	-376.3	2.13	0.57%	[0.00]	ug/L
Al 396.153†	414.4	6.76	1.63%	[0.00]	ug/L
As 188.979†	-8.5	0.01	0.18%	[0.00]	ug/L
Ba 233.527†	-75.6	4.74	6.27%	[0.00]	ug/L
Be 313.107†	-2240.0	66.30	2.96%	[0.00]	ug/L
Ca 317.933†	740.5	9.83	1.33%	[0.00]	ug/L
Cd 214.440†	148.6	2.63	1.77%	[0.00]	ug/L
Co 228.616†	-16.8	2.19	13.01%	[0.00]	ug/L
Cr 267.716†	39.1	0.11	0.28%	[0.00]	ug/L
Fe 238.204†	56.9	2.46	4.33%	[0.00]	ug/L
K 766.490†	-163.8	4.78	2.92%	[0.00]	ug/L
Mg 285.213†	21.5	7.87	36.65%	[0.00]	ug/L
Mn 257.610†	50.1	9.96	19.86%	[0.00]	ug/L
Mo 202.031†	5.9	1.16	19.70%	[0.00]	ug/L
Na 589.592†	4034.1	0.74	0.02%	[0.00]	ug/L
Ni 231.604†	-15.8	3.47	21.94%	[0.00]	ug/L
Pb 220.353†	19.8	1.50	7.60%	[0.00]	ug/L
Sb 206.836†	24.0	6.26	26.11%	[0.00]	ug/L
Se 196.026†	15.8	4.77	30.18%	[0.00]	ug/L
V 311.071†	4005.1	106.26	2.65%	[0.00]	ug/L
Sn 189.927†	-12.8	4.85	37.98%	[0.00]	ug/L
Sr 421.552†	154.5	14.79	9.58%	[0.00]	ug/L
Tl 190.801†	-50.1	0.58	1.17%	[0.00]	ug/L
Zn 206.200†	8.0	0.83	10.35%	[0.00]	ug/L
Ti 334.940†	-63.8	6.03	9.45%	[0.00]	ug/L
B 249.772†	878.8	20.13	2.29%	[0.00]	ug/L
Cu 324.752†	4458.6	122.10	2.74%	[0.00]	ug/L
S 181.975†	12.9	0.02	0.14%	[0.00]	ug/L
Zr 343.823†	419.1	19.88	4.74%	[0.00]	ug/L
Li 670.784†	223.0	76.55	34.33%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 3/28/2011 11:18:42 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	797418.9	4578.85	0.57%	0.920	mg/L
Y (radial)	107850.0	201.69	0.19%	0.963	mg/L
Ag 328.068†	76470.7	26.42	0.03%	[500]	ug/L
Al 396.153†	108784.9	71.55	0.07%	[11000]	ug/L

As 188.979†	895.1	2.23	0.25%	[1000] ug/L
Ba 233.527†	56243.9	133.05	0.24%	[1000] ug/L
Be 313.107†	976035.1	565.56	0.06%	[1000] ug/L
Ca 317.933†	339286.2	542.14	0.16%	[50000] ug/L
Cd 214.440†	30593.7	156.45	0.51%	[1000] ug/L
Co 228.616†	11925.2	3.92	0.03%	[1000] ug/L
Cr 267.716†	20097.0	46.35	0.23%	[1000] ug/L
Fe 238.204†	26111.2	4.16	0.02%	[11000] ug/L
K 766.490†	344964.1	4864.96	1.41%	[50000] ug/L
Mg 285.213†	622004.9	9539.43	1.53%	[50000] ug/L
Mn 257.610†	366138.8	792.20	0.22%	[1000] ug/L
Mo 202.031†	4395.3	28.88	0.66%	[1000] ug/L
Na 589.592†	629257.0	9134.12	1.45%	[50000] ug/L
Ni 231.604†	7436.9	53.53	0.72%	[1000] ug/L
Pb 220.353†	1432.8	0.87	0.06%	[1000] ug/L
Sb 206.836†	1549.1	14.09	0.91%	[1000] ug/L
Se 196.026†	572.5	1.80	0.32%	[1000] ug/L
V 311.071†	170431.7	126.90	0.07%	[1000] ug/L
Sn 189.927†	1624.1	9.52	0.59%	[1000] ug/L
Sr 421.552†	929328.7	13627.13	1.47%	[1000] ug/L
Tl 190.801†	1542.5	9.03	0.59%	[1000] ug/L
Zn 206.200†	9225.9	7.15	0.08%	[1000] ug/L
Ti 334.940†	516080.2	259.98	0.05%	[1000] ug/L
B 249.772†	30045.2	166.81	0.56%	[1000] ug/L
Cu 324.752†	290325.4	1660.15	0.57%	[1000] ug/L
S 181.975†	3145.0	2.40	0.08%	[20000] ug/L
Zr 343.823†	240207.5	337.06	0.14%	[1000] ug/L
Li 670.784†	267977.2	3522.50	1.31%	[1000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin, Calc Int	0.0	152.9	0.00000	1.000000	
Al 396.153	1	Lin, Calc Int	0.0	9.890	0.00000	1.000000	
As 188.979	1	Lin, Calc Int	0.0	0.8951	0.00000	1.000000	
Ba 233.527	1	Lin, Calc Int	0.0	56.24	0.00000	1.000000	
Be 313.107	1	Lin, Calc Int	0.0	976.0	0.00000	1.000000	
Ca 317.933	1	Lin, Calc Int	0.0	6.786	0.00000	1.000000	
Cd 214.440	1	Lin, Calc Int	0.0	30.59	0.00000	1.000000	
Co 228.616	1	Lin, Calc Int	0.0	11.93	0.00000	1.000000	
Cr 267.716	1	Lin, Calc Int	-0.0	20.10	0.00000	1.000000	
Fe 238.204	1	Lin, Calc Int	0.0	2.374	0.00000	1.000000	
K 766.490	1	Lin, Calc Int	0.0	6.899	0.00000	1.000000	
Mg 285.213	1	Lin, Calc Int	0.0	12.44	0.00000	1.000000	
Mn 257.610	1	Lin, Calc Int	0.0	366.1	0.00000	1.000000	
Mo 202.031	1	Lin, Calc Int	-0.0	4.395	0.00000	1.000000	
Na 589.592	1	Lin, Calc Int	0.0	12.59	0.00000	1.000000	
Ni 231.604	1	Lin, Calc Int	0.0	7.437	0.00000	1.000000	
Pb 220.353	1	Lin, Calc Int	-0.0	1.433	0.00000	1.000000	
Sb 206.836	1	Lin, Calc Int	0.0	1.549	0.00000	1.000000	
Se 196.026	1	Lin, Calc Int	0.0	0.5725	0.00000	1.000000	
V 311.071	1	Lin, Calc Int	0.0	170.4	0.00000	1.000000	
Sn 189.927	1	Lin, Calc Int	0.0	1.624	0.00000	1.000000	
Sr 421.552	1	Lin, Calc Int	0.0	929.3	0.00000	1.000000	
Tl 190.801	1	Lin, Calc Int	-0.0	1.542	0.00000	1.000000	
Zn 206.200	1	Lin, Calc Int	0.0	9.226	0.00000	1.000000	
Ti 334.940	1	Lin, Calc Int	0.0	516.1	0.00000	1.000000	
B 249.772	1	Lin, Calc Int	0.0	30.05	0.00000	1.000000	
Cu 324.752	1	Lin, Calc Int	0.0	290.3	0.00000	1.000000	
S 181.975	1	Lin, Calc Int	0.0	0.1573	0.00000	1.000000	
Zr 343.823	1	Lin, Calc Int	0.0	240.2	0.00000	1.000000	
Li 670.784	1	Lin, Calc Int	0.0	268.0	0.00000	1.000000	

Sequence No.: 3
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/28/2011 11:22:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	840507.0	0.970	mg/L	0.0064				0.66%
Y (radial)	108067.6	0.965	mg/L	0.0134				1.39%
Ag 328.068†	37108.6	241.0	ug/L	0.26	241.0	ug/L	0.26	0.11%
QC value within limits for Ag 328.068 Recovery = 96.40%								
Al 396.153†	49444.4	4984	ug/L	4.3	4984	ug/L	4.3	0.09%
QC value within limits for Al 396.153 Recovery = 99.68%								
As 188.979†	449.4	504.7	ug/L	4.04	504.7	ug/L	4.04	0.80%
QC value within limits for As 188.979 Recovery = 100.93%								
Ba 233.527†	27983.2	498.4	ug/L	1.62	498.4	ug/L	1.62	0.33%
QC value within limits for Ba 233.527 Recovery = 99.68%								
Be 313.107†	476561.2	490.7	ug/L	2.32	490.7	ug/L	2.32	0.47%
QC value within limits for Be 313.107 Recovery = 98.14%								
Ca 317.933†	120786.0	17800	ug/L	86.3	17800	ug/L	86.3	0.48%
QC value within limits for Ca 317.933 Recovery = 96.22%								
Cd 214.440†	15267.6	498.8	ug/L	4.69	498.8	ug/L	4.69	0.94%
QC value within limits for Cd 214.440 Recovery = 99.76%								
Co 228.616†	5940.9	497.5	ug/L	4.75	497.5	ug/L	4.75	0.96%
QC value within limits for Co 228.616 Recovery = 99.50%								
Cr 267.716†	10083.8	502.3	ug/L	2.85	502.3	ug/L	2.85	0.57%
QC value within limits for Cr 267.716 Recovery = 100.47%								
Fe 238.204†	11871.6	5001	ug/L	32.0	5001	ug/L	32.0	0.64%
QC value within limits for Fe 238.204 Recovery = 90.93%								
K 766.490†	271486.4	39350	ug/L	515.2	39350	ug/L	515.2	1.31%
QC value within limits for K 766.490 Recovery = 98.37%								
Mg 285.213†	224694.9	18070	ug/L	168.7	18070	ug/L	168.7	0.93%
QC value within limits for Mg 285.213 Recovery = 97.65%								
Mn 257.610†	182337.5	497.2	ug/L	2.41	497.2	ug/L	2.41	0.48%
QC value within limits for Mn 257.610 Recovery = 99.44%								
Mo 202.031†	2070.3	470.3	ug/L	2.60	470.3	ug/L	2.60	0.55%
QC value within limits for Mo 202.031 Recovery = 94.05%								
Na 589.592†	463785.6	36850	ug/L	500.1	36850	ug/L	500.1	1.36%
QC value within limits for Na 589.592 Recovery = 92.13%								
Ni 231.604†	3735.2	503.0	ug/L	5.35	503.0	ug/L	5.35	1.06%
QC value within limits for Ni 231.604 Recovery = 100.59%								
Pb 220.353†	703.4	492.0	ug/L	0.79	492.0	ug/L	0.79	0.16%
QC value within limits for Pb 220.353 Recovery = 98.39%								
Sb 206.836†	739.5	476.7	ug/L	2.00	476.7	ug/L	2.00	0.42%
QC value within limits for Sb 206.836 Recovery = 95.33%								
Se 196.026†	268.5	476.1	ug/L	5.59	476.1	ug/L	5.59	1.17%
QC value within limits for Se 196.026 Recovery = 95.23%								
V 311.071†	82212.1	474.2	ug/L	0.57	474.2	ug/L	0.57	0.12%
QC value within limits for V 311.071 Recovery = 94.85%								
Sn 189.927†	789.3	489.3	ug/L	6.99	489.3	ug/L	6.99	1.43%
QC value within limits for Sn 189.927 Recovery = 97.86%								
Sr 421.552†	457920.4	492.3	ug/L	5.60	492.3	ug/L	5.60	1.14%
QC value within limits for Sr 421.552 Recovery = 98.47%								
Tl 190.801†	753.3	493.9	ug/L	2.61	493.9	ug/L	2.61	0.53%
QC value within limits for Tl 190.801 Recovery = 98.78%								
Zn 206.200†	4522.7	495.4	ug/L	4.59	495.4	ug/L	4.59	0.93%
QC value within limits for Zn 206.200 Recovery = 99.09%								
Ti 334.940†	254282.1	492.7	ug/L	0.63	492.7	ug/L	0.63	0.13%
QC value within limits for Ti 334.940 Recovery = 98.54%								
B 249.772†	15037.8	481.3	ug/L	3.11	481.3	ug/L	3.11	0.65%
QC value within limits for B 249.772 Recovery = 96.26%								
Cu 324.752†	142992.2	493.1	ug/L	1.37	493.1	ug/L	1.37	0.28%
QC value within limits for Cu 324.752 Recovery = 98.62%								
S 181.975†	1428.9	9462	ug/L	142.8	9462	ug/L	142.8	1.51%
QC value within limits for S 181.975 Recovery = 94.62%								
Zr 343.823†	113931.5	474.2	ug/L	0.02	474.2	ug/L	0.02	0.00%
QC value within limits for Zr 343.823 Recovery = 94.83%								
Li 670.784†	136265.3	508.5	ug/L	7.63	508.5	ug/L	7.63	1.50%
QC value within limits for Li 670.784 Recovery = 101.70%								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: ICB
Analyst:
Initial Sample Wt:

Autosampler Location: 1
Date Collected: 3/28/2011 11:25:45 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	878413.5	1.014	mg/L	0.0046				0.45%
Y (radial)	109873.7	0.981	mg/L	0.0038				0.39%
Ag 328.068†	18.2	0.118	ug/L	0.0024	0.118	ug/L	0.0024	2.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-39.0	-3.965	ug/L	2.0772	-3.965	ug/L	2.0772	52.38%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.2	-2.409	ug/L	3.2750	-2.409	ug/L	3.2750	135.93%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.9	0.086	ug/L	0.0821	0.086	ug/L	0.0821	95.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	58.5	0.060	ug/L	0.0111	0.060	ug/L	0.0111	18.42%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-1.1	-0.164	ug/L	1.9318	-0.164	ug/L	1.9318	>999.9%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	2.1	0.070	ug/L	0.0127	0.070	ug/L	0.0127	18.22%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-5.2	-0.431	ug/L	0.1338	-0.431	ug/L	0.1338	31.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.9	-0.093	ug/L	0.2130	-0.093	ug/L	0.2130	228.50%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	-18.9	-7.956	ug/L	0.8650	-7.956	ug/L	0.8650	10.87%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	102.7	14.89	ug/L	3.163	14.89	ug/L	3.163	21.25%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	3.7	0.291	ug/L	0.1456	0.291	ug/L	0.1456	50.04%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-1.0	-0.003	ug/L	0.0061	-0.003	ug/L	0.0061	227.53%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.3	0.521	ug/L	0.0763	0.521	ug/L	0.0763	14.62%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	187.7	14.92	ug/L	5.457	14.92	ug/L	5.457	36.58%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	1.7	0.224	ug/L	0.1405	0.224	ug/L	0.1405	62.61%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.6	1.129	ug/L	0.1815	1.129	ug/L	0.1815	16.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.8	5.016	ug/L	0.3420	5.016	ug/L	0.3420	6.82%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.1	0.089	ug/L	5.5403	0.089	ug/L	5.5403	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
V 311.071†	-79.8	-0.468	ug/L	0.2152	-0.468	ug/L	0.2152	45.94%
QC value within limits for V 311.071 Recovery = Not calculated								
Sn 189.927†	8.9	5.451	ug/L	0.2928	5.451	ug/L	0.2928	5.37%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	33.1	0.036	ug/L	0.0127	0.036	ug/L	0.0127	35.67%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Tl 190.801†	1.4	0.902	ug/L	6.0817	0.902	ug/L	6.0817	673.95%
QC value within limits for Tl 190.801 Recovery = Not calculated								
Zn 206.200†	-1.6	-0.175	ug/L	0.2267	-0.175	ug/L	0.2267	129.37%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ti 334.940†	27.5	0.053	ug/L	0.0034	0.053	ug/L	0.0034	6.31%
QC value within limits for Ti 334.940 Recovery = Not calculated								
B 249.772†	52.7	1.783	ug/L	0.3505	1.783	ug/L	0.3505	19.65%
QC value within limits for B 249.772 Recovery = Not calculated								
Cu 324.752†	-10.9	-0.038	ug/L	0.0953	-0.038	ug/L	0.0953	248.75%
QC value within limits for Cu 324.752 Recovery = Not calculated								
S 181.975†	-2.5	-16.13	ug/L	11.233	-16.13	ug/L	11.233	69.63%
QC value within limits for S 181.975 Recovery = Not calculated								
Zr 343.823†	-9.2	-0.038	ug/L	0.0747	-0.038	ug/L	0.0747	196.99%
QC value within limits for Zr 343.823 Recovery = Not calculated								
Li 670.784†	-67.4	-0.251	ug/L	0.7569	-0.251	ug/L	0.7569	300.99%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 5 Autosampler Location: 4

Sample ID: CRI
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/28/2011 11:28:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	847338.4	0.978	mg/L	0.0072				0.74%
Y (radial)	106867.9	0.954	mg/L	0.0017				0.18%
Ag 328.068†	352.6	2.165	ug/L	0.0302	2.165	ug/L	0.0302	1.39%
QC value within limits for Ag 328.068 Recovery = 108.27%								
Al 396.153†	4748.3	479.2	ug/L	1.74	479.2	ug/L	1.74	0.36%
QC value within limits for Al 396.153 Recovery = 95.85%								
As 188.979†	22.2	24.83	ug/L	0.530	24.83	ug/L	0.530	2.14%
QC value within limits for As 188.979 Recovery = 82.78%								
Ba 233.527†	546.6	9.734	ug/L	0.2181	9.734	ug/L	0.2181	2.24%
QC value within limits for Ba 233.527 Recovery = 97.34%								
Be 313.107†	9231.6	9.601	ug/L	0.1089	9.601	ug/L	0.1089	1.13%
QC value within limits for Be 313.107 Recovery = 96.01%								
Ca 317.933†	6153.4	906.8	ug/L	4.73	906.8	ug/L	4.73	0.52%
QC value within limits for Ca 317.933 Recovery = 90.68%								
Cd 214.440†	312.7	10.21	ug/L	0.007	10.21	ug/L	0.007	0.07%
QC value within limits for Cd 214.440 Recovery = 102.11%								
Co 228.616†	112.5	9.393	ug/L	0.5880	9.393	ug/L	0.5880	6.26%
QC value within limits for Co 228.616 Recovery = 93.93%								
Cr 267.716†	196.5	9.791	ug/L	0.1431	9.791	ug/L	0.1431	1.46%
QC value within limits for Cr 267.716 Recovery = 97.91%								
Fe 238.204†	511.6	215.5	ug/L	0.05	215.5	ug/L	0.05	0.02%
QC value within limits for Fe 238.204 Recovery = 86.21%								
K 766.490†	7371.0	1068	ug/L	10.1	1068	ug/L	10.1	0.95%
QC value within limits for K 766.490 Recovery = 106.84%								
Mg 285.213†	11712.7	941.7	ug/L	5.77	941.7	ug/L	5.77	0.61%
QC value within limits for Mg 285.213 Recovery = 94.17%								
Mn 257.610†	3616.4	9.836	ug/L	0.0220	9.836	ug/L	0.0220	0.22%
QC value within limits for Mn 257.610 Recovery = 98.36%								
Mo 202.031†	117.4	26.71	ug/L	0.035	26.71	ug/L	0.035	0.13%
QC value within limits for Mo 202.031 Recovery = 89.03%								
Na 589.592†	11058.7	878.7	ug/L	0.28	878.7	ug/L	0.28	0.03%
QC value within limits for Na 589.592 Recovery = 87.87%								
Ni 231.604†	74.4	10.02	ug/L	0.395	10.02	ug/L	0.395	3.94%
QC value within limits for Ni 231.604 Recovery = 100.23%								
Pb 220.353†	44.6	31.21	ug/L	6.072	31.21	ug/L	6.072	19.45%
QC value within limits for Pb 220.353 Recovery = 104.04%								
Sb 206.836†	42.8	27.83	ug/L	4.611	27.83	ug/L	4.611	16.57%
QC value within limits for Sb 206.836 Recovery = 92.77%								
Se 196.026†	33.1	58.18	ug/L	0.188	58.18	ug/L	0.188	0.32%
QC value within limits for Se 196.026 Recovery = 77.57%								
V 311.071†	1752.2	9.810	ug/L	0.6404	9.810	ug/L	0.6404	6.53%
QC value within limits for V 311.071 Recovery = 98.10%								
Sn 189.927†	45.4	28.16	ug/L	5.153	28.16	ug/L	5.153	18.30%
QC value within limits for Sn 189.927 Recovery = 93.88%								
Sr 421.552†	8520.1	9.147	ug/L	0.0712	9.147	ug/L	0.0712	0.78%
QC value within limits for Sr 421.552 Recovery = 91.47%								
Tl 190.801†	39.0	25.67	ug/L	2.793	25.67	ug/L	2.793	10.88%
QC value within limits for Tl 190.801 Recovery = 85.58%								
Zn 206.200†	255.8	27.82	ug/L	0.643	27.82	ug/L	0.643	2.31%
QC value within limits for Zn 206.200 Recovery = 92.75%								
Ti 334.940†	14929.5	28.93	ug/L	0.211	28.93	ug/L	0.211	0.73%
QC value within limits for Ti 334.940 Recovery = 96.43%								
B 249.772†	1281.4	41.82	ug/L	0.250	41.82	ug/L	0.250	0.60%
QC value within limits for B 249.772 Recovery = 83.65%								
Cu 324.752†	2581.3	8.915	ug/L	0.0262	8.915	ug/L	0.0262	0.29%
QC value within limits for Cu 324.752 Recovery = 89.15%								
S 181.975†	140.8	914.9	ug/L	1.15	914.9	ug/L	1.15	0.13%
QC value within limits for S 181.975 Recovery = 91.49%								
Zr 343.823†	6647.2	27.67	ug/L	0.009	27.67	ug/L	0.009	0.03%
QC value within limits for Zr 343.823 Recovery = 92.22%								
Li 670.784†	2790.1	10.41	ug/L	0.240	10.41	ug/L	0.240	2.31%
QC value within limits for Li 670.784 Recovery = 104.12%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/28/2011 11:32:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	734822.7	0.848	mg/L	0.0047				0.55%
Y (radial)	98342.9	0.878	mg/L	0.0116				1.33%
Ag 328.068†	-2222.7	-5.302	ug/L	0.2110	-5.302	ug/L	0.2110	3.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	5365264.8	542500	ug/L	5549.9	542500	ug/L	5549.9	1.02%
QC value within limits for Al 396.153 Recovery = 108.50%								
As 188.979†	-8.7	36.23	ug/L	14.737	36.23	ug/L	14.737	40.68%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	455.5	4.348	ug/L	0.2240	4.348	ug/L	0.2240	5.15%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-394.6	-0.440	ug/L	0.0332	-0.440	ug/L	0.0332	7.53%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	3287702.8	484500	ug/L	8159.5	484500	ug/L	8159.5	1.68%
QC value within limits for Ca 317.933 Recovery = 96.90%								
Cd 214.440†	189.7	-1.719	ug/L	0.2757	-1.719	ug/L	0.2757	16.04%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	57.5	-1.359	ug/L	0.2743	-1.359	ug/L	0.2743	20.18%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-75.8	0.042	ug/L	0.1626	0.042	ug/L	0.1626	386.09%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	404441.0	170400	ug/L	3130.8	170400	ug/L	3130.8	1.84%
QC value within limits for Fe 238.204 Recovery = 85.19%								
K 766.490†	401.9	58.25	ug/L	9.801	58.25	ug/L	9.801	16.83%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	5756588.1	462900	ug/L	4914.1	462900	ug/L	4914.1	1.06%
QC value within limits for Mg 285.213 Recovery = 92.58%								
Mn 257.610†	-1456.2	-24.43	ug/L	0.105	-24.43	ug/L	0.105	0.43%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-64.3	-7.659	ug/L	0.5337	-7.659	ug/L	0.5337	6.97%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-157.0	-12.47	ug/L	1.644	-12.47	ug/L	1.644	13.18%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-4.9	-0.655	ug/L	0.9206	-0.655	ug/L	0.9206	140.50%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-24.2	-1.587	ug/L	2.3222	-1.587	ug/L	2.3222	146.34%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-79.4	-4.501	ug/L	4.9146	-4.501	ug/L	4.9146	109.20%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-133.6	-0.543	ug/L	16.4773	-0.543	ug/L	16.4773	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
V 311.071†	1762.4	-4.515	ug/L	0.3155	-4.515	ug/L	0.3155	6.99%
QC value within limits for V 311.071 Recovery = Not calculated								
Sn 189.927†	-43.3	-4.775	ug/L	12.1617	-4.775	ug/L	12.1617	254.70%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	24701.4	15.28	ug/L	0.204	15.28	ug/L	0.204	1.33%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Tl 190.801†	-78.4	-13.76	ug/L	3.776	-13.76	ug/L	3.776	27.43%
QC value within limits for Tl 190.801 Recovery = Not calculated								
Zn 206.200†	-17.7	-1.959	ug/L	0.8341	-1.959	ug/L	0.8341	42.58%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ti 334.940†	-3740.9	-7.249	ug/L	0.1331	-7.249	ug/L	0.1331	1.84%
QC value within limits for Ti 334.940 Recovery = Not calculated								
B 249.772†	19217.8	-14.75	ug/L	10.411	-14.75	ug/L	10.411	70.60%
QC value within limits for B 249.772 Recovery = Not calculated								
Cu 324.752†	-4904.7	1.923	ug/L	0.2920	1.923	ug/L	0.2920	15.18%
QC value within limits for Cu 324.752 Recovery = Not calculated								
S 181.975†	-1465.5	297.0	ug/L	198.72	297.0	ug/L	198.72	66.90%
QC value within limits for S 181.975 Recovery = Not calculated								
Zr 343.823†	1040.9	-0.367	ug/L	0.0454	-0.367	ug/L	0.0454	12.38%
QC value within limits for Zr 343.823 Recovery = Not calculated								

Li 670.784† 1385.8 5.171 ug/L 0.1646 5.171 ug/L 0.1646 3.18%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/28/2011 11:35:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	739965.6	0.854	mg/L	0.0070				0.82%
Y (radial)	100381.4	0.896	mg/L	0.0032				0.36%
Ag 328.068†	14382.5	101.3	ug/L	0.18	101.3	ug/L	0.18	0.18%
QC value within limits for Ag 328.068 Recovery = 101.28%								
Al 396.153†	5380272.1	544000	ug/L	804.4	544000	ug/L	804.4	0.15%
QC value within limits for Al 396.153 Recovery = 108.80%								
As 188.979†	403.3	497.5	ug/L	3.53	497.5	ug/L	3.53	0.71%
QC value within limits for As 188.979 Recovery = 99.51%								
Ba 233.527†	27366.2	483.8	ug/L	0.22	483.8	ug/L	0.22	0.05%
QC value within limits for Ba 233.527 Recovery = 96.76%								
Be 313.107†	455844.2	469.4	ug/L	0.73	469.4	ug/L	0.73	0.16%
QC value within limits for Be 313.107 Recovery = 93.88%								
Ca 317.933†	3300630.3	486400	ug/L	6015.6	486400	ug/L	6015.6	1.24%
QC value within limits for Ca 317.933 Recovery = 97.28%								
Cd 214.440†	13522.4	434.1	ug/L	4.20	434.1	ug/L	4.20	0.97%
QC value within limits for Cd 214.440 Recovery = 86.82%								
Co 228.616†	5318.1	439.3	ug/L	2.46	439.3	ug/L	2.46	0.56%
QC value within limits for Co 228.616 Recovery = 87.86%								
Cr 267.716†	9364.3	470.2	ug/L	3.52	470.2	ug/L	3.52	0.75%
QC value within limits for Cr 267.716 Recovery = 94.04%								
Fe 238.204†	403044.3	169800	ug/L	1917.6	169800	ug/L	1917.6	1.13%
QC value within limits for Fe 238.204 Recovery = 84.90%								
K 766.490†	374.8	54.33	ug/L	10.771	54.33	ug/L	10.771	19.83%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	5708775.8	459000	ug/L	764.6	459000	ug/L	764.6	0.17%
QC value within limits for Mg 285.213 Recovery = 91.81%								
Mn 257.610†	170194.0	444.6	ug/L	1.04	444.6	ug/L	1.04	0.23%
QC value within limits for Mn 257.610 Recovery = 88.91%								
Mo 202.031†	1973.9	455.2	ug/L	4.48	455.2	ug/L	4.48	0.99%
QC value within limits for Mo 202.031 Recovery = 91.04%								
Na 589.592†	-383.7	-30.49	ug/L	12.350	-30.49	ug/L	12.350	40.51%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	3204.2	431.5	ug/L	1.41	431.5	ug/L	1.41	0.33%
QC value within limits for Ni 231.604 Recovery = 86.30%								
Pb 220.353†	627.7	455.0	ug/L	0.68	455.0	ug/L	0.68	0.15%
QC value within limits for Pb 220.353 Recovery = 91.00%								
Sb 206.836†	695.8	494.0	ug/L	0.13	494.0	ug/L	0.13	0.03%
QC value within limits for Sb 206.836 Recovery = 98.80%								
Se 196.026†	420.1	966.6	ug/L	8.02	966.6	ug/L	8.02	0.83%
QC value within limits for Se 196.026 Recovery = 96.66%								
V 311.071†	83476.8	467.4	ug/L	0.22	467.4	ug/L	0.22	0.05%
QC value within limits for V 311.071 Recovery = 93.49%								
Sn 189.927†	702.8	457.2	ug/L	5.51	457.2	ug/L	5.51	1.20%
QC value within limits for Sn 189.927 Recovery = 91.45%								
Sr 421.552†	459113.7	482.7	ug/L	6.47	482.7	ug/L	6.47	1.34%
QC value within limits for Sr 421.552 Recovery = 96.54%								
Tl 190.801†	621.9	444.9	ug/L	13.29	444.9	ug/L	13.29	2.99%
QC value within limits for Tl 190.801 Recovery = 88.97%								
Zn 206.200†	3881.4	425.6	ug/L	2.65	425.6	ug/L	2.65	0.62%
QC value within limits for Zn 206.200 Recovery = 85.11%								
Ti 334.940†	248924.6	482.3	ug/L	0.37	482.3	ug/L	0.37	0.08%
QC value within limits for Ti 334.940 Recovery = 96.47%								
B 249.772†	33918.3	476.8	ug/L	7.66	476.8	ug/L	7.66	1.61%
QC value within limits for B 249.772 Recovery = 95.36%								
Cu 324.752†	156234.5	556.9	ug/L	1.62	556.9	ug/L	1.62	0.29%
QC value within limits for Cu 324.752 Recovery = 111.38%								
S 181.975†	-1458.3	262.9	ug/L	129.59	262.9	ug/L	129.59	49.28%

QC value within limits for S 181.975 Recovery = Not calculated

Zr 343.823†	116715.7	481.2 ug/L	0.33	481.2 ug/L	0.33	0.07%
QC value within limits for Zr 343.823 Recovery = 96.24%						
Li 670.784†	155497.8	580.3 ug/L	5.83	580.3 ug/L	5.83	1.00%
QC value within limits for Li 670.784 Recovery = 116.05%						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/28/2011 11:39:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	852823.0	0.984	mg/L	0.0044				0.45%
Y (radial)	108947.2	0.972	mg/L	0.0118				1.22%
Ag 328.068†	37159.4	241.3	ug/L	0.42	241.3	ug/L	0.42	0.17%
QC value within limits for Ag 328.068 Recovery = 96.53%								
Al 396.153†	49452.4	4985	ug/L	29.3	4985	ug/L	29.3	0.59%
QC value within limits for Al 396.153 Recovery = 99.70%								
As 188.979†	441.5	495.8	ug/L	2.84	495.8	ug/L	2.84	0.57%
QC value within limits for As 188.979 Recovery = 99.17%								
Ba 233.527†	28197.5	502.2	ug/L	0.23	502.2	ug/L	0.23	0.05%
QC value within limits for Ba 233.527 Recovery = 100.44%								
Be 313.107†	477964.6	492.1	ug/L	1.01	492.1	ug/L	1.01	0.20%
QC value within limits for Be 313.107 Recovery = 98.43%								
Ca 317.933†	120981.0	17830	ug/L	127.8	17830	ug/L	127.8	0.72%
QC value within limits for Ca 317.933 Recovery = 96.37%								
Cd 214.440†	15147.9	494.9	ug/L	2.47	494.9	ug/L	2.47	0.50%
QC value within limits for Cd 214.440 Recovery = 98.98%								
Co 228.616†	5894.6	493.6	ug/L	2.31	493.6	ug/L	2.31	0.47%
QC value within limits for Co 228.616 Recovery = 98.72%								
Cr 267.716†	9975.1	496.9	ug/L	1.23	496.9	ug/L	1.23	0.25%
QC value within limits for Cr 267.716 Recovery = 99.38%								
Fe 238.204†	11846.1	4990	ug/L	28.8	4990	ug/L	28.8	0.58%
QC value within limits for Fe 238.204 Recovery = 90.74%								
K 766.490†	272765.6	39540	ug/L	178.7	39540	ug/L	178.7	0.45%
QC value within limits for K 766.490 Recovery = 98.84%								
Mg 285.213†	224131.3	18020	ug/L	61.1	18020	ug/L	61.1	0.34%
QC value within limits for Mg 285.213 Recovery = 97.41%								
Mn 257.610†	183378.7	500.0	ug/L	0.90	500.0	ug/L	0.90	0.18%
QC value within limits for Mn 257.610 Recovery = 100.01%								
Mo 202.031†	2051.9	466.1	ug/L	2.71	466.1	ug/L	2.71	0.58%
QC value within limits for Mo 202.031 Recovery = 93.21%								
Na 589.592†	452948.3	35990	ug/L	109.0	35990	ug/L	109.0	0.30%
QC value within limits for Na 589.592 Recovery = 89.98%								
Ni 231.604†	3721.4	501.1	ug/L	1.84	501.1	ug/L	1.84	0.37%
QC value within limits for Ni 231.604 Recovery = 100.22%								
Pb 220.353†	695.1	486.2	ug/L	1.61	486.2	ug/L	1.61	0.33%
QC value within limits for Pb 220.353 Recovery = 97.24%								
Sb 206.836†	738.2	475.8	ug/L	2.20	475.8	ug/L	2.20	0.46%
QC value within limits for Sb 206.836 Recovery = 95.17%								
Se 196.026†	257.4	456.7	ug/L	20.41	456.7	ug/L	20.41	4.47%
QC value within limits for Se 196.026 Recovery = 91.34%								
V 311.071†	82593.7	476.5	ug/L	0.77	476.5	ug/L	0.77	0.16%
QC value within limits for V 311.071 Recovery = 95.29%								
Sn 189.927†	773.9	479.8	ug/L	4.56	479.8	ug/L	4.56	0.95%
QC value within limits for Sn 189.927 Recovery = 95.97%								
Sr 421.552†	449735.2	483.5	ug/L	2.77	483.5	ug/L	2.77	0.57%
QC value within limits for Sr 421.552 Recovery = 96.70%								
Tl 190.801†	756.1	495.8	ug/L	1.85	495.8	ug/L	1.85	0.37%
QC value within limits for Tl 190.801 Recovery = 99.15%								
Zn 206.200†	4506.9	493.7	ug/L	3.07	493.7	ug/L	3.07	0.62%
QC value within limits for Zn 206.200 Recovery = 98.74%								
Ti 334.940†	255164.7	494.4	ug/L	1.68	494.4	ug/L	1.68	0.34%
QC value within limits for Ti 334.940 Recovery = 98.89%								
B 249.772†	14662.0	468.8	ug/L	2.07	468.8	ug/L	2.07	0.44%
QC value within limits for B 249.772 Recovery = 93.77%								

Cu 324.752†	142680.7	492.0 ug/L	0.87	492.0 ug/L	0.87	0.18%
QC value within limits for Cu 324.752 Recovery = 98.40%						
S 181.975†	1389.6	9211 ug/L	21.3	9211 ug/L	21.3	0.23%
QC value within limits for S 181.975 Recovery = 92.11%						
Zr 343.823†	114114.3	474.9 ug/L	0.72	474.9 ug/L	0.72	0.15%
QC value within limits for Zr 343.823 Recovery = 94.99%						
Li 670.784†	136116.0	507.9 ug/L	0.50	507.9 ug/L	0.50	0.10%
QC value within limits for Li 670.784 Recovery = 101.59%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/28/2011 11:42:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	869645.8	1.004	mg/L	0.0182				1.82%
Y (radial)	109934.7	0.981	mg/L	0.0025				0.26%
Ag 328.068†	-7.3	-0.048	ug/L	0.0225	-0.048	ug/L	0.0225	46.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	23.7	2.423	ug/L	0.6560	2.423	ug/L	0.6560	27.08%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.0	1.070	ug/L	6.3971	1.070	ug/L	6.3971	598.10%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	11.0	0.196	ug/L	0.2167	0.196	ug/L	0.2167	110.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.6	0.007	ug/L	0.0337	0.007	ug/L	0.0337	505.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	11.6	1.705	ug/L	0.4036	1.705	ug/L	0.4036	23.68%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	-5.7	-0.186	ug/L	0.0041	-0.186	ug/L	0.0041	2.19%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-2.5	-0.214	ug/L	0.1424	-0.214	ug/L	0.1424	66.54%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.0	-0.052	ug/L	0.0540	-0.052	ug/L	0.0540	104.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	1.2	0.489	ug/L	0.6908	0.489	ug/L	0.6908	141.36%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	-23.4	-3.388	ug/L	0.1390	-3.388	ug/L	0.1390	4.10%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	13.0	1.043	ug/L	0.6973	1.043	ug/L	0.6973	66.84%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-7.1	-0.019	ug/L	0.0137	-0.019	ug/L	0.0137	70.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-3.8	-0.873	ug/L	1.1820	-0.873	ug/L	1.1820	135.41%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-345.7	-27.47	ug/L	2.739	-27.47	ug/L	2.739	9.97%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	0.7	0.098	ug/L	0.1137	0.098	ug/L	0.1137	116.48%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.4	-1.673	ug/L	0.3927	-1.673	ug/L	0.3927	23.47%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.7	-1.108	ug/L	3.3071	-1.108	ug/L	3.3071	298.43%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.5	6.112	ug/L	2.7562	6.112	ug/L	2.7562	45.09%
QC value within limits for Se 196.026 Recovery = Not calculated								
V 311.071†	-22.0	-0.129	ug/L	0.6995	-0.129	ug/L	0.6995	543.37%
QC value within limits for V 311.071 Recovery = Not calculated								
Sn 189.927†	-5.4	-3.313	ug/L	3.9707	-3.313	ug/L	3.9707	119.86%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	10.6	0.011	ug/L	0.0060	0.011	ug/L	0.0060	52.91%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Tl 190.801†	-0.2	-0.114	ug/L	4.7153	-0.114	ug/L	4.7153	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
Zn 206.200†	0.3	0.037	ug/L	0.2966	0.037	ug/L	0.2966	811.23%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ti 334.940†	-11.8	-0.023	ug/L	0.0336	-0.023	ug/L	0.0336	147.52%

QC value within limits for Ti 334.940 Recovery = Not calculated

B 249.772†	-50.8	-1.694 ug/L	0.8452	-1.694 ug/L	0.8452	49.89%

QC value within limits for B 249.772 Recovery = Not calculated

Cu 324.752†	77.2	0.266 ug/L	0.3577	0.266 ug/L	0.3577	134.54%

QC value within limits for Cu 324.752 Recovery = Not calculated

S 181.975†	-4.0	-25.17 ug/L	28.940	-25.17 ug/L	28.940	114.98%

QC value within limits for S 181.975 Recovery = Not calculated

Zr 343.823†	7.5	0.031 ug/L	0.0342	0.031 ug/L	0.0342	109.05%

QC value within limits for Zr 343.823 Recovery = Not calculated

Li 670.784†	-28.0	-0.104 ug/L	0.0109	-0.104 ug/L	0.0109	10.45%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: MB 220-48962/1-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/28/2011 11:45:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 220-48962/1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	869497.2	1.003	mg/L	0.0068				0.68%
Y (radial)	108811.2	0.971	mg/L	0.0057				0.58%
Ag 328.068†	28.9	0.190	ug/L	0.1181	0.190	ug/L	0.1181	62.10%
Al 396.153†	-7.1	-0.702	ug/L	1.5304	-0.702	ug/L	1.5304	217.89%
As 188.979†	2.1	2.315	ug/L	11.3362	2.315	ug/L	11.3362	489.68%
Ba 233.527†	11.9	0.212	ug/L	0.0542	0.212	ug/L	0.0542	25.61%
Be 313.107†	-34.7	-0.036	ug/L	0.0365	-0.036	ug/L	0.0365	101.85%
Ca 317.933†	-107.8	-15.88	ug/L	1.379	-15.88	ug/L	1.379	8.69%
Cd 214.440†	18.1	0.593	ug/L	0.1417	0.593	ug/L	0.1417	23.88%
Co 228.616†	3.3	0.274	ug/L	0.2909	0.274	ug/L	0.2909	106.05%
Cr 267.716†	2.1	0.102	ug/L	0.1614	0.102	ug/L	0.1614	157.65%
Fe 238.204†	-8.1	-3.424	ug/L	0.9656	-3.424	ug/L	0.9656	28.20%
K 766.490†	489.0	70.87	ug/L	16.606	70.87	ug/L	16.606	23.43%
Mg 285.213†	25.1	2.017	ug/L	0.0334	2.017	ug/L	0.0334	1.65%
Mn 257.610†	18.9	0.052	ug/L	0.0081	0.052	ug/L	0.0081	15.69%
Mo 202.031†	-1.6	-0.363	ug/L	1.4015	-0.363	ug/L	1.4015	386.48%
Na 589.592†	-609.9	-48.46	ug/L	10.691	-48.46	ug/L	10.691	22.06%
Ni 231.604†	-2.6	-0.355	ug/L	1.1523	-0.355	ug/L	1.1523	324.51%
Pb 220.353†	-4.7	-3.297	ug/L	0.7317	-3.297	ug/L	0.7317	22.19%
Sb 206.836†	3.1	1.998	ug/L	0.0387	1.998	ug/L	0.0387	1.94%
Se 196.026†	-0.1	-0.121	ug/L	5.0878	-0.121	ug/L	5.0878	>999.9%
V 311.071†	-15.8	-0.091	ug/L	0.5239	-0.091	ug/L	0.5239	575.35%
Sn 189.927†	6.6	4.057	ug/L	0.0987	4.057	ug/L	0.0987	2.43%
Sr 421.552†	-74.1	-0.079	ug/L	0.0078	-0.079	ug/L	0.0078	9.86%
Tl 190.801†	3.1	1.976	ug/L	4.0681	1.976	ug/L	4.0681	205.92%
Zn 206.200†	8.6	0.931	ug/L	0.2460	0.931	ug/L	0.2460	26.43%
Ti 334.940†	-23.9	-0.046	ug/L	0.0058	-0.046	ug/L	0.0058	12.44%
B 249.772†	140.5	4.690	ug/L	0.1555	4.690	ug/L	0.1555	3.32%
Cu 324.752†	133.2	0.458	ug/L	0.1001	0.458	ug/L	0.1001	21.85%
S 181.975†	-1.0	-6.486	ug/L	6.0313	-6.486	ug/L	6.0313	92.98%
Zr 343.823†	-72.2	-0.300	ug/L	0.0641	-0.300	ug/L	0.0641	21.33%
Li 670.784†	152.5	0.569	ug/L	0.0306	0.569	ug/L	0.0306	5.38%

Sequence No.: 11
Sample ID: LCS 220-48962/2-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/28/2011 11:49:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 220-48962/2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	820982.8	0.947	mg/L	0.0069				0.73%
Y (radial)	107102.5	0.956	mg/L	0.0028				0.29%
Ag 328.068†	47326.4	303.8	ug/L	0.14	303.8	ug/L	0.14	0.05%
Al 396.153†	34760.2	3480	ug/L	0.7	3480	ug/L	0.7	0.02%

As 188.979†	902.3	1007 ug/L	27.9	1007 ug/L	27.9	2.77%
Ba 233.527†	17789.1	316.9 ug/L	0.63	316.9 ug/L	0.63	0.20%
Be 313.107†	100686.7	108.3 ug/L	0.20	108.3 ug/L	0.20	0.19%
Ca 317.933†	46237.8	6814 ug/L	1.8	6814 ug/L	1.8	0.03%
Cd 214.440†	9834.2	321.3 ug/L	3.73	321.3 ug/L	3.73	1.16%
Co 228.616†	3823.4	319.5 ug/L	3.89	319.5 ug/L	3.89	1.22%
Cr 267.716†	6421.3	319.9 ug/L	4.20	319.9 ug/L	4.20	1.31%
Fe 238.204†	7567.2	3188 ug/L	20.3	3188 ug/L	20.3	0.64%
K 766.490†	190807.2	27660 ug/L	85.2	27660 ug/L	85.2	0.31%
Mg 285.213†	84391.8	6786 ug/L	5.9	6786 ug/L	5.9	0.09%
Mn 257.610†	76091.8	207.5 ug/L	0.28	207.5 ug/L	0.28	0.13%
Mo 202.031†	4561.0	1037 ug/L	9.7	1037 ug/L	9.7	0.93%
Na 589.592†	373840.7	29700 ug/L	93.4	29700 ug/L	93.4	0.31%
Ni 231.604†	2412.9	324.9 ug/L	3.09	324.9 ug/L	3.09	0.95%
Pb 220.353†	1503.7	1052 ug/L	15.5	1052 ug/L	15.5	1.48%
Sb 206.836†	1613.6	1047 ug/L	11.2	1047 ug/L	11.2	1.07%
Se 196.026†	302.6	532.2 ug/L	1.48	532.2 ug/L	1.48	0.28%
V 311.071†	54565.0	303.8 ug/L	0.73	303.8 ug/L	0.73	0.24%
Sn 189.927†	1698.1	1051 ug/L	0.0	1051 ug/L	0.0	0.00%
Sr 421.552†	-123.3	-0.292 ug/L	0.0823	-0.292 ug/L	0.0823	28.21%
Tl 190.801†	1604.1	1053 ug/L	8.5	1053 ug/L	8.5	0.81%
Zn 206.200†	2913.3	319.1 ug/L	4.31	319.1 ug/L	4.31	1.35%
Ti 334.940†	532441.0	1032 ug/L	0.5	1032 ug/L	0.5	0.04%
B 249.772†	30141.6	991.0 ug/L	5.92	991.0 ug/L	5.92	0.60%
Cu 324.752†	92972.8	320.6 ug/L	0.63	320.6 ug/L	0.63	0.20%
S 181.975†	-203.4	-1153 ug/L	39.1	-1153 ug/L	39.1	3.40%
Zr 343.823†	247822.7	1032 ug/L	0.8	1032 ug/L	0.8	0.08%
Li 670.784†	64.8	0.242 ug/L	0.0584	0.242 ug/L	0.0584	24.12%

Sequence No.: 12
Sample ID: 220-14978-B-8-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/28/2011 11:52:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	861990.8	0.995	mg/L	0.0269				2.71%
Y (radial)	112877.3	1.008	mg/L	0.0021				0.21%
Ag 328.068†	-505.1	0.340	ug/L	0.1383	0.340	ug/L	0.1383	40.66%
Al 396.153†	339566.1	34340	ug/L	34.4	34340	ug/L	34.4	0.10%
As 188.979†	3.0	14.18	ug/L	4.529	14.18	ug/L	4.529	31.94%
Ba 233.527†	22387.9	396.7	ug/L	2.09	396.7	ug/L	2.09	0.53%
Be 313.107†	-435.7	2.034	ug/L	0.0300	2.034	ug/L	0.0300	1.47%
Ca 317.933†	159713.9	23540	ug/L	24.3	23540	ug/L	24.3	0.10%
Cd 214.440†	202.0	3.547	ug/L	0.3435	3.547	ug/L	0.3435	9.68%
Co 228.616†	421.0	31.83	ug/L	1.301	31.83	ug/L	1.301	4.09%
Cr 267.716†	2845.4	143.1	ug/L	2.84	143.1	ug/L	2.84	1.98%
Fe 238.204†	156031.0	65730	ug/L	149.6	65730	ug/L	149.6	0.23%
K 766.490†	34807.6	5045	ug/L	6.3	5045	ug/L	6.3	0.13%
Mg 285.213†	205826.5	16600	ug/L	17.8	16600	ug/L	17.8	0.11%
Mn 257.610†	626111.6	1709	ug/L	2.8	1709	ug/L	2.8	0.17%
Mo 202.031†	3.0	3.295	ug/L	0.5951	3.295	ug/L	0.5951	18.06%
Na 589.592†	11967.7	950.9	ug/L	0.32	950.9	ug/L	0.32	0.03%
Ni 231.604†	566.5	76.22	ug/L	2.310	76.22	ug/L	2.310	3.03%
Pb 220.353†	822.6	567.2	ug/L	24.28	567.2	ug/L	24.28	4.28%
Sb 206.836†	-12.7	-7.658	ug/L	6.7073	-7.658	ug/L	6.7073	87.59%
Se 196.026†	-41.2	-24.70	ug/L	9.562	-24.70	ug/L	9.562	38.71%
V 311.071†	13115.9	68.88	ug/L	0.556	68.88	ug/L	0.556	0.81%
Sn 189.927†	32.5	23.68	ug/L	0.204	23.68	ug/L	0.204	0.86%
Sr 421.552†	110649.0	118.5	ug/L	0.03	118.5	ug/L	0.03	0.02%
Tl 190.801†	-25.6	-3.219	ug/L	4.0975	-3.219	ug/L	4.0975	127.30%
Zn 206.200†	7913.1	859.2	ug/L	18.47	859.2	ug/L	18.47	2.15%
Ti 334.940†	259108.7	502.1	ug/L	0.66	502.1	ug/L	0.66	0.13%
B 249.772†	8425.1	27.96	ug/L	6.611	27.96	ug/L	6.611	23.65%
Cu 324.752†	88923.0	313.5	ug/L	0.31	313.5	ug/L	0.31	0.10%
S 181.975†	1420.4	9376	ug/L	275.1	9376	ug/L	275.1	2.93%
Zr 343.823†	3510.3	12.80	ug/L	0.269	12.80	ug/L	0.269	2.10%
Li 670.784†	17460.5	65.16	ug/L	0.014	65.16	ug/L	0.014	0.02%

Sequence No.: 13
Sample ID: 220-14978-B-8-B DU
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 3/28/2011 11:55:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-B DU

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	853930.8	0.985	mg/L	0.0168				1.70%
Y (radial)	114451.6	1.022	mg/L	0.0014				0.14%
Ag 328.068†	-470.3	0.635	ug/L	0.0175	0.635	ug/L	0.0175	2.76%
Al 396.153†	324255.6	32790	ug/L	68.5	32790	ug/L	68.5	0.21%
As 188.979†	5.9	17.72	ug/L	3.677	17.72	ug/L	3.677	20.75%
Ba 233.527†	21751.0	385.4	ug/L	1.34	385.4	ug/L	1.34	0.35%
Be 313.107†	-406.0	1.971	ug/L	0.1037	1.971	ug/L	0.1037	5.26%
Ca 317.933†	170860.8	25180	ug/L	145.3	25180	ug/L	145.3	0.58%
Cd 214.440†	263.9	5.516	ug/L	0.0060	5.516	ug/L	0.0060	0.11%
Co 228.616†	386.8	28.96	ug/L	0.069	28.96	ug/L	0.069	0.24%
Cr 267.716†	3093.8	155.5	ug/L	2.80	155.5	ug/L	2.80	1.80%
Fe 238.204†	158817.6	66910	ug/L	270.0	66910	ug/L	270.0	0.40%
K 766.490†	33772.1	4895	ug/L	3.9	4895	ug/L	3.9	0.08%
Mg 285.213†	201577.3	16260	ug/L	28.3	16260	ug/L	28.3	0.17%
Mn 257.610†	595308.5	1625	ug/L	1.1	1625	ug/L	1.1	0.07%
Mo 202.031†	2.0	3.140	ug/L	0.6344	3.140	ug/L	0.6344	20.20%
Na 589.592†	12712.6	1010	ug/L	4.9	1010	ug/L	4.9	0.49%
Ni 231.604†	537.5	72.33	ug/L	0.541	72.33	ug/L	0.541	0.75%
Pb 220.353†	810.5	558.5	ug/L	7.96	558.5	ug/L	7.96	1.43%
Sb 206.836†	-24.1	-15.00	ug/L	6.729	-15.00	ug/L	6.729	44.85%
Se 196.026†	-42.7	-26.17	ug/L	0.442	-26.17	ug/L	0.442	1.69%
V 311.071†	12971.0	68.21	ug/L	0.326	68.21	ug/L	0.326	0.48%
Sn 189.927†	66.1	44.33	ug/L	6.751	44.33	ug/L	6.751	15.23%
Sr 421.552†	117509.6	125.9	ug/L	0.23	125.9	ug/L	0.23	0.19%
Tl 190.801†	-32.8	-7.969	ug/L	1.7646	-7.969	ug/L	1.7646	22.14%
Zn 206.200†	7611.8	826.7	ug/L	13.19	826.7	ug/L	13.19	1.60%
Ti 334.940†	249278.2	483.0	ug/L	0.10	483.0	ug/L	0.10	0.02%
B 249.772†	8148.8	14.25	ug/L	5.252	14.25	ug/L	5.252	36.84%
Cu 324.752†	84089.3	297.0	ug/L	0.49	297.0	ug/L	0.49	0.17%
S 181.975†	1233.2	8179	ug/L	52.6	8179	ug/L	52.6	0.64%
Zr 343.823†	3299.9	11.89	ug/L	0.290	11.89	ug/L	0.290	2.44%
Li 670.784†	15839.8	59.11	ug/L	0.326	59.11	ug/L	0.326	0.55%

Sequence No.: 14
Sample ID: 220-14978-B-8-C MS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 3/28/2011 11:58:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-C MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	855665.8	0.987	mg/L	0.0043				0.44%
Y (radial)	112349.6	1.003	mg/L	0.0027				0.27%
Ag 328.068†	8655.4	59.82	ug/L	0.208	59.82	ug/L	0.208	0.35%
Al 396.153†	410970.8	41550	ug/L	566.0	41550	ug/L	566.0	1.36%
As 188.979†	176.1	208.7	ug/L	7.92	208.7	ug/L	7.92	3.79%
Ba 233.527†	35404.2	628.2	ug/L	1.82	628.2	ug/L	1.82	0.29%
Be 313.107†	19508.7	23.52	ug/L	0.100	23.52	ug/L	0.100	0.43%
Ca 317.933†	186793.0	27530	ug/L	59.2	27530	ug/L	59.2	0.22%
Cd 214.440†	2274.1	70.92	ug/L	0.062	70.92	ug/L	0.062	0.09%
Co 228.616†	1162.6	93.50	ug/L	0.758	93.50	ug/L	0.758	0.81%
Cr 267.716†	5080.6	254.6	ug/L	0.15	254.6	ug/L	0.15	0.06%
Fe 238.204†	174028.7	73310	ug/L	22.2	73310	ug/L	22.2	0.03%
K 766.490†	76430.4	11080	ug/L	4.7	11080	ug/L	4.7	0.04%
Mg 285.213†	249024.1	20070	ug/L	1.7	20070	ug/L	1.7	0.01%
Mn 257.610†	613185.2	1674	ug/L	3.4	1674	ug/L	3.4	0.20%
Mo 202.031†	840.3	194.0	ug/L	1.03	194.0	ug/L	1.03	0.53%

Na 589.592†	29980.0	2382	ug/L	4.4	2382	ug/L	4.4	0.18%
Ni 231.604†	1109.3	149.3	ug/L	1.76	149.3	ug/L	1.76	1.18%
Pb 220.353†	1172.9	811.7	ug/L	1.74	811.7	ug/L	1.74	0.21%
Sb 206.836†	95.9	62.97	ug/L	6.415	62.97	ug/L	6.415	10.19%
Se 196.026†	3.0	58.49	ug/L	1.777	58.49	ug/L	1.777	3.04%
V 311.071†	25909.7	140.6	ug/L	0.07	140.6	ug/L	0.07	0.05%
Sn 189.927†	346.8	218.5	ug/L	1.40	218.5	ug/L	1.40	0.64%
Sr 421.552†	125590.3	134.5	ug/L	0.34	134.5	ug/L	0.34	0.25%
Tl 190.801†	278.4	197.3	ug/L	3.33	197.3	ug/L	3.33	1.69%
Zn 206.200†	9036.7	982.1	ug/L	7.06	982.1	ug/L	7.06	0.72%
Ti 334.940†	369169.3	715.3	ug/L	0.01	715.3	ug/L	0.01	0.00%
B 249.772†	14474.1	200.2	ug/L	3.03	200.2	ug/L	3.03	1.52%
Cu 324.752†	111271.8	391.4	ug/L	1.63	391.4	ug/L	1.63	0.42%
S 181.975†	1230.7	8242	ug/L	7.1	8242	ug/L	7.1	0.09%
Zr 343.823†	41515.1	170.8	ug/L	0.60	170.8	ug/L	0.60	0.35%
Li 670.784†	19554.4	72.97	ug/L	0.308	72.97	ug/L	0.308	0.42%

Sequence No.: 15
Sample ID: 220-14978-B-8-D MSD
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 3/28/2011 12:01:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-D MSD

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	849792.6	0.981	mg/L	0.0068				0.69%
Y (radial)	116918.9	1.044	mg/L	0.0042				0.40%
Ag 328.068†	8689.1	60.35	ug/L	0.531	60.35	ug/L	0.531	0.88%
Al 396.153†	378293.4	38250	ug/L	122.9	38250	ug/L	122.9	0.32%
As 188.979†	169.4	201.6	ug/L	11.98	201.6	ug/L	11.98	5.94%
Ba 233.527†	26260.5	465.5	ug/L	2.59	465.5	ug/L	2.59	0.56%
Be 313.107†	19909.9	23.72	ug/L	0.101	23.72	ug/L	0.101	0.42%
Ca 317.933†	181960.0	26820	ug/L	47.5	26820	ug/L	47.5	0.18%
Cd 214.440†	2153.1	66.71	ug/L	0.523	66.71	ug/L	0.523	0.78%
Co 228.616†	1195.6	96.16	ug/L	1.598	96.16	ug/L	1.598	1.66%
Cr 267.716†	4169.1	209.4	ug/L	1.23	209.4	ug/L	1.23	0.59%
Fe 238.204†	187455.6	78970	ug/L	104.4	78970	ug/L	104.4	0.13%
K 766.490†	72762.1	10550	ug/L	27.0	10550	ug/L	27.0	0.26%
Mg 285.213†	238808.6	19260	ug/L	53.0	19260	ug/L	53.0	0.28%
Mn 257.610†	642387.2	1754	ug/L	3.3	1754	ug/L	3.3	0.19%
Mo 202.031†	856.2	197.8	ug/L	2.10	197.8	ug/L	2.10	1.06%
Na 589.592†	30668.5	2437	ug/L	12.5	2437	ug/L	12.5	0.51%
Ni 231.604†	1071.7	144.2	ug/L	1.43	144.2	ug/L	1.43	0.99%
Pb 220.353†	990.2	683.2	ug/L	7.45	683.2	ug/L	7.45	1.09%
Sb 206.836†	115.1	75.88	ug/L	5.985	75.88	ug/L	5.985	7.89%
Se 196.026†	14.8	82.25	ug/L	4.801	82.25	ug/L	4.801	5.84%
V 311.071†	25295.9	137.3	ug/L	0.20	137.3	ug/L	0.20	0.14%
Sn 189.927†	339.6	213.7	ug/L	6.85	213.7	ug/L	6.85	3.20%
Sr 421.552†	124284.4	133.1	ug/L	0.26	133.1	ug/L	0.26	0.20%
Tl 190.801†	273.8	194.2	ug/L	7.59	194.2	ug/L	7.59	3.91%
Zn 206.200†	8524.8	926.2	ug/L	8.01	926.2	ug/L	8.01	0.87%
Ti 334.940†	346481.7	671.4	ug/L	1.01	671.4	ug/L	1.01	0.15%
B 249.772†	14854.6	191.1	ug/L	5.15	191.1	ug/L	5.15	2.70%
Cu 324.752†	107231.0	378.1	ug/L	0.03	378.1	ug/L	0.03	0.01%
S 181.975†	1638.8	10820	ug/L	120.7	10820	ug/L	120.7	1.12%
Zr 343.823†	40866.4	168.0	ug/L	0.25	168.0	ug/L	0.25	0.15%
Li 670.784†	17751.0	66.24	ug/L	0.364	66.24	ug/L	0.364	0.55%

Sequence No.: 16
Sample ID: 220-14978-B-8-A PDS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/28/2011 12:04:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-A PDS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Y 371.029	824680.2	0.952 mg/L	0.0013			0.13%
Y (radial)	115082.3	1.027 mg/L	0.0185			1.80%
Ag 328.068†	1155.6	10.07 ug/L	0.130	10.07 ug/L	0.130	1.29%
Al 396.153†	356931.7	36080 ug/L	117.5	36080 ug/L	117.5	0.33%
As 188.979†	178.5	211.4 ug/L	1.74	211.4 ug/L	1.74	0.82%
Ba 233.527†	28127.2	498.8 ug/L	1.56	498.8 ug/L	1.56	0.31%
Be 313.107†	97972.6	104.3 ug/L	0.40	104.3 ug/L	0.40	0.39%
Ca 317.933†	206129.0	30380 ug/L	81.4	30380 ug/L	81.4	0.27%
Cd 214.440†	3289.8	104.0 ug/L	1.24	104.0 ug/L	1.24	1.20%
Co 228.616†	1634.8	133.0 ug/L	2.26	133.0 ug/L	2.26	1.70%
Cr 267.716†	4921.5	246.7 ug/L	1.15	246.7 ug/L	1.15	0.47%
Fe 238.204†	179430.5	75590 ug/L	310.4	75590 ug/L	310.4	0.41%
K 766.490†	76483.5	11090 ug/L	16.5	11090 ug/L	16.5	0.15%
Mg 285.213†	289218.6	23310 ug/L	73.4	23310 ug/L	73.4	0.31%
Mn 257.610†	663521.1	1811 ug/L	5.4	1811 ug/L	5.4	0.30%
Mo 202.031†	1257.1	288.8 ug/L	3.40	288.8 ug/L	3.40	1.18%
Na 589.592†	94214.9	7486 ug/L	16.2	7486 ug/L	16.2	0.22%
Ni 231.604†	1322.7	178.1 ug/L	1.89	178.1 ug/L	1.89	1.06%
Pb 220.353†	983.6	679.1 ug/L	11.73	679.1 ug/L	11.73	1.73%
Sb 206.836†	428.4	278.7 ug/L	2.86	278.7 ug/L	2.86	1.03%
Se 196.026†	137.3	294.8 ug/L	1.41	294.8 ug/L	1.41	0.48%
V 311.071†	30335.9	164.9 ug/L	0.47	164.9 ug/L	0.47	0.29%
Sn 189.927†	519.9	325.6 ug/L	10.70	325.6 ug/L	10.70	3.29%
Sr 421.552†	203653.3	218.4 ug/L	0.69	218.4 ug/L	0.69	0.31%
Tl 190.801†	419.6	290.0 ug/L	5.66	290.0 ug/L	5.66	1.95%
Zn 206.200†	10684.9	1161 ug/L	13.5	1161 ug/L	13.5	1.16%
Ti 334.940†	411033.2	796.5 ug/L	2.37	796.5 ug/L	2.37	0.30%
B 249.772†	17377.7	288.1 ug/L	3.30	288.1 ug/L	3.30	1.15%
Cu 324.752†	117976.0	414.7 ug/L	0.99	414.7 ug/L	0.99	0.24%
S 181.975†	1347.8	9054 ug/L	136.8	9054 ug/L	136.8	1.51%
Zr 343.823†	75677.8	313.0 ug/L	0.25	313.0 ug/L	0.25	0.08%
Li 670.784†	42413.3	158.3 ug/L	0.45	158.3 ug/L	0.45	0.28%

Sequence No.: 17
Sample ID: 220-14978-B-8-A SD@5
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 3/28/2011 12:07:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-8-A SD@5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	854933.1	0.987	mg/L	0.0098				0.99%
Y (radial)	110205.1	0.984	mg/L	0.0042				0.43%
Ag 328.068†	-94.1	0.183	ug/L	0.1085	0.183	ug/L	0.1085	59.31%
Al 396.153†	68943.3	6971	ug/L	8.0	6971	ug/L	8.0	0.12%
As 188.979†	0.9	3.369	ug/L	5.2719	3.369	ug/L	5.2719	156.47%
Ba 233.527†	4811.3	85.26	ug/L	0.628	85.26	ug/L	0.628	0.74%
Be 313.107†	-101.7	0.406	ug/L	0.0305	0.406	ug/L	0.0305	7.53%
Ca 317.933†	33248.0	4900	ug/L	29.9	4900	ug/L	29.9	0.61%
Cd 214.440†	38.8	0.603	ug/L	0.1852	0.603	ug/L	0.1852	30.73%
Co 228.616†	89.9	6.792	ug/L	1.1262	6.792	ug/L	1.1262	16.58%
Cr 267.716†	585.9	29.49	ug/L	0.239	29.49	ug/L	0.239	0.81%
Fe 238.204†	34063.4	14350	ug/L	61.3	14350	ug/L	61.3	0.43%
K 766.490†	6964.0	1009	ug/L	7.6	1009	ug/L	7.6	0.75%
Mg 285.213†	43000.3	3468	ug/L	0.3	3468	ug/L	0.3	0.01%
Mn 257.610†	130071.8	355.1	ug/L	0.41	355.1	ug/L	0.41	0.12%
Mo 202.031†	-5.5	-0.679	ug/L	0.5646	-0.679	ug/L	0.5646	83.09%
Na 589.592†	599.8	47.66	ug/L	0.027	47.66	ug/L	0.027	0.06%
Ni 231.604†	132.0	17.76	ug/L	1.217	17.76	ug/L	1.217	6.85%
Pb 220.353†	176.0	121.3	ug/L	4.77	121.3	ug/L	4.77	3.93%
Sb 206.836†	-6.2	-3.914	ug/L	4.6383	-3.914	ug/L	4.6383	118.51%
Se 196.026†	-14.7	-15.49	ug/L	2.237	-15.49	ug/L	2.237	14.44%
V 311.071†	2800.8	14.75	ug/L	0.369	14.75	ug/L	0.369	2.50%
Sn 189.927†	4.5	3.506	ug/L	1.3787	3.506	ug/L	1.3787	39.32%
Sr 421.552†	23137.5	24.78	ug/L	0.055	24.78	ug/L	0.055	0.22%
Tl 190.801†	3.8	5.313	ug/L	3.4759	5.313	ug/L	3.4759	65.42%
Zn 206.200†	1725.1	187.3	ug/L	1.65	187.3	ug/L	1.65	0.88%
Ti 334.940†	53255.1	103.2	ug/L	0.15	103.2	ug/L	0.15	0.15%
B 249.772†	1783.9	4.260	ug/L	0.6822	4.260	ug/L	0.6822	16.01%

Cu 324.752†	17846.6	63.06 ug/L	0.288	63.06 ug/L	0.288	0.46%
S 181.975†	283.7	1876 ug/L	31.8	1876 ug/L	31.8	1.70%
Zr 343.823†	622.1	2.194 ug/L	0.0183	2.194 ug/L	0.0183	0.84%
Li 670.784†	3660.7	13.66 ug/L	0.563	13.66 ug/L	0.563	4.12%

Sequence No.: 18
Sample ID: 220-14978-B-21-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 3/28/2011 12:10:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-21-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	906107.9	1.046	mg/L	0.0018				0.17%
Y (radial)	117084.5	1.045	mg/L	0.0116				1.11%
Ag 328.068†	-1076.5	-0.395	ug/L	0.0909	-0.395	ug/L	0.0909	23.00%
Al 396.153†	725181.4	73330	ug/L	447.9	73330	ug/L	447.9	0.61%
As 188.979†	-1.4	16.34	ug/L	3.532	16.34	ug/L	3.532	21.61%
Ba 233.527†	26451.9	467.9	ug/L	1.66	467.9	ug/L	1.66	0.35%
Be 313.107†	980.1	3.801	ug/L	0.0137	3.801	ug/L	0.0137	0.36%
Ca 317.933†	129470.2	19080	ug/L	156.8	19080	ug/L	156.8	0.82%
Cd 214.440†	188.7	0.587	ug/L	0.1257	0.587	ug/L	0.1257	21.43%
Co 228.616†	716.2	54.47	ug/L	2.477	54.47	ug/L	2.477	4.55%
Cr 267.716†	2358.8	120.2	ug/L	0.35	120.2	ug/L	0.35	0.29%
Fe 238.204†	285027.3	120100	ug/L	731.0	120100	ug/L	731.0	0.61%
K 766.490†	46168.3	6692	ug/L	16.8	6692	ug/L	16.8	0.25%
Mg 285.213†	322106.0	25990	ug/L	9.5	25990	ug/L	9.5	0.04%
Mn 257.610†	611502.7	1669	ug/L	1.8	1669	ug/L	1.8	0.11%
Mo 202.031†	-28.4	-1.658	ug/L	1.3084	-1.658	ug/L	1.3084	78.90%
Na 589.592†	4902.1	389.5	ug/L	6.23	389.5	ug/L	6.23	1.60%
Ni 231.604†	933.1	125.6	ug/L	0.66	125.6	ug/L	0.66	0.53%
Pb 220.353†	368.9	245.6	ug/L	8.76	245.6	ug/L	8.76	3.57%
Sb 206.836†	-12.0	-7.418	ug/L	2.9171	-7.418	ug/L	2.9171	39.33%
Se 196.026†	-62.8	-28.14	ug/L	11.507	-28.14	ug/L	11.507	40.89%
V 311.071†	22027.8	118.5	ug/L	0.01	118.5	ug/L	0.01	0.01%
Sn 189.927†	9.4	9.570	ug/L	4.3808	9.570	ug/L	4.3808	45.78%
Sr 421.552†	97012.5	103.9	ug/L	0.21	103.9	ug/L	0.21	0.20%
Tl 190.801†	-38.4	-6.196	ug/L	5.4773	-6.196	ug/L	5.4773	88.41%
Zn 206.200†	4730.0	513.9	ug/L	2.87	513.9	ug/L	2.87	0.56%
Ti 334.940†	292103.5	566.0	ug/L	0.38	566.0	ug/L	0.38	0.07%
B 249.772†	14031.6	5.850	ug/L	6.0359	5.850	ug/L	6.0359	103.18%
Cu 324.752†	40641.6	153.2	ug/L	0.06	153.2	ug/L	0.06	0.04%
S 181.975†	214.1	1899	ug/L	42.3	1899	ug/L	42.3	2.23%
Zr 343.823†	5878.2	21.16	ug/L	0.148	21.16	ug/L	0.148	0.70%
Li 670.784†	33263.2	124.1	ug/L	1.02	124.1	ug/L	1.02	0.82%

Sequence No.: 19
Sample ID: 220-14978-B-23-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 3/28/2011 12:13:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-23-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	872925.4	1.007	mg/L	0.0000				0.00%
Y (radial)	108333.8	0.967	mg/L	0.0021				0.22%
Ag 328.068†	-292.6	0.461	ug/L	0.1126	0.461	ug/L	0.1126	24.41%
Al 396.153†	19923.5	2014	ug/L	7.1	2014	ug/L	7.1	0.35%
As 188.979†	-6.6	0.381	ug/L	3.0018	0.381	ug/L	3.0018	786.90%
Ba 233.527†	438649.7	7798	ug/L	12.1	7798	ug/L	12.1	0.16%
Be 313.107†	-15847.6	0.593	ug/L	0.0275	0.593	ug/L	0.0275	4.63%
Ca 317.933†	50584.2	7455	ug/L	10.1	7455	ug/L	10.1	0.14%
Cd 214.440†	2739.2	87.54	ug/L	0.704	87.54	ug/L	0.704	0.80%
Co 228.616†	626.9	43.63	ug/L	0.054	43.63	ug/L	0.054	0.12%
Cr 267.716†	5543.3	276.8	ug/L	3.81	276.8	ug/L	3.81	1.38%
Fe 238.204†	101736.1	42860	ug/L	56.3	42860	ug/L	56.3	0.13%

K 766.490†	1982.5	287.4 ug/L	15.73	287.4 ug/L	15.73	5.47%
Mg 285.213†	16102.3	1328 ug/L	3.7	1328 ug/L	3.7	0.28%
Mn 257.610†	91155.2	248.9 ug/L	1.41	248.9 ug/L	1.41	0.57%
Mo 202.031†	43.8	11.61 ug/L	1.223	11.61 ug/L	1.223	10.53%
Na 589.592†	7164.4	569.3 ug/L	9.37	569.3 ug/L	9.37	1.65%
Ni 231.604†	641.0	86.27 ug/L	3.716	86.27 ug/L	3.716	4.31%
Pb 220.353†	3861.3	2689 ug/L	24.1	2689 ug/L	24.1	0.90%
Sb 206.836†	283.6	180.5 ug/L	0.56	180.5 ug/L	0.56	0.31%
Se 196.026†	-13.9	4.111 ug/L	4.2511	4.111 ug/L	4.2511	103.41%
V 311.071†	7094.0	2.067 ug/L	0.3240	2.067 ug/L	0.3240	15.67%
Sn 189.927†	385.3	255.1 ug/L	3.82	255.1 ug/L	3.82	1.50%
Sr 421.552†	124274.5	133.6 ug/L	0.11	133.6 ug/L	0.11	0.08%
Tl 190.801†	-70.3	3.185 ug/L	6.6322	3.185 ug/L	6.6322	208.21%
Zn 206.200†	22883.3	2483 ug/L	33.4	2483 ug/L	33.4	1.35%
Ti 334.940†	1757861.5	3406 ug/L	1.8	3406 ug/L	1.8	0.05%
B 249.772†	4786.8	-5.287 ug/L	1.5822	-5.287 ug/L	1.5822	29.93%
Cu 324.752†	30848.8	111.0 ug/L	0.09	111.0 ug/L	0.09	0.08%
S 181.975†	446.8	2868 ug/L	41.8	2868 ug/L	41.8	1.46%
Zr 343.823†	1581.9	5.403 ug/L	0.0385	5.403 ug/L	0.0385	0.71%
Li 670.784†	867.7	3.238 ug/L	0.4711	3.238 ug/L	0.4711	14.55%

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/28/2011 12:17:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	842176.0	0.972	mg/L	0.0100				1.02%
Y (radial)	111082.4	0.992	mg/L	0.0168				1.69%
Ag 328.068†	37240.3	241.9	ug/L	0.73	241.9	ug/L	0.73	0.30%
QC value within limits for Ag 328.068 Recovery = 96.75%								
Al 396.153†	48359.1	4874	ug/L	29.9	4874	ug/L	29.9	0.61%
QC value within limits for Al 396.153 Recovery = 97.48%								
As 188.979†	442.9	497.5	ug/L	18.64	497.5	ug/L	18.64	3.75%
QC value within limits for As 188.979 Recovery = 99.49%								
Ba 233.527†	28200.4	502.2	ug/L	1.38	502.2	ug/L	1.38	0.28%
QC value within limits for Ba 233.527 Recovery = 100.45%								
Be 313.107†	477914.9	492.1	ug/L	0.22	492.1	ug/L	0.22	0.05%
QC value within limits for Be 313.107 Recovery = 98.42%								
Ca 317.933†	121626.6	17920	ug/L	102.9	17920	ug/L	102.9	0.57%
QC value within limits for Ca 317.933 Recovery = 96.89%								
Cd 214.440†	15278.1	499.1	ug/L	4.14	499.1	ug/L	4.14	0.83%
QC value within limits for Cd 214.440 Recovery = 99.83%								
Co 228.616†	5971.6	500.0	ug/L	4.46	500.0	ug/L	4.46	0.89%
QC value within limits for Co 228.616 Recovery = 100.01%								
Cr 267.716†	10118.9	504.1	ug/L	5.85	504.1	ug/L	5.85	1.16%
QC value within limits for Cr 267.716 Recovery = 100.82%								
Fe 238.204†	12636.2	5323	ug/L	45.5	5323	ug/L	45.5	0.85%
QC value within limits for Fe 238.204 Recovery = 96.79%								
K 766.490†	263564.5	38200	ug/L	909.6	38200	ug/L	909.6	2.38%
QC value within limits for K 766.490 Recovery = 95.50%								
Mg 285.213†	224689.0	18070	ug/L	335.7	18070	ug/L	335.7	1.86%
QC value within limits for Mg 285.213 Recovery = 97.65%								
Mn 257.610†	183244.7	499.7	ug/L	0.60	499.7	ug/L	0.60	0.12%
QC value within limits for Mn 257.610 Recovery = 99.94%								
Mo 202.031†	2082.4	473.0	ug/L	6.92	473.0	ug/L	6.92	1.46%
QC value within limits for Mo 202.031 Recovery = 94.60%								
Na 589.592†	479580.6	38110	ug/L	881.6	38110	ug/L	881.6	2.31%
QC value within limits for Na 589.592 Recovery = 95.27%								
Ni 231.604†	3772.5	508.0	ug/L	7.89	508.0	ug/L	7.89	1.55%
QC value within limits for Ni 231.604 Recovery = 101.60%								
Pb 220.353†	712.4	498.2	ug/L	5.83	498.2	ug/L	5.83	1.17%
QC value within limits for Pb 220.353 Recovery = 99.63%								
Sb 206.836†	734.2	473.3	ug/L	4.89	473.3	ug/L	4.89	1.03%
QC value within limits for Sb 206.836 Recovery = 94.65%								
Se 196.026†	261.9	464.9	ug/L	6.05	464.9	ug/L	6.05	1.30%
QC value within limits for Se 196.026 Recovery = 92.97%								

V 311.071†	82378.3	475.2 ug/L	0.18	475.2 ug/L	0.18	0.04%
QC value within limits for V 311.071 Recovery = 95.04%						
Sn 189.927†	781.9	484.8 ug/L	1.56	484.8 ug/L	1.56	0.32%
QC value within limits for Sn 189.927 Recovery = 96.96%						
Sr 421.552†	462521.1	497.3 ug/L	11.82	497.3 ug/L	11.82	2.38%
QC value within limits for Sr 421.552 Recovery = 99.46%						
Tl 190.801†	753.3	493.9 ug/L	11.89	493.9 ug/L	11.89	2.41%
QC value within limits for Tl 190.801 Recovery = 98.79%						
Zn 206.200†	4553.3	498.8 ug/L	2.49	498.8 ug/L	2.49	0.50%
QC value within limits for Zn 206.200 Recovery = 99.76%						
Ti 334.940†	255926.0	495.9 ug/L	0.19	495.9 ug/L	0.19	0.04%
QC value within limits for Ti 334.940 Recovery = 99.18%						
B 249.772†	14650.6	467.2 ug/L	5.30	467.2 ug/L	5.30	1.14%
QC value within limits for B 249.772 Recovery = 93.43%						
Cu 324.752†	143063.6	493.4 ug/L	0.23	493.4 ug/L	0.23	0.05%
QC value within limits for Cu 324.752 Recovery = 98.67%						
S 181.975†	1413.1	9362 ug/L	109.6	9362 ug/L	109.6	1.17%
QC value within limits for S 181.975 Recovery = 93.62%						
Zr 343.823†	113893.3	474.0 ug/L	0.35	474.0 ug/L	0.35	0.07%
QC value within limits for Zr 343.823 Recovery = 94.80%						
Li 670.784†	131009.4	488.9 ug/L	11.38	488.9 ug/L	11.38	2.33%
QC value within limits for Li 670.784 Recovery = 97.78%						

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/28/2011 12:20:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	865214.4	0.998	mg/L	0.0123				1.23%
Y (radial)	111162.9	0.992	mg/L	0.0083				0.84%
Ag 328.068†	20.8	0.136	ug/L	0.0792	0.136	ug/L	0.0792	58.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-49.5	-4.966	ug/L	1.8905	-4.966	ug/L	1.8905	38.07%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.2	-2.455	ug/L	3.8841	-2.455	ug/L	3.8841	158.22%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.1	0.056	ug/L	0.2735	0.056	ug/L	0.2735	486.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-40.8	-0.041	ug/L	0.0141	-0.041	ug/L	0.0141	34.57%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-10.2	-1.501	ug/L	0.4460	-1.501	ug/L	0.4460	29.72%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	8.1	0.266	ug/L	0.0554	0.266	ug/L	0.0554	20.81%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-3.4	-0.283	ug/L	0.5055	-0.283	ug/L	0.5055	178.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.3	0.411	ug/L	0.1853	0.411	ug/L	0.1853	45.05%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	-12.0	-5.053	ug/L	0.6399	-5.053	ug/L	0.6399	12.66%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	-151.4	-21.95	ug/L	17.550	-21.95	ug/L	17.550	79.96%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	10.3	0.824	ug/L	0.4270	0.824	ug/L	0.4270	51.81%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	14.3	0.039	ug/L	0.0163	0.039	ug/L	0.0163	41.90%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-4.9	-1.121	ug/L	0.4431	-1.121	ug/L	0.4431	39.52%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-2201.1	-174.9	ug/L	5.53	-174.9	ug/L	5.53	3.16%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	3.3	0.449	ug/L	0.4363	0.449	ug/L	0.4363	97.22%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.3	0.938	ug/L	4.9738	0.938	ug/L	4.9738	530.37%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.8	3.063	ug/L	2.1511	3.063	ug/L	2.1511	70.24%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-2.2	-3.821 ug/L	0.0263	-3.821 ug/L	0.0263	0.69%

QC value within limits for Se 196.026 Recovery = Not calculated

V 311.071†	19.5	0.112 ug/L	0.1147	0.112 ug/L	0.1147	102.23%

QC value within limits for V 311.071 Recovery = Not calculated

Sn 189.927†	4.6	2.823 ug/L	3.3453	2.823 ug/L	3.3453	118.52%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	-5.8	-0.006 ug/L	0.0023	-0.006 ug/L	0.0023	36.77%

QC value within limits for Sr 421.552 Recovery = Not calculated

Tl 190.801†	-0.4	-0.264 ug/L	4.1446	-0.264 ug/L	4.1446	>999.9%

QC value within limits for Tl 190.801 Recovery = Not calculated

Zn 206.200†	1.3	0.145 ug/L	0.2531	0.145 ug/L	0.2531	175.05%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ti 334.940†	102.2	0.198 ug/L	0.0076	0.198 ug/L	0.0076	3.86%

QC value within limits for Ti 334.940 Recovery = Not calculated

B 249.772†	-200.6	-6.658 ug/L	0.5754	-6.658 ug/L	0.5754	8.64%

QC value within limits for B 249.772 Recovery = Not calculated

Cu 324.752†	54.1	0.186 ug/L	0.3201	0.186 ug/L	0.3201	172.18%

QC value within limits for Cu 324.752 Recovery = Not calculated

S 181.975†	-3.3	-20.82 ug/L	35.303	-20.82 ug/L	35.303	169.55%

QC value within limits for S 181.975 Recovery = Not calculated

Zr 343.823†	7.1	0.030 ug/L	0.0564	0.030 ug/L	0.0564	189.33%

QC value within limits for Zr 343.823 Recovery = Not calculated

Li 670.784†	-32.3	-0.120 ug/L	0.1974	-0.120 ug/L	0.1974	163.84%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 220-14978-B-26-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 3/28/2011 12:23:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-26-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	891902.6	1.029	mg/L	0.0069				0.67%
Y (radial)	119273.3	1.065	mg/L	0.0061				0.57%
Ag 328.068†	-1093.0	-0.794	ug/L	0.0487	-0.794	ug/L	0.0487	6.13%
Al 396.153†	757887.4	76640	ug/L	869.9	76640	ug/L	869.9	1.14%
As 188.979†	3.3	20.65	ug/L	2.709	20.65	ug/L	2.709	13.12%
Ba 233.527†	29685.3	525.5	ug/L	2.90	525.5	ug/L	2.90	0.55%
Be 313.107†	618.1	4.106	ug/L	0.0309	4.106	ug/L	0.0309	0.75%
Ca 317.933†	120246.8	17720	ug/L	112.7	17720	ug/L	112.7	0.64%
Cd 214.440†	145.5	-0.560	ug/L	0.0621	-0.560	ug/L	0.0621	11.09%
Co 228.616†	763.8	58.37	ug/L	0.478	58.37	ug/L	0.478	0.82%
Cr 267.716†	2032.8	103.8	ug/L	1.76	103.8	ug/L	1.76	1.69%
Fe 238.204†	271585.7	114400	ug/L	543.0	114400	ug/L	543.0	0.47%
K 766.490†	50304.9	7291	ug/L	33.3	7291	ug/L	33.3	0.46%
Mg 285.213†	321776.0	25950	ug/L	24.2	25950	ug/L	24.2	0.09%
Mn 257.610†	579641.0	1582	ug/L	5.0	1582	ug/L	5.0	0.32%
Mo 202.031†	-23.4	-0.768	ug/L	0.3692	-0.768	ug/L	0.3692	48.05%
Na 589.592†	5492.6	436.4	ug/L	2.63	436.4	ug/L	2.63	0.60%
Ni 231.604†	955.7	128.6	ug/L	2.39	128.6	ug/L	2.39	1.86%
Pb 220.353†	187.2	119.8	ug/L	13.84	119.8	ug/L	13.84	11.54%
Sb 206.836†	-15.5	-9.556	ug/L	1.1258	-9.556	ug/L	1.1258	11.78%
Se 196.026†	-54.3	-16.93	ug/L	1.642	-16.93	ug/L	1.642	9.70%
V 311.071†	24167.6	129.7	ug/L	0.07	129.7	ug/L	0.07	0.05%
Sn 189.927†	-2.6	2.837	ug/L	0.8859	2.837	ug/L	0.8859	31.23%
Sr 421.552†	91752.1	98.32	ug/L	0.306	98.32	ug/L	0.306	0.31%
Tl 190.801†	-33.4	-1.656	ug/L	2.3994	-1.656	ug/L	2.3994	144.90%
Zn 206.200†	3436.3	373.5	ug/L	2.01	373.5	ug/L	2.01	0.54%
Ti 334.940†	362743.4	702.9	ug/L	0.98	702.9	ug/L	0.98	0.14%
B 249.772†	13490.2	9.578	ug/L	5.3736	9.578	ug/L	5.3736	56.11%
Cu 324.752†	33719.2	128.8	ug/L	0.29	128.8	ug/L	0.29	0.22%
S 181.975†	274.1	2280	ug/L	9.8	2280	ug/L	9.8	0.43%
Zr 343.823†	6300.5	23.07	ug/L	0.183	23.07	ug/L	0.183	0.79%
Li 670.784†	33830.3	126.2	ug/L	0.73	126.2	ug/L	0.73	0.58%

Sequence No.: 23
Sample ID: 220-14978-B-27-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 3/28/2011 12:26:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-27-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	829072.2	0.957	mg/L	0.0016				0.17%
Y (radial)	108927.4	0.972	mg/L	0.0022				0.23%
Ag 328.068†	-1158.1	-0.806	ug/L	0.1935	-0.806	ug/L	0.1935	24.00%
Al 396.153†	333730.3	33750	ug/L	56.4	33750	ug/L	56.4	0.17%
As 188.979†	-3.1	22.34	ug/L	1.906	22.34	ug/L	1.906	8.53%
Ba 233.527†	43846.8	777.0	ug/L	3.97	777.0	ug/L	3.97	0.51%
Be 313.107†	-2004.0	1.904	ug/L	0.0937	1.904	ug/L	0.0937	4.92%
Ca 317.933†	769864.7	113500	ug/L	492.7	113500	ug/L	492.7	0.43%
Cd 214.440†	470.6	9.651	ug/L	0.4919	9.651	ug/L	0.4919	5.10%
Co 228.616†	580.7	42.49	ug/L	0.711	42.49	ug/L	0.711	1.67%
Cr 267.716†	12777.9	638.7	ug/L	1.43	638.7	ug/L	1.43	0.22%
Fe 238.204†	292657.5	123300	ug/L	412.8	123300	ug/L	412.8	0.33%
K 766.490†	29756.0	4313	ug/L	21.0	4313	ug/L	21.0	0.49%
Mg 285.213†	466020.4	37560	ug/L	57.5	37560	ug/L	57.5	0.15%
Mn 257.610†	465383.7	1269	ug/L	5.8	1269	ug/L	5.8	0.46%
Mo 202.031†	24.8	10.59	ug/L	0.031	10.59	ug/L	0.031	0.29%
Na 589.592†	9037.2	718.1	ug/L	12.61	718.1	ug/L	12.61	1.76%
Ni 231.604†	850.3	114.4	ug/L	2.26	114.4	ug/L	2.26	1.98%
Pb 220.353†	4225.0	2934	ug/L	19.0	2934	ug/L	19.0	0.65%
Sb 206.836†	-35.1	-19.48	ug/L	0.096	-19.48	ug/L	0.096	0.49%
Se 196.026†	-75.8	-29.62	ug/L	10.197	-29.62	ug/L	10.197	34.43%
V 311.071†	16577.4	83.58	ug/L	0.066	83.58	ug/L	0.066	0.08%
Sn 189.927†	363.3	233.0	ug/L	6.00	233.0	ug/L	6.00	2.58%
Sr 421.552†	274229.8	292.4	ug/L	0.42	292.4	ug/L	0.42	0.14%
Tl 190.801†	-64.8	-15.59	ug/L	5.813	-15.59	ug/L	5.813	37.28%
Zn 206.200†	16074.6	1749	ug/L	6.9	1749	ug/L	6.9	0.39%
Ti 334.940†	413363.8	801.0	ug/L	1.88	801.0	ug/L	1.88	0.23%
B 249.772†	14167.0	-1.989	ug/L	2.7288	-1.989	ug/L	2.7288	137.17%
Cu 324.752†	75932.7	275.2	ug/L	1.34	275.2	ug/L	1.34	0.49%
S 181.975†	411.8	3397	ug/L	41.6	3397	ug/L	41.6	1.22%
Zr 343.823†	5105.8	17.85	ug/L	0.090	17.85	ug/L	0.090	0.50%
Li 670.784†	19621.3	73.22	ug/L	0.384	73.22	ug/L	0.384	0.52%

Sequence No.: 24
Sample ID: 220-14978-B-32-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 3/28/2011 12:29:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14978-B-32-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	855952.5	0.988	mg/L	0.0086				0.87%
Y (radial)	113523.9	1.013	mg/L	0.0166				1.64%
Ag 328.068†	-452.2	3.087	ug/L	0.0583	3.087	ug/L	0.0583	1.89%
Al 396.153†	524430.6	53030	ug/L	297.0	53030	ug/L	297.0	0.56%
As 188.979†	36.3	61.74	ug/L	14.730	61.74	ug/L	14.730	23.86%
Ba 233.527†	183678.1	3264	ug/L	9.8	3264	ug/L	9.8	0.30%
Be 313.107†	-6513.6	3.270	ug/L	0.1143	3.270	ug/L	0.1143	3.50%
Ca 317.933†	350812.0	51700	ug/L	103.6	51700	ug/L	103.6	0.20%
Cd 214.440†	996.6	27.47	ug/L	1.440	27.47	ug/L	1.440	5.24%
Co 228.616†	835.7	61.73	ug/L	0.801	61.73	ug/L	0.801	1.30%
Cr 267.716†	13292.2	664.0	ug/L	1.40	664.0	ug/L	1.40	0.21%
Fe 238.204†	260591.3	109800	ug/L	150.1	109800	ug/L	150.1	0.14%
K 766.490†	59635.0	8644	ug/L	16.6	8644	ug/L	16.6	0.19%
Mg 285.213†	356258.7	28720	ug/L	51.8	28720	ug/L	51.8	0.18%
Mn 257.610†	676921.2	1848	ug/L	1.6	1848	ug/L	1.6	0.09%
Mo 202.031†	-4.3	3.370	ug/L	0.4115	3.370	ug/L	0.4115	12.21%
Na 589.592†	179585.0	14270	ug/L	36.8	14270	ug/L	36.8	0.26%
Ni 231.604†	1288.9	173.4	ug/L	3.70	173.4	ug/L	3.70	2.14%

Pb 220.353†	3481.1	2418	ug/L	45.7	2418	ug/L	45.7	1.89%
Sb 206.836†	-0.2	-3.257	ug/L	7.9084	-3.257	ug/L	7.9084	242.79%
Se 196.026†	-69.1	-39.12	ug/L	27.105	-39.12	ug/L	27.105	69.29%
V 311.071†	20690.1	94.71	ug/L	0.081	94.71	ug/L	0.081	0.09%
Sn 189.927†	455.3	293.1	ug/L	1.91	293.1	ug/L	1.91	0.65%
Sr 421.552†	276071.6	295.9	ug/L	0.69	295.9	ug/L	0.69	0.23%
Tl 190.801†	-69.5	-6.721	ug/L	9.5348	-6.721	ug/L	9.5348	141.86%
Zn 206.200†	20901.7	2272	ug/L	6.5	2272	ug/L	6.5	0.28%
Ti 334.940†	1038614.8	2013	ug/L	0.0	2013	ug/L	0.0	0.00%
B 249.772†	13111.5	14.76	ug/L	10.980	14.76	ug/L	10.980	74.38%
Cu 324.752†	159823.6	562.6	ug/L	2.69	562.6	ug/L	2.69	0.48%
S 181.975†	665.7	4829	ug/L	64.4	4829	ug/L	64.4	1.33%
Zr 343.823†	6797.9	25.27	ug/L	0.553	25.27	ug/L	0.553	2.19%
Li 670.784†	27766.4	103.6	ug/L	0.20	103.6	ug/L	0.20	0.20%

Sequence No.: 25
Sample ID: 220-14986-A-1-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 3/28/2011 12:32:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14986-A-1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	783827.7	0.904	mg/L	0.0118				1.30%
Y (radial)	104974.8	0.937	mg/L	0.0016				0.17%
Ag 328.068†	836.3	7.798	ug/L	0.0045	7.798	ug/L	0.0045	0.06%
Al 396.153†	1302241.1	131700	ug/L	557.1	131700	ug/L	557.1	0.42%
As 188.979†	-17.3	17.82	ug/L	6.410	17.82	ug/L	6.410	35.97%
Ba 233.527†	71752.0	1275	ug/L	0.8	1275	ug/L	0.8	0.06%
Be 313.107†	-12346.7	0.900	ug/L	0.0044	0.900	ug/L	0.0044	0.49%
Ca 317.933†	2988965.0	440500	ug/L	3772.3	440500	ug/L	3772.3	0.86%
Cd 214.440†	1195.9	36.72	ug/L	0.810	36.72	ug/L	0.810	2.21%
Co 228.616†	3100.6	252.2	ug/L	4.97	252.2	ug/L	4.97	1.97%
Cr 267.716†	32470.4	1617	ug/L	4.0	1617	ug/L	4.0	0.25%
Fe 238.204†	120826.4	50900	ug/L	137.8	50900	ug/L	137.8	0.27%
K 766.490†	151278.7	21930	ug/L	40.6	21930	ug/L	40.6	0.19%
Mg 285.213†	797055.4	64110	ug/L	161.7	64110	ug/L	161.7	0.25%
Mn 257.610†	203400.8	552.7	ug/L	0.98	552.7	ug/L	0.98	0.18%
Mo 202.031†	-23.0	-3.651	ug/L	0.1341	-3.651	ug/L	0.1341	3.67%
Na 589.592†	706974.9	56180	ug/L	338.8	56180	ug/L	338.8	0.60%
Ni 231.604†	43141.5	5801	ug/L	4.6	5801	ug/L	4.6	0.08%
Pb 220.353†	13485.2	9414	ug/L	86.8	9414	ug/L	86.8	0.92%
Sb 206.836†	414.8	290.4	ug/L	5.45	290.4	ug/L	5.45	1.88%
Se 196.026†	-79.7	-6.223	ug/L	3.2207	-6.223	ug/L	3.2207	51.75%
V 311.071†	21736.8	93.40	ug/L	0.257	93.40	ug/L	0.257	0.27%
Sn 189.927†	138.5	119.4	ug/L	6.66	119.4	ug/L	6.66	5.58%
Sr 421.552†	818969.8	871.0	ug/L	0.86	871.0	ug/L	0.86	0.10%
Tl 190.801†	-93.3	-1.014	ug/L	1.1334	-1.014	ug/L	1.1334	111.79%
Zn 206.200†	211689.6	22960	ug/L	39.1	22960	ug/L	39.1	0.17%
Ti 334.940†	1415323.8	2742	ug/L	0.7	2742	ug/L	0.7	0.03%
B 249.772†	9391.5	117.1	ug/L	3.55	117.1	ug/L	3.55	3.04%
Cu 324.752†	1181342.7	4075	ug/L	10.4	4075	ug/L	10.4	0.25%
S 181.975†	25753.4	165100	ug/L	568.9	165100	ug/L	568.9	0.34%
Zr 343.823†	27232.4	112.0	ug/L	0.40	112.0	ug/L	0.40	0.36%
Li 670.784†	11315.9	42.23	ug/L	0.100	42.23	ug/L	0.100	0.24%

Sequence No.: 26
Sample ID: 220-14986-A-2-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 3/28/2011 12:36:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14986-A-2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	836914.5	0.966	mg/L	0.0053				0.55%
Y (radial)	108185.0	0.966	mg/L	0.0095				0.98%

Ag 328.068†	50.4	0.242	ug/L	0.0729	0.242	ug/L	0.0729	30.10%
Al 396.153†	7272.3	735.4	ug/L	3.86	735.4	ug/L	3.86	0.52%
As 188.979†	-3.7	-3.644	ug/L	5.4006	-3.644	ug/L	5.4006	148.21%
Ba 233.527†	526.9	9.358	ug/L	0.0121	9.358	ug/L	0.0121	0.13%
Be 313.107†	-76.6	-0.037	ug/L	0.0220	-0.037	ug/L	0.0220	58.88%
Ca 317.933†	34119.7	5028	ug/L	38.5	5028	ug/L	38.5	0.77%
Cd 214.440†	12.2	0.369	ug/L	0.1058	0.369	ug/L	0.1058	28.70%
Co 228.616†	4.0	0.290	ug/L	0.3653	0.290	ug/L	0.3653	125.97%
Cr 267.716†	537.5	26.76	ug/L	0.096	26.76	ug/L	0.096	0.36%
Fe 238.204†	1609.8	678.2	ug/L	7.39	678.2	ug/L	7.39	1.09%
K 766.490†	1446.8	209.7	ug/L	12.82	209.7	ug/L	12.82	6.11%
Mg 285.213†	6892.0	554.5	ug/L	5.43	554.5	ug/L	5.43	0.98%
Mn 257.610†	4402.6	12.00	ug/L	0.111	12.00	ug/L	0.111	0.93%
Mo 202.031†	-6.8	-1.516	ug/L	1.2691	-1.516	ug/L	1.2691	83.72%
Na 589.592†	37364.7	2969	ug/L	8.1	2969	ug/L	8.1	0.27%
Ni 231.604†	23.1	3.109	ug/L	0.2796	3.109	ug/L	0.2796	8.99%
Pb 220.353†	16.9	11.76	ug/L	1.610	11.76	ug/L	1.610	13.69%
Sb 206.836†	159.2	102.9	ug/L	0.61	102.9	ug/L	0.61	0.59%
Se 196.026†	-7.1	-10.81	ug/L	1.703	-10.81	ug/L	1.703	15.75%
V 311.071†	372.3	1.970	ug/L	0.1921	1.970	ug/L	0.1921	9.76%
Sn 189.927†	2.5	1.819	ug/L	0.2070	1.819	ug/L	0.2070	11.38%
Sr 421.552†	74623.3	80.18	ug/L	0.177	80.18	ug/L	0.177	0.22%
Tl 190.801†	-9.2	-5.541	ug/L	2.0349	-5.541	ug/L	2.0349	36.72%
Zn 206.200†	5040.9	546.7	ug/L	3.76	546.7	ug/L	3.76	0.69%
Ti 334.940†	4287.4	8.308	ug/L	0.0879	8.308	ug/L	0.0879	1.06%
B 249.772†	601.7	17.42	ug/L	0.167	17.42	ug/L	0.167	0.96%
Cu 324.752†	408149.6	1406	ug/L	1.4	1406	ug/L	1.4	0.10%
S 181.975†	302.9	1938	ug/L	5.0	1938	ug/L	5.0	0.26%
Zr 343.823†	4906.3	20.41	ug/L	0.098	20.41	ug/L	0.098	0.48%
Li 670.784†	-68.3	-0.255	ug/L	0.1910	-0.255	ug/L	0.1910	74.94%

Sequence No.: 27
Sample ID: 220-14986-A-3-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 3/28/2011 12:39:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14986-A-3-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	834069.7	0.962	mg/L	0.0068				0.70%
Y (radial)	106718.2	0.953	mg/L	0.0090				0.95%
Ag 328.068†	284.7	1.927	ug/L	0.0937	1.927	ug/L	0.0937	4.86%
Al 396.153†	34029.2	3441	ug/L	13.7	3441	ug/L	13.7	0.40%
As 188.979†	-8.4	-7.761	ug/L	4.0946	-7.761	ug/L	4.0946	52.76%
Ba 233.527†	5792.5	103.0	ug/L	0.14	103.0	ug/L	0.14	0.14%
Be 313.107†	-177.4	-0.110	ug/L	0.0249	-0.110	ug/L	0.0249	22.69%
Ca 317.933†	177985.7	26230	ug/L	132.6	26230	ug/L	132.6	0.51%
Cd 214.440†	258.9	8.387	ug/L	0.1026	8.387	ug/L	0.1026	1.22%
Co 228.616†	21.9	1.744	ug/L	0.1974	1.744	ug/L	0.1974	11.32%
Cr 267.716†	632.5	31.51	ug/L	0.587	31.51	ug/L	0.587	1.86%
Fe 238.204†	3831.0	1614	ug/L	3.1	1614	ug/L	3.1	0.19%
K 766.490†	3226.1	467.6	ug/L	1.48	467.6	ug/L	1.48	0.32%
Mg 285.213†	34621.6	2784	ug/L	8.2	2784	ug/L	8.2	0.30%
Mn 257.610†	11088.5	30.16	ug/L	0.023	30.16	ug/L	0.023	0.07%
Mo 202.031†	-4.0	-0.840	ug/L	0.2992	-0.840	ug/L	0.2992	35.63%
Na 589.592†	266332.1	21160	ug/L	31.1	21160	ug/L	31.1	0.15%
Ni 231.604†	669.6	90.04	ug/L	0.210	90.04	ug/L	0.210	0.23%
Pb 220.353†	10.7	7.473	ug/L	1.3772	7.473	ug/L	1.3772	18.43%
Sb 206.836†	-26.4	-14.92	ug/L	4.767	-14.92	ug/L	4.767	31.94%
Se 196.026†	-17.9	-24.34	ug/L	9.769	-24.34	ug/L	9.769	40.14%
V 311.071†	535.6	2.851	ug/L	0.3332	2.851	ug/L	0.3332	11.68%
Sn 189.927†	0.2	1.410	ug/L	1.2927	1.410	ug/L	1.2927	91.69%
Sr 421.552†	65199.9	69.55	ug/L	0.027	69.55	ug/L	0.027	0.04%
Tl 190.801†	-15.6	-8.577	ug/L	4.6811	-8.577	ug/L	4.6811	54.58%
Zn 206.200†	2321.5	252.0	ug/L	0.92	252.0	ug/L	0.92	0.37%
Ti 334.940†	7527.5	14.59	ug/L	0.006	14.59	ug/L	0.006	0.04%
B 249.772†	74832.6	2484	ug/L	0.2	2484	ug/L	0.2	0.01%
Cu 324.752†	14719.7	50.88	ug/L	0.110	50.88	ug/L	0.110	0.22%
S 181.975†	732.8	4718	ug/L	36.0	4718	ug/L	36.0	0.76%

Zr 343.823†	1100.8	4.538 ug/L	0.1178	4.538 ug/L	0.1178	2.60%
Li 670.784†	7272.4	27.14 ug/L	0.135	27.14 ug/L	0.135	0.50%

Sequence No.: 28
Sample ID: 220-14986-A-10-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 3/28/2011 12:43:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14986-A-10-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	793577.3	0.916	mg/L	0.0022				0.24%
Y (radial)	101573.5	0.907	mg/L	0.0185				2.04%
Ag 328.068†	-59.3	-0.225	ug/L	0.1063	-0.225	ug/L	0.1063	47.27%
Al 396.153†	73374.3	7419	ug/L	6.4	7419	ug/L	6.4	0.09%
As 188.979†	-29.3	-14.17	ug/L	2.164	-14.17	ug/L	2.164	15.27%
Ba 233.527†	1994.8	35.46	ug/L	0.192	35.46	ug/L	0.192	0.54%
Be 313.107†	-1555.6	0.211	ug/L	0.0524	0.211	ug/L	0.0524	24.83%
Ca 317.933†	385498.2	56810	ug/L	738.7	56810	ug/L	738.7	1.30%
Cd 214.440†	62.5	1.861	ug/L	0.3703	1.861	ug/L	0.3703	19.90%
Co 228.616†	145.9	11.30	ug/L	0.624	11.30	ug/L	0.624	5.53%
Cr 267.716†	52664.5	2621	ug/L	1.1	2621	ug/L	1.1	0.04%
Fe 238.204†	9225.0	3886	ug/L	1.0	3886	ug/L	1.0	0.03%
K 766.490†	22013.9	3191	ug/L	1.4	3191	ug/L	1.4	0.05%
Mg 285.213†	57385.1	4616	ug/L	0.8	4616	ug/L	0.8	0.02%
Mn 257.610†	17037.9	46.33	ug/L	0.236	46.33	ug/L	0.236	0.51%
Mo 202.031†	1.7	0.524	ug/L	1.1706	0.524	ug/L	1.1706	223.22%
Na 589.592†	4655.5	369.9	ug/L	1.95	369.9	ug/L	1.95	0.53%
Ni 231.604†	159.8	21.51	ug/L	0.223	21.51	ug/L	0.223	1.04%
Pb 220.353†	31284.5	21830	ug/L	108.2	21830	ug/L	108.2	0.50%
Sb 206.836†	71.0	19.03	ug/L	0.884	19.03	ug/L	0.884	4.65%
Se 196.026†	-24.4	-27.41	ug/L	6.898	-27.41	ug/L	6.898	25.17%
V 311.071†	6769.0	35.31	ug/L	0.129	35.31	ug/L	0.129	0.36%
Sn 189.927†	6.7	8.609	ug/L	6.5113	8.609	ug/L	6.5113	75.63%
Sr 421.552†	94151.0	99.99	ug/L	1.522	99.99	ug/L	1.522	1.52%
Tl 190.801†	-33.6	-14.03	ug/L	3.874	-14.03	ug/L	3.874	27.62%
Zn 206.200†	7877.1	881.1	ug/L	2.51	881.1	ug/L	2.51	0.28%
Ti 334.940†	188527.1	365.3	ug/L	0.55	365.3	ug/L	0.55	0.15%
B 249.772†	994.3	18.17	ug/L	0.358	18.17	ug/L	0.358	1.97%
Cu 324.752†	17834.7	61.86	ug/L	0.228	61.86	ug/L	0.228	0.37%
S 181.975†	485.9	3186	ug/L	58.8	3186	ug/L	58.8	1.85%
Zr 343.823†	5202.7	21.55	ug/L	0.015	21.55	ug/L	0.015	0.07%
Li 670.784†	1888.0	7.045	ug/L	0.0237	7.045	ug/L	0.0237	0.34%

Sequence No.: 29
Sample ID: 220-14926-G-1-C
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 3/28/2011 12:46:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-1-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	786965.4	0.908	mg/L	0.0124				1.37%
Y (radial)	102916.3	0.919	mg/L	0.0001				0.01%
Ag 328.068†	-130.4	-0.835	ug/L	0.0585	-0.835	ug/L	0.0585	7.01%
Al 396.153†	-152.8	-15.32	ug/L	4.163	-15.32	ug/L	4.163	27.17%
As 188.979†	-15.0	-11.26	ug/L	8.877	-11.26	ug/L	8.877	78.84%
Ba 233.527†	14371.8	255.5	ug/L	2.28	255.5	ug/L	2.28	0.89%
Be 313.107†	-294.3	-0.313	ug/L	0.0370	-0.313	ug/L	0.0370	11.81%
Ca 317.933†	784064.8	115500	ug/L	3001.6	115500	ug/L	3001.6	2.60%
Cd 214.440†	19.4	0.634	ug/L	0.2288	0.634	ug/L	0.2288	36.06%
Co 228.616†	-1.4	-0.113	ug/L	0.4183	-0.113	ug/L	0.4183	370.73%
Cr 267.716†	90.5	4.509	ug/L	0.6283	4.509	ug/L	0.6283	13.94%
Fe 238.204†	-15.8	-6.644	ug/L	0.8166	-6.644	ug/L	0.8166	12.29%
K 766.490†	25809.6	3741	ug/L	16.6	3741	ug/L	16.6	0.44%
Mg 285.213†	617161.8	49610	ug/L	1088.4	49610	ug/L	1088.4	2.19%

Mn 257.610†	429.8	-1.018	ug/L	0.1197	-1.018	ug/L	0.1197	11.75%
Mo 202.031†	-17.6	-3.994	ug/L	0.8582	-3.994	ug/L	0.8582	21.49%
Na 589.592†	968089.0	76920	ug/L	1533.0	76920	ug/L	1533.0	1.99%
Ni 231.604†	8.9	1.196	ug/L	0.5460	1.196	ug/L	0.5460	45.65%
Pb 220.353†	2.6	1.826	ug/L	6.4410	1.826	ug/L	6.4410	352.75%
Sb 206.836†	-56.3	-25.27	ug/L	5.197	-25.27	ug/L	5.197	20.56%
Se 196.026†	-38.8	-42.43	ug/L	20.044	-42.43	ug/L	20.044	47.25%
V 311.071†	934.4	4.482	ug/L	0.1220	4.482	ug/L	0.1220	2.72%
Sn 189.927†	-8.2	0.150	ug/L	4.7126	0.150	ug/L	4.7126	>999.9%
Sr 421.552†	250793.8	267.2	ug/L	5.42	267.2	ug/L	5.42	2.03%
Tl 190.801†	-23.6	-10.03	ug/L	0.949	-10.03	ug/L	0.949	9.46%
Zn 206.200†	119.5	13.00	ug/L	0.413	13.00	ug/L	0.413	3.18%
Ti 334.940†	-1194.8	-2.315	ug/L	0.1209	-2.315	ug/L	0.1209	5.22%
B 249.772†	8664.9	288.4	ug/L	4.64	288.4	ug/L	4.64	1.61%
Cu 324.752†	1045.7	3.601	ug/L	0.2534	3.601	ug/L	0.2534	7.04%
S 181.975†	2859.4	19210	ug/L	173.7	19210	ug/L	173.7	0.90%
Zr 343.823†	-221.6	-0.922	ug/L	0.0544	-0.922	ug/L	0.0544	5.90%
Li 670.784†	3920.7	14.63	ug/L	0.003	14.63	ug/L	0.003	0.02%

Sequence No.: 30
Sample ID: 220-14926-G-2-C
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 3/28/2011 12:49:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-2-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	766512.0	0.884	mg/L	0.0156				1.76%
Y (radial)	103245.6	0.922	mg/L	0.0016				0.17%
Ag 328.068†	-289.1	-1.872	ug/L	0.2426	-1.872	ug/L	0.2426	12.96%
Al 396.153†	-50.9	-4.885	ug/L	3.1973	-4.885	ug/L	3.1973	65.46%
As 188.979†	-14.7	-4.480	ug/L	14.4268	-4.480	ug/L	14.4268	322.03%
Ba 233.527†	11626.3	206.7	ug/L	1.96	206.7	ug/L	1.96	0.95%
Be 313.107†	-314.0	-0.347	ug/L	0.0223	-0.347	ug/L	0.0223	6.43%
Ca 317.933†	1719507.1	253400	ug/L	3475.1	253400	ug/L	3475.1	1.37%
Cd 214.440†	25.0	0.818	ug/L	0.0648	0.818	ug/L	0.0648	7.92%
Co 228.616†	1.1	0.095	ug/L	0.6751	0.095	ug/L	0.6751	713.85%
Cr 267.716†	-12.9	-0.637	ug/L	1.0577	-0.637	ug/L	1.0577	166.04%
Fe 238.204†	-14.6	-6.134	ug/L	0.9594	-6.134	ug/L	0.9594	15.64%
K 766.490†	50539.5	7325	ug/L	80.9	7325	ug/L	80.9	1.10%
Mg 285.213†	964060.8	77500	ug/L	839.2	77500	ug/L	839.2	1.08%
Mn 257.610†	339.0	-2.499	ug/L	0.0959	-2.499	ug/L	0.0959	3.84%
Mo 202.031†	-34.7	-7.891	ug/L	1.0381	-7.891	ug/L	1.0381	13.16%
Na 589.592†	1475644.4	117300	ug/L	1628.6	117300	ug/L	1628.6	1.39%
Ni 231.604†	24.9	3.353	ug/L	1.5429	3.353	ug/L	1.5429	46.01%
Pb 220.353†	-0.8	-0.608	ug/L	1.3706	-0.608	ug/L	1.3706	225.44%
Sb 206.836†	-72.9	-22.62	ug/L	1.058	-22.62	ug/L	1.058	4.68%
Se 196.026†	-52.0	-35.36	ug/L	1.178	-35.36	ug/L	1.178	3.33%
V 311.071†	1017.2	4.419	ug/L	0.1305	4.419	ug/L	0.1305	2.95%
Sn 189.927†	-34.3	-9.642	ug/L	2.8150	-9.642	ug/L	2.8150	29.19%
Sr 421.552†	390990.9	414.8	ug/L	5.41	414.8	ug/L	5.41	1.31%
Tl 190.801†	-39.6	-14.09	ug/L	0.695	-14.09	ug/L	0.695	4.93%
Zn 206.200†	98.6	10.68	ug/L	0.440	10.68	ug/L	0.440	4.12%
Ti 334.940†	-2623.6	-5.084	ug/L	0.1851	-5.084	ug/L	0.1851	3.64%
B 249.772†	36358.3	1210	ug/L	3.1	1210	ug/L	3.1	0.26%
Cu 324.752†	1556.7	5.361	ug/L	0.1704	5.361	ug/L	0.1704	3.18%
S 181.975†	10270.8	66920	ug/L	532.1	66920	ug/L	532.1	0.80%
Zr 343.823†	-217.6	-0.906	ug/L	0.0701	-0.906	ug/L	0.0701	7.74%
Li 670.784†	6484.8	24.20	ug/L	0.266	24.20	ug/L	0.266	1.10%

Sequence No.: 31
Sample ID: 220-14926-G-3-C
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 3/28/2011 12:53:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-3-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	778716.4	0.899	mg/L	0.0029				0.32%
Y (radial)	103072.2	0.920	mg/L	0.0133				1.45%
Ag 328.068†	-161.7	-1.040	ug/L	0.0719	-1.040	ug/L	0.0719	6.91%
Al 396.153†	-87.2	-8.661	ug/L	7.9332	-8.661	ug/L	7.9332	91.60%
As 188.979†	-21.3	-16.40	ug/L	4.901	-16.40	ug/L	4.901	29.88%
Ba 233.527†	3836.0	68.21	ug/L	0.517	68.21	ug/L	0.517	0.76%
Be 313.107†	-272.4	-0.295	ug/L	0.0292	-0.295	ug/L	0.0292	9.87%
Ca 317.933†	1064593.1	156900	ug/L	1371.4	156900	ug/L	1371.4	0.87%
Cd 214.440†	8.3	0.271	ug/L	0.1059	0.271	ug/L	0.1059	39.13%
Co 228.616†	0.7	0.060	ug/L	0.3101	0.060	ug/L	0.3101	515.14%
Cr 267.716†	41.4	2.064	ug/L	0.8250	2.064	ug/L	0.8250	39.98%
Fe 238.204†	-2.8	-1.196	ug/L	1.6167	-1.196	ug/L	1.6167	135.16%
K 766.490†	31594.3	4579	ug/L	22.1	4579	ug/L	22.1	0.48%
Mg 285.213†	901006.9	72430	ug/L	675.3	72430	ug/L	675.3	0.93%
Mn 257.610†	852.9	-0.871	ug/L	0.0237	-0.871	ug/L	0.0237	2.72%
Mo 202.031†	-20.6	-4.693	ug/L	0.0377	-4.693	ug/L	0.0377	0.80%
Na 589.592†	777306.6	61760	ug/L	462.8	61760	ug/L	462.8	0.75%
Ni 231.604†	13.0	1.744	ug/L	0.7181	1.744	ug/L	0.7181	41.16%
Pb 220.353†	-2.4	-1.703	ug/L	2.9166	-1.703	ug/L	2.9166	171.26%
Sb 206.836†	-58.3	-22.56	ug/L	3.136	-22.56	ug/L	3.136	13.90%
Se 196.026†	-38.4	-32.81	ug/L	1.050	-32.81	ug/L	1.050	3.20%
V 311.071†	946.3	4.089	ug/L	0.5710	4.089	ug/L	0.5710	13.97%
Sn 189.927†	-19.9	-5.162	ug/L	0.7598	-5.162	ug/L	0.7598	14.72%
Sr 421.552†	260014.8	276.1	ug/L	2.56	276.1	ug/L	2.56	0.93%
Tl 190.801†	-33.4	-14.50	ug/L	3.278	-14.50	ug/L	3.278	22.61%
Zn 206.200†	176.3	19.13	ug/L	0.985	19.13	ug/L	0.985	5.15%
Ti 334.940†	-1713.3	-3.320	ug/L	0.0392	-3.320	ug/L	0.0392	1.18%
B 249.772†	7833.1	260.7	ug/L	3.06	260.7	ug/L	3.06	1.17%
Cu 324.752†	731.8	2.520	ug/L	0.1697	2.520	ug/L	0.1697	6.73%
S 181.975†	4566.6	30550	ug/L	25.7	30550	ug/L	25.7	0.08%
Zr 343.823†	-203.4	-0.847	ug/L	0.1613	-0.847	ug/L	0.1613	19.05%
Li 670.784†	3279.4	12.24	ug/L	0.300	12.24	ug/L	0.300	2.45%

Sequence No.: 32
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/28/2011 12:56:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	855223.9	0.987	mg/L	0.0005				0.05%
Y (radial)	109132.5	0.974	mg/L	0.0027				0.27%
Ag 328.068†	37090.5	240.9	ug/L	0.11	240.9	ug/L	0.11	0.05%
QC value within limits for Ag 328.068 Recovery = 96.35%								
Al 396.153†	48706.8	4910	ug/L	4.3	4910	ug/L	4.3	0.09%
QC value within limits for Al 396.153 Recovery = 98.19%								
As 188.979†	434.0	487.5	ug/L	3.84	487.5	ug/L	3.84	0.79%
QC value within limits for As 188.979 Recovery = 97.49%								
Ba 233.527†	27974.4	498.2	ug/L	0.67	498.2	ug/L	0.67	0.14%
QC value within limits for Ba 233.527 Recovery = 99.65%								
Be 313.107†	476210.2	490.3	ug/L	1.03	490.3	ug/L	1.03	0.21%
QC value within limits for Be 313.107 Recovery = 98.07%								
Ca 317.933†	121106.9	17850	ug/L	26.7	17850	ug/L	26.7	0.15%
QC value within limits for Ca 317.933 Recovery = 96.47%								
Cd 214.440†	14889.8	486.5	ug/L	0.93	486.5	ug/L	0.93	0.19%
QC value within limits for Cd 214.440 Recovery = 97.29%								
Co 228.616†	5849.2	489.8	ug/L	0.82	489.8	ug/L	0.82	0.17%
QC value within limits for Co 228.616 Recovery = 97.95%								
Cr 267.716†	9903.5	493.4	ug/L	1.22	493.4	ug/L	1.22	0.25%
QC value within limits for Cr 267.716 Recovery = 98.67%								
Fe 238.204†	12232.3	5153	ug/L	17.1	5153	ug/L	17.1	0.33%
QC value within limits for Fe 238.204 Recovery = 93.69%								
K 766.490†	271015.0	39280	ug/L	61.5	39280	ug/L	61.5	0.16%
QC value within limits for K 766.490 Recovery = 98.20%								
Mg 285.213†	226768.2	18230	ug/L	9.2	18230	ug/L	9.2	0.05%
QC value within limits for Mg 285.213 Recovery = 98.56%								

Mn 257.610†	182325.9	497.2 ug/L	0.94	497.2 ug/L	0.94	0.19%
QC value within limits for Mn 257.610 Recovery = 99.43%						
Mo 202.031†	2038.4	463.0 ug/L	2.02	463.0 ug/L	2.02	0.44%
QC value within limits for Mo 202.031 Recovery = 92.61%						
Na 589.592†	466310.2	37050 ug/L	9.0	37050 ug/L	9.0	0.02%
QC value within limits for Na 589.592 Recovery = 92.63%						
Ni 231.604†	3691.0	497.0 ug/L	1.32	497.0 ug/L	1.32	0.27%
QC value within limits for Ni 231.604 Recovery = 99.40%						
Pb 220.353†	690.6	483.0 ug/L	3.57	483.0 ug/L	3.57	0.74%
QC value within limits for Pb 220.353 Recovery = 96.60%						
Sb 206.836†	709.9	457.6 ug/L	2.45	457.6 ug/L	2.45	0.53%
QC value within limits for Sb 206.836 Recovery = 91.53%						
Se 196.026†	253.5	450.0 ug/L	23.46	450.0 ug/L	23.46	5.21%
QC value within limits for Se 196.026 Recovery = 90.00%						
V 311.071†	82249.2	474.5 ug/L	1.32	474.5 ug/L	1.32	0.28%
QC value within limits for V 311.071 Recovery = 94.89%						
Sn 189.927†	767.1	475.7 ug/L	7.06	475.7 ug/L	7.06	1.48%
QC value within limits for Sn 189.927 Recovery = 95.14%						
Sr 421.552†	457912.2	492.3 ug/L	1.13	492.3 ug/L	1.13	0.23%
QC value within limits for Sr 421.552 Recovery = 98.46%						
Tl 190.801†	748.0	490.5 ug/L	6.08	490.5 ug/L	6.08	1.24%
QC value within limits for Tl 190.801 Recovery = 98.10%						
Zn 206.200†	4400.2	482.1 ug/L	1.55	482.1 ug/L	1.55	0.32%
QC value within limits for Zn 206.200 Recovery = 96.42%						
Ti 334.940†	254644.2	493.4 ug/L	0.28	493.4 ug/L	0.28	0.06%
QC value within limits for Ti 334.940 Recovery = 98.68%						
B 249.772†	14517.9	463.4 ug/L	1.37	463.4 ug/L	1.37	0.30%
QC value within limits for B 249.772 Recovery = 92.68%						
Cu 324.752†	143291.4	494.1 ug/L	0.15	494.1 ug/L	0.15	0.03%
QC value within limits for Cu 324.752 Recovery = 98.82%						
S 181.975†	1391.2	9226 ug/L	43.7	9226 ug/L	43.7	0.47%
QC value within limits for S 181.975 Recovery = 92.26%						
Zr 343.823†	113818.3	473.7 ug/L	0.57	473.7 ug/L	0.57	0.12%
QC value within limits for Zr 343.823 Recovery = 94.74%						
Li 670.784†	134187.1	500.7 ug/L	0.39	500.7 ug/L	0.39	0.08%
QC value within limits for Li 670.784 Recovery = 100.15%						

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/28/2011 1:00:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	863921.0	0.997 mg/L	0.0237			2.37%
Y (radial)	111542.8	0.996 mg/L	0.0195			1.96%
Ag 328.068†	13.9	0.090 ug/L	0.2464	0.090 ug/L	0.2464	274.19%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	-60.7	-6.143 ug/L	0.2562	-6.143 ug/L	0.2562	4.17%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	-0.4	-0.504 ug/L	2.3384	-0.504 ug/L	2.3384	463.61%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	9.8	0.174 ug/L	0.0626	0.174 ug/L	0.0626	35.87%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-47.5	-0.048 ug/L	0.0114	-0.048 ug/L	0.0114	23.73%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933†	24.1	3.547 ug/L	3.5472	3.547 ug/L	3.5472	99.99%
QC value within limits for Ca 317.933 Recovery = Not calculated						
Cd 214.440†	1.0	0.034 ug/L	0.5161	0.034 ug/L	0.5161	>999.9%
QC value within limits for Cd 214.440 Recovery = Not calculated						
Co 228.616†	0.7	0.062 ug/L	0.1773	0.062 ug/L	0.1773	288.16%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-2.4	-0.121 ug/L	0.3016	-0.121 ug/L	0.3016	249.98%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Fe 238.204†	-18.7	-7.861 ug/L	5.6365	-7.861 ug/L	5.6365	71.70%
QC value within limits for Fe 238.204 Recovery = Not calculated						
K 766.490†	-8.8	-1.282 ug/L	35.6610	-1.282 ug/L	35.6610	>999.9%

QC value within limits for K 766.490 Recovery = Not calculated

Mg 285.213†	6.5	0.517 ug/L	0.9209	0.517 ug/L	0.9209	178.08%
QC value within limits for Mg 285.213 Recovery = Not calculated							
Mn 257.610†	7.2	0.020 ug/L	0.0067	0.020 ug/L	0.0067	33.89%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.3	0.068 ug/L	0.1147	0.068 ug/L	0.1147	168.20%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592†	-2271.4	-180.5 ug/L	12.97	-180.5 ug/L	12.97	7.19%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ni 231.604†	7.9	1.060 ug/L	1.0059	1.060 ug/L	1.0059	94.91%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	2.1	1.450 ug/L	1.2023	1.450 ug/L	1.2023	82.91%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.4	1.576 ug/L	1.4150	1.576 ug/L	1.4150	89.77%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.7	-1.301 ug/L	1.6206	-1.301 ug/L	1.6206	124.61%
QC value within limits for Se 196.026 Recovery = Not calculated							
V 311.071†	-9.7	-0.058 ug/L	0.3236	-0.058 ug/L	0.3236	555.48%
QC value within limits for V 311.071 Recovery = Not calculated							
Sn 189.927†	2.6	1.629 ug/L	0.1137	1.629 ug/L	0.1137	6.98%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	23.4	0.025 ug/L	0.0437	0.025 ug/L	0.0437	173.93%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Tl 190.801†	7.8	5.035 ug/L	2.5374	5.035 ug/L	2.5374	50.39%
QC value within limits for Tl 190.801 Recovery = Not calculated							
Zn 206.200†	6.2	0.672 ug/L	0.2088	0.672 ug/L	0.2088	31.08%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ti 334.940†	52.4	0.101 ug/L	0.0121	0.101 ug/L	0.0121	11.91%
QC value within limits for Ti 334.940 Recovery = Not calculated							
B 249.772†	-163.7	-5.419 ug/L	0.4937	-5.419 ug/L	0.4937	9.11%
QC value within limits for B 249.772 Recovery = Not calculated							
Cu 324.752†	80.5	0.276 ug/L	0.4159	0.276 ug/L	0.4159	150.54%
QC value within limits for Cu 324.752 Recovery = Not calculated							
S 181.975†	-6.8	-43.03 ug/L	19.595	-43.03 ug/L	19.595	45.54%
QC value within limits for S 181.975 Recovery = Not calculated							
Zr 343.823†	11.2	0.047 ug/L	0.0239	0.047 ug/L	0.0239	51.20%
QC value within limits for Zr 343.823 Recovery = Not calculated							
Li 670.784†	91.9	0.343 ug/L	0.3965	0.343 ug/L	0.3965	115.55%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: 220-14926-G-4-C
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 3/28/2011 1:03:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-4-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	789816.9	0.911	mg/L	0.0177				1.94%
Y (radial)	105532.7	0.942	mg/L	0.0063				0.67%
Ag 328.068†	-164.5	-1.063	ug/L	0.0756	-1.063	ug/L	0.0756	7.12%
Al 396.153†	-143.8	-14.37	ug/L	10.952	-14.37	ug/L	10.952	76.22%
As 188.979†	-14.2	-8.709	ug/L	4.3161	-8.709	ug/L	4.3161	49.56%
Ba 233.527†	3813.4	67.81	ug/L	1.511	67.81	ug/L	1.511	2.23%
Be 313.107†	-272.3	-0.295	ug/L	0.0262	-0.295	ug/L	0.0262	8.90%
Ca 317.933†	1030373.9	151800	ug/L	1132.3	151800	ug/L	1132.3	0.75%
Cd 214.440†	-6.7	-0.219	ug/L	0.2589	-0.219	ug/L	0.2589	118.22%
Co 228.616†	3.7	0.311	ug/L	0.0866	0.311	ug/L	0.0866	27.80%
Cr 267.716†	39.8	1.987	ug/L	0.5794	1.987	ug/L	0.5794	29.16%
Fe 238.204†	-20.3	-8.561	ug/L	0.2910	-8.561	ug/L	0.2910	3.40%
K 766.490†	31355.6	4545	ug/L	15.1	4545	ug/L	15.1	0.33%
Mg 285.213†	870090.7	69940	ug/L	611.2	69940	ug/L	611.2	0.87%
Mn 257.610†	764.2	-1.003	ug/L	0.0325	-1.003	ug/L	0.0325	3.24%
Mo 202.031†	-23.1	-5.261	ug/L	2.0623	-5.261	ug/L	2.0623	39.20%
Na 589.592†	750972.2	59670	ug/L	621.8	59670	ug/L	621.8	1.04%
Ni 231.604†	3.5	0.475	ug/L	0.6104	0.475	ug/L	0.6104	128.38%
Pb 220.353†	-9.5	-6.637	ug/L	6.3182	-6.637	ug/L	6.3182	95.20%
Sb 206.836†	-59.0	-23.48	ug/L	2.927	-23.48	ug/L	2.927	12.46%

Se 196.026†	-54.4	-61.86	ug/L	1.384	-61.86	ug/L	1.384 2.24%
V 311.071†	913.9	3.945	ug/L	0.7519	3.945	ug/L	0.7519 19.06%
Sn 189.927†	-27.3	-9.954	ug/L	1.4359	-9.954	ug/L	1.4359 14.43%
Sr 421.552†	251362.1	266.9	ug/L	2.76	266.9	ug/L	2.76 1.03%
Tl 190.801†	-22.1	-7.423	ug/L	1.5091	-7.423	ug/L	1.5091 20.33%
Zn 206.200†	51.9	5.646	ug/L	0.9532	5.646	ug/L	0.9532 16.88%
Ti 334.940†	-1637.1	-3.172	ug/L	0.0512	-3.172	ug/L	0.0512 1.62%
B 249.772†	7539.0	251.0	ug/L	5.53	251.0	ug/L	5.53 2.20%
Cu 324.752†	619.6	2.133	ug/L	0.2268	2.133	ug/L	0.2268 10.63%
S 181.975†	4511.9	30150	ug/L	438.8	30150	ug/L	438.8 1.46%
Zr 343.823†	-38.2	-0.159	ug/L	0.1663	-0.159	ug/L	0.1663 104.84%
Li 670.784†	3106.0	11.59	ug/L	0.336	11.59	ug/L	0.336 2.90%

Sequence No.: 35 **Autosampler Location: 59**
Sample ID: 220-14926-G-5-C **Date Collected: 3/28/2011 1:06:27 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14926-G-5-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	842799.4	0.973	mg/L	0.0101				1.04%
Y (radial)	105312.2	0.940	mg/L	0.0042				0.45%
Ag 328.068†	36.4	0.240	ug/L	0.0238	0.240	ug/L	0.0238	9.95%
Al 396.153†	-115.4	-11.62	ug/L	3.455	-11.62	ug/L	3.455	29.73%
As 188.979†	0.1	0.179	ug/L	5.3612	0.179	ug/L	5.3612	>999.9%
Ba 233.527†	52.3	0.930	ug/L	0.0868	0.930	ug/L	0.0868	9.33%
Be 313.107†	-49.3	-0.051	ug/L	0.0455	-0.051	ug/L	0.0455	90.03%
Ca 317.933†	1317.7	194.2	ug/L	6.29	194.2	ug/L	6.29	3.24%
Cd 214.440†	12.7	0.416	ug/L	0.2074	0.416	ug/L	0.2074	49.91%
Co 228.616†	-1.8	-0.153	ug/L	0.3447	-0.153	ug/L	0.3447	225.75%
Cr 267.716†	1.0	0.049	ug/L	0.1766	0.049	ug/L	0.1766	359.61%
Fe 238.204†	-23.6	-9.948	ug/L	3.0865	-9.948	ug/L	3.0865	31.03%
K 766.490†	3467.9	502.7	ug/L	4.95	502.7	ug/L	4.95	0.98%
Mg 285.213†	641.0	51.52	ug/L	0.378	51.52	ug/L	0.378	0.73%
Mn 257.610†	335.6	0.914	ug/L	0.0151	0.914	ug/L	0.0151	1.65%
Mo 202.031†	-5.8	-1.313	ug/L	0.5211	-1.313	ug/L	0.5211	39.69%
Na 589.592†	3150.5	250.3	ug/L	3.70	250.3	ug/L	3.70	1.48%
Ni 231.604†	15.4	2.077	ug/L	0.1463	2.077	ug/L	0.1463	7.04%
Pb 220.353†	-2.6	-1.816	ug/L	2.9156	-1.816	ug/L	2.9156	160.57%
Sb 206.836†	-0.2	-0.139	ug/L	0.1663	-0.139	ug/L	0.1663	119.49%
Se 196.026†	2.9	5.023	ug/L	2.0518	5.023	ug/L	2.0518	40.85%
V 311.071†	-38.3	-0.223	ug/L	0.0130	-0.223	ug/L	0.0130	5.81%
Sn 189.927†	5.1	3.158	ug/L	2.6376	3.158	ug/L	2.6376	83.52%
Sr 421.552†	355.3	0.378	ug/L	0.0037	0.378	ug/L	0.0037	0.97%
Tl 190.801†	0.4	0.287	ug/L	0.8731	0.287	ug/L	0.8731	304.06%
Zn 206.200†	1362.4	147.7	ug/L	2.07	147.7	ug/L	2.07	1.40%
Ti 334.940†	-6.4	-0.012	ug/L	0.0011	-0.012	ug/L	0.0011	9.21%
B 249.772†	-182.5	-6.034	ug/L	0.0444	-6.034	ug/L	0.0444	0.74%
Cu 324.752†	1062.0	3.657	ug/L	0.2071	3.657	ug/L	0.2071	5.66%
S 181.975†	25.5	163.2	ug/L	0.36	163.2	ug/L	0.36	0.22%
Zr 343.823†	-88.8	-0.369	ug/L	0.0233	-0.369	ug/L	0.0233	6.32%
Li 670.784†	143.8	0.537	ug/L	0.2030	0.537	ug/L	0.2030	37.83%

Sequence No.: 36 **Autosampler Location: 60**
Sample ID: 220-14926-G-6-I **Date Collected: 3/28/2011 1:09:36 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14926-G-6-I

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	769420.8	0.888	mg/L	0.0105				1.18%
Y (radial)	104909.2	0.936	mg/L	0.0043				0.46%
Ag 328.068†	-237.7	-1.536	ug/L	0.1889	-1.536	ug/L	0.1889	12.30%
Al 396.153†	-93.5	-9.297	ug/L	13.8555	-9.297	ug/L	13.8555	149.04%

As 188.979†	-10.8	-3.921	ug/L	12.2225	-3.921	ug/L	12.2225 311.71%
Ba 233.527†	15817.3	281.2	ug/L	3.07	281.2	ug/L	3.07 1.09%
Be 313.107†	-265.9	-0.290	ug/L	0.0285	-0.290	ug/L	0.0285 9.83%
Ca 317.933†	1166614.7	171900	ug/L	2003.5	171900	ug/L	2003.5 1.17%
Cd 214.440†	10.1	0.329	ug/L	0.1979	0.329	ug/L	0.1979 60.17%
Co 228.616†	6.3	0.531	ug/L	0.2391	0.531	ug/L	0.2391 44.99%
Cr 267.716†	33.4	1.667	ug/L	0.0755	1.667	ug/L	0.0755 4.53%
Fe 238.204†	20.9	8.796	ug/L	0.4295	8.796	ug/L	0.4295 4.88%
K 766.490†	28282.3	4099	ug/L	9.9	4099	ug/L	9.9 0.24%
Mg 285.213†	919735.5	73930	ug/L	197.6	73930	ug/L	197.6 0.27%
Mn 257.610†	6001.3	13.12	ug/L	0.076	13.12	ug/L	0.076 0.58%
Mo 202.031†	-21.4	-4.867	ug/L	1.4303	-4.867	ug/L	1.4303 29.39%
Na 589.592†	674995.0	53630	ug/L	180.7	53630	ug/L	180.7 0.34%
Ni 231.604†	14.8	1.986	ug/L	0.0072	1.986	ug/L	0.0072 0.36%
Pb 220.353†	-1.1	-0.813	ug/L	2.0608	-0.813	ug/L	2.0608 253.63%
Sb 206.836†	-55.3	-19.16	ug/L	6.131	-19.16	ug/L	6.131 32.00%
Se 196.026†	-43.7	-38.78	ug/L	4.912	-38.78	ug/L	4.912 12.67%
V 311.071†	1004.5	4.402	ug/L	0.2937	4.402	ug/L	0.2937 6.67%
Sn 189.927†	-20.8	-5.017	ug/L	4.4007	-5.017	ug/L	4.4007 87.71%
Sr 421.552†	363812.6	387.5	ug/L	0.04	387.5	ug/L	0.04 0.01%
Tl 190.801†	-36.2	-15.63	ug/L	0.616	-15.63	ug/L	0.616 3.94%
Zn 206.200†	2628.6	284.9	ug/L	3.81	284.9	ug/L	3.81 1.34%
Ti 334.940†	-1864.7	-3.613	ug/L	0.0522	-3.613	ug/L	0.0522 1.44%
B 249.772†	4298.3	143.0	ug/L	1.29	143.0	ug/L	1.29 0.90%
Cu 324.752†	1808.9	6.232	ug/L	0.3343	6.232	ug/L	0.3343 5.36%
S 181.975†	9247.4	60340	ug/L	690.5	60340	ug/L	690.5 1.14%
Zr 343.823†	-178.1	-0.742	ug/L	0.0176	-0.742	ug/L	0.0176 2.37%
Li 670.784†	2654.7	9.906	ug/L	0.2522	9.906	ug/L	0.2522 2.55%

Sequence No.: 37
Sample ID: 220-14926-G-6-K MS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 3/28/2011 1:13:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-6-K MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	779171.7	0.899	mg/L	0.0053				0.59%
Y (radial)	101321.0	0.904	mg/L	0.0068				0.75%
Ag 328.068†	18374.4	118.1	ug/L	0.14	118.1	ug/L	0.14	0.12%
Al 396.153†	35409.5	3568	ug/L	4.6	3568	ug/L	4.6	0.13%
As 188.979†	336.0	383.6	ug/L	4.61	383.6	ug/L	4.61	1.20%
Ba 233.527†	22370.3	397.9	ug/L	3.70	397.9	ug/L	3.70	0.93%
Be 313.107†	38809.8	41.74	ug/L	0.057	41.74	ug/L	0.057	0.14%
Ca 317.933†	1236330.0	182200	ug/L	1873.3	182200	ug/L	1873.3	1.03%
Cd 214.440†	3564.6	116.4	ug/L	0.04	116.4	ug/L	0.04	0.03%
Co 228.616†	1351.9	112.8	ug/L	0.59	112.8	ug/L	0.59	0.53%
Cr 267.716†	2408.9	120.1	ug/L	0.82	120.1	ug/L	0.82	0.69%
Fe 238.204†	7343.9	3094	ug/L	8.6	3094	ug/L	8.6	0.28%
K 766.490†	140879.6	20420	ug/L	212.7	20420	ug/L	212.7	1.04%
Mg 285.213†	1024261.9	82340	ug/L	772.5	82340	ug/L	772.5	0.94%
Mn 257.610†	34930.2	91.76	ug/L	0.641	91.76	ug/L	0.641	0.70%
Mo 202.031†	1678.2	381.7	ug/L	0.69	381.7	ug/L	0.69	0.18%
Na 589.592†	752873.7	59820	ug/L	546.2	59820	ug/L	546.2	0.91%
Ni 231.604†	842.1	113.4	ug/L	0.77	113.4	ug/L	0.77	0.68%
Pb 220.353†	560.7	392.3	ug/L	4.01	392.3	ug/L	4.01	1.02%
Sb 206.836†	562.5	382.3	ug/L	4.71	382.3	ug/L	4.71	1.23%
Se 196.026†	66.7	158.4	ug/L	0.42	158.4	ug/L	0.42	0.26%
V 311.071†	21956.2	120.8	ug/L	0.63	120.8	ug/L	0.63	0.52%
Sn 189.927†	625.0	395.2	ug/L	2.04	395.2	ug/L	2.04	0.52%
Sr 421.552†	369898.2	393.8	ug/L	4.07	393.8	ug/L	4.07	1.03%
Tl 190.801†	554.7	373.1	ug/L	5.54	373.1	ug/L	5.54	1.48%
Zn 206.200†	3562.2	387.4	ug/L	1.05	387.4	ug/L	1.05	0.27%
Ti 334.940†	206643.8	400.4	ug/L	0.81	400.4	ug/L	0.81	0.20%
B 249.772†	16605.6	540.8	ug/L	3.03	540.8	ug/L	3.03	0.56%
Cu 324.752†	38435.5	132.7	ug/L	0.22	132.7	ug/L	0.22	0.17%
S 181.975†	9270.2	60660	ug/L	173.9	60660	ug/L	173.9	0.29%
Zr 343.823†	96056.8	399.8	ug/L	1.31	399.8	ug/L	1.31	0.33%
Li 670.784†	2997.0	11.18	ug/L	0.477	11.18	ug/L	0.477	4.26%

Sequence No.: 38
Sample ID: 220-14926-G-6-L MSD
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 3/28/2011 1:16:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-6-L MSD

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	773080.1	0.892	mg/L	0.0066				0.74%
Y (radial)	102676.4	0.917	mg/L	0.0195				2.13%
Ag 328.068†	18475.2	118.7	ug/L	0.33	118.7	ug/L	0.33	0.27%
Al 396.153†	34397.0	3465	ug/L	0.4	3465	ug/L	0.4	0.01%
As 188.979†	331.9	379.2	ug/L	1.59	379.2	ug/L	1.59	0.42%
Ba 233.527†	22400.1	398.5	ug/L	1.30	398.5	ug/L	1.30	0.33%
Be 313.107†	38748.1	41.68	ug/L	0.039	41.68	ug/L	0.039	0.09%
Ca 317.933†	1260024.8	185700	ug/L	3776.8	185700	ug/L	3776.8	2.03%
Cd 214.440†	3602.4	117.6	ug/L	1.05	117.6	ug/L	1.05	0.89%
Co 228.616†	1365.0	113.9	ug/L	1.65	113.9	ug/L	1.65	1.45%
Cr 267.716†	2440.4	121.6	ug/L	1.78	121.6	ug/L	1.78	1.46%
Fe 238.204†	7792.1	3283	ug/L	30.6	3283	ug/L	30.6	0.93%
K 766.490†	135441.8	19630	ug/L	400.1	19630	ug/L	400.1	2.04%
Mg 285.213†	1038030.0	83440	ug/L	1629.0	83440	ug/L	1629.0	1.95%
Mn 257.610†	34853.5	91.50	ug/L	0.226	91.50	ug/L	0.226	0.25%
Mo 202.031†	1693.1	385.1	ug/L	3.78	385.1	ug/L	3.78	0.98%
Na 589.592†	785548.7	62420	ug/L	1314.8	62420	ug/L	1314.8	2.11%
Ni 231.604†	855.1	115.1	ug/L	3.62	115.1	ug/L	3.62	3.14%
Pb 220.353†	554.5	387.9	ug/L	5.16	387.9	ug/L	5.16	1.33%
Sb 206.836†	570.4	387.8	ug/L	17.93	387.8	ug/L	17.93	4.63%
Se 196.026†	73.7	171.5	ug/L	4.80	171.5	ug/L	4.80	2.80%
V 311.071†	22030.1	121.2	ug/L	0.08	121.2	ug/L	0.08	0.07%
Sn 189.927†	624.6	395.0	ug/L	0.15	395.0	ug/L	0.15	0.04%
Sr 421.552†	376030.5	400.3	ug/L	8.42	400.3	ug/L	8.42	2.10%
Tl 190.801†	562.6	378.4	ug/L	3.06	378.4	ug/L	3.06	0.81%
Zn 206.200†	3600.2	391.5	ug/L	7.12	391.5	ug/L	7.12	1.82%
Ti 334.940†	206736.5	400.6	ug/L	0.23	400.6	ug/L	0.23	0.06%
B 249.772†	16938.5	551.2	ug/L	6.93	551.2	ug/L	6.93	1.26%
Cu 324.752†	38913.7	134.4	ug/L	0.35	134.4	ug/L	0.35	0.26%
S 181.975†	9530.7	62340	ug/L	1087.2	62340	ug/L	1087.2	1.74%
Zr 343.823†	96219.5	400.5	ug/L	0.94	400.5	ug/L	0.94	0.23%
Li 670.784†	2797.6	10.44	ug/L	0.261	10.44	ug/L	0.261	2.50%

Sequence No.: 39
Sample ID: 220-14926-G-6-I SD@5
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 3/28/2011 1:20:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14926-G-6-I SD@5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	836285.3	0.965	mg/L	0.0012				0.13%
Y (radial)	108125.0	0.965	mg/L	0.0112				1.16%
Ag 328.068†	-38.3	-0.246	ug/L	0.1161	-0.246	ug/L	0.1161	47.15%
Al 396.153†	-48.0	-4.749	ug/L	1.0561	-4.749	ug/L	1.0561	22.24%
As 188.979†	-12.3	-12.14	ug/L	6.390	-12.14	ug/L	6.390	52.62%
Ba 233.527†	3204.0	56.97	ug/L	0.034	56.97	ug/L	0.034	0.06%
Be 313.107†	-54.2	-0.060	ug/L	0.0083	-0.060	ug/L	0.0083	13.80%
Ca 317.933†	228354.6	33650	ug/L	128.0	33650	ug/L	128.0	0.38%
Cd 214.440†	5.3	0.172	ug/L	0.1004	0.172	ug/L	0.1004	58.35%
Co 228.616†	0.5	0.041	ug/L	0.8531	0.041	ug/L	0.8531	>999.9%
Cr 267.716†	1.2	0.061	ug/L	0.5029	0.061	ug/L	0.5029	820.48%
Fe 238.204†	-17.1	-7.196	ug/L	3.6527	-7.196	ug/L	3.6527	50.76%
K 766.490†	5329.9	772.5	ug/L	6.44	772.5	ug/L	6.44	0.83%
Mg 285.213†	181027.4	14550	ug/L	47.0	14550	ug/L	47.0	0.32%
Mn 257.610†	1193.8	2.617	ug/L	0.0270	2.617	ug/L	0.0270	1.03%
Mo 202.031†	-14.3	-3.264	ug/L	0.4658	-3.264	ug/L	0.4658	14.27%

Na 589.592†	123896.9	9845	ug/L	71.6	9845	ug/L	71.6	0.73%
Ni 231.604†	6.8	0.921	ug/L	0.7476	0.921	ug/L	0.7476	81.19%
Pb 220.353†	1.9	1.312	ug/L	2.7784	1.312	ug/L	2.7784	211.81%
Sb 206.836†	-31.1	-16.84	ug/L	2.062	-16.84	ug/L	2.062	12.25%
Se 196.026†	-23.9	-34.32	ug/L	1.636	-34.32	ug/L	1.636	4.77%
V 311.071†	331.8	1.656	ug/L	0.2950	1.656	ug/L	0.2950	17.81%
Sn 189.927†	-17.0	-8.937	ug/L	5.2780	-8.937	ug/L	5.2780	59.06%
Sr 421.552†	72178.8	76.88	ug/L	0.328	76.88	ug/L	0.328	0.43%
Tl 190.801†	-18.5	-10.45	ug/L	0.943	-10.45	ug/L	0.943	9.02%
Zn 206.200†	535.4	58.04	ug/L	0.041	58.04	ug/L	0.041	0.07%
Ti 334.940†	-513.8	-0.996	ug/L	0.0086	-0.996	ug/L	0.0086	0.86%
B 249.772†	655.1	21.83	ug/L	0.340	21.83	ug/L	0.340	1.56%
Cu 324.752†	433.9	1.494	ug/L	0.0338	1.494	ug/L	0.0338	2.26%
S 181.975†	1534.1	10060	ug/L	118.5	10060	ug/L	118.5	1.18%
Zr 343.823†	-20.7	-0.086	ug/L	0.0779	-0.086	ug/L	0.0779	90.59%
Li 670.784†	640.5	2.390	ug/L	0.0768	2.390	ug/L	0.0768	3.21%

Sequence No.: 40 **Autosampler Location: 64**
Sample ID: 220-14929-B-7-B @2 **Date Collected: 3/28/2011 1:23:36 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14929-B-7-B @2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	851928.7	0.983	mg/L	0.0080				0.81%
Y (radial)	109258.4	0.975	mg/L	0.0171				1.75%
Ag 328.068†	-100.7	1.378	ug/L	0.1495	1.378	ug/L	0.1495	10.85%
Al 396.153†	-95.2	-9.480	ug/L	2.1408	-9.480	ug/L	2.1408	22.58%
As 188.979†	6.4	12.75	ug/L	1.304	12.75	ug/L	1.304	10.23%
Ba 233.527†	6534.1	115.4	ug/L	0.89	115.4	ug/L	0.89	0.77%
Be 313.107†	12.4	0.010	ug/L	0.0734	0.010	ug/L	0.0734	704.92%
Ca 317.933†	75486.2	11120	ug/L	18.6	11120	ug/L	18.6	0.17%
Cd 214.440†	50.4	-0.095	ug/L	0.2784	-0.095	ug/L	0.2784	291.80%
Co 228.616†	278.7	22.00	ug/L	0.417	22.00	ug/L	0.417	1.89%
Cr 267.716†	12.1	1.441	ug/L	0.0534	1.441	ug/L	0.0534	3.70%
Fe 238.204†	88968.8	37480	ug/L	5.4	37480	ug/L	5.4	0.01%
K 766.490†	12785.3	1853	ug/L	34.7	1853	ug/L	34.7	1.87%
Mg 285.213†	116233.4	9373	ug/L	26.2	9373	ug/L	26.2	0.28%
Mn 257.610†	2288711.9	6251	ug/L	22.5	6251	ug/L	22.5	0.36%
Mo 202.031†	-19.6	-2.965	ug/L	0.9339	-2.965	ug/L	0.9339	31.50%
Na 589.592†	119442.3	9491	ug/L	96.6	9491	ug/L	96.6	1.02%
Ni 231.604†	20.0	2.728	ug/L	0.5378	2.728	ug/L	0.5378	19.71%
Pb 220.353†	10.0	1.555	ug/L	3.1170	1.555	ug/L	3.1170	200.44%
Sb 206.836†	-22.5	-13.46	ug/L	2.137	-13.46	ug/L	2.137	15.88%
Se 196.026†	-24.0	-16.25	ug/L	6.272	-16.25	ug/L	6.272	38.59%
V 311.071†	690.7	2.695	ug/L	0.2131	2.695	ug/L	0.2131	7.91%
Sn 189.927†	-10.7	-6.086	ug/L	6.5056	-6.086	ug/L	6.5056	106.89%
Sr 421.552†	73732.4	79.08	ug/L	0.718	79.08	ug/L	0.718	0.91%
Tl 190.801†	-11.7	-3.921	ug/L	2.0026	-3.921	ug/L	2.0026	51.07%
Zn 206.200†	79.5	8.621	ug/L	1.0199	8.621	ug/L	1.0199	11.83%
Ti 334.940†	-242.6	-0.470	ug/L	0.0002	-0.470	ug/L	0.0002	0.04%
B 249.772†	5560.5	41.12	ug/L	1.897	41.12	ug/L	1.897	4.61%
Cu 324.752†	-937.0	0.912	ug/L	0.1776	0.912	ug/L	0.1776	19.48%
S 181.975†	471.8	3194	ug/L	62.9	3194	ug/L	62.9	1.97%
Zr 343.823†	137.3	-0.462	ug/L	0.1059	-0.462	ug/L	0.1059	22.92%
Li 670.784†	253.9	0.947	ug/L	0.6207	0.947	ug/L	0.6207	65.52%

User canceled analysis.

Analysis Begun

Start Time: 3/28/2011 1:28:40 PM **Plasma On Time: 3/28/2011 9:50:51 AM**
Logged In Analyst: ctmetals **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 069N-na **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d

Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

Sequence No.: 41
Sample ID: MB 220-49104/1-A
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 65
Date Collected: 3/28/2011 1:28:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 220-49104/1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	846465.4	0.977	mg/L	0.0070				0.72%
Y (radial)	109461.1	0.977	mg/L	0.0173				1.77%
Ag 328.068†	21.0	0.142	ug/L	0.0066	0.142	ug/L	0.0066	4.69%
Al 396.153†	-86.1	-8.643	ug/L	1.7424	-8.643	ug/L	1.7424	20.16%
As 188.979†	-0.1	-0.125	ug/L	2.0695	-0.125	ug/L	2.0695	>999.9%
Ba 233.527†	24.7	0.441	ug/L	0.0316	0.441	ug/L	0.0316	7.16%
Be 313.107†	-28.2	-0.029	ug/L	0.0375	-0.029	ug/L	0.0375	129.28%
Ca 317.933†	-159.3	-23.47	ug/L	2.424	-23.47	ug/L	2.424	10.32%
Cd 214.440†	5.0	0.164	ug/L	0.0475	0.164	ug/L	0.0475	28.96%
Co 228.616†	-0.2	-0.023	ug/L	0.2604	-0.023	ug/L	0.2604	>999.9%
Cr 267.716†	-0.2	-0.008	ug/L	0.0043	-0.008	ug/L	0.0043	55.72%
Fe 238.204†	-2.0	-0.857	ug/L	1.4070	-0.857	ug/L	1.4070	164.17%
K 766.490†	-181.8	-26.35	ug/L	18.418	-26.35	ug/L	18.418	69.90%
Mg 285.213†	-1.4	-0.111	ug/L	0.4677	-0.111	ug/L	0.4677	421.79%
Mn 257.610†	18.0	0.049	ug/L	0.0100	0.049	ug/L	0.0100	20.26%
Mo 202.031†	-8.2	-1.869	ug/L	0.2841	-1.869	ug/L	0.2841	15.20%
Na 589.592†	-2585.6	-205.4	ug/L	1.48	-205.4	ug/L	1.48	0.72%
Ni 231.604†	7.1	0.952	ug/L	0.7743	0.952	ug/L	0.7743	81.33%
Pb 220.353†	-0.3	-0.187	ug/L	3.0532	-0.187	ug/L	3.0532	>999.9%
Sb 206.836†	-0.0	-0.045	ug/L	2.9023	-0.045	ug/L	2.9023	>999.9%
Se 196.026†	-1.3	-2.286	ug/L	1.3781	-2.286	ug/L	1.3781	60.29%
V 311.071†	130.8	0.770	ug/L	0.0607	0.770	ug/L	0.0607	7.88%
Sn 189.927†	1.8	1.096	ug/L	0.9990	1.096	ug/L	0.9990	91.11%
Sr 421.552†	-143.8	-0.154	ug/L	0.0023	-0.154	ug/L	0.0023	1.50%
Tl 190.801†	5.1	3.288	ug/L	2.6722	3.288	ug/L	2.6722	81.27%
Zn 206.200†	18.3	1.988	ug/L	0.2073	1.988	ug/L	0.2073	10.43%
Ti 334.940†	-14.6	-0.028	ug/L	0.0428	-0.028	ug/L	0.0428	151.09%
B 249.772†	-143.0	-4.756	ug/L	0.3812	-4.756	ug/L	0.3812	8.01%
Cu 324.752†	146.2	0.504	ug/L	0.0507	0.504	ug/L	0.0507	10.06%
S 181.975†	-6.7	-42.49	ug/L	6.548	-42.49	ug/L	6.548	15.41%
Zr 343.823†	-98.8	-0.411	ug/L	0.0669	-0.411	ug/L	0.0669	16.28%
Li 670.784†	-38.8	-0.145	ug/L	0.3009	-0.145	ug/L	0.3009	208.00%

Sequence No.: 42
Sample ID: LCS 220-49104/2-A
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 66
Date Collected: 3/28/2011 1:31:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 220-49104/2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	812747.0	0.938	mg/L	0.0143				1.52%
Y (radial)	103882.7	0.927	mg/L	0.0054				0.58%
Ag 328.068†	46994.6	301.7	ug/L	0.72	301.7	ug/L	0.72	0.24%
Al 396.153†	34322.9	3436	ug/L	1.9	3436	ug/L	1.9	0.06%
As 188.979†	895.4	998.9	ug/L	12.74	998.9	ug/L	12.74	1.28%
Ba 233.527†	17496.4	311.6	ug/L	2.41	311.6	ug/L	2.41	0.77%
Be 313.107†	99560.5	107.1	ug/L	0.03	107.1	ug/L	0.03	0.03%
Ca 317.933†	45828.7	6754	ug/L	1.6	6754	ug/L	1.6	0.02%
Cd 214.440†	9769.9	319.2	ug/L	3.34	319.2	ug/L	3.34	1.05%
Co 228.616†	3797.4	317.3	ug/L	3.81	317.3	ug/L	3.81	1.20%
Cr 267.716†	6372.0	317.4	ug/L	4.00	317.4	ug/L	4.00	1.26%
Fe 238.204†	7654.0	3224	ug/L	4.4	3224	ug/L	4.4	0.14%
K 766.490†	188026.1	27250	ug/L	112.9	27250	ug/L	112.9	0.41%
Mg 285.213†	84527.8	6797	ug/L	7.1	6797	ug/L	7.1	0.10%
Mn 257.610†	75428.4	205.7	ug/L	0.01	205.7	ug/L	0.01	0.00%

Mo 202.031†	4566.2	1038	ug/L	15.8	1038	ug/L	15.8	1.52%
Na 589.592†	387294.2	30770	ug/L	125.4	30770	ug/L	125.4	0.41%
Ni 231.604†	2402.9	323.6	ug/L	6.00	323.6	ug/L	6.00	1.85%
Pb 220.353†	1490.3	1043	ug/L	7.2	1043	ug/L	7.2	0.69%
Sb 206.836†	1614.4	1047	ug/L	11.0	1047	ug/L	11.0	1.05%
Se 196.026†	292.4	514.4	ug/L	18.95	514.4	ug/L	18.95	3.68%
V 311.071†	54021.8	300.7	ug/L	0.10	300.7	ug/L	0.10	0.03%
Sn 189.927†	1682.4	1041	ug/L	19.5	1041	ug/L	19.5	1.87%
Sr 421.552†	-30.7	-0.191	ug/L	0.0418	-0.191	ug/L	0.0418	21.93%
Tl 190.801†	1598.1	1049	ug/L	23.7	1049	ug/L	23.7	2.26%
Zn 206.200†	2933.5	321.3	ug/L	5.24	321.3	ug/L	5.24	1.63%
Ti 334.940†	530768.1	1028	ug/L	2.3	1028	ug/L	2.3	0.22%
B 249.772†	29705.7	976.3	ug/L	1.85	976.3	ug/L	1.85	0.19%
Cu 324.752†	92388.0	318.6	ug/L	0.99	318.6	ug/L	0.99	0.31%
S 181.975†	1350.5	8729	ug/L	157.1	8729	ug/L	157.1	1.80%
Zr 343.823†	247282.3	1029	ug/L	0.8	1029	ug/L	0.8	0.08%
Li 670.784†	102.5	0.382	ug/L	0.2327	0.382	ug/L	0.2327	60.85%

Sequence No.: 43
Sample ID: 460-24356-B-1-A
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 67
Date Collected: 3/28/2011 1:35:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 460-24356-B-1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	866106.3	0.999	mg/L	0.0022				0.22%
Y (radial)	115423.8	1.030	mg/L	0.0034				0.33%
Ag 328.068†	417.7	7.892	ug/L	0.0217	7.892	ug/L	0.0217	0.28%
Al 396.153†	271784.6	27480	ug/L	18.4	27480	ug/L	18.4	0.07%
As 188.979†	100.4	127.3	ug/L	10.24	127.3	ug/L	10.24	8.05%
Ba 233.527†	159660.1	2837	ug/L	19.0	2837	ug/L	19.0	0.67%
Be 313.107†	-3619.7	1.868	ug/L	0.0204	1.868	ug/L	0.0204	1.09%
Ca 317.933†	288521.5	42520	ug/L	61.2	42520	ug/L	61.2	0.14%
Cd 214.440†	209.6	2.580	ug/L	0.4089	2.580	ug/L	0.4089	15.85%
Co 228.616†	341.2	22.83	ug/L	1.501	22.83	ug/L	1.501	6.58%
Cr 267.716†	2264.7	114.9	ug/L	0.30	114.9	ug/L	0.30	0.26%
Fe 238.204†	218202.9	91920	ug/L	142.6	91920	ug/L	142.6	0.16%
K 766.490†	27024.3	3917	ug/L	17.2	3917	ug/L	17.2	0.44%
Mg 285.213†	156052.1	12620	ug/L	17.2	12620	ug/L	17.2	0.14%
Mn 257.610†	540316.9	1475	ug/L	9.1	1475	ug/L	9.1	0.62%
Mo 202.031†	2.6	4.308	ug/L	0.5079	4.308	ug/L	0.5079	11.79%
Na 589.592†	121338.3	9641	ug/L	9.7	9641	ug/L	9.7	0.10%
Ni 231.604†	2608.5	350.8	ug/L	0.74	350.8	ug/L	0.74	0.21%
Pb 220.353†	2546.0	1766	ug/L	3.6	1766	ug/L	3.6	0.20%
Sb 206.836†	91.0	61.47	ug/L	2.312	61.47	ug/L	2.312	3.76%
Se 196.026†	-59.0	-35.56	ug/L	31.367	-35.56	ug/L	31.367	88.22%
V 311.071†	19935.1	101.1	ug/L	0.28	101.1	ug/L	0.28	0.28%
Sn 189.927†	346.4	221.0	ug/L	0.45	221.0	ug/L	0.45	0.20%
Sr 421.552†	237474.2	254.5	ug/L	0.04	254.5	ug/L	0.04	0.02%
Tl 190.801†	-47.8	-6.048	ug/L	1.9501	-6.048	ug/L	1.9501	32.24%
Zn 206.200†	19625.3	2128	ug/L	13.8	2128	ug/L	13.8	0.65%
Ti 334.940†	582491.3	1129	ug/L	3.7	1129	ug/L	3.7	0.33%
B 249.772†	10343.8	-8.773	ug/L	0.0320	-8.773	ug/L	0.0320	0.36%
Cu 324.752†	1064359.8	3676	ug/L	8.8	3676	ug/L	8.8	0.24%
S 181.975†	2846.6	18360	ug/L	27.5	18360	ug/L	27.5	0.15%
Zr 343.823†	3150.3	10.58	ug/L	0.136	10.58	ug/L	0.136	1.28%
Li 670.784†	10358.3	38.65	ug/L	0.103	38.65	ug/L	0.103	0.27%

Sequence No.: 44
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 3/28/2011 1:38:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Mean Corrected Calib. Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	835652.5	0.964	mg/L	0.0049				0.50%
Y (radial)	106915.9	0.954	mg/L	0.0121				1.26%
Ag 328.068†	37158.6	241.3	ug/L	0.11	241.3	ug/L	0.11	0.05%
QC value within limits for Ag 328.068 Recovery = 96.53%								
Al 396.153†	49167.3	4956	ug/L	14.1	4956	ug/L	14.1	0.28%
QC value within limits for Al 396.153 Recovery = 99.12%								
As 188.979†	447.8	502.9	ug/L	7.79	502.9	ug/L	7.79	1.55%
QC value within limits for As 188.979 Recovery = 100.59%								
Ba 233.527†	28094.1	500.4	ug/L	3.02	500.4	ug/L	3.02	0.60%
QC value within limits for Ba 233.527 Recovery = 100.07%								
Be 313.107†	477204.3	491.4	ug/L	1.30	491.4	ug/L	1.30	0.26%
QC value within limits for Be 313.107 Recovery = 98.27%								
Ca 317.933†	121097.6	17850	ug/L	94.9	17850	ug/L	94.9	0.53%
QC value within limits for Ca 317.933 Recovery = 96.46%								
Cd 214.440†	15169.9	495.6	ug/L	4.42	495.6	ug/L	4.42	0.89%
QC value within limits for Cd 214.440 Recovery = 99.12%								
Co 228.616†	5940.1	497.4	ug/L	4.05	497.4	ug/L	4.05	0.82%
QC value within limits for Co 228.616 Recovery = 99.48%								
Cr 267.716†	10064.4	501.4	ug/L	3.50	501.4	ug/L	3.50	0.70%
QC value within limits for Cr 267.716 Recovery = 100.27%								
Fe 238.204†	12017.6	5063	ug/L	39.5	5063	ug/L	39.5	0.78%
QC value within limits for Fe 238.204 Recovery = 92.05%								
K 766.490†	273835.6	39690	ug/L	1344.5	39690	ug/L	1344.5	3.39%
QC value within limits for K 766.490 Recovery = 99.23%								
Mg 285.213†	226681.1	18230	ug/L	517.4	18230	ug/L	517.4	2.84%
QC value within limits for Mg 285.213 Recovery = 98.52%								
Mn 257.610†	182713.1	498.2	ug/L	1.87	498.2	ug/L	1.87	0.38%
QC value within limits for Mn 257.610 Recovery = 99.64%								
Mo 202.031†	2055.8	467.0	ug/L	2.81	467.0	ug/L	2.81	0.60%
QC value within limits for Mo 202.031 Recovery = 93.39%								
Na 589.592†	464195.7	36880	ug/L	1243.0	36880	ug/L	1243.0	3.37%
QC value within limits for Na 589.592 Recovery = 92.21%								
Ni 231.604†	3757.7	506.0	ug/L	2.89	506.0	ug/L	2.89	0.57%
QC value within limits for Ni 231.604 Recovery = 101.20%								
Pb 220.353†	705.2	493.2	ug/L	7.91	493.2	ug/L	7.91	1.60%
QC value within limits for Pb 220.353 Recovery = 98.64%								
Sb 206.836†	730.2	470.7	ug/L	8.06	470.7	ug/L	8.06	1.71%
QC value within limits for Sb 206.836 Recovery = 94.14%								
Se 196.026†	263.6	467.6	ug/L	1.57	467.6	ug/L	1.57	0.34%
QC value within limits for Se 196.026 Recovery = 93.51%								
V 311.071†	82538.0	476.1	ug/L	1.31	476.1	ug/L	1.31	0.27%
QC value within limits for V 311.071 Recovery = 95.23%								
Sn 189.927†	779.4	483.2	ug/L	1.22	483.2	ug/L	1.22	0.25%
QC value within limits for Sn 189.927 Recovery = 96.64%								
Sr 421.552†	458351.4	492.8	ug/L	15.28	492.8	ug/L	15.28	3.10%
QC value within limits for Sr 421.552 Recovery = 98.56%								
Tl 190.801†	757.9	496.9	ug/L	5.02	496.9	ug/L	5.02	1.01%
QC value within limits for Tl 190.801 Recovery = 99.37%								
Zn 206.200†	4489.7	491.9	ug/L	4.55	491.9	ug/L	4.55	0.93%
QC value within limits for Zn 206.200 Recovery = 98.37%								
Ti 334.940†	255215.4	494.5	ug/L	1.37	494.5	ug/L	1.37	0.28%
QC value within limits for Ti 334.940 Recovery = 98.91%								
B 249.772†	14658.2	468.4	ug/L	4.74	468.4	ug/L	4.74	1.01%
QC value within limits for B 249.772 Recovery = 93.69%								
Cu 324.752†	143573.7	495.1	ug/L	0.80	495.1	ug/L	0.80	0.16%
QC value within limits for Cu 324.752 Recovery = 99.02%								
S 181.975†	1422.3	9423	ug/L	23.2	9423	ug/L	23.2	0.25%
QC value within limits for S 181.975 Recovery = 94.23%								
Zr 343.823†	114092.0	474.8	ug/L	1.04	474.8	ug/L	1.04	0.22%
QC value within limits for Zr 343.823 Recovery = 94.97%								
Li 670.784†	137052.6	511.4	ug/L	17.12	511.4	ug/L	17.12	3.35%
QC value within limits for Li 670.784 Recovery = 102.29%								

All analyte(s) passed QC.

Sequence No.: 45
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/28/2011 1:41:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	866237.5	1.000	mg/L	0.0072				0.72%
Y (radial)	108334.1	0.967	mg/L	0.0134				1.39%
Ag 328.068†	47.6	0.311	ug/L	0.0185	0.311	ug/L	0.0185	5.95%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-42.2	-4.213	ug/L	2.1190	-4.213	ug/L	2.1190	50.29%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.4	-1.532	ug/L	7.3396	-1.532	ug/L	7.3396	478.93%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.2	0.056	ug/L	0.0278	0.056	ug/L	0.0278	49.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	47.5	0.049	ug/L	0.0025	0.049	ug/L	0.0025	5.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	0.2	0.027	ug/L	0.6428	0.027	ug/L	0.6428	>999.9%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	-1.0	-0.034	ug/L	0.1487	-0.034	ug/L	0.1487	436.52%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	3.4	0.283	ug/L	0.1938	0.283	ug/L	0.1938	68.54%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.3	0.165	ug/L	0.2118	0.165	ug/L	0.2118	128.51%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	-8.8	-3.687	ug/L	3.1426	-3.687	ug/L	3.1426	85.24%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	-20.0	-2.905	ug/L	6.5571	-2.905	ug/L	6.5571	225.73%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	5.6	0.446	ug/L	0.2101	0.446	ug/L	0.2101	47.06%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	1.6	0.004	ug/L	0.0263	0.004	ug/L	0.0263	614.46%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-7.7	-1.742	ug/L	0.5804	-1.742	ug/L	0.5804	33.32%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-2256.3	-179.3	ug/L	5.35	-179.3	ug/L	5.35	2.98%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	4.0	0.540	ug/L	1.0237	0.540	ug/L	1.0237	189.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	9.8	6.838	ug/L	2.6576	6.838	ug/L	2.6576	38.86%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.9	3.129	ug/L	0.8238	3.129	ug/L	0.8238	26.33%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.7	-2.970	ug/L	0.4423	-2.970	ug/L	0.4423	14.89%
QC value within limits for Se 196.026 Recovery = Not calculated								
V 311.071†	-52.1	-0.308	ug/L	0.1401	-0.308	ug/L	0.1401	45.56%
QC value within limits for V 311.071 Recovery = Not calculated								
Sn 189.927†	-0.4	-0.255	ug/L	2.3269	-0.255	ug/L	2.3269	911.76%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-5.2	-0.006	ug/L	0.0246	-0.006	ug/L	0.0246	442.71%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Tl 190.801†	-3.4	-2.201	ug/L	2.5763	-2.201	ug/L	2.5763	117.05%
QC value within limits for Tl 190.801 Recovery = Not calculated								
Zn 206.200†	0.8	0.093	ug/L	0.9865	0.093	ug/L	0.9865	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ti 334.940†	78.5	0.152	ug/L	0.0544	0.152	ug/L	0.0544	35.79%
QC value within limits for Ti 334.940 Recovery = Not calculated								
B 249.772†	-244.3	-8.119	ug/L	0.4841	-8.119	ug/L	0.4841	5.96%
QC value within limits for B 249.772 Recovery = Not calculated								
Cu 324.752†	35.9	0.123	ug/L	0.0118	0.123	ug/L	0.0118	9.61%
QC value within limits for Cu 324.752 Recovery = Not calculated								
S 181.975†	-5.1	-32.44	ug/L	13.891	-32.44	ug/L	13.891	42.82%
QC value within limits for S 181.975 Recovery = Not calculated								
Zr 343.823†	0.2	0.001	ug/L	0.0152	0.001	ug/L	0.0152	>999.9%
QC value within limits for Zr 343.823 Recovery = Not calculated								
Li 670.784†	49.6	0.185	ug/L	0.4528	0.185	ug/L	0.4528	244.77%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 46
Sample ID: 460-24356-B-1-B DU
Analyst: JV

Autosampler Location: 68
Date Collected: 3/28/2011 1:45:02 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 460-24356-B-1-B DU

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	843891.1	0.974	mg/L	0.0036				0.37%
Y (radial)	112678.9	1.006	mg/L	0.0051				0.50%
Ag 328.068†	1401.4	14.56	ug/L	0.360	14.56	ug/L	0.360	2.48%
Al 396.153†	325358.8	32900	ug/L	26.8	32900	ug/L	26.8	0.08%
As 188.979†	79.7	105.9	ug/L	0.40	105.9	ug/L	0.40	0.37%
Ba 233.527†	212956.8	3784	ug/L	3.5	3784	ug/L	3.5	0.09%
Be 313.107†	-3912.3	1.724	ug/L	0.0362	1.724	ug/L	0.0362	2.10%
Ca 317.933†	445676.1	65680	ug/L	124.3	65680	ug/L	124.3	0.19%
Cd 214.440†	266.2	4.213	ug/L	0.1135	4.213	ug/L	0.1135	2.69%
Co 228.616†	402.4	27.72	ug/L	0.740	27.72	ug/L	0.740	2.67%
Cr 267.716†	2152.7	109.4	ug/L	0.55	109.4	ug/L	0.55	0.50%
Fe 238.204†	229227.8	96570	ug/L	254.0	96570	ug/L	254.0	0.26%
K 766.490†	41132.5	5962	ug/L	18.0	5962	ug/L	18.0	0.30%
Mg 285.213†	191596.8	15480	ug/L	3.8	15480	ug/L	3.8	0.02%
Mn 257.610†	645447.2	1762	ug/L	2.9	1762	ug/L	2.9	0.17%
Mo 202.031†	-8.9	1.872	ug/L	0.4674	1.872	ug/L	0.4674	24.97%
Na 589.592†	141179.1	11220	ug/L	6.8	11220	ug/L	6.8	0.06%
Ni 231.604†	9018.5	1213	ug/L	0.0	1213	ug/L	0.0	0.00%
Pb 220.353†	3211.6	2230	ug/L	22.1	2230	ug/L	22.1	0.99%
Sb 206.836†	194.5	130.6	ug/L	0.99	130.6	ug/L	0.99	0.76%
Se 196.026†	-63.7	-35.64	ug/L	19.046	-35.64	ug/L	19.046	53.44%
V 311.071†	19831.1	99.96	ug/L	0.516	99.96	ug/L	0.516	0.52%
Sn 189.927†	672.9	423.3	ug/L	7.10	423.3	ug/L	7.10	1.68%
Sr 421.552†	372203.5	399.0	ug/L	0.65	399.0	ug/L	0.65	0.16%
Tl 190.801†	-60.0	-12.14	ug/L	8.830	-12.14	ug/L	8.830	72.72%
Zn 206.200†	44084.0	4779	ug/L	10.9	4779	ug/L	10.9	0.23%
Ti 334.940†	598718.4	1160	ug/L	0.8	1160	ug/L	0.8	0.07%
B 249.772†	11928.5	26.13	ug/L	0.869	26.13	ug/L	0.869	3.33%
Cu 324.752†	1889014.3	6517	ug/L	13.1	6517	ug/L	13.1	0.20%
S 181.975†	3847.6	24790	ug/L	199.4	24790	ug/L	199.4	0.80%
Zr 343.823†	3791.0	13.12	ug/L	0.016	13.12	ug/L	0.016	0.12%
Li 670.784†	12806.7	47.79	ug/L	0.456	47.79	ug/L	0.456	0.95%

Sequence No.: 47 Autosampler Location: 69
Sample ID: 460-24356-B-1-C MS Date Collected: 3/28/2011 1:48:33 PM
Analyst: JV Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 460-24356-B-1-C MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	859763.4	0.992	mg/L	0.0028				0.29%
Y (radial)	110878.5	0.990	mg/L	0.0085				0.85%
Ag 328.068†	10032.0	70.01	ug/L	0.244	70.01	ug/L	0.244	0.35%
Al 396.153†	301306.0	30460	ug/L	19.2	30460	ug/L	19.2	0.06%
As 188.979†	254.7	299.8	ug/L	3.04	299.8	ug/L	3.04	1.01%
Ba 233.527†	202954.9	3607	ug/L	3.5	3607	ug/L	3.5	0.10%
Be 313.107†	15951.7	22.69	ug/L	0.007	22.69	ug/L	0.007	0.03%
Ca 317.933†	270570.8	39870	ug/L	58.7	39870	ug/L	58.7	0.15%
Cd 214.440†	2123.6	64.90	ug/L	0.424	64.90	ug/L	0.424	0.65%
Co 228.616†	1052.5	82.17	ug/L	0.526	82.17	ug/L	0.526	0.64%
Cr 267.716†	3253.7	164.2	ug/L	0.64	164.2	ug/L	0.64	0.39%
Fe 238.204†	230596.1	97140	ug/L	33.1	97140	ug/L	33.1	0.03%
K 766.490†	67592.3	9797	ug/L	19.1	9797	ug/L	19.1	0.19%
Mg 285.213†	172002.3	13900	ug/L	19.6	13900	ug/L	19.6	0.14%
Mn 257.610†	553108.3	1510	ug/L	0.7	1510	ug/L	0.7	0.04%
Mo 202.031†	821.7	190.8	ug/L	0.40	190.8	ug/L	0.40	0.21%
Na 589.592†	166812.0	13250	ug/L	21.2	13250	ug/L	21.2	0.16%
Ni 231.604†	3956.4	532.1	ug/L	5.15	532.1	ug/L	5.15	0.97%
Pb 220.353†	9634.2	6713	ug/L	15.5	6713	ug/L	15.5	0.23%
Sb 206.836†	409.6	267.8	ug/L	3.23	267.8	ug/L	3.23	1.21%
Se 196.026†	-3.0	65.04	ug/L	4.188	65.04	ug/L	4.188	6.44%

V 311.071†	28266.4	147.3 ug/L	0.28	147.3 ug/L	0.28	0.19%
Sn 189.927†	1233.9	768.1 ug/L	7.83	768.1 ug/L	7.83	1.02%
Sr 421.552†	272103.2	291.9 ug/L	0.37	291.9 ug/L	0.37	0.13%
Tl 190.801†	213.7	165.6 ug/L	3.76	165.6 ug/L	3.76	2.27%
Zn 206.200†	28709.6	3114 ug/L	5.7	3114 ug/L	5.7	0.18%
Ti 334.940†	662418.1	1284 ug/L	0.8	1284 ug/L	0.8	0.06%
B 249.772†	17273.2	201.8 ug/L	2.46	201.8 ug/L	2.46	1.22%
Cu 324.752†	1039677.6	3592 ug/L	7.9	3592 ug/L	7.9	0.22%
S 181.975†	5289.8	33930 ug/L	194.1	33930 ug/L	194.1	0.57%
Zr 343.823†	46528.7	191.0 ug/L	0.57	191.0 ug/L	0.57	0.30%
Li 670.784†	11900.2	44.41 ug/L	0.088	44.41 ug/L	0.088	0.20%

Sequence No.: 48
Sample ID: 460-24356-B-1-A PDS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 3/28/2011 1:51:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 460-24356-B-1-A PDS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	837919.4	0.967	mg/L	0.0094				0.97%
Y (radial)	108037.8	0.964	mg/L	0.0045				0.46%
Ag 328.068†	2072.3	16.96	ug/L	0.228	16.96	ug/L	0.228	1.34%
Al 396.153†	316460.7	31990	ug/L	60.3	31990	ug/L	60.3	0.19%
As 188.979†	281.4	329.0	ug/L	3.13	329.0	ug/L	3.13	0.95%
Ba 233.527†	166500.0	2959	ug/L	7.1	2959	ug/L	7.1	0.24%
Be 313.107†	93969.1	103.3	ug/L	0.22	103.3	ug/L	0.22	0.21%
Ca 317.933†	334196.4	49250	ug/L	45.4	49250	ug/L	45.4	0.09%
Cd 214.440†	3268.9	102.7	ug/L	1.56	102.7	ug/L	1.56	1.52%
Co 228.616†	1520.8	121.5	ug/L	0.82	121.5	ug/L	0.82	0.67%
Cr 267.716†	4306.1	216.5	ug/L	3.33	216.5	ug/L	3.33	1.54%
Fe 238.204†	214287.0	90270	ug/L	25.7	90270	ug/L	25.7	0.03%
K 766.490†	73621.6	10670	ug/L	0.5	10670	ug/L	0.5	0.00%
Mg 285.213†	235847.2	19030	ug/L	52.8	19030	ug/L	52.8	0.28%
Mn 257.610†	580013.8	1583	ug/L	2.1	1583	ug/L	2.1	0.13%
Mo 202.031†	1246.6	287.1	ug/L	0.41	287.1	ug/L	0.41	0.14%
Na 589.592†	193714.8	15390	ug/L	66.9	15390	ug/L	66.9	0.43%
Ni 231.604†	3412.5	459.0	ug/L	5.61	459.0	ug/L	5.61	1.22%
Pb 220.353†	2737.6	1901	ug/L	12.5	1901	ug/L	12.5	0.66%
Sb 206.836†	551.9	360.6	ug/L	7.36	360.6	ug/L	7.36	2.04%
Se 196.026†	115.2	269.3	ug/L	3.06	269.3	ug/L	3.06	1.13%
V 311.071†	37327.1	198.4	ug/L	0.94	198.4	ug/L	0.94	0.47%
Sn 189.927†	839.6	526.6	ug/L	1.56	526.6	ug/L	1.56	0.30%
Sr 421.552†	323789.3	347.3	ug/L	0.26	347.3	ug/L	0.26	0.08%
Tl 190.801†	403.0	289.9	ug/L	1.53	289.9	ug/L	1.53	0.53%
Zn 206.200†	22120.6	2400	ug/L	14.8	2400	ug/L	14.8	0.62%
Ti 334.940†	738277.8	1431	ug/L	1.7	1431	ug/L	1.7	0.12%
B 249.772†	19258.7	294.3	ug/L	7.10	294.3	ug/L	7.10	2.41%
Cu 324.752†	1106047.3	3820	ug/L	3.7	3820	ug/L	3.7	0.10%
S 181.975†	2802.1	18210	ug/L	327.3	18210	ug/L	327.3	1.80%
Zr 343.823†	75018.8	309.8	ug/L	0.20	309.8	ug/L	0.20	0.06%
Li 670.784†	38804.1	144.8	ug/L	0.20	144.8	ug/L	0.20	0.14%

Sequence No.: 49
Sample ID: 460-24356-B-1-A SD@5
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 3/28/2011 1:54:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 460-24356-B-1-A SD@5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	847546.2	0.978	mg/L	0.0040				0.41%
Y (radial)	112282.0	1.002	mg/L	0.0146				1.46%
Ag 328.068†	106.0	1.824	ug/L	0.1369	1.824	ug/L	0.1369	7.50%
Al 396.153†	56402.9	5703	ug/L	15.1	5703	ug/L	15.1	0.27%
As 188.979†	25.0	31.23	ug/L	0.431	31.23	ug/L	0.431	1.38%

Ba 233.527†	34657.2	615.8 ug/L	2.39	615.8 ug/L	2.39	0.39%
Be 313.107†	-846.4	0.325 ug/L	0.0303	0.325 ug/L	0.0303	9.31%
Ca 317.933†	60919.9	8978 ug/L	21.0	8978 ug/L	21.0	0.23%
Cd 214.440†	61.6	1.080 ug/L	0.2115	1.080 ug/L	0.2115	19.58%
Co 228.616†	71.8	4.765 ug/L	0.1454	4.765 ug/L	0.1454	3.05%
Cr 267.716†	490.9	24.90 ug/L	0.958	24.90 ug/L	0.958	3.85%
Fe 238.204†	47766.2	20120 ug/L	44.1	20120 ug/L	44.1	0.22%
K 766.490†	5492.2	796.1 ug/L	24.94	796.1 ug/L	24.94	3.13%
Mg 285.213†	32885.7	2659 ug/L	16.6	2659 ug/L	16.6	0.63%
Mn 257.610†	116865.3	319.1 ug/L	1.28	319.1 ug/L	1.28	0.40%
Mo 202.031†	-5.3	-0.387 ug/L	2.5076	-0.387 ug/L	2.5076	648.52%
Na 589.592†	23564.1	1872 ug/L	16.5	1872 ug/L	16.5	0.88%
Ni 231.604†	572.1	76.94 ug/L	0.614	76.94 ug/L	0.614	0.80%
Pb 220.353†	549.5	381.0 ug/L	0.16	381.0 ug/L	0.16	0.04%
Sb 206.836†	21.1	14.20 ug/L	2.030	14.20 ug/L	2.030	14.30%
Se 196.026†	-16.0	-13.30 ug/L	24.475	-13.30 ug/L	24.475	183.99%
V 311.071†	4333.5	22.03 ug/L	0.491	22.03 ug/L	0.491	2.23%
Sn 189.927†	70.8	45.26 ug/L	0.945	45.26 ug/L	0.945	2.09%
Sr 421.552†	49923.7	53.51 ug/L	0.135	53.51 ug/L	0.135	0.25%
Tl 190.801†	-8.3	-0.001 ug/L	4.7182	-0.001 ug/L	4.7182	>999.9%
Zn 206.200†	4481.2	486.0 ug/L	4.26	486.0 ug/L	4.26	0.88%
Ti 334.940†	124531.6	241.3 ug/L	0.86	241.3 ug/L	0.86	0.36%
B 249.772†	2121.4	-6.679 ug/L	0.3154	-6.679 ug/L	0.3154	4.72%
Cu 324.752†	221697.5	765.8 ug/L	1.71	765.8 ug/L	1.71	0.22%
S 181.975†	600.6	3874 ug/L	6.3	3874 ug/L	6.3	0.16%
Zr 343.823†	642.8	2.121 ug/L	0.1365	2.121 ug/L	0.1365	6.44%
Li 670.784†	2229.8	8.321 ug/L	0.2176	8.321 ug/L	0.2176	2.62%

Sequence No.: 50
Sample ID: 220-14998-A-1-D
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 3/28/2011 1:57:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14998-A-1-D

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	838609.3	0.968	mg/L	0.0082				0.85%
Y (radial)	109439.6	0.977	mg/L	0.0260				2.66%
Ag 328.068†	-2499.7	0.257	ug/L	0.2668	0.257	ug/L	0.2668	103.84%
Al 396.153†	347046.0	35090	ug/L	79.2	35090	ug/L	79.2	0.23%
As 188.979†	136.8	202.1	ug/L	2.03	202.1	ug/L	2.03	1.01%
Ba 233.527†	173474.3	3078	ug/L	18.3	3078	ug/L	18.3	0.59%
Be 313.107†	-732.6	2.431	ug/L	0.0145	2.431	ug/L	0.0145	0.60%
Ca 317.933†	434298.5	64000	ug/L	230.1	64000	ug/L	230.1	0.36%
Cd 214.440†	690.7	8.392	ug/L	0.5354	8.392	ug/L	0.5354	6.38%
Co 228.616†	639.7	41.17	ug/L	1.135	41.17	ug/L	1.135	2.76%
Cr 267.716†	16546.1	830.2	ug/L	8.15	830.2	ug/L	8.15	0.98%
Fe 238.204†	724382.6	305200	ug/L	9043.8	305200	ug/L	9043.8	2.96%
K 766.490†	24270.6	3518	ug/L	11.5	3518	ug/L	11.5	0.33%
Mg 285.213†	316061.3	25640	ug/L	42.5	25640	ug/L	42.5	0.17%
Mn 257.610†	689815.2	1883	ug/L	10.2	1883	ug/L	10.2	0.54%
Mo 202.031†	-26.1	6.444	ug/L	1.7237	6.444	ug/L	1.7237	26.75%
Na 589.592†	45280.9	3598	ug/L	0.8	3598	ug/L	0.8	0.02%
Ni 231.604†	918.8	123.6	ug/L	0.15	123.6	ug/L	0.15	0.12%
Pb 220.353†	6371.1	4405	ug/L	88.5	4405	ug/L	88.5	2.01%
Sb 206.836†	1.4	-3.105	ug/L	1.8069	-3.105	ug/L	1.8069	58.20%
Se 196.026†	-159.9	-74.26	ug/L	23.853	-74.26	ug/L	23.853	32.12%
V 311.071†	18182.0	89.32	ug/L	0.742	89.32	ug/L	0.742	0.83%
Sn 189.927†	275.9	176.1	ug/L	4.62	176.1	ug/L	4.62	2.62%
Sr 421.552†	243873.6	260.9	ug/L	0.26	260.9	ug/L	0.26	0.10%
Tl 190.801†	-85.5	-17.42	ug/L	3.072	-17.42	ug/L	3.072	17.63%
Zn 206.200†	29672.4	3225	ug/L	33.1	3225	ug/L	33.1	1.03%
Ti 334.940†	332280.2	643.9	ug/L	1.75	643.9	ug/L	1.75	0.27%
B 249.772†	37286.1	68.97	ug/L	41.988	68.97	ug/L	41.988	60.88%
Cu 324.752†	216365.9	779.0	ug/L	3.13	779.0	ug/L	3.13	0.40%
S 181.975†	2042.0	13510	ug/L	207.6	13510	ug/L	207.6	1.54%
Zr 343.823†	6764.5	19.74	ug/L	0.596	19.74	ug/L	0.596	3.02%
Li 670.784†	21693.4	80.95	ug/L	0.475	80.95	ug/L	0.475	0.59%

Sequence No.: 51
Sample ID: 220-14998-A-5-D
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 3/28/2011 2:01:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14998-A-5-D

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	820536.8	0.947	mg/L	0.0074				0.78%
Y (radial)	109853.2	0.981	mg/L	0.0105				1.08%
Ag 328.068†	-771.3	0.484	ug/L	0.0469	0.484	ug/L	0.0469	9.70%
Al 396.153†	378115.1	38230	ug/L	21.0	38230	ug/L	21.0	0.05%
As 188.979†	56.1	88.72	ug/L	1.993	88.72	ug/L	1.993	2.25%
Ba 233.527†	88771.2	1576	ug/L	6.1	1576	ug/L	6.1	0.39%
Be 313.107†	-1029.0	2.588	ug/L	0.0134	2.588	ug/L	0.0134	0.52%
Ca 317.933†	1380201.9	203400	ug/L	641.1	203400	ug/L	641.1	0.32%
Cd 214.440†	600.9	14.93	ug/L	0.410	14.93	ug/L	0.410	2.74%
Co 228.616†	553.0	41.10	ug/L	0.696	41.10	ug/L	0.696	1.69%
Cr 267.716†	9504.7	475.3	ug/L	1.19	475.3	ug/L	1.19	0.25%
Fe 238.204†	240480.4	101300	ug/L	596.2	101300	ug/L	596.2	0.59%
K 766.490†	31780.0	4606	ug/L	13.5	4606	ug/L	13.5	0.29%
Mg 285.213†	404649.9	32610	ug/L	62.9	32610	ug/L	62.9	0.19%
Mn 257.610†	560572.9	1530	ug/L	5.8	1530	ug/L	5.8	0.38%
Mo 202.031†	27.4	10.30	ug/L	0.530	10.30	ug/L	0.530	5.15%
Na 589.592†	21115.0	1678	ug/L	4.4	1678	ug/L	4.4	0.26%
Ni 231.604†	790.5	106.4	ug/L	1.81	106.4	ug/L	1.81	1.70%
Pb 220.353†	4936.4	3434	ug/L	30.6	3434	ug/L	30.6	0.89%
Sb 206.836†	-25.4	-2.491	ug/L	6.9959	-2.491	ug/L	6.9959	280.89%
Se 196.026†	-81.8	-34.04	ug/L	0.045	-34.04	ug/L	0.045	0.13%
V 311.071†	14598.0	73.46	ug/L	0.017	73.46	ug/L	0.017	0.02%
Sn 189.927†	91.4	69.26	ug/L	2.859	69.26	ug/L	2.859	4.13%
Sr 421.552†	435505.8	463.9	ug/L	1.25	463.9	ug/L	1.25	0.27%
Tl 190.801†	-49.6	-4.353	ug/L	4.4627	-4.353	ug/L	4.4627	102.52%
Zn 206.200†	14917.4	1622	ug/L	5.9	1622	ug/L	5.9	0.36%
Ti 334.940†	380454.7	737.2	ug/L	1.06	737.2	ug/L	1.06	0.14%
B 249.772†	11572.3	-3.928	ug/L	3.1909	-3.928	ug/L	3.1909	81.23%
Cu 324.752†	99624.7	354.3	ug/L	0.17	354.3	ug/L	0.17	0.05%
S 181.975†	439.1	3468	ug/L	5.1	3468	ug/L	5.1	0.15%
Zr 343.823†	5908.9	21.80	ug/L	0.148	21.80	ug/L	0.148	0.68%
Li 670.784†	20910.0	78.03	ug/L	0.960	78.03	ug/L	0.960	1.23%

Sequence No.: 52
Sample ID: 220-14998-A-7-D
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 3/28/2011 2:04:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14998-A-7-D

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	829185.1	0.957	mg/L	0.0133				1.39%
Y (radial)	109973.5	0.982	mg/L	0.0016				0.16%
Ag 328.068†	-1939.6	-0.833	ug/L	0.0243	-0.833	ug/L	0.0243	2.92%
Al 396.153†	359718.8	36370	ug/L	25.3	36370	ug/L	25.3	0.07%
As 188.979†	54.6	102.2	ug/L	3.01	102.2	ug/L	3.01	2.95%
Ba 233.527†	178190.0	3164	ug/L	5.4	3164	ug/L	5.4	0.17%
Be 313.107†	-424.7	2.500	ug/L	0.0077	2.500	ug/L	0.0077	0.31%
Ca 317.933†	479766.1	70700	ug/L	476.8	70700	ug/L	476.8	0.67%
Cd 214.440†	543.7	7.671	ug/L	0.3331	7.671	ug/L	0.3331	4.34%
Co 228.616†	561.0	37.87	ug/L	1.881	37.87	ug/L	1.881	4.97%
Cr 267.716†	28553.3	1426	ug/L	3.2	1426	ug/L	3.2	0.23%
Fe 238.204†	515931.1	217300	ug/L	1226.1	217300	ug/L	1226.1	0.56%
K 766.490†	30557.6	4429	ug/L	20.6	4429	ug/L	20.6	0.47%
Mg 285.213†	398070.4	32170	ug/L	27.8	32170	ug/L	27.8	0.09%
Mn 257.610†	624464.7	1704	ug/L	0.7	1704	ug/L	0.7	0.04%
Mo 202.031†	-14.4	5.533	ug/L	0.0222	5.533	ug/L	0.0222	0.40%
Na 589.592†	52325.4	4158	ug/L	19.0	4158	ug/L	19.0	0.46%

Ni 231.604†	936.7	126.0 ug/L	0.34	126.0 ug/L	0.34	0.27%
Pb 220.353†	9508.6	6608 ug/L	121.8	6608 ug/L	121.8	1.84%
Sb 206.836†	5.6	-7.098 ug/L	0.5126	-7.098 ug/L	0.5126	7.22%
Se 196.026†	-122.2	-61.47 ug/L	19.891	-61.47 ug/L	19.891	32.36%
V 311.071†	16826.3	84.53 ug/L	0.741	84.53 ug/L	0.741	0.88%
Sn 189.927†	101.4	68.69 ug/L	5.101	68.69 ug/L	5.101	7.43%
Sr 421.552†	224721.1	240.2 ug/L	0.29	240.2 ug/L	0.29	0.12%
Tl 190.801†	-73.9	-17.87 ug/L	4.400	-17.87 ug/L	4.400	24.62%
Zn 206.200†	24026.2	2619 ug/L	1.5	2619 ug/L	1.5	0.06%
Ti 334.940†	306554.0	594.0 ug/L	0.37	594.0 ug/L	0.37	0.06%
B 249.772†	26221.2	37.96 ug/L	5.109	37.96 ug/L	5.109	13.46%
Cu 324.752†	127509.9	463.2 ug/L	0.44	463.2 ug/L	0.44	0.10%
S 181.975†	1538.8	10450 ug/L	275.9	10450 ug/L	275.9	2.64%
Zr 343.823†	5787.2	18.10 ug/L	0.377	18.10 ug/L	0.377	2.08%
Li 670.784†	19861.9	74.12 ug/L	0.877	74.12 ug/L	0.877	1.18%

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Sequence No.: 53
Sample ID: 220-15052-A-1-A ~~@10~~ JV 3/28/11
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 3/28/2011 2:07:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-1-A ~~@10~~ JV 3/28/11

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	778104.7	0.898	mg/L	0.0004				0.05%
Y (radial)	102808.4	0.918	mg/L	0.0015				0.17%
Ag 328.068†	-239.8	-2.260	ug/L	0.2058	-2.260	ug/L	0.2058	9.11%
Al 396.153†	11418.6	1155	ug/L	4.5	1155	ug/L	4.5	0.39%
As 188.979†	3.7	24.78	ug/L	2.476	24.78	ug/L	2.476	9.99%
Ba 233.527†	3398.5	60.50	ug/L	0.801	60.50	ug/L	0.801	1.32%
Be 313.107†	-25873.8	0.305	ug/L	0.7223	0.305	ug/L	0.7223	236.61%
Ca 317.933†	2709478.3	399300	ug/L	723.9	399300	ug/L	723.9	0.18%
Cd 214.440†	2637.7	86.04	ug/L	1.125	86.04	ug/L	1.125	1.31%
Co 228.616†	14825.6	1231	ug/L	9.9	1231	ug/L	9.9	0.81%
Cr 267.716†	4361.8	217.2	ug/L	1.77	217.2	ug/L	1.77	0.82%
Fe 238.204†	8998.9	3791	ug/L	22.8	3791	ug/L	22.8	0.60%
K 766.490†	5309.2	769.5	ug/L	3.00	769.5	ug/L	3.00	0.39%
Mg 285.213†	12890.2	1039	ug/L	1.8	1039	ug/L	1.8	0.17%
Mn 257.610†	19166.5	52.30	ug/L	1.293	52.30	ug/L	1.293	2.47%
Mo 202.031†	-11.6	-4.928	ug/L	0.9120	-4.928	ug/L	0.9120	18.50%
Na 589.592†	7547.0	599.7	ug/L	4.16	599.7	ug/L	4.16	0.69%
Ni 231.604†	104.6	15.84	ug/L	0.820	15.84	ug/L	0.820	5.17%
Pb 220.353†	28229.8	19700	ug/L	274.4	19700	ug/L	274.4	1.39%
Sb 206.836†	-44.9	6.922	ug/L	1.9737	6.922	ug/L	1.9737	28.51%
Se 196.026†	-50.0	2.409	ug/L	12.2301	2.409	ug/L	12.2301	507.76%
V 311.071†	13614.3	18.18	ug/L	1.985	18.18	ug/L	1.985	10.92%
Sn 189.927†	-46.7	17.32	ug/L	3.048	17.32	ug/L	3.048	17.60%
Sr 421.552†	181752.8	186.3	ug/L	0.36	186.3	ug/L	0.36	0.20%
Tl 190.801†	-127.8	-0.172	ug/L	0.8159	-0.172	ug/L	0.8159	475.10%
Zn 206.200†	1492525.9	161800	ug/L	15.9	161800	ug/L	15.9	0.01%
Ti 334.940†	2800817.8	5427	ug/L	0.4	5427	ug/L	0.4	0.01%
B 249.772†	2485.3	68.16	ug/L	1.348	68.16	ug/L	1.348	1.98%
Cu 324.752†	58371.2	201.5	ug/L	3.74	201.5	ug/L	3.74	1.85%
S 181.975†	42655.6	271300	ug/L	4732.4	271300	ug/L	4732.4	1.74%
Zr 343.823†	41020.6	170.7	ug/L	3.44	170.7	ug/L	3.44	2.01%
Li 670.784†	705.5	2.633	ug/L	0.1071	2.633	ug/L	0.1071	4.07%

User canceled analysis.

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Analysis Begun

Start Time: 3/28/2011 2:20:17 PM
Logged In Analyst: ctmetals
Spectrometer Model: Optima 4300 DV, S/N 069N-na

Plasma On Time: 3/28/2011 9:50:51 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d
Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

Sequence No.: 54
Sample ID: 220-15052-A-2-A @10
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 3/28/2011 2:20:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-2-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	831139.3	0.959	mg/L	0.0003				0.04%
Y (radial)	108736.3	0.971	mg/L	0.0023				0.24%
Ag 328.068†	3.8	0.214	ug/L	0.0200	0.214	ug/L	0.0200	9.37%
Al 396.153†	9434.8	954.1	ug/L	3.07	954.1	ug/L	3.07	0.32%
As 188.979†	-10.1	-9.432	ug/L	0.8192	-9.432	ug/L	0.8192	8.69%
Ba 233.527†	4337.7	77.15	ug/L	0.151	77.15	ug/L	0.151	0.20%
Be 313.107†	-1080.9	-0.060	ug/L	0.0178	-0.060	ug/L	0.0178	29.61%
Ca 317.933†	204280.2	30100	ug/L	73.7	30100	ug/L	73.7	0.24%
Cd 214.440†	480.3	15.60	ug/L	0.443	15.60	ug/L	0.443	2.84%
Co 228.616†	762.5	63.40	ug/L	1.167	63.40	ug/L	1.167	1.84%
Cr 267.716†	433.2	21.63	ug/L	0.955	21.63	ug/L	0.955	4.42%
Fe 238.204†	4847.4	2042	ug/L	25.4	2042	ug/L	25.4	1.25%
K 766.490†	515.8	74.76	ug/L	17.226	74.76	ug/L	17.226	23.04%
Mg 285.213†	10669.7	859.3	ug/L	7.90	859.3	ug/L	7.90	0.92%
Mn 257.610†	4867.3	13.26	ug/L	0.016	13.26	ug/L	0.016	0.12%
Mo 202.031†	-13.8	-3.173	ug/L	0.2358	-3.173	ug/L	0.2358	7.43%
Na 589.592†	-424.0	-33.69	ug/L	3.123	-33.69	ug/L	3.123	9.27%
Ni 231.604†	55.3	7.522	ug/L	0.5818	7.522	ug/L	0.5818	7.73%
Pb 220.353†	1340.5	935.3	ug/L	0.98	935.3	ug/L	0.98	0.11%
Sb 206.836†	-22.2	-11.68	ug/L	0.195	-11.68	ug/L	0.195	1.67%
Se 196.026†	-20.3	-27.50	ug/L	0.411	-27.50	ug/L	0.411	1.50%
V 311.071†	6160.5	33.69	ug/L	0.287	33.69	ug/L	0.287	0.85%
Sn 189.927†	-12.9	-5.509	ug/L	1.2519	-5.509	ug/L	1.2519	22.72%
Sr 421.552†	24230.2	25.37	ug/L	0.146	25.37	ug/L	0.146	0.57%
Tl 190.801†	-24.0	-11.53	ug/L	0.242	-11.53	ug/L	0.242	2.10%
Zn 206.200†	318654.6	34540	ug/L	148.0	34540	ug/L	148.0	0.43%
Ti 334.940†	109380.0	211.9	ug/L	0.13	211.9	ug/L	0.13	0.06%
B 249.772†	-97.7	-11.10	ug/L	0.202	-11.10	ug/L	0.202	1.82%
Cu 324.752†	5908.5	20.58	ug/L	0.070	20.58	ug/L	0.070	0.34%
S 181.975†	1304.3	8312	ug/L	76.8	8312	ug/L	76.8	0.92%
Zr 343.823†	106.7	0.388	ug/L	0.0492	0.388	ug/L	0.0492	12.70%
Li 670.784†	7.6	0.028	ug/L	0.1138	0.028	ug/L	0.1138	403.70%

Sequence No.: 55
Sample ID: 220-15052-A-3-A @10
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 3/28/2011 2:23:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-3-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	846108.5	0.976	mg/L	0.0011				0.11%
Y (radial)	107291.1	0.958	mg/L	0.0046				0.48%
Ag 328.068†	23.2	0.187	ug/L	0.0339	0.187	ug/L	0.0339	18.13%
Al 396.153†	19195.7	1941	ug/L	12.6	1941	ug/L	12.6	0.65%
As 188.979†	-9.1	-9.505	ug/L	0.2287	-9.505	ug/L	0.2287	2.41%
Ba 233.527†	34049.5	605.4	ug/L	0.38	605.4	ug/L	0.38	0.06%
Be 313.107†	-2000.2	-0.007	ug/L	0.0495	-0.007	ug/L	0.0495	665.73%
Ca 317.933†	75129.3	11070	ug/L	16.1	11070	ug/L	16.1	0.15%
Cd 214.440†	5746.7	187.8	ug/L	1.46	187.8	ug/L	1.46	0.78%
Co 228.616†	9.4	-0.123	ug/L	0.1128	-0.123	ug/L	0.1128	91.49%
Cr 267.716†	144.9	7.224	ug/L	0.2364	7.224	ug/L	0.2364	3.27%
Fe 238.204†	690.5	290.9	ug/L	1.09	290.9	ug/L	1.09	0.38%
K 766.490†	3172.6	459.8	ug/L	7.78	459.8	ug/L	7.78	1.69%
Mg 285.213†	10163.4	817.2	ug/L	3.69	817.2	ug/L	3.69	0.45%
Mn 257.610†	8326.9	22.71	ug/L	0.048	22.71	ug/L	0.048	0.21%
Mo 202.031†	-8.8	-1.994	ug/L	0.8002	-1.994	ug/L	0.8002	40.13%

Na 589.592†	-1563.8	-124.3 ug/L	3.97	-124.3 ug/L	3.97	3.20%
Ni 231.604†	14.1	1.892 ug/L	0.4783	1.892 ug/L	0.4783	25.29%
Pb 220.353†	38842.6	27110 ug/L	188.7	27110 ug/L	188.7	0.70%
Sb 206.836†	-15.1	-8.806 ug/L	4.0424	-8.806 ug/L	4.0424	45.91%
Se 196.026†	-9.9	-14.65 ug/L	0.226	-14.65 ug/L	0.226	1.54%
V 311.071†	1436.1	3.770 ug/L	0.0086	3.770 ug/L	0.0086	0.23%
Sn 189.927†	-4.5	-0.113 ug/L	2.5244	-0.113 ug/L	2.5244	>999.9%
Sr 421.552†	37462.0	40.05 ug/L	0.044	40.05 ug/L	0.044	0.11%
Tl 190.801†	-15.8	-4.249 ug/L	4.8874	-4.249 ug/L	4.8874	115.02%
Zn 206.200†	313027.1	33930 ug/L	95.7	33930 ug/L	95.7	0.28%
Ti 334.940†	213273.7	413.3 ug/L	0.30	413.3 ug/L	0.30	0.07%
B 249.772†	-328.3	-12.04 ug/L	0.584	-12.04 ug/L	0.584	4.85%
Cu 324.752†	1095.3	3.805 ug/L	0.1582	3.805 ug/L	0.1582	4.16%
S 181.975†	1392.0	8869 ug/L	115.8	8869 ug/L	115.8	1.31%
Zr 343.823†	-20.4	-0.093 ug/L	0.1882	-0.093 ug/L	0.1882	202.60%
Li 670.784†	287.4	1.072 ug/L	0.0745	1.072 ug/L	0.0745	6.95%

User canceled analysis.

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Analysis Begun

Start Time: 3/28/2011 2:34:27 PM
Logged In Analyst: ctmetals
Spectrometer Model: Optima 4300 DV, S/N 069N-na
Plasma On Time: 3/28/2011 9:50:51 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d
Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

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Sequence No.: 56
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 3/28/2011 2:34:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	841998.0	0.972	mg/L	0.0047				0.49%
Y (radial)	108648.7	0.970	mg/L	0.0005				0.05%
Ag 328.068†	37186.9	241.5	ug/L	1.22	241.5	ug/L	1.22	0.51%
QC value within limits for Ag 328.068 Recovery = 96.61%								
Al 396.153†	48774.9	4916	ug/L	5.8	4916	ug/L	5.8	0.12%
QC value within limits for Al 396.153 Recovery = 98.33%								
As 188.979†	440.2	494.5	ug/L	1.81	494.5	ug/L	1.81	0.37%
QC value within limits for As 188.979 Recovery = 98.89%								
Ba 233.527†	28074.9	500.0	ug/L	0.43	500.0	ug/L	0.43	0.09%
QC value within limits for Ba 233.527 Recovery = 100.00%								
Be 313.107†	476739.0	490.9	ug/L	0.39	490.9	ug/L	0.39	0.08%
QC value within limits for Be 313.107 Recovery = 98.18%								
Ca 317.933†	120971.9	17830	ug/L	22.9	17830	ug/L	22.9	0.13%
QC value within limits for Ca 317.933 Recovery = 96.36%								
Cd 214.440†	15044.0	491.5	ug/L	3.31	491.5	ug/L	3.31	0.67%
QC value within limits for Cd 214.440 Recovery = 98.30%								
Co 228.616†	5883.4	492.6	ug/L	3.63	492.6	ug/L	3.63	0.74%
QC value within limits for Co 228.616 Recovery = 98.53%								
Cr 267.716†	9968.2	496.6	ug/L	3.89	496.6	ug/L	3.89	0.78%
QC value within limits for Cr 267.716 Recovery = 99.32%								
Fe 238.204†	12132.4	5111	ug/L	18.0	5111	ug/L	18.0	0.35%
QC value within limits for Fe 238.204 Recovery = 92.93%								
K 766.490†	264376.2	38320	ug/L	213.6	38320	ug/L	213.6	0.56%
QC value within limits for K 766.490 Recovery = 95.80%								
Mg 285.213†	220677.2	17740	ug/L	60.7	17740	ug/L	60.7	0.34%
QC value within limits for Mg 285.213 Recovery = 95.91%								
Mn 257.610†	182577.4	497.9	ug/L	0.74	497.9	ug/L	0.74	0.15%
QC value within limits for Mn 257.610 Recovery = 99.57%								
Mo 202.031†	2040.9	463.6	ug/L	0.93	463.6	ug/L	0.93	0.20%
QC value within limits for Mo 202.031 Recovery = 92.72%								
Na 589.592†	458108.0	36400	ug/L	143.0	36400	ug/L	143.0	0.39%

QC value within limits for Na 589.592 Recovery = 91.00%						
Ni 231.604†	3706.5	499.1 ug/L	3.23	499.1 ug/L	3.23	0.65%
QC value within limits for Ni 231.604 Recovery = 99.82%						
Pb 220.353†	700.4	489.8 ug/L	7.17	489.8 ug/L	7.17	1.46%
QC value within limits for Pb 220.353 Recovery = 97.96%						
Sb 206.836†	732.8	472.3 ug/L	0.17	472.3 ug/L	0.17	0.04%
QC value within limits for Sb 206.836 Recovery = 94.47%						
Se 196.026†	263.2	466.9 ug/L	13.59	466.9 ug/L	13.59	2.91%
QC value within limits for Se 196.026 Recovery = 93.38%						
V 311.071†	82347.7	475.0 ug/L	0.77	475.0 ug/L	0.77	0.16%
QC value within limits for V 311.071 Recovery = 95.01%						
Sn 189.927†	768.4	476.4 ug/L	7.39	476.4 ug/L	7.39	1.55%
QC value within limits for Sn 189.927 Recovery = 95.29%						
Sr 421.552†	447240.9	480.8 ug/L	1.16	480.8 ug/L	1.16	0.24%
QC value within limits for Sr 421.552 Recovery = 96.17%						
Tl 190.801†	756.2	495.8 ug/L	2.16	495.8 ug/L	2.16	0.43%
QC value within limits for Tl 190.801 Recovery = 99.17%						
Zn 206.200†	4484.6	491.3 ug/L	3.68	491.3 ug/L	3.68	0.75%
QC value within limits for Zn 206.200 Recovery = 98.25%						
Ti 334.940†	255191.9	494.5 ug/L	0.05	494.5 ug/L	0.05	0.01%
QC value within limits for Ti 334.940 Recovery = 98.90%						
B 249.772†	14283.1	455.8 ug/L	3.02	455.8 ug/L	3.02	0.66%
QC value within limits for B 249.772 Recovery = 91.15%						
Cu 324.752†	142984.2	493.1 ug/L	0.83	493.1 ug/L	0.83	0.17%
QC value within limits for Cu 324.752 Recovery = 98.61%						
S 181.975†	1399.0	9265 ug/L	37.1	9265 ug/L	37.1	0.40%
QC value within limits for S 181.975 Recovery = 92.65%						
Zr 343.823†	113582.6	472.7 ug/L	0.40	472.7 ug/L	0.40	0.08%
QC value within limits for Zr 343.823 Recovery = 94.54%						
Li 670.784†	131686.7	491.4 ug/L	3.28	491.4 ug/L	3.28	0.67%
QC value within limits for Li 670.784 Recovery = 98.28%						

All analyte(s) passed QC.

Sequence No.: 57 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/28/2011 2:37:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	858746.0	0.991	mg/L	0.0097				0.98%
Y (radial)	107382.8	0.959	mg/L	0.0032				0.34%
Ag 328.068†	19.9	0.130	ug/L	0.0419	0.130	ug/L	0.0419	32.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-24.7	-2.481	ug/L	3.6328	-2.481	ug/L	3.6328	146.41%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.4	1.600	ug/L	0.0365	1.600	ug/L	0.0365	2.28%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.038	ug/L	0.1299	-0.038	ug/L	0.1299	341.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-12.6	-0.011	ug/L	0.0035	-0.011	ug/L	0.0035	30.55%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-5.6	-0.829	ug/L	0.1336	-0.829	ug/L	0.1336	16.11%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	9.2	0.301	ug/L	0.0175	0.301	ug/L	0.0175	5.80%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	2.9	0.241	ug/L	0.6042	0.241	ug/L	0.6042	250.80%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.6	-0.127	ug/L	0.4059	-0.127	ug/L	0.4059	318.86%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	-12.8	-5.396	ug/L	1.4832	-5.396	ug/L	1.4832	27.49%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	-101.7	-14.74	ug/L	2.679	-14.74	ug/L	2.679	18.17%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	8.1	0.646	ug/L	0.4035	0.646	ug/L	0.4035	62.47%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-15.4	-0.042	ug/L	0.0080	-0.042	ug/L	0.0080	19.06%
QC value within limits for Mn 257.610 Recovery = Not calculated								

Mo 202.031†	-1.6	-0.365 ug/L	1.3323	-0.365 ug/L	1.3323	364.86%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592†	-1966.7	-156.3 ug/L	6.88	-156.3 ug/L	6.88	4.40%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ni 231.604†	2.1	0.287 ug/L	0.3128	0.287 ug/L	0.3128	109.15%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	8.9	6.243 ug/L	3.1227	6.243 ug/L	3.1227	50.02%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.5	0.989 ug/L	1.4942	0.989 ug/L	1.4942	151.01%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.8	-1.368 ug/L	9.9624	-1.368 ug/L	9.9624	728.28%
QC value within limits for Se 196.026 Recovery = Not calculated						
V 311.071†	26.7	0.153 ug/L	0.0534	0.153 ug/L	0.0534	34.79%
QC value within limits for V 311.071 Recovery = Not calculated						
Sn 189.927†	-3.8	-2.325 ug/L	2.4604	-2.325 ug/L	2.4604	105.83%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-19.7	-0.021 ug/L	0.0495	-0.021 ug/L	0.0495	233.76%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Tl 190.801†	1.8	1.176 ug/L	0.8861	1.176 ug/L	0.8861	75.33%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	5.4	0.583 ug/L	0.5955	0.583 ug/L	0.5955	102.14%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	150.6	0.292 ug/L	0.0016	0.292 ug/L	0.0016	0.56%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-412.0	-13.69 ug/L	0.126	-13.69 ug/L	0.126	0.92%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	127.7	0.439 ug/L	0.1861	0.439 ug/L	0.1861	42.37%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-3.4	-21.50 ug/L	8.454	-21.50 ug/L	8.454	39.33%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	5.5	0.023 ug/L	0.1328	0.023 ug/L	0.1328	580.78%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	11.2	0.042 ug/L	0.2540	0.042 ug/L	0.2540	607.96%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 58
Sample ID: 220-15052-A-4-A @10
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 3/28/2011 2:41:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-4-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	845364.4	0.975	mg/L	0.0026				0.27%
Y (radial)	106726.1	0.953	mg/L	0.0155				1.62%
Ag 328.068†	112.6	0.849	ug/L	0.0423	0.849	ug/L	0.0423	4.98%
Al 396.153†	14242.9	1440	ug/L	14.4	1440	ug/L	14.4	1.00%
As 188.979†	-2.5	-1.967	ug/L	0.2488	-1.967	ug/L	0.2488	12.64%
Ba 233.527†	32495.2	577.7	ug/L	1.58	577.7	ug/L	1.58	0.27%
Be 313.107†	-1328.5	0.018	ug/L	0.0182	0.018	ug/L	0.0182	98.76%
Ca 317.933†	79093.2	11660	ug/L	210.4	11660	ug/L	210.4	1.80%
Cd 214.440†	8925.0	291.6	ug/L	0.41	291.6	ug/L	0.41	0.14%
Co 228.616†	18.2	0.859	ug/L	0.5307	0.859	ug/L	0.5307	61.81%
Cr 267.716†	52.5	2.662	ug/L	0.2292	2.662	ug/L	0.2292	8.61%
Fe 238.204†	4042.7	1703	ug/L	41.0	1703	ug/L	41.0	2.41%
K 766.490†	2580.6	374.0	ug/L	48.51	374.0	ug/L	48.51	12.97%
Mg 285.213†	15068.7	1213	ug/L	20.3	1213	ug/L	20.3	1.67%
Mn 257.610†	11097.2	30.26	ug/L	0.047	30.26	ug/L	0.047	0.16%
Mo 202.031†	-7.2	-1.569	ug/L	1.7356	-1.569	ug/L	1.7356	110.61%
Na 589.592†	-447.5	-35.56	ug/L	7.154	-35.56	ug/L	7.154	20.12%
Ni 231.604†	28.5	3.828	ug/L	0.4429	3.828	ug/L	0.4429	11.57%
Pb 220.353†	50554.5	35280	ug/L	133.7	35280	ug/L	133.7	0.38%
Sb 206.836†	-6.9	-3.356	ug/L	0.7205	-3.356	ug/L	0.7205	21.47%
Se 196.026†	-8.2	-10.62	ug/L	6.698	-10.62	ug/L	6.698	63.10%
V 311.071†	2235.0	9.901	ug/L	0.3707	9.901	ug/L	0.3707	3.74%
Sn 189.927†	-3.5	-0.166	ug/L	5.5568	-0.166	ug/L	5.5568	>999.9%
Sr 421.552†	25639.2	27.32	ug/L	0.193	27.32	ug/L	0.193	0.71%
Tl 190.801†	-5.5	0.800	ug/L	5.7184	0.800	ug/L	5.7184	714.65%

Zn 206.200†	404903.8	43890 ug/L	91.2	43890 ug/L	91.2	0.21%
Ti 334.940†	144095.2	279.2 ug/L	0.52	279.2 ug/L	0.52	0.19%
B 249.772†	-110.7	-10.23 ug/L	0.160	-10.23 ug/L	0.160	1.56%
Cu 324.752†	2846.3	9.992 ug/L	0.0199	9.992 ug/L	0.0199	0.20%
S 181.975†	1501.7	9575 ug/L	3.9	9575 ug/L	3.9	0.04%
Zr 343.823†	334.8	1.347 ug/L	0.0303	1.347 ug/L	0.0303	2.25%
Li 670.784†	247.1	0.922 ug/L	0.0893	0.922 ug/L	0.0893	9.68%

Sequence No.: 59 **Autosampler Location: 79**
Sample ID: 220-15052-A-5-A @10 **Date Collected: 3/28/2011 2:44:42 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-15052-A-5-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	846812.3	0.977	mg/L	0.0011				0.12%
Y (radial)	105172.4	0.939	mg/L	0.0082				0.87%
Ag 328.068†	82.5	0.360	ug/L	0.0060	0.360	ug/L	0.0060	1.66%
Al 396.153†	27159.1	2746	ug/L	7.2	2746	ug/L	7.2	0.26%
As 188.979†	-1.8	5.928	ug/L	5.0724	5.928	ug/L	5.0724	85.57%
Ba 233.527†	137453.1	2444	ug/L	4.2	2444	ug/L	4.2	0.17%
Be 313.107†	-1417.3	0.520	ug/L	0.0000	0.520	ug/L	0.0000	0.00%
Ca 317.933†	11257.6	1659	ug/L	3.1	1659	ug/L	3.1	0.19%
Cd 214.440†	67.0	2.023	ug/L	0.1853	2.023	ug/L	0.1853	9.16%
Co 228.616†	682.7	56.25	ug/L	0.449	56.25	ug/L	0.449	0.80%
Cr 267.716†	25349.1	1261	ug/L	3.0	1261	ug/L	3.0	0.24%
Fe 238.204†	8470.5	3568	ug/L	1.2	3568	ug/L	1.2	0.03%
K 766.490†	1050.6	152.3	ug/L	9.94	152.3	ug/L	9.94	6.53%
Mg 285.213†	9381.5	756.9	ug/L	0.08	756.9	ug/L	0.08	0.01%
Mn 257.610†	7010.7	19.11	ug/L	0.170	19.11	ug/L	0.170	0.89%
Mo 202.031†	-9.4	-2.099	ug/L	0.9161	-2.099	ug/L	0.9161	43.64%
Na 589.592†	-1021.7	-81.19	ug/L	3.156	-81.19	ug/L	3.156	3.89%
Ni 231.604†	41.5	5.660	ug/L	0.7161	5.660	ug/L	0.7161	12.65%
Pb 220.353†	12355.7	8623	ug/L	60.3	8623	ug/L	60.3	0.70%
Sb 206.836†	20.2	-2.362	ug/L	4.0477	-2.362	ug/L	4.0477	171.37%
Se 196.026†	-1.2	0.673	ug/L	10.9597	0.673	ug/L	10.9597	>999.9%
V 311.071†	3072.9	13.14	ug/L	0.356	13.14	ug/L	0.356	2.71%
Sn 189.927†	-2.7	0.461	ug/L	0.7765	0.461	ug/L	0.7765	168.57%
Sr 421.552†	93556.3	100.6	ug/L	0.22	100.6	ug/L	0.22	0.22%
Tl 190.801†	-9.5	-0.811	ug/L	1.4080	-0.811	ug/L	1.4080	173.70%
Zn 206.200†	23031.1	2509	ug/L	19.0	2509	ug/L	19.0	0.76%
Ti 334.940†	205981.9	399.1	ug/L	0.68	399.1	ug/L	0.68	0.17%
B 249.772†	-33.1	-14.81	ug/L	0.287	-14.81	ug/L	0.287	1.94%
Cu 324.752†	4212.1	14.90	ug/L	0.032	14.90	ug/L	0.032	0.21%
S 181.975†	437.2	2796	ug/L	24.7	2796	ug/L	24.7	0.88%
Zr 343.823†	15744.3	65.45	ug/L	0.088	65.45	ug/L	0.088	0.13%
Li 670.784†	2030.8	7.578	ug/L	0.1580	7.578	ug/L	0.1580	2.09%

Sequence No.: 60 **Autosampler Location: 80**
Sample ID: 220-15052-A-6-A @10 **Date Collected: 3/28/2011 2:47:44 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-15052-A-6-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	828115.6	0.956	mg/L	0.0010				0.10%
Y (radial)	104953.6	0.937	mg/L	0.0084				0.90%
Ag 328.068†	65.8	0.480	ug/L	0.0550	0.480	ug/L	0.0550	11.45%
Al 396.153†	11113.0	1124	ug/L	6.4	1124	ug/L	6.4	0.57%
As 188.979†	-3.1	-2.521	ug/L	1.3816	-2.521	ug/L	1.3816	54.80%
Ba 233.527†	1089.9	19.37	ug/L	0.224	19.37	ug/L	0.224	1.16%
Be 313.107†	-412.4	-0.001	ug/L	0.0198	-0.001	ug/L	0.0198	>999.9%
Ca 317.933†	123804.5	18240	ug/L	114.6	18240	ug/L	114.6	0.63%
Cd 214.440†	5027.2	164.3	ug/L	1.07	164.3	ug/L	1.07	0.65%

Co 228.616†	439.2	36.61	ug/L	0.169	36.61	ug/L	0.169	0.46%
Cr 267.716†	55.4	2.778	ug/L	0.0905	2.778	ug/L	0.0905	3.26%
Fe 238.204†	1707.9	719.5	ug/L	11.85	719.5	ug/L	11.85	1.65%
K 766.490†	66188.2	9593	ug/L	30.0	9593	ug/L	30.0	0.31%
Mg 285.213†	33372.8	2683	ug/L	20.4	2683	ug/L	20.4	0.76%
Mn 257.610†	11279.5	30.69	ug/L	0.249	30.69	ug/L	0.249	0.81%
Mo 202.031†	-7.1	-1.663	ug/L	1.4899	-1.663	ug/L	1.4899	89.61%
Na 589.592†	-1208.8	-96.05	ug/L	1.561	-96.05	ug/L	1.561	1.62%
Ni 231.604†	15.9	2.194	ug/L	0.6837	2.194	ug/L	0.6837	31.17%
Pb 220.353†	64301.5	44880	ug/L	9.3	44880	ug/L	9.3	0.02%
Sb 206.836†	-17.9	-9.863	ug/L	9.1236	-9.863	ug/L	9.1236	92.50%
Se 196.026†	-8.0	-9.458	ug/L	4.2683	-9.458	ug/L	4.2683	45.13%
V 311.071†	780.9	3.548	ug/L	0.3156	3.548	ug/L	0.3156	8.89%
Sn 189.927†	22.8	15.29	ug/L	1.532	15.29	ug/L	1.532	10.02%
Sr 421.552†	21145.7	22.33	ug/L	0.120	22.33	ug/L	0.120	0.54%
Tl 190.801†	-12.5	-6.281	ug/L	6.2940	-6.281	ug/L	6.2940	100.20%
Zn 206.200†	247336.4	26810	ug/L	123.0	26810	ug/L	123.0	0.46%
Ti 334.940†	44041.8	85.34	ug/L	0.030	85.34	ug/L	0.030	0.04%
B 249.772†	-162.0	-8.154	ug/L	0.5941	-8.154	ug/L	0.5941	7.29%
Cu 324.752†	1494.3	5.226	ug/L	0.0826	5.226	ug/L	0.0826	1.58%
S 181.975†	4022.7	25640	ug/L	231.8	25640	ug/L	231.8	0.90%
Zr 343.823†	-22.2	-0.112	ug/L	0.0359	-0.112	ug/L	0.0359	32.03%
Li 670.784†	772.2	2.882	ug/L	0.0445	2.882	ug/L	0.0445	1.54%

Sequence No.: 61
Sample ID: 220-15052-A-7-A @10
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 3/28/2011 2:51:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-7-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	825192.3	0.952	mg/L	0.0141				1.48%
Y (radial)	108096.1	0.965	mg/L	0.0043				0.45%
Ag 328.068†	-68.5	-0.329	ug/L	0.0618	-0.329	ug/L	0.0618	18.80%
Al 396.153†	5103.3	516.1	ug/L	3.10	516.1	ug/L	3.10	0.60%
As 188.979†	-16.1	-15.77	ug/L	2.095	-15.77	ug/L	2.095	13.29%
Ba 233.527†	472.9	8.368	ug/L	0.1439	8.368	ug/L	0.1439	1.72%
Be 313.107†	-947.8	-0.095	ug/L	0.0697	-0.095	ug/L	0.0697	73.52%
Ca 317.933†	271594.6	40020	ug/L	30.6	40020	ug/L	30.6	0.08%
Cd 214.440†	586.1	19.06	ug/L	0.471	19.06	ug/L	0.471	2.47%
Co 228.616†	1476.2	123.3	ug/L	0.16	123.3	ug/L	0.16	0.13%
Cr 267.716†	279.4	13.95	ug/L	0.230	13.95	ug/L	0.230	1.64%
Fe 238.204†	5165.8	2176	ug/L	21.2	2176	ug/L	21.2	0.97%
K 766.490†	269.0	38.99	ug/L	1.617	38.99	ug/L	1.617	4.15%
Mg 285.213†	9288.8	748.4	ug/L	5.28	748.4	ug/L	5.28	0.71%
Mn 257.610†	4158.4	11.32	ug/L	0.124	11.32	ug/L	0.124	1.09%
Mo 202.031†	-7.9	-1.954	ug/L	0.0546	-1.954	ug/L	0.0546	2.79%
Na 589.592†	-1658.3	-131.8	ug/L	0.27	-131.8	ug/L	0.27	0.20%
Ni 231.604†	29.6	4.153	ug/L	1.0243	4.153	ug/L	1.0243	24.66%
Pb 220.353†	1275.9	890.2	ug/L	11.91	890.2	ug/L	11.91	1.34%
Sb 206.836†	-31.9	-16.92	ug/L	0.492	-16.92	ug/L	0.492	2.91%
Se 196.026†	-29.0	-40.61	ug/L	5.163	-40.61	ug/L	5.163	12.72%
V 311.071†	734.4	2.233	ug/L	0.1511	2.233	ug/L	0.1511	6.77%
Sn 189.927†	-18.5	-8.662	ug/L	5.5541	-8.662	ug/L	5.5541	64.12%
Sr 421.552†	29326.6	30.62	ug/L	0.151	30.62	ug/L	0.151	0.49%
Tl 190.801†	-31.3	-16.70	ug/L	1.031	-16.70	ug/L	1.031	6.18%
Zn 206.200†	291646.2	31610	ug/L	126.5	31610	ug/L	126.5	0.40%
Ti 334.940†	91536.4	177.4	ug/L	0.82	177.4	ug/L	0.82	0.46%
B 249.772†	-160.2	-13.69	ug/L	0.224	-13.69	ug/L	0.224	1.63%
Cu 324.752†	3757.6	13.18	ug/L	0.379	13.18	ug/L	0.379	2.87%
S 181.975†	583.4	3725	ug/L	14.9	3725	ug/L	14.9	0.40%
Zr 343.823†	308.7	1.225	ug/L	0.0975	1.225	ug/L	0.0975	7.96%
Li 670.784†	2.2	0.008	ug/L	0.0898	0.008	ug/L	0.0898	>999.9%

Sequence No.: 62
Sample ID: 220-15052-A-8-A @10
Analyst: JV

Autosampler Location: 82
Date Collected: 3/28/2011 2:55:02 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-15052-A-8-A @10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	834090.8	0.962	mg/L	0.0032				0.33%
Y (radial)	104334.6	0.931	mg/L	0.0060				0.64%
Ag 328.068†	-589.1	-0.263	ug/L	0.0969	-0.263	ug/L	0.0969	36.81%
Al 396.153†	277.6	28.19	ug/L	2.070	28.19	ug/L	2.070	7.34%
As 188.979†	-5.9	3.919	ug/L	2.3257	3.919	ug/L	2.3257	59.35%
Ba 233.527†	1068.8	17.52	ug/L	0.013	17.52	ug/L	0.013	0.07%
Be 313.107†	-1811.0	-0.092	ug/L	0.0389	-0.092	ug/L	0.0389	42.23%
Ca 317.933†	162940.9	24010	ug/L	42.7	24010	ug/L	42.7	0.18%
Cd 214.440†	142.9	1.522	ug/L	0.0108	1.522	ug/L	0.0108	0.71%
Co 228.616†	1362.3	111.0	ug/L	0.73	111.0	ug/L	0.73	0.66%
Cr 267.716†	644.7	33.60	ug/L	0.576	33.60	ug/L	0.576	1.71%
Fe 238.204†	160825.5	67750	ug/L	306.3	67750	ug/L	306.3	0.45%
K 766.490†	1036.7	150.3	ug/L	25.72	150.3	ug/L	25.72	17.12%
Mg 285.213†	190.7	67.95	ug/L	0.516	67.95	ug/L	0.516	0.76%
Mn 257.610†	121026.4	330.5	ug/L	1.04	330.5	ug/L	1.04	0.31%
Mo 202.031†	-15.8	-1.055	ug/L	0.4036	-1.055	ug/L	0.4036	38.26%
Na 589.592†	-1578.6	-125.4	ug/L	3.87	-125.4	ug/L	3.87	3.09%
Ni 231.604†	263.7	35.63	ug/L	1.298	35.63	ug/L	1.298	3.64%
Pb 220.353†	2708.5	1881	ug/L	15.4	1881	ug/L	15.4	0.82%
Sb 206.836†	-24.3	-13.77	ug/L	4.688	-13.77	ug/L	4.688	34.05%
Se 196.026†	-39.1	-20.94	ug/L	2.208	-20.94	ug/L	2.208	10.55%
V 311.071†	1449.0	2.322	ug/L	0.0135	2.322	ug/L	0.0135	0.58%
Sn 189.927†	-1.9	1.735	ug/L	0.7825	1.735	ug/L	0.7825	45.10%
Sr 421.552†	11648.5	11.97	ug/L	0.044	11.97	ug/L	0.044	0.36%
Tl 190.801†	-23.6	-4.263	ug/L	1.8316	-4.263	ug/L	1.8316	42.96%
Zn 206.200†	6144.6	666.4	ug/L	0.09	666.4	ug/L	0.09	0.01%
Ti 334.940†	184185.0	356.9	ug/L	1.46	356.9	ug/L	1.46	0.41%
B 249.772†	7168.7	-21.61	ug/L	0.754	-21.61	ug/L	0.754	3.49%
Cu 324.752†	21475.6	81.45	ug/L	0.790	81.45	ug/L	0.790	0.97%
S 181.975†	2740.3	17430	ug/L	24.4	17430	ug/L	24.4	0.14%
Zr 343.823†	3904.5	14.39	ug/L	0.147	14.39	ug/L	0.147	1.02%
Li 670.784†	-46.6	-0.174	ug/L	0.2401	-0.174	ug/L	0.2401	138.09%

Sequence No.: 63 Autosampler Location: 83
Sample ID: 220-14980-A-1-B Date Collected: 3/28/2011 2:58:10 PM
Analyst: JV Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-14980-A-1-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	746254.1	0.861	mg/L	0.0075				0.87%
Y (radial)	99947.1	0.892	mg/L	0.0028				0.32%
Ag 328.068†	-14.8	-0.082	ug/L	0.1053	-0.082	ug/L	0.1053	127.74%
Al 396.153†	58.5	5.994	ug/L	0.4388	5.994	ug/L	0.4388	7.32%
As 188.979†	-6.3	-6.160	ug/L	3.6186	-6.160	ug/L	3.6186	58.75%
Ba 233.527†	27097.8	481.8	ug/L	1.18	481.8	ug/L	1.18	0.25%
Be 313.107†	-380.2	-0.393	ug/L	0.0065	-0.393	ug/L	0.0065	1.65%
Ca 317.933†	131337.3	19350	ug/L	25.1	19350	ug/L	25.1	0.13%
Cd 214.440†	414.5	13.55	ug/L	0.076	13.55	ug/L	0.076	0.56%
Co 228.616†	12.6	1.058	ug/L	0.1156	1.058	ug/L	0.1156	10.93%
Cr 267.716†	10.1	0.507	ug/L	0.9762	0.507	ug/L	0.9762	192.37%
Fe 238.204†	4.3	1.816	ug/L	0.4808	1.816	ug/L	0.4808	26.48%
K 766.490†	5159.7	747.9	ug/L	50.79	747.9	ug/L	50.79	6.79%
Mg 285.213†	27367.7	2200	ug/L	4.8	2200	ug/L	4.8	0.22%
Mn 257.610†	79944.9	218.2	ug/L	0.75	218.2	ug/L	0.75	0.35%
Mo 202.031†	-10.9	-2.472	ug/L	0.0907	-2.472	ug/L	0.0907	3.67%
Na 589.592†	7712629.0	612800	ug/L	6188.9	612800	ug/L	6188.9	1.01%
Ni 231.604†	53.9	7.244	ug/L	0.0390	7.244	ug/L	0.0390	0.54%
Pb 220.353†	458.9	320.3	ug/L	2.46	320.3	ug/L	2.46	0.77%
Sb 206.836†	-14.3	-7.393	ug/L	5.7920	-7.393	ug/L	5.7920	78.35%
Se 196.026†	-6.2	-6.574	ug/L	9.4872	-6.574	ug/L	9.4872	144.31%

V 311.071†	792.9	4.617 ug/L	0.4807	4.617 ug/L	0.4807	10.41%
Sn 189.927†	-10.6	-5.677 ug/L	3.9179	-5.677 ug/L	3.9179	69.01%
Sr 421.552†	50039.5	53.39 ug/L	0.166	53.39 ug/L	0.166	0.31%
Tl 190.801†	-26.0	-15.98 ug/L	1.122	-15.98 ug/L	1.122	7.02%
Zn 206.200†	1573.0	170.5 ug/L	1.23	170.5 ug/L	1.23	0.72%
Ti 334.940†	-385.5	-0.747 ug/L	0.0548	-0.747 ug/L	0.0548	7.33%
B 249.772†	248.1	8.251 ug/L	0.0028	8.251 ug/L	0.0028	0.03%
Cu 324.752†	81833.9	281.9 ug/L	0.58	281.9 ug/L	0.58	0.21%
S 181.975†	264.2	1726 ug/L	12.1	1726 ug/L	12.1	0.70%
Zr 343.823†	-147.1	-0.612 ug/L	0.0377	-0.612 ug/L	0.0377	6.15%
Li 670.784†	649.6	2.424 ug/L	0.1716	2.424 ug/L	0.1716	7.08%

Sequence No.: 64 **Autosampler Location: 84**
Sample ID: 220-14980-A-2-B **Date Collected: 3/28/2011 3:01:53 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14980-A-2-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	756759.6	0.873	mg/L	0.0076				0.87%
Y (radial)	102910.3	0.919	mg/L	0.0046				0.50%
Ag 328.068†	-32.2	-0.198	ug/L	0.0896	-0.198	ug/L	0.0896	45.37%
Al 396.153†	859.5	87.06	ug/L	3.047	87.06	ug/L	3.047	3.50%
As 188.979†	-22.1	-22.62	ug/L	12.723	-22.62	ug/L	12.723	56.25%
Ba 233.527†	39352.5	699.7	ug/L	2.19	699.7	ug/L	2.19	0.31%
Be 313.107†	-247.4	-0.260	ug/L	0.0013	-0.260	ug/L	0.0013	0.49%
Ca 317.933†	291014.1	42890	ug/L	29.5	42890	ug/L	29.5	0.07%
Cd 214.440†	2039.4	66.66	ug/L	1.060	66.66	ug/L	1.060	1.59%
Co 228.616†	86.0	7.208	ug/L	0.2182	7.208	ug/L	0.2182	3.03%
Cr 267.716†	10.3	0.517	ug/L	0.0951	0.517	ug/L	0.0951	18.38%
Fe 238.204†	16.6	7.002	ug/L	3.7520	7.002	ug/L	3.7520	53.59%
K 766.490†	7381.6	1070	ug/L	4.8	1070	ug/L	4.8	0.45%
Mg 285.213†	37041.8	2978	ug/L	5.7	2978	ug/L	5.7	0.19%
Mn 257.610†	207955.2	567.8	ug/L	0.09	567.8	ug/L	0.09	0.02%
Mo 202.031†	-19.4	-4.435	ug/L	1.9527	-4.435	ug/L	1.9527	44.03%
Na 589.592†	7713605.3	612900	ug/L	4724.5	612900	ug/L	4724.5	0.77%
Ni 231.604†	273.8	36.83	ug/L	0.224	36.83	ug/L	0.224	0.61%
Pb 220.353†	30082.1	21000	ug/L	21.9	21000	ug/L	21.9	0.10%
Sb 206.836†	-30.5	-15.55	ug/L	2.651	-15.55	ug/L	2.651	17.04%
Se 196.026†	-23.9	-32.43	ug/L	18.552	-32.43	ug/L	18.552	57.20%
V 311.071†	660.6	3.832	ug/L	0.0041	3.832	ug/L	0.0041	0.11%
Sn 189.927†	-11.5	-5.167	ug/L	2.0852	-5.167	ug/L	2.0852	40.36%
Sr 421.552†	137822.1	147.3	ug/L	0.53	147.3	ug/L	0.53	0.36%
Tl 190.801†	-19.4	-10.69	ug/L	8.234	-10.69	ug/L	8.234	77.05%
Zn 206.200†	5659.9	613.5	ug/L	12.21	613.5	ug/L	12.21	1.99%
Ti 334.940†	-682.7	-1.323	ug/L	0.0105	-1.323	ug/L	0.0105	0.79%
B 249.772†	501.8	16.68	ug/L	0.478	16.68	ug/L	0.478	2.87%
Cu 324.752†	199725.9	687.9	ug/L	0.54	687.9	ug/L	0.54	0.08%
S 181.975†	106.8	741.0	ug/L	3.50	741.0	ug/L	3.50	0.47%
Zr 343.823†	-161.8	-0.674	ug/L	0.1218	-0.674	ug/L	0.1218	18.08%
Li 670.784†	610.6	2.278	ug/L	0.0944	2.278	ug/L	0.0944	4.14%

Sequence No.: 65 **Autosampler Location: 85**
Sample ID: 220-14980-A-3-B **Date Collected: 3/28/2011 3:05:38 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14980-A-3-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	757221.7	0.874	mg/L	0.0042				0.48%
Y (radial)	100819.3	0.900	mg/L	0.0110				1.22%
Ag 328.068†	-57.4	-0.322	ug/L	0.0894	-0.322	ug/L	0.0894	27.72%
Al 396.153†	377.9	38.45	ug/L	3.509	38.45	ug/L	3.509	9.13%
As 188.979†	-8.6	-2.614	ug/L	11.1000	-2.614	ug/L	11.1000	424.59%

Ba 233.527†	35282.7	627.3 ug/L	4.12	627.3 ug/L	4.12	0.66%
Be 313.107†	-301.5	-0.325 ug/L	0.0504	-0.325 ug/L	0.0504	15.48%
Ca 317.933†	989888.5	145900 ug/L	479.6	145900 ug/L	479.6	0.33%
Cd 214.440†	10917.0	356.8 ug/L	1.57	356.8 ug/L	1.57	0.44%
Co 228.616†	398.2	33.37 ug/L	0.176	33.37 ug/L	0.176	0.53%
Cr 267.716†	18.5	0.940 ug/L	0.2036	0.940 ug/L	0.2036	21.64%
Fe 238.204†	1707.1	719.2 ug/L	11.50	719.2 ug/L	11.50	1.60%
K 766.490†	19038.9	2760 ug/L	41.8	2760 ug/L	41.8	1.51%
Mg 285.213†	51858.8	4169 ug/L	14.7	4169 ug/L	14.7	0.35%
Mn 257.610†	1436159.1	3922 ug/L	12.5	3922 ug/L	12.5	0.32%
Mo 202.031†	-31.3	-7.157 ug/L	0.2953	-7.157 ug/L	0.2953	4.13%
Na 589.592†	7695868.9	611500 ug/L	4155.6	611500 ug/L	4155.6	0.68%
Ni 231.604†	2626.5	353.2 ug/L	3.46	353.2 ug/L	3.46	0.98%
Pb 220.353†	25696.7	17930 ug/L	26.0	17930 ug/L	26.0	0.14%
Sb 206.836†	-57.1	-22.80 ug/L	4.977	-22.80 ug/L	4.977	21.82%
Se 196.026†	-56.4	-66.15 ug/L	13.964	-66.15 ug/L	13.964	21.11%
V 311.071†	626.3	3.607 ug/L	0.2118	3.607 ug/L	0.2118	5.87%
Sn 189.927†	-17.6	-4.218 ug/L	1.4008	-4.218 ug/L	1.4008	33.21%
Sr 421.552†	378528.7	403.9 ug/L	1.07	403.9 ug/L	1.07	0.27%
Tl 190.801†	-29.4	-12.54 ug/L	2.123	-12.54 ug/L	2.123	16.93%
Zn 206.200†	23083.7	2502 ug/L	19.9	2502 ug/L	19.9	0.79%
Ti 334.940†	-1722.2	-3.337 ug/L	0.1782	-3.337 ug/L	0.1782	5.34%
B 249.772†	614.9	17.70 ug/L	0.552	17.70 ug/L	0.552	3.12%
Cu 324.752†	7763.0	26.82 ug/L	0.014	26.82 ug/L	0.014	0.05%
S 181.975†	565.8	3685 ug/L	60.1	3685 ug/L	60.1	1.63%
Zr 343.823†	-206.8	-0.881 ug/L	0.0332	-0.881 ug/L	0.0332	3.77%
Li 670.784†	1012.2	3.777 ug/L	0.0256	3.777 ug/L	0.0256	0.68%

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Sequence No.: 66
Sample ID: 220-14980-A-4-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 3/28/2011 3:09:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14980-A-4-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	724253.1	0.836	mg/L	0.0002				0.02%
Y (radial)	100856.4	0.900	mg/L	0.0069				0.77%
Ag 328.068†	-183.9	-0.662	ug/L	0.2548	-0.662	ug/L	0.2548	38.48%
Al 396.153†	27201.2	2751	ug/L	9.3	2751	ug/L	9.3	0.34%
As 188.979†	-20.8	-17.51	ug/L	9.717	-17.51	ug/L	9.717	55.50%
Ba 233.527†	30964.0	550.3	ug/L	1.15	550.3	ug/L	1.15	0.21%
Be 313.107†	-385.7	-0.319	ug/L	0.0384	-0.319	ug/L	0.0384	12.05%
Ca 317.933†	599913.4	88410	ug/L	1094.1	88410	ug/L	1094.1	1.24%
Cd 214.440†	1931.2	62.62	ug/L	0.304	62.62	ug/L	0.304	0.49%
Co 228.616†	179.7	14.64	ug/L	0.861	14.64	ug/L	0.861	5.88%
Cr 267.716†	286.5	14.51	ug/L	0.765	14.51	ug/L	0.765	5.27%
Fe 238.204†	25715.3	10830	ug/L	24.6	10830	ug/L	24.6	0.23%
K 766.490†	14055.2	2037	ug/L	1.7	2037	ug/L	1.7	0.09%
Mg 285.213†	29697.6	2396	ug/L	2.1	2396	ug/L	2.1	0.09%
Mn 257.610†	386990.8	1057	ug/L	3.4	1057	ug/L	3.4	0.32%
Mo 202.031†	-10.8	-2.033	ug/L	2.0073	-2.033	ug/L	2.0073	98.73%
Na 589.592†	8473043.3	673300	ug/L	1146.0	673300	ug/L	1146.0	0.17%
Ni 231.604†	1114.4	149.9	ug/L	1.45	149.9	ug/L	1.45	0.97%
Pb 220.353†	43544.7	30390	ug/L	29.3	30390	ug/L	29.3	0.10%
Sb 206.836†	-47.0	-21.98	ug/L	5.555	-21.98	ug/L	5.555	25.28%
Se 196.026†	-42.2	-47.48	ug/L	1.006	-47.48	ug/L	1.006	2.12%
V 311.071†	1590.6	8.725	ug/L	0.3498	8.725	ug/L	0.3498	4.01%
Sn 189.927†	-13.6	-4.268	ug/L	2.0719	-4.268	ug/L	2.0719	48.54%
Sr 421.552†	326325.3	349.1	ug/L	5.15	349.1	ug/L	5.15	1.48%
Tl 190.801†	-40.1	-20.84	ug/L	0.517	-20.84	ug/L	0.517	2.48%
Zn 206.200†	14908.2	1616	ug/L	9.1	1616	ug/L	9.1	0.56%
Ti 334.940†	8002.3	15.51	ug/L	0.152	15.51	ug/L	0.152	0.98%
B 249.772†	2480.0	40.94	ug/L	0.047	40.94	ug/L	0.047	0.11%
Cu 324.752†	65042.9	225.2	ug/L	1.29	225.2	ug/L	1.29	0.57%
S 181.975†	548.0	3534	ug/L	2.4	3534	ug/L	2.4	0.07%
Zr 343.823†	2583.5	10.46	ug/L	0.156	10.46	ug/L	0.156	1.49%
Li 670.784†	2041.8	7.619	ug/L	0.0606	7.619	ug/L	0.0606	0.80%

Sequence No.: 67
Sample ID: 220-14980-A-5-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 3/28/2011 3:13:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14980-A-5-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	755510.9	0.872	mg/L	0.0041				0.47%
Y (radial)	105132.5	0.938	mg/L	0.0029				0.31%
Ag 328.068†	-176.0	-0.513	ug/L	0.2506	-0.513	ug/L	0.2506	48.86%
Al 396.153†	1948.8	197.2	ug/L	3.88	197.2	ug/L	3.88	1.97%
As 188.979†	-10.4	-6.132	ug/L	12.9733	-6.132	ug/L	12.9733	211.58%
Ba 233.527†	27581.5	490.1	ug/L	1.81	490.1	ug/L	1.81	0.37%
Be 313.107†	-436.2	-0.456	ug/L	0.0026	-0.456	ug/L	0.0026	0.58%
Ca 317.933†	560770.2	82640	ug/L	8.1	82640	ug/L	8.1	0.01%
Cd 214.440†	4138.2	134.7	ug/L	0.01	134.7	ug/L	0.01	0.01%
Co 228.616†	507.4	42.13	ug/L	0.087	42.13	ug/L	0.087	0.21%
Cr 267.716†	132.0	6.826	ug/L	1.1517	6.826	ug/L	1.1517	16.87%
Fe 238.204†	27142.9	11430	ug/L	1.9	11430	ug/L	1.9	0.02%
K 766.490†	12328.4	1787	ug/L	3.9	1787	ug/L	3.9	0.22%
Mg 285.213†	27365.5	2209	ug/L	4.2	2209	ug/L	4.2	0.19%
Mn 257.610†	440735.9	1204	ug/L	3.4	1204	ug/L	3.4	0.28%
Mo 202.031†	-18.0	-3.702	ug/L	0.4126	-3.702	ug/L	0.4126	11.14%
Na 589.592†	6982032.4	554800	ug/L	6417.1	554800	ug/L	6417.1	1.16%
Ni 231.604†	7481.6	1006	ug/L	3.5	1006	ug/L	3.5	0.35%
Pb 220.353†	20585.0	14370	ug/L	20.1	14370	ug/L	20.1	0.14%
Sb 206.836†	-41.7	-19.07	ug/L	1.651	-19.07	ug/L	1.651	8.66%
Se 196.026†	-37.0	-39.50	ug/L	12.491	-39.50	ug/L	12.491	31.62%
V 311.071†	835.8	4.527	ug/L	0.0375	4.527	ug/L	0.0375	0.83%
Sn 189.927†	-14.4	-5.148	ug/L	3.3686	-5.148	ug/L	3.3686	65.43%
Sr 421.552†	341016.8	365.0	ug/L	1.07	365.0	ug/L	1.07	0.29%
Tl 190.801†	-41.4	-22.35	ug/L	0.904	-22.35	ug/L	0.904	4.05%
Zn 206.200†	58772.3	6370	ug/L	4.2	6370	ug/L	4.2	0.07%
Ti 334.940†	-895.1	-1.734	ug/L	0.0532	-1.734	ug/L	0.0532	3.07%
B 249.772†	1777.6	15.25	ug/L	0.648	15.25	ug/L	0.648	4.25%
Cu 324.752†	1024.0	4.790	ug/L	0.1901	4.790	ug/L	0.1901	3.97%
S 181.975†	1309.7	8374	ug/L	34.7	8374	ug/L	34.7	0.41%
Zr 343.823†	-288.2	-1.515	ug/L	0.0486	-1.515	ug/L	0.0486	3.21%
Li 670.784†	997.9	3.724	ug/L	0.1559	3.724	ug/L	0.1559	4.19%

Sequence No.: 68
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/28/2011 3:16:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	822604.2	0.949	mg/L	0.0034				0.36%
Y (radial)	107562.1	0.960	mg/L	0.0048				0.50%
Ag 328.068†	37275.7	242.1	ug/L	1.07	242.1	ug/L	1.07	0.44%
QC value within limits for Ag 328.068 Recovery = 96.84%								
Al 396.153†	48275.7	4866	ug/L	23.5	4866	ug/L	23.5	0.48%
QC value within limits for Al 396.153 Recovery = 97.32%								
As 188.979†	444.5	499.2	ug/L	18.86	499.2	ug/L	18.86	3.78%
QC value within limits for As 188.979 Recovery = 99.84%								
Ba 233.527†	28031.0	499.2	ug/L	0.25	499.2	ug/L	0.25	0.05%
QC value within limits for Ba 233.527 Recovery = 99.85%								
Be 313.107†	476044.4	490.2	ug/L	0.17	490.2	ug/L	0.17	0.03%
QC value within limits for Be 313.107 Recovery = 98.03%								
Ca 317.933†	120845.6	17810	ug/L	84.2	17810	ug/L	84.2	0.47%
QC value within limits for Ca 317.933 Recovery = 96.26%								
Cd 214.440†	15058.2	492.0	ug/L	0.83	492.0	ug/L	0.83	0.17%
QC value within limits for Cd 214.440 Recovery = 98.39%								
Co 228.616†	5919.5	495.7	ug/L	0.06	495.7	ug/L	0.06	0.01%

QC value within limits for Co 228.616 Recovery = 99.13%						
Cr 267.716†	10024.4	499.4 ug/L	0.75	499.4 ug/L	0.75	0.15%
QC value within limits for Cr 267.716 Recovery = 99.88%						
Fe 238.204†	12480.4	5258 ug/L	9.5	5258 ug/L	9.5	0.18%
QC value within limits for Fe 238.204 Recovery = 95.59%						
K 766.490†	269725.5	39090 ug/L	158.4	39090 ug/L	158.4	0.41%
QC value within limits for K 766.490 Recovery = 97.74%						
Mg 285.213†	227723.2	18310 ug/L	56.3	18310 ug/L	56.3	0.31%
QC value within limits for Mg 285.213 Recovery = 98.97%						
Mn 257.610†	182479.5	497.6 ug/L	0.42	497.6 ug/L	0.42	0.09%
QC value within limits for Mn 257.610 Recovery = 99.52%						
Mo 202.031†	2056.7	467.2 ug/L	2.73	467.2 ug/L	2.73	0.58%
QC value within limits for Mo 202.031 Recovery = 93.44%						
Na 589.592†	484379.3	38490 ug/L	46.0	38490 ug/L	46.0	0.12%
QC value within limits for Na 589.592 Recovery = 96.22%						
Ni 231.604†	3723.7	501.4 ug/L	2.36	501.4 ug/L	2.36	0.47%
QC value within limits for Ni 231.604 Recovery = 100.28%						
Pb 220.353†	697.7	487.9 ug/L	2.21	487.9 ug/L	2.21	0.45%
QC value within limits for Pb 220.353 Recovery = 97.59%						
Sb 206.836†	718.6	463.2 ug/L	3.71	463.2 ug/L	3.71	0.80%
QC value within limits for Sb 206.836 Recovery = 92.63%						
Se 196.026†	255.3	453.2 ug/L	7.79	453.2 ug/L	7.79	1.72%
QC value within limits for Se 196.026 Recovery = 90.64%						
V 311.071†	82311.2	474.8 ug/L	0.13	474.8 ug/L	0.13	0.03%
QC value within limits for V 311.071 Recovery = 94.96%						
Sn 189.927†	775.6	480.9 ug/L	10.93	480.9 ug/L	10.93	2.27%
QC value within limits for Sn 189.927 Recovery = 96.18%						
Sr 421.552†	465632.7	500.6 ug/L	2.86	500.6 ug/L	2.86	0.57%
QC value within limits for Sr 421.552 Recovery = 100.13%						
Tl 190.801†	757.3	496.5 ug/L	8.90	496.5 ug/L	8.90	1.79%
QC value within limits for Tl 190.801 Recovery = 99.30%						
Zn 206.200†	4457.3	488.3 ug/L	1.55	488.3 ug/L	1.55	0.32%
QC value within limits for Zn 206.200 Recovery = 97.67%						
Ti 334.940†	255014.7	494.1 ug/L	0.49	494.1 ug/L	0.49	0.10%
QC value within limits for Ti 334.940 Recovery = 98.83%						
B 249.772†	14353.2	457.5 ug/L	1.65	457.5 ug/L	1.65	0.36%
QC value within limits for B 249.772 Recovery = 91.51%						
Cu 324.752†	143206.1	493.8 ug/L	0.71	493.8 ug/L	0.71	0.14%
QC value within limits for Cu 324.752 Recovery = 98.77%						
S 181.975†	1387.8	9206 ug/L	57.1	9206 ug/L	57.1	0.62%
QC value within limits for S 181.975 Recovery = 92.06%						
Zr 343.823†	113614.8	472.8 ug/L	0.79	472.8 ug/L	0.79	0.17%
QC value within limits for Zr 343.823 Recovery = 94.57%						
Li 670.784†	134432.6	501.7 ug/L	0.35	501.7 ug/L	0.35	0.07%
QC value within limits for Li 670.784 Recovery = 100.33%						

All analyte(s) passed QC.

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Sequence No.: 69 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/28/2011 3:20:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	846119.7	0.976	mg/L	0.0113				1.16%
Y (radial)	108185.7	0.966	mg/L	0.0006				0.06%
Ag 328.068†	15.8	0.105	ug/L	0.1029	0.105	ug/L	0.1029	98.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-29.4	-2.940	ug/L	0.6024	-2.940	ug/L	0.6024	20.49%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.9	0.975	ug/L	4.7274	0.975	ug/L	4.7274	484.76%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.4	0.062	ug/L	0.0503	0.062	ug/L	0.0503	81.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-14.2	-0.014	ug/L	0.0457	-0.014	ug/L	0.0457	321.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-17.7	-2.611	ug/L	0.9835	-2.611	ug/L	0.9835	37.67%
QC value within limits for Ca 317.933 Recovery = Not calculated								

Cd 214.440†	9.3	0.305 ug/L	0.2034	0.305 ug/L	0.2034	66.71%
QC value within limits for Cd 214.440 Recovery = Not calculated						
Co 228.616†	6.2	0.518 ug/L	0.0609	0.518 ug/L	0.0609	11.75%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.9	0.195 ug/L	0.1747	0.195 ug/L	0.1747	89.45%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Fe 238.204†	-19.9	-8.391 ug/L	0.5595	-8.391 ug/L	0.5595	6.67%
QC value within limits for Fe 238.204 Recovery = Not calculated						
K 766.490†	5.7	0.823 ug/L	3.4226	0.823 ug/L	3.4226	416.10%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 285.213†	11.2	0.893 ug/L	0.7570	0.893 ug/L	0.7570	84.79%
QC value within limits for Mg 285.213 Recovery = Not calculated						
Mn 257.610†	-12.9	-0.035 ug/L	0.0100	-0.035 ug/L	0.0100	28.32%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-4.1	-0.924 ug/L	0.7301	-0.924 ug/L	0.7301	79.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592†	-1659.6	-131.9 ug/L	2.63	-131.9 ug/L	2.63	1.99%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ni 231.604†	1.2	0.164 ug/L	0.6883	0.164 ug/L	0.6883	420.87%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	7.1	4.970 ug/L	2.5916	4.970 ug/L	2.5916	52.14%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.8	3.707 ug/L	1.4755	3.707 ug/L	1.4755	39.80%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.1	-0.134 ug/L	16.6908	-0.134 ug/L	16.6908	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
V 311.071†	156.1	0.916 ug/L	0.0438	0.916 ug/L	0.0438	4.79%
QC value within limits for V 311.071 Recovery = Not calculated						
Sn 189.927†	-4.0	-2.478 ug/L	0.4718	-2.478 ug/L	0.4718	19.04%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	20.5	0.022 ug/L	0.0165	0.022 ug/L	0.0165	74.89%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Tl 190.801†	-1.6	-1.019 ug/L	0.7481	-1.019 ug/L	0.7481	73.39%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	9.9	1.075 ug/L	0.3253	1.075 ug/L	0.3253	30.27%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	30.4	0.059 ug/L	0.0166	0.059 ug/L	0.0166	28.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-437.6	-14.53 ug/L	0.512	-14.53 ug/L	0.512	3.53%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	162.6	0.559 ug/L	0.1527	0.559 ug/L	0.1527	27.32%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-5.9	-37.37 ug/L	28.748	-37.37 ug/L	28.748	76.92%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	6.4	0.027 ug/L	0.0040	0.027 ug/L	0.0040	14.82%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	45.8	0.171 ug/L	0.3066	0.171 ug/L	0.3066	179.49%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 70
Sample ID: 220-14980-A-6-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 3/28/2011 3:23:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14980-A-6-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	745362.5	0.860	mg/L	0.0052				0.60%
Y (radial)	100526.8	0.897	mg/L	0.0013				0.15%
Ag 328.068†	-51.5	0.199	ug/L	0.1738	0.199	ug/L	0.1738	87.43%
Al 396.153†	12026.9	1216	ug/L	0.5	1216	ug/L	0.5	0.04%
As 188.979†	-3.8	-1.944	ug/L	5.4775	-1.944	ug/L	5.4775	281.80%
Ba 233.527†	27547.3	489.6	ug/L	0.85	489.6	ug/L	0.85	0.17%
Be 313.107†	-499.8	-0.474	ug/L	0.0176	-0.474	ug/L	0.0176	3.72%
Ca 317.933†	127123.9	18730	ug/L	173.0	18730	ug/L	173.0	0.92%
Cd 214.440†	934.4	30.07	ug/L	0.306	30.07	ug/L	0.306	1.02%
Co 228.616†	135.0	10.93	ug/L	1.419	10.93	ug/L	1.419	12.98%
Cr 267.716†	327.7	16.54	ug/L	0.108	16.54	ug/L	0.108	0.65%

Fe 238.204†	24021.4	10120 ug/L	84.0	10120 ug/L	84.0	0.83%
K 766.490†	7728.8	1120 ug/L	7.3	1120 ug/L	7.3	0.65%
Mg 285.213†	10441.1	847.2 ug/L	10.21	847.2 ug/L	10.21	1.21%
Mn 257.610†	303347.9	828.5 ug/L	0.77	828.5 ug/L	0.77	0.09%
Mo 202.031†	-5.1	-0.769 ug/L	0.3997	-0.769 ug/L	0.3997	51.96%
Na 589.592†	7448423.1	591800 ug/L	10390.0	591800 ug/L	10390.0	1.76%
Ni 231.604†	1098.8	147.8 ug/L	1.91	147.8 ug/L	1.91	1.29%
Pb 220.353†	54581.5	38090 ug/L	37.1	38090 ug/L	37.1	0.10%
Sb 206.836†	-12.0	-6.137 ug/L	3.1840	-6.137 ug/L	3.1840	51.88%
Se 196.026†	-19.1	-22.86 ug/L	4.587	-22.86 ug/L	4.587	20.07%
V 311.071†	1310.0	7.246 ug/L	0.6034	7.246 ug/L	0.6034	8.33%
Sn 189.927†	-2.1	-0.428 ug/L	2.4420	-0.428 ug/L	2.4420	571.09%
Sr 421.552†	65611.9	70.16 ug/L	0.059	70.16 ug/L	0.059	0.08%
Tl 190.801†	-13.4	-6.898 ug/L	3.3693	-6.898 ug/L	3.3693	48.84%
Zn 206.200†	11122.6	1206 ug/L	4.0	1206 ug/L	4.0	0.33%
Ti 334.940†	4010.5	7.771 ug/L	0.0352	7.771 ug/L	0.0352	0.45%
B 249.772†	2181.4	33.74 ug/L	0.001	33.74 ug/L	0.001	0.00%
Cu 324.752†	41082.0	142.6 ug/L	0.72	142.6 ug/L	0.72	0.51%
S 181.975†	465.4	2977 ug/L	36.4	2977 ug/L	36.4	1.22%
Zr 343.823†	1140.4	4.468 ug/L	0.1439	4.468 ug/L	0.1439	3.22%
Li 670.784†	1557.8	5.813 ug/L	0.1157	5.813 ug/L	0.1157	1.99%

User canceled analysis.

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Analysis Begun

Start Time: 3/28/2011 3:29:04 PM **Plasma On Time: 3/28/2011 9:50:51 AM**
Logged In Analyst: ctmetals **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 069N-na **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d
Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

==========

Sequence No.: 71 **Autosampler Location: 89**
Sample ID: MB 220-49038/1-A **Date Collected: 3/28/2011 3:29:04 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MB 220-49038/1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	839290.0	0.968	mg/L	0.0038				0.40%
Y (radial)	104956.4	0.937	mg/L	0.0290				3.10%
Ag 328.068†	22.1	0.148	ug/L	0.0243	0.148	ug/L	0.0243	16.47%
Al 396.153†	-115.7	-11.68	ug/L	0.478	-11.68	ug/L	0.478	4.10%
As 188.979†	0.6	0.627	ug/L	1.0286	0.627	ug/L	1.0286	164.07%
Ba 233.527†	12.1	0.215	ug/L	0.1319	0.215	ug/L	0.1319	61.34%
Be 313.107†	-23.2	-0.024	ug/L	0.0003	-0.024	ug/L	0.0003	1.06%
Ca 317.933†	-179.1	-26.39	ug/L	0.475	-26.39	ug/L	0.475	1.80%
Cd 214.440†	0.3	0.011	ug/L	0.1482	0.011	ug/L	0.1482	>999.9%
Co 228.616†	3.2	0.266	ug/L	0.1969	0.266	ug/L	0.1969	74.12%
Cr 267.716†	1.1	0.057	ug/L	0.3694	0.057	ug/L	0.3694	647.42%
Fe 238.204†	-8.4	-3.550	ug/L	1.2960	-3.550	ug/L	1.2960	36.51%
K 766.490†	111.8	16.20	ug/L	5.145	16.20	ug/L	5.145	31.76%
Mg 285.213†	-7.4	-0.600	ug/L	0.8299	-0.600	ug/L	0.8299	138.34%
Mn 257.610†	45.7	0.125	ug/L	0.0088	0.125	ug/L	0.0088	7.07%
Mo 202.031†	-3.5	-0.808	ug/L	0.1614	-0.808	ug/L	0.1614	19.98%
Na 589.592†	-1240.0	-98.53	ug/L	1.909	-98.53	ug/L	1.909	1.94%
Ni 231.604†	3.3	0.449	ug/L	0.4274	0.449	ug/L	0.4274	95.13%
Pb 220.353†	10.8	7.507	ug/L	3.0692	7.507	ug/L	3.0692	40.89%
Sb 206.836†	1.3	0.853	ug/L	2.1982	0.853	ug/L	2.1982	257.71%
Se 196.026†	-8.3	-14.46	ug/L	8.854	-14.46	ug/L	8.854	61.24%
V 311.071†	22.7	0.135	ug/L	0.4464	0.135	ug/L	0.4464	329.45%
Sn 189.927†	10.5	6.449	ug/L	1.1192	6.449	ug/L	1.1192	17.36%
Sr 421.552†	-181.6	-0.195	ug/L	0.0260	-0.195	ug/L	0.0260	13.36%
Tl 190.801†	-5.7	-3.711	ug/L	4.0443	-3.711	ug/L	4.0443	108.98%
Zn 206.200†	41.6	4.512	ug/L	0.0814	4.512	ug/L	0.0814	1.80%

Ti 334.940†	16.4	0.032	ug/L	0.0821	0.032	ug/L	0.0821 258.14%
B 249.772†	-497.4	-16.54	ug/L	0.283	-16.54	ug/L	0.283 1.71%
Cu 324.752†	104.5	0.360	ug/L	0.0305	0.360	ug/L	0.0305 8.47%
S 181.975†	-4.8	-30.51	ug/L	16.896	-30.51	ug/L	16.896 55.38%
Zr 343.823†	-127.9	-0.532	ug/L	0.0613	-0.532	ug/L	0.0613 11.51%
Li 670.784†	93.1	0.347	ug/L	0.4797	0.347	ug/L	0.4797 138.08%

Sequence No.: 72
Sample ID: LCS 220-49038/2-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 3/28/2011 3:32:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 220-49038/2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	819299.9	0.945	mg/L	0.0114				1.21%
Y (radial)	105534.7	0.942	mg/L	0.0039				0.41%
Ag 328.068†	46439.7	298.2	ug/L	1.05	298.2	ug/L	1.05	0.35%
Al 396.153†	33786.9	3383	ug/L	13.8	3383	ug/L	13.8	0.41%
As 188.979†	875.3	976.5	ug/L	3.80	976.5	ug/L	3.80	0.39%
Ba 233.527†	17353.5	309.1	ug/L	1.26	309.1	ug/L	1.26	0.41%
Be 313.107†	100412.2	107.9	ug/L	0.41	107.9	ug/L	0.41	0.38%
Ca 317.933†	45062.3	6641	ug/L	21.7	6641	ug/L	21.7	0.33%
Cd 214.440†	9609.9	314.0	ug/L	4.93	314.0	ug/L	4.93	1.57%
Co 228.616†	3743.3	312.8	ug/L	2.38	312.8	ug/L	2.38	0.76%
Cr 267.716†	6251.3	311.4	ug/L	4.53	311.4	ug/L	4.53	1.46%
Fe 238.204†	7502.1	3160	ug/L	6.5	3160	ug/L	6.5	0.21%
K 766.490†	188381.0	27300	ug/L	22.8	27300	ug/L	22.8	0.08%
Mg 285.213†	83456.7	6711	ug/L	7.4	6711	ug/L	7.4	0.11%
Mn 257.610†	74659.8	203.6	ug/L	0.49	203.6	ug/L	0.49	0.24%
Mo 202.031†	4426.5	1007	ug/L	6.9	1007	ug/L	6.9	0.68%
Na 589.592†	393526.8	31270	ug/L	91.5	31270	ug/L	91.5	0.29%
Ni 231.604†	2352.8	316.8	ug/L	4.76	316.8	ug/L	4.76	1.50%
Pb 220.353†	1473.7	1031	ug/L	19.8	1031	ug/L	19.8	1.92%
Sb 206.836†	1564.9	1015	ug/L	10.0	1015	ug/L	10.0	0.99%
Se 196.026†	285.1	501.6	ug/L	14.23	501.6	ug/L	14.23	2.84%
V 311.071†	53456.4	297.7	ug/L	0.07	297.7	ug/L	0.07	0.02%
Sn 189.927†	1614.7	999.7	ug/L	6.17	999.7	ug/L	6.17	0.62%
Sr 421.552†	-151.9	-0.318	ug/L	0.0246	-0.318	ug/L	0.0246	7.72%
Tl 190.801†	1582.0	1038	ug/L	0.4	1038	ug/L	0.4	0.03%
Zn 206.200†	2839.8	311.1	ug/L	3.38	311.1	ug/L	3.38	1.09%
Ti 334.940†	520183.3	1008	ug/L	0.7	1008	ug/L	0.7	0.07%
B 249.772†	29315.3	963.6	ug/L	5.83	963.6	ug/L	5.83	0.61%
Cu 324.752†	92671.4	319.5	ug/L	1.27	319.5	ug/L	1.27	0.40%
S 181.975†	-211.0	-1202	ug/L	13.7	-1202	ug/L	13.7	1.14%
Zr 343.823†	241810.8	1007	ug/L	0.5	1007	ug/L	0.5	0.05%
Li 670.784†	118.4	0.442	ug/L	0.1424	0.442	ug/L	0.1424	32.23%

Sequence No.: 73
Sample ID: LB 220-48978/1-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 3/28/2011 3:35:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LB 220-48978/1-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	753719.8	0.870	mg/L	0.0127				1.46%
Y (radial)	105188.5	0.939	mg/L	0.0046				0.49%
Ag 328.068†	10.8	0.076	ug/L	0.0931	0.076	ug/L	0.0931	122.39%
Al 396.153†	-105.0	-10.62	ug/L	0.756	-10.62	ug/L	0.756	7.12%
As 188.979†	-7.1	-7.949	ug/L	1.3808	-7.949	ug/L	1.3808	17.37%
Ba 233.527†	36.3	0.653	ug/L	0.0262	0.653	ug/L	0.0262	4.01%
Be 313.107†	-344.5	-0.352	ug/L	0.0827	-0.352	ug/L	0.0827	23.47%
Ca 317.933†	-142.4	-20.98	ug/L	0.385	-20.98	ug/L	0.385	1.84%
Cd 214.440†	25.9	0.847	ug/L	0.0703	0.847	ug/L	0.0703	8.30%
Co 228.616†	-4.1	-0.342	ug/L	0.5053	-0.342	ug/L	0.5053	147.94%

Cr 267.716†	12.4	0.623 ug/L	0.0051	0.623 ug/L	0.0051	0.82%
Fe 238.204†	-0.6	-0.251 ug/L	1.6497	-0.251 ug/L	1.6497	657.40%
K 766.490†	1351.1	195.8 ug/L	14.95	195.8 ug/L	14.95	7.63%
Mg 285.213†	2.8	0.226 ug/L	1.1607	0.226 ug/L	1.1607	512.92%
Mn 257.610†	82.4	0.225 ug/L	0.0097	0.225 ug/L	0.0097	4.31%
Mo 202.031†	0.3	0.063 ug/L	1.2659	0.063 ug/L	1.2659	>999.9%
Na 589.592†	8429555.6	669800 ug/L	3159.2	669800 ug/L	3159.2	0.47%
Ni 231.604†	11.7	1.568 ug/L	0.6600	1.568 ug/L	0.6600	42.09%
Pb 220.353†	4.1	2.867 ug/L	3.0108	2.867 ug/L	3.0108	105.01%
Sb 206.836†	-0.5	-0.328 ug/L	3.5203	-0.328 ug/L	3.5203	>999.9%
Se 196.026†	-1.0	-1.720 ug/L	2.0225	-1.720 ug/L	2.0225	117.58%
V 311.071†	590.3	3.461 ug/L	0.3178	3.461 ug/L	0.3178	9.18%
Sn 189.927†	2.3	1.407 ug/L	3.4237	1.407 ug/L	3.4237	243.25%
Sr 421.552†	151.3	0.163 ug/L	0.0003	0.163 ug/L	0.0003	0.20%
Tl 190.801†	-2.9	-1.842 ug/L	0.3864	-1.842 ug/L	0.3864	20.97%
Zn 206.200†	88.9	9.640 ug/L	0.0369	9.640 ug/L	0.0369	0.38%
Ti 334.940†	61.6	0.119 ug/L	0.0191	0.119 ug/L	0.0191	16.01%
B 249.772†	-241.6	-8.040 ug/L	0.8422	-8.040 ug/L	0.8422	10.48%
Cu 324.752†	701.3	2.415 ug/L	0.2312	2.415 ug/L	0.2312	9.57%
S 181.975†	9.7	61.76 ug/L	10.490	61.76 ug/L	10.490	16.98%
Zr 343.823†	82.5	0.343 ug/L	0.0498	0.343 ug/L	0.0498	14.52%
Li 670.784†	243.9	0.910 ug/L	0.0657	0.910 ug/L	0.0657	7.21%

Sequence No.: 74
Sample ID: 220-14983-A-1-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 3/28/2011 3:39:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14983-A-1-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	734100.4	0.847	mg/L	0.0078				0.91%
Y (radial)	103214.5	0.921	mg/L	0.0080				0.87%
Ag 328.068†	-236.7	-1.535	ug/L	0.2086	-1.535	ug/L	0.2086	13.58%
Al 396.153†	575.7	58.52	ug/L	3.546	58.52	ug/L	3.546	6.06%
As 188.979†	-19.4	-12.54	ug/L	8.795	-12.54	ug/L	8.795	70.12%
Ba 233.527†	15090.4	268.3	ug/L	2.25	268.3	ug/L	2.25	0.84%
Be 313.107†	-320.4	-0.348	ug/L	0.0400	-0.348	ug/L	0.0400	11.49%
Ca 317.933†	1309838.2	193000	ug/L	110.0	193000	ug/L	110.0	0.06%
Cd 214.440†	43.7	1.429	ug/L	0.1263	1.429	ug/L	0.1263	8.84%
Co 228.616†	27.6	2.313	ug/L	0.4640	2.313	ug/L	0.4640	20.06%
Cr 267.716†	-11.2	-0.552	ug/L	1.2377	-0.552	ug/L	1.2377	224.10%
Fe 238.204†	-2.8	-1.163	ug/L	0.1464	-1.163	ug/L	0.1464	12.59%
K 766.490†	32423.9	4700	ug/L	27.0	4700	ug/L	27.0	0.57%
Mg 285.213†	227832.8	18310	ug/L	54.3	18310	ug/L	54.3	0.30%
Mn 257.610†	344965.5	941.4	ug/L	0.69	941.4	ug/L	0.69	0.07%
Mo 202.031†	-39.9	-9.076	ug/L	0.0969	-9.076	ug/L	0.0969	1.07%
Na 589.592†	6783915.9	539000	ug/L	9206.4	539000	ug/L	9206.4	1.71%
Ni 231.604†	32.0	4.306	ug/L	0.1582	4.306	ug/L	0.1582	3.67%
Pb 220.353†	-2.4	-1.705	ug/L	8.6510	-1.705	ug/L	8.6510	507.51%
Sb 206.836†	-66.4	-24.26	ug/L	2.478	-24.26	ug/L	2.478	10.22%
Se 196.026†	-58.5	-60.05	ug/L	12.168	-60.05	ug/L	12.168	20.27%
V 311.071†	720.0	3.891	ug/L	0.4546	3.891	ug/L	0.4546	11.68%
Sn 189.927†	-29.0	-9.157	ug/L	8.7105	-9.157	ug/L	8.7105	95.12%
Sr 421.552†	635216.0	679.0	ug/L	1.64	679.0	ug/L	1.64	0.24%
Tl 190.801†	-40.2	-17.25	ug/L	2.967	-17.25	ug/L	2.967	17.20%
Zn 206.200†	238.1	25.80	ug/L	0.419	25.80	ug/L	0.419	1.62%
Ti 334.940†	-2059.1	-3.990	ug/L	0.0926	-3.990	ug/L	0.0926	2.32%
B 249.772†	693.1	23.07	ug/L	0.486	23.07	ug/L	0.486	2.10%
Cu 324.752†	1126.8	3.881	ug/L	0.2416	3.881	ug/L	0.2416	6.22%
S 181.975†	331.5	2489	ug/L	50.1	2489	ug/L	50.1	2.01%
Zr 343.823†	-116.4	-0.485	ug/L	0.0196	-0.485	ug/L	0.0196	4.04%
Li 670.784†	882.7	3.294	ug/L	0.4174	3.294	ug/L	0.4174	12.67%

Sequence No.: 75
Sample ID: 220-14983-A-2-B
Analyst: JV
Initial Sample Wt:

Autosampler Location: 93
Date Collected: 3/28/2011 3:43:20 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: 220-14983-A-2-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	766438.7	0.884	mg/L	0.0027				0.30%
Y (radial)	100373.7	0.896	mg/L	0.0029				0.32%
Ag 328.068†	106.0	0.723	ug/L	0.0182	0.723	ug/L	0.0182	2.51%
Al 396.153†	368.1	37.29	ug/L	0.789	37.29	ug/L	0.789	2.12%
As 188.979†	-3.6	-3.838	ug/L	5.4243	-3.838	ug/L	5.4243	141.34%
Ba 233.527†	19091.8	339.4	ug/L	0.06	339.4	ug/L	0.06	0.02%
Be 313.107†	-65.2	-0.068	ug/L	0.0181	-0.068	ug/L	0.0181	26.46%
Ca 317.933†	24464.5	3605	ug/L	10.4	3605	ug/L	10.4	0.29%
Cd 214.440†	18.5	0.590	ug/L	0.1847	0.590	ug/L	0.1847	31.32%
Co 228.616†	136.6	11.44	ug/L	1.317	11.44	ug/L	1.317	11.50%
Cr 267.716†	29.1	1.459	ug/L	0.9786	1.459	ug/L	0.9786	67.09%
Fe 238.204†	748.7	315.4	ug/L	1.02	315.4	ug/L	1.02	0.32%
K 766.490†	64578.8	9360	ug/L	114.6	9360	ug/L	114.6	1.22%
Mg 285.213†	21393.8	1720	ug/L	5.3	1720	ug/L	5.3	0.31%
Mn 257.610†	1282035.0	3501	ug/L	4.7	3501	ug/L	4.7	0.13%
Mo 202.031†	-9.0	-2.055	ug/L	0.2561	-2.055	ug/L	0.2561	12.46%
Na 589.592†	6516196.7	517800	ug/L	9768.1	517800	ug/L	9768.1	1.89%
Ni 231.604†	230.4	30.99	ug/L	0.278	30.99	ug/L	0.278	0.90%
Pb 220.353†	0.1	0.054	ug/L	6.1390	0.054	ug/L	6.1390	>999.9%
Sb 206.836†	-6.2	-3.667	ug/L	2.5713	-3.667	ug/L	2.5713	70.11%
Se 196.026†	-5.9	-9.257	ug/L	20.4440	-9.257	ug/L	20.4440	220.84%
V 311.071†	790.4	4.598	ug/L	0.4930	4.598	ug/L	0.4930	10.72%
Sn 189.927†	-6.8	-4.039	ug/L	2.2300	-4.039	ug/L	2.2300	55.21%
Sr 421.552†	31415.4	33.72	ug/L	0.281	33.72	ug/L	0.281	0.83%
Tl 190.801†	-4.5	-2.799	ug/L	0.7618	-2.799	ug/L	0.7618	27.21%
Zn 206.200†	610.7	66.21	ug/L	0.637	66.21	ug/L	0.637	0.96%
Ti 334.940†	-168.9	-0.327	ug/L	0.0113	-0.327	ug/L	0.0113	3.45%
B 249.772†	200.9	5.475	ug/L	0.5016	5.475	ug/L	0.5016	9.16%
Cu 324.752†	2945.9	10.18	ug/L	0.218	10.18	ug/L	0.218	2.14%
S 181.975†	57.1	399.0	ug/L	16.29	399.0	ug/L	16.29	4.08%
Zr 343.823†	-95.1	-0.405	ug/L	0.0086	-0.405	ug/L	0.0086	2.12%
Li 670.784†	265.7	0.992	ug/L	0.2768	0.992	ug/L	0.2768	27.91%

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Sequence No.: 76 Autosampler Location: 94
Sample ID: 220-14983-A-3-B Date Collected: 3/28/2011 3:47:02 PM
Analyst: JV Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-14983-A-3-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	729884.1	0.842	mg/L	0.0041				0.49%
Y (radial)	99279.7	0.886	mg/L	0.0020				0.22%
Ag 328.068†	-366.8	-2.390	ug/L	0.0076	-2.390	ug/L	0.0076	0.32%
Al 396.153†	973.4	98.92	ug/L	0.022	98.92	ug/L	0.022	0.02%
As 188.979†	-20.2	-7.587	ug/L	3.1143	-7.587	ug/L	3.1143	41.05%
Ba 233.527†	9109.0	162.0	ug/L	1.90	162.0	ug/L	1.90	1.18%
Be 313.107†	-471.1	-0.514	ug/L	0.0066	-0.514	ug/L	0.0066	1.28%
Ca 317.933†	2152174.8	317200	ug/L	1642.3	317200	ug/L	1642.3	0.52%
Cd 214.440†	69.1	2.260	ug/L	0.0163	2.260	ug/L	0.0163	0.72%
Co 228.616†	3.6	0.299	ug/L	0.1260	0.299	ug/L	0.1260	42.22%
Cr 267.716†	-18.2	-0.903	ug/L	0.2207	-0.903	ug/L	0.2207	24.46%
Fe 238.204†	-16.6	-7.007	ug/L	0.0035	-7.007	ug/L	0.0035	0.05%
K 766.490†	25642.5	3717	ug/L	37.2	3717	ug/L	37.2	1.00%
Mg 285.213†	1022.1	82.15	ug/L	0.075	82.15	ug/L	0.075	0.09%
Mn 257.610†	23.5	0.061	ug/L	0.1016	0.061	ug/L	0.1016	167.48%
Mo 202.031†	-64.5	-14.68	ug/L	0.999	-14.68	ug/L	0.999	6.81%
Na 589.592†	6891213.1	547600	ug/L	4090.7	547600	ug/L	4090.7	0.75%
Ni 231.604†	-5.6	-0.748	ug/L	0.2863	-0.748	ug/L	0.2863	38.28%
Pb 220.353†	-7.4	-5.212	ug/L	6.3851	-5.212	ug/L	6.3851	122.52%
Sb 206.836†	-74.0	-17.22	ug/L	1.031	-17.22	ug/L	1.031	5.99%
Se 196.026†	-61.1	-37.34	ug/L	5.483	-37.34	ug/L	5.483	14.68%
V 311.071†	251.8	1.550	ug/L	0.6688	1.550	ug/L	0.6688	43.15%

Sn 189.927†	-43.0	-12.15	ug/L	3.200	-12.15	ug/L	3.200	26.34%
Sr 421.552†	2362555.1	2535	ug/L	17.7	2535	ug/L	17.7	0.70%
Tl 190.801†	-31.9	-6.201	ug/L	2.8371	-6.201	ug/L	2.8371	45.76%
Zn 206.200†	105.5	11.43	ug/L	0.491	11.43	ug/L	0.491	4.30%
Ti 334.940†	-3257.0	-6.311	ug/L	0.1735	-6.311	ug/L	0.1735	2.75%
B 249.772†	1005.2	33.48	ug/L	0.124	33.48	ug/L	0.124	0.37%
Cu 324.752†	1017.6	3.504	ug/L	0.1114	3.504	ug/L	0.1114	3.18%
S 181.975†	1379.8	8776	ug/L	149.7	8776	ug/L	149.7	1.71%
Zr 343.823†	-197.3	-0.821	ug/L	0.1091	-0.821	ug/L	0.1091	13.29%
Li 670.784†	1342.2	5.009	ug/L	0.6152	5.009	ug/L	0.6152	12.28%

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Sequence No.: 77
Sample ID: 220-14983-A-4-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 3/28/2011 3:50:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14983-A-4-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	748782.8	0.864	mg/L	0.0078				0.91%
Y (radial)	100883.5	0.901	mg/L	0.0071				0.79%
Ag 328.068†	-75.6	-0.380	ug/L	0.0494	-0.380	ug/L	0.0494	12.99%
Al 396.153†	1173.3	118.8	ug/L	0.82	118.8	ug/L	0.82	0.69%
As 188.979†	-15.8	-14.26	ug/L	9.155	-14.26	ug/L	9.155	64.21%
Ba 233.527†	13127.6	233.4	ug/L	2.01	233.4	ug/L	2.01	0.86%
Be 313.107†	-257.8	-0.274	ug/L	0.0245	-0.274	ug/L	0.0245	8.93%
Ca 317.933†	453997.3	66900	ug/L	332.6	66900	ug/L	332.6	0.50%
Cd 214.440†	61.4	1.922	ug/L	0.2175	1.922	ug/L	0.2175	11.32%
Co 228.616†	113.8	9.477	ug/L	1.1370	9.477	ug/L	1.1370	12.00%
Cr 267.716†	12.9	0.686	ug/L	0.3836	0.686	ug/L	0.3836	55.91%
Fe 238.204†	4310.2	1816	ug/L	2.9	1816	ug/L	2.9	0.16%
K 766.490†	12855.4	1863	ug/L	12.3	1863	ug/L	12.3	0.66%
Mg 285.213†	237061.3	19060	ug/L	82.6	19060	ug/L	82.6	0.43%
Mn 257.610†	398793.8	1088	ug/L	3.6	1088	ug/L	3.6	0.33%
Mo 202.031†	-20.2	-4.545	ug/L	0.2192	-4.545	ug/L	0.2192	4.82%
Na 589.592†	6789853.2	539500	ug/L	4278.5	539500	ug/L	4278.5	0.79%
Ni 231.604†	38.5	5.196	ug/L	0.0214	5.196	ug/L	0.0214	0.41%
Pb 220.353†	-3.3	-2.549	ug/L	0.9073	-2.549	ug/L	0.9073	35.60%
Sb 206.836†	-53.4	-28.07	ug/L	9.734	-28.07	ug/L	9.734	34.67%
Se 196.026†	-23.1	-24.58	ug/L	11.221	-24.58	ug/L	11.221	45.66%
V 311.071†	891.3	4.803	ug/L	0.3651	4.803	ug/L	0.3651	7.60%
Sn 189.927†	-13.3	-5.145	ug/L	0.2458	-5.145	ug/L	0.2458	4.78%
Sr 421.552†	131717.7	140.2	ug/L	0.68	140.2	ug/L	0.68	0.49%
Tl 190.801†	-33.7	-18.72	ug/L	0.950	-18.72	ug/L	0.950	5.07%
Zn 206.200†	1836.1	199.0	ug/L	2.23	199.0	ug/L	2.23	1.12%
Ti 334.940†	-1029.9	-1.996	ug/L	0.0010	-1.996	ug/L	0.0010	0.05%
B 249.772†	939.5	24.30	ug/L	0.124	24.30	ug/L	0.124	0.51%
Cu 324.752†	3471.5	12.16	ug/L	0.293	12.16	ug/L	0.293	2.41%
S 181.975†	-408.0	-2198	ug/L	24.0	-2198	ug/L	24.0	1.09%
Zr 343.823†	-152.2	-0.684	ug/L	0.0702	-0.684	ug/L	0.0702	10.26%
Li 670.784†	509.8	1.902	ug/L	0.1910	1.902	ug/L	0.1910	10.04%

User canceled analysis.

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Analysis Begun

Start Time: 3/28/2011 3:55:28 PM
Logged In Analyst: ctmetals
Spectrometer Model: Optima 4300 DV, S/N 069N-na

Plasma On Time: 3/28/2011 9:50:51 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\4300cycloneAT\Sample Information\032811.sif
Batch ID: 6010B
Results Data Set: 032811d
Results Library: C:\PE\4300cycloneAT\2007 Results\Results.mdb

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Sequence No.: 78
Sample ID: 220-14998-D-26-B
Analyst: JV

Autosampler Location: 96
Date Collected: 3/28/2011 3:55:29 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-14998-D-26-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	821767.8	0.948	mg/L	0.0044				0.47%
Y (radial)	105293.4	0.940	mg/L	0.0020				0.21%
Ag 328.068†	42.4	0.282	ug/L	0.1472	0.282	ug/L	0.1472	52.16%
Al 396.153†	-43.1	-4.338	ug/L	1.9544	-4.338	ug/L	1.9544	45.06%
As 188.979†	1.6	1.767	ug/L	3.0702	1.767	ug/L	3.0702	173.72%
Ba 233.527†	12.4	0.222	ug/L	0.0549	0.222	ug/L	0.0549	24.75%
Be 313.107†	-59.1	-0.060	ug/L	0.0237	-0.060	ug/L	0.0237	39.23%
Ca 317.933†	1.0	0.154	ug/L	1.5790	0.154	ug/L	1.5790	>999.9%
Cd 214.440†	14.2	0.463	ug/L	0.0920	0.463	ug/L	0.0920	19.85%
Co 228.616†	3.6	0.303	ug/L	0.0977	0.303	ug/L	0.0977	32.26%
Cr 267.716†	4.4	0.217	ug/L	0.3052	0.217	ug/L	0.3052	140.33%
Fe 238.204†	-1.4	-0.578	ug/L	2.1773	-0.578	ug/L	2.1773	376.62%
K 766.490†	123.6	17.91	ug/L	1.254	17.91	ug/L	1.254	7.00%
Mg 285.213†	23.2	1.867	ug/L	0.3554	1.867	ug/L	0.3554	19.04%
Mn 257.610†	117.5	0.321	ug/L	0.0249	0.321	ug/L	0.0249	7.77%
Mo 202.031†	-2.3	-0.532	ug/L	0.4069	-0.532	ug/L	0.4069	76.45%
Na 589.592†	-669.3	-53.18	ug/L	8.536	-53.18	ug/L	8.536	16.05%
Ni 231.604†	10.4	1.400	ug/L	0.0416	1.400	ug/L	0.0416	2.97%
Pb 220.353†	6.3	4.378	ug/L	7.8430	4.378	ug/L	7.8430	179.14%
Sb 206.836†	-2.2	-1.448	ug/L	3.8262	-1.448	ug/L	3.8262	264.16%
Se 196.026†	-2.5	-4.451	ug/L	4.2618	-4.451	ug/L	4.2618	95.75%
V 311.071†	119.4	0.703	ug/L	0.0912	0.703	ug/L	0.0912	12.98%
Sn 189.927†	-1.0	-0.587	ug/L	2.5582	-0.587	ug/L	2.5582	435.66%
Sr 421.552†	-124.8	-0.134	ug/L	0.0107	-0.134	ug/L	0.0107	7.96%
Tl 190.801†	3.3	2.136	ug/L	2.2932	2.136	ug/L	2.2932	107.35%
Zn 206.200†	46.2	5.008	ug/L	0.2366	5.008	ug/L	0.2366	4.72%
Ti 334.940†	7.3	0.014	ug/L	0.0724	0.014	ug/L	0.0724	514.58%
B 249.772†	-505.9	-16.84	ug/L	0.307	-16.84	ug/L	0.307	1.82%
Cu 324.752†	154.1	0.531	ug/L	0.0649	0.531	ug/L	0.0649	12.24%
S 181.975†	-3.8	-24.26	ug/L	18.615	-24.26	ug/L	18.615	76.73%
Zr 343.823†	-134.5	-0.560	ug/L	0.0094	-0.560	ug/L	0.0094	1.68%
Li 670.784†	143.7	0.536	ug/L	0.3667	0.536	ug/L	0.3667	68.38%

Sequence No.: 79 Autosampler Location: 97
Sample ID: 220-15015-D-1-A Date Collected: 3/28/2011 3:58:38 PM
Analyst: JV Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-15015-D-1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	764873.1	0.883	mg/L	0.0009				0.11%
Y (radial)	103322.9	0.922	mg/L	0.0015				0.17%
Ag 328.068†	-131.5	-0.762	ug/L	0.1031	-0.762	ug/L	0.1031	13.54%
Al 396.153†	199.2	20.33	ug/L	4.501	20.33	ug/L	4.501	22.14%
As 188.979†	-15.5	-9.823	ug/L	6.2275	-9.823	ug/L	6.2275	63.40%
Ba 233.527†	12958.9	230.4	ug/L	0.29	230.4	ug/L	0.29	0.13%
Be 313.107†	-290.5	-0.313	ug/L	0.0369	-0.313	ug/L	0.0369	11.80%
Ca 317.933†	1048193.5	154500	ug/L	211.2	154500	ug/L	211.2	0.14%
Cd 214.440†	23.3	0.695	ug/L	0.0998	0.695	ug/L	0.0998	14.36%
Co 228.616†	119.7	9.988	ug/L	0.8376	9.988	ug/L	0.8376	8.39%
Cr 267.716†	-53.1	-2.601	ug/L	0.0501	-2.601	ug/L	0.0501	1.93%
Fe 238.204†	3392.1	1429	ug/L	33.2	1429	ug/L	33.2	2.32%
K 766.490†	70503.2	10220	ug/L	8.6	10220	ug/L	8.6	0.08%
Mg 285.213†	1555597.4	125000	ug/L	90.4	125000	ug/L	90.4	0.07%
Mn 257.610†	859045.2	2341	ug/L	0.8	2341	ug/L	0.8	0.04%
Mo 202.031†	-25.5	-5.757	ug/L	0.3290	-5.757	ug/L	0.3290	5.72%
Na 589.592†	1960896.5	155800	ug/L	91.2	155800	ug/L	91.2	0.06%
Ni 231.604†	109.6	14.75	ug/L	0.050	14.75	ug/L	0.050	0.34%
Pb 220.353†	-3.2	-2.477	ug/L	6.0842	-2.477	ug/L	6.0842	245.63%
Sb 206.836†	-58.6	-22.94	ug/L	3.078	-22.94	ug/L	3.078	13.42%
Se 196.026†	-36.0	-28.24	ug/L	41.318	-28.24	ug/L	41.318	146.29%

V 311.071†	1213.4	4.515 ug/L	0.1328	4.515 ug/L	0.1328	2.94%
Sn 189.927†	-25.3	-8.591 ug/L	6.3987	-8.591 ug/L	6.3987	74.48%
Sr 421.552†	796839.3	853.8 ug/L	0.98	853.8 ug/L	0.98	0.12%
Tl 190.801†	-28.3	-11.20 ug/L	1.174	-11.20 ug/L	1.174	10.48%
Zn 206.200†	75.3	8.139 ug/L	0.0870	8.139 ug/L	0.0870	1.07%
Ti 334.940†	-1583.9	-3.069 ug/L	0.2110	-3.069 ug/L	0.2110	6.87%
B 249.772†	6878.4	223.4 ug/L	0.50	223.4 ug/L	0.50	0.22%
Cu 324.752†	680.0	2.500 ug/L	0.2083	2.500 ug/L	0.2083	8.33%
S 181.975†	11104.1	73210 ug/L	29.1	73210 ug/L	29.1	0.04%
Zr 343.823†	-176.6	-0.774 ug/L	0.1325	-0.774 ug/L	0.1325	17.11%
Li 670.784†	793.4	2.961 ug/L	0.3280	2.961 ug/L	0.3280	11.08%

Sequence No.: 80 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/28/2011 4:02:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	832710.4	0.961	mg/L	0.0051				0.53%
Y (radial)	107570.8	0.960	mg/L	0.0101				1.06%
Ag 328.068†	37248.0	241.9	ug/L	0.25	241.9	ug/L	0.25	0.10%
QC value within limits for Ag 328.068 Recovery = 96.77%								
Al 396.153†	48958.3	4935	ug/L	18.0	4935	ug/L	18.0	0.36%
QC value within limits for Al 396.153 Recovery = 98.70%								
As 188.979†	443.5	498.2	ug/L	0.74	498.2	ug/L	0.74	0.15%
QC value within limits for As 188.979 Recovery = 99.63%								
Ba 233.527†	28065.2	499.9	ug/L	1.43	499.9	ug/L	1.43	0.29%
QC value within limits for Ba 233.527 Recovery = 99.97%								
Be 313.107†	477650.5	491.8	ug/L	0.23	491.8	ug/L	0.23	0.05%
QC value within limits for Be 313.107 Recovery = 98.36%								
Ca 317.933†	120941.0	17820	ug/L	5.8	17820	ug/L	5.8	0.03%
QC value within limits for Ca 317.933 Recovery = 96.34%								
Cd 214.440†	15166.7	495.5	ug/L	5.13	495.5	ug/L	5.13	1.04%
QC value within limits for Cd 214.440 Recovery = 99.10%								
Co 228.616†	5968.0	499.7	ug/L	4.11	499.7	ug/L	4.11	0.82%
QC value within limits for Co 228.616 Recovery = 99.95%								
Cr 267.716†	10090.3	502.7	ug/L	4.68	502.7	ug/L	4.68	0.93%
QC value within limits for Cr 267.716 Recovery = 100.53%								
Fe 238.204†	12078.0	5088	ug/L	31.1	5088	ug/L	31.1	0.61%
QC value within limits for Fe 238.204 Recovery = 92.51%								
K 766.490†	265033.6	38410	ug/L	339.9	38410	ug/L	339.9	0.88%
QC value within limits for K 766.490 Recovery = 96.04%								
Mg 285.213†	221615.5	17820	ug/L	30.6	17820	ug/L	30.6	0.17%
QC value within limits for Mg 285.213 Recovery = 96.32%								
Mn 257.610†	183044.5	499.1	ug/L	0.49	499.1	ug/L	0.49	0.10%
QC value within limits for Mn 257.610 Recovery = 99.83%								
Mo 202.031†	2061.4	468.2	ug/L	2.86	468.2	ug/L	2.86	0.61%
QC value within limits for Mo 202.031 Recovery = 93.64%								
Na 589.592†	458992.5	36470	ug/L	278.7	36470	ug/L	278.7	0.76%
QC value within limits for Na 589.592 Recovery = 91.18%								
Ni 231.604†	3749.3	504.9	ug/L	4.56	504.9	ug/L	4.56	0.90%
QC value within limits for Ni 231.604 Recovery = 100.97%								
Pb 220.353†	703.8	492.2	ug/L	3.65	492.2	ug/L	3.65	0.74%
QC value within limits for Pb 220.353 Recovery = 98.44%								
Sb 206.836†	719.0	463.4	ug/L	0.40	463.4	ug/L	0.40	0.09%
QC value within limits for Sb 206.836 Recovery = 92.68%								
Se 196.026†	252.9	449.0	ug/L	20.14	449.0	ug/L	20.14	4.49%
QC value within limits for Se 196.026 Recovery = 89.81%								
V 311.071†	82514.4	476.0	ug/L	0.17	476.0	ug/L	0.17	0.04%
QC value within limits for V 311.071 Recovery = 95.20%								
Sn 189.927†	772.0	478.7	ug/L	8.73	478.7	ug/L	8.73	1.82%
QC value within limits for Sn 189.927 Recovery = 95.74%								
Sr 421.552†	452130.3	486.1	ug/L	1.86	486.1	ug/L	1.86	0.38%
QC value within limits for Sr 421.552 Recovery = 97.22%								
Tl 190.801†	755.4	495.3	ug/L	7.62	495.3	ug/L	7.62	1.54%
QC value within limits for Tl 190.801 Recovery = 99.06%								
Zn 206.200†	4484.5	491.3	ug/L	5.61	491.3	ug/L	5.61	1.14%

QC value within limits for Zn 206.200 Recovery = 98.26%

Ti 334.940†	255298.9	494.7 ug/L	0.28	494.7 ug/L	0.28	0.06%
QC value within limits for Ti 334.940 Recovery = 98.94%						
B 249.772†	14487.2	462.6 ug/L	4.30	462.6 ug/L	4.30	0.93%
QC value within limits for B 249.772 Recovery = 92.53%						
Cu 324.752†	143447.7	494.7 ug/L	0.89	494.7 ug/L	0.89	0.18%
QC value within limits for Cu 324.752 Recovery = 98.93%						
S 181.975†	1420.6	9404 ug/L	98.4	9404 ug/L	98.4	1.05%
QC value within limits for S 181.975 Recovery = 94.04%						
Zr 343.823†	113925.5	474.1 ug/L	0.94	474.1 ug/L	0.94	0.20%
QC value within limits for Zr 343.823 Recovery = 94.83%						
Li 670.784†	132802.0	495.6 ug/L	4.73	495.6 ug/L	4.73	0.96%
QC value within limits for Li 670.784 Recovery = 99.11%						

All analyte(s) passed QC.

Sequence No.: 81 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/28/2011 4:05:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	869339.2	1.003	mg/L	0.0056				0.56%
Y (radial)	110081.1	0.983	mg/L	0.0031				0.31%
Ag 328.068†	9.7	0.062	ug/L	0.0870	0.062	ug/L	0.0870	140.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-40.1	-4.029	ug/L	0.1170	-4.029	ug/L	0.1170	2.90%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.3	2.573	ug/L	6.1408	2.573	ug/L	6.1408	238.63%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.7	0.083	ug/L	0.1090	0.083	ug/L	0.1090	131.87%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	37.5	0.039	ug/L	0.0655	0.039	ug/L	0.0655	168.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-7.5	-1.099	ug/L	1.6755	-1.099	ug/L	1.6755	152.47%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	3.1	0.102	ug/L	0.2279	0.102	ug/L	0.2279	222.58%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-5.0	-0.421	ug/L	0.1256	-0.421	ug/L	0.1256	29.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.2	0.057	ug/L	0.0601	0.057	ug/L	0.0601	105.37%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Fe 238.204†	-20.0	-8.434	ug/L	1.2839	-8.434	ug/L	1.2839	15.22%
QC value within limits for Fe 238.204 Recovery = Not calculated								
K 766.490†	62.1	8.998	ug/L	1.7772	8.998	ug/L	1.7772	19.75%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	8.6	0.689	ug/L	0.5912	0.689	ug/L	0.5912	85.86%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	7.9	0.022	ug/L	0.0358	0.022	ug/L	0.0358	165.10%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-2.8	-0.642	ug/L	1.3494	-0.642	ug/L	1.3494	210.29%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-1001.3	-79.56	ug/L	0.101	-79.56	ug/L	0.101	0.13%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	4.3	0.579	ug/L	0.1400	0.579	ug/L	0.1400	24.19%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.5	-1.071	ug/L	0.2364	-1.071	ug/L	0.2364	22.08%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.1	-0.061	ug/L	0.6957	-0.061	ug/L	0.6957	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.8	-1.355	ug/L	4.2426	-1.355	ug/L	4.2426	313.00%
QC value within limits for Se 196.026 Recovery = Not calculated								
V 311.071†	-20.2	-0.119	ug/L	0.1910	-0.119	ug/L	0.1910	159.97%
QC value within limits for V 311.071 Recovery = Not calculated								
Sn 189.927†	3.9	2.376	ug/L	1.4346	2.376	ug/L	1.4346	60.38%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-1.5	-0.002	ug/L	0.0156	-0.002	ug/L	0.0156	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated								

Tl 190.801†	5.5	3.570 ug/L	2.3256	3.570 ug/L	2.3256	65.14%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	7.4	0.798 ug/L	0.0417	0.798 ug/L	0.0417	5.22%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	46.1	0.089 ug/L	0.0185	0.089 ug/L	0.0185	20.71%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-439.5	-14.60 ug/L	0.120	-14.60 ug/L	0.120	0.82%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	-33.9	-0.118 ug/L	0.1003	-0.118 ug/L	0.1003	85.12%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-8.0	-50.84 ug/L	33.069	-50.84 ug/L	33.069	65.04%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	20.5	0.085 ug/L	0.0217	0.085 ug/L	0.0217	25.47%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	-24.3	-0.091 ug/L	0.3597	-0.091 ug/L	0.3597	396.97%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 82
Sample ID: 220-15015-D-1-B DU
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 3/28/2011 4:08:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-1-B DU

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	781447.9	0.902	mg/L	0.0016				0.18%
Y (radial)	102210.9	0.912	mg/L	0.0117				1.28%
Ag 328.068†	-135.5	-0.796	ug/L	0.0435	-0.796	ug/L	0.0435	5.46%
Al 396.153†	144.7	14.82	ug/L	5.334	14.82	ug/L	5.334	35.99%
As 188.979†	-13.6	-7.656	ug/L	8.2952	-7.656	ug/L	8.2952	108.35%
Ba 233.527†	12662.5	225.1	ug/L	1.42	225.1	ug/L	1.42	0.63%
Be 313.107†	-244.0	-0.265	ug/L	0.0389	-0.265	ug/L	0.0389	14.69%
Ca 317.933†	1052780.1	155100	ug/L	12.0	155100	ug/L	12.0	0.01%
Cd 214.440†	17.0	0.491	ug/L	0.3193	0.491	ug/L	0.3193	65.04%
Co 228.616†	132.4	11.05	ug/L	0.215	11.05	ug/L	0.215	1.94%
Cr 267.716†	-41.4	-2.021	ug/L	0.0130	-2.021	ug/L	0.0130	0.64%
Fe 238.204†	3323.9	1400	ug/L	29.5	1400	ug/L	29.5	2.11%
K 766.490†	71172.5	10320	ug/L	39.6	10320	ug/L	39.6	0.38%
Mg 285.213†	1562525.7	125600	ug/L	511.6	125600	ug/L	511.6	0.41%
Mn 257.610†	845590.7	2304	ug/L	0.6	2304	ug/L	0.6	0.03%
Mo 202.031†	-25.0	-5.643	ug/L	0.3925	-5.643	ug/L	0.3925	6.96%
Na 589.592†	1959262.0	155700	ug/L	749.6	155700	ug/L	749.6	0.48%
Ni 231.604†	100.9	13.58	ug/L	0.518	13.58	ug/L	0.518	3.82%
Pb 220.353†	-2.0	-1.631	ug/L	8.3362	-1.631	ug/L	8.3362	511.00%
Sb 206.836†	-50.7	-17.74	ug/L	6.222	-17.74	ug/L	6.222	35.07%
Se 196.026†	-45.8	-45.20	ug/L	16.706	-45.20	ug/L	16.706	36.96%
V 311.071†	975.0	3.101	ug/L	0.7791	3.101	ug/L	0.7791	25.12%
Sn 189.927†	-17.7	-3.860	ug/L	3.3893	-3.860	ug/L	3.3893	87.81%
Sr 421.552†	798437.8	855.5	ug/L	1.88	855.5	ug/L	1.88	0.22%
Tl 190.801†	-32.1	-13.66	ug/L	1.038	-13.66	ug/L	1.038	7.60%
Zn 206.200†	75.0	8.106	ug/L	1.7315	8.106	ug/L	1.7315	21.36%
Ti 334.940†	-1512.4	-2.931	ug/L	0.1236	-2.931	ug/L	0.1236	4.22%
B 249.772†	6816.6	221.5	ug/L	0.65	221.5	ug/L	0.65	0.29%
Cu 324.752†	834.9	3.030	ug/L	0.0104	3.030	ug/L	0.0104	0.34%
S 181.975†	10835.8	71520	ug/L	376.2	71520	ug/L	376.2	0.53%
Zr 343.823†	-32.3	-0.173	ug/L	0.0769	-0.173	ug/L	0.0769	44.42%
Li 670.784†	928.4	3.464	ug/L	0.3281	3.464	ug/L	0.3281	9.47%

Sequence No.: 83
Sample ID: 220-15015-D-1-C MS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 3/28/2011 4:12:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-1-C MS

Mean Corrected Calib. Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	776249.2	0.896	mg/L	0.0012				0.13%
Y (radial)	100997.9	0.902	mg/L	0.0013				0.15%
Ag 328.068†	18380.1	118.2	ug/L	0.16	118.2	ug/L	0.16	0.14%
Al 396.153†	35293.4	3556	ug/L	0.7	3556	ug/L	0.7	0.02%
As 188.979†	333.6	380.2	ug/L	7.46	380.2	ug/L	7.46	1.96%
Ba 233.527†	19058.5	339.0	ug/L	0.19	339.0	ug/L	0.19	0.06%
Be 313.107†	38028.6	40.94	ug/L	0.137	40.94	ug/L	0.137	0.33%
Ca 317.933†	1120557.9	165100	ug/L	1539.0	165100	ug/L	1539.0	0.93%
Cd 214.440†	3538.7	115.5	ug/L	0.38	115.5	ug/L	0.38	0.33%
Co 228.616†	1498.7	125.1	ug/L	0.90	125.1	ug/L	0.90	0.72%
Cr 267.716†	2317.0	115.5	ug/L	0.09	115.5	ug/L	0.09	0.07%
Fe 238.204†	11075.7	4666	ug/L	26.9	4666	ug/L	26.9	0.58%
K 766.490†	181469.7	26300	ug/L	140.1	26300	ug/L	140.1	0.53%
Mg 285.213†	1676653.3	134800	ug/L	1116.5	134800	ug/L	1116.5	0.83%
Mn 257.610†	863829.0	2353	ug/L	2.4	2353	ug/L	2.4	0.10%
Mo 202.031†	1705.1	387.9	ug/L	2.14	387.9	ug/L	2.14	0.55%
Na 589.592†	2108056.5	167500	ug/L	1205.3	167500	ug/L	1205.3	0.72%
Ni 231.604†	944.0	127.1	ug/L	0.49	127.1	ug/L	0.49	0.39%
Pb 220.353†	559.9	391.5	ug/L	3.65	391.5	ug/L	3.65	0.93%
Sb 206.836†	572.1	387.0	ug/L	5.78	387.0	ug/L	5.78	1.49%
Se 196.026†	56.9	138.5	ug/L	3.63	138.5	ug/L	3.63	2.62%
V 311.071†	21746.5	118.4	ug/L	0.08	118.4	ug/L	0.08	0.07%
Sn 189.927†	604.5	381.8	ug/L	6.94	381.8	ug/L	6.94	1.82%
Sr 421.552†	817904.3	876.3	ug/L	7.27	876.3	ug/L	7.27	0.83%
Tl 190.801†	538.8	362.1	ug/L	1.04	362.1	ug/L	1.04	0.29%
Zn 206.200†	1078.4	118.1	ug/L	1.64	118.1	ug/L	1.64	1.39%
Ti 334.940†	206681.1	400.5	ug/L	0.46	400.5	ug/L	0.46	0.11%
B 249.772†	19626.0	635.3	ug/L	1.40	635.3	ug/L	1.40	0.22%
Cu 324.752†	37722.3	130.4	ug/L	0.64	130.4	ug/L	0.64	0.49%
S 181.975†	11080.3	73260	ug/L	381.3	73260	ug/L	381.3	0.52%
Zr 343.823†	96045.6	399.7	ug/L	0.48	399.7	ug/L	0.48	0.12%
Li 670.784†	1061.2	3.960	ug/L	0.1894	3.960	ug/L	0.1894	4.78%

Sequence No.: 84
Sample ID: 220-15015-D-1-A PDS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 3/28/2011 4:15:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-1-A PDS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	766386.4	0.884	mg/L	0.0072				0.81%
Y (radial)	101217.8	0.903	mg/L	0.0054				0.59%
Ag 328.068†	1592.2	8.893	ug/L	0.0047	8.893	ug/L	0.0047	0.05%
Al 396.153†	16886.2	1698	ug/L	1.3	1698	ug/L	1.3	0.08%
As 188.979†	160.2	186.3	ug/L	9.46	186.3	ug/L	9.46	5.08%
Ba 233.527†	18034.3	320.8	ug/L	0.36	320.8	ug/L	0.36	0.11%
Be 313.107†	99629.6	103.5	ug/L	0.22	103.5	ug/L	0.22	0.21%
Ca 317.933†	1083164.3	159600	ug/L	3009.0	159600	ug/L	3009.0	1.89%
Cd 214.440†	2983.5	97.38	ug/L	1.023	97.38	ug/L	1.023	1.05%
Co 228.616†	1263.1	105.5	ug/L	1.64	105.5	ug/L	1.64	1.55%
Cr 267.716†	1950.4	97.22	ug/L	0.052	97.22	ug/L	0.052	0.05%
Fe 238.204†	7347.5	3095	ug/L	12.7	3095	ug/L	12.7	0.41%
K 766.490†	104756.9	15180	ug/L	206.3	15180	ug/L	206.3	1.36%
Mg 285.213†	1625395.9	130700	ug/L	1972.1	130700	ug/L	1972.1	1.51%
Mn 257.610†	874903.6	2384	ug/L	4.2	2384	ug/L	4.2	0.18%
Mo 202.031†	1254.7	285.4	ug/L	1.72	285.4	ug/L	1.72	0.60%
Na 589.592†	2099099.6	166800	ug/L	2280.5	166800	ug/L	2280.5	1.37%
Ni 231.604†	809.9	109.1	ug/L	0.24	109.1	ug/L	0.24	0.22%
Pb 220.353†	134.4	94.29	ug/L	1.999	94.29	ug/L	1.999	2.12%
Sb 206.836†	421.9	288.8	ug/L	6.21	288.8	ug/L	6.21	2.15%
Se 196.026†	127.8	260.1	ug/L	14.09	260.1	ug/L	14.09	5.42%
V 311.071†	18350.7	100.2	ug/L	0.14	100.2	ug/L	0.14	0.14%
Sn 189.927†	457.0	290.2	ug/L	6.60	290.2	ug/L	6.60	2.27%
Sr 421.552†	907890.6	973.2	ug/L	14.52	973.2	ug/L	14.52	1.49%
Tl 190.801†	419.4	283.0	ug/L	5.65	283.0	ug/L	5.65	1.99%
Zn 206.200†	2663.5	289.7	ug/L	0.24	289.7	ug/L	0.24	0.08%
Ti 334.940†	153945.7	298.3	ug/L	0.19	298.3	ug/L	0.19	0.06%

B 249.772†	16287.1	530.2 ug/L	7.01	530.2 ug/L	7.01	1.32%
Cu 324.752†	31861.4	110.1 ug/L	0.03	110.1 ug/L	0.03	0.03%
S 181.975†	10942.0	72300 ug/L	661.6	72300 ug/L	661.6	0.92%
Zr 343.823†	73410.7	305.5 ug/L	1.11	305.5 ug/L	1.11	0.36%
Li 670.784†	30924.1	115.4 ug/L	0.13	115.4 ug/L	0.13	0.11%

Sequence No.: 85
Sample ID: 220-15015-D-1-A SD@5
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 3/28/2011 4:19:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-1-A SD@5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	806607.5	0.931	mg/L	0.0071				0.76%
Y (radial)	108461.1	0.968	mg/L	0.0096				0.99%
Ag 328.068†	-33.6	-0.195	ug/L	0.0220	-0.195	ug/L	0.0220	11.26%
Al 396.153†	-13.8	-1.308	ug/L	0.5648	-1.308	ug/L	0.5648	43.17%
As 188.979†	-10.3	-10.02	ug/L	2.456	-10.02	ug/L	2.456	24.51%
Ba 233.527†	2671.4	47.50	ug/L	0.198	47.50	ug/L	0.198	0.42%
Be 313.107†	-137.3	-0.145	ug/L	0.0148	-0.145	ug/L	0.0148	10.19%
Ca 317.933†	207135.7	30530	ug/L	14.3	30530	ug/L	14.3	0.05%
Cd 214.440†	-0.5	-0.028	ug/L	0.0115	-0.028	ug/L	0.0115	40.61%
Co 228.616†	28.5	2.375	ug/L	0.3149	2.375	ug/L	0.3149	13.26%
Cr 267.716†	-15.3	-0.754	ug/L	0.4891	-0.754	ug/L	0.4891	64.90%
Fe 238.204†	687.5	289.6	ug/L	1.65	289.6	ug/L	1.65	0.57%
K 766.490†	12807.5	1856	ug/L	25.9	1856	ug/L	25.9	1.39%
Mg 285.213†	312526.2	25120	ug/L	28.1	25120	ug/L	28.1	0.11%
Mn 257.610†	175171.6	477.3	ug/L	0.09	477.3	ug/L	0.09	0.02%
Mo 202.031†	-11.8	-2.676	ug/L	2.6096	-2.676	ug/L	2.6096	97.50%
Na 589.592†	394178.2	31320	ug/L	177.9	31320	ug/L	177.9	0.57%
Ni 231.604†	28.9	3.888	ug/L	1.9771	3.888	ug/L	1.9771	50.85%
Pb 220.353†	-0.9	-0.704	ug/L	5.3174	-0.704	ug/L	5.3174	755.66%
Sb 206.836†	-24.6	-12.93	ug/L	1.791	-12.93	ug/L	1.791	13.85%
Se 196.026†	-21.4	-30.48	ug/L	11.298	-30.48	ug/L	11.298	37.07%
V 311.071†	589.7	2.940	ug/L	0.3007	2.940	ug/L	0.3007	10.23%
Sn 189.927†	-14.3	-7.410	ug/L	0.3040	-7.410	ug/L	0.3040	4.10%
Sr 421.552†	163454.4	175.2	ug/L	0.39	175.2	ug/L	0.39	0.22%
Tl 190.801†	-27.2	-16.21	ug/L	3.424	-16.21	ug/L	3.424	21.13%
Zn 206.200†	10.4	1.124	ug/L	0.9182	1.124	ug/L	0.9182	81.71%
Ti 334.940†	-469.4	-0.910	ug/L	0.0225	-0.910	ug/L	0.0225	2.48%
B 249.772†	1083.1	34.94	ug/L	0.817	34.94	ug/L	0.817	2.34%
Cu 324.752†	207.9	0.748	ug/L	0.0152	0.748	ug/L	0.0152	2.03%
S 181.975†	1763.8	11740	ug/L	326.2	11740	ug/L	326.2	2.78%
Zr 343.823†	-47.1	-0.204	ug/L	0.0197	-0.204	ug/L	0.0197	9.67%
Li 670.784†	-235.7	-0.880	ug/L	0.2083	-0.880	ug/L	0.2083	23.68%

Sequence No.: 86
Sample ID: 220-15015-D-2-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 3/28/2011 4:22:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	827213.1	0.955	mg/L	0.0008				0.08%
Y (radial)	106384.6	0.950	mg/L	0.0059				0.62%
Ag 328.068†	-288.0	-0.049	ug/L	0.1987	-0.049	ug/L	0.1987	404.43%
Al 396.153†	227845.1	23040	ug/L	19.5	23040	ug/L	19.5	0.08%
As 188.979†	-1.0	3.835	ug/L	6.8435	3.835	ug/L	6.8435	178.44%
Ba 233.527†	12899.1	228.8	ug/L	2.21	228.8	ug/L	2.21	0.97%
Be 313.107†	-6639.3	1.247	ug/L	0.0482	1.247	ug/L	0.0482	3.87%
Ca 317.933†	58000.7	8547	ug/L	11.3	8547	ug/L	11.3	0.13%
Cd 214.440†	41.4	-0.103	ug/L	0.0665	-0.103	ug/L	0.0665	64.62%
Co 228.616†	534.1	40.11	ug/L	0.323	40.11	ug/L	0.323	0.80%
Cr 267.716†	973.9	49.23	ug/L	0.316	49.23	ug/L	0.316	0.64%

Fe 238.204†	74391.1	31340 ug/L	105.4	31340 ug/L	105.4	0.34%
K 766.490†	52958.2	7676 ug/L	41.8	7676 ug/L	41.8	0.54%
Mg 285.213†	156246.7	12580 ug/L	12.1	12580 ug/L	12.1	0.10%
Mn 257.610†	473833.5	1294 ug/L	0.3	1294 ug/L	0.3	0.02%
Mo 202.031†	-13.3	-1.827 ug/L	0.5235	-1.827 ug/L	0.5235	28.66%
Na 589.592†	311356.9	24740 ug/L	47.4	24740 ug/L	47.4	0.19%
Ni 231.604†	226.9	30.57 ug/L	1.234	30.57 ug/L	1.234	4.04%
Pb 220.353†	39.0	24.41 ug/L	11.496	24.41 ug/L	11.496	47.09%
Sb 206.836†	-12.4	-7.769 ug/L	2.7880	-7.769 ug/L	2.7880	35.89%
Se 196.026†	-18.5	-10.04 ug/L	5.242	-10.04 ug/L	5.242	52.20%
V 311.071†	12840.8	55.83 ug/L	0.185	55.83 ug/L	0.185	0.33%
Sn 189.927†	12.6	16.56 ug/L	0.190	16.56 ug/L	0.190	1.15%
Sr 421.552†	85205.9	91.49 ug/L	0.110	91.49 ug/L	0.110	0.12%
Tl 190.801†	-41.0	-2.084 ug/L	3.4855	-2.084 ug/L	3.4855	167.23%
Zn 206.200†	779.5	84.99 ug/L	1.699	84.99 ug/L	1.699	2.00%
Ti 334.940†	840716.3	1629 ug/L	3.2	1629 ug/L	3.2	0.19%
B 249.772†	3917.0	10.01 ug/L	1.457	10.01 ug/L	1.457	14.56%
Cu 324.752†	10030.3	38.01 ug/L	0.478	38.01 ug/L	0.478	1.26%
S 181.975†	817.8	5461 ug/L	12.4	5461 ug/L	12.4	0.23%
Zr 343.823†	1271.2	4.428 ug/L	0.0369	4.428 ug/L	0.0369	0.83%
Li 670.784†	6620.1	24.70 ug/L	0.043	24.70 ug/L	0.043	0.17%

Sequence No.: 87
Sample ID: 220-15015-D-3-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 3/28/2011 4:25:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-3-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	788980.2	0.910	mg/L	0.0113				1.24%
Y (radial)	106199.9	0.948	mg/L	0.0153				1.62%
Ag 328.068†	-1.9	-0.002	ug/L	0.1505	-0.002	ug/L	0.1505	>999.9%
Al 396.153†	-66.4	-6.624	ug/L	1.0416	-6.624	ug/L	1.0416	15.72%
As 188.979†	-2.8	-2.477	ug/L	8.5336	-2.477	ug/L	8.5336	344.53%
Ba 233.527†	3979.2	70.75	ug/L	1.025	70.75	ug/L	1.025	1.45%
Be 313.107†	-204.1	-0.209	ug/L	0.0489	-0.209	ug/L	0.0489	23.38%
Ca 317.933†	99601.6	14680	ug/L	36.2	14680	ug/L	36.2	0.25%
Cd 214.440†	16.2	0.528	ug/L	0.1830	0.528	ug/L	0.1830	34.67%
Co 228.616†	-5.4	-0.453	ug/L	0.2432	-0.453	ug/L	0.2432	53.64%
Cr 267.716†	-2.2	-0.108	ug/L	0.4639	-0.108	ug/L	0.4639	430.93%
Fe 238.204†	11.3	4.752	ug/L	1.1461	4.752	ug/L	1.1461	24.12%
K 766.490†	16493.6	2391	ug/L	5.5	2391	ug/L	5.5	0.23%
Mg 285.213†	137436.8	11050	ug/L	26.0	11050	ug/L	26.0	0.24%
Mn 257.610†	238.4	0.163	ug/L	0.0072	0.163	ug/L	0.0072	4.42%
Mo 202.031†	-11.2	-2.554	ug/L	0.5625	-2.554	ug/L	0.5625	22.03%
Na 589.592†	537594.1	42720	ug/L	29.3	42720	ug/L	29.3	0.07%
Ni 231.604†	-0.5	-0.073	ug/L	0.4400	-0.073	ug/L	0.4400	605.37%
Pb 220.353†	5.6	3.919	ug/L	7.0409	3.919	ug/L	7.0409	179.65%
Sb 206.836†	-17.6	-9.934	ug/L	3.6937	-9.934	ug/L	3.6937	37.18%
Se 196.026†	-4.3	-4.251	ug/L	18.9034	-4.251	ug/L	18.9034	444.66%
V 311.071†	508.8	2.758	ug/L	0.5161	2.758	ug/L	0.5161	18.71%
Sn 189.927†	-7.3	-3.807	ug/L	0.0839	-3.807	ug/L	0.0839	2.20%
Sr 421.552†	133644.0	143.5	ug/L	0.04	143.5	ug/L	0.04	0.03%
Tl 190.801†	-8.7	-4.975	ug/L	1.9325	-4.975	ug/L	1.9325	38.84%
Zn 206.200†	18.8	2.039	ug/L	0.3842	2.039	ug/L	0.3842	18.84%
Ti 334.940†	-8.1	-0.016	ug/L	0.0590	-0.016	ug/L	0.0590	377.61%
B 249.772†	341.4	11.35	ug/L	0.530	11.35	ug/L	0.530	4.67%
Cu 324.752†	407.6	1.405	ug/L	0.3519	1.405	ug/L	0.3519	25.05%
S 181.975†	506.1	3448	ug/L	58.6	3448	ug/L	58.6	1.70%
Zr 343.823†	-123.4	-0.514	ug/L	0.0511	-0.514	ug/L	0.0511	9.95%
Li 670.784†	63.9	0.239	ug/L	0.0006	0.239	ug/L	0.0006	0.24%

Sequence No.: 88
Sample ID: 220-15015-D-4-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 3/28/2011 4:28:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-4-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	787561.9	0.909	mg/L	0.0130				1.43%
Y (radial)	103179.9	0.921	mg/L	0.0155				1.68%
Ag 328.068†	-99.4	-0.631	ug/L	0.1426	-0.631	ug/L	0.1426	22.61%
Al 396.153†	159.8	16.31	ug/L	5.488	16.31	ug/L	5.488	33.64%
As 188.979†	-12.1	-9.871	ug/L	4.6081	-9.871	ug/L	4.6081	46.68%
Ba 233.527†	3006.3	53.46	ug/L	1.135	53.46	ug/L	1.135	2.12%
Be 313.107†	-195.0	-0.204	ug/L	0.0397	-0.204	ug/L	0.0397	19.52%
Ca 317.933†	524475.5	77290	ug/L	223.5	77290	ug/L	223.5	0.29%
Cd 214.440†	18.3	0.596	ug/L	0.1972	0.596	ug/L	0.1972	33.08%
Co 228.616†	21.1	1.762	ug/L	0.7647	1.762	ug/L	0.7647	43.41%
Cr 267.716†	-32.6	-1.618	ug/L	0.3367	-1.618	ug/L	0.3367	20.81%
Fe 238.204†	185.8	78.28	ug/L	1.166	78.28	ug/L	1.166	1.49%
K 766.490†	42912.1	6220	ug/L	15.3	6220	ug/L	15.3	0.25%
Mg 285.213†	575776.2	46280	ug/L	649.9	46280	ug/L	649.9	1.40%
Mn 257.610†	262091.4	713.8	ug/L	0.98	713.8	ug/L	0.98	0.14%
Mo 202.031†	-19.9	-4.539	ug/L	0.9139	-4.539	ug/L	0.9139	20.14%
Na 589.592†	803961.7	63880	ug/L	1151.1	63880	ug/L	1151.1	1.80%
Ni 231.604†	52.8	7.100	ug/L	0.5280	7.100	ug/L	0.5280	7.44%
Pb 220.353†	-3.8	-2.706	ug/L	0.9923	-2.706	ug/L	0.9923	36.67%
Sb 206.836†	-51.2	-25.60	ug/L	3.825	-25.60	ug/L	3.825	14.94%
Se 196.026†	-39.8	-52.48	ug/L	17.927	-52.48	ug/L	17.927	34.16%
V 311.071†	854.6	4.062	ug/L	0.1726	4.062	ug/L	0.1726	4.25%
Sn 189.927†	-15.7	-6.192	ug/L	5.2970	-6.192	ug/L	5.2970	85.55%
Sr 421.552†	319384.2	341.9	ug/L	5.13	341.9	ug/L	5.13	1.50%
Tl 190.801†	-29.6	-15.67	ug/L	3.153	-15.67	ug/L	3.153	20.12%
Zn 206.200†	20.0	2.156	ug/L	0.3507	2.156	ug/L	0.3507	16.26%
Ti 334.940†	-393.2	-0.762	ug/L	0.0444	-0.762	ug/L	0.0444	5.83%
B 249.772†	15478.7	514.9	ug/L	13.41	514.9	ug/L	13.41	2.60%
Cu 324.752†	1084.9	3.745	ug/L	0.3307	3.745	ug/L	0.3307	8.83%
S 181.975†	12454.3	80160	ug/L	1748.2	80160	ug/L	1748.2	2.18%
Zr 343.823†	-151.6	-0.633	ug/L	0.0543	-0.633	ug/L	0.0543	8.57%
Li 670.784†	1518.3	5.666	ug/L	0.0104	5.666	ug/L	0.0104	0.18%

Sequence No.: 89
Sample ID: 220-15015-D-5-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 3/28/2011 4:32:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-5-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	816547.9	0.942	mg/L	0.0082				0.87%
Y (radial)	106606.2	0.952	mg/L	0.0118				1.24%
Ag 328.068†	-84.9	-0.156	ug/L	0.2708	-0.156	ug/L	0.2708	173.87%
Al 396.153†	46792.2	4732	ug/L	5.6	4732	ug/L	5.6	0.12%
As 188.979†	-13.2	-11.89	ug/L	5.015	-11.89	ug/L	5.015	42.18%
Ba 233.527†	7075.7	125.7	ug/L	2.64	125.7	ug/L	2.64	2.10%
Be 313.107†	-1754.5	0.165	ug/L	0.0371	0.165	ug/L	0.0371	22.50%
Ca 317.933†	263975.3	38900	ug/L	226.9	38900	ug/L	226.9	0.58%
Cd 214.440†	39.8	0.997	ug/L	0.0008	0.997	ug/L	0.0008	0.08%
Co 228.616†	59.7	3.899	ug/L	0.0671	3.899	ug/L	0.0671	1.72%
Cr 267.716†	209.4	10.59	ug/L	0.458	10.59	ug/L	0.458	4.32%
Fe 238.204†	15528.5	6542	ug/L	52.6	6542	ug/L	52.6	0.80%
K 766.490†	40315.4	5843	ug/L	2.0	5843	ug/L	2.0	0.03%
Mg 285.213†	299249.5	24060	ug/L	13.9	24060	ug/L	13.9	0.06%
Mn 257.610†	77447.4	210.5	ug/L	0.02	210.5	ug/L	0.02	0.01%
Mo 202.031†	-25.9	-5.644	ug/L	1.4423	-5.644	ug/L	1.4423	25.55%
Na 589.592†	503811.2	40030	ug/L	529.3	40030	ug/L	529.3	1.32%
Ni 231.604†	112.0	15.07	ug/L	1.842	15.07	ug/L	1.842	12.22%
Pb 220.353†	3.9	2.103	ug/L	2.9260	2.103	ug/L	2.9260	139.16%
Sb 206.836†	-29.1	-15.20	ug/L	2.624	-15.20	ug/L	2.624	17.27%
Se 196.026†	-33.8	-46.34	ug/L	12.597	-46.34	ug/L	12.597	27.18%
V 311.071†	3539.7	15.61	ug/L	0.572	15.61	ug/L	0.572	3.66%
Sn 189.927†	5.3	7.050	ug/L	5.7481	7.050	ug/L	5.7481	81.53%

Sr 421.552†	365001.5	391.9	ug/L	5.46	391.9	ug/L	5.46	1.39%
Tl 190.801†	-25.9	-9.165	ug/L	2.9046	-9.165	ug/L	2.9046	31.69%
Zn 206.200†	417.8	45.39	ug/L	1.846	45.39	ug/L	1.846	4.07%
Ti 334.940†	204980.7	397.2	ug/L	0.25	397.2	ug/L	0.25	0.06%
B 249.772†	1729.5	32.44	ug/L	1.672	32.44	ug/L	1.672	5.15%
Cu 324.752†	2105.6	7.975	ug/L	0.1389	7.975	ug/L	0.1389	1.74%
S 181.975†	2336.5	15360	ug/L	259.6	15360	ug/L	259.6	1.69%
Zr 343.823†	61.9	0.077	ug/L	0.0402	0.077	ug/L	0.0402	51.87%
Li 670.784†	2877.3	10.74	ug/L	0.191	10.74	ug/L	0.191	1.78%

Sequence No.: 90
Sample ID: 220-15015-D-6-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 3/28/2011 4:35:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-6-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	785334.6	0.906	mg/L	0.0106				1.17%
Y (radial)	105516.6	0.942	mg/L	0.0061				0.65%
Ag 328.068†	-387.5	-0.232	ug/L	0.1072	-0.232	ug/L	0.1072	46.14%
Al 396.153†	3481.9	352.4	ug/L	3.06	352.4	ug/L	3.06	0.87%
As 188.979†	-3.9	9.926	ug/L	3.6103	9.926	ug/L	3.6103	36.37%
Ba 233.527†	8038.0	142.0	ug/L	1.88	142.0	ug/L	1.88	1.32%
Be 313.107†	-335.1	-0.224	ug/L	0.0769	-0.224	ug/L	0.0769	34.30%
Ca 317.933†	1233118.0	181700	ug/L	909.5	181700	ug/L	909.5	0.50%
Cd 214.440†	73.3	0.436	ug/L	0.1517	0.436	ug/L	0.1517	34.77%
Co 228.616†	89.8	5.943	ug/L	1.1244	5.943	ug/L	1.1244	18.92%
Cr 267.716†	-28.3	-0.460	ug/L	0.3675	-0.460	ug/L	0.3675	79.98%
Fe 238.204†	100110.3	42170	ug/L	309.3	42170	ug/L	309.3	0.73%
K 766.490†	94274.6	13660	ug/L	6.4	13660	ug/L	6.4	0.05%
Mg 285.213†	842826.2	67780	ug/L	20.4	67780	ug/L	20.4	0.03%
Mn 257.610†	1938837.2	5292	ug/L	28.8	5292	ug/L	28.8	0.54%
Mo 202.031†	-36.8	-6.663	ug/L	2.3572	-6.663	ug/L	2.3572	35.38%
Na 589.592†	1672720.9	132900	ug/L	501.5	132900	ug/L	501.5	0.38%
Ni 231.604†	182.3	24.53	ug/L	0.604	24.53	ug/L	0.604	2.46%
Pb 220.353†	5.5	-2.216	ug/L	3.5089	-2.216	ug/L	3.5089	158.33%
Sb 206.836†	-68.8	-26.90	ug/L	3.207	-26.90	ug/L	3.207	11.92%
Se 196.026†	-53.5	-27.52	ug/L	44.034	-27.52	ug/L	44.034	160.03%
V 311.071†	1359.0	4.981	ug/L	0.5412	4.981	ug/L	0.5412	10.86%
Sn 189.927†	-31.9	-11.29	ug/L	1.498	-11.29	ug/L	1.498	13.27%
Sr 421.552†	732815.5	784.3	ug/L	0.35	784.3	ug/L	0.35	0.04%
Tl 190.801†	-30.6	-7.518	ug/L	4.9357	-7.518	ug/L	4.9357	65.65%
Zn 206.200†	57.0	6.160	ug/L	0.0672	6.160	ug/L	0.0672	1.09%
Ti 334.940†	12436.5	24.10	ug/L	0.214	24.10	ug/L	0.214	0.89%
B 249.772†	19667.4	492.6	ug/L	13.78	492.6	ug/L	13.78	2.80%
Cu 324.752†	-707.2	2.222	ug/L	0.2899	2.222	ug/L	0.2899	13.05%
S 181.975†	27107.7	173800	ug/L	87.1	173800	ug/L	87.1	0.05%
Zr 343.823†	97.4	-0.758	ug/L	0.0568	-0.758	ug/L	0.0568	7.49%
Li 670.784†	3085.7	11.51	ug/L	0.181	11.51	ug/L	0.181	1.57%

Sequence No.: 91
Sample ID: 220-15015-D-7-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 3/28/2011 4:39:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-7-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	789532.2	0.911	mg/L	0.0038				0.41%
Y (radial)	102431.5	0.914	mg/L	0.0041				0.44%
Ag 328.068†	-376.7	-0.295	ug/L	0.3076	-0.295	ug/L	0.3076	104.33%
Al 396.153†	2684.1	271.7	ug/L	9.40	271.7	ug/L	9.40	3.46%
As 188.979†	-16.5	-4.498	ug/L	7.1528	-4.498	ug/L	7.1528	159.01%
Ba 233.527†	7971.3	140.9	ug/L	1.60	140.9	ug/L	1.60	1.14%
Be 313.107†	-347.6	-0.260	ug/L	0.0229	-0.260	ug/L	0.0229	8.80%

Ca 317.933†	1232067.9	181600 ug/L	759.2	181600 ug/L	759.2	0.42%
Cd 214.440†	58.7	0.073 ug/L	0.3321	0.073 ug/L	0.3321	456.63%
Co 228.616†	85.9	5.712 ug/L	1.1410	5.712 ug/L	1.1410	19.98%
Cr 267.716†	-18.0	-0.001 ug/L	0.5990	-0.001 ug/L	0.5990	>999.9%
Fe 238.204†	94248.2	39700 ug/L	125.6	39700 ug/L	125.6	0.32%
K 766.490†	98012.0	14210 ug/L	9.8	14210 ug/L	9.8	0.07%
Mg 285.213†	842318.5	67740 ug/L	31.1	67740 ug/L	31.1	0.05%
Mn 257.610†	1934440.9	5280 ug/L	4.5	5280 ug/L	4.5	0.09%
Mo 202.031†	-35.5	-6.456 ug/L	2.0550	-6.456 ug/L	2.0550	31.83%
Na 589.592†	1609350.0	127900 ug/L	307.5	127900 ug/L	307.5	0.24%
Ni 231.604†	171.9	23.13 ug/L	1.303	23.13 ug/L	1.303	5.63%
Pb 220.353†	-2.6	-7.494 ug/L	0.1163	-7.494 ug/L	0.1163	1.55%
Sb 206.836†	-55.6	-18.38 ug/L	0.102	-18.38 ug/L	0.102	0.56%
Se 196.026†	-55.5	-32.62 ug/L	16.052	-32.62 ug/L	16.052	49.21%
V 311.071†	1362.4	5.132 ug/L	0.4801	5.132 ug/L	0.4801	9.35%
Sn 189.927†	-29.6	-9.916 ug/L	3.3288	-9.916 ug/L	3.3288	33.57%
Sr 421.552†	724812.6	775.7 ug/L	0.70	775.7 ug/L	0.70	0.09%
Tl 190.801†	-25.9	-4.739 ug/L	1.1250	-4.739 ug/L	1.1250	23.74%
Zn 206.200†	54.1	5.851 ug/L	0.0245	5.851 ug/L	0.0245	0.42%
Ti 334.940†	10027.6	19.43 ug/L	0.116	19.43 ug/L	0.116	0.60%
B 249.772†	19841.0	507.9 ug/L	6.88	507.9 ug/L	6.88	1.35%
Cu 324.752†	-761.4	1.762 ug/L	0.0618	1.762 ug/L	0.0618	3.51%
S 181.975†	26794.4	171800 ug/L	1850.7	171800 ug/L	1850.7	1.08%
Zr 343.823†	59.8	-0.846 ug/L	0.0923	-0.846 ug/L	0.0923	10.90%
Li 670.784†	3129.6	11.68 ug/L	0.925	11.68 ug/L	0.925	7.92%

Sequence No.: 92 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/28/2011 4:42:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	837898.9	0.967	mg/L	0.0145				1.50%
Y (radial)	107321.8	0.958	mg/L	0.0157				1.64%
Ag 328.068†	37268.2	242.0	ug/L	0.08	242.0	ug/L	0.08	0.03%
QC value within limits for Ag 328.068 Recovery = 96.82%								
Al 396.153†	48759.6	4915	ug/L	8.4	4915	ug/L	8.4	0.17%
QC value within limits for Al 396.153 Recovery = 98.30%								
As 188.979†	444.5	499.2	ug/L	13.67	499.2	ug/L	13.67	2.74%
QC value within limits for As 188.979 Recovery = 99.85%								
Ba 233.527†	28032.9	499.3	ug/L	0.03	499.3	ug/L	0.03	0.01%
QC value within limits for Ba 233.527 Recovery = 99.86%								
Be 313.107†	478296.1	492.5	ug/L	1.54	492.5	ug/L	1.54	0.31%
QC value within limits for Be 313.107 Recovery = 98.50%								
Ca 317.933†	120580.2	17770	ug/L	5.7	17770	ug/L	5.7	0.03%
QC value within limits for Ca 317.933 Recovery = 96.05%								
Cd 214.440†	15042.9	491.5	ug/L	12.75	491.5	ug/L	12.75	2.59%
QC value within limits for Cd 214.440 Recovery = 98.29%								
Co 228.616†	5908.3	494.7	ug/L	11.98	494.7	ug/L	11.98	2.42%
QC value within limits for Co 228.616 Recovery = 98.95%								
Cr 267.716†	10008.1	498.6	ug/L	9.11	498.6	ug/L	9.11	1.83%
QC value within limits for Cr 267.716 Recovery = 99.71%								
Fe 238.204†	12026.4	5066	ug/L	13.0	5066	ug/L	13.0	0.26%
QC value within limits for Fe 238.204 Recovery = 92.12%								
K 766.490†	272111.9	39440	ug/L	666.8	39440	ug/L	666.8	1.69%
QC value within limits for K 766.490 Recovery = 98.60%								
Mg 285.213†	225647.6	18140	ug/L	292.1	18140	ug/L	292.1	1.61%
QC value within limits for Mg 285.213 Recovery = 98.07%								
Mn 257.610†	183020.2	499.1	ug/L	1.82	499.1	ug/L	1.82	0.37%
QC value within limits for Mn 257.610 Recovery = 99.81%								
Mo 202.031†	2058.3	467.5	ug/L	14.10	467.5	ug/L	14.10	3.02%
QC value within limits for Mo 202.031 Recovery = 93.51%								
Na 589.592†	460516.4	36590	ug/L	680.3	36590	ug/L	680.3	1.86%
QC value within limits for Na 589.592 Recovery = 91.48%								
Ni 231.604†	3729.7	502.2	ug/L	11.39	502.2	ug/L	11.39	2.27%
QC value within limits for Ni 231.604 Recovery = 100.44%								
Pb 220.353†	703.3	491.9	ug/L	7.88	491.9	ug/L	7.88	1.60%

QC value within limits for Pb 220.353 Recovery = 98.38%

Sb 206.836†	718.2	463.0 ug/L	15.76	463.0 ug/L	15.76	3.40%

QC value within limits for Sb 206.836 Recovery = 92.59%

Se 196.026†	253.8	450.5 ug/L	13.75	450.5 ug/L	13.75	3.05%

QC value within limits for Se 196.026 Recovery = 90.11%

V 311.071†	82415.3	475.4 ug/L	1.03	475.4 ug/L	1.03	0.22%

QC value within limits for V 311.071 Recovery = 95.08%

Sn 189.927†	765.2	474.5 ug/L	7.74	474.5 ug/L	7.74	1.63%

QC value within limits for Sn 189.927 Recovery = 94.90%

Sr 421.552†	454184.1	488.3 ug/L	7.89	488.3 ug/L	7.89	1.62%

QC value within limits for Sr 421.552 Recovery = 97.66%

Tl 190.801†	753.0	493.7 ug/L	9.12	493.7 ug/L	9.12	1.85%

QC value within limits for Tl 190.801 Recovery = 98.74%

Zn 206.200†	4442.9	486.8 ug/L	14.47	486.8 ug/L	14.47	2.97%

QC value within limits for Zn 206.200 Recovery = 97.35%

Ti 334.940†	255278.9	494.6 ug/L	0.86	494.6 ug/L	0.86	0.17%

QC value within limits for Ti 334.940 Recovery = 98.93%

B 249.772†	14509.3	463.5 ug/L	12.56	463.5 ug/L	12.56	2.71%

QC value within limits for B 249.772 Recovery = 92.69%

Cu 324.752†	143408.5	494.5 ug/L	0.25	494.5 ug/L	0.25	0.05%

QC value within limits for Cu 324.752 Recovery = 98.90%

S 181.975†	1412.1	9357 ug/L	244.1	9357 ug/L	244.1	2.61%

QC value within limits for S 181.975 Recovery = 93.57%

Zr 343.823†	113869.4	473.9 ug/L	1.52	473.9 ug/L	1.52	0.32%

QC value within limits for Zr 343.823 Recovery = 94.78%

Li 670.784†	135488.8	505.6 ug/L	11.08	505.6 ug/L	11.08	2.19%

QC value within limits for Li 670.784 Recovery = 101.12%

All analyte(s) passed QC.

Sequence No.: 93
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/28/2011 4:46:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	857925.5	0.990	mg/L	0.0053				0.54%
Y (radial)	107990.9	0.964	mg/L	0.0045				0.47%
Ag 328.068†	21.6	0.141	ug/L	0.0266	0.141	ug/L	0.0266	18.80%

QC value within limits for Ag 328.068 Recovery = Not calculated

Al 396.153†	-50.5	-5.068	ug/L	2.3467	-5.068	ug/L	2.3467	46.30%

QC value within limits for Al 396.153 Recovery = Not calculated

As 188.979†	2.7	2.992	ug/L	0.5368	2.992	ug/L	0.5368	17.94%

QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527†	-5.3	-0.093	ug/L	0.0530	-0.093	ug/L	0.0530	57.12%

QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107†	-10.0	-0.010	ug/L	0.0663	-0.010	ug/L	0.0663	668.72%

QC value within limits for Be 313.107 Recovery = Not calculated

Ca 317.933†	-37.5	-5.519	ug/L	0.1731	-5.519	ug/L	0.1731	3.14%

QC value within limits for Ca 317.933 Recovery = Not calculated

Cd 214.440†	7.1	0.232	ug/L	0.0804	0.232	ug/L	0.0804	34.62%

QC value within limits for Cd 214.440 Recovery = Not calculated

Co 228.616†	5.0	0.417	ug/L	0.1569	0.417	ug/L	0.1569	37.67%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	0.4	0.020	ug/L	0.0060	0.020	ug/L	0.0060	29.97%

QC value within limits for Cr 267.716 Recovery = Not calculated

Fe 238.204†	-13.7	-5.792	ug/L	0.1784	-5.792	ug/L	0.1784	3.08%

QC value within limits for Fe 238.204 Recovery = Not calculated

K 766.490†	-72.6	-10.53	ug/L	12.156	-10.53	ug/L	12.156	115.47%

QC value within limits for K 766.490 Recovery = Not calculated

Mg 285.213†	7.1	0.567	ug/L	0.5712	0.567	ug/L	0.5712	100.81%

QC value within limits for Mg 285.213 Recovery = Not calculated

Mn 257.610†	10.4	0.028	ug/L	0.0110	0.028	ug/L	0.0110	39.00%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	-5.1	-1.161	ug/L	0.0718	-1.161	ug/L	0.0718	6.18%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592†	-1126.4	-89.51	ug/L	2.359	-89.51	ug/L	2.359	2.64%

QC value within limits for Na 589.592 Recovery = Not calculated

Ni 231.604†	8.4	1.134 ug/L	0.2112	1.134 ug/L	0.2112	18.63%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	0.7	0.482 ug/L	1.3632	0.482 ug/L	1.3632	283.11%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.1	3.303 ug/L	4.4110	3.303 ug/L	4.4110	133.55%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.2	-3.809 ug/L	3.8658	-3.809 ug/L	3.8658	101.50%
QC value within limits for Se 196.026 Recovery = Not calculated						
V 311.071†	40.5	0.237 ug/L	0.1095	0.237 ug/L	0.1095	46.20%
QC value within limits for V 311.071 Recovery = Not calculated						
Sn 189.927†	-0.2	-0.126 ug/L	0.5119	-0.126 ug/L	0.5119	406.12%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-15.4	-0.016 ug/L	0.0028	-0.016 ug/L	0.0028	17.21%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Tl 190.801†	-4.1	-2.641 ug/L	4.2494	-2.641 ug/L	4.2494	160.91%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	3.0	0.325 ug/L	0.1754	0.325 ug/L	0.1754	54.00%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	34.0	0.066 ug/L	0.0535	0.066 ug/L	0.0535	81.10%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-361.2	-12.00 ug/L	0.227	-12.00 ug/L	0.227	1.89%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	105.5	0.363 ug/L	0.1233	0.363 ug/L	0.1233	34.01%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-6.2	-39.25 ug/L	14.389	-39.25 ug/L	14.389	36.66%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	13.9	0.058 ug/L	0.1327	0.058 ug/L	0.1327	229.20%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	8.2	0.031 ug/L	0.0238	0.031 ug/L	0.0238	77.93%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 94
Sample ID: 220-15015-D-8-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 3/28/2011 4:49:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15015-D-8-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	827414.7	0.955	mg/L	0.0058				0.61%
Y (radial)	104339.2	0.931	mg/L	0.0020				0.21%
Ag 328.068†	33.4	0.220	ug/L	0.1767	0.220	ug/L	0.1767	80.20%
Al 396.153†	-95.6	-9.630	ug/L	1.3365	-9.630	ug/L	1.3365	13.88%
As 188.979†	-0.8	-0.868	ug/L	4.9180	-0.868	ug/L	4.9180	566.62%
Ba 233.527†	17.4	0.311	ug/L	0.0031	0.311	ug/L	0.0031	1.00%
Be 313.107†	-20.3	-0.021	ug/L	0.0352	-0.021	ug/L	0.0352	167.12%
Ca 317.933†	-140.9	-20.76	ug/L	4.059	-20.76	ug/L	4.059	19.55%
Cd 214.440†	13.6	0.444	ug/L	0.1693	0.444	ug/L	0.1693	38.15%
Co 228.616†	-0.9	-0.074	ug/L	0.4910	-0.074	ug/L	0.4910	666.21%
Cr 267.716†	1.5	0.076	ug/L	0.5087	0.076	ug/L	0.5087	665.15%
Fe 238.204†	-14.1	-5.923	ug/L	1.4500	-5.923	ug/L	1.4500	24.48%
K 766.490†	-3.3	-0.478	ug/L	7.8233	-0.478	ug/L	7.8233	>999.9%
Mg 285.213†	-6.0	-0.483	ug/L	0.4479	-0.483	ug/L	0.4479	92.65%
Mn 257.610†	24.1	0.066	ug/L	0.0460	0.066	ug/L	0.0460	69.75%
Mo 202.031†	-4.4	-0.995	ug/L	0.5655	-0.995	ug/L	0.5655	56.84%
Na 589.592†	-1693.8	-134.6	ug/L	2.70	-134.6	ug/L	2.70	2.00%
Ni 231.604†	0.2	0.023	ug/L	0.2565	0.023	ug/L	0.2565	>999.9%
Pb 220.353†	6.0	4.180	ug/L	0.0095	4.180	ug/L	0.0095	0.23%
Sb 206.836†	7.4	4.770	ug/L	1.7003	4.770	ug/L	1.7003	35.64%
Se 196.026†	4.7	8.153	ug/L	1.2586	8.153	ug/L	1.2586	15.44%
V 311.071†	75.8	0.446	ug/L	0.0928	0.446	ug/L	0.0928	20.80%
Sn 189.927†	-0.6	-0.357	ug/L	0.8636	-0.357	ug/L	0.8636	241.69%
Sr 421.552†	-163.9	-0.176	ug/L	0.0070	-0.176	ug/L	0.0070	3.98%
Tl 190.801†	-5.9	-3.825	ug/L	1.6858	-3.825	ug/L	1.6858	44.08%
Zn 206.200†	19.9	2.160	ug/L	0.0488	2.160	ug/L	0.0488	2.26%
Ti 334.940†	-22.5	-0.044	ug/L	0.0038	-0.044	ug/L	0.0038	8.67%
B 249.772†	-315.1	-10.47	ug/L	0.389	-10.47	ug/L	0.389	3.71%
Cu 324.752†	133.3	0.459	ug/L	0.0849	0.459	ug/L	0.0849	18.51%

S 181.975†	-3.8	-24.44	ug/L	15.548	-24.44	ug/L	15.548 63.62%
Zr 343.823†	-46.5	-0.193	ug/L	0.0295	-0.193	ug/L	0.0295 15.28%
Li 670.784†	112.1	0.418	ug/L	0.7092	0.418	ug/L	0.7092 169.61%

Sequence No.: 95
Sample ID: MB 220-49110/1-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 3/28/2011 4:52:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB 220-49110/1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	860921.8	0.993	mg/L	0.0120				1.21%
Y (radial)	111112.6	0.992	mg/L	0.0018				0.18%
Ag 328.068†	22.1	0.145	ug/L	0.0687	0.145	ug/L	0.0687	47.29%
Al 396.153†	-99.5	-10.05	ug/L	0.337	-10.05	ug/L	0.337	3.35%
As 188.979†	-0.9	-0.994	ug/L	3.9991	-0.994	ug/L	3.9991	402.35%
Ba 233.527†	29.9	0.530	ug/L	0.0495	0.530	ug/L	0.0495	9.34%
Be 313.107†	22.3	0.023	ug/L	0.0553	0.023	ug/L	0.0553	245.59%
Ca 317.933†	-157.8	-23.26	ug/L	0.470	-23.26	ug/L	0.470	2.02%
Cd 214.440†	1.6	0.054	ug/L	0.2396	0.054	ug/L	0.2396	447.11%
Co 228.616†	-0.0	-0.001	ug/L	0.1417	-0.001	ug/L	0.1417	>999.9%
Cr 267.716†	-7.2	-0.360	ug/L	0.4446	-0.360	ug/L	0.4446	123.56%
Fe 238.204†	-20.4	-8.606	ug/L	1.0390	-8.606	ug/L	1.0390	12.07%
K 766.490†	29.8	4.324	ug/L	3.5836	4.324	ug/L	3.5836	82.87%
Mg 285.213†	8.1	0.648	ug/L	0.0279	0.648	ug/L	0.0279	4.31%
Mn 257.610†	127.1	0.347	ug/L	0.0199	0.347	ug/L	0.0199	5.72%
Mo 202.031†	-2.1	-0.469	ug/L	0.7824	-0.469	ug/L	0.7824	166.74%
Na 589.592†	-1983.5	-157.6	ug/L	0.16	-157.6	ug/L	0.16	0.10%
Ni 231.604†	6.2	0.832	ug/L	0.0469	0.832	ug/L	0.0469	5.64%
Pb 220.353†	6.5	4.549	ug/L	0.8200	4.549	ug/L	0.8200	18.02%
Sb 206.836†	-0.3	-0.178	ug/L	2.9917	-0.178	ug/L	2.9917	>999.9%
Se 196.026†	-2.1	-3.756	ug/L	5.3948	-3.756	ug/L	5.3948	143.62%
V 311.071†	-159.0	-0.930	ug/L	0.1241	-0.930	ug/L	0.1241	13.35%
Sn 189.927†	1.5	0.930	ug/L	2.8356	0.930	ug/L	2.8356	304.94%
Sr 421.552†	-149.5	-0.160	ug/L	0.0150	-0.160	ug/L	0.0150	9.34%
Tl 190.801†	3.4	2.226	ug/L	4.5738	2.226	ug/L	4.5738	205.46%
Zn 206.200†	36.1	3.910	ug/L	0.9348	3.910	ug/L	0.9348	23.90%
Ti 334.940†	-31.6	-0.061	ug/L	0.0295	-0.061	ug/L	0.0295	48.19%
B 249.772†	-463.2	-15.39	ug/L	0.103	-15.39	ug/L	0.103	0.67%
Cu 324.752†	42.5	0.146	ug/L	0.2267	0.146	ug/L	0.2267	155.78%
S 181.975†	-3.1	-19.53	ug/L	2.386	-19.53	ug/L	2.386	12.21%
Zr 343.823†	-119.4	-0.497	ug/L	0.0013	-0.497	ug/L	0.0013	0.26%
Li 670.784†	38.8	0.145	ug/L	0.1155	0.145	ug/L	0.1155	79.78%

Sequence No.: 96
Sample ID: LCS 220-49110/2-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 3/28/2011 4:55:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS 220-49110/2-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	854491.8	0.986	mg/L	0.0168				1.71%
Y (radial)	111849.8	0.998	mg/L	0.0006				0.06%
Ag 328.068†	46376.9	297.7	ug/L	0.30	297.7	ug/L	0.30	0.10%
Al 396.153†	33602.2	3364	ug/L	9.9	3364	ug/L	9.9	0.29%
As 188.979†	869.9	970.4	ug/L	1.68	970.4	ug/L	1.68	0.17%
Ba 233.527†	17296.7	308.1	ug/L	2.63	308.1	ug/L	2.63	0.85%
Be 313.107†	99807.9	107.3	ug/L	0.50	107.3	ug/L	0.50	0.47%
Ca 317.933†	44818.5	6605	ug/L	7.2	6605	ug/L	7.2	0.11%
Cd 214.440†	9532.8	311.4	ug/L	2.94	311.4	ug/L	2.94	0.94%
Co 228.616†	3736.2	312.2	ug/L	3.43	312.2	ug/L	3.43	1.10%
Cr 267.716†	6279.2	312.8	ug/L	3.67	312.8	ug/L	3.67	1.17%
Fe 238.204†	7472.9	3148	ug/L	7.0	3148	ug/L	7.0	0.22%
K 766.490†	186711.0	27060	ug/L	208.6	27060	ug/L	208.6	0.77%

Mg 285.213†	83240.4	6694 ug/L	15.3	6694 ug/L	15.3	0.23%
Mn 257.610†	74312.1	202.7 ug/L	1.01	202.7 ug/L	1.01	0.50%
Mo 202.031†	4489.4	1021 ug/L	13.8	1021 ug/L	13.8	1.35%
Na 589.592†	379804.8	30180 ug/L	187.3	30180 ug/L	187.3	0.62%
Ni 231.604†	2347.3	316.1 ug/L	3.53	316.1 ug/L	3.53	1.12%
Pb 220.353†	1469.7	1029 ug/L	14.6	1029 ug/L	14.6	1.42%
Sb 206.836†	1559.7	1012 ug/L	11.2	1012 ug/L	11.2	1.11%
Se 196.026†	279.1	491.0 ug/L	22.50	491.0 ug/L	22.50	4.58%
V 311.071†	53317.3	296.8 ug/L	0.64	296.8 ug/L	0.64	0.22%
Sn 189.927†	1641.5	1016 ug/L	8.2	1016 ug/L	8.2	0.81%
Sr 421.552†	-123.8	-0.287 ug/L	0.1588	-0.287 ug/L	0.1588	55.27%
Tl 190.801†	1584.4	1040 ug/L	9.9	1040 ug/L	9.9	0.96%
Zn 206.200†	2839.4	311.0 ug/L	5.51	311.0 ug/L	5.51	1.77%
Ti 334.940†	523605.9	1015 ug/L	3.3	1015 ug/L	3.3	0.32%
B 249.772†	29283.8	962.6 ug/L	1.13	962.6 ug/L	1.13	0.12%
Cu 324.752†	92757.7	319.8 ug/L	0.67	319.8 ug/L	0.67	0.21%
S 181.975†	-209.2	-1191 ug/L	31.5	-1191 ug/L	31.5	2.65%
Zr 343.823†	243646.8	1014 ug/L	1.7	1014 ug/L	1.7	0.17%
Li 670.784†	159.4	0.595 ug/L	0.3440	0.595 ug/L	0.3440	57.85%

Sequence No.: 97
Sample ID: LB 220-49014/1-B
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 3/28/2011 4:59:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LB 220-49014/1-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	765388.8	0.883	mg/L	0.0115				1.31%
Y (radial)	102490.6	0.915	mg/L	0.0048				0.53%
Ag 328.068†	34.0	0.227	ug/L	0.1825	0.227	ug/L	0.1825	80.45%
Al 396.153†	-73.1	-7.408	ug/L	1.6200	-7.408	ug/L	1.6200	21.87%
As 188.979†	2.8	3.091	ug/L	3.4825	3.091	ug/L	3.4825	112.65%
Ba 233.527†	108.5	1.935	ug/L	0.0926	1.935	ug/L	0.0926	4.78%
Be 313.107†	-373.8	-0.383	ug/L	0.0733	-0.383	ug/L	0.0733	19.16%
Ca 317.933†	-122.1	-17.99	ug/L	4.241	-17.99	ug/L	4.241	23.57%
Cd 214.440†	13.6	0.444	ug/L	0.2321	0.444	ug/L	0.2321	52.32%
Co 228.616†	-2.3	-0.195	ug/L	0.2317	-0.195	ug/L	0.2317	119.08%
Cr 267.716†	21.0	1.046	ug/L	0.1832	1.046	ug/L	0.1832	17.52%
Fe 238.204†	-13.9	-5.865	ug/L	0.4035	-5.865	ug/L	0.4035	6.88%
K 766.490†	1066.2	154.5	ug/L	9.25	154.5	ug/L	9.25	5.99%
Mg 285.213†	3.9	0.313	ug/L	0.3740	0.313	ug/L	0.3740	119.68%
Mn 257.610†	107.6	0.294	ug/L	0.0135	0.294	ug/L	0.0135	4.58%
Mo 202.031†	2.6	0.592	ug/L	0.4270	0.592	ug/L	0.4270	72.16%
Na 589.592†	6659827.8	529200	ug/L	11852.0	529200	ug/L	11852.0	2.24%
Ni 231.604†	14.5	1.946	ug/L	1.0997	1.946	ug/L	1.0997	56.50%
Pb 220.353†	10.0	6.965	ug/L	3.2828	6.965	ug/L	3.2828	47.13%
Sb 206.836†	-1.0	-0.686	ug/L	2.9316	-0.686	ug/L	2.9316	427.15%
Se 196.026†	2.1	3.717	ug/L	6.9702	3.717	ug/L	6.9702	187.51%
V 311.071†	513.5	3.011	ug/L	0.0181	3.011	ug/L	0.0181	0.60%
Sn 189.927†	3.2	1.972	ug/L	1.9460	1.972	ug/L	1.9460	98.66%
Sr 421.552†	109.6	0.118	ug/L	0.0252	0.118	ug/L	0.0252	21.31%
Tl 190.801†	-0.4	-0.251	ug/L	4.4443	-0.251	ug/L	4.4443	>999.9%
Zn 206.200†	110.8	12.03	ug/L	0.101	12.03	ug/L	0.101	0.84%
Ti 334.940†	41.3	0.080	ug/L	0.0110	0.080	ug/L	0.0110	13.71%
B 249.772†	-202.5	-6.719	ug/L	0.2850	-6.719	ug/L	0.2850	4.24%
Cu 324.752†	1955.6	6.735	ug/L	0.3624	6.735	ug/L	0.3624	5.38%
S 181.975†	2.0	12.55	ug/L	30.747	12.55	ug/L	30.747	244.97%
Zr 343.823†	78.9	0.329	ug/L	0.0510	0.329	ug/L	0.0510	15.53%
Li 670.784†	89.1	0.332	ug/L	0.1196	0.332	ug/L	0.1196	35.98%

Sequence No.: 98
Sample ID: 220-15000-G-1-C
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 3/28/2011 5:03:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15000-G-1-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	717340.6	0.828	mg/L	0.0062				0.75%
Y (radial)	101884.8	0.909	mg/L	0.0088				0.97%
Ag 328.068†	-96.1	-0.602	ug/L	0.1458	-0.602	ug/L	0.1458	24.23%
Al 396.153†	-62.2	-6.046	ug/L	3.9129	-6.046	ug/L	3.9129	64.72%
As 188.979†	-6.3	-2.415	ug/L	3.0685	-2.415	ug/L	3.0685	127.06%
Ba 233.527†	12103.9	215.2	ug/L	0.12	215.2	ug/L	0.12	0.06%
Be 313.107†	-487.1	-0.510	ug/L	0.0695	-0.510	ug/L	0.0695	13.62%
Ca 317.933†	659060.7	97120	ug/L	1164.9	97120	ug/L	1164.9	1.20%
Cd 214.440†	-14.7	-0.487	ug/L	0.2822	-0.487	ug/L	0.2822	57.94%
Co 228.616†	13.0	1.084	ug/L	0.1938	1.084	ug/L	0.1938	17.88%
Cr 267.716†	-58.8	-2.914	ug/L	0.1570	-2.914	ug/L	0.1570	5.39%
Fe 238.204†	257.2	108.3	ug/L	4.61	108.3	ug/L	4.61	4.25%
K 766.490†	391336.0	56720	ug/L	473.3	56720	ug/L	473.3	0.83%
Mg 285.213†	2251450.1	181000	ug/L	867.9	181000	ug/L	867.9	0.48%
Mn 257.610†	48398.9	124.2	ug/L	0.09	124.2	ug/L	0.09	0.07%
Mo 202.031†	-32.0	-7.277	ug/L	0.0499	-7.277	ug/L	0.0499	0.69%
Na 589.592†	Saturated2							
Ni 231.604†	2.5	0.340	ug/L	2.0077	0.340	ug/L	2.0077	590.84%
Pb 220.353†	-3.2	-2.258	ug/L	4.1382	-2.258	ug/L	4.1382	183.25%
Sb 206.836†	-49.4	-22.55	ug/L	0.119	-22.55	ug/L	0.119	0.53%
Se 196.026†	-46.6	-60.07	ug/L	24.103	-60.07	ug/L	24.103	40.13%
V 311.071†	1575.5	5.505	ug/L	0.3229	5.505	ug/L	0.3229	5.87%
Sn 189.927†	-1.7	3.343	ug/L	3.0103	3.343	ug/L	3.0103	90.05%
Sr 421.552†	1071484.7	1151	ug/L	9.2	1151	ug/L	9.2	0.80%
Tl 190.801†	-31.4	-15.89	ug/L	10.696	-15.89	ug/L	10.696	67.30%
Zn 206.200†	410.7	44.48	ug/L	1.069	44.48	ug/L	1.069	2.40%
Ti 334.940†	-1136.2	-2.202	ug/L	0.0867	-2.202	ug/L	0.0867	3.94%
B 249.772†	19634.0	653.1	ug/L	0.53	653.1	ug/L	0.53	0.08%
Cu 324.752†	731.3	2.531	ug/L	0.2427	2.531	ug/L	0.2427	9.59%
S 181.975†	18675.0	122500	ug/L	178.9	122500	ug/L	178.9	0.15%
Zr 343.823†	3.2	0.010	ug/L	0.0770	0.010	ug/L	0.0770	747.58%
Li 670.784†	5749.2	21.45	ug/L	0.021	21.45	ug/L	0.021	0.10%

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Sequence No.: 99
Sample ID: 220-15041-C-1-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 3/28/2011 5:07:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15041-C-1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	749360.1	0.865	mg/L	0.0036				0.42%
Y (radial)	106261.7	0.949	mg/L	0.0070				0.74%
Ag 328.068†	-109.4	-0.693	ug/L	0.0408	-0.693	ug/L	0.0408	5.89%
Al 396.153†	1629.3	164.9	ug/L	4.26	164.9	ug/L	4.26	2.59%
As 188.979†	-18.8	-16.10	ug/L	7.343	-16.10	ug/L	7.343	45.60%
Ba 233.527†	3553.7	63.19	ug/L	0.055	63.19	ug/L	0.055	0.09%
Be 313.107†	-387.2	-0.403	ug/L	0.0037	-0.403	ug/L	0.0037	0.92%
Ca 317.933†	700899.1	103300	ug/L	111.7	103300	ug/L	111.7	0.11%
Cd 214.440†	30.7	0.997	ug/L	0.3554	0.997	ug/L	0.3554	35.63%
Co 228.616†	12.5	1.036	ug/L	0.0900	1.036	ug/L	0.0900	8.69%
Cr 267.716†	-5.9	-0.284	ug/L	1.1243	-0.284	ug/L	1.1243	396.13%
Fe 238.204†	381.5	160.7	ug/L	1.51	160.7	ug/L	1.51	0.94%
K 766.490†	202768.9	29390	ug/L	68.8	29390	ug/L	68.8	0.23%
Mg 285.213†	224884.5	18080	ug/L	50.4	18080	ug/L	50.4	0.28%
Mn 257.610†	14269.8	38.17	ug/L	0.163	38.17	ug/L	0.163	0.43%
Mo 202.031†	-21.8	-4.964	ug/L	2.4722	-4.964	ug/L	2.4722	49.80%
Na 589.592†	Saturated2							
Ni 231.604†	71.7	9.641	ug/L	0.7708	9.641	ug/L	0.7708	8.00%
Pb 220.353†	-4.3	-3.010	ug/L	3.0077	-3.010	ug/L	3.0077	99.94%
Sb 206.836†	-52.0	-23.65	ug/L	3.531	-23.65	ug/L	3.531	14.93%
Se 196.026†	-48.8	-62.57	ug/L	3.279	-62.57	ug/L	3.279	5.24%
V 311.071†	1009.8	5.561	ug/L	0.2492	5.561	ug/L	0.2492	4.48%
Sn 189.927†	-21.8	-8.760	ug/L	12.3799	-8.760	ug/L	12.3799	141.32%
Sr 421.552†	779507.6	836.4	ug/L	1.57	836.4	ug/L	1.57	0.19%
Tl 190.801†	-17.2	-6.444	ug/L	3.1189	-6.444	ug/L	3.1189	48.40%

Zn 206.200†	1396.5	151.4	ug/L	1.59	151.4	ug/L	1.59	1.05%
Ti 334.940†	-711.8	-1.379	ug/L	0.0115	-1.379	ug/L	0.0115	0.83%
B 249.772†	6825.4	226.6	ug/L	0.74	226.6	ug/L	0.74	0.33%
Cu 324.752†	7349.6	25.33	ug/L	0.346	25.33	ug/L	0.346	1.37%
S 181.975†	3899.7	25180	ug/L	15.7	25180	ug/L	15.7	0.06%
Zr 343.823†	-20.4	-0.089	ug/L	0.1025	-0.089	ug/L	0.1025	114.60%
Li 670.784†	4126.3	15.40	ug/L	0.751	15.40	ug/L	0.751	4.88%

Sequence No.: 100 **Autosampler Location: 114**
Sample ID: 220-15041-C-1-B DU **Date Collected: 3/28/2011 5:10:43 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-15041-C-1-B DU

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	761007.4	0.878	mg/L	0.0021				0.24%
Y (radial)	104694.6	0.935	mg/L	0.0011				0.12%
Ag 328.068†	-149.9	-0.957	ug/L	0.1965	-0.957	ug/L	0.1965	20.54%
Al 396.153†	1662.7	168.3	ug/L	8.47	168.3	ug/L	8.47	5.03%
As 188.979†	-11.9	-8.456	ug/L	6.5509	-8.456	ug/L	6.5509	77.47%
Ba 233.527†	3553.6	63.19	ug/L	0.415	63.19	ug/L	0.415	0.66%
Be 313.107†	-383.7	-0.399	ug/L	0.0036	-0.399	ug/L	0.0036	0.91%
Ca 317.933†	686731.8	101200	ug/L	883.9	101200	ug/L	883.9	0.87%
Cd 214.440†	21.6	0.697	ug/L	0.1269	0.697	ug/L	0.1269	18.21%
Co 228.616†	15.0	1.248	ug/L	0.2689	1.248	ug/L	0.2689	21.54%
Cr 267.716†	-26.8	-1.326	ug/L	0.5036	-1.326	ug/L	0.5036	37.97%
Fe 238.204†	416.9	175.6	ug/L	2.18	175.6	ug/L	2.18	1.24%
K 766.490†	210586.7	30520	ug/L	146.7	30520	ug/L	146.7	0.48%
Mg 285.213†	225410.1	18120	ug/L	6.6	18120	ug/L	6.6	0.04%
Mn 257.610†	13782.5	36.84	ug/L	0.168	36.84	ug/L	0.168	0.46%
Mo 202.031†	-26.0	-5.917	ug/L	0.3367	-5.917	ug/L	0.3367	5.69%
Na 589.592†	Saturated2							
Ni 231.604†	60.5	8.135	ug/L	1.0733	8.135	ug/L	1.0733	13.19%
Pb 220.353†	2.2	1.477	ug/L	12.6752	1.477	ug/L	12.6752	857.98%
Sb 206.836†	-53.9	-25.03	ug/L	1.284	-25.03	ug/L	1.284	5.13%
Se 196.026†	-54.6	-73.16	ug/L	13.950	-73.16	ug/L	13.950	19.07%
V 311.071†	908.5	4.964	ug/L	0.3249	4.964	ug/L	0.3249	6.55%
Sn 189.927†	-23.1	-9.669	ug/L	8.5208	-9.669	ug/L	8.5208	88.13%
Sr 421.552†	761912.2	817.5	ug/L	3.21	817.5	ug/L	3.21	0.39%
Tl 190.801†	-19.4	-7.950	ug/L	3.1781	-7.950	ug/L	3.1781	39.98%
Zn 206.200†	1408.3	152.6	ug/L	2.29	152.6	ug/L	2.29	1.50%
Ti 334.940†	-624.3	-1.210	ug/L	0.0219	-1.210	ug/L	0.0219	1.81%
B 249.772†	6661.3	221.0	ug/L	0.03	221.0	ug/L	0.03	0.01%
Cu 324.752†	7368.0	25.40	ug/L	0.153	25.40	ug/L	0.153	0.60%
S 181.975†	3773.7	24370	ug/L	79.2	24370	ug/L	79.2	0.32%
Zr 343.823†	-83.8	-0.354	ug/L	0.0579	-0.354	ug/L	0.0579	16.37%
Li 670.784†	4648.6	17.35	ug/L	0.373	17.35	ug/L	0.373	2.15%

Sequence No.: 101 **Autosampler Location: 115**
Sample ID: 220-15041-C-1-C MS **Date Collected: 3/28/2011 5:14:25 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-15041-C-1-C MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	766357.8	0.884	mg/L	0.0009				0.10%
Y (radial)	103921.8	0.928	mg/L	0.0084				0.90%
Ag 328.068†	19444.5	125.0	ug/L	0.42	125.0	ug/L	0.42	0.34%
Al 396.153†	37336.2	3762	ug/L	20.5	3762	ug/L	20.5	0.54%
As 188.979†	365.8	413.4	ug/L	2.81	413.4	ug/L	2.81	0.68%
Ba 233.527†	10550.2	187.8	ug/L	0.41	187.8	ug/L	0.41	0.22%
Be 313.107†	39173.2	42.21	ug/L	0.025	42.21	ug/L	0.025	0.06%
Ca 317.933†	750588.5	110600	ug/L	188.4	110600	ug/L	188.4	0.17%
Cd 214.440†	3695.8	120.6	ug/L	0.90	120.6	ug/L	0.90	0.75%

Co 228.616†	1423.0	118.8 ug/L	1.35	118.8 ug/L	1.35	1.14%
Cr 267.716†	2438.1	121.5 ug/L	0.68	121.5 ug/L	0.68	0.56%
Fe 238.204†	7854.2	3309 ug/L	0.3	3309 ug/L	0.3	0.01%
K 766.490†	326347.3	47300 ug/L	488.2	47300 ug/L	488.2	1.03%
Mg 285.213†	313480.7	25200 ug/L	183.5	25200 ug/L	183.5	0.73%
Mn 257.610†	42970.6	116.2 ug/L	0.43	116.2 ug/L	0.43	0.37%
Mo 202.031†	1778.7	404.6 ug/L	1.88	404.6 ug/L	1.88	0.47%
Na 589.592†	8853322.0	703500 ug/L	10123.1	703500 ug/L	10123.1	1.44%
Ni 231.604†	949.3	127.8 ug/L	0.99	127.8 ug/L	0.99	0.78%
Pb 220.353†	553.8	387.5 ug/L	0.49	387.5 ug/L	0.49	0.13%
Sb 206.836†	593.1	395.3 ug/L	2.16	395.3 ug/L	2.16	0.55%
Se 196.026†	85.0	174.8 ug/L	4.14	174.8 ug/L	4.14	2.37%
V 311.071†	22430.4	124.5 ug/L	0.15	124.5 ug/L	0.15	0.12%
Sn 189.927†	623.5	391.1 ug/L	1.56	391.1 ug/L	1.56	0.40%
Sr 421.552†	784054.1	841.1 ug/L	4.76	841.1 ug/L	4.76	0.57%
Tl 190.801†	545.7	364.2 ug/L	8.13	364.2 ug/L	8.13	2.23%
Zn 206.200†	2488.1	271.0 ug/L	0.50	271.0 ug/L	0.50	0.18%
Ti 334.940†	217070.3	420.6 ug/L	1.06	420.6 ug/L	1.06	0.25%
B 249.772†	19706.2	643.2 ug/L	1.35	643.2 ug/L	1.35	0.21%
Cu 324.752†	47237.1	163.1 ug/L	0.18	163.1 ug/L	0.18	0.11%
S 181.975†	3649.6	23730 ug/L	22.2	23730 ug/L	22.2	0.09%
Zr 343.823†	99930.4	415.9 ug/L	0.00	415.9 ug/L	0.00	0.00%
Li 670.784†	4769.0	17.80 ug/L	0.215	17.80 ug/L	0.215	1.21%

Sequence No.: 102
Sample ID: 220-15041-C-1-A PDS
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 3/28/2011 5:18:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15041-C-1-A PDS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	745475.6	0.860	mg/L	0.0058				0.67%
Y (radial)	103598.7	0.925	mg/L	0.0059				0.64%
Ag 328.068†	1080.8	5.999	ug/L	0.2818	5.999	ug/L	0.2818	4.70%
Al 396.153†	19594.6	1975	ug/L	34.0	1975	ug/L	34.0	1.72%
As 188.979†	118.7	137.5	ug/L	5.51	137.5	ug/L	5.51	4.01%
Ba 233.527†	7629.5	135.8	ug/L	0.56	135.8	ug/L	0.56	0.42%
Be 313.107†	69297.9	72.02	ug/L	1.188	72.02	ug/L	1.188	1.65%
Ca 317.933†	718049.4	105800	ug/L	282.1	105800	ug/L	282.1	0.27%
Cd 214.440†	2142.2	69.94	ug/L	0.706	69.94	ug/L	0.706	1.01%
Co 228.616†	810.9	67.72	ug/L	0.683	67.72	ug/L	0.683	1.01%
Cr 267.716†	1372.2	68.39	ug/L	0.157	68.39	ug/L	0.157	0.23%
Fe 238.204†	4139.2	1744	ug/L	15.2	1744	ug/L	15.2	0.87%
K 766.490†	238255.3	34530	ug/L	301.7	34530	ug/L	301.7	0.87%
Mg 285.213†	266691.9	21440	ug/L	77.7	21440	ug/L	77.7	0.36%
Mn 257.610†	38248.4	103.5	ug/L	1.49	103.5	ug/L	1.49	1.44%
Mo 202.031†	864.3	196.6	ug/L	1.42	196.6	ug/L	1.42	0.72%
Na 589.592†	Saturated2							
Ni 231.604†	572.7	77.10	ug/L	0.083	77.10	ug/L	0.083	0.11%
Pb 220.353†	108.7	76.32	ug/L	2.221	76.32	ug/L	2.221	2.91%
Sb 206.836†	276.0	189.2	ug/L	3.14	189.2	ug/L	3.14	1.66%
Se 196.026†	91.0	183.2	ug/L	9.06	183.2	ug/L	9.06	4.95%
V 311.071†	13006.3	72.57	ug/L	1.123	72.57	ug/L	1.123	1.55%
Sn 189.927†	313.3	198.8	ug/L	1.57	198.8	ug/L	1.57	0.79%
Sr 421.552†	836287.2	897.4	ug/L	4.37	897.4	ug/L	4.37	0.49%
Tl 190.801†	283.5	191.2	ug/L	3.08	191.2	ug/L	3.08	1.61%
Zn 206.200†	3388.6	368.0	ug/L	1.53	368.0	ug/L	1.53	0.42%
Ti 334.940†	106943.9	207.2	ug/L	3.38	207.2	ug/L	3.38	1.63%
B 249.772†	13653.6	447.7	ug/L	1.62	447.7	ug/L	1.62	0.36%
Cu 324.752†	30040.6	103.7	ug/L	0.80	103.7	ug/L	0.80	0.77%
S 181.975†	3886.1	25160	ug/L	35.7	25160	ug/L	35.7	0.14%
Zr 343.823†	50798.7	211.4	ug/L	2.84	211.4	ug/L	2.84	1.34%
Li 670.784†	25374.2	94.69	ug/L	1.345	94.69	ug/L	1.345	1.42%

Sequence No.: 103
Sample ID: 220-15041-C-1-A SD@5
Analyst: JV

Autosampler Location: 117
Date Collected: 3/28/2011 5:21:38 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 220-15041-C-1-A SD@5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	791946.2	0.914	mg/L	0.0087				0.95%
Y (radial)	104314.0	0.931	mg/L	0.0038				0.41%
Ag 328.068†	-22.5	-0.139	ug/L	0.0757	-0.139	ug/L	0.0757	54.30%
Al 396.153†	326.2	33.08	ug/L	0.713	33.08	ug/L	0.713	2.16%
As 188.979†	-6.7	-6.481	ug/L	3.3445	-6.481	ug/L	3.3445	51.61%
Ba 233.527†	746.0	13.27	ug/L	0.147	13.27	ug/L	0.147	1.11%
Be 313.107†	-183.4	-0.190	ug/L	0.0550	-0.190	ug/L	0.0550	28.88%
Ca 317.933†	139660.9	20580	ug/L	73.7	20580	ug/L	73.7	0.36%
Cd 214.440†	23.9	0.779	ug/L	0.0490	0.779	ug/L	0.0490	6.29%
Co 228.616†	-11.0	-0.923	ug/L	0.0357	-0.923	ug/L	0.0357	3.87%
Cr 267.716†	6.5	0.328	ug/L	0.0163	0.328	ug/L	0.0163	4.96%
Fe 238.204†	52.7	22.20	ug/L	0.270	22.20	ug/L	0.270	1.22%
K 766.490†	39444.2	5717	ug/L	12.5	5717	ug/L	12.5	0.22%
Mg 285.213†	44842.9	3605	ug/L	4.9	3605	ug/L	4.9	0.14%
Mn 257.610†	2978.9	7.977	ug/L	0.1005	7.977	ug/L	0.1005	1.26%
Mo 202.031†	-12.5	-2.848	ug/L	0.0861	-2.848	ug/L	0.0861	3.02%
Na 589.592†	1837564.3	146000	ug/L	2569.9	146000	ug/L	2569.9	1.76%
Ni 231.604†	16.9	2.266	ug/L	0.1137	2.266	ug/L	0.1137	5.02%
Pb 220.353†	-3.2	-2.221	ug/L	0.3415	-2.221	ug/L	0.3415	15.38%
Sb 206.836†	-25.5	-14.50	ug/L	0.918	-14.50	ug/L	0.918	6.33%
Se 196.026†	-17.3	-25.73	ug/L	2.021	-25.73	ug/L	2.021	7.85%
V 311.071†	461.0	2.635	ug/L	0.3040	2.635	ug/L	0.3040	11.53%
Sn 189.927†	-3.8	-1.380	ug/L	2.1908	-1.380	ug/L	2.1908	158.72%
Sr 421.552†	164422.6	176.4	ug/L	0.15	176.4	ug/L	0.15	0.09%
Tl 190.801†	-10.6	-5.895	ug/L	0.7318	-5.895	ug/L	0.7318	12.42%
Zn 206.200†	282.4	30.61	ug/L	0.007	30.61	ug/L	0.007	0.02%
Ti 334.940†	-259.4	-0.503	ug/L	0.0862	-0.503	ug/L	0.0862	17.15%
B 249.772†	1083.9	35.99	ug/L	0.714	35.99	ug/L	0.714	1.98%
Cu 324.752†	1576.0	5.431	ug/L	0.1859	5.431	ug/L	0.1859	3.42%
S 181.975†	689.6	4460	ug/L	78.0	4460	ug/L	78.0	1.75%
Zr 343.823†	-22.6	-0.095	ug/L	0.0436	-0.095	ug/L	0.0436	45.93%
Li 670.784†	929.1	3.467	ug/L	0.1684	3.467	ug/L	0.1684	4.86%

Sequence No.: 104 Autosampler Location: 7
Sample ID: CCV Date Collected: 3/28/2011 5:24:50 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	838461.2	0.968	mg/L	0.0002				0.02%
Y (radial)	110141.3	0.983	mg/L	0.0089				0.91%
Ag 328.068†	37064.0	240.7	ug/L	0.45	240.7	ug/L	0.45	0.19%
QC value within limits for Ag 328.068 Recovery = 96.28%								
Al 396.153†	48662.2	4905	ug/L	22.3	4905	ug/L	22.3	0.45%
QC value within limits for Al 396.153 Recovery = 98.10%								
As 188.979†	434.1	487.6	ug/L	9.66	487.6	ug/L	9.66	1.98%
QC value within limits for As 188.979 Recovery = 97.51%								
Ba 233.527†	27945.1	497.7	ug/L	3.60	497.7	ug/L	3.60	0.72%
QC value within limits for Ba 233.527 Recovery = 99.54%								
Be 313.107†	476316.8	490.4	ug/L	1.18	490.4	ug/L	1.18	0.24%
QC value within limits for Be 313.107 Recovery = 98.09%								
Ca 317.933†	120649.3	17780	ug/L	25.8	17780	ug/L	25.8	0.15%
QC value within limits for Ca 317.933 Recovery = 96.11%								
Cd 214.440†	15095.3	493.2	ug/L	1.00	493.2	ug/L	1.00	0.20%
QC value within limits for Cd 214.440 Recovery = 98.64%								
Co 228.616†	5922.2	495.9	ug/L	2.49	495.9	ug/L	2.49	0.50%
QC value within limits for Co 228.616 Recovery = 99.18%								
Cr 267.716†	9998.7	498.1	ug/L	0.11	498.1	ug/L	0.11	0.02%
QC value within limits for Cr 267.716 Recovery = 99.62%								
Fe 238.204†	12070.8	5085	ug/L	40.2	5085	ug/L	40.2	0.79%

QC value within limits for Fe 238.204 Recovery = 92.46%

K 766.490†	266348.5	38610 ug/L	597.4	38610 ug/L	597.4	1.55%

QC value within limits for K 766.490 Recovery = 96.51%

Mg 285.213†	221237.1	17790 ug/L	267.9	17790 ug/L	267.9	1.51%

QC value within limits for Mg 285.213 Recovery = 96.15%

Mn 257.610†	182481.9	497.6 ug/L	0.71	497.6 ug/L	0.71	0.14%

QC value within limits for Mn 257.610 Recovery = 99.52%

Mo 202.031†	2064.9	469.0 ug/L	0.53	469.0 ug/L	0.53	0.11%

QC value within limits for Mo 202.031 Recovery = 93.80%

Na 589.592†	455231.0	36170 ug/L	567.0	36170 ug/L	567.0	1.57%

QC value within limits for Na 589.592 Recovery = 90.43%

Ni 231.604†	3738.4	503.4 ug/L	0.75	503.4 ug/L	0.75	0.15%

QC value within limits for Ni 231.604 Recovery = 100.68%

Pb 220.353†	705.9	493.7 ug/L	6.13	493.7 ug/L	6.13	1.24%

QC value within limits for Pb 220.353 Recovery = 98.74%

Sb 206.836†	713.7	460.0 ug/L	3.05	460.0 ug/L	3.05	0.66%

QC value within limits for Sb 206.836 Recovery = 92.01%

Se 196.026†	258.9	459.5 ug/L	4.36	459.5 ug/L	4.36	0.95%

QC value within limits for Se 196.026 Recovery = 91.90%

V 311.071†	82236.3	474.4 ug/L	0.35	474.4 ug/L	0.35	0.07%

QC value within limits for V 311.071 Recovery = 94.88%

Sn 189.927†	779.8	483.5 ug/L	2.75	483.5 ug/L	2.75	0.57%

QC value within limits for Sn 189.927 Recovery = 96.69%

Sr 421.552†	446224.8	479.7 ug/L	8.40	479.7 ug/L	8.40	1.75%

QC value within limits for Sr 421.552 Recovery = 95.95%

Tl 190.801†	760.4	498.5 ug/L	1.60	498.5 ug/L	1.60	0.32%

QC value within limits for Tl 190.801 Recovery = 99.71%

Zn 206.200†	4452.7	487.8 ug/L	0.91	487.8 ug/L	0.91	0.19%

QC value within limits for Zn 206.200 Recovery = 97.56%

Ti 334.940†	254578.4	493.3 ug/L	0.48	493.3 ug/L	0.48	0.10%

QC value within limits for Ti 334.940 Recovery = 98.66%

B 249.772†	14530.4	464.1 ug/L	1.14	464.1 ug/L	1.14	0.24%

QC value within limits for B 249.772 Recovery = 92.82%

Cu 324.752†	143446.9	494.7 ug/L	0.48	494.7 ug/L	0.48	0.10%

QC value within limits for Cu 324.752 Recovery = 98.93%

S 181.975†	1408.8	9328 ug/L	43.3	9328 ug/L	43.3	0.46%

QC value within limits for S 181.975 Recovery = 93.28%

Zr 343.823†	113781.8	473.5 ug/L	0.08	473.5 ug/L	0.08	0.02%

QC value within limits for Zr 343.823 Recovery = 94.71%

Li 670.784†	132021.0	492.7 ug/L	7.90	492.7 ug/L	7.90	1.60%

QC value within limits for Li 670.784 Recovery = 98.53%

All analyte(s) passed QC.

Sequence No.: 105 **Autosampler Location:** 1
Sample ID: CCB **Date Collected:** 3/28/2011 5:28:21 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	855650.6	0.987	mg/L	0.0076				0.77%
Y (radial)	108868.8	0.972	mg/L	0.0041				0.42%
Ag 328.068†	16.2	0.104	ug/L	0.0310	0.104	ug/L	0.0310	29.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-36.2	-3.656	ug/L	1.7272	-3.656	ug/L	1.7272	47.25%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-4.4	-4.914	ug/L	1.8454	-4.914	ug/L	1.8454	37.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.2	0.058	ug/L	0.1010	0.058	ug/L	0.1010	174.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	32.7	0.034	ug/L	0.0142	0.034	ug/L	0.0142	41.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933†	-14.2	-2.098	ug/L	5.1160	-2.098	ug/L	5.1160	243.80%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 214.440†	9.1	0.297	ug/L	0.0838	0.297	ug/L	0.0838	28.24%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	5.5	0.465	ug/L	0.1272	0.465	ug/L	0.1272	27.34%
QC value within limits for Co 228.616 Recovery = Not calculated								

Cr 267.716†	-3.0	-0.149 ug/L	0.0088	-0.149 ug/L	0.0088	5.93%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Fe 238.204†	-23.7	-9.983 ug/L	0.4601	-9.983 ug/L	0.4601	4.61%
QC value within limits for Fe 238.204 Recovery = Not calculated						
K 766.490†	237.3	34.40 ug/L	7.633	34.40 ug/L	7.633	22.19%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 285.213†	3.3	0.259 ug/L	0.3299	0.259 ug/L	0.3299	127.22%
QC value within limits for Mg 285.213 Recovery = Not calculated						
Mn 257.610†	6.4	0.018 ug/L	0.0419	0.018 ug/L	0.0419	238.42%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-0.3	-0.064 ug/L	0.5855	-0.064 ug/L	0.5855	910.34%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592†	1864.2	148.1 ug/L	1.77	148.1 ug/L	1.77	1.19%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ni 231.604†	5.6	0.748 ug/L	0.0883	0.748 ug/L	0.0883	11.79%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.3	2.306 ug/L	0.8917	2.306 ug/L	0.8917	38.66%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.1	3.265 ug/L	2.7966	3.265 ug/L	2.7966	85.65%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.0	8.676 ug/L	15.0804	8.676 ug/L	15.0804	173.81%
QC value within limits for Se 196.026 Recovery = Not calculated						
V 311.071†	9.9	0.056 ug/L	0.4615	0.056 ug/L	0.4615	816.95%
QC value within limits for V 311.071 Recovery = Not calculated						
Sn 189.927†	-3.0	-1.867 ug/L	0.9758	-1.867 ug/L	0.9758	52.27%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	36.6	0.039 ug/L	0.0620	0.039 ug/L	0.0620	157.12%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Tl 190.801†	-2.6	-1.660 ug/L	1.9725	-1.660 ug/L	1.9725	118.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	-0.4	-0.047 ug/L	0.6309	-0.047 ug/L	0.6309	>999.9%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	61.4	0.119 ug/L	0.0053	0.119 ug/L	0.0053	4.47%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-356.7	-11.83 ug/L	0.625	-11.83 ug/L	0.625	5.28%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	36.0	0.123 ug/L	0.1560	0.123 ug/L	0.1560	126.88%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-7.5	-47.43 ug/L	34.001	-47.43 ug/L	34.001	71.68%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	37.0	0.154 ug/L	0.0047	0.154 ug/L	0.0047	3.07%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	-37.6	-0.140 ug/L	0.2164	-0.140 ug/L	0.2164	154.24%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 106 **Autosampler Location: 118**
Sample ID: 220-14983-A-5-B **Date Collected: 3/28/2011 5:31:30 PM**
Analyst: JV **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 220-14983-A-5-B

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	769384.9	0.888	mg/L	0.0028				0.31%
Y (radial)	105985.3	0.946	mg/L	0.0036				0.38%
Ag 328.068†	-3.6	0.285	ug/L	0.0434	0.285	ug/L	0.0434	15.25%
Al 396.153†	709.5	71.78	ug/L	0.176	71.78	ug/L	0.176	0.25%
As 188.979†	-9.1	-9.082	ug/L	0.9817	-9.082	ug/L	0.9817	10.81%
Ba 233.527†	19484.3	346.3	ug/L	0.35	346.3	ug/L	0.35	0.10%
Be 313.107†	36.3	0.036	ug/L	0.0328	0.036	ug/L	0.0328	91.78%
Ca 317.933†	42840.9	6313	ug/L	3.2	6313	ug/L	3.2	0.05%
Cd 214.440†	24.1	0.529	ug/L	0.2961	0.529	ug/L	0.2961	56.02%
Co 228.616†	98.1	8.021	ug/L	0.0368	8.021	ug/L	0.0368	0.46%
Cr 267.716†	11.6	0.705	ug/L	0.1261	0.705	ug/L	0.1261	17.89%
Fe 238.204†	13234.7	5575	ug/L	8.5	5575	ug/L	8.5	0.15%
K 766.490†	22076.7	3200	ug/L	4.2	3200	ug/L	4.2	0.13%
Mg 285.213†	10760.7	869.3	ug/L	1.93	869.3	ug/L	1.93	0.22%
Mn 257.610†	406666.0	1111	ug/L	0.9	1111	ug/L	0.9	0.08%

Mo 202.031†	-5.4	-1.005 ug/L	0.7647	-1.005 ug/L	0.7647	76.08%
Na 589.592†	6555240.4	520900 ug/L	3788.7	520900 ug/L	3788.7	0.73%
Ni 231.604†	31.6	4.255 ug/L	1.8144	4.255 ug/L	1.8144	42.64%
Pb 220.353†	16.1	10.41 ug/L	5.928	10.41 ug/L	5.928	56.94%
Sb 206.836†	-0.1	0.522 ug/L	0.6369	0.522 ug/L	0.6369	121.91%
Se 196.026†	-0.4	4.217 ug/L	2.6394	4.217 ug/L	2.6394	62.59%
V 311.071†	543.2	2.998 ug/L	0.2486	2.998 ug/L	0.2486	8.29%
Sn 189.927†	-0.4	0.067 ug/L	1.6501	0.067 ug/L	1.6501	>999.9%
Sr 421.552†	57888.7	62.14 ug/L	0.006	62.14 ug/L	0.006	0.01%
Tl 190.801†	-6.9	-3.776 ug/L	3.2103	-3.776 ug/L	3.2103	85.03%
Zn 206.200†	719.1	77.95 ug/L	0.900	77.95 ug/L	0.900	1.15%
Ti 334.940†	-151.1	-0.293 ug/L	0.0555	-0.293 ug/L	0.0555	18.94%
B 249.772†	1285.5	21.37 ug/L	0.706	21.37 ug/L	0.706	3.30%
Cu 324.752†	1211.9	4.790 ug/L	0.2159	4.790 ug/L	0.2159	4.51%
S 181.975†	-17.8	-95.05 ug/L	7.184	-95.05 ug/L	7.184	7.56%
Zr 343.823†	33.6	-0.014 ug/L	0.0719	-0.014 ug/L	0.0719	513.39%
Li 670.784†	232.7	0.868 ug/L	0.3220	0.868 ug/L	0.3220	37.09%

Sequence No.: 107
Sample ID: 220-14986-A-1-C
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 119
Date Collected: 3/28/2011 5:35:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14986-A-1-C

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	706649.9	0.815	mg/L	0.0053				0.65%
Y (radial)	99270.8	0.886	mg/L	0.0023				0.26%
Ag 328.068†	-495.1	-2.802	ug/L	0.0188	-2.802	ug/L	0.0188	0.67%
Al 396.153†	4708.4	476.2	ug/L	6.89	476.2	ug/L	6.89	1.45%
As 188.979†	-25.1	-9.888	ug/L	4.4182	-9.888	ug/L	4.4182	44.68%
Ba 233.527†	18919.2	336.2	ug/L	2.02	336.2	ug/L	2.02	0.60%
Be 313.107†	-704.8	-0.459	ug/L	0.0063	-0.459	ug/L	0.0063	1.36%
Ca 317.933†	2453574.2	361600	ug/L	3194.0	361600	ug/L	3194.0	0.88%
Cd 214.440†	1207.7	39.12	ug/L	0.794	39.12	ug/L	0.794	2.03%
Co 228.616†	1368.3	114.3	ug/L	1.78	114.3	ug/L	1.78	1.55%
Cr 267.716†	97.3	5.024	ug/L	0.3205	5.024	ug/L	0.3205	6.38%
Fe 238.204†	18262.5	7694	ug/L	7.7	7694	ug/L	7.7	0.10%
K 766.490†	78406.5	11360	ug/L	1.8	11360	ug/L	1.8	0.02%
Mg 285.213†	156371.5	12580	ug/L	16.3	12580	ug/L	16.3	0.13%
Mn 257.610†	62801.3	171.0	ug/L	0.24	171.0	ug/L	0.24	0.14%
Mo 202.031†	-16.8	-3.742	ug/L	0.5576	-3.742	ug/L	0.5576	14.90%
Na 589.592†	8322417.6	661300	ug/L	303.6	661300	ug/L	303.6	0.05%
Ni 231.604†	172.4	23.35	ug/L	0.700	23.35	ug/L	0.700	3.00%
Pb 220.353†	99.4	68.32	ug/L	0.424	68.32	ug/L	0.424	0.62%
Sb 206.836†	-27.0	17.45	ug/L	0.081	17.45	ug/L	0.081	0.47%
Se 196.026†	-59.2	-19.49	ug/L	9.215	-19.49	ug/L	9.215	47.29%
V 311.071†	1732.6	9.064	ug/L	0.6641	9.064	ug/L	0.6641	7.33%
Sn 189.927†	-35.6	-5.292	ug/L	6.6092	-5.292	ug/L	6.6092	124.89%
Sr 421.552†	608356.1	646.2	ug/L	6.29	646.2	ug/L	6.29	0.97%
Tl 190.801†	-57.7	-20.13	ug/L	4.866	-20.13	ug/L	4.866	24.18%
Zn 206.200†	129351.3	14020	ug/L	3.7	14020	ug/L	3.7	0.03%
Ti 334.940†	27533.5	53.35	ug/L	1.041	53.35	ug/L	1.041	1.95%
B 249.772†	4026.1	104.5	ug/L	2.76	104.5	ug/L	2.76	2.64%
Cu 324.752†	4237.3	15.44	ug/L	0.363	15.44	ug/L	0.363	2.35%
S 181.975†	33640.1	214200	ug/L	1381.6	214200	ug/L	1381.6	0.65%
Zr 343.823†	173.6	0.511	ug/L	0.0720	0.511	ug/L	0.0720	14.10%
Li 670.784†	4658.1	17.38	ug/L	0.009	17.38	ug/L	0.009	0.05%

Sequence No.: 108
Sample ID: 220-14994-B-1-C
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 120
Date Collected: 3/28/2011 5:38:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-14994-B-1-C

Mean Corrected Calib. Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	749319.4	0.865	mg/L	0.0052				0.61%
Y (radial)	102278.2	0.913	mg/L	0.0053				0.58%
Ag 328.068†	13.0	0.123	ug/L	0.0463	0.123	ug/L	0.0463	37.77%
Al 396.153†	1223.8	123.8	ug/L	1.13	123.8	ug/L	1.13	0.91%
As 188.979†	-4.7	-5.099	ug/L	2.6214	-5.099	ug/L	2.6214	51.41%
Ba 233.527†	5307.4	94.36	ug/L	0.147	94.36	ug/L	0.147	0.16%
Be 313.107†	-353.2	-0.345	ug/L	0.0027	-0.345	ug/L	0.0027	0.78%
Ca 317.933†	9008.9	1328	ug/L	5.9	1328	ug/L	5.9	0.45%
Cd 214.440†	23.5	0.748	ug/L	0.1829	0.748	ug/L	0.1829	24.46%
Co 228.616†	50.3	4.190	ug/L	0.2360	4.190	ug/L	0.2360	5.63%
Cr 267.716†	32.6	1.635	ug/L	0.5881	1.635	ug/L	0.5881	35.96%
Fe 238.204†	1059.5	446.3	ug/L	0.75	446.3	ug/L	0.75	0.17%
K 766.490†	3671.4	532.1	ug/L	15.54	532.1	ug/L	15.54	2.92%
Mg 285.213†	4331.7	348.6	ug/L	1.89	348.6	ug/L	1.89	0.54%
Mn 257.610†	46907.2	128.1	ug/L	0.15	128.1	ug/L	0.15	0.11%
Mo 202.031†	-4.0	-0.910	ug/L	0.3316	-0.910	ug/L	0.3316	36.45%
Na 589.592†	7416147.4	589300	ug/L	8389.3	589300	ug/L	8389.3	1.42%
Ni 231.604†	2.6	0.361	ug/L	1.1887	0.361	ug/L	1.1887	329.36%
Pb 220.353†	2.0	1.369	ug/L	1.1072	1.369	ug/L	1.1072	80.89%
Sb 206.836†	-0.8	-0.439	ug/L	2.1180	-0.439	ug/L	2.1180	482.38%
Se 196.026†	-1.0	-1.175	ug/L	0.3112	-1.175	ug/L	0.3112	26.49%
V 311.071†	738.6	4.276	ug/L	0.2509	4.276	ug/L	0.2509	5.87%
Sn 189.927†	1.7	1.139	ug/L	3.2866	1.139	ug/L	3.2866	288.43%
Sr 421.552†	9269.0	9.943	ug/L	0.0762	9.943	ug/L	0.0762	0.77%
Tl 190.801†	-7.4	-4.651	ug/L	4.1841	-4.651	ug/L	4.1841	89.96%
Zn 206.200†	415.6	45.07	ug/L	0.616	45.07	ug/L	0.616	1.37%
Ti 334.940†	1797.8	3.484	ug/L	0.0006	3.484	ug/L	0.0006	0.02%
B 249.772†	1513.5	48.66	ug/L	0.135	48.66	ug/L	0.135	0.28%
Cu 324.752†	1456.8	5.067	ug/L	0.0043	5.067	ug/L	0.0043	0.08%
S 181.975†	-1.7	-3.786	ug/L	24.5550	-3.786	ug/L	24.5550	648.55%
Zr 343.823†	-132.3	-0.563	ug/L	0.2480	-0.563	ug/L	0.2480	44.04%
Li 670.784†	316.1	1.180	ug/L	0.4298	1.180	ug/L	0.4298	36.43%

Sequence No.: 109
Sample ID: 220-15029-D-1-A
Analyst: JV
Initial Sample Wt:
Dilution:

Autosampler Location: 121
Date Collected: 3/28/2011 5:42:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15029-D-1-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	771900.6	0.891	mg/L	0.0002				0.02%
Y (radial)	103130.4	0.921	mg/L	0.0095				1.03%
Ag 328.068†	-412.8	-2.559	ug/L	0.0151	-2.559	ug/L	0.0151	0.59%
Al 396.153†	17486.3	1769	ug/L	23.4	1769	ug/L	23.4	1.32%
As 188.979†	-16.5	-1.708	ug/L	3.7372	-1.708	ug/L	3.7372	218.86%
Ba 233.527†	8399.7	149.3	ug/L	0.84	149.3	ug/L	0.84	0.57%
Be 313.107†	-336.6	-0.273	ug/L	0.0391	-0.273	ug/L	0.0391	14.30%
Ca 317.933†	2359473.2	347700	ug/L	1539.3	347700	ug/L	1539.3	0.44%
Cd 214.440†	34.2	1.009	ug/L	0.0323	1.009	ug/L	0.0323	3.20%
Co 228.616†	19.1	1.476	ug/L	0.7381	1.476	ug/L	0.7381	50.02%
Cr 267.716†	-8.0	-0.339	ug/L	0.3799	-0.339	ug/L	0.3799	111.91%
Fe 238.204†	5527.2	2328	ug/L	8.9	2328	ug/L	8.9	0.38%
K 766.490†	18241.0	2644	ug/L	2.4	2644	ug/L	2.4	0.09%
Mg 285.213†	998809.9	80290	ug/L	11.0	80290	ug/L	11.0	0.01%
Mn 257.610†	31447.9	82.34	ug/L	0.539	82.34	ug/L	0.539	0.65%
Mo 202.031†	-46.4	-10.47	ug/L	2.208	-10.47	ug/L	2.208	21.10%
Na 589.592†	345391.6	27440	ug/L	152.1	27440	ug/L	152.1	0.55%
Ni 231.604†	24.7	3.322	ug/L	0.0059	3.322	ug/L	0.0059	0.18%
Pb 220.353†	-12.4	-8.886	ug/L	1.9015	-8.886	ug/L	1.9015	21.40%
Sb 206.836†	-67.2	-9.829	ug/L	2.2786	-9.829	ug/L	2.2786	23.18%
Se 196.026†	-61.0	-29.00	ug/L	2.323	-29.00	ug/L	2.323	8.01%
V 311.071†	934.4	3.581	ug/L	0.4995	3.581	ug/L	0.4995	13.95%
Sn 189.927†	-9.0	10.31	ug/L	9.650	10.31	ug/L	9.650	93.61%
Sr 421.552†	1032657.6	1103	ug/L	3.3	1103	ug/L	3.3	0.30%
Tl 190.801†	-27.7	-1.592	ug/L	6.8548	-1.592	ug/L	6.8548	430.49%
Zn 206.200†	571.8	61.97	ug/L	1.580	61.97	ug/L	1.580	2.55%
Ti 334.940†	7478.7	14.49	ug/L	0.096	14.49	ug/L	0.096	0.66%

B 249.772†	732.2	15.43	ug/L	0.434	15.43	ug/L	0.434	2.81%
Cu 324.752†	1296.5	4.723	ug/L	0.0513	4.723	ug/L	0.0513	1.09%
S 181.975†	31262.7	200500	ug/L	110.2	200500	ug/L	110.2	0.05%
Zr 343.823†	-55.1	-0.294	ug/L	0.0380	-0.294	ug/L	0.0380	12.95%
Li 670.784†	12113.7	45.20	ug/L	1.336	45.20	ug/L	1.336	2.96%

Sequence No.: 110
Sample ID: 220-15052-A-6-A @20
Analyst: JV
Initial Sample Wt:
Dilution:
Autosampler Location: 122
Date Collected: 3/28/2011 5:46:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 220-15052-A-6-A @20

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	842230.4	0.972	mg/L	0.0002				0.02%
Y (radial)	105223.6	0.939	mg/L	0.0072				0.76%
Ag 328.068†	63.3	0.440	ug/L	0.0125	0.440	ug/L	0.0125	2.85%
Al 396.153†	5479.3	554.1	ug/L	1.15	554.1	ug/L	1.15	0.21%
As 188.979†	1.0	1.666	ug/L	0.0939	1.666	ug/L	0.0939	5.64%
Ba 233.527†	553.3	9.833	ug/L	0.0143	9.833	ug/L	0.0143	0.15%
Be 313.107†	-197.5	0.010	ug/L	0.0248	0.010	ug/L	0.0248	240.42%
Ca 317.933†	62786.6	9253	ug/L	11.7	9253	ug/L	11.7	0.13%
Cd 214.440†	2565.9	83.85	ug/L	0.297	83.85	ug/L	0.297	0.35%
Co 228.616†	224.0	18.67	ug/L	0.306	18.67	ug/L	0.306	1.64%
Cr 267.716†	24.4	1.224	ug/L	0.2910	1.224	ug/L	0.2910	23.77%
Fe 238.204†	856.3	360.7	ug/L	2.07	360.7	ug/L	2.07	0.57%
K 766.490†	32870.4	4764	ug/L	4.9	4764	ug/L	4.9	0.10%
Mg 285.213†	16937.5	1362	ug/L	0.5	1362	ug/L	0.5	0.04%
Mn 257.610†	5678.9	15.45	ug/L	0.025	15.45	ug/L	0.025	0.16%
Mo 202.031†	-9.8	-2.243	ug/L	0.8304	-2.243	ug/L	0.8304	37.02%
Na 589.592†	1218.8	96.85	ug/L	1.669	96.85	ug/L	1.669	1.72%
Ni 231.604†	12.1	1.656	ug/L	1.6016	1.656	ug/L	1.6016	96.72%
Pb 220.353†	32456.3	22650	ug/L	19.6	22650	ug/L	19.6	0.09%
Sb 206.836†	-8.8	-4.844	ug/L	0.0614	-4.844	ug/L	0.0614	1.27%
Se 196.026†	-12.8	-20.14	ug/L	7.499	-20.14	ug/L	7.499	37.23%
V 311.071†	367.7	1.637	ug/L	0.1457	1.637	ug/L	0.1457	8.90%
Sn 189.927†	4.1	3.191	ug/L	0.1809	3.191	ug/L	0.1809	5.67%
Sr 421.552†	10478.4	11.06	ug/L	0.012	11.06	ug/L	0.012	0.11%
Tl 190.801†	-11.0	-6.236	ug/L	0.0246	-6.236	ug/L	0.0246	0.39%
Zn 206.200†	127400.8	13810	ug/L	32.4	13810	ug/L	32.4	0.23%
Ti 334.940†	22210.7	43.04	ug/L	0.023	43.04	ug/L	0.023	0.05%
B 249.772†	-363.6	-13.49	ug/L	0.484	-13.49	ug/L	0.484	3.59%
Cu 324.752†	647.2	2.269	ug/L	0.0225	2.269	ug/L	0.0225	0.99%
S 181.975†	1989.8	12680	ug/L	24.0	12680	ug/L	24.0	0.19%
Zr 343.823†	-58.8	-0.255	ug/L	0.0152	-0.255	ug/L	0.0152	5.95%
Li 670.784†	576.2	2.150	ug/L	0.1639	2.150	ug/L	0.1639	7.62%

Sequence No.: 111
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 3/28/2011 5:49:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	845795.1	0.976	mg/L	0.0029				0.30%
Y (radial)	106717.0	0.953	mg/L	0.0045				0.47%
Ag 328.068†	37136.2	241.2	ug/L	1.26	241.2	ug/L	1.26	0.52%
QC value within limits for Ag 328.068 Recovery = 96.47%								
Al 396.153†	48946.2	4934	ug/L	0.4	4934	ug/L	0.4	0.01%
QC value within limits for Al 396.153 Recovery = 98.67%								
As 188.979†	443.3	497.8	ug/L	2.16	497.8	ug/L	2.16	0.43%
QC value within limits for As 188.979 Recovery = 99.56%								
Ba 233.527†	28044.9	499.5	ug/L	0.77	499.5	ug/L	0.77	0.15%
QC value within limits for Ba 233.527 Recovery = 99.90%								
Be 313.107†	475885.5	490.0	ug/L	0.25	490.0	ug/L	0.25	0.05%

QC value within limits for Be 313.107 Recovery = 98.00%						
Ca 317.933†	120970.4	17830 ug/L	65.3	17830 ug/L	65.3	0.37%
QC value within limits for Ca 317.933 Recovery = 96.36%						
Cd 214.440†	15074.3	492.5 ug/L	4.71	492.5 ug/L	4.71	0.96%
QC value within limits for Cd 214.440 Recovery = 98.50%						
Co 228.616†	5906.0	494.5 ug/L	4.61	494.5 ug/L	4.61	0.93%
QC value within limits for Co 228.616 Recovery = 98.91%						
Cr 267.716†	9999.1	498.1 ug/L	7.14	498.1 ug/L	7.14	1.43%
QC value within limits for Cr 267.716 Recovery = 99.62%						
Fe 238.204†	11990.1	5051 ug/L	22.4	5051 ug/L	22.4	0.44%
QC value within limits for Fe 238.204 Recovery = 91.84%						
K 766.490†	273443.3	39630 ug/L	823.8	39630 ug/L	823.8	2.08%
QC value within limits for K 766.490 Recovery = 99.08%						
Mg 285.213†	225010.6	18090 ug/L	464.2	18090 ug/L	464.2	2.57%
QC value within limits for Mg 285.213 Recovery = 97.79%						
Mn 257.610†	182501.2	497.6 ug/L	1.05	497.6 ug/L	1.05	0.21%
QC value within limits for Mn 257.610 Recovery = 99.53%						
Mo 202.031†	2048.8	465.4 ug/L	2.86	465.4 ug/L	2.86	0.61%
QC value within limits for Mo 202.031 Recovery = 93.07%						
Na 589.592†	461674.1	36680 ug/L	756.0	36680 ug/L	756.0	2.06%
QC value within limits for Na 589.592 Recovery = 91.71%						
Ni 231.604†	3738.9	503.5 ug/L	3.84	503.5 ug/L	3.84	0.76%
QC value within limits for Ni 231.604 Recovery = 100.69%						
Pb 220.353†	697.9	488.1 ug/L	5.73	488.1 ug/L	5.73	1.17%
QC value within limits for Pb 220.353 Recovery = 97.61%						
Sb 206.836†	718.1	462.9 ug/L	7.31	462.9 ug/L	7.31	1.58%
QC value within limits for Sb 206.836 Recovery = 92.57%						
Se 196.026†	260.8	462.8 ug/L	1.63	462.8 ug/L	1.63	0.35%
QC value within limits for Se 196.026 Recovery = 92.56%						
V 311.071†	82402.4	475.3 ug/L	1.76	475.3 ug/L	1.76	0.37%
QC value within limits for V 311.071 Recovery = 95.07%						
Sn 189.927†	764.0	473.7 ug/L	1.29	473.7 ug/L	1.29	0.27%
QC value within limits for Sn 189.927 Recovery = 94.75%						
Sr 421.552†	454560.8	488.7 ug/L	11.15	488.7 ug/L	11.15	2.28%
QC value within limits for Sr 421.552 Recovery = 97.74%						
Tl 190.801†	750.0	491.8 ug/L	2.83	491.8 ug/L	2.83	0.58%
QC value within limits for Tl 190.801 Recovery = 98.36%						
Zn 206.200†	4460.0	488.6 ug/L	4.98	488.6 ug/L	4.98	1.02%
QC value within limits for Zn 206.200 Recovery = 97.72%						
Ti 334.940†	255131.0	494.4 ug/L	1.93	494.4 ug/L	1.93	0.39%
QC value within limits for Ti 334.940 Recovery = 98.87%						
B 249.772†	14297.3	456.5 ug/L	3.10	456.5 ug/L	3.10	0.68%
QC value within limits for B 249.772 Recovery = 91.29%						
Cu 324.752†	143019.6	493.2 ug/L	4.33	493.2 ug/L	4.33	0.88%
QC value within limits for Cu 324.752 Recovery = 98.64%						
S 181.975†	1390.6	9219 ug/L	131.3	9219 ug/L	131.3	1.42%
QC value within limits for S 181.975 Recovery = 92.19%						
Zr 343.823†	113817.8	473.7 ug/L	2.11	473.7 ug/L	2.11	0.45%
QC value within limits for Zr 343.823 Recovery = 94.74%						
Li 670.784†	135895.1	507.1 ug/L	8.14	507.1 ug/L	8.14	1.61%
QC value within limits for Li 670.784 Recovery = 101.42%						

All analyte(s) passed QC.

==========

Sequence No.: 112 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/28/2011 5:53:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	865782.8	0.999	mg/L	0.0058				0.58%
Y (radial)	109060.1	0.973	mg/L	0.0117				1.20%
Ag 328.068†	27.9	0.179	ug/L	0.1589	0.179	ug/L	0.1589	88.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-35.4	-3.592	ug/L	0.6727	-3.592	ug/L	0.6727	18.73%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.2	1.352	ug/L	0.5124	1.352	ug/L	0.5124	37.90%
QC value within limits for As 188.979 Recovery = Not calculated								

Ba 233.527†	4.3	0.075 ug/L	0.0771	0.075 ug/L	0.0771	102.50%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	9.2	0.010 ug/L	0.0563	0.010 ug/L	0.0563	565.91%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933†	-13.1	-1.925 ug/L	1.0555	-1.925 ug/L	1.0555	54.83%
QC value within limits for Ca 317.933 Recovery = Not calculated						
Cd 214.440†	8.1	0.266 ug/L	0.4298	0.266 ug/L	0.4298	161.53%
QC value within limits for Cd 214.440 Recovery = Not calculated						
Co 228.616†	5.3	0.447 ug/L	0.1649	0.447 ug/L	0.1649	36.86%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.2	0.011 ug/L	0.1558	0.011 ug/L	0.1558	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Fe 238.204†	-16.1	-6.772 ug/L	0.1553	-6.772 ug/L	0.1553	2.29%
QC value within limits for Fe 238.204 Recovery = Not calculated						
K 766.490†	139.4	20.20 ug/L	11.132	20.20 ug/L	11.132	55.10%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 285.213†	5.0	0.394 ug/L	0.2559	0.394 ug/L	0.2559	64.89%
QC value within limits for Mg 285.213 Recovery = Not calculated						
Mn 257.610†	-2.3	-0.006 ug/L	0.0313	-0.006 ug/L	0.0313	495.05%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	1.8	0.414 ug/L	0.3883	0.414 ug/L	0.3883	93.89%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592†	1695.5	134.7 ug/L	3.13	134.7 ug/L	3.13	2.32%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ni 231.604†	2.2	0.295 ug/L	0.4952	0.295 ug/L	0.4952	168.08%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.4	2.393 ug/L	3.5726	2.393 ug/L	3.5726	149.31%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	6.2	4.004 ug/L	0.3848	4.004 ug/L	0.3848	9.61%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.6	2.850 ug/L	8.4330	2.850 ug/L	8.4330	295.86%
QC value within limits for Se 196.026 Recovery = Not calculated						
V 311.071†	-99.0	-0.583 ug/L	0.1002	-0.583 ug/L	0.1002	17.18%
QC value within limits for V 311.071 Recovery = Not calculated						
Sn 189.927†	0.1	0.046 ug/L	2.7287	0.046 ug/L	2.7287	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	13.1	0.014 ug/L	0.0101	0.014 ug/L	0.0101	71.21%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Tl 190.801†	-0.9	-0.598 ug/L	2.7917	-0.598 ug/L	2.7917	466.89%
QC value within limits for Tl 190.801 Recovery = Not calculated						
Zn 206.200†	6.3	0.679 ug/L	0.3965	0.679 ug/L	0.3965	58.40%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ti 334.940†	57.3	0.111 ug/L	0.0280	0.111 ug/L	0.0280	25.19%
QC value within limits for Ti 334.940 Recovery = Not calculated						
B 249.772†	-439.1	-14.59 ug/L	0.098	-14.59 ug/L	0.098	0.67%
QC value within limits for B 249.772 Recovery = Not calculated						
Cu 324.752†	-41.3	-0.143 ug/L	0.0802	-0.143 ug/L	0.0802	56.07%
QC value within limits for Cu 324.752 Recovery = Not calculated						
S 181.975†	-8.2	-52.33 ug/L	12.374	-52.33 ug/L	12.374	23.65%
QC value within limits for S 181.975 Recovery = Not calculated						
Zr 343.823†	56.8	0.236 ug/L	0.0008	0.236 ug/L	0.0008	0.36%
QC value within limits for Zr 343.823 Recovery = Not calculated						
Li 670.784†	5.8	0.022 ug/L	0.0836	0.022 ug/L	0.0836	385.79%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68537 Batch Start Date: 03/25/11 19:24 Batch Analyst: Staib, Thomas

Batch Method: 3050B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME_LCS-int 00024	ME_LCSS_62 00006		
MB 460-68537/1		3050B, 6010B		1.00 g	50 mL				
LCSSRM 460-68537/2		3050B, 6010B		1.00 g	50 mL		1 g		
460-24356-A-1	GPEC-WC-031911	3050B, 6010B	T	1.02 g	50 mL				
460-24285-E-1 DU		3050B, 6010B	T	1.05 g	50 mL				
460-24285-E-1 MS		3050B, 6010B	T	1.05 g	50 mL	2 mL			

Batch Notes	
Balance ID	35
Hydrogen peroxide lot number	H21J06
Lot # of hydrochloric acid	J43036
Lot # of Nitric Acid	J50063
Temperature	95 Degrees C

Basis	Basis Description
T	Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68078 Batch Start Date: 03/22/11 09:07 Batch Analyst: Sheikh, Razia B

Batch Method: 7471A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME_DCAL-IN 00502			
ICV 460-68078/31		7471A, 7471A		0.60 g	100 mL	5 mL			
CCV 460-68078/33		7471A, 7471A		0.60 g	100 mL	5 mL			

Batch Notes	
Hydroxylamine Hydrochloride Lot	j52473
Balance ID	33
Sulfuric Acid Lot Number	j25034
Lot # of hydrochloric acid	j37036
Lot # of Nitric Acid	j50063
Hood ID or number	1
Potassium Permanganate Lot Number	mkaa0345
NaCL Lot #	j15605
Oven, Bath or Block Temperature 1	121c
Stannous Chloride Lot Number	h45643

Basis	Basis Description

METALS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68108 Batch Start Date: 03/22/11 10:33 Batch Analyst: Sheikh, Razia B

Batch Method: 7471A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME_DCAL-IN 00502	ME_LCSS_62 00011		
MB 460-68108/1		7471A, 7471A		0.60 g	100 mL				
LCSSRM 460-68108/2		7471A, 7471A		0.60 g	100 mL		0.6 g		
460-24285-E-4 DU		7471A, 7471A	T	0.60 g	100 mL				
460-24285-E-4 MS		7471A, 7471A	T	0.60 g	100 mL	1 mL			
460-24356-C-1	GPEC-WC-031911	7471A, 7471A	T	0.64 g	100 mL				

Batch Notes	
Hydroxylamine Hydrochloride Lot	j52473
Balance ID	33
Sulfuric Acid Lot Number	j25034
Lot # of hydrochloric acid	j37036
Lot # of Nitric Acid	j50063
Hood ID or number	1
Potassium Permanganate Lot Number	mkaa0345
NaCL Lot #	j15605
Oven, Bath or Block Temperature 1	121c
Stannous Chloride Lot Number	h45643

Basis	Basis Description
T	Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Batch Number: 49104 Batch Start Date: 03/28/11 09:36 Batch Analyst: Haas, Melissa

Batch Method: 3050B Batch End Date: 03/28/11 12:44

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MCAL2 00005	MEMS 00008	MLCS3 00006	MNA 00006
MB 220-49104/1		3050B, 6010B		2.0 g	250 mL				
LCS 220-49104/2		3050B, 6010B		1.0 g	250 mL	0.25 mL	0.5 mL	0.25 mL	0.625 mL
460-24356-B-1	GPEC-WC-031911	3050B, 6010B	T	2.08 g	250 mL				
460-24356-B-1 DU	GPEC-WC-031911	3050B, 6010B	T	2.10 g	250 mL				
460-24356-B-1 MS	GPEC-WC-031911	3050B, 6010B	T	2.10 g	250 mL	0.05 mL	0.1 mL	0.05 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MS 00005	AnalysisComment				
MB 220-49104/1		3050B, 6010B							
LCS 220-49104/2		3050B, 6010B		0.2 mL					
460-24356-B-1	GPEC-WC-031911	3050B, 6010B	T		S				
460-24356-B-1 DU	GPEC-WC-031911	3050B, 6010B	T		S				
460-24356-B-1 MS	GPEC-WC-031911	3050B, 6010B	T	0.2 mL	S				

METALS BATCH WORKSHEET

Lab Name: TestAmerica Connecticut Job No.: 460-24356-1

SDG No.:

Batch Number: 49104 Batch Start Date: 03/28/11 09:36 Batch Analyst: Haas, Melissa

Batch Method: 3050B Batch End Date: 03/28/11 12:44

Batch Notes	
Analyst	mh
Balance ID	T2
Batch Comment	self-witnessed
First End time	1244
Hydrogen peroxide lot number	MH2O230%-1
Lot # of hydrochloric acid	WHCLACD-18
Lot # of Nitric Acid	MNITRICACD-14
Hood ID or number	HOOD1
Hot Block ID number	HB2
Oven, Bath or Block Temperature 1	94 Degrees C
Oven, Bath or Block Temperature 2	95 Degrees C
Person's name who witnessed reagent drop	mh
First Start time	0936
ID number of the thermometer	2K0511
Digestion Tube/Cup Lot #	J110161-263
Uncorrected Temperature	92 Celsius
Uncorrected Temperature 2	93 Degrees C

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG No.:

Project: Greenpoint

Client Sample ID	Lab Sample ID
GPEC-WC-031911	460-24356-1

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Analysis Method: Moisture RL Date: 02/15/2007 17:07

Prep Method:

Leach Method:

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-24356-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Analysis Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/21/2011 20:34 End Date: 03/22/2011 00:06

Lab Sample ID	D / F	Type	Time	Analytes																				
				% Sol	Moist																			
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/21/2011 20:34 End Date: 03/22/2011 00:06

Lab Sample ID	D / F	Type	Time	Analytes																				
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/21/2011 20:34 End Date: 03/22/2011 00:06

Lab Sample ID	D / F	Type	Time	Analytes																				
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 03/21/2011 20:34 End Date: 03/22/2011 00:06

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol	Moist																		
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ZZZZZZ			00:00																				
ZZZZZZ			00:06																				
ZZZZZZ			00:06																				
ZZZZZZ			00:06																				

Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-24356-1

SDG No.:

Batch Number: 68037 Batch Start Date: 03/21/11 20:34 Batch Analyst: Hall, Alonzo

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-24364-A-4 DU		Moisture	T	10	1.00 g	6.95 g	6.00 g		
460-24356-A-1	GPEC-WC-031911	Moisture	T	22	0.99 g	6.80 g	5.82 g		

Batch Notes	
Balance ID	104 No Unit
Date samples were place in the oven	3/21/2011
Oven Temp when samples are put in oven	#1 104 # 2 104 Degrees C
Time samples were place in the oven	20:45
Date samples were removed from oven	3/22/11
Oven Temp when samples removed from oven	1 104, 2 105 Degrees C
Oven ID	# 1 # 2
ID number of the thermometer	# 1 1839 # 2 1982

Basis	Basis Description
T	Total/NA

Subcontract Data

Shipping and Receiving Documents

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Joseph Chiappetta	Samplers Name (Printed) Matthew Sweet	Site/Project Identification Greenpoint Brooklyn NY
Company GEI Consultants, Inc	P. O. # 093260-1-1104	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 1 Greenwood Ave, Ste 210	Analysis Turnaround Time: Standard ☒	Regulatory Program: NYSDEC
City Montclair State NJ 07042	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone 973-857-7110 Fax 973-509-9625		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	SVOC 8270C	PCB 8082	TAL Metals 6010B	Sulfide 6010B	Merc 7471	TPH 8015 Gro/Dro					LAB USE ONLY Sample Numbers
GPEC-WC-031911	3/19/11	16:45	Soil	3	X	X	X	X	X	X	X					#1

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

Soil:	X	X	X	X	X	X	X								
Water:															

Special Instructions: send results to datagroup@geiconsultants.com

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	3/21/11 10:41	1)	TestAmerica
Relinquished by 2)	Company TestAmerica	Date / Time 3/21/11 11:55	Received by 2)	Company
Relinquished by 3)	Company	Date / Time	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

2.7°C #50

04/05/2011
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Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Login Number: 24356

List Source: TestAmerica Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7°C IR#50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-24356-1

Login Number: 24356
List Number: 1
Creator: Teixeira, Maria L

List Source: TestAmerica Connecticut
List Creation: 03/23/11 01:23 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3/23/11
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	GUN#3 2.0C/1.7C/2.1C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 460-23287-2

Job Description: Greenpoint/ Rolloff Sampling

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
Montclair, NJ 07042

Attention: Mr. Joe Chiappetta

Approved for release.
Sherree Baker
Project Manager II
3/15/2011 4:22 PM

Sherree Baker
Project Manager II
sherree.baker@testamericainc.com
03/15/2011

cc: Mr. Brian Skelly
Mr. Matthew Sweet

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

CASE NARRATIVE

Client: GEI Consultants, Inc.

Project: Greenpoint/ Rolloff Sampling

Report Number: 460-23287-2

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/21/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.6 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

TCLP METALS

Sample 460-23287-1 was analyzed for TCLP metals in accordance with EPA SW-846 Methods 1311/ 6010B. The samples were leached on 03/08/2011, prepared on 03/09/2011 and analyzed on 03/10/2011.

As a standard practice all TCLP samples are diluted 5X prior to analysis. Further dilutions may be required dependent upon analyte levels in the samples. Refer to the analytical results forms for dilutions.

No difficulties were encountered during the TCLP metals analysis.

All quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
460-23287-1	**WC COMP -021711**				
TCLP					
Lead		874	25.0	ug/L	6010B

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Metals (ICP)	TAL EDI	SW846 6010B	
TCLP Extraction	TAL EDI		SW846 1311
Preparation, Total Metals	TAL EDI		SW846 3010A

Lab References:

TAL EDI = TestAmerica Edison

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Method	Analyst	Analyst ID
SW846 6010B	Dave, Virendra	VD

SAMPLE SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-23287-1	WC COMP -021711	Solid	02/17/2011 1155	02/21/2011 1220

SAMPLE RESULTS

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Client Sample ID: **WC COMP -021711**

Lab Sample ID: 460-23287-1 Date Sampled: 02/17/2011 1155
Client Matrix: Solid Date Received: 02/21/2011 1220

6010B Metals (ICP)-TCLP

Method:	6010B	Analysis Batch: 460-67010		Instrument ID:	ICP2
Preparation:	3010A	Prep Batch: 460-66816		Lab File ID:	66873V1
Dilution:	5.0	Leachate Batch: 460-66736		Initial Weight/Volume:	100 mL
Date Analyzed:	03/10/2011 1725			Final Weight/Volume:	100 mL
Date Prepared:	03/09/2011 1135				
Date Leached:	03/08/2011 1700				

Analyte	DryWt Corrected: N	Result (ug/L)	Qualifier	MDL	RL
Lead		874		13.9	25.0

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 460-23287-2

Lab Section	Qualifier	Description
Metals		
	U	Indicates the analyte was analyzed for but not detected.

QUALITY CONTROL RESULTS

Client: GEI Consultants, Inc. Job Number: 460-23287-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-66736					
LB 460-66736/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	1311	
460-23287-1	WC COMP -021711	P	Solid	1311	
460-23287-1DU	Duplicate	P	Solid	1311	
460-23287-1MS	Matrix Spike	P	Solid	1311	
Prep Batch: 460-66816					
LCS 460-66816/2-A	Lab Control Sample	T	Water	3010A	
MB 460-66816/1-A	Method Blank	T	Water	3010A	
LB 460-66736/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	3010A	460-66736
460-23287-1	WC COMP -021711	P	Solid	3010A	460-66736
460-23287-1DU	Duplicate	P	Solid	3010A	460-66736
460-23287-1MS	Matrix Spike	P	Solid	3010A	460-66736
Analysis Batch:460-67010					
LB 460-66736/1-B ^5	TCLP SPLPE Leachate Blank	P	Solid	6010B	460-66816
LCS 460-66816/2-A	Lab Control Sample	T	Water	6010B	460-66816
MB 460-66816/1-A	Method Blank	T	Water	6010B	460-66816
460-23287-1	WC COMP -021711	P	Solid	6010B	460-66816
460-23287-1DU	Duplicate	P	Solid	6010B	460-66816
460-23287-1MS	Matrix Spike	P	Solid	6010B	460-66816

Report Basis
P = TCLP
T = Total

Method Blank - Batch: 460-66816

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 460-66816/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/10/2011 1632
Date Prepared: 03/09/2011 1135

Analysis Batch: 460-67010
Prep Batch: 460-66816
Units: ug/L

Instrument ID: ICP2
Lab File ID: 66873V1
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Lead	5.0	U	2.8	5.0

TCLP SPLPE Leachate Blank - Batch: 460-66816

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID: LB 460-66736/1-B ^5
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 03/10/2011 1803
Date Prepared: 03/09/2011 1135
Date Leached: 03/08/2011 1700

Analysis Batch: 460-67010
Prep Batch: 460-66816
Units: ug/L

Leachate Batch: 460-66736

Instrument ID: ICP2
Lab File ID: 66873V1
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	MDL	RL
Lead	25.0	U	13.9	25.0

Lab Control Sample - Batch: 460-66816

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 460-66816/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/10/2011 1638
Date Prepared: 03/09/2011 1135

Analysis Batch: 460-67010
Prep Batch: 460-66816
Units: ug/L

Instrument ID: ICP2
Lab File ID: 66873V1
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	5000	5193	104	80 - 120	

Client: GEI Consultants, Inc.

Job Number: 460-23287-2

Matrix Spike - Batch: 460-66816

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID: 460-23287-1
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 03/10/2011 1925
Date Prepared: 03/09/2011 1135
Date Leached: 03/08/2011 1700

Analysis Batch: 460-67010
Prep Batch: 460-66816
Units: ug/L

Leachate Batch: 460-66736

Instrument ID: ICP2
Lab File ID: 66873V1
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Lead	874	5000	6018	103	75 - 125	

Duplicate - Batch: 460-66816

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID: 460-23287-1
Client Matrix: Solid
Dilution: 5.0
Date Analyzed: 03/10/2011 1912
Date Prepared: 03/09/2011 1135
Date Leached: 03/08/2011 1700

Analysis Batch: 460-67010
Prep Batch: 460-66816
Units: ug/L

Leachate Batch: 460-66736

Instrument ID: ICP2
Lab File ID: 66873V1
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Lead	874	877.6	0.4	20	

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

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CHAIN OF CUSTODY / ANALYSIS REQUEST

03/15/2011

Name (for report and invoice) Joseph Chappetta	Samplers Name (Printed) Matthew Sweet	Site/Project Identification Greenpoint / Roll off Sampling
Company GEI Consultants	P. O. # 093260-1-1101	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 1 Greenwood Ave Suite 210	Analysis Turnaround Time: Standard ☒	Regulatory Program: NYSDEC
City Montclair State NJ	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 973-873-7110 Fax 973-509-9625		Job No: 460-23287

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260B	SVOC 8270C	6010B RCRA Metals	8082 PCB	D516 Sulfur	8015B DRO C-44 ea	Sample Numbers
WCCOMP-021711	2/17/11	11:55	Soil	3	X	X	X	X	X	X	#1

SubWork

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____

	VOC 8260B	SVOC 8270C	6010B RCRA Metals	8082 PCB	D516 Sulfur	8015B DRO C-44 ea
Soil:	X	X	X	X	X	X
Water:						

Special Instructions: Composited sample from 4 x 20yd rolloffs Send results to datagroup@geiconsultants.com

Water Metals Filtered (Yes/No)? NO

	Company	Date / Time		Company
Relinquished by 1)	GEI	2/18/11 11:15	Received by 1) Elisha Smith	TestAmerica
Relinquished by 2) Elisha Smith	TestAmerica	2/18/11 1220	Received by 2)	
Relinquished by 3)			Received by 3)	
Relinquished by 4)			Received by 4)	

#50
3.6

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-23287-2

Login Number: 23287

List Source: TestAmerica Edison

List Number: 1

Creator: Villadarez, Gerson Timothy S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6°C IR#50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT WC**
IAL Case Number: **E15-01273**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.

E15-01273

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 2/19/2015@11:52

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
01273-001	GPEC-WC1-021815	n/a	2/18/2015@13:35	Soil	3

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Integrated Analytical Laboratories, LLC. received one (1) sample from GEI Consultants Inc. - Montclair (IAL SDG# **E15-01273**, Project: GREENPOINT WC) on February 19, 2015 for the analysis of :

(1) TCL VO
(1) TCLP VO
(1) TPH-GRO
(1) TCL BNA
(1) TCLP BNA
(1) Herbicides
(1) TCL PCB
(1) TCL Pesticides
(1) TCLP Herbicides
(1) TCLP Pesticides
(1) TPH-DRO-48 HR
(1) TAL Metals
(1) TCLP Metals
(1) % Moisture
(1) Cr-VI (Hexavalent Chromium)
(1) Cyanide, Reactive
(1) Free Cyanide
(1) Ignitability
(1) pH/Corrosivity
(1) Sulfide, Reactive
(1) TOC
(1) TOX (Total Organic Halides)

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 1311/8260C	**Batch: L150220-01**	**Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- #001 run straight.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Volatiles By 8260C	Batch: F150220-01	Matrix: MEOH

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- 01273-001 was run straight due to matrix interference.

Volatiles By 8260C	Batch: L150219-01	Matrix: MEOH

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- #001 run straight.

Semivolatiles By 1311/8270D	Batch: 150220-03	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Internal standard recovery me QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria. NJDEP DKQP criteria not met.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E15-01273
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Semivolatiles By 8270D	Batch: 150219-01	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Internal standard recovery me QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E15-01273
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.
- 01273-001: *double final volume.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

Herbicide By 1311/8151A	Batch: 150223-05	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to matrix interference.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 001.

Herbicide By 8151A	Batch: 150220-11	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 001.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

PCB By 8082A	Batch: 150219-06	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- Sample 001 was diluted 2x for potential matrix interference.

Pesticide By 1311/8081B	Batch: 150223-08	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- #001 run straight.

Pesticide By 8081B	Batch: 150219-06	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- #001 run straight.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

TPH-DRO By 8015D	Batch: 150219-08	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- The sample was run straight.

Metals By 1311/6020A/7470A	Batch: T150223-01	Matrix: TCLP Leachate

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E15-01273
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Metals By 6020A/7471B	Batch: S150220-01	Matrix: Soil

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E15-01273
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Cyanide, Reactive By 7.3.3.2	Batch: AP045-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Free Cyanide By 9016	Batch: AP150-0001	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Hexavalent Chromium By 3060A/7196A	Batch: AP011-0015	Matrix: Soil

QC
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- The NJ DEP requires rehomogenization, redigestion and reanalysis of the entire analytical batch when the associated QC fails. If the reanalyzed analytical batch QC fails a second time and the sample environment was a "reducing" environment, as defined by the NJ DEP, then the original sample results are valid.
- MS percent recovery did not meet QC criteria. NJDEP DKQP criteria not met.
- Samples were rehomogenized/redigested/reanalyzed.
- Laboratory characterization was performed to determine if reducing conditions exist in the sample (Eh, pH, Sulfide Odor, COD).
- Sample results were not qualified based on the Matrix Spike results.
- Duplicate Recoveries met QC criteria.

E15-01273
- All samples were received within holding time.
- All samples were analyzed within holding time.

Ignitability By 1030	Batch: AP068-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

pH/Corrosivity By 9045C	Batch: AP023-0041	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Sulfide, Reactive By 7.3.4.2	Batch: AP044-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Total Organic Carbon (TOC) By Lloyd Kahn	Batch: AP030-0008	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Total Organic Halides (TOX) By 9023	Batch: AP067-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

2/24/2015
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

	Lab ID:	01273-001	
	Client ID:	GPEC-WC1-021815	
	Matrix:	Soil	
	Sampled Date	2/18/15	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Dichlorodifluoromethane	ND		0.077
Chloromethane	ND		0.055
Vinyl chloride	ND		0.052
Bromomethane	ND		0.076
Chloroethane	ND		0.093
Trichlorofluoromethane	ND		0.091
1,1-Dichloroethene	ND		0.055
Acetone	ND		0.160
Carbon disulfide	ND		0.056
Methylene chloride	ND		0.223
trans-1,2-Dichloroethene	ND		0.061
Methyl tert-butyl ether (MTBE)	ND		0.055
1,1-Dichloroethane	ND		0.040
cis-1,2-Dichloroethene	ND		0.054
2-Butanone (MEK)	ND		0.097
Bromochloromethane	ND		0.071
Chloroform	ND		0.057
1,1,1-Trichloroethane	ND		0.054
Carbon tetrachloride	ND		0.075
1,2-Dichloroethane (EDC)	ND		0.064
Benzene	ND		0.043
Trichloroethene	ND		0.040
1,2-Dichloropropane	ND		0.062
1,4-Dioxane	ND		9.25
Bromodichloromethane	ND		0.059
cis-1,3-Dichloropropene	ND		0.049
4-Methyl-2-pentanone (MIBK)	ND		0.097
Toluene	ND		0.041
trans-1,3-Dichloropropene	ND		0.047
1,1,2-Trichloroethane	ND		0.071
Tetrachloroethene	ND		0.055
2-Hexanone	ND		0.078
Dibromochloromethane	ND		0.058
1,2-Dibromoethane (EDB)	ND		0.076
Chlorobenzene	ND		0.044
Ethylbenzene	ND		0.047
Total Xylenes	ND		0.117
Styrene	ND		0.041
Bromoform	ND		0.074
Isopropylbenzene	ND		0.065
1,1,2,2-Tetrachloroethane	ND		0.077
1,3-Dichlorobenzene	ND		0.047
1,4-Dichlorobenzene	ND		0.046
1,2-Dichlorobenzene	ND		0.045

ND = Analyzed for but Not Detected at the MDL
Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	***(mg/Kg)***		
1,2-Dibromo-3-chloropropane	ND		0.104
1,2,4-Trichlorobenzene	ND		0.054
1,2,3-Trichlorobenzene	ND		0.050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.109
Methyl acetate	ND		0.100
Cyclohexane	ND		0.091
Methylcyclohexane	ND		0.086
1,3-Dichloropropene (cis- and trans-)	ND		0.049
TOTAL VO's:	ND		
TCLP Volatiles (Units)	***(mg/L)***		
Vinyl chloride	ND		0.023
1,1-Dichloroethene	ND		0.025
2-Butanone (MEK)	ND		0.044
Chloroform	ND		0.026
Carbon tetrachloride	ND		0.033
1,2-Dichloroethane (EDC)	ND		0.029
Benzene	ND		0.019
Trichloroethene	ND		0.018
Tetrachloroethene	ND		0.025
Chlorobenzene	ND		0.020
1,4-Dichlorobenzene	ND		0.021

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: GEI Consultants Inc. - Montclair

Project: GREENPOINT WC

Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
Benzaldehyde	ND		0.044
Phenol	ND		0.047
Bis(2-chloroethyl) ether	ND		0.044
2-Chlorophenol	ND		0.044
2-Methylphenol	ND		0.051
Bis(2-chloroisopropyl) ether	ND		0.044
4-Methylphenol **	ND		0.059
N-Nitrosodi-n-propylamine	ND		0.060
Acetophenone	ND		0.060
Hexachloroethane	ND		0.044
Nitrobenzene	ND		0.062
Isophorone	ND		0.067
2-Nitrophenol	ND		0.044
2,4-Dimethylphenol	ND		0.051
Bis(2-chloroethoxy) methane	ND		0.044
2,4-Dichlorophenol	ND		0.044
Naphthalene	0.297		0.044
4-Chloroaniline	ND		0.044
Hexachlorobutadiene	ND		0.044
Caprolactam	ND		0.047
4-Chloro-3-methylphenol	ND		0.044
2-Methylnaphthalene	0.163		0.044
Hexachlorocyclopentadiene	ND		0.044
2,4,6-Trichlorophenol	ND		0.044
2,4,5-Trichlorophenol	ND		0.044
1,1'-Biphenyl	0.064	J	0.044
2-Chloronaphthalene	ND		0.044
2-Nitroaniline	ND		0.044
Dimethyl phthalate	ND		0.056
2,6-Dinitrotoluene	ND		0.044
Acenaphthylene	0.178		0.051
3-Nitroaniline	ND		0.056
Acenaphthene	0.538		0.056
2,4-Dinitrophenol	ND		0.052
4-Nitrophenol	ND		0.059
2,4-Dinitrotoluene	ND		0.044
Dibenzofuran	0.431		0.044
Diethyl phthalate	ND		0.067
Fluorene	0.576		0.044
4-Chlorophenyl phenyl ether	ND		0.044
4-Nitroaniline	ND		0.044
1,2,4,5-Tetrachlorobenzene	ND		0.044

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
2,3,4,6-Tetrachlorophenol	ND		0.044
4,6-Dinitro-2-methylphenol	ND		0.044
N-Nitrosodiphenylamine	ND		0.044
4-Bromophenyl phenyl ether	ND		0.044
Hexachlorobenzene	ND		0.044
Atrazine	ND		0.044
Pentachlorophenol	ND		0.044
Phenanthrene	5.69		0.044
Anthracene	1.67		0.044
Carbazole	0.449		0.044
Di-n-butyl phthalate	ND		0.044
Fluoranthene	7.13		0.044
Pyrene	8.61		0.044
Butyl benzyl phthalate	ND		0.044
3,3'-Dichlorobenzidine	ND		0.051
Benzo[a]anthracene	4.06		0.044
Chrysene	4.54		0.044
Bis(2-ethylhexyl) phthalate	ND		0.044
Di-n-octyl phthalate	ND		0.054
Benzo[b]fluoranthene	4.24		0.044
Benzo[k]fluoranthene	4.57		0.044
Benzo[a]pyrene	4.93		0.044
Indeno[1,2,3-cd]pyrene	2.82		0.065
Dibenz[a,h]anthracene	0.882		0.044
Benzo[g,h,i]perylene	3.33		0.044
Dinitrotoluene (2,4- and 2,6-)	ND		0.044
TOTAL BNA'S:	55.2	J	
TCLP Semivolatiles (Units)	*(mg/L)*		
Pyridine	ND		0.00308
1,4-Dichlorobenzene	ND		0.00266
2-Methylphenol	ND		0.00588
4-Methylphenol	ND		0.00406
3-Methylphenol	ND		0.00406
Hexachloroethane	ND		0.003
Nitrobenzene	ND		0.00248
Hexachlorobutadiene	ND		0.00334
2,4,6-Trichlorophenol	ND		0.00236
2,4,5-Trichlorophenol	ND		0.00612
2,4-Dinitrotoluene	ND		0.00328
Hexachlorobenzene	ND		0.00376
Pentachlorophenol	ND		0.0032

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	***(mg/Kg)***		
Aroclor-1016	ND		0.034
Aroclor-1221	ND		0.034
Aroclor-1232	ND		0.034
Aroclor-1242	ND		0.034
Aroclor-1248	ND		0.034
Aroclor-1254	ND		0.034
Aroclor-1260	ND		0.034
Aroclor-1262	ND		0.034
Aroclor-1268	ND		0.034
PCBs	ND		0.034
Pesticides (Units)	***(mg/Kg)***		
alpha-BHC	ND		0.00421
beta-BHC	ND		0.00421
gamma-BHC (Lindane)	ND		0.00421
delta-BHC	ND		0.00421
Heptachlor	ND		0.00421
Aldrin	ND		0.00421
Heptachlor epoxide	ND		0.00421
Endosulfan I	ND		0.00421
4,4'-DDE	ND		0.00421
Dieldrin	ND		0.00421
Endrin	ND		0.00421
Endosulfan II	ND		0.00421
4,4'-DDD	ND		0.00421
Endrin aldehyde	ND		0.00421
Endosulfan sulfate	ND		0.00421
4,4'-DDT	ND		0.00421
Endrin ketone	ND		0.00421
Methoxychlor	ND		0.00421
alpha-Chlordane	ND		0.00421
gamma-Chlordane	ND		0.00421
Toxaphene	ND		0.051
Endosulfan (I and II)	ND		0.00421
Chlordane (alpha and gamma)	ND		0.00421
TCLP Pesticides (Units)	***(mg/L)***		
gamma-BHC (Lindane)	ND		0.000025
Heptachlor	ND		0.000025
Heptachlor epoxide	ND		0.000025
Endrin	ND		0.000025
Methoxychlor	ND		0.000025
Chlordane	ND		0.0003
Toxaphene	ND		0.0003

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Herbicides (Units)	*(mg/Kg)*		
Dalapon	ND		0.00722
Dicamba	ND		0.00722
2,4-D	ND		0.00722
2,4,5-TP (Silvex)	ND		0.00722
2,4,5-T	ND		0.00722
2,4-DB	ND		0.00722
Dinoseb	ND		0.00722
TCLP Herbicides (Units)	*(mg/L)*		
2,4-D	ND		0.0005
2,4,5-TP (Silvex)	ND		0.0005
Hydrocarbons (Units)	*(mg/Kg)*		
TPH-DRO	359		62.7
TPH-GRO (Units)	*(mg/Kg)*		
TPH-GRO	ND		4.47
Metals (Units)	*(mg/Kg)*		
Aluminum	6350		0.591
Antimony	5.46		0.295
Arsenic	14.6		0.295
Barium	180		0.591
Beryllium	0.480	J	0.236
Cadmium	0.651		0.148
Calcium	7990		5.91
Chromium	18.8		0.591
Cobalt	6.49		0.591
Copper	176		0.591
Iron	17800		5.91
Lead	299		0.591
Magnesium	2230		5.91
Manganese	337		0.295
Mercury	1.24		0.003
Nickel	21.2		0.591
Potassium	812		5.91
Selenium	1.54		0.591
Silver	0.528	J	0.148
Sodium	794		5.91
Thallium	0.282	J	0.148
Vanadium	27.1		0.591
Zinc	315		0.591

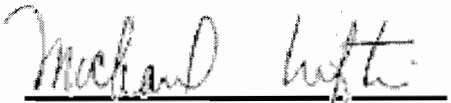
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
TCLP Metals (Units)	*(mg/L)*		
TCLP Arsenic	ND		0.100
TCLP Barium	0.779		0.100
TCLP Cadmium	ND		0.025
TCLP Chromium	ND		0.100
TCLP Lead	0.303		0.050
TCLP Mercury	ND		0.0003
TCLP Selenium	ND		0.100
TCLP Silver	ND		0.025
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.187
pH/Corrosivity(SU)	7.73		NA
Total Organic Carbon (TOC)(mg/Kg)	91800		588
Sulfide, Reactive(mg/Kg)	ND		17.9
Cyanide, Reactive(mg/Kg)	ND		11.2
Total Organic Halides (TOX)(mg/Kg)	ND		11.2
Ignitability(Yes/No)	NO		NA
Free Cyanide(mg/Kg)	ND		1.70
Percent Moisture(%)	10.60		NA

ND = Analyzed for but Not Detected at the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:



Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/19/2015
Data file: L6688.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.112	0.077
Chloromethane	ND		0.112	0.055
Vinyl chloride	ND		0.112	0.052
Bromomethane	ND		0.112	0.076
Chloroethane	ND		0.112	0.093
Trichlorofluoromethane	ND		0.112	0.091
1,1-Dichloroethene	ND		0.112	0.055
Acetone	ND		0.224	0.160
Carbon disulfide	ND		0.112	0.056
Methylene chloride	ND		0.224	0.223
trans-1,2-Dichloroethene	ND		0.112	0.061
Methyl tert-butyl ether (MTBE)	ND		0.112	0.055
1,1-Dichloroethane	ND		0.112	0.040
cis-1,2-Dichloroethene	ND		0.112	0.054
2-Butanone (MEK)	ND		0.112	0.097
Bromochloromethane	ND		0.112	0.071
Chloroform	ND		0.112	0.057
1,1,1-Trichloroethane	ND		0.112	0.054
Carbon tetrachloride	ND		0.112	0.075
1,2-Dichloroethane (EDC)	ND		0.112	0.064
Benzene	ND		0.112	0.043
Trichloroethene	ND		0.112	0.040
1,2-Dichloropropane	ND		0.112	0.062
1,4-Dioxane	ND		22.4	9.25
Bromodichloromethane	ND		0.112	0.059
cis-1,3-Dichloropropene	ND		0.112	0.049
4-Methyl-2-pentanone (MIBK)	ND		0.112	0.097

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/19/2015
Data file: L6688.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.112	0.041
trans-1,3-Dichloropropene	ND		0.112	0.047
1,1,2-Trichloroethane	ND		0.112	0.071
Tetrachloroethene	ND		0.112	0.055
2-Hexanone	ND		0.112	0.078
Dibromochloromethane	ND		0.112	0.058
1,2-Dibromoethane (EDB)	ND		0.112	0.076
Chlorobenzene	ND		0.112	0.044
Ethylbenzene	ND		0.112	0.047
Total Xylenes	ND		0.224	0.117
Styrene	ND		0.112	0.041
Bromoform	ND		0.112	0.074
Isopropylbenzene	ND		0.112	0.065
1,1,2,2-Tetrachloroethane	ND		0.112	0.077
1,3-Dichlorobenzene	ND		0.112	0.047
1,4-Dichlorobenzene	ND		0.112	0.046
1,2-Dichlorobenzene	ND		0.112	0.045
1,2-Dibromo-3-chloropropane	ND		0.224	0.104
1,2,4-Trichlorobenzene	ND		0.112	0.054
1,2,3-Trichlorobenzene	ND		0.112	0.050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.112	0.109
Methyl acetate	ND		0.112	0.100
Cyclohexane	ND		0.112	0.091
Methylcyclohexane	ND		0.112	0.086
1,3-Dichloropropene (cis- and trans-)	ND		0.112	0.049

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: 01273-001
Client ID: GPEC-WC1-021815
Date Received: 02/18/2015
Date Analyzed: 02/20/2015
Data file: F9272.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		5.59	4.47

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/20/2015
Data file: L6706.D

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.023
1,1-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.050	0.044
Chloroform	ND		0.050	0.026
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
Tetrachloroethene	ND		0.050	0.025
Chlorobenzene	ND		0.050	0.020
1,4-Dichlorobenzene	ND		0.050	0.021

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3749.D

GC/MS Column: DB-5
Sample wt/vol: 15.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.073	0.044
Phenol	ND		0.073	0.047
Bis(2-chloroethyl) ether	ND		0.073	0.044
2-Chlorophenol	ND		0.073	0.044
2-Methylphenol	ND		0.073	0.051
Bis(2-chloroisopropyl) ether	ND		0.073	0.044
4-Methylphenol **	ND		0.073	0.059
N-Nitrosodi-n-propylamine	ND		0.073	0.060
Acetophenone	ND		0.073	0.060
Hexachloroethane	ND		0.073	0.044
Nitrobenzene	ND		0.073	0.062
Isophorone	ND		0.073	0.067
2-Nitrophenol	ND		0.073	0.044
2,4-Dimethylphenol	ND		0.073	0.051
Bis(2-chloroethoxy) methane	ND		0.073	0.044
2,4-Dichlorophenol	ND		0.073	0.044
Naphthalene	0.297		0.073	0.044
4-Chloroaniline	ND		0.073	0.044
Hexachlorobutadiene	ND		0.073	0.044
Caprolactam	ND		0.073	0.047
4-Chloro-3-methylphenol	ND		0.073	0.044
2-Methylnaphthalene	0.163		0.073	0.044
Hexachlorocyclopentadiene	ND		0.073	0.044
2,4,6-Trichlorophenol	ND		0.073	0.044
2,4,5-Trichlorophenol	ND		0.073	0.044
1,1'-Biphenyl	0.064	J	0.073	0.044
2-Chloronaphthalene	ND		0.073	0.044
2-Nitroaniline	ND		0.073	0.044
Dimethyl phthalate	ND		0.073	0.056

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3749.D

GC/MS Column: DB-5
Sample wt/vol: 15.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.073	0.044
Acenaphthylene	0.178		0.073	0.051
3-Nitroaniline	ND		0.073	0.056
Acenaphthene	0.538		0.073	0.056
2,4-Dinitrophenol	ND		0.073	0.052
4-Nitrophenol	ND		0.073	0.059
2,4-Dinitrotoluene	ND		0.073	0.044
Dibenzofuran	0.431		0.073	0.044
Diethyl phthalate	ND		0.073	0.067
Fluorene	0.576		0.073	0.044
4-Chlorophenyl phenyl ether	ND		0.073	0.044
4-Nitroaniline	ND		0.073	0.044
1,2,4,5-Tetrachlorobenzene	ND		0.073	0.044
2,3,4,6-Tetrachlorophenol	ND		0.073	0.044
4,6-Dinitro-2-methylphenol	ND		0.073	0.044
N-Nitrosodiphenylamine	ND		0.073	0.044
4-Bromophenyl phenyl ether	ND		0.073	0.044
Hexachlorobenzene	ND		0.073	0.044
Atrazine	ND		0.073	0.044
Pentachlorophenol	ND		0.073	0.044
Phenanthrene	5.69		0.073	0.044
Anthracene	1.67		0.073	0.044
Carbazole	0.449		0.073	0.044
Di-n-butyl phthalate	ND		0.073	0.044
Fluoranthene	7.13		0.073	0.044
Pyrene	8.61		0.073	0.044
Butyl benzyl phthalate	ND		0.073	0.044
3,3'-Dichlorobenzidine	ND		0.073	0.051
Benzo[a]anthracene	4.06		0.073	0.044
Chrysene	4.54		0.073	0.044
Bis(2-ethylhexyl) phthalate	ND		0.073	0.044
Di-n-octyl phthalate	ND		0.073	0.054
Benzo[b]fluoranthene	4.24		0.073	0.044
Benzo[k]fluoranthene	4.57		0.073	0.044
Benzo[a]pyrene	4.93		0.073	0.044
Indeno[1,2,3-cd]pyrene	2.82		0.073	0.065
Dibenz[a,h]anthracene	0.882		0.073	0.044
Benzo[g,h,i]perylene	3.33		0.073	0.044
Dinitrotoluene (2,4- and 2,6-)	ND		0.073	0.044
Total Target Compounds (68):	55.2	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7679.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00308
1,4-Dichlorobenzene	ND		0.020	0.00266
2-Methylphenol	ND		0.020	0.00588
4-Methylphenol	ND		0.020	0.00406
3-Methylphenol	ND		0.020	0.00406
Hexachloroethane	ND		0.020	0.003
Nitrobenzene	ND		0.020	0.00248
Hexachlorobutadiene	ND		0.020	0.00334
2,4,6-Trichlorophenol	ND		0.020	0.00236
2,4,5-Trichlorophenol	ND		0.020	0.00612
2,4-Dinitrotoluene	ND		0.020	0.00328
Hexachlorobenzene	ND		0.020	0.00376
Pentachlorophenol	ND		0.020	0.0032

Total Target Compounds (13): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015
Data file: R3404.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.084	0.034
Aroclor-1221	ND		0.084	0.034
Aroclor-1232	ND		0.084	0.034
Aroclor-1242	ND		0.084	0.034
Aroclor-1248	ND		0.084	0.034
Aroclor-1254	ND		0.084	0.034
Aroclor-1260	ND		0.084	0.034
Aroclor-1262	ND		0.084	0.034
Aroclor-1268	ND		0.084	0.034
PCBs	ND		0.084	0.034

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8325.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00843	0.00421
beta-BHC	ND		0.00843	0.00421
gamma-BHC (Lindane)	ND		0.00843	0.00421
delta-BHC	ND		0.00843	0.00421
Heptachlor	ND		0.00843	0.00421
Aldrin	ND		0.00843	0.00421
Heptachlor epoxide	ND		0.00843	0.00421
Endosulfan I	ND		0.00843	0.00421
4,4'-DDE	ND		0.00843	0.00421
Dieldrin	ND		0.00843	0.00421
Endrin	ND		0.00843	0.00421
Endosulfan II	ND		0.00843	0.00421
4,4'-DDD	ND		0.00843	0.00421
Endrin aldehyde	ND		0.00843	0.00421
Endosulfan sulfate	ND		0.00843	0.00421
4,4'-DDT	ND		0.00843	0.00421
Endrin ketone	ND		0.00843	0.00421
Methoxychlor	ND		0.00843	0.00421
alpha-Chlordane	ND		0.00843	0.00421
gamma-Chlordane	ND		0.00843	0.00421
Toxaphene	ND		0.105	0.051
Endosulfan (I and II)	ND		0.00843	0.00421
Chlordane (alpha and gamma)	ND		0.00843	0.00421

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0149.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2563.D

GC Column: DB-5/DB1701P
Sample wt/vol: 15.50g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.018	0.00722
Dicamba	ND		0.018	0.00722
2,4-D	ND		0.018	0.00722
2,4,5-TP (Silvex)	ND		0.018	0.00722
2,4,5-T	ND		0.018	0.00722
2,4-DB	ND		0.018	0.00722
Dinoseb	ND		0.018	0.00722

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2571.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID:	01273-001	GC Column:	RTX-5
Client ID:	GPEC-WC1-021815	Sample wt/vol:	10.71g
Date Received:	02/19/2015	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/19/2015	Dilution Factor:	1
Date Analyzed:	02/20/2015	%Moisture:	10.6
Data File:	QB0772.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	359		78.3	62.7

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID: E15-01273-001
Client ID: GPEC-WC1-021815
Date Collected: 02/18/15 13:35
Date Received: 02/19/15 11:52
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 10.6
Batch #: 079

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	6350		1	0.591	0.591	02/23/15 10:40	6020A
Antimony	5.46		1	0.591	0.295	02/23/15 10:40	6020A
Arsenic	14.6		1	0.591	0.295	02/23/15 10:40	6020A
Barium	180		1	0.591	0.591	02/23/15 10:40	6020A
Beryllium	0.480	J	1	0.591	0.236	02/23/15 10:40	6020A
Cadmium	0.651		1	0.591	0.148	02/23/15 10:40	6020A
Calcium	7990		1	5.91	5.91	02/23/15 10:40	6020A
Chromium	18.8		1	0.591	0.591	02/23/15 10:40	6020A
Cobalt	6.49		1	0.591	0.591	02/23/15 10:40	6020A
Copper	176		1	0.591	0.591	02/23/15 10:40	6020A
Iron	17800		1	5.91	5.91	02/23/15 10:40	6020A
Lead	299		1	0.591	0.591	02/23/15 10:40	6020A
Magnesium	2230		1	5.91	5.91	02/23/15 10:40	6020A
Manganese	337		1	0.591	0.295	02/23/15 10:40	6020A
Mercury	1.24		1	0.0063	0.0030	02/20/15 16:23	7471B
Nickel	21.2		1	0.591	0.591	02/23/15 10:40	6020A
Potassium	812		1	5.91	5.91	02/23/15 10:40	6020A
Selenium	1.54		1	0.591	0.591	02/23/15 10:40	6020A
Silver	0.528	J	1	0.591	0.148	02/23/15 10:40	6020A
Sodium	794		1	5.91	5.91	02/23/15 10:40	6020A
Thallium	0.282	J	1	0.591	0.148	02/23/15 10:40	6020A
Vanadium	27.1		1	0.591	0.591	02/23/15 10:40	6020A
Zinc	315		1	0.591	0.591	02/23/15 10:40	6020A

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID: E15-01273-001
Client ID: GPEC-WC1-021815
Date Collected: 02/18/15 13:35
Date Received: 02/19/15 11:52
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 083

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Arsenic	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Barium	0.779		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Cadmium	ND		1	0.100	0.025	02/23/15 17:41	1311/6020A
TCLP Chromium	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Lead	0.303		1	0.100	0.050	02/23/15 17:41	1311/6020A
TCLP Mercury	ND		1	0.0005	0.0003	02/23/15 13:01	1311/7470A
TCLP Selenium	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Silver	ND		1	0.100	0.025	02/23/15 17:41	1311/6020A

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 3060A/7196A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	0.187	1.12	89.4	02/18/15 13:35	02/20/15 14:32

Cyanide, Reactive

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 7.3.3.2

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	11.2	11.2	89.4	02/18/15 13:35	02/20/15 16:00

Free Cyanide

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9016

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	1.70	2.80	89.4	02/18/15 13:35	02/20/15 17:30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Ignitability

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 1030

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	NO		1	Soil-Yes/No	NA	NA	89.4	02/18/15 13:35	02/20/15 15:30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: D2216-71

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	10.6		1	Soil-%	NA	NA	02/18/15 13:35	02/19/15 14:03

INTEGRATED ANALYTICAL LABORATORIES, LLC.

pH/Corrosivity

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9045C

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	7.73		1	Soil-SU	NA	NA	89.4	02/18/15 13:35	02/20/15 08:26

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfide, Reactive

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 7.3.4.2

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	17.9	17.9	89.4	02/18/15 13:35	02/20/15 16:45

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Organic Carbon (TOC)

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: Lloyd Kahn

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	91800		1	Soil-mg/Kg	588	1000	89.4	02/18/15 13:35	02/23/15 09:15

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Organic Halides (TOX)

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9023

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	11.2	33.6	89.4	02/18/15 13:35	02/20/15 11:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/19/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKM150218-01	MEOH	L6676.D	101	98	90
01168-001	MEOH	L6677.D	101	99	100
01168-002	MEOH	L6678.D	101	98	92
01062-005	MEOH	L6680.D	98	98	94
01229-001	MEOH	L6682.D	103	97	101
LCSM150219-01	MEOH	L6683.D	98	101	102
01062-005MS	MEOH	L6684.D	95	101	98
01062-005MSD	MEOH	L6685.D	95	101	99
01273-001	MEOH	L6688.D	95	98	99
01167-002	MEOH	L6689.D	96	99	101
01167-001	MEOH	L6690.D	98	98	96
01158-001	MEOH	L6691.D	96	100	101
01158-007	MEOH	L6692.D	96	98	98
01158-014	MEOH	L6693.D	96	98	100
01158-002	MEOH	L6694.D	102	100	100
01158-006	MEOH	L6695.D	98	100	98
01158-012	MEOH	L6696.D	96	100	99
01158-013	MEOH	L6697.D	95	99	100
01177-001	MEOH	L6698.D	94	98	99
01224-001	MEOH	L6699.D	98	101	98

	Concentration	DKQPs Leachate Aqueous/Meoh		Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	45-154	45-153
SMC2 = Toluene-d8	50 ppb	70-130	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	48-149	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	63.9	128	
Chloromethane	50.0	0.0	53.2	106	
Vinyl chloride	50.0	0.0	57.1	114	
Bromomethane	50.0	0.0	46.9	94	
Chloroethane	50.0	0.0	52.4	105	
Trichlorofluoromethane	50.0	0.0	43.0	86	
Acrolein	150	0.0	181.9	121	
1,1-Dichloroethene	50.0	0.0	52.9	106	
Acetone	50.0	0.0	58.0	116	
Carbon disulfide	50.0	0.0	53.7	107	
Vinyl acetate	50.0	0.0	51.0	102	
Methylene chloride	50.0	0.0	48.0	96	
Acrylonitrile	150.0	0.0	172.5	115	
tert-Butyl alcohol (TBA)	100.0	0.0	106.5	107	
trans-1,2-Dichloroethene	50.0	0.0	48.6	97	
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.3	99	
1,1-Dichloroethane	50.0	0.0	47.7	95	
Diisopropyl ether (DIPE)	50.0	0.0	52.4	105	
cis-1,2-Dichloroethene	50.0	0.0	47.9	96	
2,2-Dichloropropane	50.0	0.0	53.0	106	
2-Butanone (MEK)	50.0	0.0	56.4	113	
Bromochloromethane	50.0	0.0	45.1	90	
Chloroform	50.0	0.0	44.3	89	
1,1,1-Trichloroethane	50.0	0.0	49.5	99	
Carbon tetrachloride	50.0	0.0	50.3	101	
1,1-Dichloropropene	50.0	0.0	51.4	103	
1,2-Dichloroethane (EDC)	50.0	0.0	44.5	89	
Benzene	50.0	0.0	46.5	93	
Trichloroethene	50.0	0.0	45.7	91	
1,2-Dichloropropane	50.0	0.0	48.4	97	
Dibromomethane	50.0	0.0	44.0	88	
1,4-Dioxane	1500	0.0	1684	112	
Bromodichloromethane	50.0	0.0	45.4	91	
2-Chloroethyl vinyl ether	50.0	0.0	48.3	97	
cis-1,3-Dichloropropene	50.0	0.0	50.5	101	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	56.7	113	
Toluene	50.0	0.0	45.9	92	
trans-1,3-Dichloropropene	50.0	0.0	49.9	100	
1,1,2-Trichloroethane	50.0	0.0	45.5	91	
Tetrachloroethene	50.0	0.0	47.5	95	
1,3-Dichloropropane	50.0	0.0	47.9	96	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	62.9	126	
Dibromochloromethane	50.0	0.0	45.9	92	
1,2-Dibromoethane (EDB)	50.0	0.0	47.0	94	
Chlorobenzene	50.0	0.0	42.7	85	
1,1,1,2-Tetrachloroethane	50.0	0.0	44.7	89	
Ethylbenzene	50.0	0.0	47.5	95	
m,p-Xylene	100.0	0.0	95.5	96	
o-Xylene	50.0	0.0	50.0	100	
Styrene	50.0	0.0	49.2	98	
Bromoform	50.0	0.0	47.0	94	
Isopropylbenzene	50.0	0.0	50.8	102	
1,1,2,2-Tetrachloroethane	50.0	0.0	43.6	87	
Bromobenzene	50.0	0.0	44.4	89	
1,2,3-Trichloropropane	50.0	0.0	44.1	88	
n-Propylbenzene	50.0	0.0	47.8	96	
2-Chlorotoluene	50.0	0.0	44.8	90	
1,3,5-Trimethylbenzene	50.0	0.0	47.1	94	
4-Chlorotoluene	50.0	0.0	44.1	88	
tert-Butylbenzene	50.0	0.0	48.4	97	
1,2,4-Trimethylbenzene	50.0	0.0	45.1	90	
sec-Butylbenzene	50.0	0.0	47.1	94	
1,3-Dichlorobenzene	50.0	0.0	42.5	85	
4-Isopropyltoluene	50.0	0.0	46.1	92	
1,4-Dichlorobenzene	50.0	0.0	41.6	83	
n-Butylbenzene	50.0	0.0	47.7	95	
1,2-Dichlorobenzene	50.0	0.0	42.9	86	
1,2-Dibromo-3-chloropropane	50.0	0.0	45.8	92	
1,2,4-Trichlorobenzene	50.0	0.0	48.3	97	
Hexachlorobutadiene	50.0	0.0	47.2	94	
Naphthalene	50.0	0.0	51.7	103	
1,2,3-Trichlorobenzene	50.0	0.0	46.8	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	51.7	103	
Methyl acetate	50.0	0.0	55.3	111	
Cyclohexane	50.0	0.0	55.6	111	
Methylcyclohexane	50.0	0.0	54.7	109	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	62.8	126		61.3	123		2	
Chloromethane	50.0	0.0	56.8	114		53.5	107		6	
Vinyl chloride	50.0	0.0	56.2	112		53.8	108		4	
Bromomethane	50.0	0.0	46.0	92		45.9	92		0	
Chloroethane	50.0	0.0	49.7	99		49.8	100		0	
Trichlorofluoromethane	50.0	0.0	40.9	82		38.8	78		5	
Acrolein	150	0.0	178	119		169	113		5	
1,1-Dichloroethene	50.0	0.0	51.8	104		48.5	97		7	
Acetone	50.0	0.0	57.3	115		53.6	107		7	
Carbon disulfide	50.0	0.0	51.8	104		50.7	101		2	
Vinyl acetate	50.0	0.0	50.0	100		50.1	100		0	
Methylene chloride	50.0	0.0	46.5	93		46.7	93		0	
Acrylonitrile	150	0.0	182	121		192	128		5	
tert-Butyl alcohol (TBA)	100	0.0	103.7	104		104.5	105		1	
trans-1,2-Dichloroethene	50.0	0.0	47.6	95		47.1	94		1	
Methyl tert-butyl ether (MTBE)	50.0	0.0	48.8	98		48.9	98		0	
1,1-Dichloroethane	50.0	0.0	47.2	94		47.5	95		1	
Diisopropyl ether (DIPE)	50.0	0.0	52.1	104		53.1	106		2	
cis-1,2-Dichloroethene	50.0	0.0	48.0	96		48.7	97		1	
2,2-Dichloropropane	50.0	0.0	49.6	99		50.4	101		2	
2-Butanone (MEK)	50.0	0.0	56.5	113		55.3	111		2	
Bromochloromethane	50.0	0.0	45.0	90		46.0	92		2	
Chloroform	50.0	0.0	44.2	88		44.6	89		1	
1,1,1-Trichloroethane	50.0	0.0	48.0	96		47.7	95		1	
Carbon tetrachloride	50.0	0.0	50.1	100		48.7	97		3	
1,1-Dichloropropene	50.0	0.0	50.8	102		50.0	100		2	
1,2-Dichloroethane (EDC)	50.0	0.0	44.0	88		44.8	90		2	
Benzene	50.0	0.0	47.1	94		47.9	96		2	
Trichloroethene	50.0	0.0	46.6	93		47.8	96		3	
1,2-Dichloropropane	50.0	0.0	48.8	98		50.7	101		4	
Dibromomethane	50.0	0.0	44.4	89		45.4	91		2	
1,4-Dioxane	1,500	0.0	1625	108		1592	106		2	
Bromodichloromethane	50.0	0.0	46.3	93		47.4	95		2	
2-Chloroethyl vinyl ether	50.0	0.0	50.0	100		52.4	105		5	
cis-1,3-Dichloropropene	50.0	0.0	51.3	103		53.0	106		3	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	57.2	114		58.3	117		2	
Toluene	50.0	0.0	45.9	92		46.9	94		2	
trans-1,3-Dichloropropene	50.0	0.0	51.1	102		52.6	105		3	
1,1,2-Trichloroethane	50.0	0.0	47.1	94		48.2	96		2	
Tetrachloroethene	50.0	0.0	47.0	94		47.2	94		0	
1,3-Dichloropropane	50.0	0.0	48.5	97		49.9	100		3	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	64.4	129		64.4	129		0	
Dibromochloromethane	50.0	0.0	47.3	95		48.8	98		3	
1,2-Dibromoethane (EDB)	50.0	0.0	48.3	97		49.3	99		2	
Chlorobenzene	50.0	0.0	44.0	88		44.4	89		1	
1,1,1,2-Tetrachloroethane	50.0	0.0	46.5	93		46.6	93		0	
Ethylbenzene	50.0	0.0	49.0	98		48.2	96		2	
m,p-Xylene	100	0.0	97.4	97		96.7	97		1	
o-Xylene	50.0	0.0	50.4	101		51.1	102		1	
Styrene	50.0	0.0	50.6	101		51.2	102		1	
Bromoform	50.0	0.0	50.3	101		48.1	96		4	
Isopropylbenzene	50.0	0.0	52.1	104		50.3	101		4	
1,1,2,2-Tetrachloroethane	50.0	0.0	44.7	89		43.3	87		3	
Bromobenzene	50.0	0.0	45.9	92		45.2	90		2	
1,2,3-Trichloropropane	50.0	0.0	45.4	91		44.7	89		2	
n-Propylbenzene	50.0	0.0	49.4	99		47.7	95		4	
2-Chlorotoluene	50.0	0.0	46.3	93		45.8	92		1	
1,3,5-Trimethylbenzene	50.0	0.0	49.0	98		47.2	94		4	
4-Chlorotoluene	50.0	0.0	45.6	91		44.8	90		2	
tert-Butylbenzene	50.0	0.0	49.2	98		47.0	94		5	
1,2,4-Trimethylbenzene	50.0	0.0	46.4	93		45.6	91		2	
sec-Butylbenzene	50.0	0.0	49.4	99		47.2	94		5	
1,3-Dichlorobenzene	50.0	0.0	43.7	87		43.2	86		1	
4-Isopropyltoluene	50.0	0.0	48.8	98		47.1	94		4	
1,4-Dichlorobenzene	50.0	0.0	43.1	86		42.1	84		2	
n-Butylbenzene	50.0	0.0	51.0	102		49.1	98		4	
1,2-Dichlorobenzene	50.0	0.0	44.1	88		43.3	87		2	
1,2-Dibromo-3-chloropropane	50.0	0.0	47.3	95		47.4	95		0	
1,2,4-Trichlorobenzene	50.0	0.0	53.8	108		53.2	106		1	
Hexachlorobutadiene	50.0	0.0	48.6	97		47.4	95		3	
Naphthalene	50.0	0.0	56.1	112		54.0	108		4	
1,2,3-Trichlorobenzene	50.0	0.0	52.3	105		50.9	102		3	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	51.7	103		45.1	90		14	
Methyl acetate	50.0	0.0	55.1	110		52.9	106		4	
Cyclohexane	50.0	0.0	55.7	111		50.3	101		10	
Methylcyclohexane	50.0	0.0	57.1	114		51.1	102		11	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L6676.D Instrument ID: MSD_L

Date Analyzed: 02/19/2015 Time Analyzed: 12:13

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AA-F5_(6.5-7)/	01168-001	02/19/2015	12:40
AA-E5_(6.5-7)/	01168-002	02/19/2015	13:07
SB-106_(9-9.5)	01062-005	02/19/2015	14:01
WC-1/GB-12/12-	01229-001	02/19/2015	14:55
LCS-50PPB	LCSM150219-01	02/19/2015	15:22
MS	01062-005MS	02/19/2015	15:49
MSD	01062-005MSD	02/19/2015	16:16
GPEC-WC1-02181	01273-001	02/19/2015	17:37
ES-WC-92_(4-8)	01167-002	02/19/2015	18:05
ES-WC-92_(0-4)	01167-001	02/19/2015	18:32
SB-1_/8-9	01158-001	02/19/2015	18:59
SB-5	01158-007	02/19/2015	19:25
SB-12	01158-014	02/19/2015	19:52
SB-2_(3-4)/3-4	01158-002	02/19/2015	20:20
SB-4	01158-006	02/19/2015	20:47
SB-10	01158-012	02/19/2015	21:13
SB-11	01158-013	02/19/2015	21:40
STOCKPILE	01177-001	02/19/2015	22:06
WC1/7-7.5	01224-001	02/19/2015	22:33

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6604.D BFB Injection Date: 02/13/2015

Inst ID: MSD_L BFB Injection Time: 10:29

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.8			
75	30.0 - 60.0% of mass 95	48.1			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	99.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	96.5	(	97.4	)1
177	5.0 - 9.0% of mass 176	6.1	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC1	ICC1	L6605.D	02/13/2015	10:56
ICC5	ICC5	L6607.D	02/13/2015	11:53
ICC2	ICC2	L6608.D	02/13/2015	12:21
ICC20	ICC20	L6609.D	02/13/2015	12:48
ICC100	ICC100	L6610.D	02/13/2015	13:15
ICC150	ICC150	L6611.D	02/13/2015	13:42
ICC200	ICC200	L6612.D	02/13/2015	14:09
ICV100	ICV100	L6615.D	02/13/2015	15:30
BLKM150213-01	BLKM150213-01	L6618.D	02/13/2015	16:50
LCS-50PPB	LCSM150213-01	L6619.D	02/13/2015	17:17
MS	01069-001MS	L6620.D	02/13/2015	17:44
MSD	01069-001MSD	L6621.D	02/13/2015	18:12
ES-WC-91_(0-4)	01069-001	L6624.D	02/13/2015	19:32
T-2/5.0-5.5	01089-001	L6625.D	02/13/2015	19:59
SB-6/10.5	01049-007	L6626.D	02/13/2015	20:26
SB-7/7.5	01049-006	L6627.D	02/13/2015	20:52
SB-5/7.5	01049-005	L6628.D	02/13/2015	21:19
ES-WC-91_(4-8)	01069-002	L6629.D	02/13/2015	21:46
WC-1/GB6/12-12	01060-001	L6630.D	02/13/2015	22:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6673.D BFB Injection Date: 02/19/2015

Inst ID: MSD_L BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.4			
75	30.0 - 60.0% of mass 95	48.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.7	(	0.7	)1
174	Great than 50.0% of mass 95	98.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	95.6	(	97.5	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L6674.D	02/19/2015	11:18
BLKM150218-01	BLKM150218-01	L6676.D	02/19/2015	12:13
AA-F5_(6.5-7)/	01168-001	L6677.D	02/19/2015	12:40
AA-E5_(6.5-7)/	01168-002	L6678.D	02/19/2015	13:07
SB-106_(9-9.5)	01062-005	L6680.D	02/19/2015	14:01
WC-1/GB-12/12-	01229-001	L6682.D	02/19/2015	14:55
LCS-50PPB	LCSM150219-01	L6683.D	02/19/2015	15:22
MS	01062-005MS	L6684.D	02/19/2015	15:49
MSD	01062-005MSD	L6685.D	02/19/2015	16:16
GPEC-WC1-02181	01273-001	L6688.D	02/19/2015	17:37
ES-WC-92_(4-8)	01167-002	L6689.D	02/19/2015	18:05
ES-WC-92_(0-4)	01167-001	L6690.D	02/19/2015	18:32
SB-1_/8-9	01158-001	L6691.D	02/19/2015	18:59
SB-5	01158-007	L6692.D	02/19/2015	19:25
SB-12	01158-014	L6693.D	02/19/2015	19:52
SB-2_(3-4)/3-4	01158-002	L6694.D	02/19/2015	20:20
SB-4	01158-006	L6695.D	02/19/2015	20:47
SB-10	01158-012	L6696.D	02/19/2015	21:13
SB-11	01158-013	L6697.D	02/19/2015	21:40
STOCKPILE	01177-001	L6698.D	02/19/2015	22:06

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6673.D BFB Injection Date : 02/19/201

Inst ID: MSD_L BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.4			
75	30.0 - 60.0% of mass 95	48.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.7	(	0.7	)1
174	Great than 50.0% of mass 95	98.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	95.6	(	97.5	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
WC1/7-7.5	01224-001	L6699.D	02/19/2015	22:33

E15-01273 Page 55

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6610.D Date Analyzed: 02/13/2015

Instrument ID: MSD_L Time Analyzed: 13:15

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	334357		6.13		464375		6.95		434421		10.29	
	UPPER LIMIT	668714		6.63		928750		7.45		868842		10.79	
	LOWER LIMIT	167178.5		5.63		232187.5		6.45		217210.5		9.79	
	LAB SAMPLE ID												
01	ICC1	286657		6.13		409962		6.95		361365		10.29	
02	ICC5	304709		6.13		431865		6.95		390295		10.29	
03	ICC2	298969		6.13		429322		6.95		378604		10.29	
04	ICC20	315672		6.13		444551		6.95		400966		10.29	
05	ICC150	335884		6.13		470961		6.95		440697		10.29	
06	ICC200	347689		6.13		492059		6.94		454144		10.29	
07	ICV100	324200		6.13		455058		6.95		426508		10.29	
08	BLKM150213-01	296616		6.13		423991		6.95		386239		10.29	
09	LCSM150213-01	300487		6.13		426483		6.95		386354		10.29	
10	01069-001MS	311799		6.13		436541		6.95		404194		10.29	
11	01069-001MSD	317198		6.13		447453		6.95		416649		10.29	
12	01069-001	323490		6.12		447114		6.94		395768		10.29	
13	01089-001	322349		6.13		456099		6.95		417971		10.29	
14	01049-007	342364		6.12		482740		6.94		435833		10.29	
15	01049-006	353810		6.13		500879		6.94		455250		10.29	
16	01049-005	373112		6.13		521120		6.94		477388		10.29	
17	01069-002	369786		6.13		524497		6.95		472500		10.29	
18	01060-001	370007		6.13		524324		6.95		463729		10.29	
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6674.D Date Analyzed: 02/19/2015

Instrument ID: MSD_L Time Analyzed: 11:18

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	339787		6.13		473189		6.95		445652		10.29	
	UPPER LIMIT	679574		6.63		946378		7.45		891304		10.79	
	LOWER LIMIT	169893.5		5.63		236594.5		6.45		222826		9.79	
	LAB SAMPLE ID												
01	BLKM150218-01	311809		6.13		437922		6.95		394523		10.29	
02	01168-001	306561		6.13		425649		6.95		391762		10.29	
03	01168-002	301105		6.13		425401		6.94		387119		10.29	
04	01062-005	323191		6.12		448172		6.94		409891		10.29	
05	01229-001	314071		6.13		443845		6.95		410339		10.29	
06	LCSM150219-01	358338		6.13		507183		6.95		474079		10.29	
07	01062-005MS	375414		6.13		525180		6.95		480260		10.29	
08	01062-005MSD	381693		6.13		535479		6.95		502867		10.29	
09	01273-001	356850		6.12		504496		6.94		463108		10.29	
10	01167-002	358254		6.13		508494		6.94		464376		10.29	
11	01167-001	364492		6.13		517785		6.95		464328		10.29	
12	01158-001	360853		6.12		510264		6.94		479575		10.29	
13	01158-007	366306		6.12		525283		6.94		482277		10.29	
14	01158-014	365188		6.12		520976		6.94		480893		10.29	
15	01158-002	361914		6.13		524452		6.95		493747		10.29	
16	01158-006	378832		6.13		549501		6.95		517071		10.29	
17	01158-012	385608		6.13		550656		6.94		508637		10.29	
18	01158-013	387841		6.12		556395		6.94		508077		10.29	
19	01177-001	389075		6.13		555987		6.94		510865		10.29	
20	01224-001	389248		6.13		563480		6.95		517666		10.29	
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6688.D
Acq On : 19 Feb 2015 17:37
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 20 09:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.12	168	356850	50.00	UG	-0.01
31) 1,4-Difluorobenzene	6.94	114	504496	50.00	UG	-0.01
50) Chlorobenzene-d5	10.29	117	463108	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	145477	47.58	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.16%			
41) Toluene-d8	8.62	98	439298	49.17	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.34%			
59) Bromofluorobenzene	11.69	95	199682	49.33	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.66%			

Target Compounds	Qvalue

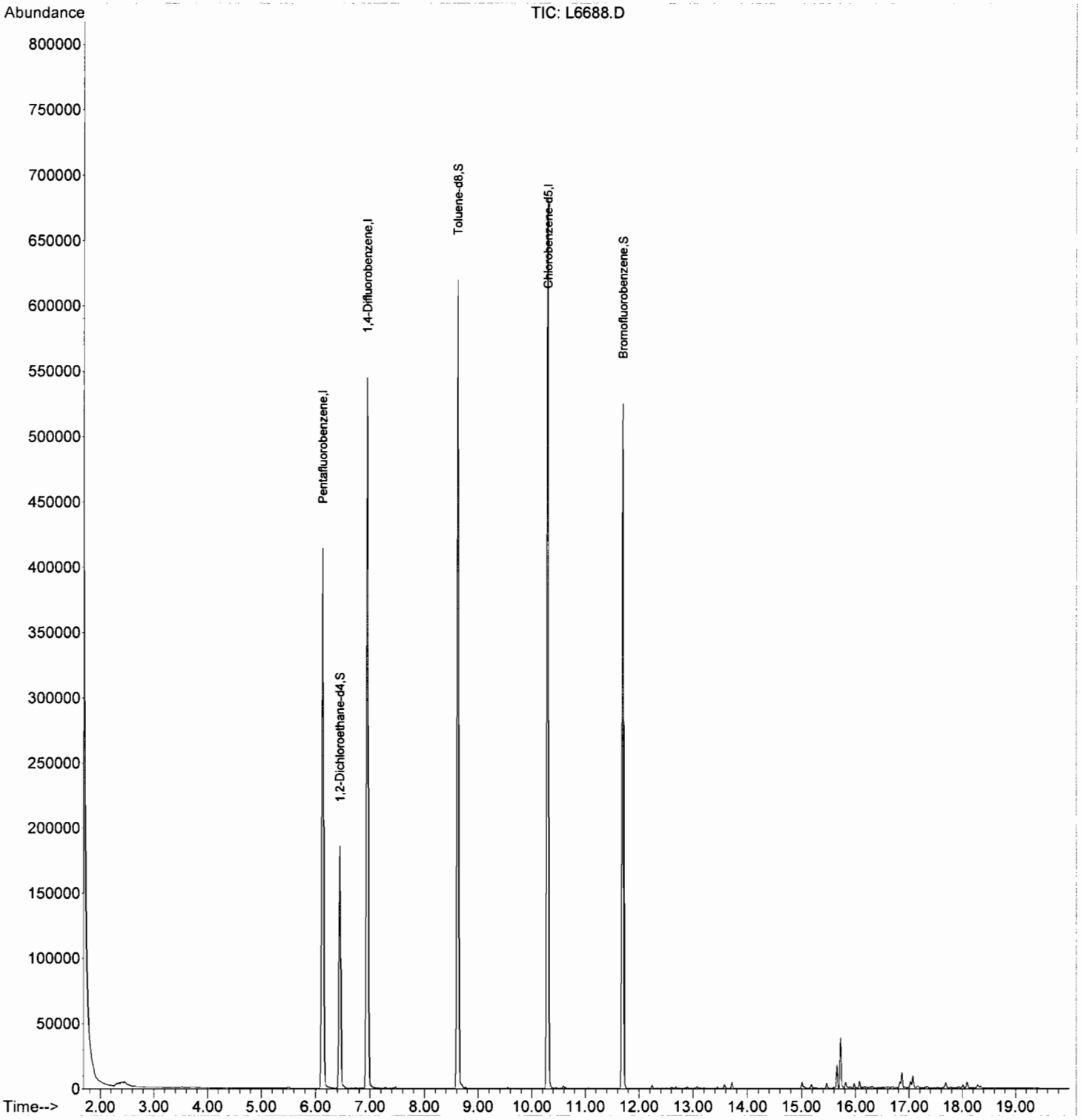
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/20/15

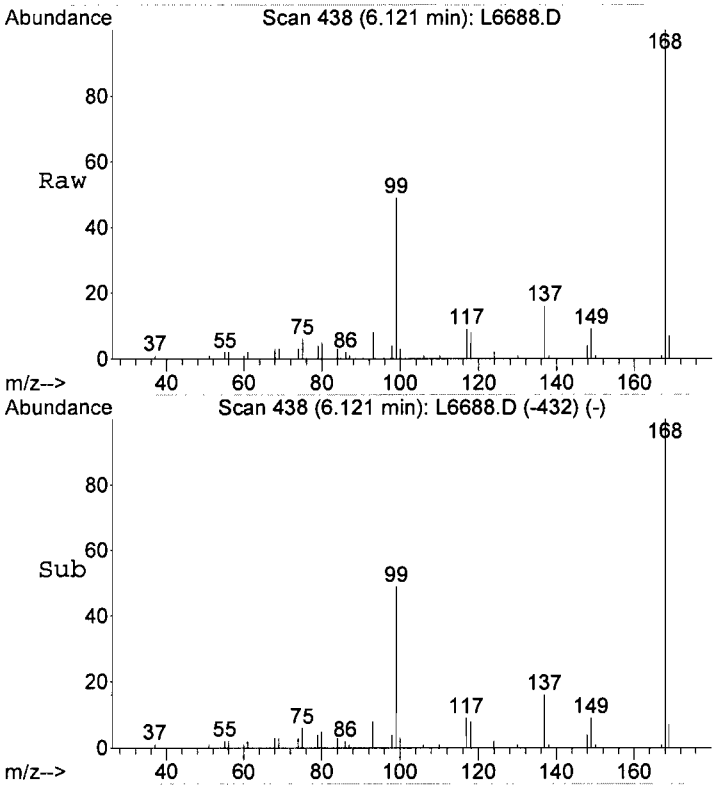
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6688.D
Acq On : 19 Feb 2015 17:37
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 20 09:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



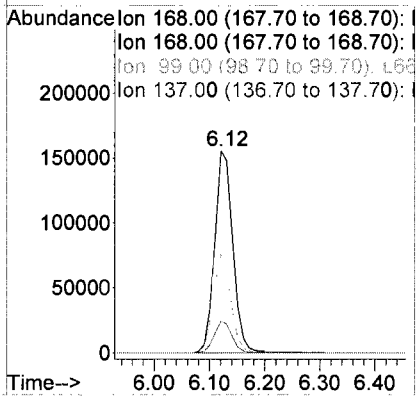
2/20/15

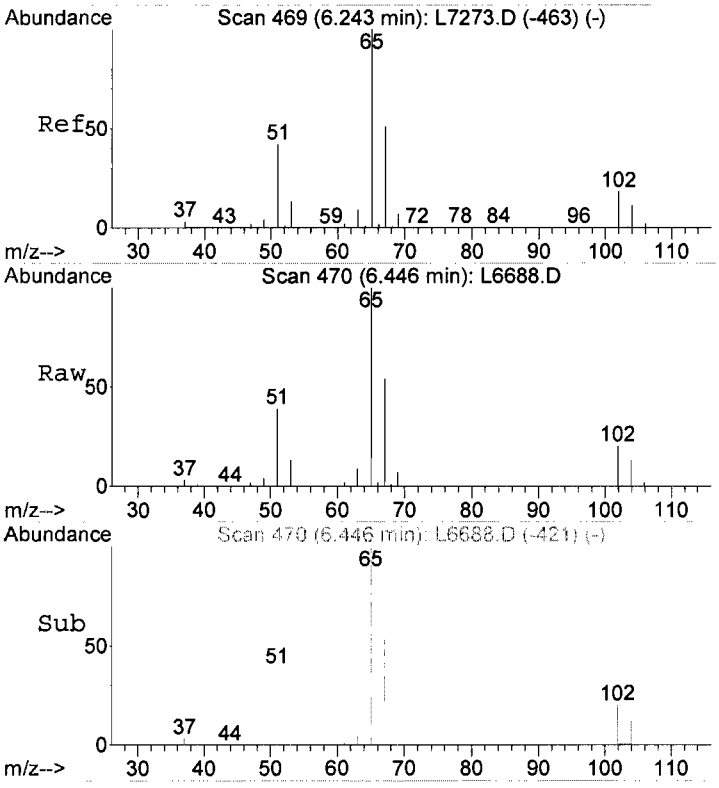


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.12 min Scan# 438
Delta R.T. -0.01 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:168 Resp: 356850

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

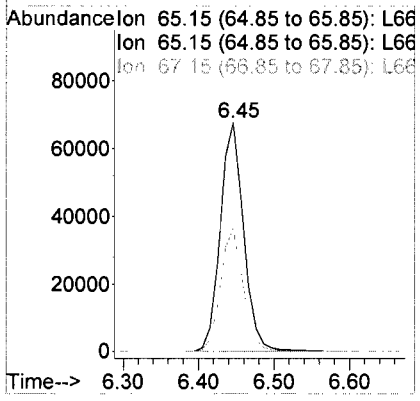


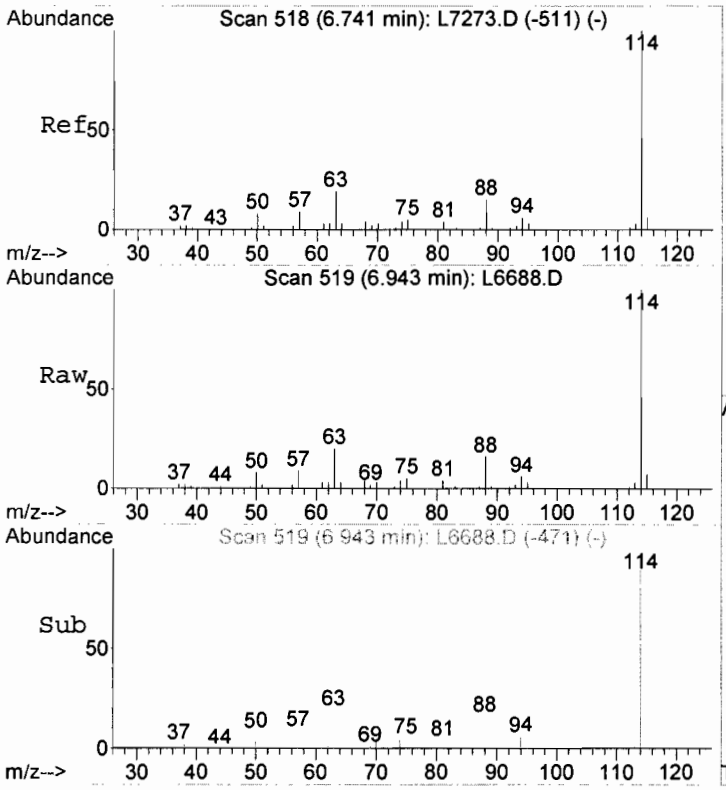


#30
1,2-Dichloroethane-d4
Concen: 47.58 UG
RT: 6.45 min Scan# 470
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 65 Resp: 145477

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	53.0	35.1	65.1

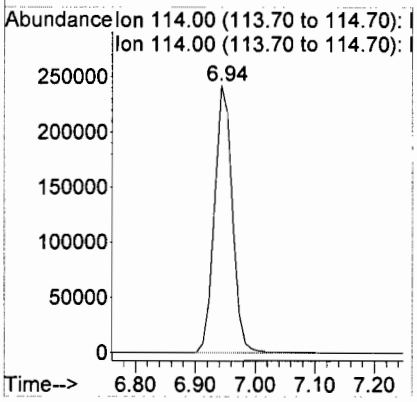


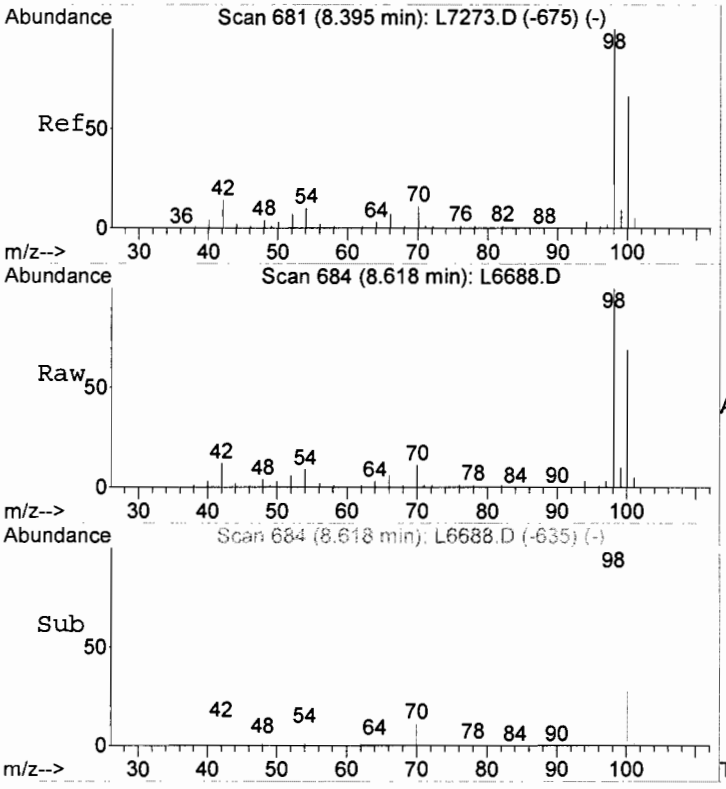


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.94 min Scan# 519
Delta R.T. -0.01 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:114 Resp: 504496

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

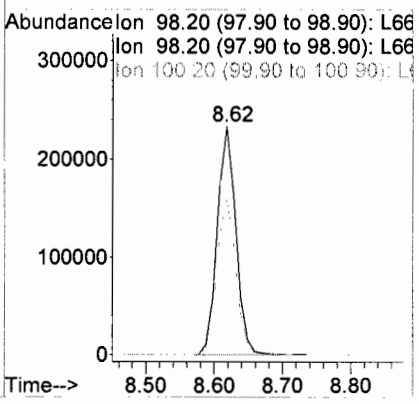


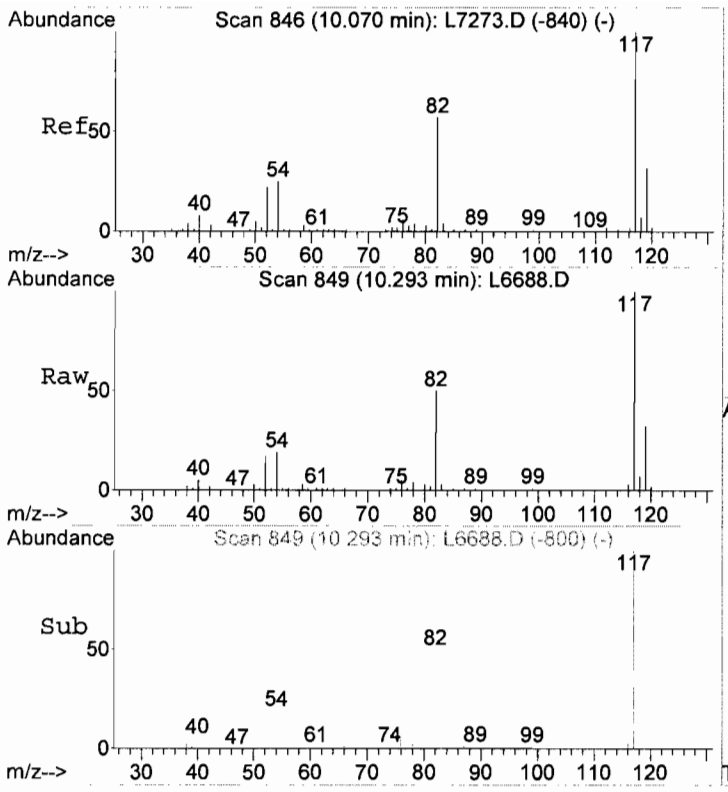


#41
Toluene-d8
Concen: 49.17 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 98 Resp: 439298

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.4	44.8	83.2

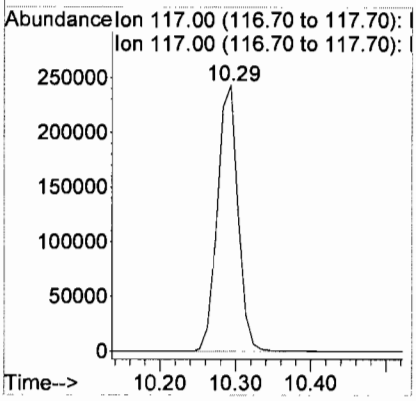


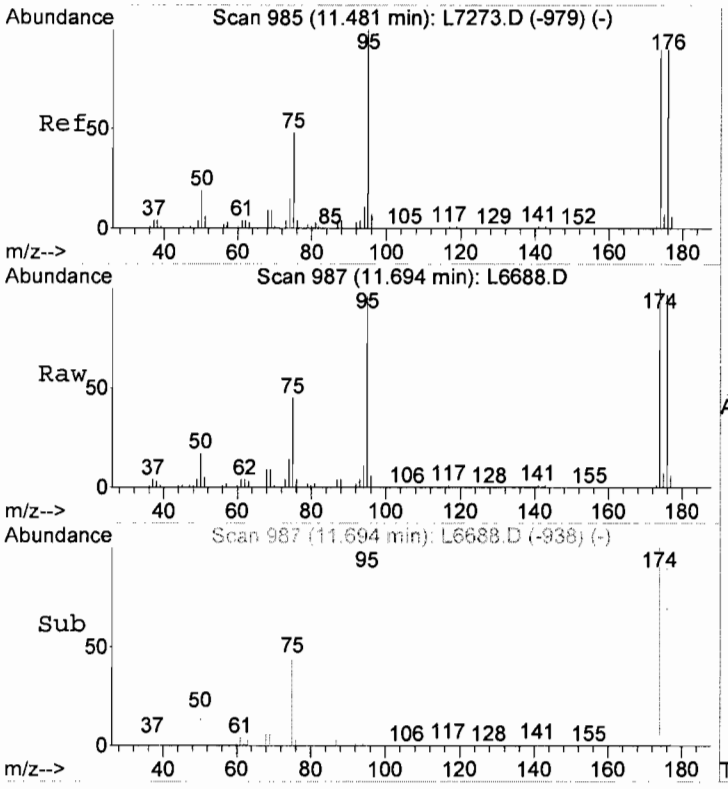


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:117 Resp: 463108

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

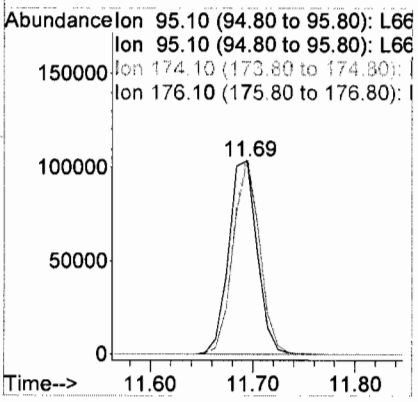




#59
Bromofluorobenzene
Concen: 49.33 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 95 Resp: 199682

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.8	0.0	0.0#
176	93.2	0.0	0.0#



VOLATILE ORGANICS STANDARDS

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015
Response Via : Initial Calibration

MXF 2/17/15
CT 2/17/15

Calibration Files
1 =L6605.D 2 =L6608.D 5 =L6607.D
20 =L6609.D 100 =L6610.D 150 =L6611.D 200 =L6612.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.168	0.124	0.239	0.213	0.203	0.222	0.219	0.198	19.88
3)	TP	Chloromethane	0.437	0.316	0.348	0.387	0.388	0.407	0.411	0.385	10.59
4)	C	Vinyl chloride	0.297	0.263	0.368	0.328	0.358	0.364	0.343	0.332	11.73
5)	T	Bromomethane	0.225	0.259	0.225	0.213	0.191	0.173	0.157	0.206	16.92
6)	T	Chloroethane	0.229	0.132	0.177	0.170	0.164	0.159	0.152	0.169	17.94
7)	T	Trichlorofluorome	0.384	0.319	0.471	0.393	0.352	0.397	0.298	0.374	15.31
8)	T	Acrolein	0.027	0.024	0.028	0.023	0.022	0.024	0.023	0.024	9.52
9)	MC	1,1-Dichloroethen	0.323	0.218	0.265	0.273	0.292	0.287	0.271	0.275	11.55
10)	T	Acetone		0.083	0.095	0.083	0.075	0.076	0.076	0.081	9.38
11)	T	Carbon disulfide	0.898	0.791	0.743	0.816	0.924	0.923	0.908	0.858	8.55
12)	T	Vinyl acetate	1.373	1.226	1.364	1.154	1.002	0.950	0.923	1.142	16.54
13)	T	Methylene chlorid		0.432	0.420	0.356	0.333	0.334	0.335	0.368	12.41
14)	T	Acrylonitrile	0.124	0.144	0.145	0.111	0.128	0.138	0.131	0.132	9.21
15)	T	tert-Butyl alcoho	0.026	0.033	0.031	0.029	0.028	0.029	0.030	0.029	7.67
16)	T	trans-1,2-Dichlor	0.563	0.456	0.518	0.475	0.471	0.453	0.446	0.483	8.80
17)	T	Methyl tert-butyl	1.550	1.315	1.384	1.291	1.236	1.246	1.278	1.329	8.23
18)	TP	1,1-Dichloroethan	1.063	0.877	0.971	0.861	0.860	0.856	0.866	0.908	8.76
19)	T	Diisopropyl ether	1.817	1.587	1.847	1.666	1.599	1.571	1.573	1.666	7.10
20)	T	cis-1,2-Dichloroe	0.592	0.519	0.578	0.540	0.534	0.527	0.529	0.546	5.11
21)	T	2,2-Dichloropropa	0.506	0.331	0.431	0.422	0.441	0.443	0.427	0.429	12.03
22)	T	2-Butanone (MEK)	0.205	0.161	0.210	0.196	0.186	0.181	0.183	0.189	8.72
23)	T	Bromochloromethan	0.313	0.301	0.303	0.278	0.265	0.264	0.268	0.285	7.31
25)	C	Chloroform	1.125	0.954	0.998	0.898	0.876	0.871	0.878	0.943	9.90
26)	T	1,1,1-Trichloroet	0.681	0.464	0.575	0.568	0.619	0.608	0.608	0.589	11.28
27)	T	Carbon tetrachlor	0.456	0.404	0.420	0.426	0.490	0.481	0.462	0.448	7.24
28)	T	1,1-Dichloroprope	0.556	0.405	0.490	0.492	0.547	0.529	0.512	0.504	10.04
29)	T	1,2-Dichloroethan	0.918	0.775	0.803	0.720	0.688	0.675	0.685	0.752	11.66
30)	S	1,2-Dichloroethan	0.454	0.445	0.440	0.426	0.414	0.412	0.409	0.428	4.20
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.596	1.326	1.484	1.334	1.316	1.274	1.256	1.370	9.06
33)	M	Trichloroethene	0.347	0.283	0.329	0.307	0.348	0.341	0.345	0.329	7.55
34)	C	1,2-Dichloropropa	0.374	0.324	0.358	0.341	0.345	0.335	0.342	0.346	4.67
35)	T	Dibromomethane	0.249	0.214	0.236	0.213	0.211	0.207	0.210	0.220	7.23
36)	T	1,4-Dioxane	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	15.84
37)	T	Bromodichlorometh	0.475	0.413	0.459	0.452	0.476	0.471	0.483	0.461	5.16
38)	T	2-Chloroethyl vin	0.195	0.203	0.195	0.191	0.213	0.207	0.215	0.203	4.67
39)	T	cis-1,3-Dichlorop	0.406	0.396	0.468	0.500	0.545	0.534	0.553	0.486	13.37
40)	T	4-Methyl-2-pentan	0.246	0.223	0.278	0.288	0.306	0.298	0.306	0.278	11.43
41)	S	Toluene-d8	0.857	0.866	0.886	0.882	0.906	0.899	0.902	0.885	2.12
42)	MC	Toluene	0.914	0.719	0.796	0.731	0.763	0.733	0.726	0.769	9.06
43)	T	trans-1,3-Dichlor	0.361	0.329	0.409	0.441	0.496	0.490	0.499	0.432	15.82
44)	T	1,1,2-Trichloroet	0.279	0.232	0.271	0.245	0.249	0.243	0.247	0.252	6.55
45)	T	Tetrachloroethene	0.303	0.218	0.258	0.243	0.270	0.256	0.252	0.257	10.06
46)	T	1,3-Dichloropropa	0.499	0.456	0.524	0.487	0.496	0.483	0.490	0.491	4.18
47)	T	2-Hexanone	0.121	0.138	0.149	0.176	0.196	0.194	0.200	0.168	19.00
48)	T	Dibromochlorometh	0.293	0.266	0.318	0.326	0.368	0.362	0.370	0.329	12.22
49)	T	1,2-Dibromoethane	0.303	0.266	0.317	0.304	0.317	0.310	0.317	0.305	5.97
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.192	1.005	1.069	0.931	0.917	0.896	0.916	0.989	10.96
52)	T	1,1,1,2-Tetrachlo	0.374	0.330	0.371	0.365	0.376	0.374	0.379	0.367	4.57

53)	C	Ethylbenzene	1.319	1.061	1.291	1.239	1.303	1.258	1.271	1.249	6.97
54)	T	m,p-Xylene	0.509	0.423	0.526	0.499	0.502	0.476	0.471	0.486	6.92
55)	T	o-Xylene	0.447	0.410	0.514	0.519	0.518	0.490	0.487	0.483	8.53
56)	T	Styrene	0.806	0.785	0.969	0.978	0.972	0.915	0.913	0.905	8.83
57)	TP	Bromoform	0.408	0.303	0.283	0.232	0.263	0.267	0.278	0.291	19.31
58)	T	Isopropylbenzene	0.887	0.685	0.921	0.966	1.054	1.015	1.034	0.937	13.51
59)	S	Bromofluorobenzen	0.432	0.436	0.439	0.427	0.439	0.446	0.439	0.437	1.36
60)	TP	1,1,2,2-Tetrachlo	0.567	0.441	0.472	0.417	0.376	0.363	0.361	0.428	17.33
61)	T	Bromobenzene	0.507	0.412	0.459	0.419	0.421	0.410	0.415	0.435	8.25
62)	T	1,2,3-Trichloropr	0.431	0.385	0.404	0.363	0.352	0.342	0.348	0.375	8.79
63)	T	n-Propylbenzene	1.174	0.894	1.078	1.071	1.124	1.100	1.107	1.078	8.17
64)	T	2-Chlorotoluene	0.917	0.731	0.864	0.794	0.798	0.779	0.798	0.812	7.47
65)	T	1,3,5-Trimethylbe	0.898	0.731	0.879	0.872	0.886	0.872	0.875	0.859	6.65
66)	T	4-Chlorotoluene	1.187	0.926	1.062	0.964	0.956	0.931	0.943	0.996	9.64
67)	T	tert-Butylbenzene	0.765	0.499	0.611	0.627	0.671	0.682	0.685	0.649	12.73
68)	T	1,2,4-Trimethylbe	1.177	0.809	0.971	0.929	0.926	0.922	0.935	0.953	11.65
69)	T	sec-Butylbenzene	1.065	0.731	0.847	0.870	0.918	0.909	0.920	0.894	11.19
70)	T	1,3-Dichlorobenze	0.869	0.659	0.687	0.638	0.613	0.609	0.629	0.672	13.54
71)	T	4-Isopropyltoluen	0.938	0.693	0.806	0.806	0.830	0.831	0.841	0.821	8.77
72)	T	1,4-Dichlorobenze	0.905	0.713	0.747	0.668	0.644	0.637	0.645	0.709	13.55
73)	T	n-Butylbenzene	0.409	0.307	0.324	0.357	0.375	0.379	0.378	0.361	9.75
74)	T	1,2-Dichlorobenze	0.858	0.684	0.734	0.667	0.618	0.614	0.614	0.684	12.96
75)	T	1,2-Dibromo-3-chl		0.042	0.056	0.059	0.065	0.068	0.069	0.060	17.10
76)	T	1,2,4-Trichlorobe	0.285	0.306	0.351	0.331	0.360	0.383	0.398	0.345	11.77
77)	T	Hexachlorobutadie		0.164	0.146	0.168	0.169	0.170	0.171	0.165	5.62
78)	T	Naphthalene	0.583	0.673	0.784	0.947	0.945	0.992	1.009	0.847	19.90
79)	T	1,2,3-Trichlorobe	0.295	0.309	0.317	0.325	0.340	0.359	0.377	0.332	8.65
80)	T	1,1,2-Trichloro-1	0.148	0.092	0.165	0.146	0.142	0.134	0.147	0.139	16.44
81)	T	Methyl acetate	0.187	0.235	0.234	0.204	0.189	0.190	0.193	0.204	10.33
82)	T	Cyclohexane	0.325	0.156	0.258	0.268	0.265	0.261	0.261	0.256	19.57
83)	T	Methylcyclohexane	0.183	0.175	0.152	0.158	0.175	0.162	0.138	0.163	9.63

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM021315.M Tue Feb 17 14:02:32 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	286657	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	409962	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	361365	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	130193	47.48	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.96%				
41) Toluene-d8	8.62	98	351417	45.22	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 90.44%				
59) Bromofluorobenzene	11.69	95	156247	47.84	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.68%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	965m	0.46	UG		
3) Chloromethane	1.93	50	2505	0.74	UG		96
4) Vinyl chloride	2.06	62	1701	0.59	UG		99
5) Bromomethane	2.42	94	1292m	0.92	UG		
6) Chloroethane	2.54	64	1315	0.90	UG	#	86
7) Trichlorofluoromethane	2.84	101	2201	0.75	UG		97
8) Acrolein	3.33	56	3085	8.81	UG	#	65
9) 1,1-Dichloroethene	3.45	96	1850	0.85	UG		96
11) Carbon disulfide	3.71	76	5151	0.72	UG		100
12) Vinyl acetate	4.96	43	7869	0.81	UG	#	99
14) Acrylonitrile	4.32	53	14269	14.12	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	297m	1.27	UG		
16) trans-1,2-Dichloroethene	4.36	96	3228	1.00	UG		97
17) Methyl tert-butyl ether (M	4.38	73	8886	1.01	UG		100
18) 1,1-Dichloroethane	4.86	63	6096	1.01	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	10416	0.93	UG		99
20) cis-1,2-Dichloroethene	5.53	96	3396	0.96	UG		98
21) 2,2-Dichloropropane	5.53	77	2901	0.95	UG		92
22) 2-Butanone (MEK)	5.55	43	1176	1.11	UG	#	89
23) Bromochloromethane	5.80	128	1796	1.07	UG		99
25) Chloroform	5.89	83	6452	1.11	UG		99
26) 1,1,1-Trichloroethane	6.10	97	3906	0.98	UG	#	80
27) Carbon tetrachloride	6.29	117	2612	0.84	UG		99
28) 1,1-Dichloropropene	6.29	75	3187	0.86	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	5262	1.16	UG		99
32) Benzene	6.53	78	13086	1.07	UG		100
33) Trichloroethene	7.25	95	2848	1.00	UG		92
34) 1,2-Dichloropropane	7.49	63	3066	0.99	UG	#	100
35) Dibromomethane	7.61	93	2039	1.10	UG		92
36) 1,4-Dioxane	7.64	88	3071	121.30	UG		98
37) Bromodichloromethane	7.80	83	3891	1.02	UG	#	97
38) 2-Chloroethyl vinyl ether	8.14	63	1597	0.96	UG	#	91
39) cis-1,3-Dichloropropene	8.30	75	3330	0.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.48	43	2021	0.81	UG		95
42) Toluene	8.70	92	7498	1.12	UG		98
43) trans-1,3-Dichloropropene	8.93	75	2964	0.81	UG	#	97
44) 1,1,2-Trichloroethane	9.15	83	2285	1.09	UG		98
45) Tetrachloroethene	9.33	166	2485	1.09	UG		100
46) 1,3-Dichloropropane	9.34	76	4094	0.99	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

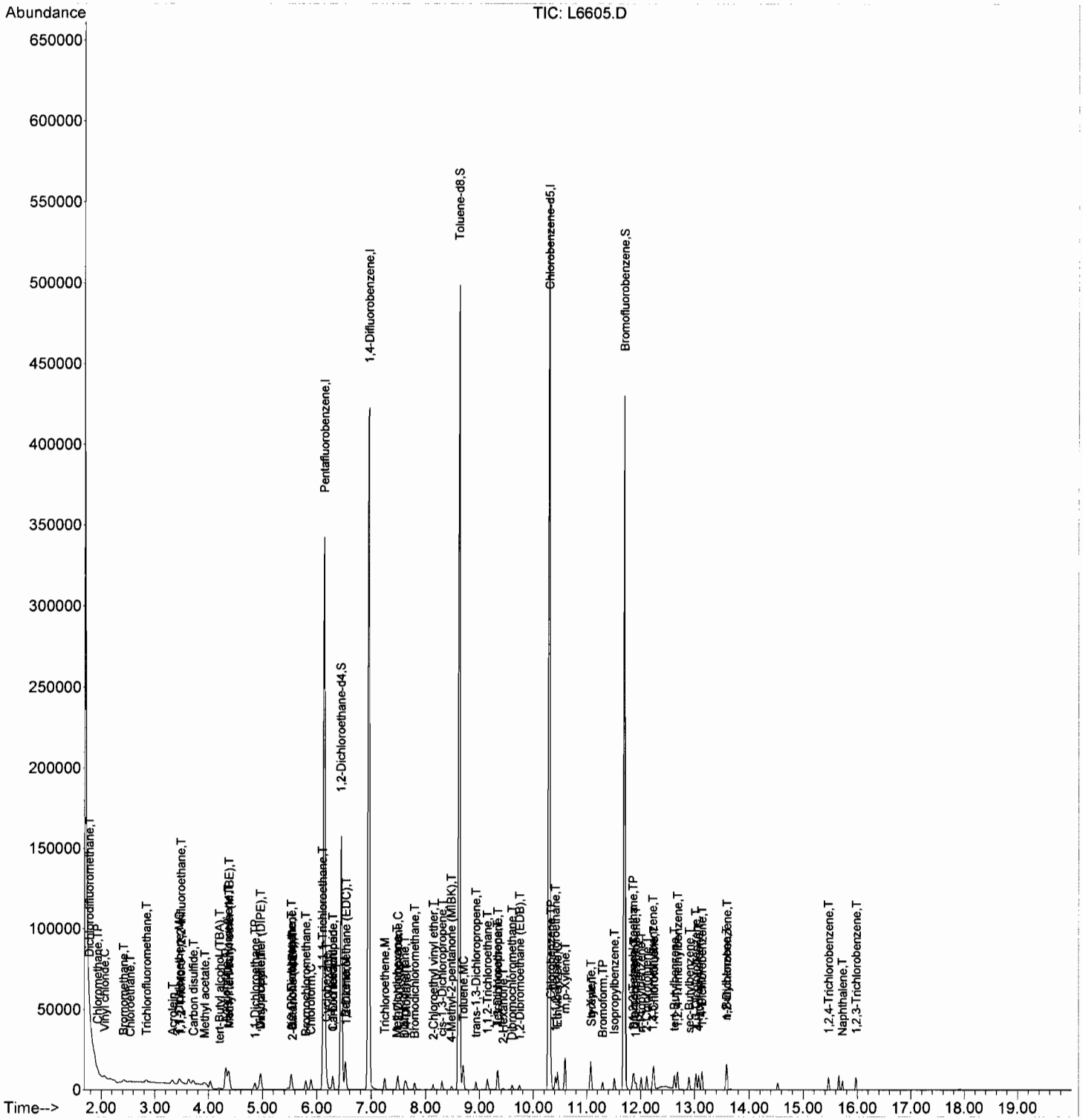
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.44	43	989	0.82	UG	#	88
48) Dibromochloromethane	9.60	129	2403	0.94	UG		97
49) 1,2-Dibromoethane (EDB)	9.75	107	2481	1.00	UG		98
51) Chlorobenzene	10.32	112	8615	1.19	UG		100
52) 1,1,1,2-Tetrachloroethane	10.42	131	2703	1.01	UG		97
53) Ethylbenzene	10.46	91	9531	0.93	UG		100
54) m,p-Xylene	10.60	106	7354	1.85	UG		94
55) o-Xylene	11.07	106	3231	0.80	UG		99
56) Styrene	11.09	104	5826	0.80	UG		98
57) Bromoform	11.30	173	2950	1.63	UG		99
58) Isopropylbenzene	11.51	105	6412	0.78	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	4100	1.25	UG	#	98
61) Bromobenzene	11.88	156	3661	1.16	UG		100
62) 1,2,3-Trichloropropane	11.91	75	3114	1.09	UG		98
63) n-Propylbenzene	12.01	91	8484	0.94	UG		100
64) 2-Chlorotoluene	12.11	91	6627	1.00	UG		100
65) 1,3,5-Trimethylbenzene	12.22	105	6488	0.94	UG		99
66) 4-Chlorotoluene	12.24	91	8576	1.11	UG		100
67) tert-Butylbenzene	12.63	119	5531	1.05	UG		100
68) 1,2,4-Trimethylbenzene	12.69	105	8507	1.15	UG		100
69) sec-Butylbenzene	12.90	105	7696	1.02	UG		99
70) 1,3-Dichlorobenzene	13.02	146	6279	1.26	UG		100
71) 4-Isopropyltoluene	13.07	119	6781	1.01	UG		99
72) 1,4-Dichlorobenzene	13.14	146	6544	1.26	UG		99
73) n-Butylbenzene	13.58	92	2956	0.95	UG		97
74) 1,2-Dichlorobenzene	13.59	146	6199	1.23	UG		99
76) 1,2,4-Trichlorobenzene	15.47	180	2057m	0.72	UG		
78) Naphthalene	15.72	128	4215m	0.62	UG		
79) 1,2,3-Trichlorobenzene	15.98	180	2135m	0.82	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1068m	0.78	UG		
81) Methyl acetate	3.93	43	1350m	0.74	UG		
82) Cyclohexane	6.17	56	2351m	0.92	UG		
83) Methylcyclohexane	7.47	55	1326	0.77	UG		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	304709	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	431865	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	390295	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134041	47.30	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.60%				
41) Toluene-d8	8.62	98	382579	47.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 95.90%				
59) Bromofluorobenzene	11.69	95	171478	49.40	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	7279m	4.25	UG		
3) Chloromethane	1.93	50	10597	3.53	UG		100
4) Vinyl chloride	2.06	62	11205m	4.69	UG		
5) Bromomethane	2.42	94	6870	4.34	UG		95
6) Chloroethane	2.55	64	5395	3.88	UG		98
7) Trichlorofluoromethane	2.83	101	14342m	5.42	UG		
8) Acrolein	3.32	56	17065	56.05	UG		100
9) 1,1-Dichloroethene	3.45	96	8067	3.78	UG		98
10) Acetone	3.51	43	2891m	3.47	UG		
11) Carbon disulfide	3.70	76	22627	3.50	UG		100
12) Vinyl acetate	4.96	43	41571	4.51	UG	#	99
13) Methylene chloride	4.03	84	12794	4.66	UG		100
14) Acrylonitrile	4.32	53	88651	88.83	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	1860m	6.38	UG		
16) trans-1,2-Dichloroethene	4.36	96	15791	4.97	UG		91
17) Methyl tert-butyl ether (M	4.38	73	42173	4.74	UG		100
18) 1,1-Dichloroethane	4.85	63	29585	4.90	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	56284	5.00	UG		99
20) cis-1,2-Dichloroethene	5.53	96	17597	4.97	UG		98
21) 2,2-Dichloropropane	5.53	77	13118	4.46	UG	#	84
22) 2-Butanone (MEK)	5.55	43	6407	5.64	UG		98
23) Bromochloromethane	5.80	128	9242	5.29	UG		100
25) Chloroform	5.89	83	30413	5.07	UG		100
26) 1,1,1-Trichloroethane	6.11	97	17535	4.54	UG	#	80
27) Carbon tetrachloride	6.29	117	12811m	4.40	UG		
28) 1,1-Dichloropropene	6.29	75	14930	4.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	24467	5.17	UG		100
32) Benzene	6.53	78	64099	5.21	UG		100
33) Trichloroethene	7.25	95	14208	5.01	UG		95
34) 1,2-Dichloropropane	7.49	63	15474	4.95	UG		100
35) Dibromomethane	7.62	93	10182	5.32	UG		93
36) 1,4-Dioxane	7.64	88	28203	1115.25	UG		99
37) Bromodichloromethane	7.80	83	19841	5.00	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	8426	4.71	UG		99
39) cis-1,3-Dichloropropene	8.30	75	20204	4.75	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	11993	4.75	UG		99
42) Toluene	8.70	92	34397	5.09	UG		98
43) trans-1,3-Dichloropropene	8.93	75	17670	4.72	UG		99
44) 1,1,2-Trichloroethane	9.15	83	11697	5.42	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

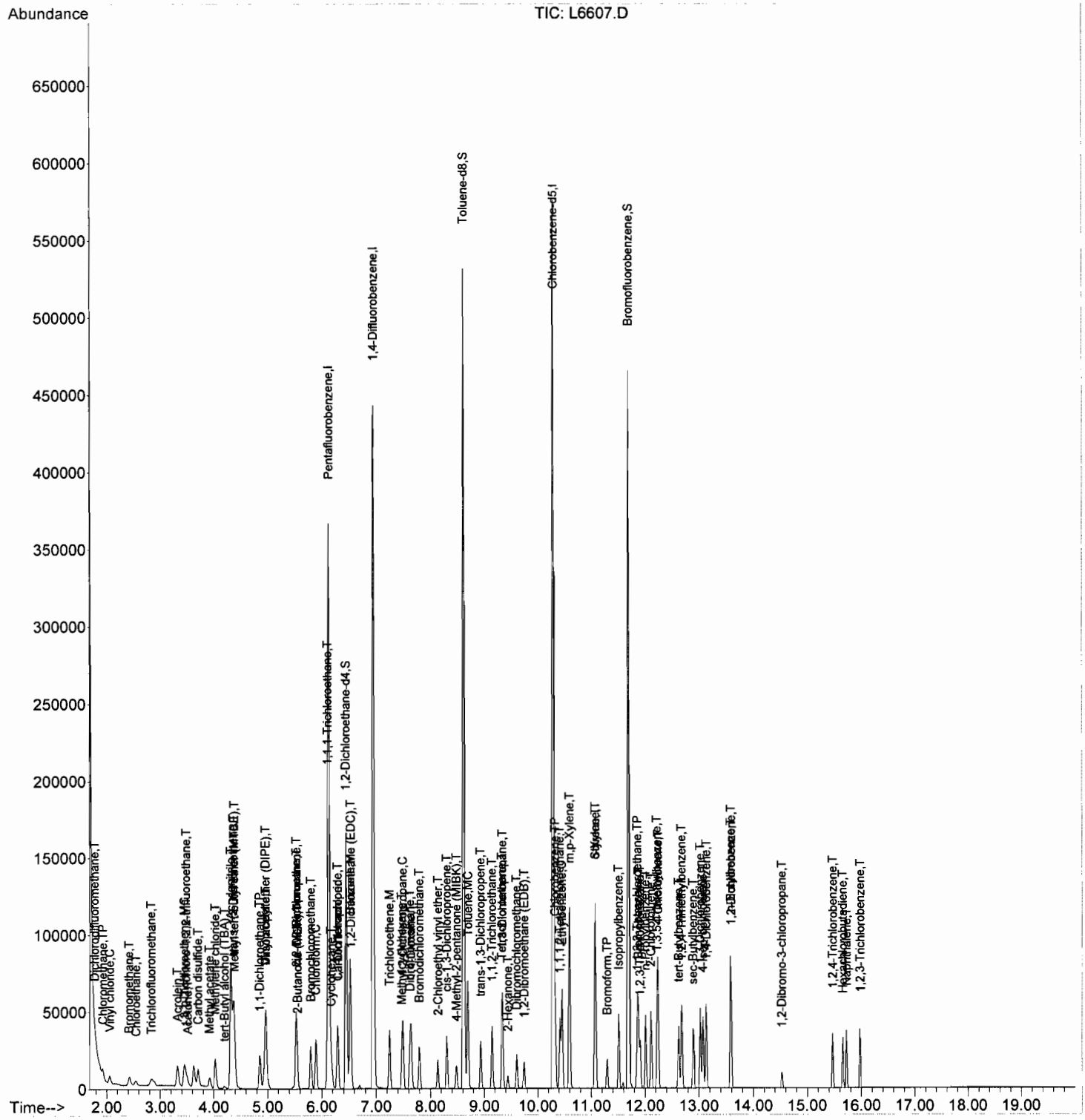
Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	11135	4.95 UG	98
46) 1,3-Dichloropropane	9.34	76	22634	5.36 UG	100
47) 2-Hexanone	9.44	43	6432	5.13 UG	98
48) Dibromochloromethane	9.60	129	13736	5.02 UG	99
49) 1,2-Dibromoethane (EDB)	9.75	107	13704	5.29 UG	99
51) Chlorobenzene	10.32	112	41728	5.37 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	14472	5.03 UG	99
53) Ethylbenzene	10.46	91	50374	4.91 UG	99
54) m,p-Xylene	10.60	106	41025	10.24 UG	96
55) o-Xylene	11.07	106	20059	4.97 UG	96
56) Styrene	11.07	104	37839	5.14 UG	98
57) Bromoform	11.30	173	11042	5.08 UG	99
58) Isopropylbenzene	11.51	105	35950	4.50 UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	18409	5.24 UG	99
61) Bromobenzene	11.88	156	17923	5.31 UG	99
62) 1,2,3-Trichloropropane	11.91	75	15766	5.22 UG	98
63) n-Propylbenzene	12.01	91	42062	4.66 UG	100
64) 2-Chlorotoluene	12.11	91	33726	5.00 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	34294	4.84 UG	99
66) 4-Chlorotoluene	12.24	91	41464	5.10 UG	99
67) tert-Butylbenzene	12.63	119	23855	4.38 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	37915	4.81 UG	99
69) sec-Butylbenzene	12.89	105	33061	4.35 UG	99
70) 1,3-Dichlorobenzene	13.02	146	26820	4.98 UG	100
71) 4-Isopropyltoluene	13.07	119	31463	4.61 UG	100
72) 1,4-Dichlorobenzene	13.14	146	29159	5.21 UG	100
73) n-Butylbenzene	13.58	92	12665	4.06 UG	96
74) 1,2-Dichlorobenzene	13.59	146	28663	5.27 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	2171m	3.08 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	13712	4.45 UG	100
77) Hexachlorobutadiene	15.65	225	5715m	3.58 UG	
78) Naphthalene	15.72	128	30590	4.35 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	12389m	4.30 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	6449m	5.34 UG	
81) Methyl acetate	3.92	43	9123	4.64 UG	98
82) Cyclohexane	6.17	56	10061m	4.33 UG	
83) Methylcyclohexane	7.47	55	5920m	3.79 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	298969	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	429322	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	378604	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	132953	48.68	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.36%				
41) Toluene-d8	8.62	98	371625	47.34	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 94.68%				
59) Bromofluorobenzene	11.69	95	165072	49.37	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.74%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	1480m	1.03	UG		
3) Chloromethane	1.93	50	3782	1.42	UG		98
4) Vinyl chloride	2.05	62	3150m	1.50	UG		
5) Bromomethane	2.42	94	3092	2.03	UG		87
6) Chloroethane	2.54	64	1573	1.26	UG	#	86
7) Trichlorofluoromethane	2.83	101	3811m	1.67	UG		
8) Acrolein	3.33	56	7161m	27.08	UG		
9) 1,1-Dichloroethene	3.45	96	2607	1.34	UG		91
10) Acetone	3.52	43	998m	1.21	UG		
11) Carbon disulfide	3.70	76	9465m	1.61	UG		
12) Vinyl acetate	4.96	43	14667	1.72	UG	#	99
13) Methylene chloride	4.03	84	5161	2.03	UG		98
14) Acrylonitrile	4.32	53	43144	46.09	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	794m	2.72	UG		
16) trans-1,2-Dichloroethene	4.36	96	5455	1.79	UG		92
17) Methyl tert-butyl ether (M	4.39	73	15726	1.85	UG		100
18) 1,1-Dichloroethane	4.85	63	10492	1.81	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	18977	1.75	UG		99
20) cis-1,2-Dichloroethene	5.52	96	6211	1.83	UG		97
21) 2,2-Dichloropropane	5.53	77	3958	1.43	UG	#	49
22) 2-Butanone (MEK)	5.55	43	1931	1.71	UG	#	89
23) Bromochloromethane	5.80	128	3600	2.11	UG		96
25) Chloroform	5.89	83	11404	1.97	UG		100
26) 1,1,1-Trichloroethane	6.11	97	5543	1.52	UG	#	80
27) Carbon tetrachloride	6.29	117	4827m	1.78	UG		
28) 1,1-Dichloropropene	6.29	75	4843	1.51	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	9263	2.01	UG		100
32) Benzene	6.53	78	22775	1.88	UG		99
33) Trichloroethene	7.25	95	4861	1.74	UG		91
34) 1,2-Dichloropropane	7.49	63	5570	1.82	UG	#	100
35) Dibromomethane	7.62	93	3667	1.92	UG		94
36) 1,4-Dioxane	7.65	88	12759	504.88	UG		100
37) Bromodichloromethane	7.80	83	7087	1.80	UG	#	68
38) 2-Chloroethyl vinyl ether	8.14	63	3480	1.96	UG		98
39) cis-1,3-Dichloropropene	8.30	75	6796	1.62	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	3831	1.55	UG		97
42) Toluene	8.70	92	12346	1.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	5651	1.52	UG		100
44) 1,1,2-Trichloroethane	9.15	83	3978	1.85	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

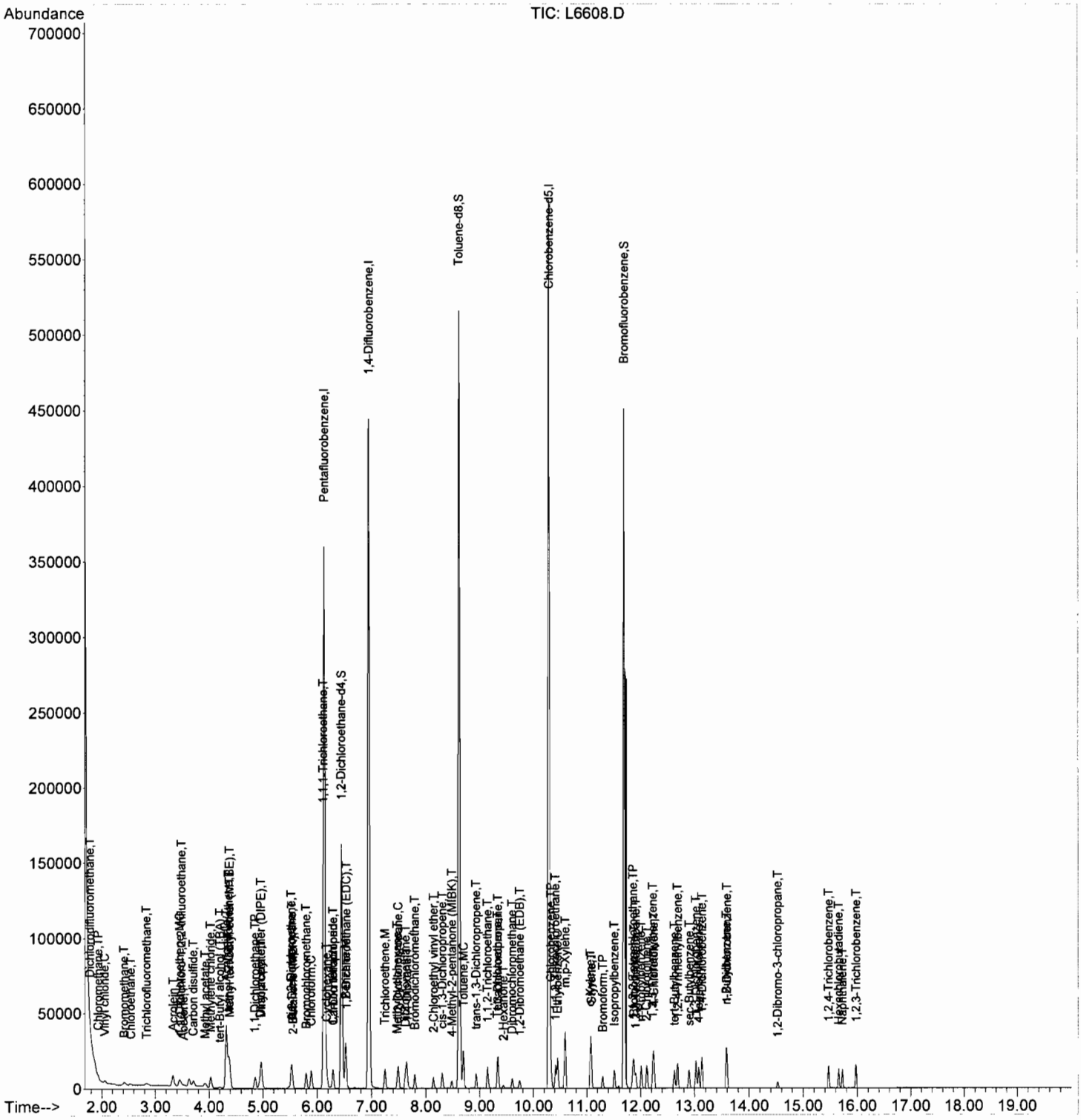
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	3747	1.70 UG	97
46) 1,3-Dichloropropane	9.34	76	7826	1.86 UG	100
47) 2-Hexanone	9.44	43	2371m	1.86 UG	
48) Dibromochloromethane	9.60	129	4571	1.66 UG	98
49) 1,2-Dibromoethane (EDB)	9.75	107	4565	1.76 UG	96
51) Chlorobenzene	10.32	112	15224	2.02 UG	99
52) 1,1,1,2-Tetrachloroethane	10.42	131	5002	1.80 UG	98
53) Ethylbenzene	10.46	91	16070	1.65 UG	99
54) m,p-Xylene	10.60	106	12806	3.36 UG	98
55) o-Xylene	11.06	106	6203	1.62 UG	95
56) Styrene	11.09	104	11886	1.69 UG	97
57) Bromoform	11.30	173	4587	2.11 UG	100
58) Isopropylbenzene	11.51	105	10374	1.39 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	6680	1.97 UG	100
61) Bromobenzene	11.88	156	6234	1.90 UG	99
62) 1,2,3-Trichloropropane	11.91	75	5833	2.01 UG	99
63) n-Propylbenzene	12.01	91	13538	1.60 UG	100
64) 2-Chlorotoluene	12.11	91	11075	1.73 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	11071	1.65 UG	100
66) 4-Chlorotoluene	12.24	91	14031	1.80 UG	99
67) tert-Butylbenzene	12.63	119	7554	1.48 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	12246	1.64 UG	99
69) sec-Butylbenzene	12.90	105	11065	1.57 UG	100
70) 1,3-Dichlorobenzene	13.02	146	9987	1.94 UG	100
71) 4-Isopropyltoluene	13.07	119	10499	1.64 UG	99
72) 1,4-Dichlorobenzene	13.14	146	10805	2.01 UG	99
73) n-Butylbenzene	13.58	92	4642	1.62 UG	96
74) 1,2-Dichlorobenzene	13.59	146	10366	1.99 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	633m	0.92 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	4633m	1.58 UG	
77) Hexachlorobutadiene	15.65	225	2480m	1.61 UG	
78) Naphthalene	15.72	128	10185	1.54 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	4673m	1.67 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1389m	1.29 UG	
81) Methyl acetate	3.93	43	3555	1.93 UG	98
82) Cyclohexane	6.17	56	2362m	1.17 UG	
83) Methylcyclohexane	7.47	55	2656m	2.00 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	315672	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	444551	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	400966	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134467	46.70	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.40%				
41) Toluene-d8	8.62	98	392017	48.23	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.46%				
59) Bromofluorobenzene	11.69	95	171258	48.23	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	26845m	18.12	UG		
3) Chloromethane	1.93	50	48903	17.53	UG		100
4) Vinyl chloride	2.06	62	41440	18.88	UG		100
5) Bromomethane	2.43	94	26908	16.65	UG		97
6) Chloroethane	2.54	64	21465	16.56	UG		100
7) Trichlorofluoromethane	2.83	101	49675m	20.82	UG		
8) Acrolein	3.33	56	28455	102.56	UG		100
9) 1,1-Dichloroethene	3.45	96	34458	16.94	UG		94
10) Acetone	3.52	43	10477	12.35	UG		100
11) Carbon disulfide	3.70	76	102974	16.66	UG		100
12) Vinyl acetate	4.96	43	145748	15.99	UG	#	99
13) Methylene chloride	4.03	84	44924	16.50	UG		100
14) Acrylonitrile	4.32	53	140306	140.34	UG		100
15) tert-Butyl alcohol (TBA)	4.21	59	7230	24.08	UG		99
16) trans-1,2-Dichloroethene	4.36	96	60027	18.57	UG		90
17) Methyl tert-butyl ether (M	4.39	73	163000	17.98	UG		100
18) 1,1-Dichloroethane	4.86	63	108728	17.71	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	210308	18.20	UG		100
20) cis-1,2-Dichloroethene	5.53	96	68143	18.82	UG		98
21) 2,2-Dichloropropane	5.53	77	53247	18.24	UG		87
22) 2-Butanone (MEK)	5.55	43	24758	21.18	UG		98
23) Bromochloromethane	5.80	128	35072	19.07	UG		99
25) Chloroform	5.89	83	113343	18.30	UG		100
26) 1,1,1-Trichloroethane	6.11	97	71744	18.61	UG		95
27) Carbon tetrachloride	6.29	117	53834	18.85	UG		100
28) 1,1-Dichloropropene	6.29	75	62146	18.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	90868	18.46	UG		100
32) Benzene	6.53	78	237299	18.83	UG		100
33) Trichloroethene	7.25	95	54620	18.78	UG		94
34) 1,2-Dichloropropane	7.49	63	60716	19.05	UG	#	100
35) Dibromomethane	7.62	93	37886	19.06	UG		93
36) 1,4-Dioxane	7.64	88	51893	1964.11	UG		98
37) Bromodichloromethane	7.80	83	80405	19.48	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	33979	18.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	88824	20.22	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	51207	19.98	UG		100
42) Toluene	8.70	92	129930	18.67	UG		98
43) trans-1,3-Dichloropropene	8.93	75	78392	20.27	UG		99
44) 1,1,2-Trichloroethane	9.15	83	43644	19.39	UG		99

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

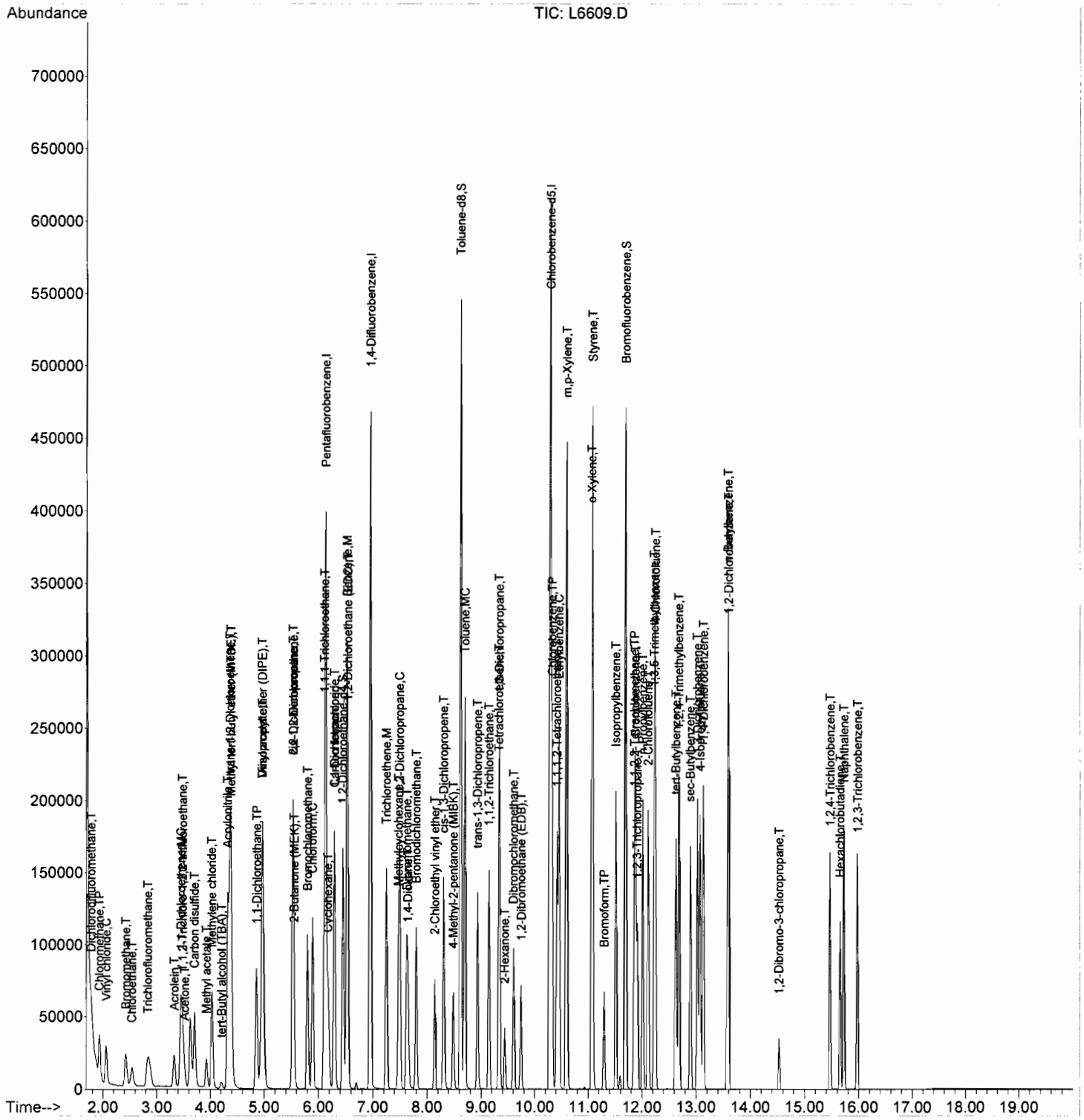
Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	43208	18.97	UG	99
46) 1,3-Dichloropropane	9.34	76	86541	19.66	UG	100
47) 2-Hexanone	9.44	43	31281	24.01	UG	100
48) Dibromochloromethane	9.60	129	57934	20.18	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	54040	20.15	UG	100
51) Chlorobenzene	10.32	112	149360	18.50	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	58497	19.73	UG	99
53) Ethylbenzene	10.46	91	198727	19.19	UG	99
54) m,p-Xylene	10.60	106	159960	39.48	UG	95
55) o-Xylene	11.06	106	83253	20.49	UG	95
56) Styrene	11.08	104	156885	20.81	UG	98
57) Bromoform	11.30	173	37262	16.11	UG	99
58) Isopropylbenzene	11.51	105	154866	19.60	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	66874	18.49	UG	99
61) Bromobenzene	11.88	156	67147	19.10	UG	99
62) 1,2,3-Trichloropropane	11.91	75	58228	18.75	UG	98
63) n-Propylbenzene	12.01	91	171807	19.07	UG	100
64) 2-Chlorotoluene	12.11	91	127352	18.67	UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	139845	19.55	UG	99
66) 4-Chlorotoluene	12.24	91	154605	18.62	UG	99
67) tert-Butylbenzene	12.63	119	100558	18.56	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	149051	18.77	UG	99
69) sec-Butylbenzene	12.89	105	139551	18.58	UG	99
70) 1,3-Dichlorobenzene	13.02	146	102366	18.64	UG	100
71) 4-Isopropyltoluene	13.07	119	129232	18.82	UG	100
72) 1,4-Dichlorobenzene	13.14	146	107179	18.55	UG	100
73) n-Butylbenzene	13.58	92	57239	18.58	UG	96
74) 1,2-Dichlorobenzene	13.59	146	106966	19.10	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	9541	12.98	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	53045m	16.46	UG	
77) Hexachlorobutadiene	15.65	225	26983	16.36	UG	100
78) Naphthalene	15.72	128	151829	21.31	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	52117m	17.01	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	23392m	21.30	UG	
81) Methyl acetate	3.93	43	32643	16.77	UG	98
82) Cyclohexane	6.17	56	42957	20.28	UG	96
83) Methylcyclohexane	7.47	55	25359	17.99	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	334357	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	464375	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	434421	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138317	46.32	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.64%				
41) Toluene-d8	8.62	98	420891	50.14	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.28%				
59) Bromofluorobenzene	11.69	95	190880	50.07	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	135581m	83.59	UG		
3) Chloromethane	1.93	50	259406	91.14	UG		100
4) Vinyl chloride	2.06	62	239662	105.33	UG		100
5) Bromomethane	2.43	94	127834	76.26	UG		99
6) Chloroethane	2.54	64	109841	83.99	UG		99
7) Trichlorofluoromethane	2.84	101	235684	101.84	UG		100
8) Acrolein	3.33	56	43868	174.73	UG		99
9) 1,1-Dichloroethene	3.45	96	195067	96.51	UG		94
10) Acetone	3.52	43	49860	55.96	UG		100
11) Carbon disulfide	3.70	76	617607	97.32	UG		100
12) Vinyl acetate	4.96	43	670300	73.09	UG	#	99
13) Methylene chloride	4.03	84	222369	80.84	UG		100
14) Acrylonitrile	4.32	53	256600	256.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	37595	121.71	UG		100
16) trans-1,2-Dichloroethene	4.36	96	314778	92.13	UG		91
17) Methyl tert-butyl ether (M	4.38	73	826446	87.14	UG		100
18) 1,1-Dichloroethane	4.86	63	575077	89.41	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1069535	90.27	UG		100
20) cis-1,2-Dichloroethene	5.53	96	357105	93.56	UG		99
21) 2,2-Dichloropropane	5.53	77	294954	96.02	UG		90
22) 2-Butanone (MEK)	5.55	43	124143	97.90	UG		99
23) Bromochloromethane	5.80	128	176982	90.48	UG		100
25) Chloroform	5.90	83	586073	89.53	UG		100
26) 1,1,1-Trichloroethane	6.11	97	413973	100.84	UG		99
27) Carbon tetrachloride	6.29	117	327970	107.13	UG		100
28) 1,1-Dichloropropene	6.29	75	365985	101.72	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	460053	88.27	UG		100
32) Benzene	6.53	78	1222361	92.49	UG		100
33) Trichloroethene	7.25	95	322888	105.03	UG		94
34) 1,2-Dichloropropane	7.49	63	320218	95.98	UG	#	100
35) Dibromomethane	7.62	93	195778	93.59	UG		93
36) 1,4-Dioxane	7.64	88	82510	3090.17	UG		99
37) Bromodichloromethane	7.80	83	442279	101.50	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	197694	102.09	UG		99
39) cis-1,3-Dichloropropene	8.30	75	506286	109.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	283828	105.94	UG		99
42) Toluene	8.70	92	708587	96.69	UG		99
43) trans-1,3-Dichloropropene	8.93	75	460271	112.42	UG		99
44) 1,1,2-Trichloroethane	9.15	83	231701	97.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

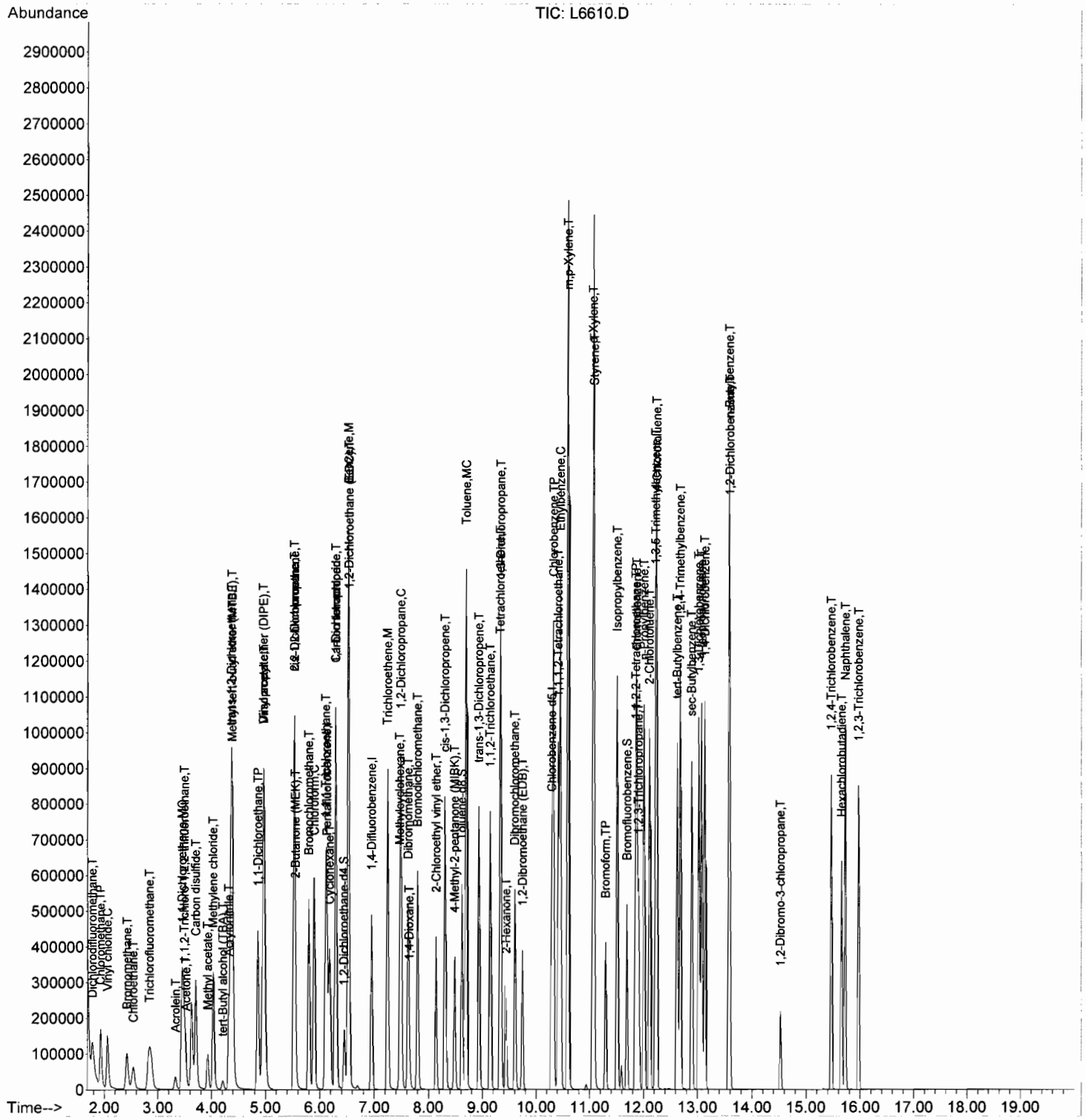
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	250451	103.35	UG	98
46) 1,3-Dichloropropane	9.34	76	460435	98.98	UG	100
47) 2-Hexanone	9.44	43	182449	127.87	UG	99
48) Dibromochloromethane	9.60	129	342079	111.87	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293964	103.36	UG	100
51) Chlorobenzene	10.32	112	796513	90.52	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	326878	100.78	UG	99
53) Ethylbenzene	10.46	91	1132069	100.80	UG	99
54) m,p-Xylene	10.60	106	871540	197.85	UG	96
55) o-Xylene	11.06	106	449662	102.13	UG	96
56) Styrene	11.09	104	844414	102.91	UG	98
57) Bromoform	11.30	173	228773	89.97	UG	100
58) Isopropylbenzene	11.51	105	916004	107.16	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	327056	83.51	UG	100
61) Bromobenzene	11.88	156	365821	95.41	UG	100
62) 1,2,3-Trichloropropane	11.91	75	305643	90.83	UG	99
63) n-Propylbenzene	12.01	91	976974	100.01	UG	100
64) 2-Chlorotoluene	12.11	91	692915	94.24	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770103	99.18	UG	100
66) 4-Chlorotoluene	12.24	91	830453	92.46	UG	99
67) tert-Butylbenzene	12.63	119	582579	99.00	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	804432	93.52	UG	100
69) sec-Butylbenzene	12.89	105	798018	97.80	UG	99
70) 1,3-Dichlorobenzene	13.02	146	532476	89.12	UG	100
71) 4-Isopropyltoluene	13.07	119	721165	96.79	UG	100
72) 1,4-Dichlorobenzene	13.14	146	559666	89.03	UG	100
73) n-Butylbenzene	13.58	92	326018	97.98	UG	96
74) 1,2-Dichlorobenzene	13.59	146	536897	88.02	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	56643	71.09	UG	86
76) 1,2,4-Trichlorobenzene	15.46	180	313022	89.18	UG	99
77) Hexachlorobutadiene	15.65	225	146999	81.48	UG	100
78) Naphthalene	15.72	128	820624	105.88	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	295261	87.53	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	123012	109.20	UG	93
81) Methyl acetate	3.93	43	164496	79.93	UG	98
82) Cyclohexane	6.18	56	230208	106.54	UG	99
83) Methylcyclohexane	7.47	55	152195	105.15	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	335884	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	470961	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	440697	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	138287	47.08	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.16%			
41) Toluene-d8	8.62	98	423609	50.20	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.40%			
59) Bromofluorobenzene	11.69	95	196398	50.95	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.78	85	223936m	140.38	UG	
3) Chloromethane	1.93	50	409652	151.59	UG	100
4) Vinyl chloride	2.06	62	366638	169.03	UG	100
5) Bromomethane	2.42	94	174399	110.10	UG	99
6) Chloroethane	2.54	64	159988	128.10	UG	100
7) Trichlorofluoromethane	2.83	101	400272m	183.63	UG	
8) Acrolein	3.32	56	64810	312.72	UG	99
9) 1,1-Dichloroethene	3.44	96	289405	149.20	UG	93
10) Acetone	3.51	43	76410	86.78	UG	100
11) Carbon disulfide	3.70	76	930236	155.90	UG	100
12) Vinyl acetate	4.96	43	957178	113.10	UG #	99
13) Methylene chloride	4.03	84	336075	128.68	UG	100
14) Acrylonitrile	4.32	53	371555	394.86	UG	99
15) tert-Butyl alcohol (TBA)	4.21	59	58432	196.44	UG	100
16) trans-1,2-Dichloroethene	4.36	96	456619	136.31	UG	92
17) Methyl tert-butyl ether (M	4.38	73	1255210	135.95	UG	100
18) 1,1-Dichloroethane	4.85	63	862969	137.24	UG	99
19) Diisopropyl ether (DIPE)	4.96	45	1583322	136.88	UG	100
20) cis-1,2-Dichloroethene	5.52	96	531219	141.44	UG	99
21) 2,2-Dichloropropane	5.53	77	446456	150.03	UG	91
22) 2-Butanone (MEK)	5.55	43	182607	142.88	UG	100
23) Bromochloromethane	5.80	128	265722	136.95	UG	99
25) Chloroform	5.89	83	877495	135.77	UG	100
26) 1,1,1-Trichloroethane	6.10	97	612568	151.61	UG	100
27) Carbon tetrachloride	6.29	117	484380	161.86	UG	100
28) 1,1-Dichloropropene	6.29	75	532589	151.63	UG	95
29) 1,2-Dichloroethane (EDC)	6.54	62	680297	132.05	UG	100
32) Benzene	6.52	78	1799829	136.43	UG	100
33) Trichloroethene	7.25	95	482468	154.71	UG	93
34) 1,2-Dichloropropane	7.49	63	473341	141.91	UG	100
35) Dibromomethane	7.62	93	292387	139.09	UG	93
36) 1,4-Dioxane	7.64	88	116905	4351.50	UG	98
37) Bromodichloromethane	7.80	83	665537	151.31	UG	100
38) 2-Chloroethyl vinyl ether	8.14	63	292781	150.08	UG	99
39) cis-1,3-Dichloropropene	8.30	75	755147	161.79	UG	99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	421459	157.42	UG	99
42) Toluene	8.70	92	1035827	140.37	UG	99
43) trans-1,3-Dichloropropene	8.93	75	692064	167.19	UG	99
44) 1,1,2-Trichloroethane	9.15	83	343381	142.81	UG	98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

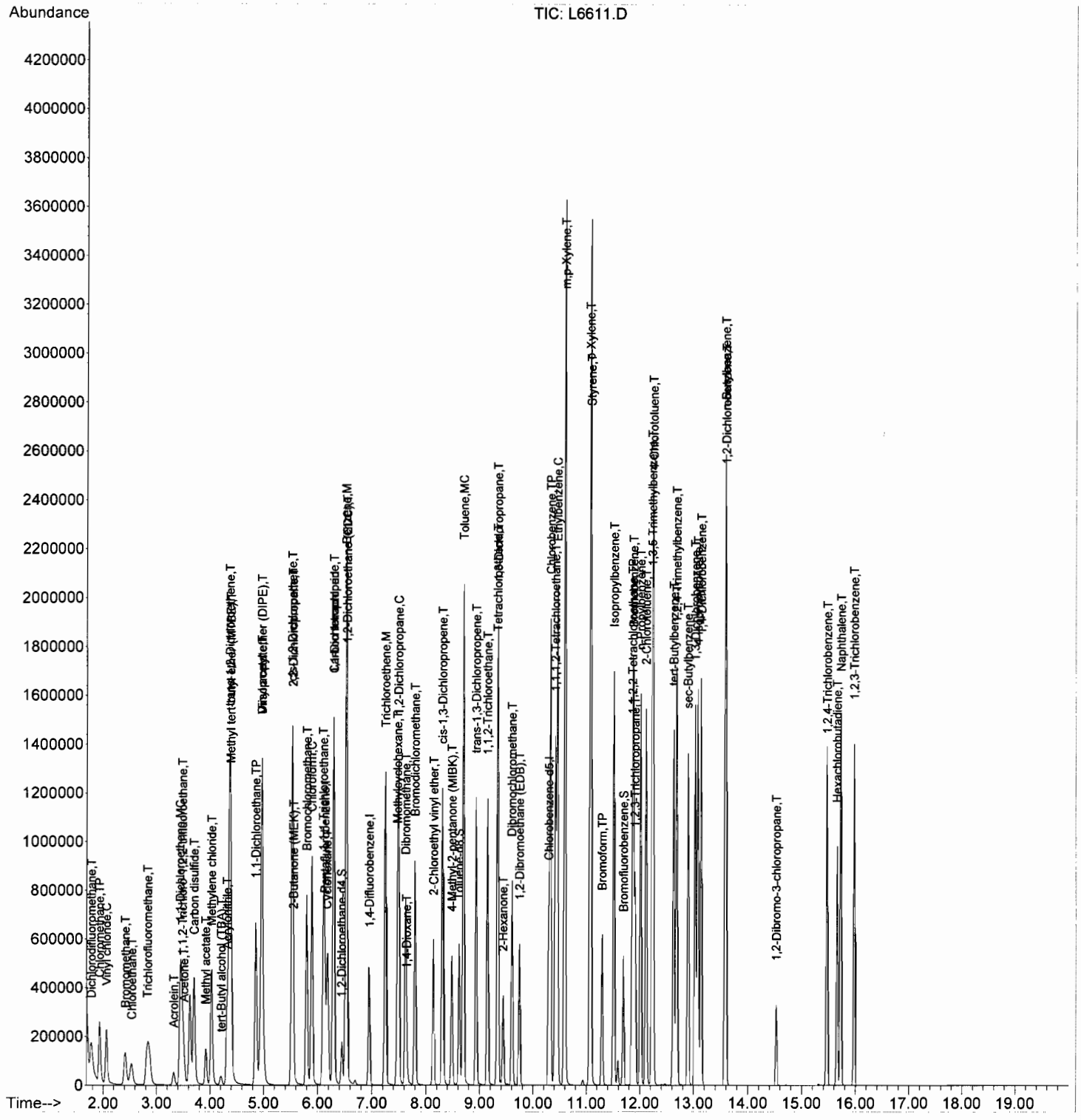
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	362196	147.56	UG	99
46) 1,3-Dichloropropane	9.34	76	681753	145.23	UG	100
47) 2-Hexanone	9.44	43	274380	182.08	UG	99
48) Dibromochloromethane	9.60	129	512049	164.28	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	437940	151.50	UG	100
51) Chlorobenzene	10.32	112	1184090	133.72	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	493957	151.08	UG	100
53) Ethylbenzene	10.46	91	1663227	147.80	UG	99
54) m,p-Xylene	10.60	106	1258493	286.06	UG	97
55) o-Xylene	11.06	106	647981	147.97	UG	97
56) Styrene	11.09	104	1209945	147.62	UG	99
57) Bromoform	11.30	173	352770	136.89	UG	100
58) Isopropylbenzene	11.51	105	1341408	157.73	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	479322	123.48	UG	100
61) Bromobenzene	11.88	156	542711	140.14	UG	100
62) 1,2,3-Trichloropropane	11.91	75	452571	134.43	UG	99
63) n-Propylbenzene	12.01	91	1454585	149.52	UG	100
64) 2-Chlorotoluene	12.11	91	1030447	140.76	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1152367	148.99	UG	100
66) 4-Chlorotoluene	12.24	91	1230325	137.19	UG	99
67) tert-Butylbenzene	12.63	119	902124	154.45	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	1219464	142.26	UG	100
69) sec-Butylbenzene	12.89	105	1201323	148.26	UG	99
70) 1,3-Dichlorobenzene	13.02	146	804657	134.15	UG	100
71) 4-Isopropyltoluene	13.07	119	1098378	148.34	UG	100
72) 1,4-Dichlorobenzene	13.14	146	841712	133.28	UG	100
73) n-Butylbenzene	13.58	92	501569	152.74	UG	96
74) 1,2-Dichlorobenzene	13.59	146	811639	132.91	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	89357	112.05	UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	506729	143.19	UG	99
77) Hexachlorobutadiene	15.65	225	224502	123.11	UG	100
78) Naphthalene	15.72	128	1311025	168.82	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	474490	138.81	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	177505	163.69	UG	93
81) Methyl acetate	3.92	43	250959	123.82	UG	98
82) Cyclohexane	6.17	56	344691m	165.44	UG	
83) Methylcyclohexane	7.47	55	214336	153.67	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	347689	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.94	114	492059	50.00	UG		-0.01
50) Chlorobenzene-d5	10.29	117	454144	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	142190	47.73	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.46%				
41) Toluene-d8	8.62	98	443856	50.93	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.86%				
59) Bromofluorobenzene	11.69	95	199429	50.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.77	85	304089m	189.29	UG		
3) Chloromethane	1.93	50	571412	213.55	UG		100
4) Vinyl chloride	2.06	62	477108	221.79	UG		100
5) Bromomethane	2.41	94	217863	137.79	UG		99
6) Chloroethane	2.53	64	211835	180.21	UG		100
7) Trichlorofluoromethane	2.83	101	414904	193.74	UG		100
8) Acrolein	3.32	56	79093	454.85	UG		99
9) 1,1-Dichloroethene	3.44	96	377014	196.81	UG		92
10) Acetone	3.51	43	106234	119.12	UG		100
11) Carbon disulfide	3.69	76	1262944	219.20	UG		100
12) Vinyl acetate	4.96	43	1284213	161.75	UG	#	99
13) Methylene chloride	4.02	84	465619	181.95	UG		100
14) Acrylonitrile	4.31	53	454543	496.14	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	82352	278.77	UG		100
16) trans-1,2-Dichloroethene	4.35	96	619869	184.48	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1777624	192.42	UG		100
18) 1,1-Dichloroethane	4.85	63	1204538	190.80	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	2187286	188.84	UG		100
20) cis-1,2-Dichloroethene	5.52	96	736184	194.03	UG		98
21) 2,2-Dichloropropane	5.53	77	593526	199.15	UG		89
22) 2-Butanone (MEK)	5.55	43	254445	193.64	UG		100
23) Bromochloromethane	5.80	128	372741	188.39	UG		99
25) Chloroform	5.89	83	1221177	186.26	UG		100
26) 1,1,1-Trichloroethane	6.10	97	845222	206.36	UG		100
27) Carbon tetrachloride	6.29	117	642375	213.82	UG		100
28) 1,1-Dichloropropene	6.29	75	712425	203.10	UG		94
29) 1,2-Dichloroethane (EDC)	6.53	62	952707	182.22	UG		100
32) Benzene	6.52	78	2472273	183.43	UG		100
33) Trichloroethene	7.25	95	679672	210.10	UG		94
34) 1,2-Dichloropropane	7.49	63	672214	197.63	UG		100
35) Dibromomethane	7.62	93	413198	191.01	UG		93
36) 1,4-Dioxane	7.64	88	140956	5023.89	UG		99
37) Bromodichloromethane	7.80	83	949898	209.27	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	423767	212.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	1088003	227.51	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	601609	220.03	UG		99
42) Toluene	8.70	92	1428367	188.76	UG		99
43) trans-1,3-Dichloropropene	8.93	75	981927	230.90	UG		99
44) 1,1,2-Trichloroethane	9.15	83	485818	195.68	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

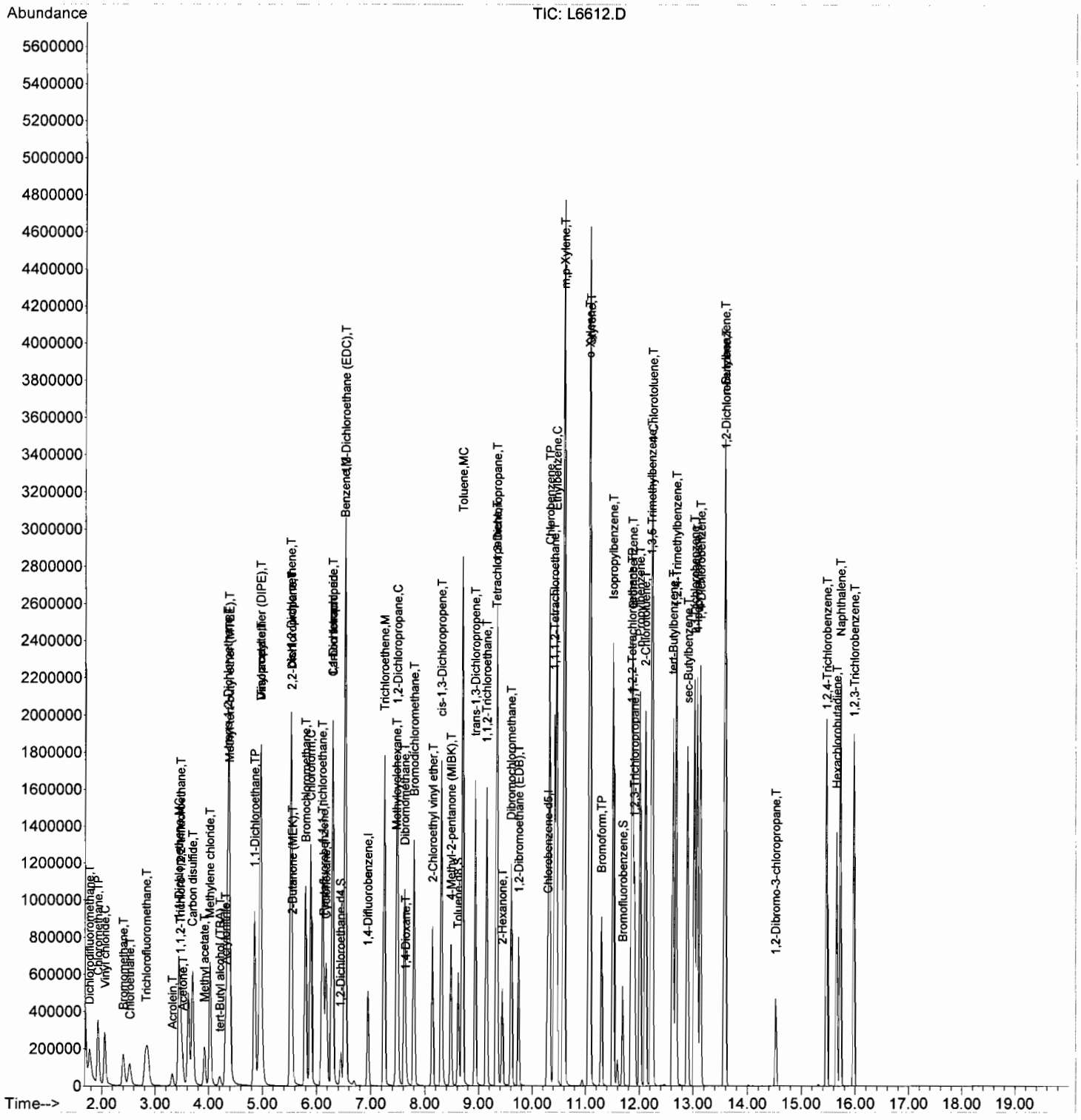
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	495262	195.74	UG	99
46) 1,3-Dichloropropane	9.34	76	963914	199.67	UG	100
47) 2-Hexanone	9.44	43	393991	245.05	UG	99
48) Dibromochloromethane	9.60	129	728089	224.80	UG	100
49) 1,2-Dibromoethane (EDB)	9.74	107	623310	207.88	UG	100
51) Chlorobenzene	10.32	112	1663788	185.14	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	688253	206.51	UG	99
53) Ethylbenzene	10.46	91	2309390	203.59	UG	99
54) m,p-Xylene	10.60	106	1711584	387.46	UG	98
55) o-Xylene	11.06	106	884103	201.35	UG	98
56) Styrene	11.09	104	1657866	201.58	UG	99
57) Bromoform	11.30	173	505262	191.39	UG	100
58) Isopropylbenzene	11.51	105	1877638	220.54	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	655689	168.61	UG	100
61) Bromobenzene	11.88	156	753587	190.89	UG	100
62) 1,2,3-Trichloropropane	11.91	75	632624	185.71	UG	99
63) n-Propylbenzene	12.01	91	2011676	205.38	UG	100
64) 2-Chlorotoluene	12.11	91	1449521	196.63	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1589689	203.77	UG	100
66) 4-Chlorotoluene	12.24	91	1713614	189.50	UG	99
67) tert-Butylbenzene	12.63	119	1245051	211.33	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	1699174	196.33	UG	100
69) sec-Butylbenzene	12.90	105	1670826	205.71	UG	99
70) 1,3-Dichlorobenzene	13.02	146	1141984	187.11	UG	100
71) 4-Isopropyltoluene	13.07	119	1527548	204.91	UG	100
72) 1,4-Dichlorobenzene	13.14	146	1171330	182.00	UG	100
73) n-Butylbenzene	13.58	92	686586	209.19	UG	96
74) 1,2-Dichlorobenzene	13.59	146	1115093	179.44	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	126115	155.00	UG	83
76) 1,2,4-Trichlorobenzene	15.47	180	722451	199.52	UG	99
77) Hexachlorobutadiene	15.65	225	309785	165.83	UG	100
78) Naphthalene	15.72	128	1833303	231.30	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	684454	194.55	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	266234m	256.23	UG	
81) Methyl acetate	3.92	43	349724	171.75	UG	98
82) Cyclohexane	6.17	56	473454m	244.90	UG	
83) Methylcyclohexane	7.47	55	251092	185.40	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.198	0.236	-19.2	113	0.00
3	TP	Chloromethane	0.385	0.431	-11.9	108	0.00
4	C	Vinyl chloride	0.332	0.383	-15.4	104	0.00
5	T	Bromomethane	0.206	0.224	-8.7	114	-0.01
6	T	Chloroethane	0.169	0.181	-7.1	107	0.00
7	T	Trichlorofluoromethane	0.374	0.435	-16.3	120	-0.01
8	T	Acrolein	0.024	0.022	8.3	99	0.00
9	MC	1,1-Dichloroethene	0.275	0.306	-11.3	102	0.00
10	T	Acetone	0.081	0.079	2.5	103	0.00
11	T	Carbon disulfide	0.858	1.000	-16.6	105	0.00
12	T	Vinyl acetate	1.142	1.151	-0.8	111	0.00
13	T	Methylene chloride	0.368	0.354	3.8	103	0.00
14	T	Acrylonitrile	0.132	0.111	15.9	84	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.030	-3.4	102	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	99	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.291	2.9	101	0.00
18	TP	1,1-Dichloroethane	0.908	0.885	2.5	100	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.651	0.9	100	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.546	0.0	99	0.00
21	T	2,2-Dichloropropane	0.429	0.501	-16.8	110	0.00
22	T	2-Butanone (MEK)	0.189	0.191	-1.1	100	0.00
23	T	Bromochloromethane	0.285	0.273	4.2	100	0.00
25	C	Chloroform	0.943	0.896	5.0	99	0.00
26	T	1,1,1-Trichloroethane	0.589	0.668	-13.4	105	0.00
27	T	Carbon tetrachloride	0.448	0.526	-17.4	104	0.01
28	T	1,1-Dichloropropene	0.504	0.562	-11.5	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.705	6.3	99	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.417	2.6	98	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
32	M	Benzene	1.370	1.325	3.3	99	0.00
33	M	Trichloroethene	0.329	0.330	-0.3	93	0.00
34	C	1,2-Dichloropropane	0.346	0.348	-0.6	99	0.00
35	T	Dibromomethane	0.220	0.213	3.2	99	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	95	0.01
37	T	Bromodichloromethane	0.461	0.483	-4.8	99	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.215	-5.9	99	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.551	-13.4	99	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.310	-11.5	99	0.00
41	S	Toluene-d8	0.885	0.902	-1.9	98	0.00
42	MC	Toluene	0.769	0.760	1.2	98	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.503	-16.4	99	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	100	0.00
45	T	Tetrachloroethene	0.257	0.271	-5.4	98	0.00
46	T	1,3-Dichloropropane	0.491	0.504	-2.6	100	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	99	0.00
48	T	Dibromochloromethane	0.329	0.369	-12.2	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.319	-4.6	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
51	TP	Chlorobenzene	0.989	0.921	6.9	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.379	-3.3	99	0.00
53	C	Ethylbenzene	1.249	1.305	-4.5	98	0.00
54	T	m,p-Xylene	0.486	0.504	-3.7	99	0.00
55	T	o-Xylene	0.483	0.523	-8.3	99	0.00
56	T	Styrene	0.905	0.964	-6.5	97	0.00
57	TP	Bromoform	0.291	0.270	7.2	101	0.00
58	T	Isopropylbenzene	0.937	1.069	-14.1	100	0.00
59	S	Bromofluorobenzene	0.437	0.448	-2.5	100	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.410	4.2	107	0.00
61	T	Bromobenzene	0.435	0.425	2.3	99	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	101	0.00
63	T	n-Propylbenzene	1.078	1.158	-7.4	101	0.00
64	T	2-Chlorotoluene	0.812	0.817	-0.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.903	-5.1	100	0.00
66	T	4-Chlorotoluene	0.996	0.968	2.8	99	0.00
67	T	tert-Butylbenzene	0.649	0.709	-9.2	104	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.951	0.2	101	0.00
69	T	sec-Butylbenzene	0.894	0.952	-6.5	102	0.00
70	T	1,3-Dichlorobenzene	0.672	0.632	6.0	101	0.00
71	T	4-Isopropyltoluene	0.821	0.862	-5.0	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.656	7.5	100	0.00
73	T	n-Butylbenzene	0.361	0.394	-9.1	103	0.00
74	T	1,2-Dichlorobenzene	0.684	0.638	6.7	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.067	-11.7	101	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.375	-8.7	102	0.00
77	T	Hexachlorobutadiene	0.165	0.187	-13.3	109	0.00
78	T	Naphthalene	0.847	0.979	-15.6	102	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.347	-4.5	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.164	-18.0	114	-0.01
81	T	Methyl acetate	0.204	0.203	0.5	105	0.00
82	T	Cyclohexane	0.256	0.292	-14.1	108	0.00
83	T	Methylcyclohexane	0.163	0.193	-18.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Tue Feb 17 14:03:27 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	324200	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	455058	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	426508	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	135106	48.63	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.26%				
41) Toluene-d8	8.62	98	410628	50.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.90%				
59) Bromofluorobenzene	11.69	95	191250	51.30	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	153154m	119.19	UG		
3) Chloromethane	1.93	50	279647	112.08	UG		100
4) Vinyl chloride	2.06	62	248132	115.40	UG		100
5) Bromomethane	2.42	94	145361	108.72	UG		99
6) Chloroethane	2.54	64	117664	107.35	UG		99
7) Trichlorofluoromethane	2.83	101	281762	116.34	UG		100
8) Acrolein	3.33	56	43324	274.92	UG		99
9) 1,1-Dichloroethene	3.45	96	198435	111.09	UG		94
10) Acetone	3.52	43	51407	97.46	UG		100
11) Carbon disulfide	3.70	76	648362	116.60	UG		100
12) Vinyl acetate	4.96	43	746390	100.81	UG	#	99
13) Methylene chloride	4.03	84	229842	96.32	UG		100
14) Acrylonitrile	4.32	53	216498	253.43	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	38272	201.59	UG		100
16) trans-1,2-Dichloroethene	4.36	96	310892	99.23	UG		92
17) Methyl tert-butyl ether (M	4.38	73	836791	97.14	UG		100
18) 1,1-Dichloroethane	4.86	63	573848	97.48	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1070219	99.09	UG		100
20) cis-1,2-Dichloroethene	5.53	96	354243	100.13	UG		99
21) 2,2-Dichloropropane	5.53	77	324539	116.79	UG		96
22) 2-Butanone (MEK)	5.55	43	123684	100.95	UG		99
23) Bromochloromethane	5.80	128	176968	95.92	UG		99
25) Chloroform	5.90	83	580962	95.03	UG		100
26) 1,1,1-Trichloroethane	6.11	97	433067	113.39	UG		100
27) Carbon tetrachloride	6.30	117	341234	117.36	UG		100
28) 1,1-Dichloropropene	6.29	75	364272	111.37	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	456834	93.71	UG		100
32) Benzene	6.53	78	1205529	96.72	UG		100
33) Trichloroethene	7.25	95	300022	100.28	UG		93
34) 1,2-Dichloropropane	7.49	63	316367	100.58	UG		100
35) Dibromomethane	7.62	93	194003	96.97	UG		93
36) 1,4-Dioxane	7.65	88	78353	3019.69	UG		99
37) Bromodichloromethane	7.80	83	439343	104.66	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	195483	105.96	UG		99
39) cis-1,3-Dichloropropene	8.30	75	501441	113.38	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	282039	111.54	UG		100
42) Toluene	8.70	92	691395	98.80	UG		99
43) trans-1,3-Dichloropropene	8.93	75	457480	116.32	UG		99
44) 1,1,2-Trichloroethane	9.15	83	230613	100.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

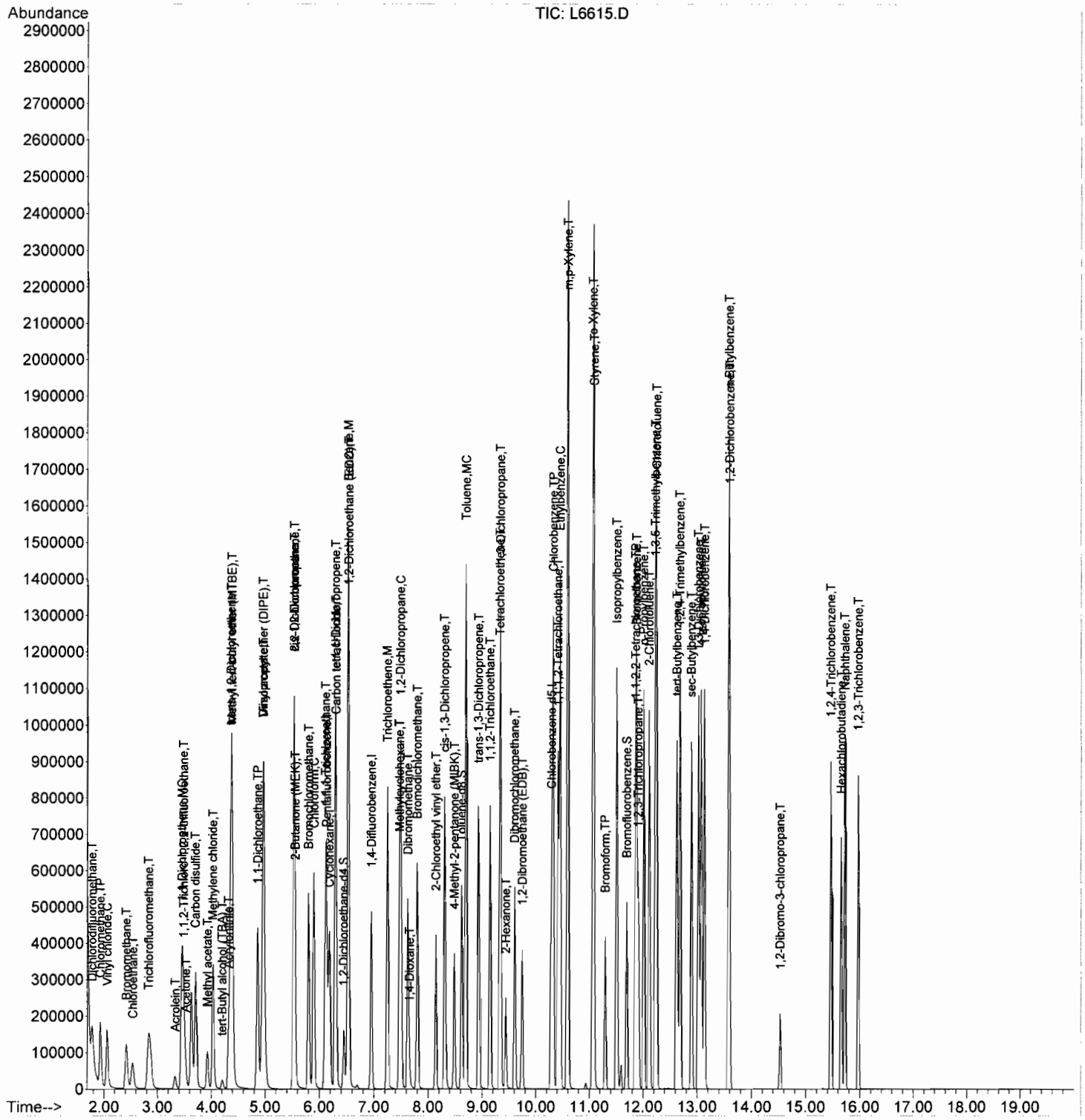
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	246473	105.33 UG	98
46) 1,3-Dichloropropane	9.34	76	459129	102.84 UG	100
47) 2-Hexanone	9.44	43	180312	118.09 UG	99
48) Dibromochloromethane	9.60	129	335763	112.10 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	290638	104.81 UG	100
51) Chlorobenzene	10.32	112	785293	93.05 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	323215	103.26 UG	99
53) Ethylbenzene	10.46	91	1113113	104.49 UG	99
54) m,p-Xylene	10.60	106	860185	207.34 UG	96
55) o-Xylene	11.06	106	446318	108.23 UG	96
56) Styrene	11.09	104	822727	106.52 UG	99
57) Bromoform	11.30	173	230374	92.92 UG	100
58) Isopropylbenzene	11.51	105	912035	114.07 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349552	95.71 UG	100
61) Bromobenzene	11.88	156	362773	97.85 UG	100
62) 1,2,3-Trichloropropane	11.91	75	307882	96.24 UG	99
63) n-Propylbenzene	12.01	91	988101	107.41 UG	100
64) 2-Chlorotoluene	12.11	91	696626	100.62 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770246	105.13 UG	100
66) 4-Chlorotoluene	12.24	91	825829	97.24 UG	99
67) tert-Butylbenzene	12.63	119	604701	109.29 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	810795	99.75 UG	100
69) sec-Butylbenzene	12.89	105	811907	106.44 UG	99
70) 1,3-Dichlorobenzene	13.02	146	539274	94.08 UG	100
71) 4-Isopropyltoluene	13.07	119	735159	105.01 UG	100
72) 1,4-Dichlorobenzene	13.14	146	559709	92.60 UG	100
73) n-Butylbenzene	13.58	92	335894	108.97 UG	96
74) 1,2-Dichlorobenzene	13.59	146	544194	93.25 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	56934	111.51 UG	85
76) 1,2,4-Trichlorobenzene	15.46	180	319645	108.67 UG	99
77) Hexachlorobutadiene	15.65	225	159520	113.57 UG	100
78) Naphthalene	15.72	128	835014	115.52 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	296326	104.73 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	139981	118.06 UG	92
81) Methyl acetate	3.93	43	173324	99.43 UG	98
82) Cyclohexane	6.18	56	249268	114.07 UG	100
83) Methylcyclohexane	7.47	55	165056	118.38 UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.198	0.235	-18.7	118	0.00
3	TP	Chloromethane	0.385	0.436	-13.2	114	0.00
4	C	Vinyl chloride	0.332	0.393	-18.4	111	0.00
5	T	Bromomethane	0.206	0.205	0.5	109	-0.01
6	T	Chloroethane	0.169	0.189	-11.8	117	0.00
7	T	Trichlorofluoromethane	0.374	0.360	3.7	104	0.00
8	T	Acrolein	0.024	0.028	-16.7	131	0.00
9	MC	1,1-Dichloroethene	0.275	0.317	-15.3	110	0.00
10	T	Acetone	0.081	0.090	-11.1	123	0.00
11	T	Carbon disulfide	0.858	1.026	-19.6	113	0.00
12	T	Vinyl acetate	1.142	1.201	-5.2	122	0.00
13	T	Methylene chloride	0.368	0.358	2.7	109	0.00
14	T	Acrylonitrile	0.132	0.157	-18.9	125	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.033	-13.8	118	0.00
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	103	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.327	0.2	109	0.01
18	TP	1,1-Dichloroethane	0.908	0.911	-0.3	108	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.769	-6.2	112	0.01
20	T	cis-1,2-Dichloroethene	0.546	0.540	1.1	103	0.00
21	T	2,2-Dichloropropane	0.429	0.475	-10.7	109	0.00
22	T	2-Butanone (MEK)	0.189	0.204	-7.9	112	0.00
23	T	Bromochloromethane	0.285	0.266	6.7	102	0.00
25	C	Chloroform	0.943	0.891	5.5	103	0.00
26	T	1,1,1-Trichloroethane	0.589	0.642	-9.0	105	0.00
27	T	Carbon tetrachloride	0.448	0.509	-13.6	105	0.01
28	T	1,1-Dichloropropene	0.504	0.572	-13.5	106	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.700	6.9	103	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.418	2.3	103	0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
32	M	Benzene	1.370	1.333	2.7	103	0.00
33	M	Trichloroethene	0.329	0.334	-1.5	98	0.00
34	C	1,2-Dichloropropane	0.346	0.353	-2.0	104	0.00
35	T	Dibromomethane	0.220	0.208	5.5	101	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	106	0.00
37	T	Bromodichloromethane	0.461	0.475	-3.0	102	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.211	-3.9	101	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.545	-12.1	102	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.315	-13.3	105	0.00
41	S	Toluene-d8	0.885	0.898	-1.5	101	0.00
42	MC	Toluene	0.769	0.753	2.1	101	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.490	-13.4	101	0.00
44	T	1,1,2-Trichloroethane	0.252	0.246	2.4	101	0.00
45	T	Tetrachloroethene	0.257	0.269	-4.7	102	0.00
46	T	1,3-Dichloropropane	0.491	0.495	-0.8	102	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	102	0.00
48	T	Dibromochloromethane	0.329	0.355	-7.9	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.310	-1.6	100	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
51	TP	Chlorobenzene	0.989	0.899	9.1	101	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.373	-1.6	102	0.00
53	C	Ethylbenzene	1.249	1.291	-3.4	102	0.00
54	T	m,p-Xylene	0.486	0.491	-1.0	100	0.00
55	T	o-Xylene	0.483	0.501	-3.7	99	0.00
56	T	Styrene	0.905	0.940	-3.9	99	0.00
57	TP	Bromoform	0.291	0.311	-6.9	121	0.00
58	T	Isopropylbenzene	0.937	1.036	-10.6	101	0.00
59	S	Bromofluorobenzene	0.437	0.445	-1.8	104	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.392	8.4	107	0.00
61	T	Bromobenzene	0.435	0.413	5.1	101	0.00
62	T	1,2,3-Trichloropropane	0.375	0.351	6.4	102	0.00
63	T	n-Propylbenzene	1.078	1.108	-2.8	101	0.00
64	T	2-Chlorotoluene	0.812	0.783	3.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.862	-0.3	100	0.00
66	T	4-Chlorotoluene	0.996	0.932	6.4	100	0.00
67	T	tert-Butylbenzene	0.649	0.675	-4.0	103	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.913	4.2	101	0.01
69	T	sec-Butylbenzene	0.894	0.910	-1.8	102	0.01
70	T	1,3-Dichlorobenzene	0.672	0.600	10.7	100	0.00
71	T	4-Isopropyltoluene	0.821	0.823	-0.2	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.623	12.1	99	0.00
73	T	n-Butylbenzene	0.361	0.370	-2.5	101	0.00
74	T	1,2-Dichlorobenzene	0.684	0.608	11.1	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.066	-10.0	103	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.353	-2.3	100	0.01
77	T	Hexachlorobutadiene	0.165	0.171	-3.6	104	0.00
78	T	Naphthalene	0.847	0.922	-8.9	100	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.324	2.4	98	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.150	-7.9	109	0.00
81	T	Methyl acetate	0.204	0.224	-9.8	121	0.00
82	T	Cyclohexane	0.256	0.285	-11.3	110	0.00
83	T	Methylcyclohexane	0.163	0.186	-14.1	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Thu Feb 19 16:11:28 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	339787	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	473189	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	445652	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.46	65	142049	48.79	UG		0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.58%				
41) Toluene-d8	8.62	98	424731	50.68	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.36%				
59) Bromofluorobenzene	11.69	95	198520	50.97	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.94%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	159918m	118.75	UG		
3) Chloromethane	1.93	50	296192m	113.27	UG		
4) Vinyl chloride	2.06	62	267127m	118.53	UG		
5) Bromomethane	2.42	94	139145	99.30	UG		98
6) Chloroethane	2.54	64	128710	112.04	UG		100
7) Trichlorofluoromethane	2.84	101	244544	96.34	UG		100
8) Acrolein	3.33	56	57395m	347.50	UG		
9) 1,1-Dichloroethene	3.45	96	215543	115.14	UG		96
10) Acetone	3.52	43	61420m	111.10	UG		
11) Carbon disulfide	3.70	76	697303	119.65	UG		100
12) Vinyl acetate	4.96	43	816083	105.17	UG	#	99
13) Methylene chloride	4.03	84	243413	97.33	UG		100
14) Acrylonitrile	4.32	53	319797	357.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	44519	223.74	UG		100
16) trans-1,2-Dichloroethene	4.36	96	325415	99.10	UG		94
17) Methyl tert-butyl ether (M	4.40	73	901735	99.88	UG		100
18) 1,1-Dichloroethane	4.86	63	618948	100.32	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	1201980	106.19	UG		100
20) cis-1,2-Dichloroethene	5.53	96	367200	99.03	UG		99
21) 2,2-Dichloropropane	5.53	77	322828	110.84	UG		94
22) 2-Butanone (MEK)	5.55	43	138601m	107.93	UG		
23) Bromochloromethane	5.80	128	180716	93.46	UG		100
25) Chloroform	5.90	83	605265	94.46	UG		100
26) 1,1,1-Trichloroethane	6.11	97	436238	108.98	UG		99
27) Carbon tetrachloride	6.30	117	345702	113.44	UG		100
28) 1,1-Dichloropropene	6.29	75	388398	113.30	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	475712	93.10	UG		100
32) Benzene	6.53	78	1261297	97.31	UG		100
33) Trichloroethene	7.25	95	316420	101.71	UG		93
34) 1,2-Dichloropropane	7.49	63	333891	102.08	UG		100
35) Dibromomethane	7.62	93	197064	94.73	UG		93
36) 1,4-Dioxane	7.64	88	87541m	3244.52	UG		
37) Bromodichloromethane	7.80	83	449543	102.99	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	199611	104.05	UG		99
39) cis-1,3-Dichloropropene	8.30	75	515996	112.20	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	297944m	113.32	UG		
42) Toluene	8.70	92	712862	97.96	UG		99
43) trans-1,3-Dichloropropene	8.93	75	463395	113.31	UG		99
44) 1,1,2-Trichloroethane	9.15	83	233061	97.62	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

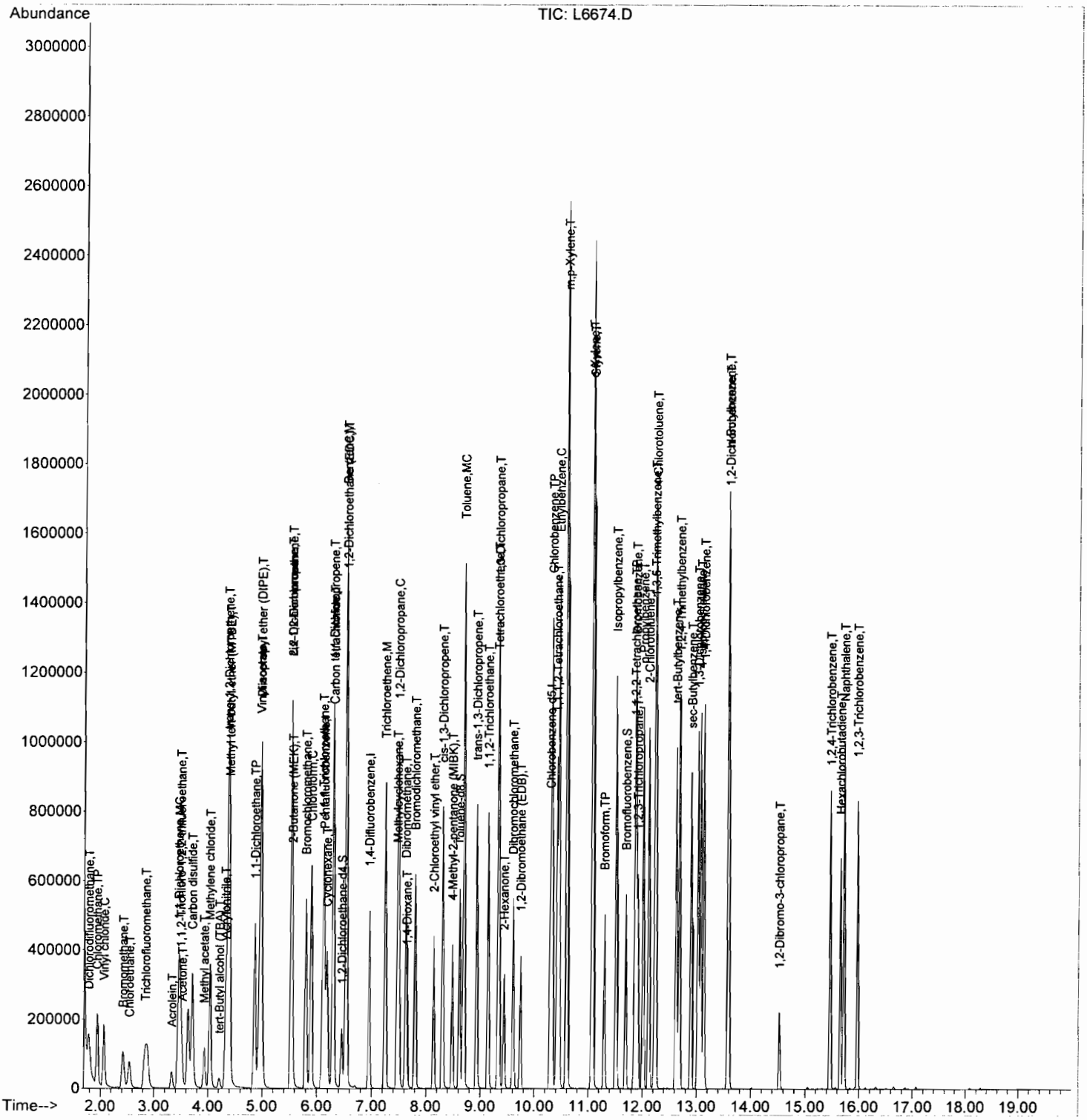
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	254284	104.51	UG	98
46) 1,3-Dichloropropane	9.34	76	468572	100.93	UG	100
47) 2-Hexanone	9.44	43	186986m	117.77	UG	
48) Dibromochloromethane	9.60	129	335786	107.81	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293590	101.82	UG	100
51) Chlorobenzene	10.32	112	801563	90.89	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	332873	101.78	UG	99
53) Ethylbenzene	10.46	91	1150555	103.37	UG	99
54) m,p-Xylene	10.60	106	874440	201.73	UG	97
55) o-Xylene	11.06	106	446825	103.70	UG	97
56) Styrene	11.09	104	837983	103.83	UG	99
57) Bromoform	11.30	173	277474	107.11	UG	100
58) Isopropylbenzene	11.51	105	923413	110.53	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349318	91.54	UG	100
61) Bromobenzene	11.88	156	368251	95.06	UG	100
62) 1,2,3-Trichloropropane	11.91	75	312635	93.52	UG	99
63) n-Propylbenzene	12.01	91	987623	102.75	UG	100
64) 2-Chlorotoluene	12.11	91	697537	96.43	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	768006	100.32	UG	100
66) 4-Chlorotoluene	12.24	91	830914	93.64	UG	99
67) tert-Butylbenzene	12.63	119	601434	104.03	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	813581	95.79	UG	100
69) sec-Butylbenzene	12.90	105	810826	101.73	UG	99
70) 1,3-Dichlorobenzene	13.02	146	534814	89.29	UG	100
71) 4-Isopropyltoluene	13.07	119	733878	100.32	UG	100
72) 1,4-Dichlorobenzene	13.14	146	555617	87.98	UG	100
73) n-Butylbenzene	13.58	92	330036	102.47	UG	96
74) 1,2-Dichlorobenzene	13.59	146	542074	88.89	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	58398	109.47	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	314189	102.22	UG	100
77) Hexachlorobutadiene	15.65	225	152322	103.79	UG	100
78) Naphthalene	15.72	128	822222	108.87	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	288938	97.73	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	133714	107.93	UG	94
81) Methyl acetate	3.93	43	199684	109.63	UG	99
82) Cyclohexane	6.18	56	253603	111.07	UG	99
83) Methylcyclohexane	7.47	55	166176	114.07	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



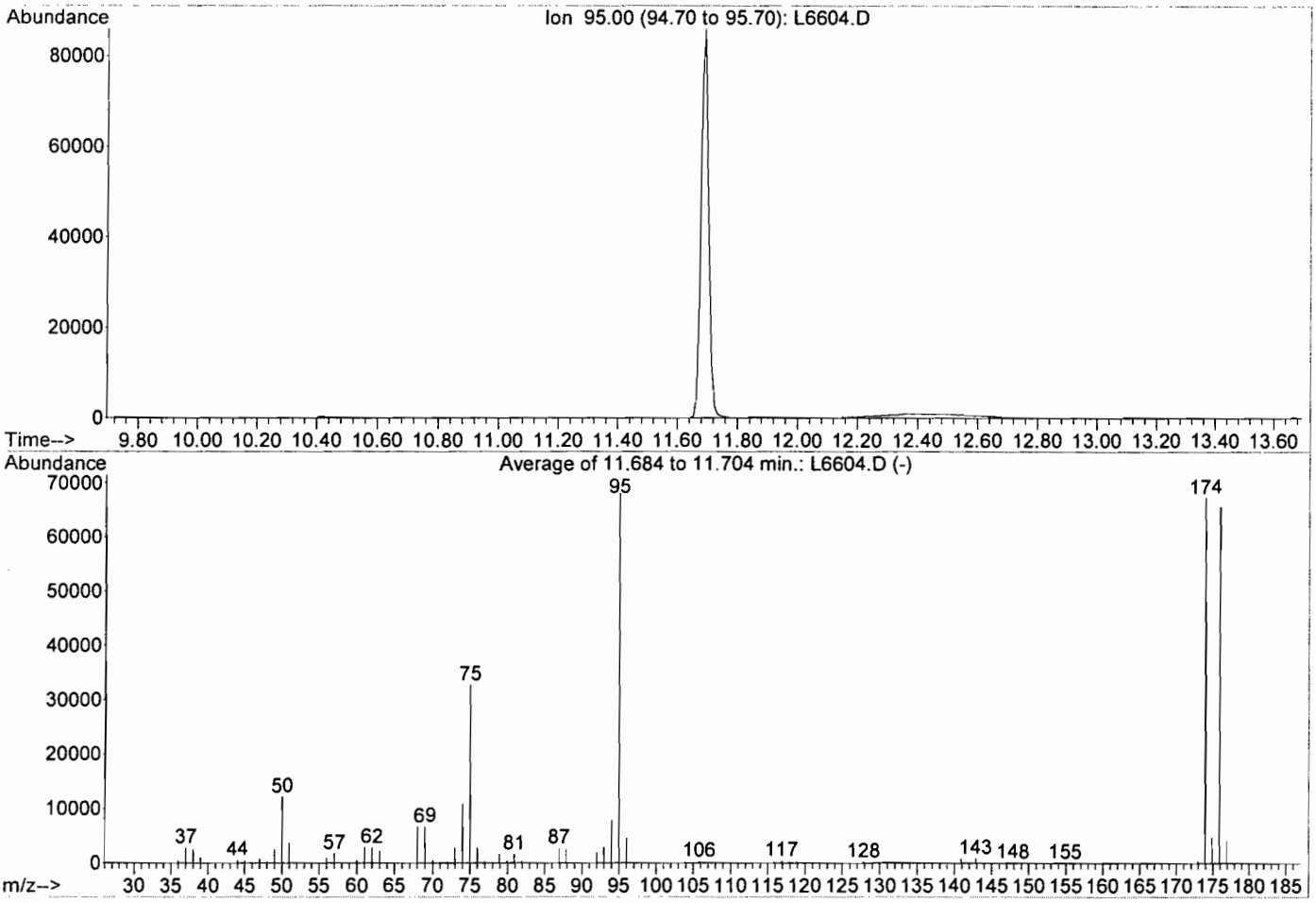
VOLATILE ORGANICS RAW QC DATA

BFB

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6604.D
Acq On : 13 Feb 2015 10:29
Operator : MEI
Sample : BFB150213
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12137	PASS
75	95	30	60	48.1	32720	PASS
95	95	100	100	100.0	68045	PASS
96	95	5	9	6.7	4577	PASS
173	174	0.00	2	0.6	434	PASS
174	95	50	100	99.1	67400	PASS
175	174	5	9	7.1	4785	PASS
176	174	95	101	97.4	65629	PASS
177	176	5	9	6.3	4113	PASS

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	470	51.00	3639	70.00	510	81.90	341
37.00	2748	52.00	151	71.95	221	86.90	2722
38.00	2473	56.00	947	73.00	2746	87.90	2497
39.00	993	57.00	1767	74.00	10841	90.90	180
40.00	71	60.00	537	75.00	32720	92.00	1898
44.00	515	61.00	2808	76.00	2838	93.00	2852
45.00	487	62.00	2810	76.95	351	94.00	7830
47.00	799	63.00	2199	77.95	188	95.00	68045
48.00	298	64.05	174	78.90	1658	96.00	4577
49.00	2523	68.00	6523	79.90	458	103.90	220
50.00	12137	69.00	6609	80.90	1660	105.85	298

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

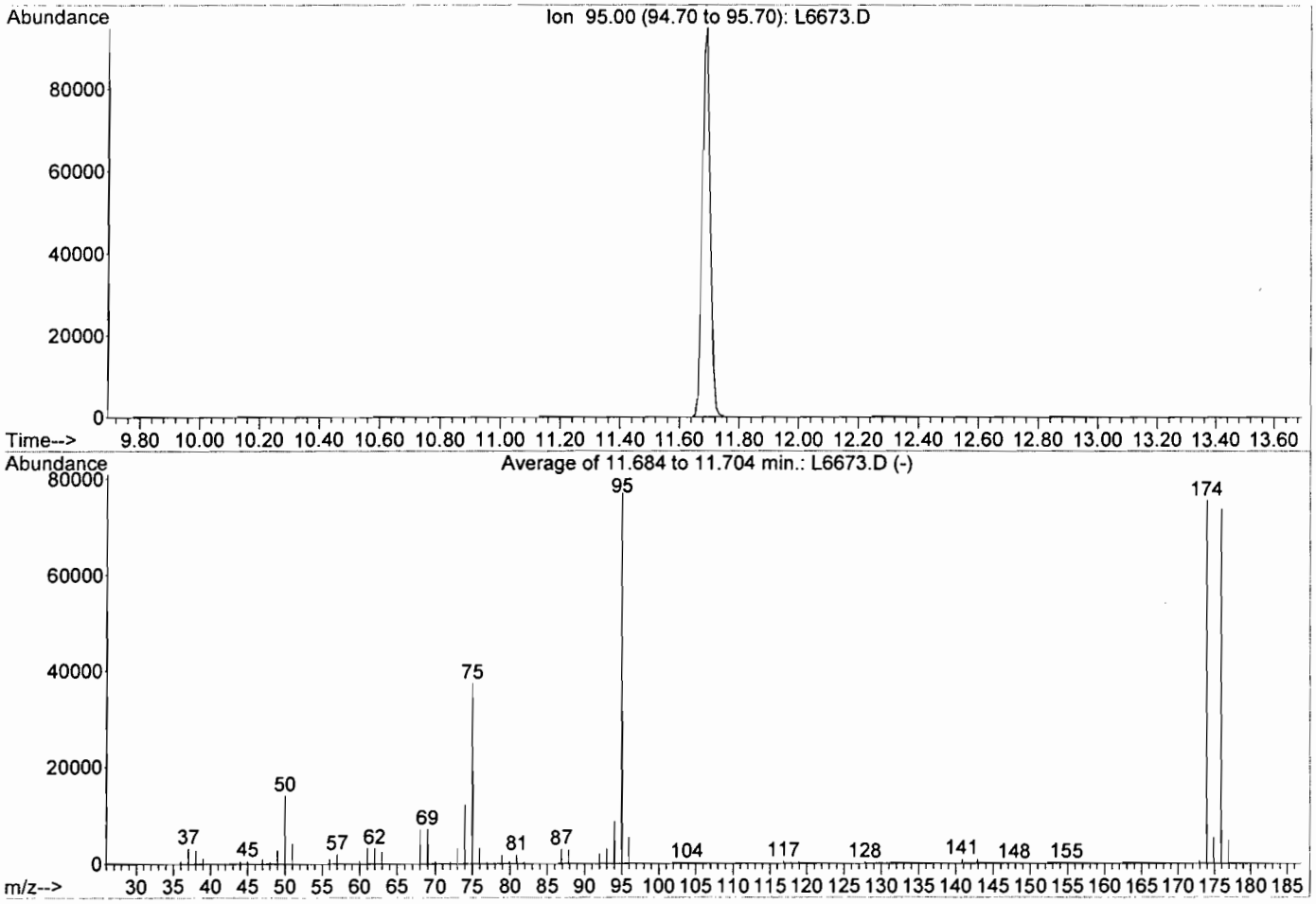
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.85	234	173.90	67400				
116.90	441	174.90	4785				
117.90	205	175.90	65629				
118.90	362	176.90	4113				
127.85	262						
129.85	212						
140.90	793						
142.90	876						
147.90	85						
154.90	80						
172.95	434						

BFB

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6673.D
Acq On : 19 Feb 2015 10:51
Operator : MEI
Sample : BFB150219
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	14138	PASS
75	95	30	60	48.7	37506	PASS
95	95	100	100	100.0	77018	PASS
96	95	5	9	7.0	5424	PASS
173	174	0.00	2	0.7	548	PASS
174	95	50	100	98.1	75554	PASS
175	174	5	9	7.1	5396	PASS
176	174	95	101	97.5	73637	PASS
177	176	5	9	6.6	4841	PASS

Average of 11.684 to 11.704 min.: L6673.D
BFB150219
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	556	51.00	4235	68.00	7183	79.90	490
37.00	3229	51.95	168	69.00	7210	80.90	1823
38.00	2852	55.00	76	70.00	544	81.90	362
39.00	1167	56.00	978	72.00	377	86.90	3029
39.95	142	57.00	1958	73.00	3119	87.90	2915
44.00	564	60.00	620	74.00	12240	90.90	175
45.00	638	61.00	3251	75.00	37506	92.00	2091
47.00	989	62.00	3263	76.00	3197	93.00	3044
48.00	399	63.00	2500	76.95	309	94.00	8737
49.00	2886	64.00	202	77.90	254	95.00	77018
50.00	14138	66.95	142	78.90	1735	96.00	5424

Average of 11.684 to 11.704 min.: L6673.D
BFB150219
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.85	244	154.85	229				
105.90	236	171.90	91				
115.80	208	172.95	548				
116.85	474	173.90	75554				
117.85	274	174.90	5396				
118.90	401	175.90	73637				
127.85	302	176.90	4841				
129.85	208						
140.85	895						
142.90	873						
147.85	173						

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.050	0.034
Chloromethane	ND		0.050	0.025
Vinyl chloride	ND		0.050	0.023
Bromomethane	ND		0.050	0.034
Chloroethane	ND		0.050	0.041
Trichlorofluoromethane	ND		0.050	0.041
1,1-Dichloroethene	ND		0.050	0.025
Acetone	ND		0.100	0.072
Carbon disulfide	ND		0.050	0.025
Methylene chloride	ND		0.100	0.100
trans-1,2-Dichloroethene	ND		0.050	0.027
Methyl tert-butyl ether (MTBE)	ND		0.050	0.025
1,1-Dichloroethane	ND		0.050	0.018
cis-1,2-Dichloroethene	ND		0.050	0.024
2-Butanone (MEK)	ND		0.050	0.044
Bromochloromethane	ND		0.050	0.032
Chloroform	ND		0.050	0.026
1,1,1-Trichloroethane	ND		0.050	0.024
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
1,2-Dichloropropane	ND		0.050	0.028
1,4-Dioxane	ND		10.0	4.14
Bromodichloromethane	ND		0.050	0.026
cis-1,3-Dichloropropene	ND		0.050	0.022
4-Methyl-2-pentanone (MIBK)	ND		0.050	0.043

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.019
trans-1,3-Dichloropropene	ND		0.050	0.021
1,1,2-Trichloroethane	ND		0.050	0.032
Tetrachloroethene	ND		0.050	0.025
2-Hexanone	ND		0.050	0.035
Dibromochloromethane	ND		0.050	0.026
1,2-Dibromoethane (EDB)	ND		0.050	0.034
Chlorobenzene	ND		0.050	0.020
Ethylbenzene	ND		0.050	0.021
Total Xylenes	ND		0.100	0.052
Styrene	ND		0.050	0.019
Bromoform	ND		0.050	0.033
Isopropylbenzene	ND		0.050	0.029
1,1,2,2-Tetrachloroethane	ND		0.050	0.035
1,3-Dichlorobenzene	ND		0.050	0.021
1,4-Dichlorobenzene	ND		0.050	0.021
1,2-Dichlorobenzene	ND		0.050	0.020
1,2-Dibromo-3-chloropropane	ND		0.100	0.047
1,2,4-Trichlorobenzene	ND		0.050	0.024
1,2,3-Trichlorobenzene	ND		0.050	0.023
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.049
Methyl acetate	ND		0.050	0.045
Cyclohexane	ND		0.050	0.041
Methylcyclohexane	ND		0.050	0.039
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.022

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 19 16:11:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	311809	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	437922	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	394523	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	135416	50.68	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 101.36%			
41) Toluene-d8	8.62	98	380624	49.08	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.16%			
59) Bromofluorobenzene	11.69	95	154848	44.91	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 89.82%			

Target Compounds	Qvalue

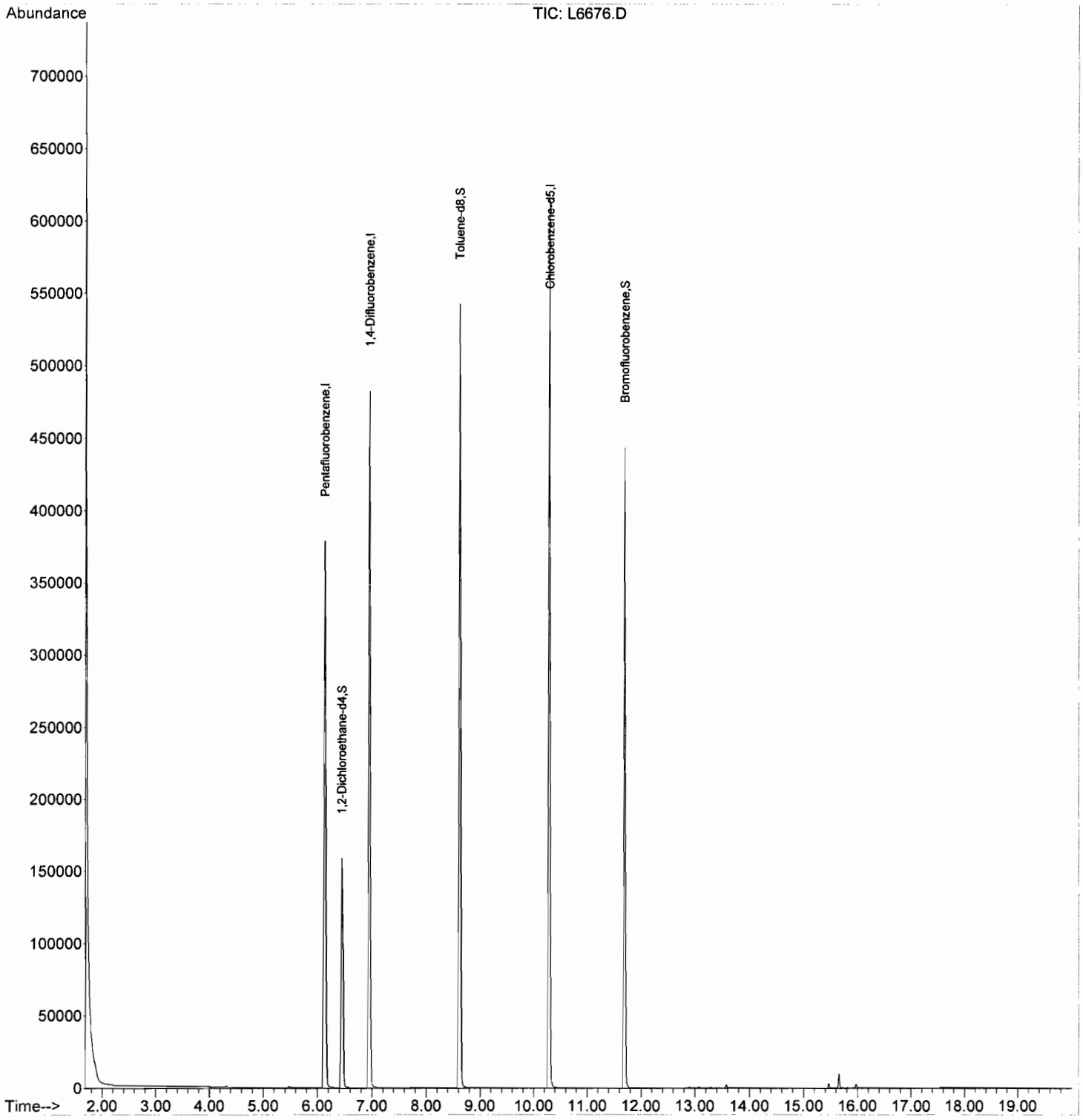
(#) = qualifier out of range (m) = manual integration (+) = signals summed

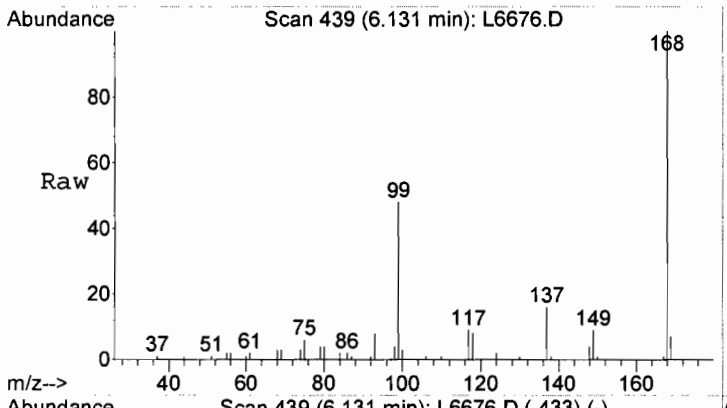
2/20/15

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 19 16:11:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

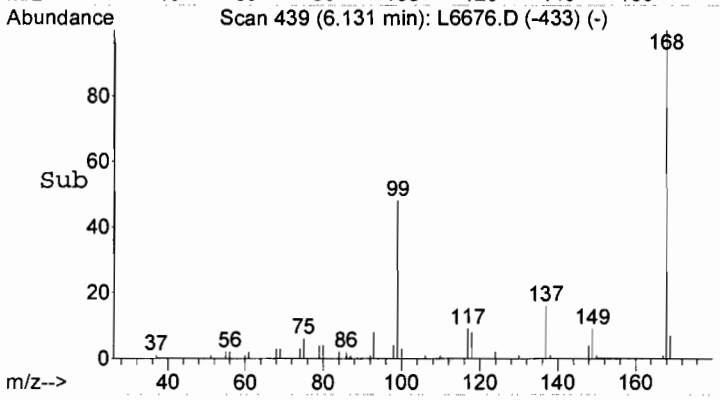


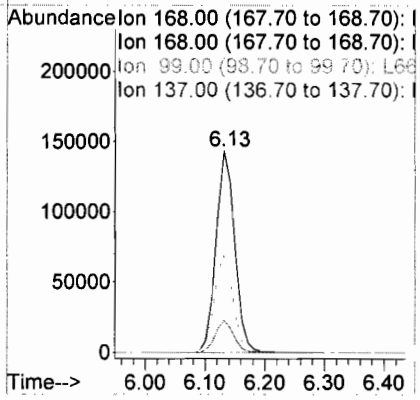


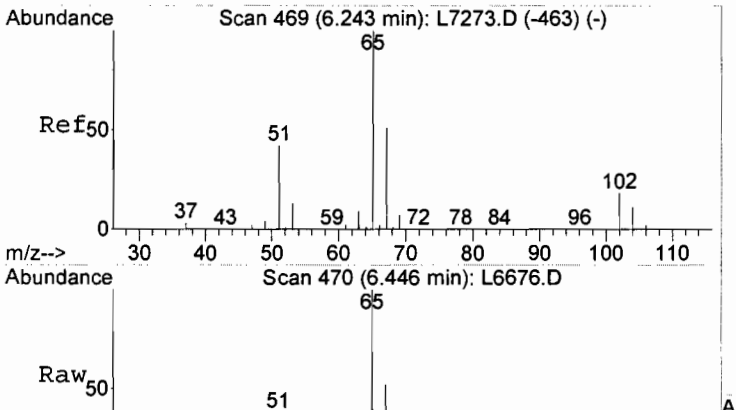
#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:168 Resp: 311809

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#



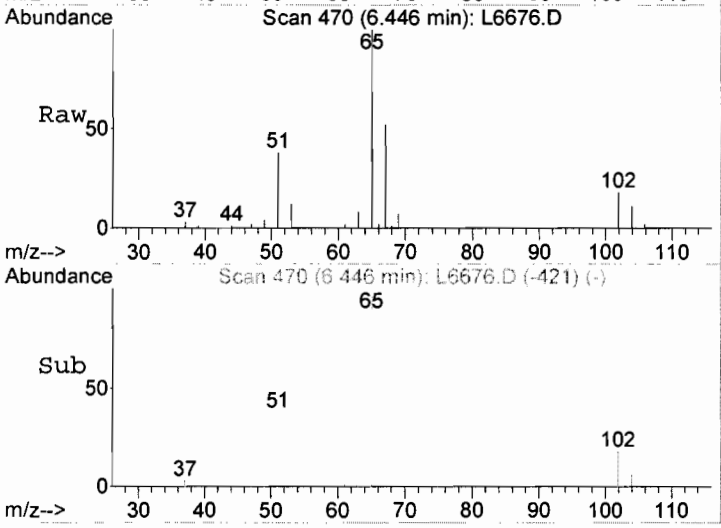


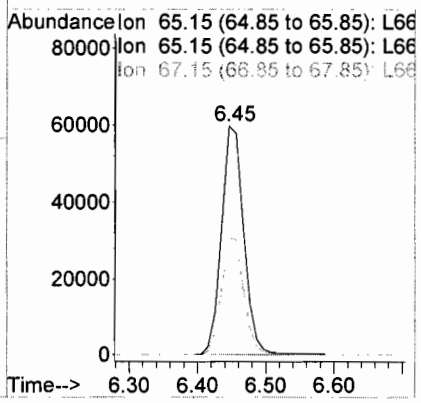


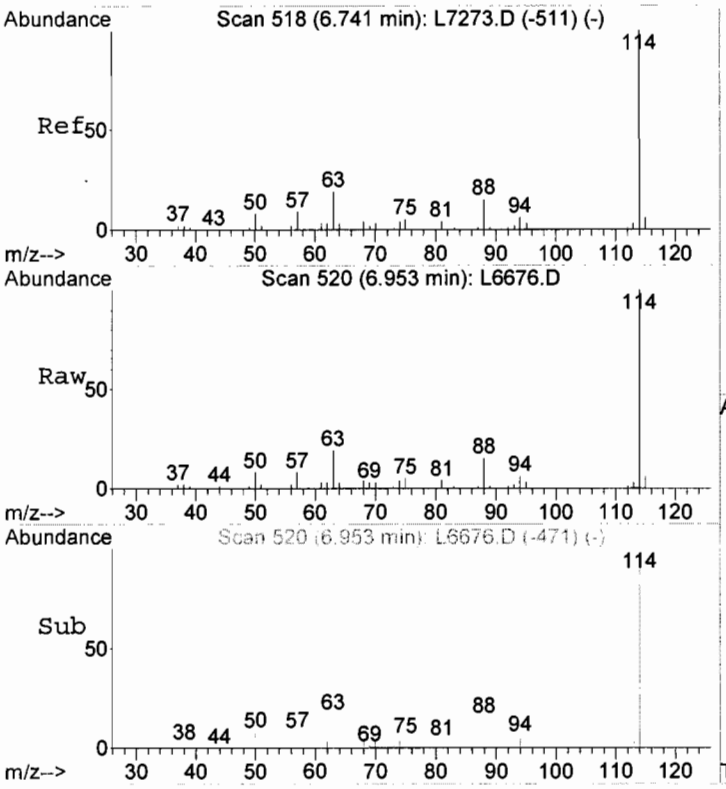
#30
1,2-Dichloroethane-d4
Concen: 50.68 UG
RT: 6.45 min Scan# 470
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 65 Resp: 135416

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	51.5	35.1	65.1



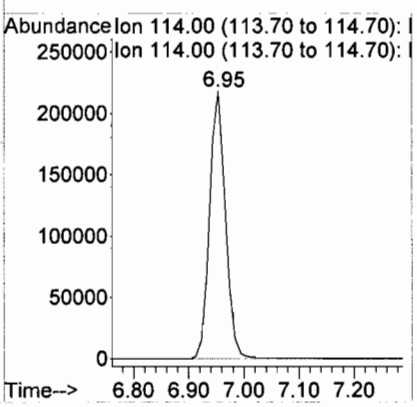


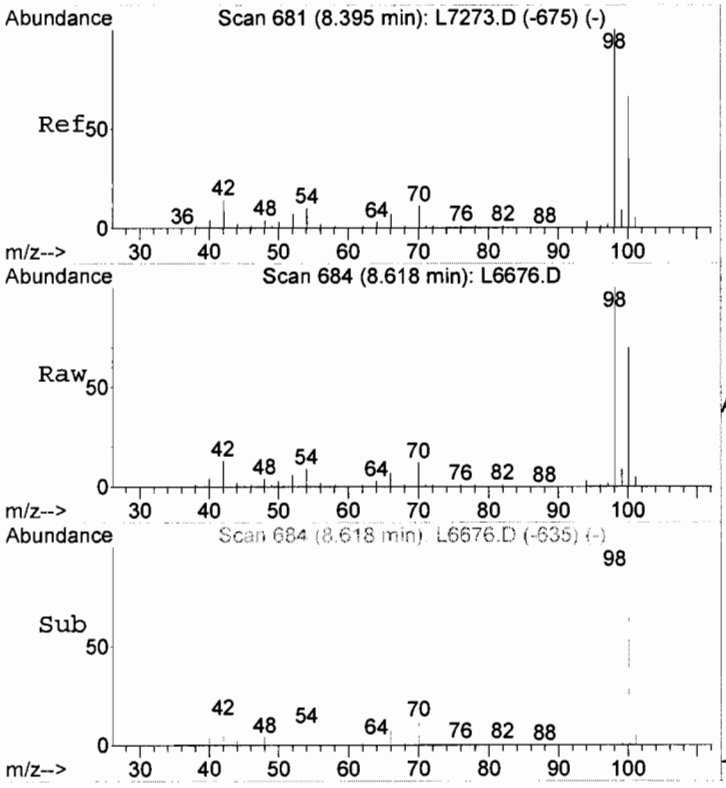


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:114 Resp: 437922

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

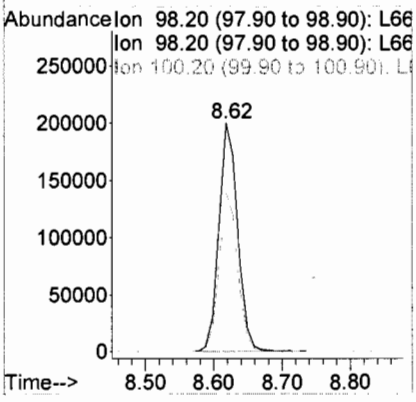


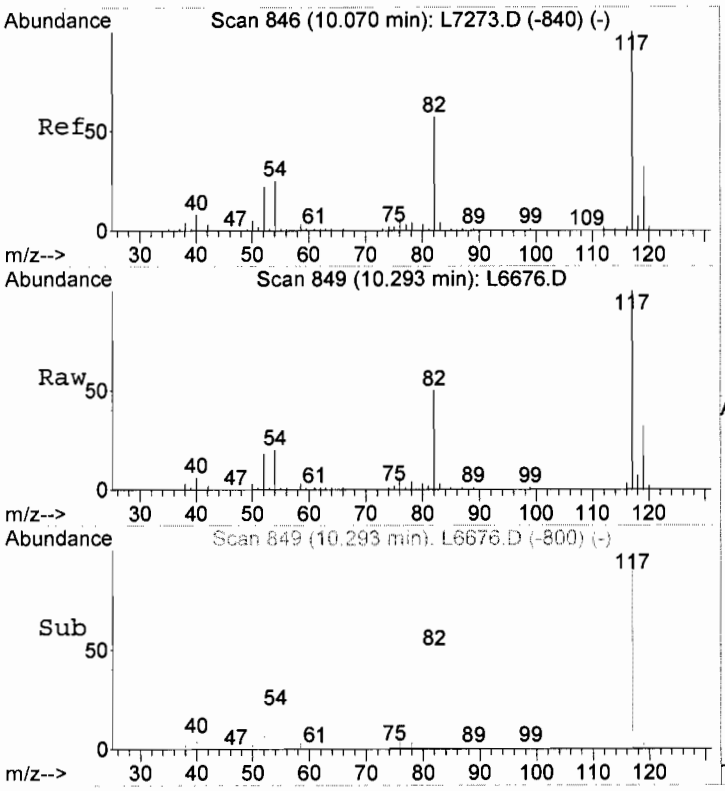


#41
Toluene-d8
Concen: 49.08 UG
RT: 8.62 min Scan# 684
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 98 Resp: 380624

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.2	44.8	83.2

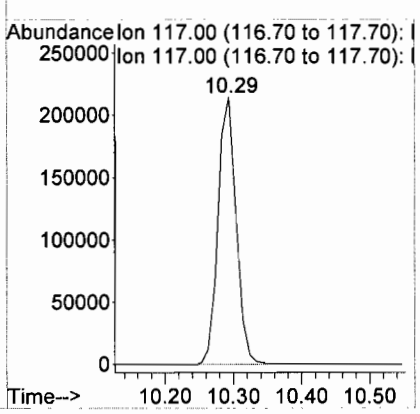


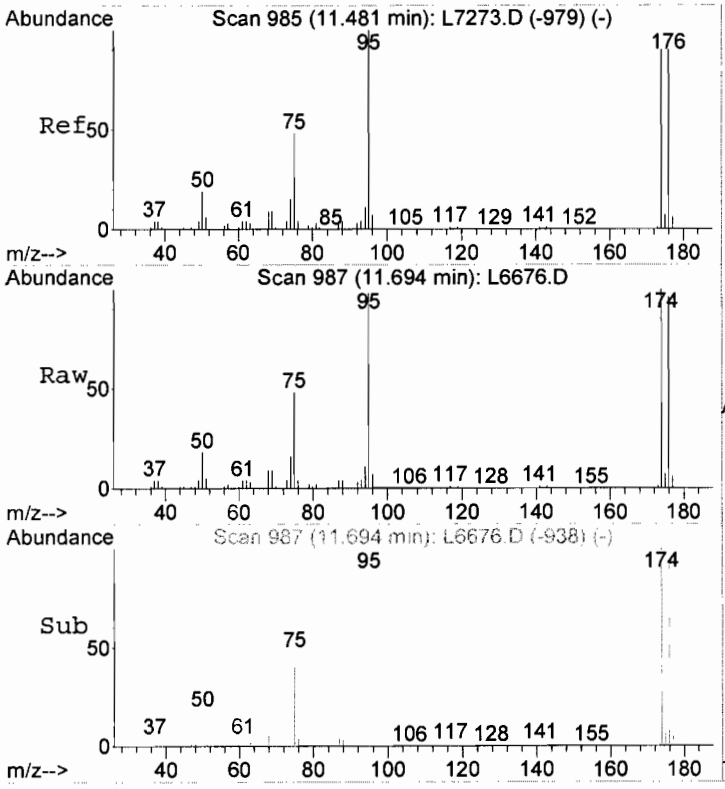


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:117 Resp: 394523

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

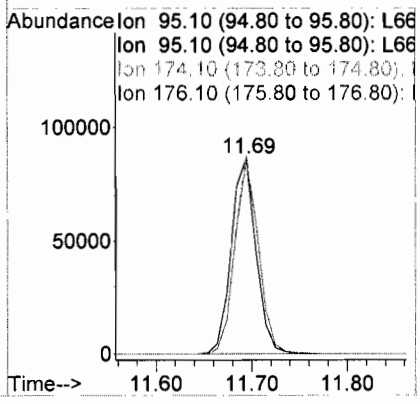




#59
Bromofluorobenzene
Concen: 44.91 UG
RT: 11.69 min Scan# 987
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 95 Resp: 154848

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	97.8	0.0	0.0#
176	94.7	0.0	0.0#



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	433	439	457	rVB	378834	817620	70.51%	15.922%
2	6.446	465	470	481	rBV	158648	356749	30.76%	6.947%
3	6.953	513	520	535	rBV	482002	972704	83.88%	18.943%
4	8.618	678	684	698	rBV	542665	1031169	88.92%	20.081%
5	10.293	841	849	860	rBV	614330	1159657	100.00%	22.583%
6	11.694	977	987	996	rVB	443665	782197	67.45%	15.233%
7	15.654	1371	1377	1382	rBV	9919	14902	1.29%	0.290%

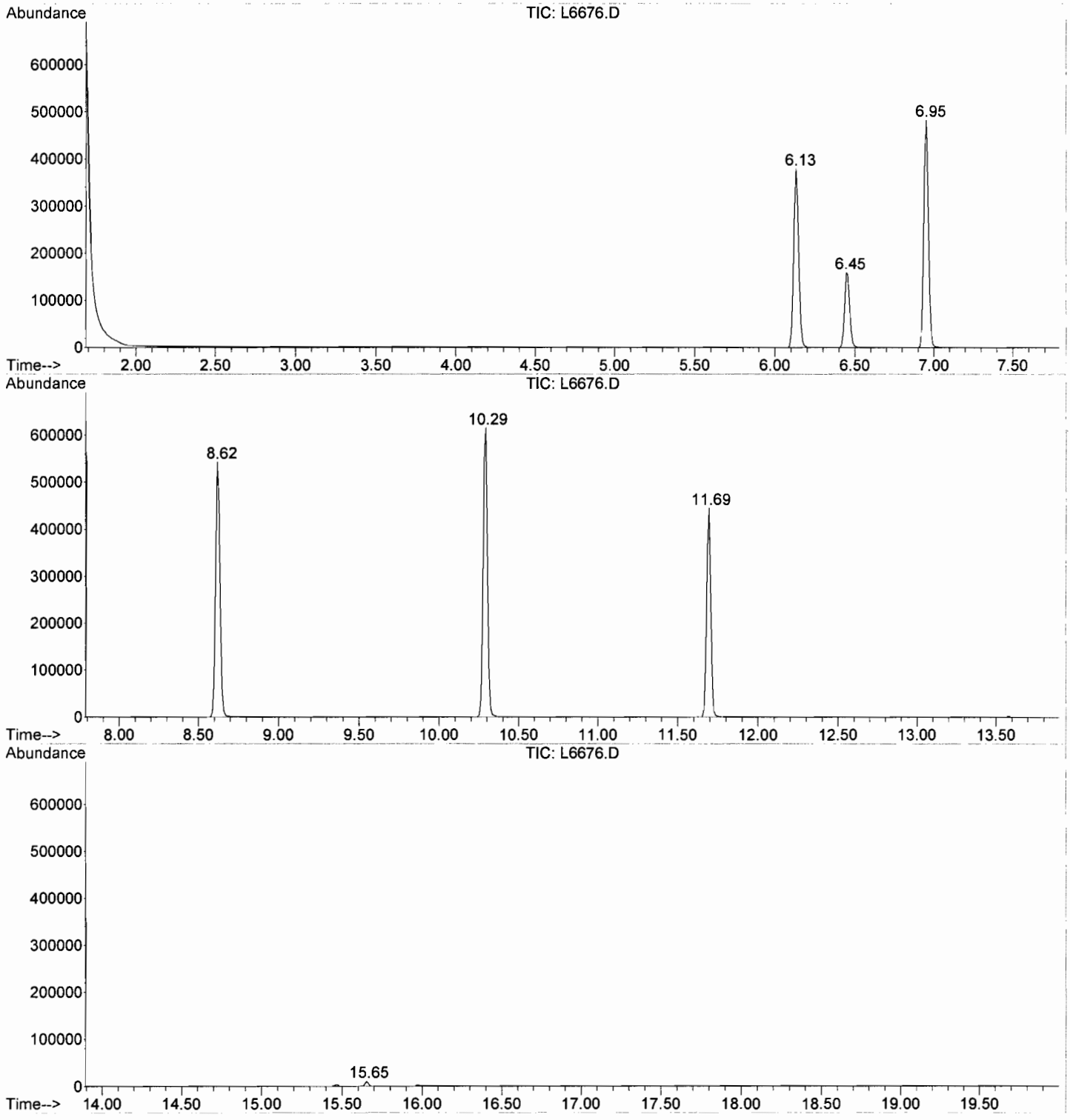
Sum of corrected areas: 5134998

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	358338	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	507183	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	474079	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	150819	49.12	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.24%				
41) Toluene-d8	8.62	98	454597	50.61	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.22%				
59) Bromofluorobenzene	11.69	95	212087	51.19	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	90711m	63.87	UG		
3) Chloromethane	1.93	50	146568	53.15	UG		100
4) Vinyl chloride	2.06	62	135574	57.04	UG		100
5) Bromomethane	2.43	94	69304	46.90	UG		97
6) Chloroethane	2.55	64	63474	52.39	UG		99
7) Trichlorofluoromethane	2.83	101	114992	42.96	UG		100
8) Acrolein	3.33	56	31691	181.94	UG		99
9) 1,1-Dichloroethene	3.45	96	104390	52.88	UG		96
10) Acetone	3.51	43	33794	57.97	UG		100
11) Carbon disulfide	3.70	76	329997	53.69	UG		100
12) Vinyl acetate	4.96	43	417645	51.03	UG	#	99
13) Methylene chloride	4.03	84	126616	48.01	UG		100
14) Acrylonitrile	4.32	53	162868m	172.49	UG		
15) tert-Butyl alcohol (TBA)	4.20	59	22357	106.54	UG		99
16) trans-1,2-Dichloroethene	4.36	96	168160	48.56	UG		93
17) Methyl tert-butyl ether (M	4.38	73	469132	49.27	UG		100
18) 1,1-Dichloroethane	4.85	63	310005	47.65	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	625421	52.39	UG		99
20) cis-1,2-Dichloroethene	5.53	96	187347	47.91	UG		99
21) 2,2-Dichloropropane	5.53	77	162646	52.95	UG		93
22) 2-Butanone (MEK)	5.55	43	76334	56.37	UG		99
23) Bromochloromethane	5.80	128	91983	45.11	UG		99
25) Chloroform	5.89	83	299209	44.28	UG		100
26) 1,1,1-Trichloroethane	6.11	97	208855	49.48	UG		98
27) Carbon tetrachloride	6.29	117	161607	50.28	UG		100
28) 1,1-Dichloropropene	6.29	75	185829	51.40	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	239856	44.51	UG		100
32) Benzene	6.53	78	645332	46.45	UG		100
33) Trichloroethene	7.25	95	152202	45.65	UG		93
34) 1,2-Dichloropropane	7.49	63	169774	48.43	UG		100
35) Dibromomethane	7.62	93	98032	43.97	UG		93
36) 1,4-Dioxane	7.64	88	48714	1684.47	UG		100
37) Bromodichloromethane	7.80	83	212533	45.43	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	99281	48.28	UG		99
39) cis-1,3-Dichloropropene	8.30	75	248789	50.47	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	159707	56.67	UG		100
42) Toluene	8.70	92	357574	45.85	UG		100
43) trans-1,3-Dichloropropene	8.93	75	218898	49.94	UG		99
44) 1,1,2-Trichloroethane	9.15	83	116430	45.50	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

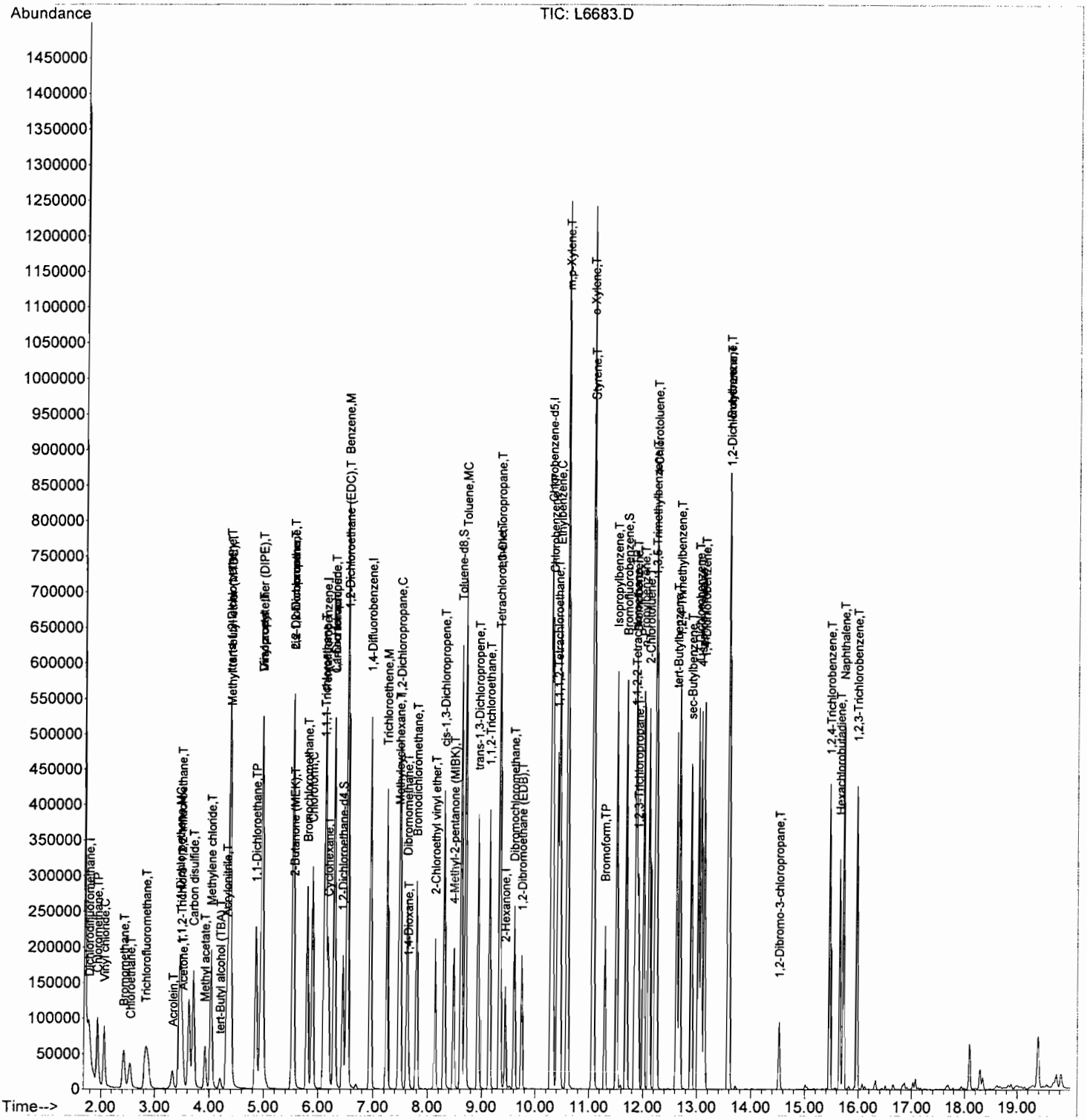
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	123975	47.54	UG	98
46) 1,3-Dichloropropane	9.34	76	238270	47.88	UG	100
47) 2-Hexanone	9.44	43	107014	62.88	UG	100
48) Dibromochloromethane	9.60	129	153228	45.90	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	145163	46.97	UG	100
51) Chlorobenzene	10.32	112	400190	42.66	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	155498	44.69	UG	99
53) Ethylbenzene	10.46	91	562303	47.49	UG	99
54) m,p-Xylene	10.60	106	440230	95.47	UG	96
55) o-Xylene	11.06	106	229103	49.98	UG	95
56) Styrene	11.09	104	422221	49.18	UG	98
57) Bromoform	11.30	173	129594	47.02	UG	100
58) Isopropylbenzene	11.51	105	451564	50.81	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	177165	43.64	UG	100
61) Bromobenzene	11.88	156	182906	44.38	UG	100
62) 1,2,3-Trichloropropane	11.91	75	156729	44.07	UG	99
63) n-Propylbenzene	12.01	91	489174	47.84	UG	100
64) 2-Chlorotoluene	12.11	91	344957	44.83	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	383468	47.09	UG	100
66) 4-Chlorotoluene	12.24	91	416073	44.08	UG	99
67) tert-Butylbenzene	12.63	119	297792	48.42	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	407228	45.07	UG	100
69) sec-Butylbenzene	12.89	105	399084	47.07	UG	99
70) 1,3-Dichlorobenzene	13.02	146	270727	42.49	UG	100
71) 4-Isopropyltoluene	13.07	119	358560	46.08	UG	100
72) 1,4-Dichlorobenzene	13.14	146	279572	41.61	UG	100
73) n-Butylbenzene	13.58	92	163287	47.66	UG	96
74) 1,2-Dichlorobenzene	13.59	146	278095	42.87	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	25979	45.78	UG	87
76) 1,2,4-Trichlorobenzene	15.47	180	157799	48.26	UG	100
77) Hexachlorobutadiene	15.65	225	73706	47.21	UG	100
78) Naphthalene	15.72	128	415382	51.70	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	147247	46.82	UG	100
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	68098	51.67	UG	95
81) Methyl acetate	3.92	43	107104	55.28	UG	99
82) Cyclohexane	6.18	56	134953	55.56	UG	99
83) Methylcyclohexane	7.47	55	84736	54.68	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	375414	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	525180	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	480260	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.46	65	153361	47.67	UG		0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.34%				
41) Toluene-d8	8.62	98	470007	50.53	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.06%				
59) Bromofluorobenzene	11.69	95	206322	49.15	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	93428m	62.79	UG		
3) Chloromethane	1.93	50	164120	56.81	UG		100
4) Vinyl chloride	2.06	62	140009	56.23	UG		100
5) Bromomethane	2.43	94	71275	46.04	UG		98
6) Chloroethane	2.55	64	63063	49.69	UG		100
7) Trichlorofluoromethane	2.84	101	114625	40.87	UG		100
8) Acrolein	3.33	56	32541	178.32	UG		99
9) 1,1-Dichloroethene	3.46	96	107205	51.83	UG		96
10) Acetone	3.52	43	35020	57.34	UG		100
11) Carbon disulfide	3.72	76	333535	51.80	UG		100
12) Vinyl acetate	4.96	43	428621	49.99	UG	#	99
13) Methylene chloride	4.03	84	128366	46.46	UG		100
14) Acrylonitrile	4.32	53	179747m	181.71	UG		
15) tert-Butyl alcohol (TBA)	4.21	59	22803	103.72	UG		99
16) trans-1,2-Dichloroethene	4.36	96	172759	47.62	UG		93
17) Methyl tert-butyl ether (M	4.40	73	486340	48.76	UG		100
18) 1,1-Dichloroethane	4.86	63	321956	47.23	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	651785	52.12	UG		99
20) cis-1,2-Dichloroethene	5.53	96	196779	48.03	UG		100
21) 2,2-Dichloropropane	5.53	77	159723	49.64	UG		89
22) 2-Butanone (MEK)	5.55	43	80207	56.53	UG		99
23) Bromochloromethane	5.80	128	96151	45.01	UG		99
25) Chloroform	5.90	83	312870	44.20	UG		100
26) 1,1,1-Trichloroethane	6.11	97	212340	48.01	UG		98
27) Carbon tetrachloride	6.30	117	168510	50.05	UG		100
28) 1,1-Dichloropropene	6.29	75	192389	50.80	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	248332	43.99	UG		100
32) Benzene	6.53	78	676917	47.06	UG		100
33) Trichloroethene	7.25	95	160709	46.55	UG		93
34) 1,2-Dichloropropane	7.49	63	177088	48.78	UG		100
35) Dibromomethane	7.62	93	102530	44.41	UG		92
36) 1,4-Dioxane	7.64	88	48660	1624.94	UG		100
37) Bromodichloromethane	7.80	83	224321	46.30	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	106492	50.01	UG		99
39) cis-1,3-Dichloropropene	8.30	75	261734	51.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	166938	57.21	UG		100
42) Toluene	8.70	92	370326	45.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	231980	51.11	UG		99
44) 1,1,2-Trichloroethane	9.15	83	124749	47.08	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

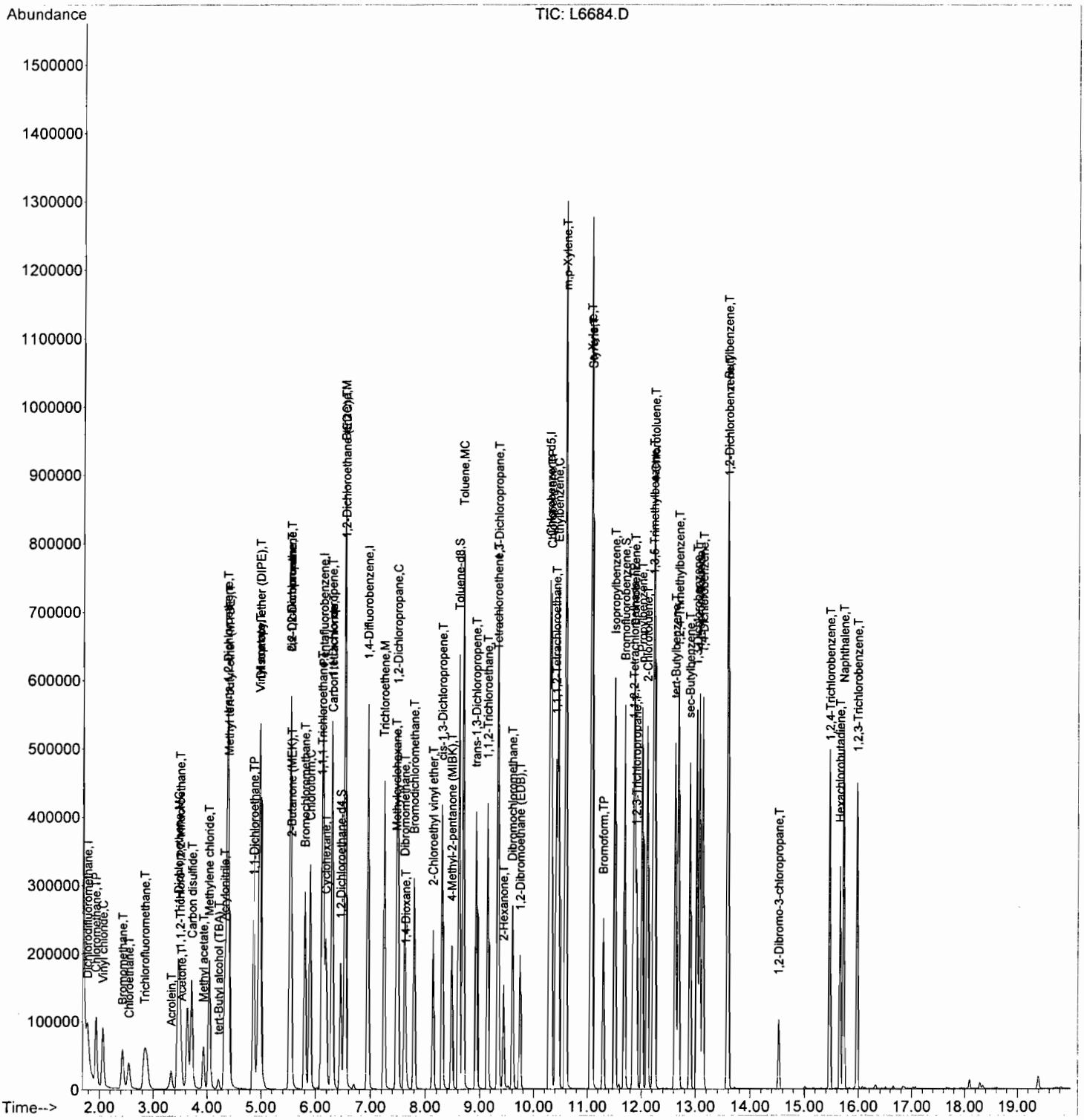
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	127034	47.04 UG	98
46) 1,3-Dichloropropane	9.34	76	249993	48.52 UG	100
47) 2-Hexanone	9.44	43	113473	64.40 UG	100
48) Dibromochloromethane	9.60	129	163320	47.25 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	154648	48.32 UG	100
51) Chlorobenzene	10.32	112	417927	43.98 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	163834	46.48 UG	99
53) Ethylbenzene	10.46	91	587941	49.01 UG	99
54) m,p-Xylene	10.60	106	455180	97.44 UG	96
55) o-Xylene	11.06	106	233809	50.35 UG	96
56) Styrene	11.09	104	440353	50.63 UG	98
57) Bromoform	11.30	173	140426	50.30 UG	100
58) Isopropylbenzene	11.51	105	469473	52.14 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	183744	44.68 UG	100
61) Bromobenzene	11.88	156	191582	45.89 UG	100
62) 1,2,3-Trichloropropane	11.91	75	163680	45.44 UG	99
63) n-Propylbenzene	12.01	91	511748	49.40 UG	100
64) 2-Chlorotoluene	12.11	91	361233	46.34 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	404163	48.99 UG	100
66) 4-Chlorotoluene	12.24	91	436134	45.61 UG	99
67) tert-Butylbenzene	12.63	119	306243	49.15 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	425076	46.44 UG	99
69) sec-Butylbenzene	12.89	105	423884	49.35 UG	99
70) 1,3-Dichlorobenzene	13.02	146	281724	43.65 UG	100
71) 4-Isopropyltoluene	13.08	119	384377	48.76 UG	100
72) 1,4-Dichlorobenzene	13.14	146	293306	43.10 UG	100
73) n-Butylbenzene	13.58	92	176855	50.95 UG	96
74) 1,2-Dichlorobenzene	13.59	146	289697	44.08 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	27168	47.26 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	178297	53.83 UG	100
77) Hexachlorobutadiene	15.65	225	76817	48.57 UG	100
78) Naphthalene	15.72	128	456585	56.10 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	166541	52.27 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	69030	51.70 UG	95
81) Methyl acetate	3.93	43	108138	55.09 UG	99
82) Cyclohexane	6.18	56	137153	55.74 UG	100
83) Methylcyclohexane	7.47	55	89697	57.13 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	381693	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	535479	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	502867	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	155571	47.57	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.14%				
41) Toluene-d8	8.62	98	480939	50.72	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.44%				
59) Bromofluorobenzene	11.69	95	217615	49.51	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 99.02%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	92777m	61.33	UG		
3) Chloromethane	1.93	50	157263	53.54	UG		100
4) Vinyl chloride	2.06	62	136278	53.83	UG		100
5) Bromomethane	2.43	94	72266	45.91	UG		97
6) Chloroethane	2.55	64	64312	49.84	UG		100
7) Trichlorofluoromethane	2.84	101	110609	38.79	UG		99
8) Acrolein	3.33	56	31299	168.70	UG		100
9) 1,1-Dichloroethene	3.45	96	102032	48.52	UG		96
10) Acetone	3.52	43	33265	53.57	UG		100
11) Carbon disulfide	3.70	76	331926	50.70	UG		100
12) Vinyl acetate	4.96	43	436382	50.06	UG	#	99
13) Methylene chloride	4.03	84	131228	46.71	UG		100
14) Acrylonitrile	4.32	53	193578	192.47	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	23364	104.53	UG		99
16) trans-1,2-Dichloroethene	4.36	96	173880	47.14	UG		93
17) Methyl tert-butyl ether (M	4.39	73	496117	48.92	UG		100
18) 1,1-Dichloroethane	4.86	63	329194	47.50	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	675548	53.13	UG		99
20) cis-1,2-Dichloroethene	5.53	96	202686	48.66	UG		100
21) 2,2-Dichloropropane	5.53	77	164845	50.38	UG		89
22) 2-Butanone (MEK)	5.55	43	79754	55.29	UG		99
23) Bromochloromethane	5.80	128	99800	45.95	UG		99
25) Chloroform	5.90	83	320977	44.59	UG		100
26) 1,1,1-Trichloroethane	6.11	97	214440	47.69	UG		98
27) Carbon tetrachloride	6.30	117	166580	48.66	UG		100
28) 1,1-Dichloropropene	6.29	75	192427	49.97	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	256843	44.75	UG		100
32) Benzene	6.53	78	703172	47.94	UG		100
33) Trichloroethene	7.25	95	168430	47.84	UG		93
34) 1,2-Dichloropropane	7.49	63	187615	50.69	UG		100
35) Dibromomethane	7.62	93	106810	45.37	UG		93
36) 1,4-Dioxane	7.65	88	48602	1591.79	UG		99
37) Bromodichloromethane	7.80	83	234153	47.40	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	113732	52.39	UG		99
39) cis-1,3-Dichloropropene	8.30	75	275977	53.03	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	173584	58.34	UG		100
42) Toluene	8.70	92	386239	46.90	UG		99
43) trans-1,3-Dichloropropene	8.93	75	243549	52.63	UG		99
44) 1,1,2-Trichloroethane	9.15	83	130269	48.22	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

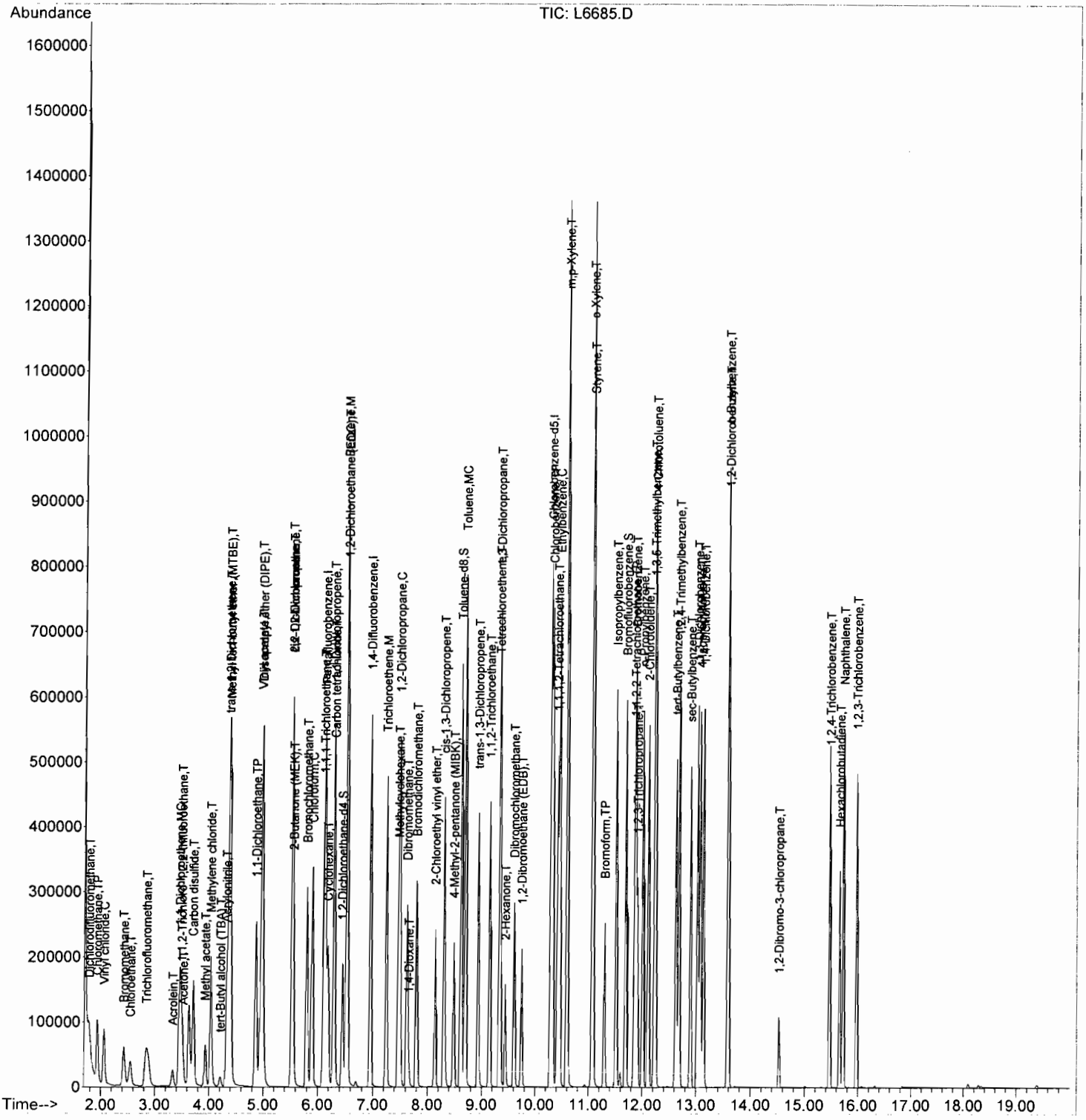
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	129849	47.16 UG	98
46) 1,3-Dichloropropane	9.34	76	262384	49.94 UG	100
47) 2-Hexanone	9.44	43	115623	64.35 UG	100
48) Dibromochloromethane	9.60	129	171915	48.78 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	160830	49.29 UG	100
51) Chlorobenzene	10.32	112	441448	44.36 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	172069	46.63 UG	99
53) Ethylbenzene	10.46	91	605194	48.18 UG	99
54) m,p-Xylene	10.60	106	473101	96.72 UG	96
55) o-Xylene	11.06	106	248636	51.14 UG	95
56) Styrene	11.09	104	466147	51.19 UG	98
57) Bromoform	11.30	173	140501	48.06 UG	100
58) Isopropylbenzene	11.51	105	473973	50.28 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	186478	43.31 UG	100
61) Bromobenzene	11.88	156	197466	45.17 UG	100
62) 1,2,3-Trichloropropane	11.91	75	168622	44.70 UG	99
63) n-Propylbenzene	12.01	91	517255	47.69 UG	100
64) 2-Chlorotoluene	12.11	91	373397	45.74 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	407913	47.22 UG	99
66) 4-Chlorotoluene	12.24	91	448329	44.77 UG	99
67) tert-Butylbenzene	12.63	119	306863	47.04 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	437014	45.60 UG	100
69) sec-Butylbenzene	12.89	105	424029	47.15 UG	99
70) 1,3-Dichlorobenzene	13.02	146	291826	43.18 UG	100
71) 4-Isopropyltoluene	13.08	119	389129	47.14 UG	100
72) 1,4-Dichlorobenzene	13.14	146	300009	42.10 UG	100
73) n-Butylbenzene	13.58	92	178243	49.05 UG	96
74) 1,2-Dichlorobenzene	13.59	146	298198	43.34 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	28526	47.39 UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	184564	53.22 UG	99
77) Hexachlorobutadiene	15.65	225	78474	47.39 UG	100
78) Naphthalene	15.72	128	459864	53.96 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	169642	50.85 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	63062	45.11 UG	94
81) Methyl acetate	3.93	43	108732	52.90 UG	99
82) Cyclohexane	6.18	56	129673	50.33 UG	100
83) Methylcyclohexane	7.47	55	83961	51.07 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/13/2015 17:16

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-13-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6604	BFB150213										ok
2	2	L6605	ICC1	ICC1		5		W				100	ok
3	3	L6606	ICC2	ICC2		5		W				100	—
4	4	L6607	ICC5	ICC5		5		W				100	ok
5	5	L6608	ICC2	ICC2		5		W				100	ok
6	6	L6609	ICC20	ICC20		5		W				100	ok
7	7	L6610	ICC100	ICC100		5		W				100	ok
8	8	L6611	ICC150	ICC150		5		W				100	ok
9	9	L6612	ICC200	ICC200		5		W				100	ok
10	10	L6613	RB										—
11	11	L6614	RB										—
12	12	L6615	ICV100	ICV100		5		W				100	ok
13	13	L6616	RB										—
14	14	L6617	RB										—
15	15	L6618	BLKM150213-01	LKM150213-01		0.1		M				0	ok
16	16	L6619	LCS-50PPB	CSM150213-01		0.05		M				0	ok
17	17	L6620	MS	01069-001MS		0.05		M				0	ok
18	18	L6621	MSD	1069-001MSD		0.05		M				0	ok
19	19	L6622	RB										—
20	20	L6623	RB										—
21	21	L6624	1069	1	1	0.088		M	ES-WC-91_(0-4)	02/10/15	02/11/15	7.30	Re-Soil
22	22	L6625	1089	1	20	0.0031		M	T-2/5.0-5.5	02/10/15	02/11/15	32.2	ok
23	23	L6626	1049	7	1	0.027		M	SB-6/10.5	02/10/15	02/11/15	16.7	ok
24	24	L6627		6	1	0.048		M	SB-7/7.5	02/10/15	02/11/15	13.5	ok
25	25	L6628		5	1	0.022		M	SB-5/7.5	02/10/15	02/11/15	14.4	ok
26	26	L6629	1069	2	5	0.006		M	ES-WC-91_(4-8)	02/10/15	02/11/15	42.9	ok
27	27	L6630	1060	1	5	0.01		M	WC-1/GB6/12-12	11/14/14	02/11/15	10.7	ok
28	28	L6631	RB										—

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/19/2015 15:58

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-19-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6673	BFB150219										ok
2	2	L6674	CCV100	CCV100		5		W				100	ok
3	3	L6675	RB										ok
4	4	L6676	BLKM150219-01	LKM150219-01		0.1		M				0	ok
5	5	L6677	1168	1	1	0.062		M	AA-F5_(6.5-7)/	02/13/15	02/13/15	14.4	ok
6	6	L6678		2	1	0.05		M	AA-E5_(6.5-7)/	02/13/15	02/13/15	15.3	ok
7	7	L6679	1062	4	1	0.062		M	SB-105_(11.5-1	02/10/15	02/11/15	17.3	Re-5g soil
8	8	L6680		5	1	0.09		M	SB-106_(9-9.5)	02/10/15	02/11/15	18.5	↓
9	9	L6681		2	1	0.067		M	SB-102_(5.5-6)	02/10/15	02/11/15	15.0	ok
10	10	L6682	1229	1	2	0.025		M	WC-1/GB-12/12-	05/05/14	02/17/15	7.50	ok
11	11	L6683	LCS-50PPB	CSM150219-01		0.05		M				0	ok
12	12	L6684	MS	01062-005MS		0.05		M				0	ok
13	13	L6685	MSD	1062-005MSD		0.05		M				0	ok
14	14	L6686	RB										ok
15	15	L6687	1062	2	1	0.067		M	SB-102_(5.5-6)	02/10/15	02/11/15	15.0	Re-5g soil, confirmation run
16	16	L6688	1273	1	1	0.05		M	GPEC-WC1-02181	02/18/15	02/19/15		ok
17	17	L6689	1167	2	1	0.063		M	ES-WC-92_(4-8)	02/13/15	02/13/15	17.0	ok
18	18	L6690		1	5	0.007		M	ES-WC-92_(0-4)	02/13/15	02/13/15	15.4	ok
19	19	L6691	1158	1	1	0.05		M	SB-1_/8-9	02/13/15	02/13/15	11.1	ok
20	20	L6692		7	1	0.027		M	SB-5	02/13/15	02/13/15	26.3	ok
21	21	L6693		14	1	0.031		M	SB-12	02/13/15	02/13/15	12.0	ok
22	22	L6694		2	5	0.006		M	SB-2_(3-4)/3-4	02/13/15	02/13/15	31.6	ok
23	23	L6695		6	5	0.006		M	SB-4	02/13/15	02/13/15	13.3	ok
24	24	L6696		12	2	0.02		M	SB-10	02/13/15	02/13/15	14.7	ok
25	25	L6697		13	1	0.042		M	SB-11	02/13/15	02/13/15	14.6	ok
26	26	L6698	1177	1	1	0.05		M	STOCKPILE	02/12/15	02/13/15	6.00	ok
27	27	L6699	1224	1	5	0.01		M	WC1/7-7.5	02/16/15	02/17/15	23.7	ok
28	28	L6700	RB										✓

LS1030 TPH-GRO Working Std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertiPrep GAS-20 (Lot# C113091108.) @ 20mg/ml
Exp: 1/11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/6/14, exp: 2/28/17)
Exp: 3/9/15 1ml ECS-A46 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/7/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIFE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 10/11/2015)
1ml of ECS-A44 8260 Addition @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
~~1ml of VOA-ZALAST-1 @ 2,000ppm Lot# C112121913~~ (Rec: 5/1/14 exp: 4/28/2015)
diluted into 50ml MeOH

LS1032 Secondary Acrolein/Acrylonitrile @ 1000 ppm working soln
CXZ 12/15/14 ~~1ml of ECS-A4038 (Lot# 120814, exp. 3/8/15)~~ into 10ml
exp. 3/8/15 MeOH, final volume is 10ml

LS1033 ~~TPH working std @ 500 mg/ml~~
prep: 1/5/15 ~~1ml of Spex CertiPrep GAS-20 (Lot# C113091108) @ 20mg/ml~~
Exp: 4/3/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working Std @ 1,000 mg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/8/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (< -10° C)

LS1035 BFB @ 25 µg/ml for tuning
pre: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 82# MM2/ (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) Dilute with MeOH, Final volume: 2 ml
CXM

LS1036 1,4-Dioxane working Std @ 10,000 ppm
pre: 1/20/15 Transfer 1,4-Dioxane @ 10,000 ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CXM

LS1037 DIPE stock std soln @ 5,000 µg/ml
MXF 2/3/15 34.48 µl of DIPE neat (Recd 6/19/13, Lot# SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
MXF 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
exp. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
pre: 4/5/15 1 ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MEOH
CXM

x528

x528 — x50 ppm screening work solution.

Exp 11/11/14

50 µl (cat# V0-2BL-12) (Lot# C.113060408)

exp 2/11/15 — at 50 ng/µl dilut with 1ml MeoH.

L2529 — ~~Secondary Mix of 100 ppm~~

12/10/14 — 98 ml of L2478 NITRO/TRIA/DIPE @ 5000 PPM/

3/10/15 — 1000 PPM / 5000 ppm

MeoH — 2ml of ECS-A-049 Add-ons Mix #3 2000 PPM

Lot: AO309 received 7/17/14 exp 11/16/2015

2ml of ECS-524.2/8260 Main Mix 2000 ppm

ECS-A-033 Lot. 524MM20, received 7/17/14

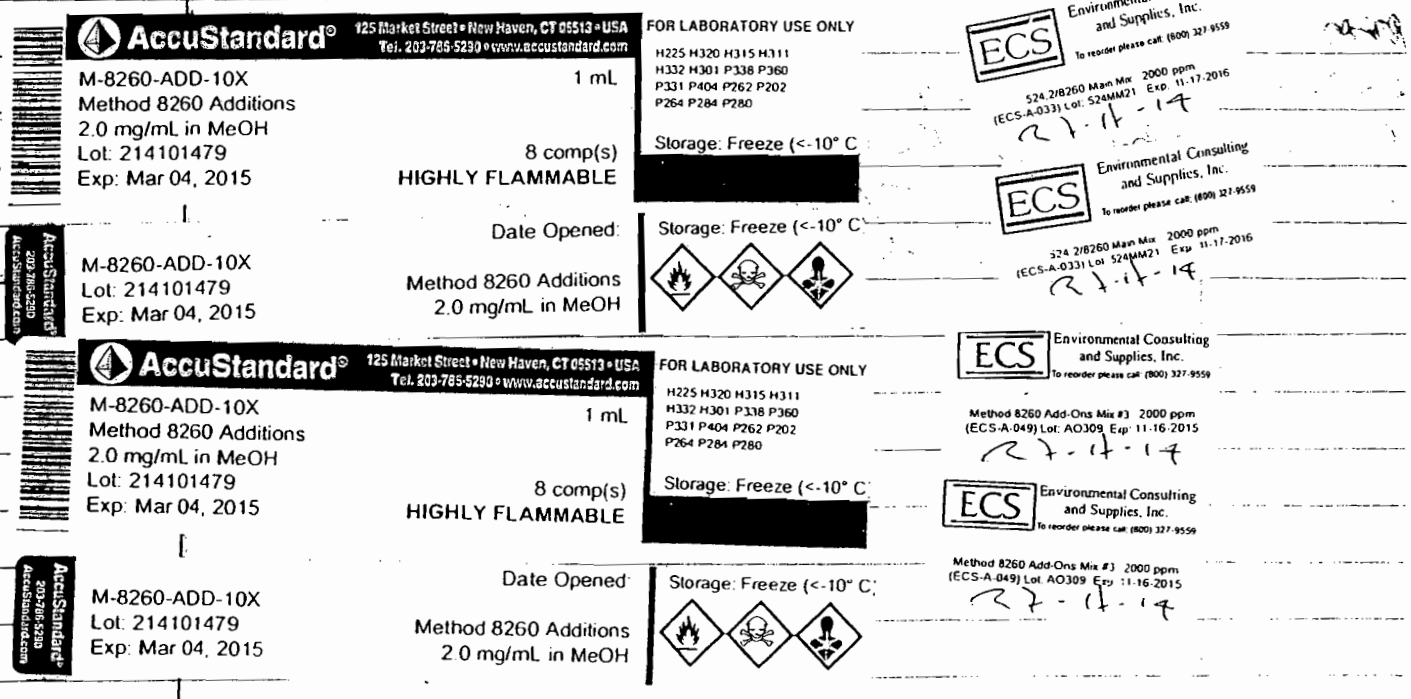
Exp 11/17/16

MeOH — 1ml/s of Volatiles gases Mix 1000 ppm ECS-A-0

Lot: VGM022, received 12/24/14 exp. 11/6/15

2ml of M-8260-ADD-10x, received 6/13/14 exp.

03/04/15 ~~12/23/14~~ into 100 ml of MeOH



VOLATILE ORGANICS/TPH-GRO

VOLATILE ORGANICS/TPH-GRO QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKT150220-01	MEOH	F9271.D	122	85	89
01273-001	MEOH	F9272.D	112	91	90
LCST150220-01	MEOH	F9273.D	98	99	92
01273-001MS	MEOH	F9274.D	96	92	94
01273-001MSD	MEOH	F9275.D	97	99	93

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

D Surrogate diluted out

M Matrix interference

FORM **2**

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCST150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: F9273.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
TPH-GRO	500	0.0	475	95	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-021815
Date Received:
Date Analyzed: 02/20/2015
MS Data file: F9274.D
MSD Data file: F9275.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
TPH-GRO	500	0.0	545	109		471	94		15	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F9271.D Instrument ID: MSD_F

Date Analyzed: 02/20/2015 Time Analyzed: 15:06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1-021815	01273-001	02/20/2015	15:34
TPH-500PPB	LCST150220-01	02/20/2015	16:02
MS	01273-001MS	02/20/2015	16:29
MSD	01273-001MSD	02/20/2015	16:57

FORM **4**

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F9261.D BFB Injection Date: 02/20/2015

Inst ID: MSD_F BFB Injection Time: 9:33

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.5			
75	30.0 - 60.0% of mass 95	46.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.8	(	1.1	)1
174	Great than 50.0% of mass 95	75.5			
175	5.0 - 9.0% of mass 174	5.5	(	7.3	)1
176	95.0 - 101.0% of mass 174	71.9	(	95.2	)1
177	5.0 - 9.0% of mass 176	4.8	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC50	ICC50	F9262.D	02/20/2015	10:38
ICC100	ICC100	F9263.D	02/20/2015	11:06
ICC200	ICC200	F9264.D	02/20/2015	11:37
ICC1000	ICC1000	F9265.D	02/20/2015	12:07
ICC2000	ICC2000	F9266.D	02/20/2015	12:47
ICC5000	ICC5000	F9267.D	02/20/2015	13:14
ICV1000	ICV1000	F9269.D	02/20/2015	14:10
BLKT150220-01	BLKT150220-01	F9271.D	02/20/2015	15:06
GPEC-WC1-02181	01273-001	F9272.D	02/20/2015	15:34
TPH-500PPB	LCST150220-01	F9273.D	02/20/2015	16:02
MS	01273-001MS	F9274.D	02/20/2015	16:29
MSD	01273-001MSD	F9275.D	02/20/2015	16:57

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F9265.D

Date Analyzed: 02/20/2015

Instrument ID: MSD_F

Time Analyzed: 12:07

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	256360		6.05		388560		6.88		360050		10.22	
	UPPER LIMIT	512720		6.55		777120		7.38		720100		10.72	
	LOWER LIMIT	128180		5.55		194280		6.38		180025		9.72	
	LAB SAMPLE ID												
01	ICC50	198139		6.05		354684		6.87		321567		10.21	
02	ICC100	203461		6.05		361351		6.87		324737		10.21	
03	ICC200	222399		6.05		379228		6.87		342360		10.21	
04	ICC2000	274954		6.05		412103		6.88		376513		10.22	
05	ICC5000	299488		6.05		447367		6.86		427354		10.22	
06	ICV1000	284376		6.05		442387		6.88		405946		10.22	
07	BLKT150220-01	189146		6.05		336251		6.88		279757		10.21	
08	01273-001	200011		6.05		341713		6.87		294225		10.22	
09	LCST150220-01	243648		6.05		388262		6.88		349700		10.22	
10	01273-001MS	236255		6.05		358884		6.88		291005		10.21	
11	01273-001MSD	257710		6.05		412275		6.87		376144		10.21	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9272.D
Acq On : 20 Feb 2015 15:34
Operator : XING
Sample : GPEC-WC1-021815,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPO,02/18/15,02/18/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 16:29:09 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	200011	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.865	114	341713	50.00	UG	-0.01
5) Chlorobenzene-d5	10.215	117	294225	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	107578	56.23	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 112.46%			
4) Toluene-d8	8.540	98	280341	45.38	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 90.76%			
6) Bromofluorobenzene	11.616	95	136906	45.13	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 90.26%			

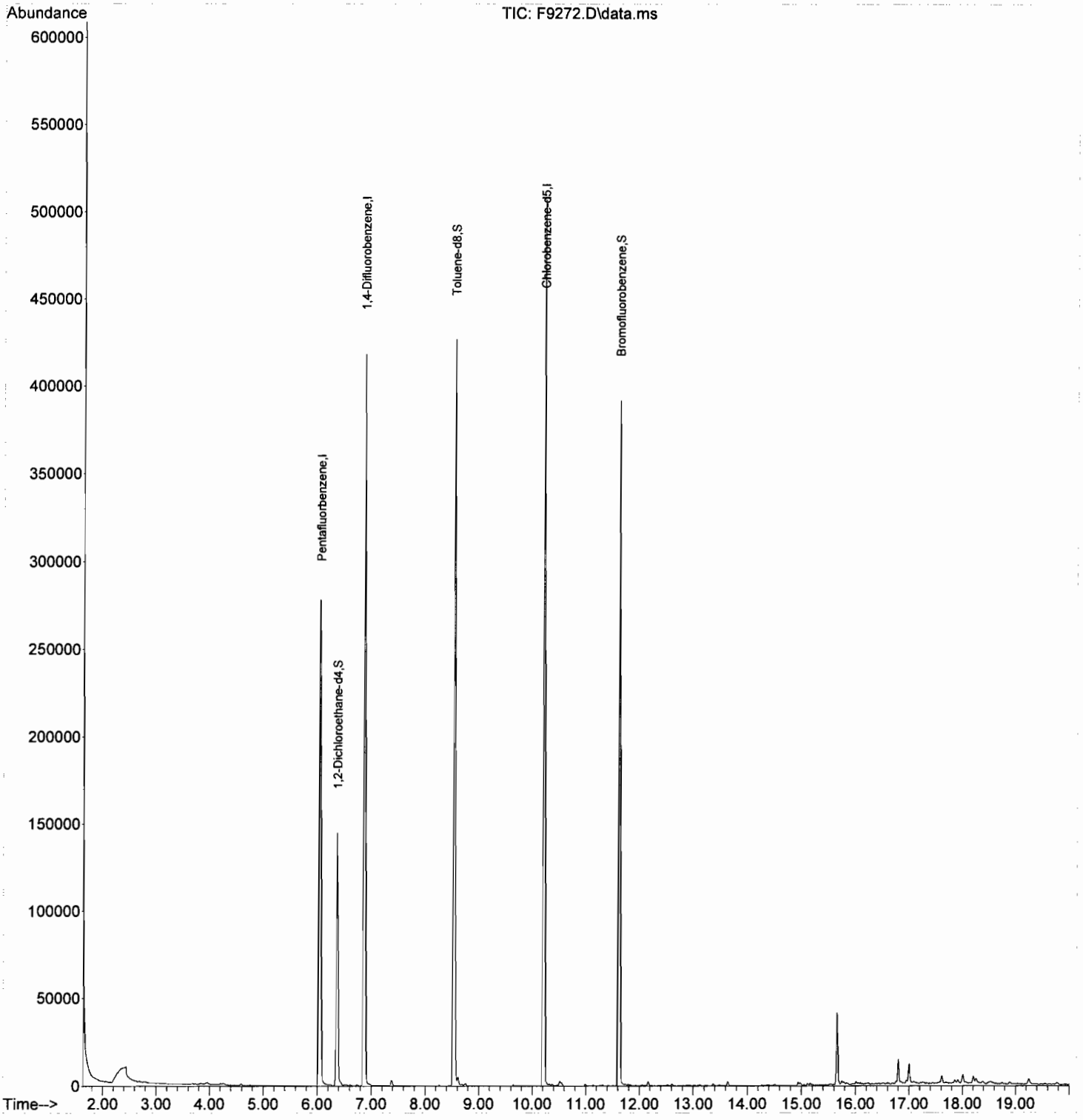
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9272.D
Acq On : 20 Feb 2015 15:34
Operator : XING
Sample : GPEC-WC1-021815,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPO,02/18/15,02/18/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 16:29:09 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



GRO
VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_F

Method Path : C:\msdchem\1\METHODS\
Method File : FTPM0220.M
Title : VOLATILE ORGANICS BY EPA 8260C
Last Update : Fri Feb 20 15:28:02 2015
Response Via : Initial Calibration

Calibration Files
50 =F9262.D 100 =F9263.D 200 =F9264.D
1000=F9265.D 2000=F9266.D 5000=F9267.D =

		Compound	50	100	200	1000	2000	5000	Avg	%RSD
1)	I	Pentafluorbenzene	----------ISTD----------							
2)	S	1,2-Dichloroethan	0.538	0.533	0.500	0.443	0.432	0.424	0.478	10.78
3)	I	1,4-Difluorobenzene	----------ISTD----------							
4)	S	Toluene-d8	0.877	0.870	0.906	0.905	0.915	0.951	0.904	3.22
5)	I	Chlorobenzene-d5	----------ISTD----------							
6)	S	Bromofluorobenzen	0.539	0.570	0.510	0.486	0.495	0.494	0.516	6.26
7)	H	TPH-GRO	1.345	1.260	1.408	1.509	1.606	1.633	1.460	10.14

(#) = Out of Range

FTPM0220.M Fri Feb 20 15:28:09 2015 RP1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9262.D
Acq On : 20 Feb 2015 10:38
Operator : XING
Sample : ICC50,ICC50,A,5mL,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 15:25:05 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 13:35:38 2015
Response via : Initial Calibration

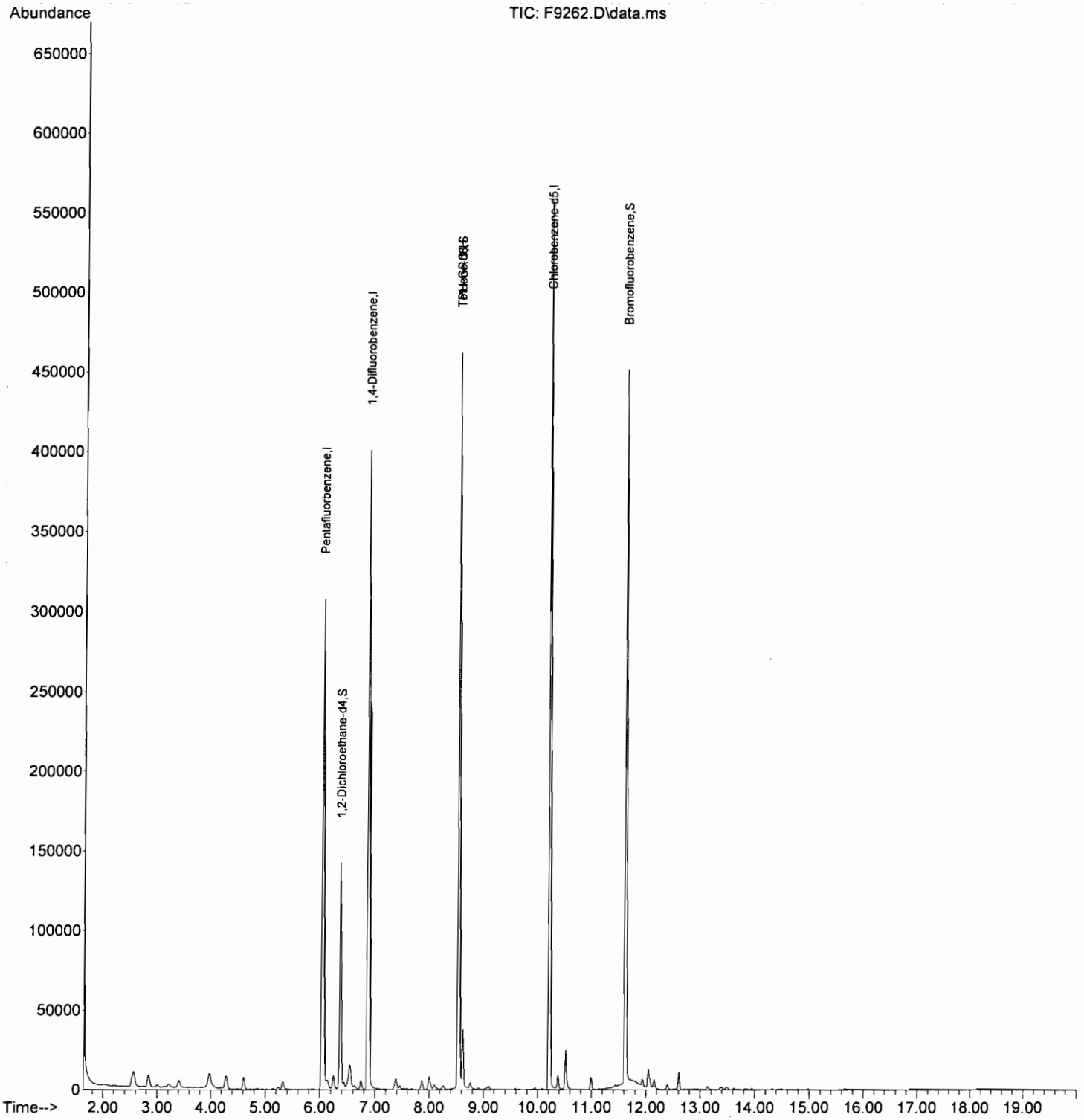
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	198139	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	354684	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	321567	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	106589	56.24	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 112.48%			
4) Toluene-d8	8.540	98	310901	48.49	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 96.98%			
6) Bromofluorobenzene	11.616	95	173173	52.23	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 104.46%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	432376m	46.05	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9262.D
Acq On : 20 Feb 2015 10:38
Operator : XING
Sample : ICC50,ICC50,A,5mL,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 15:25:05 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 13:35:38 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9263.D
Acq On : 20 Feb 2015 11:06
Operator : XING
Sample : ICC100,ICC100,A,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:25:30 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:15 2015
Response via : Initial Calibration

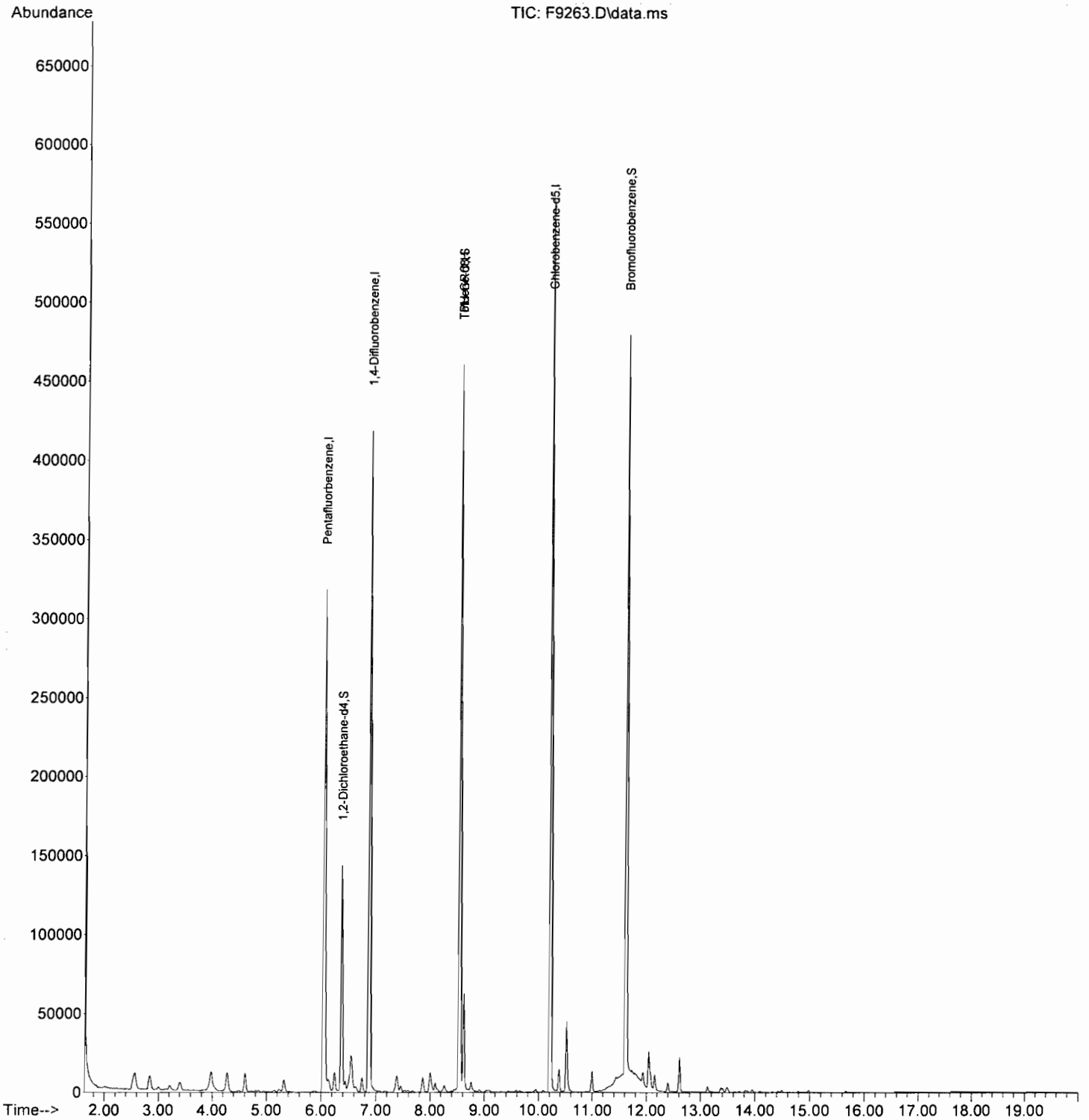
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	203461	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	361351	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	324737	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	108362	55.68	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 111.36%			
4) Toluene-d8	8.540	98	314385	48.13	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 96.26%			
6) Bromofluorobenzene	11.616	95	184962	55.24	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 110.48%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	818465m	86.31	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9263.D
Acq On : 20 Feb 2015 11:06
Operator : XING
Sample : ICC100,ICC100,A,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:25:30 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:15 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9264.D
Acq On : 20 Feb 2015 11:37
Operator : XING
Sample : ICC200,ICC200,A,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:26:03 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:39 2015
Response via : Initial Calibration

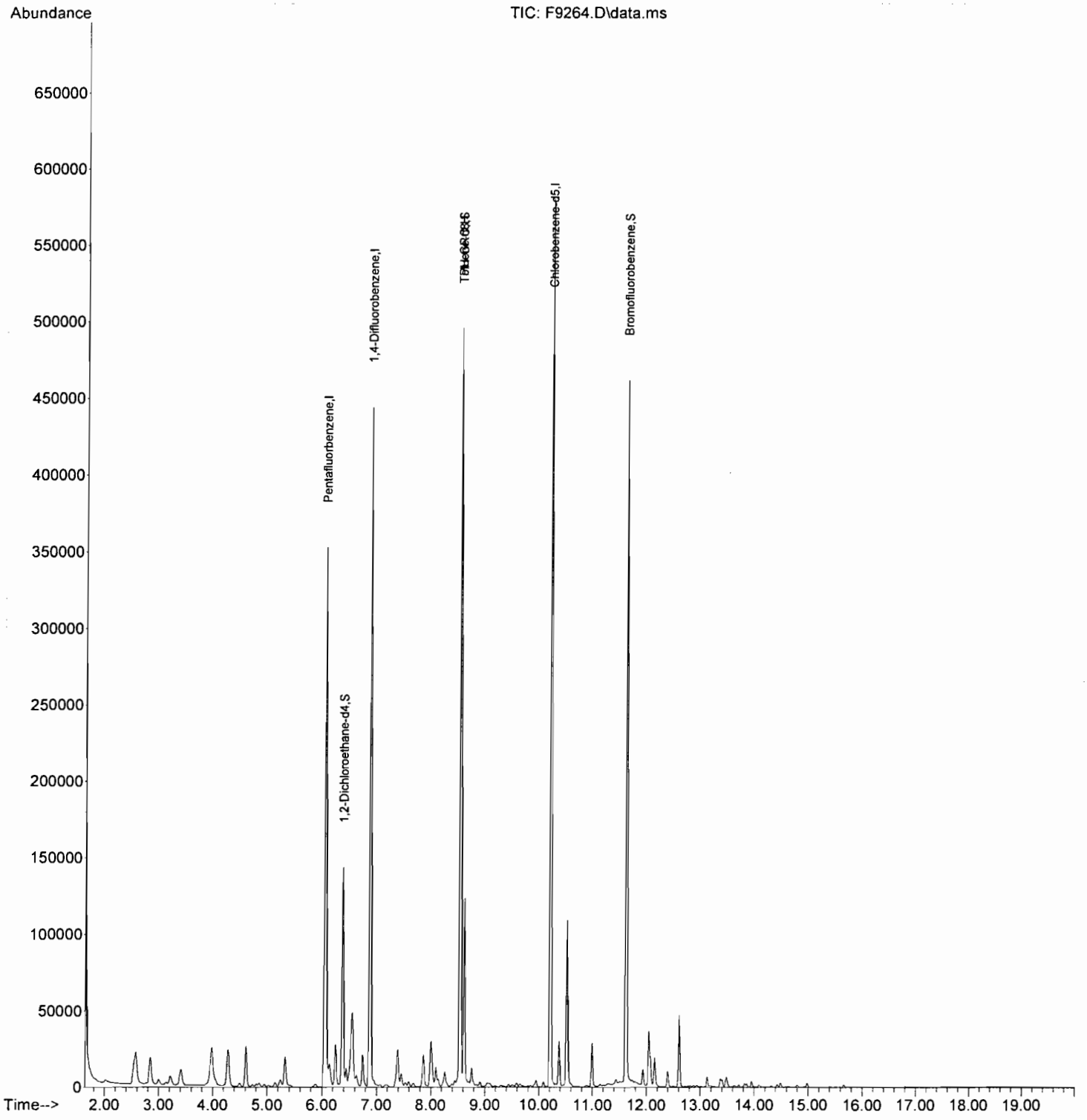
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	222399	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	379228	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	342360	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.378	65	111163	52.25	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 104.50%			
4) Toluene-d8	8.540	98	343404	50.09	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.18%			
6) Bromofluorobenzene	11.616	95	174519	49.44	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.88%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	1927580m	192.81	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9264.D
Acq On : 20 Feb 2015 11:37
Operator : XING
Sample : ICC200,ICC200,A,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:26:03 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:39 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9265.D
Acq On : 20 Feb 2015 12:07
Operator : XING
Sample : ICC1000,ICC1000,A,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:26:40 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:13 2015
Response via : Initial Calibration

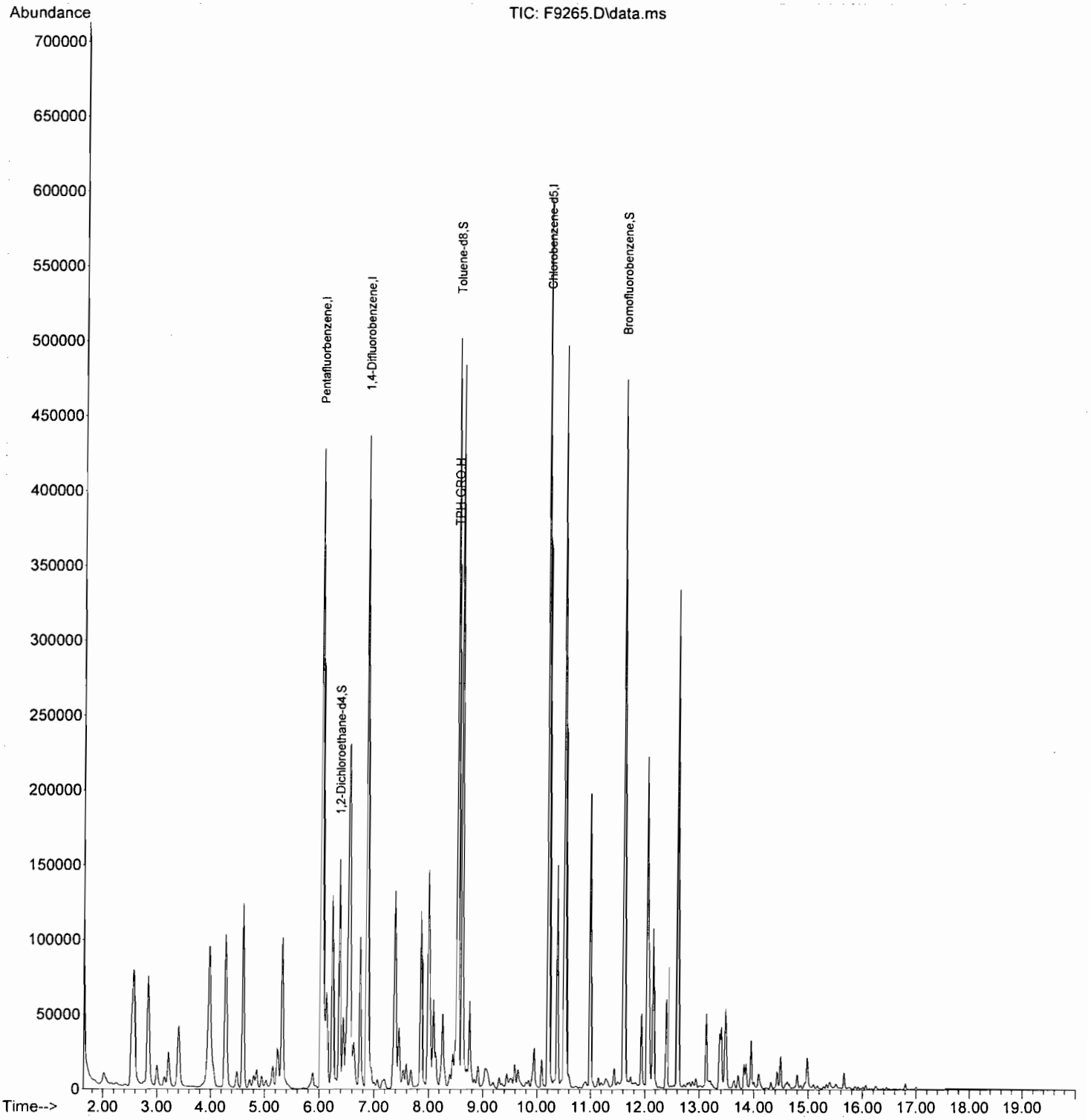
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	256360	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	388560	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	360050	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	113663	46.35	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 92.70%			
4) Toluene-d8	8.540	98	351764	50.08	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.16%			
6) Bromofluorobenzene	11.616	95	175075	47.16	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 94.32%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	10868882m	1033.76	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9265.D
Acq On : 20 Feb 2015 12:07
Operator : XING
Sample : ICC1000,ICC1000,A,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:26:40 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:13 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9266.D
Acq On : 20 Feb 2015 12:47
Operator : XING
Sample : ICC2000,ICC2000,A,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 15:27:11 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:50 2015
Response via : Initial Calibration

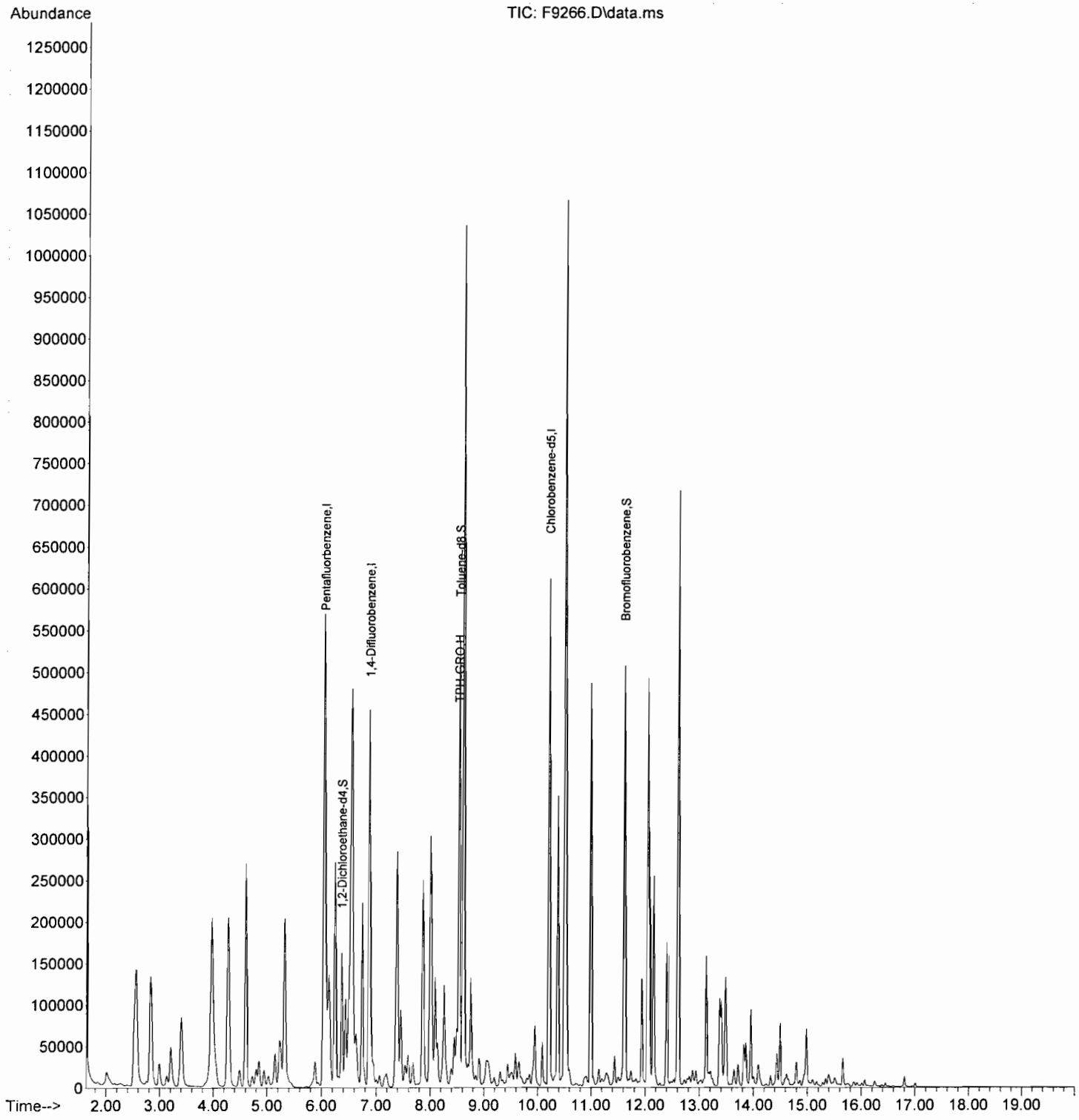
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	274954	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	412103	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	376513	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	118894	45.20	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 90.40%			
4) Toluene-d8	8.540	98	376931	50.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.20%			
6) Bromofluorobenzene	11.616	95	186373	48.00	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 96.00%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	24180365m	2199.29	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9266.D
Acq On : 20 Feb 2015 12:47
Operator : XING
Sample : ICC2000,ICC2000,A,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 15:27:11 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:50 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9267.D
Acq On : 20 Feb 2015 13:14
Operator : XING
Sample : ICC5000,ICC5000,A,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 15:27:37 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:27:23 2015
Response via : Initial Calibration

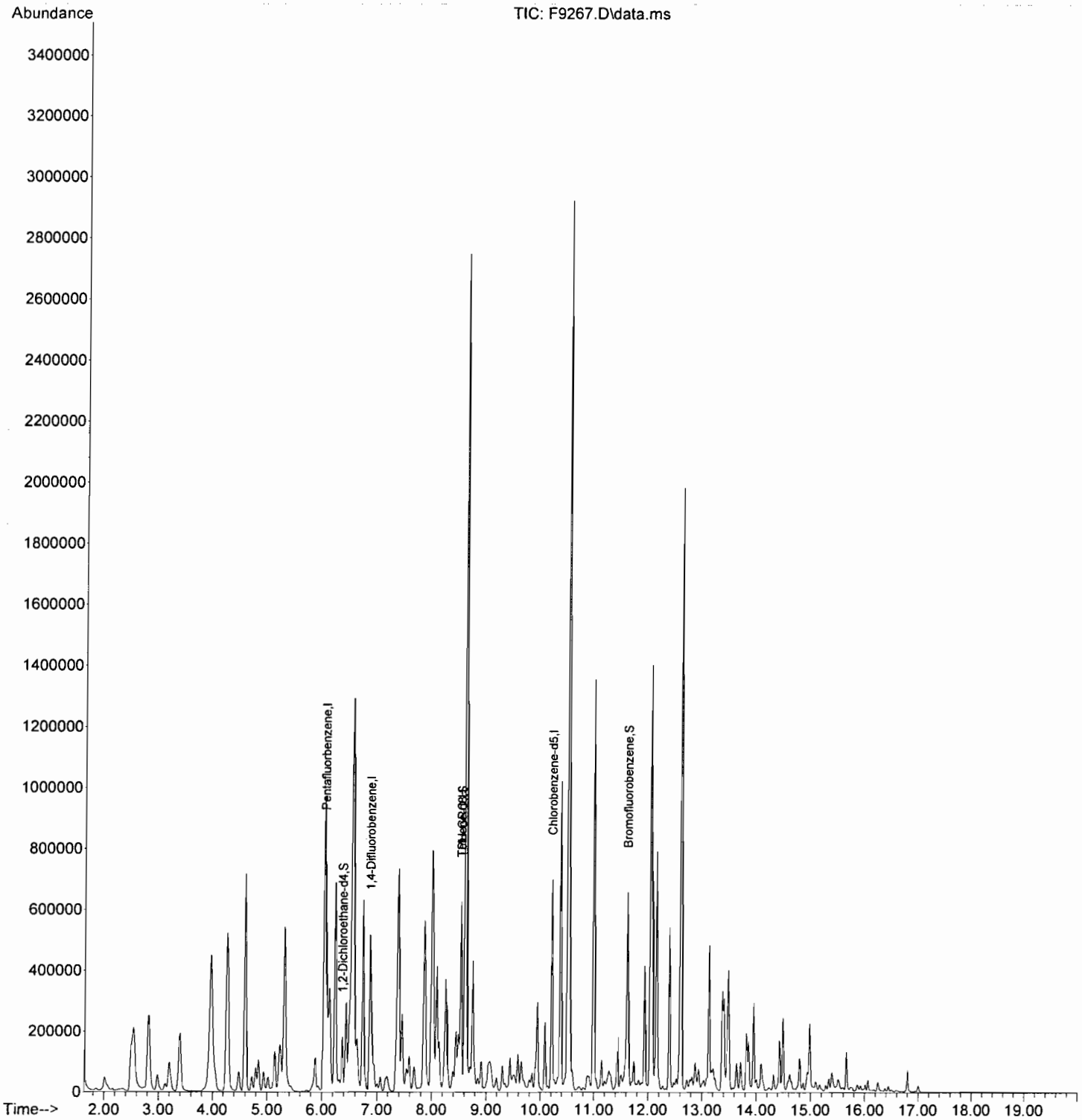
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	299488	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.865	114	447367	50.00	UG	-0.01
5) Chlorobenzene-d5	10.215	117	427354	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	126873	44.29	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 88.58%			
4) Toluene-d8	8.540	98	425401	52.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 105.20%			
6) Bromofluorobenzene	11.616	95	211260	47.94	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 95.88%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	69791478m	5592.60	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9267.D
Acq On : 20 Feb 2015 13:14
Operator : XING
Sample : ICC5000,ICC5000,A,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 15:27:37 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:27:23 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Min. RRF : 0.300 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorbenzene	1.000	1.000	0.0	111	0.00
2	S	1,2-Dichloroethane-d4	0.478	0.441	7.7	110	0.00
3	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
4	S	Toluene-d8	0.904	0.906	-0.2	114	0.00
5	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00
6	S	Bromofluorobenzene	0.516	0.482	6.6	112	0.00
7	H	TPH-GRO	1.460	1.404	3.8	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FTPM0220.M Fri Feb 20 15:29:00 2015 RP1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

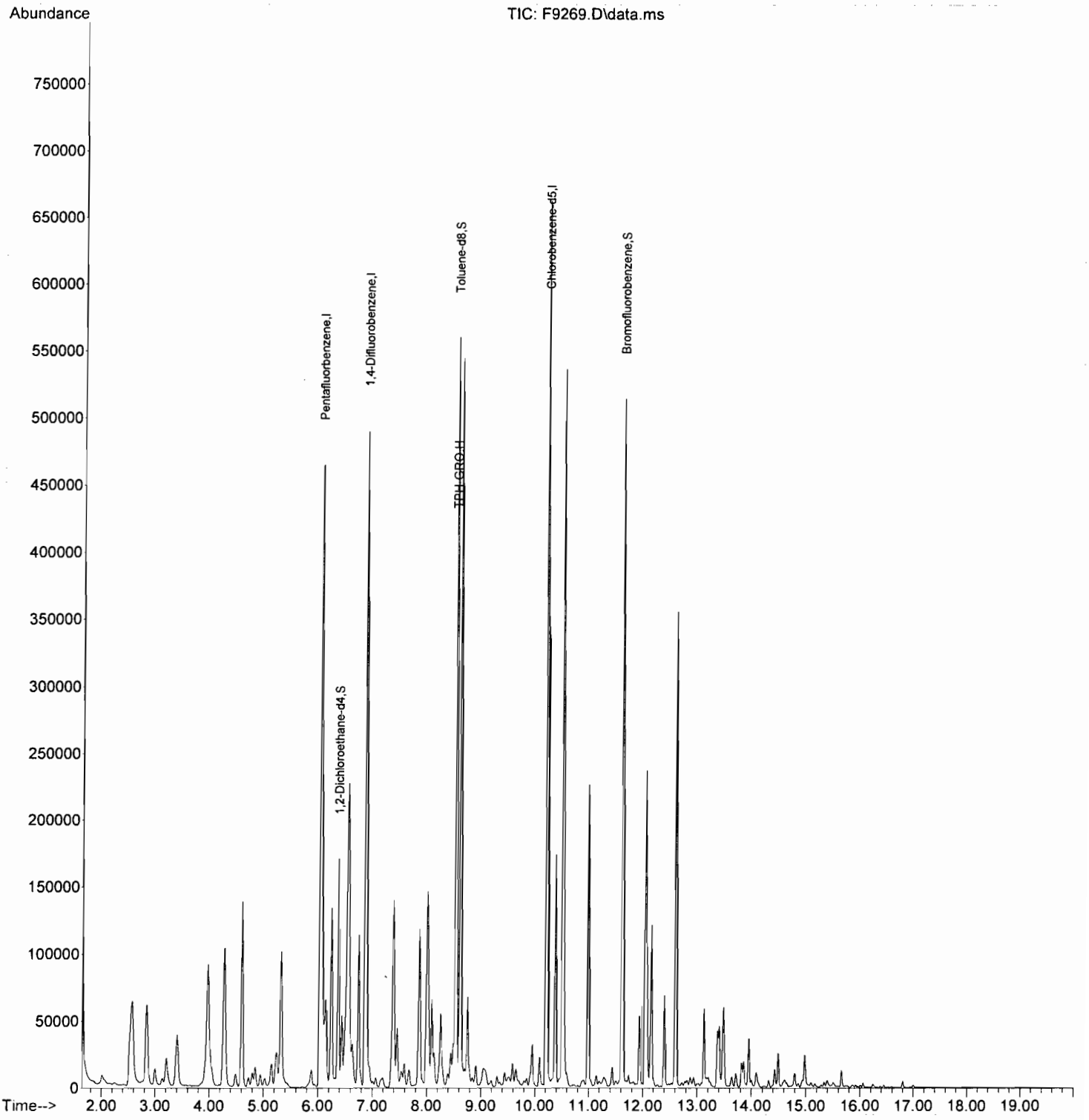
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	284376	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	442387	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	405946	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	125341	46.08	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 92.16%			
4) Toluene-d8	8.540	98	400915	50.13	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.26%			
6) Bromofluorobenzene	11.616	95	195564	46.72	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.44%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	11397407m	961.47	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

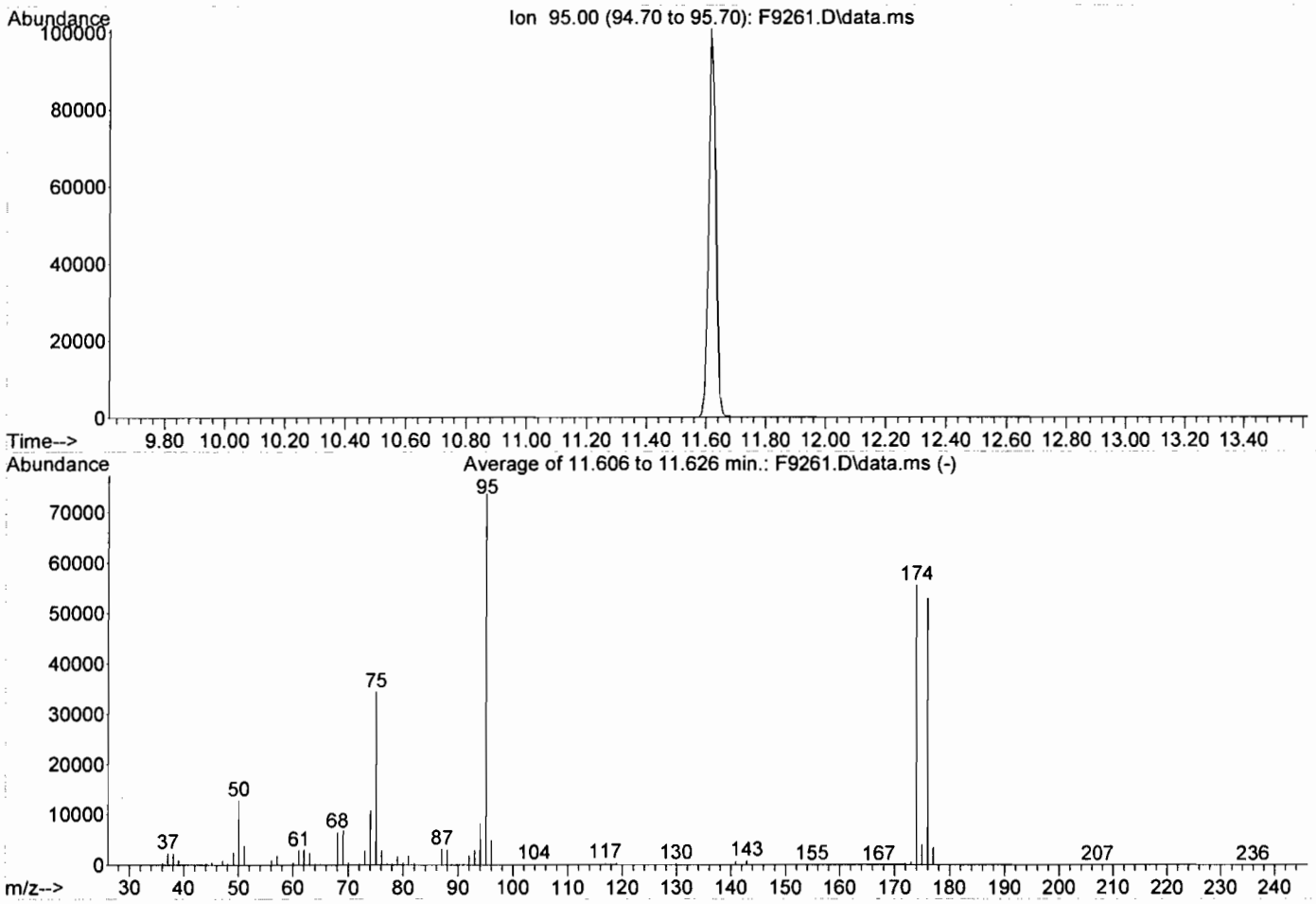


GRO
VOLATILE ORGANICS RAW QC DATA

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9261.D
Acq On : 20 Feb 2015 9:33
Operator : XING
Sample : BFB150220
Misc : 50NG
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\FA010715.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Thu Jan 08 09:56:44 2015



AutoFind: Scans 983, 984, 985; Background Corrected with Scan 977

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	12886	PASS
75	95	30	60	46.9	34504	PASS
95	95	100	100	100.0	73640	PASS
96	95	5	9	6.7	4905	PASS
173	174	0.00	2	1.1	616	PASS
174	95	50	100	75.5	55562	PASS
175	174	5	9	7.3	4064	PASS
176	174	95	101	95.2	52883	PASS
177	176	5	9	6.7	3554	PASS

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	443	47.10	884	56.05	976	68.05	6566
37.10	2421	48.05	324	57.10	1906	69.10	6872
38.10	2282	49.10	2552	58.10	77	70.05	518
39.10	987	50.10	12886	60.05	542	71.00	27
40.05	40	51.10	3930	61.10	2975	71.20	20
41.15	62	52.10	149	62.05	3106	72.00	325
42.20	21	52.70	6	63.10	2479	73.05	2945
43.15	96	53.00	18	64.05	276	74.05	10886
44.10	348	53.20	21	65.05	254	75.10	34504
45.10	547	54.05	18	66.00	24	76.10	3001
46.15	65	55.05	152	67.05	190	77.10	434

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.00	295	91.00	246	104.95	106	116.90	434
79.00	1772	92.00	2002	105.90	259	117.90	265
80.00	544	93.00	3078	106.95	59	118.90	365
80.95	1908	94.00	8251	108.05	27	119.90	13
82.00	393	95.10	73640	109.90	57	120.50	6
83.00	73	96.05	4905	110.95	46	122.00	6
84.10	12	97.05	157	111.90	35	123.00	22
85.05	22	98.15	27	112.10	21	123.90	40
85.95	94	99.15	29	112.95	60	124.80	8
87.00	3218	102.85	24	114.90	61	125.40	7
88.00	3085	103.90	286	115.90	267	125.95	25

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
126.85	19	138.80	12	148.95	52	160.95	68
128.00	235	139.20	7	149.95	65	167.10	7
128.95	122	139.90	48	151.80	15	168.50	11
129.90	280	140.90	726	152.05	27	169.80	14
130.95	88	141.95	94	152.90	39	170.10	13
131.90	16	142.95	885	153.95	52	170.95	89
133.80	7	143.95	61	154.95	175	171.95	373
134.80	19	144.90	190	155.95	69	173.00	616
134.95	143	145.95	112	156.95	160	174.00	55562
135.90	13	146.90	51	158.00	53	175.00	4064
136.90	122	147.95	172	158.90	97	176.00	52883

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	3554						
177.95	92						
207.10	7						
236.00	8						

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: BLKT150220-01
Client ID: BLKT150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: F9271.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		2.50	2.00

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9271.D
Acq On : 20 Feb 2015 15:06
Operator : XING
Sample : BLKT150220-01,BLKT150220-01,M,0.1g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 15:30:17 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	189146	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	336251	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	279757	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.378	65	110457	61.05	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 122.10%#			
4) Toluene-d8	8.540	98	258922	42.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 85.20%#			
6) Bromofluorobenzene	11.616	95	128872	44.67	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 89.34%			

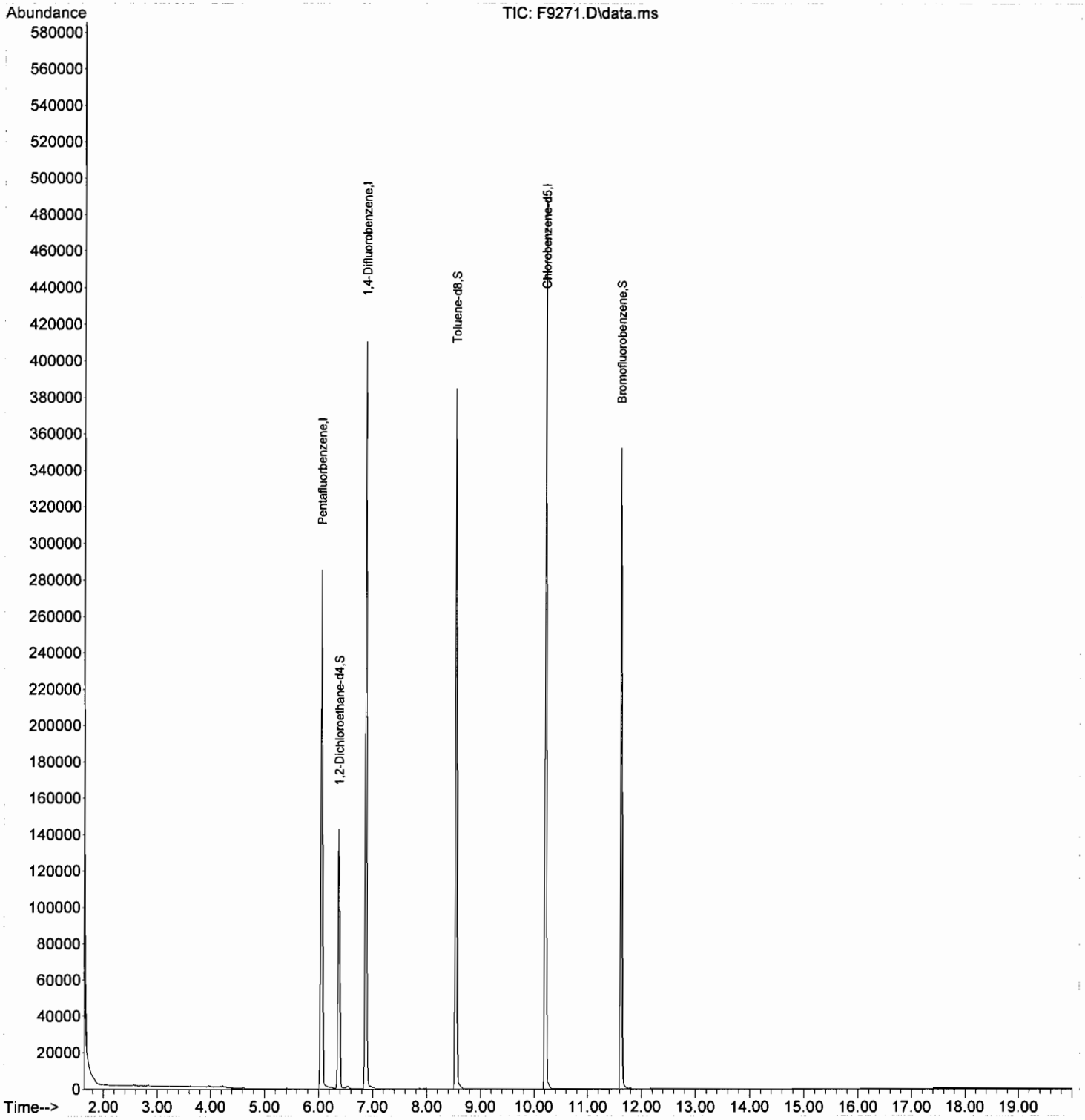
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9271.D
Acq On : 20 Feb 2015 15:06
Operator : XING
Sample : BLKT150220-01,BLKT150220-01,M,0.1g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 15:30:17 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9273.D
Acq On : 20 Feb 2015 16:02
Operator : XING
Sample : TPH-500PPB,LCST150220-01,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 16:22:33 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

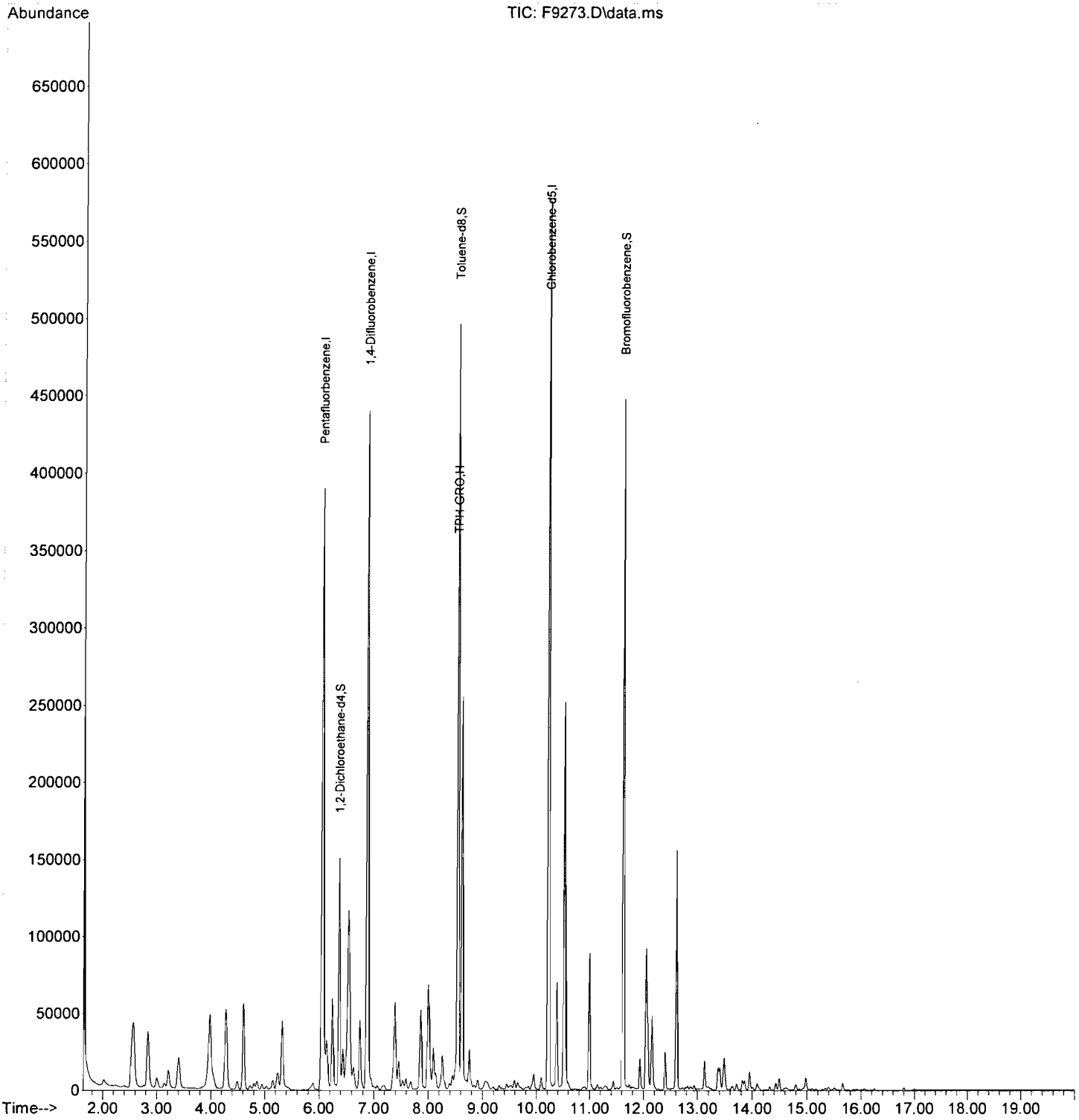
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	243648	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	388262	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	349700	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	113808	48.83	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.66%			
4) Toluene-d8	8.540	98	346583	49.38	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 98.76%			
6) Bromofluorobenzene	11.616	95	166330	46.13	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 92.26%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	4847922m	474.74	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9273.D
Acq On : 20 Feb 2015 16:02
Operator : XING
Sample : TPH-500PPB,LCST150220-01,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 16:22:33 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9274.D
Acq On : 20 Feb 2015 16:29
Operator : XING
Sample : MS,01273-001MS,M,0.05g,0
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 16:55:38 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

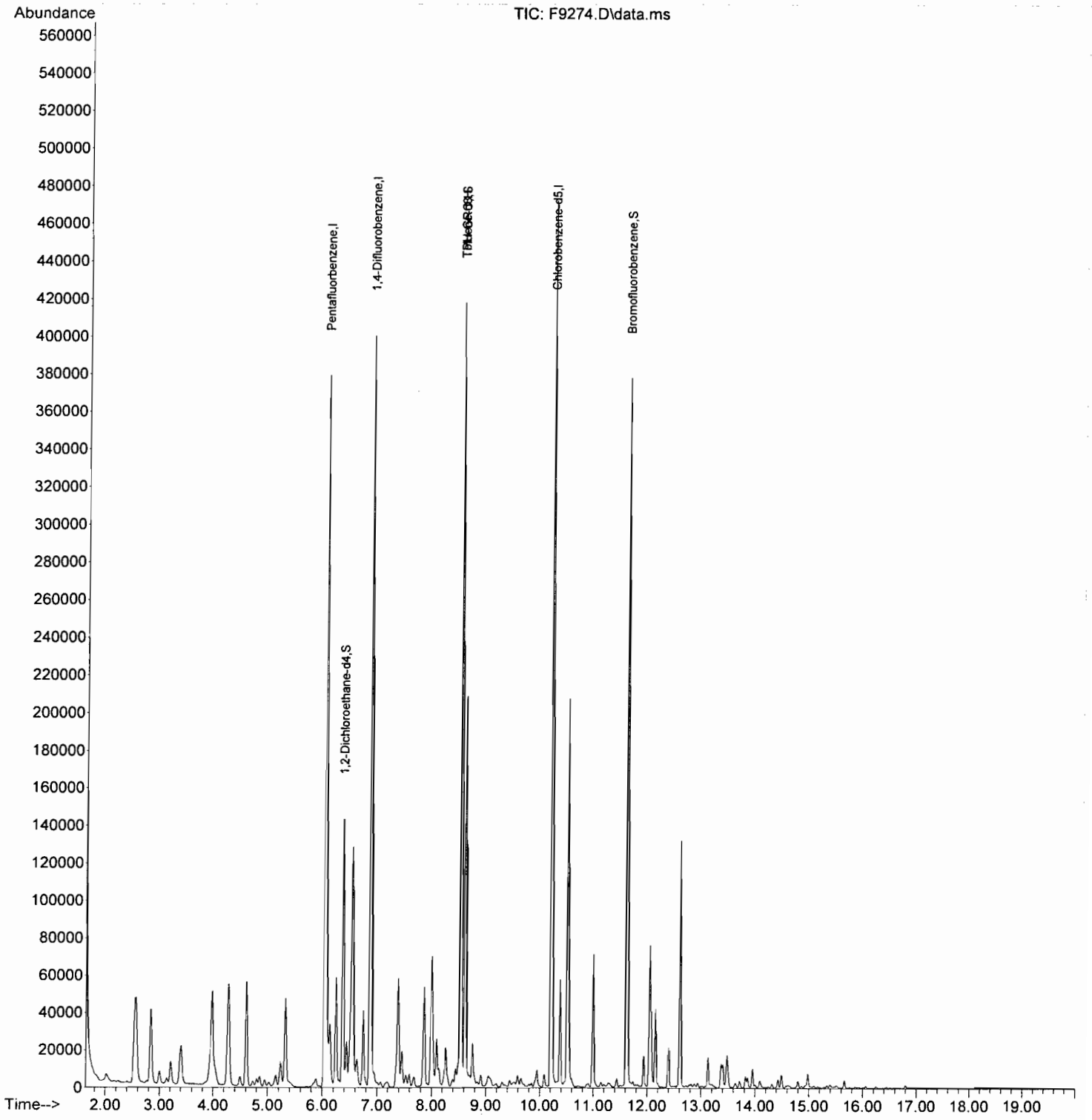
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	236255	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	358884	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	291005	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	108457	47.99	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 95.98%			
4) Toluene-d8	8.540	98	297179	45.81	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 91.62%			
6) Bromofluorobenzene	11.616	95	140721	46.90	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.80%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	4627358m	544.54	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9274.D
Acq On : 20 Feb 2015 16:29
Operator : XING
Sample : MS,01273-001MS,M,0.05g,0
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 16:55:38 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9275.D
Acq On : 20 Feb 2015 16:57
Operator : XING
Sample : MSD,01273-001MSD,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:20:19 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

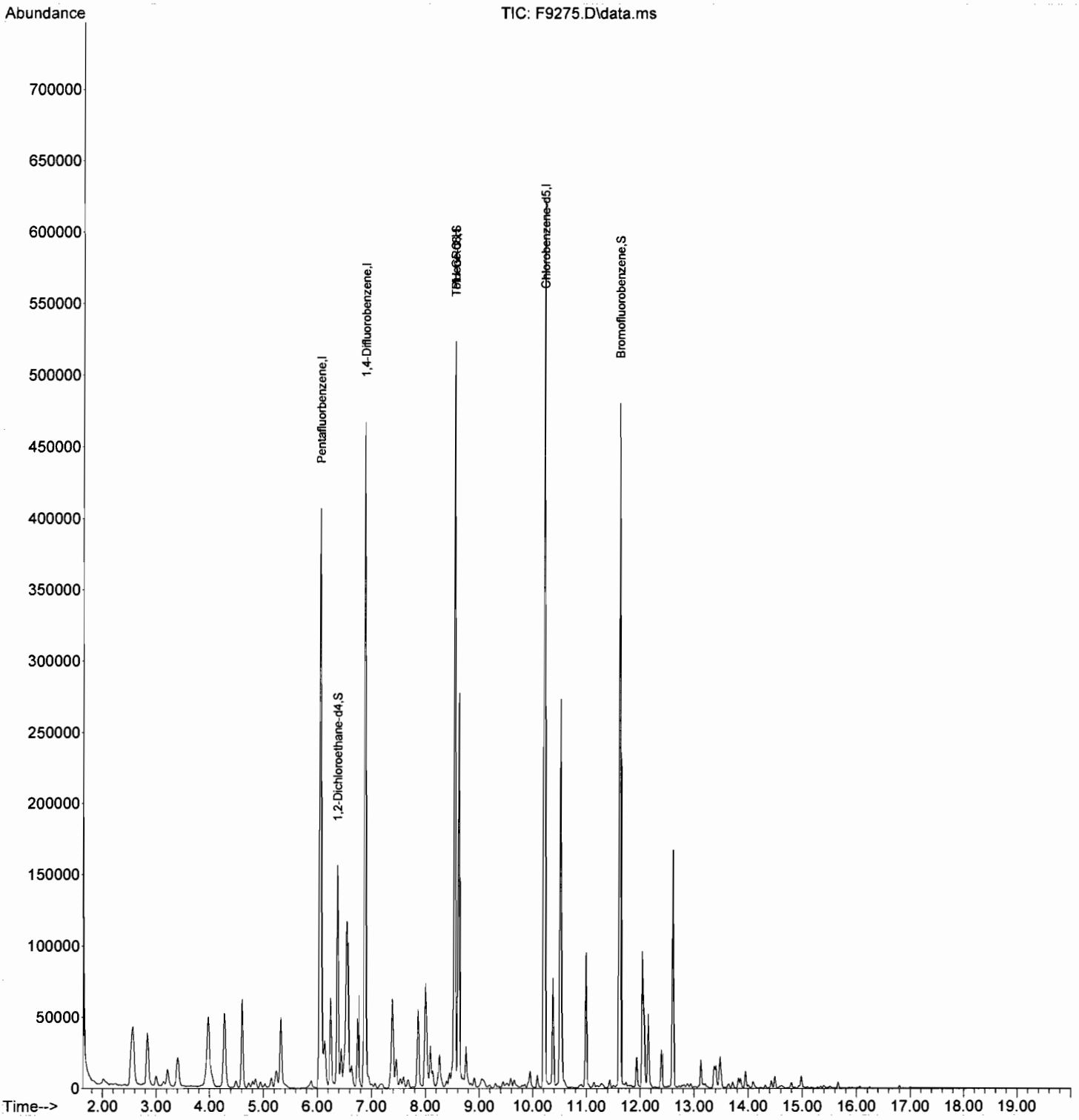
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	257710	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	412275	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	376144	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	119066	48.30	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 96.60%			
4) Toluene-d8	8.540	98	370530	49.72	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.44%			
6) Bromofluorobenzene	11.616	95	180493	46.54	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.08%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	5171566m	470.83	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9275.D
Acq On : 20 Feb 2015 16:57
Operator : XING
Sample : MSD,01273-001MSD,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:20:19 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



GRO
VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/20/2015 16:56

INSTRUMENT: MSD-F

TUNE FILE: TUNE F

SEQUENCE FILE: 2/20/2015

METHOD: FTPM0220

ANALYST: Xingfang Wang

WXF Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX	Client ID	Samp Date	Recd Date	% Moist	Comments
1	1	F9261	BFB150220	BFB150220									ok
2	2	F9262	ICC50	ICC50		5		A				100	ok
3	3	F9263	ICC100	ICC100		5		A				100	ok
4	4	F9264	ICC200	ICC200		5		A				100	ok
5	5	F9265	ICC1000	ICC1000		5		A				100	ok
6	6	F9266	ICC2000	ICC2000		5		A				100	ok
7	7	F9267	ICC5000	ICC5000		5		A				100	ok
8	8	F9268	RB			5		A				100	/
9	9	F9269	ICV1000	ICV1000		5		A				100	ok
10	10	F9270	RB			5		A				100	/
11	11	F9271	BLKT150220-01	LKT150220-01		0.1		M				0	ok
12	12	F9272	1273	1	1	0.05		M	GPEC-WC1-02181	02/18/15	02/19/15	10.6	ok
13	13	F9273	TPH-500PPB	CST150220-	1	0.05		M				0	ok
14	14	F9274	MS	01273-001MS	1	0.05		M				0	ok
15	15	F9275	MSD	1273-001MS	1	0.05		M				0	ok
16	16	F9276	RB		1	0.05		M				0	/

LS1030 TPH-GRO Working std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertPrep GAS-20 (Lot# C113091108) @ 20mg/ml
Exp: 3/11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/3/14, exp. 2/28/17)
Exp: 3/9/15 1ml ECS-A40 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/7/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIPE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 12/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
1ml of VO-IALAS-1 @ 2,000ppm Lot# C112121913 (Rec: 5/1/14, exp: 4/29/2017)
diluted into 50ml MeOH.

LS1032 Secondary Acrolein/Acrylonitrile @ 1000ppm working soln
prep 12/15/14 1ml of ECS-A-038 (Lot # 120814, exp. 3/8/15) into 10ml
exp. 3/8/15 MeOH, final volume is 10ml

LS1033 TPH-GRO working std @ 500 mg/ml
prep: 1/7/15 125 µl of Spex CertPrep GAS-20 (Lot# C113091108) @ 20mg/ml
Exp: 4/7/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working std @ 1,000µg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/13/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280
Storage: Freeze (<-10° C)
Danger

LS1035 BFB @ 25 µg/ml for tuning
prep: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 524 MM21 (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) into 1ml MeOH. Final Volume 2ml
CXM

LS1036: 1,4-Dioxane working Std @ 10,000 ppm
prep: 1/20/15 Transfer 1,4-Dioxane @ 10,000ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CXM

LS1037 DIPE stock std soln @ 5,000 µg/ml
XF 2/3/15 34.48 µl of DIPE neat (Recd 6/9/13, Lot # SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
F 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
p. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
prep: 4/5/15 1ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MeOH
CXM

TCLP
VOLATILE ORGANICS

TCLP
VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA150220-01	AQUEOUS	L6704.D	96	99	99
TCLP150220	LEACHATE	L6705.D	96	99	94
01273-001	LEACHATE	L6706.D	96	99	95
SPLP150207	LEACHATE	L6707.D	96	99	97
00995-002	LEACHATE	L6708.D	99	98	97
01137-002	AQUEOUS	L6709.D	96	96	98
01137-007	AQUEOUS	L6710.D	97	97	92
01137-008	AQUEOUS	L6711.D	95	97	93
01137-003	AQUEOUS	L6712.D	94	98	99
01213-001	AQUEOUS	L6714.D	98	97	88
LCSA150220-01	AQUEOUS	L6715.D	96	100	92
01273-001MS	AQUEOUS	L6716.D	96	101	92
01273-001MSD	AQUEOUS	L6717.D	95	101	94
01137-005	AQUEOUS	L6720.D	99	97	96
01137-006	AQUEOUS	L6721.D	99	96	99
01137-001	AQUEOUS	L6722.D	100	97	95
01137-004	AQUEOUS	L6723.D	101	98	99
01214-001	AQUEOUS	L6724.D	101	97	95
01244-001	AQUEOUS	L6725.D	100	96	91
01244-002	AQUEOUS	L6726.D	101	98	92
01244-003	AQUEOUS	L6727.D	101	99	91

			Leachate	
	Concentration	DKQPs	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	45-154	45-153
SMC2 = Toluene-d8	50 ppb	70-130	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	48-149	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	62.0	124	
Chloromethane	50.0	0.0	55.4	111	
Vinyl chloride	50.0	0.0	58.0	116	
Bromomethane	50.0	0.0	53.2	106	
Chloroethane	50.0	0.0	56.8	114	
Trichlorofluoromethane	50.0	0.0	43.6	87	
Acrolein	150	0.0	154.4	103	
1,1-Dichloroethene	50.0	0.0	53.3	107	
Acetone	50.0	0.0	63.1	126	
Carbon disulfide	50.0	0.0	55.6	111	
Vinyl acetate	50.0	0.0	50.1	100	
Methylene chloride	50.0	0.0	49.3	99	
Acrylonitrile	150.0	0.0	154.9	103	
tert-Butyl alcohol (TBA)	100.0	0.0	89.0	89	
trans-1,2-Dichloroethene	50.0	0.0	48.6	97	
Methyl tert-butyl ether (MTBE)	50.0	0.0	48.4	97	
1,1-Dichloroethane	50.0	0.0	49.0	98	
Diisopropyl ether (DIPE)	50.0	0.0	52.3	105	
cis-1,2-Dichloroethene	50.0	0.0	50.1	100	
2,2-Dichloropropane	50.0	0.0	53.3	107	
2-Butanone (MEK)	50.0	0.0	61.7	123	
Bromochloromethane	50.0	0.0	46.3	93	
Chloroform	50.0	0.0	46.1	92	
1,1,1-Trichloroethane	50.0	0.0	51.6	103	
Carbon tetrachloride	50.0	0.0	52.2	104	
1,1-Dichloropropene	50.0	0.0	53.3	107	
1,2-Dichloroethane (EDC)	50.0	0.0	45.5	91	
Benzene	50.0	0.0	48.6	97	
Trichloroethene	50.0	0.0	48.6	97	
1,2-Dichloropropane	50.0	0.0	50.7	101	
Dibromomethane	50.0	0.0	45.5	91	
1,4-Dioxane	1500	0.0	1162	77	
Bromodichloromethane	50.0	0.0	48.7	97	
2-Chloroethyl vinyl ether	50.0	0.0	49.6	99	
cis-1,3-Dichloropropene	50.0	0.0	53.3	107	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	57.1	114	
Toluene	50.0	0.0	48.2	96	
trans-1,3-Dichloropropene	50.0	0.0	52.1	104	
1,1,2-Trichloroethane	50.0	0.0	47.3	95	
Tetrachloroethene	50.0	0.0	47.7	95	
1,3-Dichloropropane	50.0	0.0	49.4	99	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	63.9	128	
Dibromochloromethane	50.0	0.0	49.1	98	
1,2-Dibromoethane (EDB)	50.0	0.0	48.6	97	
Chlorobenzene	50.0	0.0	45.5	91	
1,1,1,2-Tetrachloroethane	50.0	0.0	48.4	97	
Ethylbenzene	50.0	0.0	49.0	98	
m,p-Xylene	100.0	0.0	98.2	98	
o-Xylene	50.0	0.0	50.7	101	
Styrene	50.0	0.0	50.7	101	
Bromoform	50.0	0.0	47.2	94	
Isopropylbenzene	50.0	0.0	50.9	102	
1,1,2,2-Tetrachloroethane	50.0	0.0	42.4	85	
Bromobenzene	50.0	0.0	45.2	90	
1,2,3-Trichloropropane	50.0	0.0	43.5	87	
n-Propylbenzene	50.0	0.0	47.1	94	
2-Chlorotoluene	50.0	0.0	45.5	91	
1,3,5-Trimethylbenzene	50.0	0.0	46.9	94	
4-Chlorotoluene	50.0	0.0	44.1	88	
tert-Butylbenzene	50.0	0.0	46.4	93	
1,2,4-Trimethylbenzene	50.0	0.0	44.8	90	
sec-Butylbenzene	50.0	0.0	45.3	91	
1,3-Dichlorobenzene	50.0	0.0	41.8	84	
4-Isopropyltoluene	50.0	0.0	44.8	90	
1,4-Dichlorobenzene	50.0	0.0	40.8	82	
n-Butylbenzene	50.0	0.0	45.2	90	
1,2-Dichlorobenzene	50.0	0.0	41.2	82	
1,2-Dibromo-3-chloropropane	50.0	0.0	38.7	77	
1,2,4-Trichlorobenzene	50.0	0.0	38.8	78	
Hexachlorobutadiene	50.0	0.0	40.3	81	
Naphthalene	50.0	0.0	37.1	74	
1,2,3-Trichlorobenzene	50.0	0.0	36.2	72	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	54.3	109	
Methyl acetate	50.0	0.0	54.1	108	
Cyclohexane	50.0	0.0	55.7	111	
Methylcyclohexane	50.0	0.0	55.6	111	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260 **MS/MSD SPIKE REPORT**

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	62.8	126		58.7	117		7	
Chloromethane	50.0	0.0	59.1	118		54.4	109		8	
Vinyl chloride	50.0	0.0	64.4	129		54.5	109		17	
Bromomethane	50.0	0.0	55.3	111		49.8	100		10	
Chloroethane	50.0	0.0	60.3	121		51.9	104		15	
Trichlorofluoromethane	50.0	0.0	47.0	94		39.7	79		17	
Acrolein	150	0.0	162	108		162	108		0	
1,1-Dichloroethene	50.0	0.0	58.9	118		51.4	103		14	
Acetone	50.0	0.0	61.9	124		58.8	118		5	
Carbon disulfide	50.0	0.0	61.8	124		52.9	106		16	
Vinyl acetate	50.0	0.0	53.7	107		50.6	101		6	
Methylene chloride	50.0	0.0	50.8	102		48.0	96		6	
Acrylonitrile	150	0.0	181	121		187	125		3	
tert-Butyl alcohol (TBA)	100	0.0	97.7	98		96.6	97		1	
trans-1,2-Dichloroethene	50.0	0.0	53.0	106		48.7	97		8	
Methyl tert-butyl ether (MTBE)	50.0	0.0	51.3	103		48.7	97		5	
1,1-Dichloroethane	50.0	0.0	51.4	103		48.7	97		5	
Diisopropyl ether (DIPE)	50.0	0.0	54.3	109		52.3	105		4	
cis-1,2-Dichloroethene	50.0	0.0	52.4	105		50.0	100		5	
2,2-Dichloropropane	50.0	0.0	61.7	123		51.7	103		18	
2-Butanone (MEK)	50.0	0.0	61.5	123		63.7	127		4	
Bromochloromethane	50.0	0.0	48.7	97		46.6	93		4	
Chloroform	50.0	0.0	48.2	96		46.3	93		4	
1,1,1-Trichloroethane	50.0	0.0	57.6	115		50.0	100		14	
Carbon tetrachloride	50.0	0.0	60.5	121		50.8	102		17	
1,1-Dichloropropene	50.0	0.0	58.9	118		51.9	104		13	
1,2-Dichloroethane (EDC)	50.0	0.0	46.6	93		45.3	91		3	
Benzene	50.0	0.0	50.5	101		48.2	96		5	
Trichloroethene	50.0	0.0	50.8	102		47.8	96		6	
1,2-Dichloropropane	50.0	0.0	51.9	104		50.3	101		3	
Dibromomethane	50.0	0.0	46.6	93		45.1	90		3	
1,4-Dioxane	1,500	0.0	1738	116		1717	114		1	
Bromodichloromethane	50.0	0.0	49.9	100		48.5	97		3	
2-Chloroethyl vinyl ether	50.0	0.0	50.9	102		49.6	99		3	
cis-1,3-Dichloropropene	50.0	0.0	55.4	111		53.6	107		3	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	59.2	118		57.5	115		3	
Toluene	50.0	0.0	50.2	100		47.9	96		5	
trans-1,3-Dichloropropene	50.0	0.0	54.4	109		53.7	107		1	
1,1,2-Trichloroethane	50.0	0.0	48.6	97		47.4	95		3	
Tetrachloroethene	50.0	0.0	52.4	105		48.4	97		8	
1,3-Dichloropropane	50.0	0.0	50.1	100		49.1	98		2	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	59.5	119		58.7	117		1	
Dibromochloromethane	50.0	0.0	51.3	103		50.0	100		3	
1,2-Dibromoethane (EDB)	50.0	0.0	49.9	100		48.8	98		2	
Chlorobenzene	50.0	0.0	47.3	95		46.5	93		2	
1,1,1,2-Tetrachloroethane	50.0	0.0	50.4	101		49.1	98		3	
Ethylbenzene	50.0	0.0	53.1	106		50.6	101		5	
m,p-Xylene	100	0.0	105.2	105		101.5	102		4	
o-Xylene	50.0	0.0	54.8	110		52.8	106		4	
Styrene	50.0	0.0	54.0	108		53.1	106		2	
Bromoform	50.0	0.0	52.2	104		51.0	102		2	
Isopropylbenzene	50.0	0.0	57.2	114		53.6	107		6	
1,1,2,2-Tetrachloroethane	50.0	0.0	44.8	90		43.7	87		2	
Bromobenzene	50.0	0.0	48.3	97		47.5	95		2	
1,2,3-Trichloropropane	50.0	0.0	45.6	91		44.6	89		2	
n-Propylbenzene	50.0	0.0	54.2	108		50.5	101		7	
2-Chlorotoluene	50.0	0.0	49.7	99		48.4	97		3	
1,3,5-Trimethylbenzene	50.0	0.0	53.8	108		51.0	102		5	
4-Chlorotoluene	50.0	0.0	48.5	97		47.1	94		3	
tert-Butylbenzene	50.0	0.0	54.5	109		50.9	102		7	
1,2,4-Trimethylbenzene	50.0	0.0	50.6	101		48.3	97		5	
sec-Butylbenzene	50.0	0.0	55.2	110		51.2	102		8	
1,3-Dichlorobenzene	50.0	0.0	45.8	92		45.3	91		1	
4-Isopropyltoluene	50.0	0.0	53.8	108		51.2	102		5	
1,4-Dichlorobenzene	50.0	0.0	45.1	90		44.3	89		2	
n-Butylbenzene	50.0	0.0	55.6	111		52.5	105		6	
1,2-Dichlorobenzene	50.0	0.0	45.3	91		44.9	90		1	
1,2-Dibromo-3-chloropropane	50.0	0.0	40.6	81		39.5	79		3	
1,2,4-Trichlorobenzene	50.0	0.0	49.2	98		48.3	97		2	
Hexachlorobutadiene	50.0	0.0	51.2	102		47.2	94		8	
Naphthalene	50.0	0.0	37.3	75		36.7	73		2	
1,2,3-Trichlorobenzene	50.0	0.0	47.3	95		52.4	105		10	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	54.3	109		49.5	99		9	
Methyl acetate	50.0	0.0	55.0	110		51.9	104		6	
Cyclohexane	50.0	0.0	60.8	122		53.9	108		12	
Methylcyclohexane	50.0	0.0	60.9	122		56.8	114		7	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L6704.D Instrument ID: MSD_L

Date Analyzed: 02/20/2015 Time Analyzed: 10:03

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TCLP150220	TCLP150220	02/20/2015	10:30
GPEC-WC1-02181	01273-001	02/20/2015	10:56
SPLP150207	SPLP150207	02/20/2015	11:23
SS-14A-01C/2.0	00995-002	02/20/2015	11:50
MW-3	01137-002	02/20/2015	12:17
MW-2	01137-007	02/20/2015	12:44
MW-6	01137-008	02/20/2015	13:11
MW-4	01137-003	02/20/2015	13:38
MW-1/5	01213-001	02/20/2015	14:32
LCS-50PPB	LCSA150220-01	02/20/2015	14:59
MS	01273-001MS	02/20/2015	15:25
MSD	01273-001MSD	02/20/2015	15:52
FIELD_BLANK	01137-005	02/20/2015	17:13
TRIP_BLANK	01137-006	02/20/2015	17:40
MW-1R	01137-001	02/20/2015	18:07
MW-5	01137-004	02/20/2015	18:33
MW-1/10	01214-001	02/20/2015	19:00
MW-1	01244-001	02/20/2015	19:27
MW-2	01244-002	02/20/2015	19:53
MW-3	01244-003	02/20/2015	20:20

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6604.D BFB Injection Date: 02/13/2015

Inst ID: MSD_L BFB Injection Time: 10:29

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	17.8	
75	30.0 - 60.0% of mass 95	48.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.6 (0.6)1	
174	Great than 50.0% of mass 95	99.1	
175	5.0 - 9.0% of mass 174	7.0 (7.1)1	
176	95.0 - 101.0% of mass 174	96.5 (97.4)1	
177	5.0 - 9.0% of mass 176	6.1 (6.3)2	
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC1	ICC1	L6605.D	02/13/2015	10:56
ICC5	ICC5	L6607.D	02/13/2015	11:53
ICC2	ICC2	L6608.D	02/13/2015	12:21
ICC20	ICC20	L6609.D	02/13/2015	12:48
ICC100	ICC100	L6610.D	02/13/2015	13:15
ICC150	ICC150	L6611.D	02/13/2015	13:42
ICC200	ICC200	L6612.D	02/13/2015	14:09
ICV100	ICV100	L6615.D	02/13/2015	15:30
BLKM150213-01	BLKM150213-01	L6618.D	02/13/2015	16:50
LCS-50PPB	LCSM150213-01	L6619.D	02/13/2015	17:17
MS	01069-001MS	L6620.D	02/13/2015	17:44
MSD	01069-001MSD	L6621.D	02/13/2015	18:12
ES-WC-91_(0-4)	01069-001	L6624.D	02/13/2015	19:32
T-2/5.0-5.5	01089-001	L6625.D	02/13/2015	19:59
SB-6/10.5	01049-007	L6626.D	02/13/2015	20:26
SB-7/7.5	01049-006	L6627.D	02/13/2015	20:52
SB-5/7.5	01049-005	L6628.D	02/13/2015	21:19
ES-WC-91_(4-8)	01069-002	L6629.D	02/13/2015	21:46
WC-1/GB6/12-12	01060-001	L6630.D	02/13/2015	22:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6701.D

BFB Injection Date: 02/20/2015

Inst ID: MSD_L

BFB Injection Time: 8:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.7			
75	30.0 - 60.0% of mass 95	46.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	98.8			
175	5.0 - 9.0% of mass 174	7.1	(	7.2	)1
176	95.0 - 101.0% of mass 174	96.1	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L6702.D	02/20/2015	9:08
BLKA150220-01	BLKA150220-01	L6704.D	02/20/2015	10:03
TCLP150220	TCLP150220	L6705.D	02/20/2015	10:30
GPEC-WC1-02181	01273-001	L6706.D	02/20/2015	10:56
SPLP150207	SPLP150207	L6707.D	02/20/2015	11:23
SS-14A-01C/2.0	00995-002	L6708.D	02/20/2015	11:50
MW-3	01137-002	L6709.D	02/20/2015	12:17
MW-2	01137-007	L6710.D	02/20/2015	12:44
MW-6	01137-008	L6711.D	02/20/2015	13:11
MW-4	01137-003	L6712.D	02/20/2015	13:38
MW-1/5	01213-001	L6714.D	02/20/2015	14:32
LCS-50PPB	LCSA150220-01	L6715.D	02/20/2015	14:59
MS	01273-001MS	L6716.D	02/20/2015	15:25
MSD	01273-001MSD	L6717.D	02/20/2015	15:52
FIELD_BLANK	01137-005	L6720.D	02/20/2015	17:13
TRIP_BLANK	01137-006	L6721.D	02/20/2015	17:40
MW-1R	01137-001	L6722.D	02/20/2015	18:07
MW-5	01137-004	L6723.D	02/20/2015	18:33
MW-1/10	01214-001	L6724.D	02/20/2015	19:00
MW-1	01244-001	L6725.D	02/20/2015	19:27

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6701.D BFB Injection Date : 02/20/201

Inst ID: MSD_L BFB Injection Time: 8:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.7			
75	30.0 - 60.0% of mass 95	46.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	98.8			
175	5.0 - 9.0% of mass 174	7.1	(	7.2	)1
176	95.0 - 101.0% of mass 174	96.1	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MW-2	01244-002	L6726.D	02/20/2015	19:53
MW-3	01244-003	L6727.D	02/20/2015	20:20

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6610.D Date Analyzed: 02/13/2015

Instrument ID: MSD_L Time Analyzed: 13:15

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	334357	6.13	464375	6.95	434421	10.29
	UPPER LIMIT	668714	6.63	928750	7.45	868842	10.79
	LOWER LIMIT	167178.5	5.63	232187.5	6.45	217210.5	9.79
	LAB SAMPLE ID						
01	ICC1	286657	6.13	409962	6.95	361365	10.29
02	ICC5	304709	6.13	431865	6.95	390295	10.29
03	ICC2	298969	6.13	429322	6.95	378604	10.29
04	ICC20	315672	6.13	444551	6.95	400966	10.29
05	ICC150	335884	6.13	470961	6.95	440697	10.29
06	ICC200	347689	6.13	492059	6.94	454144	10.29
07	ICV100	324200	6.13	455058	6.95	426508	10.29
08	BLKM150213-01	296616	6.13	423991	6.95	386239	10.29
09	LCSM150213-01	300487	6.13	426483	6.95	386354	10.29
10	01069-001MS	311799	6.13	436541	6.95	404194	10.29
11	01069-001MSD	317198	6.13	447453	6.95	416649	10.29
12	01069-001	323490	6.12	447114	6.94	395768	10.29
13	01089-001	322349	6.13	456099	6.95	417971	10.29
14	01049-007	342364	6.12	482740	6.94	435833	10.29
15	01049-006	353810	6.13	500879	6.94	455250	10.29
16	01049-005	373112	6.13	521120	6.94	477388	10.29
17	01069-002	369786	6.13	524497	6.95	472500	10.29
18	01060-001	370007	6.13	524324	6.95	463729	10.29
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6702.D Date Analyzed: 02/20/2015

Instrument ID: MSD_L Time Analyzed: 9:08

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	396182	6.13	567004	6.95	525446	10.29
	UPPER LIMIT	792364	6.63	1134008	7.45	1050892	10.79
	LOWER LIMIT	198091	5.63	283502	6.45	262723	9.79
	LAB SAMPLE ID						
01	BLKA150220-01	395270	6.13	561728	6.95	517534	10.29
02	TCLP150220	388456	6.13	555838	6.95	505670	10.29
03	01273-001	383297	6.13	547554	6.95	504535	10.29
04	SPLP150207	382177	6.13	543077	6.95	500403	10.29
05	00995-002	368268	6.13	530332	6.95	491932	10.29
06	01137-002	358906	6.13	504406	6.95	441781	10.29
07	01137-007	366400	6.13	518865	6.95	455972	10.29
08	01137-008	359499	6.13	499821	6.95	436848	10.29
09	01137-003	355099	6.13	502966	6.95	460139	10.29
10	01213-001	348964	6.13	498361	6.95	440328	10.29
11	LCSA150220-01	358207	6.13	505677	6.95	465279	10.29
12	01273-001MS	350927	6.13	499982	6.95	457693	10.29
13	01273-001MSD	362029	6.13	510735	6.95	466211	10.29
14	01137-005	332042	6.13	472562	6.95	432911	10.29
15	01137-006	334498	6.13	481200	6.95	427831	10.29
16	01137-001	324840	6.13	461642	6.95	427180	10.29
17	01137-004	309013	6.13	439981	6.95	415435	10.29
18	01214-001	311805	6.13	448291	6.95	405623	10.29
19	01244-001	302713	6.13	427750	6.95	381285	10.29
20	01244-002	301531	6.13	436343	6.95	395069	10.29
21	01244-003	296768	6.13	422672	6.95	387127	10.29
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

TCLP
VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6706.D
Acq On : 20 Feb 2015 10:56
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,T,0.1ml,100
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 16:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	383297	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	547554	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	504535	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	156919	47.78	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.56%			
41) Toluene-d8	8.62	98	480459	49.55	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.10%			
59) Bromofluorobenzene	11.69	95	209857	47.59	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.18%			
Target Compounds						Qvalue

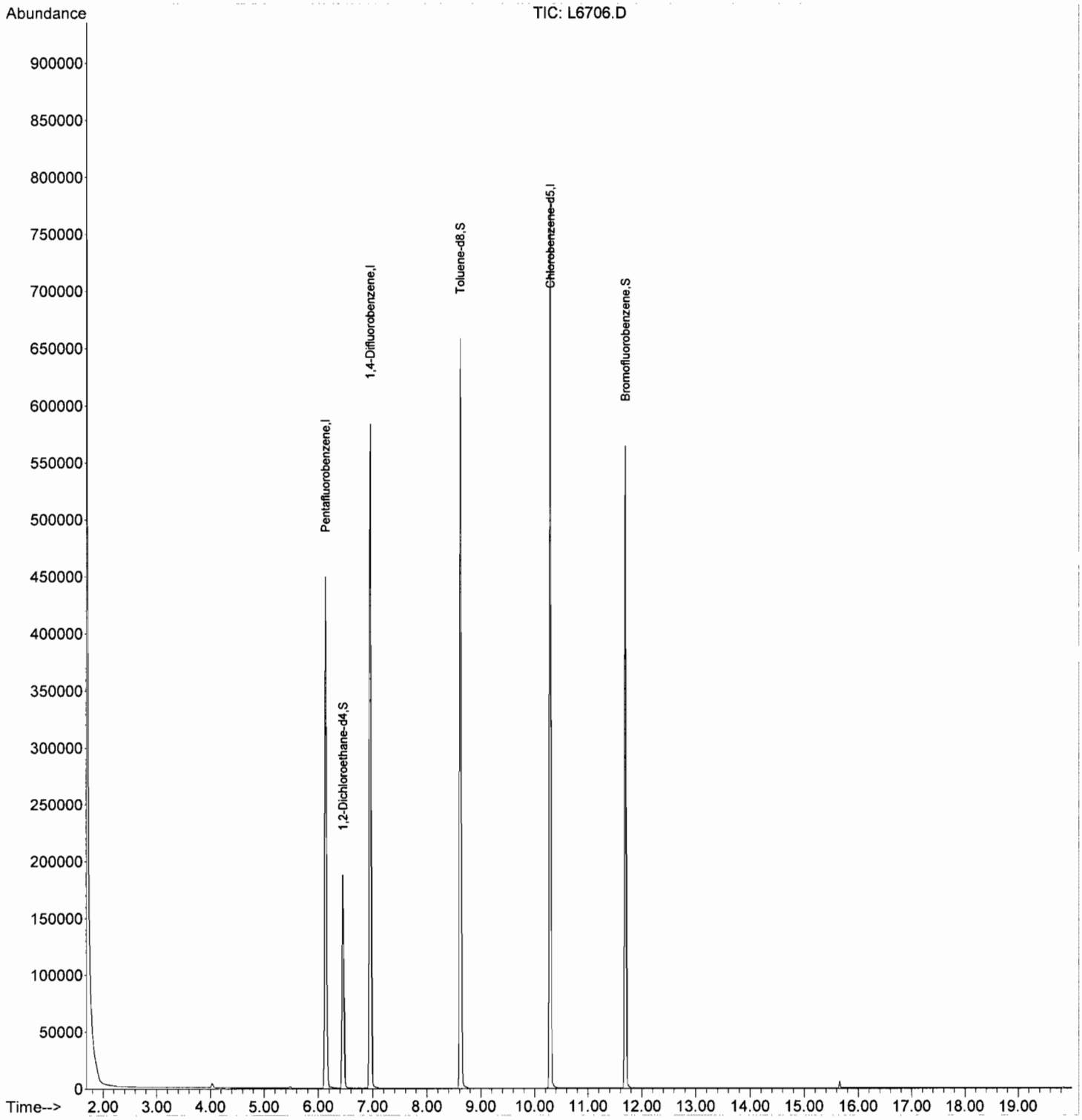
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

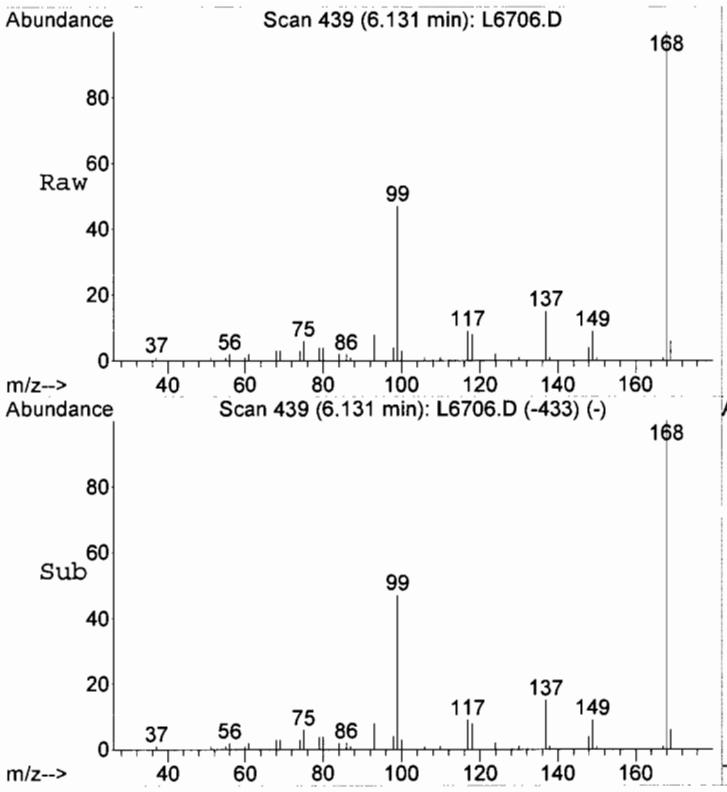
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6706.D
Acq On : 20 Feb 2015 10:56
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,T,0.1ml,100
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 16:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



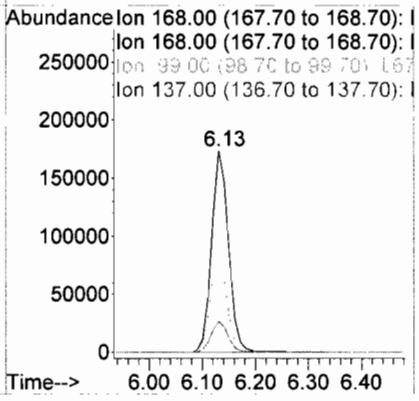
2/23/15

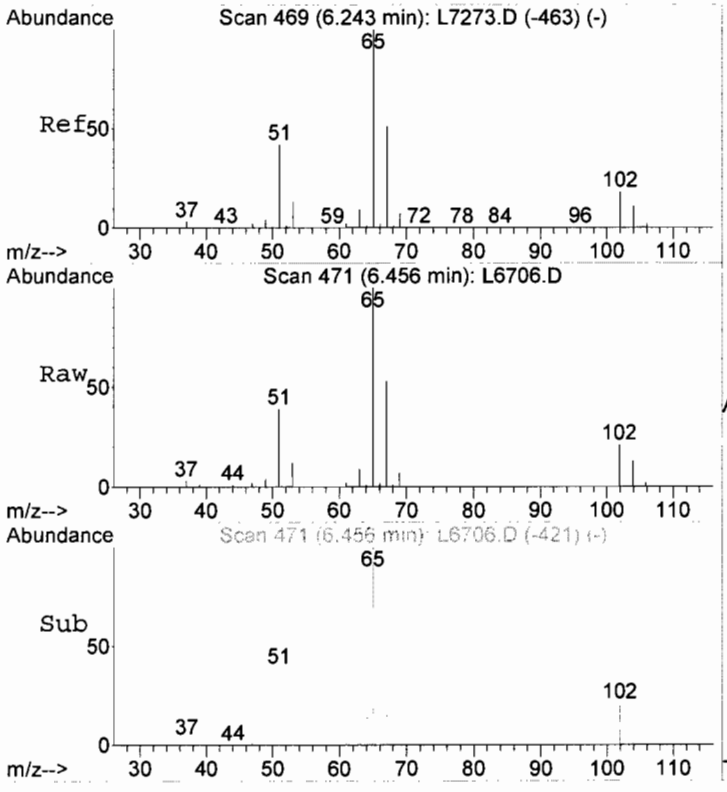


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:168 Resp: 383297

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

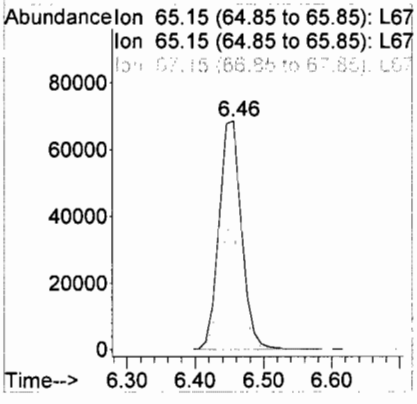


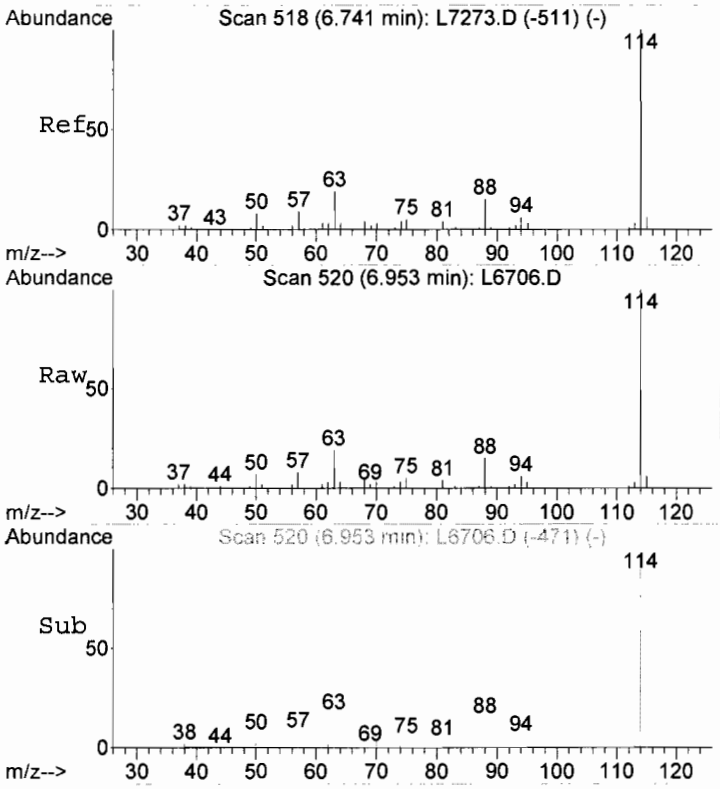


#30
1,2-Dichloroethane-d4
Concen: 47.78 UG
RT: 6.46 min Scan# 471
Delta R.T. 0.01 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 65 Resp: 156919

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	52.8	35.1	65.1

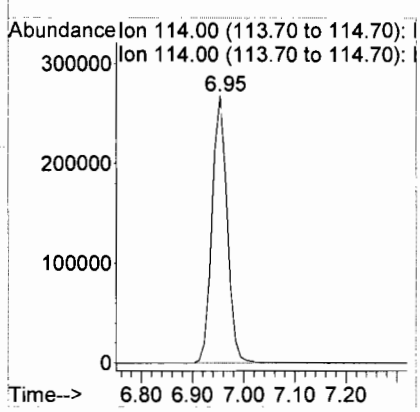


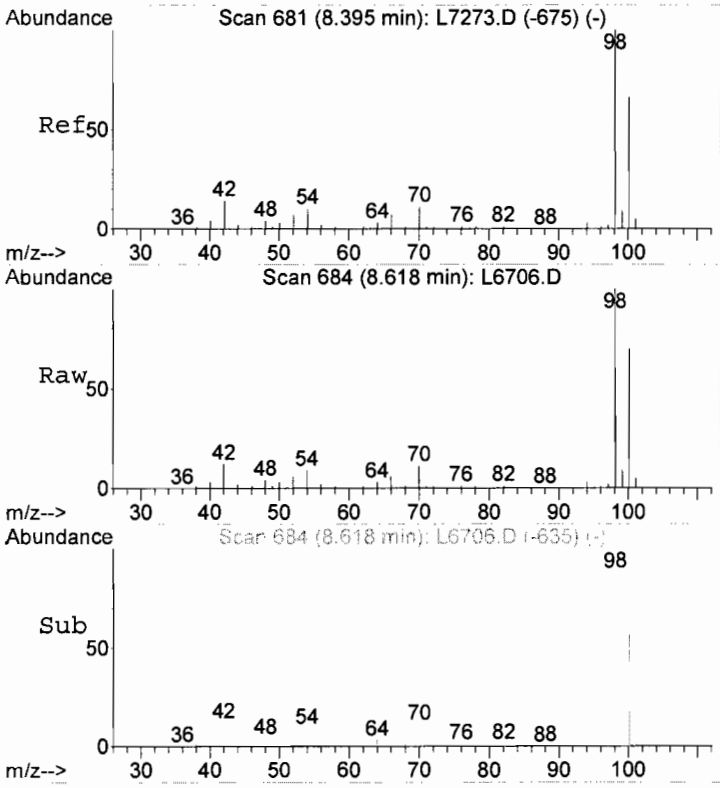


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:114 Resp: 547554

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

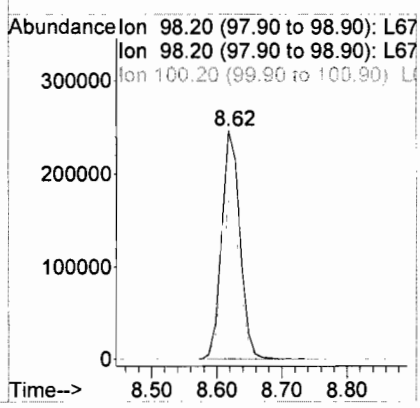


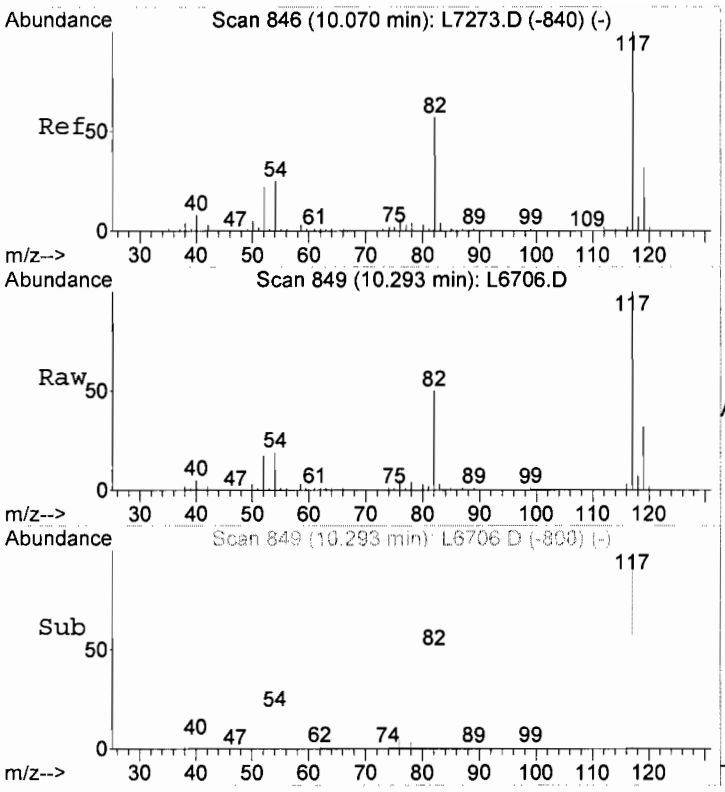


#41
Toluene-d8
Concen: 49.55 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 98 Resp: 480459

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.5	44.8	83.2

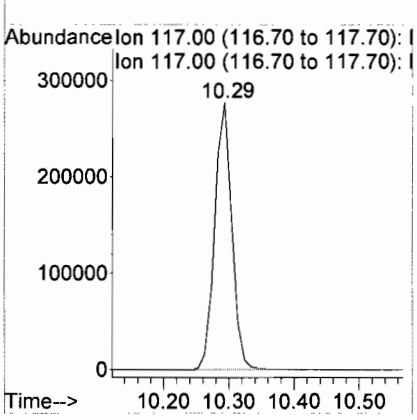


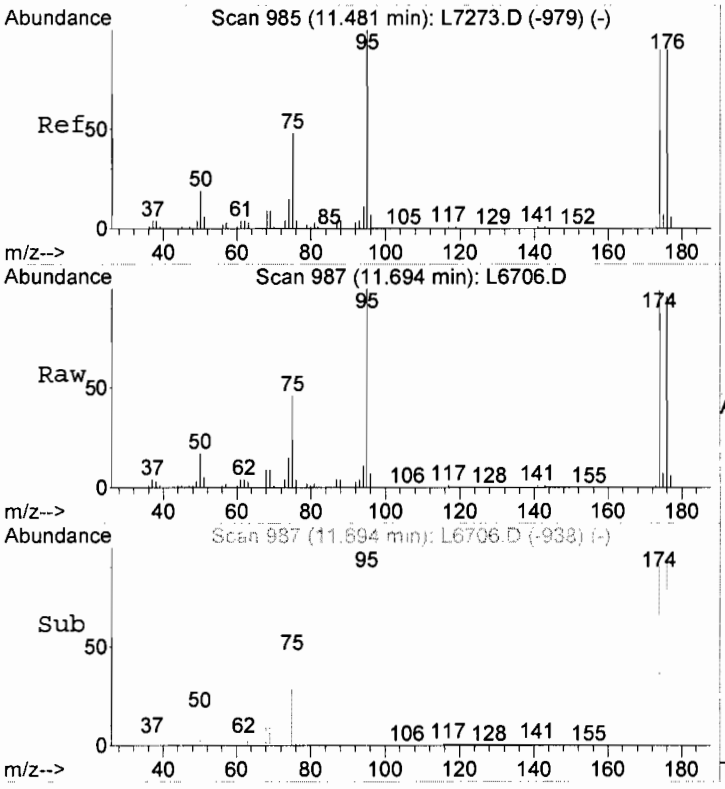


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:117 Resp: 504535

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

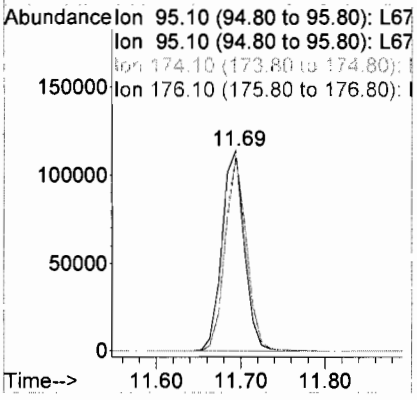




#59
Bromofluorobenzene
Concen: 47.59 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 95 Resp: 209857

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.0	0.0	0.0#
176	91.6	0.0	0.0#



TCLP
VOLATILE ORGANICS STANDARDS

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015
Response Via : Initial Calibration

MXF 2/17/15
CT 2/17/15

Calibration Files
1 =L6605.D 2 =L6608.D 5 =L6607.D
20 =L6609.D 100 =L6610.D 150 =L6611.D 200 =L6612.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.168	0.124	0.239	0.213	0.203	0.222	0.219	0.198	19.88
3)	TP	Chloromethane	0.437	0.316	0.348	0.387	0.388	0.407	0.411	0.385	10.59
4)	C	Vinyl chloride	0.297	0.263	0.368	0.328	0.358	0.364	0.343	0.332	11.73
5)	T	Bromomethane	0.225	0.259	0.225	0.213	0.191	0.173	0.157	0.206	16.92
6)	T	Chloroethane	0.229	0.132	0.177	0.170	0.164	0.159	0.152	0.169	17.94
7)	T	Trichlorofluorome	0.384	0.319	0.471	0.393	0.352	0.397	0.298	0.374	15.31
8)	T	Acrolein	0.027	0.024	0.028	0.023	0.022	0.024	0.023	0.024	9.52
9)	MC	1,1-Dichloroethen	0.323	0.218	0.265	0.273	0.292	0.287	0.271	0.275	11.55
10)	T	Acetone		0.083	0.095	0.083	0.075	0.076	0.076	0.081	9.38
11)	T	Carbon disulfide	0.898	0.791	0.743	0.816	0.924	0.923	0.908	0.858	8.55
12)	T	Vinyl acetate	1.373	1.226	1.364	1.154	1.002	0.950	0.923	1.142	16.54
13)	T	Methylene chlorid		0.432	0.420	0.356	0.333	0.334	0.335	0.368	12.41
14)	T	Acrylonitrile	0.124	0.144	0.145	0.111	0.128	0.138	0.131	0.132	9.21
15)	T	tert-Butyl alcoho	0.026	0.033	0.031	0.029	0.028	0.029	0.030	0.029	7.67
16)	T	trans-1,2-Dichlor	0.563	0.456	0.518	0.475	0.471	0.453	0.446	0.483	8.80
17)	T	Methyl tert-butyl	1.550	1.315	1.384	1.291	1.236	1.246	1.278	1.329	8.23
18)	TP	1,1-Dichloroethan	1.063	0.877	0.971	0.861	0.860	0.856	0.866	0.908	8.76
19)	T	Diisopropyl ether	1.817	1.587	1.847	1.666	1.599	1.571	1.573	1.666	7.10
20)	T	cis-1,2-Dichloroe	0.592	0.519	0.578	0.540	0.534	0.527	0.529	0.546	5.11
21)	T	2,2-Dichloropropa	0.506	0.331	0.431	0.422	0.441	0.443	0.427	0.429	12.03
22)	T	2-Butanone (MEK)	0.205	0.161	0.210	0.196	0.186	0.181	0.183	0.189	8.72
23)	T	Bromochloromethan	0.313	0.301	0.303	0.278	0.265	0.264	0.268	0.285	7.31
25)	C	Chloroform	1.125	0.954	0.998	0.898	0.876	0.871	0.878	0.943	9.90
26)	T	1,1,1-Trichloroet	0.681	0.464	0.575	0.568	0.619	0.608	0.608	0.589	11.28
27)	T	Carbon tetrachlor	0.456	0.404	0.420	0.426	0.490	0.481	0.462	0.448	7.24
28)	T	1,1-Dichloroprope	0.556	0.405	0.490	0.492	0.547	0.529	0.512	0.504	10.04
29)	T	1,2-Dichloroethan	0.918	0.775	0.803	0.720	0.688	0.675	0.685	0.752	11.66
30)	S	1,2-Dichloroethan	0.454	0.445	0.440	0.426	0.414	0.412	0.409	0.428	4.20
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.596	1.326	1.484	1.334	1.316	1.274	1.256	1.370	9.06
33)	M	Trichloroethene	0.347	0.283	0.329	0.307	0.348	0.341	0.345	0.329	7.55
34)	C	1,2-Dichloropropa	0.374	0.324	0.358	0.341	0.345	0.335	0.342	0.346	4.67
35)	T	Dibromomethane	0.249	0.214	0.236	0.213	0.211	0.207	0.210	0.220	7.23
36)	T	1,4-Dioxane	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	15.84
37)	T	Bromodichlorometh	0.475	0.413	0.459	0.452	0.476	0.471	0.483	0.461	5.16
38)	T	2-Chloroethyl vin	0.195	0.203	0.195	0.191	0.213	0.207	0.215	0.203	4.67
39)	T	cis-1,3-Dichlorop	0.406	0.396	0.468	0.500	0.545	0.534	0.553	0.486	13.37
40)	T	4-Methyl-2-pentan	0.246	0.223	0.278	0.288	0.306	0.298	0.306	0.278	11.43
41)	S	Toluene-d8	0.857	0.866	0.886	0.882	0.906	0.899	0.902	0.885	2.12
42)	MC	Toluene	0.914	0.719	0.796	0.731	0.763	0.733	0.726	0.769	9.06
43)	T	trans-1,3-Dichlor	0.361	0.329	0.409	0.441	0.496	0.490	0.499	0.432	15.82
44)	T	1,1,2-Trichloroet	0.279	0.232	0.271	0.245	0.249	0.243	0.247	0.252	6.55
45)	T	Tetrachloroethene	0.303	0.218	0.258	0.243	0.270	0.256	0.252	0.257	10.06
46)	T	1,3-Dichloropropa	0.499	0.456	0.524	0.487	0.496	0.483	0.490	0.491	4.18
47)	T	2-Hexanone	0.121	0.138	0.149	0.176	0.196	0.194	0.200	0.168	19.00
48)	T	Dibromochlorometh	0.293	0.266	0.318	0.326	0.368	0.362	0.370	0.329	12.22
49)	T	1,2-Dibromoethane	0.303	0.266	0.317	0.304	0.317	0.310	0.317	0.305	5.97
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.192	1.005	1.069	0.931	0.917	0.896	0.916	0.989	10.96
52)	T	1,1,1,2-Tetrachlo	0.374	0.330	0.371	0.365	0.376	0.374	0.379	0.367	4.57

53)	C	Ethylbenzene	1.319	1.061	1.291	1.239	1.303	1.258	1.271	1.249	6.97
54)	T	m,p-Xylene	0.509	0.423	0.526	0.499	0.502	0.476	0.471	0.486	6.92
55)	T	o-Xylene	0.447	0.410	0.514	0.519	0.518	0.490	0.487	0.483	8.53
56)	T	Styrene	0.806	0.785	0.969	0.978	0.972	0.915	0.913	0.905	8.83
57)	TP	Bromoform	0.408	0.303	0.283	0.232	0.263	0.267	0.278	0.291	19.31
58)	T	Isopropylbenzene	0.887	0.685	0.921	0.966	1.054	1.015	1.034	0.937	13.51
59)	S	Bromofluorobenzen	0.432	0.436	0.439	0.427	0.439	0.446	0.439	0.437	1.36
60)	TP	1,1,2,2-Tetrachlo	0.567	0.441	0.472	0.417	0.376	0.363	0.361	0.428	17.33
61)	T	Bromobenzene	0.507	0.412	0.459	0.419	0.421	0.410	0.415	0.435	8.25
62)	T	1,2,3-Trichloropr	0.431	0.385	0.404	0.363	0.352	0.342	0.348	0.375	8.79
63)	T	n-Propylbenzene	1.174	0.894	1.078	1.071	1.124	1.100	1.107	1.078	8.17
64)	T	2-Chlorotoluene	0.917	0.731	0.864	0.794	0.798	0.779	0.798	0.812	7.47
65)	T	1,3,5-Trimethylbe	0.898	0.731	0.879	0.872	0.886	0.872	0.875	0.859	6.65
66)	T	4-Chlorotoluene	1.187	0.926	1.062	0.964	0.956	0.931	0.943	0.996	9.64
67)	T	tert-Butylbenzene	0.765	0.499	0.611	0.627	0.671	0.682	0.685	0.649	12.73
68)	T	1,2,4-Trimethylbe	1.177	0.809	0.971	0.929	0.926	0.922	0.935	0.953	11.65
69)	T	sec-Butylbenzene	1.065	0.731	0.847	0.870	0.918	0.909	0.920	0.894	11.19
70)	T	1,3-Dichlorobenze	0.869	0.659	0.687	0.638	0.613	0.609	0.629	0.672	13.54
71)	T	4-Isopropyltoluen	0.938	0.693	0.806	0.806	0.830	0.831	0.841	0.821	8.77
72)	T	1,4-Dichlorobenze	0.905	0.713	0.747	0.668	0.644	0.637	0.645	0.709	13.55
73)	T	n-Butylbenzene	0.409	0.307	0.324	0.357	0.375	0.379	0.378	0.361	9.75
74)	T	1,2-Dichlorobenze	0.858	0.684	0.734	0.667	0.618	0.614	0.614	0.684	12.96
75)	T	1,2-Dibromo-3-chl		0.042	0.056	0.059	0.065	0.068	0.069	0.060	17.10
76)	T	1,2,4-Trichlorobe	0.285	0.306	0.351	0.331	0.360	0.383	0.398	0.345	11.77
77)	T	Hexachlorobutadie		0.164	0.146	0.168	0.169	0.170	0.171	0.165	5.62
78)	T	Naphthalene	0.583	0.673	0.784	0.947	0.945	0.992	1.009	0.847	19.90
79)	T	1,2,3-Trichlorobe	0.295	0.309	0.317	0.325	0.340	0.359	0.377	0.332	8.65
80)	T	1,1,2-Trichloro-1	0.148	0.092	0.165	0.146	0.142	0.134	0.147	0.139	16.44
81)	T	Methyl acetate	0.187	0.235	0.234	0.204	0.189	0.190	0.193	0.204	10.33
82)	T	Cyclohexane	0.325	0.156	0.258	0.268	0.265	0.261	0.261	0.256	19.57
83)	T	Methylcyclohexane	0.183	0.175	0.152	0.158	0.175	0.162	0.138	0.163	9.63

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM021315.M Tue Feb 17 14:02:32 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	286657	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	409962	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	361365	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	130193	47.48	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.96%				
41) Toluene-d8	8.62	98	351417	45.22	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 90.44%				
59) Bromofluorobenzene	11.69	95	156247	47.84	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.68%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	965m	0.46	UG		
3) Chloromethane	1.93	50	2505	0.74	UG		96
4) Vinyl chloride	2.06	62	1701	0.59	UG		99
5) Bromomethane	2.42	94	1292m	0.92	UG		
6) Chloroethane	2.54	64	1315	0.90	UG	#	86
7) Trichlorofluoromethane	2.84	101	2201	0.75	UG		97
8) Acrolein	3.33	56	3085	8.81	UG	#	65
9) 1,1-Dichloroethene	3.45	96	1850	0.85	UG		96
11) Carbon disulfide	3.71	76	5151	0.72	UG		100
12) Vinyl acetate	4.96	43	7869	0.81	UG	#	99
14) Acrylonitrile	4.32	53	14269	14.12	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	297m	1.27	UG		
16) trans-1,2-Dichloroethene	4.36	96	3228	1.00	UG		97
17) Methyl tert-butyl ether (M	4.38	73	8886	1.01	UG		100
18) 1,1-Dichloroethane	4.86	63	6096	1.01	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	10416	0.93	UG		99
20) cis-1,2-Dichloroethene	5.53	96	3396	0.96	UG		98
21) 2,2-Dichloropropane	5.53	77	2901	0.95	UG		92
22) 2-Butanone (MEK)	5.55	43	1176	1.11	UG	#	89
23) Bromochloromethane	5.80	128	1796	1.07	UG		99
25) Chloroform	5.89	83	6452	1.11	UG		99
26) 1,1,1-Trichloroethane	6.10	97	3906	0.98	UG	#	80
27) Carbon tetrachloride	6.29	117	2612	0.84	UG		99
28) 1,1-Dichloropropene	6.29	75	3187	0.86	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	5262	1.16	UG		99
32) Benzene	6.53	78	13086	1.07	UG		100
33) Trichloroethene	7.25	95	2848	1.00	UG		92
34) 1,2-Dichloropropane	7.49	63	3066	0.99	UG	#	100
35) Dibromomethane	7.61	93	2039	1.10	UG		92
36) 1,4-Dioxane	7.64	88	3071	121.30	UG		98
37) Bromodichloromethane	7.80	83	3891	1.02	UG	#	97
38) 2-Chloroethyl vinyl ether	8.14	63	1597	0.96	UG	#	91
39) cis-1,3-Dichloropropene	8.30	75	3330	0.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.48	43	2021	0.81	UG		95
42) Toluene	8.70	92	7498	1.12	UG		98
43) trans-1,3-Dichloropropene	8.93	75	2964	0.81	UG	#	97
44) 1,1,2-Trichloroethane	9.15	83	2285	1.09	UG		98
45) Tetrachloroethene	9.33	166	2485	1.09	UG		100
46) 1,3-Dichloropropane	9.34	76	4094	0.99	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

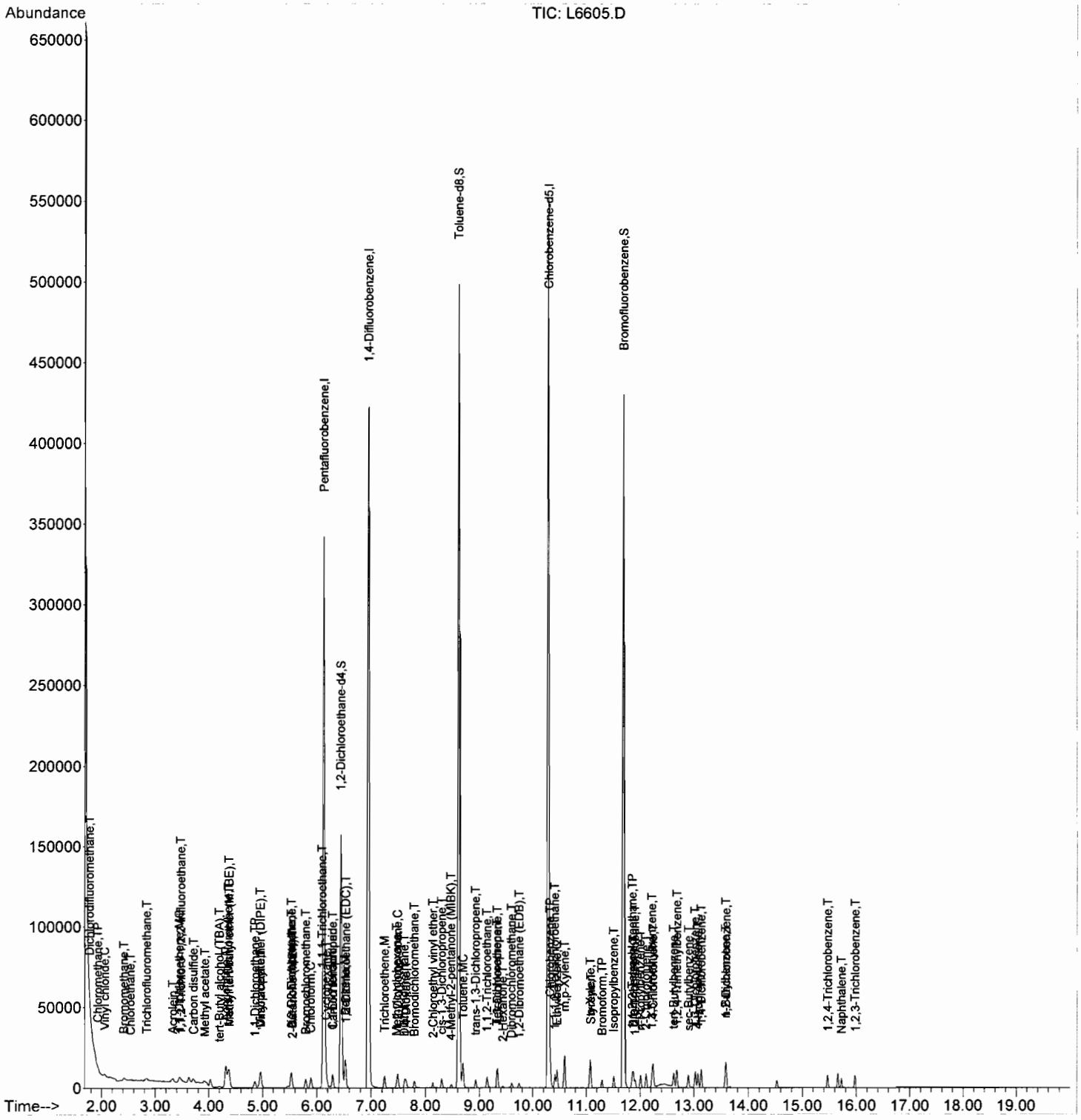
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.44	43	989	0.82	UG	#	88
48) Dibromochloromethane	9.60	129	2403	0.94	UG		97
49) 1,2-Dibromoethane (EDB)	9.75	107	2481	1.00	UG		98
51) Chlorobenzene	10.32	112	8615	1.19	UG		100
52) 1,1,1,2-Tetrachloroethane	10.42	131	2703	1.01	UG		97
53) Ethylbenzene	10.46	91	9531	0.93	UG		100
54) m,p-Xylene	10.60	106	7354	1.85	UG		94
55) o-Xylene	11.07	106	3231	0.80	UG		99
56) Styrene	11.09	104	5826	0.80	UG		98
57) Bromoform	11.30	173	2950	1.63	UG		99
58) Isopropylbenzene	11.51	105	6412	0.78	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	4100	1.25	UG	#	98
61) Bromobenzene	11.88	156	3661	1.16	UG		100
62) 1,2,3-Trichloropropane	11.91	75	3114	1.09	UG		98
63) n-Propylbenzene	12.01	91	8484	0.94	UG		100
64) 2-Chlorotoluene	12.11	91	6627	1.00	UG		100
65) 1,3,5-Trimethylbenzene	12.22	105	6488	0.94	UG		99
66) 4-Chlorotoluene	12.24	91	8576	1.11	UG		100
67) tert-Butylbenzene	12.63	119	5531	1.05	UG		100
68) 1,2,4-Trimethylbenzene	12.69	105	8507	1.15	UG		100
69) sec-Butylbenzene	12.90	105	7696	1.02	UG		99
70) 1,3-Dichlorobenzene	13.02	146	6279	1.26	UG		100
71) 4-Isopropyltoluene	13.07	119	6781	1.01	UG		99
72) 1,4-Dichlorobenzene	13.14	146	6544	1.26	UG		99
73) n-Butylbenzene	13.58	92	2956	0.95	UG		97
74) 1,2-Dichlorobenzene	13.59	146	6199	1.23	UG		99
76) 1,2,4-Trichlorobenzene	15.47	180	2057m	0.72	UG		
78) Naphthalene	15.72	128	4215m	0.62	UG		
79) 1,2,3-Trichlorobenzene	15.98	180	2135m	0.82	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1068m	0.78	UG		
81) Methyl acetate	3.93	43	1350m	0.74	UG		
82) Cyclohexane	6.17	56	2351m	0.92	UG		
83) Methylcyclohexane	7.47	55	1326	0.77	UG		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	304709	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	431865	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	390295	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134041	47.30	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.60%				
41) Toluene-d8	8.62	98	382579	47.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 95.90%				
59) Bromofluorobenzene	11.69	95	171478	49.40	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	7279m	4.25	UG		
3) Chloromethane	1.93	50	10597	3.53	UG		100
4) Vinyl chloride	2.06	62	11205m	4.69	UG		
5) Bromomethane	2.42	94	6870	4.34	UG		95
6) Chloroethane	2.55	64	5395	3.88	UG		98
7) Trichlorofluoromethane	2.83	101	14342m	5.42	UG		
8) Acrolein	3.32	56	17065	56.05	UG		100
9) 1,1-Dichloroethene	3.45	96	8067	3.78	UG		98
10) Acetone	3.51	43	2891m	3.47	UG		
11) Carbon disulfide	3.70	76	22627	3.50	UG		100
12) Vinyl acetate	4.96	43	41571	4.51	UG	#	99
13) Methylene chloride	4.03	84	12794	4.66	UG		100
14) Acrylonitrile	4.32	53	88651	88.83	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	1860m	6.38	UG		
16) trans-1,2-Dichloroethene	4.36	96	15791	4.97	UG		91
17) Methyl tert-butyl ether (M	4.38	73	42173	4.74	UG		100
18) 1,1-Dichloroethane	4.85	63	29585	4.90	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	56284	5.00	UG		99
20) cis-1,2-Dichloroethene	5.53	96	17597	4.97	UG		98
21) 2,2-Dichloropropane	5.53	77	13118	4.46	UG	#	84
22) 2-Butanone (MEK)	5.55	43	6407	5.64	UG		98
23) Bromochloromethane	5.80	128	9242	5.29	UG		100
25) Chloroform	5.89	83	30413	5.07	UG		100
26) 1,1,1-Trichloroethane	6.11	97	17535	4.54	UG	#	80
27) Carbon tetrachloride	6.29	117	12811m	4.40	UG		
28) 1,1-Dichloropropene	6.29	75	14930	4.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	24467	5.17	UG		100
32) Benzene	6.53	78	64099	5.21	UG		100
33) Trichloroethene	7.25	95	14208	5.01	UG		95
34) 1,2-Dichloropropane	7.49	63	15474	4.95	UG		100
35) Dibromomethane	7.62	93	10182	5.32	UG		93
36) 1,4-Dioxane	7.64	88	28203	1115.25	UG		99
37) Bromodichloromethane	7.80	83	19841	5.00	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	8426	4.71	UG		99
39) cis-1,3-Dichloropropene	8.30	75	20204	4.75	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	11993	4.75	UG		99
42) Toluene	8.70	92	34397	5.09	UG		98
43) trans-1,3-Dichloropropene	8.93	75	17670	4.72	UG		99
44) 1,1,2-Trichloroethane	9.15	83	11697	5.42	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

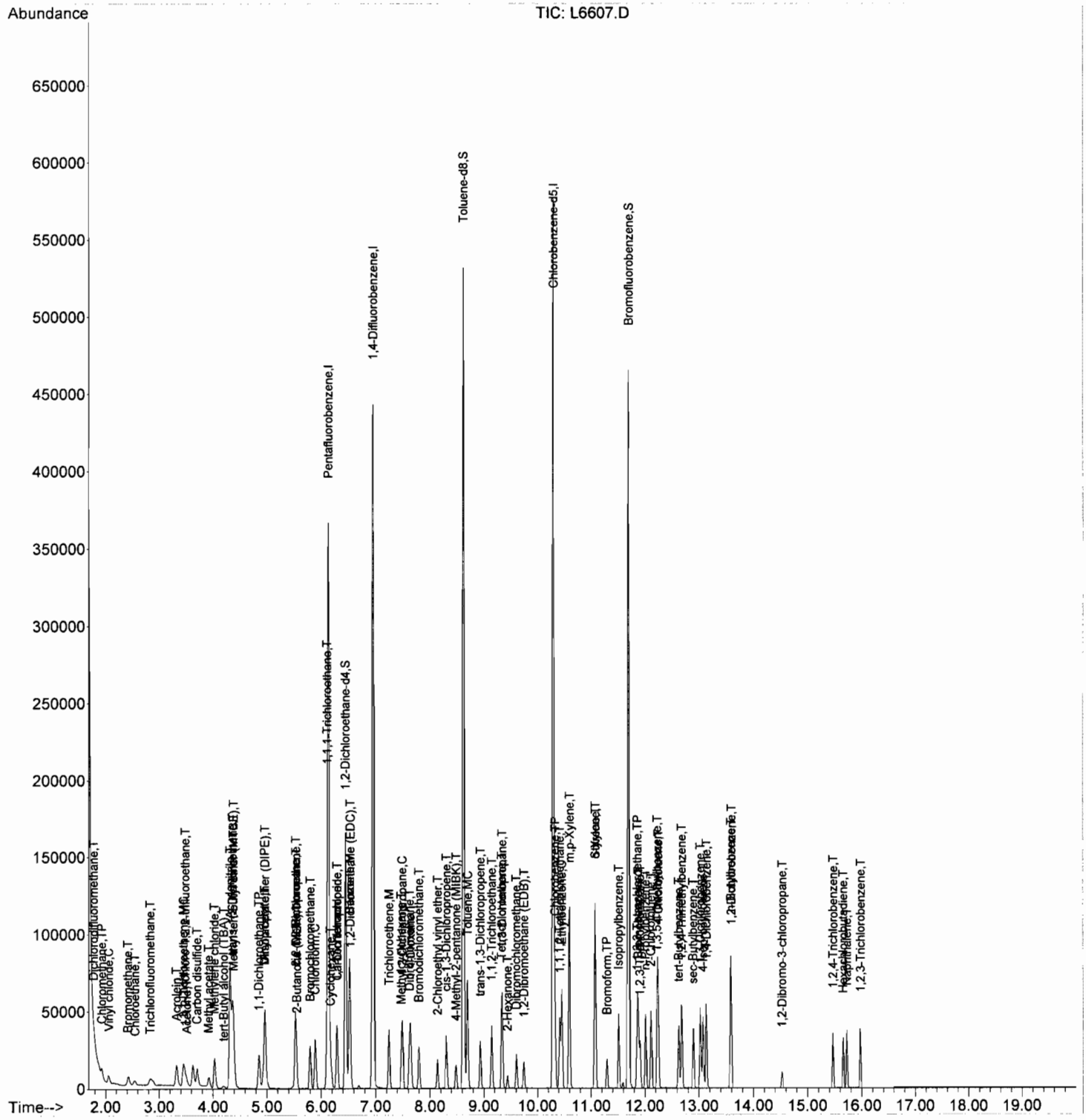
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	11135	4.95	UG	98
46) 1,3-Dichloropropane	9.34	76	22634	5.36	UG	100
47) 2-Hexanone	9.44	43	6432	5.13	UG	98
48) Dibromochloromethane	9.60	129	13736	5.02	UG	99
49) 1,2-Dibromoethane (EDB)	9.75	107	13704	5.29	UG	99
51) Chlorobenzene	10.32	112	41728	5.37	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	14472	5.03	UG	99
53) Ethylbenzene	10.46	91	50374	4.91	UG	99
54) m,p-Xylene	10.60	106	41025	10.24	UG	96
55) o-Xylene	11.07	106	20059	4.97	UG	96
56) Styrene	11.07	104	37839	5.14	UG	98
57) Bromoform	11.30	173	11042	5.08	UG	99
58) Isopropylbenzene	11.51	105	35950	4.50	UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	18409	5.24	UG	99
61) Bromobenzene	11.88	156	17923	5.31	UG	99
62) 1,2,3-Trichloropropane	11.91	75	15766	5.22	UG	98
63) n-Propylbenzene	12.01	91	42062	4.66	UG	100
64) 2-Chlorotoluene	12.11	91	33726	5.00	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	34294	4.84	UG	99
66) 4-Chlorotoluene	12.24	91	41464	5.10	UG	99
67) tert-Butylbenzene	12.63	119	23855	4.38	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	37915	4.81	UG	99
69) sec-Butylbenzene	12.89	105	33061	4.35	UG	99
70) 1,3-Dichlorobenzene	13.02	146	26820	4.98	UG	100
71) 4-Isopropyltoluene	13.07	119	31463	4.61	UG	100
72) 1,4-Dichlorobenzene	13.14	146	29159	5.21	UG	100
73) n-Butylbenzene	13.58	92	12665	4.06	UG	96
74) 1,2-Dichlorobenzene	13.59	146	28663	5.27	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	2171m	3.08	UG	
76) 1,2,4-Trichlorobenzene	15.47	180	13712	4.45	UG	100
77) Hexachlorobutadiene	15.65	225	5715m	3.58	UG	
78) Naphthalene	15.72	128	30590	4.35	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	12389m	4.30	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	6449m	5.34	UG	
81) Methyl acetate	3.92	43	9123	4.64	UG	98
82) Cyclohexane	6.17	56	10061m	4.33	UG	
83) Methylcyclohexane	7.47	55	5920m	3.79	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	298969	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	429322	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	378604	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	132953	48.68	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.36%				
41) Toluene-d8	8.62	98	371625	47.34	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 94.68%				
59) Bromofluorobenzene	11.69	95	165072	49.37	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.74%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	1480m	1.03	UG		
3) Chloromethane	1.93	50	3782	1.42	UG		98
4) Vinyl chloride	2.05	62	3150m	1.50	UG		
5) Bromomethane	2.42	94	3092	2.03	UG		87
6) Chloroethane	2.54	64	1573	1.26	UG	#	86
7) Trichlorofluoromethane	2.83	101	3811m	1.67	UG		
8) Acrolein	3.33	56	7161m	27.08	UG		
9) 1,1-Dichloroethene	3.45	96	2607	1.34	UG		91
10) Acetone	3.52	43	998m	1.21	UG		
11) Carbon disulfide	3.70	76	9465m	1.61	UG		
12) Vinyl acetate	4.96	43	14667	1.72	UG	#	99
13) Methylene chloride	4.03	84	5161	2.03	UG		98
14) Acrylonitrile	4.32	53	43144	46.09	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	794m	2.72	UG		
16) trans-1,2-Dichloroethene	4.36	96	5455	1.79	UG		92
17) Methyl tert-butyl ether (M	4.39	73	15726	1.85	UG		100
18) 1,1-Dichloroethane	4.85	63	10492	1.81	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	18977	1.75	UG		99
20) cis-1,2-Dichloroethene	5.52	96	6211	1.83	UG		97
21) 2,2-Dichloropropane	5.53	77	3958	1.43	UG	#	49
22) 2-Butanone (MEK)	5.55	43	1931	1.71	UG	#	89
23) Bromochloromethane	5.80	128	3600	2.11	UG		96
25) Chloroform	5.89	83	11404	1.97	UG		100
26) 1,1,1-Trichloroethane	6.11	97	5543	1.52	UG	#	80
27) Carbon tetrachloride	6.29	117	4827m	1.78	UG		
28) 1,1-Dichloropropene	6.29	75	4843	1.51	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	9263	2.01	UG		100
32) Benzene	6.53	78	22775	1.88	UG		99
33) Trichloroethene	7.25	95	4861	1.74	UG		91
34) 1,2-Dichloropropane	7.49	63	5570	1.82	UG	#	100
35) Dibromomethane	7.62	93	3667	1.92	UG		94
36) 1,4-Dioxane	7.65	88	12759	504.88	UG		100
37) Bromodichloromethane	7.80	83	7087	1.80	UG	#	68
38) 2-Chloroethyl vinyl ether	8.14	63	3480	1.96	UG		98
39) cis-1,3-Dichloropropene	8.30	75	6796	1.62	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	3831	1.55	UG		97
42) Toluene	8.70	92	12346	1.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	5651	1.52	UG		100
44) 1,1,2-Trichloroethane	9.15	83	3978	1.85	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

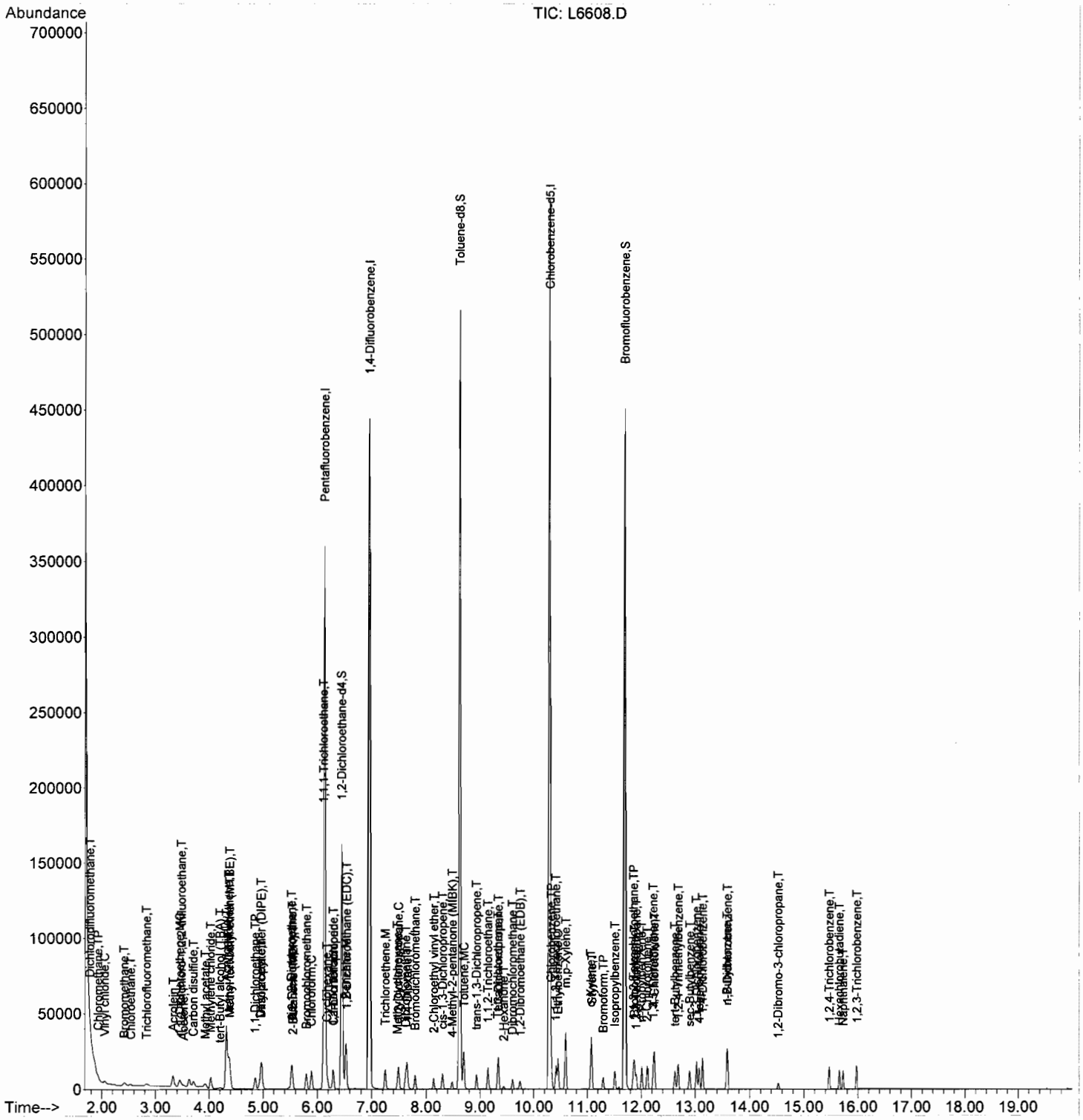
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	3747	1.70 UG	97
46) 1,3-Dichloropropane	9.34	76	7826	1.86 UG	100
47) 2-Hexanone	9.44	43	2371m	1.86 UG	
48) Dibromochloromethane	9.60	129	4571	1.66 UG	98
49) 1,2-Dibromoethane (EDB)	9.75	107	4565	1.76 UG	96
51) Chlorobenzene	10.32	112	15224	2.02 UG	99
52) 1,1,1,2-Tetrachloroethane	10.42	131	5002	1.80 UG	98
53) Ethylbenzene	10.46	91	16070	1.65 UG	99
54) m,p-Xylene	10.60	106	12806	3.36 UG	98
55) o-Xylene	11.06	106	6203	1.62 UG	95
56) Styrene	11.09	104	11886	1.69 UG	97
57) Bromoform	11.30	173	4587	2.11 UG	100
58) Isopropylbenzene	11.51	105	10374	1.39 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	6680	1.97 UG	100
61) Bromobenzene	11.88	156	6234	1.90 UG	99
62) 1,2,3-Trichloropropane	11.91	75	5833	2.01 UG	99
63) n-Propylbenzene	12.01	91	13538	1.60 UG	100
64) 2-Chlorotoluene	12.11	91	11075	1.73 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	11071	1.65 UG	100
66) 4-Chlorotoluene	12.24	91	14031	1.80 UG	99
67) tert-Butylbenzene	12.63	119	7554	1.48 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	12246	1.64 UG	99
69) sec-Butylbenzene	12.90	105	11065	1.57 UG	100
70) 1,3-Dichlorobenzene	13.02	146	9987	1.94 UG	100
71) 4-Isopropyltoluene	13.07	119	10499	1.64 UG	99
72) 1,4-Dichlorobenzene	13.14	146	10805	2.01 UG	99
73) n-Butylbenzene	13.58	92	4642	1.62 UG	96
74) 1,2-Dichlorobenzene	13.59	146	10366	1.99 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	633m	0.92 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	4633m	1.58 UG	
77) Hexachlorobutadiene	15.65	225	2480m	1.61 UG	
78) Naphthalene	15.72	128	10185	1.54 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	4673m	1.67 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1389m	1.29 UG	
81) Methyl acetate	3.93	43	3555	1.93 UG	98
82) Cyclohexane	6.17	56	2362m	1.17 UG	
83) Methylcyclohexane	7.47	55	2656m	2.00 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	315672	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	444551	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	400966	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134467	46.70	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.40%				
41) Toluene-d8	8.62	98	392017	48.23	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.46%				
59) Bromofluorobenzene	11.69	95	171258	48.23	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	26845m	18.12	UG		
3) Chloromethane	1.93	50	48903	17.53	UG		100
4) Vinyl chloride	2.06	62	41440	18.88	UG		100
5) Bromomethane	2.43	94	26908	16.65	UG		97
6) Chloroethane	2.54	64	21465	16.56	UG		100
7) Trichlorofluoromethane	2.83	101	49675m	20.82	UG		
8) Acrolein	3.33	56	28455	102.56	UG		100
9) 1,1-Dichloroethene	3.45	96	34458	16.94	UG		94
10) Acetone	3.52	43	10477	12.35	UG		100
11) Carbon disulfide	3.70	76	102974	16.66	UG		100
12) Vinyl acetate	4.96	43	145748	15.99	UG	#	99
13) Methylene chloride	4.03	84	44924	16.50	UG		100
14) Acrylonitrile	4.32	53	140306	140.34	UG		100
15) tert-Butyl alcohol (TBA)	4.21	59	7230	24.08	UG		99
16) trans-1,2-Dichloroethene	4.36	96	60027	18.57	UG		90
17) Methyl tert-butyl ether (M	4.39	73	163000	17.98	UG		100
18) 1,1-Dichloroethane	4.86	63	108728	17.71	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	210308	18.20	UG		100
20) cis-1,2-Dichloroethene	5.53	96	68143	18.82	UG		98
21) 2,2-Dichloropropane	5.53	77	53247	18.24	UG		87
22) 2-Butanone (MEK)	5.55	43	24758	21.18	UG		98
23) Bromochloromethane	5.80	128	35072	19.07	UG		99
25) Chloroform	5.89	83	113343	18.30	UG		100
26) 1,1,1-Trichloroethane	6.11	97	71744	18.61	UG		95
27) Carbon tetrachloride	6.29	117	53834	18.85	UG		100
28) 1,1-Dichloropropene	6.29	75	62146	18.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	90868	18.46	UG		100
32) Benzene	6.53	78	237299	18.83	UG		100
33) Trichloroethene	7.25	95	54620	18.78	UG		94
34) 1,2-Dichloropropane	7.49	63	60716	19.05	UG	#	100
35) Dibromomethane	7.62	93	37886	19.06	UG		93
36) 1,4-Dioxane	7.64	88	51893	1964.11	UG		98
37) Bromodichloromethane	7.80	83	80405	19.48	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	33979	18.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	88824	20.22	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	51207	19.98	UG		100
42) Toluene	8.70	92	129930	18.67	UG		98
43) trans-1,3-Dichloropropene	8.93	75	78392	20.27	UG		99
44) 1,1,2-Trichloroethane	9.15	83	43644	19.39	UG		99

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

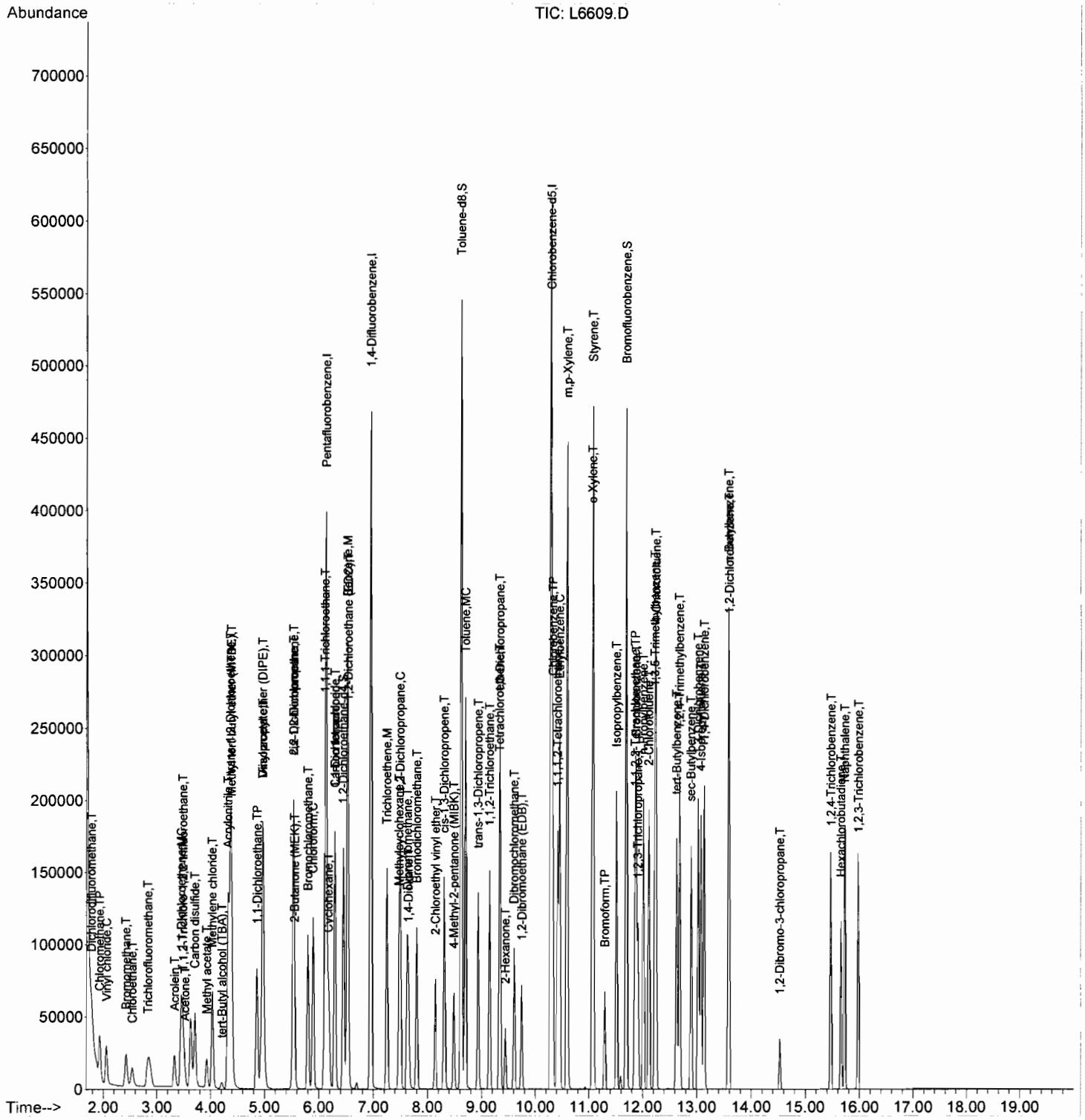
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	43208	18.97	UG	99
46) 1,3-Dichloropropane	9.34	76	86541	19.66	UG	100
47) 2-Hexanone	9.44	43	31281	24.01	UG	100
48) Dibromochloromethane	9.60	129	57934	20.18	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	54040	20.15	UG	100
51) Chlorobenzene	10.32	112	149360	18.50	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	58497	19.73	UG	99
53) Ethylbenzene	10.46	91	198727	19.19	UG	99
54) m,p-Xylene	10.60	106	159960	39.48	UG	95
55) o-Xylene	11.06	106	83253	20.49	UG	95
56) Styrene	11.08	104	156885	20.81	UG	98
57) Bromoform	11.30	173	37262	16.11	UG	99
58) Isopropylbenzene	11.51	105	154866	19.60	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	66874	18.49	UG	99
61) Bromobenzene	11.88	156	67147	19.10	UG	99
62) 1,2,3-Trichloropropane	11.91	75	58228	18.75	UG	98
63) n-Propylbenzene	12.01	91	171807	19.07	UG	100
64) 2-Chlorotoluene	12.11	91	127352	18.67	UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	139845	19.55	UG	99
66) 4-Chlorotoluene	12.24	91	154605	18.62	UG	99
67) tert-Butylbenzene	12.63	119	100558	18.56	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	149051	18.77	UG	99
69) sec-Butylbenzene	12.89	105	139551	18.58	UG	99
70) 1,3-Dichlorobenzene	13.02	146	102366	18.64	UG	100
71) 4-Isopropyltoluene	13.07	119	129232	18.82	UG	100
72) 1,4-Dichlorobenzene	13.14	146	107179	18.55	UG	100
73) n-Butylbenzene	13.58	92	57239	18.58	UG	96
74) 1,2-Dichlorobenzene	13.59	146	106966	19.10	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	9541	12.98	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	53045m	16.46	UG	
77) Hexachlorobutadiene	15.65	225	26983	16.36	UG	100
78) Naphthalene	15.72	128	151829	21.31	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	52117m	17.01	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	23392m	21.30	UG	
81) Methyl acetate	3.93	43	32643	16.77	UG	98
82) Cyclohexane	6.17	56	42957	20.28	UG	96
83) Methylcyclohexane	7.47	55	25359	17.99	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	334357	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	464375	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	434421	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138317	46.32	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.64%				
41) Toluene-d8	8.62	98	420891	50.14	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.28%				
59) Bromofluorobenzene	11.69	95	190880	50.07	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	135581m	83.59	UG		
3) Chloromethane	1.93	50	259406	91.14	UG		100
4) Vinyl chloride	2.06	62	239662	105.33	UG		100
5) Bromomethane	2.43	94	127834	76.26	UG		99
6) Chloroethane	2.54	64	109841	83.99	UG		99
7) Trichlorofluoromethane	2.84	101	235684	101.84	UG		100
8) Acrolein	3.33	56	43868	174.73	UG		99
9) 1,1-Dichloroethene	3.45	96	195067	96.51	UG		94
10) Acetone	3.52	43	49860	55.96	UG		100
11) Carbon disulfide	3.70	76	617607	97.32	UG		100
12) Vinyl acetate	4.96	43	670300	73.09	UG	#	99
13) Methylene chloride	4.03	84	222369	80.84	UG		100
14) Acrylonitrile	4.32	53	256600	256.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	37595	121.71	UG		100
16) trans-1,2-Dichloroethene	4.36	96	314778	92.13	UG		91
17) Methyl tert-butyl ether (M	4.38	73	826446	87.14	UG		100
18) 1,1-Dichloroethane	4.86	63	575077	89.41	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1069535	90.27	UG		100
20) cis-1,2-Dichloroethene	5.53	96	357105	93.56	UG		99
21) 2,2-Dichloropropane	5.53	77	294954	96.02	UG		90
22) 2-Butanone (MEK)	5.55	43	124143	97.90	UG		99
23) Bromochloromethane	5.80	128	176982	90.48	UG		100
25) Chloroform	5.90	83	586073	89.53	UG		100
26) 1,1,1-Trichloroethane	6.11	97	413973	100.84	UG		99
27) Carbon tetrachloride	6.29	117	327970	107.13	UG		100
28) 1,1-Dichloropropene	6.29	75	365985	101.72	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	460053	88.27	UG		100
32) Benzene	6.53	78	1222361	92.49	UG		100
33) Trichloroethene	7.25	95	322888	105.03	UG		94
34) 1,2-Dichloropropane	7.49	63	320218	95.98	UG	#	100
35) Dibromomethane	7.62	93	195778	93.59	UG		93
36) 1,4-Dioxane	7.64	88	82510	3090.17	UG		99
37) Bromodichloromethane	7.80	83	442279	101.50	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	197694	102.09	UG		99
39) cis-1,3-Dichloropropene	8.30	75	506286	109.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	283828	105.94	UG		99
42) Toluene	8.70	92	708587	96.69	UG		99
43) trans-1,3-Dichloropropene	8.93	75	460271	112.42	UG		99
44) 1,1,2-Trichloroethane	9.15	83	231701	97.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

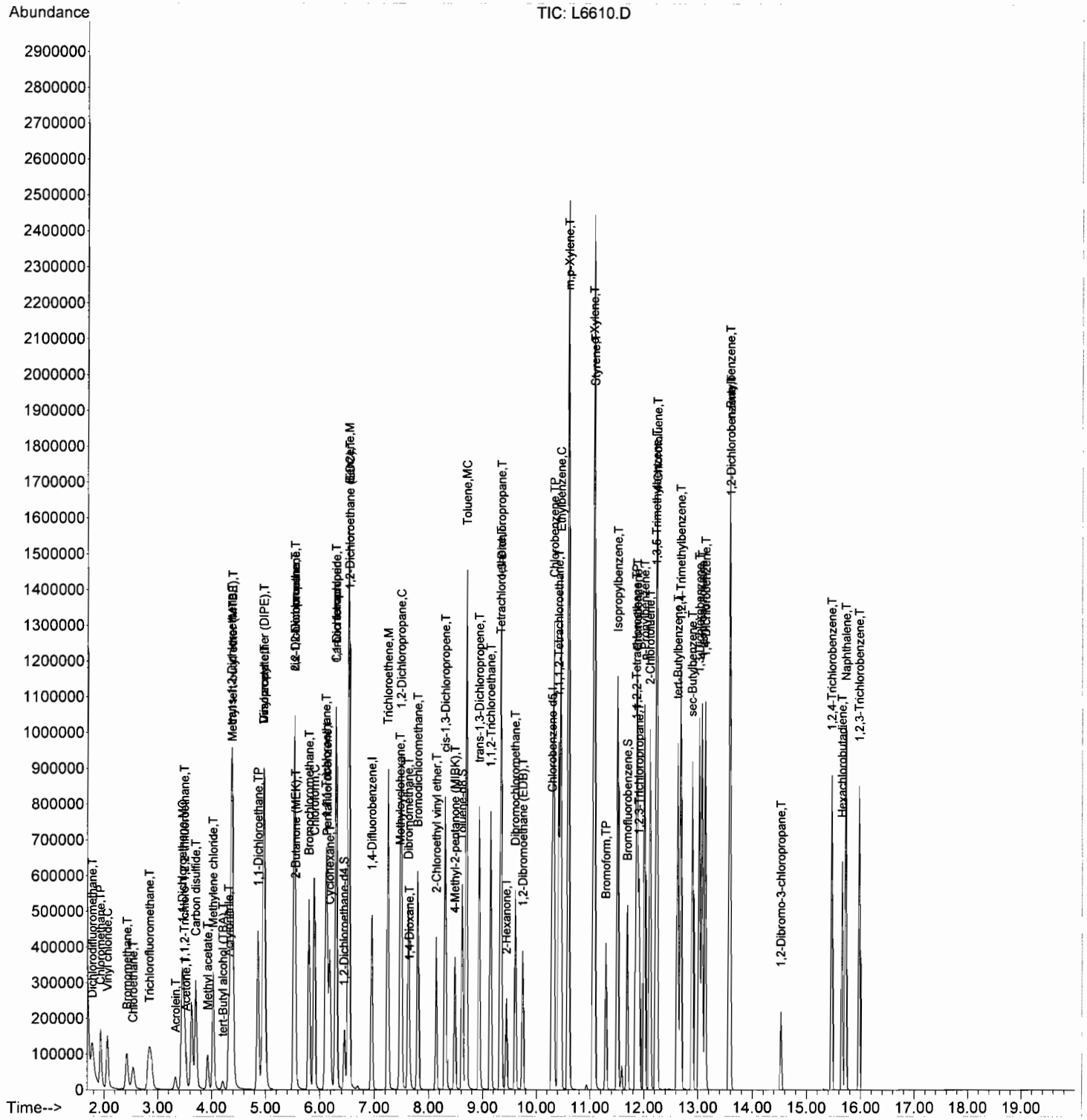
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	250451	103.35 UG	98
46) 1,3-Dichloropropane	9.34	76	460435	98.98 UG	100
47) 2-Hexanone	9.44	43	182449	127.87 UG	99
48) Dibromochloromethane	9.60	129	342079	111.87 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293964	103.36 UG	100
51) Chlorobenzene	10.32	112	796513	90.52 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	326878	100.78 UG	99
53) Ethylbenzene	10.46	91	1132069	100.80 UG	99
54) m,p-Xylene	10.60	106	871540	197.85 UG	96
55) o-Xylene	11.06	106	449662	102.13 UG	96
56) Styrene	11.09	104	844414	102.91 UG	98
57) Bromoform	11.30	173	228773	89.97 UG	100
58) Isopropylbenzene	11.51	105	916004	107.16 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	327056	83.51 UG	100
61) Bromobenzene	11.88	156	365821	95.41 UG	100
62) 1,2,3-Trichloropropane	11.91	75	305643	90.83 UG	99
63) n-Propylbenzene	12.01	91	976974	100.01 UG	100
64) 2-Chlorotoluene	12.11	91	692915	94.24 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770103	99.18 UG	100
66) 4-Chlorotoluene	12.24	91	830453	92.46 UG	99
67) tert-Butylbenzene	12.63	119	582579	99.00 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	804432	93.52 UG	100
69) sec-Butylbenzene	12.89	105	798018	97.80 UG	99
70) 1,3-Dichlorobenzene	13.02	146	532476	89.12 UG	100
71) 4-Isopropyltoluene	13.07	119	721165	96.79 UG	100
72) 1,4-Dichlorobenzene	13.14	146	559666	89.03 UG	100
73) n-Butylbenzene	13.58	92	326018	97.98 UG	96
74) 1,2-Dichlorobenzene	13.59	146	536897	88.02 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	56643	71.09 UG	86
76) 1,2,4-Trichlorobenzene	15.46	180	313022	89.18 UG	99
77) Hexachlorobutadiene	15.65	225	146999	81.48 UG	100
78) Naphthalene	15.72	128	820624	105.88 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	295261	87.53 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	123012	109.20 UG	93
81) Methyl acetate	3.93	43	164496	79.93 UG	98
82) Cyclohexane	6.18	56	230208	106.54 UG	99
83) Methylcyclohexane	7.47	55	152195	105.15 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	335884	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	470961	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	440697	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138287	47.08	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.16%				
41) Toluene-d8	8.62	98	423609	50.20	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.40%				
59) Bromofluorobenzene	11.69	95	196398	50.95	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.90%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	223936m	140.38	UG		
3) Chloromethane	1.93	50	409652	151.59	UG		100
4) Vinyl chloride	2.06	62	366638	169.03	UG		100
5) Bromomethane	2.42	94	174399	110.10	UG		99
6) Chloroethane	2.54	64	159988	128.10	UG		100
7) Trichlorofluoromethane	2.83	101	400272m	183.63	UG		
8) Acrolein	3.32	56	64810	312.72	UG		99
9) 1,1-Dichloroethene	3.44	96	289405	149.20	UG		93
10) Acetone	3.51	43	76410	86.78	UG		100
11) Carbon disulfide	3.70	76	930236	155.90	UG		100
12) Vinyl acetate	4.96	43	957178	113.10	UG	#	99
13) Methylene chloride	4.03	84	336075	128.68	UG		100
14) Acrylonitrile	4.32	53	371555	394.86	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	58432	196.44	UG		100
16) trans-1,2-Dichloroethene	4.36	96	456619	136.31	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1255210	135.95	UG		100
18) 1,1-Dichloroethane	4.85	63	862969	137.24	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1583322	136.88	UG		100
20) cis-1,2-Dichloroethene	5.52	96	531219	141.44	UG		99
21) 2,2-Dichloropropane	5.53	77	446456	150.03	UG		91
22) 2-Butanone (MEK)	5.55	43	182607	142.88	UG		100
23) Bromochloromethane	5.80	128	265722	136.95	UG		99
25) Chloroform	5.89	83	877495	135.77	UG		100
26) 1,1,1-Trichloroethane	6.10	97	612568	151.61	UG		100
27) Carbon tetrachloride	6.29	117	484380	161.86	UG		100
28) 1,1-Dichloropropene	6.29	75	532589	151.63	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	680297	132.05	UG		100
32) Benzene	6.52	78	1799829	136.43	UG		100
33) Trichloroethene	7.25	95	482468	154.71	UG		93
34) 1,2-Dichloropropane	7.49	63	473341	141.91	UG		100
35) Dibromomethane	7.62	93	292387	139.09	UG		93
36) 1,4-Dioxane	7.64	88	116905	4351.50	UG		98
37) Bromodichloromethane	7.80	83	665537	151.31	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	292781	150.08	UG		99
39) cis-1,3-Dichloropropene	8.30	75	755147	161.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	421459	157.42	UG		99
42) Toluene	8.70	92	1035827	140.37	UG		99
43) trans-1,3-Dichloropropene	8.93	75	692064	167.19	UG		99
44) 1,1,2-Trichloroethane	9.15	83	343381	142.81	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

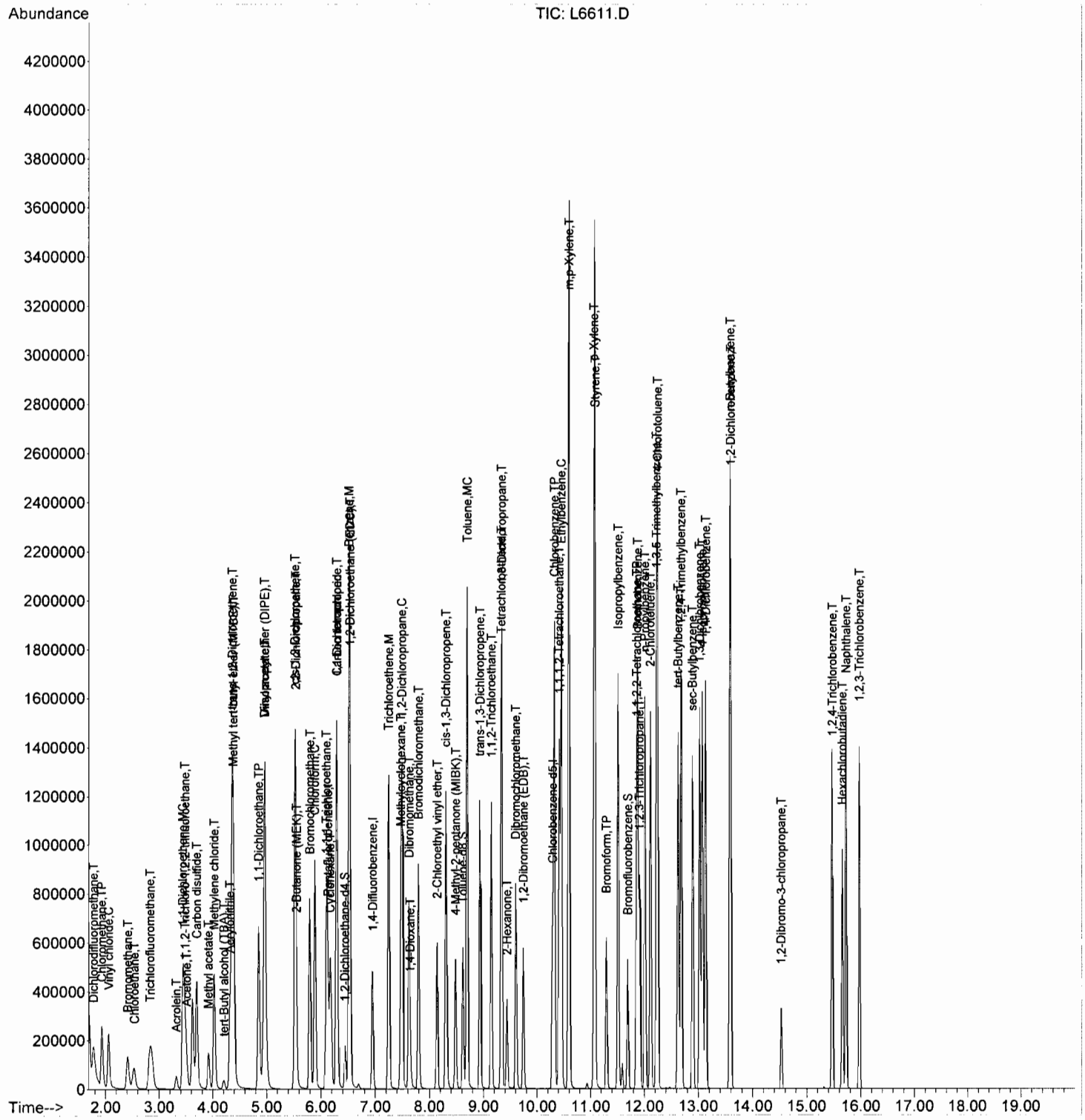
Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	362196	147.56 UG	99
46) 1,3-Dichloropropane	9.34	76	681753	145.23 UG	100
47) 2-Hexanone	9.44	43	274380	182.08 UG	99
48) Dibromochloromethane	9.60	129	512049	164.28 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	437940	151.50 UG	100
51) Chlorobenzene	10.32	112	1184090	133.72 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	493957	151.08 UG	100
53) Ethylbenzene	10.46	91	1663227	147.80 UG	99
54) m,p-Xylene	10.60	106	1258493	286.06 UG	97
55) o-Xylene	11.06	106	647981	147.97 UG	97
56) Styrene	11.09	104	1209945	147.62 UG	99
57) Bromoform	11.30	173	352770	136.89 UG	100
58) Isopropylbenzene	11.51	105	1341408	157.73 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	479322	123.48 UG	100
61) Bromobenzene	11.88	156	542711	140.14 UG	100
62) 1,2,3-Trichloropropane	11.91	75	452571	134.43 UG	99
63) n-Propylbenzene	12.01	91	1454585	149.52 UG	100
64) 2-Chlorotoluene	12.11	91	1030447	140.76 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1152367	148.99 UG	100
66) 4-Chlorotoluene	12.24	91	1230325	137.19 UG	99
67) tert-Butylbenzene	12.63	119	902124	154.45 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	1219464	142.26 UG	100
69) sec-Butylbenzene	12.89	105	1201323	148.26 UG	99
70) 1,3-Dichlorobenzene	13.02	146	804657	134.15 UG	100
71) 4-Isopropyltoluene	13.07	119	1098378	148.34 UG	100
72) 1,4-Dichlorobenzene	13.14	146	841712	133.28 UG	100
73) n-Butylbenzene	13.58	92	501569	152.74 UG	96
74) 1,2-Dichlorobenzene	13.59	146	811639	132.91 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	89357	112.05 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	506729	143.19 UG	99
77) Hexachlorobutadiene	15.65	225	224502	123.11 UG	100
78) Naphthalene	15.72	128	1311025	168.82 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	474490	138.81 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	177505	163.69 UG	93
81) Methyl acetate	3.92	43	250959	123.82 UG	98
82) Cyclohexane	6.17	56	344691m	165.44 UG	
83) Methylcyclohexane	7.47	55	214336	153.67 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	347689	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.94	114	492059	50.00	UG		-0.01
50) Chlorobenzene-d5	10.29	117	454144	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	142190	47.73	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.46%				
41) Toluene-d8	8.62	98	443856	50.93	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.86%				
59) Bromofluorobenzene	11.69	95	199429	50.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.77	85	304089m	189.29	UG		
3) Chloromethane	1.93	50	571412	213.55	UG		100
4) Vinyl chloride	2.06	62	477108	221.79	UG		100
5) Bromomethane	2.41	94	217863	137.79	UG		99
6) Chloroethane	2.53	64	211835	180.21	UG		100
7) Trichlorofluoromethane	2.83	101	414904	193.74	UG		100
8) Acrolein	3.32	56	79093	454.85	UG		99
9) 1,1-Dichloroethene	3.44	96	377014	196.81	UG		92
10) Acetone	3.51	43	106234	119.12	UG		100
11) Carbon disulfide	3.69	76	1262944	219.20	UG		100
12) Vinyl acetate	4.96	43	1284213	161.75	UG	#	99
13) Methylene chloride	4.02	84	465619	181.95	UG		100
14) Acrylonitrile	4.31	53	454543	496.14	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	82352	278.77	UG		100
16) trans-1,2-Dichloroethene	4.35	96	619869	184.48	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1777624	192.42	UG		100
18) 1,1-Dichloroethane	4.85	63	1204538	190.80	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	2187286	188.84	UG		100
20) cis-1,2-Dichloroethene	5.52	96	736184	194.03	UG		98
21) 2,2-Dichloropropane	5.53	77	593526	199.15	UG		89
22) 2-Butanone (MEK)	5.55	43	254445	193.64	UG		100
23) Bromochloromethane	5.80	128	372741	188.39	UG		99
25) Chloroform	5.89	83	1221177	186.26	UG		100
26) 1,1,1-Trichloroethane	6.10	97	845222	206.36	UG		100
27) Carbon tetrachloride	6.29	117	642375	213.82	UG		100
28) 1,1-Dichloropropene	6.29	75	712425	203.10	UG		94
29) 1,2-Dichloroethane (EDC)	6.53	62	952707	182.22	UG		100
32) Benzene	6.52	78	2472273	183.43	UG		100
33) Trichloroethene	7.25	95	679672	210.10	UG		94
34) 1,2-Dichloropropane	7.49	63	672214	197.63	UG		100
35) Dibromomethane	7.62	93	413198	191.01	UG		93
36) 1,4-Dioxane	7.64	88	140956	5023.89	UG		99
37) Bromodichloromethane	7.80	83	949898	209.27	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	423767	212.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	1088003	227.51	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	601609	220.03	UG		99
42) Toluene	8.70	92	1428367	188.76	UG		99
43) trans-1,3-Dichloropropene	8.93	75	981927	230.90	UG		99
44) 1,1,2-Trichloroethane	9.15	83	485818	195.68	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

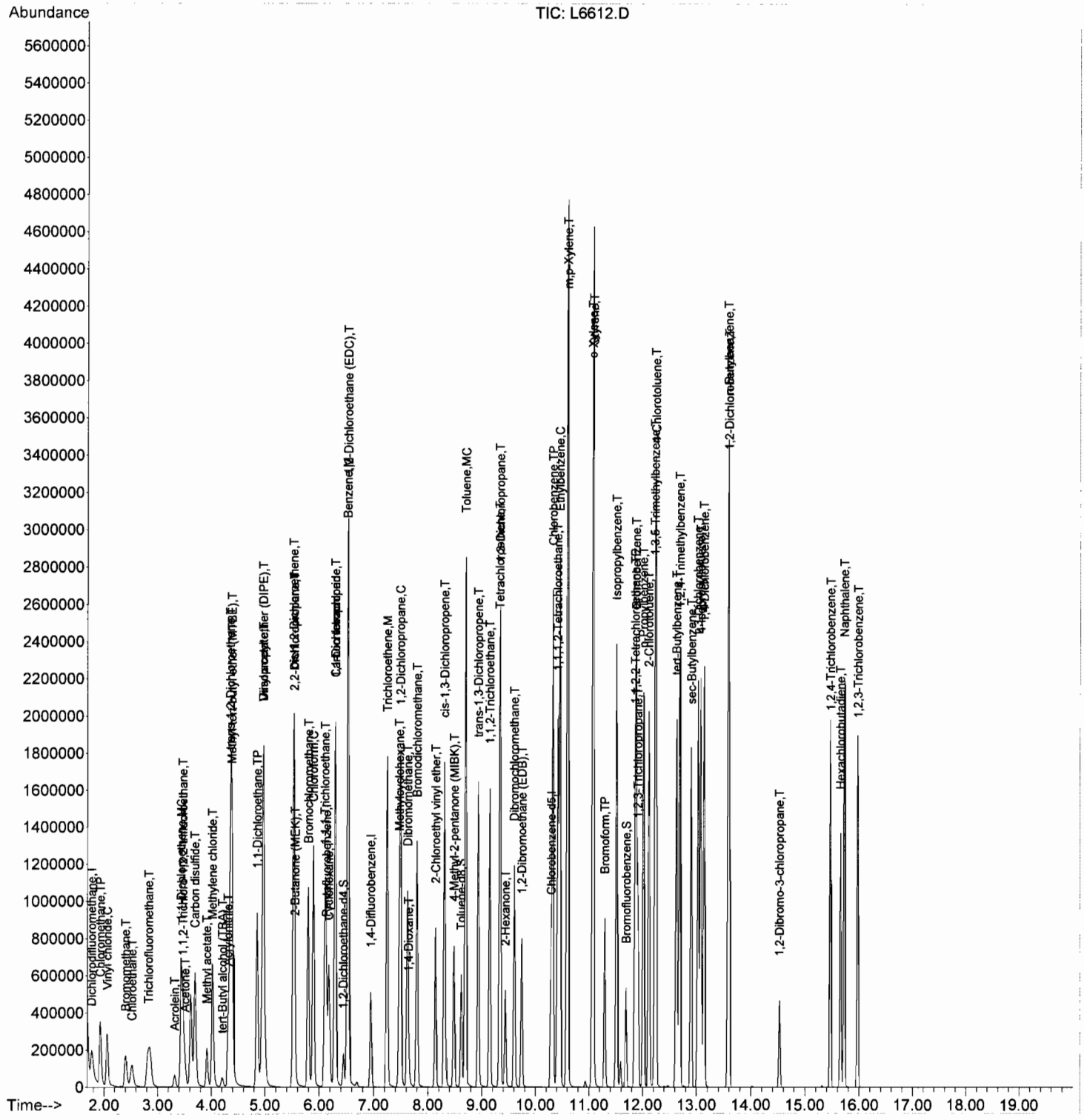
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	495262	195.74	UG	99
46) 1,3-Dichloropropane	9.34	76	963914	199.67	UG	100
47) 2-Hexanone	9.44	43	393991	245.05	UG	99
48) Dibromochloromethane	9.60	129	728089	224.80	UG	100
49) 1,2-Dibromoethane (EDB)	9.74	107	623310	207.88	UG	100
51) Chlorobenzene	10.32	112	1663788	185.14	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	688253	206.51	UG	99
53) Ethylbenzene	10.46	91	2309390	203.59	UG	99
54) m,p-Xylene	10.60	106	1711584	387.46	UG	98
55) o-Xylene	11.06	106	884103	201.35	UG	98
56) Styrene	11.09	104	1657866	201.58	UG	99
57) Bromoform	11.30	173	505262	191.39	UG	100
58) Isopropylbenzene	11.51	105	1877638	220.54	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	655689	168.61	UG	100
61) Bromobenzene	11.88	156	753587	190.89	UG	100
62) 1,2,3-Trichloropropane	11.91	75	632624	185.71	UG	99
63) n-Propylbenzene	12.01	91	2011676	205.38	UG	100
64) 2-Chlorotoluene	12.11	91	1449521	196.63	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1589689	203.77	UG	100
66) 4-Chlorotoluene	12.24	91	1713614	189.50	UG	99
67) tert-Butylbenzene	12.63	119	1245051	211.33	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	1699174	196.33	UG	100
69) sec-Butylbenzene	12.90	105	1670826	205.71	UG	99
70) 1,3-Dichlorobenzene	13.02	146	1141984	187.11	UG	100
71) 4-Isopropyltoluene	13.07	119	1527548	204.91	UG	100
72) 1,4-Dichlorobenzene	13.14	146	1171330	182.00	UG	100
73) n-Butylbenzene	13.58	92	686586	209.19	UG	96
74) 1,2-Dichlorobenzene	13.59	146	1115093	179.44	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	126115	155.00	UG	83
76) 1,2,4-Trichlorobenzene	15.47	180	722451	199.52	UG	99
77) Hexachlorobutadiene	15.65	225	309785	165.83	UG	100
78) Naphthalene	15.72	128	1833303	231.30	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	684454	194.55	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	266234m	256.23	UG	
81) Methyl acetate	3.92	43	349724	171.75	UG	98
82) Cyclohexane	6.17	56	473454m	244.90	UG	
83) Methylcyclohexane	7.47	55	251092	185.40	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.198	0.236	-19.2	113	0.00
3	TP	Chloromethane	0.385	0.431	-11.9	108	0.00
4	C	Vinyl chloride	0.332	0.383	-15.4	104	0.00
5	T	Bromomethane	0.206	0.224	-8.7	114	-0.01
6	T	Chloroethane	0.169	0.181	-7.1	107	0.00
7	T	Trichlorofluoromethane	0.374	0.435	-16.3	120	-0.01
8	T	Acrolein	0.024	0.022	8.3	99	0.00
9	MC	1,1-Dichloroethene	0.275	0.306	-11.3	102	0.00
10	T	Acetone	0.081	0.079	2.5	103	0.00
11	T	Carbon disulfide	0.858	1.000	-16.6	105	0.00
12	T	Vinyl acetate	1.142	1.151	-0.8	111	0.00
13	T	Methylene chloride	0.368	0.354	3.8	103	0.00
14	T	Acrylonitrile	0.132	0.111	15.9	84	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.030	-3.4	102	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	99	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.291	2.9	101	0.00
18	TP	1,1-Dichloroethane	0.908	0.885	2.5	100	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.651	0.9	100	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.546	0.0	99	0.00
21	T	2,2-Dichloropropane	0.429	0.501	-16.8	110	0.00
22	T	2-Butanone (MEK)	0.189	0.191	-1.1	100	0.00
23	T	Bromochloromethane	0.285	0.273	4.2	100	0.00
25	C	Chloroform	0.943	0.896	5.0	99	0.00
26	T	1,1,1-Trichloroethane	0.589	0.668	-13.4	105	0.00
27	T	Carbon tetrachloride	0.448	0.526	-17.4	104	0.01
28	T	1,1-Dichloropropene	0.504	0.562	-11.5	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.705	6.3	99	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.417	2.6	98	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
32	M	Benzene	1.370	1.325	3.3	99	0.00
33	M	Trichloroethene	0.329	0.330	-0.3	93	0.00
34	C	1,2-Dichloropropane	0.346	0.348	-0.6	99	0.00
35	T	Dibromomethane	0.220	0.213	3.2	99	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	95	0.01
37	T	Bromodichloromethane	0.461	0.483	-4.8	99	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.215	-5.9	99	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.551	-13.4	99	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.310	-11.5	99	0.00
41	S	Toluene-d8	0.885	0.902	-1.9	98	0.00
42	MC	Toluene	0.769	0.760	1.2	98	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.503	-16.4	99	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	100	0.00
45	T	Tetrachloroethene	0.257	0.271	-5.4	98	0.00
46	T	1,3-Dichloropropane	0.491	0.504	-2.6	100	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	99	0.00
48	T	Dibromochloromethane	0.329	0.369	-12.2	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.319	-4.6	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
51	TP	Chlorobenzene	0.989	0.921	6.9	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.379	-3.3	99	0.00
53	C	Ethylbenzene	1.249	1.305	-4.5	98	0.00
54	T	m,p-Xylene	0.486	0.504	-3.7	99	0.00
55	T	o-Xylene	0.483	0.523	-8.3	99	0.00
56	T	Styrene	0.905	0.964	-6.5	97	0.00
57	TP	Bromoform	0.291	0.270	7.2	101	0.00
58	T	Isopropylbenzene	0.937	1.069	-14.1	100	0.00
59	S	Bromofluorobenzene	0.437	0.448	-2.5	100	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.410	4.2	107	0.00
61	T	Bromobenzene	0.435	0.425	2.3	99	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	101	0.00
63	T	n-Propylbenzene	1.078	1.158	-7.4	101	0.00
64	T	2-Chlorotoluene	0.812	0.817	-0.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.903	-5.1	100	0.00
66	T	4-Chlorotoluene	0.996	0.968	2.8	99	0.00
67	T	tert-Butylbenzene	0.649	0.709	-9.2	104	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.951	0.2	101	0.00
69	T	sec-Butylbenzene	0.894	0.952	-6.5	102	0.00
70	T	1,3-Dichlorobenzene	0.672	0.632	6.0	101	0.00
71	T	4-Isopropyltoluene	0.821	0.862	-5.0	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.656	7.5	100	0.00
73	T	n-Butylbenzene	0.361	0.394	-9.1	103	0.00
74	T	1,2-Dichlorobenzene	0.684	0.638	6.7	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.067	-11.7	101	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.375	-8.7	102	0.00
77	T	Hexachlorobutadiene	0.165	0.187	-13.3	109	0.00
78	T	Naphthalene	0.847	0.979	-15.6	102	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.347	-4.5	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.164	-18.0	114	-0.01
81	T	Methyl acetate	0.204	0.203	0.5	105	0.00
82	T	Cyclohexane	0.256	0.292	-14.1	108	0.00
83	T	Methylcyclohexane	0.163	0.193	-18.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Tue Feb 17 14:03:27 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	324200	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	455058	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	426508	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	135106	48.63	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.26%				
41) Toluene-d8	8.62	98	410628	50.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.90%				
59) Bromofluorobenzene	11.69	95	191250	51.30	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	153154m	119.19	UG		
3) Chloromethane	1.93	50	279647	112.08	UG		100
4) Vinyl chloride	2.06	62	248132	115.40	UG		100
5) Bromomethane	2.42	94	145361	108.72	UG		99
6) Chloroethane	2.54	64	117664	107.35	UG		99
7) Trichlorofluoromethane	2.83	101	281762	116.34	UG		100
8) Acrolein	3.33	56	43324	274.92	UG		99
9) 1,1-Dichloroethene	3.45	96	198435	111.09	UG		94
10) Acetone	3.52	43	51407	97.46	UG		100
11) Carbon disulfide	3.70	76	648362	116.60	UG		100
12) Vinyl acetate	4.96	43	746390	100.81	UG	#	99
13) Methylene chloride	4.03	84	229842	96.32	UG		100
14) Acrylonitrile	4.32	53	216498	253.43	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	38272	201.59	UG		100
16) trans-1,2-Dichloroethene	4.36	96	310892	99.23	UG		92
17) Methyl tert-butyl ether (M	4.38	73	836791	97.14	UG		100
18) 1,1-Dichloroethane	4.86	63	573848	97.48	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1070219	99.09	UG		100
20) cis-1,2-Dichloroethene	5.53	96	354243	100.13	UG		99
21) 2,2-Dichloropropane	5.53	77	324539	116.79	UG		96
22) 2-Butanone (MEK)	5.55	43	123684	100.95	UG		99
23) Bromochloromethane	5.80	128	176968	95.92	UG		99
25) Chloroform	5.90	83	580962	95.03	UG		100
26) 1,1,1-Trichloroethane	6.11	97	433067	113.39	UG		100
27) Carbon tetrachloride	6.30	117	341234	117.36	UG		100
28) 1,1-Dichloropropene	6.29	75	364272	111.37	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	456834	93.71	UG		100
32) Benzene	6.53	78	1205529	96.72	UG		100
33) Trichloroethene	7.25	95	300022	100.28	UG		93
34) 1,2-Dichloropropane	7.49	63	316367	100.58	UG		100
35) Dibromomethane	7.62	93	194003	96.97	UG		93
36) 1,4-Dioxane	7.65	88	78353	3019.69	UG		99
37) Bromodichloromethane	7.80	83	439343	104.66	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	195483	105.96	UG		99
39) cis-1,3-Dichloropropene	8.30	75	501441	113.38	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	282039	111.54	UG		100
42) Toluene	8.70	92	691395	98.80	UG		99
43) trans-1,3-Dichloropropene	8.93	75	457480	116.32	UG		99
44) 1,1,2-Trichloroethane	9.15	83	230613	100.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

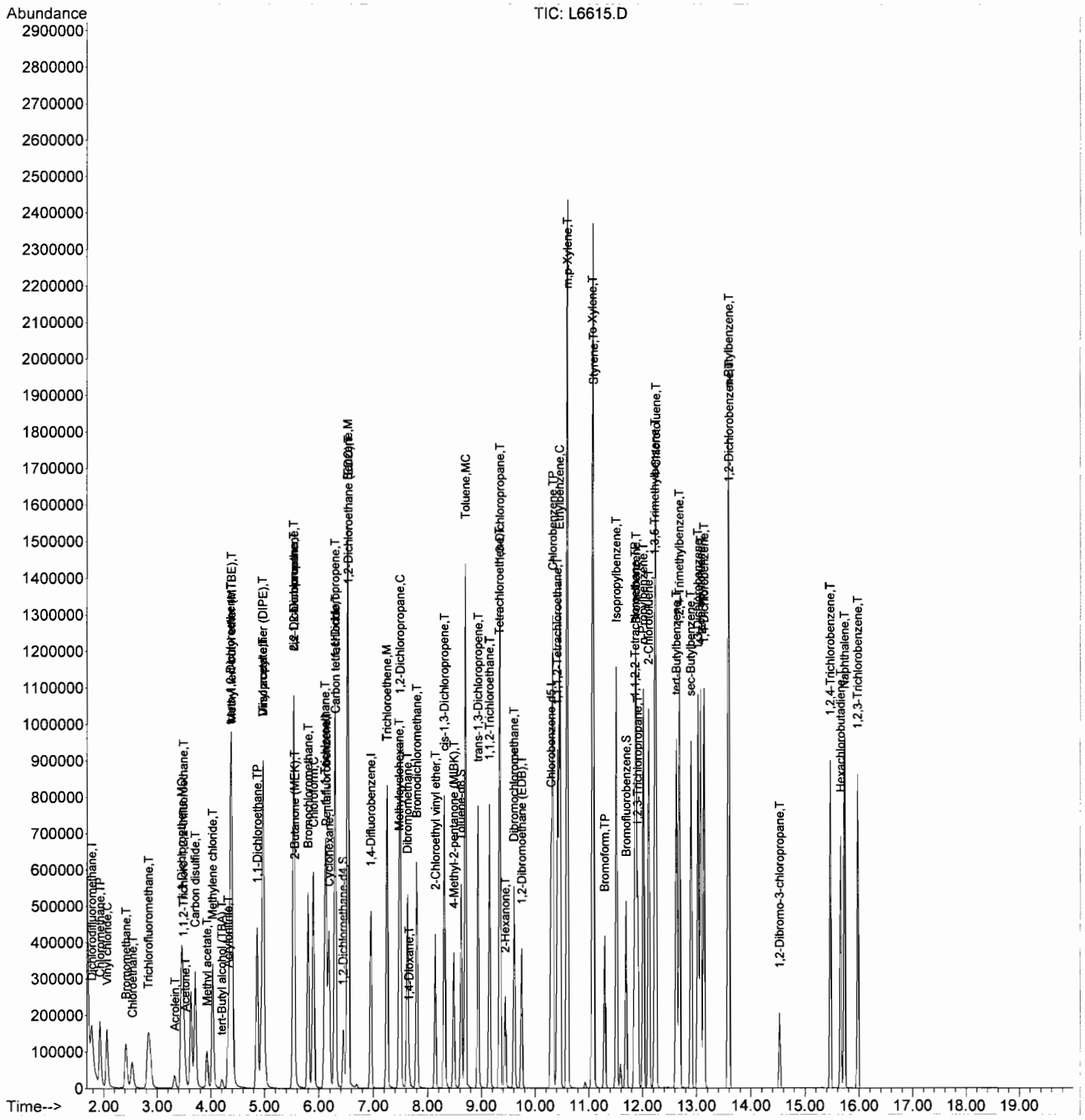
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	246473	105.33	UG	98
46) 1,3-Dichloropropane	9.34	76	459129	102.84	UG	100
47) 2-Hexanone	9.44	43	180312	118.09	UG	99
48) Dibromochloromethane	9.60	129	335763	112.10	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	290638	104.81	UG	100
51) Chlorobenzene	10.32	112	785293	93.05	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	323215	103.26	UG	99
53) Ethylbenzene	10.46	91	1113113	104.49	UG	99
54) m,p-Xylene	10.60	106	860185	207.34	UG	96
55) o-Xylene	11.06	106	446318	108.23	UG	96
56) Styrene	11.09	104	822727	106.52	UG	99
57) Bromoform	11.30	173	230374	92.92	UG	100
58) Isopropylbenzene	11.51	105	912035	114.07	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349552	95.71	UG	100
61) Bromobenzene	11.88	156	362773	97.85	UG	100
62) 1,2,3-Trichloropropane	11.91	75	307882	96.24	UG	99
63) n-Propylbenzene	12.01	91	988101	107.41	UG	100
64) 2-Chlorotoluene	12.11	91	696626	100.62	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770246	105.13	UG	100
66) 4-Chlorotoluene	12.24	91	825829	97.24	UG	99
67) tert-Butylbenzene	12.63	119	604701	109.29	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	810795	99.75	UG	100
69) sec-Butylbenzene	12.89	105	811907	106.44	UG	99
70) 1,3-Dichlorobenzene	13.02	146	539274	94.08	UG	100
71) 4-Isopropyltoluene	13.07	119	735159	105.01	UG	100
72) 1,4-Dichlorobenzene	13.14	146	559709	92.60	UG	100
73) n-Butylbenzene	13.58	92	335894	108.97	UG	96
74) 1,2-Dichlorobenzene	13.59	146	544194	93.25	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	56934	111.51	UG	85
76) 1,2,4-Trichlorobenzene	15.46	180	319645	108.67	UG	99
77) Hexachlorobutadiene	15.65	225	159520	113.57	UG	100
78) Naphthalene	15.72	128	835014	115.52	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	296326	104.73	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	139981	118.06	UG	92
81) Methyl acetate	3.93	43	173324	99.43	UG	98
82) Cyclohexane	6.18	56	249268	114.07	UG	100
83) Methylcyclohexane	7.47	55	165056	118.38	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	118	0.00
2	T	Dichlorodifluoromethane	0.198	0.237	-19.7	138	0.00
3	TP	Chloromethane	0.385	0.451	-17.1	138	0.00
4	C	Vinyl chloride	0.332	0.395	-19.0	131	0.00
5	T	Bromomethane	0.206	0.205	0.5	127	-0.01
6	T	Chloroethane	0.169	0.193	-14.2	139	0.00
7	T	Trichlorofluoromethane	0.374	0.338	9.6	114	0.00
8	T	Acrolein	0.024	0.028	-16.7	151	-0.01
9	MC	1,1-Dichloroethene	0.275	0.311	-13.1	126	0.00
10	T	Acetone	0.081	0.094	-16.0	149	-0.01
11	T	Carbon disulfide	0.858	1.007	-17.4	129	0.00
12	T	Vinyl acetate	1.142	1.184	-3.7	140	0.00
13	T	Methylene chloride	0.368	0.381	-3.5	136	0.00
14	T	Acrylonitrile	0.132	0.149	-12.9	138	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.033	-13.8	140	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.489	-1.2	123	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.375	-3.5	132	0.00
18	TP	1,1-Dichloroethane	0.908	0.928	-2.2	128	-0.01
19	T	Diisopropyl ether (DIPE)	1.666	1.817	-9.1	135	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.559	-2.4	124	0.00
21	T	2,2-Dichloropropane	0.429	0.492	-14.7	132	0.00
22	T	2-Butanone (MEK)	0.189	0.218	-15.3	139	-0.01
23	T	Bromochloromethane	0.285	0.274	3.9	123	0.00
25	C	Chloroform	0.943	0.885	6.2	120	-0.01
26	T	1,1,1-Trichloroethane	0.589	0.634	-7.6	121	0.00
27	T	Carbon tetrachloride	0.448	0.510	-13.8	123	0.00
28	T	1,1-Dichloropropene	0.504	0.561	-11.3	122	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.691	8.1	119	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.408	4.7	117	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	122	0.00
32	M	Benzene	1.370	1.345	1.8	125	0.00
33	M	Trichloroethene	0.329	0.328	0.3	115	0.00
34	C	1,2-Dichloropropane	0.346	0.358	-3.5	127	0.00
35	T	Dibromomethane	0.220	0.208	5.5	120	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	144	0.00
37	T	Bromodichloromethane	0.461	0.464	-0.7	119	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.228	-12.3	131	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.557	-14.6	125	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.327	-17.6	131	-0.01
41	S	Toluene-d8	0.885	0.898	-1.5	121	0.00
42	MC	Toluene	0.769	0.733	4.7	117	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.495	-14.6	122	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	124	0.00
45	T	Tetrachloroethene	0.257	0.263	-2.3	119	0.00
46	T	1,3-Dichloropropane	0.491	0.506	-3.1	125	0.00

47	T	2-Hexanone	0.168	0.192	-14.3	120	0.00
48	T	Dibromochloromethane	0.329	0.347	-5.5	115	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.316	-3.6	122	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00
51	TP	Chlorobenzene	0.989	0.896	9.4	118	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.363	1.1	117	0.00
53	C	Ethylbenzene	1.249	1.295	-3.7	120	0.00
54	T	m,p-Xylene	0.486	0.489	-0.6	118	0.00
55	T	o-Xylene	0.483	0.501	-3.7	117	0.00
56	T	Styrene	0.905	0.929	-2.7	116	0.00
57	TP	Bromoform	0.291	0.324	-11.3	149	0.00
58	T	Isopropylbenzene	0.937	1.063	-13.4	122	0.00
59	S	Bromofluorobenzene	0.437	0.431	1.4	119	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.403	5.8	130	0.00
61	T	Bromobenzene	0.435	0.404	7.1	116	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	124	0.00
63	T	n-Propylbenzene	1.078	1.146	-6.3	123	0.00
64	T	2-Chlorotoluene	0.812	0.791	2.6	120	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.898	-4.5	122	0.00
66	T	4-Chlorotoluene	0.996	0.941	5.5	119	0.00
67	T	tert-Butylbenzene	0.649	0.707	-8.9	128	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.936	1.8	122	0.01
69	T	sec-Butylbenzene	0.894	0.961	-7.5	127	0.00
70	T	1,3-Dichlorobenzene	0.672	0.610	9.2	120	0.00
71	T	4-Isopropyltoluene	0.821	0.860	-4.8	125	0.00
72	T	1,4-Dichlorobenzene	0.709	0.627	11.6	118	0.00
73	T	n-Butylbenzene	0.361	0.395	-9.4	127	0.00
74	T	1,2-Dichlorobenzene	0.684	0.600	12.3	117	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.063	-5.0	116	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.357	-3.5	120	0.01
77	T	Hexachlorobutadiene	0.165	0.173	-4.8	124	0.00
78	T	Naphthalene	0.847	0.873	-3.1	112	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.360	-8.4	128	0.01
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.140	-0.7	120	-0.01
81	T	Methyl acetate	0.204	0.225	-10.3	143	-0.01
82	T	Cyclohexane	0.256	0.286	-11.7	130	0.00
83	T	Methylcyclohexane	0.163	0.186	-14.1	128	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Fri Feb 20 16:56:36 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	396182	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	567004	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	525446	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	161449	47.56	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.12%			
41) Toluene-d8	8.62	98	509043	50.69	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.38%			
59) Bromofluorobenzene	11.69	95	226451	49.31	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.62%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.78	85	187500m	119.41	UG	
3) Chloromethane	1.93	50	357270m	117.18	UG	
4) Vinyl chloride	2.06	62	313331m	119.25	UG	
5) Bromomethane	2.42	94	162346	99.37	UG	99
6) Chloroethane	2.54	64	152691	114.00	UG	99
7) Trichlorofluoromethane	2.84	101	267721	90.46	UG	100
8) Acrolein	3.32	56	66152m	343.51	UG	
9) 1,1-Dichloroethene	3.45	96	246270	112.83	UG	96
10) Acetone	3.51	43	74434	115.48	UG	99
11) Carbon disulfide	3.70	76	797744m	117.40	UG	
12) Vinyl acetate	4.96	43	938113	103.68	UG	# 99
13) Methylene chloride	4.03	84	301689	103.46	UG	100
14) Acrylonitrile	4.32	53	353497m	338.62	UG	
15) tert-Butyl alcohol (TBA)	4.20	59	52537m	226.45	UG	
16) trans-1,2-Dichloroethene	4.36	96	387656	101.25	UG	93
17) Methyl tert-butyl ether (M	4.38	73	1089838	103.53	UG	100
18) 1,1-Dichloroethane	4.85	63	734932	102.16	UG	99
19) Diisopropyl ether (DIPE)	4.96	45	1439626	109.08	UG	100
20) cis-1,2-Dichloroethene	5.53	96	442774	102.41	UG	99
21) 2,2-Dichloropropane	5.53	77	389623	114.73	UG	94
22) 2-Butanone (MEK)	5.54	43	172758	115.38	UG	99
23) Bromochloromethane	5.80	128	216946	96.23	UG	99
25) Chloroform	5.89	83	700894	93.82	UG	100
26) 1,1,1-Trichloroethane	6.11	97	502690	107.71	UG	99
27) Carbon tetrachloride	6.29	117	403966	113.69	UG	100
28) 1,1-Dichloropropene	6.29	75	444788	111.28	UG	95
29) 1,2-Dichloroethane (EDC)	6.54	62	547628	91.92	UG	100
32) Benzene	6.53	78	1524690	98.17	UG	100
33) Trichloroethene	7.25	95	371683	99.71	UG	94
34) 1,2-Dichloropropane	7.49	63	406203	103.64	UG	100
35) Dibromomethane	7.62	93	235705	94.56	UG	93
36) 1,4-Dioxane	7.64	88	118574	3667.56	UG	99
37) Bromodichloromethane	7.80	83	526253	100.61	UG	100
38) 2-Chloroethyl vinyl ether	8.14	63	258319	112.37	UG	99
39) cis-1,3-Dichloropropene	8.30	75	631463	114.59	UG	100
40) 4-Methyl-2-pentanone (MIBK	8.48	43	370591m	117.63	UG	
42) Toluene	8.70	92	830700	95.27	UG	100
43) trans-1,3-Dichloropropene	8.93	75	560931	114.47	UG	99
44) 1,1,2-Trichloroethane	9.15	83	286506	100.15	UG	98

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

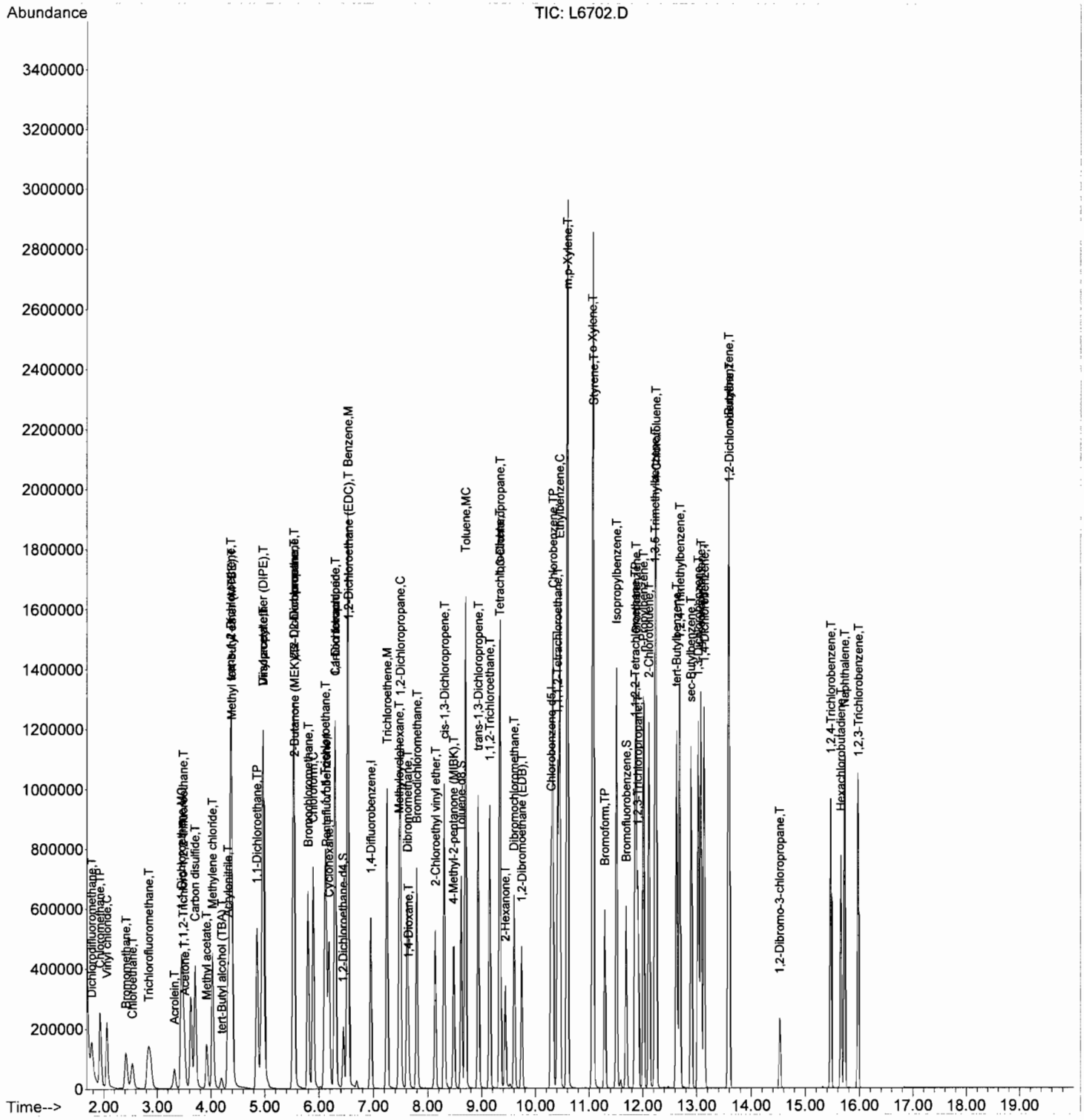
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	297781	102.13 UG	99
46) 1,3-Dichloropropane	9.34	76	573660	103.12 UG	100
47) 2-Hexanone	9.44	43	218133m	114.66 UG	
48) Dibromochloromethane	9.60	129	393581	105.46 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	358270	103.69 UG	100
51) Chlorobenzene	10.32	112	942013	90.60 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	381170	98.85 UG	99
53) Ethylbenzene	10.46	91	1360872	103.69 UG	99
54) m,p-Xylene	10.60	106	1028410	201.22 UG	97
55) o-Xylene	11.06	106	526798	103.69 UG	96
56) Styrene	11.09	104	976519	102.62 UG	98
57) Bromoform	11.30	173	340370	111.43 UG	100
58) Isopropylbenzene	11.51	105	1116729	113.37 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	423681	94.17 UG	100
61) Bromobenzene	11.88	156	424242	92.88 UG	100
62) 1,2,3-Trichloropropane	11.91	75	379509	96.29 UG	99
63) n-Propylbenzene	12.01	91	1204136	106.25 UG	100
64) 2-Chlorotoluene	12.11	91	831029	97.43 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	943343	104.51 UG	100
66) 4-Chlorotoluene	12.24	91	988952	94.52 UG	99
67) tert-Butylbenzene	12.63	119	742847	108.98 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	983185	98.18 UG	100
69) sec-Butylbenzene	12.89	105	1010064	107.48 UG	99
70) 1,3-Dichlorobenzene	13.02	146	641181	90.80 UG	100
71) 4-Isopropyltoluene	13.07	119	903591	104.76 UG	100
72) 1,4-Dichlorobenzene	13.14	146	658776	88.47 UG	100
73) n-Butylbenzene	13.58	92	414842	109.24 UG	96
74) 1,2-Dichlorobenzene	13.59	146	630677	87.72 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	65715	104.48 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	375145	103.52 UG	99
77) Hexachlorobutadiene	15.65	225	182018	105.19 UG	100
78) Naphthalene	15.72	128	917914	103.08 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	378494	108.58 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	147574	101.03 UG	94
81) Methyl acetate	3.92	43	235937m	109.86 UG	
82) Cyclohexane	6.18	56	300390	111.58 UG	99
83) Methylcyclohexane	7.47	55	194944	113.49 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

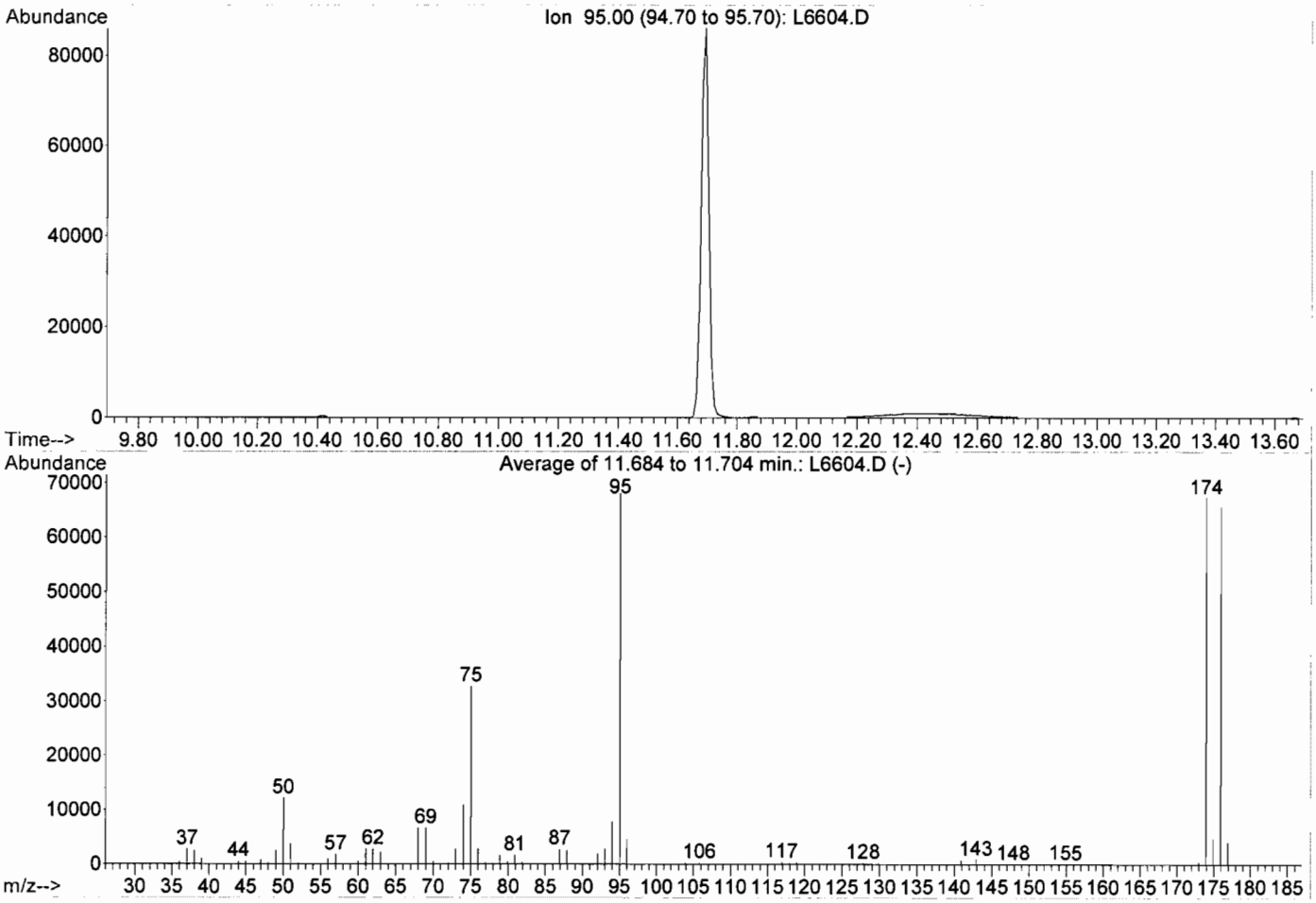


TCLP
VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6604.D
Acq On : 13 Feb 2015 10:29
Operator : MEI
Sample : BFB150213
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12137	PASS
75	95	30	60	48.1	32720	PASS
95	95	100	100	100.0	68045	PASS
96	95	5	9	6.7	4577	PASS
173	174	0.00	2	0.6	434	PASS
174	95	50	100	99.1	67400	PASS
175	174	5	9	7.1	4785	PASS
176	174	95	101	97.4	65629	PASS
177	176	5	9	6.3	4113	PASS

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	470	51.00	3639	70.00	510	81.90	341
37.00	2748	52.00	151	71.95	221	86.90	2722
38.00	2473	56.00	947	73.00	2746	87.90	2497
39.00	993	57.00	1767	74.00	10841	90.90	180
40.00	71	60.00	537	75.00	32720	92.00	1898
44.00	515	61.00	2808	76.00	2838	93.00	2852
45.00	487	62.00	2810	76.95	351	94.00	7830
47.00	799	63.00	2199	77.95	188	95.00	68045
48.00	298	64.05	174	78.90	1658	96.00	4577
49.00	2523	68.00	6523	79.90	458	103.90	220
50.00	12137	69.00	6609	80.90	1660	105.85	298

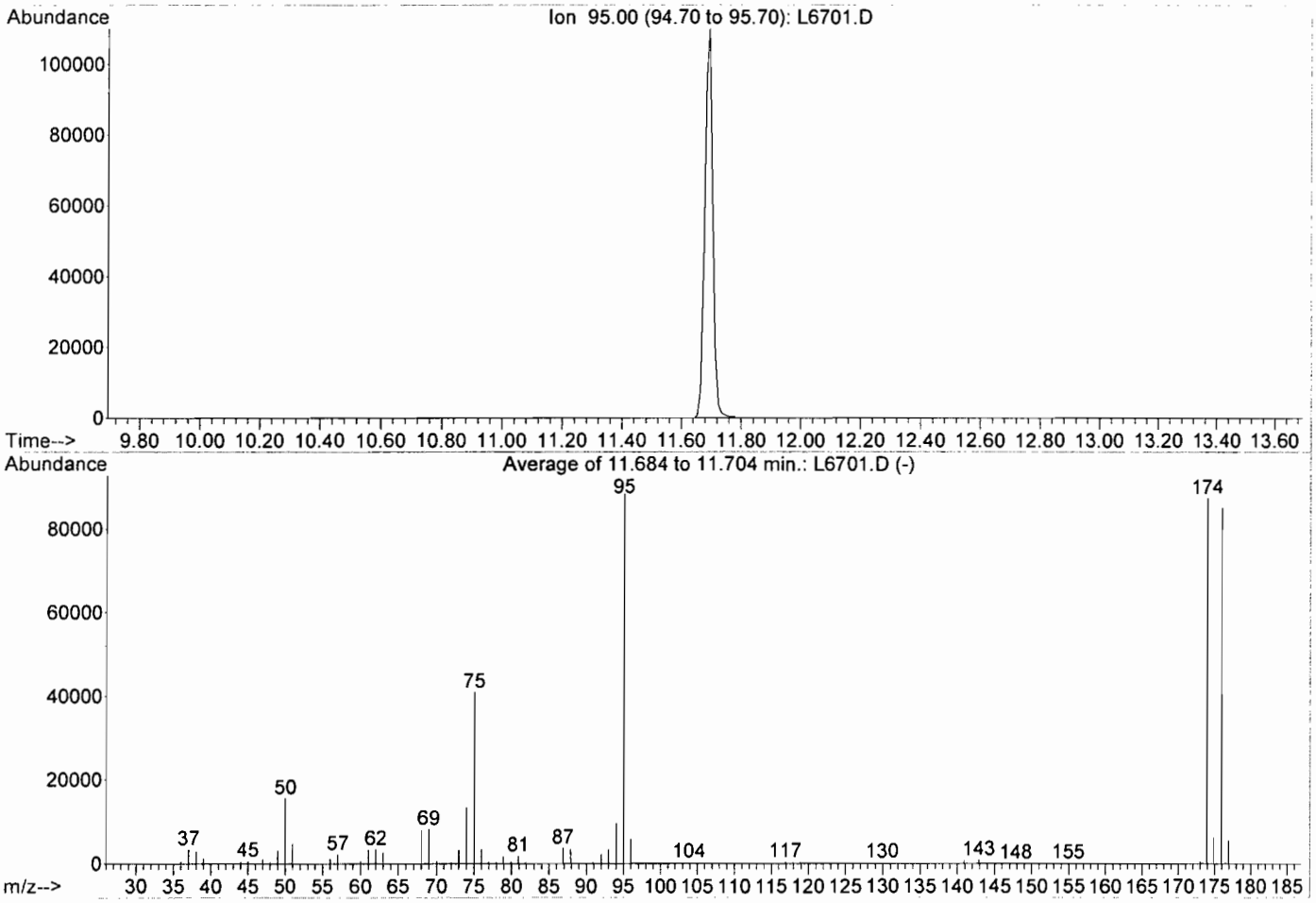
Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.85	234	173.90	67400				
116.90	441	174.90	4785				
117.90	205	175.90	65629				
118.90	362	176.90	4113				
127.85	262						
129.85	212						
140.90	793						
142.90	876						
147.90	85						
154.90	80						
172.95	434						

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6701.D
Acq On : 20 Feb 2015 8:41
Operator : MEI
Sample : BFB150220
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	15622	PASS
75	95	30	60	46.3	40965	PASS
95	95	100	100	100.0	88450	PASS
96	95	5	9	6.7	5921	PASS
173	174	0.00	2	0.6	567	PASS
174	95	50	100	98.8	87373	PASS
175	174	5	9	7.2	6268	PASS
176	174	95	101	97.3	85013	PASS
177	176	5	9	6.6	5585	PASS

Average of 11.684 to 11.704 min.: L6701.D
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	609	49.00	3192	64.00	190	77.95	348
37.00	3448	50.00	15622	66.95	161	78.90	1821
38.00	3062	51.00	4795	68.00	8022	79.90	501
39.00	1304	52.00	158	69.00	8257	80.90	1846
40.00	233	55.00	214	70.00	677	81.90	377
41.00	68	56.00	1168	71.95	354	86.90	3712
43.05	157	57.00	2269	73.00	3305	87.90	3503
44.00	416	60.00	645	74.00	13454	90.90	298
45.00	668	61.00	3413	75.00	40965	92.00	2336
47.00	1180	62.00	3428	76.00	3488	93.00	3467
48.00	444	63.00	2651	76.95	465	94.00	9739

Average of 11.684 to 11.704 min.: L6701.D
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	88450	129.90	313				
96.00	5921	140.90	885				
97.00	74	142.90	933				
103.90	321	147.90	86				
105.90	312	154.95	181				
115.85	266	156.90	82				
116.90	488	173.00	567				
117.90	306	173.90	87373				
118.85	449	174.90	6268				
127.85	308	175.90	85013				
128.90	69	176.90	5585				

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150220-01
Client ID: BLKA150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: L6704.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		1.00	0.493
Vinyl chloride	ND		1.00	0.463
Bromomethane	ND		1.00	0.684
Chloroethane	ND		1.00	0.829
Trichlorofluoromethane	ND		1.00	0.813
Acrolein	ND		20.0	8.50
1,1-Dichloroethene	ND		1.00	0.491
Methylene chloride	ND		2.00	1.99
Acrylonitrile	ND		20.0	12.3
trans-1,2-Dichloroethene	ND		1.00	0.544
1,1-Dichloroethane	ND		1.00	0.358
Chloroform	ND		1.00	0.511
1,1,1-Trichloroethane	ND		1.00	0.485
Carbon tetrachloride	ND		1.00	0.668
1,2-Dichloroethane (EDC)	ND		1.00	0.573
Benzene	ND		1.00	0.388
Trichloroethene	ND		1.00	0.357
1,2-Dichloropropane	ND		1.00	0.556
Bromodichloromethane	ND		1.00	0.526
2-Chloroethyl vinyl ether	ND		1.00	0.990
cis-1,3-Dichloropropene	ND		1.00	0.441
Toluene	ND		1.00	0.370
trans-1,3-Dichloropropene	ND		1.00	0.416
1,1,2-Trichloroethane	ND		1.00	0.633
Tetrachloroethene	ND		1.00	0.495
Dibromochloromethane	ND		1.00	0.516
Chlorobenzene	ND		1.00	0.395
Ethylbenzene	ND		1.00	0.420
Total Xylenes	ND		2.00	1.04
Bromoform	ND		1.00	0.663
1,1,2,2-Tetrachloroethane	ND		1.00	0.691
1,3-Dichlorobenzene	ND		1.00	0.416
1,4-Dichlorobenzene	ND		1.00	0.409
1,2-Dichlorobenzene	ND		1.00	0.401

Total Target Compounds (34): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA150220-01
Client ID: BLKA150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: L6704.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: TCLP150220
Client ID: TCLP150220
Date Received:
Date Analyzed: 02/20/2015
Data file: L6705.D

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.023
1,1-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.050	0.044
Chloroform	ND		0.050	0.026
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
Tetrachloroethene	ND		0.050	0.025
Chlorobenzene	ND		0.050	0.020
1,4-Dichlorobenzene	ND		0.050	0.021

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 16:57:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	395270	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	561728	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	517534	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	162200	47.89	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.78%			
41) Toluene-d8	8.62	98	493549	49.61	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.22%			
59) Bromofluorobenzene	11.69	95	223067	49.32	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.64%			

Target Compounds	Qvalue

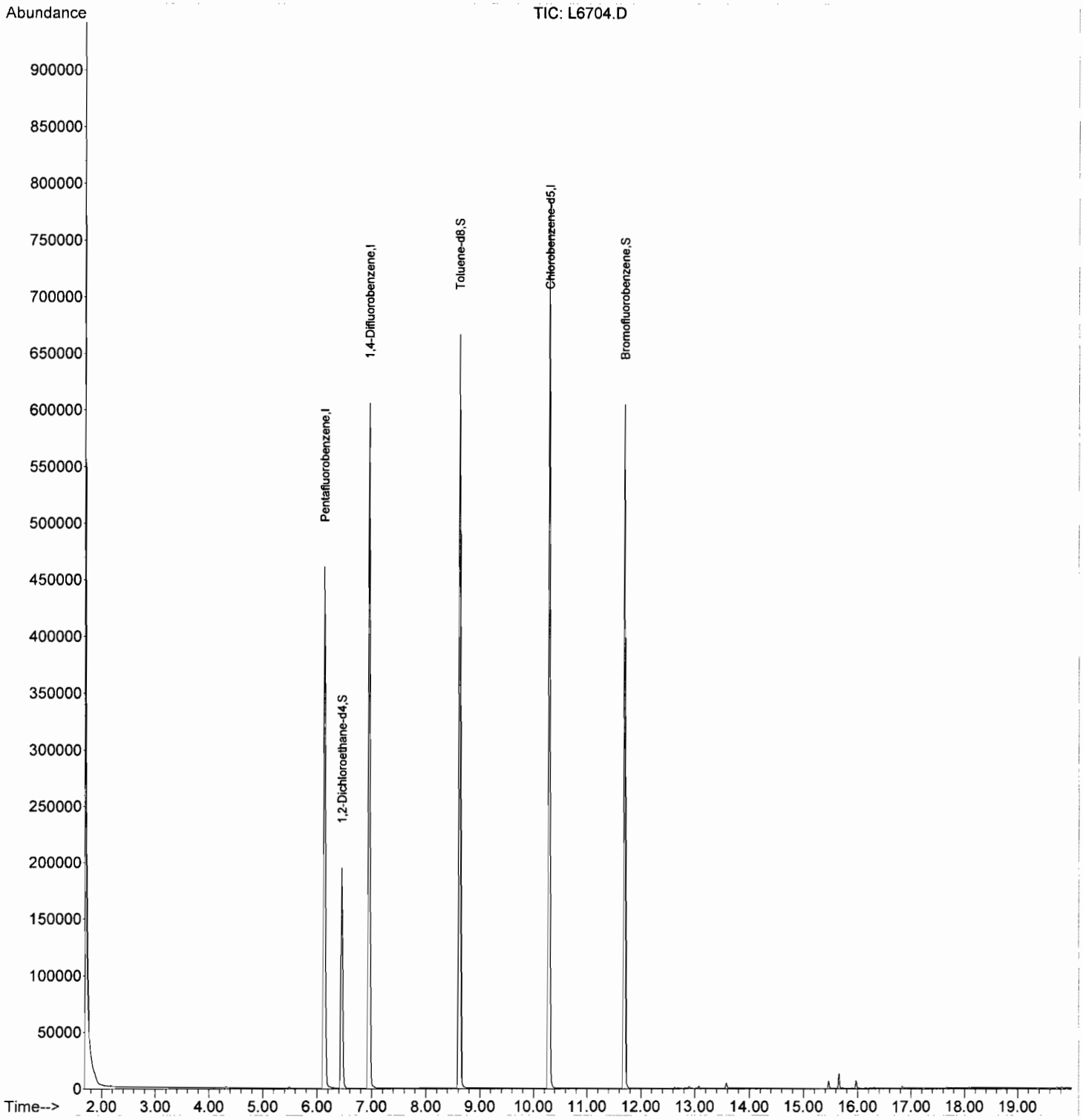
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

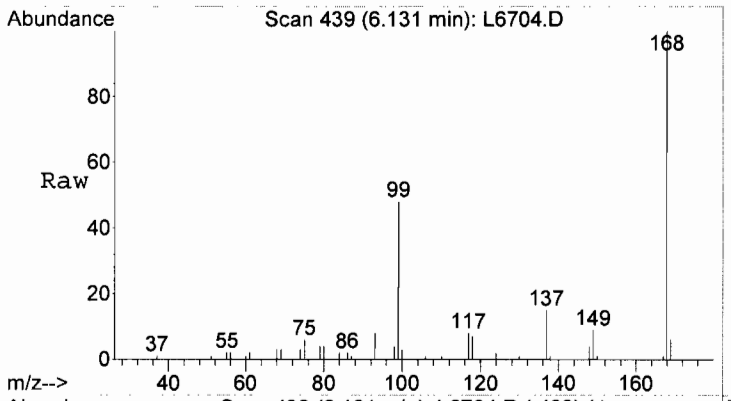
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 16:57:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



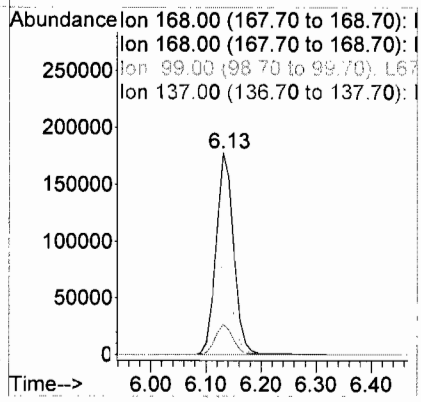
CT 2/23/15

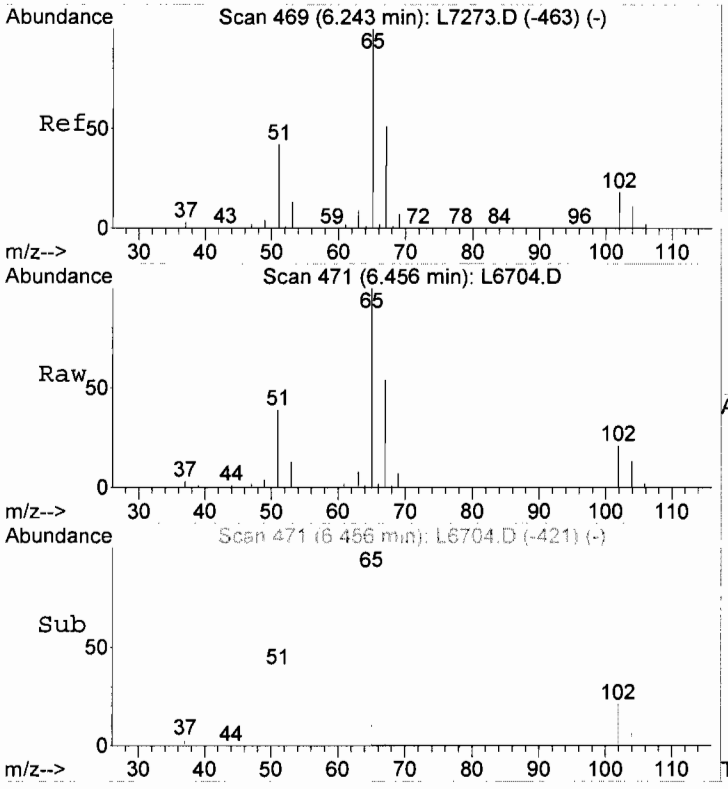


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:168 Resp: 395270

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

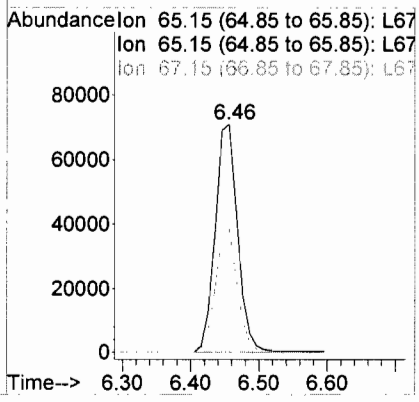


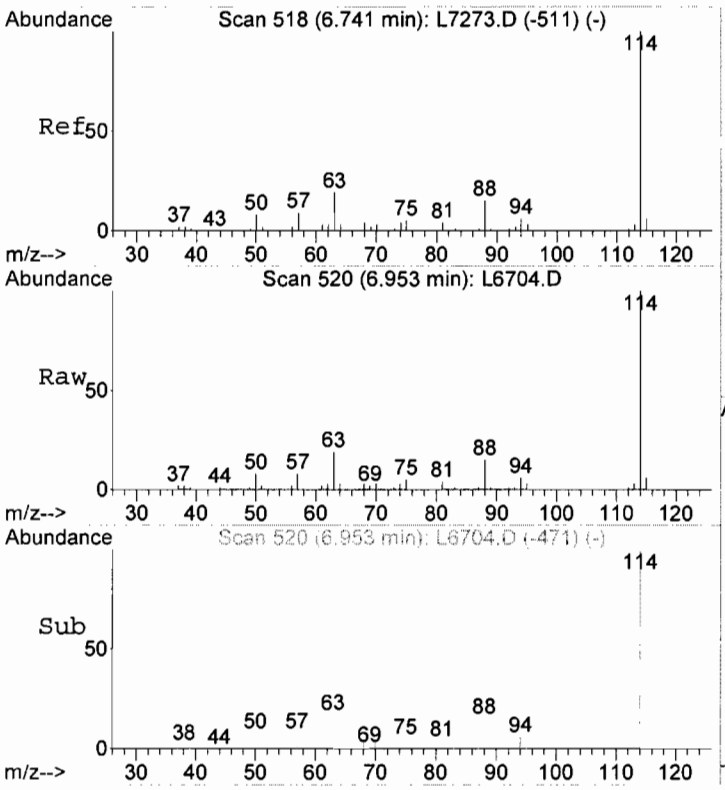


#30
1,2-Dichloroethane-d4
Concen: 47.89 UG
RT: 6.46 min Scan# 471
Delta R.T. 0.01 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 65 Resp: 162200

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	52.9	35.1	65.1

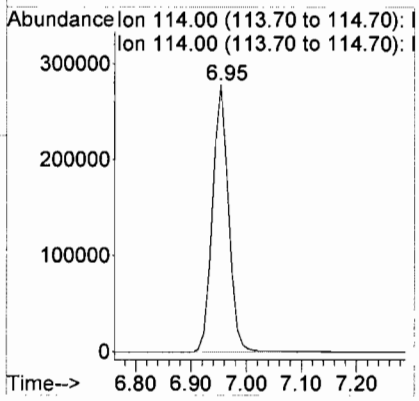


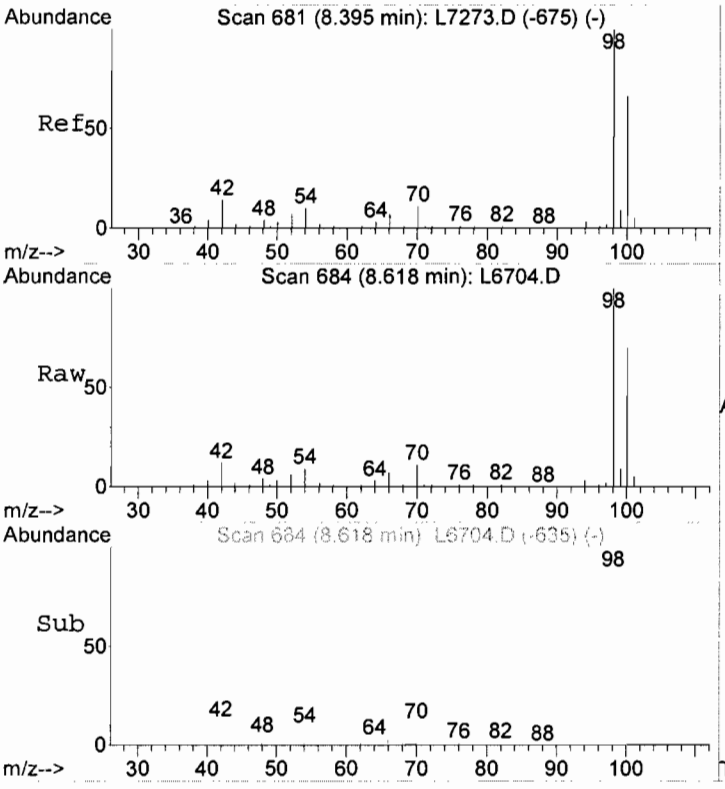


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:114 Resp: 561728

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

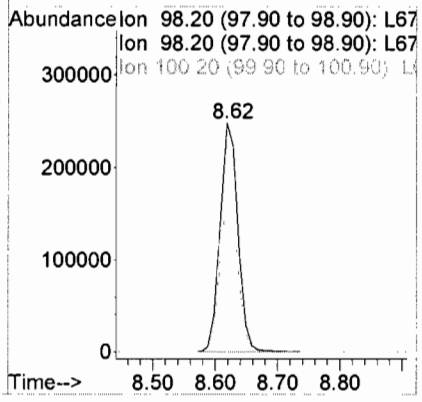


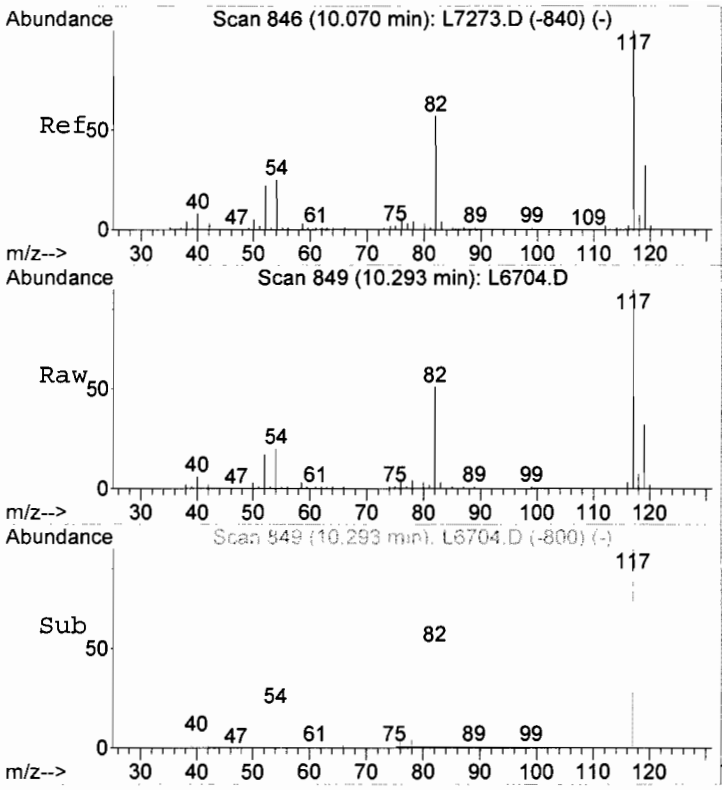


#41
Toluene-d8
Concen: 49.61 UG
RT: 8.62 min Scan# 684
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 98 Resp: 493549

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.7	44.8	83.2

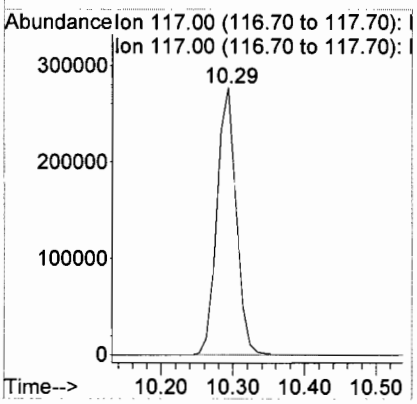


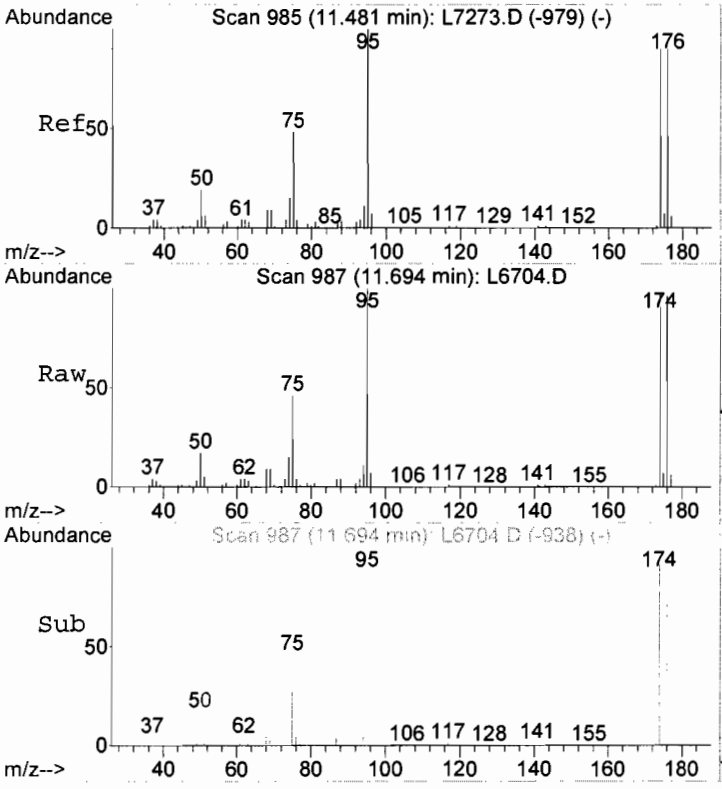


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:117 Resp: 517534

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

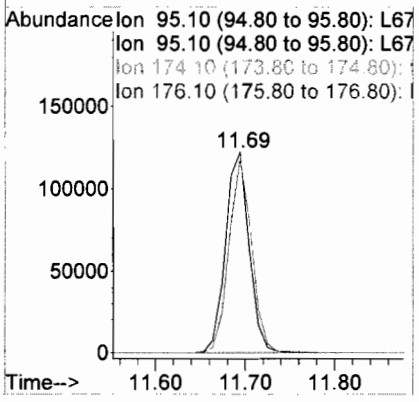




#59
Bromofluorobenzene
Concen: 49.32 UG
RT: 11.69 min Scan# 987
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 95 Resp: 223067

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	94.8	0.0	0.0#
176	92.4	0.0	0.0#



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	433	439	462	rVB	461111	1011026	67.46%	15.288%
2	6.456	465	471	488	rVB	194719	441154	29.44%	6.671%
3	6.953	514	520	543	rVB	605579	1226164	81.81%	18.541%
4	8.618	678	684	703	rVB	666374	1323130	88.28%	20.007%
5	10.293	843	849	866	rBV	784868	1498721	100.00%	22.663%
6	11.694	981	987	998	rVB	604969	1094767	73.05%	16.554%
7	15.653	1372	1377	1381	rBV	12870	18235	1.22%	0.276%

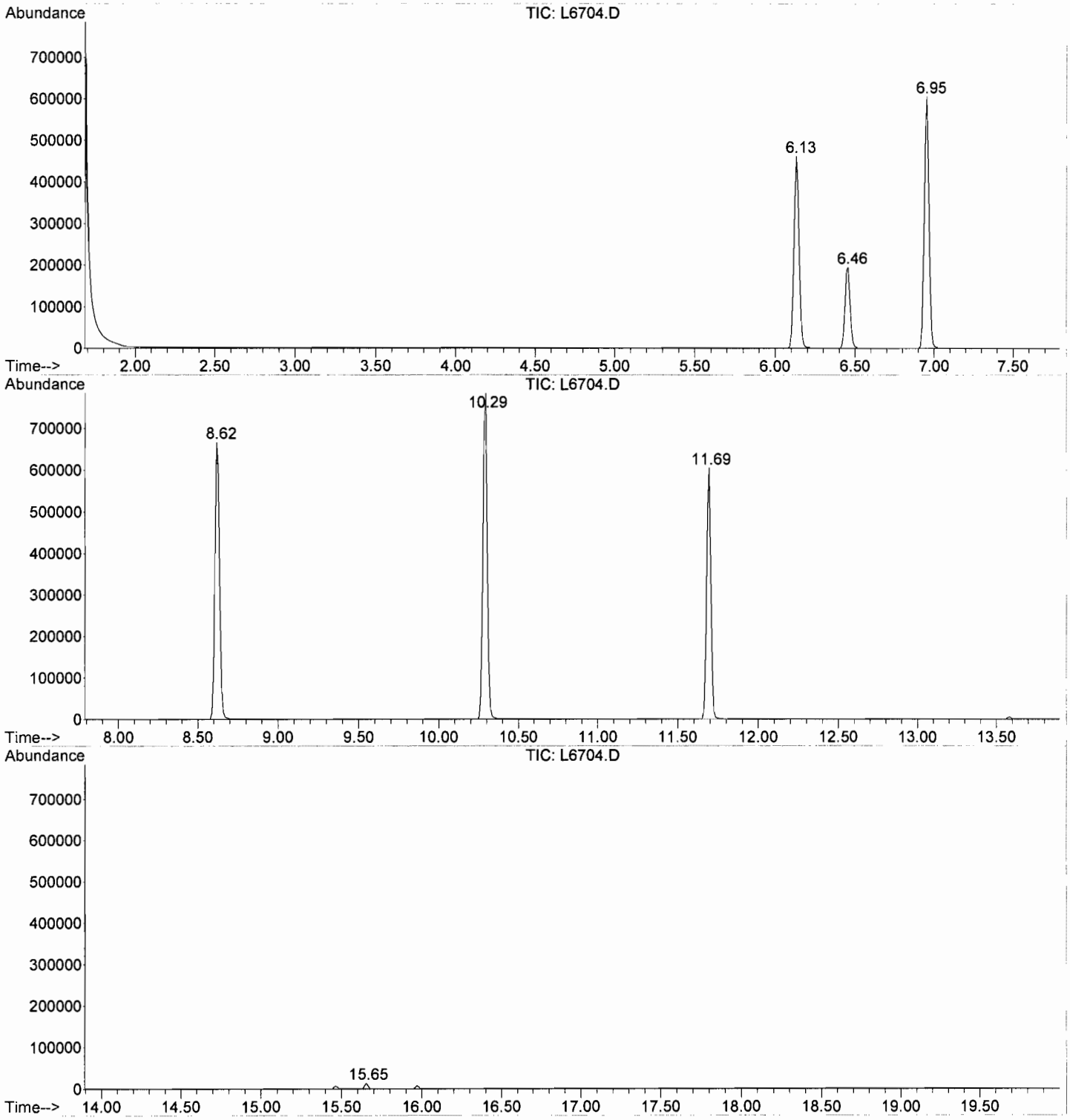
Sum of corrected areas: 6613197

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6705.D
Acq On : 20 Feb 2015 10:30
Operator : MEI
Sample : TCLP150220,TCLP150220,T,0.1ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 16:58:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	388456	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	555838	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	505670	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	159249	47.84	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.68%			
41) Toluene-d8	8.62	98	488900	49.67	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.34%			
59) Bromofluorobenzene	11.69	95	208284	47.13	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.26%			

Target Compounds	Qvalue

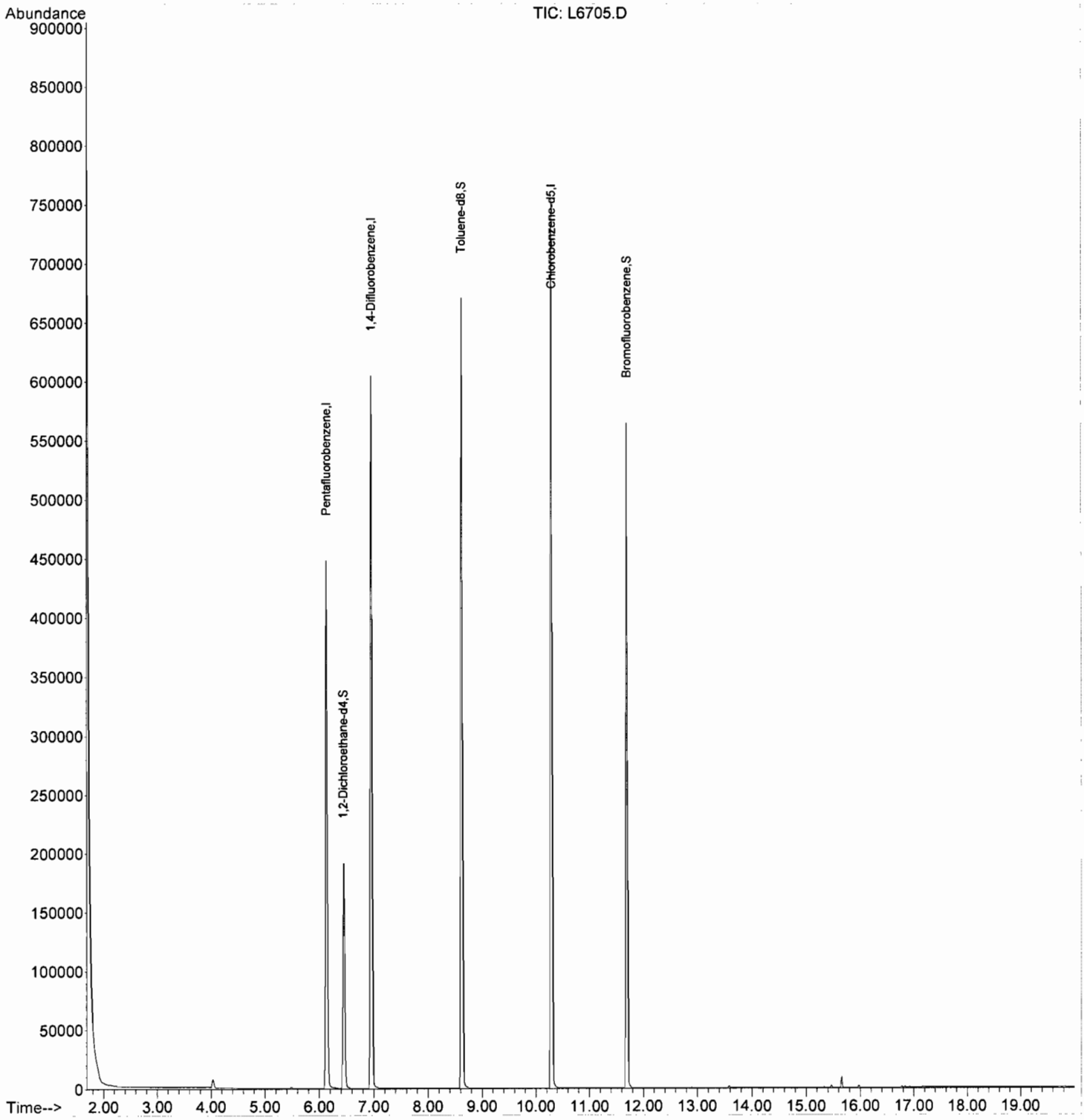
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

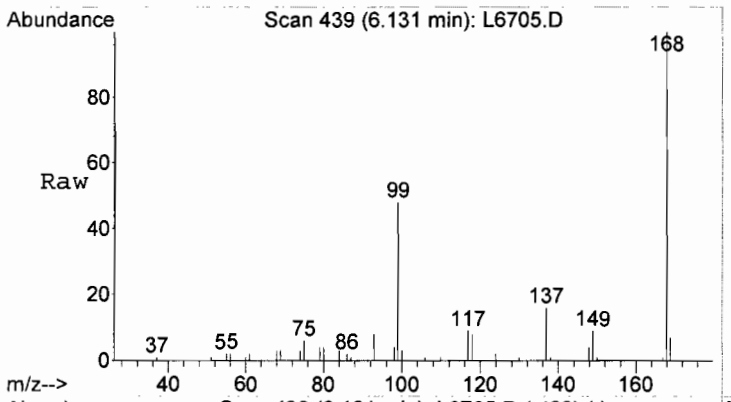
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6705.D
Acq On : 20 Feb 2015 10:30
Operator : MEI
Sample : TCLP150220,TCLP150220,T,0.1ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 16:58:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



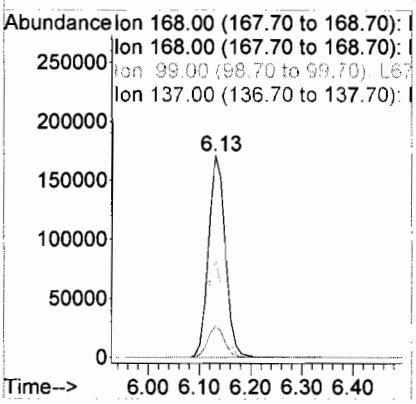
2/23/15

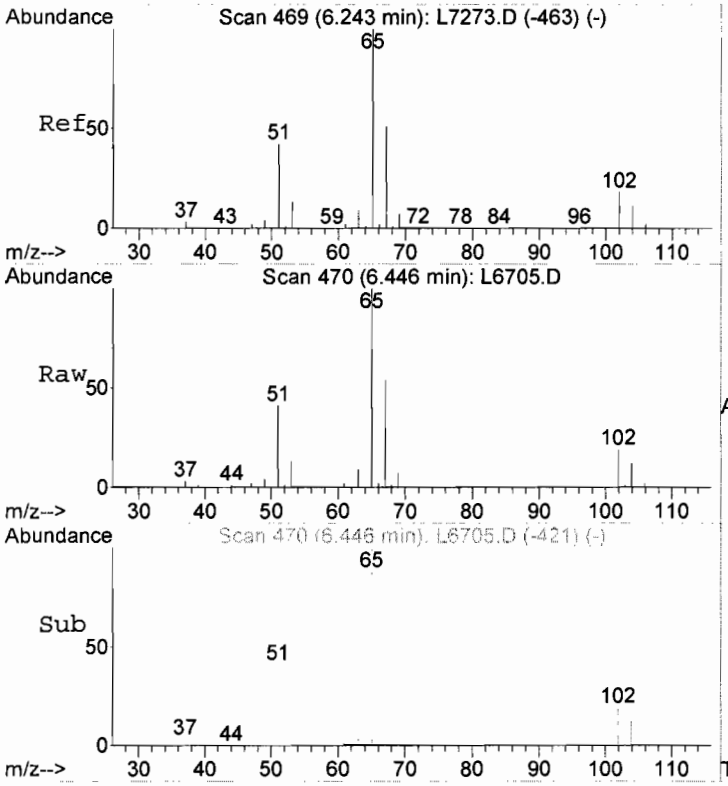


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:168 Resp: 388456

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

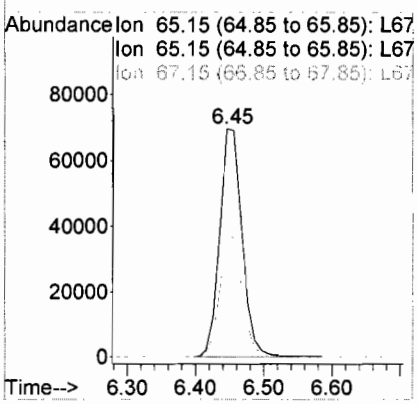


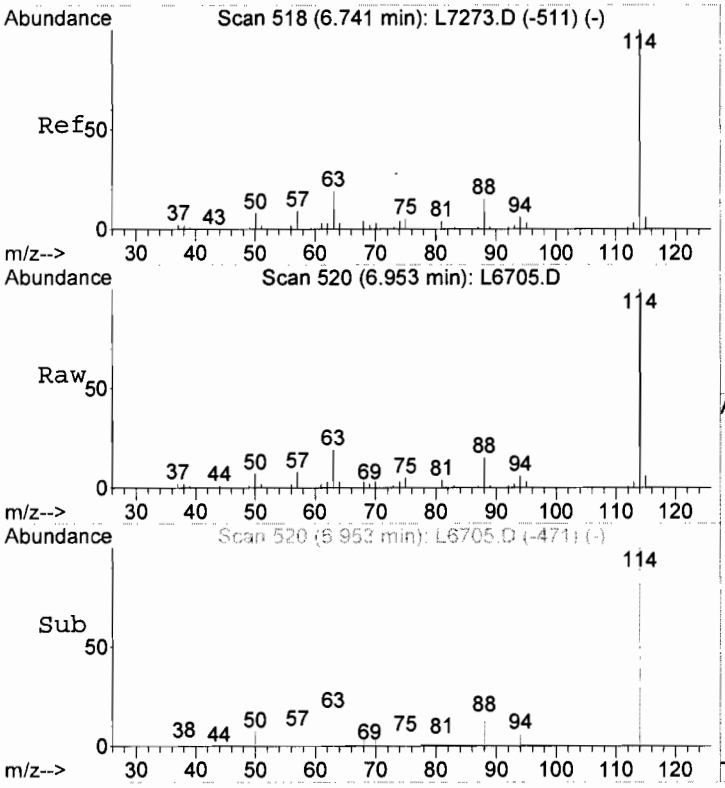


#30
1,2-Dichloroethane-d4
Concen: 47.84 UG
RT: 6.45 min Scan# 470
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 65 Resp: 159249

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	53.2	35.1	65.1

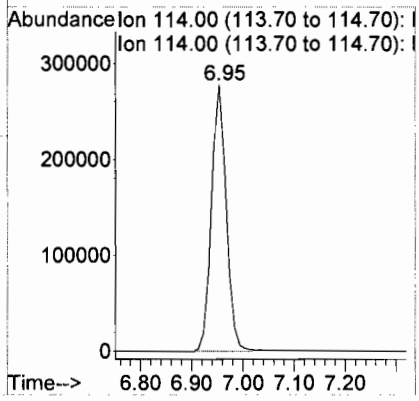


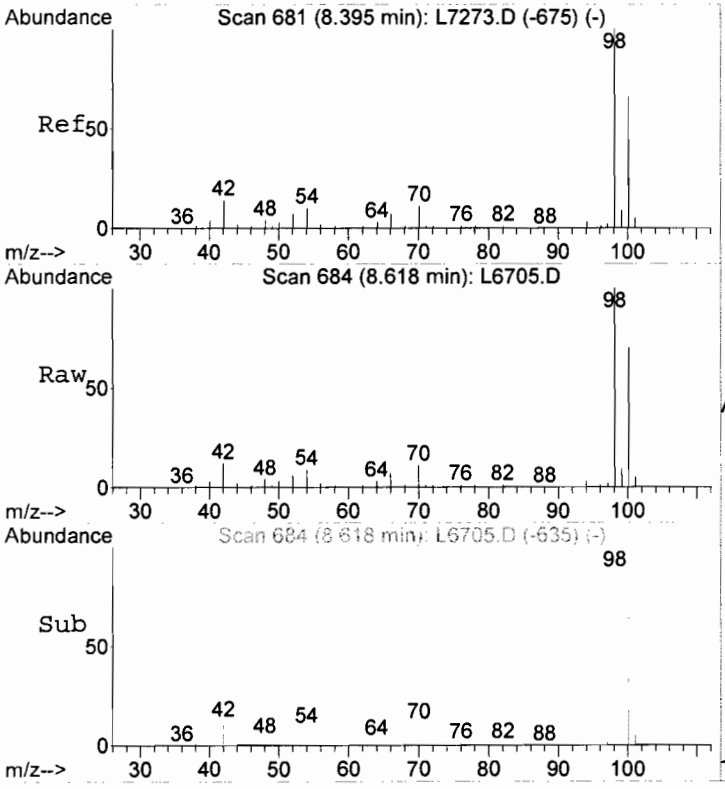


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:114 Resp: 555838

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

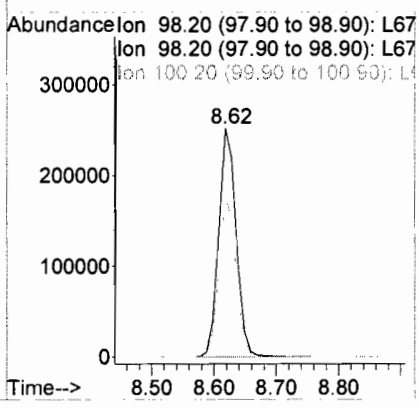


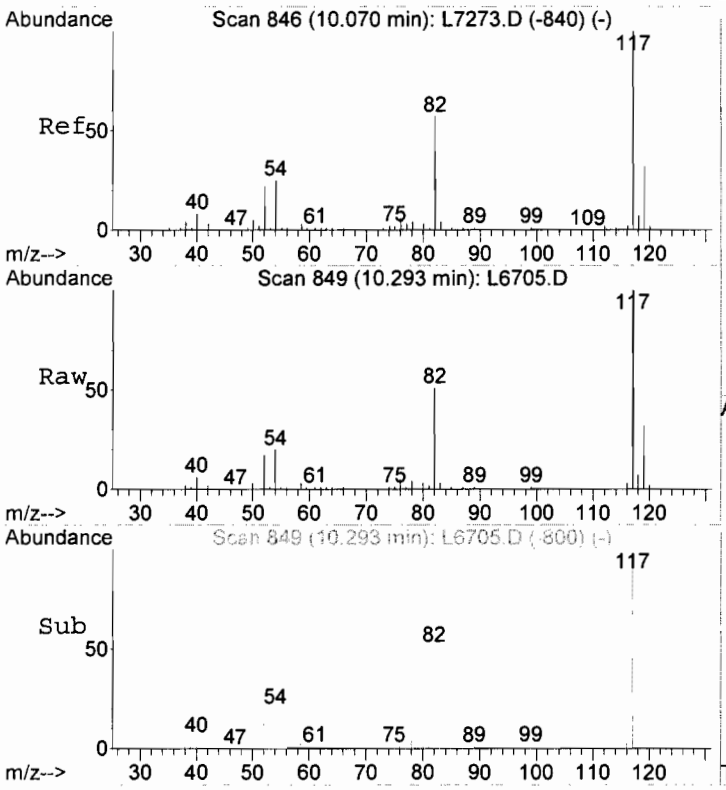


#41
Toluene-d8
Concen: 49.67 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 98 Resp: 488900

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.3	44.8	83.2

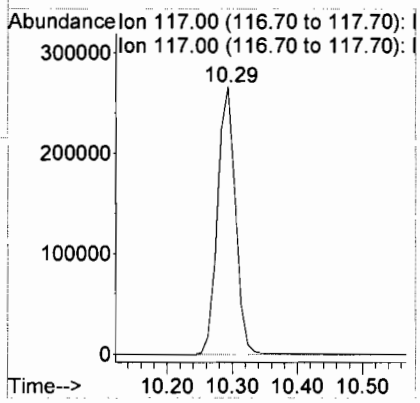


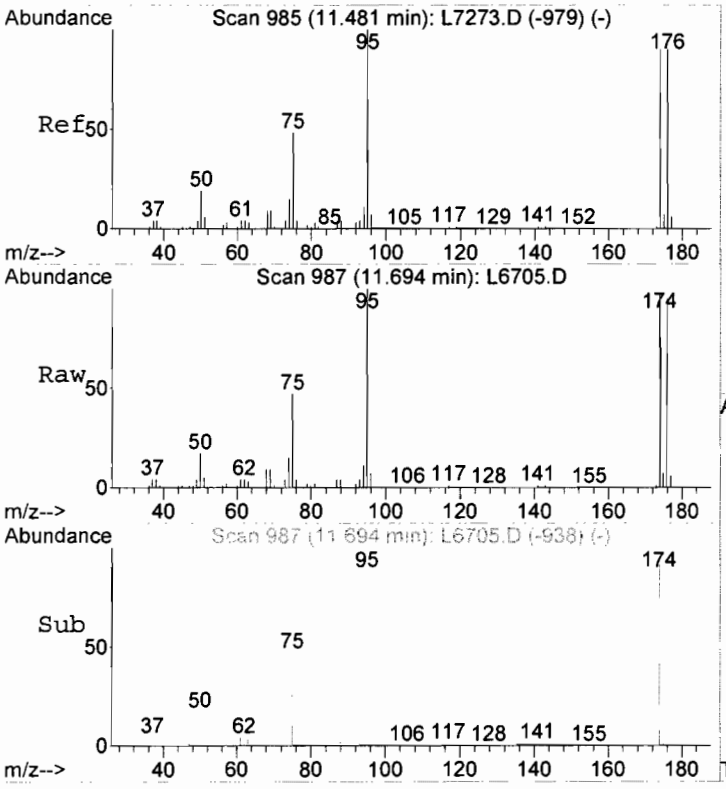


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:117 Resp: 505670

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

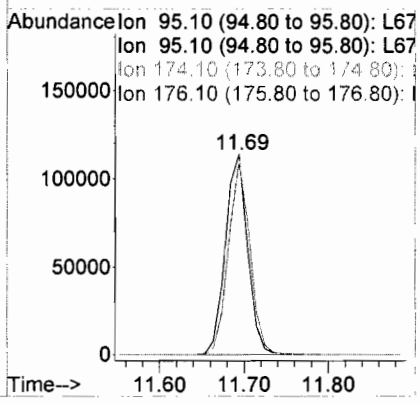




#59
Bromofluorobenzene
Concen: 47.13 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 95 Resp: 208284

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.4	0.0	0.0#
176	92.5	0.0	0.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	358207	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	505677	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	465279	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	147238	47.97	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.94%				
41) Toluene-d8	8.62	98	448436	50.07	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.14%				
59) Bromofluorobenzene	11.69	95	187455	46.10	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	87981m	61.97	UG		
3) Chloromethane	1.93	50	152772	55.42	UG		100
4) Vinyl chloride	2.06	62	137745	57.98	UG		100
5) Bromomethane	2.43	94	78619	53.22	UG		98
6) Chloroethane	2.54	64	68735	56.76	UG		100
7) Trichlorofluoromethane	2.83	101	116655	43.59	UG		100
8) Acrolein	3.32	56	26885	154.41	UG		99
9) 1,1-Dichloroethene	3.45	96	105098	53.25	UG		95
10) Acetone	3.51	43	36790m	63.13	UG		
11) Carbon disulfide	3.70	76	341569	55.60	UG		100
12) Vinyl acetate	4.96	43	409662	50.08	UG	#	99
13) Methylene chloride	4.03	84	129980	49.30	UG		100
14) Acrylonitrile	4.32	53	146170	154.86	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	18661	88.96	UG		99
16) trans-1,2-Dichloroethene	4.36	96	168049	48.55	UG		93
17) Methyl tert-butyl ether (M	4.39	73	460653	48.40	UG		100
18) 1,1-Dichloroethane	4.85	63	318361	48.95	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	624433	52.33	UG		100
20) cis-1,2-Dichloroethene	5.53	96	195640	50.05	UG		100
21) 2,2-Dichloropropane	5.53	77	163566	53.27	UG		91
22) 2-Butanone (MEK)	5.55	43	83477	61.66	UG		99
23) Bromochloromethane	5.80	128	94334	46.28	UG		100
25) Chloroform	5.89	83	311346	46.09	UG		100
26) 1,1,1-Trichloroethane	6.11	97	217915	51.64	UG		98
27) Carbon tetrachloride	6.29	117	167664	52.19	UG		100
28) 1,1-Dichloropropene	6.29	75	192532	53.28	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	245271	45.53	UG		100
32) Benzene	6.53	78	673183	48.60	UG		100
33) Trichloroethene	7.25	95	161401	48.55	UG		94
34) 1,2-Dichloropropane	7.49	63	177368	50.74	UG		100
35) Dibromomethane	7.62	93	101072	45.46	UG		92
36) 1,4-Dioxane	7.64	88	33515	1162.36	UG		100
37) Bromodichloromethane	7.80	83	227065	48.68	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	101653	49.58	UG		99
39) cis-1,3-Dichloropropene	8.30	75	262095	53.33	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	160563	57.14	UG		100
42) Toluene	8.70	92	374832	48.20	UG		99
43) trans-1,3-Dichloropropene	8.93	75	227537	52.06	UG		99
44) 1,1,2-Trichloroethane	9.15	83	120655	47.29	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

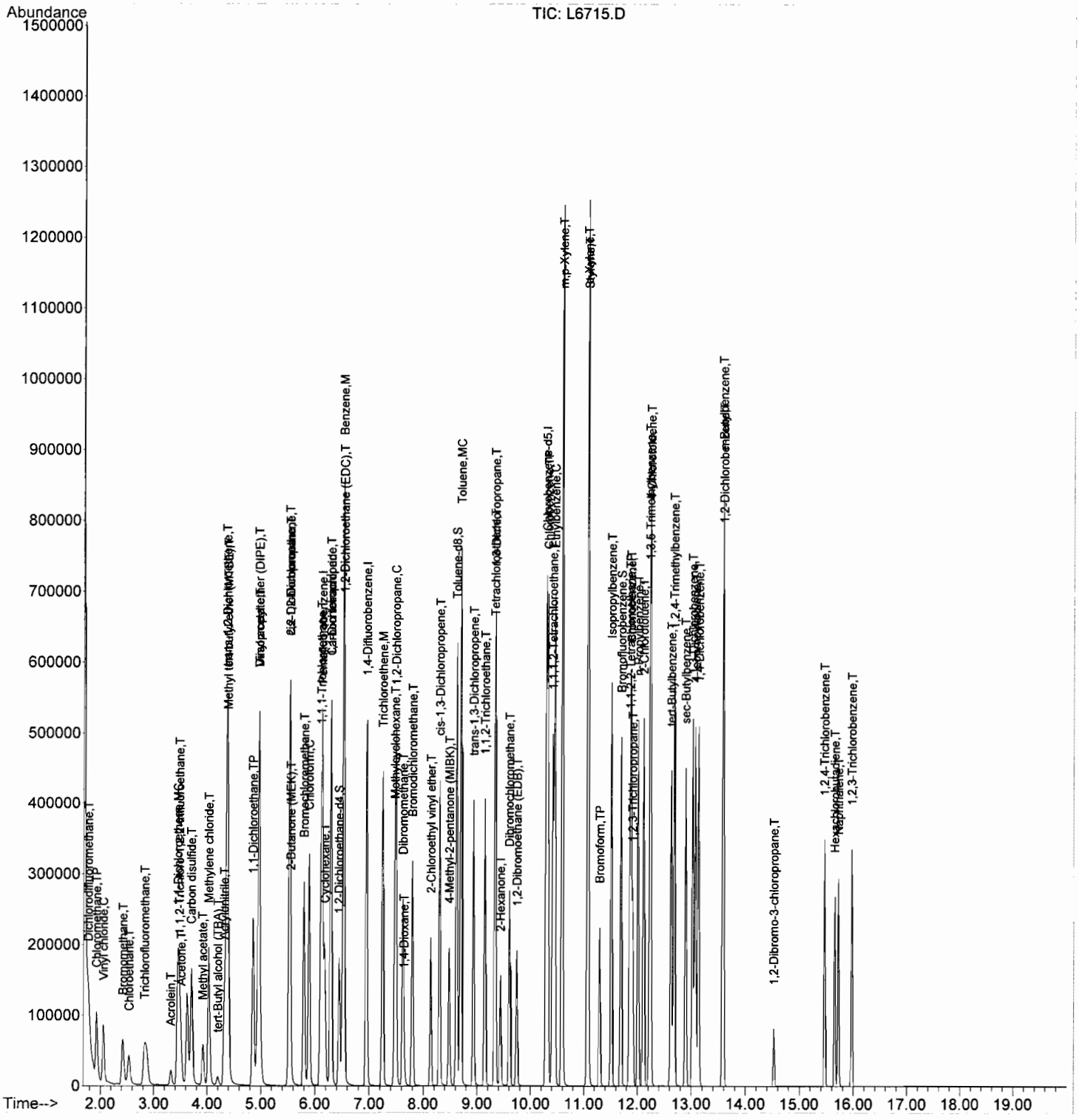
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	124008	47.69 UG	98
46) 1,3-Dichloropropane	9.34	76	244840	49.35 UG	100
47) 2-Hexanone	9.44	43	108441m	63.91 UG	
48) Dibromochloromethane	9.60	129	163494	49.12 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	149717	48.59 UG	100
51) Chlorobenzene	10.32	112	418821	45.49 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	165370	48.43 UG	99
53) Ethylbenzene	10.46	91	569287	48.99 UG	99
54) m,p-Xylene	10.60	106	444186	98.15 UG	96
55) o-Xylene	11.06	106	228091	50.70 UG	96
56) Styrene	11.08	104	427268	50.71 UG	98
57) Bromoform	11.30	173	127633	47.19 UG	100
58) Isopropylbenzene	11.51	105	444047	50.91 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	168822	42.37 UG	100
61) Bromobenzene	11.88	156	182805	45.20 UG	100
62) 1,2,3-Trichloropropane	11.91	75	151667	43.46 UG	99
63) n-Propylbenzene	12.01	91	472916	47.13 UG	100
64) 2-Chlorotoluene	12.11	91	343312	45.46 UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	375173	46.94 UG	100
66) 4-Chlorotoluene	12.24	91	408112	44.05 UG	99
67) tert-Butylbenzene	12.63	119	279810	46.36 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	396780	44.75 UG	100
69) sec-Butylbenzene	12.89	105	377152	45.32 UG	99
70) 1,3-Dichlorobenzene	13.02	146	261086	41.75 UG	100
71) 4-Isopropyltoluene	13.08	119	342208	44.81 UG	100
72) 1,4-Dichlorobenzene	13.14	146	269284	40.84 UG	100
73) n-Butylbenzene	13.58	92	151876	45.17 UG	96
74) 1,2-Dichlorobenzene	13.59	146	262521	41.23 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	21555	38.70 UG	89
76) 1,2,4-Trichlorobenzene	15.46	180	124501	38.80 UG	99
77) Hexachlorobutadiene	15.65	225	61789	40.33 UG	100
78) Naphthalene	15.72	128	292346m	37.08 UG	
79) 1,2,3-Trichlorobenzene	15.97	180	111838	36.23 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	70200	54.27 UG	94
81) Methyl acetate	3.92	43	102785	54.05 UG	99
82) Cyclohexane	6.18	56	132788	55.70 UG	100
83) Methylcyclohexane	7.47	55	84497	55.55 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	350927	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	499982	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	457693	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	143925	47.86	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.72%				
41) Toluene-d8	8.62	98	446619	50.44	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.88%				
59) Bromofluorobenzene	11.69	95	184172	46.04	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	87399m	62.84	UG		
3) Chloromethane	1.93	50	159660	59.12	UG		100
4) Vinyl chloride	2.06	62	149787	64.36	UG		100
5) Bromomethane	2.43	94	80053	55.32	UG		98
6) Chloroethane	2.54	64	71555	60.31	UG		100
7) Trichlorofluoromethane	2.83	101	123307m	47.03	UG		
8) Acrolein	3.32	56	27693	162.35	UG		99
9) 1,1-Dichloroethene	3.45	96	113931	58.93	UG		96
10) Acetone	3.51	43	35360m	61.93	UG		
11) Carbon disulfide	3.70	76	372150	61.83	UG		100
12) Vinyl acetate	4.96	43	429929	53.64	UG	#	99
13) Methylene chloride	4.03	84	131126	50.77	UG		100
14) Acrylonitrile	4.32	53	167583	181.23	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	20080	97.71	UG		99
16) trans-1,2-Dichloroethene	4.36	96	179683	52.98	UG		92
17) Methyl tert-butyl ether (M	4.39	73	478054	51.27	UG		100
18) 1,1-Dichloroethane	4.85	63	327685	51.43	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	634579	54.28	UG		100
20) cis-1,2-Dichloroethene	5.53	96	200493	52.35	UG		100
21) 2,2-Dichloropropane	5.53	77	185688	61.73	UG		97
22) 2-Butanone (MEK)	5.55	43	81546m	61.49	UG		
23) Bromochloromethane	5.80	128	97170	48.66	UG		100
25) Chloroform	5.89	83	318670	48.16	UG		100
26) 1,1,1-Trichloroethane	6.11	97	238264	57.63	UG		98
27) Carbon tetrachloride	6.29	117	190386	60.49	UG		100
28) 1,1-Dichloropropene	6.29	75	208662	58.94	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	246049	46.63	UG		100
32) Benzene	6.53	78	691829	50.52	UG		100
33) Trichloroethene	7.25	95	166856	50.76	UG		93
34) 1,2-Dichloropropane	7.49	63	179461	51.93	UG		100
35) Dibromomethane	7.62	93	102451	46.61	UG		92
36) 1,4-Dioxane	7.64	88	49545	1737.88	UG		99
37) Bromodichloromethane	7.80	83	230240	49.92	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	103222	50.92	UG		99
39) cis-1,3-Dichloropropene	8.30	75	269246	55.41	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.48	43	164566	59.24	UG		100
42) Toluene	8.70	92	386047	50.21	UG		99
43) trans-1,3-Dichloropropene	8.93	75	234959	54.38	UG		99
44) 1,1,2-Trichloroethane	9.15	83	122511	48.56	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

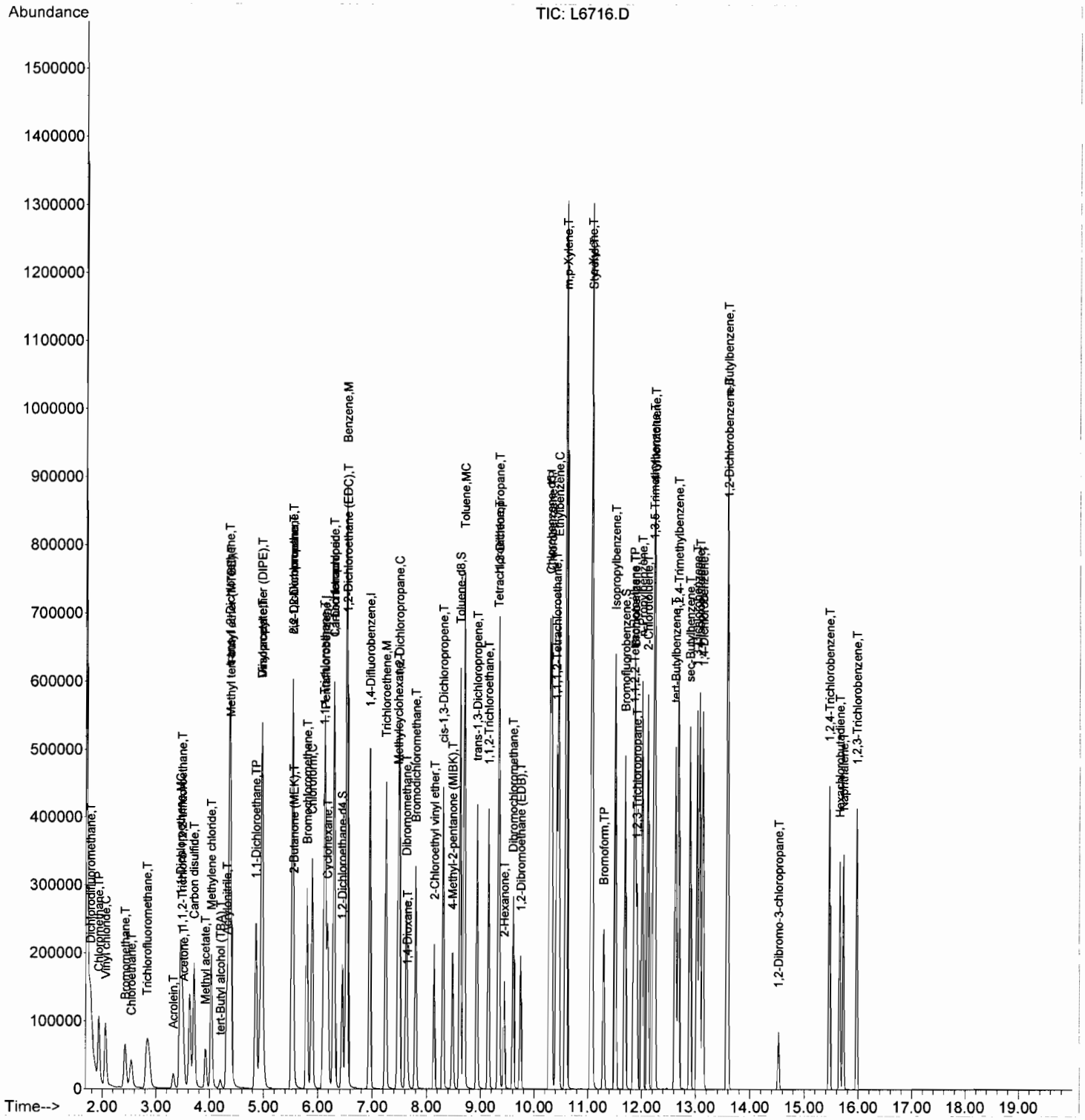
Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	134674	52.38	UG	98
46) 1,3-Dichloropropane	9.34	76	245600	50.07	UG	100
47) 2-Hexanone	9.44	43	99844m	59.52	UG	
48) Dibromochloromethane	9.60	129	168865	51.31	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	151941	49.87	UG	100
51) Chlorobenzene	10.32	112	428666	47.33	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	169386	50.43	UG	99
53) Ethylbenzene	10.46	91	606602	53.06	UG	99
54) m,p-Xylene	10.60	106	468238	105.18	UG	96
55) o-Xylene	11.06	106	242361	54.77	UG	96
56) Styrene	11.08	104	447331	53.97	UG	98
57) Bromoform	11.30	173	138769	52.16	UG	100
58) Isopropylbenzene	11.51	105	490854	57.21	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	175516	44.79	UG	100
61) Bromobenzene	11.88	156	192171	48.30	UG	100
62) 1,2,3-Trichloropropane	11.91	75	156433	45.56	UG	99
63) n-Propylbenzene	12.01	91	534862	54.18	UG	100
64) 2-Chlorotoluene	12.11	91	369231	49.70	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	422864	53.78	UG	100
66) 4-Chlorotoluene	12.24	91	442136	48.51	UG	99
67) tert-Butylbenzene	12.63	119	323577	54.50	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	440901	50.55	UG	100
69) sec-Butylbenzene	12.89	105	451545	55.16	UG	99
70) 1,3-Dichlorobenzene	13.02	146	281708	45.80	UG	100
71) 4-Isopropyltoluene	13.07	119	404056	53.78	UG	100
72) 1,4-Dichlorobenzene	13.14	146	292184	45.05	UG	100
73) n-Butylbenzene	13.58	92	183748	55.55	UG	96
74) 1,2-Dichlorobenzene	13.59	146	283395	45.25	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	22240	40.59	UG	87
76) 1,2,4-Trichlorobenzene	15.46	180	155138	49.15	UG	99
77) Hexachlorobutadiene	15.65	225	77233	51.24	UG	100
78) Naphthalene	15.72	128	289381	37.31	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	143525	47.27	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	69143m	54.34	UG	
81) Methyl acetate	3.92	43	102920	55.02	UG	99
82) Cyclohexane	6.17	56	142644m	60.83	UG	
83) Methylcyclohexane	7.47	55	91065m	60.86	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	362029	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	510735	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	466211	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	147644	47.59	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.18%				
41) Toluene-d8	8.62	98	454679	50.27	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.54%				
59) Bromofluorobenzene	11.69	95	191719	47.05	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	84290m	58.74	UG		
3) Chloromethane	1.93	50	151525	54.39	UG		100
4) Vinyl chloride	2.06	62	130830	54.49	UG		100
5) Bromomethane	2.43	94	74297	49.76	UG		98
6) Chloroethane	2.55	64	63480	51.86	UG		100
7) Trichlorofluoromethane	2.84	101	107394	39.71	UG		100
8) Acrolein	3.33	56	28523	162.08	UG		99
9) 1,1-Dichloroethene	3.45	96	102482	51.38	UG		95
10) Acetone	3.51	43	34613m	58.77	UG		
11) Carbon disulfide	3.70	76	328291	52.87	UG		100
12) Vinyl acetate	4.96	43	418572	50.63	UG	#	99
13) Methylene chloride	4.03	84	127835	47.97	UG		100
14) Acrylonitrile	4.32	53	178131	186.73	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	20489	96.64	UG		100
16) trans-1,2-Dichloroethene	4.36	96	170292	48.67	UG		93
17) Methyl tert-butyl ether (M	4.39	73	468106	48.66	UG		100
18) 1,1-Dichloroethane	4.86	63	319798	48.65	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	630678	52.29	UG		100
20) cis-1,2-Dichloroethene	5.53	96	197474	49.98	UG		99
21) 2,2-Dichloropropane	5.53	77	160327	51.67	UG		89
22) 2-Butanone (MEK)	5.55	43	87142	63.69	UG		99
23) Bromochloromethane	5.80	128	96069	46.63	UG		100
25) Chloroform	5.89	83	315902	46.27	UG		100
26) 1,1,1-Trichloroethane	6.11	97	213206	49.99	UG		98
27) Carbon tetrachloride	6.30	117	164864	50.78	UG		100
28) 1,1-Dichloropropene	6.29	75	189589	51.91	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	246578	45.29	UG		100
32) Benzene	6.53	78	674540	48.22	UG		100
33) Trichloroethene	7.25	95	160382	47.76	UG		93
34) 1,2-Dichloropropane	7.49	63	177669	50.32	UG		100
35) Dibromomethane	7.62	93	101364	45.14	UG		92
36) 1,4-Dioxane	7.64	88	50002	1716.98	UG		100
37) Bromodichloromethane	7.80	83	228444	48.49	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	102668	49.58	UG		99
39) cis-1,3-Dichloropropene	8.30	75	266063	53.60	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	163193	57.50	UG		100
42) Toluene	8.70	92	375965	47.87	UG		100
43) trans-1,3-Dichloropropene	8.93	75	236793	53.65	UG		99
44) 1,1,2-Trichloroethane	9.15	83	122017	47.35	UG		98

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

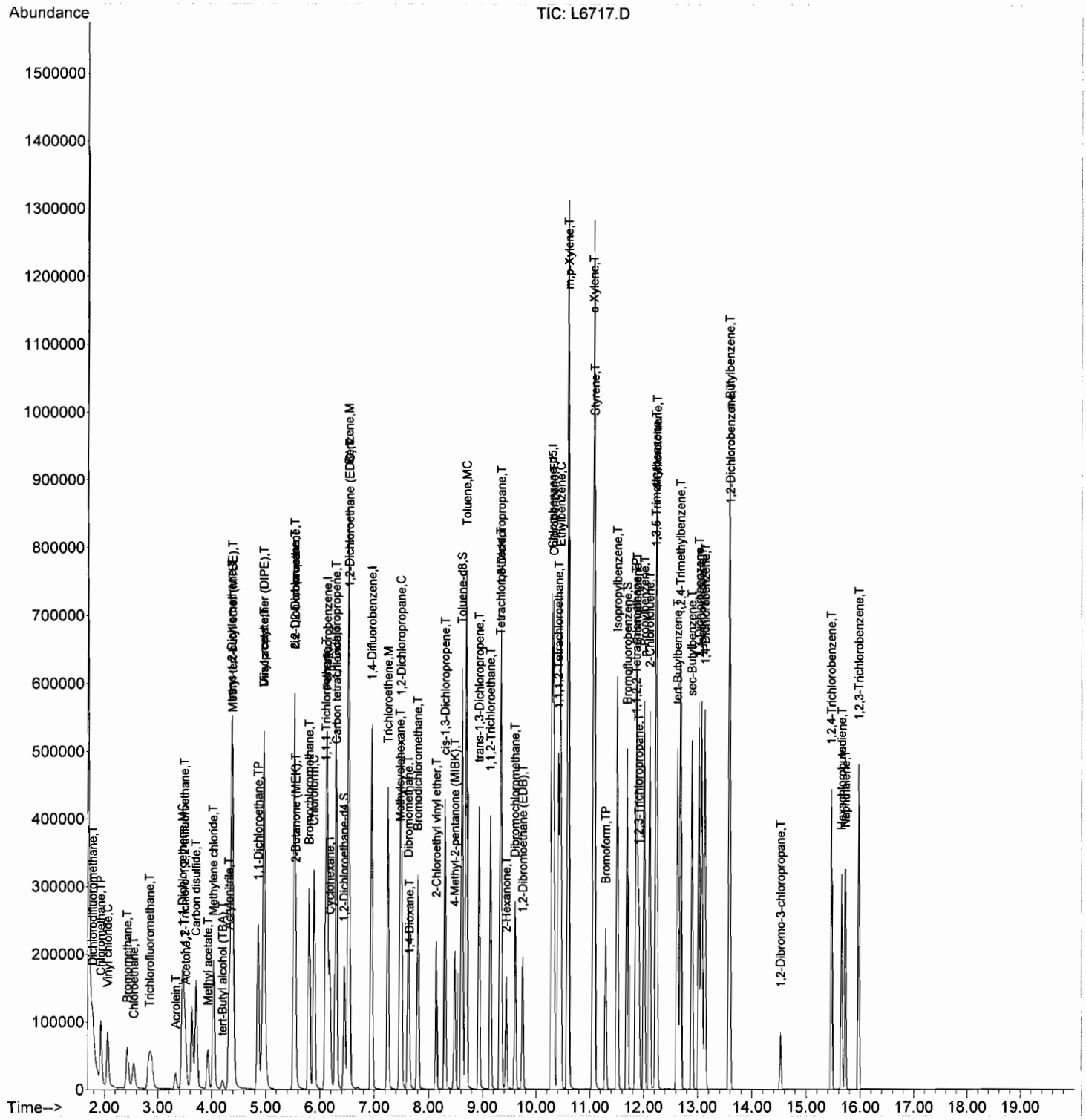
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	127024	48.37 UG	98
46) 1,3-Dichloropropane	9.34	76	246252	49.14 UG	100
47) 2-Hexanone	9.44	43	100597m	58.70 UG	
48) Dibromochloromethane	9.60	129	168102	50.00 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	151774	48.77 UG	100
51) Chlorobenzene	10.32	112	428521	46.45 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	168065	49.12 UG	99
53) Ethylbenzene	10.46	91	589666	50.64 UG	99
54) m,p-Xylene	10.60	106	460257	101.49 UG	96
55) o-Xylene	11.06	106	237917	52.78 UG	95
56) Styrene	11.09	104	448186	53.08 UG	98
57) Bromoform	11.30	173	138308	51.03 UG	100
58) Isopropylbenzene	11.51	105	468391	53.59 UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	174564	43.73 UG	100
61) Bromobenzene	11.88	156	192500	47.50 UG	100
62) 1,2,3-Trichloropropane	11.91	75	155852	44.57 UG	99
63) n-Propylbenzene	12.01	91	507377	50.46 UG	100
64) 2-Chlorotoluene	12.11	91	366033	48.37 UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	408115	50.96 UG	100
66) 4-Chlorotoluene	12.24	91	436746	47.05 UG	99
67) tert-Butylbenzene	12.63	119	307618	50.86 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	429107	48.30 UG	100
69) sec-Butylbenzene	12.89	105	427221	51.24 UG	99
70) 1,3-Dichlorobenzene	13.02	146	283982	45.32 UG	100
71) 4-Isopropyltoluene	13.07	119	392137	51.24 UG	100
72) 1,4-Dichlorobenzene	13.14	146	292478	44.27 UG	100
73) n-Butylbenzene	13.58	92	176913	52.51 UG	96
74) 1,2-Dichlorobenzene	13.59	146	286555	44.92 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	22045	39.50 UG	87
76) 1,2,4-Trichlorobenzene	15.46	180	155334	48.31 UG	99
77) Hexachlorobutadiene	15.65	225	72406	47.16 UG	100
78) Naphthalene	15.72	128	289839	36.68 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	161938	52.36 UG	100
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	64156	49.50 UG	94
81) Methyl acetate	3.93	43	98839	51.87 UG	99
82) Cyclohexane	6.18	56	128669	53.87 UG	100
83) Methylcyclohexane	7.47	55	86548	56.79 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



TCLP
VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/13/2015 17:16

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-13-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6604	BFB150213										ok
2	2	L6605	ICC1	ICC1		5		W				100	ok
3	3	L6606	ICC2	ICC2		5		W				100	—
4	4	L6607	ICC5	ICC5		5		W				100	ok
5	5	L6608	ICC2	ICC2		5		W				100	ok
6	6	L6609	ICC20	ICC20		5		W				100	ok
7	7	L6610	ICC100	ICC100		5		W				100	ok
8	8	L6611	ICC150	ICC150		5		W				100	ok
9	9	L6612	ICC200	ICC200		5		W				100	ok
10	10	L6613	RB										—
11	11	L6614	RB										—
12	12	L6615	ICV100	ICV100		5		W				100	ok
13	13	L6616	RB										—
14	14	L6617	RB										—
15	15	L6618	BLKM150213-01	LKM150213-01		0.1		M				0	ok
16	16	L6619	LCS-50PPB	CSM150213-01		0.05		M				0	ok
17	17	L6620	MS	01069-001MS		0.05		M				0	ok
18	18	L6621	MSD	1069-001MSD		0.05		M				0	ok
19	19	L6622	RB										—
20	20	L6623	RB										—
21	21	L6624	1069	1	1	0.088		M	ES-WC-91_(0-4)	02/10/15	02/11/15	7.30	Re-Soil
22	22	L6625	1089	1	20	0.0031		M	T-2/5.0-5.5	02/10/15	02/11/15	32.2	ok
23	23	L6626	1049	7	1	0.027		M	SB-6/10.5	02/10/15	02/11/15	16.7	ok
24	24	L6627		6	1	0.048		M	SB-7/7.5	02/10/15	02/11/15	13.5	ok
25	25	L6628		5	1	0.022		M	SB-5/7.5	02/10/15	02/11/15	14.4	ok
26	26	L6629	1069	2	5	0.006		M	ES-WC-91_(4-8)	02/10/15	02/11/15	42.9	ok
27	27	L6630	1060	1	5	0.01		M	WC-1/GB6/12-12	11/14/14	02/11/15	10.7	ok
28	28	L6631	RB										—

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/20/15 9:23

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-20-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	#	(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX	Client ID	Samp Date	Recd Date	% Moist	Comments
1	1	L6701	BFB150220										ok
2	2	L6702	CCV100	CCV100		5		A				100	ok
3	3	L6703	RB										/
4	4	L6704	BLKA150220-0	LKA150220-01		5		A				100	ok
5	5	L6705	TCLP150220	TCLP150220		0.1		T				100	ok
6	6	L6706	1273	1		0.1		T	GPEC-WC1-02181	02/18/15	02/19/15	100	ok
7	7	L6707	SPLP150207	SPLP150207		5		P				100	ok
8	8	L6708	995	2		5		P	SS-14A-01C/2.0	02/06/15	02/06/15	100	ok
9	9	L6709	1137	2		5		A	MW-3	02/12/15	02/12/15	100	ok
10	10	L6710		7		5		A	MW-2	02/12/15	02/12/15	100	ok
11	11	L6711		8		5		A	MW-6	02/12/15	02/12/15	100	ok
12	12	L6712		3		5		A	MW-4	02/12/15	02/12/15	100	ok
13	13	L6713	1213	1		5		A	MW-1/5	02/17/15	02/17/15	100	sample foaming, MeOH contamination
14	14	L6714		1		2.5		A	MW-1/5	02/17/15	02/17/15	100	ok
15	15	L6715	LCS-50PPB	CSA150220-01		5		A				100	ok
16	16	L6716	MS	1273-001MS		5		A				100	ok
17	17	L6717	MSD	273-001MSD		5		A				100	ok
18	18	L6718	RB									100	ok
19	19	L6719	RB										/
20	20	L6720	1137	5		5		A	FIELD_BLANK	02/12/15	02/12/15	100	ok
21	21	L6721		6		5		A	TRIP_BLANK	02/12/15	02/12/15	100	ok
22	22	L6722		1		5		A	MW-1R	02/12/15	02/12/15	100	ok
23	23	L6723		4		5		A	MW-5	02/12/15	02/12/15	100	ok
24	24	L6724	1214	1		5		A	MW-1/10	02/16/15	02/17/15	100	ok
25	25	L6725	1244	1		5		A	MW-1	02/17/15	02/18/15	100	ok
26	26	L6726		2		5		A	MW-2	02/17/15	02/18/15	100	ok
27	27	L6727		3		5		A	MW-3	02/17/15	02/18/15	100	ok
28	28	L6728	1137	7		5		A	MW-2	02/12/15	02/12/15	100	confirmation run for EDC
29	29	L6729	RB										/

LS1030 TPH-GRO Working Std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertiPrep GAS-20 (Lot# C113091008) @ 20mg/ml
Exp: 11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/6/14, exp: 2/28/17)
Exp: 3/8/15 1ml ECS-A40 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/19/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIPE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 10/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
1ml of VOA-TRAIN-1 @ 2,000ppm Lot# C112121913 (Rec: 5/1/14, exp: 4/29/2015)
diluted into 50ml MeOH.

LS1032 Secondary Acrolein/Acrylonitrile @ 1000 ppm working soln
exp 12/15/14 1ml of ECS-A2038 (Lot# 120814, exp. 3/8/15) into 10ml
exp. 3/8/15 MeOH, final volume 10ml

LS1033 TPH-GRO working std @ 500 mg/ml
prep: 1/7/15 125µl of Spex CertiPrep GAS-20 (Lot# C113091008) @ 20mg/ml
Exp: 4/3/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working std @ 1,000 mg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/8/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X R 1-13-15
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
1 mL
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (< -10° C)

LS1035 BFB @ 25 µg/ml for tuning
pre: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 524 MM2 (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) into 1ml MeOH, Final Volume: 2 ml
CKM

LS1036 1,4-Dioxane working Std @ 10,000 ppm
pre: 1/20/15 Transfer 1,4-Dioxane @10,000 ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CKM

LS1037 DIPE stock std soln @ 5,000 µg/ml
MXF 2/3/15 34.48 µl of DIPE neat (Recd 6/19/13, Lot# SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
MXF 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
exp. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
pre: 4/5/15 1 ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MEOH
CKM

trans 2528

2528 250 ppm screening work solution.

are 11/11/14 50 ml (cat# V0-2BL-12) (Lot# C113060408)

exp 2/11/15 at 5000 ug/ml dilut with 1ml MeOH.

200 ppm

L2529 ~~Secondary Mix of 200 ppm~~

P. 12/10/14 98 ml of L2478 MTBE/TAME/DIPE @ 5000 ppm/

3/10/15 1000 ppm/5000 ppm

2ml of ECS-A-049 Add-ons Mix #3 2000 ppm

MeOH Lot: AO309 received 7/17/14 exp 11/16/2015

2ml of ECS-524.2/8260 Main Mix 2000 ppm

ECS-A-033 Lot: 524MM20, received 7/17/14

exp. 11/17/16

MeOH 10ml's of Restek gases Mix 1000 ppm ECS-A-0

Lot: VGM022, received 12/24/14 exp. 11/6/15

2ml of M-8260-ADD-10x, received 6/13/14 exp.

03/04/15 12/23/14 into 100 ml of MeOH

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M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214101479
Exp: Mar 04, 2015

1 mL
8 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280

Storage: Freeze (<-10° C

[redacted]

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

524.2/8260 Main Mix 2000 ppm
(ECS-A-033) Lot: 524MM21 Exp. 11-17-2016
7-17-14

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

524.2/8260 Main Mix 2000 ppm
(ECS-A-033) Lot: 524MM21 Exp. 11-17-2016
7-17-14

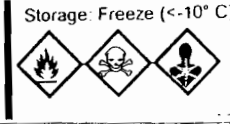
AccuStandard 203-786-5290 AccuStandard.com

M-8260-ADD-10X
Lot: 214101479
Exp: Mar 04, 2015

Date Opened:

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C



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M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214101479
Exp: Mar 04, 2015

1 mL
8 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280

Storage: Freeze (<-10° C

[redacted]

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

Method 8260 Add-Ons Mix #3 2000 ppm
(ECS-A-049) Lot: AO309 Exp: 11-16-2015
7-17-14

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

Method 8260 Add-Ons Mix #3 2000 ppm
(ECS-A-049) Lot: AO309 Exp: 11-16-2015
7-17-14

AccuStandard 203-786-5290 AccuStandard.com

M-8260-ADD-10X
Lot: 214101479
Exp: Mar 04, 2015

Date Opened

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C

SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	S1	#	S2	#	S3	#	S4	#	S5	#	S6	#
CCV040BNA2		C3744.D	N/A		N/A		N/A		N/A		N/A		N/A	
BLKS150219-01	SOIL	C3745.D	55		57		53		59		67		76	
LCSS150219-01	SOIL	C3746.D	54		63		59		65		73		78	
E15-01158-021MS	SOIL	C3747.D	50		55		52		57		61		63	
E15-01158-021MSD	SOIL	C3748.D	49		56		53		54		63		73	
E15-01273-001	SOIL	C3749.D	38		44		40		52		58		66	
E15-00920-002	SOIL	C3750.D	N/A		N/A		80		76		N/A		76	
E15-01248-002	SOIL	C3751.D	39		46		46		57		54		61	
E15-01248-004	SOIL	C3752.D	28	$	37		33		48		51		56	
E15-01248-006	SOIL	C3753.D	26	$	38		41		58		54		63	
E15-01158-021	SOIL	C3754.D	N/A		N/A		59		66		N/A		61	
E15-01158-022	SOIL	C3755.D	N/A		N/A		41		52		N/A		60	
E15-01246-001	SOIL	C3756.D	N/A		N/A		43		51		N/A		58	
E15-01246-002	SOIL	C3757.D	N/A		N/A		26	$	40		N/A		57	

	DKQPs		IAL	
	Aqueous	Soil	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	15-110	30-130	45-104	24-101
S2 (PHL) = Phenol-d5	15-110	30-130	52-106	23-108
S3 (NBZ) = Nitrobenzene-d5	30-130	30-130	57-107	26-98
S4 (FBP) = 2-Fluorobiphenyl	30-130	30-130	57-126	34-96
S5 (TBP) = 2,4,6-Tribromophenol	15-110	30-130	30-147	32-112
S6 (TPH) = Terphenyl-d14	30-130	30-130	68-133	19-118

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference
N/A Not applicable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-01
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3746.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	DKQP
N-Nitrosodimethylamine	50.0	26.8	54	$	40-140	70-130
Pyridine	50.0	23.9	48		20-120	20-160
Benzaldehyde	50.0	5.3	11	$	10-110	20-160
Phenol	50.0	28.3	57		30-140	20-160
Aniline	50.0	31.2	62	$	40-140	70-130
Bis(2-chloroethyl) ether	50.0	28.8	58	$	40-140	70-130
2-Chlorophenol	50.0	27.4	55		30-140	20-160
1,3-Dichlorobenzene	50.0	28.1	56	$	40-140	70-130
1,4-Dichlorobenzene	50.0	25.2	50	$	40-140	70-130
Benzyl alcohol	50.0	30.1	60	$	40-140	70-130
1,2-Dichlorobenzene	50.0	26.8	54	$	40-140	70-130
2-Methylphenol	50.0	38.1	76		30-140	20-160
Bis(2-chloroisopropyl) ether	50.0	30.7	61	$	40-140	70-130
4-Methylphenol	50.0	33.2	66	$	30-140	70-130
N-Nitrosodi-n-propylamine	50.0	31.0	62	$	40-140	70-130
Acetophenone	50.0	31.4	63	$	40-140	70-130
3-Methylphenol	50.0	33.2	66		30-140	20-160
Hexachloroethane	50.0	26.9	54	$	40-140	70-130
Nitrobenzene	50.0	29.6	59	$	40-140	70-130
Isophorone	50.0	31.6	63	$	40-140	70-130
2-Nitrophenol	50.0	29.7	59		30-140	20-160
2,4-Dimethylphenol	50.0	30.0	60		30-140	20-160
Bis(2-chloroethoxy) methane	50.0	29.3	59	$	40-140	70-130
Benzoic acid	50.0	33.0	66		30-140	20-160
2,4-Dimethylaniline	50.0	36.2	72		40-140	70-130
2,4-Dichlorophenol	50.0	29.2	58		30-140	20-160
1,2,4-Trichlorobenzene	50.0	28.7	57	$	40-140	70-130
Naphthalene	50.0	29.0	58	$	40-140	70-130
4-Chloroaniline	50.0	33.0	66	$	40-140	70-130
Hexachlorobutadiene	50.0	29.8	60	$	40-140	70-130
Caprolactam	50.0	34.4	69	$	40-140	70-130
4-Chloro-3-methylphenol	50.0	29.9	60		30-140	20-160
2-Methylnaphthalene	50.0	33.3	67	$	40-140	70-130
Hexachlorocyclopentadiene	50.0	9.8	20		5-105	20-160
2,4,6-Trichlorophenol	50.0	30.3	61		30-140	20-160
2,4,5-Trichlorophenol	50.0	34.8	70		30-140	20-160
1,1'-Biphenyl	50.0	34.9	70		40-140	70-130
2-Chloronaphthalene	50.0	32.1	64	$	40-140	70-130
2-Nitroaniline	50.0	35.5	71		40-140	70-130
Dimethyl phthalate	50.0	32.7	65	$	40-140	70-130
2,6-Dinitrotoluene	50.0	34.9	70		40-140	70-130
Acenaphthylene	50.0	32.6	65	$	40-140	70-130
3-Nitroaniline	50.0	36.4	73		40-140	70-130
Acenaphthene	50.0	32.5	65		40-140	20-160
2,4-Dinitrophenol	50.0	20.5	41		5-105	20-160

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-01
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3746.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	Rec Limits DKQP
4-Nitrophenol	50.0	26.4	53		30-140	20-160
2,4-Dinitrotoluene	50.0	36.3	73		40-140	70-130
Dibenzofuran	50.0	34.1	68	$	40-140	70-130
Diethyl phthalate	50.0	31.4	63	$	40-140	70-130
Fluorene	50.0	32.2	64	$	40-140	70-130
4-Chlorophenyl phenyl ether	50.0	33.6	67	$	40-140	70-130
4-Nitroaniline	50.0	32.3	65	$	40-140	70-130
1,2,4,5-Tetrachlorobenzene	50.0	33.5	67	$	40-140	70-130
2,3,4,6-Tetrachlorophenol	50.0	35.9	72		40-140	70-130
4,6-Dinitro-2-methylphenol	50.0	35.3	71		10-110	20-160
N-Nitrosodiphenylamine	50.0	35.1	70		40-140	70-130
1,2-Diphenylhydrazine	50.0	29.7	59	$	40-140	70-130
4-Bromophenyl phenyl ether	50.0	34.1	68	$	40-140	70-130
Hexachlorobenzene	50.0	33.6	67	$	40-140	70-130
Atrazine	50.0	37.8	76		20-120	20-160
Pentachlorophenol	50.0	28.4	57		30-140	20-160
Phenanthrene	50.0	32.9	66	$	40-140	70-130
Anthracene	50.0	34.3	69	$	40-140	70-130
Carbazole	50.0	33.9	68	$	40-140	70-130
Di-n-butyl phthalate	50.0	33.8	68	$	40-140	70-130
Fluoranthene	50.0	32.2	64	$	40-140	70-130
Benzidine	50.0	8.1	16	$	5-105	20-160
Pyrene	50.0	39.1	78		40-140	70-130
3,3'-Dimethylbenzidine	50.0	14.5	29		5-105	20-160
Butyl benzyl phthalate	50.0	36.5	73		40-140	70-130
3,3'-Dichlorobenzidine	50.0	34.3	69	$	40-140	70-130
Benzo[a]anthracene	50.0	35.6	71		40-140	70-130
Chrysene	50.0	37.2	74		40-140	70-130
Bis(2-ethylhexyl) phthalate	50.0	37.4	75		40-140	70-130
Di-n-octyl phthalate	50.0	58.4	117		40-140	70-130
Benzo[b]fluoranthene	50.0	48.5	97		40-140	70-130
Benzo[k]fluoranthene	50.0	57.1	114		40-140	70-130
Benzo[a]pyrene	50.0	49.7	99		40-140	70-130
Indeno[1,2,3-cd]pyrene	50.0	43.6	87		40-140	70-130
Dibenz[a,h]anthracene	50.0	44.5	89		40-140	70-130
Benzo[g,h,i]perylene	50.0	42.7	85		40-140	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01158-021
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: C3747.D
MSD Data file: C3748.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD limits IAL	DKQP
N-Nitrosodimethylamine	50.0	0.0	30.5	61	$	29.5	59	$	3		40-140/30	70-130/30
Pyridine	50.0	0.0	17.3	35		16.6	33		4		20-120/30	20-160/30
Benzaldehyde	50.0	0.0	22.6	45		22.5	45		0		10-110/30	20-160/30
Phenol	50.0	0.0	31.1	62		30.8	62		1		30-140/30	20-160/30
Aniline	50.0	0.0	27.6	55	$	32.5	65	$	16		40-140/30	70-130/30
Bis(2-chloroethyl) ether	50.0	0.0	30.8	62	$	33.0	66	$	7		40-140/30	70-130/30
2-Chlorophenol	50.0	0.0	30.3	61		30.0	60		1		30-140/30	20-160/30
1,3-Dichlorobenzene	50.0	0.0	31.5	63	$	30.9	62	$	2		40-140/30	70-130/30
1,4-Dichlorobenzene	50.0	0.0	29.8	60	$	29.5	59	$	1		40-140/30	70-130/30
Benzyl alcohol	50.0	0.0	32.2	64	$	32.0	64	$	1		40-140/30	70-130/30
1,2-Dichlorobenzene	50.0	0.0	29.9	60	$	29.9	60	$	0		40-140/30	70-130/30
2-Methylphenol	50.0	0.0	41.3	83		41.5	83		0		30-140/30	20-160/30
Bis(2-chloroisopropyl) ether	50.0	0.0	33.0	66	$	33.1	66	$	0		40-140/30	70-130/30
4-Methylphenol	50.0	0.0	34.0	68	$	34.2	68	$	1		30-140/30	70-130/30
N-Nitrosodi-n-propylamine	50.0	0.0	37.3	75		34.6	69	$	8		40-140/30	70-130/30
Acetophenone	50.0	0.0	32.8	66	$	33.2	66	$	1		40-140/30	70-130/30
3-Methylphenol	50.0	0.0	34.0	68		34.2	68		1		30-140/30	20-160/30
Hexachloroethane	50.0	0.0	31.2	62	$	31.7	63	$	2		40-140/30	70-130/30
Nitrobenzene	50.0	0.0	30.2	60	$	32.1	64	$	6		40-140/30	70-130/30
Isophorone	50.0	0.0	32.0	64	$	32.9	66	$	3		40-140/30	70-130/30
2-Nitrophenol	50.0	0.0	31.3	63		31.2	62		0		30-140/30	20-160/30
2,4-Dimethylphenol	50.0	0.0	30.3	61		32.3	65		6		30-140/30	20-160/30
Bis(2-chloroethoxy) methane	50.0	0.0	30.3	61	$	31.5	63	$	4		40-140/30	70-130/30
Benzoic acid	50.0	0.0	17.2	34		17.9	36		4		30-140/30	20-160/30
2,4-Dimethylaniline	50.0	0.0	30.4	61	$	35.0	70		14		40-140/30	70-130/30
2,4-Dichlorophenol	50.0	0.0	30.4	61		30.8	62		1		30-140/30	20-160/30
1,2,4-Trichlorobenzene	50.0	0.0	30.7	61	$	31.3	63	$	2		40-140/30	70-130/30
Naphthalene	50.0	0.0	29.4	59	$	30.0	60	$	2		40-140/30	70-130/30
4-Chloroaniline	50.0	0.0	25.4	51	$	33.2	66	$	27		40-140/30	70-130/30
Hexachlorobutadiene	50.0	0.0	30.8	62	$	31.5	63	$	2		40-140/30	70-130/30
Caprolactam	50.0	0.0	32.2	64	$	32.9	66	$	2		40-140/30	70-130/30
4-Chloro-3-methylphenol	50.0	0.0	29.9	60		30.0	60		0		30-140/30	20-160/30
2-Methylnaphthalene	50.0	0.0	34.2	68	$	35.0	70		2		40-140/30	70-130/30
Hexachlorocyclopentadiene	50.0	0.0	15.8	32		11.8	24		29		5-105/30	20-160/30
2,4,6-Trichlorophenol	50.0	0.0	31.5	63		30.8	62		2		30-140/30	20-160/30
2,4,5-Trichlorophenol	50.0	0.0	35.9	72		35.4	71		1		30-140/30	20-160/30
1,1'-Biphenyl	50.0	0.0	35.1	70		35.1	70		0		40-140/30	70-130/30
2-Chloronaphthalene	50.0	0.0	32.6	65	$	32.5	65	$	0		40-140/30	70-130/30
2-Nitroaniline	50.0	0.0	35.9	72		37.6	75		5		40-140/30	70-130/30
Dimethyl phthalate	50.0	0.0	33.4	67	$	32.3	65	$	3		40-140/30	70-130/30
2,6-Dinitrotoluene	50.0	0.0	37.8	76		35.8	72		5		40-140/30	70-130/30
Acenaphthylene	50.0	0.0	33.5	67	$	31.9	64	$	5		40-140/30	70-130/30
3-Nitroaniline	50.0	0.0	29.7	59	$	35.0	70		16		40-140/30	70-130/30
Acenaphthene	50.0	0.0	33.4	67		32.7	65		2		40-140/30	20-160/30
2,4-Dinitrophenol	50.0	0.0	2.9	6	$	3.7	7	$	24		5-105/30	20-160/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01158-021
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: C3747.D
MSD Data file: C3748.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD IAL Limits	Rec/RPD DKQP Limits
4-Nitrophenol	50.0	0.0	25.4	51		24.2	48		5		30-140/30	20-160/30
2,4-Dinitrotoluene	50.0	0.0	37.8	76		35.8	72		5		40-140/30	70-130/30
Dibenzofuran	50.0	0.0	34.5	69	$	34.9	70		1		40-140/30	70-130/30
Diethyl phthalate	50.0	0.0	32.1	64	$	32.1	64	$	0		40-140/30	70-130/30
Fluorene	50.0	0.0	32.9	66	$	32.8	66	$	0		40-140/30	70-130/30
4-Chlorophenyl phenyl ether	50.0	0.0	34.5	69	$	34.0	68	$	1		40-140/30	70-130/30
4-Nitroaniline	50.0	0.0	24.9	50	$	29.0	58	$	15		40-140/30	70-130/30
1,2,4,5-Tetrachlorobenzene	50.0	0.0	35.5	71		34.0	68	$	4		40-140/30	70-130/30
2,3,4,6-Tetrachlorophenol	50.0	0.0	33.8	68	$	32.0	64	$	5		40-140/30	70-130/30
4,6-Dinitro-2-methylphenol	50.0	0.0	15.6	31		15.8	32		1		10-110/30	20-160/30
N-Nitrosodiphenylamine	50.0	0.0	35.1	70		36.4	73		4		40-140/30	70-130/30
1,2-Diphenylhydrazine	50.0	0.0	30.1	60	$	32.6	65	$	8		40-140/30	70-130/30
4-Bromophenyl phenyl ether	50.0	0.0	33.7	67	$	34.7	69	$	3		40-140/30	70-130/30
Hexachlorobenzene	50.0	0.0	33.2	66	$	34.3	69	$	3		40-140/30	70-130/30
Atrazine	50.0	0.0	37.8	76		38.3	77		1		20-120/30	20-160/30
Pentachlorophenol	50.0	0.0	22.2	44		21.9	44		1		30-140/30	20-160/30
Phenanthrene	50.0	0.0	33.5	67	$	33.9	68	$	1		40-140/30	70-130/30
Anthracene	50.0	0.0	33.8	68	$	34.9	70		3		40-140/30	70-130/30
Carbazole	50.0	0.0	32.5	65	$	34.5	69	$	6		40-140/30	70-130/30
Di-n-butyl phthalate	50.0	0.0	34.1	68	$	35.6	71		4		40-140/30	70-130/30
Fluoranthene	50.0	0.0	32.1	64	$	33.0	66	$	3		40-140/30	70-130/30
Benzidine	50.0	0.0	3.2	6	$	3.7	7	$	14		5-105/30	20-160/30
Pyrene	50.0	0.0	35.5	71		40.8	82		14		40-140/30	70-130/30
3,3'-Dimethylbenzidine	50.0	0.0	9.1	18	$	10.0	20		9		5-105/30	20-160/30
Butyl benzyl phthalate	50.0	0.0	32.8	66	$	39.7	79		19		40-140/30	70-130/30
3,3'-Dichlorobenzidine	50.0	0.0	26.2	52	$	31.9	64	$	20		40-140/30	70-130/30
Benzo[a]anthracene	50.0	0.0	29.2	58	$	35.1	70		18		40-140/30	70-130/30
Chrysene	50.0	0.0	30.7	61	$	34.8	70		13		40-140/30	70-130/30
Bis(2-ethylhexyl) phthalate	50.0	0.0	40.1	80		39.8	80		1		40-140/30	70-130/30
Di-n-octyl phthalate	50.0	0.0	54.4	109		62.5	125		14		40-140/30	70-130/30
Benzo[b]fluoranthene	50.0	0.0	49.6	99		49.7	99		0		40-140/30	70-130/30
Benzo[k]fluoranthene	50.0	0.0	43.9	88		46.1	92		5		40-140/30	70-130/30
Benzo[a]pyrene	50.0	0.0	46.1	92		51.4	103		11		40-140/30	70-130/30
Indeno[1,2,3-cd]pyrene	50.0	0.0	41.4	83		46.7	93		12		40-140/30	70-130/30
Dibenz[a,h]anthracene	50.0	0.0	43.1	86		45.7	91		6		40-140/30	70-130/30
Benzo[g,h,i]perylene	50.0	0.0	43.6	87		46.7	93		7		40-140/30	70-130/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C3745.D Instrument ID: MSDC

Date Extracted: 02/19/15 Matrix: SOIL

Date Analyzed: 02/20/2015 Time Analyzed: 12:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS150219-01	02/20/2015	12:36
.	E15-01158-021MS	02/20/2015	12:51
.	E15-01158-021MSD	02/20/2015	13:07
GPEC-WC1	E15-01273-001	02/20/2015	13:22
S-2	E15-00920-002	02/20/2015	13:37
WC-1/0-4	E15-01248-002	02/20/2015	13:53
WC-2/0-4	E15-01248-004	02/20/2015	14:08
WC-3/0-4	E15-01248-006	02/20/2015	14:24
SB-13	E15-01158-021	02/20/2015	14:39
SB-14	E15-01158-022	02/20/2015	14:55
SB-N	E15-01246-001	02/20/2015	15:10
SB-S	E15-01246-002	02/20/2015	15:26

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C3568.D DFTPP Injection Date : 02/10/2015

Inst ID: MSDC DFTPP Injection Time: 11:24

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	38.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	43.7	
70	Less than 2.0% of mass 69	0.7	(1.7)1
127	40.0 - 60.0% of mass 198	52.5	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.3	
275	10.0 - 30.0% of mass 198	21.0	
365	Greater than 1.0% of mass 198	1.3	
441	Present, but less than mass 443	8.16	(74.8)3
442	40.0 - 100.0% of mass 198	51.2	
443	17.0 - 23.0% of mass 442	10.9	(21.3)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN011-15	ICC040BNA1	C3569.D	02/10/2015	11:34
ABN008-15	ICC001BNA1	C3570.D	02/10/2015	11:50
ABN009-15	ICC010BNA1	C3571.D	02/10/2015	12:05
ABN010-15	ICC020BNA1	C3572.D	02/10/2015	12:19
ABN012-15	ICC080BNA1	C3573.D	02/10/2015	12:35
ABN013-15	ICC160BNA1	C3574.D	02/10/2015	12:50
ABN004-15	ICV040BNA1	C3575.D	02/10/2015	13:06
ABN019-15	ICC160BNA2	C3576.D	02/10/2015	13:22
ABN018-15	ICC080BNA2	C3577.D	02/10/2015	13:37
ABN017-15	ICC040BNA2	C3578.D	02/10/2015	13:53
ABN016-15	ICC020BNA2	C3579.D	02/10/2015	14:08
ABN015-15	ICC010BNA2	C3580.D	02/10/2015	14:24
ABN014-15	ICC001BNA2	C3581.D	02/10/2015	14:39
ABN031-15	ICV040BNA2	C3582.D	02/10/2015	14:55

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C3742.D

DFTPP Injection Date : 02/20/2015

Inst ID: MSDC

DFTPP Injection Time: 11:39

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	46.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	54.1	
70	Less than 2.0% of mass 69	0.8	(1.4)1
127	40.0 - 60.0% of mass 198	57.5	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	8.0	
275	10.0 - 30.0% of mass 198	19.5	
365	Greater than 1.0% of mass 198	1.4	
441	Present, but less than mass 443	7.24	(71.1)3
442	40.0 - 100.0% of mass 198	48.5	
443	17.0 - 23.0% of mass 442	10.2	(21.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN004-15	CCV040BNA1	C3743.D	02/20/2015	11:50
ABN031-15	CCV040BNA2	C3744.D	02/20/2015	12:05
.	BLKS150219-01	C3745.D	02/20/2015	12:21
.	LCSS150219-01	C3746.D	02/20/2015	12:36
.	E15-01158-021MS	C3747.D	02/20/2015	12:51
.	E15-01158-021MSD	C3748.D	02/20/2015	13:07
GPEC-WC1	E15-01273-001	C3749.D	02/20/2015	13:22
S-2	E15-00920-002	C3750.D	02/20/2015	13:37
WC-1/0-4	E15-01248-002	C3751.D	02/20/2015	13:53
WC-2/0-4	E15-01248-004	C3752.D	02/20/2015	14:08
WC-3/0-4	E15-01248-006	C3753.D	02/20/2015	14:24
SB-13	E15-01158-021	C3754.D	02/20/2015	14:39
SB-14	E15-01158-022	C3755.D	02/20/2015	14:55
SB-N	E15-01246-001	C3756.D	02/20/2015	15:10
SB-S	E15-01246-002	C3757.D	02/20/2015	15:26

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3569.D

Date Analyzed: 02/10/2015

Instrument ID: MSDC

Time Analyzed: 11:34

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	128878		2.48		491089		3.03		306133		3.86	
	UPPER LIMIT	257756		2.98		982178		3.53		612266		4.36	
	LOWER LIMIT	64439		1.98		245545		2.53		153067		3.36	
	LAB SAMPLE ID												
01	ICC001BNA1	120599		2.47		481938		3.02		308833		3.85	
02	ICC010BNA1	121980		2.47		482893		3.02		310857		3.84	
03	ICC020BNA1	124974		2.47		495357		3.02		318422		3.83	
04	ICC080BNA1	117890		2.48		452565		3.02		283380		3.83	
05	ICC160BNA1	116160		2.48		433200		3.02		285658		3.83	
06	ICV040BNA1	140335		2.47		547618		3.02		342721		3.84	
07	ICC160BNA2	112064		2.47		438405		3.02		282014		3.83	
08	ICC080BNA2	118843		2.47		459361		3.02		307746		3.83	
09	ICC040BNA2	122613		2.47		473594		3.02		311728		3.83	
10	ICC020BNA2	130773		2.47		493240		3.02		325159		3.83	
11	ICC010BNA2	118679		2.47		459942		3.02		300684		3.83	
12	ICC001BNA2	113727		2.47		424579		3.02		279832		3.83	
13	ICV040BNA2	117923		2.47		451084		3.02		293610		3.83	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3569.D

Date Analyzed: 02/10/2015

Instrument ID: MSDC

Time Analyzed: 11:34

	40 ppm	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	510793		4.64		443021		6.42		309002		7.78	
	UPPER LIMIT	1021586		5.14		886042		6.92		618004		8.28	
	LOWER LIMIT	255397		4.14		221511		5.92		154501		7.28	
	LAB SAMPLE ID												
01	ICC001BNA1	525203		4.62		530919		6.40		366392		7.78	
02	ICC010BNA1	529904		4.61		511752		6.38		339678		7.74	
03	ICC020BNA1	527797		4.60		481370		6.37		324066		7.73	
04	ICC080BNA1	464948		4.60		406279		6.36		330161		7.72	
05	ICC160BNA1	452920		4.60		432931		6.37		364958		7.73	
06	ICV040BNA1	556309		4.60		452138		6.37		293263		7.74	
07	ICC160BNA2	482111		4.60		446203		6.37		368020		7.73	
08	ICC080BNA2	506712		4.59		476955		6.35		354984		7.72	
09	ICC040BNA2	531401		4.59		512173		6.36		368255		7.72	
10	ICC020BNA2	557105		4.59		513638		6.36		367657		7.71	
11	ICC010BNA2	506182		4.59		513614		6.36		377287		7.73	
12	ICC001BNA2	487355		4.60		487361		6.36		367497		7.73	
13	ICV040BNA2	505182		4.59		494765		6.34		354952		7.71	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3743.D

Date Analyzed: 02/20/2015

Instrument ID: MSDC

Time Analyzed: 11:50

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	126309		2.47		488911		3.02		306165		3.85	
	UPPER LIMIT	252618		2.97		977822		3.52		612330		4.35	
	LOWER LIMIT	63155		1.97		244456		2.52		153083		3.35	
	LAB SAMPLE ID												
01	CCV040BNA2	115264		2.47		473345		3.02		295665		3.85	
02	BLKS150219-01	207374		2.47		787539		3.02		507870		3.86	
03	LCSS150219-01	196449		2.47		769799		3.02		482907		3.84	
04	E15-01158-021MS	226612		2.47		921329		3.02		565711		3.84	
05	E15-01158-021MSD	198493		2.47		783720		3.02		503473		3.84	
06	E15-01273-001	232545		2.47		843807		3.02		499791		3.83	
07	E15-00920-002	206753		2.47		787215		3.02		415988		3.84	
08	E15-01248-002	224253		2.47		830558		3.02		459897		3.83	
09	E15-01248-004	219591		2.47		790921		3.02		435582		3.84	
10	E15-01248-006	227638		2.47		840664		3.02		457148		3.84	
11	E15-01158-021	148429		2.47		573169		3.02		336535		3.84	
12	E15-01158-022	202861		2.47		779927		3.02		456718		3.84	
13	E15-01246-001	218577		2.47		814014		3.02		460180		3.83	
14	E15-01246-002	192149		2.47		732890		3.02		421426		3.83	
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3743.D

Date Analyzed: 02/20/2015

Instrument ID: MSDC

Time Analyzed: 11:50

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	514072	4.64	487175	6.42	339778	7.78
	UPPER LIMIT	1028144	5.14	974350	6.92	679556	8.28
	LOWER LIMIT	257036	4.14	243588	5.92	169889	7.28
	LAB SAMPLE ID						
01	CCV040BNA2	497118	4.62	519865	6.40	424296	7.77
02	BLKS150219-01	872040	4.64	776719	6.42	345367	7.78
03	LCSS150219-01	783779	4.61	604354	6.38	258590	7.74
04	E15-01158-021MS	922302	4.61	777322	6.38	303669	7.74
05	E15-01158-021MSD	789669	4.60	585903	6.38	247743	7.73
06	E15-01273-001	697019	4.59	475946	6.36	306634	7.72
07	E15-00920-002	574757	4.61	558060	6.39	344898	7.77
08	E15-01248-002	613073	4.59	496990	6.37	333728	7.72
09	E15-01248-004	578188	4.60	497495	6.38	317234	7.74
10	E15-01248-006	615863	4.60	494496	6.37	308217	7.74
11	E15-01158-021	474921	4.61	401415	6.38	250946	7.74
12	E15-01158-022	633416	4.60	506712	6.37	309039	7.72
13	E15-01246-001	627872	4.59	498385	6.36	316589	7.73
14	E15-01246-002	585123	4.60	495876	6.37	313689	7.73
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3749.D
Acq On : 20 Feb 2015 13:22
Operator : EDM
Sample : GPEC-WC1,E15-01273-001,S,15.24g,10.6,1
Misc : 150219-01,02/19/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 14:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

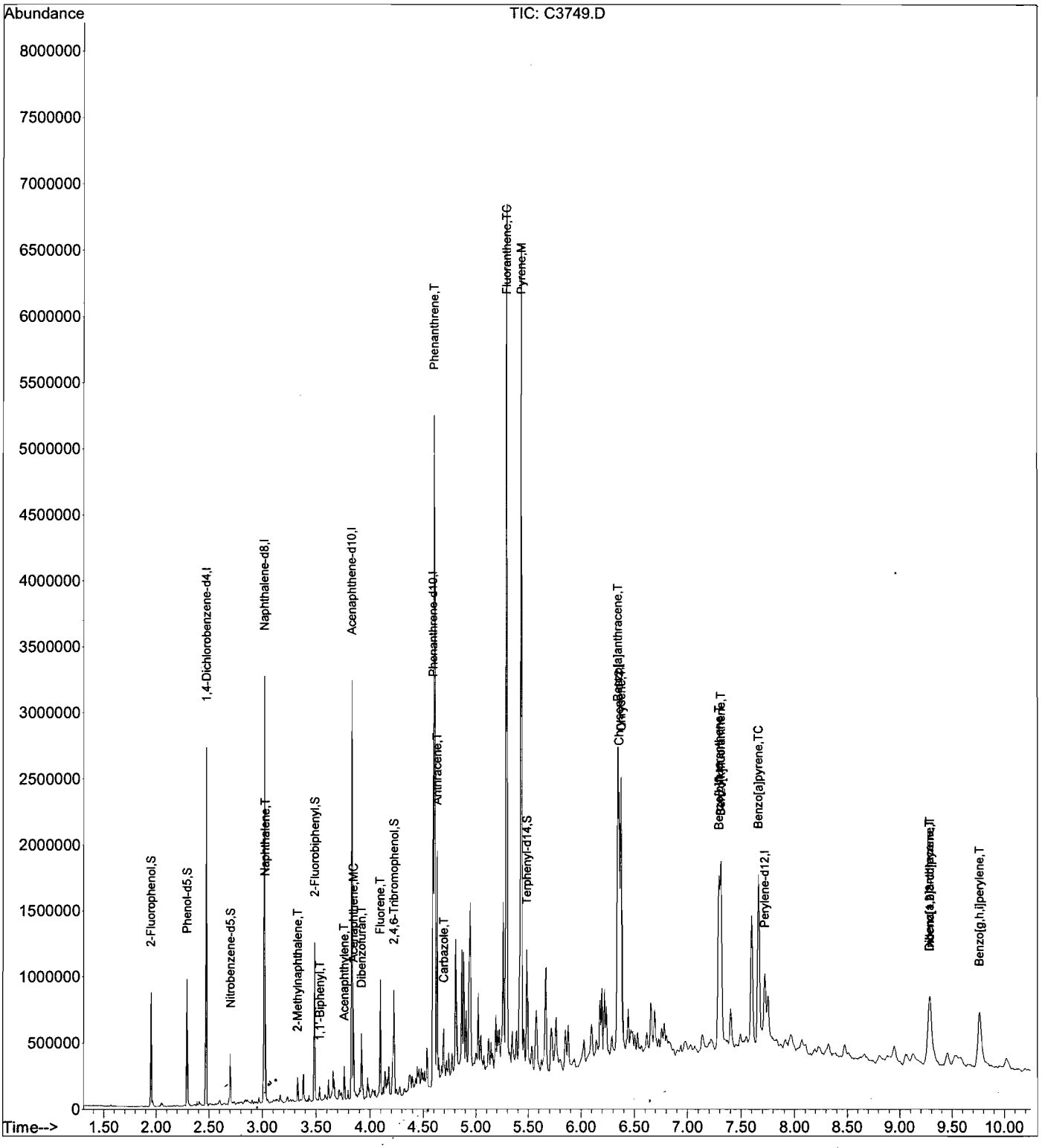
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	232545	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	843807	40.00	UG		-0.01
43) Acenaphthene-d10	3.83	164	499791	40.00	UG		-0.03
66) Phenanthrene-d10	4.59	188	697019	40.00	UG		-0.05
82) Chrysene-d12	6.36	240	475946	40.00	UG		-0.07
92) Perylene-d12	7.72	264	306634	40.00	UG		-0.06
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	132964	18.65	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	18.65%#			
6) Phenol-d5	2.29	99	193120	22.24	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	22.24%#			
24) Nitrobenzene-d5	2.70	82	68693	10.19	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery =	20.38%#			
47) 2-Fluorobiphenyl	3.49	172	223235	12.87	UG		-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	25.74%#			
70) 2,4,6-Tribromophenol	4.22	330	79615	28.68	UG		-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	28.68%#			
84) Terphenyl-d14	5.48	244	220522m	16.70	UG		-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	33.40%			
Target Compounds							Qvalue
34) Naphthalene	3.03	128	95317	4.04	UG	#	57
41) 2-Methylnaphthalene	3.33	142	35887	2.22	UG		94
48) 1,1'-Biphenyl	3.53	154	16435	0.88	UG		94
53) Acenaphthylene	3.76	152	55050	2.43	UG		100
55) Acenaphthene	3.84	153	106522	7.33	UG		88
59) Dibenzofuran	3.92	168	121435	5.88	UG	#	81
61) Fluorene	4.10	166	130333	7.84	UG		99
75) Phenanthrene	4.61	178	1561119	77.57	UG		98
76) Anthracene	4.63	178	456404	22.80	UG		98
77) Carbazole	4.69	167	107388	6.12	UG		99
79) Fluoranthene	5.29	202	2025519	97.11	UG	#	93
83) Pyrene	5.43	202	1813693	117.35	UG	#	86
88) Benzo[a]anthracene	6.34	228	745377	55.25	UG	#	93
89) Chrysene	6.38	228	776464	61.89	UG		98
94) Benzo[b]fluoranthene	7.30	252	645539m	57.72	UG		
95) Benzo[k]fluoranthene	7.31	252	658839	62.26	UG	#	84
96) Benzo[a]pyrene	7.66	252	699481	67.17	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.29	276	502144	38.47	UG	#	51
98) Dibenz[a,h]anthracene	9.28	278	128626	12.02	UG	#	64
99) Benzo[g,h,i]perylene	9.76	276	491013	45.35	UG	#	53

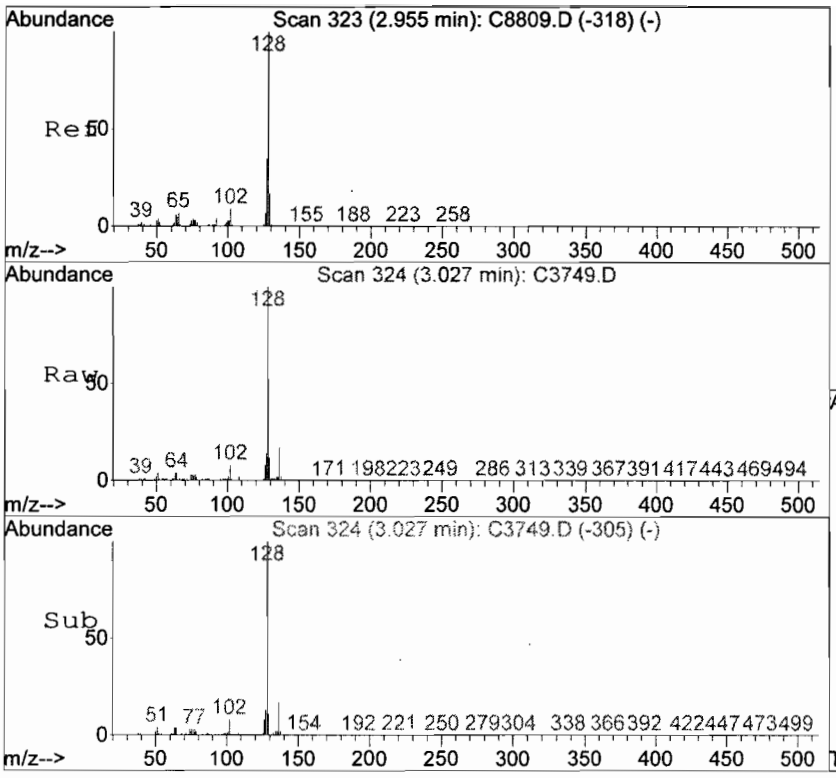
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3749.D
Acq On : 20 Feb 2015 13:22
Operator : EDM
Sample : GPEC-WC1,E15-01273-001,S,15.24g,10.6,1
Misc : 150219-01,02/19/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 14:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

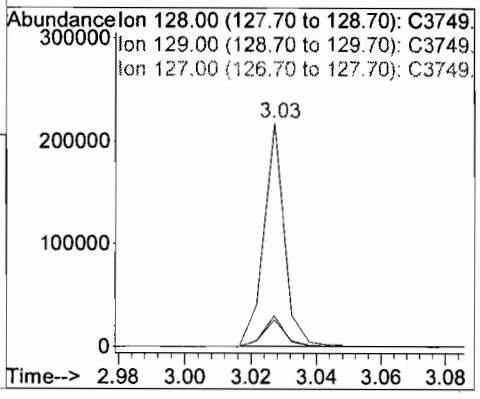


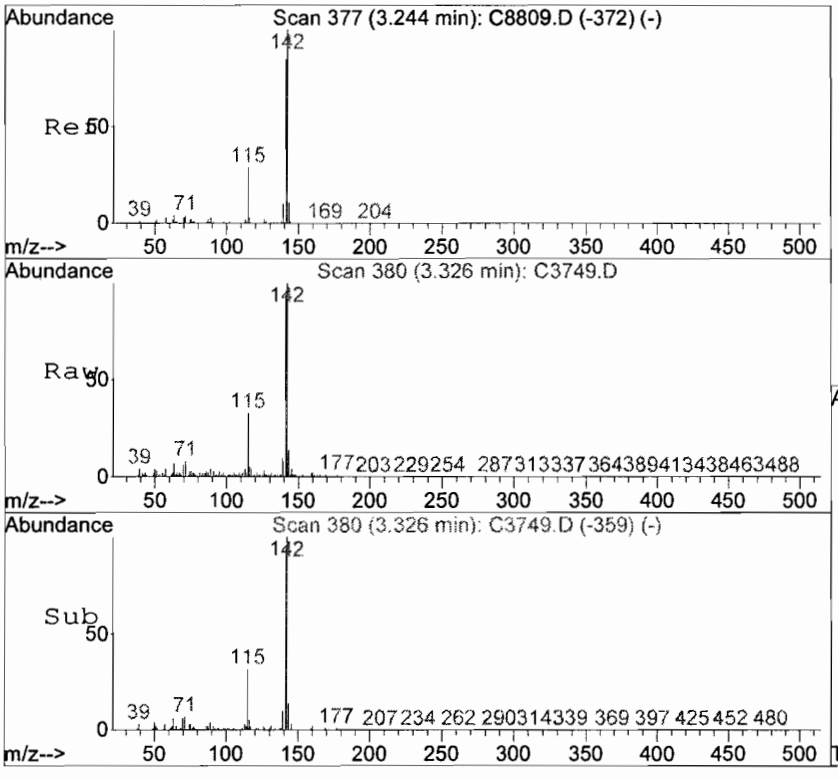


#34
Naphthalene
Concen: 4.04 UG
RT: 3.03 min Scan# 324
Delta R.T. -0.01 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:128 Resp: 95317

Ion	Ratio	Lower	Upper
128	100		
129	14.1	19.6	29.4#
127	14.3	41.3	61.9#

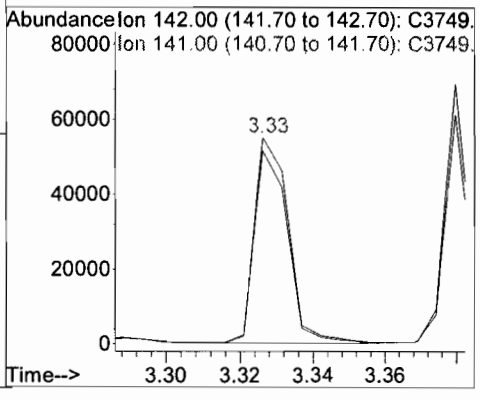


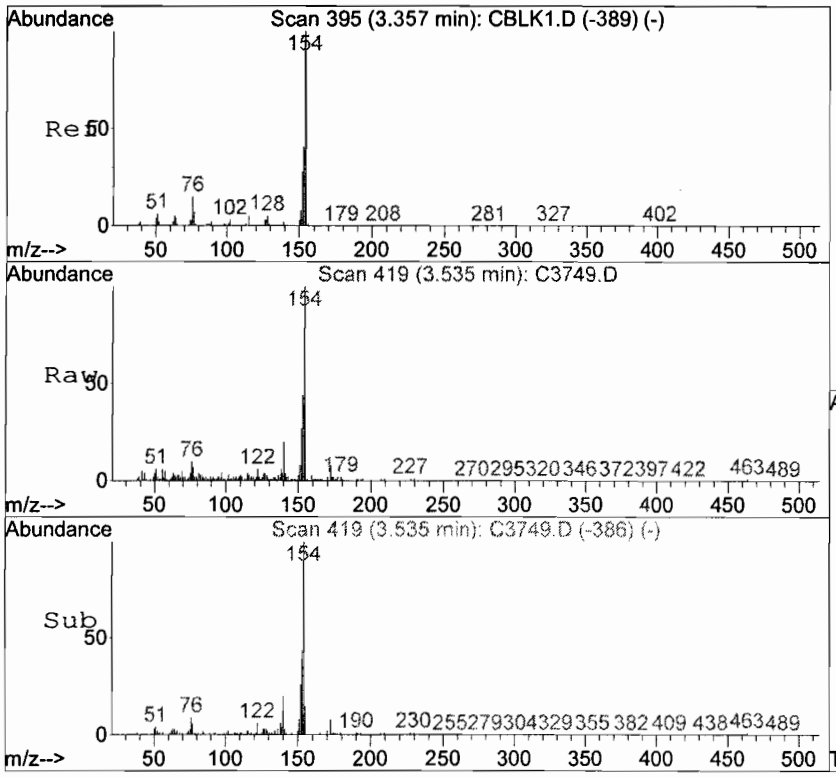


#41
2-Methylnaphthalene
Concen: 2.22 UG
RT: 3.33 min Scan# 380
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:142 Resp: 35887

Ion	Ratio	Lower	Upper
142	100		
141	90.8	68.6	102.8

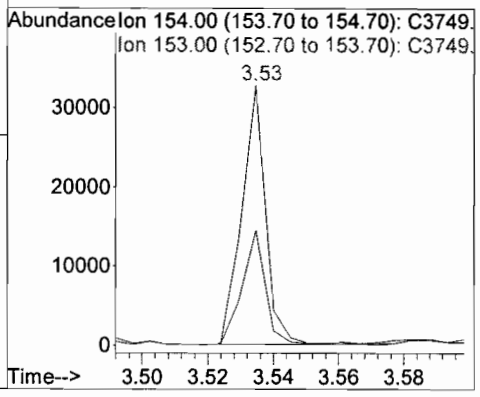


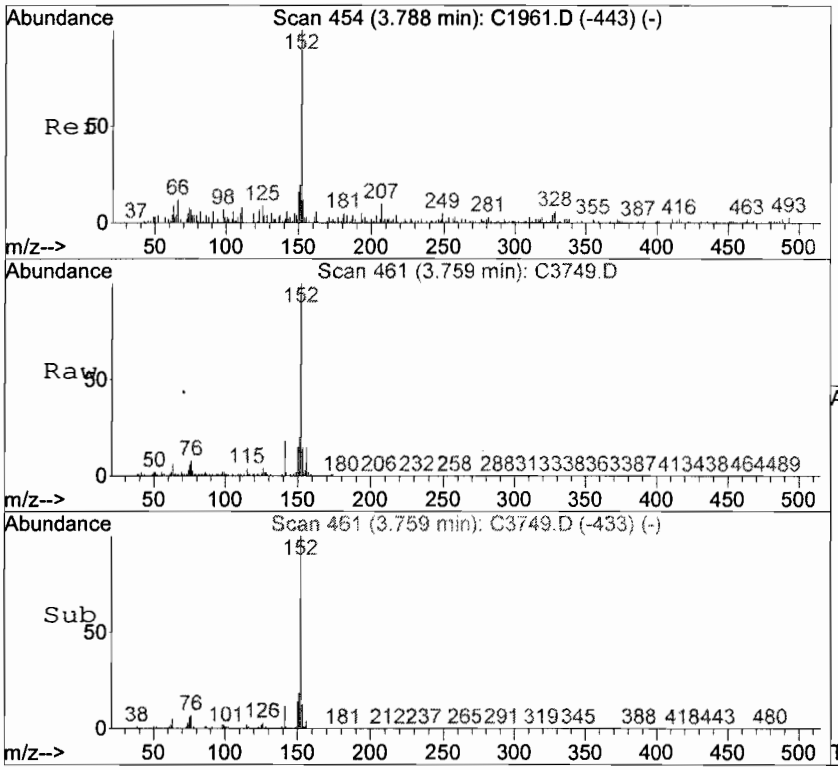


#48
1,1'-Bipheny1
Concen: 0.88 UG
RT: 3.53 min Scan# 419
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:154 Resp: 16435

Ion	Ratio	Lower	Upper
154	100		
153	43.9	32.3	48.5

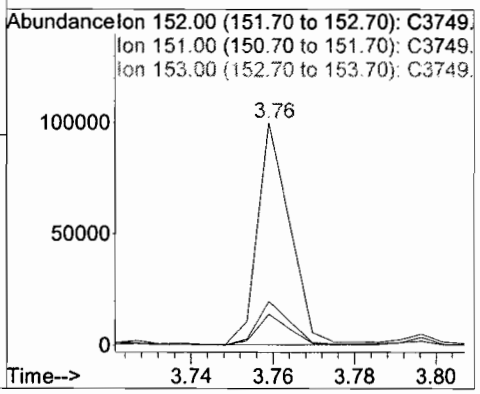


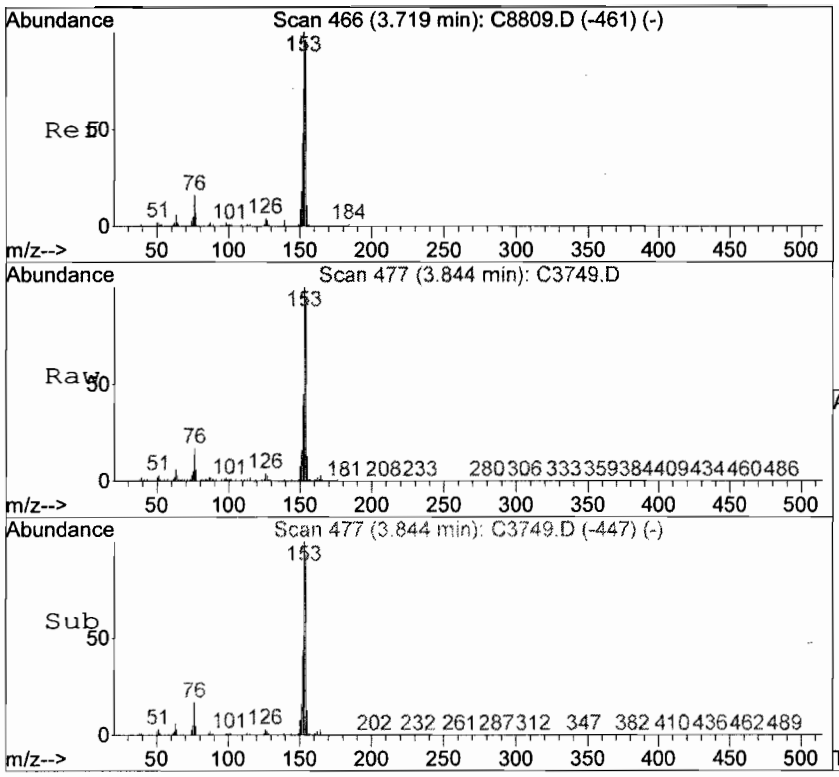


#53
Acenaphthy1ene
Concen: 2.43 UG
RT: 3.76 min Scan# 461
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:152 Resp: 55050

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.8	23.6
153	13.8	11.2	16.8

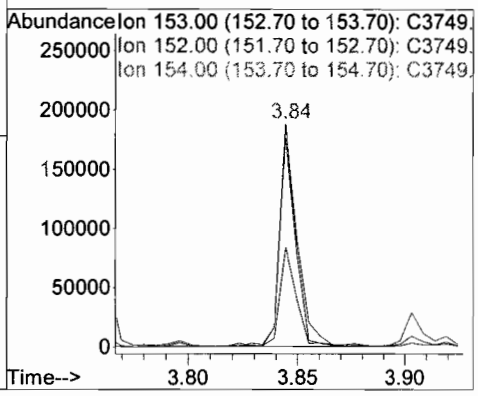


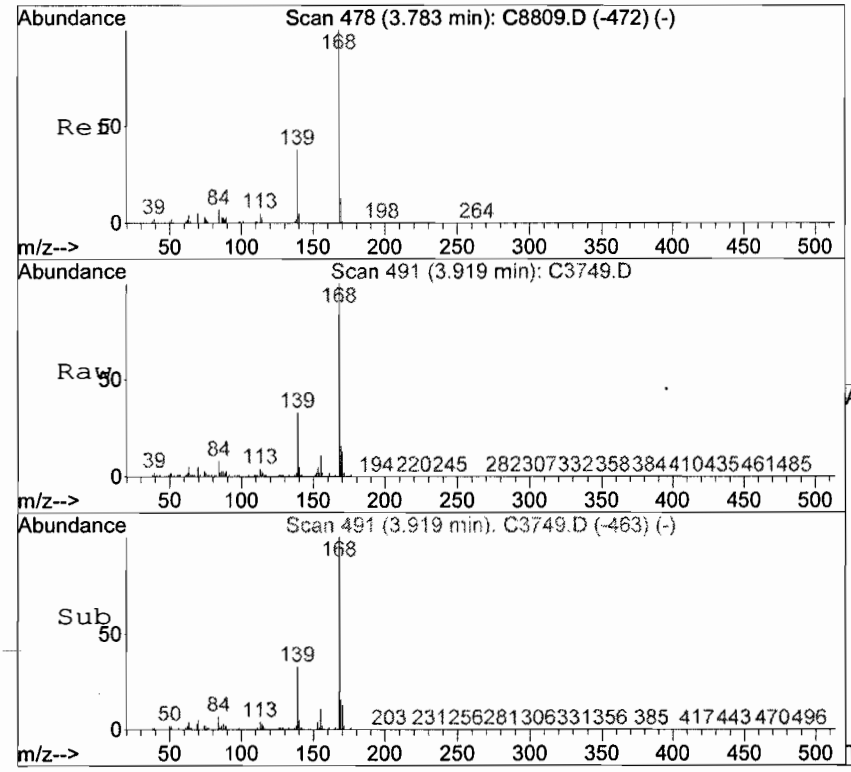


#55
Acenaphthene
Concen: 7.33 UG
RT: 3.84 min Scan# 477
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:153 Resp: 106522

Ion	Ratio	Lower	Upper
153	100		
152	43.7	37.7	56.5
154	87.2	82.6	124.0

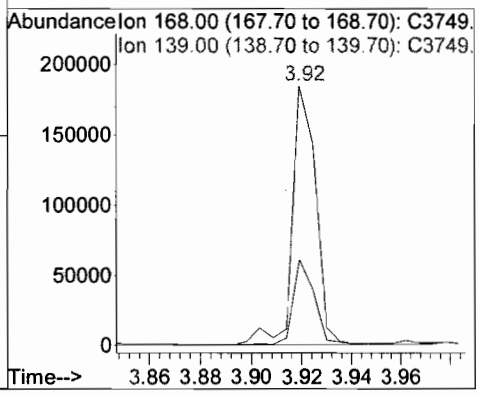


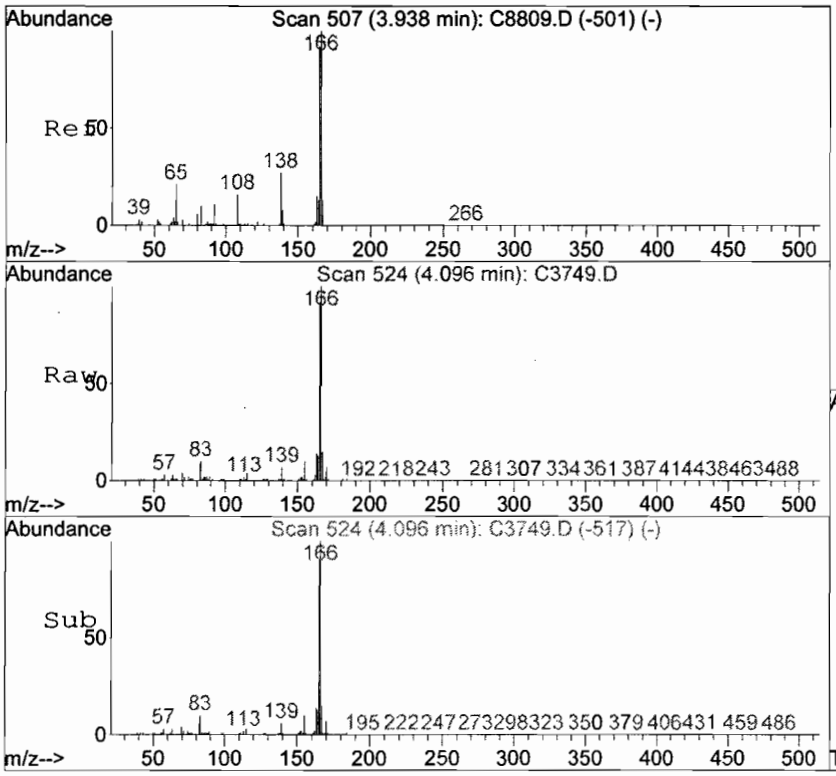


#59
Dibenzofuran
Concen: 5.88 UG
RT: 3.92 min Scan# 491
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:168 Resp: 121435

Ion	Ratio	Lower	Upper
168	100		
139	29.6	33.3	49.9#

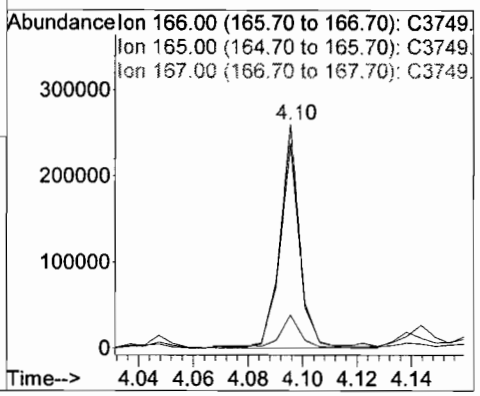


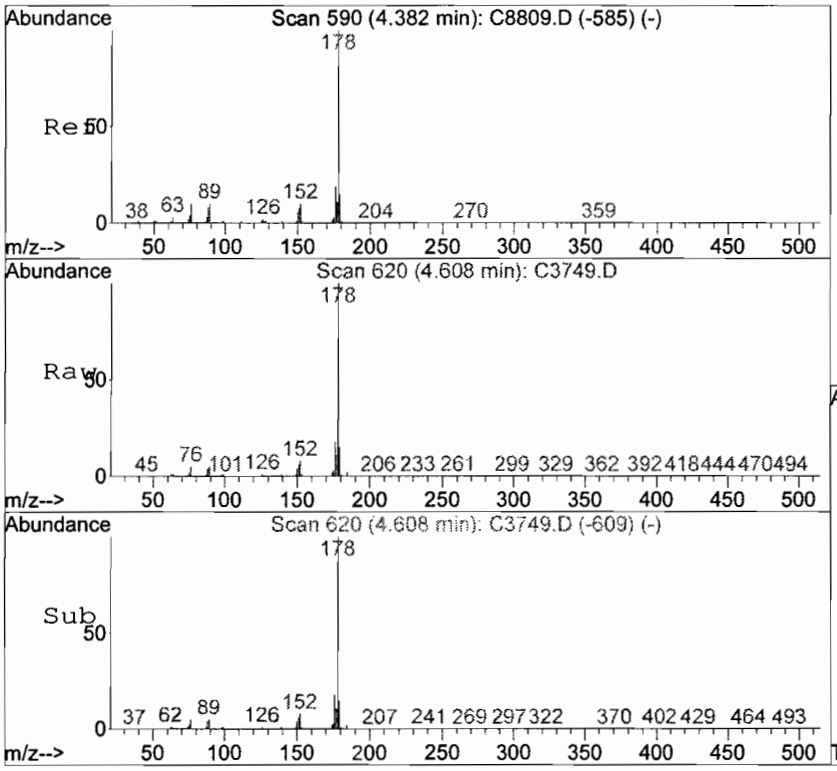


#61
Fluorene
Concen: 7.84 UG
RT: 4.10 min Scan# 524
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:166 Resp: 130333

Ion	Ratio	Lower	Upper
166	100		
165	92.7	74.6	112.0
167	17.6	11.8	17.8

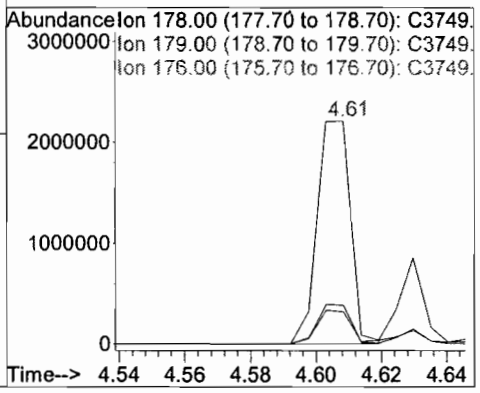


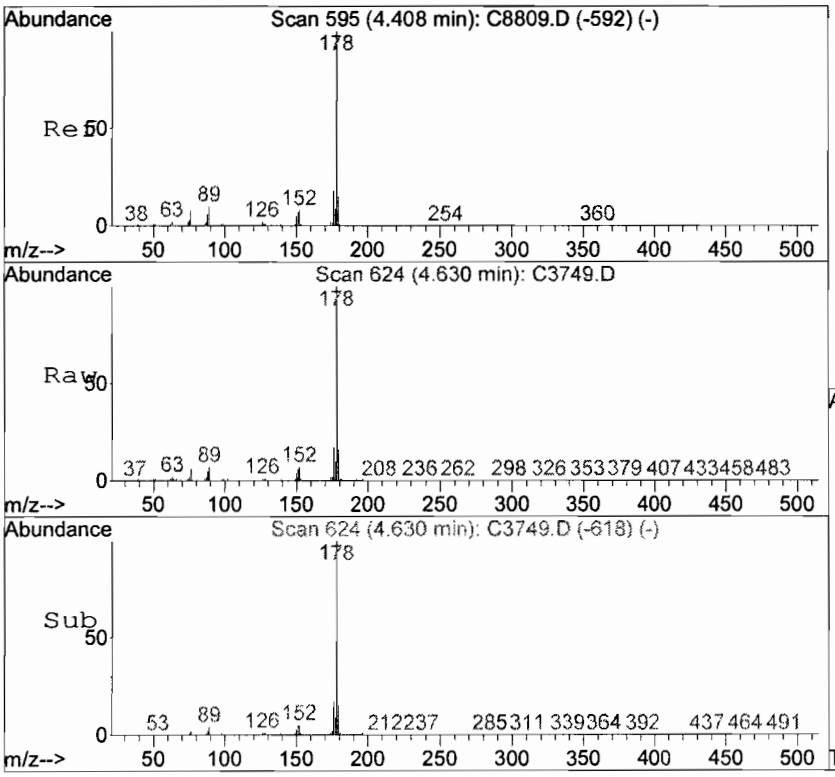


#75
Phenanthrene
Concen: 77.57 UG
RT: 4.61 min Scan# 620
Delta R.T. -0.04 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:178 Resp: 1561119

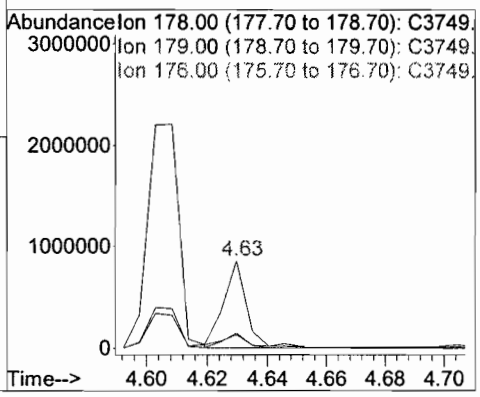
Ion	Ratio	Lower	Upper
178	100		
179	16.0	12.6	18.8
176	17.9	15.5	23.3

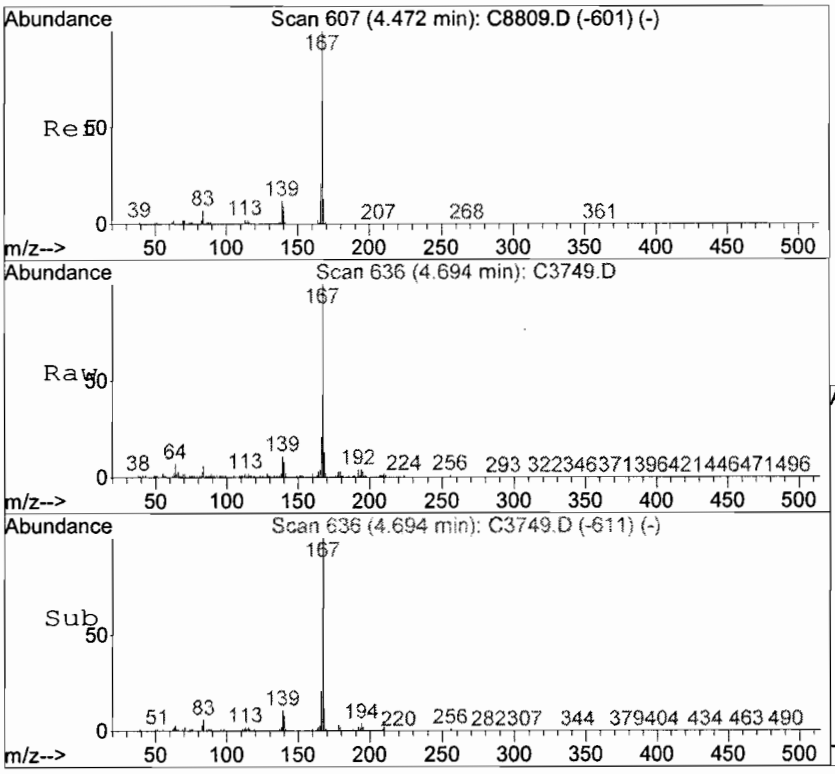




#76
Anthracene
Concen: 22.80 UG
RT: 4.63 min Scan# 624
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

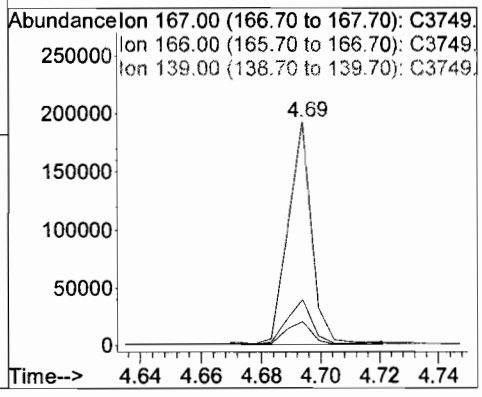
Tgt Ion:178	Resp:	456404	
Ion	Ratio	Lower	Upper
178	100		
179	16.5	12.5	18.7
176	17.2	14.5	21.7

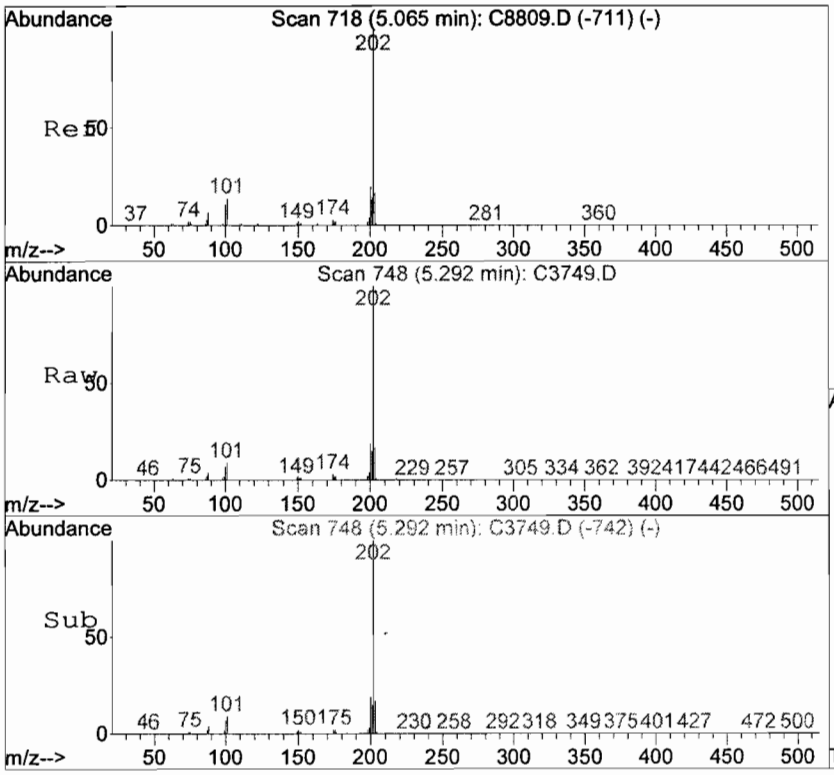




#77
Carbazole
Concen: 6.12 UG
RT: 4.69 min Scan# 636
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:167	Resp:	107388	
Ion	Ratio	Lower	Upper
167	100		
166	22.2	16.9	25.3
139	12.9	10.2	15.4

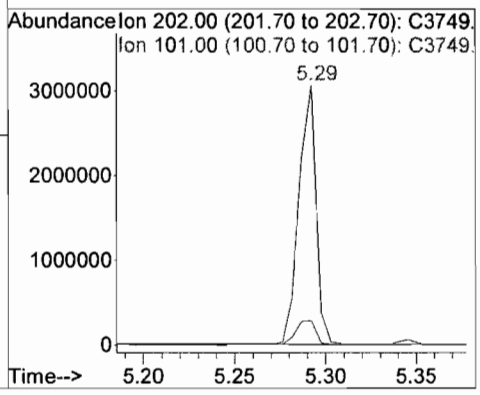


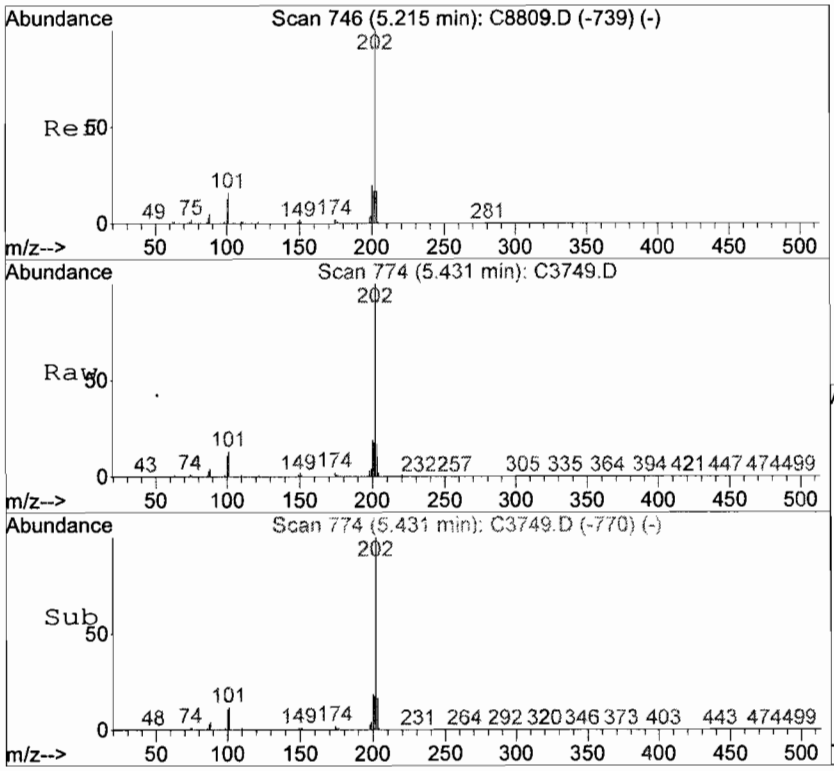


#79
Fluoranthene
Concen: 97.11 UG
RT: 5.29 min Scan# 748
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:202 Resp: 2025519

Ion	Ratio	Lower	Upper
202	100		
101	10.7	6.5	9.7#

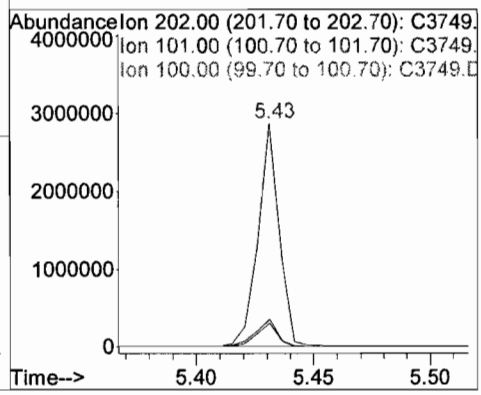


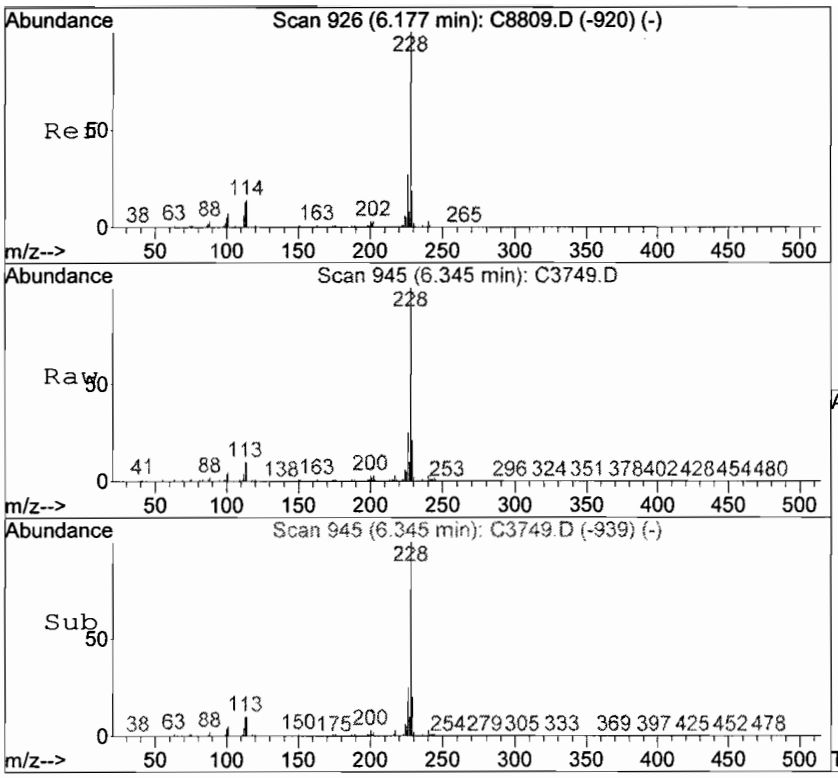


#83
Pyrene
Concen: 117.35 UG
RT: 5.43 min Scan# 774
Delta R.T. -0.08 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:202 Resp: 1813693

Ion	Ratio	Lower	Upper
202	100		
101	13.4	6.2	9.4#
100	10.8	5.2	7.8#

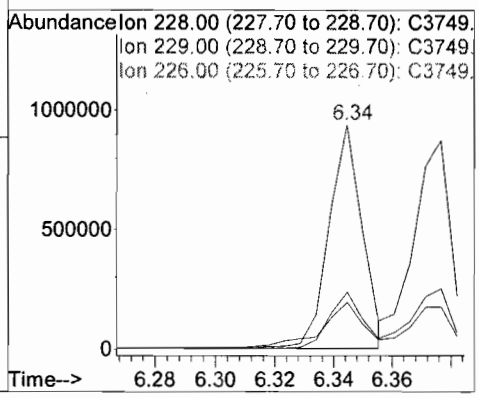


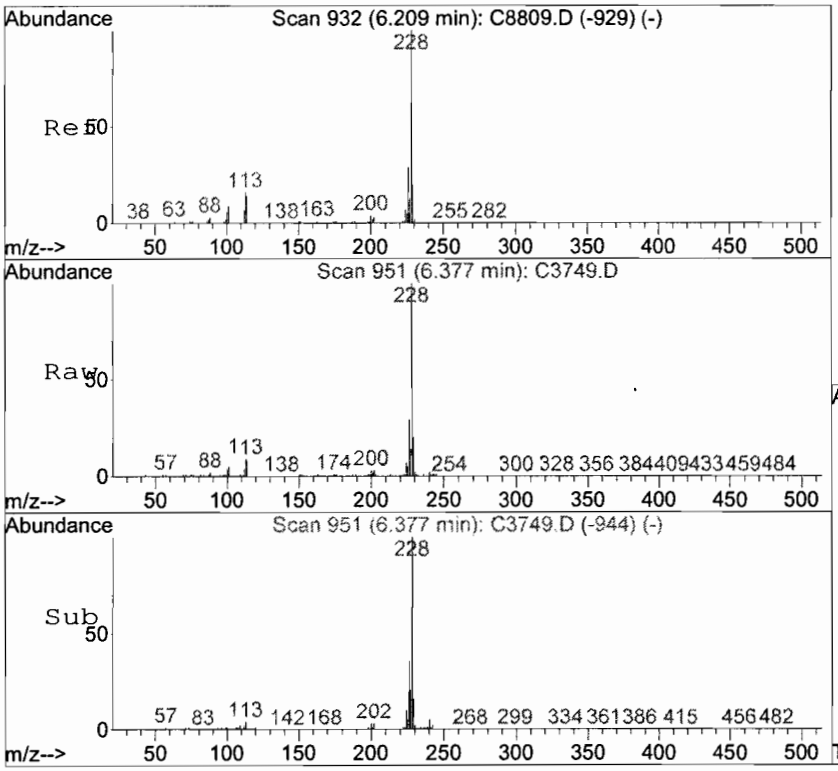


#88
Benzo[a]anthracene
Concen: 55.25 UG
RT: 6.34 min Scan# 945
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:228 Resp: 745377

Ion	Ratio	Lower	Upper
228	100		
229	25.6	15.7	23.5#
226	25.9	20.0	30.0

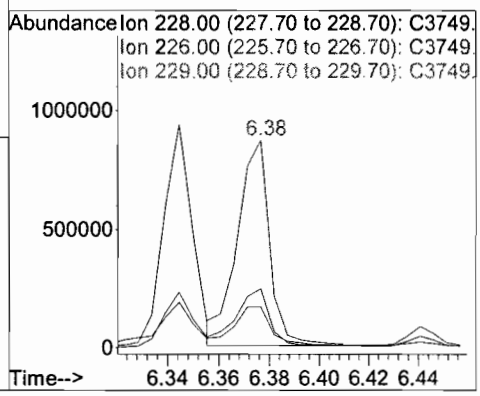


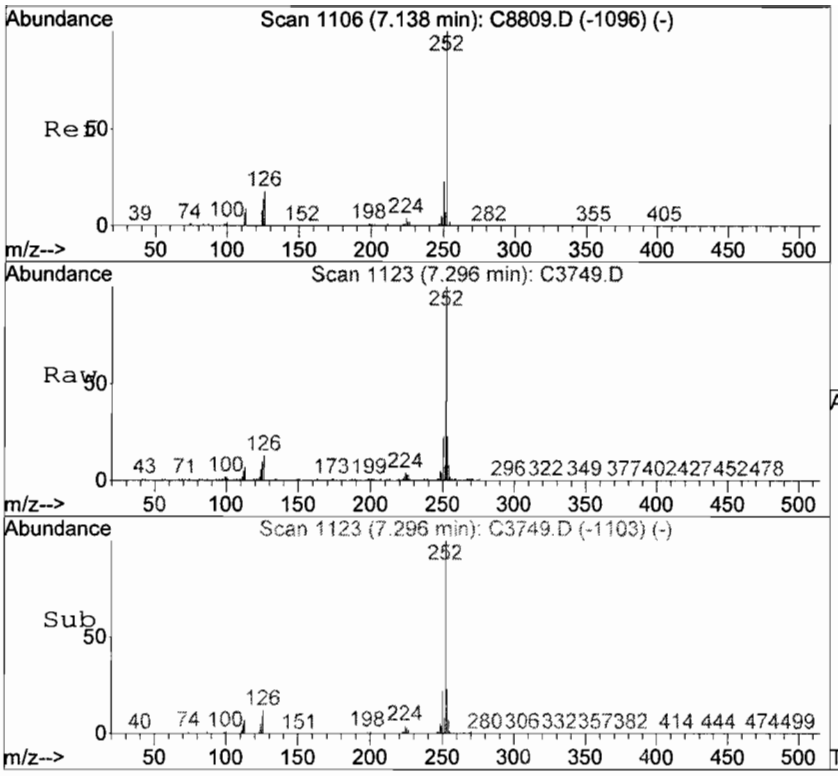


#89
Chrysene
Concen: 61.89 UG
RT: 6.38 min Scan# 951
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:228 Resp: 776464

Ion	Ratio	Lower	Upper
228	100		
226	30.1	23.7	35.5
229	22.4	16.9	25.3

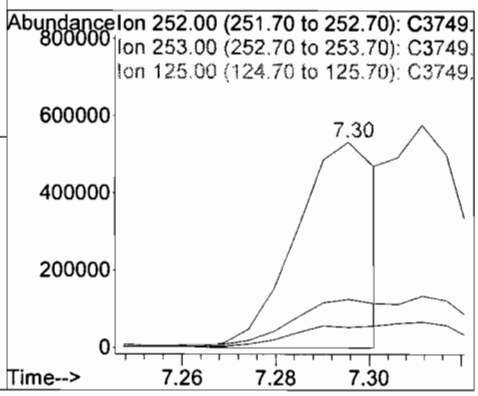


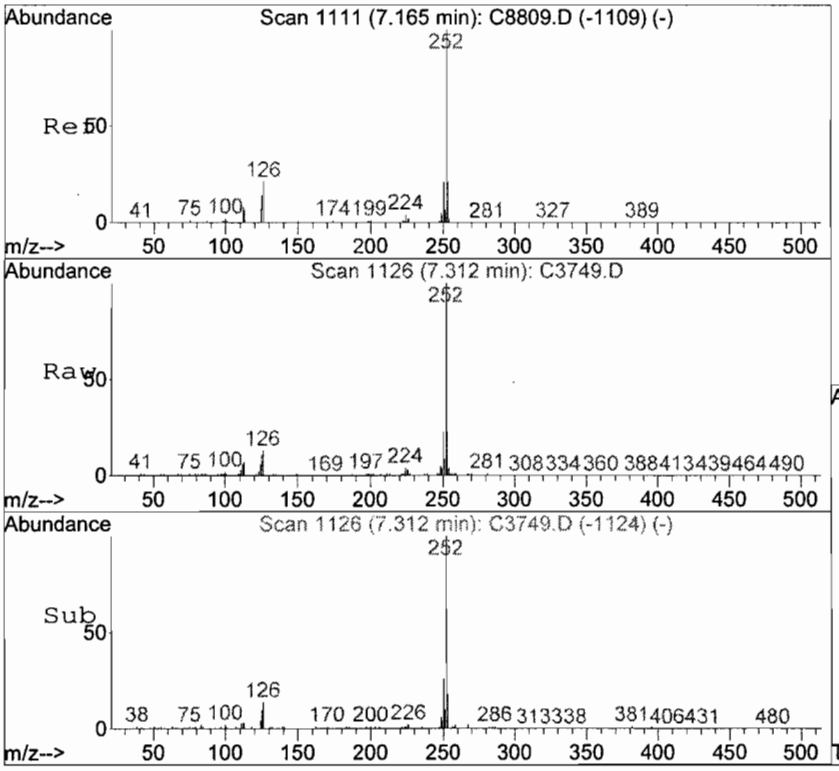


#94
Benzo[b]fluoranthene
Concen: 57.72 UG m
RT: 7.30 min Scan# 1123
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 645539

Ion	Ratio	Lower	Upper
252	100		
253	17.4	17.4	26.0
125	22.0	7.1	10.7#

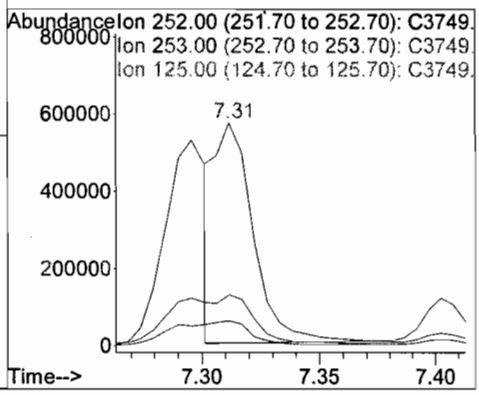


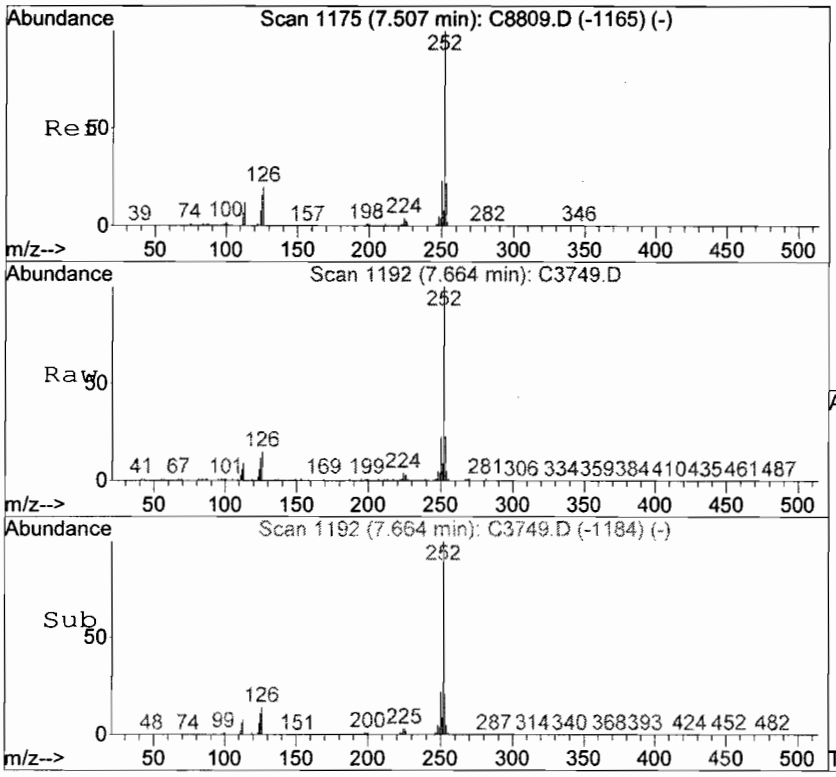


#95
Benzo[k]fluoranthene
Concen: 62.26 UG
RT: 7.31 min Scan# 1126
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 658839

Ion	Ratio	Lower	Upper
252	100		
253	17.5	16.7	25.1
125	21.4	6.5	9.7#

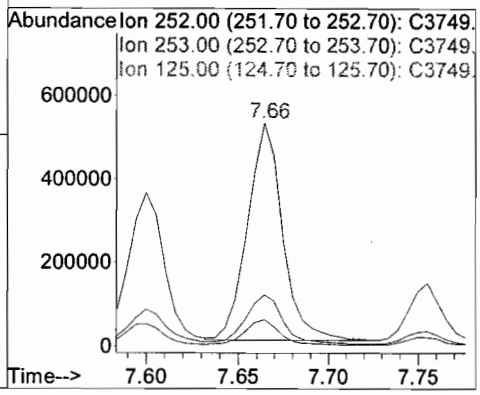


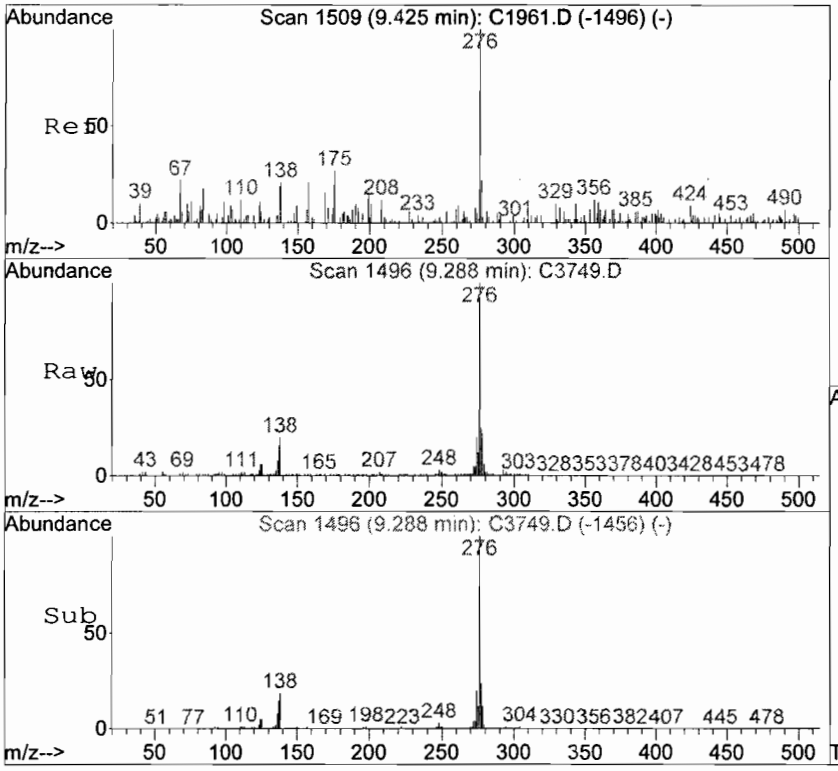


#96
Benzo[a]pyrene
Concen: 67.17 UG
RT: 7.66 min Scan# 1192
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 699481

Ion	Ratio	Lower	Upper
252	100		
253	23.4	18.0	27.0
125	11.4	7.5	11.3#

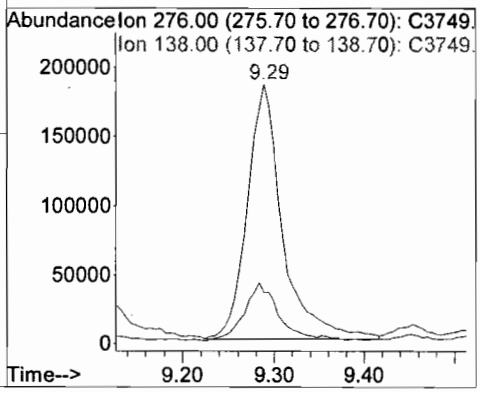


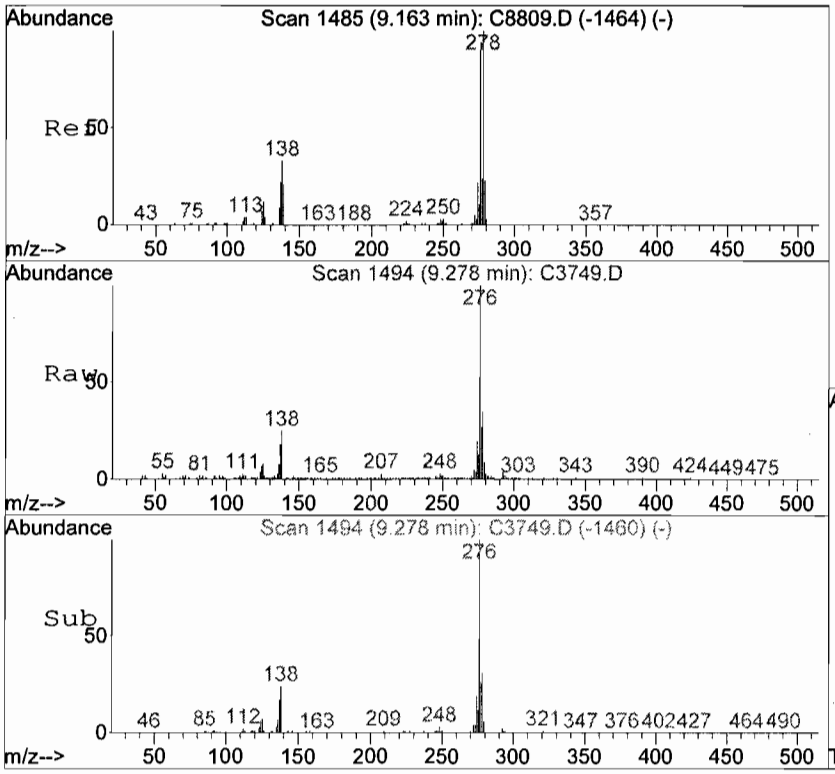


#97
Indeno[1,2,3-cd]pyrene
Concen: 38.47 UG
RT: 9.29 min Scan# 1496
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:276 Resp: 502144

Ion	Ratio	Lower	Upper
276	100		
138	22.6	0.8	1.2#

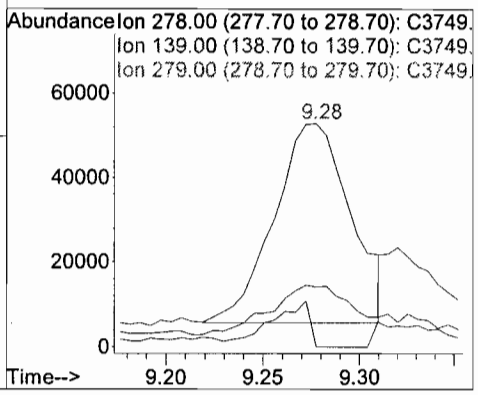


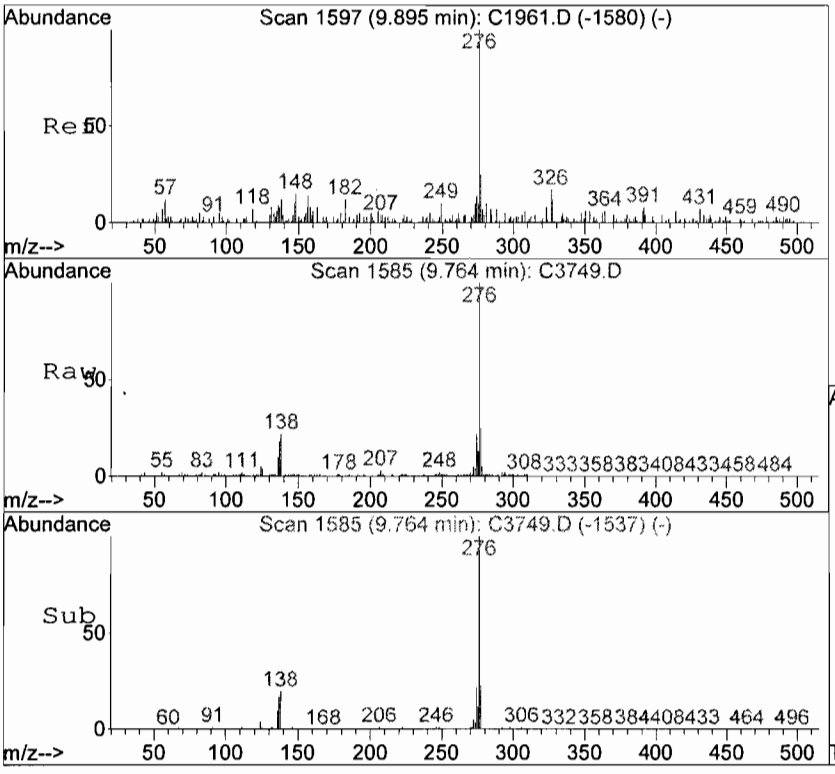


#98
Dibenz[a,h]anthracene
Concen: 12.02 UG
RT: 9.28 min Scan# 1494
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:278 Resp: 128626

Ion	Ratio	Lower	Upper
278	100		
139	11.6	0.6	0.8#
279	28.4	0.6	0.8#

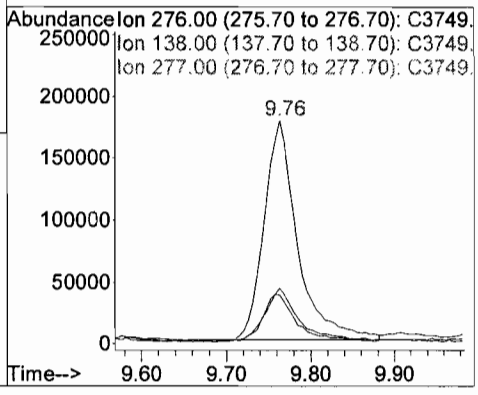




#99
Benzo[g,h,i]perylene
Concen: 45.35 UG
RT: 9.76 min Scan# 1585
Delta R.T. -0.04 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:276 Resp: 491013

Ion	Ratio	Lower	Upper
276	100		
138	22.7	0.7	1.1#
277	25.4	0.0	0.0#



SEMI-VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS0415.M
Title : BNA CALIBRATION METHOD
Last Update : Wed Feb 11 11:39:18 2015
Response Via : Initial Calibration

Calibration Files
1 =C3570.D 10 =C3571.D 20 =C3572.D
40 =C3569.D 80 =C3573.D 160 =C3574.D

		Compound	1	10	20	40	80	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	0.655	0.617	0.657	0.622	0.698	0.630	0.647	4.69
3)	T	Pyridine	0.786	0.769	0.741	0.635	0.762	0.731	0.737	7.28
4)	S	2-Fluorophenol	1.237	1.222	1.275	1.189	1.219	1.214	1.226	2.33
5)	T	Benzaldehyde	0.686	0.621	0.603	0.764	0.625	0.643	0.657	9.05
6)	S	Phenol-d5	1.506	1.543	1.578	1.390	1.483	1.463	1.494	4.39
7)	MC	Phenol	1.612	1.584	1.711	1.478	1.462	1.584	1.572	5.84
8)	T	Aniline	0.742	0.640	0.650	0.619	0.616	0.609	0.646	7.66
9)	T	Bis(2-chloroethyl	0.827	0.712	0.731	0.678	0.678	0.693	0.720	7.84
10)	M	2-Chlorophenol	1.327	1.491	1.477	1.336	1.436	1.483	1.425	5.26
11)	T	1,3-Dichlorobenze	1.827	1.565	1.627	1.560	1.520	1.588	1.615	6.80
12)	MC	1,4-Dichlorobenze	1.628	1.656	1.671	1.550	1.629	1.510	1.607	3.94
13)	T	Benzyl alcohol	1.046	0.815	0.866	0.883	0.885	0.852	0.891	9.00
14)	T	1,2-Dichlorobenze	1.804	1.469	1.551	1.473	1.486	1.473	1.542	8.53
15)	T	2-Methylphenol	1.115	0.817	0.865	1.169	0.885	0.853	0.951	15.86
16)	T	Bis(2-chloroisopr	1.290	0.991	1.040	1.039	0.967	1.035	1.060	10.99
17)	T	4-Methylphenol	1.428	1.192	1.284	1.259	1.212	1.195	1.262	7.09
18)	MP	N-Nitrosodi-n-pro	0.885	0.776	0.800	0.767	0.751	0.758	0.790	6.31
19)	T	Acetophenone	2.095	1.643	1.751	1.700	1.654	1.635	1.746	10.09
20)	T	3-Methylphenol	1.428	1.206	1.280	1.258	1.211	1.194	1.263	6.93
21)	T	Hexachloroethane	0.367	0.490	0.491	0.468	0.488	0.489	0.466	10.49
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.314	0.301	0.311	0.292	0.327	0.372	0.320	8.88
25)	T	Nitrobenzene	0.380	0.282	0.299	0.280	0.276	0.302	0.303	12.90
26)	T	Isophorone	0.643	0.534	0.563	0.557	0.553	0.573	0.570	6.60
27)	TC	2-Nitrophenol	0.218	0.196	0.214	0.192	0.214	0.207	0.207	5.09
28)	T	2,4-Dimethylpheno	0.378	0.333	0.357	0.332	0.343	0.363	0.351	5.14
29)	T	Bis(2-chloroethox	0.417	0.333	0.339	0.351	0.340	0.350	0.355	8.76
30)	T	Benzoic acid	0.142	0.149	0.159	0.145	0.164	0.145	0.151	5.90
31)	T	2,4-Dimethylanili	0.425	0.375	0.397	0.385	0.404	0.406	0.399	4.46
32)	TC	2,4-Dichloropheno	0.336	0.316	0.321	0.306	0.332	0.317	0.321	3.43
33)	M	1,2,4-Trichlorobe	0.420	0.345	0.355	0.347	0.342	0.357	0.361	8.18
34)	T	Naphthalene	1.288	1.049	1.100	1.033	1.113	1.124	1.118	8.14
35)	T	4-Chloroaniline	0.623	0.526	0.568	0.584	0.562	0.583	0.574	5.57
36)	T	4-Aminotoluene	0.640	0.545	0.584	0.555	0.564	0.611	0.583	6.27
37)	TC	Hexachlorobutadie	0.225	0.178	0.193	0.191	0.193	0.188	0.195	8.01
38)	T	Caprolactam	0.080	0.096	0.099	0.097	0.093	0.097	0.094	7.63
39)	T	2-Aminotoluene	0.640	0.545	0.584	0.555	0.564	0.611	0.583	6.27
40)	MC	4-Chloro-3-methyl	0.385	0.305	0.314	0.296	0.296	0.307	0.317	10.69
41)	T	2-Methylnaphthale	0.854	0.721	0.757	0.792	0.736	0.740	0.767	6.41
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.134	0.130	0.138	0.138	0.123	0.155	0.136	7.91
45)	TC	2,4,6-Trichloroph	0.471	0.379	0.386	0.373	0.382	0.364	0.392	9.95
46)	T	2,4,5-Trichloroph	0.397	0.379	0.377	0.434	0.395	0.374	0.393	5.70
47)	S	2-Fluorobiphenyl	1.446	1.397	1.409	1.332	1.392	1.355	1.388	2.90
48)	T	1,1'-Biphenyl	1.710	1.436	1.445	1.570	1.493	1.357	1.502	8.25
49)	T	2-Chloronaphthale	1.209	1.079	1.105	1.108	1.133	1.043	1.113	5.05
50)	T	2-Nitroaniline	0.232	0.206	0.214	0.235	0.228	0.213	0.221	5.33
51)	T	Dimethyl phthalat	1.506	1.207	1.247	1.258	1.292	1.206	1.286	8.78

52)	T	2,6-Dinitrotoluen	0.262	0.238	0.258	0.261	0.263	0.281	0.261	5.25
53)	T	Acenaphthylene	1.983	1.739	1.796	1.775	1.821	1.768	1.814	4.82
54)	T	3-Nitroaniline	0.313	0.278	0.285	0.311	0.287	0.278	0.292	5.39
55)	MC	Acenaphthene	1.332	1.124	1.159	1.110	1.161	1.093	1.163	7.48
56)	TP	2,4-Dinitrophenol	0.119	0.091	0.087	0.107	0.111	0.115	0.105	12.53
57)	MP	4-Nitrophenol	0.196	0.171	0.162	0.171	0.165	0.158	0.170	8.05
58)	M	2,4-Dinitrotoluen	0.327	0.302	0.333	0.353	0.354	0.350	0.336	6.00
59)	T	Dibenzofuran	1.844	1.575	1.599	1.747	1.635	1.524	1.654	7.21
60)	T	Diethyl phthalate	1.418	1.143	1.176	1.191	1.148	1.134	1.202	9.01
61)	T	Fluorene	1.486	1.291	1.310	1.303	1.304	1.285	1.330	5.81
62)	T	4-Chlorophenyl ph	0.760	0.668	0.639	0.699	0.638	0.628	0.672	7.49
63)	T	4-Nitroaniline	0.297	0.287	0.287	0.331	0.301	0.298	0.300	5.42
64)		1,2,4,5-Tetrachlo	0.642	0.567	0.592	0.627	0.582	0.540	0.592	6.40
65)	T	2,3,4,6-Tetrachlo	0.376	0.352	0.266	0.330	0.321	0.304	0.325	11.82
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.084	0.092	0.108	0.123	0.127	0.136	0.111	18.48
68)	TC	N-Nitrosodiphenyl	0.618	0.547	0.569	0.615	0.593	0.581	0.587	4.63
69)	T	1,2-Diphenylhydra	0.661	0.554	0.620	0.584	0.624	0.608	0.609	5.99
70)	S	2,4,6-Tribromophe	0.151	0.159	0.165	0.158	0.162	0.162	0.159	2.90
71)	T	4-Bromophenyl phe	0.307	0.235	0.255	0.273	0.256	0.245	0.262	9.75
72)	T	Hexachlorobenzene	0.330	0.283	0.299	0.293	0.289	0.274	0.295	6.56
73)	T	Atrazine	0.210	0.208	0.223	0.183	0.228	0.214	0.211	7.50
74)	MC	Pentachlorophenol	0.137	0.146	0.165	0.168	0.173	0.174	0.160	9.59
75)	T	Phenanthrene	1.352	1.117	1.135	1.122	1.133	1.070	1.155	8.61
76)	T	Anthracene	1.329	1.087	1.132	1.148	1.125	1.071	1.149	8.08
77)	T	Carbazole	1.134	0.980	0.987	1.029	0.984	0.930	1.007	6.91
78)	T	Di-n-butyl phthal	1.285	1.114	1.165	1.199	1.168	1.148	1.180	4.99
79)	TC	Fluoranthene	1.406	1.172	1.179	1.161	1.155	1.108	1.197	8.80
80)	T	Benzidine	0.490	0.499	0.578	0.589	0.453	0.455	0.511	11.60
81)		4-Aminoaniline							0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.398	1.243	1.305	1.375	1.308	1.164	1.299	6.64
84)	S	Terphenyl-d14	1.131	1.117	1.140	1.146	1.131	0.991	1.109	5.28
85)	T	3,3'-Dimethylbenz	0.579	0.648	0.616	0.496	0.582	0.492	0.569	11.10
86)	T	Butyl benzyl phth	0.576	0.490	0.496	0.538	0.498	0.449	0.508	8.63
87)	T	3,3'-Dichlorobenz	0.397	0.380	0.395	0.425	0.388	0.319	0.384	9.20
88)	T	Benzo[a]anthracen	1.311	1.066	1.109	1.184	1.104	1.030	1.134	8.89
89)	T	Chrysene	1.133	1.044	1.045	1.093	1.049	0.962	1.054	5.42
90)	T	Bis(2-ethylhexyl)	0.736	0.642	0.684	0.750	0.697	0.638	0.691	6.72
91)	T	3,3'-Dimethoxyben							0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	1.649	1.377	1.460	1.669	1.307	1.231	1.449	12.41
94)	T	Benzo[b]fluoranth	1.448	1.289	1.490	1.727	1.327	1.472	1.459	10.59
95)	T	Benzo[k]fluoranth	1.498	1.495	1.293	1.490	1.403	1.103	1.380	11.41
96)	TC	Benzo[a]pyrene	1.458	1.257	1.309	1.561	1.322	1.242	1.358	9.23
97)	T	Indeno[1,2,3-cd]p	1.689	1.508	1.685	1.967	1.732	1.635	1.703	8.85
98)	T	Dibenz[a,h]anthra	1.375	1.262	1.321	1.661	1.427	1.331	1.396	10.09
99)	T	Benzo[g,h,i]peryl	1.347	1.265	1.399	1.664	1.446	1.353	1.412	9.71

(#) = Out of Range

CS0415.M Wed Feb 11 11:39:35 2015 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00
2	T	N-Nitrosodimethylamine	0.647	0.640	1.1	112	0.00
3	T	Pyridine	0.737	0.652	11.5	112	0.00
4	S	2-Fluorophenol	1.226	1.177	4.0	108	0.00
5	T	Benzaldehyde	0.657	0.765	-16.4	92	0.00
6	S	Phenol-d5	1.494	1.417	5.2	111	0.00
7	MC	Phenol	1.572	1.567	0.3	115	0.00
8	T	Aniline	0.646	0.646	0.0	114	0.00
9	T	Bis(2-chloroethyl) ether	0.720	0.703	2.4	113	0.00
10	M	2-Chlorophenol	1.425	1.337	6.2	109	0.00
11	T	1,3-Dichlorobenzene	1.615	1.574	2.5	110	0.00
12	MC	1,4-Dichlorobenzene	1.607	1.543	4.0	108	0.00
13	T	Benzyl alcohol	0.891	0.880	1.2	109	0.00
14	T	1,2-Dichlorobenzene	1.542	1.483	3.8	110	0.00
15	T	2-Methylphenol	0.951	0.881	7.4	82	-0.04
16	T	Bis(2-chloroisopropyl) ethe	1.060	1.099	-3.7	115	0.00
17	T	4-Methylphenol	1.262	1.268	-0.5	110	0.00
18	MP	N-Nitrosodi-n-propylamine	0.790	0.820	-3.8	116	0.00
19	T	Acetophenone	1.746	1.730	0.9	111	0.00
20	T	3-Methylphenol	1.263	1.268	-0.4	110	0.00
21	T	Hexachloroethane	0.466	0.473	-1.5	110	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	112	0.00
24	S	Nitrobenzene-d5	0.320	0.297	7.2	113	0.00
25	T	Nitrobenzene	0.303	0.296	2.3	118	0.00
26	T	Isophorone	0.570	0.545	4.4	109	0.00
27	TC	2-Nitrophenol	0.207	0.199	3.9	115	0.00
28	T	2,4-Dimethylphenol	0.351	0.344	2.0	115	0.00
29	T	Bis(2-chloroethoxy) methane	0.355	0.332	6.5	106	0.00
30	T	Benzoic acid	0.151	0.171	-13.2	131	0.00
31	T	2,4-Dimethylaniline	0.399	0.381	4.5	110	0.00
32	TC	2,4-Dichlorophenol	0.321	0.301	6.2	110	0.00
33	M	1,2,4-Trichlorobenzene	0.361	0.340	5.8	109	0.00
34	T	Naphthalene	1.118	1.040	7.0	112	0.00
35	T	4-Chloroaniline	0.574	0.567	1.2	108	0.00
36	T	4-Aminotoluene	0.583	0.549	5.8	110	0.00
37	TC	Hexachlorobutadiene	0.195	0.191	2.1	111	0.00
38	T	Caprolactam	0.094	0.099	-5.3	113	0.00
39	T	2-Aminotoluene	0.583	0.549	5.8	110	0.00
40	MC	4-Chloro-3-methylphenol	0.317	0.294	7.3	111	0.00
41	T	2-Methylnaphthalene	0.767	0.771	-0.5	109	-0.01
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	112	-0.02
44	TP	Hexachlorocyclopentadiene	0.136	0.164	-20.6	133	-0.01
45	TC	2,4,6-Trichlorophenol	0.392	0.363	7.4	109	-0.01
46	T	2,4,5-Trichlorophenol	0.393	0.421	-7.1	108	-0.01

47	S	2-Fluorobiphenyl	1.388	1.315	5.3	111	-0.01
48	T	1,1'-Biphenyl	1.502	1.574	-4.8	112	-0.01
49	T	2-Chloronaphthalene	1.113	1.077	3.2	109	-0.01
50	T	2-Nitroaniline	0.221	0.246	-11.3	117	-0.01
51	T	Dimethyl phthalate	1.286	1.246	3.1	111	-0.01
52	T	2,6-Dinitrotoluene	0.261	0.272	-4.2	117	-0.02
53	T	Acenaphthylene	1.814	1.745	3.8	110	-0.01
54	T	3-Nitroaniline	0.292	0.299	-2.4	107	-0.02
55	MC	Acenaphthene	1.163	1.116	4.0	113	-0.02
56	TP	2,4-Dinitrophenol	0.105	0.109	-3.8	114	-0.02
57	MP	4-Nitrophenol	0.170	0.159	6.5	104	-0.02
58	M	2,4-Dinitrotoluene	0.336	0.355	-5.7	113	-0.02
59	T	Dibenzofuran	1.654	1.672	-1.1	107	-0.02
60	T	Diethyl phthalate	1.202	1.146	4.7	108	-0.02
61	T	Fluorene	1.330	1.303	2.0	112	-0.02
62	T	4-Chlorophenyl phenyl ether	0.672	0.681	-1.3	109	-0.02
63	T	4-Nitroaniline	0.300	0.323	-7.7	109	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.592	0.612	-3.4	109	-0.01
65	T	2,3,4,6-Tetrachlorophenol	0.325	0.331	-1.8	112	-0.02
66	I	Phenanthrene-d10	1.000	1.000	0.0	109	-0.04
67	T	4,6-Dinitro-2-methylphenol	0.111	0.130	-17.1	115	-0.03
68	TC	N-Nitrosodiphenylamine	0.587	0.618	-5.3	110	-0.03
69	T	1,2-Diphenylhydrazine	0.609	0.573	5.9	107	-0.03
70	S	2,4,6-Tribromophenol	0.159	0.155	2.5	107	-0.03
71	T	4-Bromophenyl phenyl ether	0.262	0.266	-1.5	106	-0.03
72	T	Hexachlorobenzene	0.295	0.292	1.0	109	-0.03
73	T	Atrazine	0.211	0.175	17.1	104	-0.03
74	MC	Pentachlorophenol	0.160	0.162	-1.3	105	-0.04
75	T	Phenanthrene	1.155	1.103	4.5	107	-0.04
76	T	Anthracene	1.149	1.139	0.9	108	-0.04
77	T	Carbazole	1.007	0.992	1.5	105	-0.04
78	T	Di-n-butyl phthalate	1.180	1.182	-0.2	107	-0.05
79	TC	Fluoranthene	1.197	1.116	6.8	105	-0.06
80	T	Benzidine	0.511	0.505	1.2	85	0.04
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	102	-0.05
83	M	Pyrene	1.299	1.414	-8.9	105	-0.06
84	S	Terphenyl-d14	1.109	1.172	-5.7	104	-0.07
85	T	3,3'-Dimethylbenzidine	0.569	0.630	-10.7	142	-0.03
86	T	Butyl benzyl phthalate	0.508	0.530	-4.3	100	-0.07
87	T	3,3'-Dichlorobenzidine	0.384	0.414	-7.8	99	-0.06
88	T	Benzo[a]anthracene	1.134	1.149	-1.3	99	-0.06
89	T	Chrysene	1.054	1.124	-6.6	105	-0.05
90	T	Bis(2-ethylhexyl) phthalate	0.691	0.752	-8.8	102	-0.05
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	95	-0.04
93	TC	Di-n-octyl phthalate	1.449	1.708	-17.9	97	-0.05
94	T	Benzo[b]fluoranthene	1.459	1.576	-8.0	87	-0.05
95	T	Benzo[k]fluoranthene	1.380	1.645	-19.2	105	-0.05
96	TC	Benzo[a]pyrene	1.358	1.585	-16.7	96	-0.05
97	T	Indeno[1,2,3-cd]pyrene	1.703	1.974	-15.9	95	-0.04
98	T	Dibenz[a,h]anthracene	1.396	1.599	-14.5	91	-0.04
99	T	Benzo[g,h,i]perylene	1.412	1.651	-16.9	94	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0415.M Wed Feb 11 11:41:03 2015 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	0.647	0.661	-2.2	104	0.00
3	T	Pyridine	0.737	0.683	7.3	105	0.00
4	S	2-Fluorophenol	1.226	1.178	3.9	97	0.00
5	T	Benzaldehyde	0.657	0.799	-21.6	94	0.00
6	S	Phenol-d5	1.494	1.432	4.1	101	0.00
7	MC	Phenol	1.572	1.583	-0.7	105	0.00
8	T	Aniline	0.646	0.634	1.9	100	0.00
9	T	Bis(2-chloroethyl) ether	0.720	0.712	1.1	103	0.00
10	M	2-Chlorophenol	1.425	1.352	5.1	99	0.00
11	T	1,3-Dichlorobenzene	1.615	1.606	0.6	101	0.00
12	MC	1,4-Dichlorobenzene	1.607	1.559	3.0	99	0.00
13	T	Benzyl alcohol	0.891	0.878	1.5	97	0.00
14	T	1,2-Dichlorobenzene	1.542	1.499	2.8	100	0.00
15	T	2-Methylphenol	0.951	1.230	-29.3	103	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.060	1.074	-1.3	101	0.00
17	T	4-Methylphenol	1.262	1.308	-3.6	102	0.00
18	MP	N-Nitrosodi-n-propylamine	0.790	0.805	-1.9	103	0.00
19	T	Acetophenone	1.746	1.765	-1.1	102	0.00
20	T	3-Methylphenol	1.263	1.308	-3.6	102	0.00
21	T	Hexachloroethane	0.466	0.472	-1.3	99	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
24	S	Nitrobenzene-d5	0.320	0.298	6.9	102	0.00
25	T	Nitrobenzene	0.303	0.287	5.3	102	0.00
26	T	Isophorone	0.570	0.570	0.0	102	0.00
27	TC	2-Nitrophenol	0.207	0.201	2.9	104	0.00
28	T	2,4-Dimethylphenol	0.351	0.339	3.4	101	0.00
29	T	Bis(2-chloroethoxy) methane	0.355	0.338	4.8	96	0.00
30	T	Benzoic acid	0.151	0.134	11.3	92	0.00
31	T	2,4-Dimethylaniline	0.399	0.386	3.3	100	0.00
32	TC	2,4-Dichlorophenol	0.321	0.312	2.8	102	0.00
33	M	1,2,4-Trichlorobenzene	0.361	0.348	3.6	100	0.00
34	T	Naphthalene	1.118	1.069	4.4	103	0.00
35	T	4-Chloroaniline	0.574	0.579	-0.9	99	0.00
36	T	4-Aminotoluene	0.583	0.544	6.7	98	0.00
37	TC	Hexachlorobutadiene	0.195	0.186	4.6	97	0.00
38	T	Caprolactam	0.094	0.100	-6.4	102	0.00
39	T	2-Aminotoluene	0.583	0.544	6.7	98	0.00
40	MC	4-Chloro-3-methylphenol	0.317	0.297	6.3	100	0.00
41	T	2-Methylnaphthalene	0.767	0.794	-3.5	100	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
44	TP	Hexachlorocyclopentadiene	0.136	0.121	11.0	88	0.00
45	TC	2,4,6-Trichlorophenol	0.392	0.372	5.1	100	0.00

46	T	2,4,5-Trichlorophenol	0.393	0.427	-8.7	98	0.00
47	S	2-Fluorobiphenyl	1.388	1.296	6.6	97	0.00
48	T	1,1'-Biphenyl	1.502	1.559	-3.8	99	0.00
49	T	2-Chloronaphthalene	1.113	1.125	-1.1	102	0.00
50	T	2-Nitroaniline	0.221	0.249	-12.7	106	0.00
51	T	Dimethyl phthalate	1.286	1.266	1.6	101	0.00
52	T	2,6-Dinitrotoluene	0.261	0.278	-6.5	106	0.00
53	T	Acenaphthylene	1.814	1.800	0.8	101	0.00
54	T	3-Nitroaniline	0.292	0.319	-9.2	102	0.00
55	MC	Acenaphthene	1.163	1.101	5.3	99	0.00
56	TP	2,4-Dinitrophenol	0.105	0.106	-1.0	99	0.00
57	MP	4-Nitrophenol	0.170	0.158	7.1	93	0.00
58	M	2,4-Dinitrotoluene	0.336	0.359	-6.8	102	0.00
59	T	Dibenzofuran	1.654	1.755	-6.1	100	0.00
60	T	Diethyl phthalate	1.202	1.172	2.5	98	0.00
61	T	Fluorene	1.330	1.320	0.8	101	0.00
62	T	4-Chlorophenyl phenyl ether	0.672	0.698	-3.9	100	0.00
63	T	4-Nitroaniline	0.300	0.346	-15.3	104	0.00
64		1,2,4,5-Tetrachlorobenzene	0.592	0.617	-4.2	98	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.325	0.339	-4.3	103	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.00
67	T	4,6-Dinitro-2-methylphenol	0.111	0.123	-10.8	101	0.00
68	TC	N-Nitrosodiphenylamine	0.587	0.621	-5.8	102	0.00
69	T	1,2-Diphenylhydrazine	0.609	0.571	6.2	98	0.00
70	S	2,4,6-Tribromophenol	0.159	0.155	2.5	99	0.00
71	T	4-Bromophenyl phenyl ether	0.262	0.262	0.0	97	0.00
72	T	Hexachlorobenzene	0.295	0.293	0.7	101	0.00
73	T	Atrazine	0.211	0.159	24.6	88	0.00
74	MC	Pentachlorophenol	0.160	0.162	-1.3	97	0.00
75	T	Phenanthrene	1.155	1.131	2.1	101	0.00
76	T	Anthracene	1.149	1.160	-1.0	102	0.00
77	T	Carbazole	1.007	1.067	-6.0	104	-0.01
78	T	Di-n-butyl phthalate	1.180	1.187	-0.6	100	-0.01
79	TC	Fluoranthene	1.197	1.219	-1.8	106	-0.01
80	T	Benzidine	0.511	0.566	-10.8	94	0.11
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	110	0.00
83	M	Pyrene	1.299	1.308	-0.7	105	-0.01
84	S	Terphenyl-d14	1.109	1.088	1.9	104	-0.01
85	T	3,3'-Dimethylbenzidine	0.569	0.655	-15.1	155	0.06
86	T	Butyl benzyl phthalate	0.508	0.512	-0.8	105	-0.01
87	T	3,3'-Dichlorobenzidine	0.384	0.408	-6.2	105	0.00
88	T	Benzo[a]anthracene	1.134	1.128	0.5	105	-0.01
89	T	Chrysene	1.054	1.114	-5.7	112	0.00
90	T	Bis(2-ethylhexyl) phthalate	0.691	0.725	-4.9	106	0.00
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	110	0.00
93	TC	Di-n-octyl phthalate	1.449	1.661	-14.6	109	0.00
94	T	Benzo[b]fluoranthene	1.459	1.642	-12.5	105	0.00
95	T	Benzo[k]fluoranthene	1.380	1.554	-12.6	115	0.00
96	TC	Benzo[a]pyrene	1.358	1.544	-13.7	109	0.00
97	T	Indeno[1,2,3-cd]pyrene	1.703	1.888	-10.9	106	0.00
98	T	Dibenz[a,h]anthracene	1.396	1.580	-13.2	105	0.00
99	T	Benzo[g,h,i]perylene	1.412	1.628	-15.3	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0415.M Fri Feb 20 12:53:13 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	128878	40.00	UG		0.00
23) Naphthalene-d8	3.03	136	491089	40.00	UG		0.01
43) Acenaphthene-d10	3.86	164	306133	40.00	UG		0.03
66) Phenanthrene-d10	4.64	188	510793	40.00	UG		0.05
82) Chrysene-d12	6.42	240	443021	40.00	UG		0.07
92) Perylene-d12	7.78	264	309002	40.00	UG		0.09
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	383205	99.84	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 99.84%				
6) Phenol-d5	2.30	99	447903	97.36	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 97.36%				
24) Nitrobenzene-d5	2.71	82	179263	45.14	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 90.28%				
47) 2-Fluorobiphenyl	3.50	172	509736	47.08	UG		0.02
Spiked Amount 50.000	Range 34 - 96		Recovery = 94.16%				
70) 2,4,6-Tribromophenol	4.26	330	201288	92.73	UG		0.04
Spiked Amount 100.000	Range 32 - 112		Recovery = 92.73%				
84) Terphenyl-d14	5.58	244	634491	48.54	UG		0.10
Spiked Amount 50.000	Range 19 - 118		Recovery = 97.08%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	80175	37.17	UG	#	37
3) Pyridine	1.46	52	81884	32.79	UG	#	81
7) Phenol	2.30	94	190432	37.84	UG	#	27
8) Aniline	2.34	66	79821	41.80	UG		89
9) Bis(2-chloroethyl) ether	2.34	63	87363	38.08	UG	#	69
10) 2-Chlorophenol	2.40	128	172154	35.79	UG		91
11) 1,3-Dichlorobenzene	2.46	146	201044	37.59	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	199717	38.73	UG	#	80
13) Benzyl alcohol	2.51	108	113838	40.31	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	189890	38.35	UG		93
15) 2-Methylphenol	2.55	108	150594	46.37	UG		83
16) Bis(2-chloroisopropyl) eth	2.57	45	133922	41.59	UG	#	93
17) 4-Methylphenol	2.61	108	162273	39.90	UG		96
18) N-Nitrosodi-n-propylamine	2.63	70	98825	40.05	UG	#	88
19) Acetophenone	2.64	105	219078	40.12	UG	#	1
20) 3-Methylphenol	2.61	108	162171	39.94	UG		95
21) Hexachloroethane	2.70	117	60257	35.86	UG		90
25) Nitrobenzene	2.71	77	137560	38.75	UG	#	85
26) Isophorone	2.81	82	273322	38.54	UG		92
27) 2-Nitrophenol	2.85	139	94514	34.22	UG	#	71
28) 2,4-Dimethylphenol	2.84	107	163260	36.11	UG		88
29) Bis(2-chloroethoxy) methan	2.88	93	172384	40.35	UG		97
30) Benzoic acid	2.87	122	71439m	39.68	UG		
31) 2,4-Dimethylaniline	2.93	121	188884	36.87	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	150431	35.61	UG		98
33) 1,2,4-Trichlorobenzene	3.00	180	170351	36.80	UG		99
34) Naphthalene	3.03	128	507301	34.50	UG		95
35) 4-Chloroaniline	3.04	127	286924	40.07	UG		96
36) 4-Aminotoluene	2.65	106	272335	37.03	UG		97
37) Hexachlorobutadiene	3.10	225	93987	36.09	UG		97
38) Caprolactam	3.18	55	47819	46.50	UG	#	74
39) 2-Aminotoluene	2.65	106	272335	37.03	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration

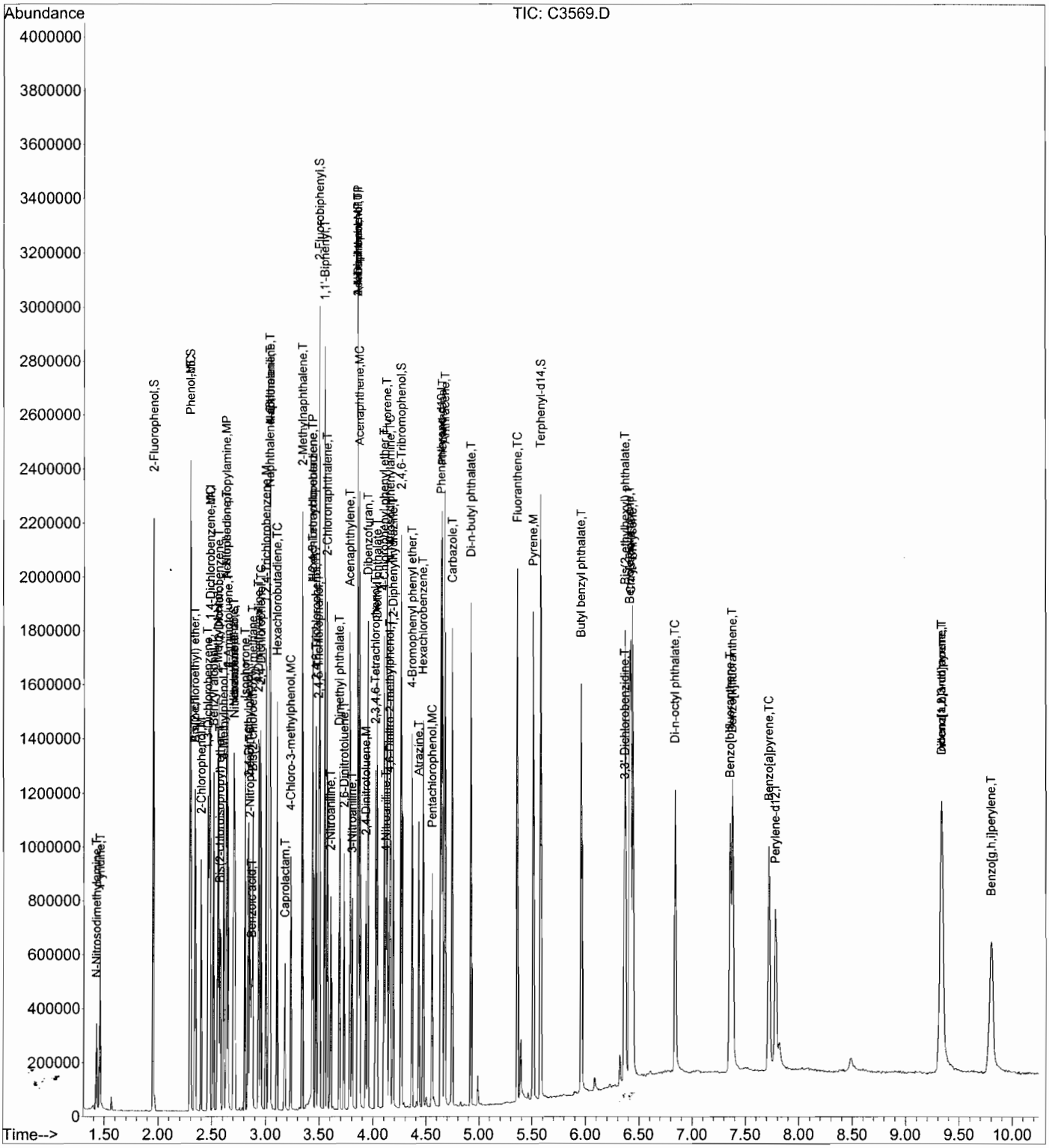
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	145384	38.34	UG		96
41) 2-Methylnaphthalene	3.34	142	389077	38.65	UG		99
44) Hexachlorocyclopentadiene	3.44	237	42148	16.08	UG	#	95
45) 2,4,6-Trichlorophenol	3.47	196	114315	35.39	UG		97
46) 2,4,5-Trichlorophenol	3.49	196	132934	42.56	UG		99
48) 1,1'-Biphenyl	3.55	154	480779	41.40	UG		98
49) 2-Chloronaphthalene	3.57	162	339332	38.61	UG		97
50) 2-Nitroaniline	3.60	65	71999	43.98	UG	#	74
51) Dimethyl phthalate	3.68	163	385090	37.58	UG		97
52) 2,6-Dinitrotoluene	3.73	165	80050	38.06	UG	#	86
53) Acenaphthylene	3.78	152	543356	38.87	UG		98
54) 3-Nitroaniline	3.80	138	95242	43.43	UG	#	96
55) Acenaphthene	3.87	153	339898	37.95	UG		96
56) 2,4-Dinitrophenol	3.86	184	32852	36.69	UG	#	1
57) 4-Nitrophenol	3.86	65	52241	43.25	UG	#	66
58) 2,4-Dinitrotoluene	3.93	165	107936	42.20	UG	#	77
59) Dibenzofuran	3.95	168	534928	42.12	UG	#	82
60) Diethyl phthalate	4.04	149	364713	39.58	UG		96
61) Fluorene	4.13	166	398830	38.29	UG		99
62) 4-Chlorophenyl phenyl ethe	4.10	204	213943	40.71	UG	#	88
63) 4-Nitroaniline	4.12	138	101386	50.56	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.44	216	191865	39.93	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.02	232	101010	33.40	UG		96
67) 4,6-Dinitro-2-methylphenol	4.15	198	62692	42.03	UG	#	74
68) N-Nitrosodiphenylamine	4.16	169	313965	41.75	UG		97
69) 1,2-Diphenylhydrazine	4.19	77	298173	39.10	UG	#	86
71) 4-Bromophenyl phenyl ether	4.36	248	139371m	39.78	UG		
72) Hexachlorobenzene	4.47	284	149690	36.26	UG	#	94
73) Atrazine	4.43	200	93252	32.37	UG		99
74) Pentachlorophenol	4.56	266	85942	35.55	UG		92
75) Phenanthrene	4.65	178	573172m	39.62	UG		
76) Anthracene	4.68	178	586339	40.54	UG		99
77) Carbazole	4.75	167	525536	43.61	UG		98
78) Di-n-butyl phthalate	4.92	149	612571	42.03	UG	#	97
79) Fluoranthene	5.36	202	593263	40.43	UG	#	91
83) Pyrene	5.51	202	609167m	40.31	UG		
86) Butyl benzyl phthalate	5.96	149	238408m	46.94	UG		
87) 3,3'-Dichlorobenzidine	6.36	252	188315	46.43	UG		98
88) Benzo[a]anthracene	6.41	228	524512	42.53	UG		100
89) Chrysene	6.44	228	484241	41.47	UG		96
90) Bis(2-ethylhexyl) phthalat	6.37	149	332352	47.62	UG		94
93) Di-n-octyl phthalate	6.84	149	515689	53.27	UG		100
94) Benzo[b]fluoranthene	7.36	252	533596	49.80	UG		99
95) Benzo[k]fluoranthene	7.38	252	460341m	45.03	UG		
96) Benzo[a]pyrene	7.72	252	482458	48.70	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.34	276	607704	47.66	UG	#	47
98) Dibenz[a,h]anthracene	9.34	278	513125	51.16	UG	#	64
99) Benzo[g,h,i]perylene	9.80	276	514236	47.68	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	120599	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	481938	40.00	UG	0.00
43) Acenaphthene-d10	3.85	164	308833	40.00	UG	0.00
66) Phenanthrene-d10	4.62	188	525203m	40.00	UG	-0.02
82) Chrysene-d12	6.40	240	530919	40.00	UG	-0.02
92) Perylene-d12	7.78	264	366392	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	373050	104.03	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 104.03%#			
6) Phenol-d5	2.30	99	454117	108.35	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 108.35%#			
24) Nitrobenzene-d5	2.71	82	189074	53.74	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 107.48%#			
47) 2-Fluorobiphenyl	3.50	172	558147	54.27	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 108.54%#			
70) 2,4,6-Tribromophenol	4.25	330	198890	96.10	UG	-0.01
Spiked Amount 100.000	Range 32 - 112		Recovery = 96.10%			
84) Terphenyl-d14	5.56	244	750898	49.38	UG	-0.02
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.76%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.43	74	1976m	1.05	UG	
3) Pyridine	1.47	52	2371m	1.24	UG	
7) Phenol	2.30	94	4861	1.09	UG	# 1
8) Aniline	2.34	66	2237	1.20	UG	96
9) Bis(2-chloroethyl) ether	2.34	63	2494	1.22	UG	# 80
10) 2-Chlorophenol	2.40	128	4000m	0.99	UG	
11) 1,3-Dichlorobenzene	2.46	146	5508	1.17	UG	# 100
12) 1,4-Dichlorobenzene	2.48	146	4907	1.05	UG	# 52
13) Benzyl alcohol	2.51	108	3155	1.18	UG	# 75
14) 1,2-Dichlorobenzene	2.56	146	5438	1.22	UG	94
15) 2-Methylphenol	2.55	108	3362m	0.95	UG	
16) Bis(2-chloroisopropyl) eth	2.57	45	3889	1.24	UG	99
17) 4-Methylphenol	2.61	108	4305	1.13	UG	98
18) N-Nitrosodi-n-propylamine	2.63	70	2669	1.15	UG	90
19) Acetophenone	2.63	105	6316	1.23	UG	# 6
20) 3-Methylphenol	2.61	108	4305	1.13	UG	96
21) Hexachloroethane	2.70	117	1108m	0.79	UG	
25) Nitrobenzene	2.71	77	4578	1.36	UG	# 89
26) Isophorone	2.81	82	7744	1.15	UG	# 89
27) 2-Nitrophenol	2.85	139	2629	1.13	UG	# 74
28) 2,4-Dimethylphenol	2.83	107	4556	1.14	UG	# 67
29) Bis(2-chloroethoxy) methan	2.87	93	5028	1.19	UG	96
30) Benzoic acid	2.85	122	1711m	0.71	UG	
31) 2,4-Dimethylaniline	2.93	121	5126	1.11	UG	# 100
32) 2,4-Dichlorophenol	2.95	162	4051	1.10	UG	# 84
33) 1,2,4-Trichlorobenzene	3.00	180	5064	1.21	UG	88
34) Naphthalene	3.03	128	15524	1.25	UG	# 82
35) 4-Chloroaniline	3.03	127	7512	1.07	UG	# 25
36) 4-Aminotoluene	2.65	106	7712	1.15	UG	97
37) Hexachlorobutadiene	3.10	225	2706	1.17	UG	94
38) Caprolactam	3.16	55	960m	0.82	UG	
39) 2-Aminotoluene	2.65	106	7712	1.15	UG	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration

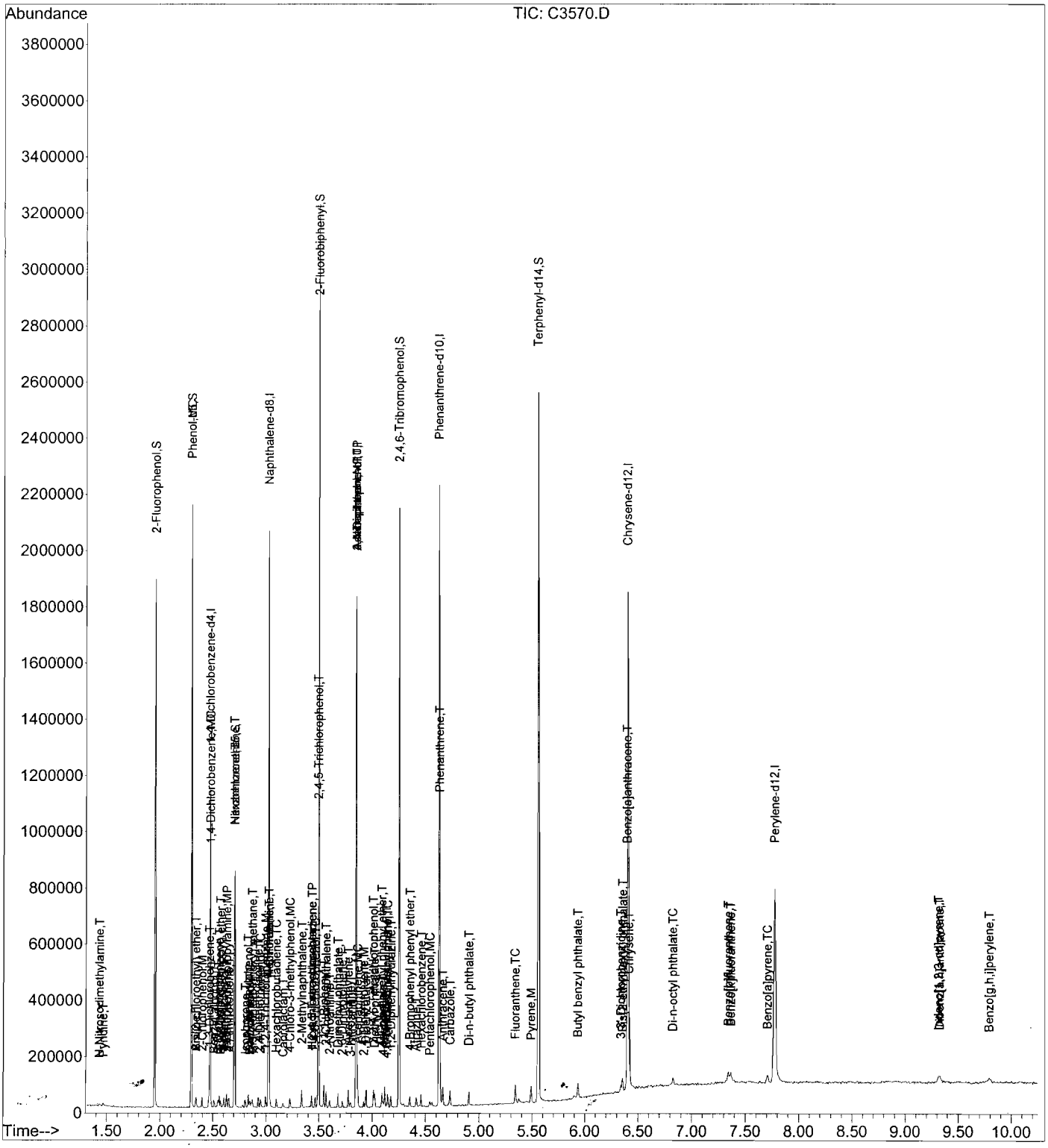
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	4637	1.30	UG	#	91
41) 2-Methylnaphthalene	3.34	142	10287	1.08	UG		100
44) Hexachlorocyclopentadiene	3.44	237	1037m	0.98	UG		
45) 2,4,6-Trichlorophenol	3.47	196	3634	1.26	UG		92
46) 2,4,5-Trichlorophenol	3.49	196	3062	0.91	UG		89
48) 1,1'-Biphenyl	3.55	154	13206	1.09	UG		96
49) 2-Chloronaphthalene	3.57	162	9338	1.09	UG		95
50) 2-Nitroaniline	3.60	65	1790	0.99	UG	#	80
51) Dimethyl phthalate	3.68	163	11631	1.20	UG	#	93
52) 2,6-Dinitrotoluene	3.72	165	2025	1.00	UG		89
53) Acenaphthylene	3.78	152	15312	1.12	UG		96
54) 3-Nitroaniline	3.80	138	2414	1.00	UG	#	87
55) Acenaphthene	3.87	153	10285	1.20	UG		95
56) 2,4-Dinitrophenol	3.85	184	922	1.11	UG	#	1
57) 4-Nitrophenol	3.84	65	1516m	1.15	UG		
58) 2,4-Dinitrotoluene	3.92	165	2528	0.93	UG	#	74
59) Dibenzofuran	3.94	168	14237	1.06	UG		88
60) Diethyl phthalate	4.02	149	10951	1.19	UG	#	89
61) Fluorene	4.12	166	11477	1.14	UG		98
62) 4-Chlorophenyl phenyl ethe	4.09	204	5870	1.09	UG		89
63) 4-Nitroaniline	4.10	138	2293	0.90	UG	#	59
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	4960	1.03	UG		95
65) 2,3,4,6-Tetrachlorophenol	4.01	232	2905m	1.14	UG		
67) 4,6-Dinitro-2-methylphenol	4.13	198	1100	0.68	UG	#	90
68) N-Nitrosodiphenylamine	4.14	169	8108	1.00	UG		96
69) 1,2-Diphenylhydrazine	4.18	77	8675m	1.13	UG		
71) 4-Bromophenyl phenyl ether	4.35	248	4035	1.13	UG	#	76
72) Hexachlorobenzene	4.46	284	4334	1.13	UG	#	89
73) Atrazine	4.42	200	2759m	1.15	UG		
74) Pentachlorophenol	4.54	266	1794	0.81	UG		93
75) Phenanthrene	4.64	178	17751m	1.20	UG		
76) Anthracene	4.66	178	17447	1.16	UG		99
77) Carbazole	4.73	167	14890	1.10	UG	#	95
78) Di-n-butyl phthalate	4.91	149	16878	1.07	UG		96
79) Fluoranthene	5.34	202	18457	1.21	UG	#	94
83) Pyrene	5.49	202	18560	1.02	UG	#	86
86) Butyl benzyl phthalate	5.93	149	7651	1.07	UG	#	88
87) 3,3'-Dichlorobenzidine	6.34	252	5268	0.93	UG	#	94
88) Benzo[a]anthracene	6.39	228	17398	1.11	UG		96
89) Chrysene	6.42	228	15033	1.04	UG		97
90) Bis(2-ethylhexyl) phthalat	6.36	149	9769	0.98	UG	#	84
93) Di-n-octyl phthalate	6.83	149	15108	0.99	UG		100
94) Benzo[b]fluoranthene	7.34	252	13266m	0.84	UG		
95) Benzo[k]fluoranthene	7.37	252	13722	1.01	UG	#	84
96) Benzo[a]pyrene	7.71	252	13356	0.93	UG	#	90
97) Indeno[1,2,3-cd]pyrene	9.32	276	15470	0.86	UG	#	37
98) Dibenz[a,h]anthracene	9.33	278	12594	0.83	UG	#	66
99) Benzo[g,h,i]perylene	9.79	276	12337	0.81	UG	#	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	121980	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	482893	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	310857	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	529904	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	511752	40.00	UG		-0.05
92) Perylene-d12	7.74	264	339678	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	372698	100.73	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 100.73%				
6) Phenol-d5	2.30	99	470486	106.54	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 106.54%				
24) Nitrobenzene-d5	2.71	82	181929	49.75	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 99.50%#				
47) 2-Fluorobiphenyl	3.49	172	542780	50.29	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 100.58%#				
70) 2,4,6-Tribromophenol	4.24	330	210222	102.68	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.68%				
84) Terphenyl-d14	5.52	244	714780	49.07	UG		-0.06
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.14%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	18802	8.54	UG	#	38
3) Pyridine	1.46	52	23440	10.81	UG	#	84
7) Phenol	2.30	94	48289	10.25	UG	#	43
8) Aniline	2.34	66	19510	9.40	UG		87
9) Bis(2-chloroethyl) ether	2.34	63	21702	9.46	UG	#	68
10) 2-Chlorophenol	2.40	128	45464	9.51	UG		91
11) 1,3-Dichlorobenzene	2.46	146	47724	9.24	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	50491	10.42	UG	#	87
13) Benzyl alcohol	2.51	108	24853	8.45	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	44788	8.96	UG		96
15) 2-Methylphenol	2.51	108	24907	7.37	UG		96
16) Bis(2-chloroisopropyl) eth	2.57	45	30209	8.51	UG		98
17) 4-Methylphenol	2.61	108	36342	8.87	UG		94
18) N-Nitrosodi-n-propylamine	2.63	70	23654	9.39	UG	#	87
19) Acetophenone	2.63	105	50097	8.66	UG	#	1
20) 3-Methylphenol	2.61	108	36764	8.98	UG		94
21) Hexachloroethane	2.70	117	14949	8.51	UG		98
25) Nitrobenzene	2.71	77	33985	8.53	UG	#	84
26) Isophorone	2.80	82	64502	8.91	UG		91
27) 2-Nitrophenol	2.85	139	23709	9.56	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	40223	9.38	UG		84
29) Bis(2-chloroethoxy) methan	2.87	93	40247	8.68	UG		97
30) Benzoic acid	2.85	122	17934m	8.72	UG		
31) 2,4-Dimethylaniline	2.93	121	45225	9.25	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	38190	9.85	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	41685	9.00	UG		97
34) Naphthalene	3.03	128	126629	9.04	UG		98
35) 4-Chloroaniline	3.03	127	63481	8.71	UG		94
36) 4-Aminotoluene	2.65	106	65765	9.12	UG		98
37) Hexachlorobutadiene	3.10	225	21540	8.58	UG		92
38) Caprolactam	3.16	55	11614m	7.99	UG		
39) 2-Aminotoluene	2.65	106	65765	9.12	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration

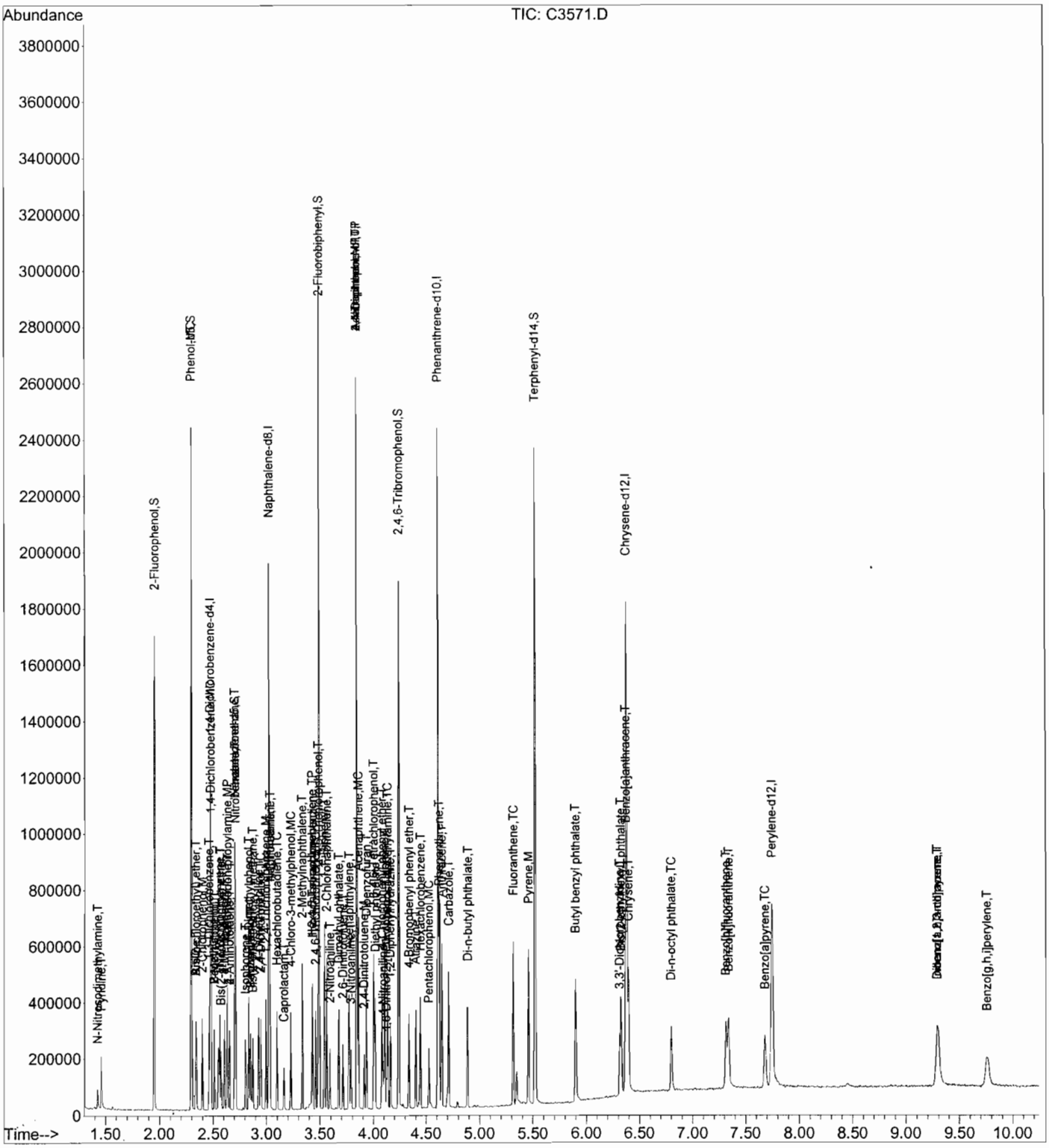
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	36790	8.95	UG		95
41) 2-Methylnaphthalene	3.33	142	87021	8.76	UG		99
44) Hexachlorocyclopentadiene	3.43	237	10117m	11.94	UG		
45) 2,4,6-Trichlorophenol	3.46	196	29429	8.97	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	29440	9.12	UG		99
48) 1,1'-Biphenyl	3.54	154	111583	8.75	UG		98
49) 2-Chloronaphthalene	3.56	162	83884	9.31	UG		98
50) 2-Nitroaniline	3.59	65	16039	8.84	UG	#	73
51) Dimethyl phthalate	3.67	163	93777	8.73	UG		98
52) 2,6-Dinitrotoluene	3.71	165	18496	9.09	UG	#	88
53) Acenaphthylene	3.77	152	135167	9.26	UG		99
54) 3-Nitroaniline	3.79	138	21643	8.93	UG	#	91
55) Acenaphthene	3.86	153	87348	9.20	UG		95
56) 2,4-Dinitrophenol	3.84	184	7052	8.00	UG	#	1
57) 4-Nitrophenol	3.83	65	13259	6.75	UG	#	75
58) 2,4-Dinitrotoluene	3.91	165	23471	8.88	UG	#	76
59) Dibenzofuran	3.93	168	122403	8.77	UG	#	83
60) Diethyl phthalate	4.02	149	88816	8.76	UG		95
61) Fluorene	4.11	166	100331	9.26	UG		98
62) 4-Chlorophenyl phenyl ethe	4.08	204	51938	9.16	UG	#	86
63) 4-Nitroaniline	4.09	138	22275	9.13	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	44083	8.94	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	27368m	6.38	UG		
67) 4,6-Dinitro-2-methylphenol	4.12	198	12180	8.90	UG	#	82
68) N-Nitrosodiphenylamine	4.13	169	72458	8.88	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	73448	8.91	UG	#	84
71) 4-Bromophenyl phenyl ether	4.34	248	31130	8.10	UG	#	84
72) Hexachlorobenzene	4.44	284	37530	9.09	UG	#	93
73) Atrazine	4.40	200	27600	9.21	UG		88
74) Pentachlorophenol	4.52	266	19356	9.58	UG		92
75) Phenanthrene	4.62	178	147996	9.03	UG		97
76) Anthracene	4.65	178	144042	8.78	UG		97
77) Carbazole	4.71	167	129818	9.06	UG		97
78) Di-n-butyl phthalate	4.89	149	147531	8.96	UG	#	97
79) Fluoranthene	5.31	202	155327	9.13	UG	#	95
83) Pyrene	5.46	202	159076	8.97	UG	#	88
86) Butyl benzyl phthalate	5.90	149	62717m	8.80	UG		
87) 3,3'-Dichlorobenzidine	6.31	252	48618	9.25	UG		98
88) Benzo[a]anthracene	6.37	228	136402	8.55	UG		98
89) Chrysene	6.40	228	133596	9.38	UG		95
90) Bis(2-ethylhexyl) phthalat	6.33	149	82186	8.64	UG		93
93) Di-n-octyl phthalate	6.80	149	116919	8.30	UG		99
94) Benzo[b]fluoranthene	7.31	252	109489m	8.12	UG		
95) Benzo[k]fluoranthene	7.34	252	126986	10.01	UG		98
96) Benzo[a]pyrene	7.68	252	106702	8.32	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.29	276	128040	8.25	UG	#	46
98) Dibenz[a,h]anthracene	9.29	278	107171	8.32	UG	#	64
99) Benzo[g,h,i]perylene	9.76	276	107453	8.40	UG	#	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	124974	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	495357	40.00	UG		0.00
43) Acenaphthene-d10	3.83	164	318422	40.00	UG		-0.02
66) Phenanthrene-d10	4.60	188	527797	40.00	UG		-0.03
82) Chrysene-d12	6.37	240	481370	40.00	UG		-0.03
92) Perylene-d12	7.73	264	324066	40.00	UG		-0.05
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	398336	104.82	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 104.82%#				
6) Phenol-d5	2.30	99	493078	106.65	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 106.65%				
24) Nitrobenzene-d5	2.71	82	192806	51.48	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 102.96%#				
47) 2-Fluorobiphenyl	3.49	172	560721	50.62	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 101.24%#				
70) 2,4,6-Tribromophenol	4.23	330	217673	105.80	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 105.80%				
84) Terphenyl-d14	5.51	244	685912	50.37	UG		-0.05
Spiked Amount 50.000	Range 19 - 118		Recovery = 100.74%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	41027	19.11	UG	#	38
3) Pyridine	1.46	52	46293m	20.29	UG		
7) Phenol	2.30	94	106912	21.97	UG	#	32
8) Aniline	2.34	66	40643	19.50	UG		86
9) Bis(2-chloroethyl) ether	2.34	63	45701	19.80	UG	#	71
10) 2-Chlorophenol	2.40	128	92286	19.15	UG		91
11) 1,3-Dichlorobenzene	2.46	146	101693	19.72	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	104441	20.75	UG	#	82
13) Benzyl alcohol	2.51	108	54117	18.93	UG	#	80
14) 1,2-Dichlorobenzene	2.56	146	96895	19.60	UG		94
15) 2-Methylphenol	2.51	108	54078	17.13	UG		99
16) Bis(2-chloroisopropyl) eth	2.57	45	64986	18.80	UG		96
17) 4-Methylphenol	2.61	108	80222	19.86	UG		93
18) N-Nitrosodi-n-propylamine	2.63	70	49984	19.77	UG	#	85
19) Acetophenone	2.63	105	109386	19.32	UG	#	1
20) 3-Methylphenol	2.61	108	79981	19.73	UG		93
21) Hexachloroethane	2.70	117	30682	17.94	UG	#	86
25) Nitrobenzene	2.71	77	74062	19.05	UG	#	85
26) Isophorone	2.81	82	139370m	19.48	UG		
27) 2-Nitrophenol	2.85	139	53115	21.20	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	88320	20.50	UG		88
29) Bis(2-chloroethoxy) methan	2.87	93	84063	18.48	UG		97
30) Benzoic acid	2.86	122	39465	19.54	UG		88
31) 2,4-Dimethylaniline	2.93	121	98338	20.11	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	79408	20.06	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	87994	19.16	UG		97
34) Naphthalene	3.03	128	272418	19.58	UG		100
35) 4-Chloroaniline	3.03	127	140705	19.66	UG		99
36) 4-Aminotoluene	2.65	106	144711	20.15	UG		98
37) Hexachlorobutadiene	3.10	225	47828	19.49	UG		97
38) Caprolactam	3.17	55	24455	21.68	UG		82
39) 2-Aminotoluene	2.65	106	144711	20.15	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration

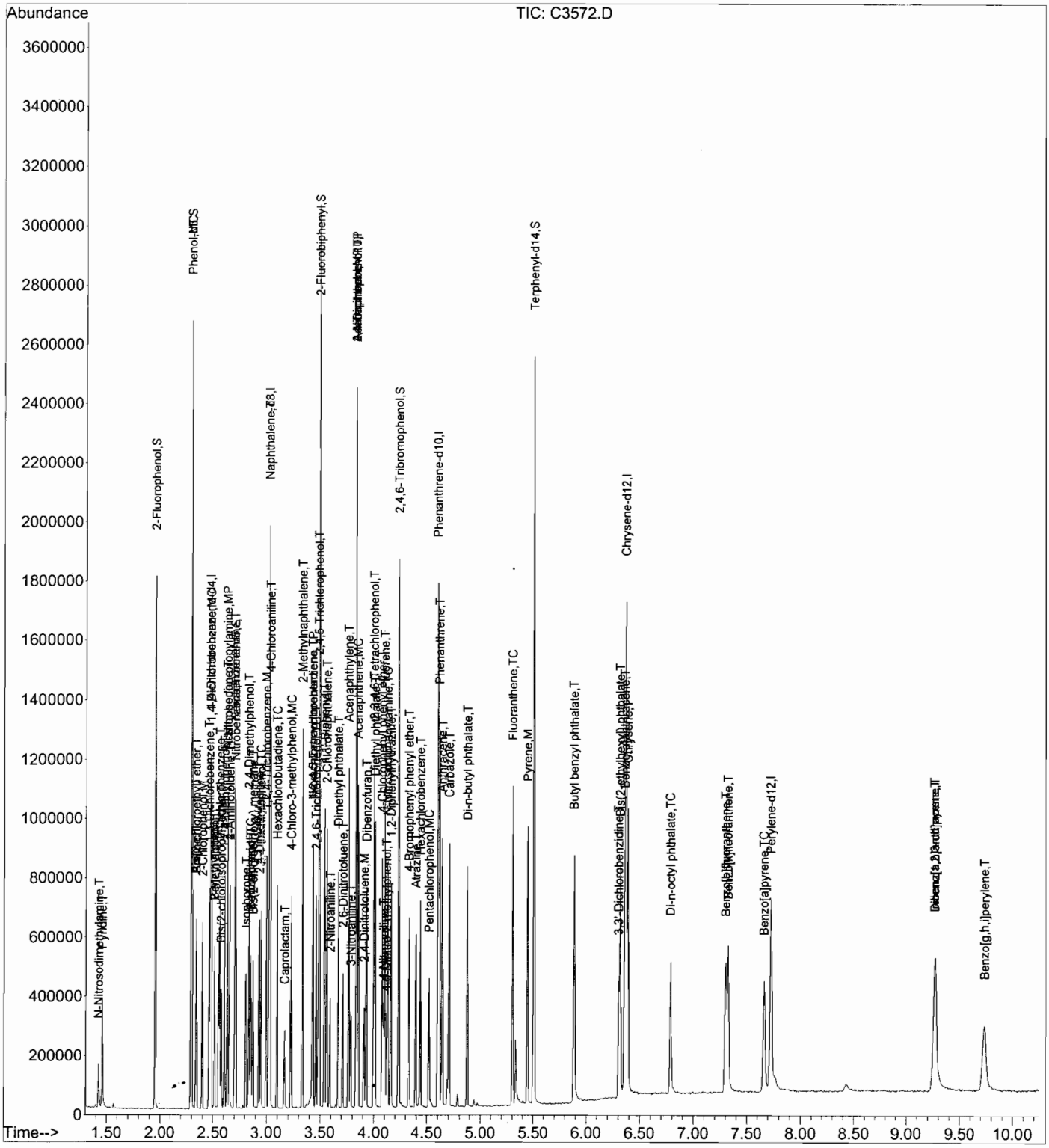
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	77816	19.13	UG		96
41) 2-Methylnaphthalene	3.33	142	187589	19.20	UG		99
44) Hexachlorocyclopentadiene	3.43	237	21981m	29.69	UG		
45) 2,4,6-Trichlorophenol	3.46	196	61397	18.92	UG		98
46) 2,4,5-Trichlorophenol	3.48	196	60079	18.72	UG		99
48) 1,1'-Biphenyl	3.54	154	230121	18.39	UG		99
49) 2-Chloronaphthalene	3.56	162	175856	19.51	UG		98
50) 2-Nitroaniline	3.59	65	34063	19.06	UG	#	73
51) Dimethyl phthalate	3.67	163	198560	18.84	UG	#	97
52) 2,6-Dinitrotoluene	3.71	165	41010	20.29	UG	#	84
53) Acenaphthylene	3.76	152	286004	19.61	UG		98
54) 3-Nitroaniline	3.79	138	45440	18.98	UG	#	94
55) Acenaphthene	3.85	153	184519	19.50	UG		94
56) 2,4-Dinitrophenol	3.83	184	13880	16.48	UG	#	1
57) 4-Nitrophenol	3.83	65	25740	18.04	UG	#	66
58) 2,4-Dinitrotoluene	3.91	165	52952	20.32	UG	#	75
59) Dibenzofuran	3.93	168	254622	18.57	UG	#	83
60) Diethyl phthalate	4.01	149	187278	18.81	UG		94
61) Fluorene	4.10	166	208551	19.26	UG		98
62) 4-Chlorophenyl phenyl ethe	4.07	204	101763	18.03	UG		89
63) 4-Nitroaniline	4.09	138	45765	18.85	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	94305	19.35	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	42297m	15.06	UG		
67) 4,6-Dinitro-2-methylphenol	4.12	198	28417	21.65	UG	#	81
68) N-Nitrosodiphenylamine	4.13	169	150154	19.19	UG		99
69) 1,2-Diphenylhydrazine	4.16	77	163729	20.69	UG	#	85
71) 4-Bromophenyl phenyl ether	4.33	248	67322	18.78	UG	#	86
72) Hexachlorobenzene	4.44	284	78864	19.78	UG	#	93
73) Atrazine	4.39	200	58722	20.21	UG		95
74) Pentachlorophenol	4.52	266	43420	21.89	UG		91
75) Phenanthrene	4.61	178	299576	18.97	UG		98
76) Anthracene	4.64	178	298749	19.06	UG		100
77) Carbazole	4.70	167	260451	18.84	UG		98
78) Di-n-butyl phthalate	4.88	149	307472	19.43	UG	#	97
79) Fluoranthene	5.30	202	311142	18.92	UG	#	94
83) Pyrene	5.45	202	314098	19.49	UG	#	88
86) Butyl benzyl phthalate	5.89	149	119374	18.54	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	94960	19.69	UG		93
88) Benzo[a]anthracene	6.36	228	266820	18.68	UG		99
89) Chrysene	6.39	228	251566	19.18	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	164588	19.28	UG		94
93) Di-n-octyl phthalate	6.79	149	236643	18.66	UG		100
94) Benzo[b]fluoranthene	7.30	252	241498m	20.03	UG		
95) Benzo[k]fluoranthene	7.32	252	209476	17.30	UG	#	96
96) Benzo[a]pyrene	7.66	252	212142	18.37	UG		98
97) Indeno[1,2,3-cd]pyrene	9.27	276	273024	19.58	UG	#	45
98) Dibenz[a,h]anthracene	9.27	278	214072	18.45	UG	#	63
99) Benzo[g,h,i]perylene	9.73	276	226747	19.63	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	117890	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	452565	40.00	UG		0.00
43) Acenaphthene-d10	3.83	164	283380	40.00	UG		0.00
66) Phenanthrene-d10	4.60	188	464948	40.00	UG		0.00
82) Chrysene-d12	6.36	240	406279	40.00	UG		-0.01
92) Perylene-d12	7.72	264	330161	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	359250	99.02	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 99.02%				
6) Phenol-d5	2.30	99	437036	98.57	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 98.57%				
24) Nitrobenzene-d5	2.71	82	184869	53.63	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 107.26%#				
47) 2-Fluorobiphenyl	3.49	172	493079	49.86	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 99.72%#				
70) 2,4,6-Tribromophenol	4.23	330	187726	102.09	UG		0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.09%				
84) Terphenyl-d14	5.50	244	574312	49.88	UG		-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 99.76%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	164601	82.20	UG	#	38
3) Pyridine	1.45	52	179565	83.14	UG	#	84
7) Phenol	2.30	94	344819	73.30	UG	#	25
8) Aniline	2.34	66	145133	74.29	UG		87
9) Bis(2-chloroethyl) ether	2.34	63	159891	73.61	UG	#	69
10) 2-Chlorophenol	2.40	128	338537	75.28	UG	#	89
11) 1,3-Dichlorobenzene	2.46	146	358464	73.95	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	384074	80.14	UG	#	81
13) Benzyl alcohol	2.51	108	208573	78.40	UG	#	75
14) 1,2-Dichlorobenzene	2.56	146	350312	75.51	UG		96
15) 2-Methylphenol	2.51	108	208573	72.64	UG		97
16) Bis(2-chloroisopropyl) eth	2.57	45	227889	70.94	UG	#	94
17) 4-Methylphenol	2.61	108	285779	75.13	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	177111	74.47	UG	#	86
19) Acetophenone	2.64	105	389973	73.63	UG	#	1
20) 3-Methylphenol	2.61	108	285430	74.90	UG		94
21) Hexachloroethane	2.70	117	115161	73.27	UG		90
25) Nitrobenzene	2.71	77	250057	71.26	UG	#	85
26) Isophorone	2.81	82	500905m	77.12	UG		
27) 2-Nitrophenol	2.85	139	193764	83.39	UG	#	69
28) 2,4-Dimethylphenol	2.83	107	310500	78.39	UG		85
29) Bis(2-chloroethoxy) methan	2.88	93	308194	75.61	UG		98
30) Benzoic acid	2.87	122	148771	81.09	UG	#	76
31) 2,4-Dimethylaniline	2.93	121	365951	81.80	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	300550	83.05	UG		97
33) 1,2,4-Trichlorobenzene	3.00	180	309824	74.63	UG		97
34) Naphthalene	3.03	128	1007636	79.69	UG		98
35) 4-Chloroaniline	3.03	127	509117	78.20	UG		96
36) 4-Aminotoluene	2.65	106	510066	77.61	UG		100
37) Hexachlorobutadiene	3.10	225	174583	78.38	UG		98
38) Caprolactam	3.18	55	84246	80.07	UG	#	74
39) 2-Aminotoluene	2.65	106	510066	77.61	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

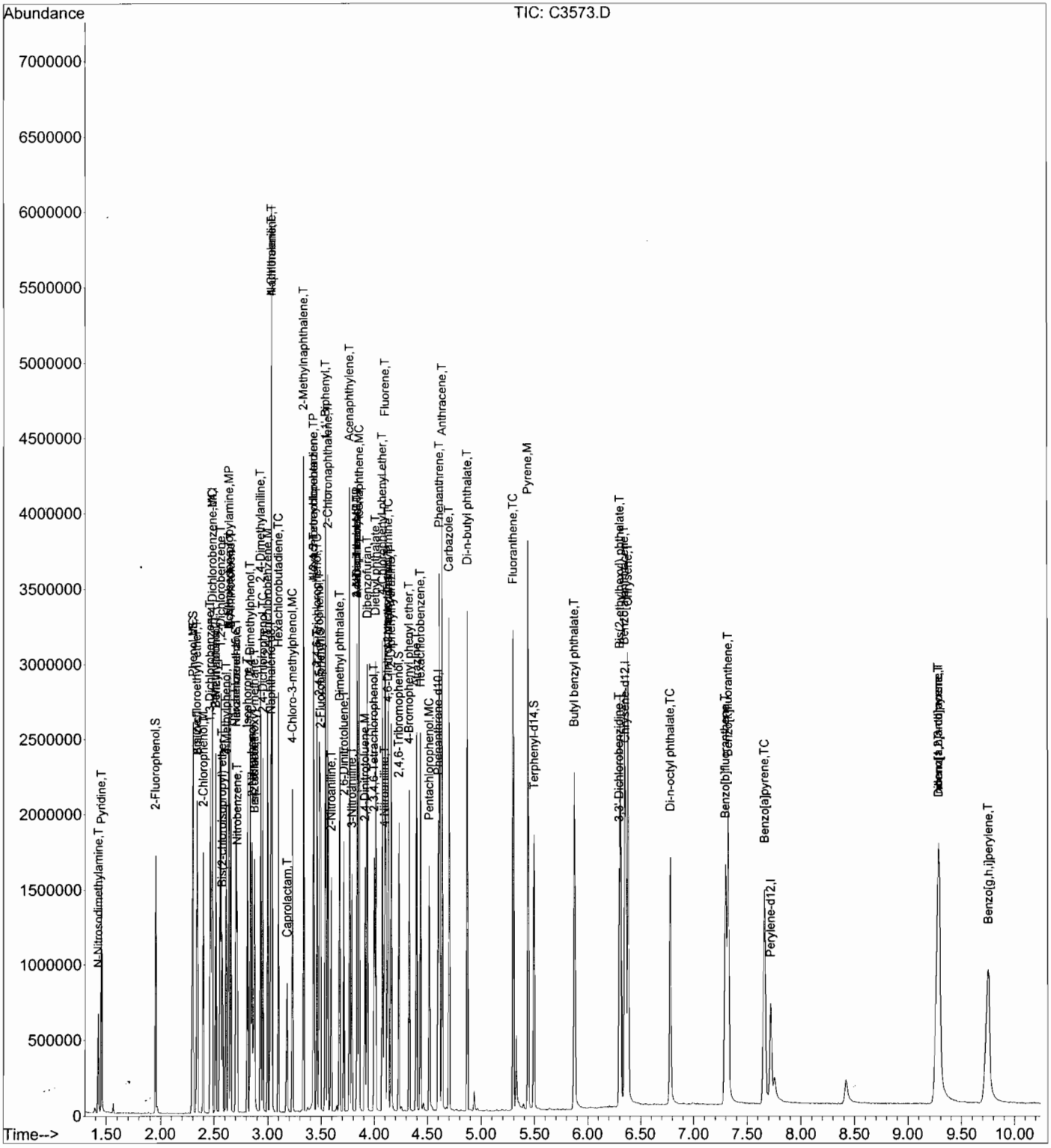
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	267840	72.85	UG		93
41) 2-Methylnaphthalene	3.33	142	666562	75.43	UG		100
44) Hexachlorocyclopentadiene	3.43	237	69451m	105.99	UG		
45) 2,4,6-Trichlorophenol	3.46	196	216736	76.08	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	223816	79.63	UG		98
48) 1,1'-Biphenyl	3.54	154	845960	77.51	UG		99
49) 2-Chloronaphthalene	3.56	162	642395	80.57	UG		99
50) 2-Nitroaniline	3.59	65	129351	82.30	UG	#	76
51) Dimethyl phthalate	3.67	163	732365	79.24	UG		97
52) 2,6-Dinitrotoluene	3.71	165	149059	82.56	UG	#	85
53) Acenaphthylene	3.76	152	1032202	79.90	UG		98
54) 3-Nitroaniline	3.79	138	162562	77.28	UG	#	96
55) Acenaphthene	3.86	153	658221	78.65	UG		95
56) 2,4-Dinitrophenol	3.84	184	62777	87.59	UG	#	1
57) 4-Nitrophenol	3.83	65	93440	75.44	UG	#	61
58) 2,4-Dinitrotoluene	3.91	165	200505	86.11	UG	#	77
59) Dibenzofuran	3.93	168	926682	77.33	UG	#	83
60) Diethyl phthalate	4.01	149	650855	74.56	UG		95
61) Fluorene	4.10	166	739131	77.42	UG		100
62) 4-Chlorophenyl phenyl ethe	4.07	204	361773	73.83	UG		90
63) 4-Nitroaniline	4.09	138	170702	80.17	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	329710	76.65	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	182137	77.67	UG		94
67) 4,6-Dinitro-2-methylphenol	4.12	198	118067	100.04	UG	#	72
68) N-Nitrosodiphenylamine	4.13	169	551199	80.78	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	580288	82.54	UG	#	84
71) 4-Bromophenyl phenyl ether	4.33	248	237933	76.50	UG	#	87
72) Hexachlorobenzene	4.43	284	268546	76.67	UG		94
73) Atrazine	4.39	200	212176	82.67	UG		99
74) Pentachlorophenol	4.51	266	160873	89.94	UG		93
75) Phenanthrene	4.61	178	1053673	76.72	UG		97
76) Anthracene	4.64	178	1046473	76.69	UG		98
77) Carbazole	4.70	167	914710	76.22	UG		98
78) Di-n-butyl phthalate	4.87	149	1085852	78.44	UG	#	97
79) Fluoranthene	5.30	202	1074356	75.17	UG	#	92
83) Pyrene	5.44	202	1062818	78.65	UG	#	86
86) Butyl benzyl phthalate	5.87	149	404690	75.86	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	315347	77.79	UG		99
88) Benzo[a]anthracene	6.35	228	897005	75.65	UG		99
89) Chrysene	6.38	228	852097	77.77	UG		97
90) Bis(2-ethylhexyl) phthalat	6.31	149	566479	79.32	UG		93
93) Di-n-octyl phthalate	6.78	149	862952	67.94	UG		100
94) Benzo[b]fluoranthene	7.30	252	875976	71.29	UG		99
95) Benzo[k]fluoranthene	7.32	252	926466	77.73	UG	#	97
96) Benzo[a]pyrene	7.66	252	873228	75.77	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.28	276	1143533	80.92	UG	#	45
98) Dibenz[a,h]anthracene	9.28	278	941988	81.25	UG	#	65
99) Benzo[g,h,i]perylene	9.75	276	954551	81.50	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	116160	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	433200	40.00	UG	0.00
43) Acenaphthene-d10	3.83	164	285658	40.00	UG	0.00
66) Phenanthrene-d10	4.60	188	452920	40.00	UG	0.00
82) Chrysene-d12	6.37	240	432931	40.00	UG	0.00
92) Perylene-d12	7.73	264	364958	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	352408	98.58	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 98.58%			
6) Phenol-d5	2.30	99	424909	97.26	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 97.26%			
24) Nitrobenzene-d5	2.71	82	201615	61.10	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 122.20%#			
47) 2-Fluorobiphenyl	3.49	172	483734	48.53	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 97.06%#			
70) 2,4,6-Tribromophenol	4.23	330	183093	102.22	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.22%			
84) Terphenyl-d14	5.50	244	536518	43.73	UG	-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 87.46%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.43	74	292941	148.47	UG	# 38
3) Pyridine	1.46	52	339860	159.70	UG	# 84
7) Phenol	2.31	94	736179	158.83	UG	# 24
8) Aniline	2.34	66	283081	147.05	UG	85
9) Bis(2-chloroethyl) ether	2.35	63	322098	150.49	UG	# 71
10) 2-Chlorophenol	2.40	128	689089	155.51	UG	91
11) 1,3-Dichlorobenzene	2.47	146	737842	154.47	UG	# 94
12) 1,4-Dichlorobenzene	2.48	146	701745	148.61	UG	# 81
13) Benzyl alcohol	2.51	108	395829	151.00	UG	# 76
14) 1,2-Dichlorobenzene	2.56	146	684239	149.68	UG	94
15) 2-Methylphenol	2.51	108	396276	140.06	UG	98
16) Bis(2-chloroisopropyl) eth	2.58	45	480902	151.94	UG	94
17) 4-Methylphenol	2.62	108	555098	148.10	UG	96
18) N-Nitrosodi-n-propylamine	2.64	70	352307	150.35	UG	# 88
19) Acetophenone	2.64	105	759855	145.61	UG	# 1
20) 3-Methylphenol	2.62	108	554869	147.78	UG	95
21) Hexachloroethane	2.70	117	227046	146.62	UG	93
25) Nitrobenzene	2.72	77	523168	155.75	UG	# 87
26) Isophorone	2.81	82	992815	159.69	UG	92
27) 2-Nitrophenol	2.85	139	358567	161.21	UG	# 70
28) 2,4-Dimethylphenol	2.84	107	628192	165.69	UG	90
29) Bis(2-chloroethoxy) methan	2.88	93	607152	155.61	UG	97
30) Benzoic acid	2.88	122	251974m	143.47	UG	
31) 2,4-Dimethylaniline	2.94	121	703901	164.37	UG	# 100
32) 2,4-Dichlorophenol	2.95	162	548846	158.43	UG	97
33) 1,2,4-Trichlorobenzene	3.00	180	618557	155.65	UG	97
34) Naphthalene	3.03	128	1946890	160.86	UG	99
35) 4-Chloroaniline	3.03	127	1009877	162.05	UG	97
36) 4-Aminotoluene	2.66	106	1058317	168.22	UG	100
37) Hexachlorobutadiene	3.10	225	326059	152.92	UG	98
38) Caprolactam	3.19	55	168837	167.64	UG	# 75
39) 2-Aminotoluene	2.66	106	1058317	168.22	UG	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

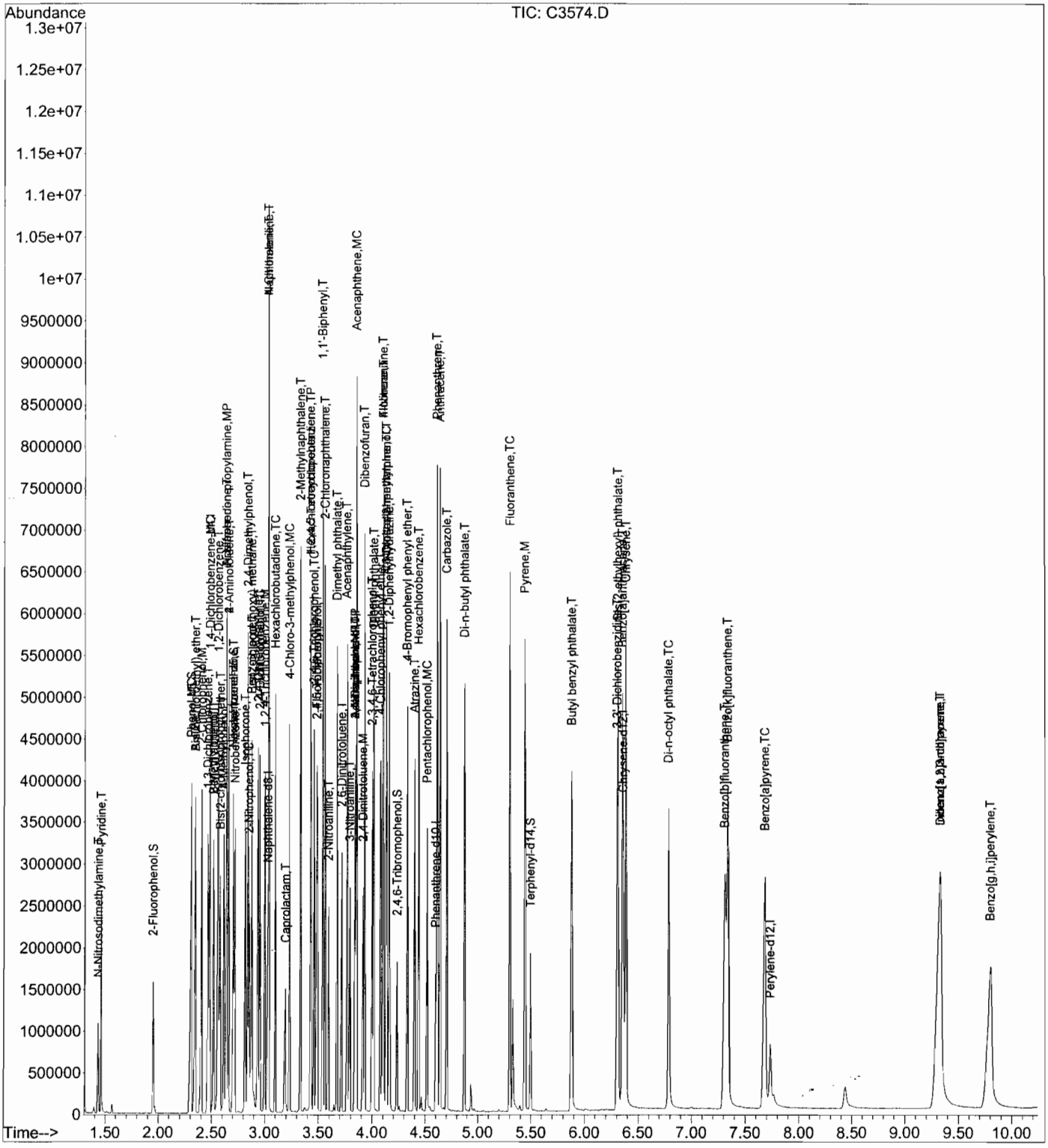
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	532304	151.25	UG		93
41) 2-Methylnaphthalene	3.33	142	1281659	151.51	UG		100
44) Hexachlorocyclopentadiene	3.43	237	176975m	267.92	UG		
45) 2,4,6-Trichlorophenol	3.46	196	415838	144.81	UG		98
46) 2,4,5-Trichlorophenol	3.49	196	427885	151.02	UG		99
48) 1,1'-Biphenyl	3.54	154	1550952	140.97	UG		99
49) 2-Chloronaphthalene	3.56	162	1192303	148.34	UG		97
50) 2-Nitroaniline	3.59	65	243383	153.63	UG	#	72
51) Dimethyl phthalate	3.67	163	1377474	147.86	UG		98
52) 2,6-Dinitrotoluene	3.72	165	320781	176.26	UG	#	82
53) Acenaphthylene	3.77	152	2019614	155.09	UG		98
54) 3-Nitroaniline	3.79	138	317754	149.85	UG		96
55) Acenaphthene	3.86	153	1248374	147.97	UG		95
56) 2,4-Dinitrophenol	3.84	184	131380	181.85	UG		59
57) 4-Nitrophenol	3.84	65	180298	144.41	UG	#	58
58) 2,4-Dinitrotoluene	3.91	165	400317	170.56	UG	#	82
59) Dibenzofuran	3.93	168	1741718	144.19	UG	#	83
60) Diethyl phthalate	4.02	149	1295327	147.20	UG		95
61) Fluorene	4.11	166	1468731	152.62	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	717797	145.32	UG	#	88
63) 4-Nitroaniline	4.10	138	340697	158.73	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	616962	142.28	UG		96
65) 2,3,4,6-Tetrachlorophenol	4.00	232	347097	146.83	UG		94
67) 4,6-Dinitro-2-methylphenol	4.13	198	246037	214.01	UG	#	65
68) N-Nitrosodiphenylamine	4.13	169	1052697	158.37	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	1101316	160.81	UG	#	84
71) 4-Bromophenyl phenyl ether	4.33	248	444567	146.74	UG	#	88
72) Hexachlorobenzene	4.44	284	496251	145.45	UG		95
73) Atrazine	4.40	200	386938	154.77	UG		99
74) Pentachlorophenol	4.52	266	314699	180.61	UG		92
75) Phenanthrene	4.61	178	1938115	144.86	UG		97
76) Anthracene	4.64	178	1940388	145.97	UG		99
77) Carbazole	4.70	167	1684819	144.12	UG		98
78) Di-n-butyl phthalate	4.88	149	2079147	154.19	UG	#	97
79) Fluoranthene	5.30	202	2006679	144.12	UG	#	92
83) Pyrene	5.44	202	2014935	139.93	UG	#	87
86) Butyl benzyl phthalate	5.88	149	777809	136.83	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	552255	127.84	UG		100
88) Benzo[a]anthracene	6.36	228	1782914	141.11	UG		100
89) Chrysene	6.39	228	1666391	142.72	UG		96
90) Bis(2-ethylhexyl) phthalat	6.31	149	1104791	145.18	UG		94
93) Di-n-octyl phthalate	6.79	149	1796941	127.98	UG		100
94) Benzo[b]fluoranthene	7.32	252	2149222	158.23	UG		95
95) Benzo[k]fluoranthene	7.34	252	1610602m	122.25	UG		
96) Benzo[a]pyrene	7.69	252	1813827	142.37	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.34	276	2387402	152.83	UG	#	45
98) Dibenz[a,h]anthracene	9.33	278	1943131	151.62	UG	#	63
99) Benzo[g,h,i]perylene	9.80	276	1974995	152.55	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1 ,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration



Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	140335	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	547618	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	342721	40.00	UG		-0.01
66) Phenanthrene-d10	4.60	188	556309	40.00	UG		-0.02
82) Chrysene-d12	6.37	240	452138	40.00	UG		-0.03
92) Perylene-d12	7.74	264	293263	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	412861	95.98	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 95.98%				
6) Phenol-d5	2.30	99	497196	94.86	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 94.86%				
24) Nitrobenzene-d5	2.71	82	203244	46.45	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 92.90%				
47) 2-Fluorobiphenyl	3.49	172	563343	47.36	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 94.72%				
70) 2,4,6-Tribromophenol	4.23	330	216157	97.55	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 97.55%				
84) Terphenyl-d14	5.51	244	662387	52.82	UG		-0.05
Spiked Amount 50.000	Range 19 - 118		Recovery = 105.64%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	89854	39.61	UG	#	39
3) Pyridine	1.46	52	91468	35.36	UG	#	82
7) Phenol	2.30	94	219911	39.88	UG	#	27
8) Aniline	2.34	66	90622	39.98	UG		94
9) Bis(2-chloroethyl) ether	2.34	63	98705	39.08	UG	#	75
10) 2-Chlorophenol	2.40	128	187616	35.56	UG		92
11) 1,3-Dichlorobenzene	2.46	146	220954	39.01	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	216575	38.41	UG	#	81
13) Benzyl alcohol	2.51	108	123527	39.51	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	208111	38.46	UG		97
15) 2-Methylphenol	2.51	108	123672	37.54	UG		100
16) Bis(2-chloroisopropyl) eth	2.57	45	154188	41.45	UG	#	93
17) 4-Methylphenol	2.61	108	177979	40.21	UG		94
18) N-Nitrosodi-n-propylamine	2.63	70	115103	41.56	UG	#	87
19) Acetophenone	2.63	105	242712	39.62	UG	#	1
20) 3-Methylphenol	2.61	108	178002	40.18	UG		94
21) Hexachloroethane	2.70	117	66375	36.50	UG		90
25) Nitrobenzene	2.71	77	161870	39.00	UG		89
26) Isophorone	2.81	82	298272	38.19	UG		92
27) 2-Nitrophenol	2.85	139	109100	38.48	UG	#	72
28) 2,4-Dimethylphenol	2.83	107	188384	39.20	UG		91
29) Bis(2-chloroethoxy) methan	2.87	93	182062	37.43	UG		96
30) Benzoic acid	2.87	122	93445m	42.73	UG		
31) 2,4-Dimethylaniline	2.93	121	208574	38.21	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	165105	37.53	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	186362	37.69	UG		97
34) Naphthalene	3.03	128	569386	37.21	UG		97
35) 4-Chloroaniline	3.03	127	310764	39.51	UG		97
36) 4-Aminotoluene	2.65	106	300831	37.69	UG		96
37) Hexachlorobutadiene	3.10	225	104400	39.15	UG		98
38) Caprolactam	3.17	55	54206	42.23	UG	#	74
39) 2-Aminotoluene	2.65	106	300831	37.69	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

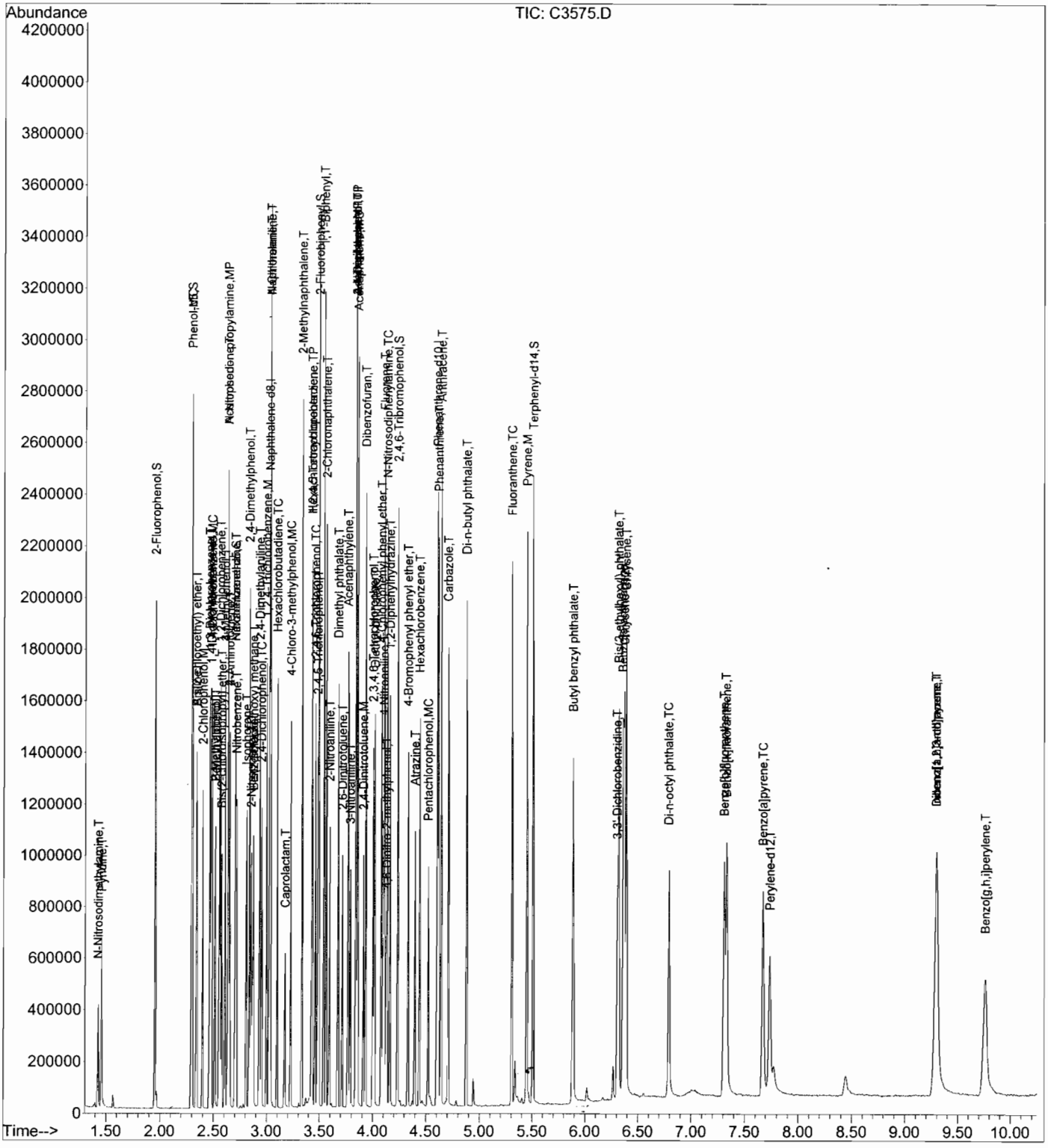
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	160998	37.08	UG		96
41) 2-Methylnaphthalene	3.33	142	422341	40.24	UG		100
44) Hexachlorocyclopentadiene	3.43	237	56059	48.01	UG		96
45) 2,4,6-Trichlorophenol	3.46	196	124561	37.04	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	144121	42.83	UG		99
48) 1,1'-Biphenyl	3.54	154	539363	41.91	UG		98
49) 2-Chloronaphthalene	3.56	162	369012	38.69	UG		97
50) 2-Nitroaniline	3.59	65	84153	44.36	UG	#	80
51) Dimethyl phthalate	3.67	163	426874	38.74	UG		98
52) 2,6-Dinitrotoluene	3.71	165	93305	41.80	UG	#	84
53) Acenaphthylene	3.77	152	598096	38.49	UG		98
54) 3-Nitroaniline	3.79	138	102353	40.90	UG		98
55) Acenaphthene	3.86	153	382482	38.38	UG		95
56) 2,4-Dinitrophenol	3.84	184	37331	41.47	UG	#	1
57) 4-Nitrophenol	3.84	65	54431	37.30	UG	#	61
58) 2,4-Dinitrotoluene	3.91	165	121660	42.20	UG	#	76
59) Dibenzofuran	3.93	168	573132	40.44	UG	#	83
60) Diethyl phthalate	4.02	149	392889	38.16	UG		94
61) Fluorene	4.11	166	446466	39.18	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	233236	40.50	UG	#	89
63) 4-Nitroaniline	4.10	138	110699	43.03	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	209866	41.39	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.00	232	113399	40.74	UG		95
67) 4,6-Dinitro-2-methylphenol	4.12	198	72092	46.50	UG	#	73
68) N-Nitrosodiphenylamine	4.13	169	343981	42.14	UG		97
69) 1,2-Diphenylhydrazine	4.16	77	318623	37.65	UG	#	86
71) 4-Bromophenyl phenyl ether	4.33	248	147768	40.57	UG	#	88
72) Hexachlorobenzene	4.44	284	162573	39.67	UG		94
73) Atrazine	4.39	200	97386	31.71	UG		100
74) Pentachlorophenol	4.52	266	90313	40.49	UG		93
75) Phenanthrene	4.61	178	613397	38.19	UG		98
76) Anthracene	4.64	178	633520	39.65	UG		98
77) Carbazole	4.70	167	551675	39.38	UG		97
78) Di-n-butyl phthalate	4.88	149	657549	40.07	UG	#	97
79) Fluoranthene	5.30	202	621012	37.31	UG	#	92
83) Pyrene	5.45	202	639408	43.55	UG	#	87
86) Butyl benzyl phthalate	5.89	149	239545	41.72	UG	#	87
87) 3,3'-Dichlorobenzidine	6.30	252	187334	43.17	UG		95
88) Benzo[a]anthracene	6.36	228	519636	40.55	UG		99
89) Chrysene	6.39	228	508094	42.63	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	340186	43.54	UG		94
93) Di-n-octyl phthalate	6.79	149	501028	47.17	UG		100
94) Benzo[b]fluoranthene	7.31	252	462305m	43.22	UG		
95) Benzo[k]fluoranthene	7.33	252	482418	47.67	UG	#	97
96) Benzo[a]pyrene	7.67	252	464959	46.69	UG		97
97) Indeno[1,2,3-cd]pyrene	9.30	276	578999	46.38	UG	#	44
98) Dibenz[a,h]anthracene	9.29	278	469061	45.83	UG	#	62
99) Benzo[g,h,i]perylene	9.76	276	484213	46.76	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3576.D
Acq On : 10 Feb 2015 13:22
Operator : EDM
Sample : ABN019-15,ICC160BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 11 11:38:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration

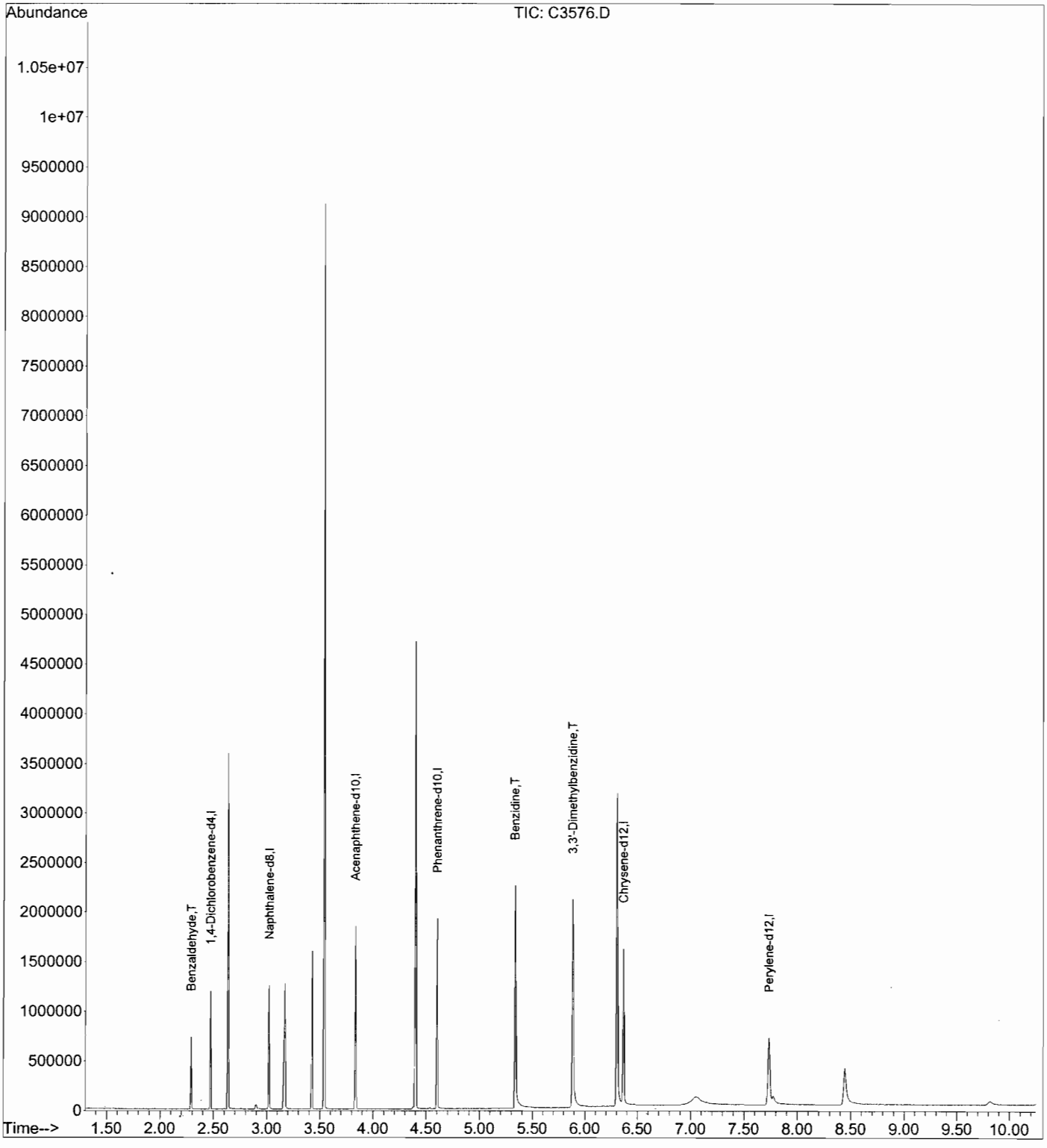
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	112070	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	438405	40.00	UG	0.00
43) Acenaphthene-d10	3.83	164	282039	40.00	UG	-0.02
66) Phenanthrene-d10	4.60	188	482455	40.00	UG	-0.04
82) Chrysene-d12	6.37	240	446203	40.00	UG	-0.06
92) Perylene-d12	7.73	264	368020	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	398	0.12	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 0.12%#			
6) Phenol-d5	2.30	99	538	0.13	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 0.13%#			
24) Nitrobenzene-d5	2.70	82	358	0.10	UG	-0.01
Spiked Amount 50.000	Range 26 - 98		Recovery = 0.20%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	4.23	330	185	0.10	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery = 0.10%#			
84) Terphenyl-d14	5.51	244	278	0.02	UG	-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 0.04%#			
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	298953m	162.57	UG	
80) Benzidine	5.34	184	824894m	134.12	UG	
85) 3,3'-Dimethylbenzidine	5.89	212	851545m	133.79	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3576.D
Acq On : 10 Feb 2015 13:22
Operator : EDM
Sample : ABN019-15,ICC160BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 11 11:38:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3577.D
Acq On : 10 Feb 2015 13:37
Operator : EDM
Sample : ABN018-15,ICC080BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 10 14:03:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:58:41 2015
Response via : Initial Calibration

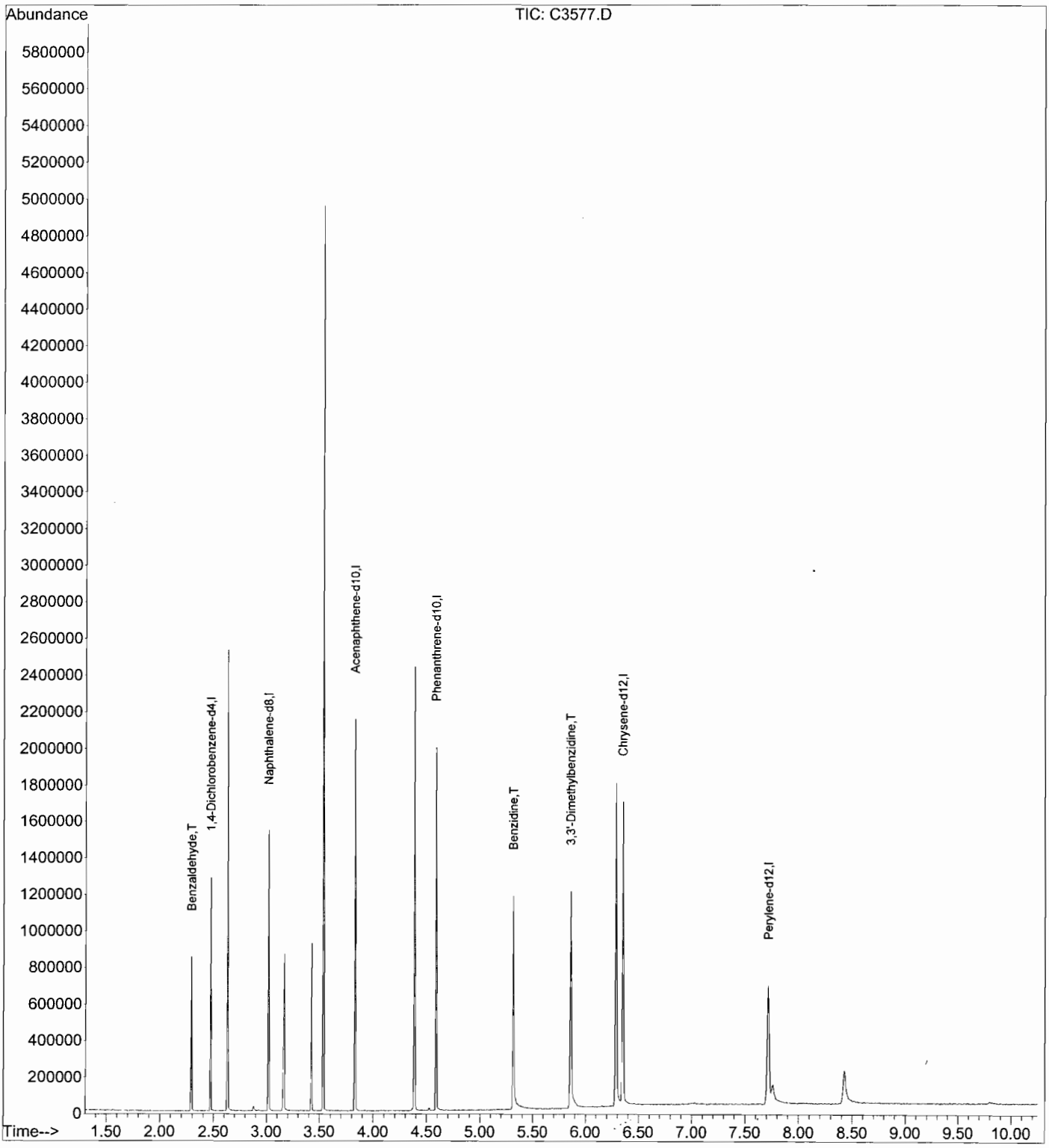
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	118843	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	459361	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	307746	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	506712	40.00	UG	-0.05
82) Chrysene-d12	6.35	240	476955	40.00	UG	-0.07
92) Perylene-d12	7.72	264	354984	40.00	UG	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	184	0.05	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.05%#		
6) Phenol-d5	2.29	99	144	0.03	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.66	82	148	0.04	UG	-0.04
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.08%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.00%#		
84) Terphenyl-d14	5.48	244	252	0.02	UG	-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	147431m	77.56	UG	
80) Benzidine	5.31	184	421293m	73.83	UG	
85) 3,3'-Dimethylbenzidine	5.86	212	473247m	79.00	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3577.D
Acq On : 10 Feb 2015 13:37
Operator : EDM
Sample : ABN018-15,ICC080BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 10 14:03:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:58:41 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3578.D
Acq On : 10 Feb 2015 13:53
Operator : EDM
Sample : ABN017-15,ICC040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 10 14:12:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:03:58 2015
Response via : Initial Calibration

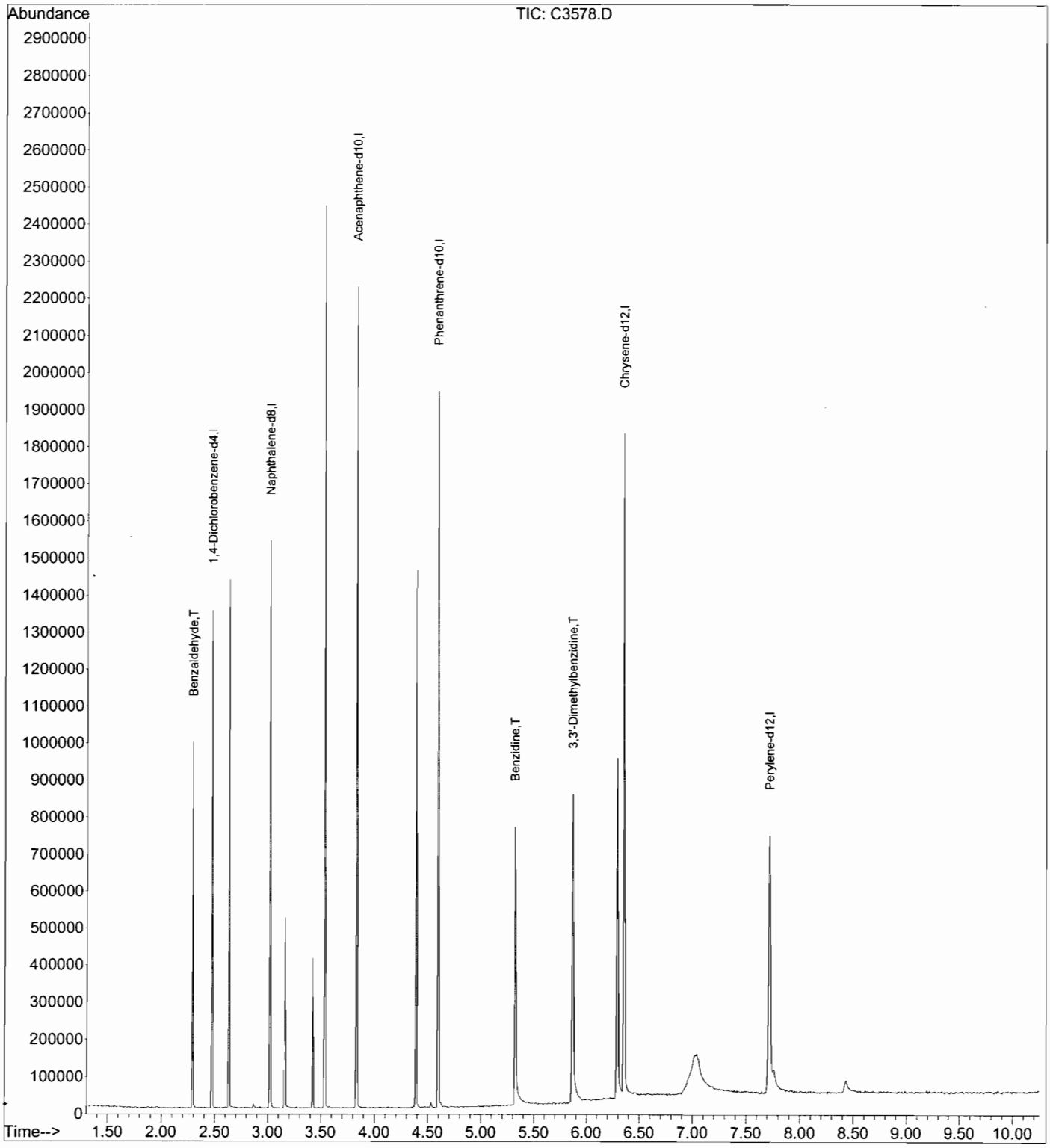
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	122613	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	473594	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	311728	40.00	UG	-0.02
66) Phenanthrene-d10	4.59	188	531401	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	512173	40.00	UG	-0.07
92) Perylene-d12	7.72	264	368255	40.00	UG	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	522	0.14	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.14%#		
6) Phenol-d5	2.30	99	734	0.16	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.16%#		
24) Nitrobenzene-d5	2.71	82	223	0.06	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.23	330	182	0.09	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.09%#		
84) Terphenyl-d14	5.54	244	106	0.01	UG	-0.04
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.02%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	98409	50.75	UG	95
80) Benzidine	5.32	184	300729m	50.11	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	219758m	31.64	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3578.D
Acq On : 10 Feb 2015 13:53
Operator : EDM
Sample : ABN017-15,ICC040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 10 14:12:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:03:58 2015
Response via : Initial Calibration



Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3579.D
Acq On : 10 Feb 2015 14:08
Operator : EDM
Sample : ABN016-15,ICC020BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 10 14:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration

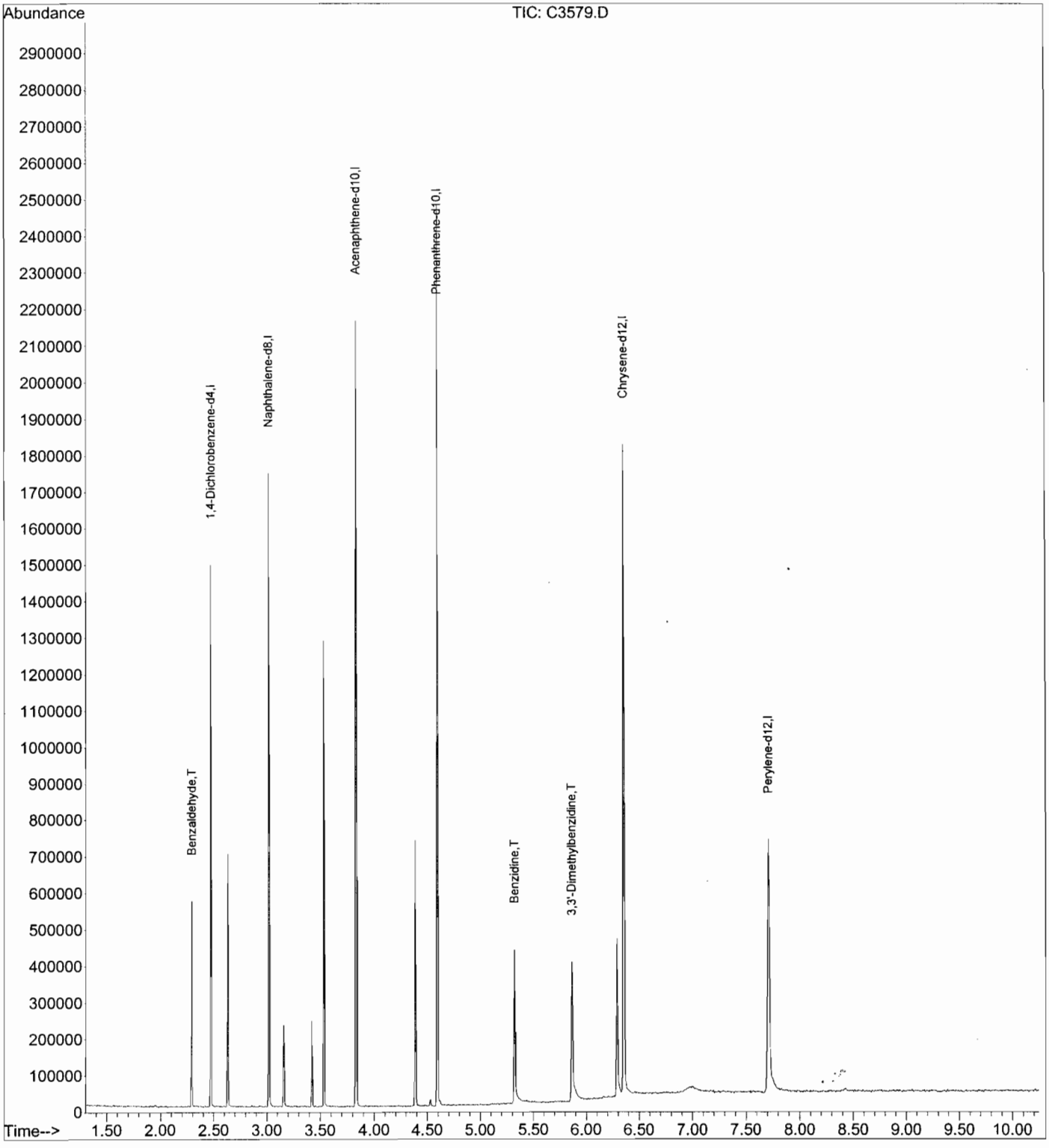
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	130773	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	493240	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	325159	40.00	UG	-0.02
66) Phenanthrene-d10	4.59	188	557105	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	513638	40.00	UG	-0.07
92) Perylene-d12	7.71	264	367657	40.00	UG	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	849	0.21	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.21%#		
6) Phenol-d5	2.29	99	1293	0.26	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.26%#		
24) Nitrobenzene-d5	2.75	82	303	0.08	UG	0.04
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.16%#		
47) 2-Fluorobiphenyl	3.49	172	148	0.01	UG	-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.02%#		
70) 2,4,6-Tribromophenol	4.23	330	347	0.16	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.16%#		
84) Terphenyl-d14	5.48	244	197	0.01	UG	-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.02%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	37650m	17.03	UG	
80) Benzidine	5.32	184	152522m	22.02	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	148148m	21.89	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3579.D
Acq On : 10 Feb 2015 14:08
Operator : EDM
Sample : ABN016-15,ICC020BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 10 14:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3580.D
Acq On : 10 Feb 2015 14:24
Operator : EDM
Sample : ABN015-15,ICC010BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 10 14:50:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration

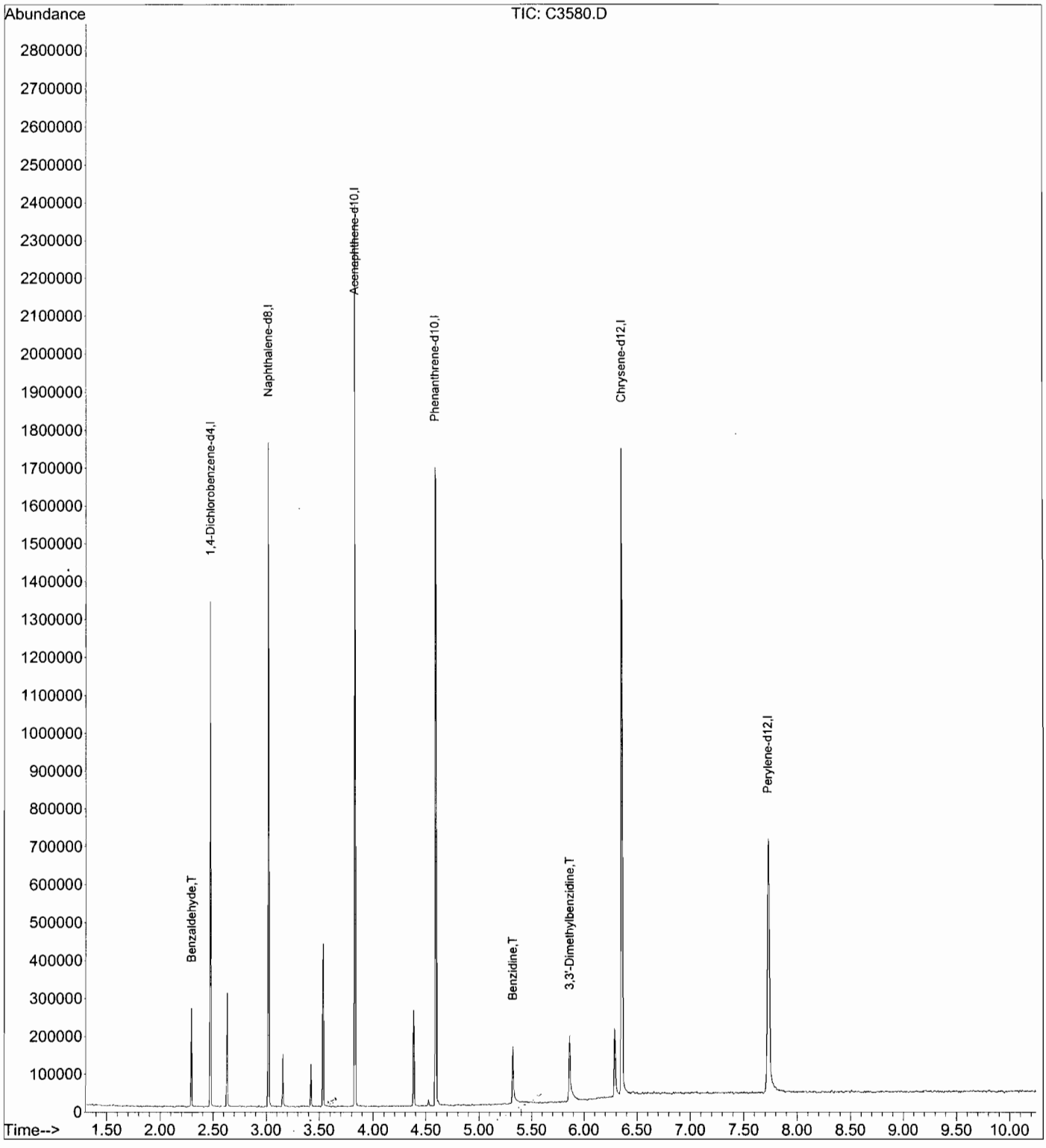
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	118679	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	459942	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	300684	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	506182	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	513614	40.00	UG	-0.07
92) Perylene-d12	7.73	264	377287	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	275	0.08	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.08%#		
6) Phenol-d5	2.30	99	502	0.11	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.11%#		
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.22	330	232	0.12	UG	-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.12%#		
84) Terphenyl-d14	5.49	244	255	0.02	UG	-0.09
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	18929m	9.43	UG	
80) Benzidine	5.32	184	66136m	10.51	UG	
85) 3,3'-Dimethylbenzidine	5.86	212	82875m	12.25	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3580.D
Acq On : 10 Feb 2015 14:24
Operator : EDM
Sample : ABN015-15,ICC010BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 10 14:50:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3581.D
Acq On : 10 Feb 2015 14:39
Operator : EDM
Sample : ABN014-15,ICC001BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 10 14:55:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:51:03 2015
Response via : Initial Calibration

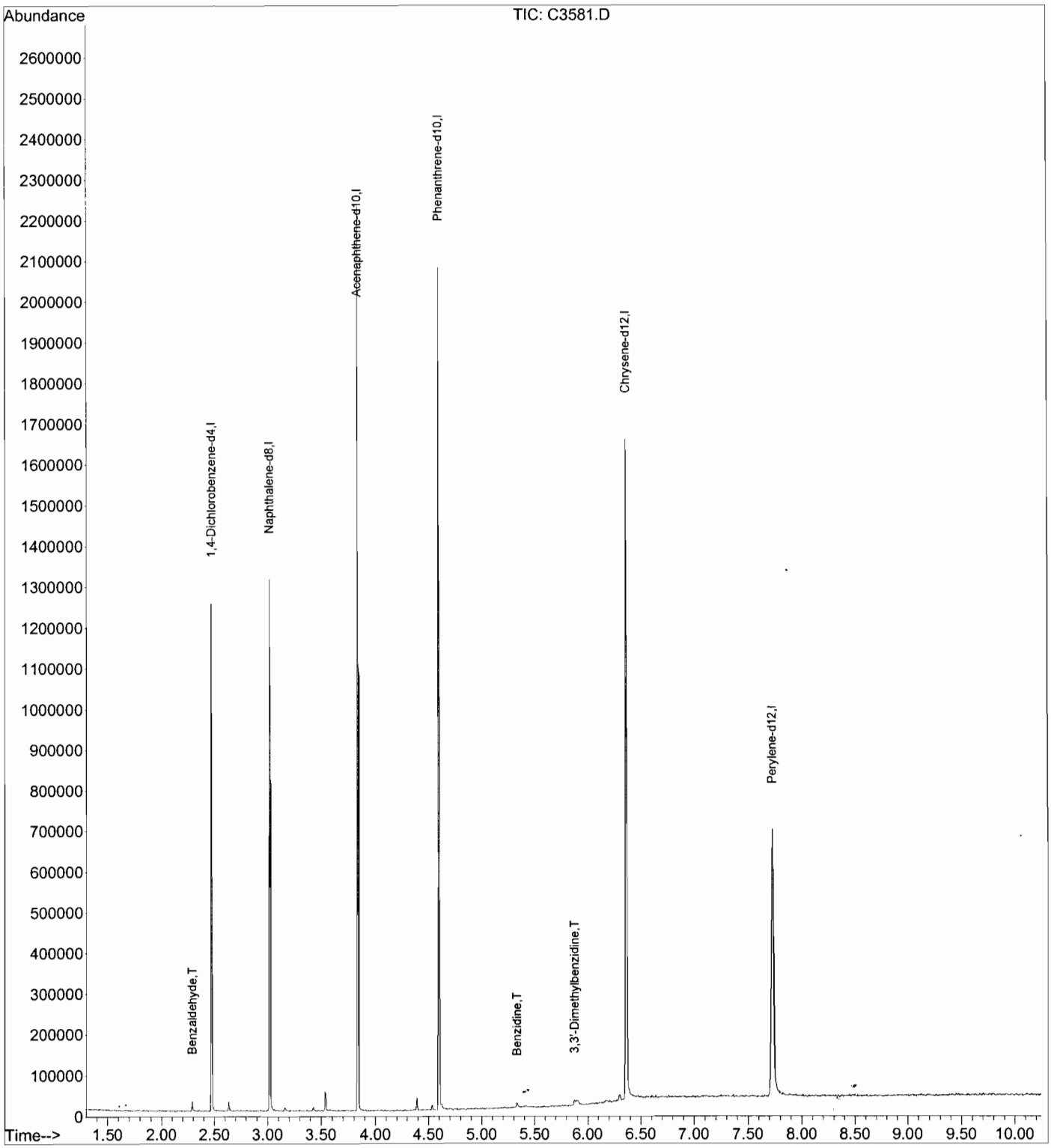
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	113727	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	424579	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	279832	40.00	UG	-0.02
66) Phenanthrene-d10	4.60	188	487355	40.00	UG	-0.04
82) Chrysene-d12	6.36	240	487361	40.00	UG	-0.06
92) Perylene-d12	7.73	264	367497	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.81	112	171	0.05	UG	-0.14
Spiked Amount 100.000	Range 24 - 101		Recovery = 0.05%#			
6) Phenol-d5	2.47	99	832	0.20	UG	0.18
Spiked Amount 100.000	Range 23 - 108		Recovery = 0.20%#			
24) Nitrobenzene-d5	2.74	82	133	0.04	UG	0.04
Spiked Amount 50.000	Range 26 - 98		Recovery = 0.08%#			
47) 2-Fluorobiphenyl	3.54	172	449	0.05	UG	0.04
Spiked Amount 50.000	Range 34 - 96		Recovery = 0.10%#			
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 32 - 112		Recovery = 0.00%#			
84) Terphenyl-d14	5.51	244	235	0.02	UG	-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 0.04%#			
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	2069m	1.12	UG	
80) Benzidine	5.33	184	6435m	1.03	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	7688m	1.06	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3581.D
Acq On : 10 Feb 2015 14:39
Operator : EDM
Sample : ABN014-15,ICC001BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 10 14:55:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:51:03 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3582.D
Acq On : 10 Feb 2015 14:55
Operator : EDM
Sample : ABN031-15,ICV040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

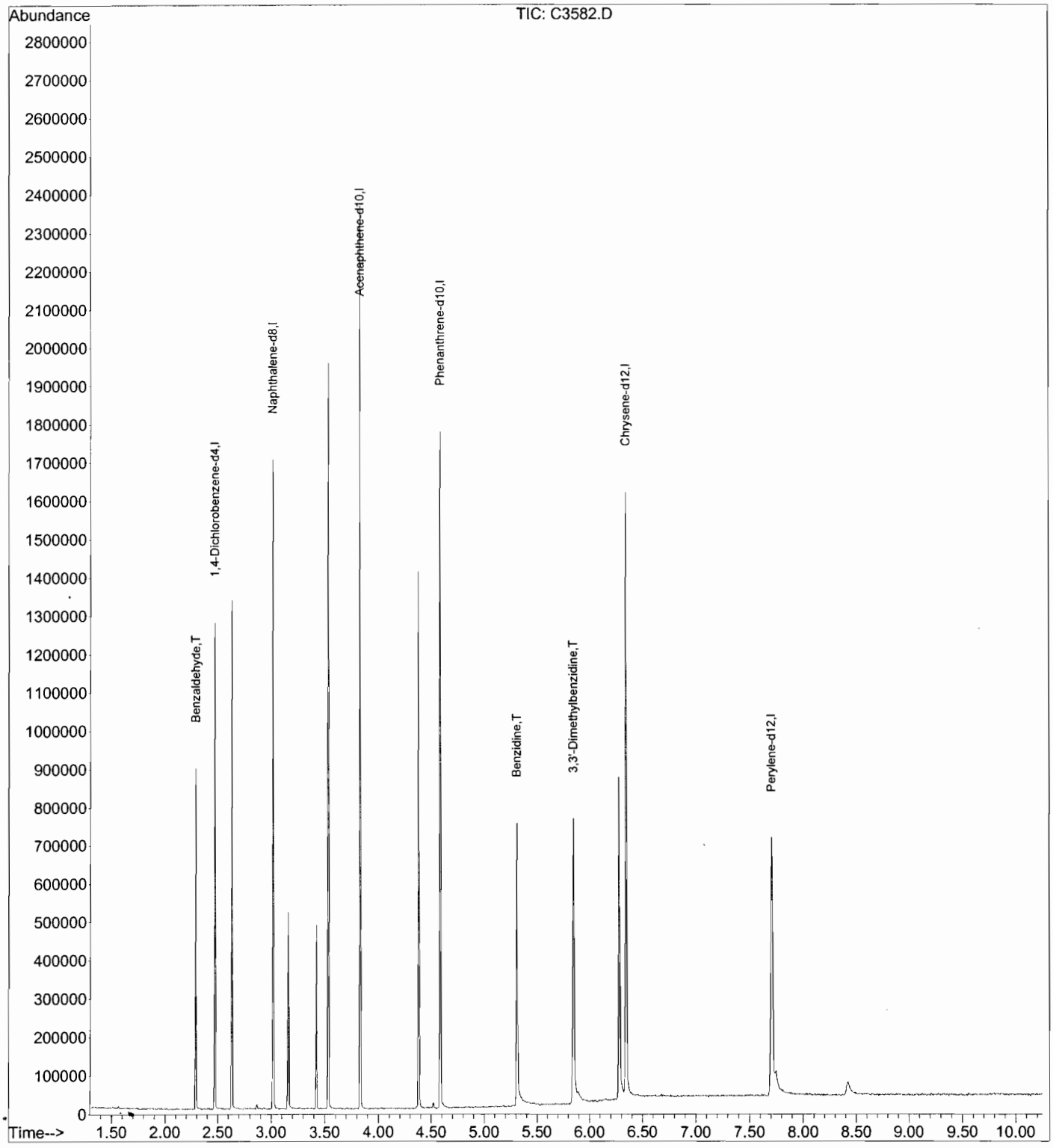
Quant Time: Feb 10 15:27:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	117923	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	451084	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	293610	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	505182	40.00	UG	-0.05
82) Chrysene-d12	6.34	240	494765	40.00	UG	-0.08
92) Perylene-d12	7.71	264	354952	40.00	UG	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	266	0.07	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.07%#		
6) Phenol-d5	2.29	99	138	0.03	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.64	82	201	0.06	UG	-0.07
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	3.49	172	128	0.01	UG	-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.02%#		
70) 2,4,6-Tribromophenol	4.22	330	127	0.06	UG	-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.06%#		
84) Terphenyl-d14	5.47	244	211	0.02	UG	-0.11
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	90214	46.62	UG	96
80) Benzidine	5.31	184	254865m	39.57	UG	
85) 3,3'-Dimethylbenzidine	5.85	212	311576	44.15	UG	# 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3582.D
Acq On : 10 Feb 2015 14:55
Operator : EDM
Sample : ABN031-15,ICV040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 10 15:27:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	126309	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	488911	40.00	UG		0.00
43) Acenaphthene-d10	3.85	164	306165	40.00	UG		0.00
66) Phenanthrene-d10	4.64	188	514072	40.00	UG		0.00
82) Chrysene-d12	6.42	240	487175	40.00	UG		0.00
92) Perylene-d12	7.78	264	339778	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	372077	96.11	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 96.11%				
6) Phenol-d5	2.30	99	452049	95.83	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 95.83%				
24) Nitrobenzene-d5	2.71	82	182018	46.59	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 93.18%				
47) 2-Fluorobiphenyl	3.50	172	495974	46.67	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 93.34%				
70) 2,4,6-Tribromophenol	4.26	330	199423	97.39	UG		0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 97.39%				
84) Terphenyl-d14	5.57	244	662334	49.02	UG		-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.04%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	83431	40.87	UG	#	36
3) Pyridine	1.45	52	86281	37.06	UG	#	82
7) Phenol	2.30	94	199983	40.29	UG	#	27
8) Aniline	2.34	66	80055	39.24	UG		89
9) Bis(2-chloroethyl) ether	2.34	63	89915	39.55	UG	#	73
10) 2-Chlorophenol	2.40	128	170777	37.96	UG		92
11) 1,3-Dichlorobenzene	2.46	146	202833	39.78	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	196930	38.80	UG	#	83
13) Benzyl alcohol	2.51	108	110873	39.40	UG	#	75
14) 1,2-Dichlorobenzene	2.56	146	189287	38.86	UG		95
15) 2-Methylphenol	2.55	108	155331	51.75	UG		87
16) Bis(2-chloroisopropyl) eth	2.57	45	135651	40.52	UG	#	93
17) 4-Methylphenol	2.61	108	165174	41.46	UG		96
18) N-Nitrosodi-n-propylamine	2.63	70	101644	40.77	UG	#	88
19) Acetophenone	2.63	105	222960	40.43	UG	#	1
20) 3-Methylphenol	2.61	108	165206	41.43	UG		96
21) Hexachloroethane	2.70	117	59629	40.56	UG		88
25) Nitrobenzene	2.71	77	140443	37.90	UG	#	86
26) Isophorone	2.81	82	278724	39.98	UG		91
27) 2-Nitrophenol	2.85	139	98370	38.86	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	165498	38.58	UG		94
29) Bis(2-chloroethoxy) methan	2.87	93	165375	38.08	UG		96
30) Benzoic acid	2.87	122	65538m	35.54	UG		
31) 2,4-Dimethylaniline	2.93	121	188613	38.70	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	152757	38.89	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	169980	38.50	UG		96
34) Naphthalene	3.03	128	522724	38.26	UG		97
35) 4-Chloroaniline	3.03	127	283040	40.31	UG		98
36) 4-Aminotoluene	2.65	106	266034	37.33	UG		96
37) Hexachlorobutadiene	3.10	225	90926	38.20	UG		97
38) Caprolactam	3.17	55	48832	42.61	UG	#	69
39) 2-Aminotoluene	2.65	106	266034	37.33	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

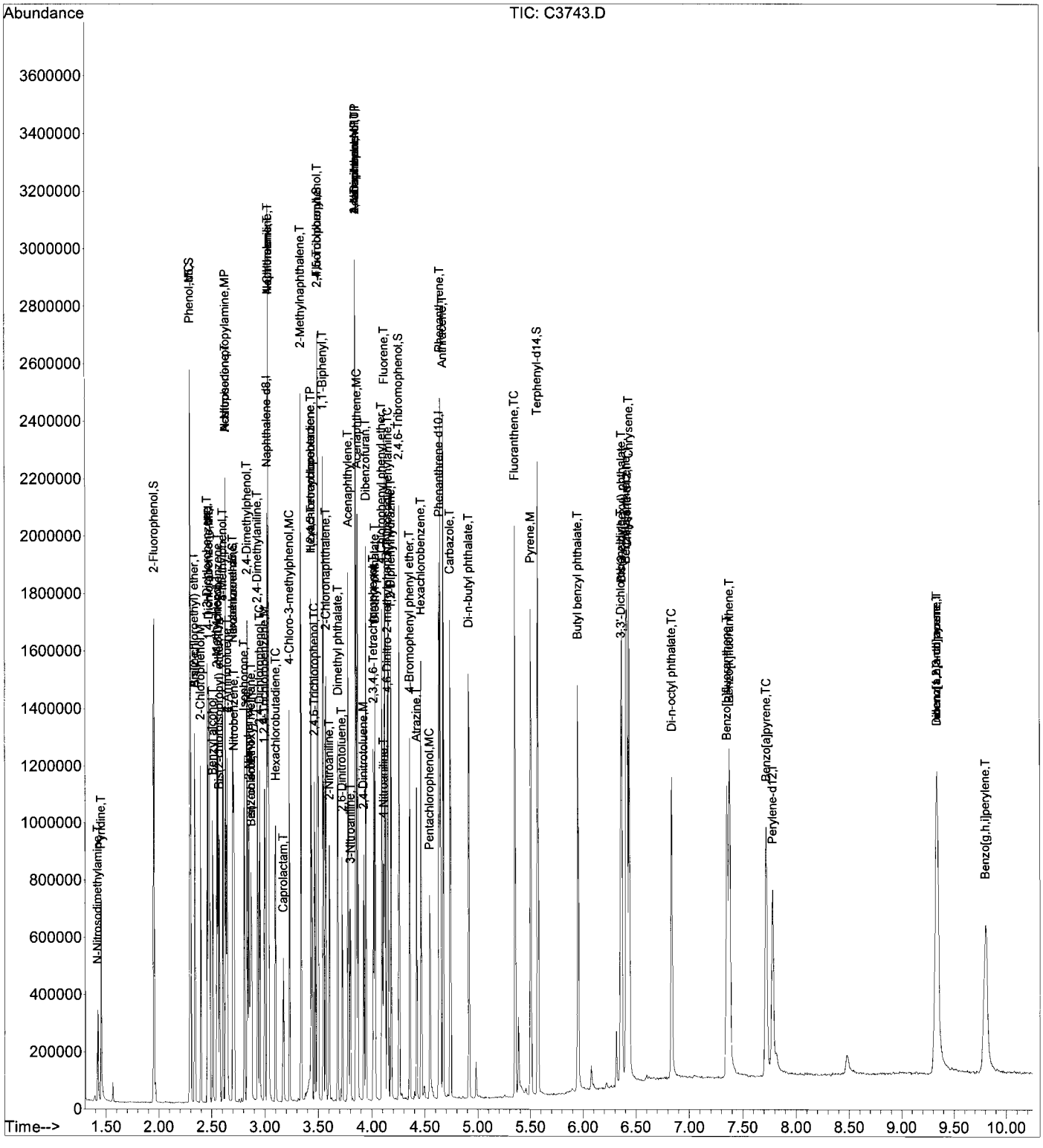
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	145231	37.46	UG		94
41) 2-Methylnaphthalene	3.34	142	388030	41.41	UG		99
44) Hexachlorocyclopentadiene	3.44	237	37176m	35.64	UG		
45) 2,4,6-Trichlorophenol	3.47	196	113986	37.95	UG		99
46) 2,4,5-Trichlorophenol	3.49	196	130585	43.44	UG		97
48) 1,1'-Biphenyl	3.55	154	477417	41.53	UG		98
49) 2-Chloronaphthalene	3.57	162	344476	40.43	UG		95
50) 2-Nitroaniline	3.60	65	76379	45.06	UG	#	78
51) Dimethyl phthalate	3.68	163	387591	39.38	UG		98
52) 2,6-Dinitrotoluene	3.72	165	85090	42.67	UG	#	83
53) Acenaphthylene	3.78	152	551081	39.70	UG		98
54) 3-Nitroaniline	3.80	138	97582	43.65	UG	#	94
55) Acenaphthene	3.87	153	337097	37.86	UG		96
56) 2,4-Dinitrophenol	3.86	184	32420	40.31	UG	#	1
57) 4-Nitrophenol	3.85	65	48410	37.13	UG	#	58
58) 2,4-Dinitrotoluene	3.92	165	110000	42.71	UG	#	75
59) Dibenzofuran	3.95	168	537335	42.44	UG	#	82
60) Diethyl phthalate	4.03	149	358807	39.01	UG		95
61) Fluorene	4.12	166	404081	39.69	UG		99
62) 4-Chlorophenyl phenyl ethe	4.10	204	213763	41.55	UG	#	88
63) 4-Nitroaniline	4.11	138	105943	46.10	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	188847	41.70	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.02	232	103759	41.73	UG		94
67) 4,6-Dinitro-2-methylphenol	4.14	198	63011	43.98	UG	#	71
68) N-Nitrosodiphenylamine	4.15	169	319315	42.33	UG		98
69) 1,2-Diphenylhydrazine	4.18	77	293512	37.53	UG	#	86
71) 4-Bromophenyl phenyl ether	4.36	248	134870	40.07	UG	#	86
72) Hexachlorobenzene	4.46	284	150543	39.75	UG	#	92
73) Atrazine	4.42	200	81853	30.20	UG		98
74) Pentachlorophenol	4.55	266	83479	40.50	UG		92
75) Phenanthrene	4.65	178	581516	39.18	UG		97
76) Anthracene	4.67	178	596563	40.41	UG		99
77) Carbazole	4.74	167	548506	42.37	UG		98
78) Di-n-butyl phthalate	4.91	149	610132	40.24	UG	#	97
79) Fluoranthene	5.35	202	626498	40.73	UG	#	94
83) Pyrene	5.50	202	637263	40.28	UG	#	88
86) Butyl benzyl phthalate	5.95	149	249598	40.34	UG	#	90
87) 3,3'-Dichlorobenzidine	6.36	252	198538	42.46	UG		99
88) Benzo[a]anthracene	6.40	228	549610	39.80	UG		99
89) Chrysene	6.44	228	542625	42.26	UG		97
90) Bis(2-ethylhexyl) phthalat	6.37	149	353347	41.97	UG		93
93) Di-n-octyl phthalate	6.84	149	564521	45.87	UG		100
94) Benzo[b]fluoranthene	7.35	252	558052m	45.03	UG		
95) Benzo[k]fluoranthene	7.38	252	527963	45.03	UG	#	98
96) Benzo[a]pyrene	7.72	252	524650	45.47	UG	#	96
97) Indeno[1,2,3-cd]pyrene	9.34	276	641556	44.36	UG	#	45
98) Dibenz[a,h]anthracene	9.34	278	536830	45.27	UG	#	64
99) Benzo[g,h,i]perylene	9.80	276	553175	46.11	UG	#	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3744.D
Acq On : 20 Feb 2015 12:05
Operator : EDM
Sample : ABN031-15,CCV040BNA2
Misc : NA,02/20/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 20 12:54:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

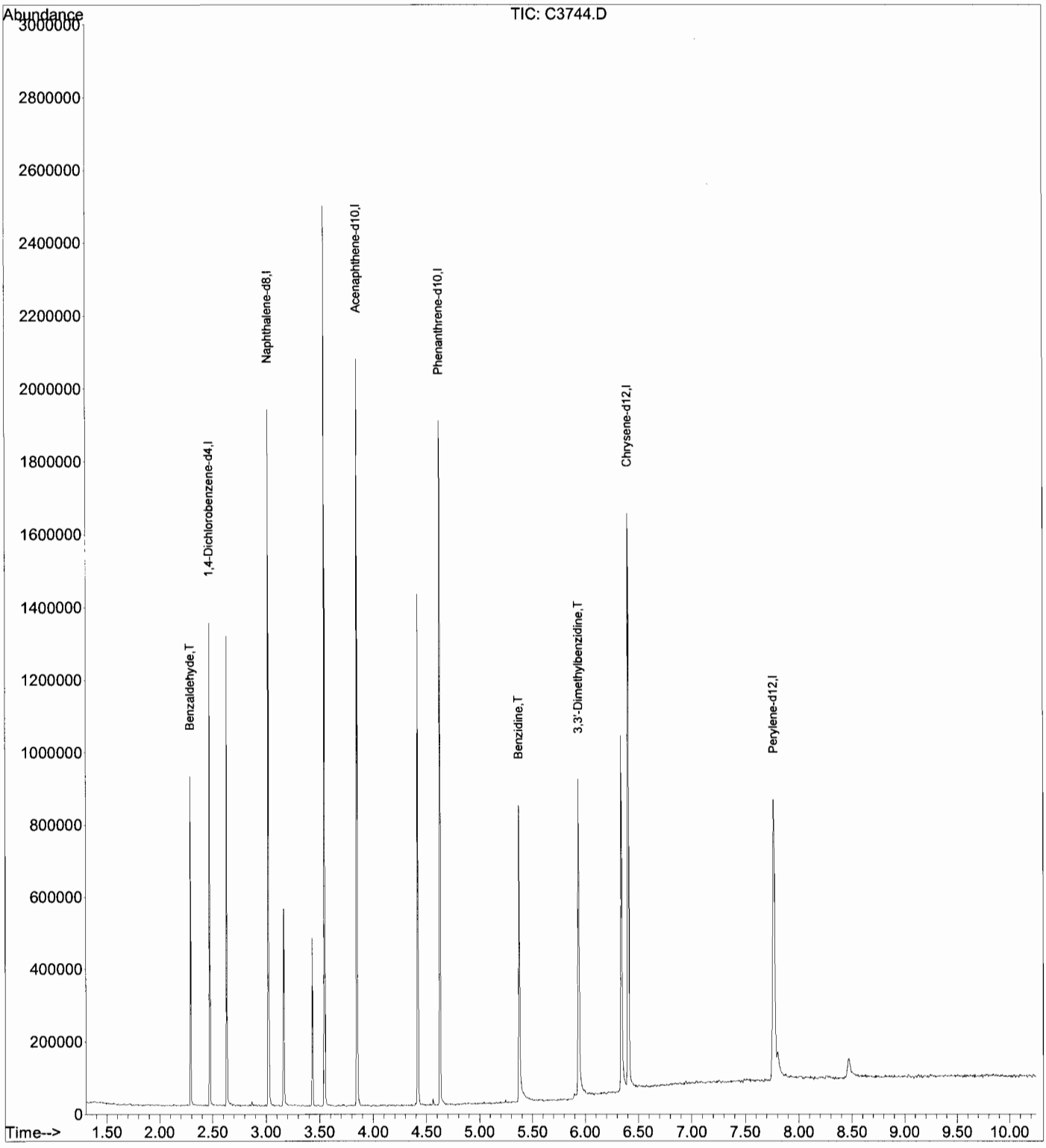
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	115264	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	473345	40.00	UG	0.00
43) Acenaphthene-d10	3.85	164	295665	40.00	UG	0.00
66) Phenanthrene-d10	4.62	188	497118	40.00	UG	-0.02
82) Chrysene-d12	6.40	240	519865	40.00	UG	-0.02
92) Perylene-d12	7.77	264	424296	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	147	0.04	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.04%#		
6) Phenol-d5	2.30	99	175	0.04	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.04%#		
24) Nitrobenzene-d5	2.69	82	395	0.10	UG	-0.02
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.20%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.26	330	191	0.10	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.10%#		
84) Terphenyl-d14	5.55	244	417	0.03	UG	-0.03
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.06%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	92055	48.63	UG	94
80) Benzidine	5.37	184	281185m	44.30	UG	
85) 3,3'-Dimethylbenzidine	5.94	212	340621m	46.08	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3744.D
Acq On : 20 Feb 2015 12:05
Operator : EDM
Sample : ABN031-15,CCV040BNA2
Misc : NA,02/20/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 20 12:54:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

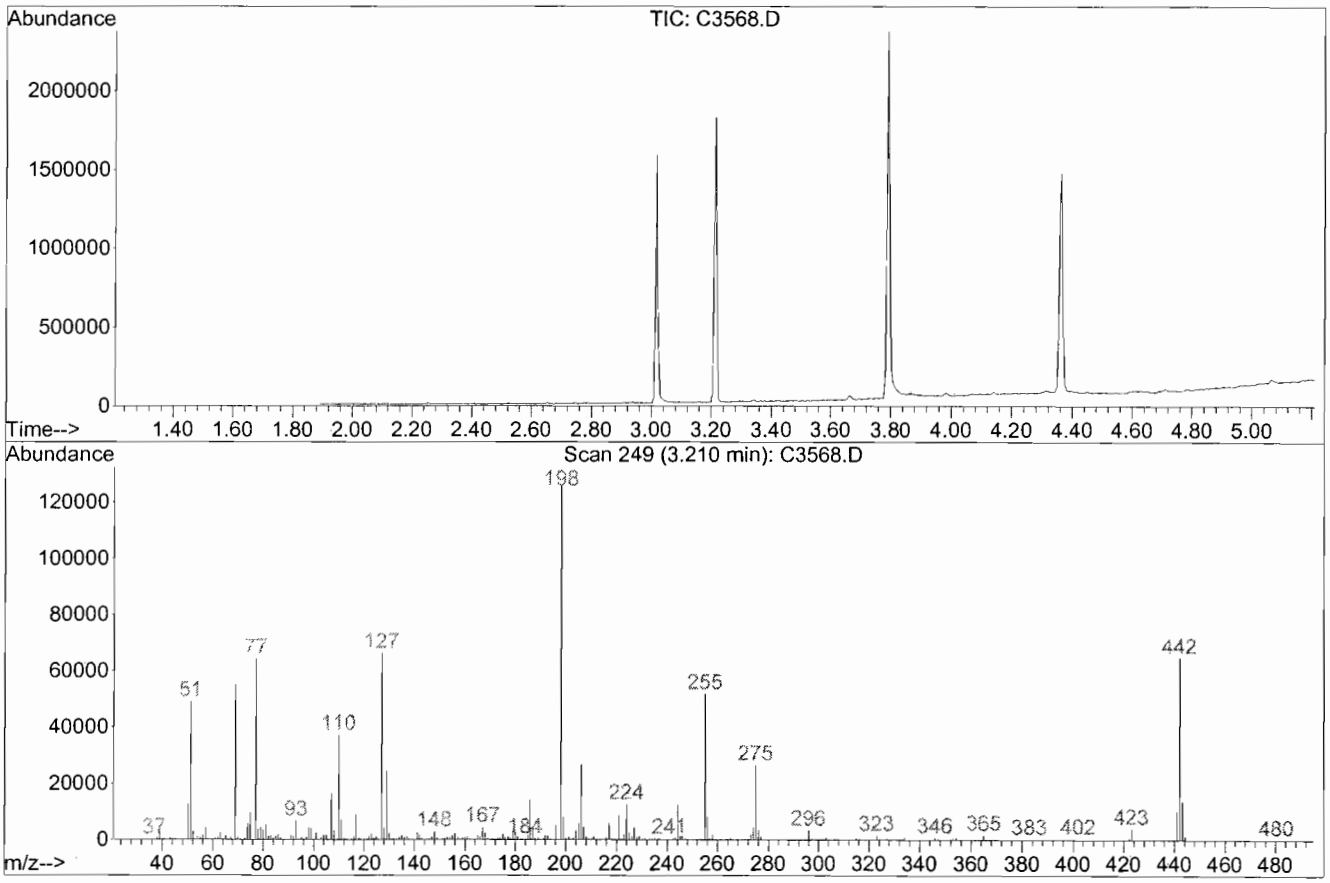


SEMI-VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3568.D
Acq On : 10 Feb 2015 11:24
Operator : EDM
Sample : ABN005-15,DFTPP150210
Misc : NA,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2.M
Title :
Last Update : Mon Jul 25 11:08:53 2011



Spectrum Information: Scan 249

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.8	49008	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.7	55184	PASS
70	69	0.00	2	1.7	950	PASS
127	198	40	60	52.5	66272	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	126320	PASS
199	198	5	9	6.3	7976	PASS
275	198	10	30	21.0	26472	PASS
365	198	1	100	1.3	1660	PASS
441	443	0.01	100	74.8	10319	PASS
442	198	40	100	51.2	64720	PASS
443	442	17	23	21.3	13798	PASS

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	145	51.10	49008	64.10	330	78.00	3764
37.00	241	52.10	2878	65.10	1351	79.00	4354
37.40	164	53.00	256	66.30	154	80.00	3406
38.10	1004	55.00	869	67.10	873	81.00	5347
39.10	4366	56.10	1578	69.00	55184	82.10	1296
40.00	360	57.10	4317	70.00	950	83.00	1378
41.00	373	57.80	394	71.10	431	83.90	570
43.10	723	59.80	155	73.00	710	85.10	1219
44.10	509	61.00	730	74.00	5685	86.00	1752
45.10	224	62.00	910	75.00	9633	87.00	821
50.10	12759	63.00	2467	77.10	64184	91.00	1527

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1178	104.00	1769	117.90	520	129.00	24432
93.00	6671	105.00	1642	118.20	549	130.00	2288
94.00	441	107.00	16464	118.80	206	131.10	278
95.10	782	108.10	3043	120.00	228	131.80	442
96.00	435	110.00	37112	121.30	234	133.10	389
97.10	843	111.00	7043	122.00	1256	134.00	836
98.00	4301	112.00	521	123.00	2067	135.00	1535
99.00	4003	113.10	389	123.90	718	136.10	803
100.00	454	115.00	386	124.90	909	137.10	1067
101.00	2560	116.20	1198	127.00	66272	137.90	395
103.00	862	117.00	9008	128.00	4201	138.90	277

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.10	2469	152.00	637	163.80	302	175.10	1977
142.00	1565	153.00	956	165.00	1477	175.90	931
143.00	759	154.10	808	166.00	1170	177.10	1218
144.10	309	155.00	1459	167.00	4323	178.00	668
145.00	291	156.00	2144	168.00	2365	179.00	3205
146.00	439	157.10	761	168.90	364	180.00	2703
147.00	1063	157.90	517	169.20	362	180.90	1198
148.00	2888	159.10	615	170.90	437	182.20	213
149.00	631	159.90	833	172.10	283	182.90	179
149.80	301	160.90	1116	173.20	770	184.10	376
151.20	599	161.90	343	173.90	675	185.10	1543

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.00	14171	199.00	7976	210.30	613	227.00	4177
187.00	4192	200.00	746	211.00	1217	228.10	872
187.90	591	201.30	910	215.00	268	229.00	1200
189.00	819	202.20	413	216.00	819	230.20	171
190.00	161	203.00	641	217.00	5875	231.10	515
191.40	599	204.10	3350	217.90	493	231.70	140
192.00	1526	205.10	5890	221.00	8654	232.90	240
193.00	1446	206.00	26736	223.10	1836	234.00	245
194.10	387	207.00	4531	224.00	12558	235.00	666
196.10	5174	208.00	1131	225.10	2468	236.00	227
198.00	126320	209.00	532	226.10	987	237.00	420

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.00	167	249.80	213	265.00	830	281.00	383
240.20	180	252.10	155	265.90	407	281.90	302
241.00	275	253.20	373	267.90	204	282.90	175
242.20	424	255.00	51792	271.20	150	283.20	165
243.10	836	256.00	8246	272.10	353	284.10	324
244.10	12409	256.90	649	273.00	1813	285.00	422
245.10	1425	258.00	1701	274.00	4491	292.00	172
246.00	1362	259.20	393	275.00	26472	292.90	293

247.10	430	261.00	248	276.00	3500	296.00	3401
248.00	183	263.80	250	277.00	1296	297.20	504
249.20	278	264.20	151	278.00	336	302.10	226

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
303.00	807	326.20	160	352.00	343	390.20	208
304.10	165	327.10	449	352.90	450	402.00	417
308.10	195	328.00	261	354.00	782	403.10	286
314.00	153	332.00	147	359.10	156	403.90	191
315.00	586	333.10	271	360.10	249	420.60	179
316.20	314	334.00	983	365.00	1660	421.00	293
317.20	218	335.20	261	365.80	231	422.10	646
318.90	150	337.10	201	370.90	255	423.00	3954
322.00	184	341.00	225	372.00	445	423.90	533
323.10	1569	346.00	735	373.10	275	441.10	10319
324.10	448	347.10	298	383.00	318	442.00	64720

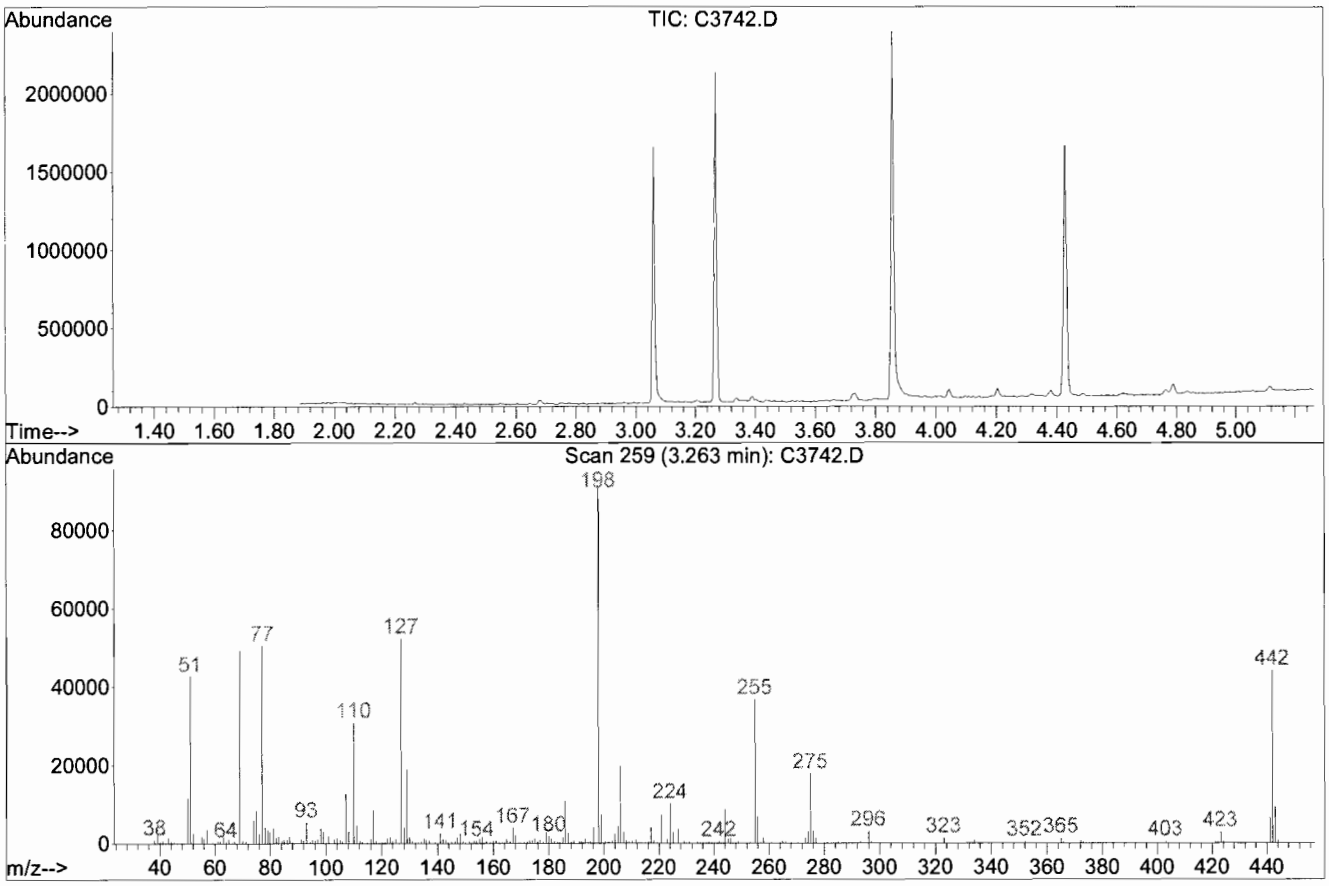
Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.10	13798						
444.10	1406						
445.20	145						
480.40	160						

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3742.D
Acq On : 20 Feb 2015 11:39
Operator : EDM
Sample : ABN005-15,DFTPP150220
Misc : NA,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\CS0415.M
Title : BNA CALIBRATION METHOD
Last Update : Wed Feb 11 11:39:18 2015



Spectrum Information: Scan 259

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.8	42728	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	54.1	49368	PASS
70	69	0.00	2	1.4	710	PASS
127	198	40	60	57.5	52424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91240	PASS
199	198	5	9	8.0	7255	PASS
275	198	10	30	19.5	17792	PASS
365	198	1	100	1.4	1257	PASS
441	443	0.01	100	71.1	6591	PASS
442	198	40	100	48.5	44240	PASS
443	442	17	23	21.0	9273	PASS

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	190	52.10	2497	65.10	1115	79.10	3468
38.10	904	53.10	212	66.30	167	79.90	2994
39.10	3997	55.10	1806	67.20	599	81.10	3983
40.00	316	56.00	1369	69.00	49368	82.20	1599
41.10	747	57.00	3554	70.00	710	83.00	1883
42.10	261	59.10	223	71.20	560	84.10	656
43.00	1529	61.00	655	74.10	5788	85.00	1104
44.10	453	61.80	512	75.00	8422	86.00	959
45.20	321	62.00	524	76.10	2453	87.00	1744
50.10	11572	63.00	1655	77.10	50584	88.00	328
51.10	42728	64.00	373	78.10	4023	89.10	149

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.10	1128	103.10	1079	116.10	1163	128.10	4139
91.90	964	104.00	1468	117.00	8463	129.00	19000
93.00	5463	105.00	963	118.00	690	130.00	1726
94.20	468	105.90	586	119.00	220	131.00	530
95.20	973	107.10	12726	120.10	274	132.00	313
96.10	843	108.10	3108	121.20	280	133.10	328
97.10	1206	110.00	30952	122.10	1309	134.10	486
98.10	3745	111.00	4567	123.10	1693	135.00	1303
99.00	3088	112.10	759	124.00	689	135.90	910
100.00	390	113.00	418	125.00	1071	137.00	845
101.00	1904	114.80	161	127.00	52424	139.10	240

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	2552	152.10	168	163.10	186	174.00	685
141.90	1121	153.10	714	164.10	368	175.00	1212
142.90	809	154.00	633	164.90	1090	175.80	393
143.70	268	155.00	1155	166.00	523	176.20	392
145.00	329	156.00	1669	167.00	3938	176.90	879
146.30	546	157.40	514	168.00	2203	178.00	358
147.10	1528	157.70	525	169.10	328	179.00	2898
148.10	2444	158.90	322	169.80	229	180.00	1793
149.00	562	159.90	587	171.10	333	181.00	1201
149.90	232	160.90	785	172.20	535	182.00	509
151.40	501	162.00	298	173.10	667	183.00	325

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.50	245	194.00	401	205.00	4278	216.10	527
184.00	175	195.00	438	206.00	19760	217.00	4030
185.00	1509	196.10	4028	207.10	2825	217.90	750
186.00	10949	198.00	91240	208.10	835	219.20	152
187.00	2524	199.00	7255	208.90	495	221.00	7264
188.10	395	200.30	437	210.10	564	222.90	1090
189.00	634	200.90	230	211.50	957	224.10	10144
191.00	507	201.50	407	212.20	276	225.10	2801
191.80	651	201.90	434	213.00	154	225.90	169
192.30	352	202.90	573	213.70	145	227.00	3596
193.10	1122	204.00	2504	215.10	189	229.10	609

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
230.00	217	245.10	1154	258.90	162	277.00	1257
231.00	335	246.10	1317	261.00	166	280.00	146
234.00	366	247.10	198	263.90	224	281.10	190
235.10	325	248.90	399	265.00	654	283.20	191
236.20	191	249.90	159	266.00	381	285.00	247
237.00	268	251.10	222	268.20	196	293.10	470
238.20	261	253.30	299	270.50	257	293.90	225
239.30	205	255.00	36776	273.10	1343	296.00	3037

240.10	202	256.00	6784	274.10	2950	297.00	343
241.90	470	257.00	371	275.00	17792	303.00	273
244.10	8694	258.00	1349	276.00	3173	304.30	156

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
310.30	202	334.00	783	372.10	645	444.10	684
312.40	143	335.00	163	373.00	434		
314.50	185	340.90	277	403.00	509		
315.00	283	346.00	267	421.20	295		
316.20	269	348.90	140	422.10	312		
321.00	228	352.00	528	423.10	2861		
323.00	1337	353.20	259	424.10	417		
323.90	206	354.10	356	439.00	202		
325.90	174	362.90	205	441.10	6591		
326.90	278	365.00	1257	442.10	44240		
328.00	162	365.90	368	443.10	9273		

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.028
Pyridine	ND		0.033	0.031
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.021
Aniline	ND		0.033	0.020
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.020
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.027
Benzyl alcohol	ND		0.033	0.020
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.023
Bis(2-chloroisopropyl) ether	ND		0.033	0.020
4-Methylphenol **	ND		0.033	0.027
N-Nitrosodi-n-propylamine	ND		0.033	0.027
Acetophenone	ND		0.033	0.027
3-Methylphenol	ND		0.033	0.029
Hexachloroethane	ND		0.033	0.020
Nitrobenzene	ND		0.033	0.028
Isophorone	ND		0.033	0.030
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.023
Bis(2-chloroethoxy) methane	ND		0.033	0.020
Benzoic acid	ND		0.033	0.020
2,4-Dimethylaniline	ND		0.033	0.020
2,4-Dichlorophenol	ND		0.033	0.020
1,2,4-Trichlorobenzene	ND		0.033	0.021
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
4-Aminotoluene	ND		0.033	0.032
Hexachlorobutadiene	ND		0.033	0.020
Caprolactam	ND		0.033	0.021
2-Aminotoluene	ND		0.033	0.029
4-Chloro-3-methylphenol	ND		0.033	0.020
2-Methylnaphthalene	ND		0.033	0.020
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.025

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.025
2,4-Dinitrophenol	ND		0.033	0.024
4-Nitrophenol	ND		0.033	0.027
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.020
Diethyl phthalate	ND		0.033	0.031
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.020
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.020
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.024
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.020
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.029
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.020

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:54:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	207374	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	787539	40.00	UG	0.00
43) Acenaphthene-d10	3.86	164	507870	40.00	UG	0.00
66) Phenanthrene-d10	4.64	188	872040	40.00	UG	0.00
82) Chrysene-d12	6.42	240	776719	40.00	UG	0.00
92) Perylene-d12	7.78	264	345367	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	350459	55.14	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 55.14%			
6) Phenol-d5	2.29	99	443788	57.30	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 57.30%			
24) Nitrobenzene-d5	2.70	82	168201	26.73	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 53.46%			
47) 2-Fluorobiphenyl	3.50	172	516431	29.30	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 58.60%			
70) 2,4,6-Tribromophenol	4.26	330	231731	66.71	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 66.71%			
84) Terphenyl-d14	5.58	244	818726	38.00	UG	0.00
Spiked Amount 50.000	Range 19 - 118		Recovery = 76.00%			

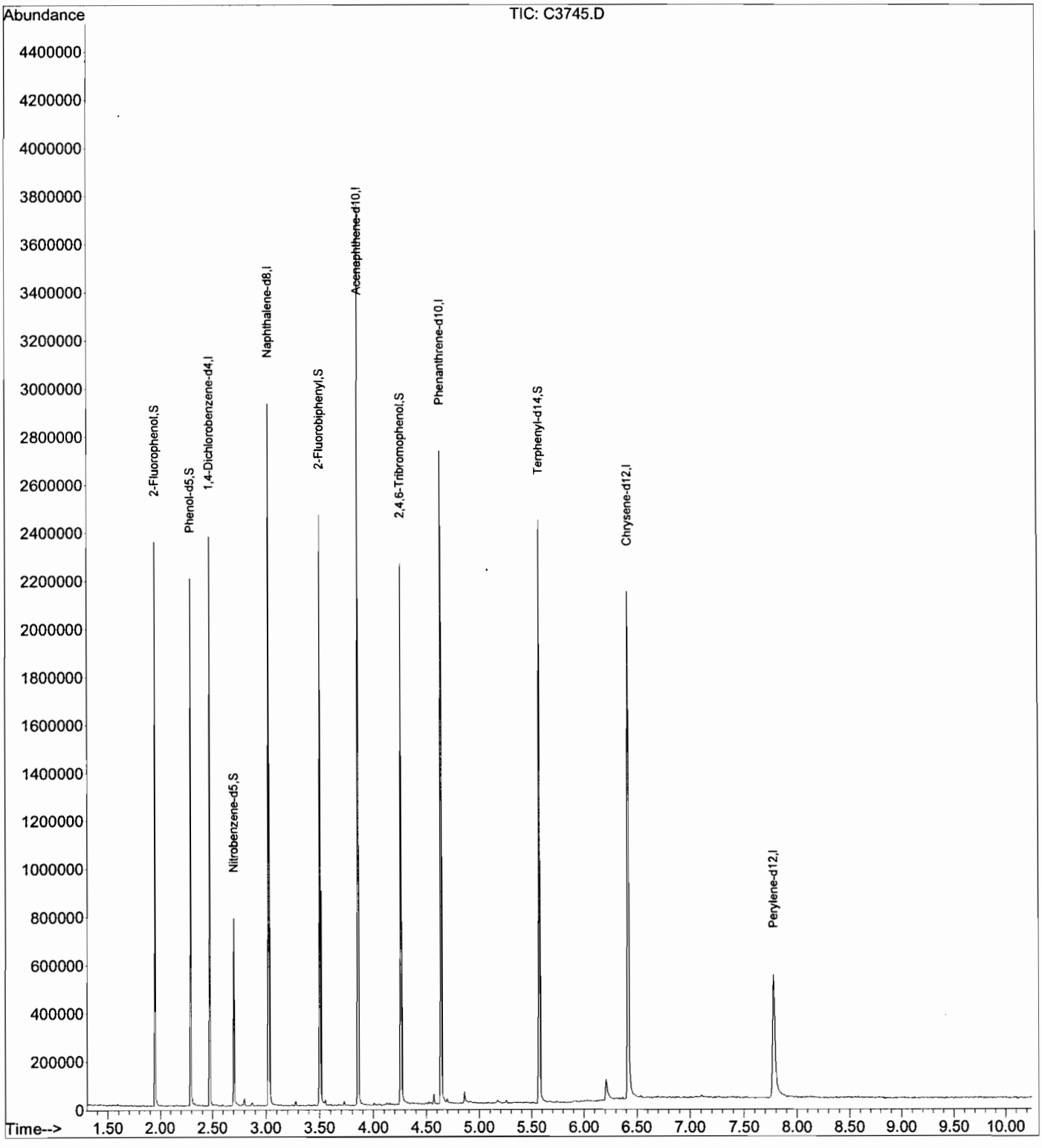
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:54:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS0415.M Fri Feb 20 12:54:35 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	196449	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	769799	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	482907	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	783779	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	604354	40.00	UG		-0.04
92) Perylene-d12	7.74	264	258590	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	323011	53.64	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 53.64%				
6) Phenol-d5	2.30	99	463460	63.17	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 63.17%				
24) Nitrobenzene-d5	2.70	82	180375	29.32	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 58.64%				
47) 2-Fluorobiphenyl	3.49	172	541716	32.32	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 64.64%				
70) 2,4,6-Tribromophenol	4.24	330	227718	72.94	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 72.94%				
84) Terphenyl-d14	5.52	244	657810	39.24	UG		-0.06
Spiked Amount 50.000	Range 19 - 118		Recovery = 78.48%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.43	74	85128	26.81	UG	#	37
3) Pyridine	1.46	52	86679	23.93	UG	#	81
5) Benzaldehyde	2.29	106	16960m	5.26	UG		
7) Phenol	2.30	94	218269	28.27	UG	#	25
8) Aniline	2.34	66	98836	31.15	UG		91
9) Bis(2-chloroethyl) ether	2.34	63	101740	28.78	UG	#	62
10) 2-Chlorophenol	2.40	128	191400	27.35	UG		90
11) 1,3-Dichlorobenzene	2.46	146	222852	28.10	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	199094	25.22	UG	#	81
13) Benzyl alcohol	2.51	108	131584	30.06	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	203391	26.85	UG		96
15) 2-Methylphenol	2.55	108	177670	38.06	UG		83
16) Bis(2-chloroisopropyl) eth	2.57	45	159651	30.66	UG	#	94
17) 4-Methylphenol	2.61	108	205712	33.20	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	120104	30.98	UG	#	87
19) Acetophenone	2.63	105	269228	31.39	UG	#	1
20) 3-Methylphenol	2.61	108	205632	33.16	UG		94
21) Hexachloroethane	2.70	117	61496	26.90	UG		87
25) Nitrobenzene	2.71	77	172677	29.60	UG	#	87
26) Isophorone	2.81	82	347214	31.63	UG		92
27) 2-Nitrophenol	2.85	139	118262	29.67	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	202638	30.00	UG		95
29) Bis(2-chloroethoxy) methan	2.87	93	200645	29.34	UG		97
30) Benzoic acid	2.87	122	95815	33.00	UG		93
31) 2,4-Dimethylaniline	2.93	121	278132	36.25	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	180454	29.18	UG		97
33) 1,2,4-Trichlorobenzene	3.00	180	199259	28.67	UG		98
34) Naphthalene	3.03	128	623415	28.98	UG		93
35) 4-Chloroaniline	3.03	127	364807	33.00	UG		94
36) 4-Aminotoluene	2.65	106	416123	37.09	UG		96
37) Hexachlorobutadiene	3.10	225	111533	29.76	UG		97
38) Caprolactam	3.17	55	62081	34.41	UG	#	72

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

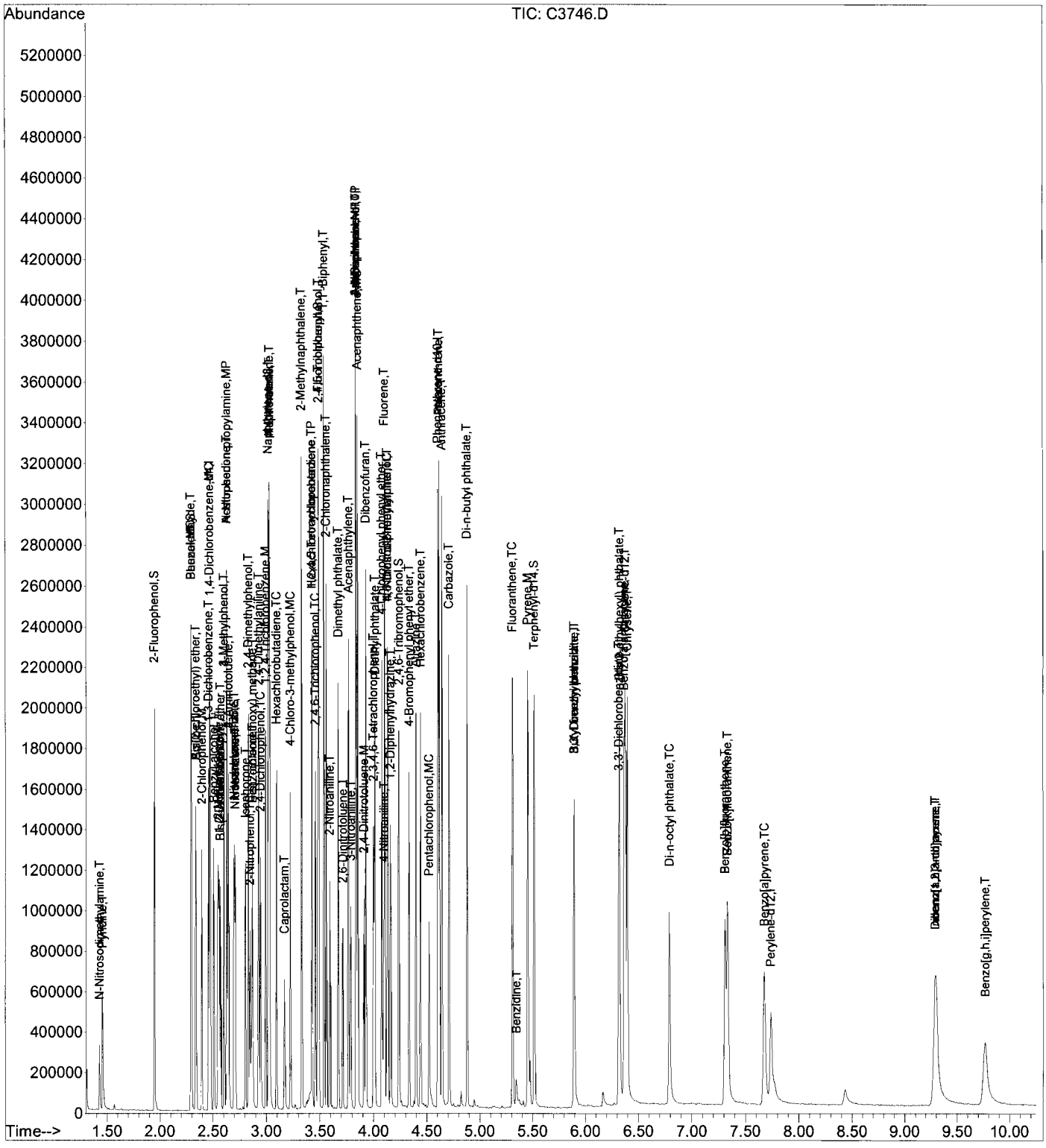
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	416123	37.09 UG		96
40) 4-Chloro-3-methylphenol	3.22	107	182213	29.85 UG		95
41) 2-Methylnaphthalene	3.33	142	490774	33.26 UG		99
44) Hexachlorocyclopentadiene	3.43	237	16205	9.85 UG		92
45) 2,4,6-Trichlorophenol	3.46	196	143548	30.30 UG		99
46) 2,4,5-Trichlorophenol	3.49	196	164848	34.77 UG		98
48) 1,1'-Biphenyl	3.54	154	632607	34.89 UG		98
49) 2-Chloronaphthalene	3.56	162	431589	32.12 UG		97
50) 2-Nitroaniline	3.59	65	94807	35.46 UG	#	73
51) Dimethyl phthalate	3.67	163	507742	32.70 UG		97
52) 2,6-Dinitrotoluene	3.72	165	109616	34.85 UG	#	83
53) Acenaphthylene	3.77	152	713524	32.59 UG		98
54) 3-Nitroaniline	3.79	138	128493	36.44 UG	#	92
55) Acenaphthene	3.86	153	456881	32.53 UG		93
56) 2,4-Dinitrophenol	3.84	184	26031	20.52 UG	#	1
57) 4-Nitrophenol	3.84	65	54247	26.38 UG	#	59
58) 2,4-Dinitrotoluene	3.91	165	147402	36.29 UG	#	76
59) Dibenzofuran	3.93	168	681581	34.13 UG	#	82
60) Diethyl phthalate	4.02	149	455636	31.40 UG		94
61) Fluorene	4.11	166	517108	32.21 UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	272467	33.58 UG	#	88
63) 4-Nitroaniline	4.10	138	117175	32.32 UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	239298	33.50 UG		96
65) 2,3,4,6-Tetrachlorophenol	4.00	232	140952	35.94 UG		93
67) 4,6-Dinitro-2-methylphenol	4.13	198	77112	35.30 UG	#	71
68) N-Nitrosodiphenylamine	4.13	169	403966	35.12 UG		99
69) 1,2-Diphenylhydrazine	4.16	77	353809	29.67 UG	#	83
71) 4-Bromophenyl phenyl ether	4.34	248	175095	34.12 UG	#	89
72) Hexachlorobenzene	4.44	284	193786	33.56 UG		94
73) Atrazine	4.40	200	156216	37.81 UG		97
74) Pentachlorophenol	4.52	266	89155	28.37 UG		90
75) Phenanthrene	4.62	178	743657	32.86 UG		98
76) Anthracene	4.65	178	771582	34.28 UG		99
77) Carbazole	4.71	167	669486	33.92 UG		98
78) Di-n-butyl phthalate	4.88	149	780252	33.75 UG	#	97
79) Fluoranthene	5.31	202	754402	32.17 UG	#	94
80) Benzidine	5.35	184	80864m	8.08 UG		
83) Pyrene	5.46	202	766532	39.06 UG	#	88
85) 3,3'-Dimethylbenzidine	5.90	212	124840m	14.53 UG		
86) Butyl benzyl phthalate	5.90	149	279878	36.47 UG	#	86
87) 3,3'-Dichlorobenzidine	6.31	252	199224	34.35 UG		99
88) Benzo[a]anthracene	6.37	228	609403	35.57 UG		100
89) Chrysene	6.40	228	592548	37.20 UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	390350	37.38 UG		92
93) Di-n-octyl phthalate	6.79	149	546861	58.38 UG		99
94) Benzo[b]fluoranthene	7.31	252	457769m	48.53 UG		
95) Benzo[k]fluoranthene	7.34	252	509660	57.11 UG	#	98
96) Benzo[a]pyrene	7.68	252	436737	49.73 UG	#	98
97) Indeno[1,2,3-cd]pyrene	9.30	276	479602	43.57 UG	#	48
98) Dibenz[a,h]anthracene	9.29	278	401406	44.48 UG	#	66
99) Benzo[g,h,i]perylene	9.77	276	389423	42.65 UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSSl50219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	226612	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	921329	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	565711	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	922302	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	777322	40.00	UG		-0.05
92) Perylene-d12	7.74	264	303669	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	344267	49.56	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 49.56%				
6) Phenol-d5	2.30	99	467172	55.20	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 55.20%				
24) Nitrobenzene-d5	2.70	82	191533	26.02	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 52.04%				
47) 2-Fluorobiphenyl	3.49	172	560087	28.52	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 57.04%				
70) 2,4,6-Tribromophenol	4.24	330	224653	61.15	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 61.15%				
84) Terphenyl-d14	5.51	244	676967	31.40	UG		-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 62.80%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.43	74	111597	30.47	UG	#	38
3) Pyridine	1.46	52	72134	17.27	UG	#	79
5) Benzaldehyde	2.29	106	84039	22.58	UG		92
7) Phenol	2.30	94	276847	31.09	UG	#	26
8) Aniline	2.34	66	101142	27.63	UG		77
9) Bis(2-chloroethyl) ether	2.34	63	125628	30.80	UG	#	76
10) 2-Chlorophenol	2.40	128	244918	30.34	UG	#	90
11) 1,3-Dichlorobenzene	2.46	146	287934	31.48	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	271510	29.82	UG	#	83
13) Benzyl alcohol	2.51	108	162522	32.19	UG	#	76
14) 1,2-Dichlorobenzene	2.56	146	260987	29.87	UG		94
15) 2-Methylphenol	2.55	108	222313	41.28	UG		84
16) Bis(2-chloroisopropyl) eth	2.57	45	198383	33.03	UG	#	94
17) 4-Methylphenol	2.61	108	242690	33.96	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	166964	37.33	UG	#	84
19) Acetophenone	2.63	105	324329	32.78	UG	#	1
20) 3-Methylphenol	2.61	108	242690	33.92	UG		95
21) Hexachloroethane	2.70	117	82335	31.22	UG		90
25) Nitrobenzene	2.71	77	211181	30.25	UG	#	87
26) Isophorone	2.81	82	419818	31.95	UG		92
27) 2-Nitrophenol	2.85	139	149303	31.30	UG	#	69
28) 2,4-Dimethylphenol	2.83	107	244582	30.25	UG		87
29) Bis(2-chloroethoxy) methan	2.87	93	247607	30.25	UG		97
30) Benzoic acid	2.84	122	59731m	17.19	UG		
31) 2,4-Dimethylaniline	2.93	121	279540	30.44	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	225163	30.42	UG		96
33) 1,2,4-Trichlorobenzene	3.00	180	255121	30.67	UG		97
34) Naphthalene	3.03	128	756653	29.39	UG		91
35) 4-Chloroaniline	3.03	127	335564	25.36	UG		99
36) 4-Aminotoluene	2.65	106	375050	27.93	UG		95
37) Hexachlorobutadiene	3.10	225	138082	30.78	UG		98
38) Caprolactam	3.18	55	69619	32.24	UG	#	77

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

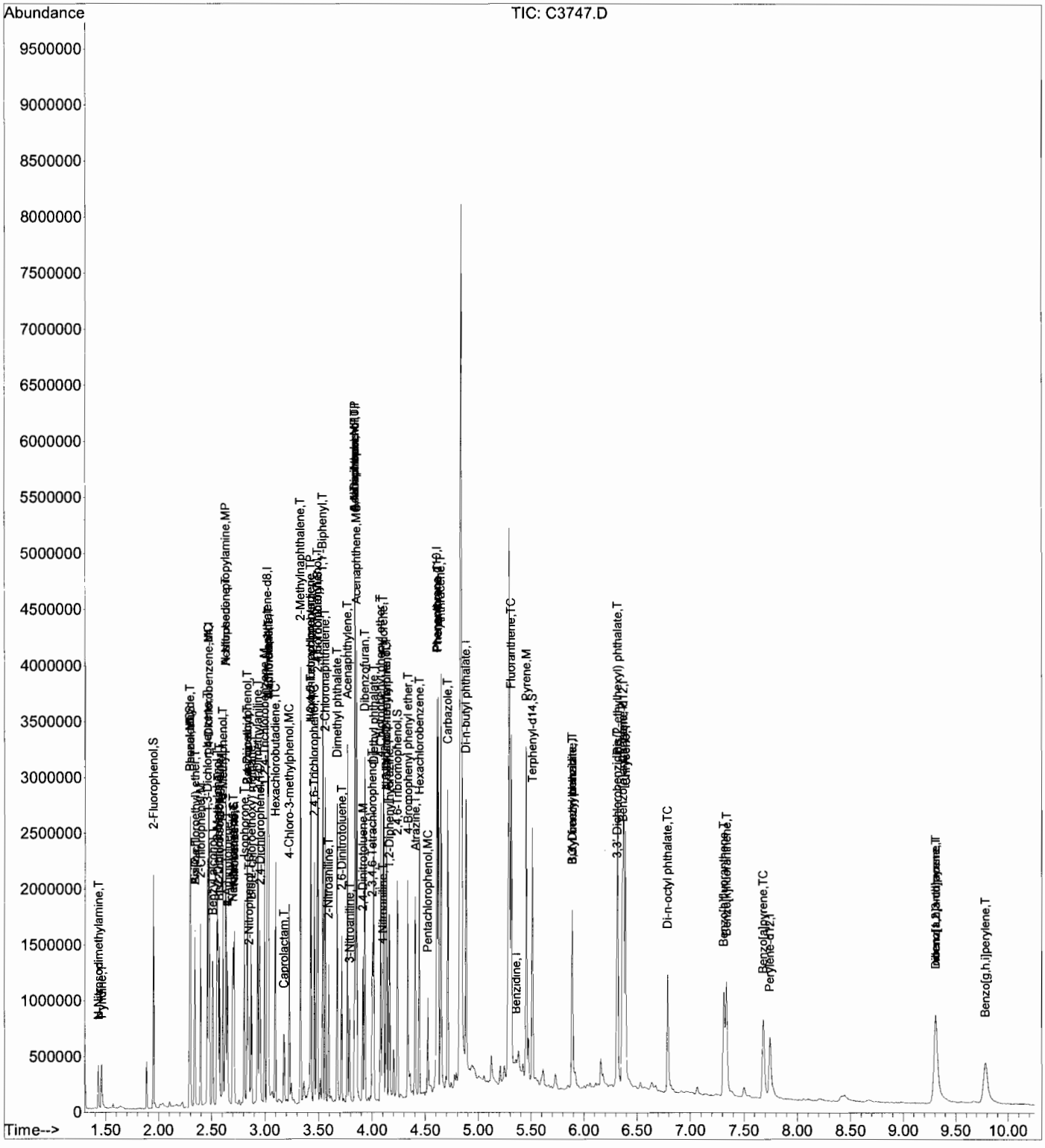
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	375050	27.93	UG		95
40) 4-Chloro-3-methylphenol	3.22	107	218072	29.85	UG		96
41) 2-Methylnaphthalene	3.33	142	603356	34.16	UG		100
44) Hexachlorocyclopentadiene	3.43	237	30541	15.85	UG	#	94
45) 2,4,6-Trichlorophenol	3.46	196	174638	31.46	UG		99
46) 2,4,5-Trichlorophenol	3.49	196	199590	35.93	UG		99
48) 1,1'-Biphenyl	3.54	154	745546	35.10	UG		97
49) 2-Chloronaphthalene	3.56	162	513726	32.63	UG		97
50) 2-Nitroaniline	3.59	65	112275	35.85	UG	#	72
51) Dimethyl phthalate	3.67	163	607435	33.40	UG		97
52) 2,6-Dinitrotoluene	3.72	165	139214	37.78	UG	#	85
53) Acenaphthylene	3.77	152	858060	33.45	UG		98
54) 3-Nitroaniline	3.79	138	122722	29.71	UG		95
55) Acenaphthene	3.86	153	548848	33.36	UG		92
56) 2,4-Dinitrophenol	3.84	184	4252	2.86	UG	#	1
57) 4-Nitrophenol	3.84	65	61304m	25.45	UG		
58) 2,4-Dinitrotoluene	3.91	165	179646	37.75	UG	#	76
59) Dibenzofuran	3.93	168	806438	34.47	UG	#	83
60) Diethyl phthalate	4.02	149	546058	32.13	UG		94
61) Fluorene	4.11	166	617965	32.85	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	327956	34.50	UG	#	88
63) 4-Nitroaniline	4.10	138	105861	24.93	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	296726	35.46	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	155304	33.80	UG		94
67) 4,6-Dinitro-2-methylphenol	4.13	198	39991	15.56	UG	#	83
68) N-Nitrosodiphenylamine	4.13	169	474988	35.09	UG		100
69) 1,2-Diphenylhydrazine	4.16	77	422163	30.09	UG	#	82
71) 4-Bromophenyl phenyl ether	4.34	248	203497	33.70	UG	#	87
72) Hexachlorobenzene	4.44	284	225599	33.20	UG	#	94
73) Atrazine	4.41	200	183598	37.76	UG		96
74) Pentachlorophenol	4.52	266	82087	22.20	UG		92
75) Phenanthrene	4.62	178	890773	33.45	UG		98
76) Anthracene	4.65	178	894805	33.78	UG		98
77) Carbazole	4.71	167	754071	32.47	UG		98
78) Di-n-butyl phthalate	4.88	149	928522	34.13	UG	#	97
79) Fluoranthene	5.31	202	885257	32.08	UG	#	81
80) Benzidine	5.36	184	37962m	3.22	UG		
83) Pyrene	5.45	202	895182	35.47	UG	#	88
85) 3,3'-Dimethylbenzidine	5.89	212	100956m	9.13	UG		
86) Butyl benzyl phthalate	5.89	149	324248	32.85	UG	#	90
87) 3,3'-Dichlorobenzidine	6.31	252	195122	26.15	UG		98
88) Benzo[a]anthracene	6.36	228	643915	29.22	UG		100
89) Chrysene	6.39	228	629772	30.74	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	538650	40.10	UG		93
93) Di-n-octyl phthalate	6.79	149	597836	54.35	UG		100
94) Benzo[b]fluoranthene	7.31	252	549030	49.57	UG		99
95) Benzo[k]fluoranthene	7.34	252	460120m	43.91	UG		
96) Benzo[a]pyrene	7.69	252	474895	46.05	UG		98
97) Indeno[1,2,3-cd]pyrene	9.32	276	535549	41.43	UG	#	45
98) Dibenz[a,h]anthracene	9.31	278	456361	43.06	UG	#	65
99) Benzo[g,h,i]perylene	9.79	276	467307	43.58	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	198493	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	783720	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	503473	40.00	UG		-0.02
66) Phenanthrene-d10	4.60	188	789669	40.00	UG		-0.04
82) Chrysene-d12	6.38	240	585903	40.00	UG		-0.05
92) Perylene-d12	7.73	264	247743	40.00	UG		-0.05
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	299552	49.24	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 49.24%				
6) Phenol-d5	2.30	99	414700	55.94	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 55.94%				
24) Nitrobenzene-d5	2.70	82	167234	26.70	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 53.40%				
47) 2-Fluorobiphenyl	3.49	172	475588	27.22	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 54.44%				
70) 2,4,6-Tribromophenol	4.23	330	198953	63.25	UG		-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery = 63.25%				
84) Terphenyl-d14	5.51	244	593012m	36.49	UG		-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 72.98%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	94625	29.49	UG	#	38
3) Pyridine	1.46	52	60742	16.60	UG	#	82
5) Benzaldehyde	2.29	106	73192	22.45	UG		92
7) Phenol	2.30	94	240456	30.83	UG	#	26
8) Aniline	2.34	66	104125	32.48	UG		88
9) Bis(2-chloroethyl) ether	2.34	63	117764	32.96	UG	#	74
10) 2-Chlorophenol	2.40	128	211980	29.98	UG		91
11) 1,3-Dichlorobenzene	2.46	146	247333	30.87	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	235386	29.51	UG	#	84
13) Benzyl alcohol	2.51	108	141427	31.98	UG	#	76
14) 1,2-Dichlorobenzene	2.56	146	228967	29.91	UG		94
15) 2-Methylphenol	2.55	108	195898	41.53	UG		87
16) Bis(2-chloroisopropyl) eth	2.57	45	174375	33.14	UG	#	93
17) 4-Methylphenol	2.61	108	214294	34.23	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	135437	34.57	UG	#	87
19) Acetophenone	2.63	105	288088	33.25	UG	#	1
20) 3-Methylphenol	2.61	108	214294	34.20	UG		94
21) Hexachloroethane	2.70	117	73239	31.70	UG		93
25) Nitrobenzene	2.71	77	190606	32.09	UG		89
26) Isophorone	2.80	82	367332	32.87	UG		92
27) 2-Nitrophenol	2.85	139	126704	31.23	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	221811	32.25	UG		93
29) Bis(2-chloroethoxy) methan	2.87	93	219285	31.50	UG		97
30) Benzoic acid	2.84	122	53013m	17.94	UG		
31) 2,4-Dimethylaniline	2.93	121	273148	34.97	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	194249	30.85	UG		98
33) 1,2,4-Trichlorobenzene	3.00	180	221519	31.30	UG		98
34) Naphthalene	3.03	128	656120	29.96	UG		94
35) 4-Chloroaniline	3.03	127	373831	33.21	UG		95
36) 4-Aminotoluene	2.65	106	396677	34.73	UG		96
37) Hexachlorobutadiene	3.10	225	120052	31.46	UG		97
38) Caprolactam	3.17	55	60379	32.87	UG	#	75

gdm

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

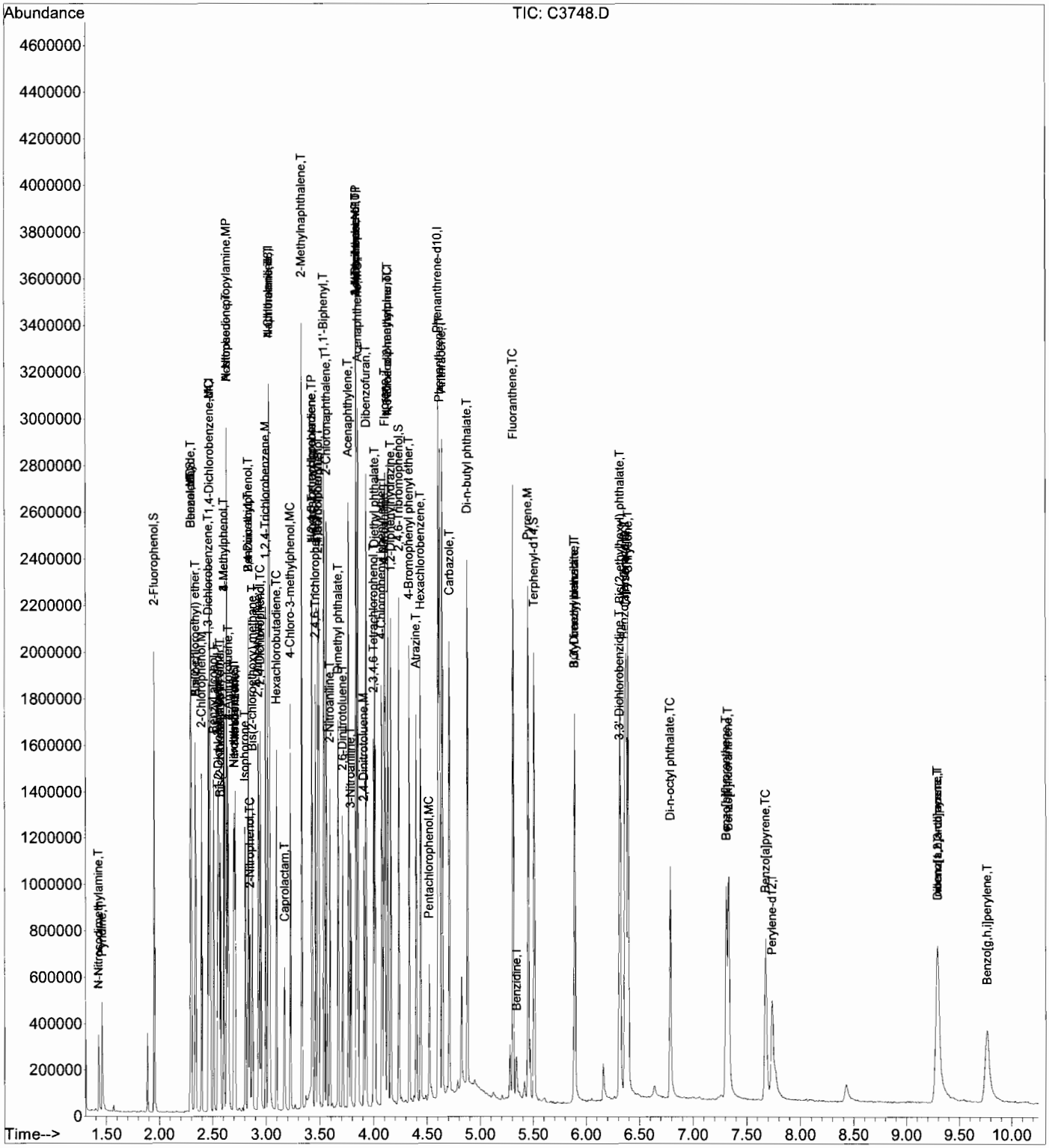
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	396677	34.73	UG		96
40) 4-Chloro-3-methylphenol	3.22	107	186122	29.95	UG		93
41) 2-Methylnaphthalene	3.33	142	525742	35.00	UG		99
44) Hexachlorocyclopentadiene	3.43	237	20210	11.78	UG		89
45) 2,4,6-Trichlorophenol	3.46	196	152259	30.82	UG		98
46) 2,4,5-Trichlorophenol	3.48	196	174833	35.37	UG		99
48) 1,1'-Biphenyl	3.54	154	664083	35.13	UG		98
49) 2-Chloronaphthalene	3.56	162	454677	32.45	UG		97
50) 2-Nitroaniline	3.59	65	104929	37.65	UG	#	76
51) Dimethyl phthalate	3.67	163	522553	32.28	UG		97
52) 2,6-Dinitrotoluene	3.71	165	117317	35.78	UG	#	82
53) Acenaphthylene	3.76	152	728047	31.89	UG		98
54) 3-Nitroaniline	3.79	138	128699	35.00	UG	#	93
55) Acenaphthene	3.86	153	478236	32.66	UG		92
56) 2,4-Dinitrophenol	3.84	184	4901	3.71	UG	#	1
57) 4-Nitrophenol	3.84	65	51907	24.21	UG	#	62
58) 2,4-Dinitrotoluene	3.91	165	151723	35.83	UG	#	76
59) Dibenzofuran	3.93	168	726234	34.88	UG	#	83
60) Diethyl phthalate	4.01	149	486330	32.15	UG		95
61) Fluorene	4.11	166	548297	32.75	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	287945	34.03	UG	#	88
63) 4-Nitroaniline	4.10	138	109483m	28.97	UG		
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	253157	33.99	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.00	232	130882	32.01	UG		96
67) 4,6-Dinitro-2-methylphenol	4.13	198	34871m	15.84	UG		
68) N-Nitrosodiphenylamine	4.13	169	422011	36.42	UG		100
69) 1,2-Diphenylhydrazine	4.16	77	391130	32.56	UG	#	86
71) 4-Bromophenyl phenyl ether	4.33	248	179224m	34.66	UG		
72) Hexachlorobenzene	4.44	284	199720	34.33	UG	#	93
73) Atrazine	4.39	200	159436	38.30	UG		96
74) Pentachlorophenol	4.52	266	69465	21.94	UG		95
75) Phenanthrene	4.62	178	772993	33.90	UG		98
76) Anthracene	4.64	178	792217	34.93	UG		99
77) Carbazole	4.71	167	685877	34.49	UG		98
78) Di-n-butyl phthalate	4.88	149	830023	35.64	UG	#	97
79) Fluoranthene	5.31	202	780853	33.05	UG	#	94
80) Benzidine	5.34	184	37688m	3.74	UG		
83) Pyrene	5.45	202	776843	40.83	UG	#	88
85) 3,3'-Dimethylbenzidine	5.89	212	82907m	9.95	UG		
86) Butyl benzyl phthalate	5.89	149	295711	39.74	UG	#	88
87) 3,3'-Dichlorobenzidine	6.31	252	179636m	31.94	UG		
88) Benzo[a]anthracene	6.36	228	583710m	35.15	UG		
89) Chrysene	6.39	228	537930m	34.83	UG		
90) Bis(2-ethylhexyl) phthalat	6.32	149	403112	39.81	UG		94
93) Di-n-octyl phthalate	6.79	149	560453	62.45	UG		100
94) Benzo[b]fluoranthene	7.31	252	449105	49.70	UG		98
95) Benzo[k]fluoranthene	7.33	252	394420m	46.13	UG		
96) Benzo[a]pyrene	7.67	252	432630	51.42	UG		98
97) Indeno[1,2,3-cd]pyrene	9.29	276	492755	46.73	UG	#	48
98) Dibenz[a,h]anthracene	9.29	278	394831	45.66	UG	#	65
99) Benzo[g,h,i]perylene	9.76	276	408885	46.74	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



SEMI-VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC

EXTRACTION LOG - SEMIVOLATILES
(BN/AE/BNA)

Extraction Date/Time: 2/19/2015 8:59:00 AM **Tray ID:** **Batch ID: 150219-01**

Technician: Kimberly **Matrix: Soil**

Sample	*V			%	Initial	Final	Surrogate (# : ul)		Spike (# : ul)		%		
ID #	/C	*F	Test	Moist	(g)	(ml)	BN	Acid	BNA	Color	SED	Comments	Due
BLKS150219-01	BLK		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25		1			
LCSS150219-01	LCS		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
01158-021MS	MS		BNA	-	15.01	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
01158-021MSD	MSD		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
00920-002	1	1	PAH	18.2	15.27	1.00	BNS025 : 25			5			
01248-002	2	2	BNA	15.8	15.43	0.500	BNS025 : 25	AES026 : 25		5			
01248-004	3	3	BNA	17.9	15.36	0.500	BNS025 : 25	AES026 : 25		5			
01248-006	4	4	BNA	14.4	15.24	0.500	BNS025 : 25	AES026 : 25		4			
01158-021	5	5	BN	17.4	15.03	0.500	BNS025 : 25			2			
01158-022	6	6	BN	11.9	15.10	0.500	BNS025 : 25			4			
01246-001	7	1	PAH	9.10	15.60	0.500	BNS025 : 25			4			
01246-002	8	2	PAH	10.8	15.18	0.500	BNS025 : 25			5			
01273-001	9	3	BNA	10.6	15.24	1.00	BNS025 : 25	AES026 : 25		5		R-48	

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

*V/C=Vap/Cell
*F=Funnel

Color: 1 = Clear; 2 = Light Yellow
3 = Yellow-Gold; 4 = Brown; 5 = Black

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 2/10/2015 **BATCH ID:**

INSTRUMENT: C

TUNE FILE: DFTPP.U

METHOD 1 CS0415

METHOD 2

METHOD 3

ANALYST: Eleanor

John Initial

ISTD.Lot ECS SVI028

P (limit:2) = 0.90

B (limit:2) = 0.99

D(limit=20%)=

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
96	C3568	ABN005-15	DFTPP150210									11:24		
97	C3569	ABN011-15	ICC040BNA1											
26	C3570	ABN008-15	ICC001BNA1											
27	C3571	ABN009-15	ICC010BNA1											
28	C3572	ABN010-15	ICC020BNA1											
30	C3573	ABN012-15	ICC080BNA1											
31	C3574	ABN013-15	ICC160BNA1											
97	C3575	ABN004-15	ICV040BNA1											
32	C3576	ABN019-15	ICC160BNA2											
33	C3577	ABN018-15	ICC080BNA2											
34	C3578	ABN017-15	ICC040BNA2											
35	C3579	ABN016-15	ICC020BNA2											
36	C3580	ABN015-15	ICC010BNA2											
37	C3581	ABN014-15	ICC001BNA2											
98	C3582	ABN031-15	ICV040BNA2											

DATE: 2/20/2015 **BATCH ID:** 150219-01

INSTRUMENT: C 150219-03

TUNE FILE: DFTPP.U

METHOD 1 CS0415 ISTD.Lot ECS SVI028

METHOD 2 P(limit:2) = 0.98

METHOD 3 B(limit:2) = 1.30

ANALYST: Eleanor D(limit=20%) =

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
96	C3742	ABN005-15	DFTPP150220									11:39		.
97	C3743	ABN004-15	CCV040BNA1											.
98	C3744	ABN031-15	CCV040BNA2											.
1	C3745	BLKS150219-01		1	15.00	0.5	S			2/19/15	0			.
2	C3746	LCSS150219-01		1	15.00	0.5	S			2/19/15	0			.
3	C3747	15-01158-021MS		1	15.01	0.5	S			2/19/15	0			.
4	C3748	15-01158-021MSD		1	15.00	0.5	S			2/19/15	0			.
13	C3749	01273	1	1	15.24	1	S	2/18/15	2/19/15	2/19/15	10.6			GPEC-WC1
5	C3750	00920	2	2	15.27	1	S	2/5/15	2/5/15	2/19/15	18.2			S-2
6	C3751	01248	2	1	15.43	0.5	S	2/18/15	2/18/15	2/19/15	15.8			WC-1/0-4
7	C3752	01248	4	1	15.36	0.5	S	2/18/15	2/18/15	2/19/15	17.9			WC-2/0-4
8	C3753	01248	6	1	15.24	0.5	S	2/18/15	2/18/15	2/19/15	14.4			WC-3/0-4
9	C3754	01158	21	1	15.03	0.5	S	2/13/15	2/13/15	2/19/15				SB-13
10	C3755	01158	22	1	15.10	0.5	S	2/13/15	2/13/15	2/19/15				SB-14
11	C3756	01246	1	1	15.60	0.5	S	2/18/15	2/18/15	2/19/15				SB-N
12	C3757	01246	2	1	15.18	0.5	S	2/18/15	2/18/15	2/19/15				SB-S
26	C3758	BLKS150219-03		1	15.00	0.5	S			2/19/15	0			.
27	C3759	LCSS150219-03		1	15.00	0.5	S			2/19/15	0		*dble acid surr.	.
28	C3760	15-01281-011MS		1	15.03	0.5	S			2/19/15	0			.
29	C3761	15-01281-011MSD		1	15.02	0.5	S			2/19/15	0			.
30	C3762	01281	1	1	15.66	1	S	2/18/15	2/19/15	2/19/15	33.6			DPX-104A
31	C3763	01281	2	1	15.36	0.5	S	2/18/15	2/19/15	2/19/15	15.2			DPX-104B
32	C3764	01281	3	1	15.69	1	S	2/18/15	2/19/15	2/19/15	15.4			DPX-105A
33	C3765	01281	4	1	15.02	0.5	S	2/18/15	2/19/15	2/19/15	21.2			DPX-105B
34	C3766	01281	5	5	15.28	1	S	2/18/15	2/19/15	2/19/15	35.3			DPX-106A
35	C3767	01281	6	1	15.23	0.5	S	2/18/15	2/19/15	2/19/15	19.0			DPX-106B
36	C3768	01281	7	1	15.12	0.5	S	2/18/15	2/19/15	2/19/15	20.6			DPX-111A
37	C3769	01281	8	1	15.55	0.5	S	2/18/15	2/19/15	2/19/15	27.6			DPX-111B
38	C3770	01281	9	1	15.26	0.5	S	2/18/15	2/19/15	2/19/15	35.7			DPX-112A
39	C3771	01281	10	1	15.18	0.5	S	2/18/15	2/19/15	2/19/15	36.5			DPX-112B
40	C3772	01281	11	1	15.06	0.5	S	2/18/15	2/19/15	2/19/15	37.9			DPX-113A
41	C3773	01281	12	1	15.16	0.5	S	2/18/15	2/19/15	2/19/15	35.9			DPX-113B
42	C3774	01281	13	1	15.04	0.5	S	2/18/15	2/19/15	2/19/15	33.6			DPX-126
43	C3775	01281	14	1	15.25	0.5	S	2/18/15	2/19/15	2/19/15	39.4			DPX-127
44	C3776	01281	15	1	15.09	0.5	S	2/18/15	2/19/15	2/19/15	41.3			DPX-128
45	C3777	01281	16	1	15.00	0.5	S	2/18/15	2/19/15	2/19/15	30.6			DPX-129

ABN005-15

DATE:01/22/15

DFTPP		Rec. Date	EXP.Date	
Dftpp 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	1.25ml of each/250ml CH2CL2
Pentachlorophenol 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	
Benzidine 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	**final conc: 50ug/ml**
DDT 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	

EXP:7/15

DATE: 01/23/15	Conc :	Rec/Prep		ABN008-15	ABN009-15	ABN010-15	ABN011-15	ABN012-15	ABN013-15
BNAMIX1 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-13	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-16	50ul	50ul	50ul	50ul	50ul	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Nov-16	50ul	50ul	50ul	50ul	50ul	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-16	20ul	20ul	20ul	20ul	20ul	20ul
PAH mix (CPI-238513)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
PHENOL mix(CPI-238668)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
BN mix (CPI-199335)	2000ug/ml	Oct-14	Oct-16	0.5ul	5ul	10ul	20ul	40ul	80ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Oct-15	0.5ul	5ul	10ul	20ul	40ul	80ul
OLMO4 mix(CPI- 219588)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
EXTRA (ABN007-15)	2000ug/ml	Jan-15	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
DIOXANE (SUPELCO-LB914570)	2000ug/ml	Dec-14	Dec-15	0.5ul	5ul	10ul	20ul	40ul	80ul
2,3,4,6-Tetrachlorophenol(RESTEK a010265)	1000ug/ml	Dec-14	Sep-22	1ul	10ul	20ul	40ul	80ul	160ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:7/15									

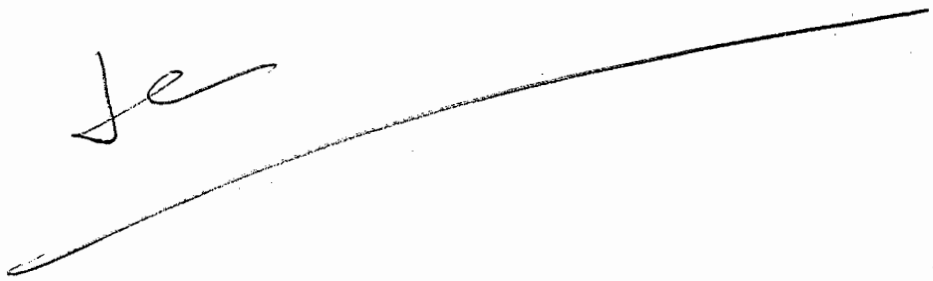
DATE: 01/23/15	Conc :	Rec/Prep		ABN014-15	ABN015-15	ABN016-15	ABN017-15	ABN018-15	ABN019-15
BNAMIX2 STD		Date	Exp Date	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:07/15									

ABN004-15

DATE: 01/21/15

40ng BNA CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-15	20ul
ABN001-15	287ug/ml	Jan-15	Jul-15	140ul
Final Volume				1ml

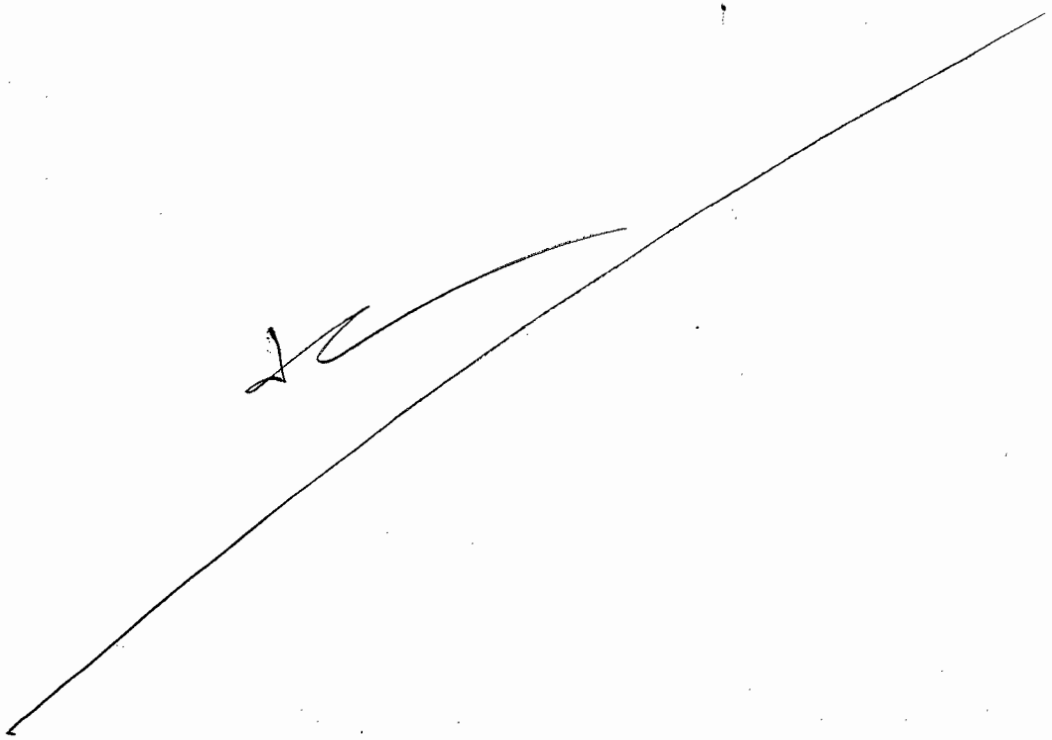
EXP:07/15



ABN031-15

DATE: 01/23/15 **40ng BNA - MIX2 CHECK STD**	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI027)	4000ug/ml	May-12	May-15	10ul
ADD ON #2 mix(ECS-8270A203)	2000ug/mL	Jan-15	Nov-16	20ul
BENZIDINES mix (SUPELCO-LC00780)	2000ug/mL	Jan-15	May-16	20ul
Final Volume				1ml

EXP:07/15



TCLP
SEMI-VOLATILE ORGANICS

TCLP
SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	S1	#	S2	#	S3	#	S4	#	S5	#	S6	#
CCV040BNA2		B7652.D	N/A		N/A		N/A		N/A		N/A		N/A	
BLKA150220-03	AQUEOUS	B7674.D	21		13		$ 46		52		56		67	
TCLP150219	LEACHATE	B7675.D	21		13		$ 46		49		58		67	
LCSA150220-03	AQUEOUS	B7676.D	23		14		$ 47		51		71		79	
E15-01273-001MS	AQUEOUS	B7677.D	29		20		46		50		69		80	
E15-01273-001MSD	AQUEOUS	B7678.D	28		22		45		48		62		72	
E15-01273-001	LEACHATE	B7679.D	27		18		44		51		64		67	

	DKQPs		IAL	
	Aqueous	Soil	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	15-110	30-130	10-100	28-108
S2 (PHL) = Phenol-d5	15-110	30-130	10-102	34-107
S3 (NBZ) = Nitrobenzene-d5	30-130	30-130	27-102	26-104
S4 (FBP) = 2-Fluorobiphenyl	30-130	30-130	26-101	32-128
S5 (TBP) = 2,4,6-Tribromophenol	15-110	30-130	22-115	35-126
S6 (TPH) = Terphenyl-d14	30-130	30-130	23-124	32-135

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference
N/A Not applicable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-03
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7676.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	DKQP
N-Nitrosodimethylamine	30.0	12.1	40	$	40-140	70-130
Pyridine	30.0	10.6	35		20-120	20-160
Benzaldehyde	30.0	8.4	28		10-110	20-160
Phenol	30.0	12.2	41		30-140	20-160
Aniline	30.0	21.3	71		40-140	70-130
Bis(2-chloroethyl) ether	30.0	19.9	66	$	40-140	70-130
2-Chlorophenol	30.0	15.2	51		30-140	20-160
1,3-Dichlorobenzene	30.0	16.9	56	$	40-140	70-130
1,4-Dichlorobenzene	30.0	16.6	55	$	40-140	70-130
Benzyl alcohol	30.0	13.2	44	$	40-140	70-130
1,2-Dichlorobenzene	30.0	17.0	57	$	40-140	70-130
2-Methylphenol	30.0	13.4	45		30-140	20-160
Bis(2-chloroisopropyl) ether	30.0	19.0	63	$	40-140	70-130
4-Methylphenol	30.0	13.8	46	$	30-140	70-130
N-Nitrosodi-n-propylamine	30.0	19.5	65	$	40-140	70-130
Acetophenone	30.0	20.5	68	$	40-140	70-130
3-Methylphenol	30.0	13.8	46		30-140	20-160
Hexachloroethane	30.0	16.1	54	$	40-140	70-130
Nitrobenzene	30.0	16.1	54	$	40-140	70-130
Isophorone	30.0	16.9	56	$	40-140	70-130
2-Nitrophenol	30.0	14.8	49		30-140	20-160
2,4-Dimethylphenol	30.0	17.4	58		30-140	20-160
Bis(2-chloroethoxy) methane	30.0	16.1	54	$	40-140	70-130
Benzoic acid	30.0	14.3	48		30-140	20-160
2,4-Dimethylaniline	30.0	16.7	56	$	40-140	70-130
2,4-Dichlorophenol	30.0	17.2	57		30-140	20-160
1,2,4-Trichlorobenzene	30.0	16.0	53	$	40-140	70-130
Naphthalene	30.0	15.9	53	$	40-140	70-130
4-Chloroaniline	30.0	16.2	54	$	40-140	70-130
Hexachlorobutadiene	30.0	17.8	59	$	40-140	70-130
Caprolactam	30.0	13.1	44	$	40-140	70-130
4-Chloro-3-methylphenol	30.0	16.6	55		30-140	20-160
2-Methylnaphthalene	30.0	18.2	61	$	40-140	70-130
Hexachlorocyclopentadiene	30.0	12.3	41		5-105	20-160
2,4,6-Trichlorophenol	30.0	18.4	61		30-140	20-160
2,4,5-Trichlorophenol	30.0	21.0	70		30-140	20-160
1,1'-Biphenyl	30.0	18.5	62	$	40-140	70-130
2-Chloronaphthalene	30.0	18.1	60	$	40-140	70-130
2-Nitroaniline	30.0	21.1	70		40-140	70-130
Dimethyl phthalate	30.0	18.2	61	$	40-140	70-130
2,6-Dinitrotoluene	30.0	18.2	61	$	40-140	70-130
Acenaphthylene	30.0	16.8	56	$	40-140	70-130
3-Nitroaniline	30.0	20.3	68	$	40-140	70-130
Acenaphthene	30.0	17.7	59		40-140	20-160
2,4-Dinitrophenol	30.0	16.2	54		5-105	20-160

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-03
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7676.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	Rec Limits DKQP
4-Nitrophenol	30.0	15.0	50		30-140	20-160
2,4-Dinitrotoluene	30.0	23.5	78		40-140	70-130
Dibenzofuran	30.0	20.9	70		40-140	70-130
Diethyl phthalate	30.0	24.3	81		40-140	70-130
Fluorene	30.0	19.9	66	$	40-140	70-130
4-Chlorophenyl phenyl ether	30.0	21.1	70		40-140	70-130
4-Nitroaniline	30.0	26.5	88		40-140	70-130
1,2,4,5-Tetrachlorobenzene	30.0	18.7	62	$	40-140	70-130
2,3,4,6-Tetrachlorophenol	30.0	20.6	69	$	40-140	70-130
4,6-Dinitro-2-methylphenol	30.0	23.8	79		10-110	20-160
N-Nitrosodiphenylamine	30.0	27.5	92		40-140	70-130
1,2-Diphenylhydrazine	30.0	20.7	69	$	40-140	70-130
4-Bromophenyl phenyl ether	30.0	23.1	77		40-140	70-130
Hexachlorobenzene	30.0	21.6	72		40-140	70-130
Atrazine	30.0	27.5	92		20-120	20-160
Pentachlorophenol	30.0	25.4	85		30-140	20-160
Phenanthrene	30.0	22.4	75		40-140	70-130
Anthracene	30.0	24.0	80		40-140	70-130
Carbazole	30.0	26.6	89		40-140	70-130
Di-n-butyl phthalate	30.0	26.3	88		40-140	70-130
Fluoranthene	30.0	24.2	81		40-140	70-130
Benzidine	30.0	11.7	39		5-105	20-160
Pyrene	30.0	26.1	87		40-140	70-130
3,3'-Dimethylbenzidine	30.0	11.1	37		5-105	20-160
Butyl benzyl phthalate	30.0	26.3	88		40-140	70-130
3,3'-Dichlorobenzidine	30.0	30.3	101		40-140	70-130
Benzo[a]anthracene	30.0	27.0	90		40-140	70-130
Chrysene	30.0	29.4	98		40-140	70-130
Bis(2-ethylhexyl) phthalate	30.0	27.1	90		40-140	70-130
Di-n-octyl phthalate	30.0	30.9	103		40-140	70-130
Benzo[b]fluoranthene	30.0	35.3	118		40-140	70-130
Benzo[k]fluoranthene	30.0	35.6	119		40-140	70-130
Benzo[a]pyrene	30.0	35.5	118		40-140	70-130
Indeno[1,2,3-cd]pyrene	30.0	36.1	120		40-140	70-130
Dibenz[a,h]anthracene	30.0	36.8	123		40-140	70-130
Benzo[g,h,i]perylene	30.0	35.1	117		40-140	70-130

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
MS Data file: B7677.D
MSD Data file: B7678.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD limits IAL	DKQP
N-Nitrosodimethylamine	40.0	0.0	20.6	52	$	20.4	51	$	1		40-140/20	70-130/20
Pyridine	40.0	0.0	16.3	41		16.0	40		2		20-120/20	20-160/20
Benzaldehyde	40.0	0.0	9.5	24		10.2	26		7		10-110/20	20-160/20
Phenol	40.0	0.0	18.0	45		17.7	44		2		30-140/20	20-160/20
Aniline	40.0	0.0	19.4	49	$	19.3	48	$	1		40-140/20	70-130/20
Bis(2-chloroethyl) ether	40.0	0.0	18.7	47	$	18.2	46	$	3		40-140/20	70-130/20
2-Chlorophenol	40.0	0.0	15.5	39		16.0	40		3		30-140/20	20-160/20
1,3-Dichlorobenzene	40.0	0.0	17.2	43	$	17.7	44	$	3		40-140/20	70-130/20
1,4-Dichlorobenzene	40.0	0.0	16.3	41	$	16.6	42	$	2		40-140/20	70-130/20
Benzyl alcohol	40.0	0.0	17.7	44	$	16.9	42	$	5		40-140/20	70-130/20
1,2-Dichlorobenzene	40.0	0.0	17.2	43	$	17.8	45	$	3		40-140/20	70-130/20
2-Methylphenol	40.0	0.0	16.8	42		17.0	43		1		30-140/20	20-160/20
Bis(2-chloroisopropyl) ether	40.0	0.0	19.0	48	$	19.4	49	$	2		40-140/20	70-130/20
4-Methylphenol	40.0	0.0	18.2	46	$	18.4	46	$	1		30-140/20	70-130/20
N-Nitrosodi-n-propylamine	40.0	0.0	20.2	51	$	20.3	51	$	0		40-140/20	70-130/20
Acetophenone	40.0	0.0	22.0	55	$	21.2	53	$	4		40-140/20	70-130/20
3-Methylphenol	40.0	0.0	18.2	46		18.4	46		1		30-140/20	20-160/20
Hexachloroethane	40.0	0.0	16.6	42	$	17.0	43	$	2		40-140/20	70-130/20
Nitrobenzene	40.0	0.0	19.1	48	$	19.1	48	$	0		40-140/20	70-130/20
Isophorone	40.0	0.0	19.7	49	$	19.3	48	$	2		40-140/20	70-130/20
2-Nitrophenol	40.0	0.0	17.6	44		17.0	43		3		30-140/20	20-160/20
2,4-Dimethylphenol	40.0	0.0	19.3	48		18.5	46		4		30-140/20	20-160/20
Bis(2-chloroethoxy) methane	40.0	0.0	18.6	47	$	18.2	46	$	2		40-140/20	70-130/20
Benzoic acid	40.0	0.0	19.6	49		16.1	40		20		30-140/20	20-160/20
2,4-Dimethylaniline	40.0	0.0	19.9	50	$	19.4	49	$	3		40-140/20	70-130/20
2,4-Dichlorophenol	40.0	0.0	18.9	47		18.4	46		3		30-140/20	20-160/20
1,2,4-Trichlorobenzene	40.0	0.0	18.5	46	$	18.4	46	$	1		40-140/20	70-130/20
Naphthalene	40.0	0.0	18.4	46	$	18.0	45	$	2		40-140/20	70-130/20
4-Chloroaniline	40.0	0.0	19.8	50	$	19.2	48	$	3		40-140/20	70-130/20
Hexachlorobutadiene	40.0	0.0	19.5	49	$	19.5	49	$	0		40-140/20	70-130/20
Caprolactam	40.0	0.0	18.9	47	$	19.3	48	$	2		40-140/20	70-130/20
4-Chloro-3-methylphenol	40.0	0.0	20.1	50		19.5	49		3		30-140/20	20-160/20
2-Methylnaphthalene	40.0	0.0	21.7	54	$	20.2	51	$	7		40-140/20	70-130/20
Hexachlorocyclopentadiene	40.0	0.0	14.7	37		14.4	36		2		5-105/20	20-160/20
2,4,6-Trichlorophenol	40.0	0.0	20.5	51		19.2	48		7		30-140/20	20-160/20
2,4,5-Trichlorophenol	40.0	0.0	24.0	60		23.0	58		4		30-140/20	20-160/20
1,1'-Biphenyl	40.0	0.0	22.4	56	$	21.9	55	$	2		40-140/20	70-130/20
2-Chloronaphthalene	40.0	0.0	20.9	52	$	20.8	52	$	0		40-140/20	70-130/20
2-Nitroaniline	40.0	0.0	25.6	64	$	25.2	63	$	2		40-140/20	70-130/20
Dimethyl phthalate	40.0	0.0	21.1	53	$	20.0	50	$	5		40-140/20	70-130/20
2,6-Dinitrotoluene	40.0	0.0	23.6	59	$	23.2	58	$	2		40-140/20	70-130/20
Acenaphthylene	40.0	0.0	20.8	52	$	19.5	49	$	6		40-140/20	70-130/20
3-Nitroaniline	40.0	0.0	26.8	67	$	24.3	61	$	10		40-140/20	70-130/20
Acenaphthene	40.0	0.0	20.6	52		20.8	52		1		40-140/20	20-160/20
2,4-Dinitrophenol	40.0	0.0	18.3	46		15.2	38		19		5-105/20	20-160/20

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
MS Data file: B7677.D
MSD Data file: B7678.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD IAL Limits	Rec/RPD DKQP Limits
4-Nitrophenol	40.0	0.0	23.7	59		20.8	52		13		30-140/20	20-160/20
2,4-Dinitrotoluene	40.0	0.0	27.1	68	$	26.6	67	$	2		40-140/20	70-130/20
Dibenzofuran	40.0	0.0	25.3	63	$	24.3	61	$	4		40-140/20	70-130/20
Diethyl phthalate	40.0	0.0	27.3	68	$	25.3	63	$	8		40-140/20	70-130/20
Fluorene	40.0	0.0	24.8	62	$	23.7	59	$	5		40-140/20	70-130/20
4-Chlorophenyl phenyl ether	40.0	0.0	25.3	63	$	24.5	61	$	3		40-140/20	70-130/20
4-Nitroaniline	40.0	0.0	32.3	81		29.8	75		8		40-140/20	70-130/20
1,2,4,5-Tetrachlorobenzene	40.0	0.0	21.3	53	$	21.0	53	$	1		40-140/20	70-130/20
2,3,4,6-Tetrachlorophenol	40.0	0.0	23.0	58	$	19.9	50	$	14		40-140/20	70-130/20
4,6-Dinitro-2-methylphenol	40.0	0.0	25.9	65		27.2	68		5		10-110/20	20-160/20
N-Nitrosodiphenylamine	40.0	0.0	31.3	78		29.4	74		6		40-140/20	70-130/20
1,2-Diphenylhydrazine	40.0	0.0	25.8	65	$	24.2	61	$	6		40-140/20	70-130/20
4-Bromophenyl phenyl ether	40.0	0.0	27.3	68	$	24.6	62	$	10		40-140/20	70-130/20
Hexachlorobenzene	40.0	0.0	25.1	63	$	23.2	58	$	8		40-140/20	70-130/20
Atrazine	40.0	0.0	32.5	81		30.4	76		7		20-120/20	20-160/20
Pentachlorophenol	40.0	0.0	28.8	72		28.5	71		1		30-140/20	20-160/20
Phenanthrene	40.0	0.0	26.1	65	$	24.9	62	$	5		40-140/20	70-130/20
Anthracene	40.0	0.0	27.2	68	$	26.0	65	$	5		40-140/20	70-130/20
Carbazole	40.0	0.0	30.8	77		28.1	70		9		40-140/20	70-130/20
Di-n-butyl phthalate	40.0	0.0	31.2	78		28.5	71		9		40-140/20	70-130/20
Fluoranthene	40.0	0.0	29.0	73		26.6	67	$	9		40-140/20	70-130/20
Benzidine	40.0	0.0	14.4	36		11.9	30		19		5-105/20	20-160/20
Pyrene	40.0	0.0	32.3	81		29.2	73		10		40-140/20	70-130/20
3,3'-Dimethylbenzidine	40.0	0.0	12.5	31		10.9	27		14		5-105/20	20-160/20
Butyl benzyl phthalate	40.0	0.0	32.5	81		28.7	72		12		40-140/20	70-130/20
3,3'-Dichlorobenzidine	40.0	0.0	37.1	93		32.7	82		13		40-140/20	70-130/20
Benzo[a]anthracene	40.0	0.0	33.7	84		30.2	76		11		40-140/20	70-130/20
Chrysene	40.0	0.0	34.7	87		31.5	79		10		40-140/20	70-130/20
Bis(2-ethylhexyl) phthalate	40.0	0.0	33.0	83		28.1	70		16		40-140/20	70-130/20
Di-n-octyl phthalate	40.0	0.0	38.9	97		35.5	89		9		40-140/20	70-130/20
Benzo[b]fluoranthene	40.0	0.0	41.2	103		38.0	95		8		40-140/20	70-130/20
Benzo[k]fluoranthene	40.0	0.0	49.7	124		45.1	113		10		40-140/20	70-130/20
Benzo[a]pyrene	40.0	0.0	47.3	118		43.5	109		8		40-140/20	70-130/20
Indeno[1,2,3-cd]pyrene	40.0	0.0	47.4	119		43.8	110		8		40-140/20	70-130/20
Dibenz[a,h]anthracene	40.0	0.0	49.1	123		45.8	115		7		40-140/20	70-130/20
Benzo[g,h,i]perylene	40.0	0.0	46.7	117		43.3	108		8		40-140/20	70-130/20

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B7674.D

Instrument ID: MSDB

Date Extracted: 02/20/15

Matrix: LEACHATE

Date Analyzed: 02/20/2015

Time Analyzed: 16:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	TCLP150219	02/20/2015	16:55
.	LCSA150220-03	02/20/2015	17:12
.	E15-01273-001MS	02/20/2015	17:29
.	E15-01273-001MSD	02/20/2015	17:46
GPEC-WC1	E15-01273-001	02/20/2015	18:03

FORM IV SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B7540.D

DFTPP Injection Date : 02/17/2015

Inst ID: MSDB

DFTPP Injection Time: 07:59

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	50.9	
68	Less than 2.0% of mass 69	0.7	(1.4)1
69	Mass 69 relative abundance	50.4	
70	Less than 2.0% of mass 69	0.4	(0.8)1
127	40.0 - 60.0% of mass 198	52.3	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	19.0	
365	Greater than 1.0% of mass 198	2.6	
441	Present, but less than mass 443	7.74	(80.4)3
442	40.0 - 100.0% of mass 198	51.5	
443	17.0 - 23.0% of mass 442	9.6	(18.7)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN011-15	ICC040BNA1	B7541.D	02/17/2015	08:27
ABN008-15	ICC001BNA1	B7542.D	02/17/2015	08:44
ABN009-15	ICC010BNA1	B7543.D	02/17/2015	09:01
ABN010-15	ICC020BNA1	B7544.D	02/17/2015	09:18
ABN012-15	ICC080BNA1	B7545.D	02/17/2015	09:35
ABN013-15	ICC160BNA1	B7546.D	02/17/2015	09:53
ABN019-15	ICC160BNA2	B7547.D	02/17/2015	10:10
ABN018-15	ICC080BNA2	B7548.D	02/17/2015	10:27
ABN017-15	ICC040BNA2	B7549.D	02/17/2015	10:44
ABN016-15	ICC020BNA2	B7550.D	02/17/2015	11:01
ABN015-15	ICC010BNA2	B7551.D	02/17/2015	11:18
ABN014-15	ICC001BNA2	B7552.D	02/17/2015	11:36
ABN004-15	ICV040BNA1	B7558.D	02/17/2015	13:12
ABN031-15	ICV040BNA2	B7559.D	02/17/2015	13:29

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B7650.D

DFTPP Injection Date : 02/20/2015

Inst ID: MSDB

DFTPP Injection Time: 10:04

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	57.3	
68	Less than 2.0% of mass 69	0.7	(1.1)1
69	Mass 69 relative abundance	59.1	
70	Less than 2.0% of mass 69	0.6	(1.0)1
127	40.0 - 60.0% of mass 198	58.5	
197	Less than 1.0% of mass 198	0.6	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.1	
275	10.0 - 30.0% of mass 198	20.8	
365	Greater than 1.0% of mass 198	3.2	
441	Present, but less than mass 443	8.48	(77.5)3
442	40.0 - 100.0% of mass 198	51.4	
443	17.0 - 23.0% of mass 442	10.9	(21.3)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN004-15	CCV040BNA1	B7651.D	02/20/2015	10:14
ABN031-15	CCV040BNA2	B7652.D	02/20/2015	10:31
.	BLKA150220-03	B7674.D	02/20/2015	16:32
.	TCLP150219	B7675.D	02/20/2015	16:55
.	LCSA150220-03	B7676.D	02/20/2015	17:12
.	E15-01273-001MS	B7677.D	02/20/2015	17:29
.	E15-01273-001MSD	B7678.D	02/20/2015	17:46
GPEC-WC1	E15-01273-001	B7679.D	02/20/2015	18:03

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7541.D

Date Analyzed: 02/17/2015

Instrument ID: MSDB

Time Analyzed: 08:27

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	265194		3.63		1020973		4.40		580734		5.43	
	UPPER LIMIT	530388		4.13		2041946		4.90		1161468		5.93	
	LOWER LIMIT	132597		3.13		510487		3.90		290367		4.93	
	LAB SAMPLE ID												
01	ICC001BNA1	249918		3.63		984282		4.40		572049		5.43	
02	ICC010BNA1	266766		3.63		1048584		4.40		589759		5.43	
03	ICC020BNA1	264017		3.63		1006969		4.40		582660		5.43	
04	ICC080BNA1	252846		3.63		954046		4.40		544113		5.43	
05	ICC160BNA1	256961		3.64		973549		4.41		546858		5.43	
06	ICC160BNA2	260332		3.63		1021817		4.40		572066		5.43	
07	ICC080BNA2	248093		3.63		964115		4.40		537275		5.43	
08	ICC040BNA2	244613		3.63		945145		4.40		534323		5.42	
09	ICC020BNA2	280541		3.63		1057602		4.40		604787		5.43	
10	ICC010BNA2	294317		3.63		1121813		4.40		623673		5.43	
11	ICC001BNA2	266988		3.63		1051949		4.40		588074		5.43	
12	ICV040BNA1	251755		3.63		955520		4.40		528177		5.43	
13	ICV040BNA2	260289		3.63		1006846		4.40		565692		5.43	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7541.D Date Analyzed: 02/17/2015

Instrument ID: MSDB Time Analyzed: 08:27

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	913175	6.34	687309	7.93	465631	9.19
	UPPER LIMIT	1826350	6.84	1374618	8.43	931262	9.69
	LOWER LIMIT	456588	5.84	343655	7.43	232816	8.69
	LAB SAMPLE ID						
01	ICC001BNA1	912219	6.34	817150	7.95	575957	9.21
02	ICC010BNA1	952946	6.34	829114	7.95	543635	9.20
03	ICC020BNA1	921697	6.34	742687	7.96	493542	9.22
04	ICC080BNA1	818451	6.34	612317	7.93	434851	9.18
05	ICC160BNA1	805034	6.34	592953	7.94	453776	9.19
06	ICC160BNA2	894081	6.34	700244	7.93	523880	9.19
07	ICC080BNA2	864948	6.34	740917	7.93	539163	9.19
08	ICC040BNA2	849485	6.34	738367	7.93	556975	9.18
09	ICC020BNA2	956779	6.34	780984	7.92	555867	9.17
10	ICC010BNA2	985722	6.34	783467	7.91	546239	9.17
11	ICC001BNA2	935116	6.34	761940	7.91	544616	9.17
12	ICV040BNA1	800179	6.33	615650	7.89	408464	9.14
13	ICV040BNA2	897048	6.34	728224	7.88	512976	9.13
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7651.D

Date Analyzed: 02/20/2015

Instrument ID: MSDB

Time Analyzed: 10:14

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	188553		3.63		732149		4.40		401688		5.42	
	UPPER LIMIT	377106		4.13		1464298		4.90		803376		5.92	
	LOWER LIMIT	94277		3.13		366075		3.90		200844		4.92	
	LAB SAMPLE ID												
01	CCV040BNA2	169759		3.63		680872		4.39		390445		5.42	
02	BLKA150220-03	231862		3.62		888279		4.39		463551		5.42	
03	TCLP150219	156420		3.63		607604		4.39		336371		5.42	
04	LCSA150220-03	129033		3.63		554614		4.39		303475		5.42	
05	E15-01273-001MS	122417		3.63		472402		4.39		259617		5.42	
06	E15-01273-001MSD	140801		3.62		545232		4.39		294751		5.42	
07	E15-01273-001	163530		3.63		621637		4.39		327580		5.42	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7651.D

Date Analyzed: 02/20/2015

Instrument ID: MSDB

Time Analyzed: 10:14

	40 ppm	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	631572		6.34		457744		7.95		287679		9.20	
	UPPER LIMIT	1263144		6.84		915488		8.45		575358		9.70	
	LOWER LIMIT	315786		5.84		228872		7.45		143840		8.70	
	LAB SAMPLE ID												
01	CCV040BNA2	658326		6.33		550146		7.93		402557		9.19	
02	BLKA150220-03	690950		6.34		555163		7.94		319451		9.19	
03	TCLP150219	485182		6.33		390488		7.89		226831		9.15	
04	LCSA150220-03	444364		6.33		340489		7.90		211186		9.14	
05	E15-01273-001MS	380833		6.33		283838		7.91		167458		9.15	
06	E15-01273-001MSD	433750		6.33		329861		7.93		189240		9.19	
07	E15-01273-001	489861		6.34		398097		7.97		226518		9.23	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

TCLP
SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7679.D
Acq On : 20 Feb 2015 18:03
Operator : DANA
Sample : GPEC-WC1,E15-01273-001,T,50.00ml,100,1
Misc : 150220-03,02/20/15,02/19/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 23 09:14:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	163530	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	621637	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	327580	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	489861	40.00	UG	0.00
82) Chrysene-d12	7.97	240	398097	40.00	UG	0.04
92) Perylene-d12	9.23	264	226518	40.00	UG	0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	157904	27.18	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 27.18%			
6) Phenol-d5	3.38	99	127751	17.79	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 17.79%			
24) Nitrobenzene-d5	3.96	82	147633	22.24	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 44.48%			
47) 2-Fluorobiphenyl	5.01	172	284336	25.50	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.00%			
70) 2,4,6-Tribromophenol	5.95	330	140595	64.47	UG	-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 64.47%			
84) Terphenyl-d14	7.25	244	363019	33.50	UG	0.02
Spiked Amount 50.000	Range 23 - 124		Recovery = 67.00%			

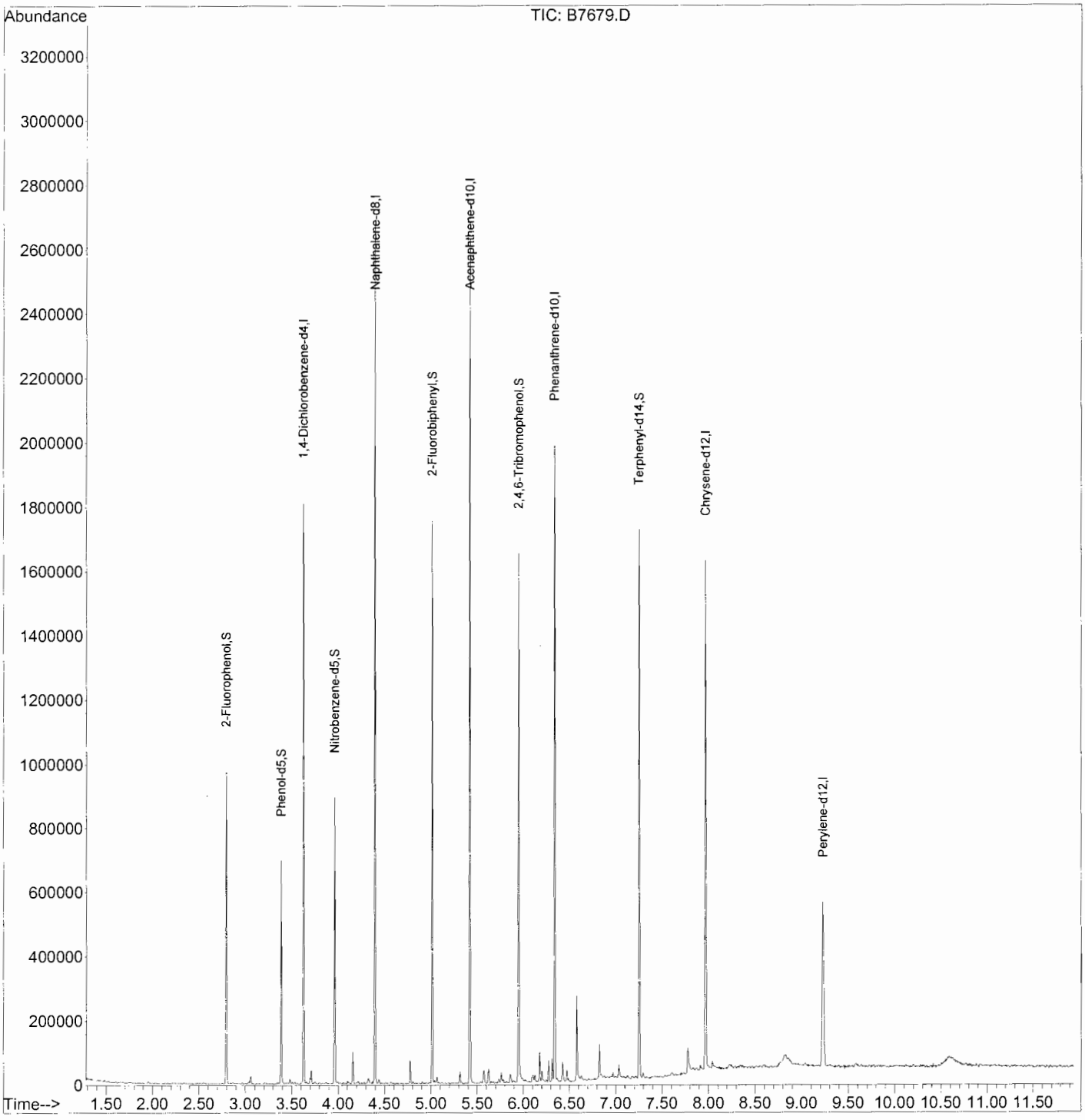
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7679.D
Acq On : 20 Feb 2015 18:03
Operator : DANA
Sample : GPEC-WC1,E15-01273-001,T,50.00ml,100,1
Misc : 150220-03,02/20/15,02/19/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 23 09:14:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



TCLP
SEMI-VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_B

Method Path : C:\MSDCHEM\1\METHODS\
Method File : BW0215.M
Title : BNA CALIBRATION METHOD
Last Update : Tue Feb 17 12:23:34 2015
Response Via : Initial Calibration

Calibration Files
1 =B7542.D 10 =B7543.D 20 =B7544.D
40 =B7541.D 80 =B7545.D 160 =B7546.D =

		Compound	1	10	20	40	80	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	1.263	0.967	1.025	0.988	1.001	1.042	1.048	10.39
3)	T	Pyridine	1.563	1.299	1.413	1.326	1.356	1.404	1.393	6.75
4)	S	2-Fluorophenol	1.360	1.422	1.468	1.430	1.406	1.442	1.421	2.57
5)	T	Benzaldehyde	0.379	0.384	0.358	0.375	0.259	0.250	0.334	18.66
6)	S	Phenol-d5	1.743	1.745	1.804	1.761	1.730	1.757	1.757	1.45
7)	MC	Phenol	2.183	1.941	1.915	1.942	1.851	1.606	1.906	9.74
8)	T	Aniline	0.992	0.933	0.948	0.927	0.881	0.689	0.895	11.96
9)	T	Bis(2-chloroethyl	1.278	1.179	1.182	1.146	1.149	1.247	1.197	4.51
10)	M	2-Chlorophenol	1.749	1.538	1.574	1.565	1.491	1.481	1.566	6.21
11)	T	1,3-Dichlorobenze	1.922	1.651	1.681	1.642	1.557	1.643	1.683	7.40
12)	MC	1,4-Dichlorobenze	1.997	1.669	1.685	1.669	1.593	1.522	1.689	9.64
13)	T	Benzyl alcohol	1.146	0.998	1.028	1.032	1.003	0.854	1.010	9.28
14)	T	1,2-Dichlorobenze	1.930	1.552	1.597	1.577	1.489	1.486	1.605	10.32
15)	T	2-Methylphenol	1.622	1.322	1.370	1.346	1.280	1.237	1.363	9.95
16)	T	Bis(2-chloroisopr	3.008	2.489	2.594	2.566	2.570	2.568	2.633	7.11
17)	T	4-Methylphenol	1.484	1.303	1.408	1.340	1.306	1.119	1.327	9.27
18)	MP	N-Nitrosodi-n-pro	1.423	1.145	1.213	1.189	1.127	0.972	1.178	12.43
19)	T	Acetophenone	2.160	1.901	1.927	1.921	1.877	1.800	1.931	6.29
20)	T	3-Methylphenol	1.484	1.303	1.408	1.340	1.306	1.119	1.327	9.27
21)	T	Hexachloroethane	0.795	0.625	0.636	0.645	0.619	0.602	0.654	10.82
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.409	0.395	0.410	0.420	0.438	0.492	0.427	8.12
25)	T	Nitrobenzene	0.495	0.384	0.405	0.393	0.385	0.396	0.410	10.38
26)	T	Isophorone	0.867	0.732	0.783	0.767	0.751	0.674	0.762	8.38
27)	TC	2-Nitrophenol	0.198	0.177	0.177	0.186	0.173	0.176	0.181	5.15
28)	T	2,4-Dimethylpheno	0.430	0.364	0.386	0.385	0.367	0.358	0.382	6.82
29)	T	Bis(2-chloroethox	0.541	0.451	0.470	0.455	0.447	0.438	0.467	8.12
30)	T	Benzoic acid	0.167	0.147	0.167	0.192	0.152	0.172	0.166	9.60
31)	T	2,4-Dimethylanili	0.478	0.399	0.446	0.421	0.401	0.370	0.419	9.16
32)	TC	2,4-Dichloropheno	0.325	0.303	0.320	0.318	0.306	0.270	0.307	6.54
33)	M	1,2,4-Trichlorobe	0.383	0.338	0.350	0.338	0.323	0.310	0.340	7.36
34)	T	Naphthalene	1.258	1.119	1.162	1.119	1.078	1.022	1.126	7.08
35)	T	4-Chloroaniline	0.673	0.570	0.598	0.580	0.567	0.533	0.587	8.05
36)	T	4-Aminotoluene	0.660	0.616	0.634	0.611	0.579	0.473	0.595	11.01
37)	TC	Hexachlorobutadie	0.206	0.192	0.207	0.194	0.191	0.183	0.195	4.67
38)	T	Caprolactam	0.203	0.167	0.178	0.178	0.172	0.160	0.176	8.45
39)	T	2-Aminotoluene	0.660	0.616	0.634	0.611	0.579	0.473	0.595	11.01
40)	MC	4-Chloro-3-methyl	0.386	0.305	0.333	0.321	0.313	0.285	0.324	10.63
41)	T	2-Methylnaphthale	0.763	0.683	0.726	0.706	0.646	0.615	0.690	7.77
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.350	0.348	0.371	0.387	0.381	0.358	0.366	4.42
45)	TC	2,4,6-Trichloroph	0.429	0.368	0.375	0.385	0.375	0.361	0.382	6.37
46)	T	2,4,5-Trichloroph	0.414	0.378	0.395	0.396	0.377	0.353	0.386	5.42
47)	S	2-Fluorobiphenyl	1.385	1.370	1.377	1.350	1.310	1.378	1.362	2.05
48)	T	1,1'-Biphenyl	1.715	1.502	1.501	1.475	1.429	1.322	1.491	8.64
49)	T	2-Chloronaphthale	1.287	1.133	1.182	1.145	1.088	1.018	1.142	7.93
50)	T	2-Nitroaniline	0.363	0.318	0.308	0.338	0.326	0.321	0.329	5.90
51)	T	Dimethyl phthalat	1.411	1.316	1.329	1.303	1.274	1.188	1.303	5.59
52)	T	2,6-Dinitrotoluen	0.203	0.209	0.224	0.253	0.236	0.241	0.228	8.46
53)	T	Acenaphthylene	2.100	1.917	1.910	1.922	1.779	1.661	1.882	7.90

54)	T	3-Nitroaniline	0.272	0.260	0.287	0.297	0.300	0.273	0.281	5.62
55)	MC	Acenaphthene	1.373	1.194	1.183	1.172	1.064	0.971	1.159	11.71
56)	TP	2,4-Dinitrophenol	0.052	0.047	0.044	0.061	0.069	0.056	0.055	16.84
57)	MP	4-Nitrophenol	0.221	0.221	0.227	0.242	0.238	0.217	0.228	4.51
58)	M	2,4-Dinitrotoluen	0.254	0.262	0.286	0.319	0.345	0.342	0.301	13.20
59)	T	Dibenzofuran	1.795	1.731	1.788	1.725	1.780	1.660	1.746	2.97
60)	T	Diethyl phthalate	1.526	1.373	1.381	1.383	1.403	1.325	1.398	4.83
61)	T	Fluorene	1.537	1.430	1.433	1.455	1.419	1.296	1.428	5.45
62)	T	4-Chlorophenyl ph	0.798	0.644	0.668	0.651	0.679	0.632	0.679	8.96
63)	T	4-Nitroaniline	0.328	0.300	0.314	0.337	0.325	0.306	0.318	4.43
64)		1,2,4,5-Tetrachlo	0.663	0.580	0.602	0.584	0.552	0.499	0.580	9.38
65)	T	2,3,4,6-Tetrachlo	0.403	0.477	0.445	0.354	0.310	0.302	0.382	18.89
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.085	0.064	0.068	0.080	0.100	0.080	0.079	16.25
68)	TC	N-Nitrosodiphenyl	0.656	0.600	0.616	0.618	0.653	0.626	0.628	3.52
69)	T	1,2-Diphenylhydra	1.121	0.995	1.039	1.059	1.124	1.061	1.067	4.65
70)	S	2,4,6-Tribromophe	0.169	0.178	0.182	0.177	0.183	0.181	0.178	2.93
71)	T	4-Bromophenyl phe	0.275	0.251	0.258	0.258	0.260	0.229	0.255	5.92
72)	T	Hexachlorobenzene	0.388	0.307	0.310	0.303	0.282	0.252	0.307	14.70
73)	T	Atrazine	0.268	0.222	0.227	0.230	0.220	0.199	0.228	9.92
74)	MC	Pentachlorophenol	0.143	0.130	0.133	0.147	0.151	0.153	0.143	6.65
75)	T	Phenanthrene	1.397	1.138	1.148	1.114	1.104	0.929	1.138	13.18
76)	T	Anthracene	1.255	1.097	1.122	1.126	1.059	0.921	1.097	9.88
77)	T	Carbazole	1.170	1.021	1.002	0.986	0.982	0.837	1.000	10.63
78)	T	Di-n-butyl phthal	1.472	1.323	1.347	1.356	1.285	1.168	1.325	7.49
79)	TC	Fluoranthene	1.300	1.121	1.120	1.096	1.035	0.904	1.096	11.79
80)	T	Benzidine	0.480	0.534	0.599	0.535	0.438	0.425	0.502	13.25
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.489	1.305	1.407	1.478	1.383	1.199	1.377	8.00
84)	S	Terphenyl-d14	1.082	1.042	1.103	1.160	1.107	1.040	1.089	4.16
85)	T	3,3'-Dimethylbenz	0.559	0.668	0.795	0.775	0.606	0.519	0.654	17.38
86)	T	Butyl benzyl phth	0.744	0.622	0.645	0.684	0.641	0.554	0.648	9.80
87)	T	3,3'-Dichlorobenz	0.498	0.420	0.403	0.393	0.336	0.299	0.392	17.65
88)	T	Benzo[a]anthracen	1.400	1.109	1.135	1.174	1.125	0.989	1.156	11.70
89)	T	Chrysene	1.161	0.995	1.041	1.089	1.019	0.913	1.036	8.12
90)	T	Bis(2-ethylhexyl)	0.946	0.842	0.883	0.958	0.910	0.779	0.886	7.61
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	2.066	1.933	1.987	2.180	1.966	1.666	1.966	8.73
94)	T	Benzo[b]fluoranth	1.648	1.510	1.602	1.687	1.595	1.562	1.601	3.89
95)	T	Benzo[k]fluoranth	1.464	1.318	1.310	1.290	1.258	1.269	1.318	5.68
96)	TC	Benzo[a]pyrene	1.479	1.265	1.307	1.385	1.326	1.247	1.335	6.43
97)	T	Indeno[1,2,3-cd]p	1.833	1.392	1.532	1.608	1.724	1.669	1.626	9.46
98)	T	Dibenz[a,h]anthra	1.457	1.160	1.246	1.346	1.427	1.363	1.333	8.42
99)	T	Benzo[g,h,i]peryl	1.863	1.157	1.241	1.355	1.422	1.438	1.413	17.40

(#) = Out of Range

BW0215.M Tue Feb 17 13:56:07 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	249918	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	984282	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	572049	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	912219	40.00	UG		0.00
82) Chrysene-d12	7.95	240	817150	40.00	UG		0.02
92) Perylene-d12	9.21	264	575957	40.00	UG		0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	849935	95.14	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 95.14%				
6) Phenol-d5	3.40	99	1088716	98.93	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 98.93%				
24) Nitrobenzene-d5	3.97	82	503204	48.66	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 97.32%				
47) 2-Fluorobiphenyl	5.02	172	990298	51.28	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 102.56%#				
70) 2,4,6-Tribromophenol	5.95	330	384441	95.48	UG		-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 95.48%				
84) Terphenyl-d14	7.24	244	1105093	46.65	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 93.30%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	7892	1.28	UG		88
3) Pyridine	1.73	52	9766	1.18	UG		36
7) Phenol	3.40	94	13637	1.12	UG		91
8) Aniline	3.43	66	6195	1.07	UG	#	71
9) Bis(2-chloroethyl) ether	3.46	63	7985	1.12	UG		78
10) 2-Chlorophenol	3.51	128	10927	1.12	UG		95
11) 1,3-Dichlorobenzene	3.61	146	12010	1.17	UG	#	90
12) 1,4-Dichlorobenzene	3.64	146	12476	1.20	UG		86
13) Benzyl alcohol	3.70	108	7161	1.11	UG		94
14) 1,2-Dichlorobenzene	3.75	146	12059	1.22	UG		84
15) 2-Methylphenol	3.77	108	10134	1.21	UG		92
16) Bis(2-chloroisopropyl) eth	3.80	45	18792	1.17	UG	#	75
17) 4-Methylphenol	3.85	108	9274	1.11	UG		95
18) N-Nitrosodi-n-propylamine	3.88	70	8888	1.20	UG		87
19) Acetophenone	3.87	105	13498	1.12	UG		97
20) 3-Methylphenol	3.85	108	9274	1.11	UG		95
21) Hexachloroethane	3.95	117	4966	1.23	UG		88
25) Nitrobenzene	3.98	77	12191	1.26	UG		91
26) Isophorone	4.12	82	21346	1.13	UG		87
27) 2-Nitrophenol	4.17	139	4874	1.06	UG	#	55
28) 2,4-Dimethylphenol	4.17	107	10573	1.12	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	13324	1.19	UG		89
30) Benzoic acid	4.19	105	4110m	0.87	UG		
31) 2,4-Dimethylaniline	4.29	121	11774	1.14	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	7999	1.02	UG		87
33) 1,2,4-Trichlorobenzene	4.37	180	9420	1.13	UG		87
34) Naphthalene	4.41	128	30944	1.12	UG	#	97
35) 4-Chloroaniline	4.43	127	16551	1.16	UG		99
36) 4-Aminotoluene	3.90	106	16237	1.08	UG	#	57
37) Hexachlorobutadiene	4.51	225	5059	1.06	UG		96
38) Caprolactam	4.59	55	5004m	1.14	UG		
39) 2-Aminotoluene	3.90	106	16237	1.08	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	9506	1.20	UG		79
41) 2-Methylnaphthalene	4.81	142	18773	1.08	UG		91
44) Hexachlorocyclopentadiene	4.94	237	5004	0.90	UG	#	45
45) 2,4,6-Trichlorophenol	4.97	196	6136	1.12	UG		99
46) 2,4,5-Trichlorophenol	5.00	196	5915	1.04	UG		89
48) 1,1'-Biphenyl	5.07	154	24520	1.16	UG		100
49) 2-Chloronaphthalene	5.09	162	18400	1.12	UG		92
50) 2-Nitroaniline	5.14	65	5196	1.07	UG		75
51) Dimethyl phthalate	5.24	163	20173	1.08	UG		96
52) 2,6-Dinitrotoluene	5.29	165	2903	0.80	UG		50
53) Acenaphthylene	5.33	152	30038	1.09	UG		95
54) 3-Nitroaniline	5.37	138	3897	0.92	UG	#	61
55) Acenaphthene	5.44	153	19629	1.17	UG		95
56) 2,4-Dinitrophenol	5.43	184	737m	0.84	UG		
57) 4-Nitrophenol	5.43	65	3156m	0.91	UG		
58) 2,4-Dinitrotoluene	5.52	165	3629	0.80	UG		75
59) Dibenzofuran	5.54	168	25672	1.04	UG		88
60) Diethyl phthalate	5.68	149	21818	1.10	UG		96
61) Fluorene	5.78	166	21984	1.06	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	11412	1.23	UG		88
63) 4-Nitroaniline	5.76	138	4696	0.98	UG		68
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	9483	1.14	UG		69
65) 2,3,4,6-Tetrachlorophenol	5.64	232	5767m	1.14	UG		
67) 4,6-Dinitro-2-methylphenol	5.81	198	1928m	1.06	UG		
68) N-Nitrosodiphenylamine	5.83	169	14965	1.06	UG		92
69) 1,2-Diphenylhydrazine	5.86	77	25565	1.06	UG		87
71) 4-Bromophenyl phenyl ether	6.07	248	6280	1.07	UG	#	67
72) Hexachlorobenzene	6.17	284	8838	1.28	UG		94
73) Atrazine	6.15	200	6121	1.17	UG		86
74) Pentachlorophenol	6.26	266	3266	0.97	UG		71
75) Phenanthrene	6.35	178	31858	1.25	UG		100
76) Anthracene	6.38	178	28619	1.11	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

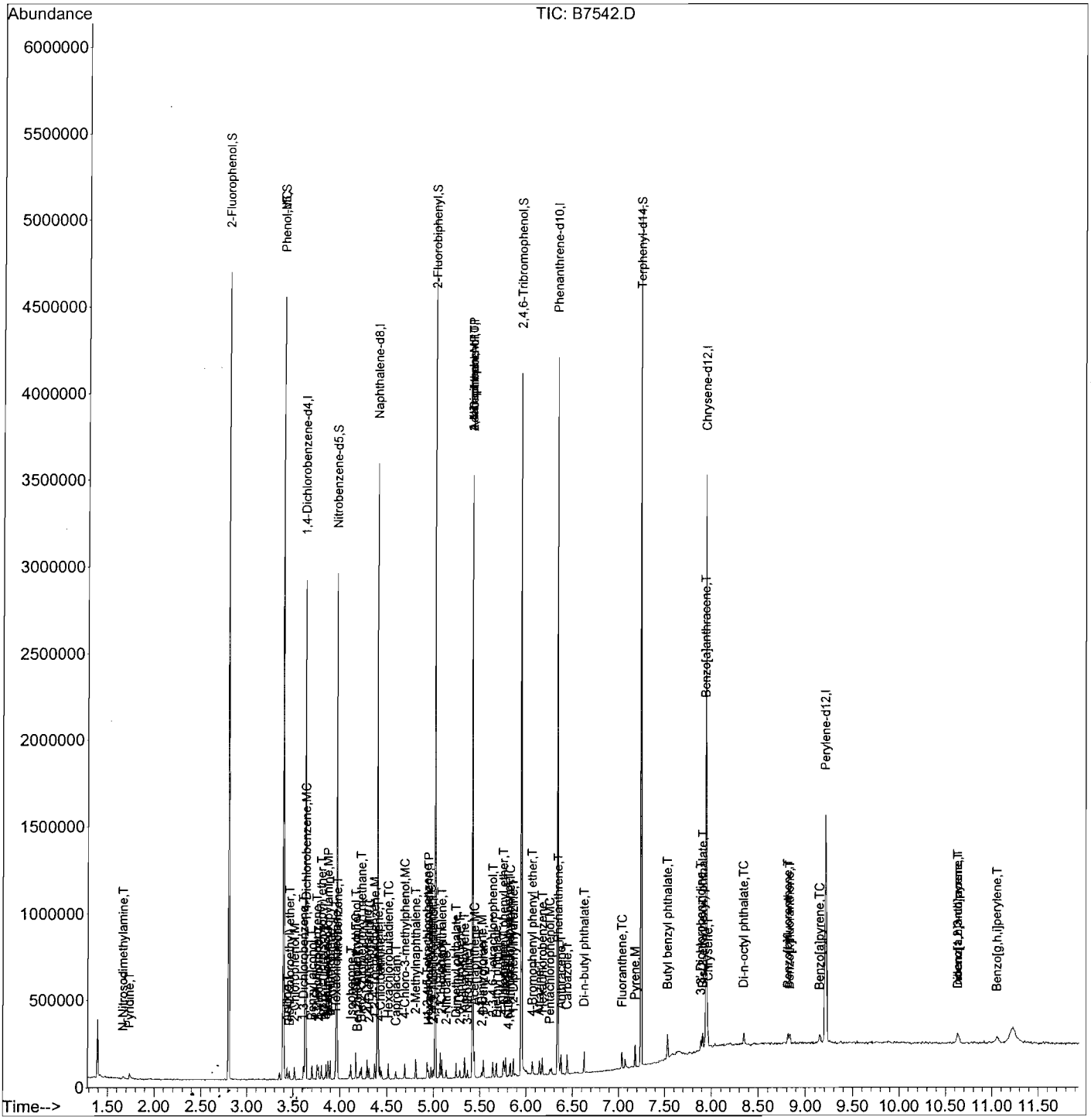
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.44	167	26693	1.19	UG	96
78) Di-n-butyl phthalate	6.63	149	33572	1.09	UG	96
79) Fluoranthene	7.04	202	29651	1.19	UG	89
83) Pyrene	7.18	202	30420	1.01	UG	89
86) Butyl benzyl phthalate	7.53	149	15204	1.09	UG	74
87) 3,3'-Dichlorobenzidine	7.89	252	10174	1.27	UG	90
88) Benzo[a]anthracene	7.94	228	28608	1.19	UG	98
89) Chrysene	7.96	228	23709	1.07	UG	95
90) Bis(2-ethylhexyl) phthalat	7.91	149	19335	0.99	UG	93
93) Di-n-octyl phthalate	8.35	149	29743	0.95	UG	86
94) Benzo[b]fluoranthene	8.81	252	23734	0.98	UG	89
95) Benzo[k]fluoranthene	8.83	252	21076	1.13	UG	92
96) Benzo[a]pyrene	9.15	252	21299	1.07	UG	98
97) Indeno[1,2,3-cd]pyrene	10.63	276	26392	1.14	UG	71
98) Dibenz[a,h]anthracene	10.63	278	20976	1.08	UG	81
99) Benzo[g,h,i]perylene	11.06	276	26831	1.38	UG	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	266766	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	1048584	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	589759	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	952946	40.00	UG		0.00
82) Chrysene-d12	7.95	240	829114	40.00	UG		0.02
92) Perylene-d12	9.20	264	543635	40.00	UG		0.02
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	948083	101.90	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.90%#				
6) Phenol-d5	3.40	99	1163715	99.60	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 99.60%				
24) Nitrobenzene-d5	3.97	82	517942	47.65	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 95.30%				
47) 2-Fluorobiphenyl	5.02	172	1010017	50.09	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 100.18%				
70) 2,4,6-Tribromophenol	5.95	330	423856	103.10	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 103.10%				
84) Terphenyl-d14	7.24	244	1079495	46.47	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 92.94%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	64501	8.59	UG		86
3) Pyridine	1.72	52	86602	8.99	UG		44
7) Phenol	3.40	94	129480	9.41	UG		1
8) Aniline	3.43	66	62223	9.73	UG		78
9) Bis(2-chloroethyl) ether	3.46	63	78659	9.73	UG		73
10) 2-Chlorophenol	3.51	128	102542	9.28	UG		92
11) 1,3-Dichlorobenzene	3.61	146	110086	9.26	UG	#	92
12) 1,4-Dichlorobenzene	3.64	146	111319	9.11	UG		54
13) Benzyl alcohol	3.70	108	66588	9.17	UG		95
14) 1,2-Dichlorobenzene	3.76	146	103507	8.85	UG		91
15) 2-Methylphenol	3.77	108	88144	8.91	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	166012	8.93	UG		88
17) 4-Methylphenol	3.85	108	86920	9.23	UG		96
18) N-Nitrosodi-n-propylamine	3.88	70	76368	8.77	UG		85
19) Acetophenone	3.87	105	126806	9.32	UG		96
20) 3-Methylphenol	3.85	108	86920	9.23	UG		96
21) Hexachloroethane	3.95	117	41687	8.68	UG		87
25) Nitrobenzene	3.98	77	100771	8.65	UG		95
26) Isophorone	4.12	82	191862	8.95	UG		89
27) 2-Nitrophenol	4.17	139	46357	9.20	UG		79
28) 2,4-Dimethylphenol	4.17	107	95447	8.94	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	118340	9.06	UG		98
30) Benzoic acid	4.20	105	38482	8.18	UG		61
31) 2,4-Dimethylaniline	4.29	121	104646	8.88	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	79369	9.42	UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	88714	9.39	UG		90
34) Naphthalene	4.41	128	293421	9.42	UG	#	98
35) 4-Chloroaniline	4.43	127	149374	9.10	UG		91
36) 4-Aminotoluene	3.90	106	161379	9.69	UG	#	56
37) Hexachlorobutadiene	4.51	225	50206	9.58	UG		96
38) Caprolactam	4.60	55	43877	8.78	UG	#	1
39) 2-Aminotoluene	3.90	106	161379	9.69	UG	#	57
40) 4-Chloro-3-methylphenol	4.69	107	79914	8.62	UG		87
41) 2-Methylnaphthalene	4.81	142	179088	9.30	UG		100
44) Hexachlorocyclopentadiene	4.94	237	51368	9.45	UG	#	39
45) 2,4,6-Trichlorophenol	4.98	196	54277	9.05	UG		91
46) 2,4,5-Trichlorophenol	5.00	196	55709	9.33	UG		95
48) 1,1'-Biphenyl	5.07	154	221523	9.42	UG		99
49) 2-Chloronaphthalene	5.09	162	167052	9.32	UG		87
50) 2-Nitroaniline	5.14	65	46843	9.06	UG		77
51) Dimethyl phthalate	5.25	163	194064	9.70	UG		94
52) 2,6-Dinitrotoluene	5.29	165	30815	9.18	UG		72
53) Acenaphthylene	5.33	152	282570	9.53	UG		99
54) 3-Nitroaniline	5.37	138	38273	9.12	UG	#	68
55) Acenaphthene	5.44	153	175976	9.38	UG		92
56) 2,4-Dinitrophenol	5.43	184	6992m	7.78	UG		
57) 4-Nitrophenol	5.44	65	32597	7.15	UG		87
58) 2,4-Dinitrotoluene	5.52	165	38685	9.17	UG		98
59) Dibenzofuran	5.54	168	255152	9.83	UG		91
60) Diethyl phthalate	5.68	149	202375	9.44	UG		94
61) Fluorene	5.78	166	210840	9.56	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	94992	8.89	UG		88
63) 4-Nitroaniline	5.77	138	44276	9.03	UG		84
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	85476	9.30	UG		68
65) 2,3,4,6-Tetrachlorophenol	5.64	232	70365m	9.41	UG		
67) 4,6-Dinitro-2-methylphenol	5.81	198	15190m	7.97	UG		
68) N-Nitrosodiphenylamine	5.83	169	142884	9.41	UG		94
69) 1,2-Diphenylhydrazine	5.87	77	236990	9.13	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	59851	9.43	UG		91
72) Hexachlorobenzene	6.18	284	73209	8.90	UG		91
73) Atrazine	6.15	200	52985	8.92	UG		93
74) Pentachlorophenol	6.26	266	30920	8.95	UG	#	47
75) Phenanthrene	6.35	178	271005	9.06	UG		97
76) Anthracene	6.38	178	261455	9.22	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

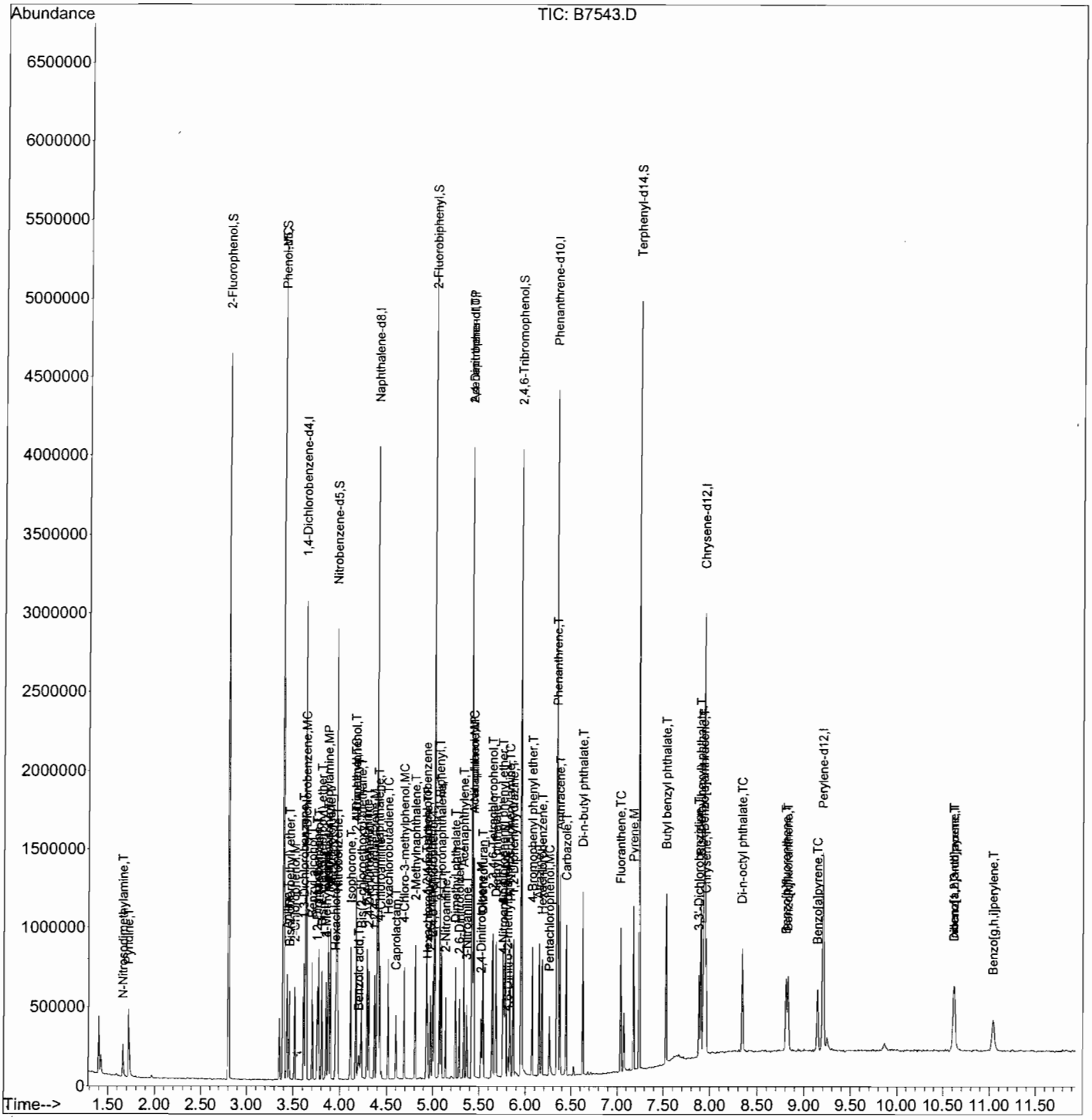
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	243191	9.47	UG	98
78) Di-n-butyl phthalate	6.63	149	315124	9.36	UG	98
79) Fluoranthene	7.03	202	267174	9.36	UG	97
83) Pyrene	7.18	202	270437	8.79	UG	94
86) Butyl benzyl phthalate	7.53	149	128924	8.71	UG	88
87) 3,3'-Dichlorobenzidine	7.88	252	87007	9.42	UG	92
88) Benzo[a]anthracene	7.93	228	229900	8.62	UG	97
89) Chrysene	7.96	228	206192	8.84	UG	98
90) Bis(2-ethylhexyl) phthalat	7.90	149	174497	8.84	UG	94
93) Di-n-octyl phthalate	8.34	149	262691	9.11	UG	88
94) Benzo[b]fluoranthene	8.81	252	205239	9.06	UG	84
95) Benzo[k]fluoranthene	8.83	252	179077	9.57	UG	94
96) Benzo[a]pyrene	9.14	252	171857	8.83	UG	90
97) Indeno[1,2,3-cd]pyrene	10.62	276	189150	8.09	UG	75
98) Dibenz[a,h]anthracene	10.62	278	157622	8.27	UG	89
99) Benzo[g,h,i]perylene	11.04	276	157258	7.19	UG	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	264017	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	1006969	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	582660	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	921697	40.00	UG		0.00
82) Chrysene-d12	7.96	240	742687	40.00	UG		0.03
92) Perylene-d12	9.22	264	493542	40.00	UG		0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.81	112	969104	104.58	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 104.58%#				
6) Phenol-d5	3.40	99	1190546	103.09	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 103.09%#				
24) Nitrobenzene-d5	3.97	82	515471	50.17	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 100.34%				
47) 2-Fluorobiphenyl	5.02	172	1002738	50.31	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 100.62%				
70) 2,4,6-Tribromophenol	5.95	330	418390	104.14	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 104.14%				
84) Terphenyl-d14	7.25	244	1023810	50.38	UG		0.01
Spiked Amount 50.000	Range 23 - 124		Recovery = 100.76%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	135301	19.11	UG		87
3) Pyridine	1.72	52	186466	20.24	UG		43
7) Phenol	3.40	94	252843	18.94	UG		1
8) Aniline	3.43	66	125172	19.96	UG		83
9) Bis(2-chloroethyl) ether	3.46	63	156038	19.68	UG		76
10) 2-Chlorophenol	3.52	128	207732	19.46	UG		92
11) 1,3-Dichlorobenzene	3.61	146	221960	19.35	UG	#	94
12) 1,4-Dichlorobenzene	3.64	146	222476	18.95	UG		52
13) Benzyl alcohol	3.71	108	135646	19.41	UG		95
14) 1,2-Dichlorobenzene	3.76	146	210831	18.94	UG		92
15) 2-Methylphenol	3.77	108	180888	19.17	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	342375	19.30	UG		87
17) 4-Methylphenol	3.85	108	185931	20.48	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	160173	19.38	UG		82
19) Acetophenone	3.87	105	254387	19.33	UG		76
20) 3-Methylphenol	3.85	108	185931	20.47	UG		100
21) Hexachloroethane	3.95	117	83924	18.47	UG		87
25) Nitrobenzene	3.98	77	204138	19.11	UG		96
26) Isophorone	4.12	82	394116	19.84	UG		89
27) 2-Nitrophenol	4.17	139	89185	18.94	UG		71
28) 2,4-Dimethylphenol	4.17	107	194596	19.67	UG		94

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	236686	19.48	UG		99
30) Benzoic acid	4.21	105	83928	19.78	UG		49
31) 2,4-Dimethylaniline	4.29	121	224597	20.62	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	161123	20.31	UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	176376	19.85	UG		91
34) Naphthalene	4.41	128	585147	19.94	UG	#	99
35) 4-Chloroaniline	4.43	127	301188	19.69	UG		92
36) 4-Aminotoluene	3.90	106	319119	20.16	UG	#	56
37) Hexachlorobutadiene	4.51	225	103990	20.96	UG		97
38) Caprolactam	4.60	55	89457	19.44	UG	#	1
39) 2-Aminotoluene	3.90	106	319119	20.16	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	167599	19.73	UG		85
41) 2-Methylnaphthalene	4.81	142	365305	20.23	UG		100
44) Hexachlorocyclopentadiene	4.94	237	107959	20.48	UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	109154	19.02	UG		92
46) 2,4,5-Trichlorophenol	5.00	196	115178	19.98	UG		92
48) 1,1'-Biphenyl	5.07	154	437159	19.19	UG		99
49) 2-Chloronaphthalene	5.09	162	344404	19.90	UG		91
50) 2-Nitroaniline	5.14	65	89870	18.16	UG		79
51) Dimethyl phthalate	5.25	163	387078	19.78	UG		96
52) 2,6-Dinitrotoluene	5.29	165	65143	20.19	UG		75
53) Acenaphthylene	5.33	152	556431	19.29	UG		98
54) 3-Nitroaniline	5.37	138	83584	20.77	UG		76
55) Acenaphthene	5.44	153	344737	19.00	UG		91
56) 2,4-Dinitrophenol	5.43	184	12899	16.34	UG	#	100
57) 4-Nitrophenol	5.44	65	66142	16.23	UG		89
58) 2,4-Dinitrotoluene	5.52	165	83383	20.57	UG		95
59) Dibenzofuran	5.54	168	520858	20.43	UG		92
60) Diethyl phthalate	5.69	149	402301	19.35	UG		95
61) Fluorene	5.78	166	417456	19.44	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	194561	19.14	UG		86
63) 4-Nitroaniline	5.77	138	91411	19.50	UG		87
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	175439	19.78	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	129689m	16.17	UG		
67) 4,6-Dinitro-2-methylphenol	5.82	198	31531	19.03	UG	#	1
68) N-Nitrosodiphenylamine	5.84	169	283835	19.71	UG		95
69) 1,2-Diphenylhydrazine	5.87	77	478889	19.64	UG		87
71) 4-Bromophenyl phenyl ether	6.07	248	118962	19.75	UG		87
72) Hexachlorobenzene	6.18	284	142878	18.64	UG		91
73) Atrazine	6.15	200	104715	18.90	UG		96
74) Pentachlorophenol	6.26	266	61338	19.02	UG	#	42
75) Phenanthrene	6.35	178	528842	18.87	UG		96
76) Anthracene	6.38	178	516992	19.35	UG		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

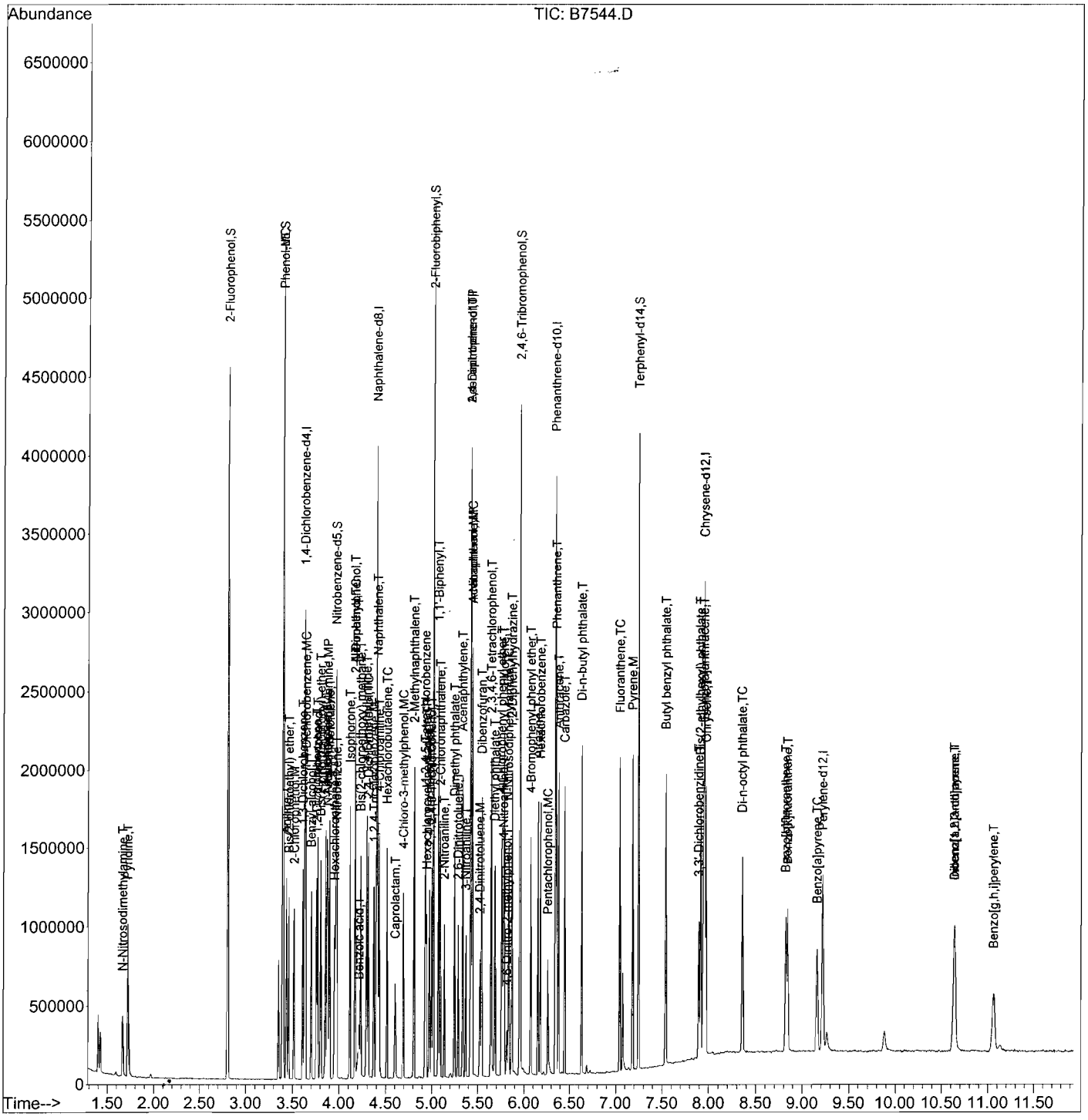
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	461745	18.92	UG	97
78) Di-n-butyl phthalate	6.63	149	620880	19.48	UG	98
79) Fluoranthene	7.04	202	516298	19.11	UG	100
83) Pyrene	7.18	202	522627	19.77	UG	95
86) Butyl benzyl phthalate	7.54	149	239499	18.88	UG	88
87) 3,3'-Dichlorobenzidine	7.90	252	149573	18.43	UG	94
88) Benzo[a]anthracene	7.95	228	421541	18.49	UG	96
89) Chrysene	7.97	228	386602	19.25	UG	97
90) Bis(2-ethylhexyl) phthalat	7.92	149	327997	19.30	UG	93
93) Di-n-octyl phthalate	8.36	149	490457	19.30	UG	90
94) Benzo[b]fluoranthene	8.82	252	395348	19.84	UG	84
95) Benzo[k]fluoranthene	8.84	252	323279	19.30	UG	91
96) Benzo[a]pyrene	9.16	252	322467	18.99	UG	88
97) Indeno[1,2,3-cd]pyrene	10.64	276	378056	19.02	UG	80
98) Dibenz[a,h]anthracene	10.64	278	307435	18.86	UG	89
99) Benzo[g,h,i]perylene	11.07	276	306184	17.01	UG	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	265194m	40.00	UG	-0.09
23) Naphthalene-d8	4.40	136	1020973	40.00	UG	-0.09
43) Acenaphthene-d10	5.43	164	580734	40.00	UG	-0.10
66) Phenanthrene-d10	6.34	188	913175	40.00	UG	-0.09
82) Chrysene-d12	7.93	240	687309	40.00	UG	-0.12
92) Perylene-d12	9.19	264	465631	40.00	UG	-0.21
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	947963	111.26	UG	-0.10
Spiked Amount 100.000	Range 10 - 100		Recovery = 111.26%#			
6) Phenol-d5	3.40	99	1167809m	110.73	UG	-0.09
Spiked Amount 100.000	Range 10 - 102		Recovery = 110.73%#			
24) Nitrobenzene-d5	3.97	82	536380	46.41	UG	-0.09
Spiked Amount 50.000	Range 27 - 102		Recovery = 92.82%			
47) 2-Fluorobiphenyl	5.02	172	980177	52.87	UG	-0.09
Spiked Amount 50.000	Range 26 - 101		Recovery = 105.74%#			
70) 2,4,6-Tribromophenol	5.96	330	403062	134.65	UG	-0.10
Spiked Amount 100.000	Range 22 - 115		Recovery = 134.65%#			
84) Terphenyl-d14	7.24	244	996334	54.61	UG	-0.10
Spiked Amount 50.000	Range 23 - 124		Recovery = 109.22%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.66	74	261917	48.85	UG	90
3) Pyridine	1.71	52	351643	48.75	UG	41
7) Phenol	3.41	94	515107	44.04	UG	1
8) Aniline	3.43	66	245704m	46.30	UG	
9) Bis(2-chloroethyl) ether	3.46	63	303876m	48.16	UG	
10) 2-Chlorophenol	3.52	128	414946	40.12	UG	92
11) 1,3-Dichlorobenzene	3.61	146	435447m	39.08	UG	
12) 1,4-Dichlorobenzene	3.64	146	442638m	38.88	UG	
13) Benzyl alcohol	3.71	108	273686m	43.90	UG	
14) 1,2-Dichlorobenzene	3.76	146	418128m	39.53	UG	
15) 2-Methylphenol	3.77	108	356827m	40.98	UG	
16) Bis(2-chloroisopropyl) eth	3.80	45	680460	54.02	UG	87
17) 4-Methylphenol	3.85	108	355267	41.07	UG	98
18) N-Nitrosodi-n-propylamine	3.88	70	315401m	42.58	UG	
19) Acetophenone	3.88	105	509382	39.29	UG	77
20) 3-Methylphenol	3.85	108	355490	41.12	UG	98
21) Hexachloroethane	3.96	117	171089m	38.81	UG	
25) Nitrobenzene	3.98	77	401492	43.02	UG	97
26) Isophorone	4.12	82	783528	42.08	UG	89
27) 2-Nitrophenol	4.17	139	190226	36.90	UG	72
28) 2,4-Dimethylphenol	4.18	107	393347	37.74	UG	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	464912	45.90 UG		98
30) Benzoic acid	4.22	105	195976	33.32 UG		50
31) 2,4-Dimethylaniline	4.29	121	429447	38.47 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	324159	38.15 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	344979	35.62 UG		91
34) Naphthalene	4.41	128	1142871	39.50 UG	#	97
35) 4-Chloroaniline	4.43	127	592410	38.86 UG		99
36) 4-Aminotoluene	3.90	106	624134	41.81 UG	#	56
37) Hexachlorobutadiene	4.51	225	198140	36.84 UG		98
38) Caprolactam	4.62	55	181432	49.64 UG	#	1
39) 2-Aminotoluene	3.90	106	624134	41.81 UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	328017	36.53 UG		86
41) 2-Methylnaphthalene	4.81	142	720699	36.71 UG		99
44) Hexachlorocyclopentadiene	4.94	237	224813	54.12 UG	#	35
45) 2,4,6-Trichlorophenol	4.98	196	223337	42.24 UG		97
46) 2,4,5-Trichlorophenol	5.00	196	229997	43.46 UG		93
48) 1,1'-Biphenyl	5.07	154	856346	42.59 UG		99
49) 2-Chloronaphthalene	5.09	162	664718	42.82 UG		89
50) 2-Nitroaniline	5.14	65	196491	42.33 UG		80
51) Dimethyl phthalate	5.25	163	756461	40.46 UG		96
52) 2,6-Dinitrotoluene	5.29	165	146687	35.64 UG		77
53) Acenaphthylene	5.34	152	1116460	42.91 UG		98
54) 3-Nitroaniline	5.37	138	172204	41.05 UG		77
55) Acenaphthene	5.44	153	680428	41.05 UG		91
56) 2,4-Dinitrophenol	5.43	184	35419	21.40 UG	#	100
57) 4-Nitrophenol	5.44	65	140746	42.83 UG		93
58) 2,4-Dinitrotoluene	5.53	165	185082	37.60 UG		96
59) Dibenzofuran	5.54	168	1001633	41.30 UG		91
60) Diethyl phthalate	5.69	149	803030	40.61 UG		95
61) Fluorene	5.79	166	845258	43.53 UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	378140	39.86 UG		85
63) 4-Nitroaniline	5.78	138	195488	43.42 UG		90
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	339252	43.69 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	205522	34.70 UG		96
67) 4,6-Dinitro-2-methylphenol	5.82	198	73086	23.83 UG	#	11
68) N-Nitrosodiphenylamine	5.84	169	564781	41.32 UG		94
69) 1,2-Diphenylhydrazine	5.87	77	966855	43.72 UG		87
71) 4-Bromophenyl phenyl ether	6.08	248	235291	41.48 UG		89
72) Hexachlorobenzene	6.18	284	277048	48.48 UG		92
73) Atrazine	6.16	200	210383	40.42 UG		95
74) Pentachlorophenol	6.26	266	134138	38.53 UG	#	42
75) Phenanthrene	6.36	178	1016916	39.09 UG		96
76) Anthracene	6.38	178	1027800	39.66 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

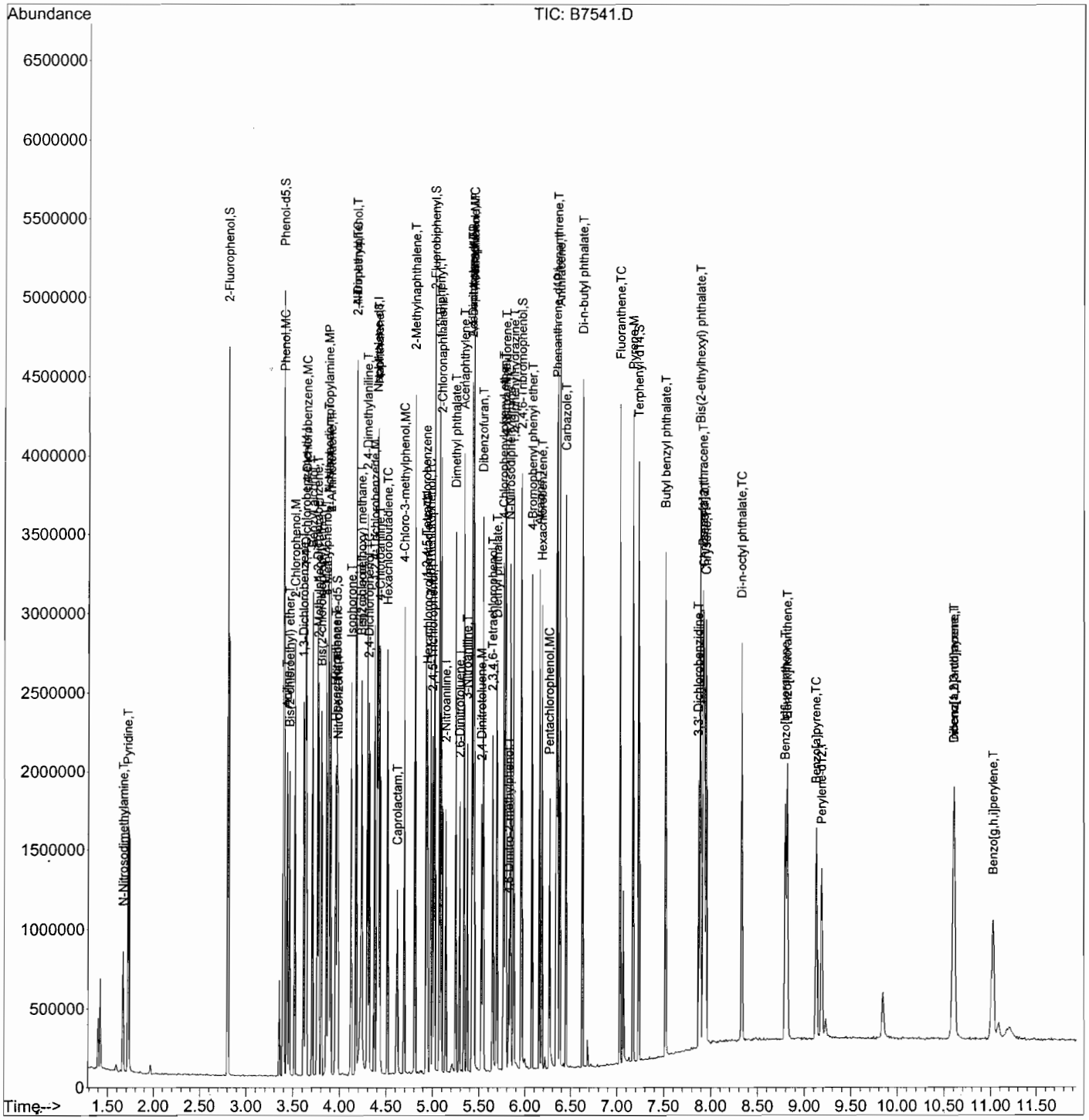
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	900047	38.01	UG	97
78) Di-n-butyl phthalate	6.63	149	1237831	38.98	UG	98
79) Fluoranthene	7.03	202	1000736	38.20	UG	99
83) Pyrene	7.17	202	1016145	41.83	UG	95
86) Butyl benzyl phthalate	7.52	149	469934	41.92	UG	87
87) 3,3'-Dichlorobenzidine	7.87	252	270421	36.68	UG	91
88) Benzo[a]anthracene	7.92	228	807114	37.59	UG	96
89) Chrysene	7.95	228	748817	40.70	UG	96
90) Bis(2-ethylhexyl) phthalat	7.89	149	658410	39.22	UG	93
93) Di-n-octyl phthalate	8.33	149	1015061	40.97	UG	91
94) Benzo[b]fluoranthene	8.80	252	785502	43.17	UG	83
95) Benzo[k]fluoranthene	8.82	252	600807m	36.18	UG	
96) Benzo[a]pyrene	9.13	252	644960	40.72	UG	86
97) Indeno[1,2,3-cd]pyrene	10.61	276	748559	39.52	UG	74
98) Dibenz[a,h]anthracene	10.61	278	626912	40.59	UG	89
99) Benzo[g,h,i]perylene	11.03	276	630942	39.53	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	252846	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	954046	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	544113	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	818451	40.00	UG		0.00
82) Chrysene-d12	7.93	240	612317	40.00	UG		0.00
92) Perylene-d12	9.18	264	434851	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	888458	98.98	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 98.98%				
6) Phenol-d5	3.40	99	1093854	98.15	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 98.15%				
24) Nitrobenzene-d5	3.97	82	521791	53.56	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 107.12%#				
47) 2-Fluorobiphenyl	5.02	172	890874	47.79	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 95.58%				
70) 2,4,6-Tribromophenol	5.96	330	374037	103.77	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 103.77%				
84) Terphenyl-d14	7.23	244	847594	50.50	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 101.00%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.67	74	506304	75.51	UG		88
3) Pyridine	1.72	52	685661	77.48	UG		41
7) Phenol	3.41	94	935815	74.19	UG		1
8) Aniline	3.44	66	445722	74.24	UG		81
9) Bis(2-chloroethyl) ether	3.46	63	580863	76.81	UG		77
10) 2-Chlorophenol	3.52	128	753786	74.24	UG		92
11) 1,3-Dichlorobenzene	3.61	146	787152	72.23	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	805760	72.63	UG		49
13) Benzyl alcohol	3.71	108	507261	76.35	UG		96
14) 1,2-Dichlorobenzene	3.76	146	752820	71.57	UG		92
15) 2-Methylphenol	3.77	108	647220	72.37	UG		98
16) Bis(2-chloroisopropyl) eth	3.81	45	1299820	77.19	UG		86
17) 4-Methylphenol	3.86	108	660275	75.48	UG		98
18) N-Nitrosodi-n-propylamine	3.89	70	570147	72.59	UG		79
19) Acetophenone	3.88	105	948994	75.92	UG		78
20) 3-Methylphenol	3.86	108	660275	75.46	UG		97
21) Hexachloroethane	3.96	117	313059	73.35	UG		84
25) Nitrobenzene	3.98	77	735486	73.48	UG		95
26) Isophorone	4.12	82	1433843	76.35	UG		88
27) 2-Nitrophenol	4.18	139	330834	75.14	UG		68
28) 2,4-Dimethylphenol	4.18	107	700982	75.09	UG		92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	852232	74.50 UG		99
30) Benzoic acid	4.24	105	290196m	72.37 UG		
31) 2,4-Dimethylaniline	4.30	121	764572	73.51 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	584417	77.46 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	615417	73.23 UG		91
34) Naphthalene	4.42	128	2056713	74.04 UG	#	98
35) 4-Chloroaniline	4.43	127	1082002	74.96 UG		99
36) 4-Aminotoluene	3.90	106	1104170	73.47 UG	#	55
37) Hexachlorobutadiene	4.52	225	364978	76.73 UG		97
38) Caprolactam	4.63	55	327851	75.72 UG	#	1
39) 2-Aminotoluene	3.90	106	1104170	73.47 UG	#	57
40) 4-Chloro-3-methylphenol	4.70	107	597804	74.52 UG		88
41) 2-Methylnaphthalene	4.81	142	1233139	71.87 UG		100
44) Hexachlorocyclopentadiene	4.94	237	414137	83.64 UG	#	38
45) 2,4,6-Trichlorophenol	4.98	196	408265	77.13 UG		96
46) 2,4,5-Trichlorophenol	5.00	196	410781	76.31 UG		93
48) 1,1'-Biphenyl	5.08	154	1554831	73.84 UG		100
49) 2-Chloronaphthalene	5.09	162	1183818	73.34 UG		90
50) 2-Nitroaniline	5.14	65	354659	78.54 UG		79
51) Dimethyl phthalate	5.25	163	1386186	76.08 UG		95
52) 2,6-Dinitrotoluene	5.29	165	257252	85.17 UG		77
53) Acenaphthylene	5.34	152	1936410	72.54 UG		98
54) 3-Nitroaniline	5.38	138	326965	86.19 UG		77
55) Acenaphthene	5.45	153	1157463	69.16 UG		93
56) 2,4-Dinitrophenol	5.44	184	75490m	109.04 UG		
57) 4-Nitrophenol	5.44	65	259118	71.44 UG		90
58) 2,4-Dinitrotoluene	5.53	165	375744	98.56 UG		75
59) Dibenzofuran	5.55	168	1937245	80.94 UG		91
60) Diethyl phthalate	5.69	149	1527053	79.31 UG		96
61) Fluorene	5.79	166	1544337	77.55 UG		98
62) 4-Chlorophenyl phenyl ethe	5.77	204	739303	78.73 UG		87
63) 4-Nitroaniline	5.79	138	354189	81.43 UG		89
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	600314	72.67 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.65	232	336909	42.79 UG		94
67) 4,6-Dinitro-2-methylphenol	5.83	198	164383	113.57 UG	#	38
68) N-Nitrosodiphenylamine	5.84	169	1068626	83.89 UG		94
69) 1,2-Diphenylhydrazine	5.87	77	1840539	85.39 UG		86
71) 4-Bromophenyl phenyl ether	6.08	248	426118	79.91 UG		90
72) Hexachlorobenzene	6.18	284	462068	69.05 UG		89
73) Atrazine	6.16	200	359568	74.12 UG		95
74) Pentachlorophenol	6.26	266	247926	87.65 UG	#	40
75) Phenanthrene	6.36	178	1807071	73.66 UG		96
76) Anthracene	6.38	178	1733926	73.69 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

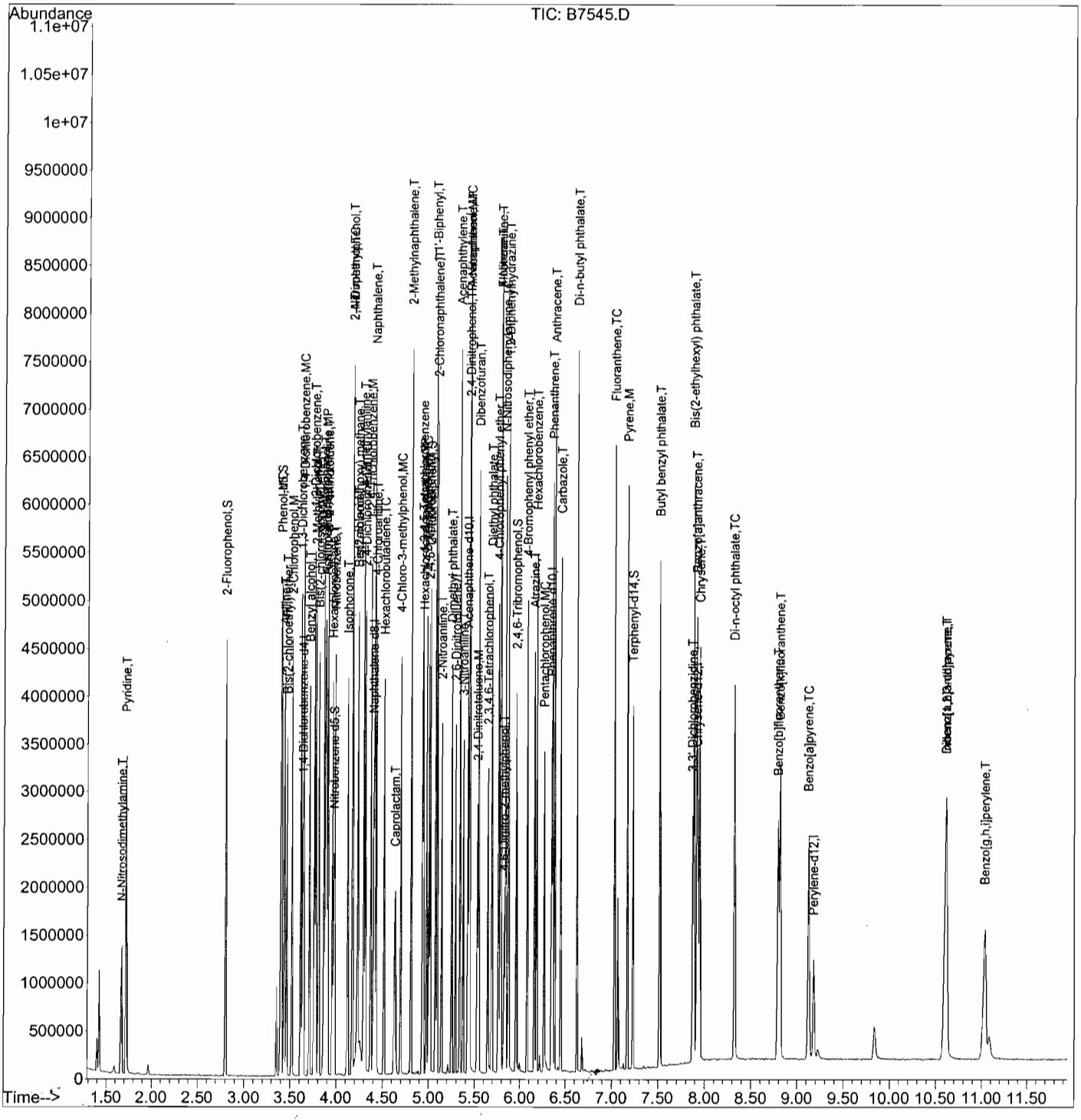
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	1606955	75.18	UG	97
78) Di-n-butyl phthalate	6.63	149	2102966	74.78	UG	98
79) Fluoranthene	7.03	202	1693577	71.39	UG	99
83) Pyrene	7.17	202	1693534	77.91	UG	96
86) Butyl benzyl phthalate	7.52	149	785441	76.16	UG	87
87) 3,3'-Dichlorobenzidine	7.87	252	411496	62.73	UG	93
88) Benzo[a]anthracene	7.92	228	1378245	74.73	UG	97
89) Chrysene	7.95	228	1247650	76.07	UG	97
90) Bis(2-ethylhexyl) phthalat	7.89	149	1113977	80.20	UG	94
93) Di-n-octyl phthalate	8.33	149	1709415	77.02	UG	91
94) Benzo[b]fluoranthene	8.80	252	1387492	79.18	UG	83
95) Benzo[k]fluoranthene	8.82	252	1094292	74.82	UG	93
96) Benzo[a]pyrene	9.13	252	1153395	78.07	UG	87
97) Indeno[1,2,3-cd]pyrene	10.62	276	1499186	86.67	UG	80
98) Dibenz[a,h]anthracene	10.62	278	1241437	87.69	UG	90
99) Benzo[g,h,i]perylene	11.04	276	1237011	81.04	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.64	152	256961	40.00	UG		0.00
23) Naphthalene-d8	4.41	136	973549	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	546858	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	805034	40.00	UG		0.00
82) Chrysene-d12	7.94	240	592953	40.00	UG		0.00
92) Perylene-d12	9.19	264	453776	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.81	112	926391	101.76	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.76%#				
6) Phenol-d5	3.41	99	1128495m	100.00	UG		0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 100.00%				
24) Nitrobenzene-d5	3.97	82	598643	59.37	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 118.74%#				
47) 2-Fluorobiphenyl	5.02	172	941630	50.70	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 101.40%#				
70) 2,4,6-Tribromophenol	5.96	330	364397	102.01	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 102.01%				
84) Terphenyl-d14	7.23	244	770529	47.31	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 94.62%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.69	74	1070535	158.89	UG		88
3) Pyridine	1.73	52	1443212	161.48	UG		40
7) Phenol	3.42	94	1650558	130.66	UG		1
8) Aniline	3.44	66	708077	117.74	UG		68
9) Bis(2-chloroethyl) ether	3.47	63	1282196	168.18	UG		53
10) 2-Chlorophenol	3.52	128	1522002	149.66	UG		92
11) 1,3-Dichlorobenzene	3.61	146	1689063	155.53	UG	#	93
12) 1,4-Dichlorobenzene	3.65	146	1563955	141.32	UG		49
13) Benzyl alcohol	3.72	108	877367	131.14	UG		93
14) 1,2-Dichlorobenzene	3.76	146	1526955	145.92	UG		91
15) 2-Methylphenol	3.78	108	1271608	142.63	UG		86
16) Bis(2-chloroisopropyl) eth	3.81	45	2639911	155.34	UG		83
17) 4-Methylphenol	3.87	108	1150484	130.89	UG		87
18) N-Nitrosodi-n-propylamine	3.90	70	999229	127.54	UG		79
19) Acetophenone	3.89	105	1850366	147.17	UG		73
20) 3-Methylphenol	3.87	108	1150549	130.88	UG		87
21) Hexachloroethane	3.96	117	618600	145.03	UG		86
25) Nitrobenzene	3.99	77	1541507	153.43	UG		95
26) Isophorone	4.13	82	2622806	138.12	UG		88
27) 2-Nitrophenol	4.18	139	685181	154.38	UG		70
28) 2,4-Dimethylphenol	4.19	107	1395779	148.35	UG		91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.24	93	1705733	148.17 UG		100
30) Benzoic acid	4.26	105	668961	166.67 UG		46
31) 2,4-Dimethylaniline	4.30	121	1441869	138.09 UG	#	33
32) 2,4-Dichlorophenol	4.32	162	1050491	137.31 UG		95
33) 1,2,4-Trichlorobenzene	4.38	180	1207831	143.26 UG		91
34) Naphthalene	4.42	128	3979896	142.53 UG	#	94
35) 4-Chloroaniline	4.43	127	2074179	142.61 UG		93
36) 4-Aminotoluene	3.91	106	1842991	122.16 UG	#	55
37) Hexachlorobutadiene	4.52	225	712647	148.03 UG		98
38) Caprolactam	4.66	55	622073	142.32 UG	#	1
39) 2-Aminotoluene	3.91	106	1842991	122.16 UG	#	57
40) 4-Chloro-3-methylphenol	4.70	107	1111585	137.68 UG		85
41) 2-Methylnaphthalene	4.82	142	2395960	139.68 UG		100
44) Hexachlorocyclopentadiene	4.94	237	783904	156.10 UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	789295	149.44 UG		96
46) 2,4,5-Trichlorophenol	5.01	196	772043	144.04 UG		95
48) 1,1'-Biphenyl	5.08	154	2892134	138.79 UG		99
49) 2-Chloronaphthalene	5.10	162	2225728	139.52 UG		90
50) 2-Nitroaniline	5.15	65	702809	155.42 UG		78
51) Dimethyl phthalate	5.25	163	2598046	143.27 UG		95
52) 2,6-Dinitrotoluene	5.30	165	527550	171.56 UG		79
53) Acenaphthylene	5.35	152	3633643	138.02 UG		97
54) 3-Nitroaniline	5.38	138	597028	154.20 UG		80
55) Acenaphthene	5.45	153	2123260	129.75 UG		93
56) 2,4-Dinitrophenol	5.44	184	122243m	163.41 UG		
57) 4-Nitrophenol	5.45	65	475136	133.19 UG		86
58) 2,4-Dinitrotoluene	5.54	165	748601	186.71 UG		76
59) Dibenzofuran	5.55	168	3631158	150.59 UG		89
60) Diethyl phthalate	5.70	149	2897915	150.01 UG		95
61) Fluorene	5.79	166	2834043	142.48 UG		98
62) 4-Chlorophenyl phenyl ethe	5.77	204	1381862	146.89 UG		87
63) 4-Nitroaniline	5.80	138	668391	152.35 UG		89
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	1091150	133.88 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.66	232	659609	91.91 UG		93
67) 4,6-Dinitro-2-methylphenol	5.84	198	256441m	182.94 UG		
68) N-Nitrosodiphenylamine	5.85	169	2017348	159.45 UG		94
69) 1,2-Diphenylhydrazine	5.88	77	3417009	159.03 UG		87
71) 4-Bromophenyl phenyl ether	6.08	248	737958	140.73 UG		86
72) Hexachlorobenzene	6.19	284	810418	126.58 UG		89
73) Atrazine	6.17	200	642277	136.60 UG		93
74) Pentachlorophenol	6.27	266	491373	173.29 UG	#	45
75) Phenanthrene	6.36	178	2992254	126.01 UG		96
76) Anthracene	6.39	178	2966368	130.23 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

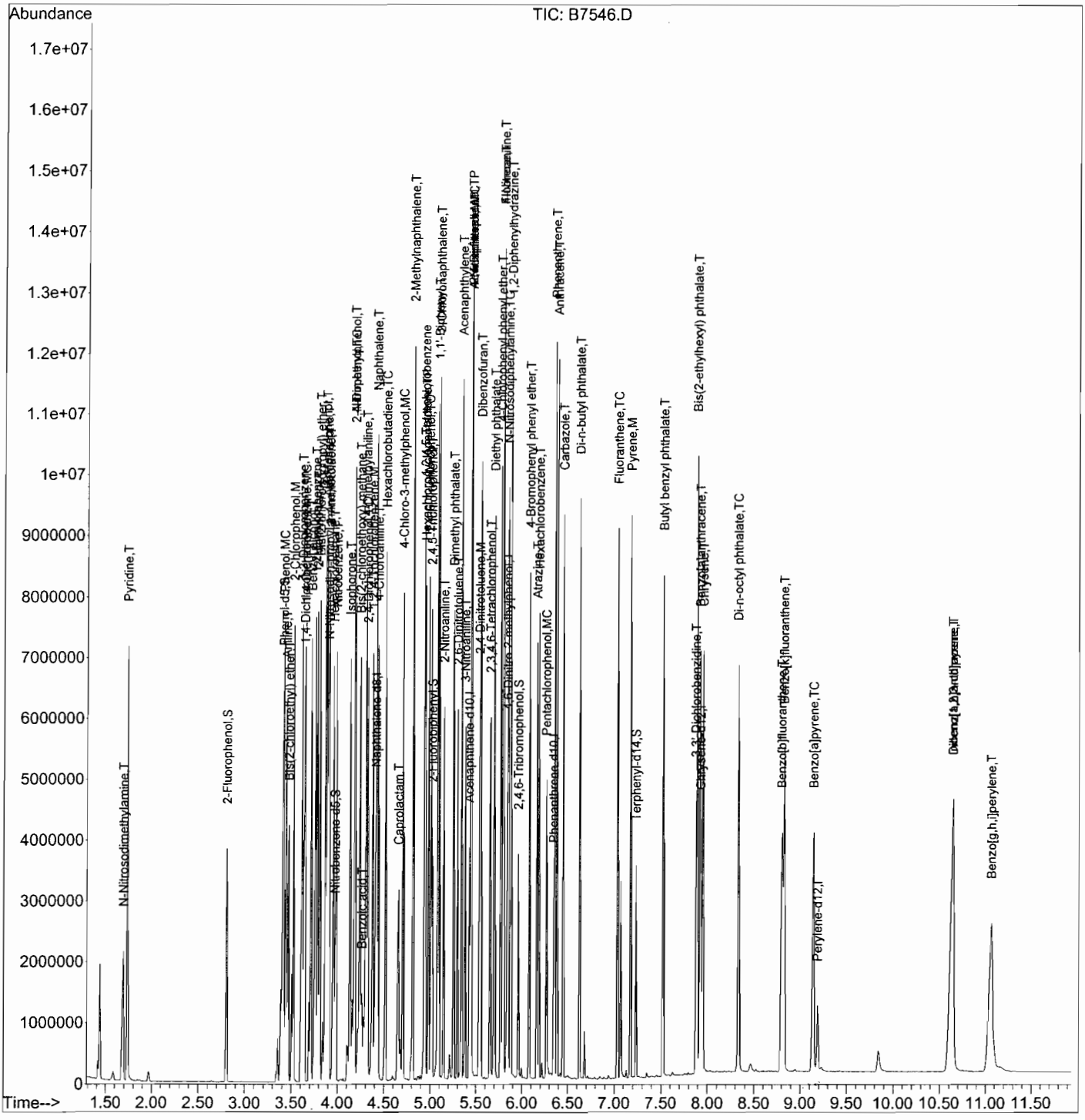
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.45	167	2696331	129.81 UG	97
78) Di-n-butyl phthalate	6.63	149	3761835	137.80 UG	98
79) Fluoranthene	7.04	202	2911000	127.49 UG	97
83) Pyrene	7.18	202	2844328	135.84 UG	97
86) Butyl benzyl phthalate	7.52	149	1313002	132.74 UG	86
87) 3,3'-Dichlorobenzidine	7.88	252	709474	116.73 UG	94
88) Benzo[a]anthracene	7.93	228	2346152	133.12 UG	96
89) Chrysene	7.96	228	2166314	137.74 UG	97
90) Bis(2-ethylhexyl) phthalat	7.89	149	1848443	137.35 UG	94
93) Di-n-octyl phthalate	8.33	149	3023853	131.55 UG	91
94) Benzo[b]fluoranthene	8.80	252	2835643	155.39 UG	79
95) Benzo[k]fluoranthene	8.83	252	2304084m	152.94 UG	
96) Benzo[a]pyrene	9.14	252	2264144	147.58 UG	87
97) Indeno[1,2,3-cd]pyrene	10.64	276	3029096	165.07 UG	80
98) Dibenz[a,h]anthracene	10.64	278	2474651	164.36 UG	91
99) Benzo[g,h,i]perylene	11.07	276	2610222	163.45 UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7552.D
Acq On : 17 Feb 2015 11:36
Operator : DANA
Sample : ABN014-15,ICC001BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 17 12:22:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

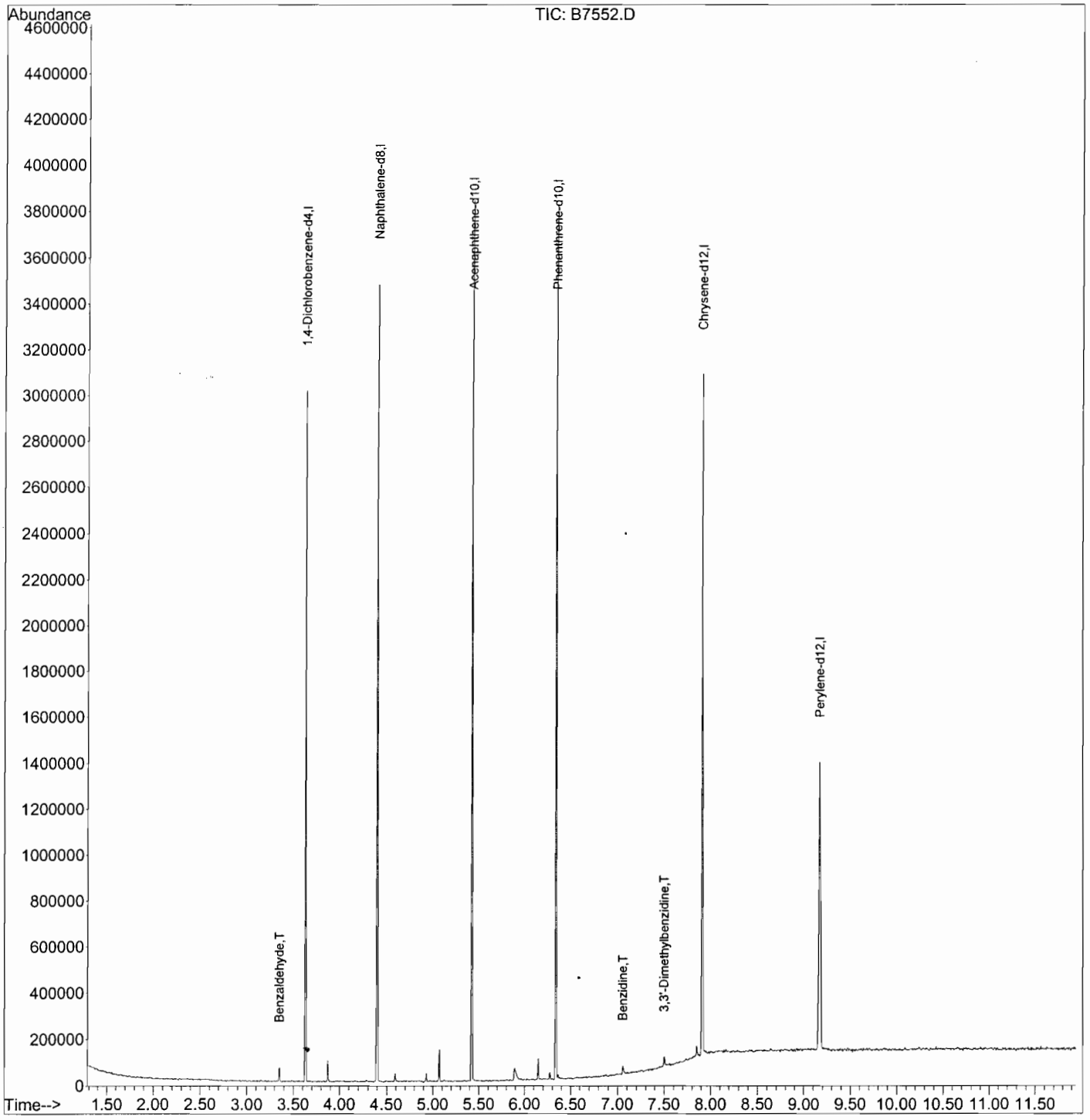
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	266988	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1051949	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	588074	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	935116	40.00	UG	0.00
82) Chrysene-d12	7.91	240	761940	40.00	UG	-0.02
92) Perylene-d12	9.17	264	544616	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	2370m	1.18	UG	
80) Benzidine	7.05	184	10955	1.09	UG	97
85) 3,3'-Dimethylbenzidine	7.50	212	11415	1.07	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7552.D
Acq On : 17 Feb 2015 11:36
Operator : DANA
Sample : ABN014-15,ICC001BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 17 12:22:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7551.D
Acq On : 17 Feb 2015 11:18
Operator : DANA
Sample : ABN015-15,ICC010BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 12:23:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

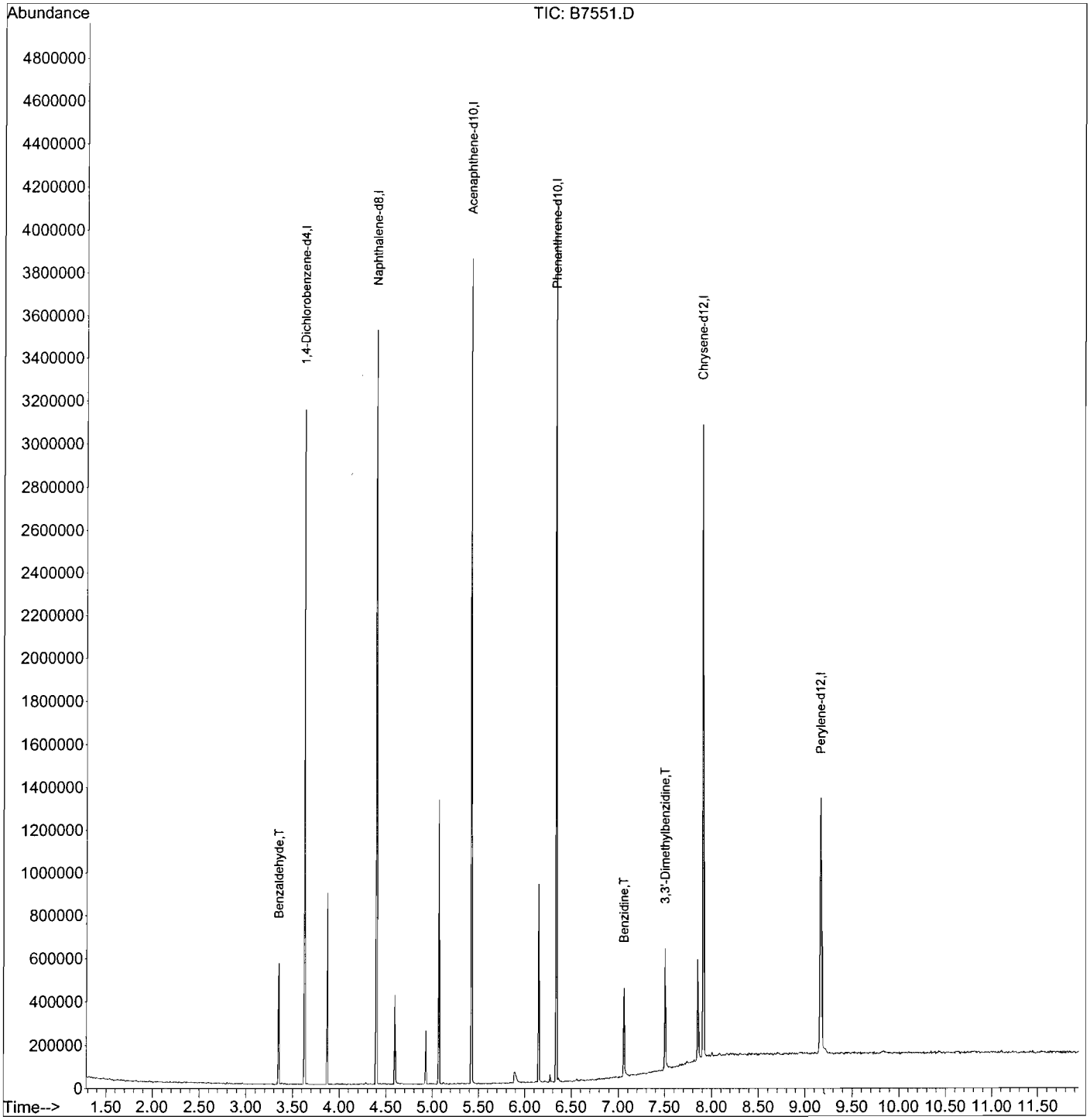
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	294317	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1121813	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	623673	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	985722	40.00	UG	0.00
82) Chrysene-d12	7.91	240	783467	40.00	UG	-0.02
92) Perylene-d12	9.17	264	546239	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	25603m	11.52	UG	
80) Benzidine	7.06	184	127285	11.98	UG	95
85) 3,3'-Dimethylbenzidine	7.50	212	138514	12.58	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7551.D
Acq On : 17 Feb 2015 11:18
Operator : DANA
Sample : ABN015-15,ICC010BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 12:23:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7550.D
Acq On : 17 Feb 2015 11:01
Operator : DANA
Sample : ABN016-15,ICC020BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 17 12:22:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

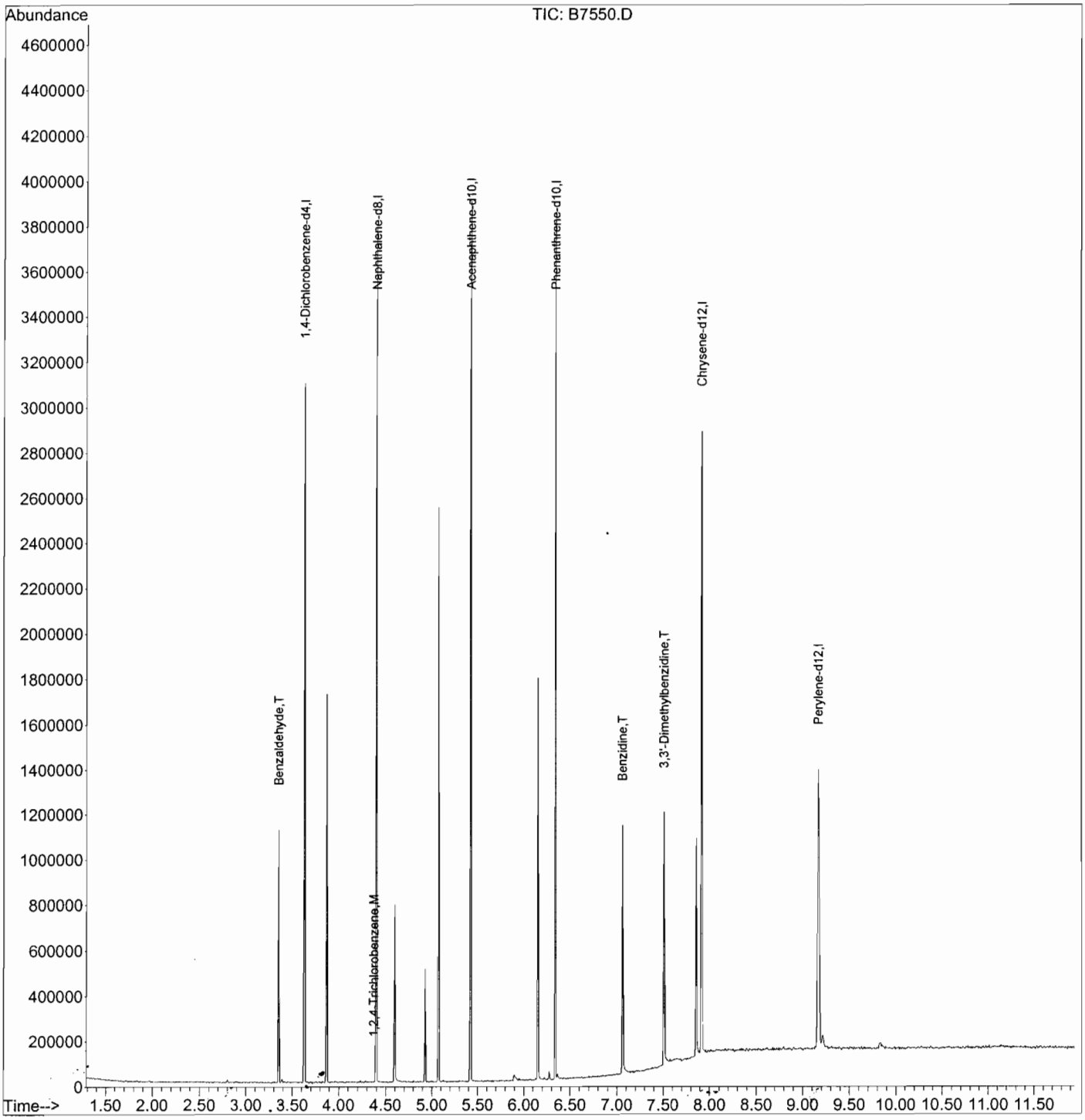
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	280541	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1057602	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	604787	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	956779	40.00	UG	0.00
82) Chrysene-d12	7.92	240	780984	40.00	UG	-0.01
92) Perylene-d12	9.17	264	555867	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	47255m	22.31	UG	
33) 1,2,4-Trichlorobenzene	4.37	180	322	0.04	UG	# 35
80) Benzidine	7.06	184	275855	26.76	UG	94
85) 3,3'-Dimethylbenzidine	7.51	212	295324	26.90	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7550.D
Acq On : 17 Feb 2015 11:01
Operator : DANA
Sample : ABN016-15,ICC020BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 17 12:22:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7549.D
Acq On : 17 Feb 2015 10:44
Operator : DANA
Sample : ABN017-15,ICC040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 17 12:19:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

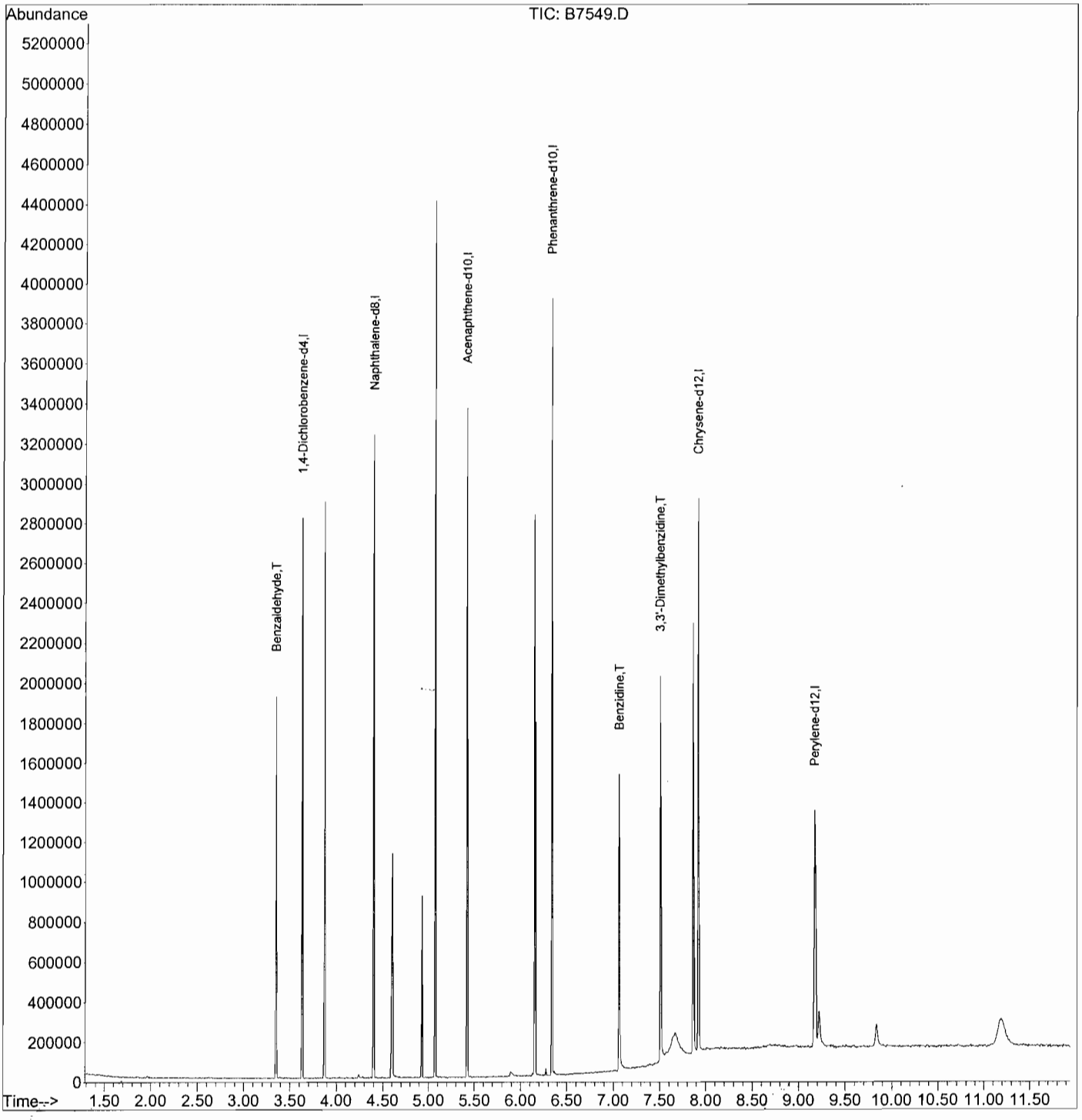
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	244613	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	945145	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	534323	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	849485	40.00	UG	0.00
82) Chrysene-d12	7.93	240	738367	40.00	UG	0.00
92) Perylene-d12	9.18	264	556975	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	99448m	53.85	UG	
80) Benzidine	7.07	184	488614	53.38	UG	96
85) 3,3'-Dimethylbenzidine	7.51	212	532857	51.34	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7549.D
Acq On : 17 Feb 2015 10:44
Operator : DANA
Sample : ABN017-15,ICC040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 17 12:19:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7548.D
Acq On : 17 Feb 2015 10:27
Operator : DANA
Sample : ABN018-15,ICC080BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 12:21:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:24:52 2015
Response via : Initial Calibration

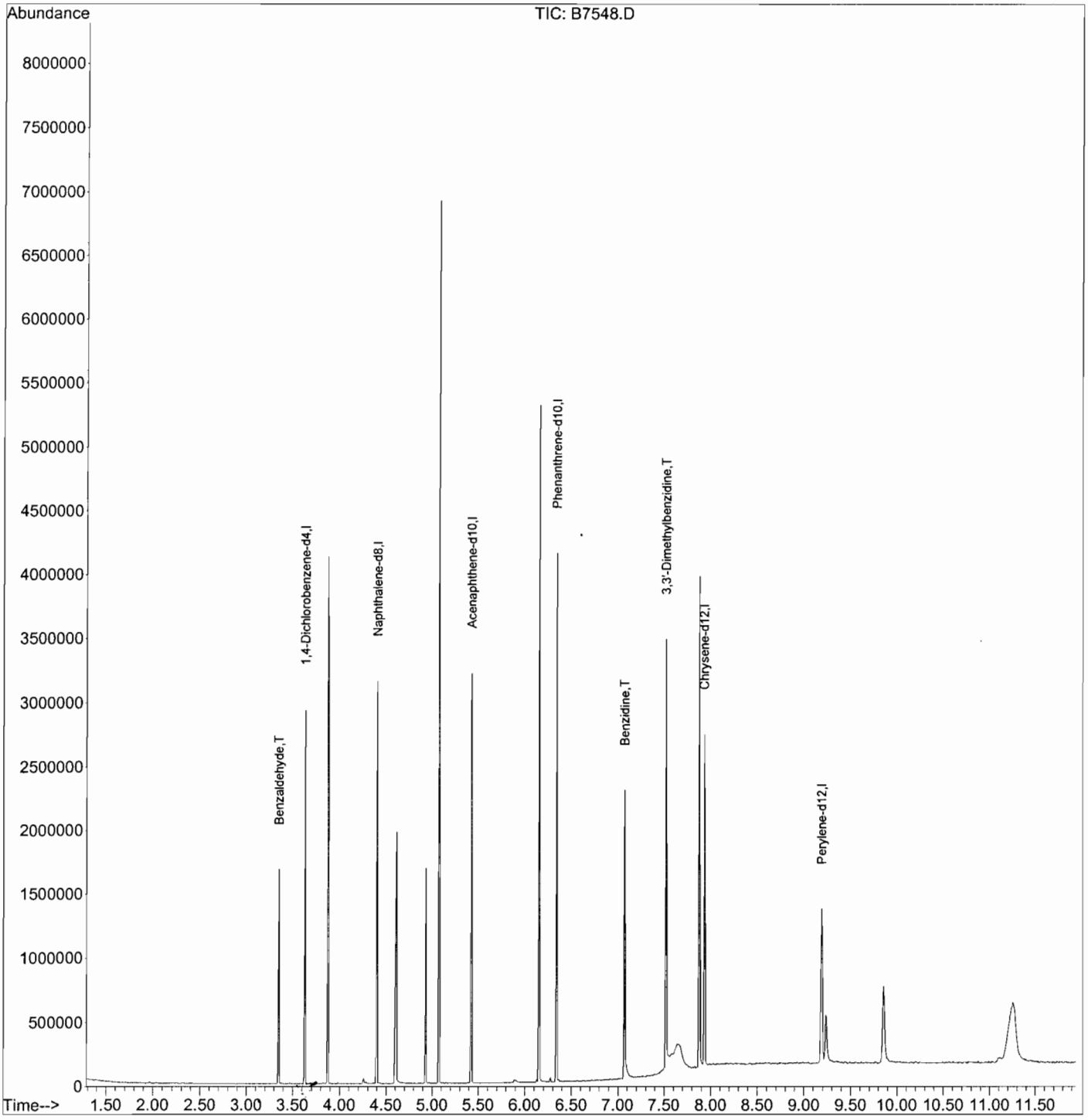
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	248093	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	964115	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	537275	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	864948	40.00	UG	0.00
82) Chrysene-d12	7.93	240	740917	40.00	UG	0.00
92) Perylene-d12	9.19	264	539163	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	131085m	104.73	UG	
80) Benzidine	7.07	184	716146	78.01	UG	95
85) 3,3'-Dimethylbenzidine	7.52	212	741741	77.18	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7548.D
Acq On : 17 Feb 2015 10:27
Operator : DANA
Sample : ABN018-15,ICC080BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 12:21:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:24:52 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7547.D
Acq On : 17 Feb 2015 10:10
Operator : DANA
Sample : ABN019-15,ICC160BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 12:20:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:23:35 2015
Response via : Initial Calibration

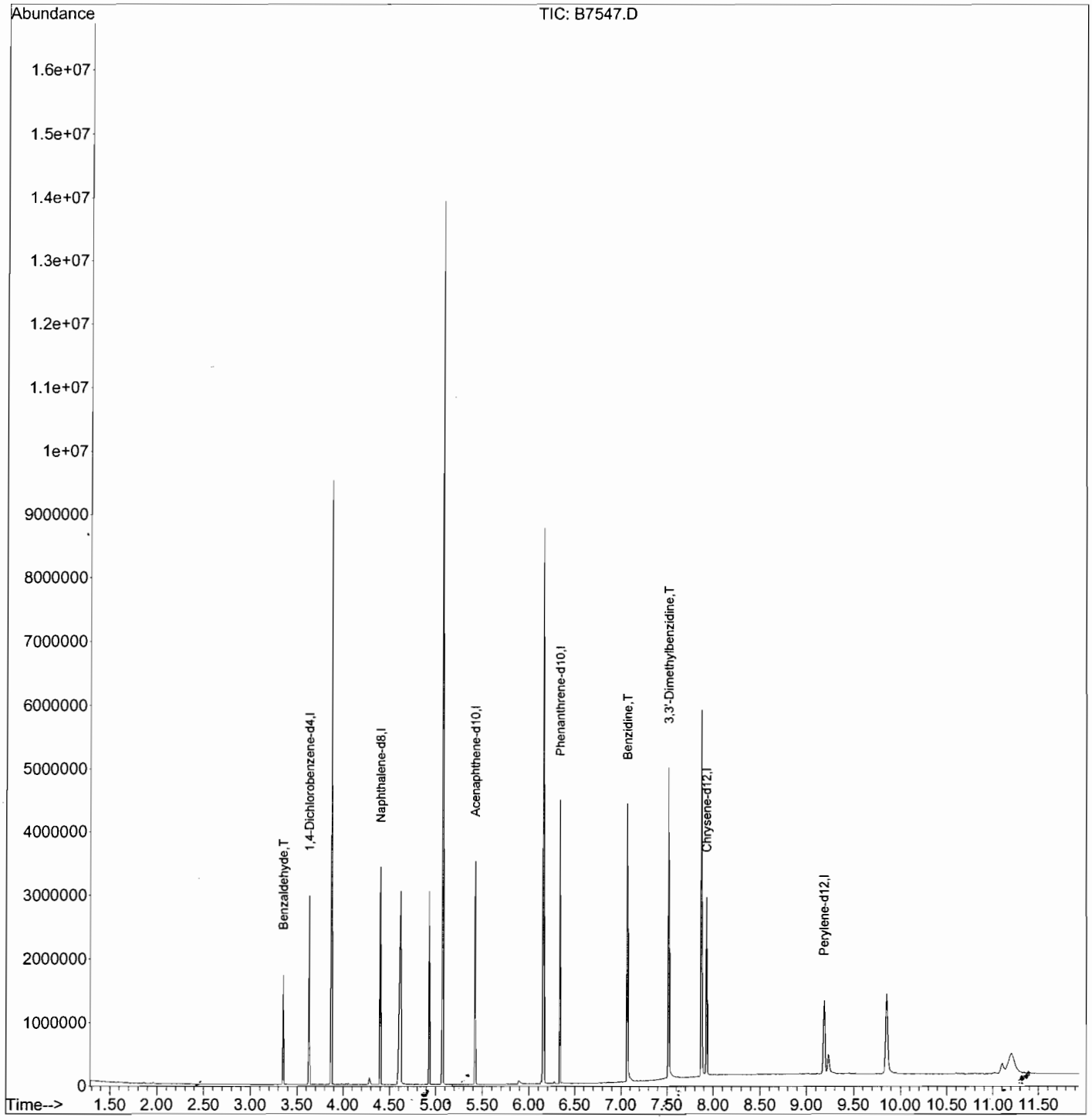
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	260332	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1021817	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	572066	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	894081	40.00	UG	0.00
82) Chrysene-d12	7.93	240	700244	40.00	UG	0.00
92) Perylene-d12	9.19	264	523880	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	256939m	195.62	UG	
80) Benzidine	7.07	184	1367138	143.91	UG	95
85) 3,3'-Dimethylbenzidine	7.52	212	1230580	135.48	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7547.D
Acq On : 17 Feb 2015 10:10
Operator : DANA
Sample : ABN019-15,ICC160BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 12:20:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:23:35 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 5.00min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00
2	T	N-Nitrosodimethylamine	1.048	0.950	9.4	91	0.00
3	T	Pyridine	1.393	1.317	5.5	94	0.00
4	S	2-Fluorophenol	1.421	1.444	-1.6	96	0.00
5	T	Benzaldehyde	0.334	0.360	-7.8	94	0.00
6	S	Phenol-d5	1.757	1.794	-2.1	97	0.00
7	MC	Phenol	1.906	1.894	0.6	93	0.00
8	T	Aniline	0.895	0.886	1.0	91	0.00
9	T	Bis(2-chloroethyl) ether	1.197	1.118	6.6	93	0.00
10	M	2-Chlorophenol	1.566	1.541	1.6	93	0.00
11	T	1,3-Dichlorobenzene	1.683	1.619	3.8	94	0.00
12	MC	1,4-Dichlorobenzene	1.689	1.685	0.2	96	0.00
13	T	Benzyl alcohol	1.010	1.004	0.6	92	0.00
14	T	1,2-Dichlorobenzene	1.605	1.562	2.7	94	0.00
15	T	2-Methylphenol	1.363	1.309	4.0	92	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.633	2.454	6.8	91	0.00
17	T	4-Methylphenol	1.327	1.314	1.0	93	0.00
18	MP	N-Nitrosodi-n-propylamine	1.178	1.099	6.7	88	0.00
19	T	Acetophenone	1.931	1.895	1.9	94	0.00
20	T	3-Methylphenol	1.327	1.314	1.0	93	0.00
21	T	Hexachloroethane	0.654	0.611	6.6	90	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00
24	S	Nitrobenzene-d5	0.427	0.387	9.4	86	0.00
25	T	Nitrobenzene	0.410	0.366	10.7	87	0.00
26	T	Isophorone	0.762	0.732	3.9	89	0.00
27	TC	2-Nitrophenol	0.181	0.161	11.0	81	0.00
28	T	2,4-Dimethylphenol	0.382	0.383	-0.3	93	0.00
29	T	Bis(2-chloroethoxy) methane	0.467	0.453	3.0	93	0.00
30	T	Benzoic acid	0.166	0.153	7.8	75	0.00
31	T	2,4-Dimethylaniline	0.419	0.419	0.0	93	0.00
32	TC	2,4-Dichlorophenol	0.307	0.302	1.6	89	0.00
33	M	1,2,4-Trichlorobenzene	0.340	0.329	3.2	91	0.00
34	T	Naphthalene	1.126	1.141	-1.3	95	0.00
35	T	4-Chloroaniline	0.587	0.576	1.9	93	0.00
36	T	4-Aminotoluene	0.595	0.593	0.3	91	0.00
37	TC	Hexachlorobutadiene	0.195	0.185	5.1	89	0.00
38	T	Caprolactam	0.176	0.158	10.2	83	0.00
39	T	2-Aminotoluene	0.595	0.593	0.3	91	0.00
40	MC	4-Chloro-3-methylphenol	0.324	0.308	4.9	90	0.00
41	T	2-Methylnaphthalene	0.690	0.706	-2.3	94	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00
44	TP	Hexachlorocyclopentadiene	0.366	0.349	4.6	82	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.380	0.5	90	0.00
46	T	2,4,5-Trichlorophenol	0.386	0.385	0.3	88	0.00

47	S	2-Fluorobiphenyl	1.362	1.403	-3.0	94	0.00
48	T	1,1'-Biphenyl	1.491	1.553	-4.2	96	0.00
49	T	2-Chloronaphthalene	1.142	1.181	-3.4	94	0.00
50	T	2-Nitroaniline	0.329	0.297	9.7	80	0.00
51	T	Dimethyl phthalate	1.303	1.311	-0.6	92	0.00
52	T	2,6-Dinitrotoluene	0.228	0.223	2.2	80	0.00
53	T	Acenaphthylene	1.882	1.982	-5.3	94	0.00
54	T	3-Nitroaniline	0.281	0.273	2.8	84	0.00
55	MC	Acenaphthene	1.159	1.178	-1.6	91	0.00
56	TP	2,4-Dinitrophenol	0.055	0.054	1.8	81	0.00
57	MP	4-Nitrophenol	0.228	0.206	9.6	77	0.00
58	M	2,4-Dinitrotoluene	0.301	0.270	10.3	77	0.00
59	T	Dibenzofuran	1.746	1.644	5.8	87	0.00
60	T	Diethyl phthalate	1.398	1.255	10.2	83	0.00
61	T	Fluorene	1.428	1.314	8.0	82	0.00
62	T	4-Chlorophenyl phenyl ether	0.679	0.610	10.2	85	0.00
63	T	4-Nitroaniline	0.318	0.285	10.4	77	0.00
64		1,2,4,5-Tetrachlorobenzene	0.580	0.590	-1.7	92	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.382	0.335	12.3	86	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	88	-0.01
67	T	4,6-Dinitro-2-methylphenol	0.079	0.083	-5.1	90	0.00
68	TC	N-Nitrosodiphenylamine	0.628	0.594	5.4	84	0.00
69	T	1,2-Diphenylhydrazine	1.067	1.024	4.0	85	0.00
70	S	2,4,6-Tribromophenol	0.178	0.176	1.1	88	0.00
71	T	4-Bromophenyl phenyl ether	0.255	0.255	0.0	87	0.00
72	T	Hexachlorobenzene	0.307	0.306	0.3	88	-0.01
73	T	Atrazine	0.228	0.233	-2.2	89	0.00
74	MC	Pentachlorophenol	0.143	0.140	2.1	84	0.00
75	T	Phenanthrene	1.138	1.168	-2.6	92	0.00
76	T	Anthracene	1.097	1.150	-4.8	89	-0.01
77	T	Carbazole	1.000	1.022	-2.2	91	0.00
78	T	Di-n-butyl phthalate	1.325	1.337	-0.9	86	-0.01
79	TC	Fluoranthene	1.096	1.105	-0.8	88	-0.02
80	T	Benzidine	0.502	0.532	-6.0	98	-0.02
82	I	Chrysene-d12	1.000	1.000	0.0	90	-0.04
83	M	Pyrene	1.377	1.455	-5.7	88	-0.02
84	S	Terphenyl-d14	1.089	1.126	-3.4	87	-0.03
85	T	3,3'-Dimethylbenzidine	0.654	0.682	-4.3	93	-0.03
86	T	Butyl benzyl phthalate	0.648	0.630	2.8	83	-0.03
87	T	3,3'-Dichlorobenzidine	0.392	0.342	12.8	78	-0.04
88	T	Benzo[a]anthracene	1.156	1.132	2.1	86	-0.04
89	T	Chrysene	1.036	1.069	-3.2	88	-0.04
90	T	Bis(2-ethylhexyl) phthalate	0.886	0.874	1.4	82	-0.04
92	I	Perylene-d12	1.000	1.000	0.0	88	-0.04
93	TC	Di-n-octyl phthalate	1.966	1.915	2.6	77	-0.04
94	T	Benzo[b]fluoranthene	1.601	1.537	4.0	80	-0.04
95	T	Benzo[k]fluoranthene	1.318	1.441	-9.3	98	-0.04
96	TC	Benzo[a]pyrene	1.335	1.315	1.5	83	-0.04
97	T	Indeno[1,2,3-cd]pyrene	1.626	1.672	-2.8	91	-0.04
98	T	Dibenz[a,h]anthracene	1.333	1.399	-5.0	91	-0.04
99	T	Benzo[g,h,i]perylene	1.413	1.359	3.8	88	-0.04

(#) = Out of Range

BW0215.M Tue Feb 17 13:56:37 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	251755	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	955520	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	528177	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	800179	40.00	UG		-0.01
82) Chrysene-d12	7.89	240	615650	40.00	UG		-0.04
92) Perylene-d12	9.14	264	408464	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	908823	101.60	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.60%#				
6) Phenol-d5	3.40	99	1129234	102.14	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 102.14%#				
24) Nitrobenzene-d5	3.97	82	461978	45.27	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 90.54%				
47) 2-Fluorobiphenyl	5.02	172	926240	51.52	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 103.04%#				
70) 2,4,6-Tribromophenol	5.95	330	352723	99.01	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 99.01%				
84) Terphenyl-d14	7.21	244	866239	51.69	UG		-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 103.38%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	239251	36.29	UG		88
3) Pyridine	1.71	52	331593	37.81	UG		43
7) Phenol	3.41	94	476827	39.74	UG		1
8) Aniline	3.43	66	222932	39.58	UG		81
9) Bis(2-chloroethyl) ether	3.46	63	281420	37.36	UG		77
10) 2-Chlorophenol	3.52	128	387895	39.35	UG		92
11) 1,3-Dichlorobenzene	3.61	146	407548	38.48	UG	#	94
12) 1,4-Dichlorobenzene	3.64	146	424293	39.91	UG		50
13) Benzyl alcohol	3.71	108	252764	39.76	UG		99
14) 1,2-Dichlorobenzene	3.76	146	393213	38.92	UG		94
15) 2-Methylphenol	3.77	108	329520	38.42	UG		96
16) Bis(2-chloroisopropyl) eth	3.80	45	617764	37.28	UG		87
17) 4-Methylphenol	3.85	108	330784	39.61	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	276695	37.31	UG		82
19) Acetophenone	3.88	105	476956	39.24	UG		79
20) 3-Methylphenol	3.85	108	330784	39.61	UG		100
21) Hexachloroethane	3.95	117	153797	37.39	UG		85
25) Nitrobenzene	3.98	77	349964	35.73	UG		96
26) Isophorone	4.12	82	699577	38.41	UG		89
27) 2-Nitrophenol	4.17	139	154129	35.59	UG		72
28) 2,4-Dimethylphenol	4.18	107	366219	40.14	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	432695	38.77	UG		99
30) Benzoic acid	4.22	105	146416	36.91	UG		48
31) 2,4-Dimethylaniline	4.29	121	400089	39.95	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	288325	39.33	UG		96
33) 1,2,4-Trichlorobenzene	4.37	180	314603	38.69	UG		93
34) Naphthalene	4.41	128	1089853	40.50	UG	#	95
35) 4-Chloroaniline	4.43	127	550432	39.27	UG		96
36) 4-Aminotoluene	3.90	106	566359	39.82	UG	#	56
37) Hexachlorobutadiene	4.51	225	176949	37.92	UG		98
38) Caprolactam	4.62	55	151139	35.89	UG	#	1
39) 2-Aminotoluene	3.90	106	566359	39.82	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	294776	38.08	UG		88
41) 2-Methylnaphthalene	4.81	142	674407	40.93	UG		100
44) Hexachlorocyclopentadiene	4.94	237	184387	38.17	UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	200858	39.81	UG		95
46) 2,4,5-Trichlorophenol	5.00	196	203178	39.91	UG		93
48) 1,1'-Biphenyl	5.07	154	820321	41.68	UG		99
49) 2-Chloronaphthalene	5.09	162	623960	41.38	UG		91
50) 2-Nitroaniline	5.14	65	156991	36.12	UG		83
51) Dimethyl phthalate	5.25	163	692349	40.23	UG		95
52) 2,6-Dinitrotoluene	5.29	165	117999	39.26	UG		78
53) Acenaphthylene	5.34	152	1046615	42.12	UG		98
54) 3-Nitroaniline	5.37	138	144250	38.81	UG		76
55) Acenaphthene	5.44	153	622325	40.66	UG		91
56) 2,4-Dinitrophenol	5.43	184	28778m	39.69	UG		
57) 4-Nitrophenol	5.44	65	109040	36.26	UG		93
58) 2,4-Dinitrotoluene	5.53	165	142455	35.79	UG		92
59) Dibenzofuran	5.54	168	868256	37.65	UG		92
60) Diethyl phthalate	5.69	149	662965	35.91	UG		95
61) Fluorene	5.78	166	694053	36.80	UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	322135	35.94	UG		87
63) 4-Nitroaniline	5.78	138	150353	35.77	UG		88
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	311461	40.67	UG		68
65) 2,3,4,6-Tetrachlorophenol	5.64	232	177171m	35.14	UG		
67) 4,6-Dinitro-2-methylphenol	5.82	198	66139m	41.60	UG		
68) N-Nitrosodiphenylamine	5.84	169	475340	37.82	UG		94
69) 1,2-Diphenylhydrazine	5.87	77	819533	38.41	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	204362	40.01	UG		88
72) Hexachlorobenzene	6.17	284	244533	39.81	UG		92
73) Atrazine	6.15	200	186234	40.85	UG		94
74) Pentachlorophenol	6.26	266	112128	39.24	UG	#	44
75) Phenanthrene	6.35	178	934619	41.05	UG		96
76) Anthracene	6.37	178	919864	41.93	UG		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

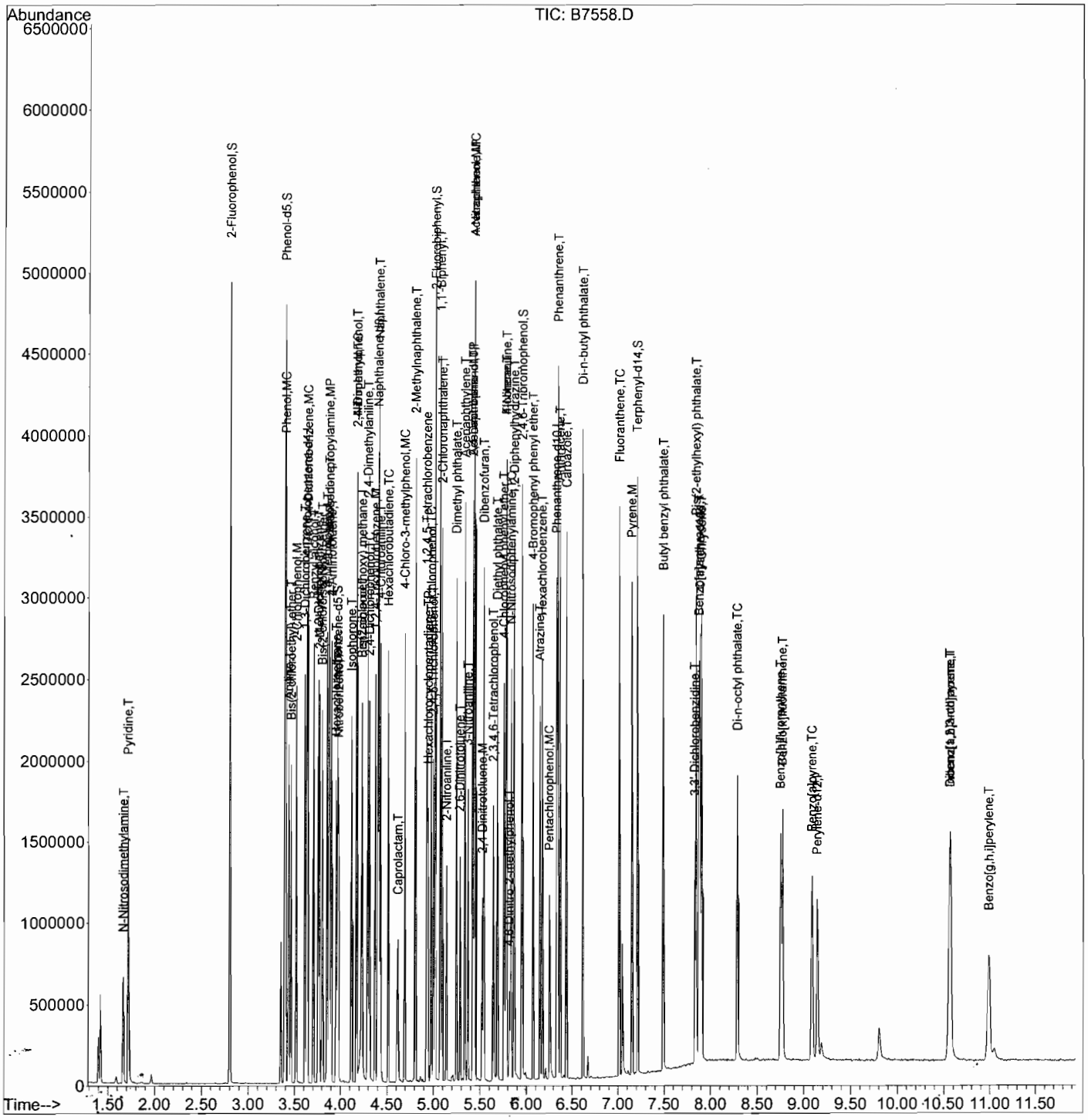
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.44	167	817787	40.89 UG	97
78) Di-n-butyl phthalate	6.62	149	1069743	40.36 UG	98
79) Fluoranthene	7.02	202	884505	40.34 UG	98
83) Pyrene	7.15	202	895891	42.27 UG	95
86) Butyl benzyl phthalate	7.49	149	388045	38.89 UG	86
87) 3,3'-Dichlorobenzidine	7.83	252	210846	34.99 UG	92
88) Benzo[a]anthracene	7.88	228	696835	39.18 UG	96
89) Chrysene	7.91	228	658330	41.27 UG	96
90) Bis(2-ethylhexyl) phthalat	7.85	149	537855	39.42 UG	93
93) Di-n-octyl phthalate	8.29	149	782222	38.96 UG	91
94) Benzo[b]fluoranthene	8.75	252	627868	38.41 UG	85
95) Benzo[k]fluoranthene	8.77	252	588658	43.73 UG	91
96) Benzo[a]pyrene	9.09	252	537048	39.40 UG	89
97) Indeno[1,2,3-cd]pyrene	10.57	276	682785	41.12 UG	77
98) Dibenz[a,h]anthracene	10.57	278	571638	41.99 UG	90
99) Benzo[g,h,i]perylene	10.99	276	555237	38.49 UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7559.D
Acq On : 17 Feb 2015 13:29
Operator : DANA
Sample : ABN031-15,ICV040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 17 13:55:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

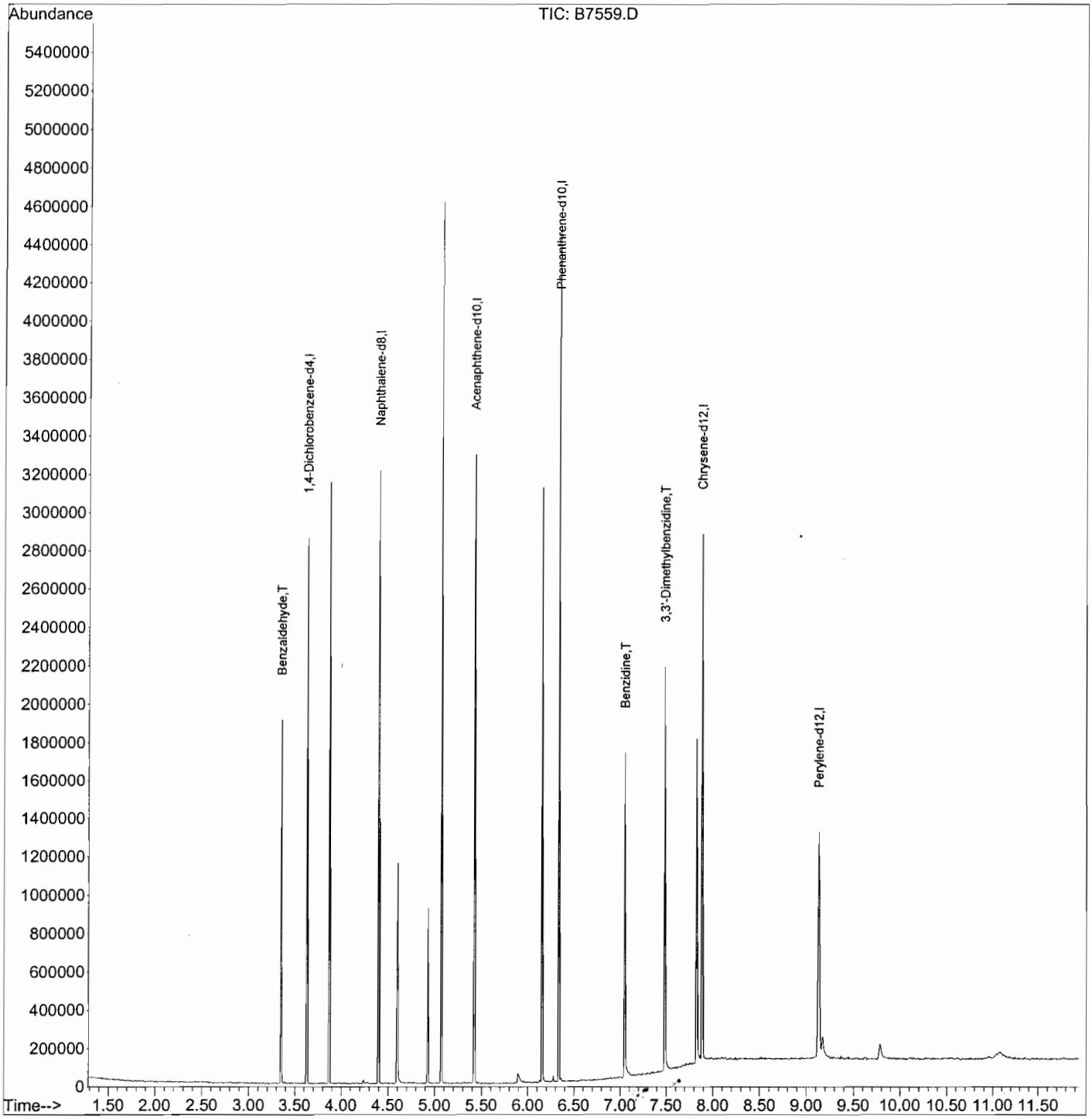
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	260289	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1006846	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	565692	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	897048	40.00	UG	0.00
82) Chrysene-d12	7.88	240	728224	40.00	UG	-0.05
92) Perylene-d12	9.13	264	512976	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery =	0.00%#		
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery =	0.00%#		
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery =	0.00%#		
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	93732m	43.10	UG	
80) Benzidine	7.05	184	476899	42.38	UG	95
85) 3,3'-Dimethylbenzidine	7.48	212	496924	41.76	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7559.D
Acq On : 17 Feb 2015 13:29
Operator : DANA
Sample : ABN031-15,ICV040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 17 13:55:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 10:28:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 5.00min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.00
2	T	N-Nitrosodimethylamine	1.048	0.973	7.2	70	-0.02
3	T	Pyridine	1.393	1.329	4.6	71	-0.01
4	S	2-Fluorophenol	1.421	1.280	9.9	64	0.00
5	T	Benzaldehyde	0.334	0.364	-9.0	62	0.00
6	S	Phenol-d5	1.757	1.617	8.0	65	0.00
7	MC	Phenol	1.906	1.767	7.3	65	0.00
8	T	Aniline	0.895	0.861	3.8	66	0.00
9	T	Bis(2-chloroethyl) ether	1.197	1.181	1.3	73	0.00
10	M	2-Chlorophenol	1.566	1.380	11.9	63	0.00
11	T	1,3-Dichlorobenzene	1.683	1.594	5.3	69	0.00
12	MC	1,4-Dichlorobenzene	1.689	1.552	8.1	66	0.00
13	T	Benzyl alcohol	1.010	0.914	9.5	63	0.00
14	T	1,2-Dichlorobenzene	1.605	1.481	7.7	67	0.00
15	T	2-Methylphenol	1.363	1.226	10.1	65	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.633	2.779	-5.5	77	0.00
17	T	4-Methylphenol	1.327	1.304	1.7	69	0.00
18	MP	N-Nitrosodi-n-propylamine	1.178	1.174	0.3	70	0.00
19	T	Acetophenone	1.931	2.029	-5.1	75	0.00
20	T	3-Methylphenol	1.327	1.304	1.7	69	0.00
21	T	Hexachloroethane	0.654	0.618	5.5	68	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	72	0.00
24	S	Nitrobenzene-d5	0.427	0.388	9.1	66	0.00
25	T	Nitrobenzene	0.410	0.399	2.7	73	0.00
26	T	Isophorone	0.762	0.738	3.1	69	0.00
27	TC	2-Nitrophenol	0.181	0.162	10.5	62	0.00
28	T	2,4-Dimethylphenol	0.382	0.335	12.3	62	0.00
29	T	Bis(2-chloroethoxy) methane	0.467	0.445	4.7	70	0.00
30	T	Benzoic acid	0.166	0.170	-2.4	63	0.00
31	T	2,4-Dimethylaniline	0.419	0.394	6.0	67	0.00
32	TC	2,4-Dichlorophenol	0.307	0.285	7.2	64	0.00
33	M	1,2,4-Trichlorobenzene	0.340	0.320	5.9	68	0.00
34	T	Naphthalene	1.126	1.066	5.3	68	0.00
35	T	4-Chloroaniline	0.587	0.560	4.6	69	0.00
36	T	4-Aminotoluene	0.595	0.558	6.2	65	-0.01
37	TC	Hexachlorobutadiene	0.195	0.201	-3.1	74	0.00
38	T	Caprolactam	0.176	0.186	-5.7	75	0.00
39	T	2-Aminotoluene	0.595	0.558	6.2	65	-0.01
40	MC	4-Chloro-3-methylphenol	0.324	0.309	4.6	69	0.00
41	T	2-Methylnaphthalene	0.690	0.673	2.5	68	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	69	0.00
44	TP	Hexachlorocyclopentadiene	0.366	0.383	-4.6	68	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.367	3.9	66	0.00
46	T	2,4,5-Trichlorophenol	0.386	0.405	-4.9	71	0.00

47	S	2-Fluorobiphenyl	1.362	1.292	5.1	66	0.00
48	T	1,1'-Biphenyl	1.491	1.571	-5.4	74	0.00
49	T	2-Chloronaphthalene	1.142	1.142	0.0	69	0.00
50	T	2-Nitroaniline	0.329	0.344	-4.6	70	0.00
51	T	Dimethyl phthalate	1.303	1.304	-0.1	69	0.00
52	T	2,6-Dinitrotoluene	0.228	0.225	1.3	62	0.00
53	T	Acenaphthylene	1.882	1.850	1.7	67	0.00
54	T	3-Nitroaniline	0.281	0.298	-6.0	69	0.00
55	MC	Acenaphthene	1.159	1.137	1.9	67	0.00
56	TP	2,4-Dinitrophenol	0.055	0.059	-7.3	67	0.00
57	MP	4-Nitrophenol	0.228	0.245	-7.5	70	0.00
58	M	2,4-Dinitrotoluene	0.301	0.335	-11.3	73	0.00
59	T	Dibenzofuran	1.746	1.890	-8.2	76	0.00
60	T	Diethyl phthalate	1.398	1.555	-11.2	78	0.00
61	T	Fluorene	1.428	1.549	-8.5	74	0.00
62	T	4-Chlorophenyl phenyl ether	0.679	0.774	-14.0	82	0.00
63	T	4-Nitroaniline	0.318	0.358	-12.6	74	0.00
64		1,2,4,5-Tetrachlorobenzene	0.580	0.595	-2.6	71	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.382	0.362	5.2	71	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	69	0.00
67	T	4,6-Dinitro-2-methylphenol	0.079	0.088	-11.4	76	0.00
68	TC	N-Nitrosodiphenylamine	0.628	0.720	-14.6	81	0.00
69	T	1,2-Diphenylhydrazine	1.067	1.111	-4.1	73	0.00
70	S	2,4,6-Tribromophenol	0.178	0.176	1.1	69	0.00
71	T	4-Bromophenyl phenyl ether	0.255	0.277	-8.6	74	0.00
72	T	Hexachlorobenzene	0.307	0.304	1.0	69	0.00
73	T	Atrazine	0.228	0.200	12.3	60	0.00
74	MC	Pentachlorophenol	0.143	0.150	-4.9	71	0.00
75	T	Phenanthrene	1.138	1.130	0.7	70	0.00
76	T	Anthracene	1.097	1.144	-4.3	70	0.00
77	T	Carbazole	1.000	1.032	-3.2	72	0.00
78	T	Di-n-butyl phthalate	1.325	1.341	-1.2	68	0.00
79	TC	Fluoranthene	1.096	1.090	0.5	69	0.00
80	T	Benzidine	0.502	0.455	9.4	61	0.00
82	I	Chrysene-d12	1.000	1.000	0.0	67	0.02
83	M	Pyrene	1.377	1.523	-10.6	69	0.00
84	S	Terphenyl-d14	1.089	1.134	-4.1	65	0.00
85	T	3,3'-Dimethylbenzidine	0.654	0.606	7.3	63	0.00
86	T	Butyl benzyl phthalate	0.648	0.706	-9.0	69	0.01
87	T	3,3'-Dichlorobenzidine	0.392	0.371	5.4	63	0.02
88	T	Benzo[a]anthracene	1.156	1.228	-6.2	70	0.02
89	T	Chrysene	1.036	1.126	-8.7	69	0.01
90	T	Bis(2-ethylhexyl) phthalate	0.886	0.929	-4.9	65	0.02
92	I	Perylene-d12	1.000	1.000	0.0	62	0.01
93	TC	Di-n-octyl phthalate	1.966	2.199	-11.9	62	0.01
94	T	Benzo[b]fluoranthene	1.601	1.747	-9.1	64	0.01
95	T	Benzo[k]fluoranthene	1.318	1.390	-5.5	67	0.01
96	TC	Benzo[a]pyrene	1.335	1.531	-14.7	68	0.02
97	T	Indeno[1,2,3-cd]pyrene	1.626	1.795	-10.4	69	0.02
98	T	Dibenz[a,h]anthracene	1.333	1.519	-14.0	70	0.02
99	T	Benzo[g,h,i]perylene	1.413	1.586	-12.2	72	0.01

(#) = Out of Range

BW0215.M Fri Feb 20 13:40:44 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	188553	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	732149	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	401688	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	631572	40.00	UG		0.00
82) Chrysene-d12	7.95	240	457744	40.00	UG		0.02
92) Perylene-d12	9.20	264	287679	40.00	UG		0.01
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	603211	90.04	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 90.04%				
6) Phenol-d5	3.40	99	762424	92.08	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 92.08%				
24) Nitrobenzene-d5	3.97	82	355384	45.45	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 90.90%				
47) 2-Fluorobiphenyl	5.02	172	648902	47.46	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 94.92%				
70) 2,4,6-Tribromophenol	5.95	330	277575	98.72	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 98.72%				
84) Terphenyl-d14	7.24	244	648680	52.06	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 104.12%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.65	74	183383	37.14	UG		77
3) Pyridine	1.70	52	250671	38.17	UG		40
7) Phenol	3.40	94	333253	37.08	UG		1
8) Aniline	3.43	66	162251	38.46	UG		77
9) Bis(2-chloroethyl) ether	3.46	63	222729	39.48	UG		73
10) 2-Chlorophenol	3.51	128	260294	35.26	UG		92
11) 1,3-Dichlorobenzene	3.61	146	300547	37.89	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	292651	36.75	UG		50
13) Benzyl alcohol	3.70	108	172384	36.20	UG		87
14) 1,2-Dichlorobenzene	3.75	146	279258	36.91	UG		93
15) 2-Methylphenol	3.77	108	231087	35.97	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	524067	42.23	UG		86
17) 4-Methylphenol	3.85	108	245935	39.32	UG		99
18) N-Nitrosodi-n-propylamine	3.88	70	221448	39.87	UG		78
19) Acetophenone	3.87	105	382667	42.04	UG		74
20) 3-Methylphenol	3.85	108	245935	39.32	UG		99
21) Hexachloroethane	3.95	117	116432	37.79	UG		83
25) Nitrobenzene	3.98	77	292365	38.96	UG		93
26) Isophorone	4.12	82	540155	38.71	UG		88
27) 2-Nitrophenol	4.17	139	118606	35.74	UG		59
28) 2,4-Dimethylphenol	4.17	107	245378	35.10	UG		89

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	325522	38.07 UG		98
30) Benzoic acid	4.22	105	124109m	40.83 UG		
31) 2,4-Dimethylaniline	4.29	121	288331	37.58 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	208864	37.18 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	234650	37.67 UG		92
34) Naphthalene	4.41	128	780513	37.86 UG	#	100
35) 4-Chloroaniline	4.43	127	409851	38.16 UG		97
36) 4-Aminotoluene	3.89	106	408265	37.46 UG	#	52
37) Hexachlorobutadiene	4.51	225	147151	41.16 UG		97
38) Caprolactam	4.61	55	136279	42.24 UG	#	1
39) 2-Aminotoluene	3.89	106	408265	37.46 UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	226235	38.15 UG		82
41) 2-Methylnaphthalene	4.81	142	492429	39.00 UG		99
44) Hexachlorocyclopentadiene	4.94	237	153866	41.88 UG	#	37
45) 2,4,6-Trichlorophenol	4.98	196	147595	38.47 UG		93
46) 2,4,5-Trichlorophenol	5.00	196	162538	41.98 UG		92
48) 1,1'-Biphenyl	5.07	154	631251	42.17 UG		100
49) 2-Chloronaphthalene	5.09	162	458894	40.02 UG		88
50) 2-Nitroaniline	5.14	65	138098	41.78 UG		74
51) Dimethyl phthalate	5.25	163	523853	40.03 UG		96
52) 2,6-Dinitrotoluene	5.29	165	90414	39.55 UG		65
53) Acenaphthylene	5.33	152	743049	39.32 UG		98
54) 3-Nitroaniline	5.37	138	119541	42.29 UG		71
55) Acenaphthene	5.44	153	456631	39.23 UG		92
56) 2,4-Dinitrophenol	5.43	184	23566m	42.73 UG		
57) 4-Nitrophenol	5.44	65	98305	42.98 UG		82
58) 2,4-Dinitrotoluene	5.53	165	134507	44.44 UG		99
59) Dibenzofuran	5.54	168	759336	43.30 UG		87
60) Diethyl phthalate	5.69	149	624553	44.48 UG		95
61) Fluorene	5.78	166	622268	43.38 UG		97
62) 4-Chlorophenyl phenyl ethe	5.76	204	311055	45.64 UG		85
63) 4-Nitroaniline	5.78	138	143770	44.97 UG		80
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	239185	41.07 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	145483	37.95 UG		94
67) 4,6-Dinitro-2-methylphenol	5.82	198	55388m	44.14 UG		
68) N-Nitrosodiphenylamine	5.84	169	454808	45.85 UG		95
69) 1,2-Diphenylhydrazine	5.87	77	701891	41.68 UG		86
71) 4-Bromophenyl phenyl ether	6.08	248	175112	43.44 UG		86
72) Hexachlorobenzene	6.18	284	192264	39.66 UG		90
73) Atrazine	6.16	200	126367m	35.11 UG		
74) Pentachlorophenol	6.26	266	95029	42.13 UG	#	41
75) Phenanthrene	6.35	178	713705	39.72 UG		96
76) Anthracene	6.38	178	722485	41.72 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

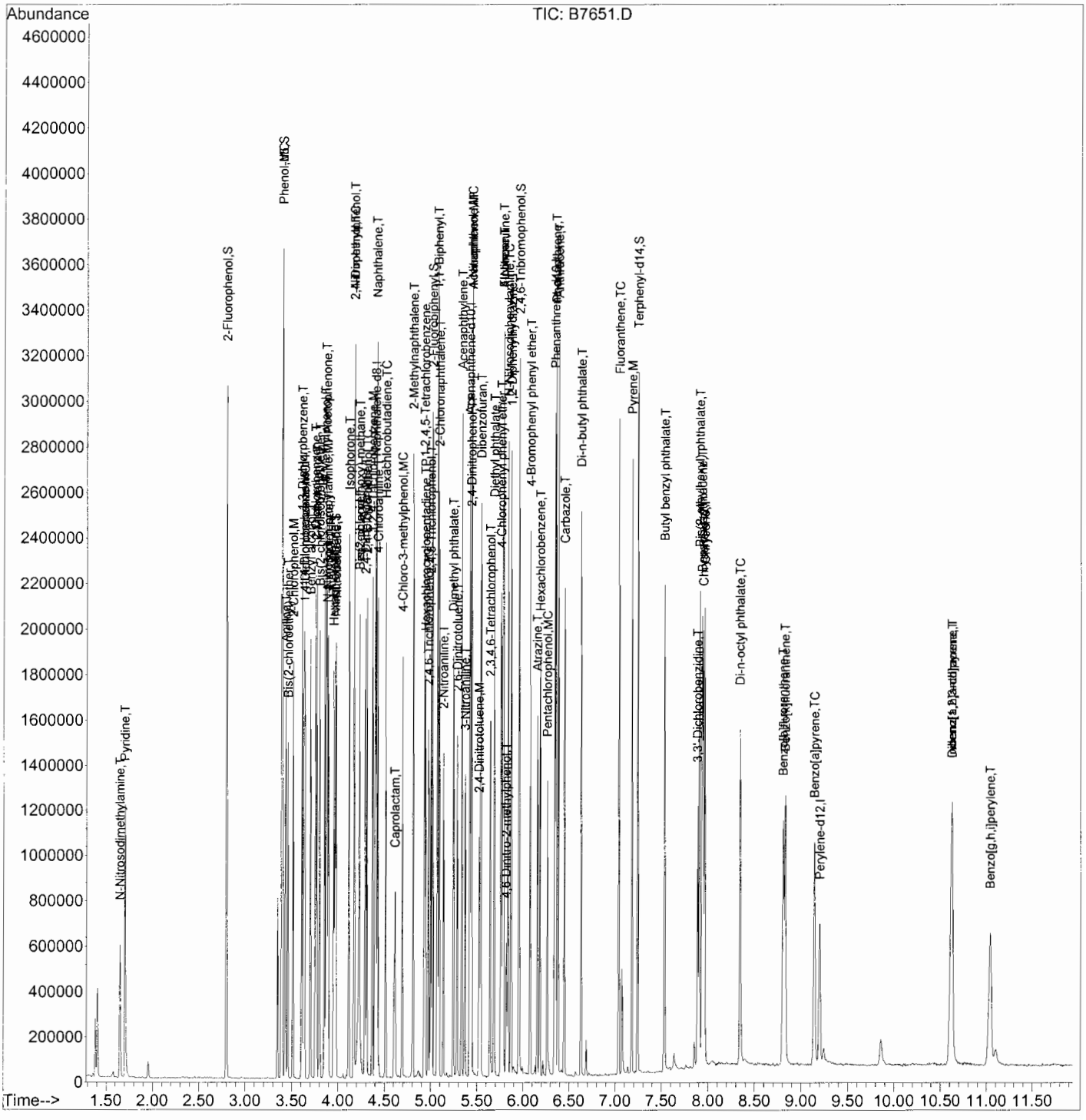
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.45	167	651861	41.30 UG	97
78) Di-n-butyl phthalate	6.63	149	847073	40.49 UG	98
79) Fluoranthene	7.04	202	688458	39.78 UG	97
83) Pyrene	7.18	202	697256	44.25 UG	97
86) Butyl benzyl phthalate	7.53	149	323029	43.54 UG	85
87) 3,3'-Dichlorobenzidine	7.89	252	170007	37.94 UG	92
88) Benzo[a]anthracene	7.94	228	562263	42.52 UG	96
89) Chrysene	7.96	228	515451	43.46 UG	97
90) Bis(2-ethylhexyl) phthalat	7.91	149	425424	41.94 UG	94
93) Di-n-octyl phthalate	8.34	149	632659	44.74 UG	91
94) Benzo[b]fluoranthene	8.81	252	502536	43.65 UG	84
95) Benzo[k]fluoranthene	8.83	252	399761m	42.17 UG	
96) Benzo[a]pyrene	9.14	252	440354m	45.87 UG	
97) Indeno[1,2,3-cd]pyrene	10.62	276	516479m	44.16 UG	
98) Dibenz[a,h]anthracene	10.62	278	436950m	45.57 UG	
99) Benzo[g,h,i]perylene	11.04	276	456383m	44.92 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7652.D
Acq On : 20 Feb 2015 10:31
Operator : DANA
Sample : ABN031-15,CCV040BNA2
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 23 09:18:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

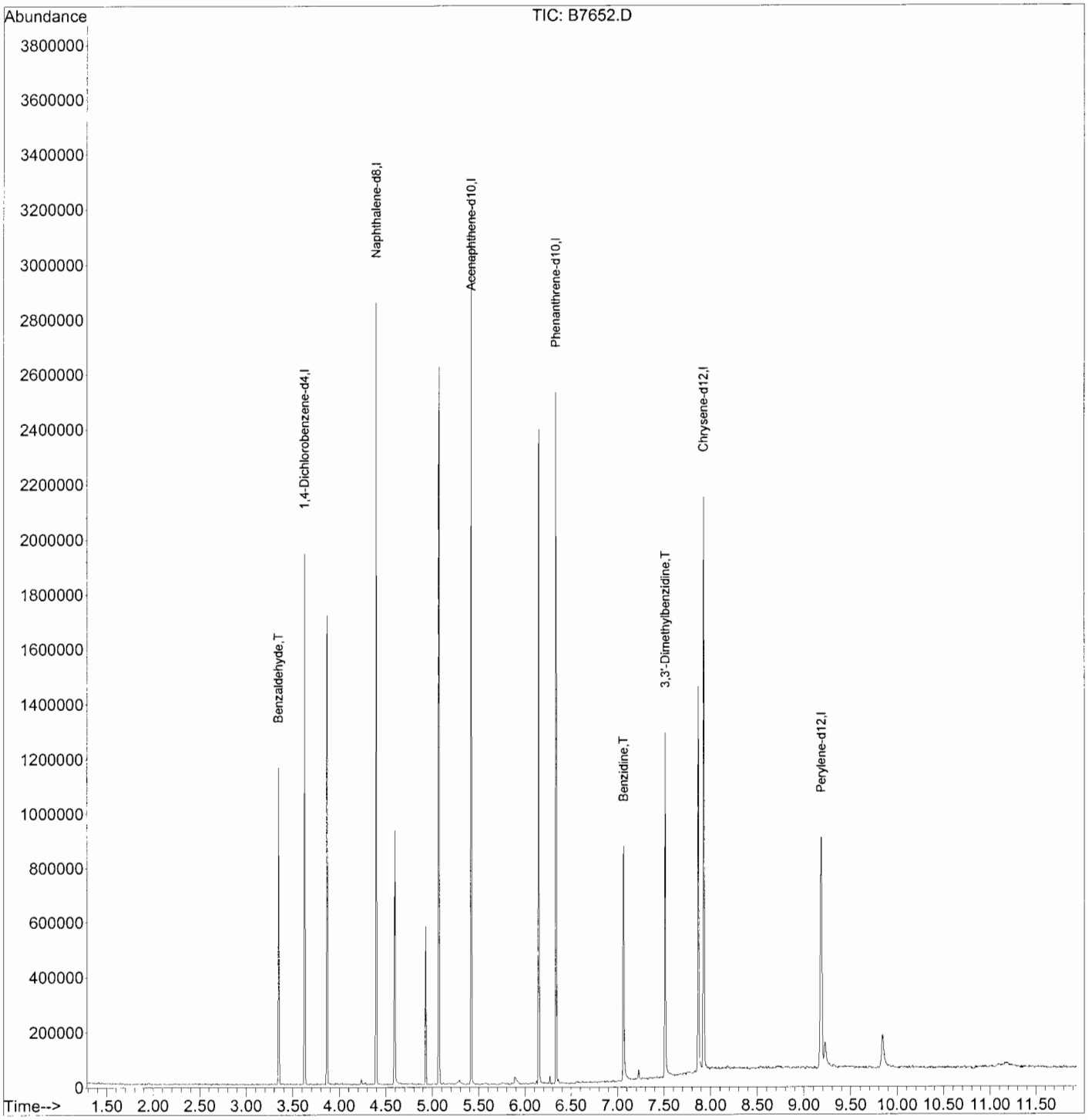
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	169759	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	680872	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	390445	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	658326	40.00	UG	-0.01
82) Chrysene-d12	7.93	240	550146	40.00	UG	0.00
92) Perylene-d12	9.19	264	402557	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	61861m	43.61	UG	
80) Benzidine	7.07	184	299327m	36.25	UG	
85) 3,3'-Dimethylbenzidine	7.51	212	333385m	37.08	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7652.D
Acq On : 20 Feb 2015 10:31
Operator : DANA
Sample : ABN031-15,CCV040BNA2
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 23 09:18:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

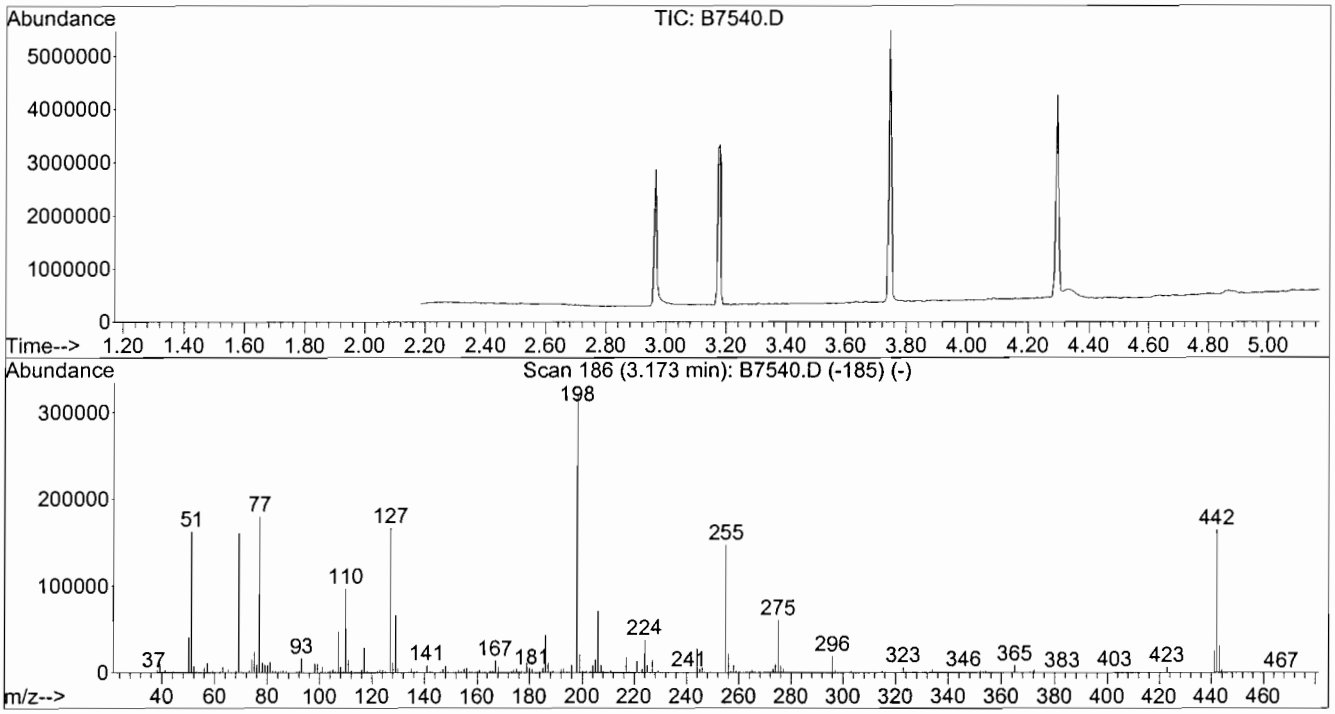


TCLP
SEMI-VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7540.D
Acq On : 17 Feb 2015 7:59
Operator : DANA
Sample : ABN005-15,DFTPP(150217)
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP1.M
Title :
Last Update : Fri Oct 07 04:35:10 2011



Spectrum Information: Scan 186

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.9	162448	PASS
68	69	0.00	2	1.4	2194	PASS
69	198	0.00	100	50.4	161048	PASS
70	69	0.00	2	0.8	1214	PASS
127	198	40	60	52.3	166840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	319224	PASS
199	198	5	9	6.6	20964	PASS
275	198	10	30	19.0	60768	PASS
365	198	1	100	2.6	8177	PASS
441	443	0.01	100	80.4	24758	PASS
442	198	40	100	51.5	164559	PASS
443	442	17	23	18.7	30810	PASS

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	159	50.10	41396	64.10	839	77.10	180096
37.05	646	51.10	162448	65.05	3297	78.10	11811
38.15	3030	52.10	7618	66.05	595	79.10	8776
39.20	17469	53.10	1091	67.05	314	80.05	8656
40.10	1299	56.10	5629	68.20	2194	81.10	12289
41.20	2952	57.20	10984	69.10	161048	82.10	2196
42.20	836	58.10	925	70.10	1214	83.10	1877
43.20	1360	59.30	1881	73.10	2522	84.10	1114
44.10	1832	61.10	1228	74.10	14671	85.10	2399
45.10	258	62.10	1559	75.10	24178	86.00	2589
47.10	559	63.10	6629	76.10	9285	87.10	1497

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.00	192	102.10	645	113.00	337	125.05	1765
91.00	1546	103.10	1136	114.10	587	127.05	166840
92.10	2219	104.00	2580	115.10	786	128.00	11504
93.05	16731	105.10	3711	116.10	3551	129.10	67135
94.00	314	106.00	1470	117.00	28717	130.00	5204
95.10	69	107.10	48043	118.05	2455	131.00	759
96.15	470	108.05	7014	119.15	891	132.00	443
98.10	10771	109.10	1584	120.10	146	133.00	599
99.10	9904	110.00	97330	122.05	2289	134.05	1180
100.10	474	111.10	15400	123.00	3872	135.05	4933
101.10	7159	112.10	2390	124.10	2877	136.10	1693

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.10	1798	147.00	4497	158.00	1543	169.00	1042
138.05	517	148.00	7811	159.10	1261	170.15	701
139.00	519	149.00	1616	159.95	1814	171.90	868
140.20	826	150.10	558	160.95	3320	173.10	1407
141.00	8589	151.05	927	162.10	1067	174.00	3758
142.10	2004	152.00	589	163.00	370	175.00	4793
143.00	1356	153.00	3242	163.95	84	176.05	1933
144.10	610	154.00	1716	165.00	2263	176.95	2353
145.00	511	155.05	4302	166.05	2389	177.85	597
146.00	1483	156.00	5563	166.95	14240	178.95	11556
146.20	965	157.10	1514	168.05	7108	180.05	5525

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	4227	191.00	527	204.00	8449	216.00	923
181.80	347	192.00	4165	205.00	15194	217.00	18326
182.20	171	192.95	4674	206.00	70989	218.00	1640
182.95	390	194.10	1320	207.05	8861	219.00	702
184.00	1518	194.90	722	208.00	2191	221.00	13688
185.10	5790	196.05	9090	209.00	860	223.00	4212
186.10	43718	197.95	319224	211.00	2122	224.00	37994
187.05	11556	199.00	20964	212.10	293	225.05	8724
188.00	1230	200.10	2021	213.15	321	227.00	14934
188.90	1921	201.50	1839	213.90	3	228.05	1089
190.00	605	203.05	1468	214.95	416	229.10	2496

Scan 186 (3.173 min): B7540.D (-185)

ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
230.05	583	242.05	1384	253.10	332	265.80	222
231.00	1550	243.00	1835	255.00	147239	267.20	249
231.80	481	244.00	27718	256.00	21931	269.10	235
232.90	525	245.00	4134	257.00	1719	269.80	246
234.00	901	246.00	5467	257.90	8077	270.90	493
235.00	734	246.80	944	258.90	1803	271.90	223
236.00	993	248.00	173	260.00	290	273.00	4613
237.00	1244	249.00	657	260.90	355	274.00	9810
237.90	238	249.80	364	262.00	343	275.00	60768
238.85	917	251.00	515	263.00	338	275.95	7757
241.05	1235	251.70	333	265.00	3386	276.95	4513

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.90	747	291.85	391	307.10	174	324.00	961
278.90	163	293.00	1147	307.80	371	325.80	151
281.05	24	294.10	209	310.10	143	326.85	1253
282.15	642	296.00	18894	313.10	281	328.00	818
283.10	237	296.95	2523	314.00	1313	331.80	323
284.20	210	297.90	248	314.90	2026	333.00	303
284.80	1005	299.00	319	316.10	911	334.00	3681
285.10	864	301.00	385	317.10	279	335.00	1008
286.30	330	302.00	261	320.90	648	336.00	243
289.10	402	303.00	1929	321.90	516	338.40	173
291.20	276	304.10	584	323.00	6423	339.10	142

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
340.80	693	361.10	141	384.10	293	409.90	249
341.90	147	363.90	174	388.90	185	414.80	169
342.40	143	365.00	8177	389.90	413	420.70	1053
345.80	1675	365.90	1181	390.40	177	421.90	1731
347.05	81	370.20	191	391.90	267	422.90	6457
352.10	2060	370.80	570	397.20	221	423.80	1459
353.10	1318	372.10	2999	400.90	272	424.70	428
354.10	1787	373.00	780	402.00	1077	441.00	24758
355.00	332	374.10	216	402.90	1567	441.95	164559
356.00	519	376.90	286	403.90	323	442.95	30810
357.10	290	382.80	726	405.40	154	443.90	3476

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

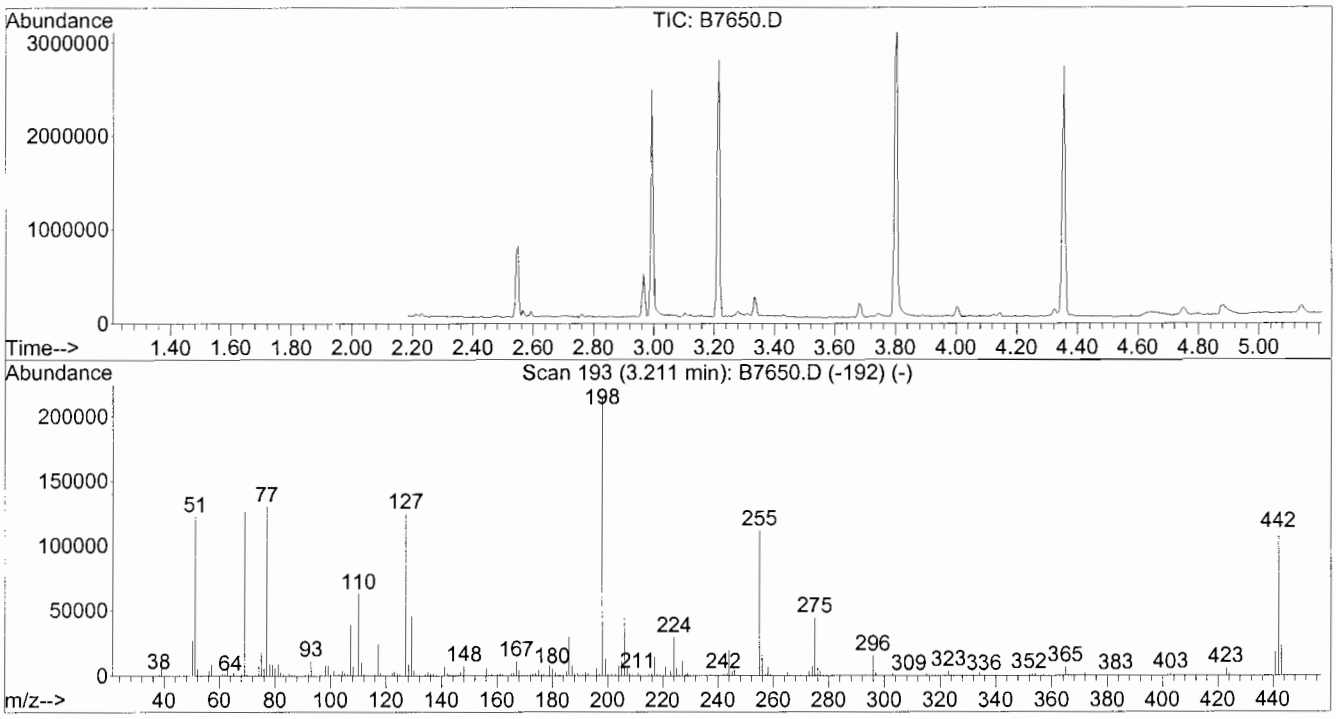
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
467.00	162						

DFTPP

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7650.D
Acq On : 20 Feb 2015 10:04
Operator : DANA
Sample : ABN005-15,DFTPP022015
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP1.M
Title :
Last Update : Fri Oct 07 04:35:10 2011



Spectrum Information: Scan 193

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.3	122464	PASS
68	69	0.00	2	1.1	1386	PASS
69	198	0.00	100	59.1	126248	PASS
70	69	0.00	2	1.0	1309	PASS
127	198	40	60	58.5	124929	PASS
197	198	0.00	1	0.6	1177	PASS
198	198	100	100	100.0	213632	PASS
199	198	5	9	6.1	13063	PASS
275	198	10	30	20.8	44453	PASS
365	198	1	100	3.2	6739	PASS
441	443	0.01	100	77.5	18134	PASS
442	198	40	100	51.4	109900	PASS
443	442	17	23	21.3	23391	PASS

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	210	55.15	350	66.10	151	78.10	8866
37.00	429	56.10	4003	67.20	79	79.10	8509
38.15	1653	57.10	8641	68.05	1386	80.10	5936
39.20	12514	58.10	529	69.10	126248	81.10	9049
45.10	201	59.00	270	70.05	1309	82.05	2624
47.00	290	60.00	255	71.10	380	83.10	1312
48.10	298	61.15	1456	73.20	614	85.10	1456
50.20	26986	62.10	1348	74.15	9160	86.10	1019
51.20	122464	63.10	5124	75.10	18045	87.05	279
52.05	5428	64.10	367	76.10	5867	88.00	67
53.30	353	65.15	2495	77.10	130224	91.00	1499

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1778	104.10	4043	117.05	24329	129.10	45824
93.10	11195	105.10	2637	118.10	2484	130.10	4333
94.05	796	106.10	1606	119.30	633	131.05	802
96.15	444	107.10	39535	120.00	516	132.00	443
97.00	356	108.10	7083	120.90	341	132.95	20
98.10	8234	110.05	62822	122.15	2260	134.10	1009
99.10	8033	111.05	10437	123.00	3340	135.05	3109
100.00	1088	112.00	1474	124.05	1691	136.10	1640
101.10	3959	112.90	548	124.95	1245	137.05	1963
102.00	293	114.20	330	127.10	124929	138.20	550
102.95	1688	116.00	1577	128.05	10525	139.15	167

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.15	604	151.05	1044	161.90	1234	173.00	1590
141.05	6776	152.10	503	163.20	593	174.00	2068
142.10	2141	153.00	317	164.10	140	175.10	4703
143.00	1192	154.10	1598	165.10	1561	176.05	1070
144.10	380	155.05	2362	166.00	1917	177.00	1858
145.00	306	156.05	5423	167.00	11109	178.00	688
146.10	728	157.00	636	167.95	4042	179.00	7895
146.95	3115	158.00	2162	169.00	824	180.05	5817
148.10	7371	159.00	501	170.10	613	181.05	2633
149.00	777	160.00	1420	171.00	459	182.20	494
150.00	563	161.00	1970	172.00	1096	182.80	250

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.80	674	194.05	43	207.10	6769	220.20	283
185.10	3378	195.95	5888	208.05	1799	220.95	6859
186.05	29588	197.00	1177	208.90	580	222.95	3783
187.10	7952	198.00	213632	210.90	2186	224.10	29370
188.10	1441	199.05	13063	211.70	404	225.00	6076
189.10	2390	200.00	1368	213.10	73	226.05	606
189.80	260	201.50	1390	215.00	1099	227.00	11621
190.10	225	202.95	1552	215.90	1813	228.10	1306
191.00	779	204.10	7637	217.00	14150	229.00	2225
192.00	2879	205.00	11149	217.90	1245	229.90	416
193.00	2284	206.10	49977	219.00	547	231.00	882

Scan 193 (3.211 min): B7650.D (-192)

ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
232.10	230	243.20	1780	255.95	16465	270.30	169
232.80	297	244.00	19572	257.05	1108	271.90	295
234.00	758	245.05	3180	257.95	6673	272.90	3620
235.10	620	246.00	5122	259.00	986	274.00	7502
235.90	613	247.15	572	259.90	202	275.00	44453
237.10	1005	248.90	504	260.90	437	276.00	6102
238.00	222	251.00	387	263.20	217	277.00	3783
239.00	422	252.20	240	265.00	2461	278.10	887
240.00	561	252.90	40	265.90	521	279.10	195
241.00	528	254.00	639	266.80	170	281.20	412
242.05	1816	255.00	111475	269.90	200	282.00	252

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.00	810	303.80	610	322.00	255	336.00	289
284.00	279	308.10	223	323.10	3647	339.00	165
285.00	705	308.90	256	324.00	879	341.10	673
290.10	141	313.10	159	326.90	828	345.95	677
291.80	164	314.00	938	328.00	466	351.90	1282
292.20	295	314.90	1718	328.90	292	353.00	1302
293.10	900	315.90	811	331.90	376	354.10	1558
296.00	15503	317.00	203	332.40	260	356.10	193
297.00	2561	318.30	232	333.00	411	357.10	177
302.00	200	320.30	188	334.10	2325	358.80	154
303.00	1936	321.00	442	335.00	787	365.00	6739

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.90	1150	403.00	1515	444.00	1463		
369.80	225	404.10	633				
370.60	383	404.90	164				
372.00	2246	414.90	157				
372.90	447	420.90	545				
383.20	902	421.90	733				
389.80	313	423.00	5686				
390.00	304	424.00	1645				
390.90	269	440.85	18134				
400.90	242	442.00	109900				
401.90	1157	443.00	23391				

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA150220-03
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7674.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		1.00	0.185
Pyridine	ND		1.00	0.154
Benzaldehyde	ND		1.00	0.237
Phenol	ND		1.00	0.113
Aniline	ND		1.00	0.200
Bis(2-chloroethyl) ether	ND		1.00	0.131
2-Chlorophenol	ND		1.00	0.144
1,3-Dichlorobenzene	ND		1.00	0.112
1,4-Dichlorobenzene	ND		1.00	0.133
Benzyl alcohol	ND		1.00	0.128
1,2-Dichlorobenzene	ND		1.00	0.153
2-Methylphenol	ND		1.00	0.294
Bis(2-chloroisopropyl) ether	ND		1.00	0.127
4-Methylphenol **	ND		1.00	0.203
N-Nitrosodi-n-propylamine	ND		1.00	0.186
Acetophenone	ND		1.00	0.144
3-Methylphenol	ND		1.00	0.203
Hexachloroethane	ND		1.00	0.150
Nitrobenzene	ND		1.00	0.124
Isophorone	ND		1.00	0.127
2-Nitrophenol	ND		1.00	0.205
2,4-Dimethylphenol	ND		1.00	0.144
Bis(2-chloroethoxy) methane	ND		1.00	0.113
Benzoic acid	ND		1.00	0.184
2,4-Dimethylaniline	ND		1.00	0.221
2,4-Dichlorophenol	ND		1.00	0.136
1,2,4-Trichlorobenzene	ND		1.00	0.221
Naphthalene	ND		1.00	0.123
4-Chloroaniline	ND		1.00	0.135
4-Aminotoluene	ND		1.00	0.158
Hexachlorobutadiene	ND		1.00	0.167
Caprolactam	ND		1.00	0.232
2-Aminotoluene	ND		1.00	0.158
4-Chloro-3-methylphenol	ND		1.00	0.162
2-Methylnaphthalene	ND		1.00	0.112
Hexachlorocyclopentadiene	ND		1.00	0.158
2,4,6-Trichlorophenol	ND		1.00	0.118
2,4,5-Trichlorophenol	ND		1.00	0.306
1,1'-Biphenyl	ND		1.00	0.105
2-Chloronaphthalene	ND		1.00	0.256
2-Nitroaniline	ND		1.00	0.202
Dimethyl phthalate	ND		1.00	0.131

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA150220-03
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7674.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.207
Acenaphthylene	ND		1.00	0.107
3-Nitroaniline	ND		1.00	0.156
Acenaphthene	ND		1.00	0.122
2,4-Dinitrophenol	ND		1.00	0.413
4-Nitrophenol	ND		1.00	0.157
2,4-Dinitrotoluene	ND		1.00	0.164
Dibenzofuran	ND		1.00	0.123
Diethyl phthalate	ND		1.00	0.127
Fluorene	ND		1.00	0.176
4-Chlorophenyl phenyl ether	ND		1.00	0.133
4-Nitroaniline	ND		1.00	0.193
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.222
2,3,4,6-Tetrachlorophenol	ND		1.00	0.231
4,6-Dinitro-2-methylphenol	ND		1.00	0.194
N-Nitrosodiphenylamine	ND		1.00	0.117
1,2-Diphenylhydrazine	ND		1.00	0.106
4-Bromophenyl phenyl ether	ND		1.00	0.182
Hexachlorobenzene	ND		1.00	0.188
Atrazine	ND		1.00	0.259
Pentachlorophenol	ND		1.00	0.160
Phenanthrene	ND		1.00	0.111
Anthracene	ND		1.00	0.155
Carbazole	ND		1.00	0.119
Di-n-butyl phthalate	ND		1.00	0.177
Fluoranthene	ND		1.00	0.118
Benzidine	ND		1.00	0.192
Pyrene	ND		1.00	0.142
3,3'-Dimethylbenzidine	ND		1.00	0.254
Butyl benzyl phthalate	ND		1.00	0.245
3,3'-Dichlorobenzidine	ND		1.00	0.197
Benzo[a]anthracene	ND		1.00	0.109
Chrysene	ND		1.00	0.149
Bis(2-ethylhexyl) phthalate	ND		1.00	0.429
Di-n-octyl phthalate	ND		1.00	0.175
Benzo[b]fluoranthene	ND		1.00	0.220
Benzo[k]fluoranthene	ND		1.00	0.289
Benzo[a]pyrene	ND		1.00	0.176
Indeno[1,2,3-cd]pyrene	ND		1.00	0.238
Dibenz[a,h]anthracene	ND		1.00	0.217
Benzo[g,h,i]perylene	ND		1.00	0.183

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: TCLP150219
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7675.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00308
1,4-Dichlorobenzene	ND		0.020	0.00266
2-Methylphenol	ND		0.020	0.00588
4-Methylphenol	ND		0.020	0.00406
3-Methylphenol	ND		0.020	0.00406
Hexachloroethane	ND		0.020	0.003
Nitrobenzene	ND		0.020	0.00248
Hexachlorobutadiene	ND		0.020	0.00334
2,4,6-Trichlorophenol	ND		0.020	0.00236
2,4,5-Trichlorophenol	ND		0.020	0.00612
2,4-Dinitrotoluene	ND		0.020	0.00328
Hexachlorobenzene	ND		0.020	0.00376
Pentachlorophenol	ND		0.020	0.0032

Total Target Compounds (13): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7674.D
Acq On : 20 Feb 2015 16:32
Operator : DANA
Sample : .,BLKA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 09:14:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.62	152	231862	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	888279	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	463551	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	690950	40.00	UG	0.00
82) Chrysene-d12	7.94	240	555163	40.00	UG	0.00
92) Perylene-d12	9.19	264	319451	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	174496	21.18	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 21.18%			
6) Phenol-d5	3.38	99	128151	12.59	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 12.59%			
24) Nitrobenzene-d5	3.96	82	217710	22.95	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 45.90%			
47) 2-Fluorobiphenyl	5.01	172	409450	25.95	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.90%			
70) 2,4,6-Tribromophenol	5.95	330	173339	56.35	UG	0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 56.35%			
84) Terphenyl-d14	7.24	244	508879	33.67	UG	0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 67.34%			

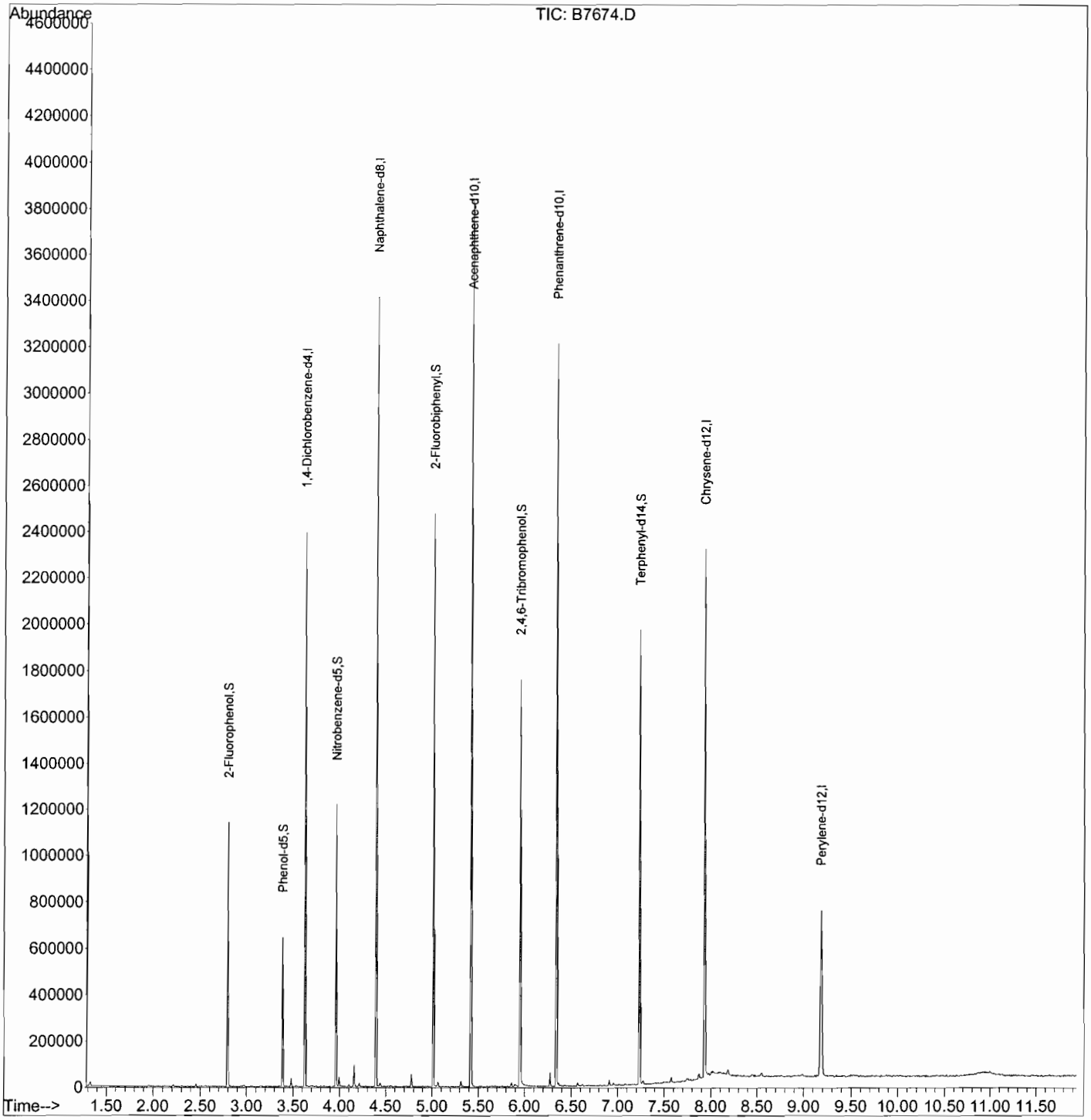
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7674.D
Acq On : 20 Feb 2015 16:32
Operator : DANA
Sample : .,BLKA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 09:14:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7675.D
Acq On : 20 Feb 2015 16:55
Operator : DANA
Sample : .,TCLP150219,T,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 23 09:14:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	156420	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	607604	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	336371	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	485182	40.00	UG	-0.01
82) Chrysene-d12	7.89	240	390488	40.00	UG	-0.04
92) Perylene-d12	9.15	264	226831	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	115422	20.77	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 20.77%			
6) Phenol-d5	3.38	99	86698	12.62	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 12.62%			
24) Nitrobenzene-d5	3.96	82	149825	23.09	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 46.18%			
47) 2-Fluorobiphenyl	5.01	172	281743	24.61	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 49.22%			
70) 2,4,6-Tribromophenol	5.95	330	125016	57.88	UG	-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 57.88%			
84) Terphenyl-d14	7.21	244	353511	33.26	UG	-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 66.52%			

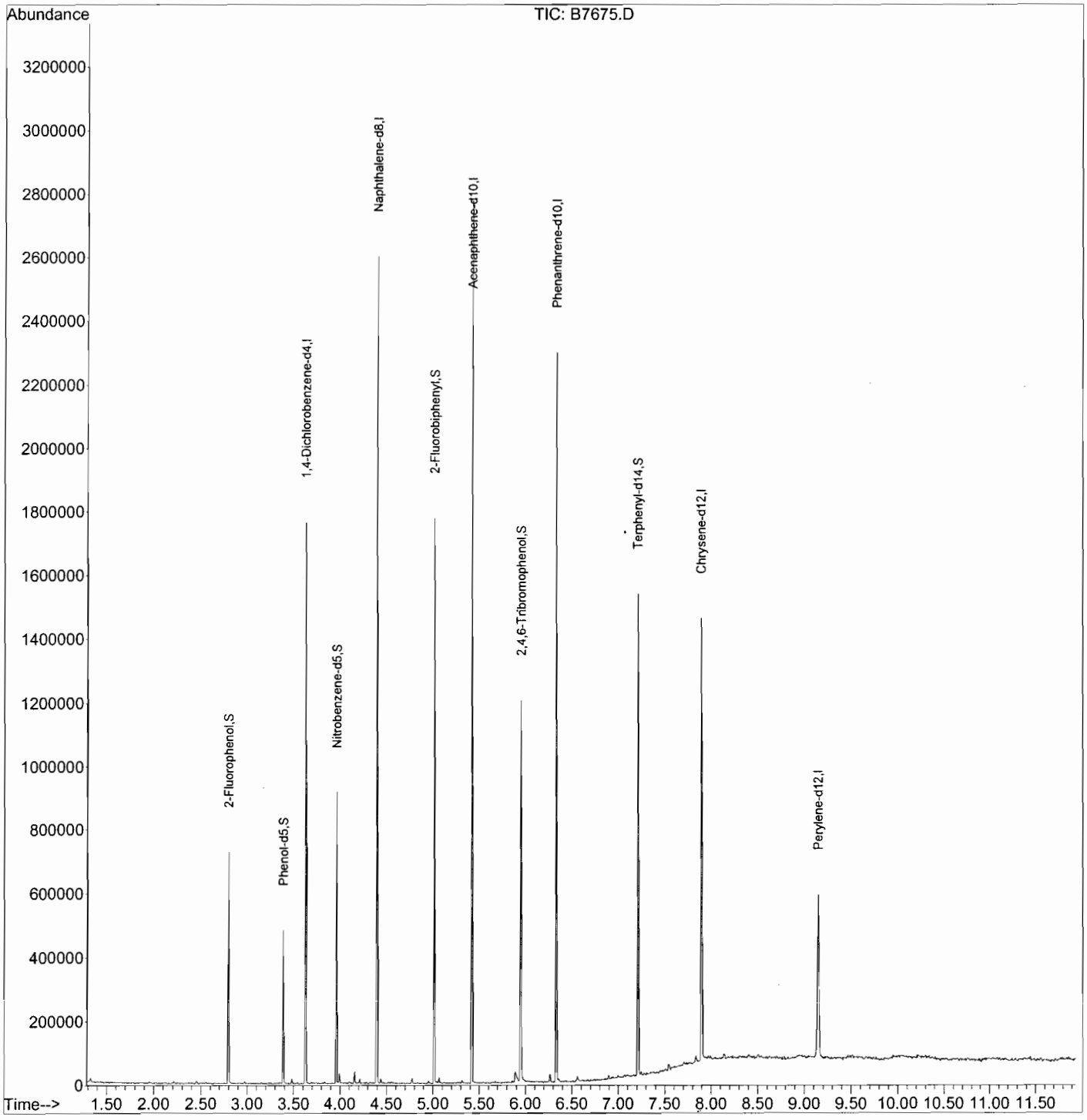
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7675.D
Acq On : 20 Feb 2015 16:55
Operator : DANA
Sample : .,TCLP150219,T,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 23 09:14:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	129033m	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	554614	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	303475	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	444364	40.00	UG	-0.01
82) Chrysene-d12	7.90	240	340489	40.00	UG	-0.03
92) Perylene-d12	9.14	264	211186m	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	103580	22.59	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 22.59%			
6) Phenol-d5	3.38	99	78825	13.91	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 13.91%			
24) Nitrobenzene-d5	3.96	82	139879	23.61	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 47.22%			
47) 2-Fluorobiphenyl	5.01	172	265643	25.72	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.44%			
70) 2,4,6-Tribromophenol	5.95	330	141237	71.39	UG	0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 71.39%			
84) Terphenyl-d14	7.21	244	365068	39.39	UG	-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 78.78%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.64	74	40737m	12.05	UG	
3) Pyridine	1.71	52	47735m	10.62	UG	
5) Benzaldehyde	3.35	106	9055m	8.40	UG	
7) Phenol	3.40	94	75307m	12.25	UG	
8) Aniline	3.43	66	61493m	21.30	UG	
9) Bis(2-chloroethyl) ether	3.45	63	76772m	19.88	UG	
10) 2-Chlorophenol	3.51	128	76604	15.16	UG	91
11) 1,3-Dichlorobenzene	3.61	146	91950m	16.94	UG	
12) 1,4-Dichlorobenzene	3.64	146	90353m	16.58	UG	
13) Benzyl alcohol	3.70	108	42894m	13.16	UG	
14) 1,2-Dichlorobenzene	3.75	146	87907	16.98	UG	91
15) 2-Methylphenol	3.76	108	58847m	13.39	UG	
16) Bis(2-chloroisopropyl) eth	3.80	45	161518	19.02	UG	87
17) 4-Methylphenol	3.85	108	59272	13.85	UG	96
18) N-Nitrosodi-n-propylamine	3.88	70	74066m	19.49	UG	
19) Acetophenone	3.87	105	127475	20.46	UG	80
20) 3-Methylphenol	3.85	108	59272	13.85	UG	96
21) Hexachloroethane	3.95	117	33880	16.07	UG	82
25) Nitrobenzene	3.97	77	91415	16.08	UG	94
26) Isophorone	4.11	82	178793	16.91	UG	86
27) 2-Nitrophenol	4.17	139	37174	14.79	UG	54

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	91872	17.35	UG		85
29) Bis(2-chloroethoxy) methan	4.22	93	104319	16.10	UG		96
30) Benzoic acid	4.19	105	32858m	14.27	UG		
31) 2,4-Dimethylaniline	4.29	121	97001	16.69	UG	#	33
32) 2,4-Dichlorophenol	4.30	162	73220	17.21	UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	75351	15.97	UG		93
34) Naphthalene	4.40	128	247698	15.86	UG	#	98
35) 4-Chloroaniline	4.42	127	131582	16.17	UG		94
36) 4-Aminotoluene	3.89	106	149154	18.07	UG	#	53
37) Hexachlorobutadiene	4.51	225	48181	17.79	UG		96
38) Caprolactam	4.59	55	32021m	13.10	UG		
39) 2-Aminotoluene	3.89	106	149154	18.07	UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	74626	16.61	UG		87
41) 2-Methylnaphthalene	4.81	142	174200	18.21	UG		100
44) Hexachlorocyclopentadiene	4.94	237	34051m	12.27	UG		
45) 2,4,6-Trichlorophenol	4.97	196	53232	18.36	UG		99
46) 2,4,5-Trichlorophenol	4.99	196	61425	21.00	UG		93
48) 1,1'-Biphenyl	5.07	154	209293	18.51	UG		98
49) 2-Chloronaphthalene	5.09	162	156437	18.06	UG		90
50) 2-Nitroaniline	5.14	65	52666	21.09	UG		71
51) Dimethyl phthalate	5.24	163	180041	18.21	UG		96
52) 2,6-Dinitrotoluene	5.29	165	31346	18.15	UG		60
53) Acenaphthylene	5.33	152	240393	16.84	UG		98
54) 3-Nitroaniline	5.37	138	43319	20.28	UG		70
55) Acenaphthene	5.44	153	155517	17.68	UG		90
56) 2,4-Dinitrophenol	5.43	184	6761	16.23	UG	#	100
57) 4-Nitrophenol	5.43	65	26001m	15.05	UG		
58) 2,4-Dinitrotoluene	5.52	165	53814	23.53	UG		98
59) Dibenzofuran	5.54	168	276737	20.89	UG		85
60) Diethyl phthalate	5.68	149	257472	24.27	UG		96
61) Fluorene	5.78	166	215306	19.87	UG		95
62) 4-Chlorophenyl phenyl ethe	5.76	204	108891	21.15	UG		85
63) 4-Nitroaniline	5.77	138	64074	26.53	UG		74
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	82066	18.65	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	59651	20.59	UG		94
67) 4,6-Dinitro-2-methylphenol	5.81	198	20968	23.75	UG	#	27
68) N-Nitrosodiphenylamine	5.83	169	191984	27.51	UG		93
69) 1,2-Diphenylhydrazine	5.86	77	245164	20.69	UG		85
71) 4-Bromophenyl phenyl ether	6.07	248	65608	23.13	UG		83
72) Hexachlorobenzene	6.17	284	73781	21.63	UG		86
73) Atrazine	6.15	200	69730	27.54	UG		90
74) Pentachlorophenol	6.26	266	40322	25.41	UG	#	39
75) Phenanthrene	6.35	178	283104	22.39	UG		95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

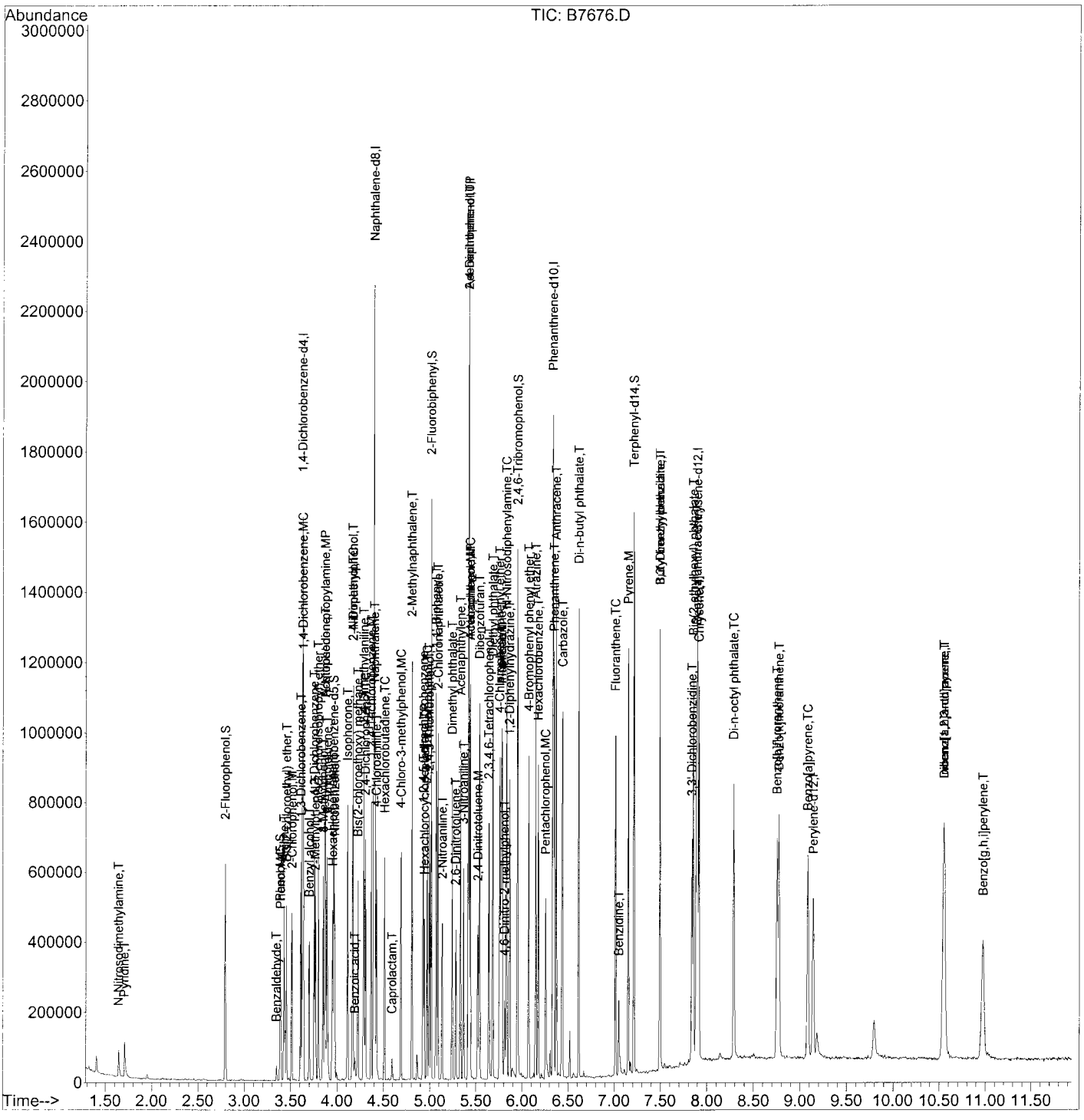
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	292817	24.03	UG	98
77) Carbazole	6.44	167	295869	26.64	UG	95
78) Di-n-butyl phthalate	6.62	149	387307	26.31	UG	98
79) Fluoranthene	7.02	202	294564	24.19	UG	98
80) Benzidine	7.05	184	65411	11.74	UG	95
83) Pyrene	7.15	202	306482	26.15	UG	98
85) 3,3'-Dimethylbenzidine	7.49	212	61716	11.09	UG	88
86) Butyl benzyl phthalate	7.49	149	145389	26.35	UG	83
87) 3,3'-Dichlorobenzidine	7.84	252	100849	30.26	UG	92
88) Benzo[a]anthracene	7.89	228	265564	27.00	UG	95
89) Chrysene	7.91	228	259146	29.38	UG	97
90) Bis(2-ethylhexyl) phthalat	7.86	149	204208	27.06	UG	96
93) Di-n-octyl phthalate	8.29	149	320507	30.87	UG	90
94) Benzo[b]fluoranthene	8.75	252	298119	35.27	UG	83
95) Benzo[k]fluoranthene	8.77	252	247443	35.55	UG	90
96) Benzo[a]pyrene	9.08	252	249856m	35.45	UG	
97) Indeno[1,2,3-cd]pyrene	10.55	276	309640m	36.07	UG	
98) Dibenz[a,h]anthracene	10.55	278	259376m	36.85	UG	
99) Benzo[g,h,i]perylene	10.98	276	261844m	35.10	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	122417	40.00	UG		0.00
23) Naphthalene-d8	4.39	136	472402	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	259617	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	380833	40.00	UG		-0.01
82) Chrysene-d12	7.91	240	283838	40.00	UG		-0.02
92) Perylene-d12	9.15	264	167458	40.00	UG		-0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	126138	29.00	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 29.00%				
6) Phenol-d5	3.38	99	108997	20.27	UG		-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 20.27%				
24) Nitrobenzene-d5	3.96	82	116611	23.11	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 46.22%				
47) 2-Fluorobiphenyl	5.01	172	218985	24.78	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 49.56%				
70) 2,4,6-Tribromophenol	5.95	330	116583	68.76	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 68.76%				
84) Terphenyl-d14	7.22	244	310698	40.21	UG		-0.02
Spiked Amount 50.000	Range 23 - 124		Recovery = 80.42%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.64	74	65942m	20.57	UG		
3) Pyridine	1.70	52	69407m	16.28	UG		
5) Benzaldehyde	3.35	106	9766m	9.55	UG		
7) Phenol	3.40	94	104808m	17.96	UG		
8) Aniline	3.43	66	53252	19.44	UG		73
9) Bis(2-chloroethyl) ether	3.45	63	68584	18.72	UG		71
10) 2-Chlorophenol	3.51	128	74186	15.48	UG		91
11) 1,3-Dichlorobenzene	3.61	146	88496	17.18	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	84048	16.26	UG		52
13) Benzyl alcohol	3.70	108	54738	17.71	UG		93
14) 1,2-Dichlorobenzene	3.75	146	84446	17.19	UG		92
15) 2-Methylphenol	3.76	108	70107	16.81	UG		98
16) Bis(2-chloroisopropyl) eth	3.80	45	153052	19.00	UG		87
17) 4-Methylphenol	3.85	108	73702	18.15	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	72860	20.20	UG		79
19) Acetophenone	3.87	105	129869	21.97	UG		78
20) 3-Methylphenol	3.85	108	73702	18.15	UG		100
21) Hexachloroethane	3.95	117	33197	16.60	UG		86
25) Nitrobenzene	3.97	77	92476	19.10	UG		91
26) Isophorone	4.11	82	177127	19.67	UG		88
27) 2-Nitrophenol	4.17	139	37596	17.56	UG		60

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	86939	19.28	UG		90
29) Bis(2-chloroethoxy) methan	4.22	93	102648	18.60	UG		96
30) Benzoic acid	4.20	105	38531m	19.65	UG		
31) 2,4-Dimethylaniline	4.29	121	98644	19.92	UG	#	33
32) 2,4-Dichlorophenol	4.30	162	68326	18.85	UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	74489	18.53	UG		92
34) Naphthalene	4.41	128	244531	18.38	UG	#	60
35) 4-Chloroaniline	4.42	127	137093	19.78	UG		56
36) 4-Aminotoluene	3.89	106	156478	22.25	UG	#	53
37) Hexachlorobutadiene	4.51	225	44901	19.46	UG		99
38) Caprolactam	4.59	55	39268m	18.86	UG		
39) 2-Aminotoluene	3.89	106	156478	22.25	UG	#	55
40) 4-Chloro-3-methylphenol	4.69	107	77036	20.13	UG		84
41) 2-Methylnaphthalene	4.81	142	176591	21.68	UG		99
44) Hexachlorocyclopentadiene	4.94	237	34800	14.66	UG	#	40
45) 2,4,6-Trichlorophenol	4.97	196	50922	20.53	UG		98
46) 2,4,5-Trichlorophenol	4.99	196	59950	23.96	UG		94
48) 1,1'-Biphenyl	5.07	154	216335	22.36	UG		98
49) 2-Chloronaphthalene	5.09	162	155235	20.94	UG		89
50) 2-Nitroaniline	5.14	65	54771	25.64	UG		74
51) Dimethyl phthalate	5.24	163	178595	21.11	UG		96
52) 2,6-Dinitrotoluene	5.29	165	34799	23.55	UG		62
53) Acenaphthylene	5.33	152	253938	20.79	UG		97
54) 3-Nitroaniline	5.37	138	49049	26.85	UG		75
55) Acenaphthene	5.44	153	155300	20.64	UG		93
56) 2,4-Dinitrophenol	5.43	184	6516	18.28	UG	#	100
57) 4-Nitrophenol	5.43	65	34970m	23.66	UG		
58) 2,4-Dinitrotoluene	5.52	165	52974	27.08	UG		84
59) Dibenzofuran	5.54	168	286579	25.28	UG		85
60) Diethyl phthalate	5.68	149	247635	27.29	UG		95
61) Fluorene	5.78	166	230292	24.84	UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	111650	25.35	UG		86
63) 4-Nitroaniline	5.77	138	66674	32.27	UG		78
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	80069	21.27	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	57017	23.01	UG		90
67) 4,6-Dinitro-2-methylphenol	5.81	198	19587	25.89	UG	#	1
68) N-Nitrosodiphenylamine	5.83	169	186979	31.26	UG		94
69) 1,2-Diphenylhydrazine	5.86	77	262072	25.81	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	66379	27.31	UG		85
72) Hexachlorobenzene	6.18	284	73372	25.10	UG		85
73) Atrazine	6.15	200	70442	32.46	UG		93
74) Pentachlorophenol	6.26	266	39198	28.82	UG	#	46
75) Phenanthrene	6.35	178	283143	26.13	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

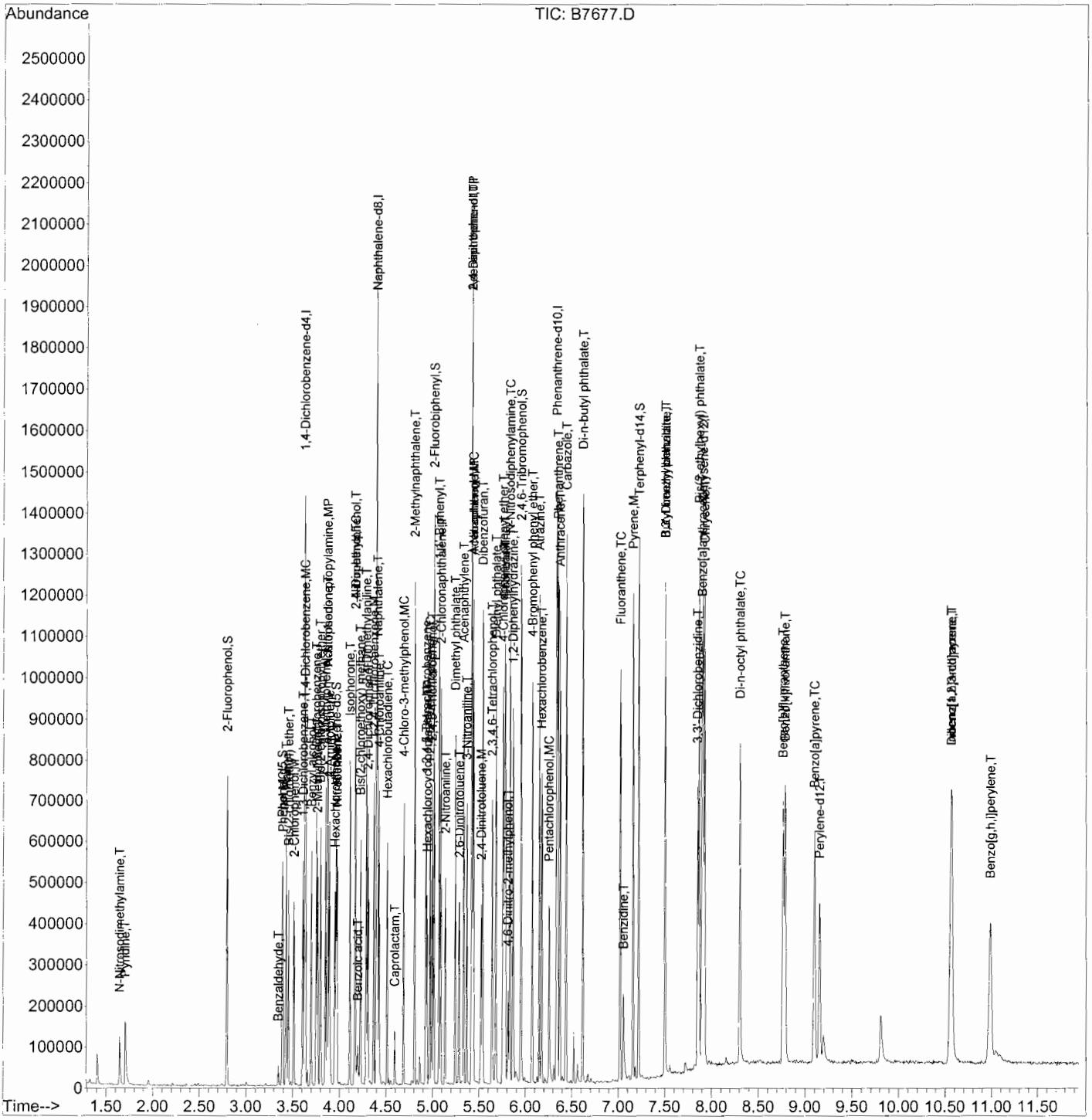
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	284101	27.21	UG	98
77) Carbazole	6.44	167	293079	30.79	UG	96
78) Di-n-butyl phthalate	6.62	149	393788	31.21	UG	97
79) Fluoranthene	7.02	202	302164	28.96	UG	98
80) Benzidine	7.05	184	68758	14.39	UG	96
83) Pyrene	7.16	202	315183	32.26	UG	97
85) 3,3'-Dimethylbenzidine	7.50	212	58180	12.54	UG	88
86) Butyl benzyl phthalate	7.50	149	149493	32.50	UG	84
87) 3,3'-Dichlorobenzidine	7.85	252	103057	37.09	UG	92
88) Benzo[a]anthracene	7.90	228	276527	33.72	UG	96
89) Chrysene	7.93	228	255128	34.69	UG	98
90) Bis(2-ethylhexyl) phthalat	7.87	149	207338	32.96	UG	95
93) Di-n-octyl phthalate	8.30	149	320460	38.93	UG	90
94) Benzo[b]fluoranthene	8.76	252	275873	41.16	UG	84
95) Benzo[k]fluoranthene	8.79	252	274531	49.75	UG	88
96) Benzo[a]pyrene	9.10	252	264490	47.33	UG	87
97) Indeno[1,2,3-cd]pyrene	10.56	276	322581	47.38	UG	84
98) Dibenz[a,h]anthracene	10.57	278	274094	49.11	UG	91
99) Benzo[g,h,i]perylene	10.99	276	276448	46.74	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.62	152	140801	40.00	UG		0.00
23) Naphthalene-d8	4.39	136	545232	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	294751	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	433750	40.00	UG		-0.01
82) Chrysene-d12	7.93	240	329861	40.00	UG		0.00
92) Perylene-d12	9.19	264	189240	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	141128	28.21	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 28.21%				
6) Phenol-d5	3.39	99	133977	21.67	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 21.67%				
24) Nitrobenzene-d5	3.96	82	131695	22.61	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 45.22%				
47) 2-Fluorobiphenyl	5.01	172	240289	23.95	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 47.90%				
70) 2,4,6-Tribromophenol	5.94	330	118945	61.60	UG		-0.02
Spiked Amount 100.000	Range 22 - 115		Recovery = 61.60%				
84) Terphenyl-d14	7.23	244	324908	36.19	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 72.38%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.65	74	75327m	20.43	UG		
3) Pyridine	1.70	52	78323m	15.97	UG		
5) Benzaldehyde	3.35	106	11973m	10.18	UG		
7) Phenol	3.40	94	118768m	17.70	UG		
8) Aniline	3.43	66	60788	19.30	UG		71
9) Bis(2-chloroethyl) ether	3.45	63	76763	18.22	UG		74
10) 2-Chlorophenol	3.51	128	88232	16.01	UG		91
11) 1,3-Dichlorobenzene	3.61	146	104668	17.67	UG	#	92
12) 1,4-Dichlorobenzene	3.64	146	98794	16.61	UG		51
13) Benzyl alcohol	3.70	108	60126	16.91	UG		83
14) 1,2-Dichlorobenzene	3.75	146	100824	17.85	UG		90
15) 2-Methylphenol	3.77	108	81443	16.98	UG		98
16) Bis(2-chloroisopropyl) eth	3.80	45	180176	19.44	UG		86
17) 4-Methylphenol	3.85	108	85867	18.39	UG		99
18) N-Nitrosodi-n-propylamine	3.88	70	84350	20.34	UG		76
19) Acetophenone	3.87	105	144415	21.25	UG		76
20) 3-Methylphenol	3.85	108	85867	18.38	UG		99
21) Hexachloroethane	3.95	117	39227	17.05	UG		82
25) Nitrobenzene	3.97	77	106490	19.06	UG		93
26) Isophorone	4.11	82	200381	19.28	UG		86
27) 2-Nitrophenol	4.17	139	41959	16.98	UG		53

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	96347	18.51 UG		87
29) Bis(2-chloroethoxy) methan	4.22	93	116028	18.22 UG		97
30) Benzoic acid	4.20	105	36429m	16.09 UG		
31) 2,4-Dimethylaniline	4.29	121	110805	19.39 UG	#	33
32) 2,4-Dichlorophenol	4.30	162	77137	18.44 UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	85572	18.45 UG		92
34) Naphthalene	4.41	128	276631	18.02 UG	#	99
35) 4-Chloroaniline	4.42	127	153955	19.25 UG		96
36) 4-Aminotoluene	3.89	106	177650	21.89 UG	#	53
37) Hexachlorobutadiene	4.51	225	51911	19.50 UG		98
38) Caprolactam	4.59	55	46447m	19.33 UG		
39) 2-Aminotoluene	3.89	106	177650	21.89 UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	86117	19.50 UG		86
41) 2-Methylnaphthalene	4.81	142	189965	20.20 UG		97
44) Hexachlorocyclopentadiene	4.94	237	38867	14.42 UG	#	37
45) 2,4,6-Trichlorophenol	4.97	196	54064	19.20 UG		94
46) 2,4,5-Trichlorophenol	4.99	196	65412	23.02 UG		93
48) 1,1'-Biphenyl	5.07	154	240132	21.86 UG		100
49) 2-Chloronaphthalene	5.09	162	175371	20.84 UG		88
50) 2-Nitroaniline	5.14	65	61198	25.23 UG		76
51) Dimethyl phthalate	5.24	163	192147	20.01 UG		96
52) 2,6-Dinitrotoluene	5.29	165	38997	23.25 UG		69
53) Acenaphthylene	5.33	152	270187	19.49 UG		97
54) 3-Nitroaniline	5.37	138	50322	24.26 UG		68
55) Acenaphthene	5.44	153	177723	20.81 UG		90
56) 2,4-Dinitrophenol	5.43	184	6170m	15.25 UG		
57) 4-Nitrophenol	5.43	65	34888m	20.79 UG		
58) 2,4-Dinitrotoluene	5.52	165	59002	26.56 UG		98
59) Dibenzofuran	5.54	168	313273	24.34 UG		85
60) Diethyl phthalate	5.68	149	260497	25.28 UG		94
61) Fluorene	5.78	166	248981	23.65 UG		99
62) 4-Chlorophenyl phenyl ethe	5.75	204	122523	24.50 UG		84
63) 4-Nitroaniline	5.77	138	69925	29.81 UG		79
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	89653	20.98 UG		66
65) 2,3,4,6-Tetrachlorophenol	5.64	232	56039	19.92 UG		96
67) 4,6-Dinitro-2-methylphenol	5.80	198	23408m	27.16 UG		
68) N-Nitrosodiphenylamine	5.83	169	200207	29.39 UG		95
69) 1,2-Diphenylhydrazine	5.86	77	279596	24.18 UG		85
71) 4-Bromophenyl phenyl ether	6.07	248	68118	24.60 UG		79
72) Hexachlorobenzene	6.17	284	77274	23.21 UG		85
73) Atrazine	6.14	200	75075	30.38 UG		91
74) Pentachlorophenol	6.25	266	44180m	28.52 UG		
75) Phenanthrene	6.34	178	307374	24.91 UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

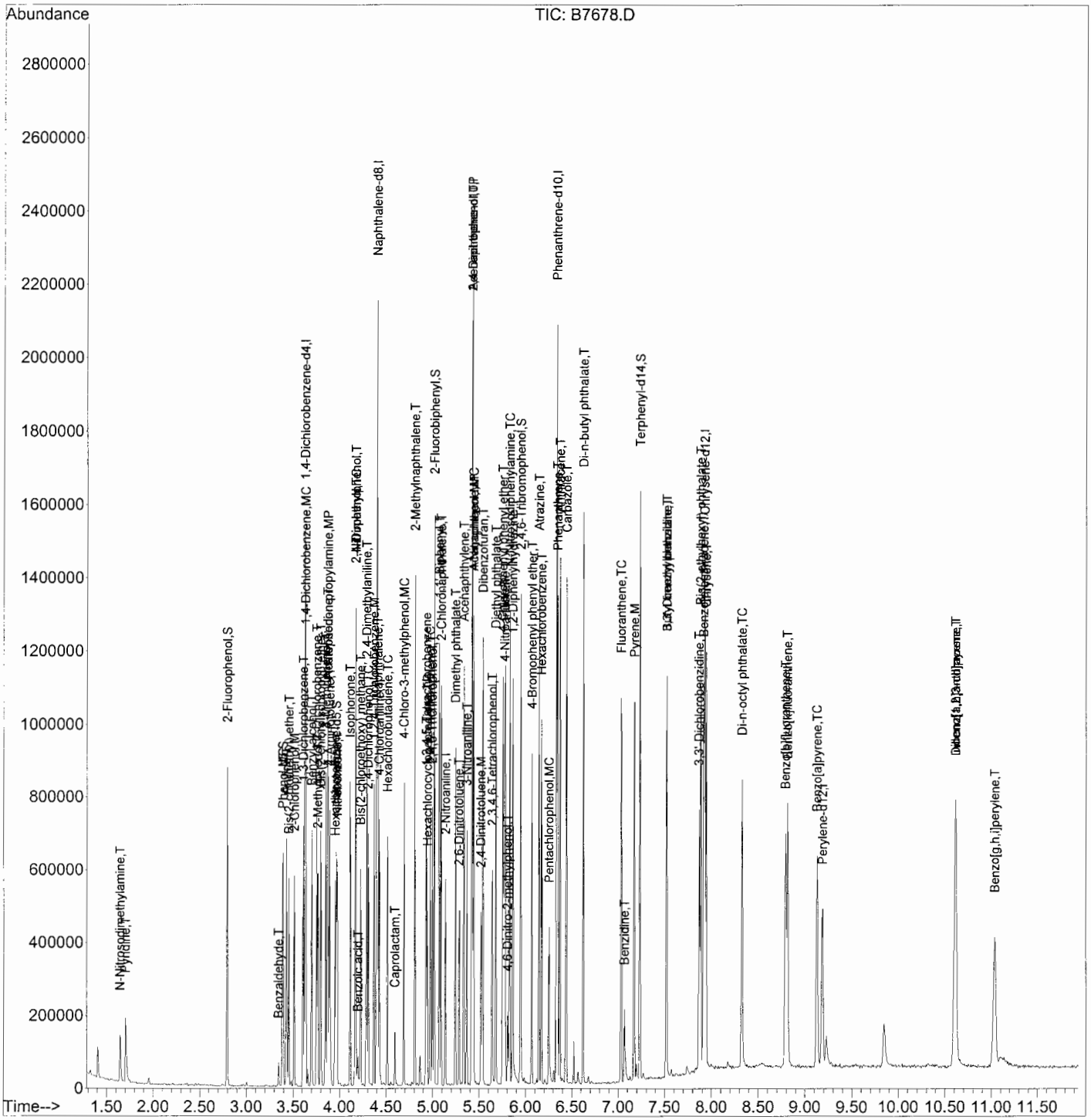
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	308781	25.96	UG	98
77) Carbazole	6.44	167	304435	28.08	UG	96
78) Di-n-butyl phthalate	6.62	149	409836	28.52	UG	97
79) Fluoranthene	7.03	202	315652	26.56	UG	98
80) Benzidine	7.07	184	64489	11.85	UG	92
83) Pyrene	7.17	202	331054	29.15	UG	98
85) 3,3'-Dimethylbenzidine	7.51	212	58941	10.93	UG	89
86) Butyl benzyl phthalate	7.52	149	153588	28.73	UG	84
87) 3,3'-Dichlorobenzidine	7.87	252	105462	32.66	UG	97
88) Benzo[a]anthracene	7.91	228	287412	30.16	UG	96
89) Chrysene	7.94	228	268805	31.45	UG	97
90) Bis(2-ethylhexyl) phthalat	7.88	149	205184	28.07	UG	93
93) Di-n-octyl phthalate	8.33	149	330348	35.51	UG	92
94) Benzo[b]fluoranthene	8.79	252	288110	38.04	UG	83
95) Benzo[k]fluoranthene	8.81	252	281088	45.07	UG	89
96) Benzo[a]pyrene	9.13	252	274529	43.47	UG	87
97) Indeno[1,2,3-cd]pyrene	10.61	276	336870	43.79	UG	85
98) Dibenz[a,h]anthracene	10.61	278	288883	45.80	UG	92
99) Benzo[g,h,i]perylene	11.03	276	289420	43.30	UG	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



TCLP
SEMI-VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC

EXTRACTION LOG - SEMIVOLATILES
(BN/AE/BNA)

Extraction Date/Time: 2/20/2015 11:05:00 AM **Tray ID:** **Batch ID: 150220-03**

Technician: F. Lowell **Matrix: Aqueous**

Sample	*V			%	Initial	Final	Surrogate (# : ul)		Spike (# : ul)		%		
ID #	/C	*F	Test	Moist	(ml)	(ml)	BN	Acid	BNA	Color	SED	Comments	Due
BLKA150220-03	BLK		TCLP BNA	-	1000	1.00	BNS025 : 50	AES026 : 50					
LCSA150220-03	LCS		TCLP BNA	-	1000	1.00	BNS025 : 50	AES026 : 50	BNA Matrix 105				
01273-001MS	MS		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50	BNA MATRIX 140				
01273-001MSD	MSD		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50	BNA MATRIX 140				
TCLP150219	-		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50					
01273-001	1	1	TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50				R-72; TCLP(2/19/15)	

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

*V/C=Vap/Cell
*F=Funnel

Color: 1 = Clear; 2 = Light Yellow
3 = Yellow-Gold; 4 = Brown; 5 = Black

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 2/176/2015 **BATCH ID:** _____

INSTRUMENT: _____ **(yymmdd-##)** _____

TUNE FILE: DFTPP.U

METHOD 1 BW0215 P: 0.59

METHOD 2 BD0215 B: 1.08

METHOD 3 BSIM0215 D: 0

ANALYST: Dana

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
1	B7561	ABN005-14	DFTPP	1	1000	1	A				100	7:59		.
2	B7562	ABN011-14	ICC40ngBN/	1	1000	1	A				100			.
3	B7563	ABN008-15	ICC1ngBNA	1	1000	1	A				100			.
4	B7564	ABN009-15	ICC10ngBN/	1	1000	1	A				100			.
5	B7565	ABN010-15	ICC20ngBN/	1	1000	1	A				100			.
6	B7566	ABN012-15	ICC80ngBN/	1	1000	1	A				100			.
7	B7567	ABN013-15	ICC160ngBN	1	1000	1	A				100			.
8	B7568	ABN019-15	ICC160ngBN	1	1000	1	A				100			.
9	B7569	ABN018-15	ICC80ngBN/	1	1000	1	A				100			.
10	B7570	ABN017-15	ICC40ngBN/	1	1000	1	A				100			.
11	B7571	ABN016-15	ICC20ngBN/	1	1000	1	A				100			.
12	B7572	ABN015-15	ICC10ngBN/	1	1000	1	A				100			.
13	B7573	ABN014-15	ICV001BNA	1	1000	1	A				100			.
14	B7574	ABN027-15	0.5ng-SIM	1	1000	1	A				100			.
15	B7575	ABN025-15	0.1ng-SIM	1	1000	1	A				100			.
16	B7576	ABN026-15	0.2ng-SIM	1	1000	1	A				100			.
17	B7577	ABN028-15	001ng-SIM	1	1000	1	A				100			.
18	B7578	ABN029-15	002ng-SIM	1	1000	1	A				100			.
19	B7579	ABN004-15	ICV40ngBN/	1	1000	1	A				100			.
20	B7580	ABN031-15	ICC40ngBN/	1	1000	1	A				100			.
21	B7581	ABN030-15	0.5ng-SIM	1	1000	1	A				100	13:46		.

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE:	2/20/2015	**BATCH ID:**	**150220-01**
INSTRUMENT:	B	**(yymmdd-##)**	**150220-03**
TUNE FILE:	DFTPP.U		
METHOD 1	**BW0215**		
METHOD 2	BSIM0215		
METHOD 3	BD0215		
ANALYST:	Dana Initial		

	ISTD.Lot ECS SVI028
P(limit:2) =	1.19
B(limit:2) =	0.47
D(limit=20%) :	0

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
1	B7650	ABN005-15	FTPP0218	1	1000	1	A				100	10:04	OK	.
2	B7651	ABN004-15	CV040BNA	1	1000	1	A				100		OK	.
3	B7652	ABN031-15	CV040BNA	1	1000	1	A				100		OK	.
4	B7653	ABN030-15	CV000.5S	1	1000	1	Ia				100		OK	.
5	B7654	LKA150220-01		1	1000	1	Ia			2/20/15	100		OK	.
6	B7655	01267	2	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	FB-2-18-
7	B7656	01267	3	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-1/14.
8	B7657	01267	4	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-2/19.
9	B7658	01267	5	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-3R/17
10	B7659	01267	6	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-4/9.2
11	B7660	01276	1	1	500	0.5	Ia	2/19/15	2/19/15	2/20/15	100		OK	TEMP-2
12	B7661	LKA150220-01		1	1000	1	A			2/20/15	100		OK	.
13	B7662	CSA150220-01		1	1000	1	A			2/20/15	100		OK	.
14	B7663	5-01276-001MS		1	500.0	0.5	A			2/20/15	100		OK	.
15	B7664	5-01276-001MSD		1	500.0	0.5	A			2/20/15	100		OK	.
16	B7665	01267	2	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	FB-2-18-
17	B7666	01267	3	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-1/14.
18	B7667	01267	4	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-2/19.
19	B7668	01267	5	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-3R/17
20	B7669	01267	6	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-4/9.2
21	B7670	01276	1	1	500	0.5	A	2/19/15	2/19/15	2/20/15	100		OK	TEMP-2
22	B7671	01280	1	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		RR 20x	B-2/3/6.
23	B7672	01280	2	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		OK	B-5/8/4.
24	B7673	01280	3	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		RR 20x	B-3/4/2.
25	B7674	LKA150220-03		1	1000	1	A			2/20/15	100		OK	.
26	B7675	**TCLP150219**		1	**50.00**	**1**	T			2/20/15	100		OK	.
27	B7676	CSA150220-03		1	1000	1	A			2/20/15	100		OK	.
28	B7677	**5-01273-001MS**		1	**50.00**	1	A			2/20/15	100		OK	.
29	B7678	**5-01273-001MSD**		1	**50.00**	**1**	A			2/20/15	100		OK	.
30	B7679	**01273**	**1**	1	**50.00**	**1**	T	2/18/15	2/19/15	2/20/15	100		OK	GPEC-WC1
31	B7680	01280	1DL	20	1000	1	A	2/19/15	2/19/15	2/20/15	100		OK	B-2/3/6.
32	B7681	01280	3DL	20	1000	1	A	2/19/15	2/19/15	2/20/15	100	18:37	OK	B-3/4/2.

DATE: 01/23/15	Conc :	Rec/Prep		ABN008-15	ABN009-15	ABN010-15	ABN011-15	ABN012-15	ABN013-15
BNAMIX1 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-13	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-16	50ul	50ul	50ul	50ul	50ul	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Nov-16	50ul	50ul	50ul	50ul	50ul	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-16	20ul	20ul	20ul	20ul	20ul	20ul
PAH mix (CPI-238513)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
PHENOL mix(CPI-238668)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
BN mix (CPI-199335)	2000ug/ml	Oct-14	Oct-16	0.5ul	5ul	10ul	20ul	40ul	80ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Oct-15	0.5ul	5ul	10ul	20ul	40ul	80ul
OLMO4 mix(CPI- 219588)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
EXTRA (ABN007-15)	2000ug/ml	Jan-15	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
DIOXANE (SUPELCO-LB914570)	2000ug/ml	Dec-14	Dec-15	0.5ul	5ul	10ul	20ul	40ul	80ul
2,3,4,6-Tetrachlorophenol(RESTEK a010265)	1000ug/ml	Dec-14	Sep-22	1ul	10ul	20ul	40ul	80ul	160ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:7/15									

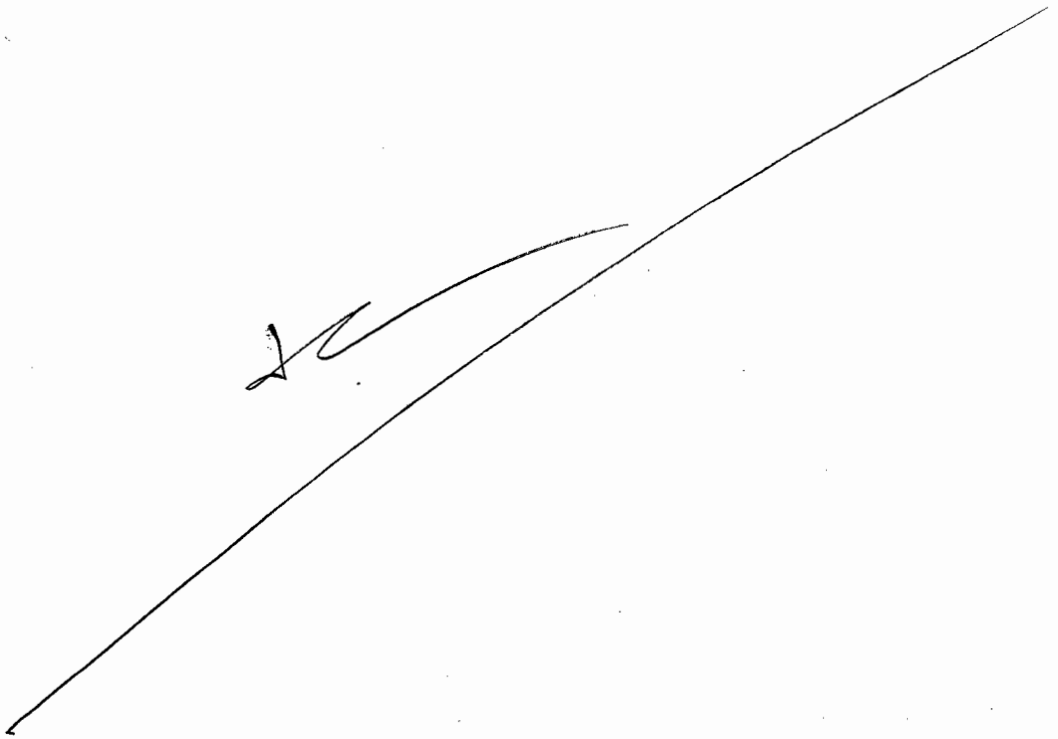
DATE: 01/23/15	Conc :	Rec/Prep		ABN014-15	ABN015-15	ABN016-15	ABN017-15	ABN018-15	ABN019-15
BNAMIX2 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:07/15									

ABN031-15

DATE: 01/23/15

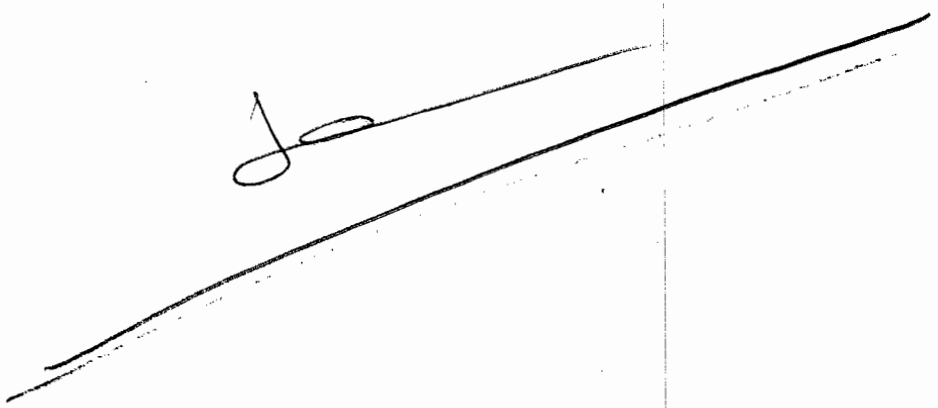
40ng BNA - MIX2 CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI027)	4000ug/ml	May-12	May-15	10ul
ADD ON #2 mix(ECS-8270A203)	2000ug/mL	Jan-15	Nov-16	20ul
BENZIDINES mix (SUPELCO-LC00780)	2000ug/mL	Jan-15	May-16	20ul
Final Volume				1ml

EXP:07/15



				ABN025-15	ABN026-15	ABN027-15	ABN028-15	ABN029-15
DATE : 01/23/15	Conc :	Rec/Prep						
SIM STD		Date	Exp Date	0.02/0.1	0.04/0.2	0.1/0.5	0.2/1	0.5/2
ISTD (ABN020-15)	200ug/ml	01/23/15	7/15	5ul	5ul	5ul	5ul	5ul
Hexachlorobenzene(ABN022-15)	10ug/ml	01/23/15	1/16	2ul	4ul	10ul	20ul	50ul
BNA Mix (ABN021-15)	20ug/ml	01/23/15	1/16	5ul	10ul	25ul	50ul	100ul
Final Volume				1mL	1mL	1mL	1mL	1mL
EXP:07/15								

ABN-030-15		Rec/Prep		
DATE : 01/23/15	Conc :	Date	Exp Date	
0.5ng SIM check STD				0.1/0.5
ISTD (ABN020-15)	200ug/ml	01/23/15	7/15	5ul
Hexachlorobenzene(ABN024-15)	10ug/ml	01/23/15	1/16	10ul
BNA Mix (ABN023-15)	20ug/ml	01/23/15	1/16	25ul
Final Volume				1ml
EXP:07/15				

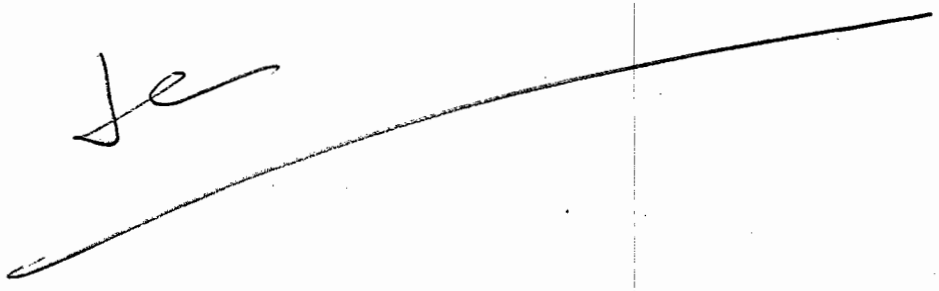


ABN004-15

DATE: 01/21/15

40ng BNA CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-15	20ul
ABN001-15	287ug/ml	Jan-15	Jul-15	140ul
Final Volume				1ml

EXP:07/15



ABN005-15

DATE:01/22/15

DFTPP		Rec. Date	EXP.Date	
Dftpp 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	1.25ml of each/250ml CH2CL2
Pentachlorophenol 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	
Benzidine 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	**final conc: 50ug/ml**
DDT 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	

EXP:7/15

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/19/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150219-06	SOIL	106		92		103		92	
PCB	LCSS150219-06	SOIL	106		94		103		93	
PCB	01273-001MS	SOIL	98		94		96		92	
PCB	01273-001MSD	SOIL	99		104		97		139	
GPEC-WC1	E15-01273-001	SOIL	96		115		94		143	
SB-7B/6-	E15-01264-001	SOIL	115		99		110		102	
SB-7N1A/	E15-01264-004	SOIL	107		97		102		94	
SB-7E1A/	E15-01264-008	SOIL	105		78		98		109	
SB-7S1A/	E15-01264-012	SOIL	102		90		93		92	
SB-7W1A/	E15-01264-016	SOIL	106		96		99		106	
REP02181	E15-01264-036	SOIL	108		93		101		142	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150219-06
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	471.1	94	40 - 140
Aroclor-1260	500	0.0	470.8	94	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-01273-001
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	481.1	96	40 - 140
Aroclor-1260	500	0.0	486.3	97	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	474.6	95	1	50/30	40 - 140
Aroclor-1260	0.0	485.3	97	0	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

PCB METHOD BLANK SUMMARY

Lab File ID: R3400.D

Instrument ID: GC-R

Date Extracted: 02/19/2015

Matrix: SOIL

Date Analyzed: 02/19/2015

Time Analyzed: 17:03

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150219-06	02/19/2015	17:21
PCB	01273-001MS	02/19/2015	17:38
PCB	01273-001MSD	02/19/2015	17:55
GPEC-WC1	E15-01273-001	02/19/2015	18:13
SB-7B/6-	E15-01264-001	02/19/2015	19:05
SB-7N1A/	E15-01264-004	02/19/2015	19:22
SB-7E1A/	E15-01264-008	02/19/2015	19:40
SB-7S1A/	E15-01264-012	02/19/2015	19:57
SB-7W1A/	E15-01264-016	02/19/2015	20:15
REP02181	E15-01264-036	02/19/2015	20:32

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.05 **TCMX 2** 2.89 **DCB 2** 12.57

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150219-06	02/19/2015	17:03	2.72		12.05		2.89		12.57	
PCB	LCSS150219-06	02/19/2015	17:21	2.72		12.05		2.88		12.56	
PCB	01273-001MS	02/19/2015	17:38	2.72		12.05		2.88		12.57	
PCB	01273-001MSD	02/19/2015	17:55	2.72		12.05		2.88		12.57	
GPEC-WC1	E15-01273-001	02/19/2015	18:13	2.72		12.05		2.88		12.57	
SB-7B/6-	E15-01264-001	02/19/2015	19:05	2.72		12.05		2.88		12.56	
SB-7N1A/	E15-01264-004	02/19/2015	19:22	2.72		12.05		2.88		12.56	
SB-7E1A/	E15-01264-008	02/19/2015	19:40	2.72		12.05		2.88		12.57	
SB-7S1A/	E15-01264-012	02/19/2015	19:57	2.72		12.05		2.88		12.56	
SB-7W1A/	E15-01264-016	02/19/2015	20:15	2.72		12.05		2.88		12.57	
REP02181	E15-01264-036	02/19/2015	20:32	2.72		12.05		2.88		12.57	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3404.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 18:13
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	1572.0E6	9974.9E6	95.630	94.482
Spiked Amount 200.000			Recovery	=	47.81%	47.24%
2) S DCB	12.05	12.57	651.7E6	4528.3E6	115.076	142.786m
Spiked Amount 200.000			Recovery	=	57.54%	71.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

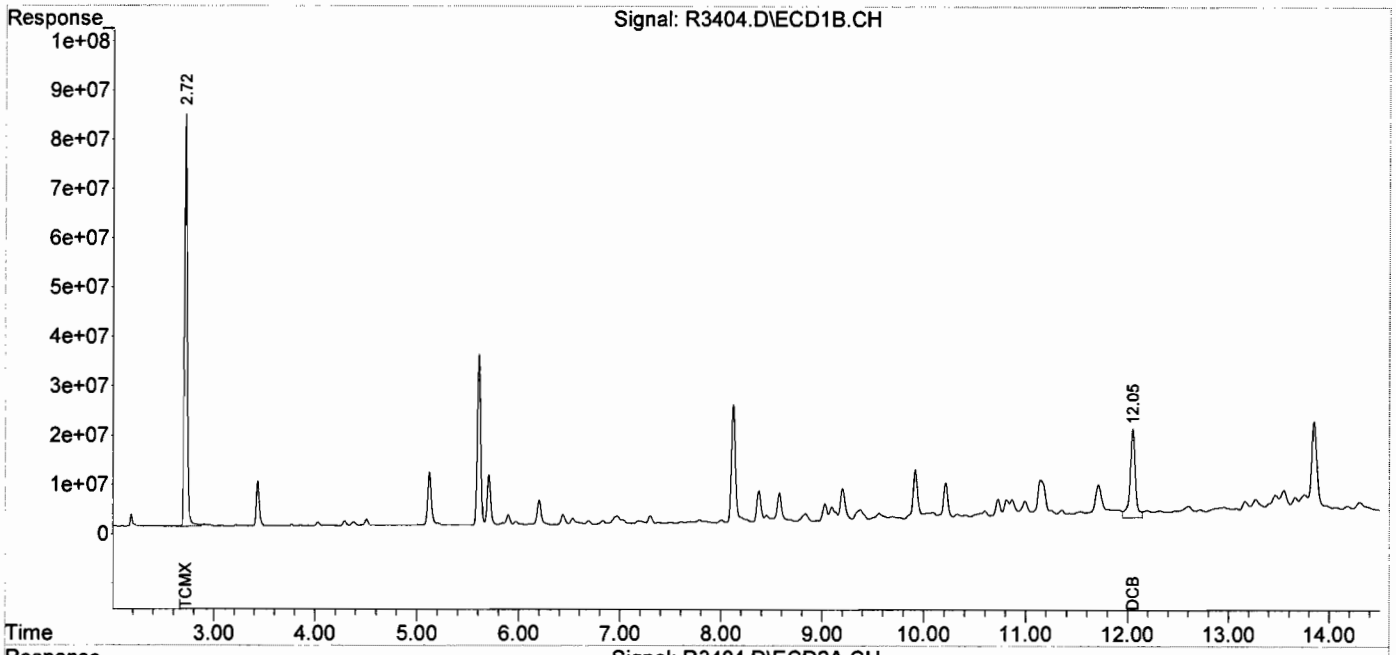
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

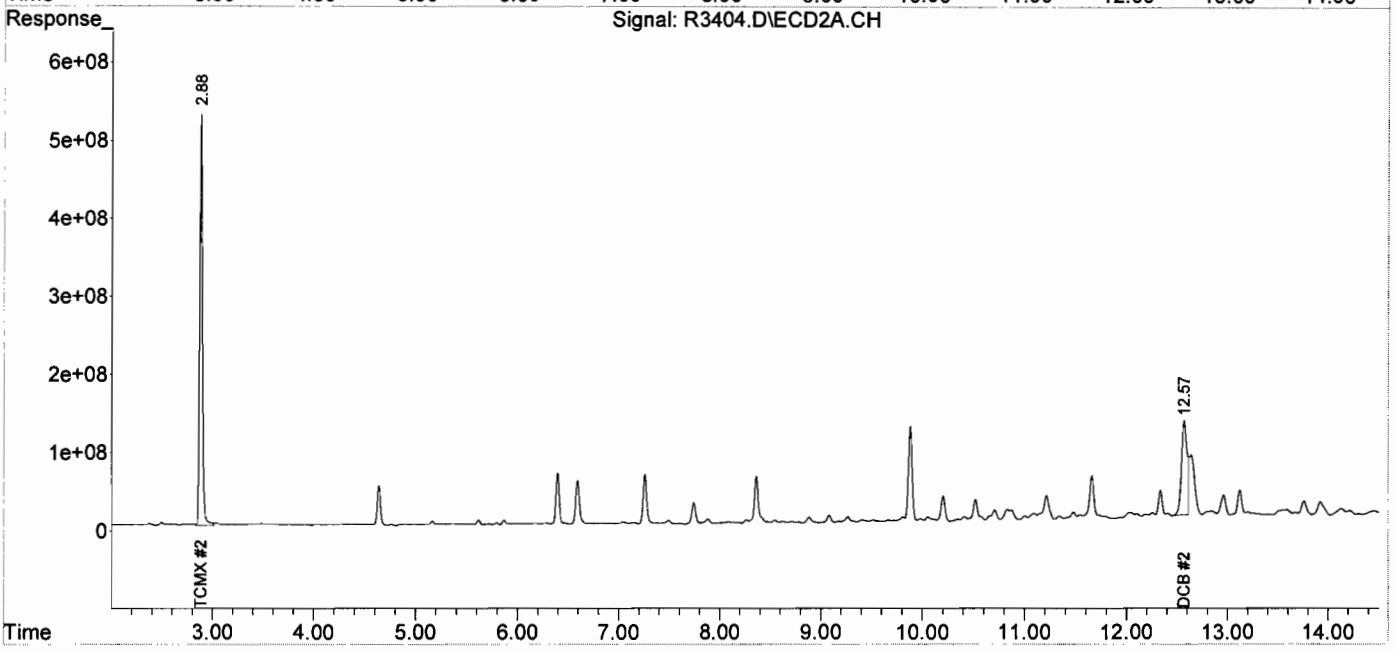
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3404.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 18:13
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB STANDARDS

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.18	3.18	3.18	3.18	3.18	3.18	3.11	3.25
Aroclor-1016 {2}	4.00	4.00	4.00	4.00	4.00	4.00	3.93	4.07
Aroclor-1016 {3}	4.55	4.55	4.55	4.55	4.55	4.55	4.48	4.62
Aroclor-1016 {4}	5.01	5.01	5.01	5.01	5.01	5.01	4.94	5.08
Aroclor-1016 {5}	5.45	5.45	5.45	5.45	5.45	5.45	5.38	5.52
Aroclor-1221			2.10				2.03	2.17
Aroclor-1221 {2}			2.98				2.91	3.05
Aroclor-1221 {3}			3.10				3.03	3.17
Aroclor-1221 {4}			3.18				3.11	3.25
Aroclor-1221 {5}			3.77				3.70	3.84
Aroclor-1232			3.18				3.11	3.25
Aroclor-1232 {2}			4.00				3.93	4.07
Aroclor-1232 {3}			4.66				4.59	4.73
Aroclor-1232 {4}			5.31				5.24	5.38
Aroclor-1232 {5}			5.45				5.38	5.52
Aroclor-1242			4.00				3.93	4.07
Aroclor-1242 {2}			4.94				4.87	5.01
Aroclor-1242 {3}			5.26				5.19	5.33
Aroclor-1242 {4}			5.95				5.88	6.02
Aroclor-1242 {5}			6.23				6.16	6.30
Aroclor-1248			4.40				4.32	4.48
Aroclor-1248 {2}			4.94				4.86	5.02
Aroclor-1248 {3}			5.26				5.18	5.34
Aroclor-1248 {4}			5.96				5.88	6.04
Aroclor-1248 {5}			6.23				6.15	6.31
Aroclor-1254			6.35				6.27	6.43
Aroclor-1254 {2}			6.79				6.71	6.87
Aroclor-1254 {3}			6.95				6.86	7.04
Aroclor-1254 {4}			7.39				7.30	7.48
Aroclor-1254 {5}			8.24				8.15	8.33
Aroclor-1260	8.24	8.24	8.24	8.24	8.24	8.24	7.34	9.14
Aroclor-1260 {2}	8.92	8.92	8.92	8.92	8.92	8.92	8.02	9.82
Aroclor-1260 {3}	9.40	9.39	9.39	9.40	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.95	10.94	10.95	10.95	10.95	10.95	10.05	11.85

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	334646	290297	289626	268132	280588	292658	8.58
Aroclor-1016 {2}	448534	387275	395850	372582	383511	397550	7.47
Aroclor-1016 {3}	582764	498111	506481	475374	499228	512392	8.01
Aroclor-1016 {4}	309866	265494	256254	241041	251885	264908	10.05
Aroclor-1016 {5}	447008	387499	402765	386546	411964	407156	6.07
Aroclor-1221			130252				
Aroclor-1221 {2}			210461				
Aroclor-1221 {3}			134508				
Aroclor-1221 {4}			460364				
Aroclor-1221 {5}			104896				
Aroclor-1232			323549				
Aroclor-1232 {2}			190065				
Aroclor-1232 {3}			166290				
Aroclor-1232 {4}			132314				
Aroclor-1232 {5}			227266				
Aroclor-1242			356248				
Aroclor-1242 {2}			232709				
Aroclor-1242 {3}			324864				
Aroclor-1242 {4}			451857				
Aroclor-1242 {5}			425731				
Aroclor-1248			739644				
Aroclor-1248 {2}			436612				
Aroclor-1248 {3}			570008				
Aroclor-1248 {4}			833779				
Aroclor-1248 {5}			697246				
Aroclor-1254			962649				
Aroclor-1254 {2}			608131				
Aroclor-1254 {3}			1157444				
Aroclor-1254 {4}			1213711				
Aroclor-1254 {5}			1133241				
Aroclor-1260	1226015	1033007	1112075	1032907	1158256	1112452	7.47
Aroclor-1260 {2}	770299	631919	656162	608465	685227	670414	9.35
Aroclor-1260 {3}	1773014	1430500	1578117	1441933	1669179	1578549	9.32
Aroclor-1260 {4}	844097	715071	776418	699378	848383	776669	8.98
Aroclor-1260 {5}	486715	399693	404378	356362	446539	418737	11.85
					Average %RSD		8.72

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.78	3.77	3.77	3.78	3.77	3.77	3.70	3.84
Aroclor-1016 {2}	4.39	4.38	4.37	4.38	4.38	4.38	4.31	4.45
Aroclor-1016 {3}	5.14	5.13	5.13	5.14	5.13	5.13	5.06	5.20
Aroclor-1016 {4}	5.35	5.34	5.34	5.35	5.34	5.34	5.27	5.41
Aroclor-1016 {5}	5.53	5.52	5.52	5.53	5.52	5.52	5.45	5.59
Aroclor-1221			2.44				2.37	2.51
Aroclor-1221 {2}			3.45				3.38	3.52
Aroclor-1221 {3}			3.69				3.62	3.76
Aroclor-1221 {4}			3.78				3.71	3.85
Aroclor-1221 {5}			5.14				5.07	5.21
Aroclor-1232			3.77				3.70	3.84
Aroclor-1232 {2}			4.76				4.69	4.83
Aroclor-1232 {3}			5.34				5.27	5.41
Aroclor-1232 {4}			5.52				5.45	5.59
Aroclor-1232 {5}			6.12				6.05	6.19
Aroclor-1242			4.76				4.69	4.83
Aroclor-1242 {2}			5.52				5.45	5.59
Aroclor-1242 {3}			6.12				6.05	6.19
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.81				6.74	6.88
Aroclor-1248			5.13				5.05	5.21
Aroclor-1248 {2}			5.72				5.64	5.80
Aroclor-1248 {3}			6.12				6.04	6.20
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.62				6.54	6.70
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.15				8.06	8.24
Aroclor-1254 {4}			8.33				8.24	8.42
Aroclor-1254 {5}			9.16				9.07	9.25
Aroclor-1260	7.91	7.90	7.90	7.91	7.90	7.90	7.00	8.80
Aroclor-1260 {2}	8.16	8.15	8.15	8.16	8.15	8.16	7.26	9.06
Aroclor-1260 {3}	9.77	9.76	9.76	9.77	9.76	9.76	8.86	10.66
Aroclor-1260 {4}	10.27	10.27	10.27	10.27	10.27	10.27	9.37	11.17
Aroclor-1260 {5}	10.87	10.86	10.86	10.87	10.86	10.86	9.96	11.76

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	2244125	1929985	1806068	1589477	1566127	1827156	15.22
Aroclor-1016 {2}	4213361	3601735	3339319	3060558	2951727	3433340	14.68
Aroclor-1016 {3}	10530478	8200450	7710370	7090673	7178416	8142077	17.29
Aroclor-1016 {4}	4574459	3811673	3443945	3121062	3110471	3612322	16.88
Aroclor-1016 {5}	2855623	2867711	2539815	2345609	2392752	2600302	9.58
Aroclor-1221			948711				
Aroclor-1221 {2}			1449945				
Aroclor-1221 {3}			878710				
Aroclor-1221 {4}			2926520				
Aroclor-1221 {5}			700890				
Aroclor-1232			2100384				
Aroclor-1232 {2}			909978				
Aroclor-1232 {3}			1845458				
Aroclor-1232 {4}			1228252				
Aroclor-1232 {5}			1989693				
Aroclor-1242			1524168				
Aroclor-1242 {2}			2288400				
Aroclor-1242 {3}			3334472				
Aroclor-1242 {4}			2791426				
Aroclor-1242 {5}			5242295				
Aroclor-1248			4742904				
Aroclor-1248 {2}			6932980				
Aroclor-1248 {3}			5138683				
Aroclor-1248 {4}			4734512				
Aroclor-1248 {5}			2326610				
Aroclor-1254			6299784				
Aroclor-1254 {2}			4553514				
Aroclor-1254 {3}			3411360				
Aroclor-1254 {4}			4739280				
Aroclor-1254 {5}			6831093				
Aroclor-1260	3687945	3451800	3038352	2796158	2906768	3176204	11.93
Aroclor-1260 {2}	6186522	4964078	4340433	4030248	4130831	4730423	18.84
Aroclor-1260 {3}	5527342	4658623	4156636	3825169	4215125	4476579	14.70
Aroclor-1260 {4}	11629768	9237162	9246276	8478951	9817091	9681850	12.27
Aroclor-1260 {5}	8108416	6804923	6419290	5800366	6870061	6800611	12.44
					Average %RSD		14.38

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.53				8.41	8.65
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.95				10.83	11.07
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			10.72				10.60	10.84
Aroclor-1268 {5}			11.56				11.44	11.68

GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.76				9.64	9.88
Aroclor-1262 {2}			10.27				10.15	10.39
Aroclor-1262 {3}			10.77				10.65	10.89
Aroclor-1262 {4}			10.86				10.74	10.98
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.77				10.65	10.89
Aroclor-1268 {2}			10.85				10.73	10.97
Aroclor-1268 {3}			11.11				10.99	11.23
Aroclor-1268 {4}			11.25				11.13	11.37
Aroclor-1268 {5}			12.34				12.22	12.46

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1106126				
Aroclor-1262 {2}			2120925				
Aroclor-1262 {3}			841505				
Aroclor-1262 {4}			882786				
Aroclor-1262 {5}			736984				
Aroclor-1268			2305941				
Aroclor-1268 {2}			2178984				
Aroclor-1268 {3}			1851457				
Aroclor-1268 {4}			468092				
Aroclor-1268 {5}			5951632				

GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5539833				
Aroclor-1262 {2}			12792233				
Aroclor-1262 {3}			4404590				
Aroclor-1262 {4}			8556302				
Aroclor-1262 {5}			1714927				
Aroclor-1268			12496132				
Aroclor-1268 {2}			12123884				
Aroclor-1268 {3}			10295633				
Aroclor-1268 {4}			2653820				
Aroclor-1268 {5}			32791853				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	62094454	480.6E6	3.777	4.553
Spiked Amount 200.000			Recovery	=	1.89%	2.28%
2) S DCB	12.05	12.57	26792729	150.4E6	4.731	4.818m
Spiked Amount 200.000			Recovery	=	2.37%	2.41%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.78	3346459	22441253	11.435	12.271m
4) L2 Aroclor-1016 {2}	4.00	4.39	4485339	42133606	11.282	12.020m
5) L2 Aroclor-1016 {3}	4.55	5.14	5827639	105.3E6	11.373	12.960m
6) L2 Aroclor-1016 {4}	5.01	5.35	3098665	45744588	11.697	12.717m
7) L2 Aroclor-1016 {5}	5.45	5.53	4470081	28556228	10.979	10.704m
Sum Aroclor-1016			21228183	244.2E6	56.766	60.671
Average Aroclor-1016					11.353	12.134
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.91	12260153	36879450	11.021	11.409m
34) L8 Aroclor-1260 {2}	8.92	8.16	7702986	61865220	11.490	13.071m
35) L8 Aroclor-1260 {3}	9.40	9.77	17730145	55273419	11.232	12.347
36) L8 Aroclor-1260 {4}	9.88	10.27	8440966	116.3E6	10.868	12.012
37) L8 Aroclor-1260 {5}	10.95	10.87	4867150	81084156	11.623	11.924m
Sum Aroclor-1260			51001399	351.4E6	56.234	60.763
Average Aroclor-1260					11.247	12.153
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

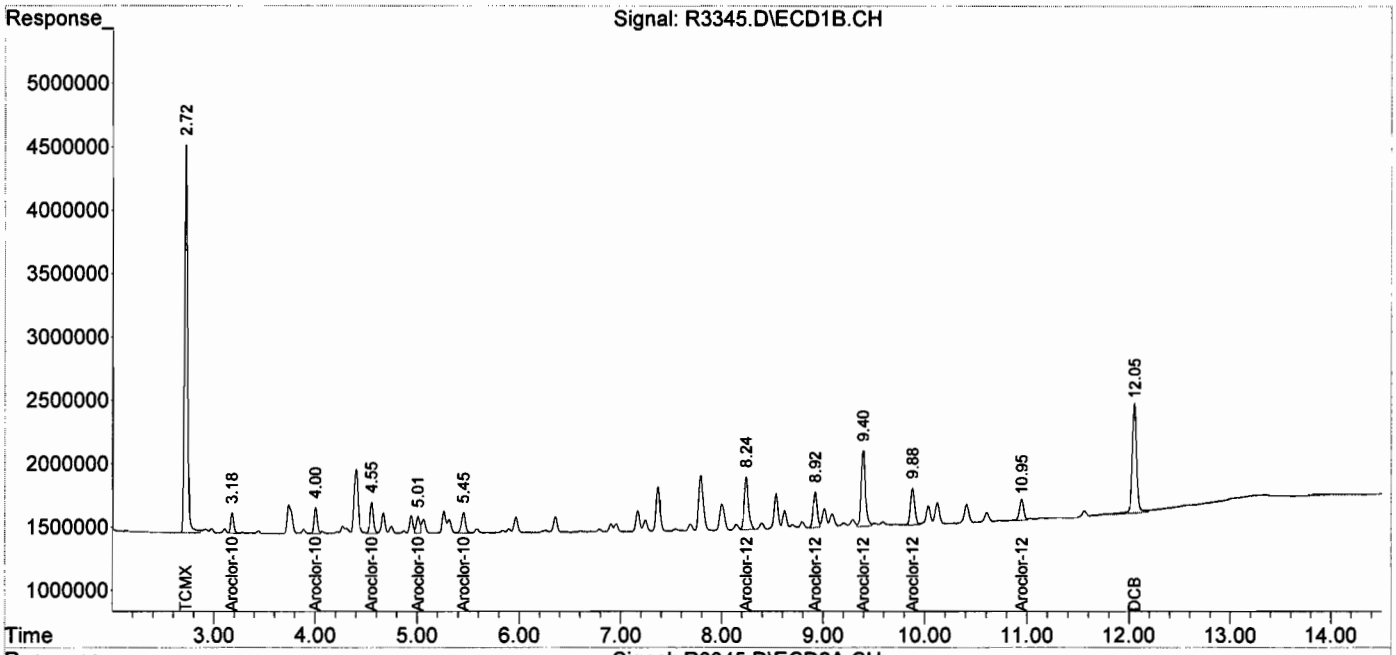
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

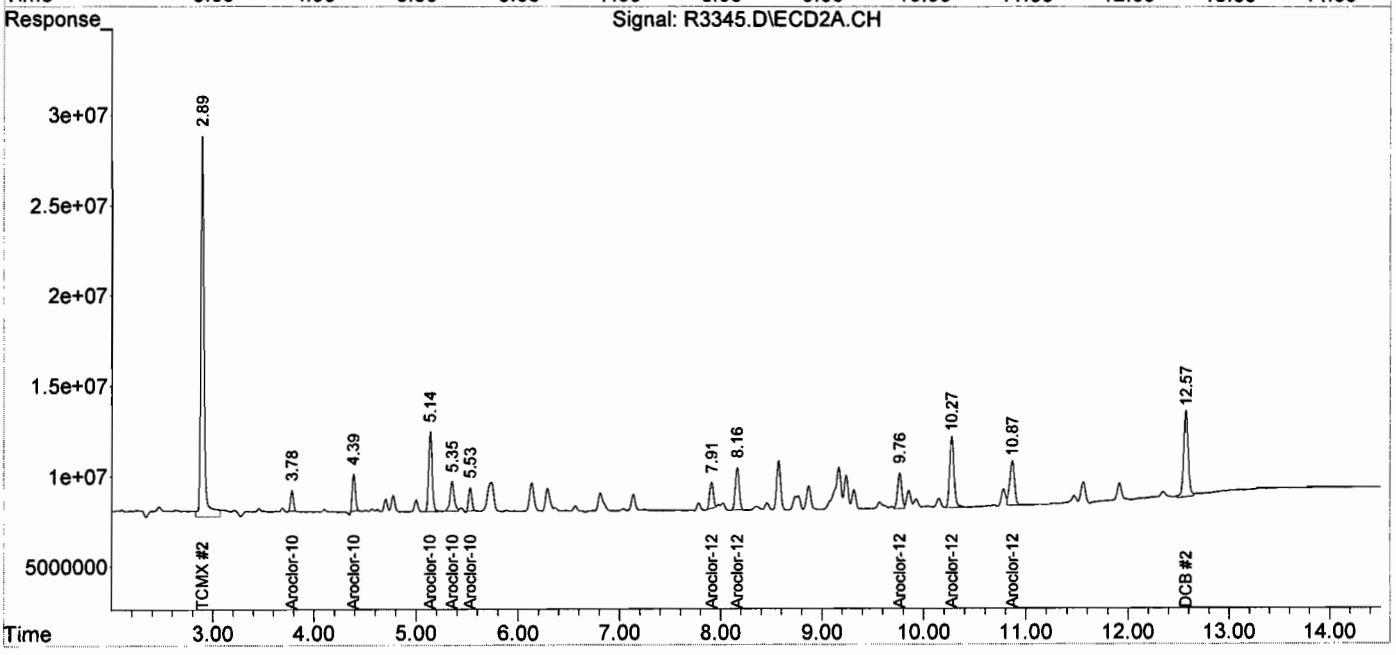
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	296.6E6	1877.5E6	18.041	17.784
Spiked Amount 200.000			Recovery =		9.02%	8.89%
2) S DCB	12.05	12.57	104.3E6	629.9E6	18.424	20.181
Spiked Amount 200.000			Recovery =		9.21%	10.09%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	14514838	96499237	49.597	52.765m
4) L2 Aroclor-1016 {2}	4.00	4.38	19363759	180.1E6	48.708	51.374m
5) L2 Aroclor-1016 {3}	4.55	5.13	24905526	410.0E6	48.606	50.463
6) L2 Aroclor-1016 {4}	5.01	5.34	13274697	190.6E6	50.111	52.982
7) L2 Aroclor-1016 {5}	5.45	5.52	19374928	143.4E6	47.586	53.745
Sum Aroclor-1016			91433749	1020.6E6	244.607	261.330
Average Aroclor-1016					48.921	52.266
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	51650341	172.6E6	46.429	53.391
34) L8 Aroclor-1260 {2}	8.92	8.15	31595954	248.2E6	47.129	52.440
35) L8 Aroclor-1260 {3}	9.39	9.76	71525009	232.9E6	45.311	52.033
36) L8 Aroclor-1260 {4}	9.88	10.27	35753535	461.9E6	46.034	47.703
37) L8 Aroclor-1260 {5}	10.94	10.86	19984631	340.2E6	47.726	50.035
Sum Aroclor-1260			210.5E6	1455.8E6	232.629	255.603
Average Aroclor-1260					46.526	51.121
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

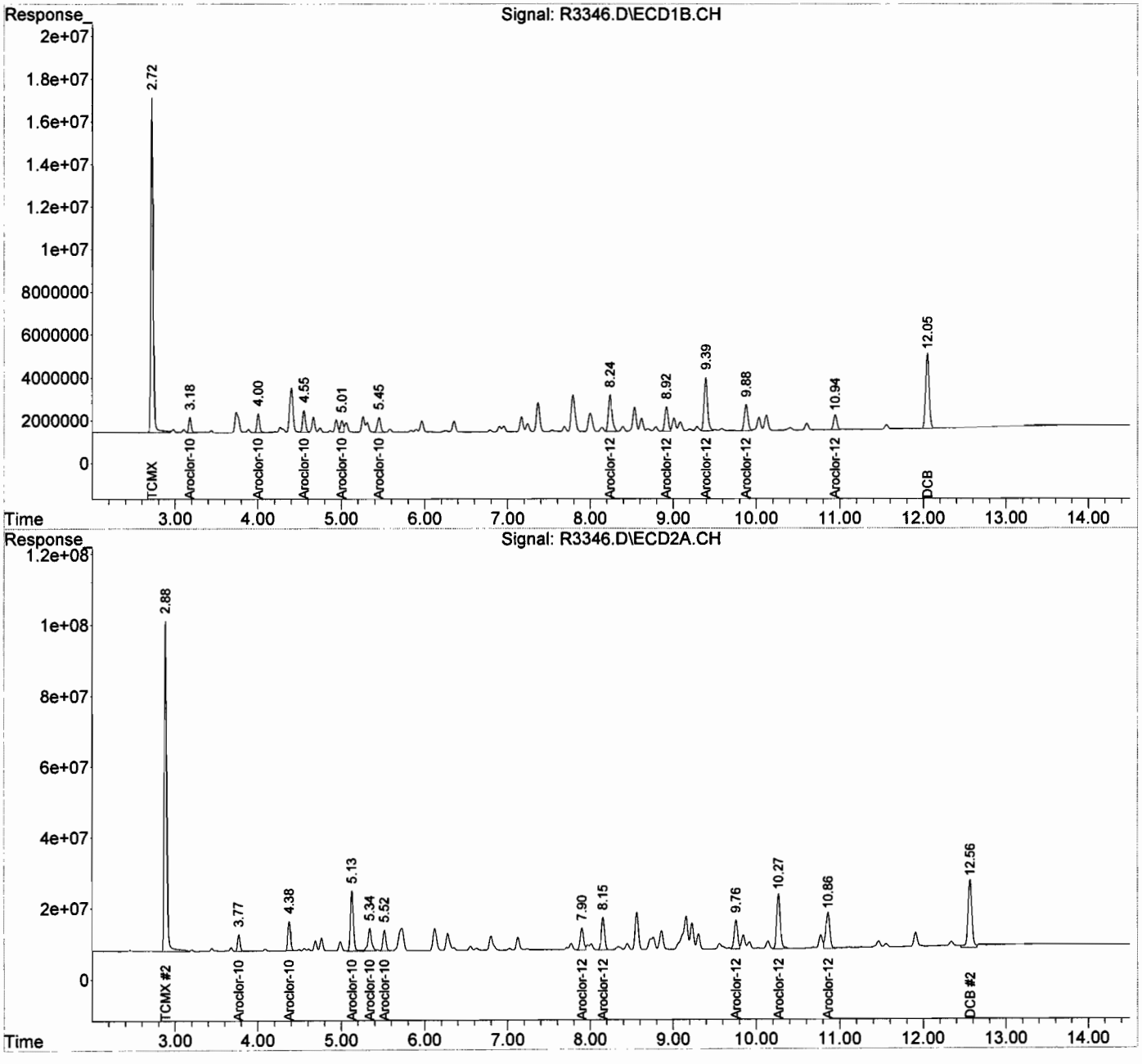
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3537.4E6	21489.8E6	215.195	203.550
Spiked Amount 200.000			Recovery	=	107.60%	101.78%
2) S DCB	12.05	12.56	1111.3E6	5940.2E6	196.229	190.311
Spiked Amount 200.000			Recovery	=	98.11%	95.16%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	144.8E6	903.0E6	494.821	493.773
4) L2 Aroclor-1016 {2}	4.00	4.37	197.9E6	1669.7E6	497.862	476.309
5) L2 Aroclor-1016 {3}	4.55	5.13	253.2E6	3855.2E6	494.232	474.475
6) L2 Aroclor-1016 {4}	5.01	5.34	128.1E6	1722.0E6	483.666	478.707
7) L2 Aroclor-1016 {5}	5.45	5.52	201.4E6	1269.9E6	494.608	475.998
Sum Aroclor-1016			925.5E6	9419.8E6	2465.189	2399.263
Average Aroclor-1016					493.038	479.853
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	556.0E6	1519.2E6	499.830	469.959
34) L8 Aroclor-1260 {2}	8.92	8.15	328.1E6	2170.2E6	489.370	458.520
35) L8 Aroclor-1260 {3}	9.39	9.76	789.1E6	2078.3E6	499.863	464.265
36) L8 Aroclor-1260 {4}	9.88	10.27	388.2E6	4623.1E6	499.838	477.506
37) L8 Aroclor-1260 {5}	10.95	10.86	202.2E6	3209.6E6	482.854	471.996
Sum Aroclor-1260			2263.6E6	13600.5E6	2471.756	2342.245
Average Aroclor-1260					494.351	468.449
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

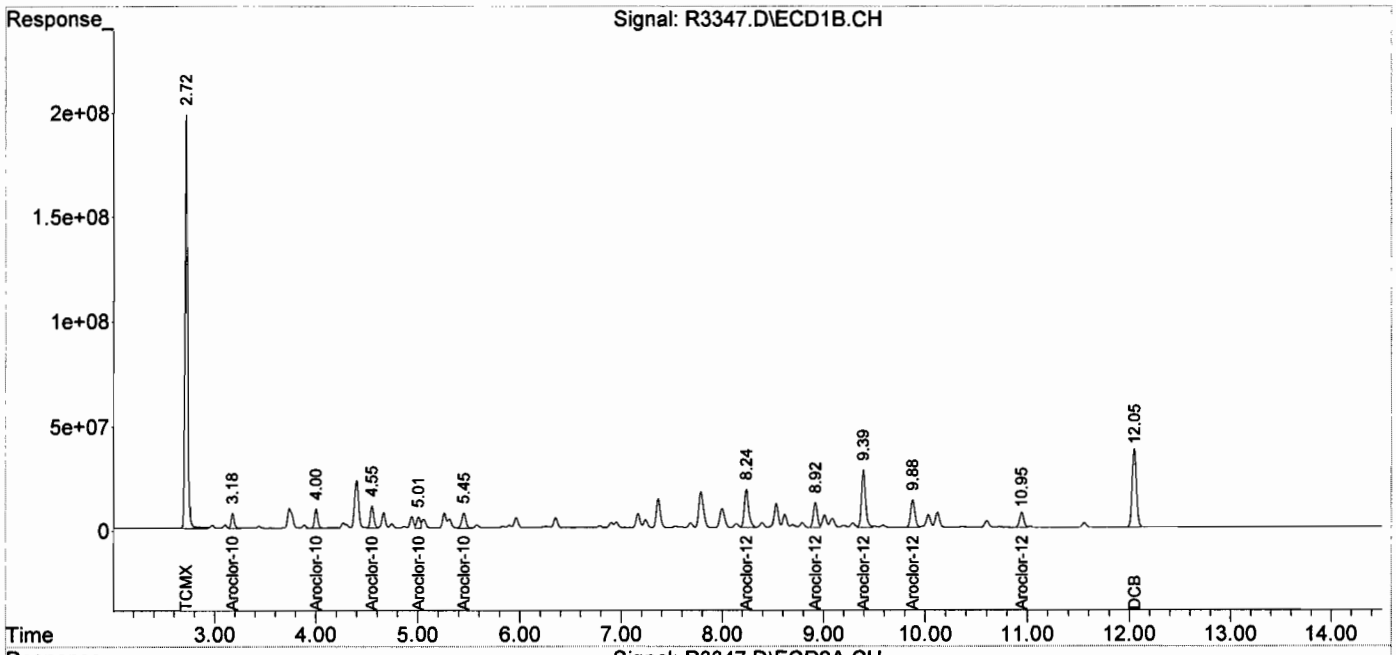
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

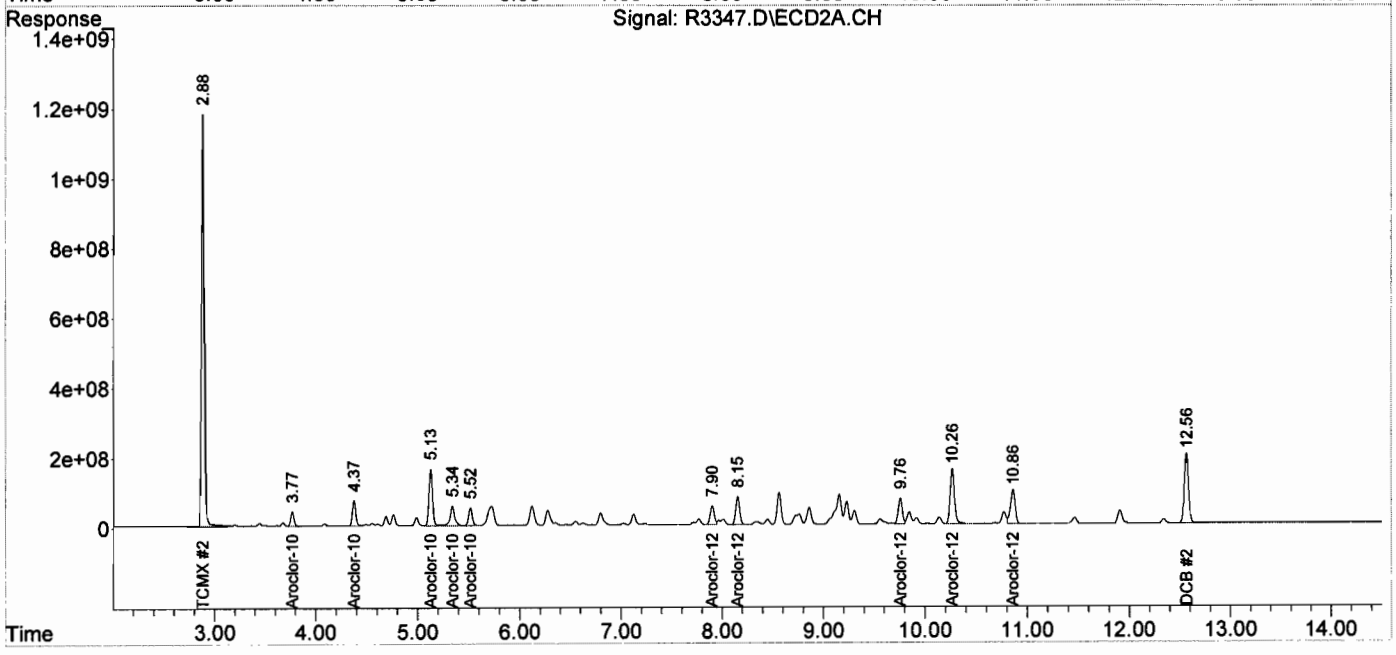
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	6642.9E6	42402.0E6	404.114	401.630
Spiked Amount 200.000			Recovery	=	202.06%	200.82%
2) S DCB	12.05	12.57	1965.6E6	10638.0E6	347.055	340.819
Spiked Amount 200.000			Recovery	=	173.53%	170.41%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.78	268.1E6	1589.5E6	916.196	869.115
4) L2 Aroclor-1016 {2}	4.00	4.38	372.6E6	3060.6E6	937.194	873.096
5) L2 Aroclor-1016 {3}	4.55	5.14	475.4E6	7090.7E6	927.756	872.681
6) L2 Aroclor-1016 {4}	5.01	5.35	241.0E6	3121.1E6	909.903	867.653
7) L2 Aroclor-1016 {5}	5.45	5.53	386.5E6	2345.6E6	949.380	879.203
Sum Aroclor-1016			1743.7E6	17207.4E6	4640.429	4361.748
Average Aroclor-1016					928.086	872.350
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.91	1032.9E6	2796.2E6	928.496	864.995
34) L8 Aroclor-1260 {2}	8.92	8.16	608.5E6	4030.2E6	907.595	851.504
35) L8 Aroclor-1260 {3}	9.40	9.77	1441.9E6	3825.2E6	913.455	854.485
36) L8 Aroclor-1260 {4}	9.88	10.27	699.4E6	8479.0E6	900.484	875.757
37) L8 Aroclor-1260 {5}	10.95	10.87	356.4E6	5800.4E6	851.040	852.976
Sum Aroclor-1260			4139.0E6	24930.9E6	4501.070	4299.717
Average Aroclor-1260					900.214	859.943
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

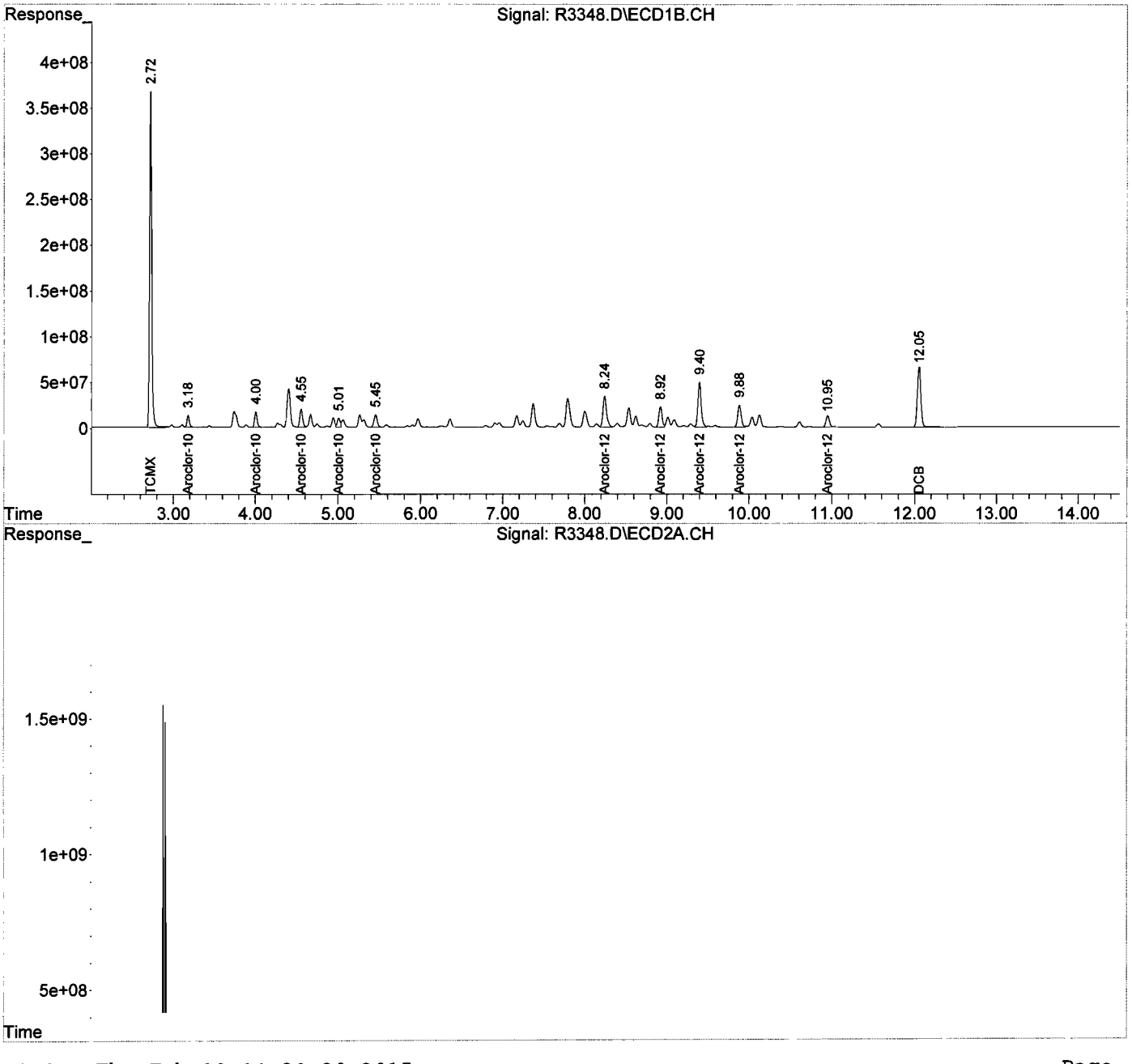
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

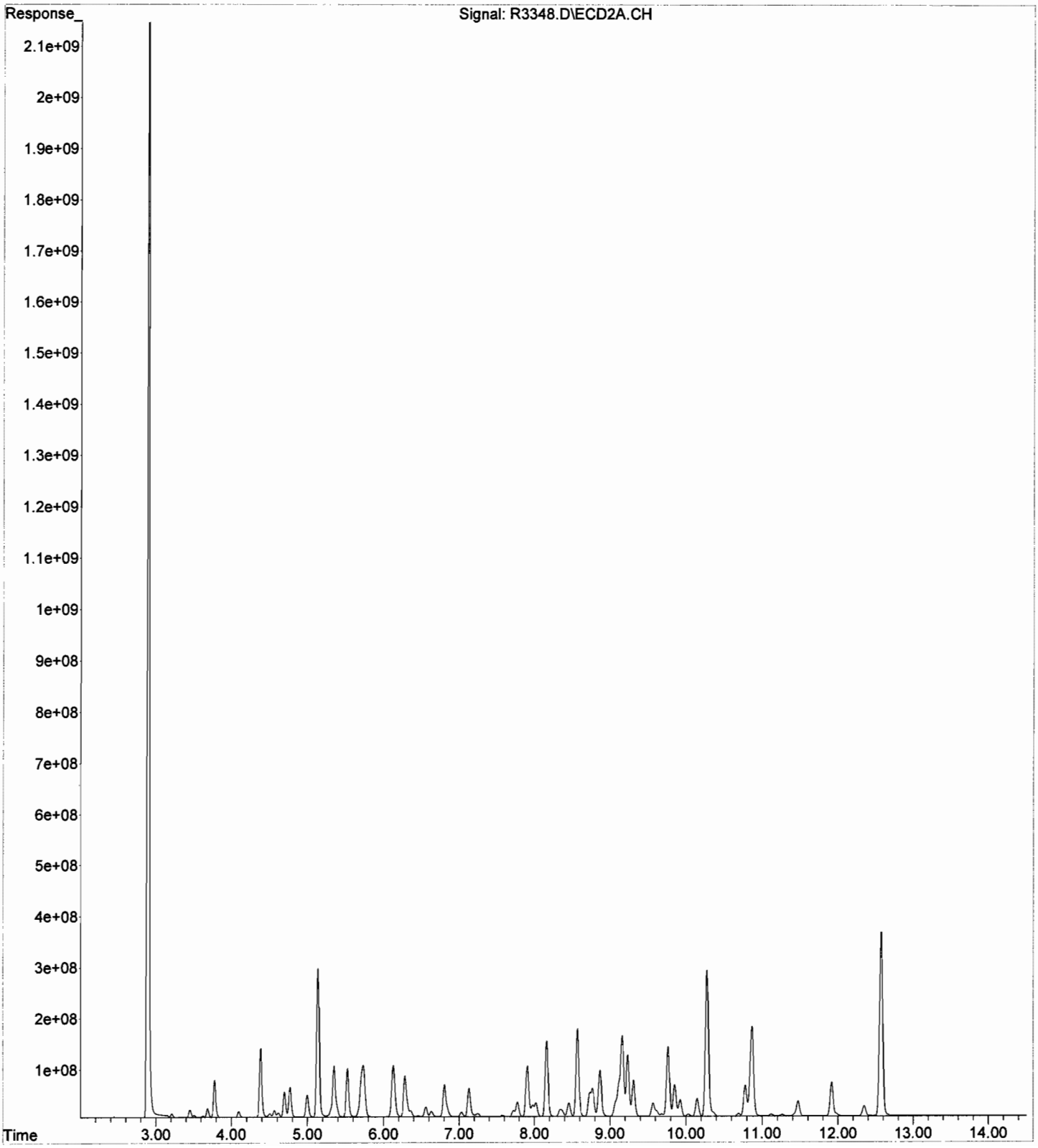
Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File :C:\MSDCHEM\1\DATA\02-18-15\R3348.D
Operator : JS
Acquired : 18 Feb 2015 13:12 using AcqMethod RPCB0218.M
Instrument : GC_R
Sample Name: ICC_8082_L4_IAS_5138,1_PPM
Misc Info : NA,NA,NA,1
Vial Number: 4



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	2.72	2.91	14036.0E6	80309.6E6	853.862	760.689
Spiked Amount	200.000			Recovery	=	426.93%	380.34%
2) S	DCB	12.05	12.57	4745.4E6	26548.3E6	837.886	850.550
Spiked Amount	200.000			Recovery	=	418.94%	425.27%
	Target Compounds						
3) L2	Aroclor-1016	3.18	3.77	561.2E6	3132.3E6	1917.515	1712.695
4) L2	Aroclor-1016 {2}	4.00	4.38	767.0E6	5903.5E6	1929.370	1684.098
5) L2	Aroclor-1016 {3}	4.55	5.13	998.5E6	14356.8E6	1948.621	1766.960
6) L2	Aroclor-1016 {4}	5.01	5.34	503.8E6	6220.9E6	1901.680	1729.418
7) L2	Aroclor-1016 {5}	5.45	5.52	823.9E6	4785.5E6	2023.614	1793.746
Sum	Aroclor-1016			3654.4E6	34399.0E6	9720.799	8686.918
Average	Aroclor-1016					1944.160	1737.384
Sum	Aroclor-1221			0	0	N.D.	N.D.
Average	Aroclor-1221					0.000	0.000
Sum	Aroclor-1232			0	0	N.D.	N.D.
Average	Aroclor-1232					0.000	0.000
Sum	Aroclor-1242			0	0	N.D.	N.D.
Average	Aroclor-1242					0.000	0.000
Sum	Aroclor-1248			0	0	N.D.	N.D.
Average	Aroclor-1248					0.000	0.000
Sum	Aroclor-1254			0	0	N.D.	N.D.
Average	Aroclor-1254					0.000	0.000
33) L8	Aroclor-1260	8.24	7.90	2316.5E6	5813.5E6	2082.347	1798.424
34) L8	Aroclor-1260 {2}	8.92	8.15	1370.5E6	8261.7E6	2044.190	1745.510
35) L8	Aroclor-1260 {3}	9.39	9.76	3338.4E6	8430.2E6	2114.827	1883.190
36) L8	Aroclor-1260 {4}	9.88	10.27	1696.8E6	19634.2E6	2184.671	2027.937
37) L8	Aroclor-1260 {5}	10.95	10.86	893.1E6	13740.1E6	2132.787	2020.562
Sum	Aroclor-1260			9615.2E6	55879.8E6	10558.823	9475.624
Average	Aroclor-1260					2111.765	1895.125
Sum	Aroclor-1262			0	0	N.D.	N.D.
Average	Aroclor-1262					0.000	0.000
Sum	Aroclor-1268			0	0	N.D.	N.D.
Average	Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

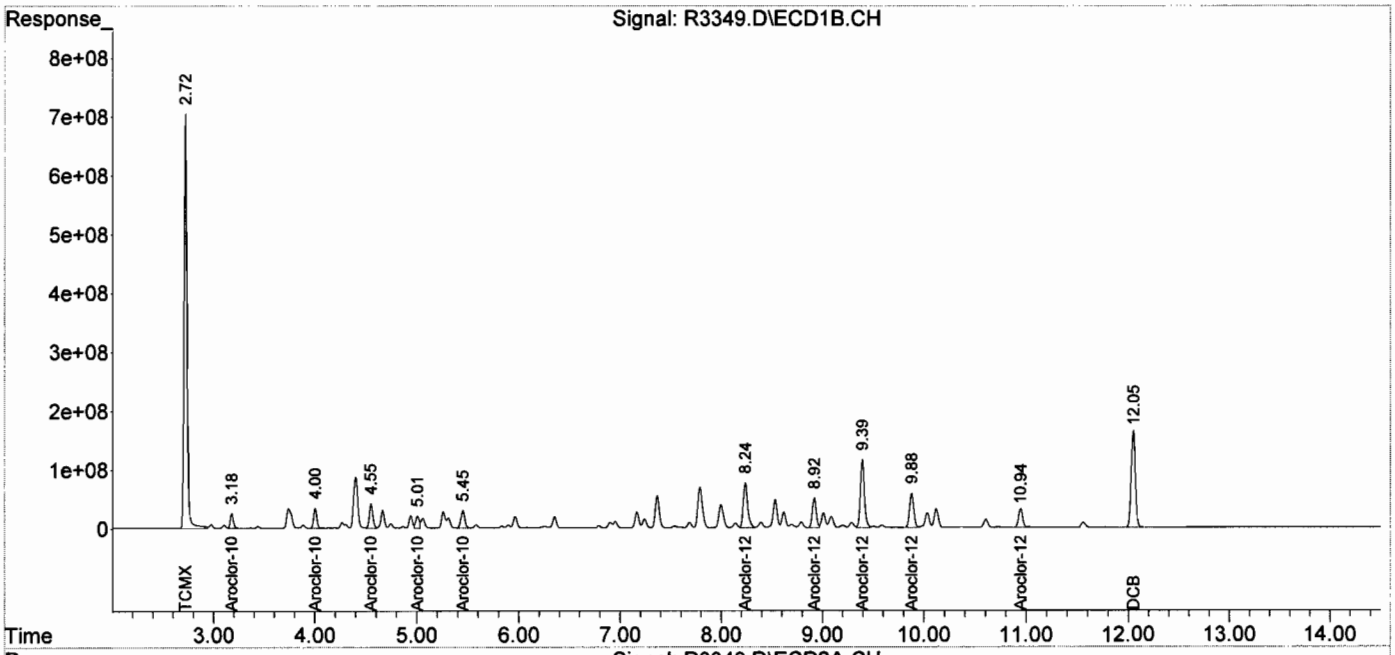
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

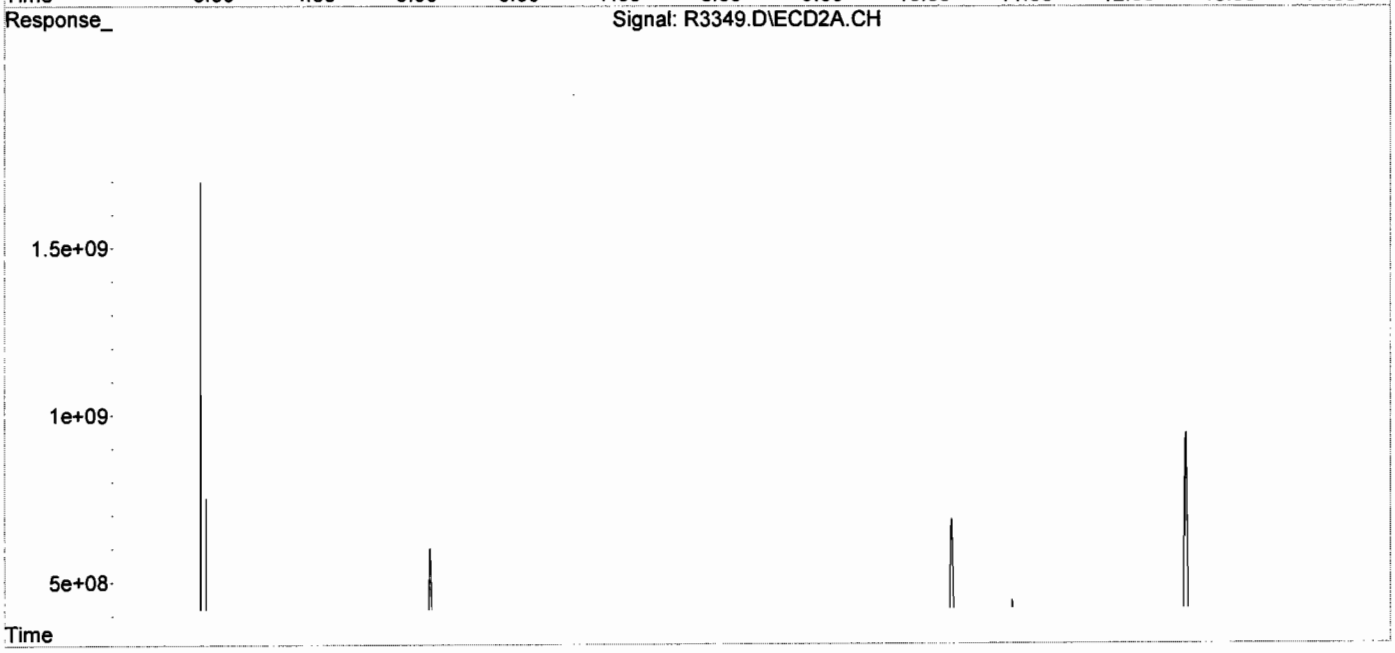
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

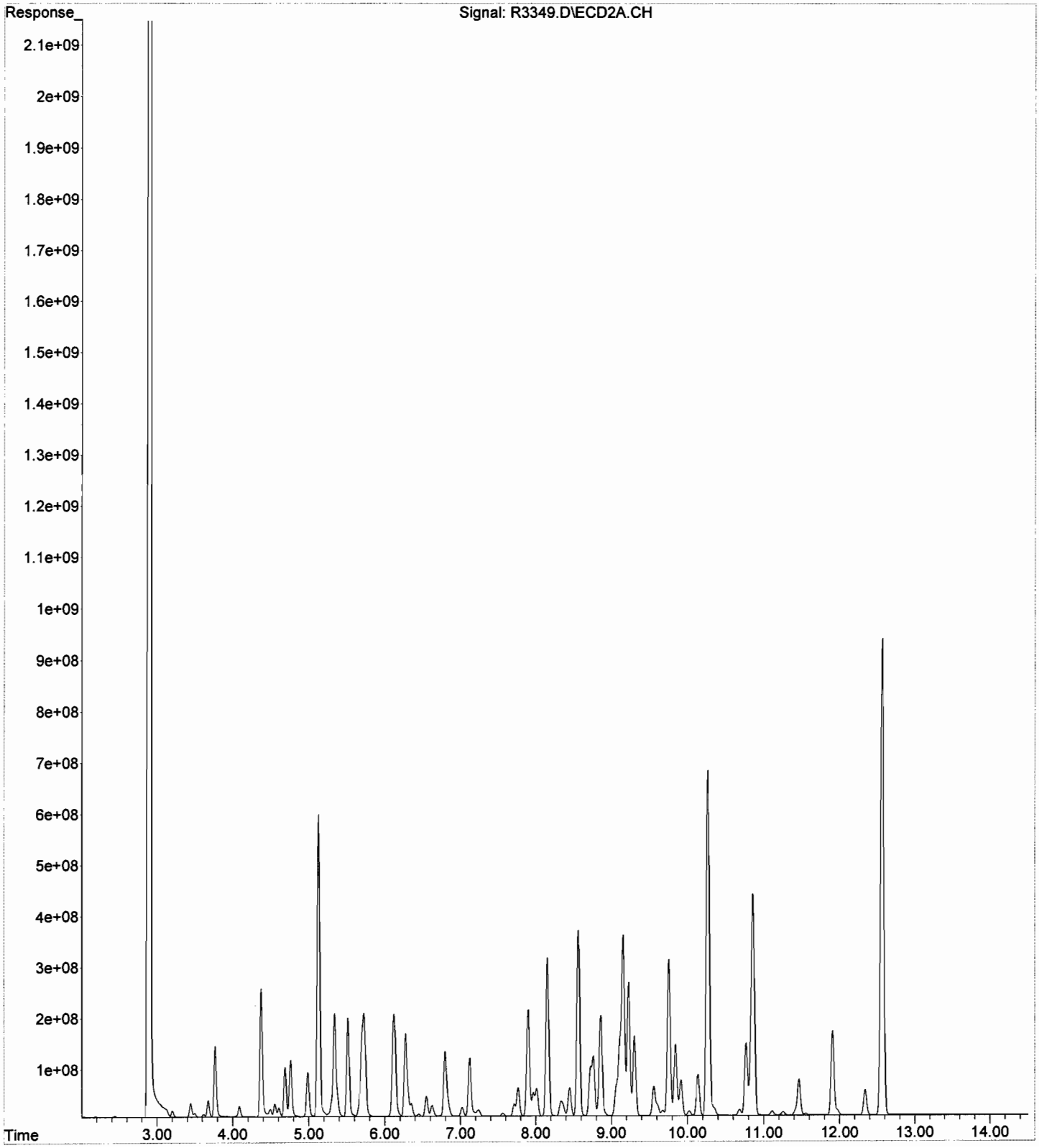
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





File :C:\MSDCHEM\1\DATA\02-18-15\R3349.D
Operator : JS
Acquired : 18 Feb 2015 13:30 using AcqMethod RPCB0218.M
Instrument : GC_R
Sample Name: ICC_8082_L5_IAS_5137,2_PPM
Misc Info : NA,NA,NA,1
Vial Number: 5



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3350.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:56
Operator : JS
Sample : ICC_8082_1221_IAS_5158,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:31:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:31:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

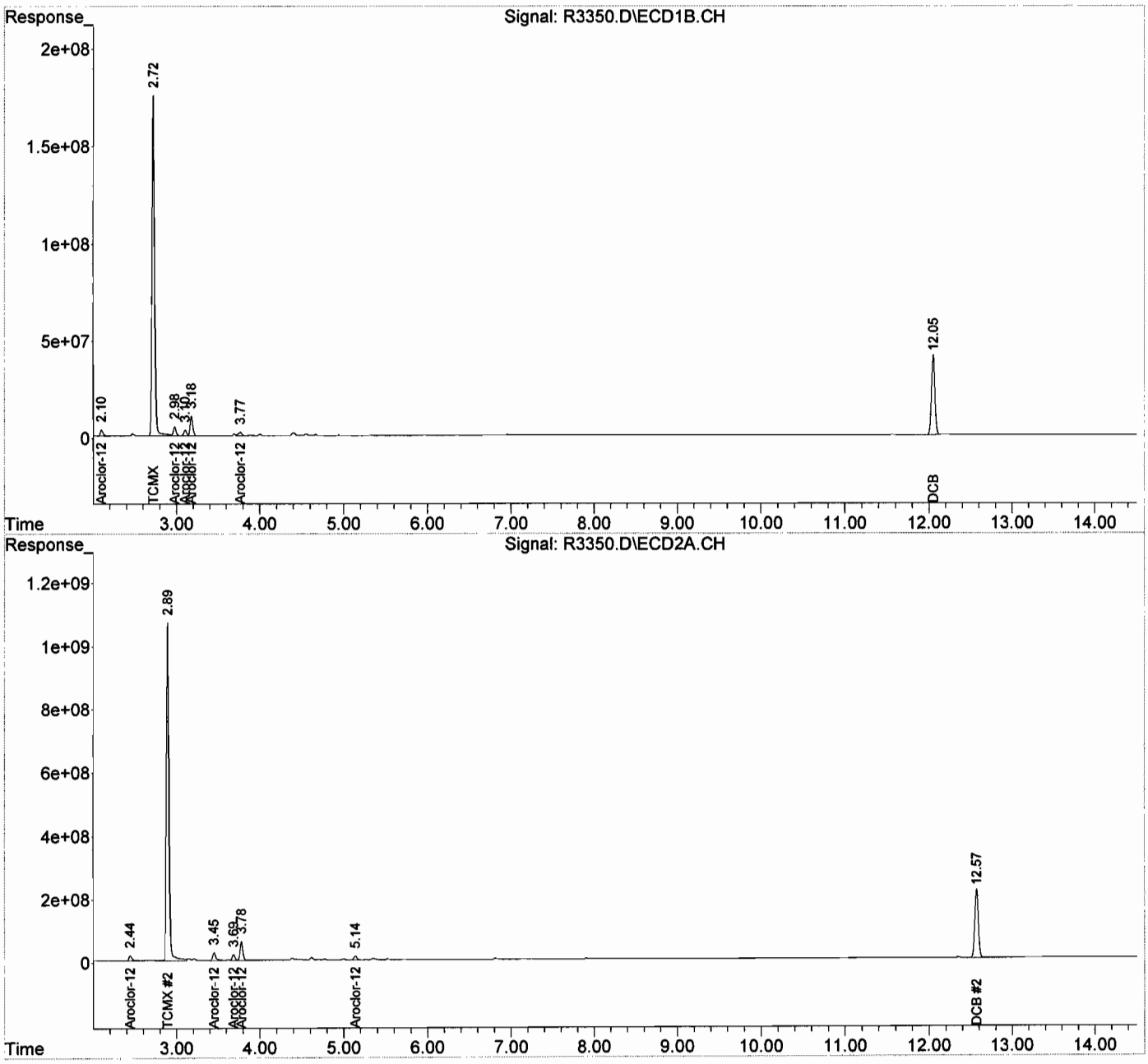
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3613.4E6	22170.7E6	219.818	210.000
Spiked Amount 200.000			Recovery	=	109.91%	105.00%
2) S DCB	12.05	12.57	1178.2E6	6428.9E6	208.025	202.718
Spiked Amount 200.000			Recovery	=	104.01%	101.36%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
8) L3 Aroclor-1221	2.10	2.44	65126185	474.4E6	500.000	500.000
9) L3 Aroclor-1221 {2}	2.98	3.45	105.2E6	725.0E6	500.000	500.000
10) L3 Aroclor-1221 {3}	3.10	3.69	67253871	439.4E6	500.000	500.000
11) L3 Aroclor-1221 {4}	3.18	3.78	230.2E6	1463.3E6	500.000	500.000
12) L3 Aroclor-1221 {5}	3.77	5.14	52447870	350.4E6	500.000	500.000
Sum Aroclor-1221			520.2E6	3452.4E6	2500.000	2500.000
Average Aroclor-1221					500.000	500.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3350.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:56
Operator : JS
Sample : ICC_8082_1221_IAS_5158,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:31:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:31:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3351.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:13
Operator : JS
Sample : ICC_8082_1232_IAS_5159,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:33:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3796.9E6	23520.6E6	230.977	222.786
Spiked Amount 200.000			Recovery	=	115.49%	111.39%
2) S DCB	12.05	12.57	1249.0E6	6724.2E6	220.527	212.029
Spiked Amount 200.000			Recovery	=	110.26%	106.01%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
13) L4 Aroclor-1232	3.18	3.77	161.8E6	1050.2E6	500.000	500.000
14) L4 Aroclor-1232 {2}	4.00	4.76	95032500	455.0E6	500.000	500.000
15) L4 Aroclor-1232 {3}	4.66	5.34	83145125	922.7E6	500.000	500.000
16) L4 Aroclor-1232 {4}	5.31	5.52	66156801	614.1E6	500.000	500.000
17) L4 Aroclor-1232 {5}	5.45	6.12	113.6E6	994.8E6	500.000	500.000
Sum Aroclor-1232			519.7E6	4036.9E6	2500.000	2500.000
Average Aroclor-1232					500.000	500.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

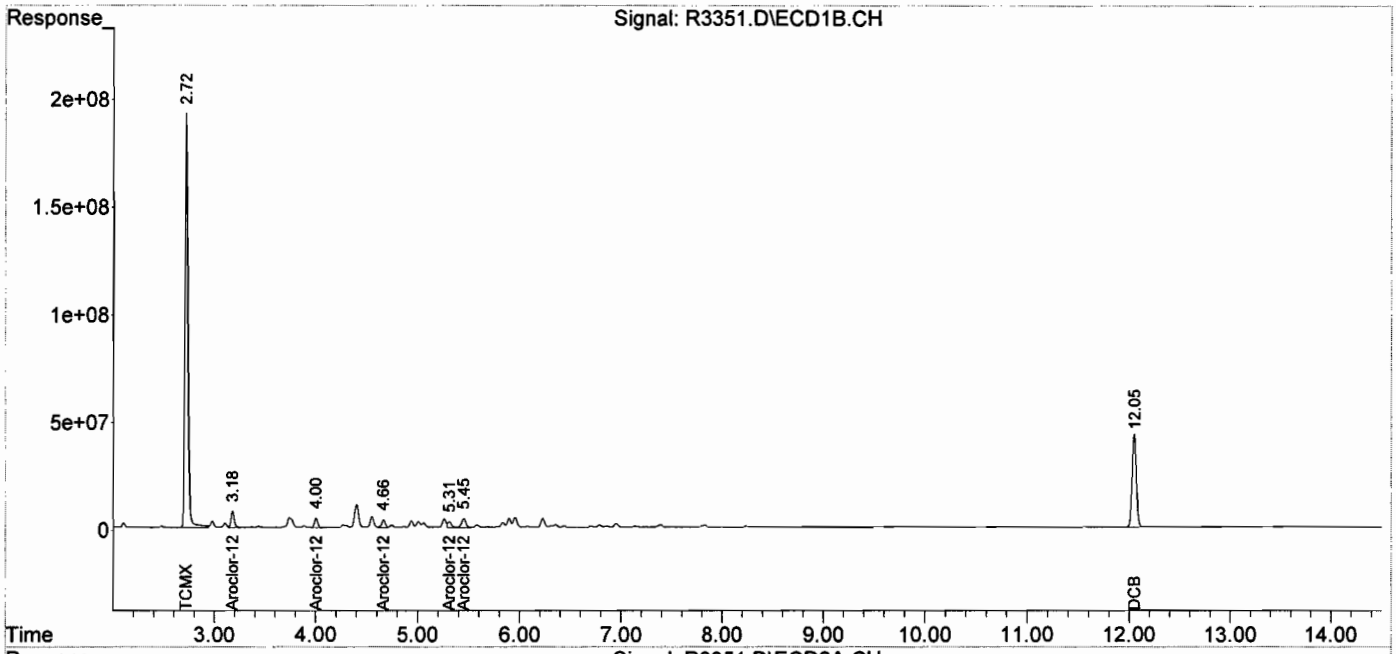
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

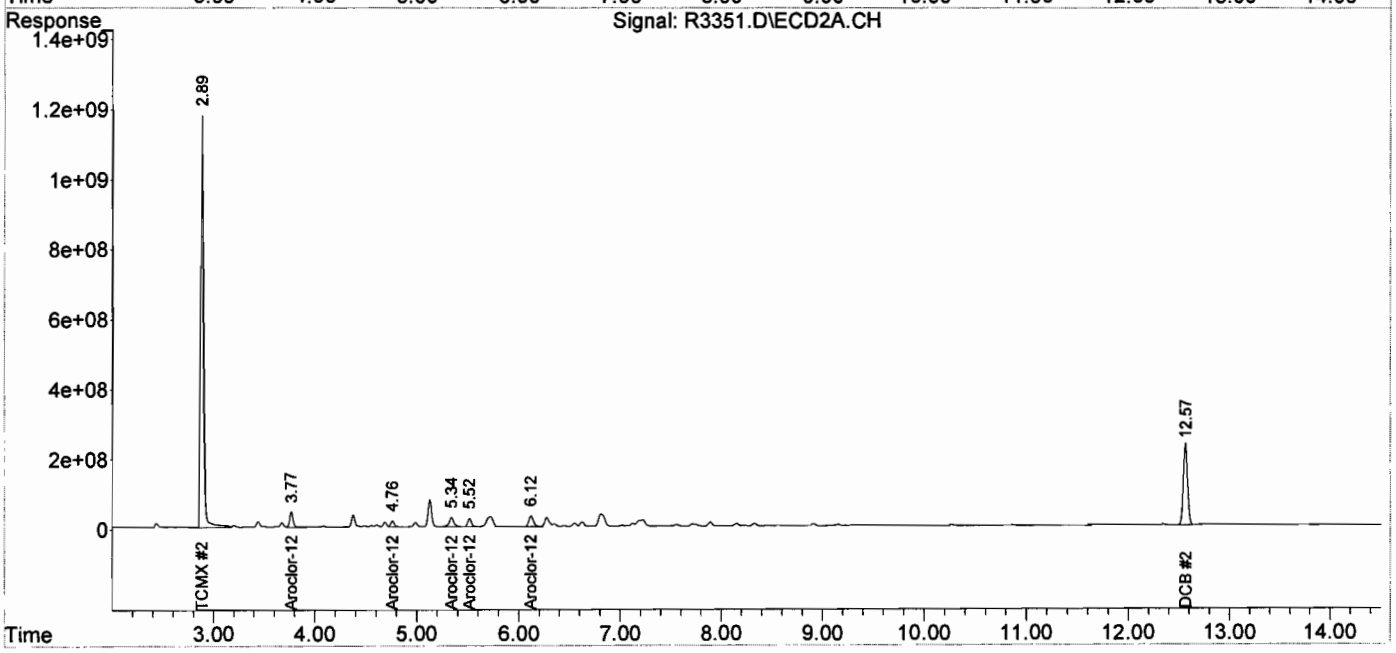
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3351.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:13
Operator : JS
Sample : ICC_8082_1232_IAS_5159,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:33:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3352.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:31
Operator : JS
Sample : ICC_8082_1242_IAS_5160,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:34:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:34:32 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3662.3E6	22884.9E6	222.791	216.765
Spiked Amount 200.000			Recovery	=	111.40%	108.38%
2) S DCB	12.05	12.56	1216.4E6	6658.6E6	214.774	209.959
Spiked Amount 200.000			Recovery	=	107.39%	104.98%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
18) L5 Aroclor-1242	4.00	4.76	178.1E6	762.1E6	500.000	500.000
19) L5 Aroclor-1242 {2}	4.94	5.52	116.4E6	1144.2E6	500.000	500.000
20) L5 Aroclor-1242 {3}	5.26	6.12	162.4E6	1667.2E6	500.000	500.000
21) L5 Aroclor-1242 {4}	5.95	6.27	225.9E6	1395.7E6	500.000	500.000
22) L5 Aroclor-1242 {5}	6.23	6.81	212.9E6	2621.1E6	500.000	500.000
Sum Aroclor-1242			895.7E6	7590.4E6	2500.000	2500.000
Average Aroclor-1242					500.000	500.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

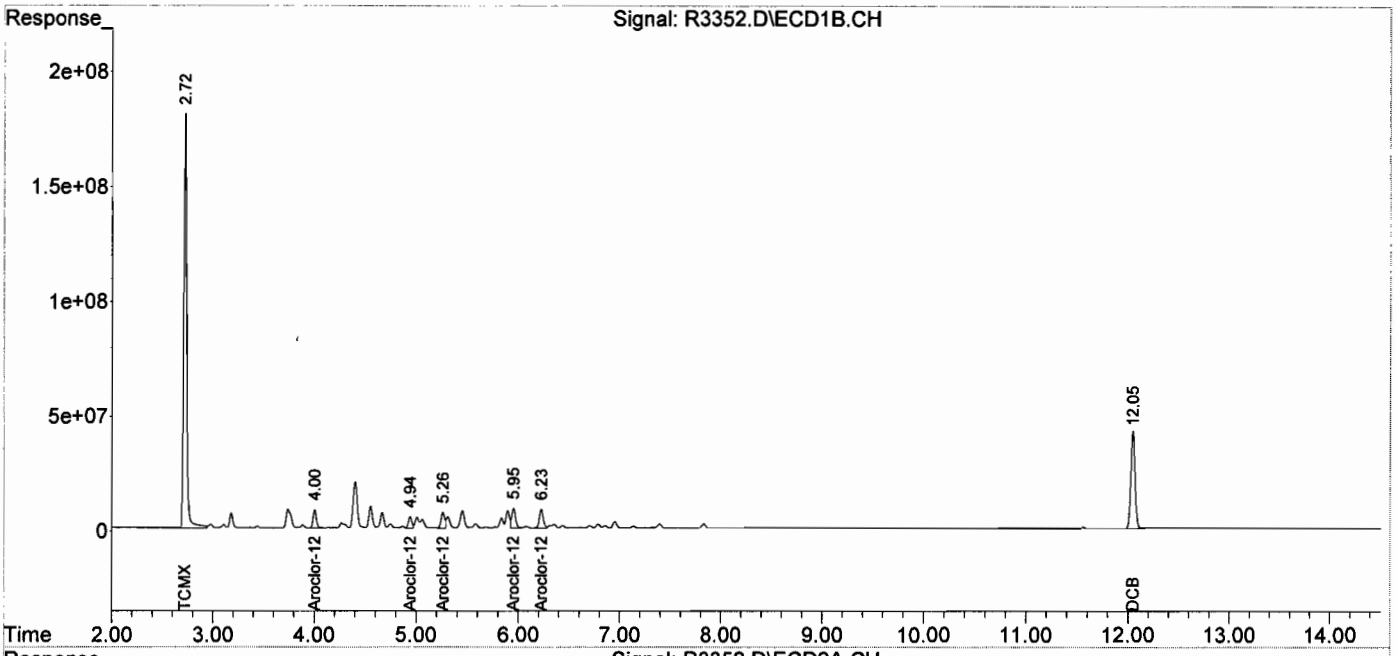
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

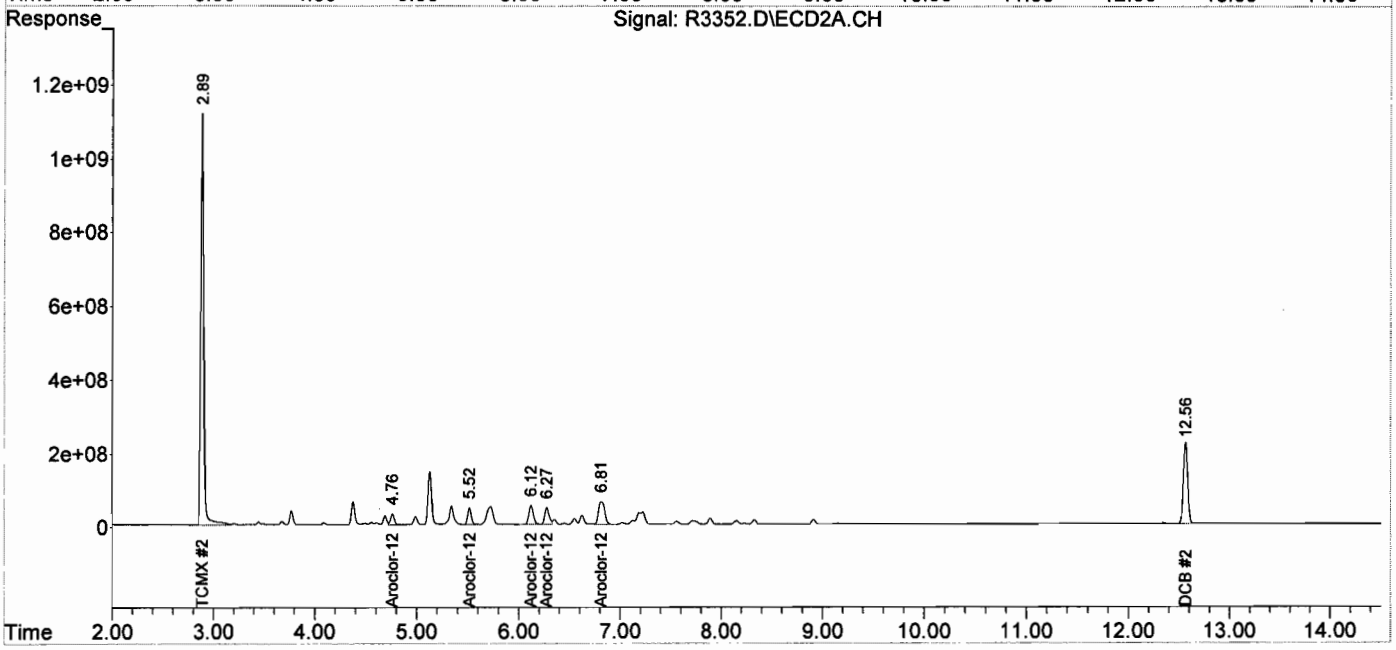
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3352.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:31
Operator : JS
Sample : ICC_8082_1242_IAS_5160,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:34:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:34:32 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3353.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:48
Operator : JS
Sample : ICC_8082_1248_IAS_5161,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:41:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:40:50 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

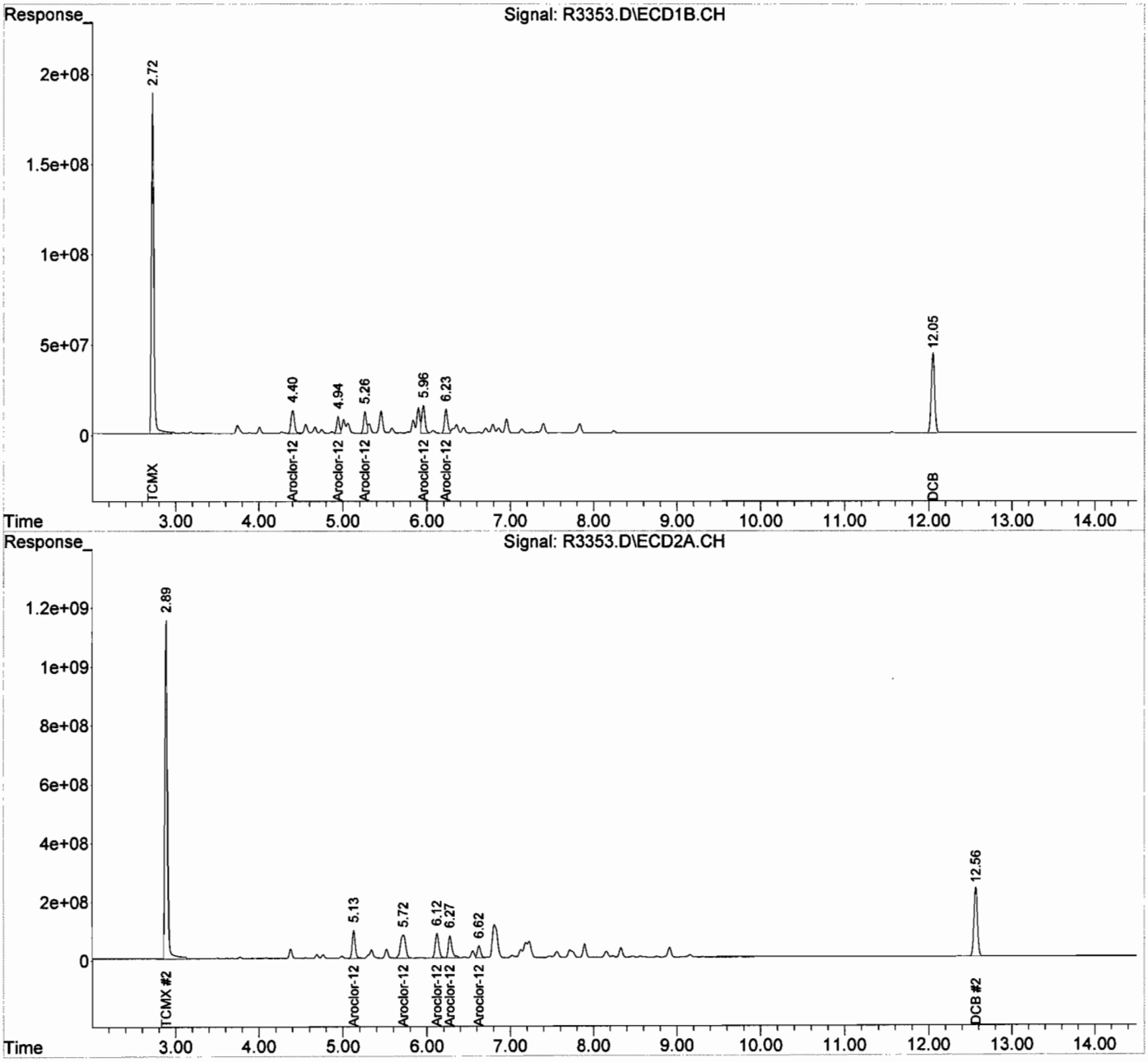
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3783.7E6	23537.5E6	230.177	222.946
Spiked Amount 200.000			Recovery	=	115.09%	111.47%
2) S DCB	12.05	12.57	1255.0E6	6861.3E6	221.601	216.351
Spiked Amount 200.000			Recovery	=	110.80%	108.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.40	5.13	369.8E6	2371.5E6	500.000	500.000
24) L6 Aroclor-1248 {2}	4.94	5.72	218.3E6	3466.5E6	500.000	500.000
25) L6 Aroclor-1248 {3}	5.26	6.12	285.0E6	2569.3E6	500.000	500.000
26) L6 Aroclor-1248 {4}	5.96	6.27	416.9E6	2367.3E6	500.000	500.000
27) L6 Aroclor-1248 {5}	6.23	6.62	348.6E6	1163.3E6	500.000	500.000
Sum Aroclor-1248			1638.6E6	11937.8E6	2500.000	2500.000
Average Aroclor-1248					500.000	500.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3353.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:48
Operator : JS
Sample : ICC_8082_1248_IAS_5161,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:41:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:40:50 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3354.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:06
Operator : JS
Sample : ICC_8082_1254_IAS_5162,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:49:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:49:22 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3685.2E6	22810.8E6	224.182	216.063
Spiked Amount 200.000			Recovery	=	112.09%	108.03%
2) S DCB	12.05	12.56	1121.7E6	6014.8E6	198.050	189.660
Spiked Amount 200.000			Recovery	=	99.03%	94.83%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.35	7.12	481.3E6	3149.9E6	500.000	500.000
29) L7 Aroclor-1254 {2}	6.79	7.71	304.1E6	2276.8E6	500.000	500.000
30) L7 Aroclor-1254 {3}	6.95	8.15	578.7E6	1705.7E6	500.000	500.000
31) L7 Aroclor-1254 {4}	7.39	8.33	606.9E6	2369.6E6	500.000	500.000
32) L7 Aroclor-1254 {5}	8.24	9.16	566.6E6	3415.5E6	500.000	500.000
Sum Aroclor-1254			2537.6E6	12917.5E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

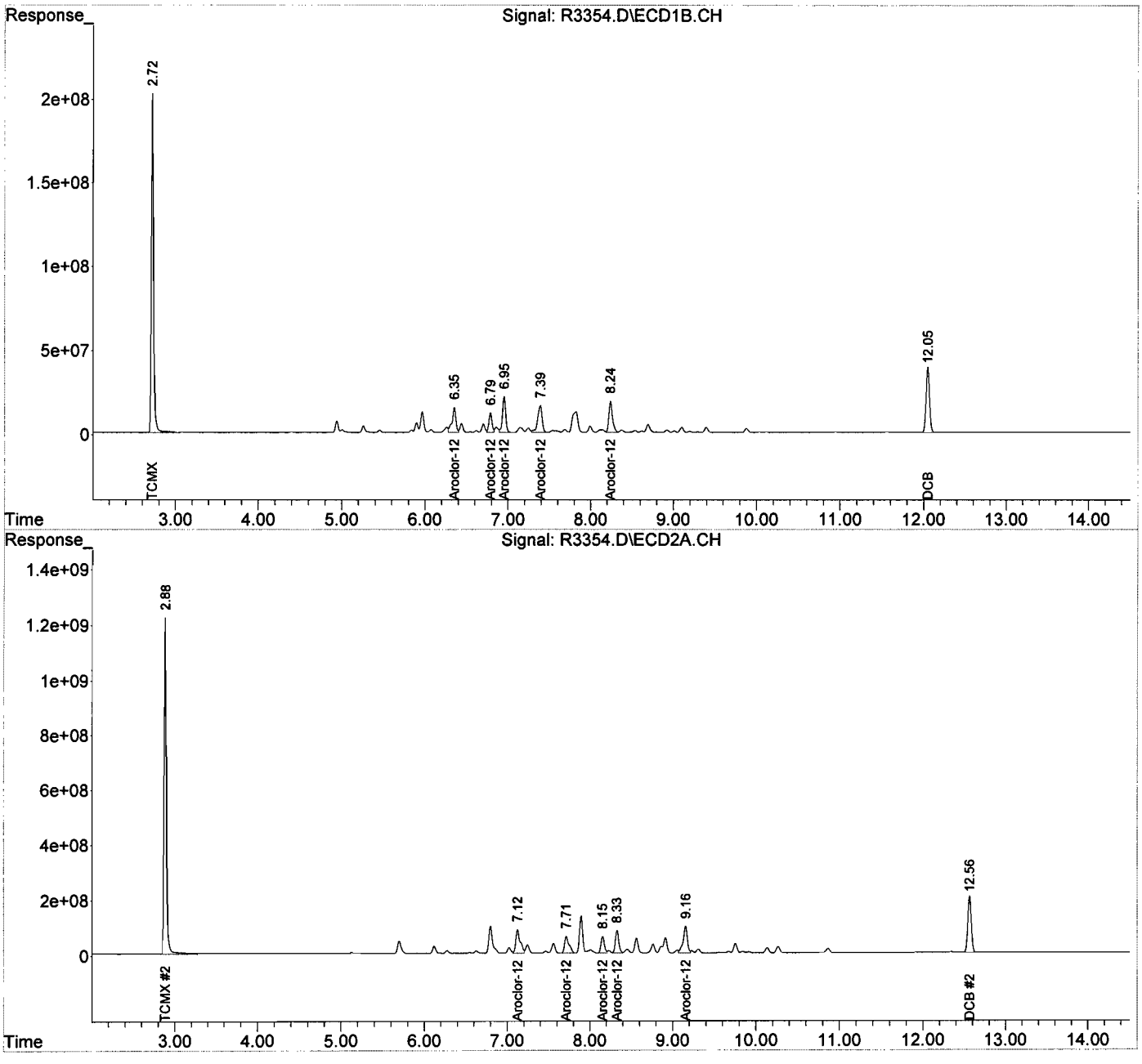
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3354.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:06
Operator : JS
Sample : ICC_8082_1254_IAS_5162,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:49:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:49:22 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3355.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:23
Operator : JS
Sample : ICC_8082_1262_IAS_5163,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:53:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:52:41 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3773.6E6	23398.2E6	229.559	221.627
Spiked Amount 200.000			Recovery	=	114.78%	110.81%
2) S DCB	12.05	12.57	1247.0E6	6717.5E6	220.185	211.817
Spiked Amount 200.000			Recovery	=	110.09%	105.91%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
38) L9 Aroclor-1262	8.53	9.76	553.1E6	2769.9E6	500.000	500.000
39) L9 Aroclor-1262 {2}	9.40	10.27	1060.5E6	6396.1E6	500.000	500.000
40) L9 Aroclor-1262 {3}	10.03	10.77	420.8E6	2202.3E6	500.000	500.000
41) L9 Aroclor-1262 {4}	10.12	10.86	441.4E6	4278.2E6	500.000	500.000
42) L9 Aroclor-1262 {5}	10.95	11.46	368.5E6	857.5E6	500.000	500.000
Sum Aroclor-1262			2844.2E6	16503.9E6	2500.000	2500.000
Average Aroclor-1262					500.000	500.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

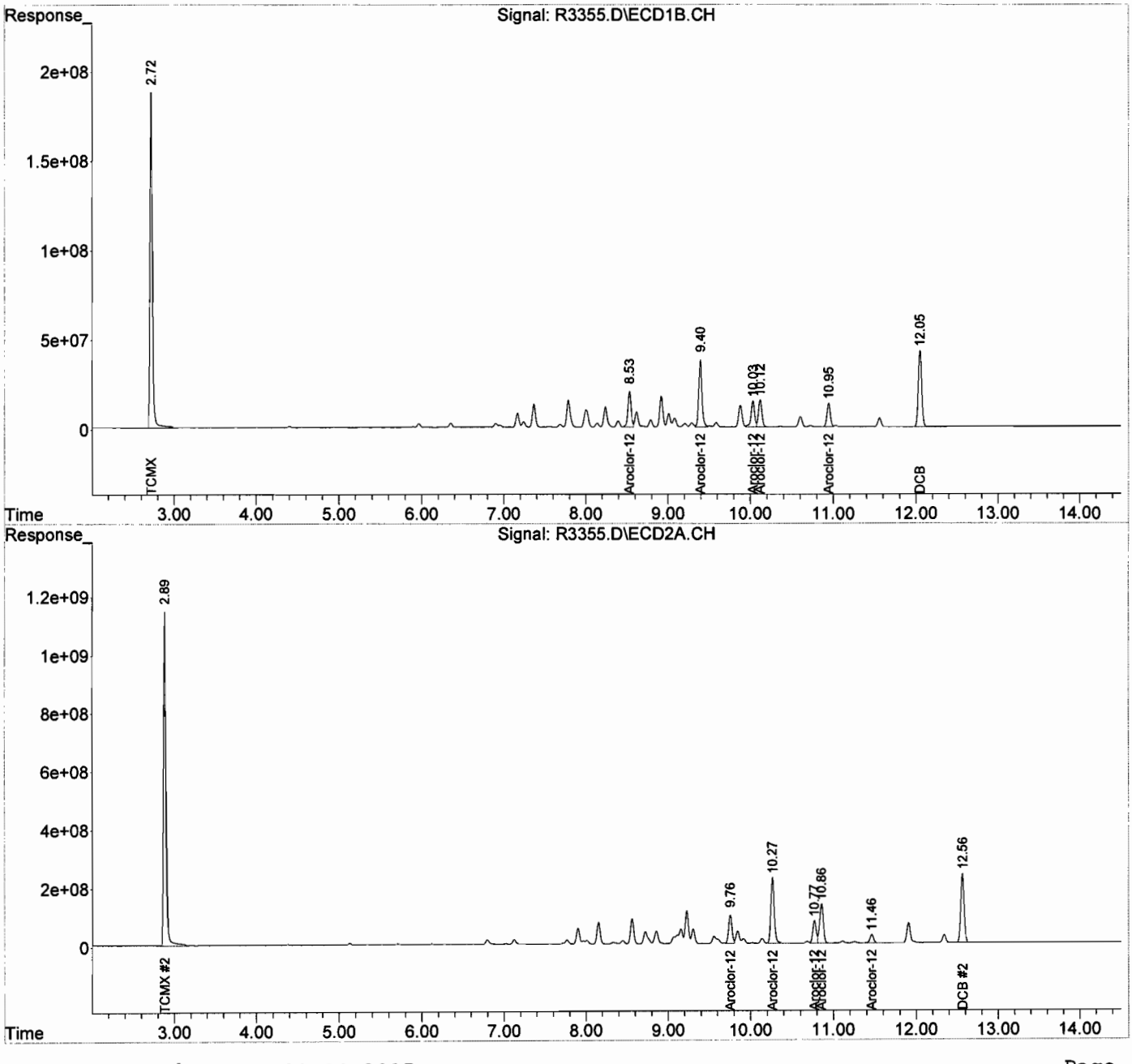
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3355.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:23
Operator : JS
Sample : ICC_8082_1262_IAS_5163,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:53:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:52:41 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3356.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:40
Operator : JS
Sample : ICC_8082_1268_IAS_5164,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:59:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:58:59 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3819.8E6	23594.3E6	232.374	223.484
Spiked Amount 200.000			Recovery	=	116.19%	111.74%
2) S DCB	12.05	12.57	1795.1E6	9715.8E6	316.951	306.358
Spiked Amount 200.000			Recovery	=	158.48%	153.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
43) L10 Aroclor-1268	10.03	10.77	1153.0E6	6248.1E6	500.000	500.000
44) L10 Aroclor-1268 {2}	10.12	10.85	1089.5E6	6061.9E6	500.000	500.000
45) L10 Aroclor-1268 {3}	10.59	11.11	925.7E6	5147.8E6	500.000	500.000
46) L10 Aroclor-1268 {4}	10.72	11.25	234.0E6	1326.9E6	500.000	500.000
47) L10 Aroclor-1268 {5}	11.56	12.34	2975.8E6	16395.9E6	500.000	500.000
Sum Aroclor-1268			6378.1E6	35180.7E6	2500.000	2500.000
Average Aroclor-1268					500.000	500.000

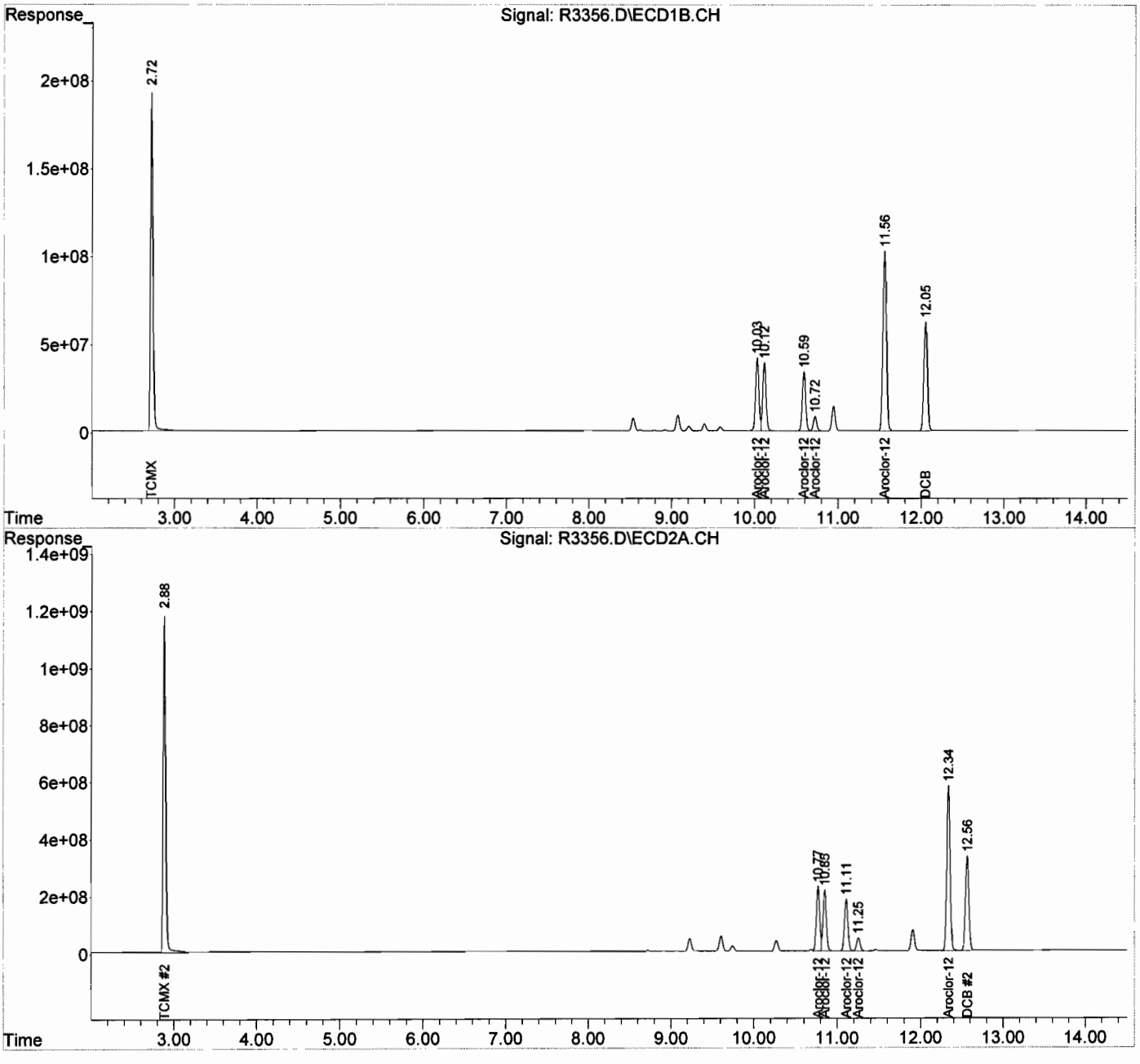
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3356.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:40
Operator : JS
Sample : ICC_8082_1268_IAS_5164,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:59:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:58:59 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-R

Data File: R3357.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	270069	7.72
Aroclor-1016 {2}	4.00	3.93	4.07	397550	364183	8.39
Aroclor-1016 {3}	4.55	4.48	4.62	512392	469991	8.27
Aroclor-1016 {4}	5.01	4.94	5.08	264908	239693	9.52
Aroclor-1016 {5}	5.45	5.38	5.52	407156	376327	7.57
Aroclor-1260	8.24	7.34	9.14	1112452	1085048	2.46
Aroclor-1260 {2}	8.92	8.02	9.82	670414	643902	3.95
Aroclor-1260 {3}	9.39	8.50	10.30	1578549	1562089	1.04
Aroclor-1260 {4}	9.88	8.98	10.78	776669	776165	0.06
Aroclor-1260 {5}	10.95	10.05	11.85	418737	410924	1.87

Data File: R3357.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	1703991	6.74
Aroclor-1016 {2}	4.38	4.31	4.45	3433340	3197251	6.88
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	7294642	10.41
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3239481	10.32
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2462681	5.29
Aroclor-1260	7.90	7.00	8.80	3176204	2971097	6.46
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4256667	10.02
Aroclor-1260 {3}	9.76	8.86	10.66	4476579	4226312	5.59
Aroclor-1260 {4}	10.27	9.37	11.17	9681850	9338424	3.55
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	6473558	4.81

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/19/2015 **Instrument ID:** GC-R

Data File: R3399.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	294331	0.57
Aroclor-1016 {2}	4.00	3.93	4.07	397550	404377	1.72
Aroclor-1016 {3}	4.55	4.48	4.62	512392	510390	0.39
Aroclor-1016 {4}	5.01	4.94	5.08	264908	257129	2.94
Aroclor-1016 {5}	5.45	5.38	5.52	407156	409564	0.59
Aroclor-1260	8.24	7.34	9.14	1112452	1105990	0.58
Aroclor-1260 {2}	8.92	8.02	9.82	670414	639187	4.66
Aroclor-1260 {3}	9.40	8.50	10.30	1578549	1544782	2.14
Aroclor-1260 {4}	9.88	8.98	10.78	776669	756872	2.55
Aroclor-1260 {5}	10.95	10.05	11.85	418737	382023	8.77

Data File: R3399.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	2008521	9.93
Aroclor-1016 {2}	4.37	4.31	4.45	3433340	3199646	6.81
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	8022969	1.46
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3700059	2.43
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2363474	9.11
Aroclor-1260	7.90	7.00	8.80	3176204	3148109	0.88
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4544620	3.93
Aroclor-1260 {3}	9.76	8.86	10.66	4476579	3786900	15.41
Aroclor-1260 {4}	10.27	9.37	11.17	9681850	9259155	4.37
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	6606832	2.85

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/19/2015 **Instrument ID:** GC-R

Data File: R3415.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	294733	0.71
Aroclor-1016 {2}	4.00	3.93	4.07	397550	398023	0.12
Aroclor-1016 {3}	4.55	4.48	4.62	512392	501786	2.07
Aroclor-1016 {4}	5.01	4.94	5.08	264908	255465	3.56
Aroclor-1016 {5}	5.45	5.38	5.52	407156	404931	0.55
Aroclor-1260	8.24	7.34	9.14	1112452	1090621	1.96
Aroclor-1260 {2}	8.92	8.02	9.82	670414	633185	5.55
Aroclor-1260 {3}	9.40	8.50	10.30	1578549	1535347	2.74
Aroclor-1260 {4}	9.88	8.98	10.78	776669	753173	3.03
Aroclor-1260 {5}	10.95	10.05	11.85	418737	411825	1.65

Data File: R3415.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	1856529	1.61
Aroclor-1016 {2}	4.37	4.31	4.45	3433340	3005528	12.46
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	7594977	6.72
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3346366	7.36
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2138775	17.75
Aroclor-1260	7.90	7.00	8.80	3176204	2850660	10.25
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4102384	13.28
Aroclor-1260 {3}	9.75	8.86	10.66	4476579	3660915	18.22
Aroclor-1260 {4}	10.26	9.37	11.17	9681850	8728330	9.85
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	5970371	12.21

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3357.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:58
Operator : JS
Sample : ICV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 19 14:14:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3252.8E6	20230.5E6	197.877	191.623
Spiked Amount 200.000			Recovery	=	98.94%	95.81%
2) S DCB	12.05	12.57	1119.5E6	5955.0E6	197.664	187.773
Spiked Amount 200.000			Recovery	=	98.83%	93.89%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	135.0E6	852.0E6	461.408	466.296
4) L2 Aroclor-1016 {2}	4.00	4.38	182.1E6	1598.6E6	458.034	465.618
5) L2 Aroclor-1016 {3}	4.55	5.13	235.0E6	3647.3E6	458.625	447.959
6) L2 Aroclor-1016 {4}	5.01	5.34	119.8E6	1619.7E6	452.408	448.393
7) L2 Aroclor-1016 {5}	5.45	5.52	188.2E6	1231.3E6	462.141	473.538
Sum Aroclor-1016			860.1E6	8949.0E6	2292.616	2301.804
Average Aroclor-1016					458.523	460.361
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	542.5E6	1485.5E6	487.683	467.712
34) L8 Aroclor-1260 {2}	8.92	8.15	322.0E6	2128.3E6	480.227	449.925
35) L8 Aroclor-1260 {3}	9.39	9.76	781.0E6	2113.2E6	494.786	472.047
36) L8 Aroclor-1260 {4}	9.88	10.27	388.1E6	4669.2E6	499.675	482.264
37) L8 Aroclor-1260 {5}	10.95	10.86	205.5E6	3236.8E6	490.670	475.954
Sum Aroclor-1260			2239.1E6	13633.0E6	2453.042	2347.902
Average Aroclor-1260					490.608	469.580
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3357.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:58
Operator : JS
Sample : ICV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 19 14:14:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3544.9E6	22035.3E6	215.651	208.717
Spiked Amount 200.000			Recovery	=	107.83%	104.36%
2) S DCB	12.05	12.56	991.3E6	5761.4E6	175.038	181.670
Spiked Amount 200.000			Recovery	=	87.52%	90.83%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	147.2E6	1004.3E6	502.859	549.630
4) L2 Aroclor-1016 {2}	4.00	4.37	202.2E6	1599.8E6	508.585	465.967
5) L2 Aroclor-1016 {3}	4.55	5.13	255.2E6	4011.5E6	498.046	492.686
6) L2 Aroclor-1016 {4}	5.01	5.34	128.6E6	1850.0E6	485.318	512.144
7) L2 Aroclor-1016 {5}	5.45	5.52	204.8E6	1181.7E6	502.956	454.461
Sum Aroclor-1016			937.9E6	9647.3E6	2497.765	2474.888
Average Aroclor-1016					499.553	494.978
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	553.0E6	1574.1E6	497.096	495.577
34) L8 Aroclor-1260 {2}	8.92	8.15	319.6E6	2272.3E6	476.710	480.361
35) L8 Aroclor-1260 {3}	9.40	9.76	772.4E6	1893.5E6	489.304	422.968
36) L8 Aroclor-1260 {4}	9.88	10.27	378.4E6	4629.6E6	487.255	478.171
37) L8 Aroclor-1260 {5}	10.95	10.86	191.0E6	3303.4E6	456.161	485.753
Sum Aroclor-1260			2214.4E6	13672.8E6	2406.526	2362.830
Average Aroclor-1260					481.305	472.566
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

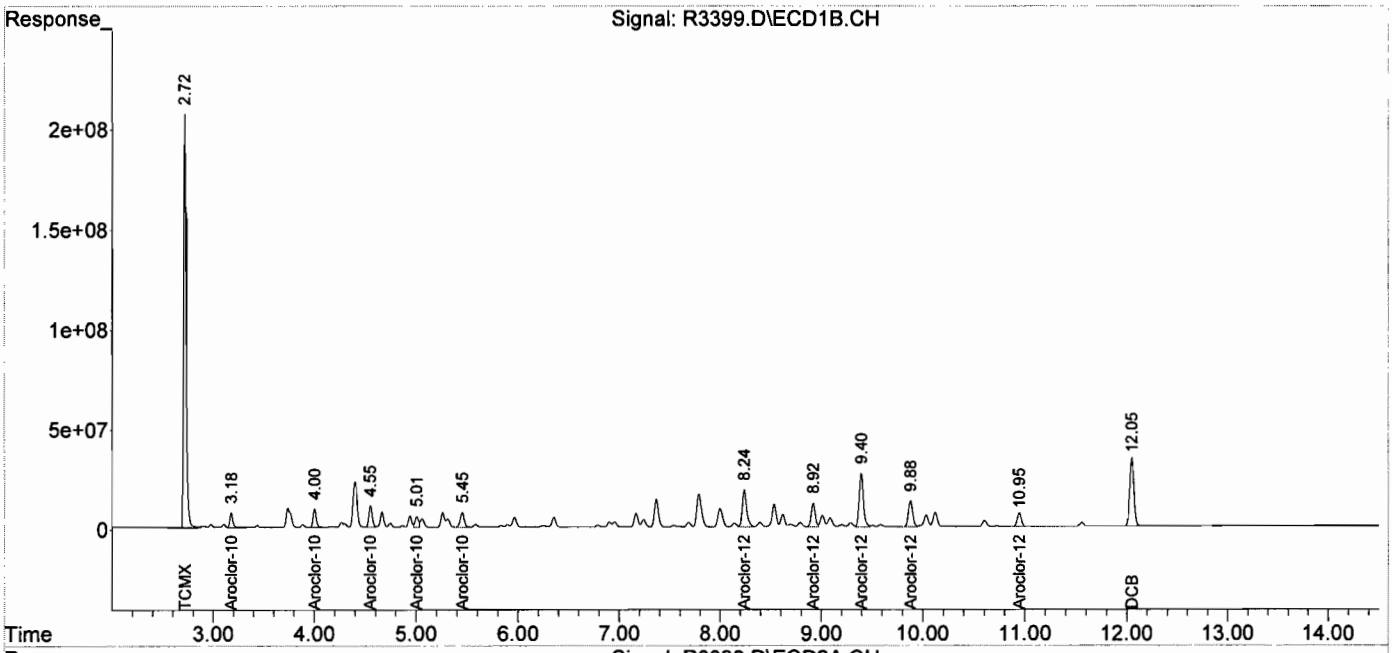
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

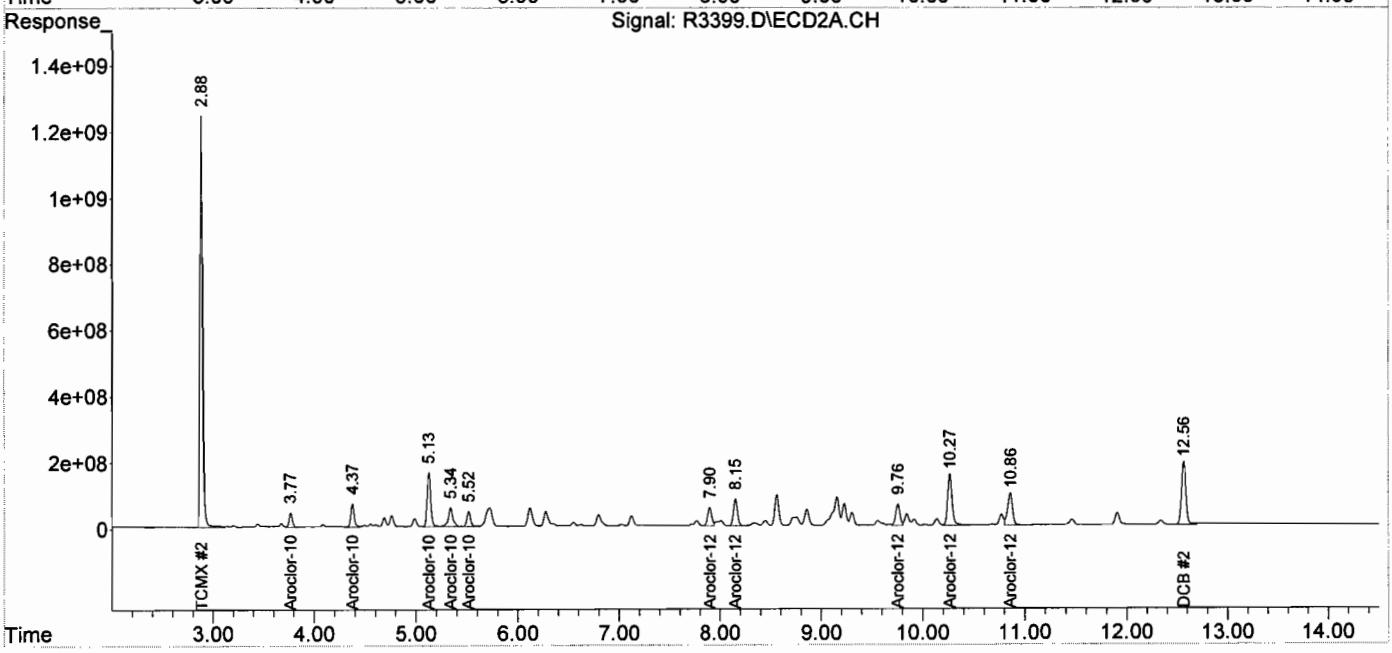
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3546.5E6	21551.6E6	215.744	204.136
Spiked Amount 200.000			Recovery	=	107.87%	102.07%
2) S DCB	12.05	12.56	1090.8E6	5280.3E6	192.603	166.499
Spiked Amount 200.000			Recovery	=	96.30%	83.25%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	147.4E6	928.3E6	503.546	508.038
4) L2 Aroclor-1016 {2}	4.00	4.37	199.0E6	1502.8E6	500.594	437.697
5) L2 Aroclor-1016 {3}	4.55	5.13	250.9E6	3797.5E6	489.651	466.403
6) L2 Aroclor-1016 {4}	5.01	5.34	127.7E6	1673.2E6	482.177	463.188
7) L2 Aroclor-1016 {5}	5.45	5.52	202.5E6	1069.4E6	497.267	411.255
Sum Aroclor-1016			927.5E6	8971.1E6	2473.235	2286.581
Average Aroclor-1016					494.647	457.316
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	545.3E6	1425.3E6	490.188	448.753
34) L8 Aroclor-1260 {2}	8.92	8.15	316.6E6	2051.2E6	472.234	433.617
35) L8 Aroclor-1260 {3}	9.40	9.75	767.7E6	1830.5E6	486.316	408.896m
36) L8 Aroclor-1260 {4}	9.88	10.26	376.6E6	4364.2E6	484.874	450.757
37) L8 Aroclor-1260 {5}	10.95	10.86	205.9E6	2985.2E6	491.746	438.958
Sum Aroclor-1260			2212.1E6	12656.3E6	2425.358	2180.982
Average Aroclor-1260					485.072	436.196
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

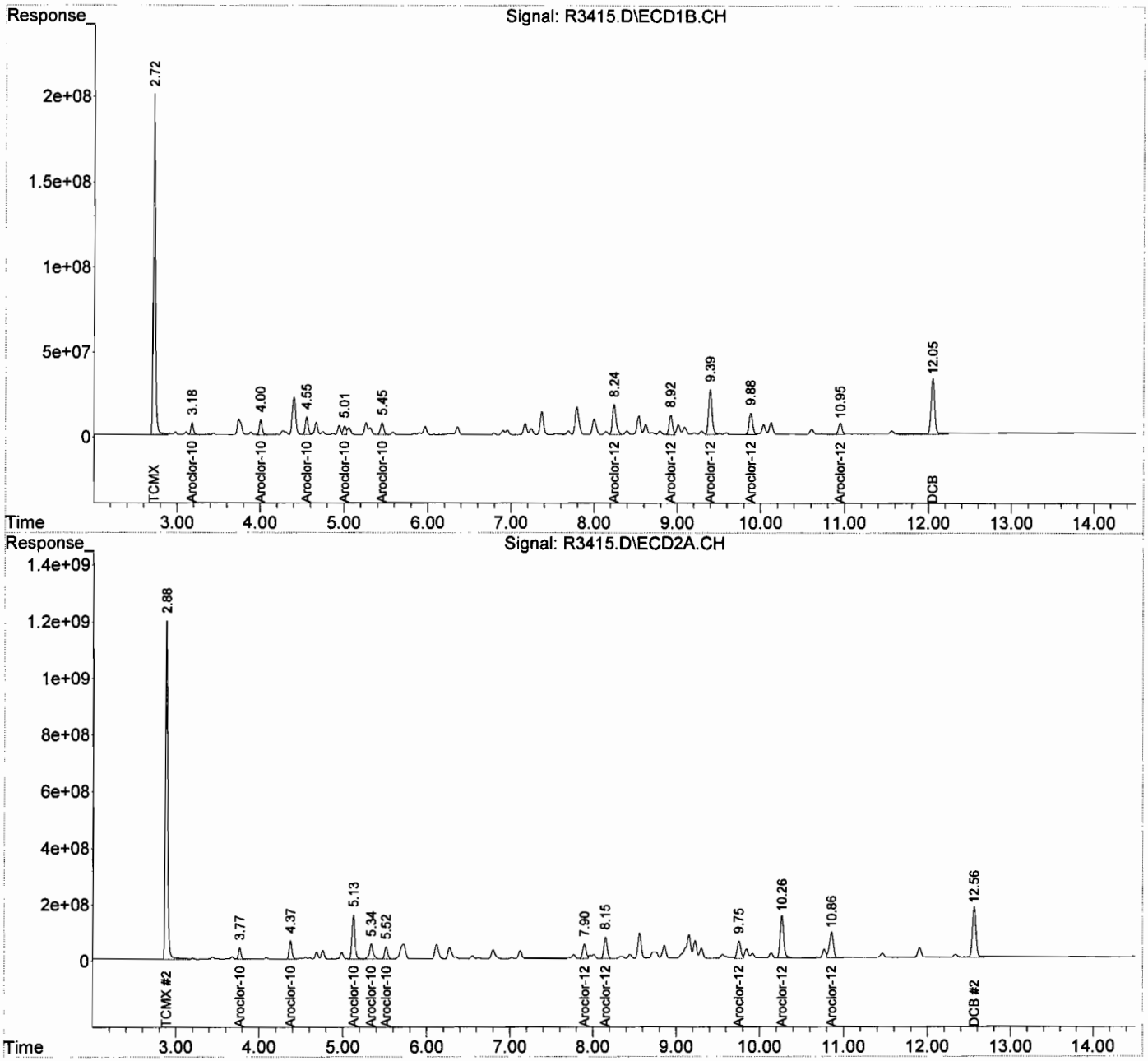
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150219-06
Client ID: PCB
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015
Data file: R3400.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3400.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:03
Operator : JS
Sample : PCB,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:10:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3480.7E6	21765.1E6	211.741	206.158
Spiked Amount 200.000			Recovery	=	105.87%	103.08%
2) S DCB	12.05	12.57	1039.2E6	5852.5E6	183.493	184.541
Spiked Amount 200.000			Recovery	=	91.75%	92.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

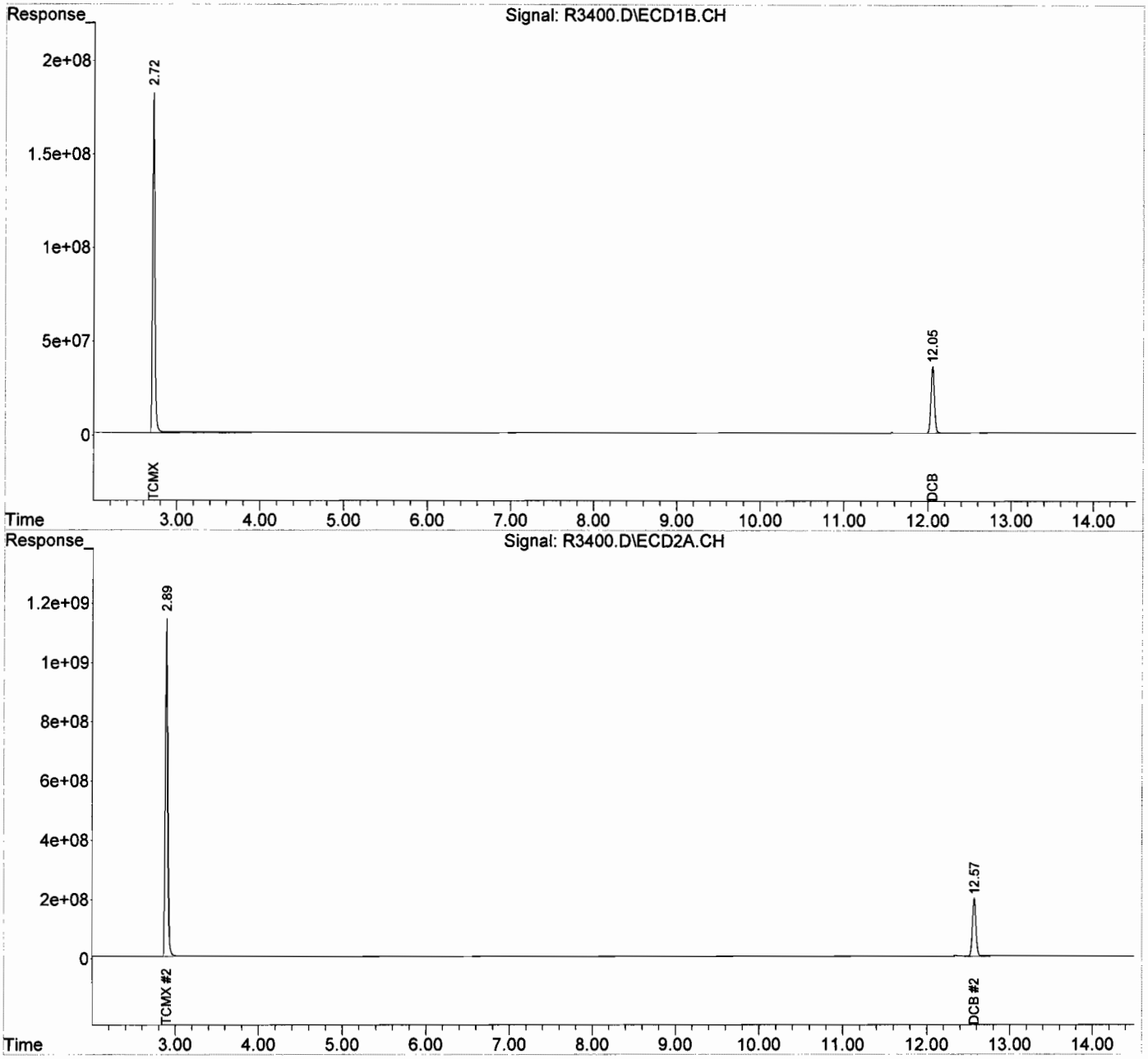
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3400.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:03
Operator : JS
Sample : PCB,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:10:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3475.9E6	21755.2E6	211.454	206.065
Spiked Amount 200.000			Recovery	=	105.73%	103.03%
2) S DCB	12.05	12.56	1061.1E6	5879.5E6	187.360	185.394
Spiked Amount 200.000			Recovery	=	93.68%	92.70%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	138.2E6	1021.0E6	472.170	558.791
4) L2 Aroclor-1016 {2}	4.00	4.37	187.5E6	1755.7E6	471.532	511.362
5) L2 Aroclor-1016 {3}	4.55	5.13	243.0E6	3933.5E6	474.261	483.107
6) L2 Aroclor-1016 {4}	5.00	5.34	122.9E6	1842.6E6	464.042	510.101
7) L2 Aroclor-1016 {5}	5.45	5.51	192.8E6	1362.1E6	473.504	523.821
Sum Aroclor-1016			884.4E6	9914.9E6	2355.510	2587.181
Average Aroclor-1016					471.102	517.436
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	521.9E6	1547.4E6	469.178	487.195
34) L8 Aroclor-1260 {2}	8.92	8.15	313.0E6	2216.5E6	466.879	468.569
35) L8 Aroclor-1260 {3}	9.39	9.76	757.0E6	2097.5E6	479.567	468.555
36) L8 Aroclor-1260 {4}	9.88	10.27	372.5E6	4430.4E6	479.604	457.594
37) L8 Aroclor-1260 {5}	10.95	10.86	192.2E6	3216.7E6	458.994	472.995
Sum Aroclor-1260			2156.7E6	13508.5E6	2354.222	2354.908
Average Aroclor-1260					470.844	470.982
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

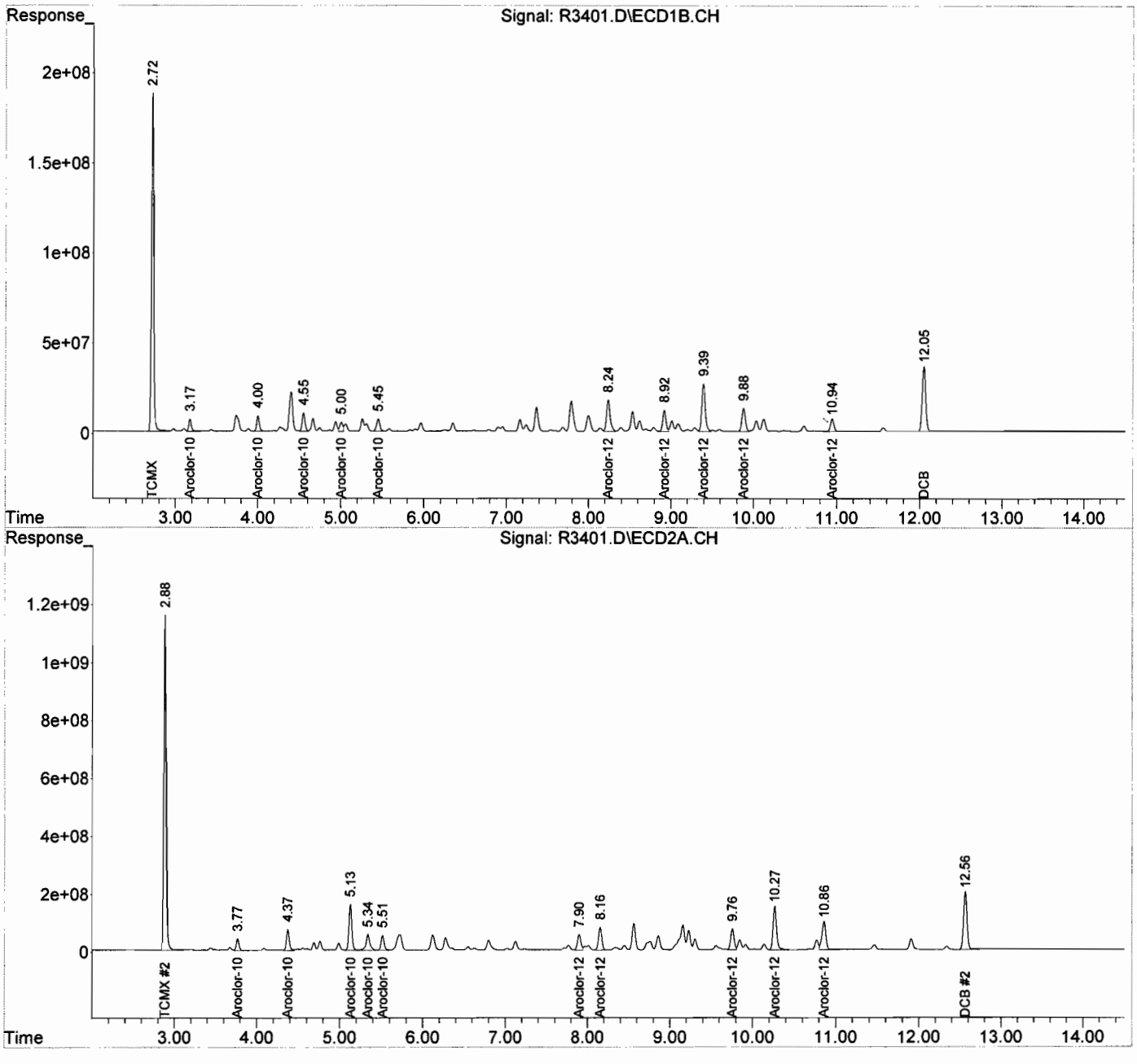
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.72	2.88	1614.7E6	10170.0E6	98.225	96.330	
Spiked Amount 200.000			Recovery	=	49.11%	48.16%	
2) S DCB	12.05	12.57	529.8E6	2918.2E6	93.538	92.017	
Spiked Amount 200.000			Recovery	=	46.77%	46.01%	
Target Compounds							
3) L2 Aroclor-1016	3.18	3.77	68599869	513.8E6	234.403	281.226	
4) L2 Aroclor-1016 {2}	4.00	4.37	98408375	942.1E6	247.537	274.384	
5) L2 Aroclor-1016 {3}	4.55	5.13	127.4E6	2021.2E6	248.553	248.247	
6) L2 Aroclor-1016 {4}	5.00	5.34	62623228	990.7E6	236.396	274.264	
7) L2 Aroclor-1016 {5}	5.45	5.51	96024407	726.1E6	235.842	279.248	
Sum Aroclor-1016			453.0E6	5194.0E6	1202.730	1357.368	
Average Aroclor-1016					240.546	271.474	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.24	7.89	252.7E6	876.3E6	227.192	275.889	
34) L8 Aroclor-1260 {2}	8.92	8.15	138.2E6	1108.4E6	206.167	234.310	
35) L8 Aroclor-1260 {3}	9.39	9.76	388.5E6	1031.8E6	246.127	230.486	
36) L8 Aroclor-1260 {4}	9.88	10.27	299.0E6	2035.9E6	384.978	210.280	#
37) L8 Aroclor-1260 {5}	10.95	10.86	108.0E6	1800.3E6	257.819m	264.729	
Sum Aroclor-1260			1186.4E6	6852.7E6	1322.283	1215.695	
Average Aroclor-1260					264.457	243.139	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

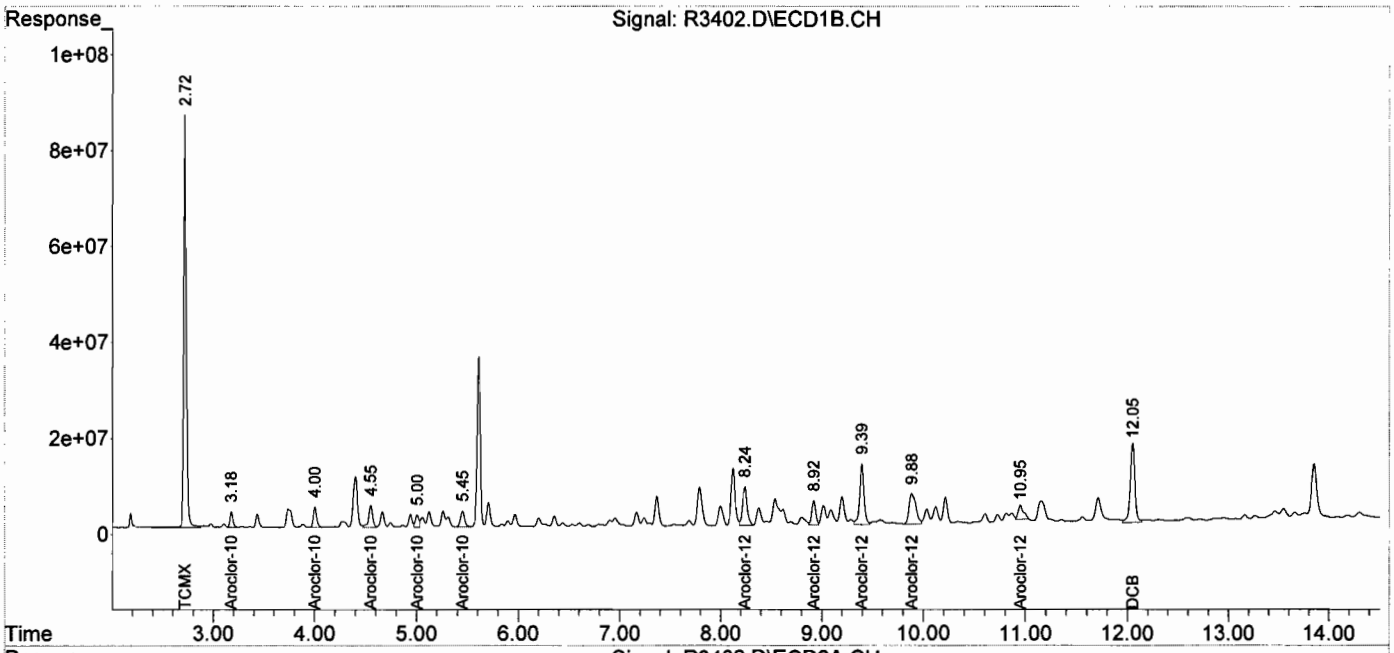
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

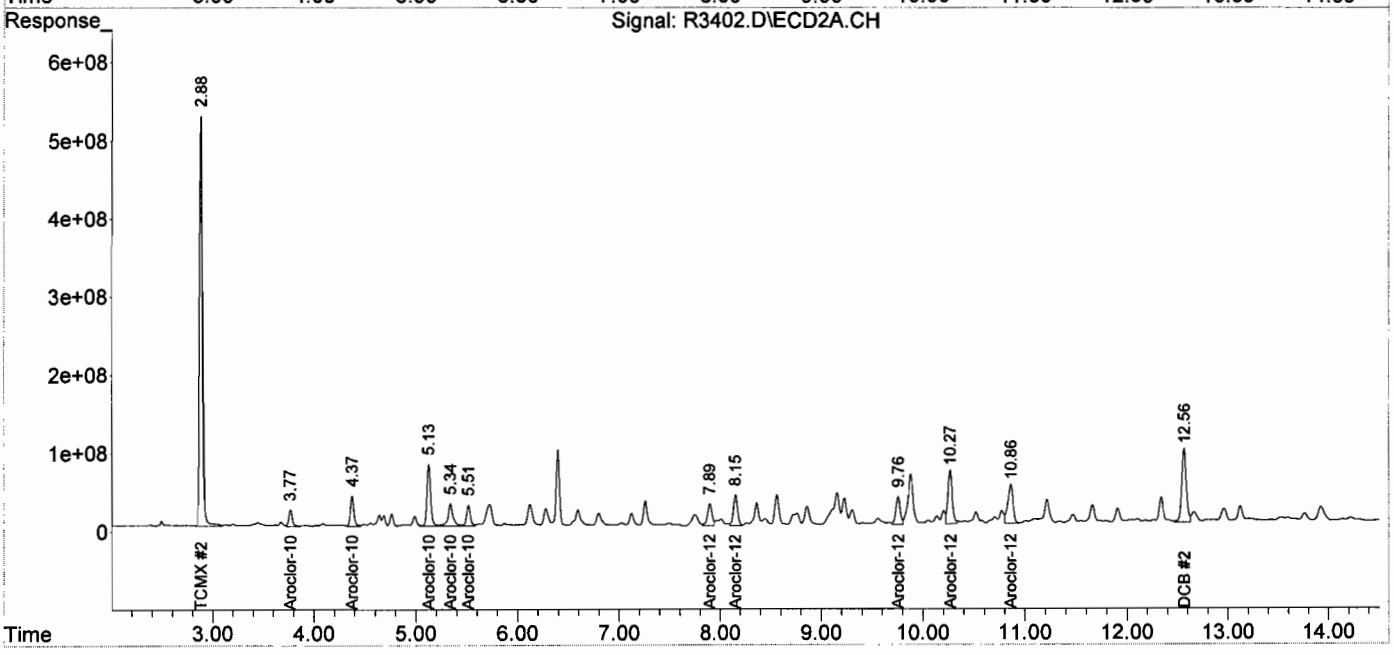
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	1633.7E6	10258.1E6	99.384	97.164
Spiked Amount 200.000			Recovery	=	49.69%	48.58%
2) S DCB	12.05	12.57	588.8E6	4423.1E6	103.970	139.470m#
Spiked Amount 200.000			Recovery	=	51.99%	69.73%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	67755579	488.7E6	231.518	267.449
4) L2 Aroclor-1016 {2}	4.00	4.37	97251112	917.9E6	244.626	267.346
5) L2 Aroclor-1016 {3}	4.55	5.13	129.3E6	1942.5E6	252.440	238.581
6) L2 Aroclor-1016 {4}	5.01	5.34	60487056	930.8E6	228.332	257.660
7) L2 Aroclor-1016 {5}	5.45	5.51	93440509	687.5E6	229.495	264.376
Sum Aroclor-1016			448.3E6	4967.3E6	1186.412	1295.412
Average Aroclor-1016					237.282	259.082
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	257.1E6	809.2E6	231.134	254.773
34) L8 Aroclor-1260 {2}	8.92	8.15	142.5E6	1079.2E6	212.570	228.141
35) L8 Aroclor-1260 {3}	9.39	9.76	399.7E6	1067.7E6	253.205	238.501
36) L8 Aroclor-1260 {4}	9.91	10.27	347.7E6	1943.7E6	447.702	200.761 #
37) L8 Aroclor-1260 {5}	10.95	10.86	126.5E6	1979.8E6	302.107m	291.128
Sum Aroclor-1260			1273.6E6	6879.7E6	1446.718	1213.305
Average Aroclor-1260					289.344	242.661
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
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Response via : Initial Calibration
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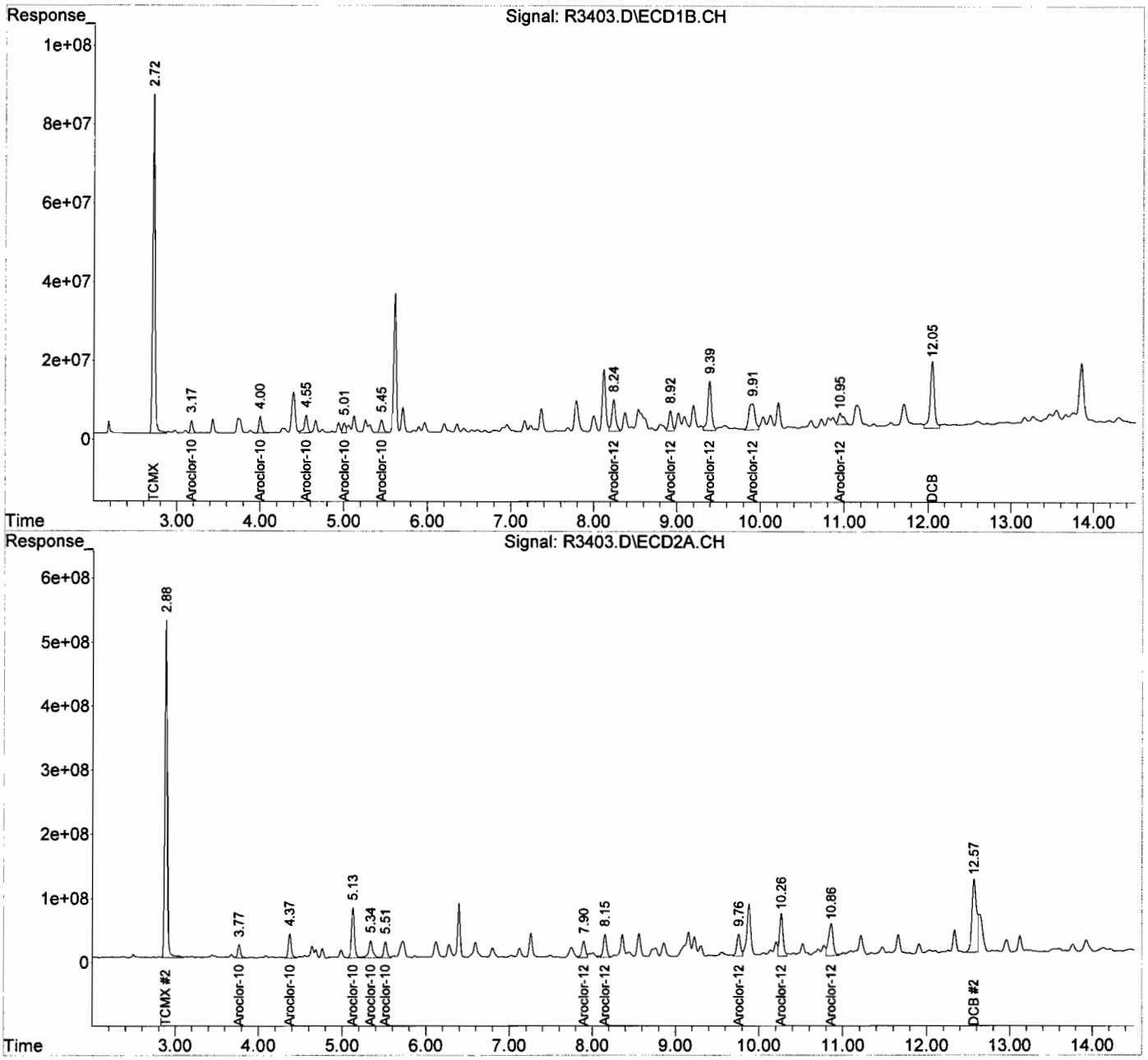
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PCB RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Soil)

Extraction Date/Time: 02/19/2015 14:29

Batch ID: **150219-06**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-06	PCB/Pest	5.00	20	40	1			
LCSS150219-06	PCB	5	20	40	1	100		
01273-001MS	PCB	5.27	20	40	4	100		R-48
01273-001MSD	PCB	5.60	20	40	4	100		R-48
LCSS150219-06	Pesticides	5.00	20	40	1		100	
01273-001MS	Pesticides	5.09	20	40	4		100	R-48
01273-001MSD	Pesticides	5.93	20	40	4		100	R-48

Standard Info	Surrogate IAS #
Solvent	RA#74-17/RA#74-13
Surrogate	IAS#5134
SPK 1	IAS#5175
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	PCB/Pest	5.31	20	40	4	10.6	R-48	01273-001MS / 150219-06	01273-001MS / 150219-06
2	01264-001	PCB	5.10	20	40	3	22.8		01273-001MS / 150219-06	
3	01264-004	PCB	5.66	20	40	4	15.5		01273-001MS / 150219-06	
4	01264-008	PCB	5.20	20	40	3	15.0		01273-001MS / 150219-06	
5	01264-012	PCB	5.27	20	40	4	15.3		01273-001MS / 150219-06	
6	01264-016	PCB	5.41	20	40	4	16.4		01273-001MS / 150219-06	
7	01264-036	PCB	5.23	20	40	3	16.2		01273-001MS / 150219-06	
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/19/2015 14:29
Weighed	Archie	02/19/2015 14:47
Surrogated	Archie	02/19/2015 14:48
Filtered	Archie	02/19/2015 16:39
Transferred	Archie	02/19/2015 16:39
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

PCB

DATE	2/18/2015 0:00	**Extra. Batch**	**150217-15**	BS	**Soil**
INSTRUMENT	**R**		**150218-07**	BS	Soil
METHOD	**RPCB0218**				
SYS METHOD	**8082A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	R3343		HEXANE									
2	99	R3344		ISOOCTANE									
3	1	R3345		ICC_8082_L1_IAS_5141,0.01_PPM									
4	2	R3346		ICC_8082_L2_IAS_5140,0.05_PPM									
5	3	R3347		ICC_8082_L3_IAS_5139,0.5_PPM									
6	4	R3348		ICC_8082_L4_IAS_5138,1_PPM									
7	5	R3349		ICC_8082_L5_IAS_5137,2_PPM									
8	6	R3350		ICC_8082_1221_IAS_5158,0.5_PPM									
9	7	R3351		ICC_8082_1232_IAS_5159,0.5_PPM									
10	8	R3352		ICC_8082_1242_IAS_5160,0.5_PPM									
11	9	R3353		ICC_8082_1248_IAS_5161,0.5_PPM									
12	10	R3354		ICC_8082_1254_IAS_5162,0.5_PPM									
13	11	R3355		ICC_8082_1262_IAS_5163,0.5_PPM									
14	12	R3356		ICC_8082_1268_IAS_5164,0.5_PPM									
15	13	R3357		ICV_8082_C_IAS_5143,0.5_PPM									

LABORATORY CHRONICLE - GC

PCB

DATE	2/19/2015 0:00	**Extra. Batch**	**150218-12**	BA	**Aqueous**
INSTRUMENT	**R**		**150218-08**	BS	Soil (Sonic)
METHOD	**RPCB0218**		**150219-06**	BS	Soil
SYS METHOD	**8082A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

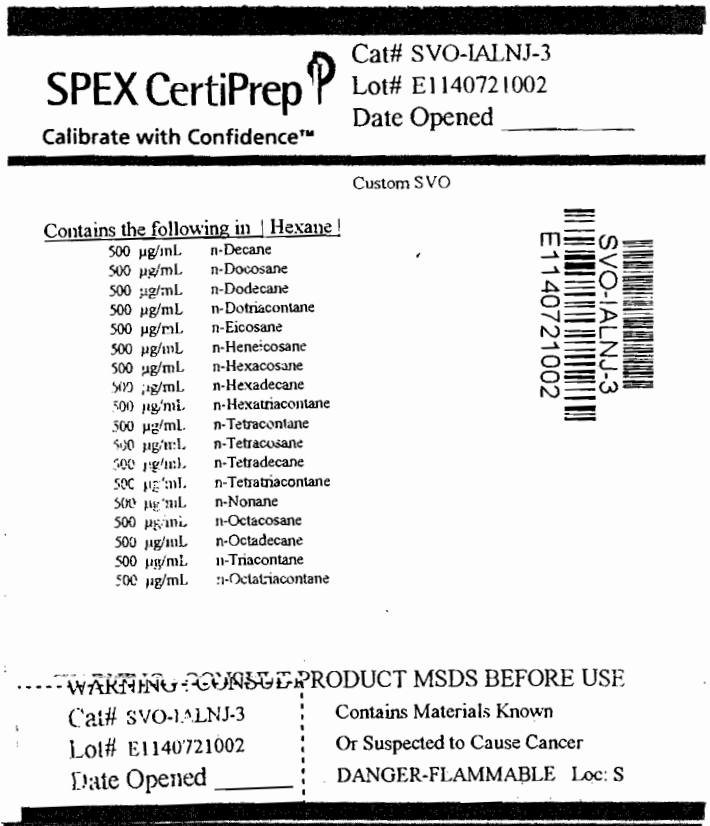
	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
20	1	R3399	CCV_8082_C_IAS_5143,0.5_PPM			1							
21	19	R3400		BLKS150219-06		1	5.00	20	S			2/19/15	0
22	20	R3401		LCSS150219-06		1	5	20	S			2/19/15	0
23	21	R3402		01273-001MS		2	5.27	20	S			2/19/15	10.6
24	22	R3403		01273-001MSD		2	5.60	20	S			2/19/15	10.6
25	23	R3404		01273	1	2	5.31	20	S	2/18/15	2/19/15	2/19/15	10.6
26	100	R3405		HEXANE		1							
27	100	R3406		HEXANE		1							
28	24	R3407		01264	1	1	5.10	20	S	2/18/15	2/19/15	2/19/15	22.8
29	25	R3408		01264	4	1	5.66	20	S	2/18/15	2/19/15	2/19/15	15.5
30	26	R3409		01264	8	1	5.20	20	S	2/18/15	2/19/15	2/19/15	15.0
31	27	R3410		01264	12	1	5.27	20	S	2/18/15	2/19/15	2/19/15	15.3
32	28	R3411		01264	16	1	5.41	20	S	2/18/15	2/19/15	2/19/15	16.4
33	29	R3412		01264	36	1	5.23	20	S	2/18/15	2/19/15	2/19/15	16.2
34	100	R3413		HEXANE		1							
35	100	R3414		HEXANE		1							
36	1	R3415	CCV_8082_C_IAS_5143,0.5_PPM			1							

STANDARD IAS#	STANDARD NAME:	ALI SPIKE		
5172				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/16/14	SPEX	SVO-IAL NJ-3	E1140721002	500 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/16/15	—			500PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	ARO SPIKE		
5173				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/16/14	SPEX	SVO-IAL NJ-4	E1140718009	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/16/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB Spike Stock (1016/1260)		
5174				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/31/14	CHEM SERVICE	1016 S11086J4 1260 S11092J4	254 0100 2302000	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	10ml of 1016 + 10ml of 1260			500 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5175				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/31/14	IAS # 5174	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
7/30/24	HEXANE		138465	



SPEX CertiPrep
Calibrate with Confidence™

Cat# SVO-IALNJ-3
Lot# E1140721002
Date Opened _____

Custom SVO

Contains the following in | Hexane |

500 µg/mL	n-Decane
500 µg/mL	n-Docosane
500 µg/mL	n-Dodecane
500 µg/mL	n-Dotriacontane
500 µg/mL	n-Eicosane
500 µg/mL	n-Heneicosane
500 µg/mL	n-Hexacosane
500 µg/mL	n-Hexadecane
500 µg/mL	n-Hexatriacontane
500 µg/mL	n-Tetracontane
500 µg/mL	n-Tetracosane
500 µg/mL	n-Tetradecane
500 µg/mL	n-Tetratriacontane
500 µg/mL	n-Nonane
500 µg/mL	n-Octacosane
500 µg/mL	n-Octadecane
500 µg/mL	n-Triacontane
500 µg/mL	n-Octatriacontane

SVO-IALNJ-3
E1140721002

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Cat# SVO-IALNJ-3
Lot# E1140721002
Date Opened _____

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: S

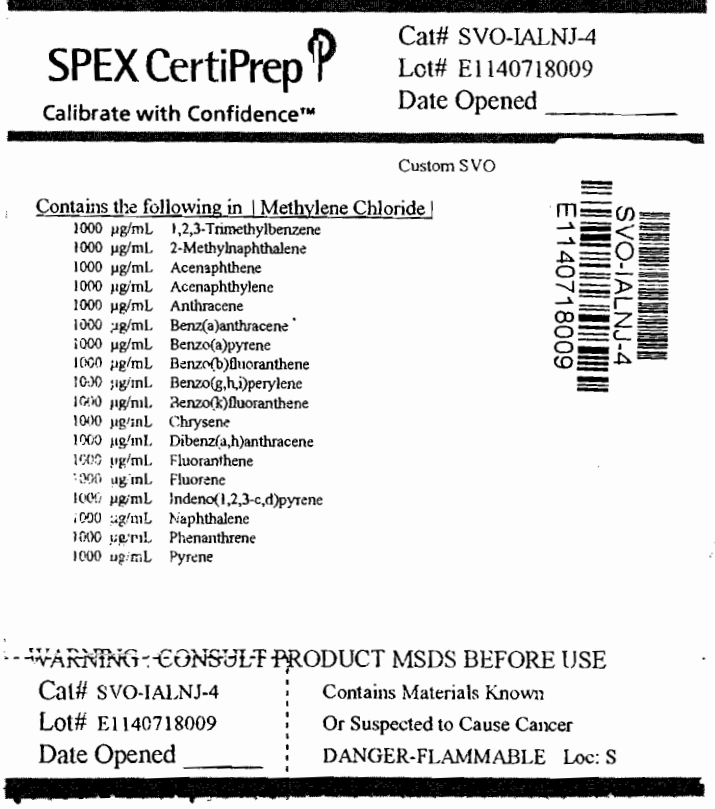
S-11086J4-5ML Exp 4/30/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 2540100

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD



SPEX CertiPrep
Calibrate with Confidence™

Cat# SVO-IALNJ-4
Lot# E1140718009
Date Opened _____

Custom SVO

Contains the following in | Methylene Chloride |

1000 µg/mL	1,2,3-Trimethylbenzene
1000 µg/mL	2-Methylnaphthalene
1000 µg/mL	Acenaphthene
1000 µg/mL	Acenaphthylene
1000 µg/mL	Anthracene
1000 µg/mL	Benz(a)anthracene
1000 µg/mL	Benzo(a)pyrene
1000 µg/mL	Benzo(b)fluoranthene
1000 µg/mL	Benzo(g,h,i)perylene
1000 µg/mL	Benzo(k)fluoranthene
1000 µg/mL	Chrysene
1000 µg/mL	Dibenz(a,h)anthracene
1000 µg/mL	Fluoranthene
1000 µg/mL	Fluorene
1000 µg/mL	Indeno(1,2,3-c,d)pyrene
1000 µg/mL	Naphthalene
1000 µg/mL	Phenanthrene
1000 µg/mL	Pyrene

SVO-IALNJ-4
E1140718009

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Cat# SVO-IALNJ-4
Lot# E1140718009
Date Opened _____

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: S

S-11092J4-5ML Exp 12/31/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution

Lot: 2302000

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

S-10542B3-5ML Exp 9/30/2017

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot:3168100

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 9/30/2017

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot:3168100

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

BZ-209J4-5ML Exp 11/30/2016

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution

Lot: 2188800

1000ug/ml In Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

NOTEBOOK INSERT LABEL

Aroclor 1016 **48097**
Lot: XA10671V EXP: OCT/2017 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

SUPELCO
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NOTEBOOK INSERT LABEL

Aroclor 1260 **4-4809**
Lot: LC02622 EXP: AUG/2016 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
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STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10542B3 DCB B2-20924	3168100 2158800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ml of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock Chml of IAS#5135 + 400 µl of SURR. (IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
5137				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS #5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:5			2 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V59-10	

STANDARD IAS#	STANDARD NAME:	PCB L4 (1016/1260)		
5138				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10			1 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB L3 (1016/1260)		
5139				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:20			0.5 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
5140				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5136 33	—	—	0.5 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10			0.05 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB98893 EXP: MAY/2016 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

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STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
5140				
STD.PREP.DATE	Co.NAME 33	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5136	—	—	0.5 PPM + SURRO.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:50			0.01 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB HORIBA STANDARD (SECOND SOURCE)		
5142				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS #4978	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/30/15	1:10 (1ML of ~~#4978 + 1016 1ML 1260~~ IAS #5134 Dual SURROG.) → 10ML ISOOCTANE			10 PPM + 4 PPM SURROG.
SOLVENT EXP.DATE	SOLVENT USED: ISOOCTANE		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	PCB L3 (SECOND SOURCE)		
5143				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5142	—	—	10 PPM + 4 PPM SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/30/15	1:20			0.5 PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED: ISOOCTANE		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	1221 PCB		
5144				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-8098	LB 98893	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
5/31/16	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
4976				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			0.05ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
4977				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:50			0.01 ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB STOCK (second source)		
4978				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	ChemService	(1016) S-11086J4 (1260) S-11092J4	2540100 2302000	1,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~6/30~~/15	1:10 (1mL of 1016, 1mL 1260 → 10mL)			100ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB Working Standard (second source)		
4979				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4978	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:10 stock (IAS #4978) + 400uL surrog (IAS #4828) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

NOTEBOOK INSERT LABEL

Aroclor 1232 **4-4805**

Lot: LC01902 EXP: JUL/2018 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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NOTEBOOK INSERT LABEL

Aroclor 1242 **44806**

Lot: LC07107V EXP: APR/2017 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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NOTEBOOK INSERT LABEL

Aroclor 1248 **4-4807**

Lot: LC08888V EXP: JUL/2017 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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NOTEBOOK INSERT LABEL

Aroclor 1254 **4-4808**

Lot: LB98272 EXP: FEB/2016 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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STANDARD IAS#	STANDARD NAME:	1232 PCB		
5145				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4805	LC01902	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/31/18	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB		
5146				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	44806	LC07107V	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/17	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB		
5147				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4807	LC08888V	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/31/17	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB		
5148				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4808	LB98272	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/16	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA

Catalog# 32409
This product contains PCB's
Aroclor® 1262 Standard

1000 ug/mL each in Hexane
Lot# A097027 Exp. Date: 10/2019 Store: 25°C nomin

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA

Catalog# 32410
This product contains PCB's
Aroclor® 1268 Standard

1000 ug/mL each in Hexane
Lot# A094374 Exp. Date: 06/2018 Store: 25°C nominal

STANDARD IAS#	STANDARD NAME:	PCB 1262		
5149				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	RESTEK	32409	A097027	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/31/19	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	PCB 1268		
5150				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	RESTEK	32410	A094374	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/30/19	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1221 PCB STOCK		
5151				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5144	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100 µl of 1221 (IAS# 5144)) + 1:25 (SURROG. 400 µl (IAS# 5134)) → 10 ML			10PPM + 4PPM SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/04/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB STOCK		
5152				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5145	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100 µl (1232) of 5145) + 1:25 (SURROG. 400 µl (IAS# 5134)) → 10 ML			10PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/04/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB STOCK		
5153				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5146	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1242 IAS#5146) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB STOCK		
5154				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5147	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1248 IAS# 5147) + 1:25 (400µl of surr. IAS# 5134) → 10 ML			10 PPM + 4PPM SURR
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB STOCK		
5155				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5148	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1254 IAS # 5148) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1262 PCB STOCK		
5156				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5149	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1262 IAS# 5149) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1268 PCB STOCK		
5157				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5150	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of IAS# 5150 1268 # ~~1:25~~ (400µl of IAS# 5134 SURR.) 510ML			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	ISOOCTANE		V559-10	

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
5158				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5151	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
5159				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5152	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
5160				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5153	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	ISOOctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1248 PCB L3		
5161				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5154	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1254 PCB L3		
5162				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5155	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1262 PCB L3		
5163				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5156	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10PPM+4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1268 PCB L3		
5164				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5157	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10PPM+4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

NOTEBOOK INSERT LABEL

Aroclor 1016 **4-8097**

Lot: LB95199 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

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NOTEBOOK INSERT LABEL

Aroclor 1260 **4-4809**

Lot: LB92109 EXP: APR/2015 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
Analytical
595 North Harrison Road • Bellefonte, PA
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STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809 ~~8097~~	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:			
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:			
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

PESTICIDE DATA

PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150219-06	SOIL	102		90		101		87	
Pest	LCSS150219-06	SOIL	101		84		100		97	
Pest	01273-001MS	SOIL	94		82		98		120	
Pest	01273-001MSD	SOIL	98		81		100		110	
GPEC-WC1	E15-01273-001	SOIL	91		94		95		130	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-06
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8322.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	78.9	79	
beta-BHC	100.0	0.0	74.4	74	
gamma-BHC (Lindane)	100.0	0.0	78.5	79	
delta-BHC	100.0	0.0	74.7	75	
Heptachlor	100.0	0.0	77.0	77	
Aldrin	100.0	0.0	79.9	80	
Heptachlor epoxide	100.0	0.0	79.4	79	
Endosulfan I	100.0	0.0	81.9	82	
4,4'-DDE	100.0	0.0	79.5	80	
Dieldrin	100.0	0.0	69.0	69	
Endrin	100.0	0.0	74.9	75	
Endosulfan II	100.0	0.0	80.1	80	
4,4'-DDD	100.0	0.0	74.8	75	
Endrin aldehyde	100.0	0.0	73.7	74	
Endosulfan sulfate	100.0	0.0	75.6	76	
4,4'-DDT	100.0	0.0	73.7	74	
Endrin ketone	100.0	0.0	79.2	79	
Methoxychlor	100.0	0.0	72.0	72	
alpha-Chlordane	100.0	0.0	78.9	79	
gamma-Chlordane	100.0	0.0	79.4	79	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: O8323.D
MSD Data file: O8324.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.6
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
alpha-BHC	100.0	0.0	74.2	74		75.0	75	1
beta-BHC	100.0	0.0	77.3	77		76.8	77	1
gamma-BHC (Lindane)	100.0	0.0	75.1	75		71.2	71	5
delta-BHC	100.0	0.0	71.4	71		72.8	73	2
Heptachlor	100.0	0.0	70.8	71		70.0	70	1
Aldrin	100.0	0.0	74.8	75		73.9	74	1
Heptachlor epoxide	100.0	0.0	72.4	72		71.8	72	1
Endosulfan I	100.0	0.0	72.1	72		75.1	75	4
4,4'-DDE	100.0	0.0	74.9	75		74.6	75	0
Dieldrin	100.0	0.0	61.8	62		64.3	64	4
Endrin	100.0	0.0	78.8	79		75.7	76	4
Endosulfan II	100.0	0.0	72.5	73		72.1	72	1
4,4'-DDD	100.0	0.0	84.7	85		81.5	82	4
Endrin aldehyde	100.0	0.0	69.7	70		64.5	65	8
Endosulfan sulfate	100.0	0.0	71.6	72		68.7	69	4
4,4'-DDT	100.0	0.0	77.7	78		75.3	75	3
Endrin ketone	100.0	0.0	80.0	80		71.3	71	12
Methoxychlor	100.0	0.0	82.7	83		76.5	77	8
alpha-Chlordane	100.0	0.0	71.3	71		70.0	70	2
gamma-Chlordane	100.0	0.0	68.2	68		67.0	67	2

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O8321.D

Instrument ID: GC-O

Date Extracted: 02/19/2015

Matrix: SOIL

Date Analyzed: 02/20/2015

Time Analyzed: 17:08

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150219-06	02/20/2015	17:20
Pest	01273-001MS	02/20/2015	17:33
Pest	01273-001MSD	02/20/2015	17:46
GPEC-WC1	E15-01273-001	02/20/2015	17:58

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150219-06	02/20/2015	17:08	1.81		6.60		2.08		8.15	
Pest	LCSS150219-06	02/20/2015	17:20	1.81		6.60		2.08		8.15	
Pest	01273-001MS	02/20/2015	17:33	1.81		6.60		2.08		8.15	
Pest	01273-001MSD	02/20/2015	17:46	1.81		6.60		2.08		8.15	
GPEC-WC1	E15-01273-001	02/20/2015	17:58	1.81		6.59		2.08		8.14	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8325.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:58
Operator : IB
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:48:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17975562	28260321	181.781	189.589
Spiked Amount 200.000	Range 10 - 180		Recovery =		90.89%	94.79%
2) S DCB	6.59	8.14	8571813	16116924	187.891	259.152m#
Spiked Amount 200.000	Range 10 - 180		Recovery =		93.95%	129.58%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

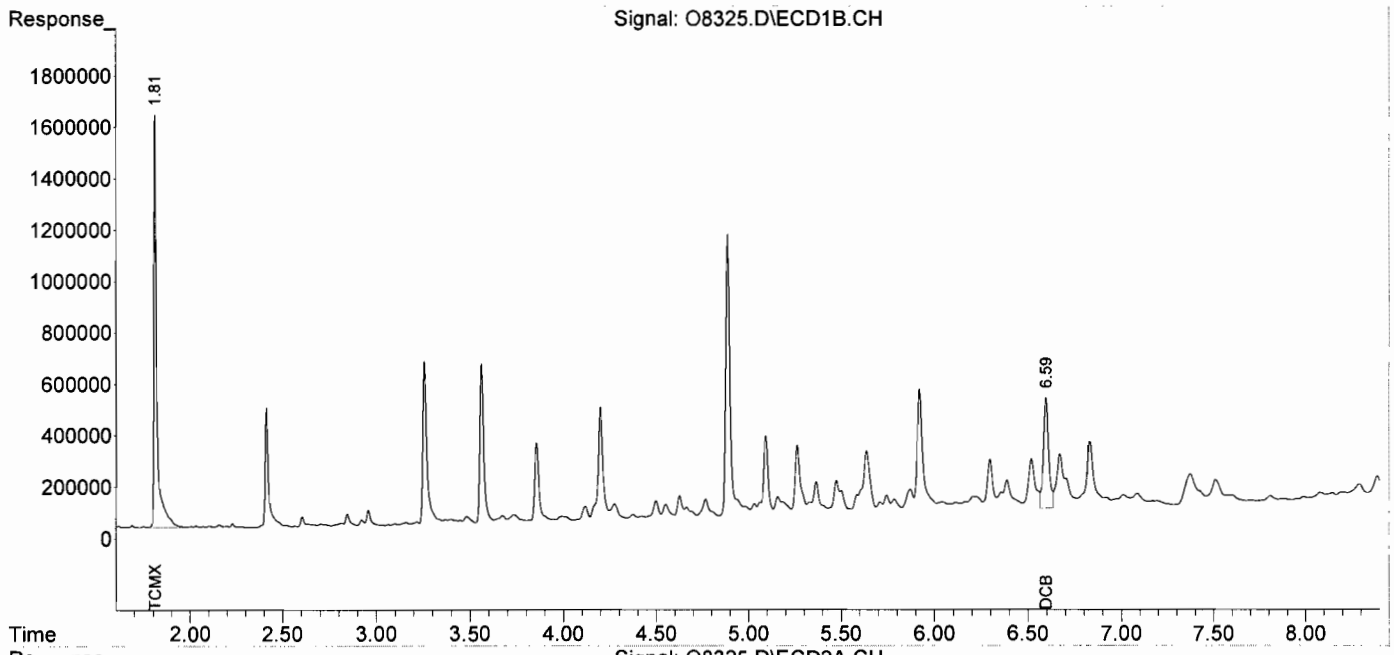
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

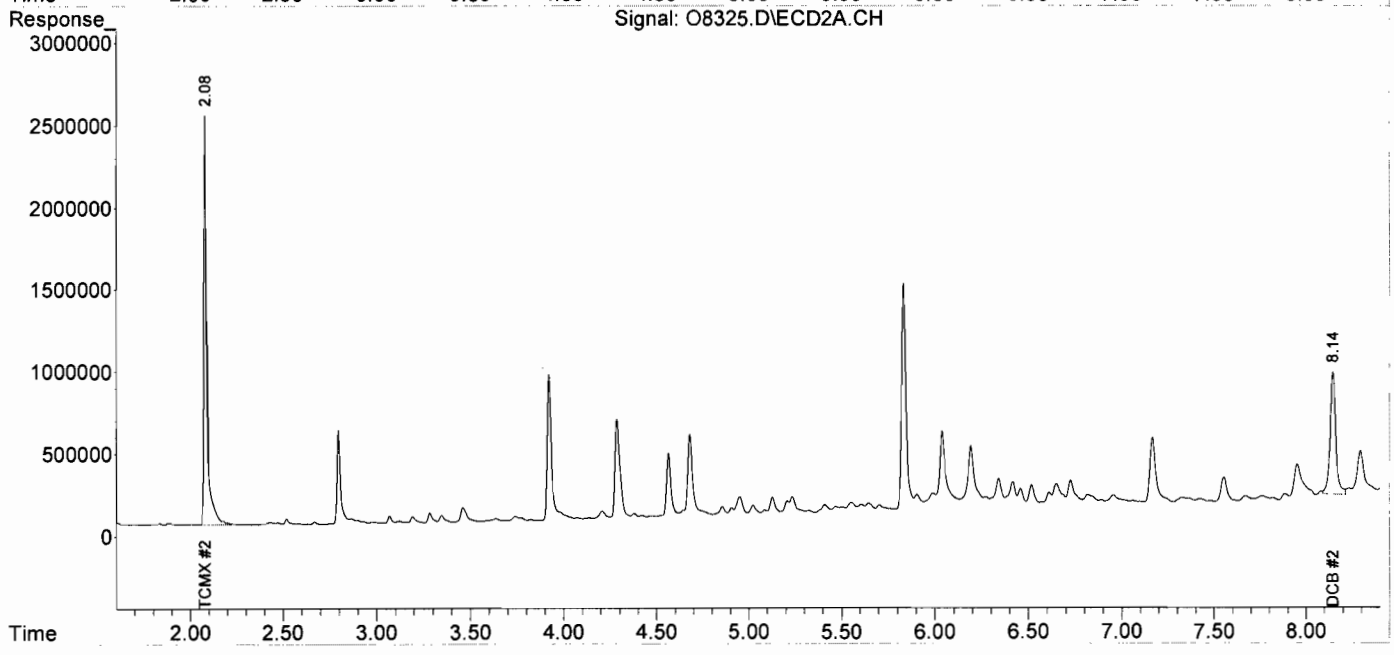
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8325.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:58
Operator : IB
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:48:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE STANDARDS

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8317.D O8316.D O8315.D O8314.D O8313.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.13	2.13	2.13	2.13	2.13	2.13	2.07	2.19
beta-BHC	2.38	2.38	2.38	2.38	2.38	2.38	2.32	2.44
gamma-BHC	2.33	2.33	2.33	2.33	2.33	2.33	2.27	2.39
delta-BHC	2.51	2.51	2.51	2.51	2.52	2.51	2.45	2.57
Heptachlor	2.66	2.66	2.66	2.66	2.67	2.67	2.59	2.75
Aldrin	2.89	2.89	2.89	2.90	2.90	2.90	2.82	2.98
Heptachlor epoxide	3.38	3.38	3.38	3.38	3.39	3.38	3.30	3.46
Endosulfan I	3.73	3.73	3.73	3.73	3.73	3.73	3.65	3.81
4,4'-DDE	3.67	3.67	3.67	3.67	3.67	3.67	3.57	3.77
Dieldrin	3.94	3.94	3.94	3.94	3.95	3.94	3.84	4.04
Endrin	4.16	4.16	4.16	4.16	4.16	4.16	4.06	4.26
Endosulfan II	4.37	4.37	4.37	4.37	4.37	4.37	4.27	4.47
4,4'-DDD	4.22	4.22	4.22	4.22	4.23	4.22	4.12	4.32
Endrin aldehyde	4.78	4.78	4.78	4.78	4.78	4.78	4.66	4.90
Endosulfan sulfate	5.21	5.22	5.22	5.21	5.22	5.22	5.10	5.34
4,4'-DDT	4.49	4.49	4.49	4.49	4.49	4.49	4.37	4.61
Endrin ketone	5.50	5.50	5.50	5.50	5.50	5.50	5.38	5.62
Methoxychlor	4.98	4.98	4.98	4.98	4.98	4.98	4.86	5.10
alpha-Chlordane	3.60	3.60	3.61	3.61	3.61	3.61	3.53	3.69
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.61				2.53	2.69
Chlordane {2}			3.00				2.92	3.08
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.60				3.52	3.68
Chlordane {5}			4.31				4.23	4.39
Toxaphene 500 ppb			4.48				4.40	4.56
Toxaphene {2}			4.75				4.67	4.83
Toxaphene {3}			5.11				5.03	5.19
Toxaphene {4}			5.48				5.40	5.56
Toxaphene {5}			5.64				5.56	5.72

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O8317.D O8316.D O8315.D O8314.D O8313.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	173433	194063	195057	237542	191608	198340	11.91
beta-BHC	88575	77997	92666	96893	84067	88039	8.36
gamma-BHC	157228	166815	154533	199489	155327	166678	11.39
delta-BHC	168557	171097	176015	214343	174483	180899	10.46
Heptachlor	158910	163215	163976	197471	157008	168116	9.91
Aldrin	158683	163919	164950	197194	157663	168482	9.71
Heptachlor epoxide	150092	147477	148518	175652	140545	152457	8.84
Endosulfan I	147629	144248	145989	173216	138722	149961	8.95
4,4'-DDE	120276	129612	134211	160794	130456	135070	11.30
Dieldrin	146364	151024	153612	183677	148337	156603	9.82
Endrin	113493	120627	122091	149696	119137	125009	11.34
Endosulfan II	134861	124318	127821	152959	123585	132709	9.17
4,4'-DDD	113020	109584	115685	138187	114578	118211	9.65
Endrin aldehyde	122856	102294	106455	125827	103958	112278	9.94
Endosulfan sulfate	132377	108345	112614	134629	110627	119718	10.61
4,4'-DDT	79787	91837	98945	125699	103288	99911	16.95
Endrin ketone	155862	138044	142703	166983	134848	147688	9.10
Methoxychlor	42787	47656	50261	63250	50596	50910	14.87
alpha-Chlordane	147762	143296	144335	170242	136583	148444	8.65
gamma-Chlordane	149524	149002	149887	178383	143223	154004	9.02
Chlordane 500 ppb			3960				
Chlordane {2}			4953				
Chlordane {3}			14412				
Chlordane {4}			22881				
Chlordane {5}			3567				
Toxaphene 500 ppb			2135				
Toxaphene {2}			3804				
Toxaphene {3}			3964				
Toxaphene {4}			3722				
Toxaphene {5}			1591				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O8317.C O8316.C O8315.C O8314.C O8313.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.51	2.51	2.51	2.51	2.52	2.51	2.45	2.57
beta-BHC	2.86	2.86	2.86	2.86	2.86	2.86	2.80	2.92
gamma-BHC	2.80	2.80	2.80	2.80	2.81	2.80	2.74	2.86
delta-BHC	3.12	3.12	3.12	3.12	3.12	3.12	3.06	3.18
Heptachlor	3.18	3.18	3.18	3.18	3.19	3.18	3.10	3.26
Aldrin	3.48	3.48	3.48	3.48	3.49	3.48	3.40	3.56
Heptachlor epoxide	4.02	4.02	4.02	4.02	4.02	4.02	3.94	4.10
Endosulfan I	4.41	4.41	4.41	4.41	4.42	4.41	4.33	4.49
4,4'-DDE	4.51	4.51	4.51	4.51	4.51	4.51	4.41	4.61
Dieldrin	4.69	4.69	4.69	4.69	4.69	4.69	4.59	4.79
Endrin	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Endosulfan II	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDD	5.11	5.11	5.11	5.11	5.11	5.11	5.01	5.21
Endrin aldehyde	5.59	5.59	5.59	5.59	5.59	5.59	5.47	5.71
Endosulfan sulfate	5.89	5.89	5.89	5.89	5.89	5.89	5.77	6.01
4,4'-DDT	5.44	5.44	5.45	5.45	5.45	5.45	5.33	5.57
Endrin ketone	6.49	6.49	6.49	6.49	6.49	6.49	6.37	6.61
Methoxychlor	6.20	6.20	6.20	6.20	6.20	6.20	6.08	6.32
alpha-Chlordane	4.35	4.35	4.35	4.35	4.35	4.35	4.27	4.43
gamma-Chlordane	4.20	4.20	4.20	4.20	4.21	4.20	4.12	4.28
Chlordane 500 ppb			3.06				2.98	3.14
Chlordane {2}			3.61				3.53	3.69
Chlordane {3}			4.20				4.12	4.28
Chlordane {4}			4.29				4.21	4.37
Chlordane {5}			4.35				4.27	4.43
Toxaphene 500 ppb			5.32				5.24	5.40
Toxaphene {2}			5.59				5.51	5.67
Toxaphene {3}			5.88				5.80	5.96
Toxaphene {4}			6.16				6.08	6.24
Toxaphene {5}			6.60				6.52	6.68

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O8317.C O8316.C O8315.C O8314.C O8313.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	221620	268777	276045	343300	272349	276418	15.72
beta-BHC	120466	104332	112126	128498	106816	114448	8.73
gamma-BHC	207380	239616	239267	303132	242309	246341	14.14
delta-BHC	218481	229059	237759	298939	242175	245282	12.77
Heptachlor	203182	221354	230409	284262	228592	233560	12.98
Aldrin	208297	224152	230348	282616	227380	234558	12.01
Heptachlor epoxide	195491	201219	206439	251113	202391	211331	10.69
Endosulfan I	176480	182477	188493	230059	185799	192661	11.10
4,4'-DDE	172443	186080	196024	241080	196929	198511	12.98
Dieldrin	184036	201848	210818	260057	212505	213853	13.18
Endrin	134638	151368	157137	200418	160720	160856	15.09
Endosulfan II	185859	176539	183269	221598	181428	189739	9.56
4,4'-DDD	143543	143810	154385	190315	159156	158242	12.11
Endrin aldehyde	168722	138364	145112	174682	144917	154359	10.50
Endosulfan sulfate	183313	145749	152452	186747	154647	164582	11.54
4,4'-DDT	94449	106339	120528	154451	132577	121669	19.15
Endrin ketone	196229	195994	201505	237744	197796	205854	8.73
Methoxychlor	61352	59866	64159	80624	64107	66021	12.67
alpha-Chlordane	190897	194993	200293	243486	196472	205228	10.55
gamma-Chlordane	193461	200010	207069	254618	204935	212019	11.50
Chlordane 500 ppb			5541				
Chlordane {2}			6052				
Chlordane {3}			18904				
Chlordane {4}			14646				
Chlordane {5}			15830				
Toxaphene 500 ppb			4902				
Toxaphene {2}			4212				
Toxaphene {3}			2616				
Toxaphene {4}			5528				
Toxaphene {5}			3655				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08313.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:32
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:24:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

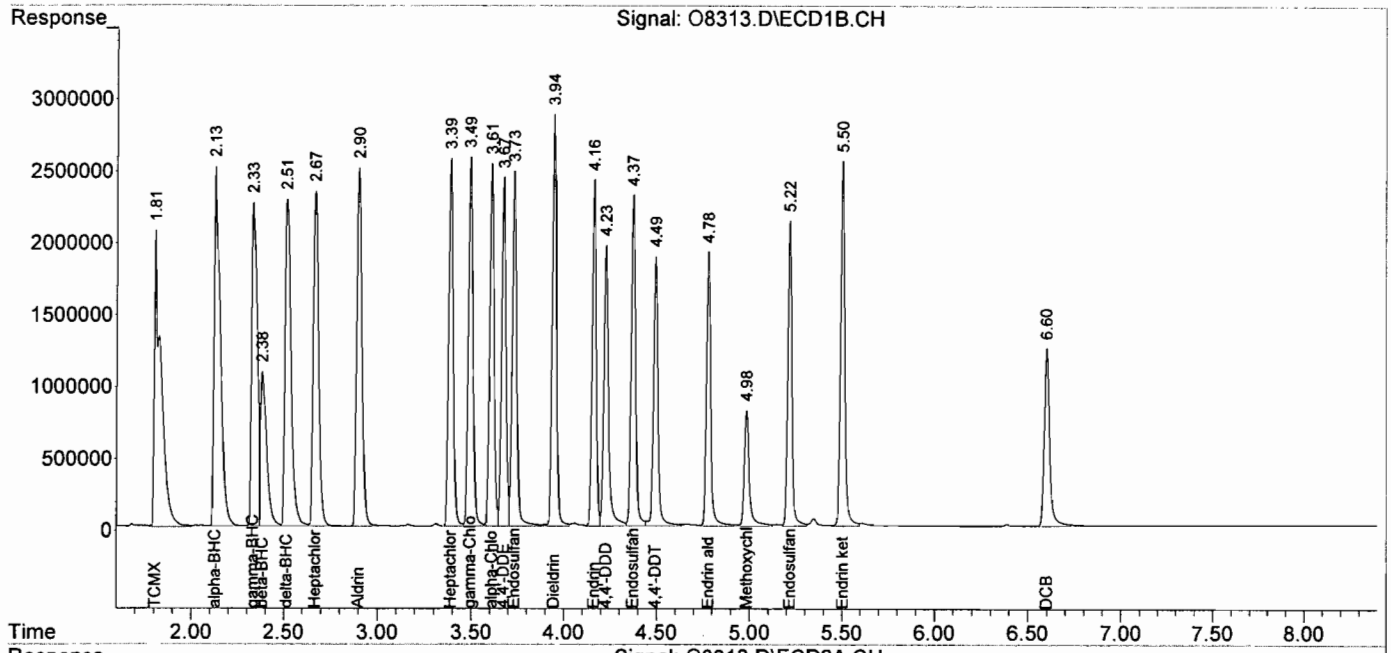
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	51587956	77912190	541.752m	546.700
	Spiked Amount 200.000	Range 10 - 180		Recovery =		270.88%#	273.35%#
2) S	DCB	6.60	8.15	25184705	33046176	548.861	563.460
	Spiked Amount 200.000	Range 10 - 180		Recovery =		274.43%#	281.73%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	57482366	81704717	289.817	295.584
4) T	beta-BHC	2.38	2.86	25219962	32044844	286.462	279.995
5) T	gamma-BHC (Linda	2.33	2.81	46598091	72692846	279.569	295.090
6) T	delta-BHC	2.52	3.12	52344817	72652427	289.360	296.199
7) T	Heptachlor	2.67	3.19	47102288	68577654	280.177	293.619
8) T	Aldrin	2.90	3.49	47298947	68213865	280.736	290.818
9) T	Heptachlor epoxi	3.39	4.02	42163459	60717349	276.560	287.310
10) T	Endosulfan I	3.73	4.42	41616707	55739603	277.517	289.314
11) T	4,4'-DDE	3.67	4.51	39136768	59078567	289.753	297.609
12) T	Dieldrin	3.95	4.69	44501109	63751545	284.166	298.110
13) T	Endrin	4.16	5.01	35741037	48215884	285.908	299.745
14) T	Endosulfan II	4.37	5.23	37075592	54428516	279.375	286.860
15) T	4,4'-DDD	4.23	5.11	34373531	47746940	290.781	301.734
16) T	Endrin aldehyde	4.78	5.59	31187477	43475228	277.770	281.649
17) T	Endosulfan sulfa	5.22	5.89	33188160	46394201	277.218	281.891
18) T	4,4'-DDT	4.49	5.45	30986445	39773106	310.140	324.202m
19) T	Endrin ketone	5.50	6.49	40454408	59338908	273.918	290.325
20) T	Methoxychlor	4.98	6.20	15178734	19232225	298.148	292.337m
21) T	alpha-Chlordane	3.61	4.35	40974905	58941618	276.030	287.200
22) T	gamma-Chlordane	3.49	4.21	42966776	61480535	278.998	289.977
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

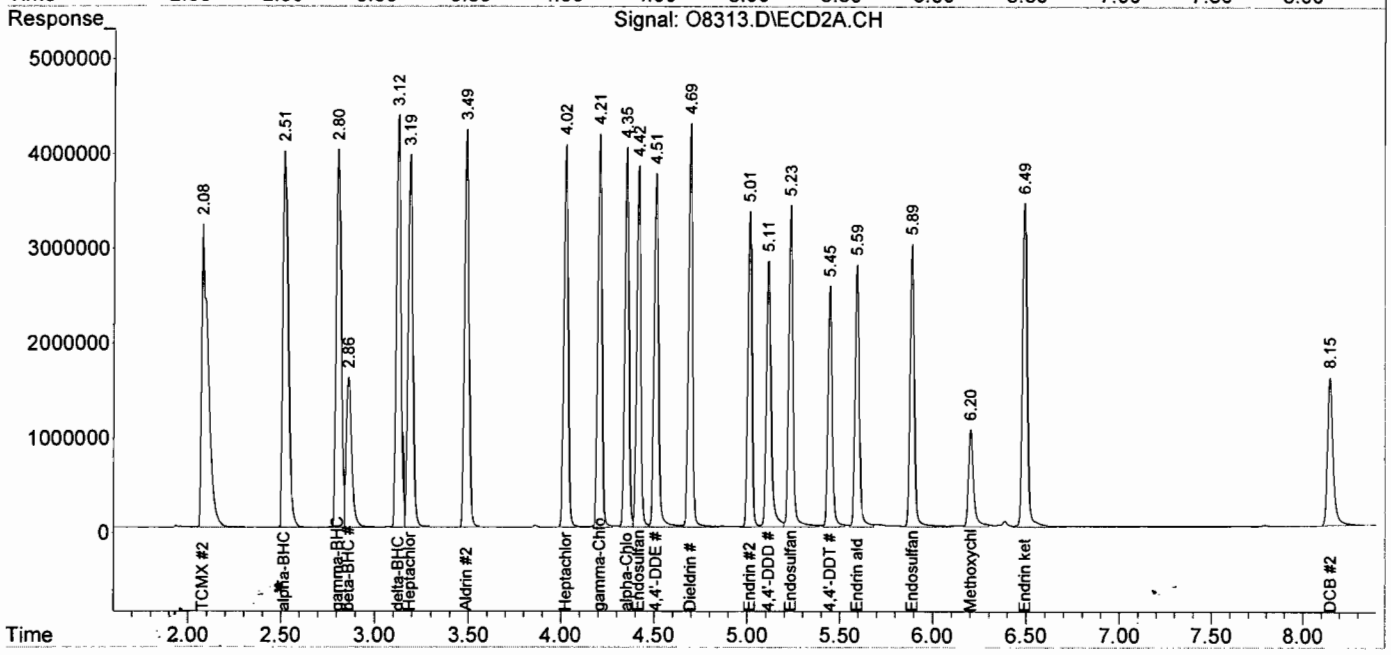
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8313.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:32
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:24:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08314.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:45
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

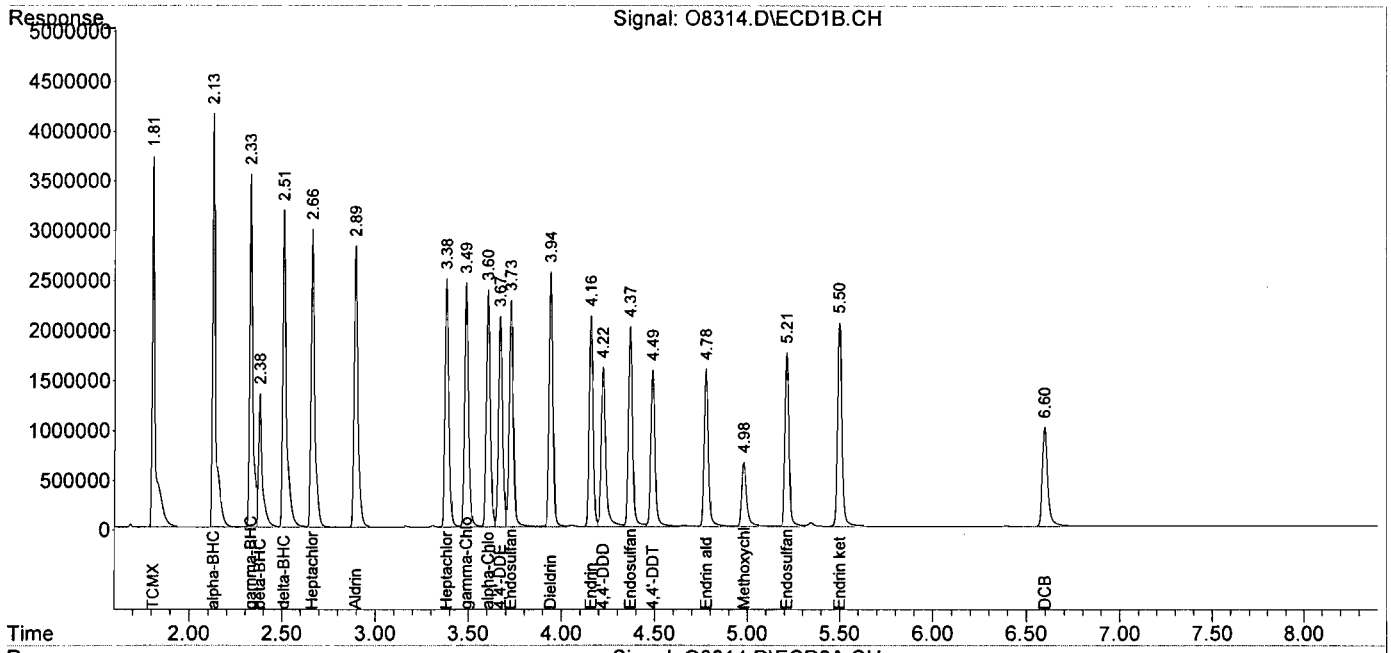
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	41890217	64890079	439.911	455.326
	Spiked Amount 200.000	Range 10 - 180		Recovery =		219.96%#	227.66%#
2) S	DCB	6.60	8.15	20380986	26772914	444.171	456.497
	Spiked Amount 200.000	Range 10 - 180		Recovery =		222.09%#	228.25%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	47508335	68659919	239.529	248.392
4) T	beta-BHC	2.38	2.86	19378590	25699569	220.113	224.553
5) T	gamma-BHC (Linda	2.33	2.80	39897832	60626437	239.370	246.108
6) T	delta-BHC	2.51	3.12	42868561	59787723	236.975	243.750
7) T	Heptachlor	2.66	3.18	39494292	56852373	234.923	243.417
8) T	Aldrin	2.90	3.48	39438840	56523235	234.084	240.977
9) T	Heptachlor epoxi	3.38	4.02	35130486	50222523	230.429	237.649
10) T	Endosulfan I	3.73	4.41	34643109	46011803	231.014	238.822
11) T	4,4'-DDE	3.67	4.51	32158844	48215949	238.091	242.888
12) T	Dieldrin	3.94	4.69	36735497	52011330	234.578	243.211
13) T	Endrin	4.16	5.01	29939216	40083578	239.497	249.189
14) T	Endosulfan II	4.37	5.23	30591808	44319656	230.518	233.582
15) T	4,4'-DDD	4.22	5.11	27637455	38062999	233.798	240.537
16) T	Endrin aldehyde	4.78	5.59	25165463	34936418	224.135	226.332
17) T	Endosulfan sulfa	5.21	5.89	26925786	37349483	224.909	226.936
18) T	4,4'-DDT	4.49	5.45	25139843	30890292	251.622	251.795m
19) T	Endrin ketone	5.50	6.49	33396670	47548890	226.130	232.640
20) T	Methoxychlor	4.98	6.20	12650045	16124754	248.478	245.103
21) T	alpha-Chlordane	3.61	4.35	34048494	48697133	229.370	237.283
22) T	gamma-Chlordane	3.49	4.20	35676585	50923693	231.660	240.185
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

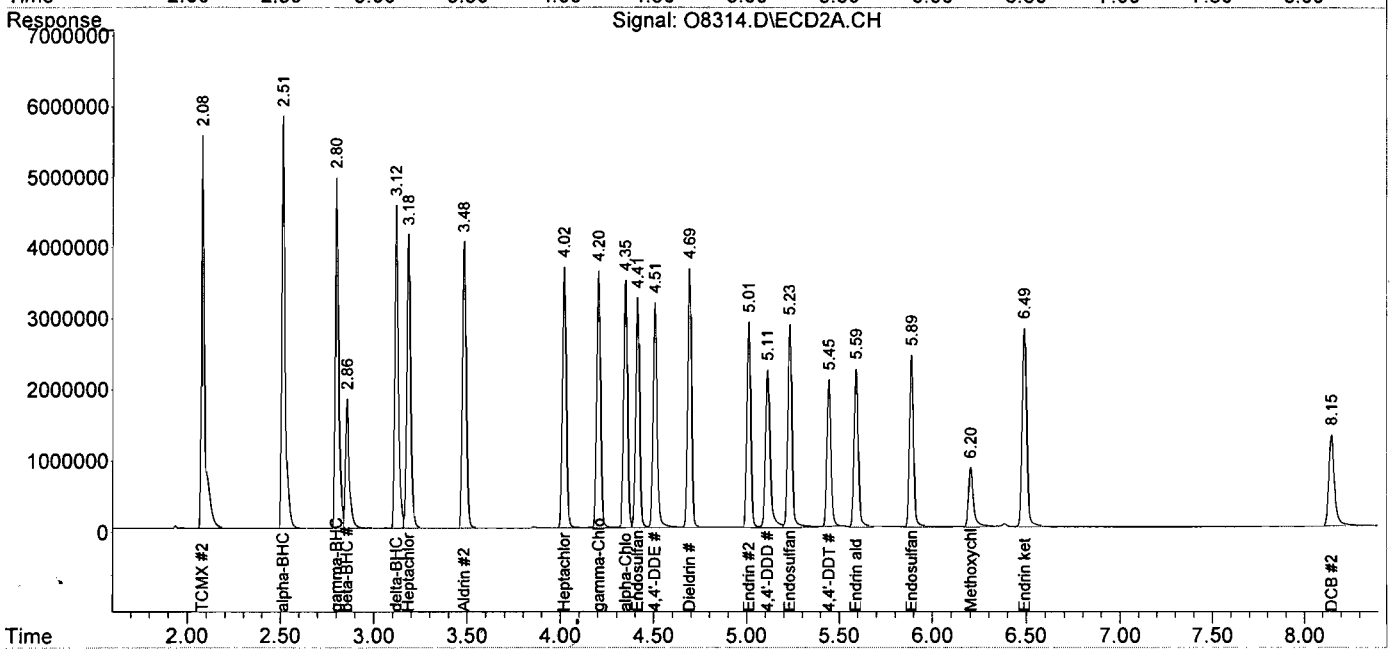
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8314.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:45
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08315.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:57
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:22:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18420435	27270240	193.442m	191.352
	Spiked Amount 200.000	Range 10 - 180		Recovery =		96.72%	95.68%
2) S	DCB	6.60	8.15	8883110	11126531	193.593	189.715
	Spiked Amount 200.000	Range 10 - 180		Recovery =		96.80%	94.86%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	19505677	27604497	98.344	99.865
4) T	beta-BHC	2.38	2.86	9266594	11212628	105.255	97.972
5) T	gamma-BHC (Linda	2.33	2.80	15453271	23926710	92.713	97.128
6) T	delta-BHC	2.51	3.12	17601481	23775937	97.300	96.933
7) T	Heptachlor	2.66	3.18	16397567	23040911	97.537	98.651
8) T	Aldrin	2.89	3.48	16495023	23034796	97.904	98.205
9) T	Heptachlor epoxi	3.38	4.02	14851799	20643930	97.417	97.685
10) T	Endosulfan I	3.73	4.41	14598933	18849265	97.352	97.836
11) T	4,4'-DDE	3.67	4.51	13421066	19602378	99.364	98.747
12) T	Dieldrin	3.94	4.69	15361153	21081777	98.090	98.581
13) T	Endrin	4.16	5.01	12209057	15713709	97.666	97.688
14) T	Endosulfan II	4.37	5.23	12782068	18326939	96.317	96.590
15) T	4,4'-DDD	4.22	5.11	11568507	15438488	97.863	97.563
16) T	Endrin aldehyde	4.78	5.59	10645541	14511162	94.814	94.009
17) T	Endosulfan sulfa	5.22	5.89	11261417	15245208	94.066	92.630
18) T	4,4'-DDT	4.49	5.45	9894487	12052850	99.033	98.246
19) T	Endrin ketone	5.50	6.49	14270293	20150490	96.625	98.589
20) T	Methoxychlor	4.98	6.20	5026120	6415860	98.726	97.524
21) T	alpha-Chlordane	3.61	4.35	14433477	20029304	97.232	97.595
22) T	gamma-Chlordane	3.49	4.20	14988727	20706879	97.327	97.665
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

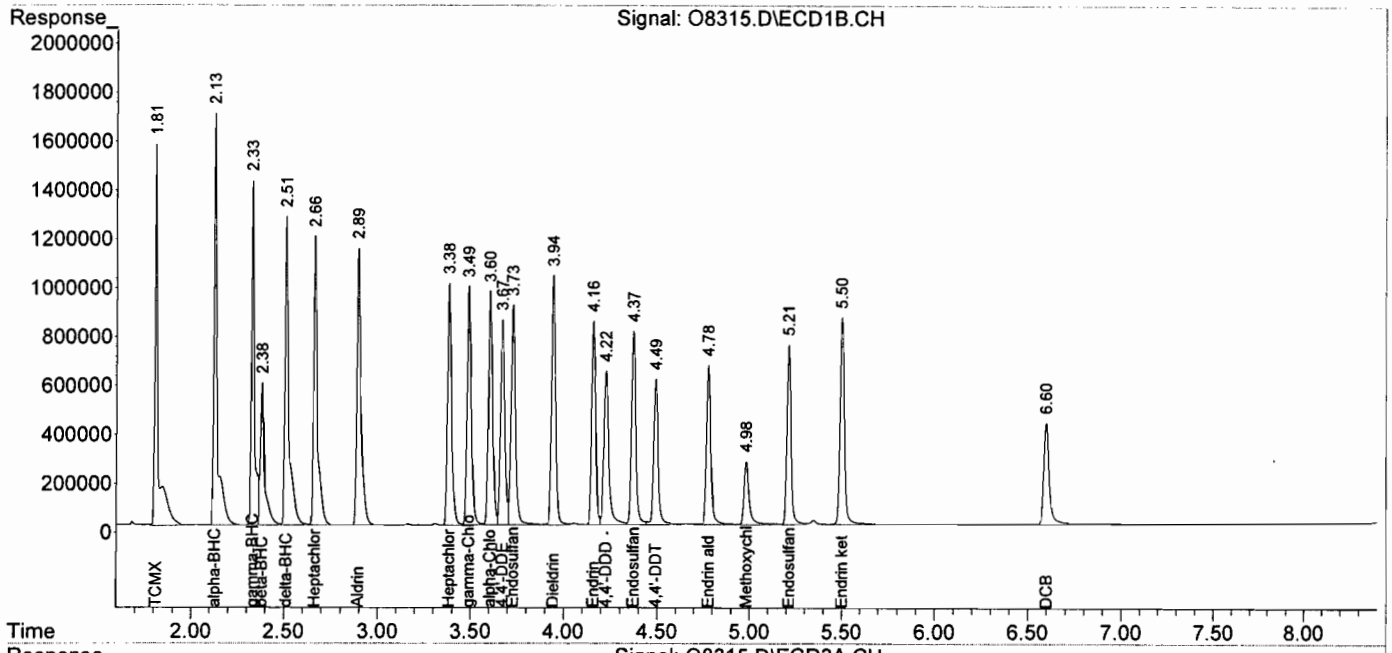
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

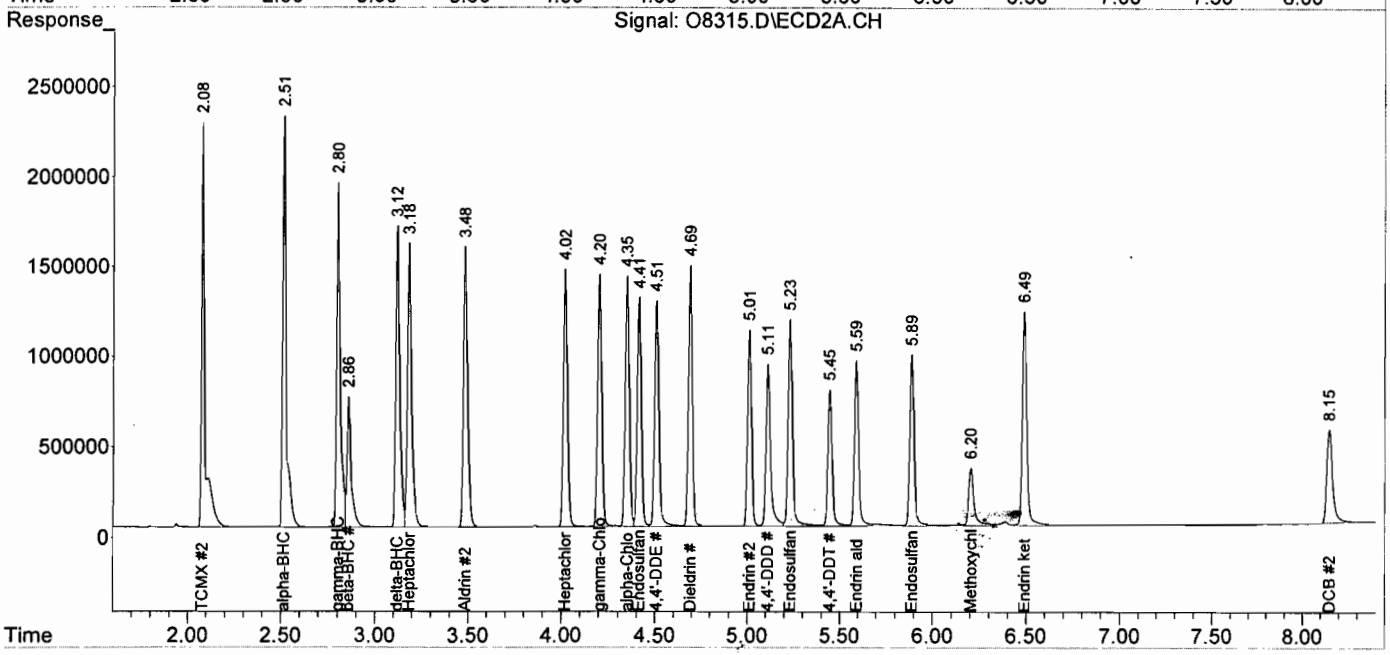
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8315.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:57
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:22:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08316.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:10
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

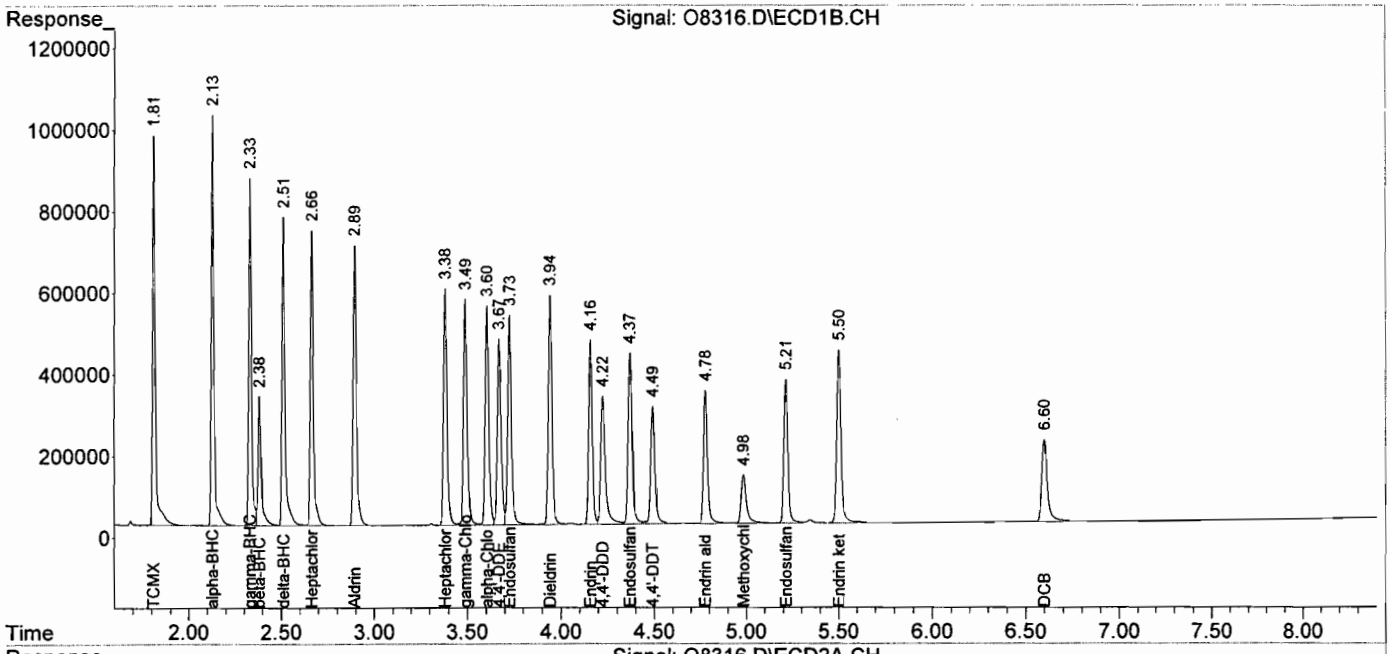
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	9225212	13749205	96.879	96.476
	Spiked Amount 200.000	Range 10 - 180		Recovery =		48.44%	48.24%
2) S	DCB	6.60	8.15	4440167	5461634	96.766	93.125
	Spiked Amount 200.000	Range 10 - 180		Recovery =		48.38%	46.56%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	9703133	13438861	48.922	48.618
4) T	beta-BHC	2.38	2.86	3899844	5216625	44.297	45.581
5) T	gamma-BHC (Linda	2.33	2.80	8340761	11980783	50.041	48.635
6) T	delta-BHC	2.51	3.12	8554829	11452937	47.291	46.693
7) T	Heptachlor	2.66	3.18	8160755	11067689	48.542	47.387
8) T	Aldrin	2.89	3.48	8195930	11207591	48.646	47.782
9) T	Heptachlor epoxi	3.38	4.02	7373826	10060962	48.367	47.608
10) T	Endosulfan I	3.73	4.41	7212413	9123828	48.095	47.357
11) T	4,4'-DDE	3.67	4.51	6480582	9303978	47.980	46.869
12) T	Dieldrin	3.94	4.69	7551187	10092393	48.219	47.193
13) T	Endrin	4.16	5.01	6031337	7568401	48.247	47.051
14) T	Endosulfan II	4.37	5.23	6215912	8826947	46.839	46.522
15) T	4,4'-DDD	4.22	5.11	5479200	7190482	46.351	45.440
16) T	Endrin aldehyde	4.78	5.59	5114700	6918196	45.554	44.819
17) T	Endosulfan sulfa	5.22	5.89	5417260	7287452	45.250	44.279
18) T	4,4'-DDT	4.49	5.44	4591851	5316960	45.959	43.340m
19) T	Endrin ketone	5.50	6.49	6902189	9799708	46.735	47.947
20) T	Methoxychlor	4.98	6.20	2382778	2993290	46.804	45.499m
21) T	alpha-Chlordane	3.60	4.35	7164799	9749673	48.266	47.506
22) T	gamma-Chlordane	3.49	4.20	7450115	10000522	48.376	47.168
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

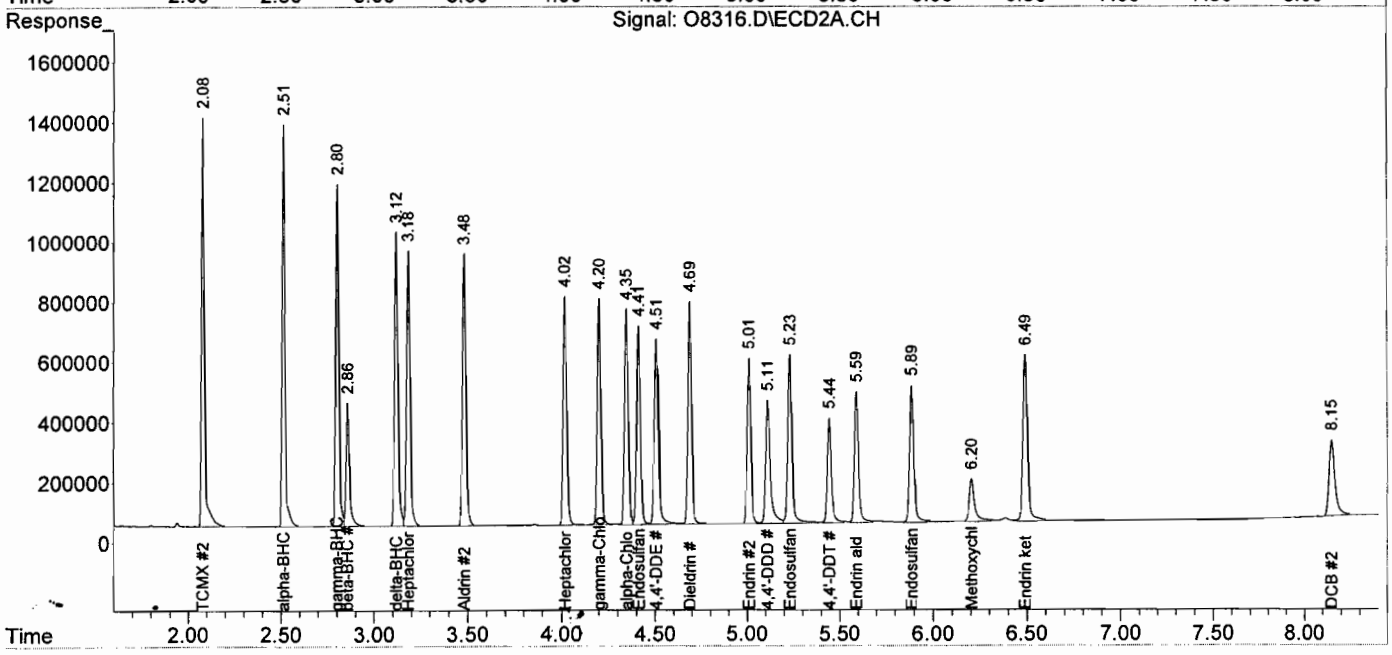
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8316.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:10
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08317.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:23
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

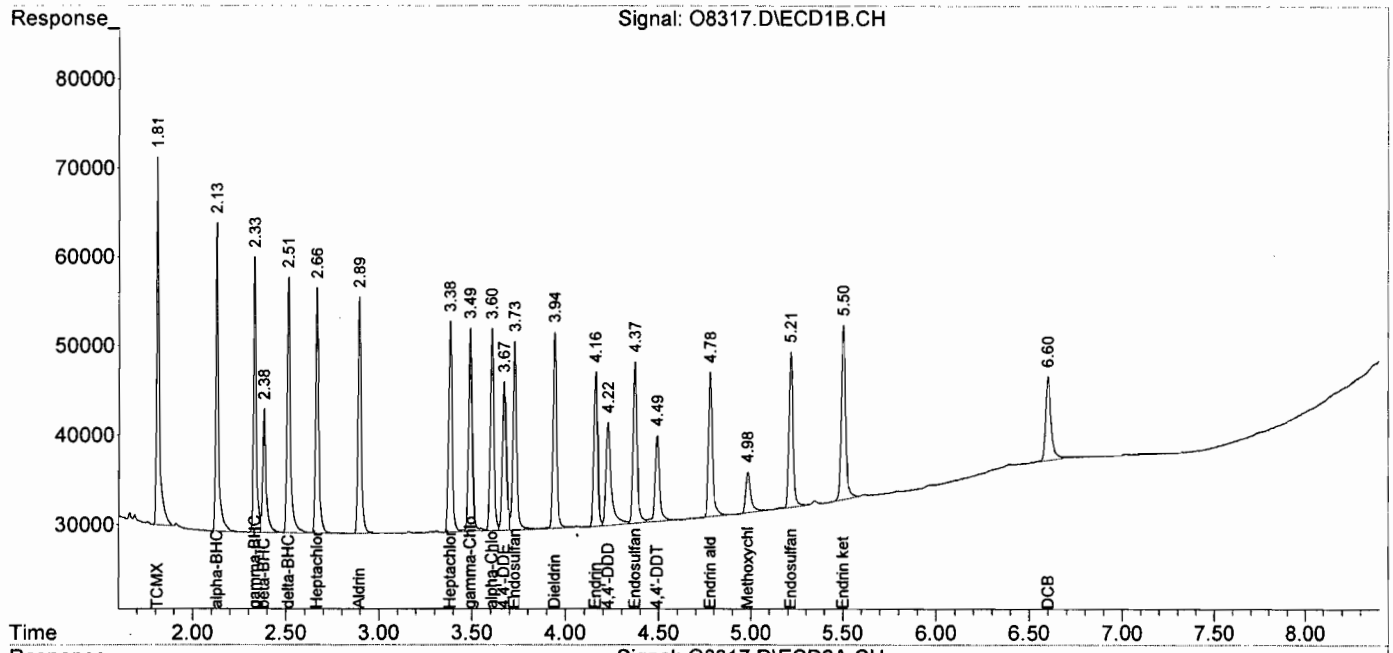
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	403910	586583	4.242	4.116
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.12%#	2.06%#
2) S	DCB	6.60	8.15	187282	252422	4.082m	4.304m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.04%#	2.15%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	346866	443239	1.749	1.604
4) T	beta-BHC	2.38	2.86	177150	240932	2.012	2.105
5) T	gamma-BHC (Linda	2.33	2.80	314455	414761	1.887	1.684
6) T	delta-BHC	2.51	3.12	337114	436962	1.864	1.781
7) T	Heptachlor	2.66	3.18	317821	406363	1.890	1.740
8) T	Aldrin	2.89	3.48	317366	416593	1.884	1.776
9) T	Heptachlor epoxi	3.38	4.02	300183	390981	1.969	1.850
10) T	Endosulfan I	3.73	4.41	295259	352961	1.969	1.832
11) T	4,4'-DDE	3.67	4.51	240551	344885	1.781	1.737
12) T	Dieldrin	3.94	4.69	292728	368072	1.869	1.721
13) T	Endrin	4.16	5.01	226987	269277	1.816	1.674
14) T	Endosulfan II	4.37	5.23	269722	371719	2.032	1.959
15) T	4,4'-DDD	4.22	5.11	226040	287087	1.912	1.814
16) T	Endrin aldehyde	4.78	5.59	245711	337444	2.188	2.186
17) T	Endosulfan sulfa	5.21	5.89	264754	366626	2.211	2.228
18) T	4,4'-DDT	4.49	5.44	159574	188899	1.597	1.540m
19) T	Endrin ketone	5.50	6.49	311724	392458	2.111	1.920m
20) T	Methoxychlor	4.98	6.20	85575	122703	1.681	1.865m
21) T	alpha-Chlordane	3.60	4.35	295524	381795	1.991	1.860
22) T	gamma-Chlordane	3.49	4.20	299048	386922	1.942	1.825
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

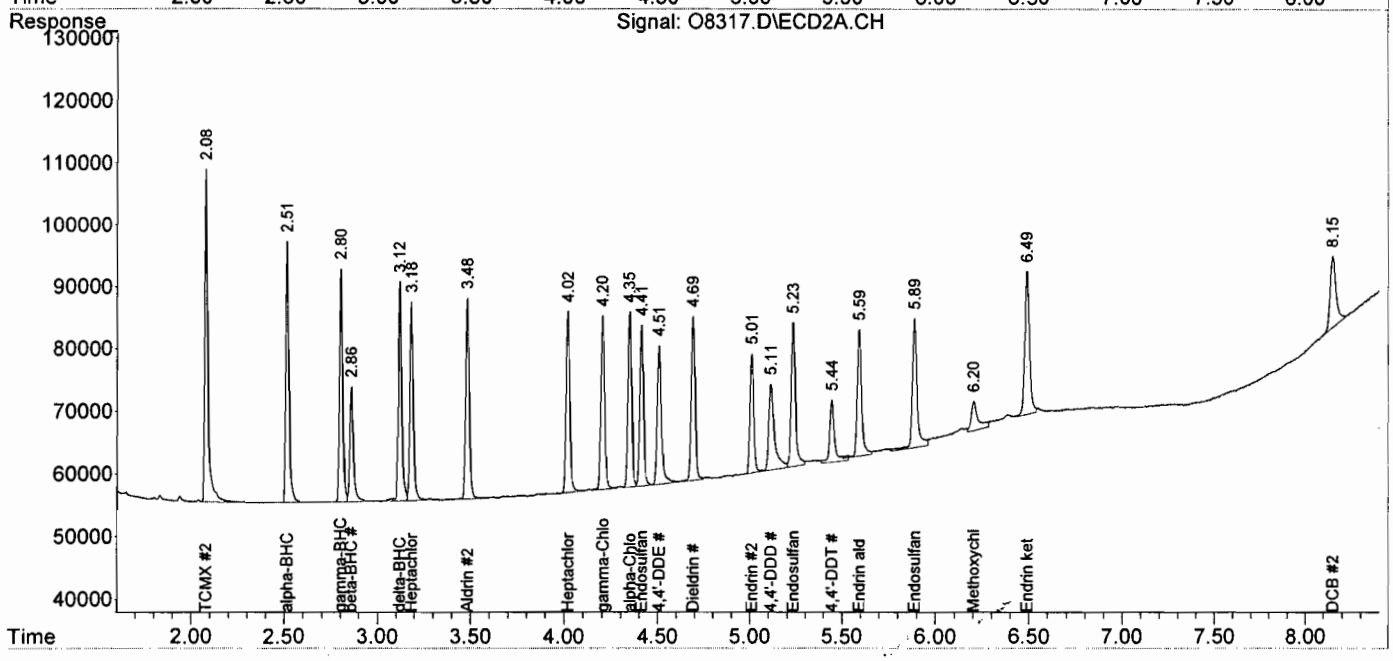
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8317.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:23
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8318.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:35
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:45:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22099019	33818037	223.480	226.873
Spiked Amount 200.000	Range 10 - 180		Recovery =		111.74%	113.44%
2) S DCB	6.60	8.15	8791388	14244838	192.704	229.050
Spiked Amount 200.000	Range 10 - 180		Recovery =		96.35%	114.53%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.48	5.32	1067748	2451235	500.000	500.000
29) L2 Toxaphene {2}	4.75	5.59	1902083	2106162	500.000	500.000
30) L2 Toxaphene {3}	5.11	5.88	1981835	1308155	500.000	500.000
31) L2 Toxaphene {4}	5.48	6.16	1860895	2763761	500.000	500.000
32) L2 Toxaphene {5}	5.64	6.60	795344	1827576	500.000	500.000
Sum Toxaphene			7607905	10456890	2500.000	2500.000
Average Toxaphene					500.000	500.000

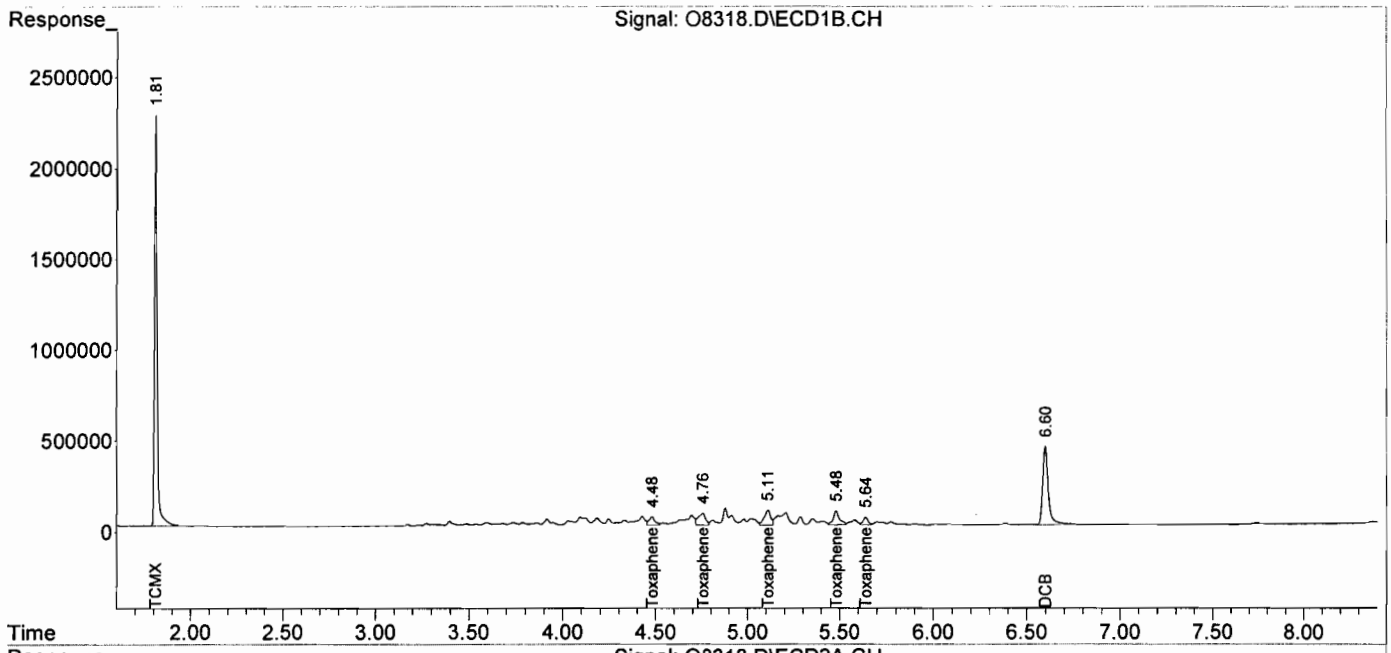
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

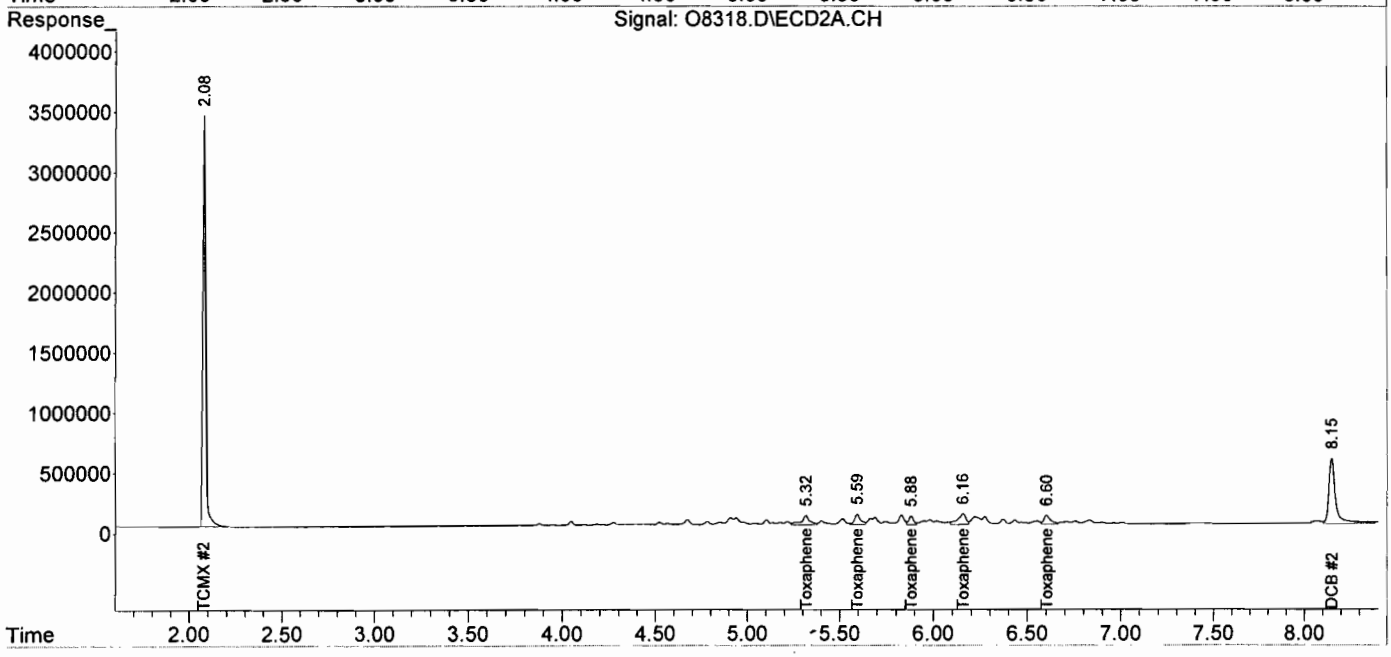
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8318.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:35
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:45:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8319.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:48
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:42:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:42:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	19375647	29957945	201.488	206.320
Spiked Amount 200.000	Range 10 - 180		Recovery =		100.74%	103.16%
2) S DCB	6.60	8.15	9193904	12425636	199.764	205.818
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.88%	102.91%
Target Compounds						
23) L1 Chlordane	2.61	3.06	1979914	2770433	500.000	500.000
24) L1 Chlordane {2}	3.00	3.61	2476431	3025964	500.000	500.000
25) L1 Chlordane {3}	3.49	4.20	7206175	9451932	500.000	500.000
26) L1 Chlordane {4}	3.60	4.29	11440368	7322849	500.000	500.000
27) L1 Chlordane {5}	4.31	4.35	1783666	7914965	500.000	500.000
Sum Chlordane			24886555	30486144	2500.000	2500.000
Average Chlordane					500.000	500.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

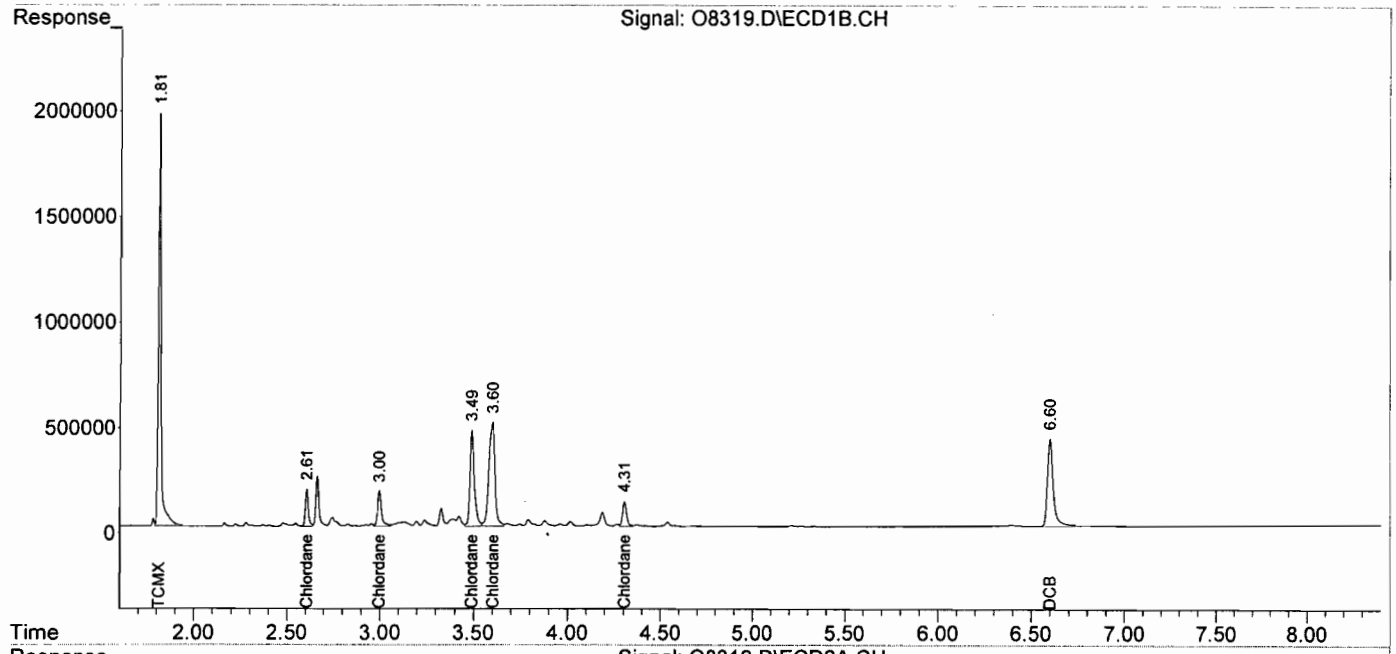
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

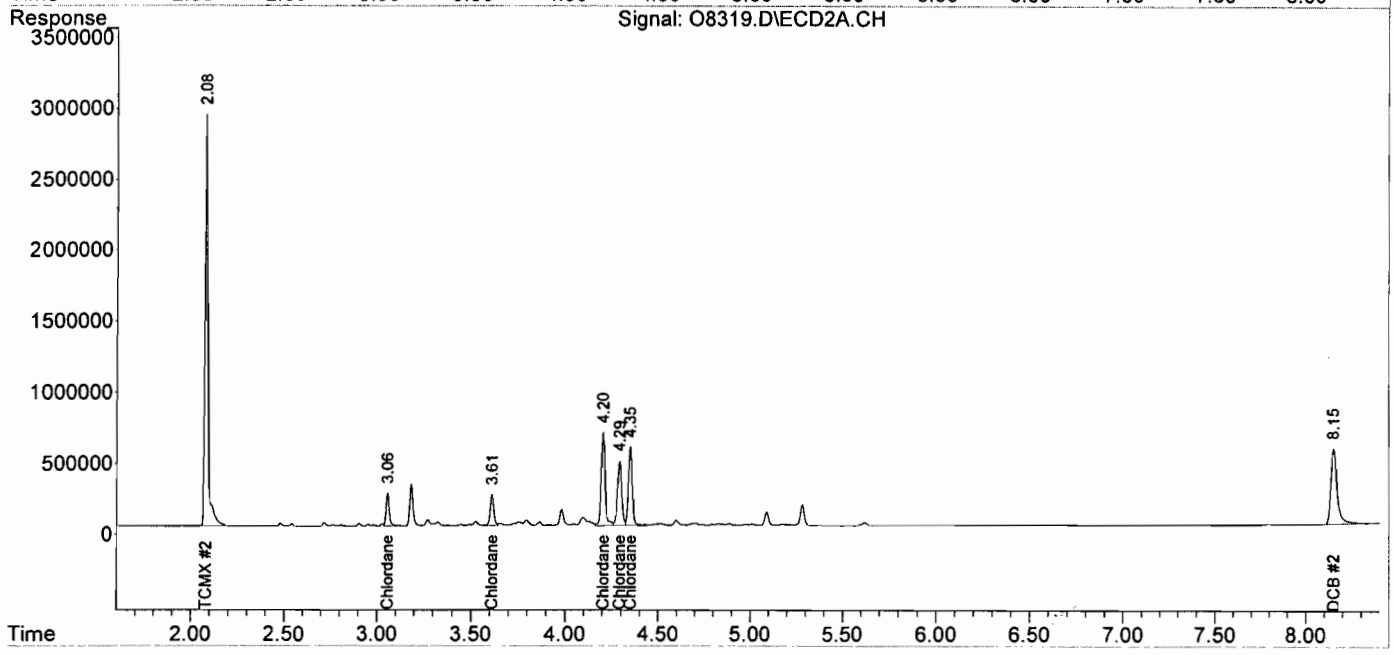
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8319.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:48
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:42:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:42:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8320.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.15	2.07	2.19	198340	179103	9.70
beta-BHC	2.40	2.32	2.44	88039	72246	17.94
gamma-BHC	2.35	2.27	2.39	166678	153893	7.67
delta-BHC	2.53	2.45	2.57	180899	166222	8.11
Heptachlor	2.68	2.59	2.75	168116	157353	6.40
Aldrin	2.91	2.82	2.98	168482	153513	8.88
Heptachlor epoxide	3.39	3.30	3.46	152457	135375	11.20
Endosulfan I	3.73	3.65	3.81	149961	133676	10.86
4,4'-DDE	3.68	3.57	3.77	135070	130346	3.50
Dieldrin	3.95	3.84	4.04	156603	142731	8.86
Endrin	4.16	4.06	4.26	125009	126502	1.19
Endosulfan II	4.37	4.27	4.47	132709	122311	7.84
4,4'-DDD	4.23	4.12	4.32	118211	110845	6.23
Endrin aldehyde	4.78	4.66	4.90	112278	100925	10.11
Endosulfan sulfate	5.22	5.10	5.34	119718	109085	8.88
4,4'-DDT	4.49	4.37	4.61	99911	110968	11.07
Endrin ketone	5.50	5.38	5.62	147688	135768	8.07
Methoxychlor	4.98	4.86	5.10	50910	54596	7.24
alpha-Chlordane	3.61	3.53	3.69	148444	133992	9.74
gamma-Chlordane	3.50	3.41	3.57	154004	139274	9.56

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8320.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.45	2.57	276418	251265	9.10
beta-BHC	2.87	2.80	2.92	114448	104987	8.27
gamma-BHC	2.82	2.74	2.86	246341	224152	9.01
delta-BHC	3.13	3.06	3.18	245282	225413	8.10
Heptachlor	3.20	3.10	3.26	233560	215189	7.87
Aldrin	3.50	3.40	3.56	234558	214111	8.72
Heptachlor epoxide	4.03	3.94	4.10	211331	191457	9.40
Endosulfan I	4.42	4.33	4.49	192661	174496	9.43
4,4'-DDE	4.51	4.41	4.61	198511	188911	4.84
Dieldrin	4.70	4.59	4.79	213853	194546	9.03
Endrin	5.02	4.91	5.11	160856	167267	3.99
Endosulfan II	5.24	5.13	5.33	189739	169075	10.89
4,4'-DDD	5.12	5.01	5.21	158242	147993	6.48
Endrin aldehyde	5.60	5.47	5.71	154359	138297	10.41
Endosulfan sulfate	5.89	5.77	6.01	164582	153025	7.02
4,4'-DDT	5.45	5.33	5.57	121669	140071	15.12
Endrin ketone	6.50	6.37	6.61	205854	185662	9.81
Methoxychlor	6.21	6.08	6.32	66021	73150	10.80
alpha-Chlordane	4.36	4.27	4.43	205228	185989	9.37
gamma-Chlordane	4.21	4.12	4.28	212019	193139	8.90

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8326.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.16	2.07	2.19	198340	183097	7.69
beta-BHC	2.40	2.32	2.44	88039	73102	16.97
gamma-BHC	2.35	2.27	2.39	166678	162321	2.61
delta-BHC	2.53	2.45	2.57	180899	169529	6.29
Heptachlor	2.68	2.59	2.75	168116	155428	7.55
Aldrin	2.91	2.82	2.98	168482	156380	7.18
Heptachlor epoxide	3.39	3.30	3.46	152457	140520	7.83
Endosulfan I	3.74	3.65	3.81	149961	138175	7.86
4,4'-DDE	3.68	3.57	3.77	135070	131265	2.82
Dieldrin	3.95	3.84	4.04	156603	145267	7.24
Endrin	4.17	4.06	4.26	125009	123051	1.57
Endosulfan II	4.38	4.27	4.47	132709	122733	7.52
4,4'-DDD	4.23	4.12	4.32	118211	115965	1.90
Endrin aldehyde	4.78	4.66	4.90	112278	98425	12.34
Endosulfan sulfate	5.22	5.10	5.34	119718	108828	9.10
4,4'-DDT	4.50	4.37	4.61	99911	94897	5.02
Endrin ketone	5.50	5.38	5.62	147688	135351	8.35
Methoxychlor	4.98	4.86	5.10	50910	49851	2.08
alpha-Chlordane	3.61	3.53	3.69	148444	136700	7.91
gamma-Chlordane	3.50	3.41	3.57	154004	142681	7.35

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8326.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.45	2.57	276418	256773	7.11
beta-BHC	2.87	2.80	2.92	114448	105285	8.01
gamma-BHC	2.82	2.74	2.86	246341	227088	7.82
delta-BHC	3.13	3.06	3.18	245282	229077	6.61
Heptachlor	3.20	3.10	3.26	233560	212474	9.03
Aldrin	3.50	3.40	3.56	234558	214602	8.51
Heptachlor epoxide	4.03	3.94	4.10	211331	193329	8.52
Endosulfan I	4.42	4.33	4.49	192661	176998	8.13
4,4'-DDE	4.51	4.41	4.61	198511	186558	6.02
Dieldrin	4.70	4.59	4.79	213853	198435	7.21
Endrin	5.02	4.91	5.11	160856	161973	0.69
Endosulfan II	5.24	5.13	5.33	189739	177784	6.30
4,4'-DDD	5.11	5.01	5.21	158242	156127	1.34
Endrin aldehyde	5.59	5.47	5.71	154359	142778	7.50
Endosulfan sulfate	5.89	5.77	6.01	164582	156171	5.11
4,4'-DDT	5.45	5.33	5.57	121669	114576	5.83
Endrin ketone	6.49	6.37	6.61	205854	208651	1.36
Methoxychlor	6.20	6.08	6.32	66021	71600	8.45
alpha-Chlordane	4.36	4.27	4.43	205228	187445	8.67
gamma-Chlordane	4.21	4.12	4.28	212019	194285	8.36

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08320.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 13:07
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:18:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

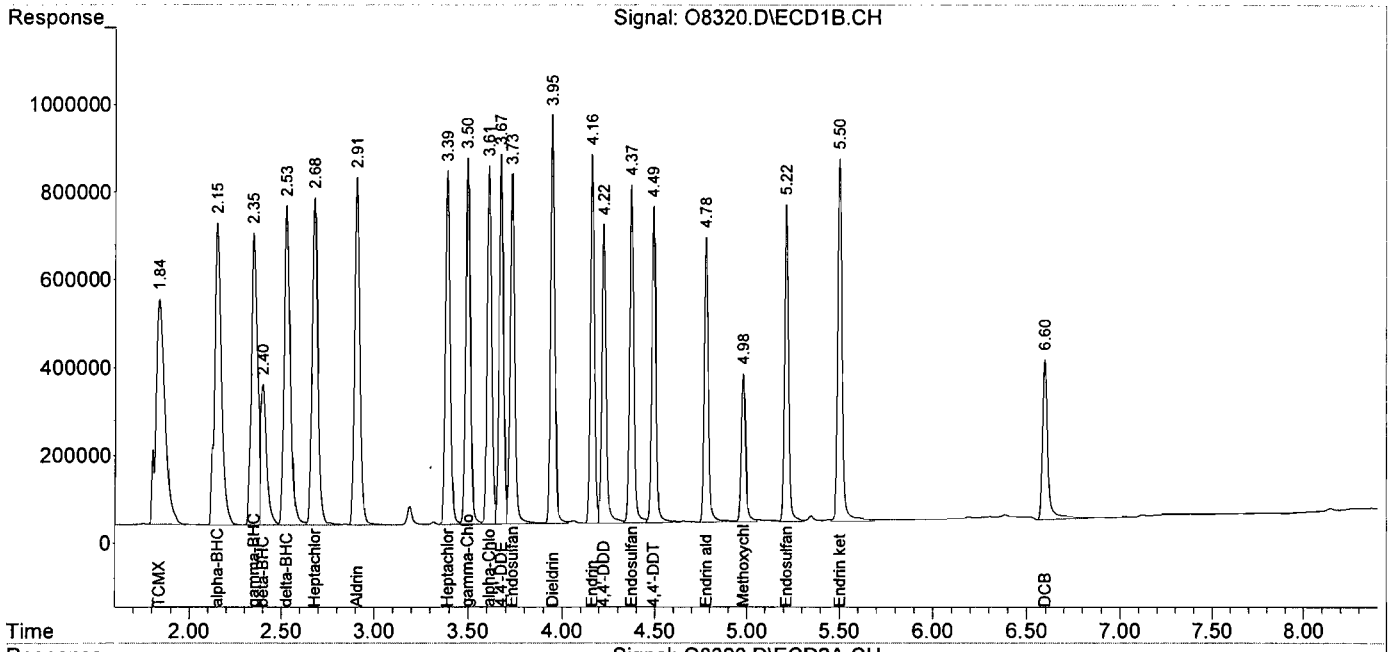
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.84	2.10	17107297	25397952	173.000	170.386
	Spiked Amount 200.000	Range 10 - 180		Recovery =		86.50%	85.19%
2) S	DCB	6.60	8.15	7406978	10728640	162.358	172.511
	Spiked Amount 200.000	Range 10 - 180		Recovery =		81.18%	86.26%
	Target Compounds						
3) T	alpha-BHC	2.15	2.53	17910307	25126538	90.301	90.900
4) T	beta-BHC	2.40	2.87	7224628	10498668	82.061	91.733
5) T	gamma-BHC (Linda	2.35	2.82	15389260	22415237	92.329	90.993
6) T	delta-BHC	2.53	3.13	16622199	22541298	91.887	91.899
7) T	Heptachlor	2.68	3.20	15735314	21518857	93.598	92.134
8) T	Aldrin	2.91	3.50	15351309	21411077	91.116	91.282
9) T	Heptachlor epoxi	3.39	4.03	13537540	19145718	88.796	90.596
10) T	Endosulfan I	3.73	4.42	13367621	17449560	89.141	90.571
11) T	4,4'-DDE	3.68	4.51	13034553	18891074	96.502	95.164
12) T	Dieldrin	3.95	4.70	14273137	19454596	91.142	90.972
13) T	Endrin	4.16	5.02	12650151	16726703	101.194	103.985
14) T	Endosulfan II	4.37	5.24	12231060	16907519	92.165	89.109
15) T	4,4'-DDD	4.23	5.12	11084469	14799306	93.769	93.523
16) T	Endrin aldehyde	4.78	5.60	10092537	13829686	89.889	89.594
17) T	Endosulfan sulfa	5.22	5.89	10908519	15302492	91.118	92.978
18) T	4,4'-DDT	4.49	5.45	11096765	14007053	111.066	115.124
19) T	Endrin ketone	5.50	6.50	13576826	18566238	91.929	90.191
20) T	Methoxychlor	4.98	6.21	5459584	7314954	107.240	110.797m
21) T	alpha-Chlordane	3.61	4.36	13399199	18598882	90.265	90.625
22) T	gamma-Chlordane	3.50	4.21	13927404	19313905	90.435	91.095
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

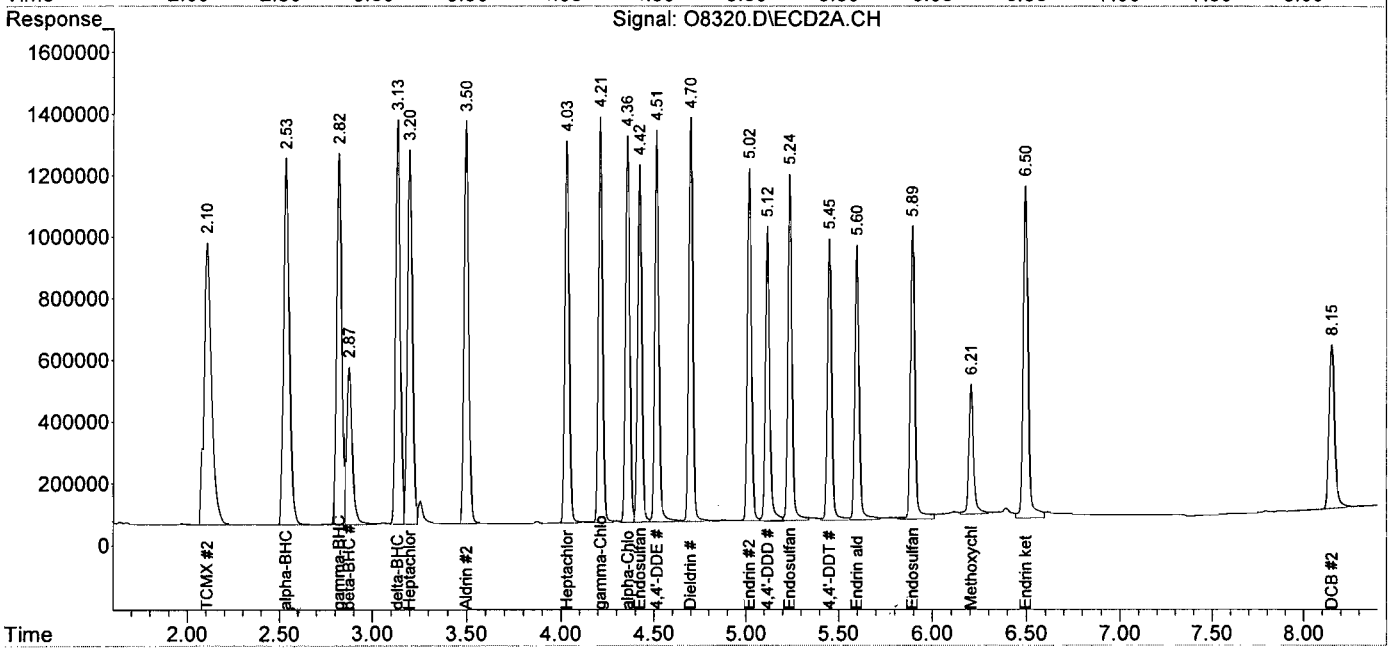
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8320.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 13:07
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:18:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08326.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 18:23
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:51:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

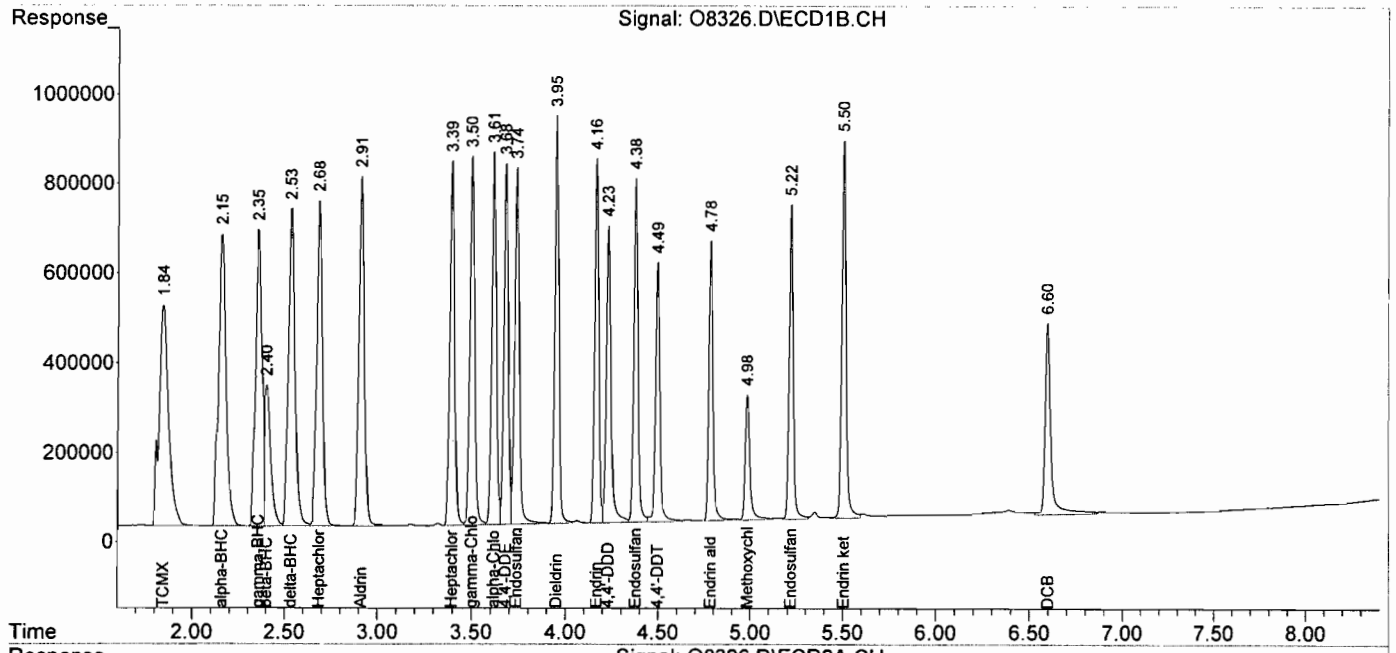
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	TCMX	1.84	2.11	17586002	25871563	177.841	173.563	
	Spiked Amount 200.000	Range 10 - 180		Recovery =		88.92%	86.78%	
2) S	DCB	6.60	8.15	9223631	17005619	202.179	273.442	#
	Spiked Amount 200.000	Range 10 - 180		Recovery =		101.09%	136.72%	
	Target Compounds							
3) T	alpha-BHC	2.16	2.53	18309720	25677309	92.315	92.893	
4) T	beta-BHC	2.40	2.87	7310194	10528516	83.033	91.994	
5) T	gamma-BHC (Linda	2.35	2.82	16232104	22708816	97.386	92.184	
6) T	delta-BHC	2.53	3.13	16952888	22907741	93.715	93.393	
7) T	Heptachlor	2.68	3.20	15542800	21247381	92.453	90.972	
8) T	Aldrin	2.91	3.50	15638009	21460212	92.817	91.492	
9) T	Heptachlor epoxi	3.39	4.03	14051989	19332869	92.170	91.482	
10) T	Endosulfan I	3.74	4.42	13817486	17699762	92.141	91.870	
11) T	4,4'-DDE	3.68	4.51	13126464	18655833	97.183	93.979	
12) T	Dieldrin	3.95	4.70	14526651	19843537	92.761	92.791	
13) T	Endrin	4.17	5.02	12305095	16197323	98.434	100.694	
14) T	Endosulfan II	4.38	5.24	12273271	17778354	92.483	93.699	
15) T	4,4'-DDD	4.23	5.11	11596506	15612681	98.100	98.663	
16) T	Endrin aldehyde	4.78	5.59	9842540	14277823	87.662	92.497	
17) T	Endosulfan sulfa	5.22	5.89	10882758	15617055	90.903	94.889	
18) T	4,4'-DDT	4.50	5.45	9489749	11457566	94.982	94.170	
19) T	Endrin ketone	5.50	6.49	13535091	20865138	91.646	101.359	
20) T	Methoxychlor	4.98	6.20	4985092	7160019	97.920	108.450	
21) T	alpha-Chlordane	3.61	4.36	13670015	18744468	92.089	91.335	
22) T	gamma-Chlordane	3.50	4.21	14268050	19428515	92.647	91.636	
	Sum Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

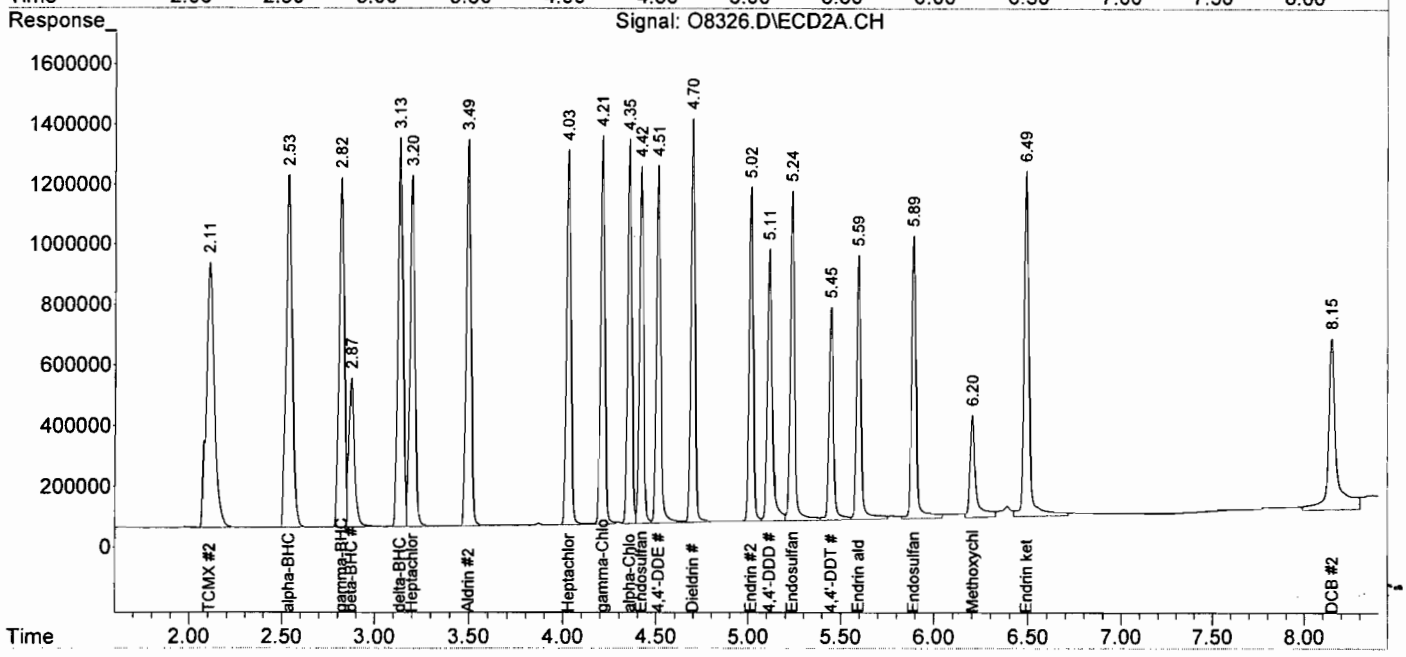
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8326.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 18:23
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:51:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150219-06	02/20/2015	17:08	1.81		6.60		2.08		8.15	
Pest	LCSS150219-06	02/20/2015	17:20	1.81		6.60		2.08		8.15	
Pest	01273-001MS	02/20/2015	17:33	1.81		6.60		2.08		8.15	
Pest	01273-001MSD	02/20/2015	17:46	1.81		6.60		2.08		8.15	
GPEC-WC1	E15-01273-001	02/20/2015	17:58	1.81		6.59		2.08		8.14	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 02/20/2015

Data file: O8309.D Mon Feb 23 09:12:04 2015

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	9238791	Endrin (1)	10384387	5.24	6.66
DDD	370105	Endrin ketone	428925		
DDE	140284	Endrin aldehyde	311830		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	10436408	Endrin (2)	13784047	6.02	6.21
DDD	469751	Endrin ketone	585524		
DDE	199095	Endrin aldehyde	326508		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08309.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 10:41
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:12:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.67	4.51	140284	199095	1.039	1.003
13) T	Endrin	4.16	5.02	10384387	13784047	83.069	85.692
15) T	4,4'-DDD	4.22	5.12	370105	469751	3.131	2.969m
16) T	Endrin aldehyde	4.78	5.60	311830	326508	2.777	2.115m
18) T	4,4'-DDT	4.49	5.45	9238791	10436408	92.470	85.777
19) T	Endrin ketone	5.50	6.50	428925	585524	2.904m	2.844m
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

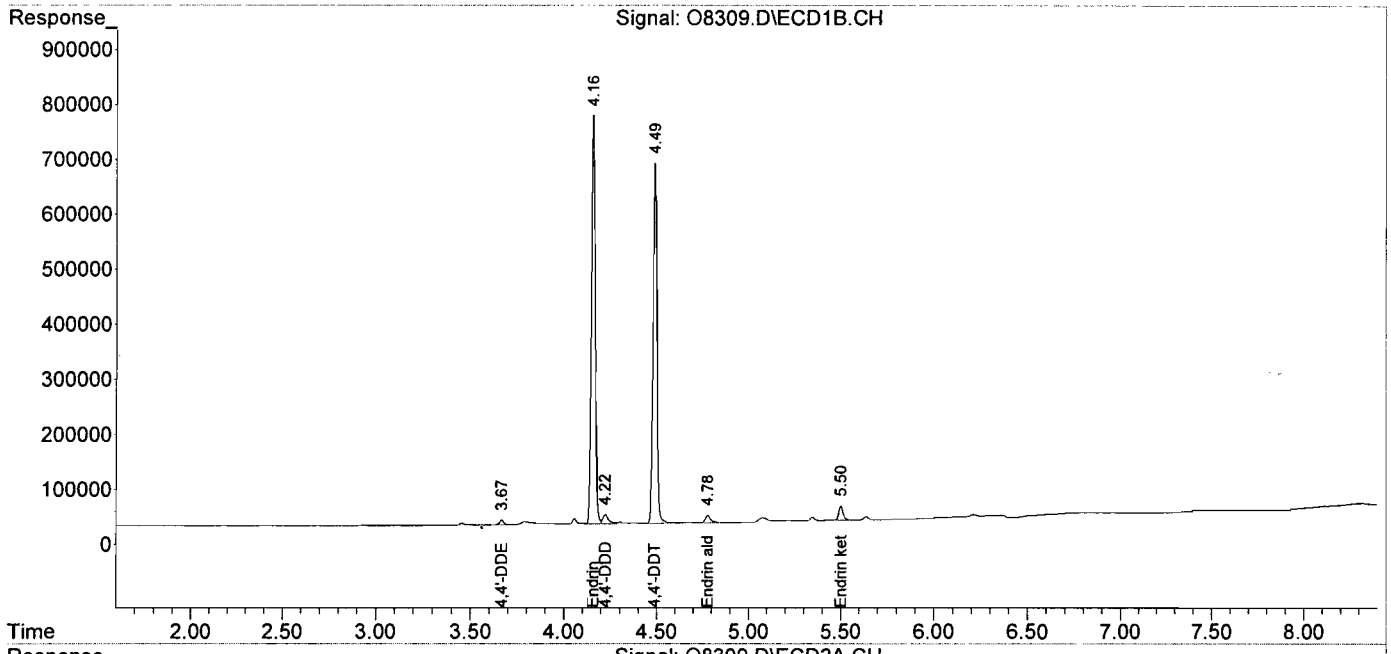
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

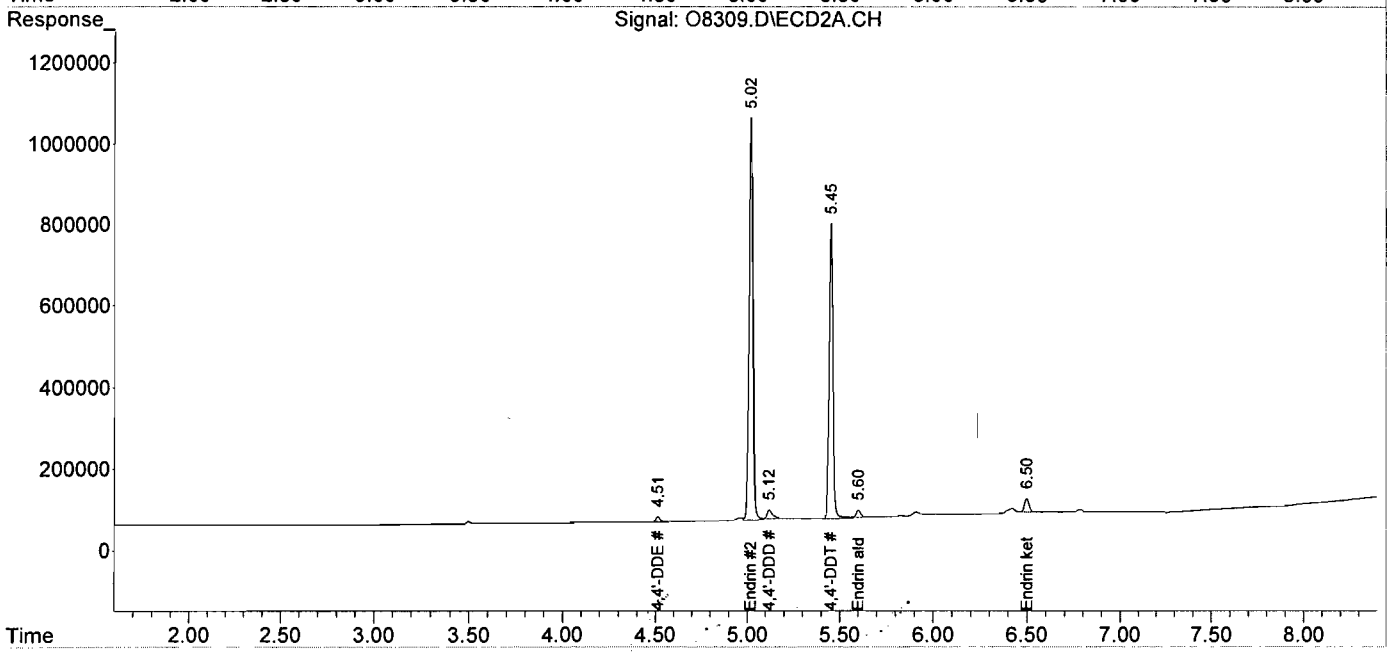
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8309.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 10:41
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:12:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150219-06
Client ID: Pest
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8321.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.008	0.004
beta-BHC	ND		0.008	0.004
gamma-BHC (Lindane)	ND		0.008	0.004
delta-BHC	ND		0.008	0.004
Heptachlor	ND		0.008	0.004
Aldrin	ND		0.008	0.004
Heptachlor epoxide	ND		0.008	0.004
Endosulfan I	ND		0.008	0.004
4,4'-DDE	ND		0.008	0.004
Dieldrin	ND		0.008	0.004
Endrin	ND		0.008	0.004
Endosulfan II	ND		0.008	0.004
4,4'-DDD	ND		0.008	0.004
Endrin aldehyde	ND		0.008	0.004
Endosulfan sulfate	ND		0.008	0.004
4,4'-DDT	ND		0.008	0.004
Endrin ketone	ND		0.008	0.004
Methoxychlor	ND		0.008	0.004
alpha-Chlordane	ND		0.008	0.004
gamma-Chlordane	ND		0.008	0.004
Toxaphene	ND		0.100	0.048
Endosulfan (I and II)	ND		0.008	0.004
Chlordane (alpha and gamma)	ND		0.008	0.004

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8321.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:08
Operator : IB
Sample : Pest,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:46:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

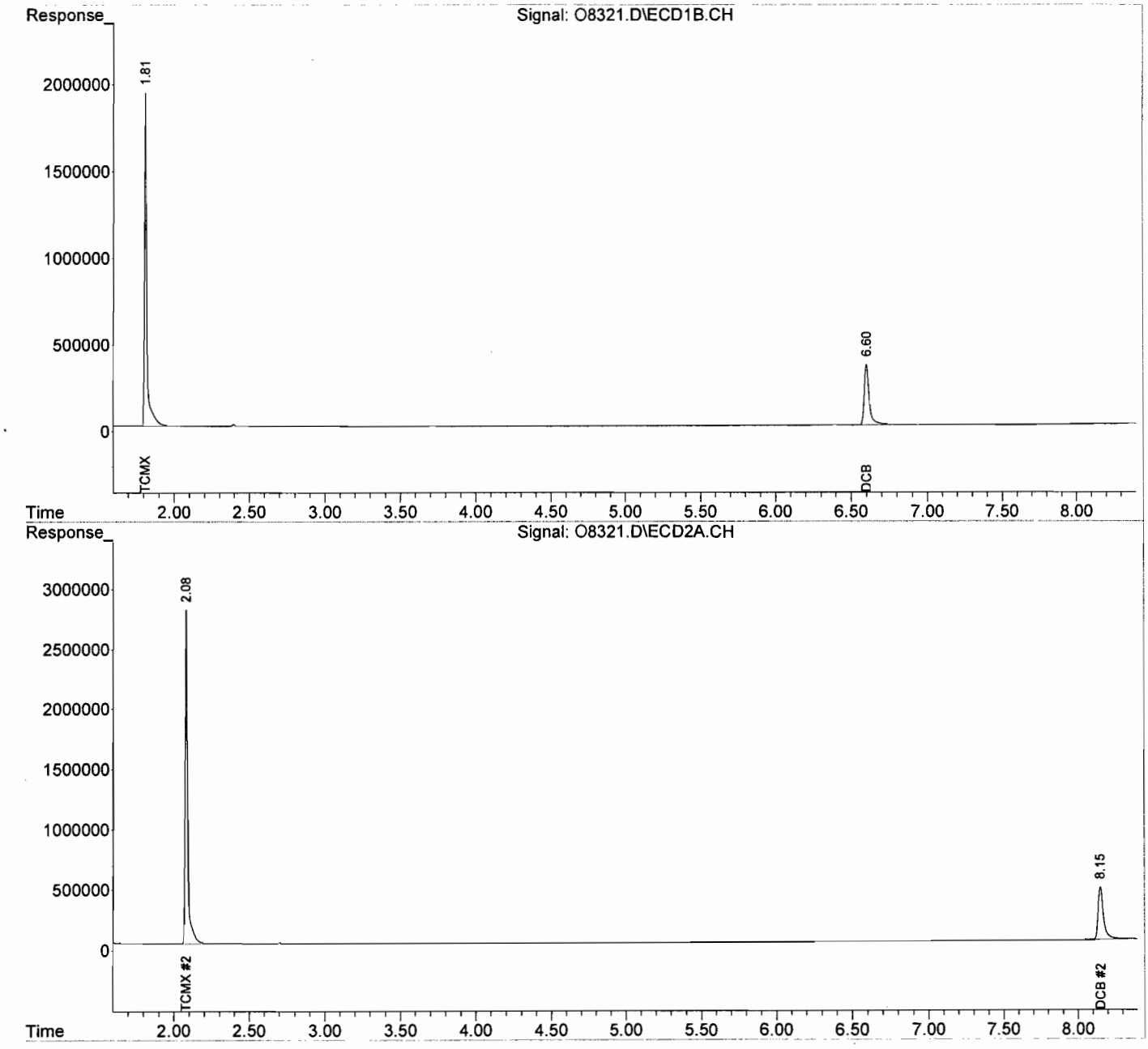
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	20071697	30204554	202.978	202.632
Spiked Amount 200.000	Range 10 - 180		Recovery =		101.49%	101.32%
2) S DCB	6.60	8.15	8208748	10851605	179.933	174.488
Spiked Amount 200.000	Range 10 - 180		Recovery =		89.97%	87.24%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8321.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:08
Operator : IB
Sample : Pest,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:46:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08322.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:20
Operator : IB
Sample : Pest,LCSS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19938202	29919283	201.628	200.718
	Spiked Amount 200.000	Range 10 - 180		Recovery =		100.81%	100.36%
2) S	DCB	6.60	8.15	7626586	12094232	167.172	194.469
	Spiked Amount 200.000	Range 10 - 180		Recovery =		83.59%	97.23%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	15651388	22055079	78.912	79.789
4) T	beta-BHC	2.38	2.86	7078385	8514235	80.400	74.394
5) T	gamma-BHC (Linda	2.33	2.80	13078530	19906960	78.466	80.811
6) T	delta-BHC	2.51	3.12	13723858	18326582	75.865	74.716
7) T	Heptachlor	2.66	3.18	12937710	18516524	76.957	79.280
8) T	Aldrin	2.90	3.48	13572954	18728934	80.560	79.848
9) T	Heptachlor epoxi	3.38	4.02	12105074	16865959	79.400	79.808
10) T	Endosulfan I	3.73	4.41	12911193	15786137	86.097	81.937
11) T	4,4'-DDE	3.67	4.51	10734241	16010052	79.472	80.651
12) T	Dieldrin	3.94	4.69	10802376	15147398	68.979	70.831
13) T	Endrin	4.16	5.01	9357263	12172933	74.853	75.676
14) T	Endosulfan II	4.37	5.23	10623147	15670391	80.049	82.589
15) T	4,4'-DDD	4.23	5.12	9072532	11843520	76.749	74.844
16) T	Endrin aldehyde	4.78	5.59	8488967	11368922	75.607	73.652
17) T	Endosulfan sulfa	5.22	5.89	9080991	12445579	75.853	75.619
18) T	4,4'-DDT	4.49	5.45	7760172	8966780	77.671	73.698
19) T	Endrin ketone	5.50	6.49	11689413	16480608	79.149	80.060
20) T	Methoxychlor	4.99	6.21	3817531	4754749	74.986	72.018
21) T	alpha-Chlordane	3.61	4.35	11713699	16192488	78.910	78.900
22) T	gamma-Chlordane	3.49	4.20	12220830	17034524	79.354	80.344
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

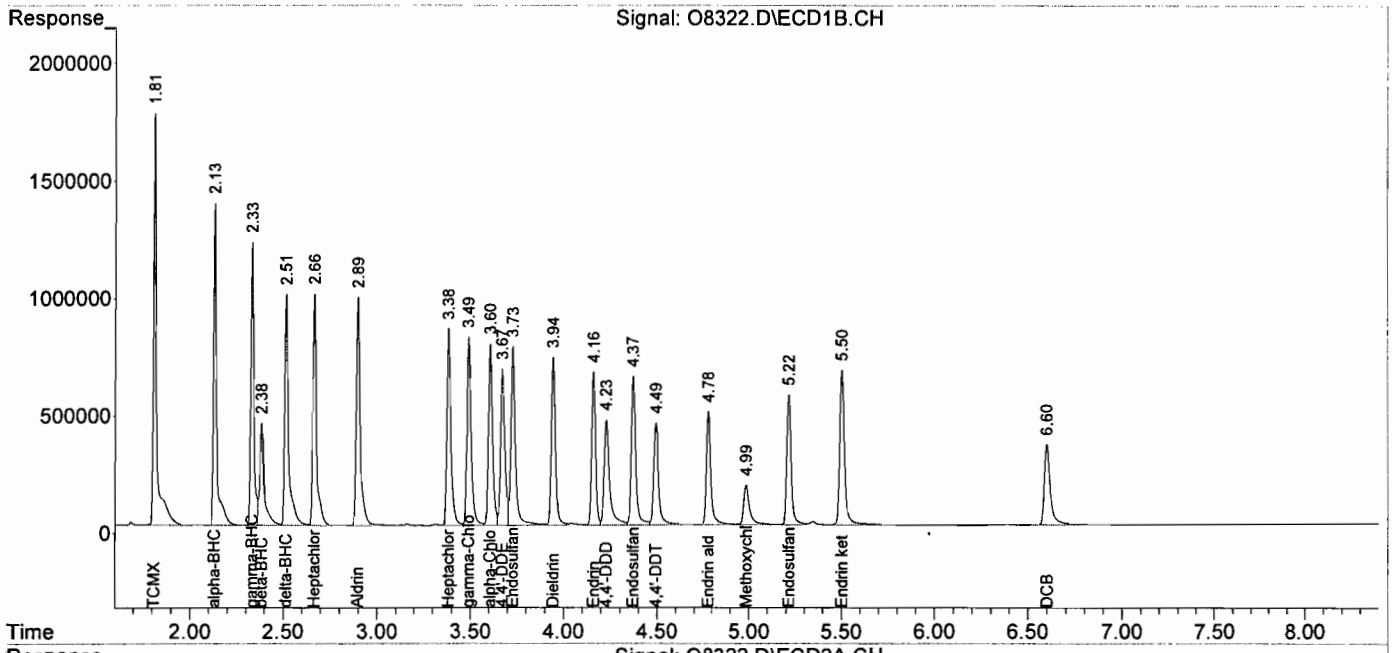
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

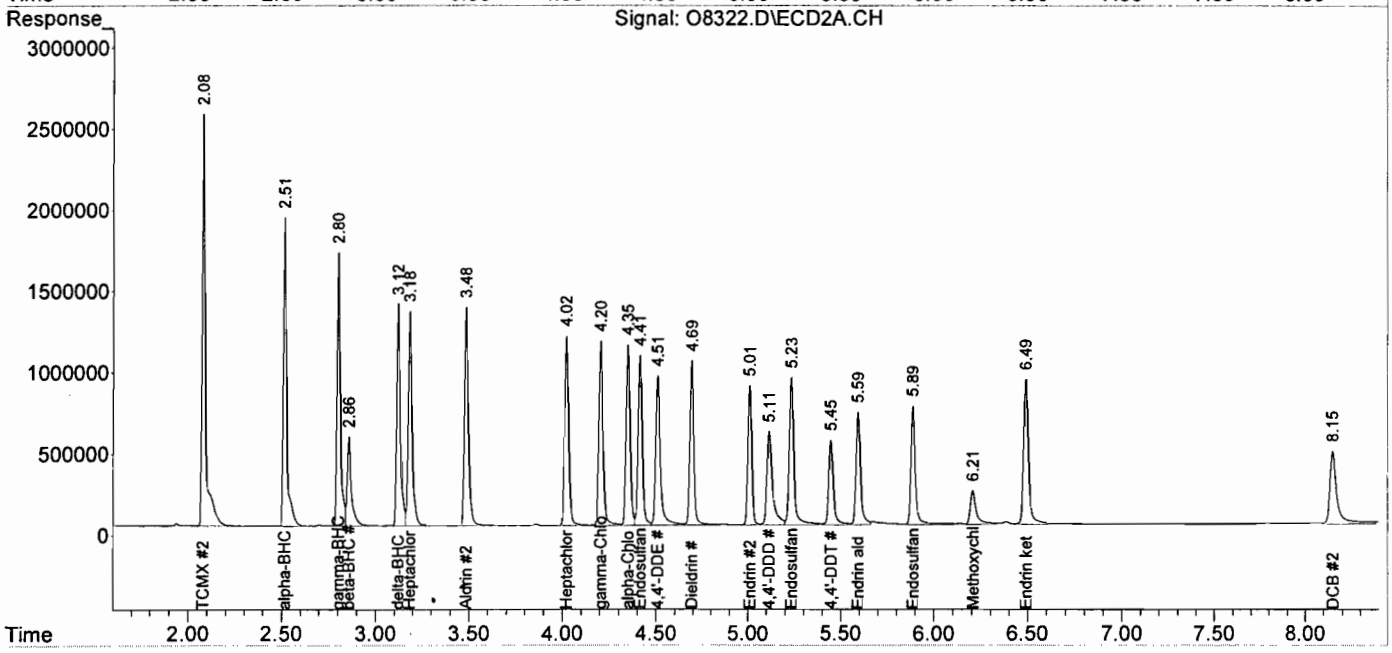
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8322.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:20
Operator : IB
Sample : Pest,LCSS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08323.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:33
Operator : IB
Sample : Pest,01273-001MS,S,5.09g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:02:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

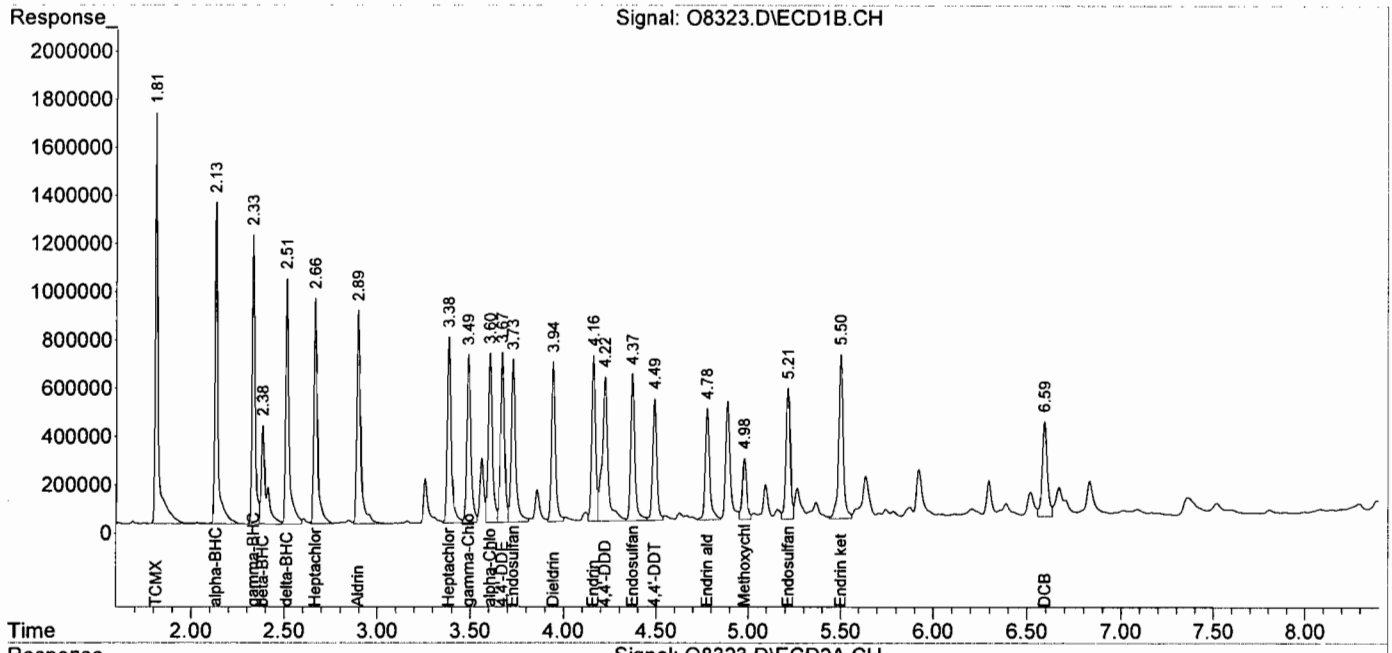
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18675395	29136955	188.858	195.470
	Spiked Amount 200.000	Range 10 - 180		Recovery =		94.43%	97.73%
2) S	DCB	6.60	8.15	7480974	14896656	163.980	239.531 #
	Spiked Amount 200.000	Range 10 - 180		Recovery =		81.99%	119.77%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	14720506	21332658	74.218	77.175
4) T	beta-BHC	2.38	2.86	7363087	8842937	83.634m	77.266
5) T	gamma-BHC (Linda	2.33	2.80	12524355	20654029	75.141	83.843
6) T	delta-BHC	2.51	3.12	12907142	18511985	71.350	75.472
7) T	Heptachlor	2.66	3.18	11900202	17322810	70.786	74.169
8) T	Aldrin	2.90	3.48	12604439	17974117	74.812	76.630
9) T	Heptachlor epoxi	3.38	4.02	11038811	16054342	72.406	75.968
10) T	Endosulfan I	3.73	4.41	10804662	14875093	72.050	77.208
11) T	4,4'-DDE	3.67	4.51	10206394	14858829	75.564	74.851
12) T	Dieldrin	3.94	4.69	9679576	19434938	61.810	90.880 #
13) T	Endrin	4.16	5.01	9846035	13615481	78.763	84.644
14) T	Endosulfan II	4.37	5.23	9621325	15509811	72.500	81.743
15) T	4,4'-DDD	4.22	5.11	12775586	13398101	108.074	84.668
16) T	Endrin aldehyde	4.78	5.59	7826030	11946571	69.702	77.395
17) T	Endosulfan sulfa	5.21	5.89	8575577	14125556	71.631	85.827
18) T	4,4'-DDT	4.49	5.44	7763286	9771688	77.702	80.314
19) T	Endrin ketone	5.50	6.49	11813332	17639806	79.988	85.691
20) T	Methoxychlor	4.98	6.20	4208444	8409936	82.664	127.382m#
21) T	alpha-Chlordane	3.60	4.35	10584751	15740004	71.305	76.695
22) T	gamma-Chlordane	3.49	4.20	10499697	15485463	68.178	73.038
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

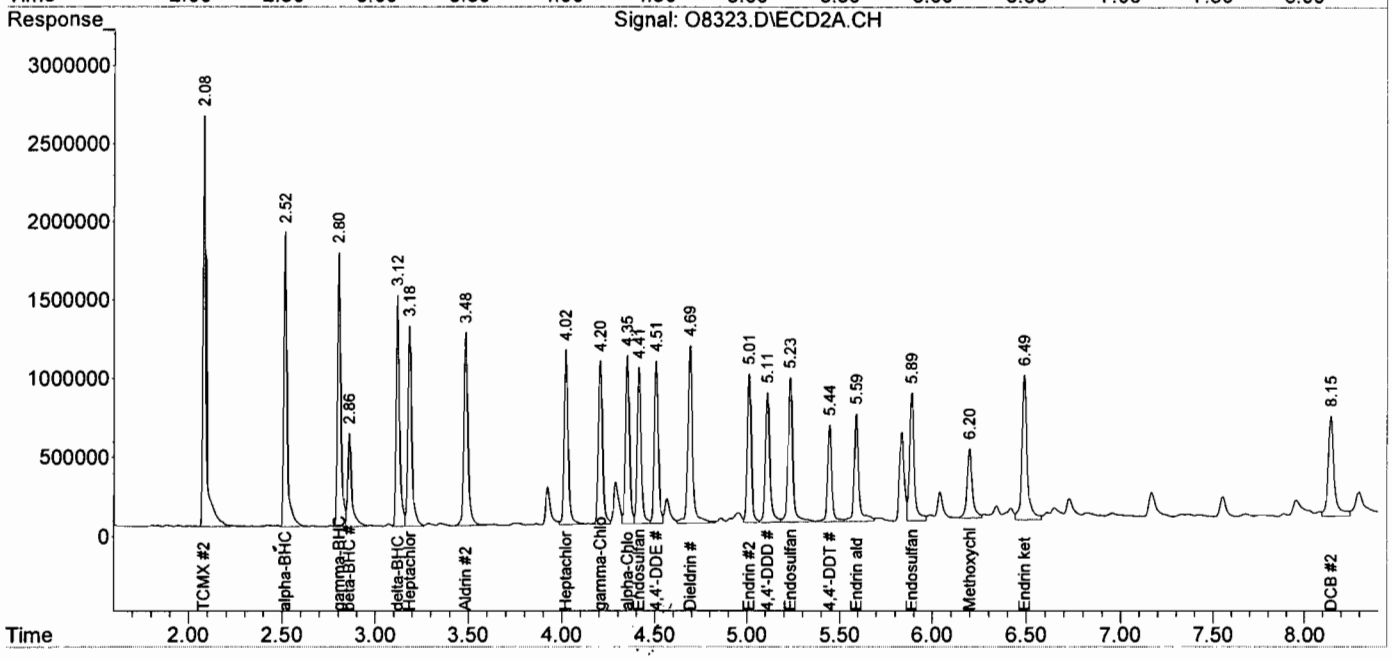
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8323.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:33
Operator : IB
Sample : Pest,01273-001MS,S,5.09g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:02:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08324.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:46
Operator : IB
Sample : Pest,01273-001MSD,S,5.93g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19344181	29648882	195.621	198.904
Spiked Amount	200.000	Range 10 - 180		Recovery =		97.81%	99.45%
2) S	DCB	6.60	8.15	7392180	13618686	162.034	218.981 #
Spiked Amount	200.000	Range 10 - 180		Recovery =		81.02%	109.49%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	14878158	21221989	75.013	76.775
4) T	beta-BHC	2.38	2.86	7398092	8792682	84.032	76.827
5) T	gamma-BHC (Linda	2.33	2.80	11867721	19371943	71.201	78.639
6) T	delta-BHC	2.51	3.12	13165573	18156576	72.779	74.023
7) T	Heptachlor	2.66	3.18	11763182	17039147	69.971	72.954
8) T	Aldrin	2.90	3.48	12453550	17691884	73.916	75.426
9) T	Heptachlor epoxi	3.38	4.02	10939236	15700329	71.753	74.293
10) T	Endosulfan I	3.73	4.41	11253989	14870331	75.046	77.184
11) T	4,4'-DDE	3.67	4.51	10147744	14813835	75.130	74.625
12) T	Dieldrin	3.94	4.69	10072475	16136615	64.319	75.457
13) T	Endrin	4.16	5.01	9460211	13120055	75.676	81.564
14) T	Endosulfan II	4.37	5.23	9561015	15035939	72.045	79.245
15) T	4,4'-DDD	4.22	5.11	10694894	12889856	90.473	81.457
16) T	Endrin aldehyde	4.78	5.59	7240963	10720354	64.491	69.451
17) T	Endosulfan sulfa	5.22	5.89	8223575	13207574	68.691	80.249
18) T	4,4'-DDT	4.49	5.45	7524429	9607991	75.311	78.968
19) T	Endrin ketone	5.50	6.49	10533982	16599898	71.326	80.639
20) T	Methoxychlor	4.98	6.20	3896234	6680592	76.532	101.188m#
21) T	alpha-Chlordane	3.61	4.35	10385246	15125370	69.961	73.700
22) T	gamma-Chlordane	3.49	4.20	10323527	15084113	67.034	71.145
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

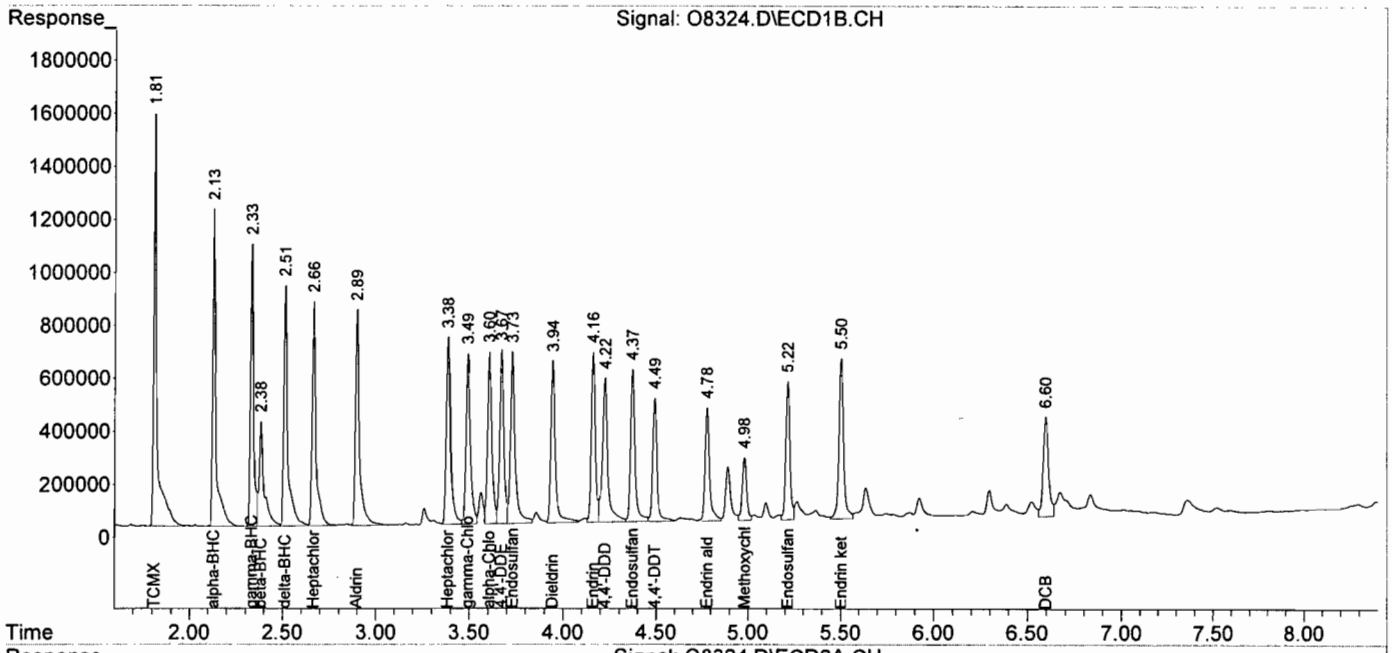
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

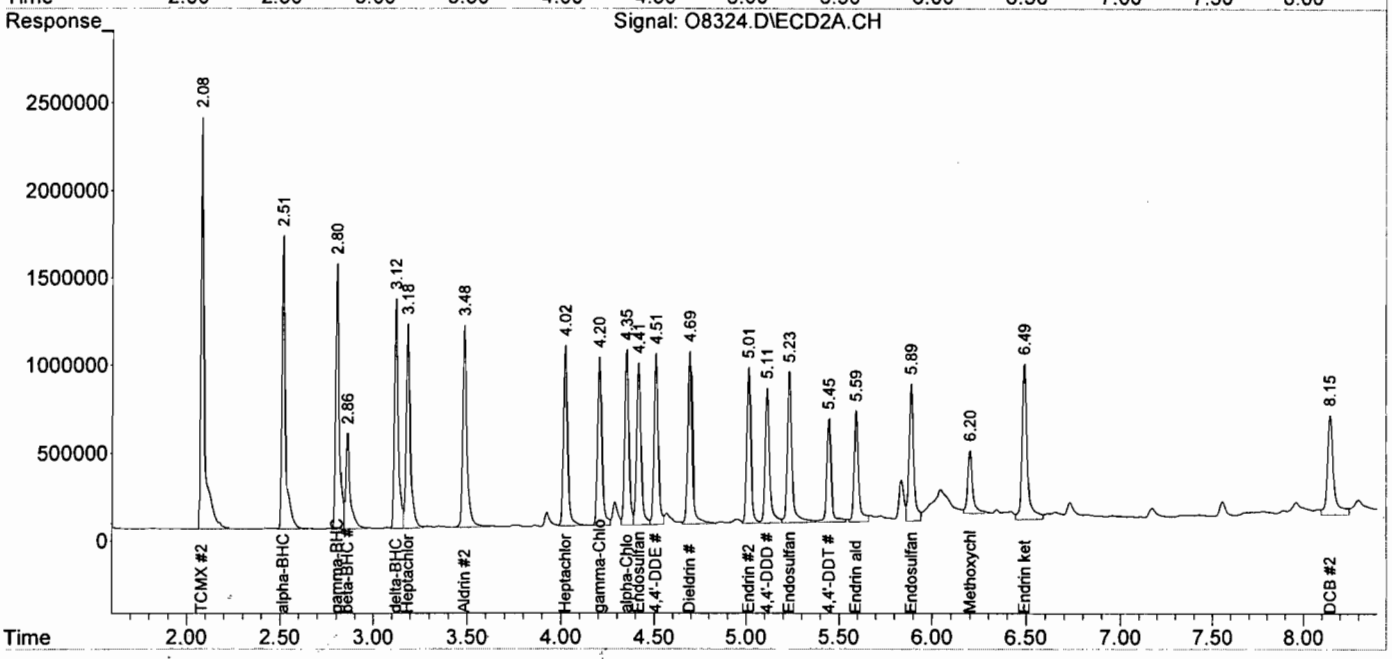
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8324.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:46
Operator : IB
Sample : Pest,01273-001MSD,S,5.93g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Soil)

Extraction Date/Time: 02/19/2015 14:29

Batch ID: **150219-06**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-06	PCB/Pest	5.00	20	40	1			
LCSS150219-06	PCB	5	20	40	1	100		
01273-001MS	PCB	5.27	20	40	4	100		R-48
01273-001MSD	PCB	5.60	20	40	4	100		R-48
LCSS150219-06	Pesticides	5.00	20	40	1		100	
01273-001MS	Pesticides	5.09	20	40	4		100	R-48
01273-001MSD	Pesticides	5.93	20	40	4		100	R-48

Standard Info	Surrogate IAS #
Solvent	RA#74-17/RA#74-13
Surrogate	IAS#5134
SPK 1	IAS#5175
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	PCB/Pest	5.31	20	40	4		R-48	01273-001MS / 150219-06	01273-001MS / 150219-06
2	01264-001	PCB	5.10	20	40	3			01273-001MS / 150219-06	
3	01264-004	PCB	5.66	20	40	4			01273-001MS / 150219-06	
4	01264-008	PCB	5.20	20	40	3			01273-001MS / 150219-06	
5	01264-012	PCB	5.27	20	40	4			01273-001MS / 150219-06	
6	01264-016	PCB	5.41	20	40	4			01273-001MS / 150219-06	
7	01264-036	PCB	5.23	20	40	3			01273-001MS / 150219-06	
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/19/2015 14:29
Weighed	Archie	02/19/2015 14:47
Surrogated	Archie	02/19/2015 14:48
Filtered	Archie	02/19/2015 16:39
Transferred	Archie	02/19/2015 16:39
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Pest

DATE 2/20/2015 9:19 **Extra. Batch** 150219-06 BS Soil

INSTRUMENT O

METHOD OPST0220

SYS METHOD 8081B (eg. 8015B M, 3810)

ANALYST Iwona

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8309		ENDRIN/DDT						1			
2	100	O8310		HEXANE						1			
3	99	O8311		ISOOCTANE						1			
4	95	O8312		PRIMER						1			
5	5	O8313	ICC_PEST_L5_IAS_5248,300_PPB							1			
6	6	O8314	ICC_PEST_L4_IAS_5249,200_PPB							1			
7	9	O8315	ICC_PEST_L3_IAS_5250,100_PPB							1			
8	7	O8316	ICC_PEST_L2_IAS_5251,50_PPB							1			
9	8	O8317	ICC_PEST_L1_IAS_5252,2_PPB							1			
10	3	O8318	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	O8319	ICC_CHLOR_C_IAS_5254,0.5_PPM							1			
12	2	O8320	ICV_PEST_C_IAS_5171,100_PPB							1			
13	10	O8321		BLKS150219-06		1	5.00	20	S			2/19/15	0
14	11	O8322		LCSS150219-06		1	5.00	20	S			2/19/15	0
15	12	O8323		01273-001MS		1	5.09	20	S			2/19/15	10.6
16	13	O8324		01273-001MSD		1	5.93	20	S			2/19/15	10.6
17	14	O8325		01273	1	1	5.31	20	S	2/18/15	2/19/15	2/19/15	10.6
18	22	O8326	CCV_PEST_C_IAS_5171,100_PPB							1			

STANDARD IAS#	STANDARD NAME:	Pest L-1		
5252				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:500			2PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Stock		
5253				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	SUPELCO	48065-U	LC01899	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/20/16	100µl (SUPELCO) → 10ml isooctane			10 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Hale. Std.		
5254				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5253	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl (IAS# 5253) Chlad 20 µl (IAS# 5134) Surr. → 10ml isooctane			500PPB Chlordane 200PPB surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Endrin / DDT Mole. Std.		
5255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5056	—	—	5PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/28/15	1:50			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pest L-5		
5248				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5246 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:3,33			300PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-4		
5249				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:5			200PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-3		
5250				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-2		
5251				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:20			50PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	8011 Holding Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-308I-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 Surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809 ~~8097~~	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500µl Tox (IAS# 5167) 20µl surr (IAS# 5134) → 10ml (isooctane)			500PPB (Tox) / 2000PB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO		L1
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10562B3 DCB B2-20924	3168100 2188800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ML of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS# 5135 + 400 µl of SURR.) (IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep	ACE-8081-S	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

TCLP
PESTICIDE DATA

TCLP
PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/10/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150209-14	AQUEOUS	88		86		90		82	
Pest	TCLP150206	AQUEOUS	88		84		89		89	
Pest	00895-001MS	LEACHATE	89		104		92		105	
Pest	00895-001MSD	LEACHATE	90		102		93		104	
GROWES_W	E15-00895-001	LEACHATE	81		91		86		93	
TSCA_W.C	E15-00896-001	LEACHATE	84		99		89		96	
Pest	LCSA150209-14	AQUEOUS	88		82		91		84	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/23/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150223-08	AQUEOUS	102		92		105		96	
Pest	TCLP150219	AQUEOUS	103		96		108		94	
Pest	LCSA150223-08	AQUEOUS	104		98		109		98	
GPEC-WC1	E15-01273-001	LEACHATE	93		105		103		100	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150223-08
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0148.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	74.0	74	
beta-BHC	100.0	0.0	66.8	67	
gamma-BHC (Lindane)	100.0	0.0	75.5	76	
delta-BHC	100.0	0.0	68.5	69	
Heptachlor	100.0	0.0	73.4	73	
Aldrin	100.0	0.0	76.5	77	
Heptachlor epoxide	100.0	0.0	75.3	75	
Endosulfan I	100.0	0.0	76.6	77	
4,4'-DDE	100.0	0.0	77.3	77	
Dieldrin	100.0	0.0	66.9	67	
Endrin	100.0	0.0	75.1	75	
Endosulfan II	100.0	0.0	74.3	74	
4,4'-DDD	100.0	0.0	75.5	76	
Endrin aldehyde	100.0	0.0	68.3	68	
Endosulfan sulfate	100.0	0.0	70.0	70	
4,4'-DDT	100.0	0.0	76.3	76	
Endrin ketone	100.0	0.0	76.0	76	
Methoxychlor	100.0	0.0	81.5	82	
alpha-Chlordane	100.0	0.0	75.0	75	
gamma-Chlordane	100.0	0.0	75.4	75	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-00895-001
Date Received: 02/05/2015
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
MS Data file: O8182.D
MSD Data file: O8183.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
alpha-BHC	100.0	0.0	67.5	68		70.8	71	5
beta-BHC	100.0	0.0	58.5	59		64.7	65	10
gamma-BHC (Lindane)	100.0	0.0	74.5	75		76.9	77	3
delta-BHC	100.0	0.0	67.6	68		71.3	71	5
Heptachlor	100.0	0.0	74.2	74		77.4	77	4
Aldrin	100.0	0.0	72.0	72		74.4	74	3
Heptachlor epoxide	100.0	0.0	73.6	74		75.2	75	2
Endosulfan I	100.0	0.0	76.7	77		78.2	78	2
4,4'-DDE	100.0	0.0	78.3	78		80.4	80	3
Dieldrin	100.0	0.0	66.7	67		68.0	68	2
Endrin	100.0	0.0	92.3	92		94.8	95	3
Endosulfan II	100.0	0.0	73.3	73		76.1	76	4
4,4'-DDD	100.0	0.0	71.7	72		73.7	74	3
Endrin aldehyde	100.0	0.0	64.0	64		66.7	67	4
Endosulfan sulfate	100.0	0.0	72.2	72		76.4	76	6
4,4'-DDT	100.0	0.0	86.5	87		91.4	91	6
Endrin ketone	100.0	0.0	69.3	69		72.4	72	4
Methoxychlor	100.0	0.0	94.1	94		101.0	101	7
alpha-Chlordane	100.0	0.0	74.3	74		75.6	76	2
gamma-Chlordane	100.0	0.0	76.0	76		77.4	77	2

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID:	O8180.D	Instrument ID:	GC-O
Date Extracted:	02/09/2015	Matrix:	AQUEOUS
Date Analyzed:	02/10/2015	Time Analyzed:	12:12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	TCLP150206	02/10/2015	12:25
Pest	00895-001MS	02/10/2015	12:50
Pest	00895-001MSD	02/10/2015	13:03
GROWES_W	E15-00895-001	02/10/2015	13:15
TSCA_W.C	E15-00896-001	02/10/2015	13:28
Pest	LCSA150209-14	02/10/2015	14:19

PESTICIDE METHOD BLANK SUMMARY

Lab File ID:	V0146.D	Instrument ID:	GC-V
Date Extracted:	02/23/2015	Matrix:	AQUEOUS
Date Analyzed:	02/23/2015	Time Analyzed:	14:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	TCLP150219	02/23/2015	14:49
Pest	LCSA150223-08	02/23/2015	15:01
GPEC-WC1	E15-01273-001	02/23/2015	15:12

TCLP
PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0149.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:12
Operator : IB
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-08,02/23/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.06	140.0E6	40198243	186.601	205.911
Spiked Amount 200.000			Recovery	=	93.30%	102.96%
2) S DCB	6.05	6.73	59069128	16224576	209.643	199.827
Spiked Amount 200.000			Recovery	=	104.82%	99.91%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

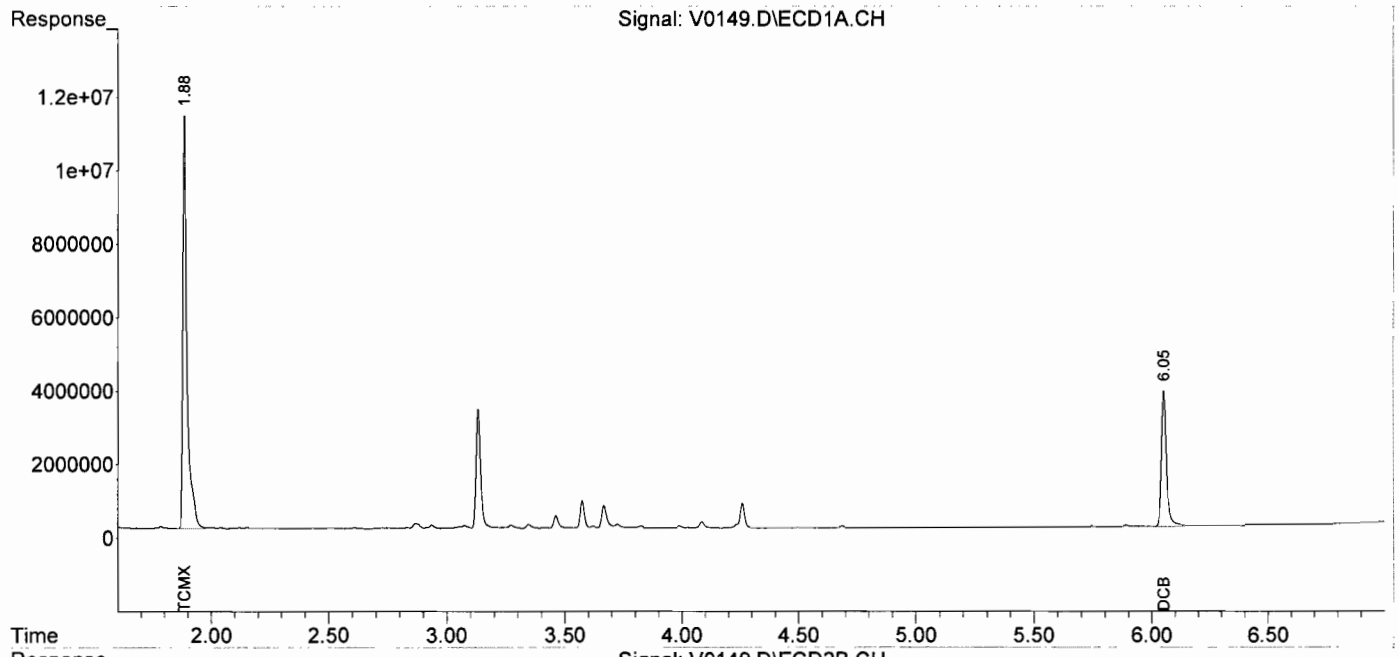
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

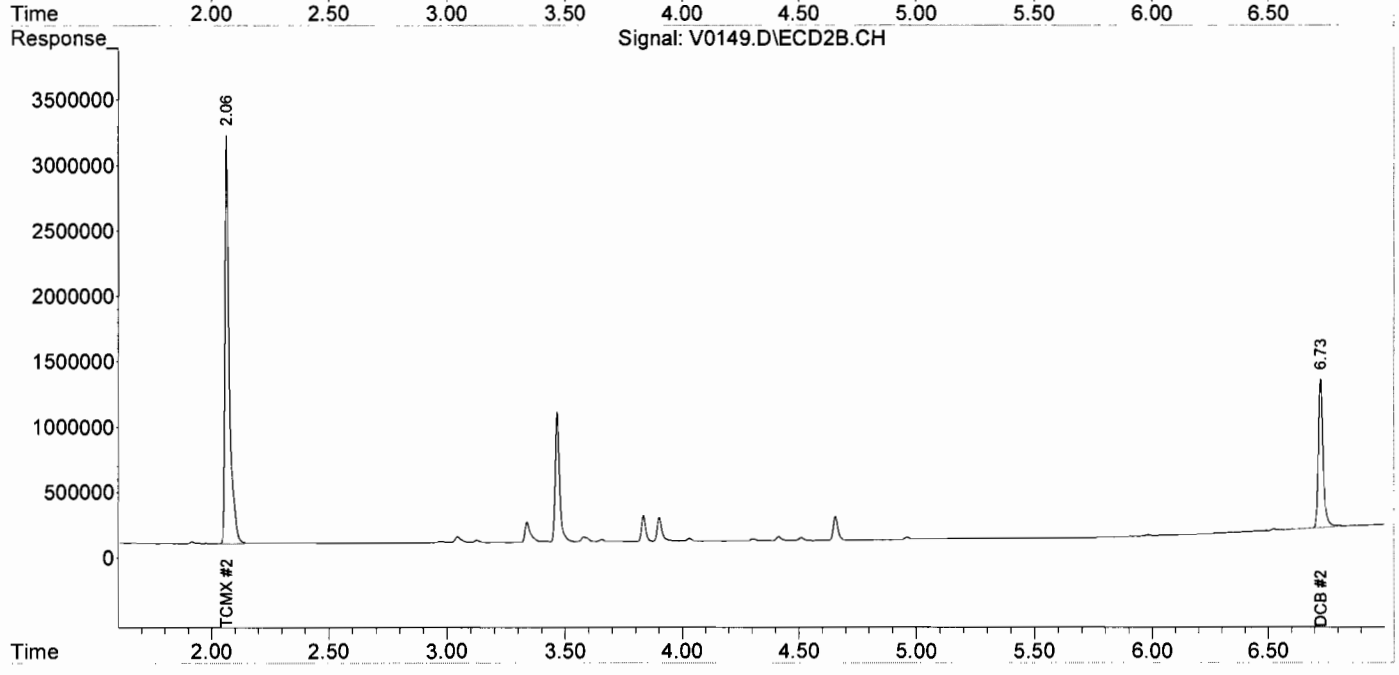
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0149.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:12
Operator : IB
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-08,02/23/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE STANDARDS

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8043.D O8042.D O8041.D O8040.D O8039.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.13	2.13	2.13	2.13	2.13	2.13	2.07	2.19
beta-BHC	2.38	2.38	2.38	2.38	2.38	2.38	2.32	2.44
gamma-BHC	2.33	2.33	2.33	2.33	2.33	2.33	2.27	2.39
delta-BHC	2.51	2.51	2.51	2.51	2.51	2.51	2.45	2.57
Heptachlor	2.66	2.66	2.67	2.67	2.67	2.66	2.58	2.74
Aldrin	2.89	2.90	2.90	2.90	2.90	2.90	2.82	2.98
Heptachlor epoxide	3.38	3.38	3.38	3.39	3.38	3.38	3.30	3.46
Endosulfan I	3.73	3.73	3.73	3.73	3.73	3.73	3.65	3.81
4,4'-DDE	3.67	3.67	3.67	3.67	3.67	3.67	3.57	3.77
Dieldrin	3.94	3.94	3.94	3.94	3.94	3.94	3.84	4.04
Endrin	4.16	4.16	4.16	4.16	4.16	4.16	4.06	4.26
Endosulfan II	4.37	4.37	4.37	4.37	4.37	4.37	4.27	4.47
4,4'-DDD	4.22	4.22	4.22	4.22	4.22	4.22	4.12	4.32
Endrin aldehyde	4.78	4.78	4.78	4.78	4.78	4.78	4.66	4.90
Endosulfan sulfate	5.22	5.22	5.22	5.22	5.22	5.22	5.10	5.34
4,4'-DDT	4.49	4.49	4.49	4.49	4.49	4.49	4.37	4.61
Endrin ketone	5.50	5.50	5.50	5.50	5.50	5.50	5.38	5.62
Methoxychlor	4.98	4.98	4.98	4.98	4.98	4.98	4.86	5.10
alpha-Chlordane	3.60	3.61	3.61	3.61	3.61	3.61	3.53	3.69
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.61				2.53	2.69
Chlordane {2}			3.00				2.92	3.08
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.60				3.52	3.68
Chlordane {5}			4.31				4.23	4.39
Toxaphene 500 ppb			4.76				4.68	4.84
Toxaphene {2}			4.88				4.80	4.96
Toxaphene {3}			5.11				5.03	5.19
Toxaphene {4}			5.48				5.40	5.56
Toxaphene {5}			5.64				5.56	5.72

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8043.D O8042.D O8041.D O8040.D O8039.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	174569	189043	189399	195825	187234	187214	4.16
beta-BHC	93104	77777	83873	86442	80636	84366	6.97
gamma-BHC	150478	162704	155468	158536	152133	155864	3.16
delta-BHC	159659	169092	170441	177038	168744	168995	3.67
Heptachlor	156434	153850	153678	156801	149332	154019	1.94
Aldrin	159596	160523	160785	163897	155257	160012	1.94
Heptachlor epoxide	151016	144749	144212	145464	137184	144525	3.41
Endosulfan I	148932	141683	140090	142568	134202	141495	3.73
4,4'-DDE	122670	128945	130612	135019	127987	129047	3.46
Dieldrin	147822	148446	148919	151976	142989	148030	2.19
Endrin	100630	106276	107793	113596	108767	107412	4.35
Endosulfan II	136080	126828	125916	128501	120486	127562	4.41
4,4'-DDD	113428	109635	110790	114956	108054	111373	2.52
Endrin aldehyde	127517	107760	107151	108836	101666	110586	8.92
Endosulfan sulfate	127322	111761	111269	114353	106439	114229	6.88
4,4'-DDT	80757	92158	96367	105130	100797	95042	9.83
Endrin ketone	166919	145759	143025	144249	133357	146662	8.40
Methoxychlor	40378	45577	46213	49143	46448	45552	7.02
alpha-Chlordane	148668	142026	141168	142932	134900	141939	3.46
gamma-Chlordane	150291	147896	146398	149868	141827	147256	2.32
Chlordane 500 ppb			4252				
Chlordane {2}			5382				
Chlordane {3}			15780				
Chlordane {4}			24978				
Chlordane {5}			4043				
Toxaphene 500 ppb			4041				
Toxaphene {2}			3288				
Toxaphene {3}			4300				
Toxaphene {4}			4108				
Toxaphene {5}			1931				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (2nd): RTX-CLP2

Data File: O8043.C O8042.C O8041.C O8040.C O8039.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.51	2.52	2.51	2.52	2.52	2.52	2.46	2.58
beta-BHC	2.86	2.86	2.86	2.86	2.86	2.86	2.80	2.92
gamma-BHC	2.80	2.80	2.80	2.80	2.80	2.80	2.74	2.86
delta-BHC	3.12	3.12	3.12	3.12	3.12	3.12	3.06	3.18
Heptachlor	3.18	3.19	3.19	3.19	3.19	3.19	3.11	3.27
Aldrin	3.48	3.48	3.49	3.49	3.49	3.48	3.40	3.56
Heptachlor epoxide	4.02	4.02	4.02	4.02	4.02	4.02	3.94	4.10
Endosulfan I	4.41	4.41	4.42	4.42	4.42	4.41	4.33	4.49
4,4'-DDE	4.51	4.51	4.51	4.51	4.51	4.51	4.41	4.61
Dieldrin	4.69	4.69	4.69	4.69	4.69	4.69	4.59	4.79
Endrin	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Endosulfan II	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDD	5.11	5.11	5.11	5.11	5.11	5.11	5.01	5.21
Endrin aldehyde	5.59	5.59	5.59	5.59	5.59	5.59	5.47	5.71
Endosulfan sulfate	5.89	5.89	5.89	5.89	5.89	5.89	5.77	6.01
4,4'-DDT	5.45	5.45	5.45	5.45	5.45	5.45	5.33	5.57
Endrin ketone	6.49	6.49	6.49	6.49	6.49	6.49	6.37	6.61
Methoxychlor	6.21	6.21	6.21	6.20	6.20	6.20	6.08	6.32
alpha-Chlordane	4.35	4.35	4.35	4.35	4.35	4.35	4.27	4.43
gamma-Chlordane	4.20	4.20	4.21	4.21	4.21	4.20	4.12	4.28
Chlordane 500 ppb			3.06				2.98	3.14
Chlordane {2}			3.61				3.53	3.69
Chlordane {3}			4.20				4.12	4.28
Chlordane {4}			4.29				4.21	4.37
Chlordane {5}			4.35				4.27	4.43
Toxaphene 500 ppb			5.32				5.24	5.40
Toxaphene {2}			5.60				5.52	5.68
Toxaphene {3}			5.88				5.80	5.96
Toxaphene {4}			6.16				6.08	6.24
Toxaphene {5}			6.60				6.52	6.68

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (2nd): RTX-CLP2

Data File: O8043.C O8042.C O8041.C O8040.C O8039.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	216827	253312	257672	268082	260324	251243	7.95
beta-BHC	117378	101282	101195	103983	100878	104943	6.73
gamma-BHC	198536	227408	229244	239924	229580	224938	6.92
delta-BHC	198936	219546	223795	236618	227778	221335	6.33
Heptachlor	186204	200023	204958	215468	207236	202778	5.33
Aldrin	198215	214003	217847	225860	217377	214661	4.74
Heptachlor epoxide	190748	190964	193495	200237	191795	193448	2.04
Endosulfan I	169591	174346	177124	183599	175833	176098	2.88
4,4'-DDE	169247	180729	185319	194753	186778	183365	5.11
Dieldrin	180243	191498	196872	205387	197445	194289	4.78
Endrin	113720	129048	133962	145533	141376	132728	9.34
Endosulfan II	173843	170968	172134	177693	168764	172680	1.94
4,4'-DDD	137597	139017	143343	152254	145796	143601	4.07
Endrin aldehyde	155476	146798	147463	151155	142494	148677	3.29
Endosulfan sulfate	148905	142285	144007	151208	144002	146081	2.59
4,4'-DDT	83502	104337	113069	129088	125799	111159	16.53
Endrin ketone	211267	197017	190085	194503	182251	195024	5.47
Methoxychlor	49656	55199	56757	60749	58400	56152	7.43
alpha-Chlordane	190062	187778	189712	196863	188745	190632	1.89
gamma-Chlordane	188079	192533	197267	205622	197351	196170	3.33
Chlordane 500 ppb			6221				
Chlordane {2}			6419				
Chlordane {3}			20052				
Chlordane {4}			15455				
Chlordane {5}			16727				
Toxaphene 500 ppb			5003				
Toxaphene {2}			4207				
Toxaphene {3}			2656				
Toxaphene {4}			5464				
Toxaphene {5}			3809				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8039.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 10:56
Operator : IB
Sample : ICC_PEST_L5_IAS_5113,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	55352740	84785057	543.245	569.098
	Spiked Amount 200.000	Range 10 - 180		Recovery =		271.62%#	284.55%#
2) S	DCB	6.60	8.15	24043108	32678557	546.201	578.272
	Spiked Amount 200.000	Range 10 - 180		Recovery =		273.10%#	289.14%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	56170213	78097237	300.032	310.843
4) T	beta-BHC	2.38	2.86	24190716	30263331	286.735	288.378
5) T	gamma-BHC (Linda	2.33	2.80	45639954	68874114	292.820	306.191
6) T	delta-BHC	2.51	3.12	50623318	68333514	299.555	308.733
7) T	Heptachlor	2.67	3.19	44799660	62170905	290.870	306.596
8) T	Aldrin	2.90	3.49	46577088	65213244	291.086	303.797
9) T	Heptachlor epoxi	3.38	4.02	41155117	57538427	284.761	297.437
10) T	Endosulfan I	3.73	4.42	40260511	52749878	284.536	299.548
11) T	4,4'-DDE	3.67	4.51	38396145	56033448	297.537	305.584
12) T	Dieldrin	3.94	4.69	42896836	59233617	289.784	304.874
13) T	Endrin	4.16	5.01	32630135	42412825	303.784	319.547
14) T	Endosulfan II	4.37	5.23	36145653	50629141	283.357	293.196
15) T	4,4'-DDD	4.22	5.11	32416119	43738694	291.060	304.584
16) T	Endrin aldehyde	4.78	5.59	30499823	42748191	275.802	287.523
17) T	Endosulfan sulfa	5.22	5.89	31931603	43200533	279.541	300.218
18) T	4,4'-DDT	4.49	5.45	30239247	37739643	318.167	343.117
19) T	Endrin ketone	5.50	6.49	40006964	54675349	272.784	283.301
20) T	Methoxychlor	4.98	6.20	13934295	17520030	305.900	312.010
21) T	alpha-Chlordane	3.61	4.35	40470135	56623589	285.124	297.031
22) T	gamma-Chlordane	3.49	4.21	42548128	59205288	288.940	301.805
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

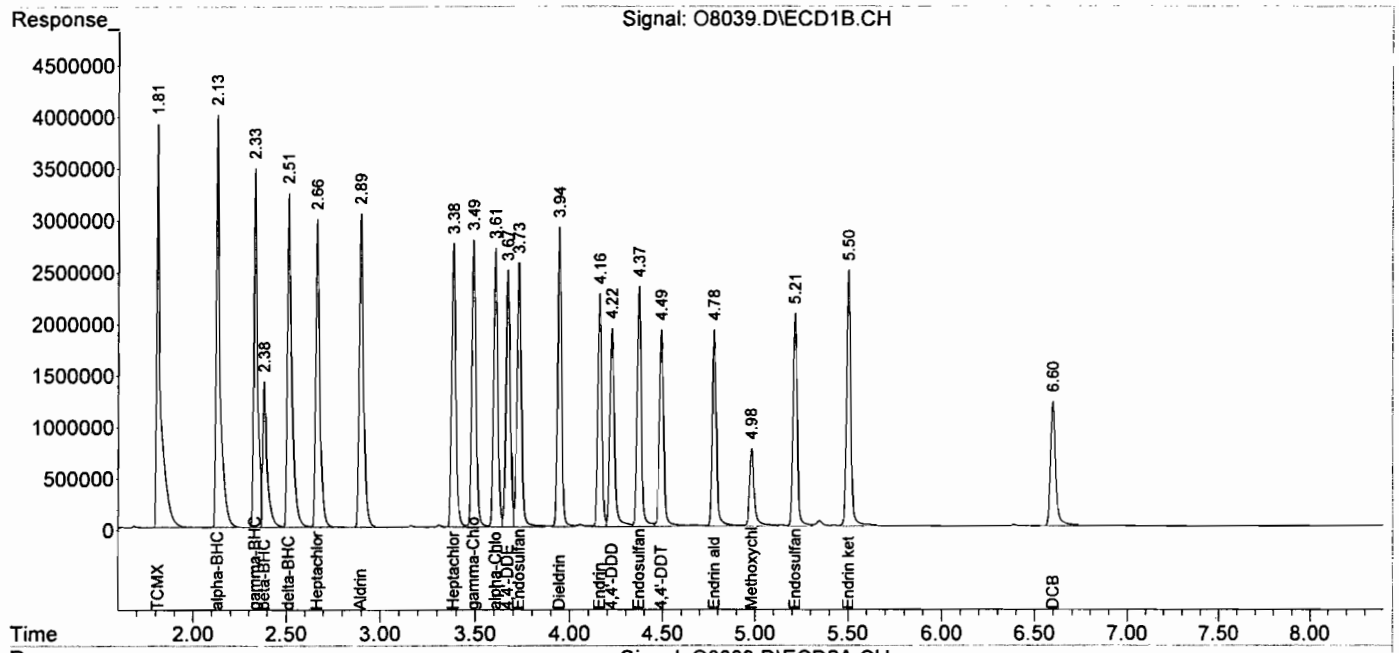
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

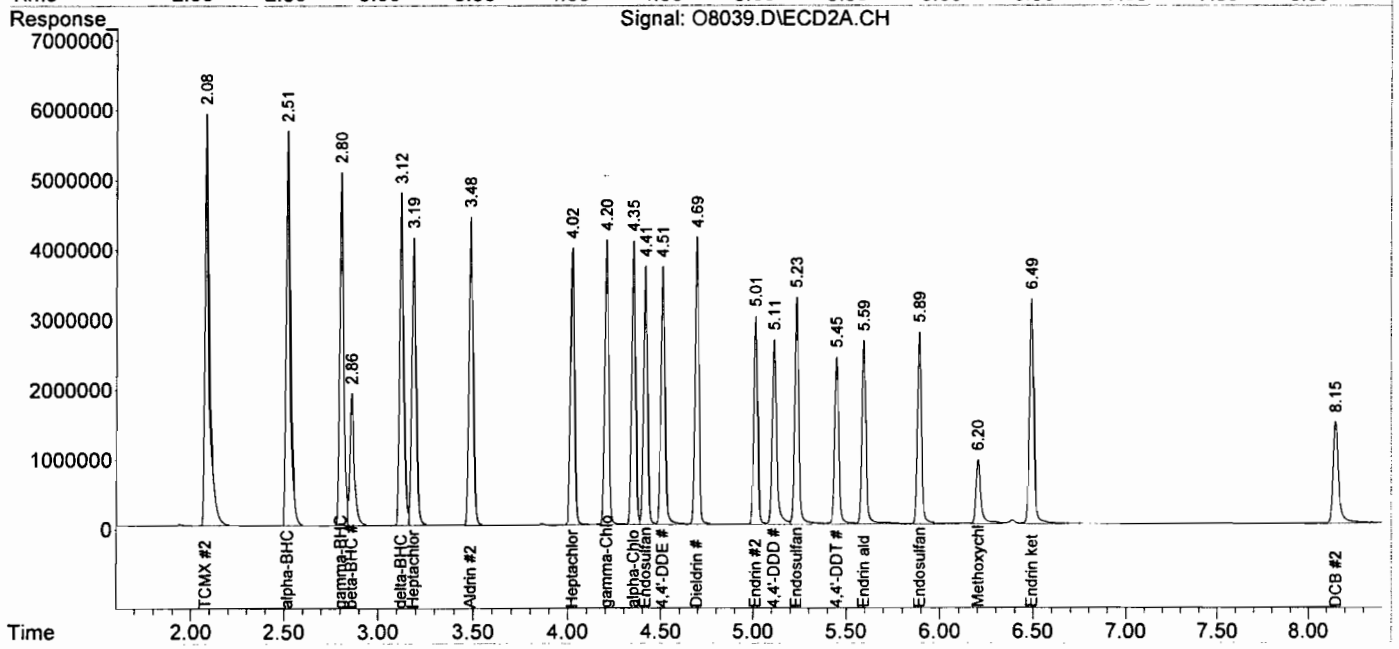
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8039.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 10:56
Operator : IB
Sample : ICC_PEST_L5_IAS_5113,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8040.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:09
Operator : IB
Sample : ICC_PEST_L4_IAS_5114,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	39860188	59715851	391.197	400.827
	Spiked Amount 200.000	Range 10 - 180		Recovery =		195.60%#	200.41%#
2) S	DCB	6.60	8.15	17097264	21426761	388.408	379.163
	Spiked Amount 200.000	Range 10 - 180		Recovery =		194.20%#	189.58%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	39165044	53616471	209.199	213.405
4) T	beta-BHC	2.38	2.86	17288331	20796574	204.920	198.170
5) T	gamma-BHC (Linda	2.33	2.80	31707146	47984899	203.429	213.325
6) T	delta-BHC	2.51	3.12	35407687	47323698	209.519	213.810
7) T	Heptachlor	2.67	3.19	31360224	43093598	203.612	212.516
8) T	Aldrin	2.90	3.49	32779307	45172076	204.856	210.435
9) T	Heptachlor epoxi	3.39	4.02	29092839	40047385	201.300	207.019
10) T	Endosulfan I	3.73	4.42	28513678	36719874	201.517	208.519
11) T	4,4'-DDE	3.67	4.51	27003876	38950669	209.256	212.421
12) T	Dieldrin	3.94	4.69	30395259	41077343	205.331	211.424
13) T	Endrin	4.16	5.01	22719170	29106572	211.513	219.295
14) T	Endosulfan II	4.37	5.23	25700164	35538612	201.472	205.806
15) T	4,4'-DDD	4.22	5.11	22991199	30450705	206.435	212.050
16) T	Endrin aldehyde	4.78	5.59	21767214	30231034	196.835	203.333
17) T	Endosulfan sulfa	5.22	5.89	22870536	30241524	200.217	210.161
18) T	4,4'-DDT	4.49	5.45	21026096	25817560	221.229	234.725
19) T	Endrin ketone	5.50	6.49	28849776	38900631	196.710	201.564
20) T	Methoxychlor	4.98	6.20	9828605	12149735	215.767	216.372
21) T	alpha-Chlordane	3.61	4.35	28586439	39372525	201.400	206.537
22) T	gamma-Chlordane	3.49	4.21	29973647	41124352	203.548	209.636
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

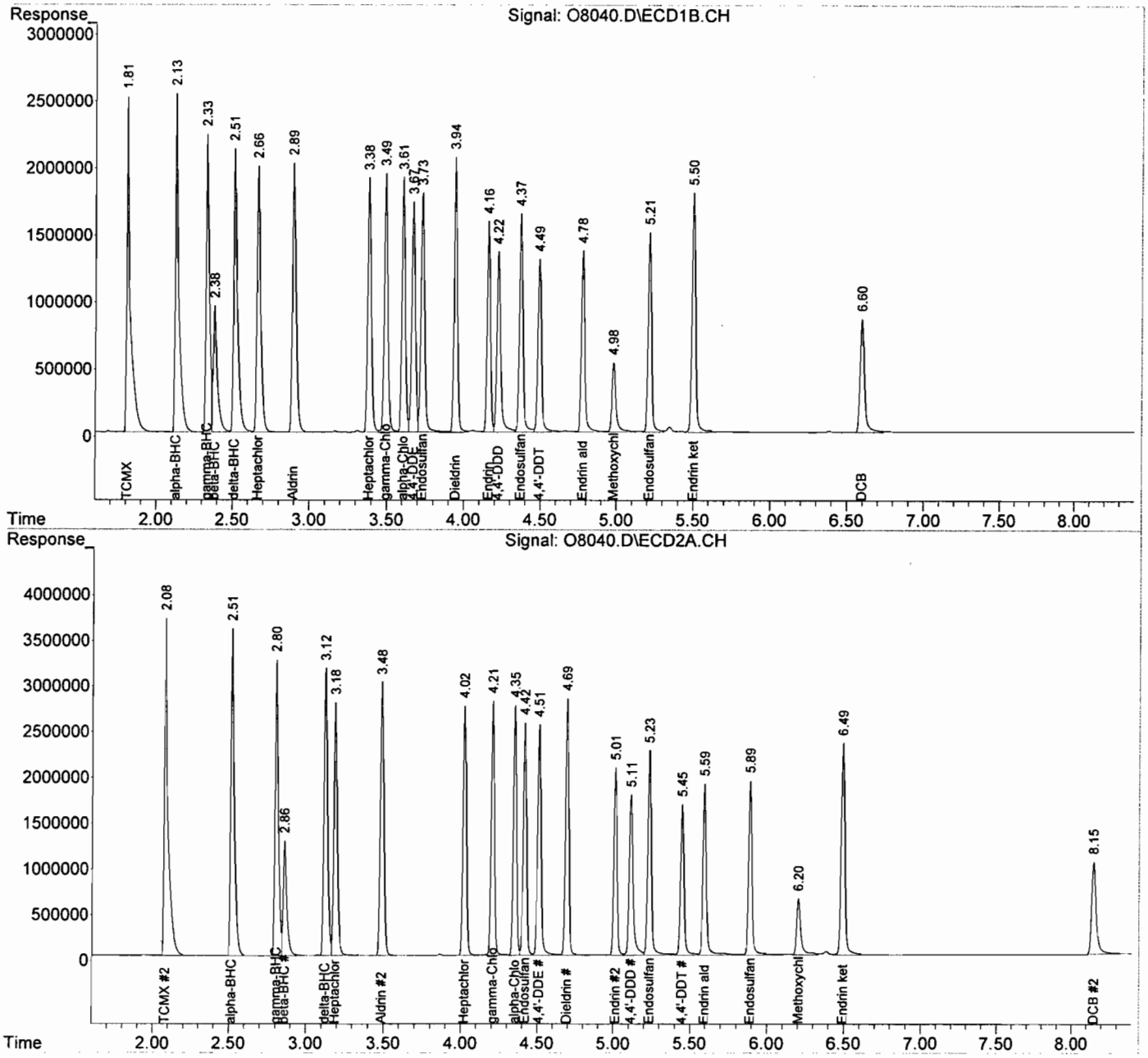
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8040.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:09
Operator : IB
Sample : ICC_PEST_L4_IAS_5114,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:22
Operator : IB
Sample : ICC_PEST_L3_IAS_5115,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19940920	29386310	195.705	197.248
	Spiked Amount 200.000	Range 10 - 180		Recovery =		97.85%	98.62%
2) S	DCB	6.60	8.15	8431431	11984286	191.542	212.071
	Spiked Amount 200.000	Range 10 - 180		Recovery =		95.77%	106.04%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	18939883	25767171	101.167	102.559
4) T	beta-BHC	2.38	2.86	8387317	10119463	99.416	96.428
5) T	gamma-BHC (Linda	2.33	2.80	15546792	22924417	99.746	101.914
6) T	delta-BHC	2.51	3.12	17044053	22379522	100.855	101.112
7) T	Heptachlor	2.67	3.19	15367841	20495841	99.779	101.075
8) T	Aldrin	2.90	3.49	16078516	21784749	100.483	101.485
9) T	Heptachlor epoxi	3.38	4.02	14421215	19349517	99.784	100.025
10) T	Endosulfan I	3.73	4.42	14009041	17712370	99.007	100.582
11) T	4,4'-DDE	3.67	4.51	13061163	18531898	101.213	101.065
12) T	Dieldrin	3.94	4.69	14891871	19687171	100.600	101.329
13) T	Endrin	4.16	5.01	10779343	13396190	100.355	100.930
14) T	Endosulfan II	4.37	5.23	12591588	17213373	98.709	99.684
15) T	4,4'-DDD	4.22	5.11	11079002	14334317	99.477	99.820
16) T	Endrin aldehyde	4.78	5.59	10715129	14746285	96.894	99.183
17) T	Endosulfan sulfa	5.22	5.89	11126877	14400747	97.409	100.077
18) T	4,4'-DDT	4.49	5.45	9636710	11306885	101.394	102.799
19) T	Endrin ketone	5.50	6.49	14302510	19008470	97.520	98.493
20) T	Methoxychlor	4.98	6.21	4621266	5675716	101.451	101.077
21) T	alpha-Chlordane	3.61	4.35	14116766	18971152	99.457	99.517
22) T	gamma-Chlordane	3.49	4.21	14639783	19726699	99.417	100.559
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

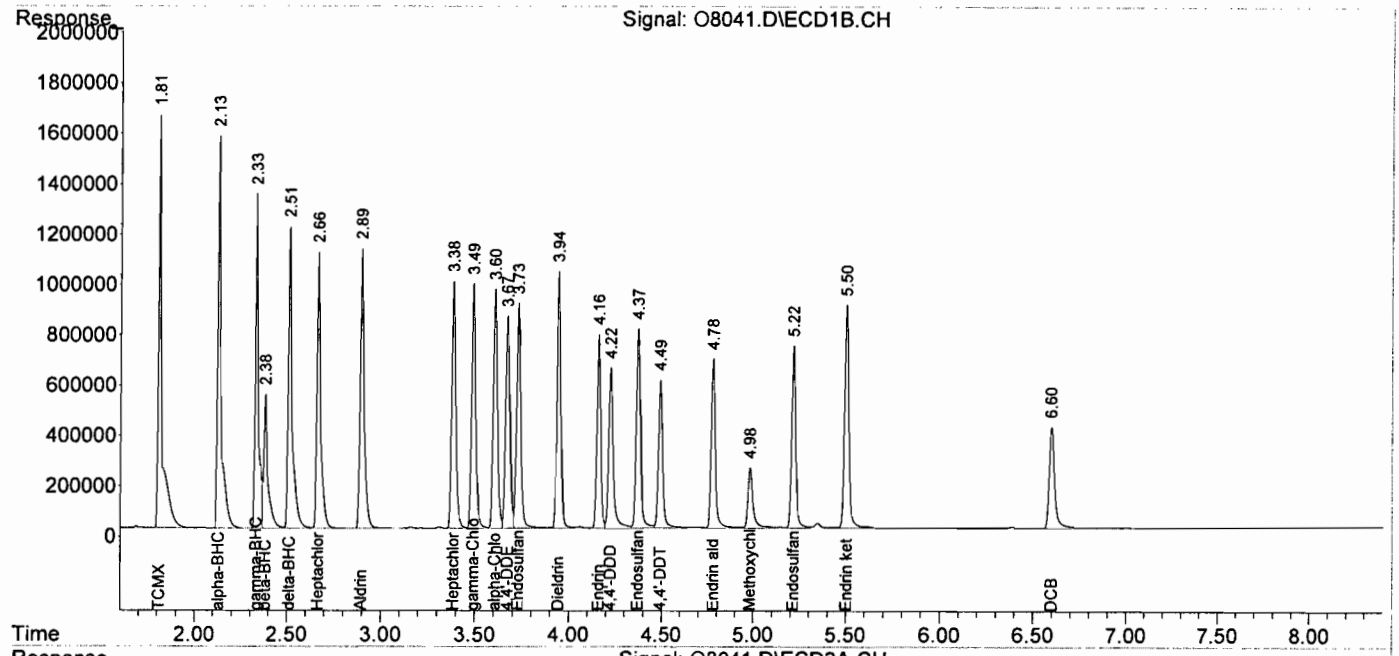
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

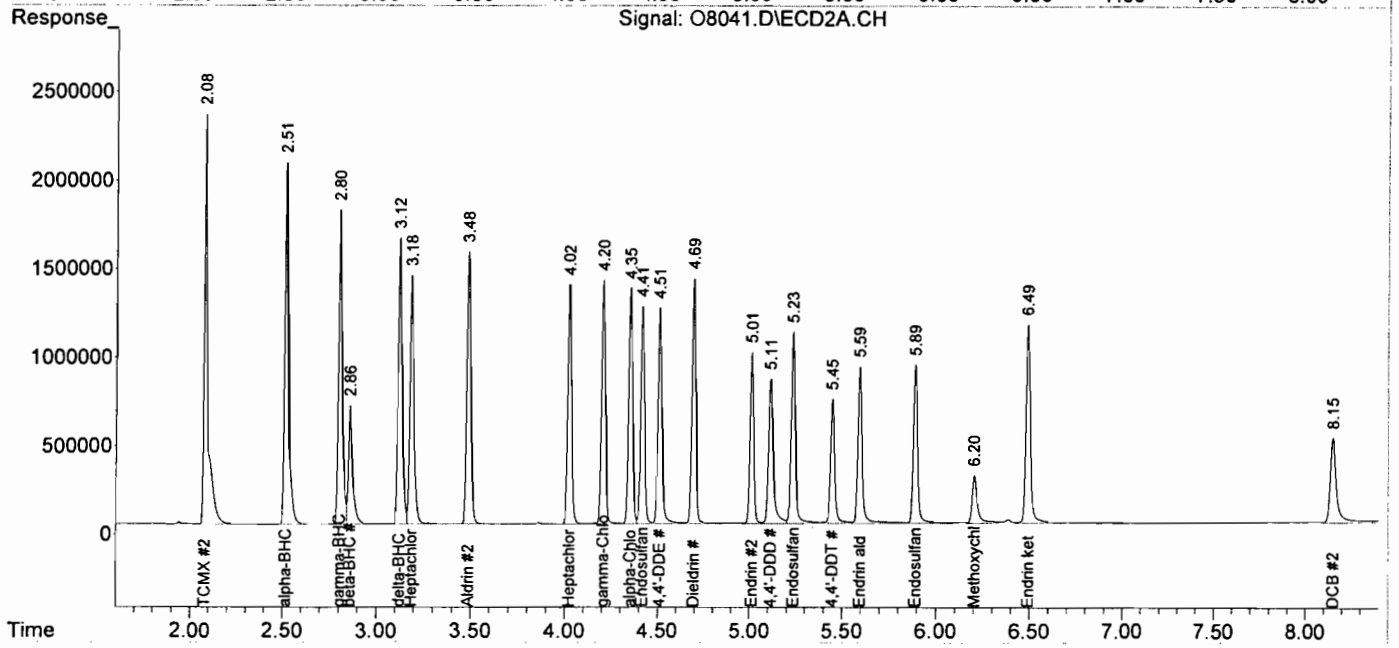
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:22
Operator : IB
Sample : ICC_PEST_L3_IAS_5115,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:34
Operator : IB
Sample : ICC_PEST_L2_IAS_5116,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	10281040	14921333	100.900	100.156
	Spiked Amount 200.000	Range 10 - 180		Recovery =		50.45%	50.08%
2) S	DCB	6.60	8.15	4428562	5219635	100.606	92.365
	Spiked Amount 200.000	Range 10 - 180		Recovery =		50.30%	46.18%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	9452167	12665593	50.489	50.412
4) T	beta-BHC	2.38	2.86	3888836	5064119	46.095	48.256
5) T	gamma-BHC (Linda	2.33	2.80	8135192	11370377	52.194	50.549
6) T	delta-BHC	2.51	3.12	8454624	10977324	50.029	49.596
7) T	Heptachlor	2.66	3.19	7692520	10001163	49.945	49.321
8) T	Aldrin	2.90	3.48	8026168	10700137	50.160	49.847
9) T	Heptachlor epoxi	3.38	4.02	7237433	9548192	50.077	49.358
10) T	Endosulfan I	3.73	4.41	7084154	8717279	50.066	49.502
11) T	4,4'-DDE	3.67	4.51	6447270	9036472	49.961	49.281
12) T	Dieldrin	3.94	4.69	7422289	9574923	50.140	49.282
13) T	Endrin	4.16	5.01	5313782	6452419	49.471	48.614
14) T	Endosulfan II	4.37	5.23	6341424	8548378	49.712	49.504
15) T	4,4'-DDD	4.22	5.11	5481774	6950839	49.220	48.404
16) T	Endrin aldehyde	4.78	5.59	5388008	7339919	48.722	49.368
17) T	Endosulfan sulfa	5.22	5.89	5588070	7114248	48.920	49.440
18) T	4,4'-DDT	4.49	5.45	4607924	5216851	48.483	47.430
19) T	Endrin ketone	5.50	6.49	7287936	9850837	49.692	51.042
20) T	Methoxychlor	4.98	6.21	2278874	2759937	50.028	49.151
21) T	alpha-Chlordane	3.61	4.35	7101306	9388923	50.031	49.252
22) T	gamma-Chlordane	3.49	4.20	7394809	9626657	50.217	49.073
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

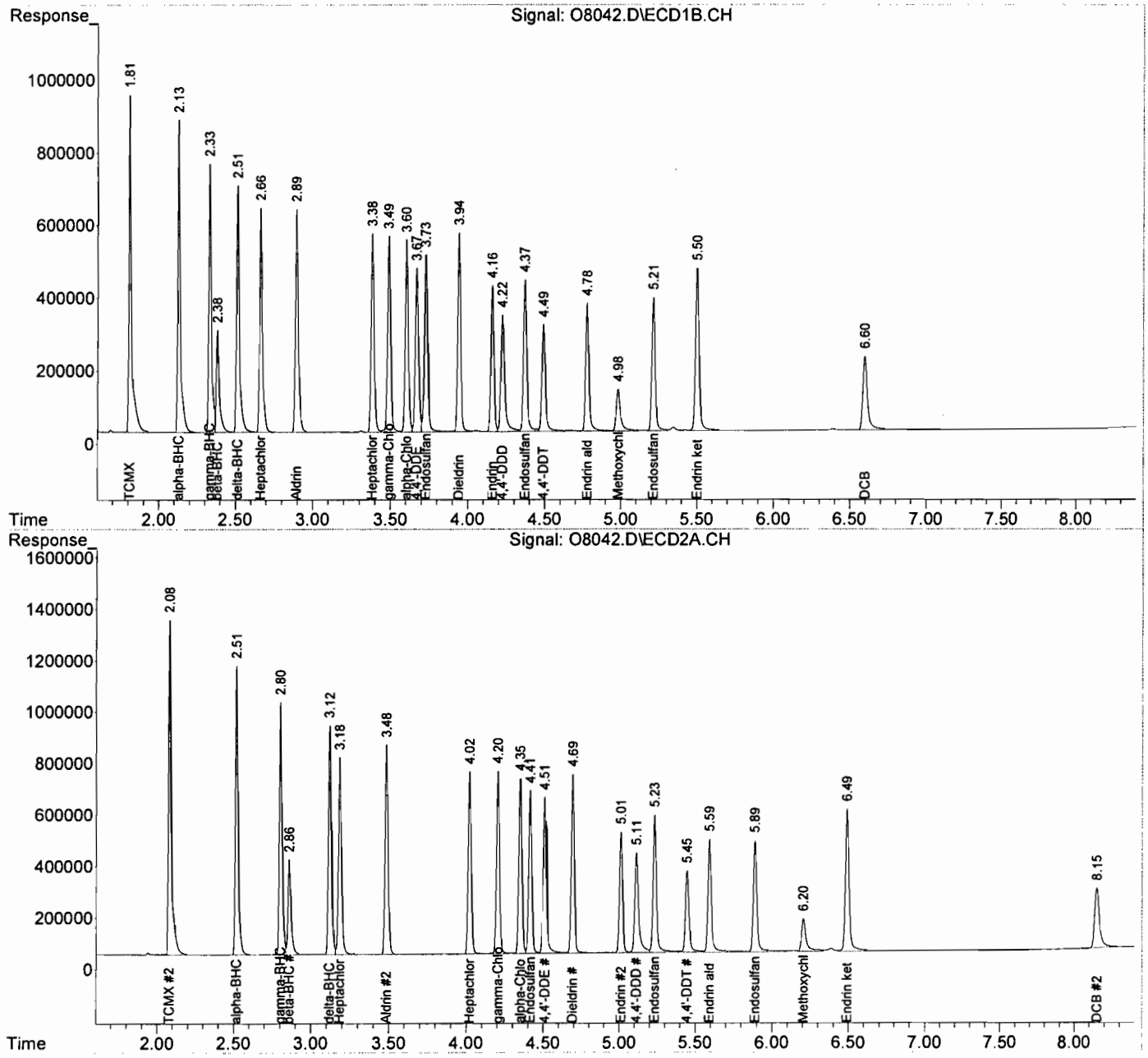
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:34
Operator : IB
Sample : ICC_PEST_L2_IAS_5116,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:47
Operator : IB
Sample : ICC_PEST_L1_IAS_5117,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	460177	632658	4.516	4.247
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.26%#	2.12%#
2) S	DCB	6.60	8.15	196189	243267	4.457m	4.305m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.23%#	2.15%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	349138	433654	1.865	1.726
4) T	beta-BHC	2.38	2.86	186208	234756	2.207	2.237
5) T	gamma-BHC (Linda	2.33	2.80	300955	397071	1.931	1.765
6) T	delta-BHC	2.51	3.12	319318	397873	1.890	1.798
7) T	Heptachlor	2.66	3.18	312869	372409	2.031	1.837
8) T	Aldrin	2.89	3.48	319193	396430	1.995	1.847
9) T	Heptachlor epoxi	3.38	4.02	302032	381496	2.090	1.972
10) T	Endosulfan I	3.73	4.41	297864	339182	2.105	1.926
11) T	4,4'-DDE	3.67	4.51	245341	338494	1.901	1.846
12) T	Dieldrin	3.94	4.69	295643	360486	1.997	1.855
13) T	Endrin	4.16	5.01	201260	227440	1.874	1.714
14) T	Endosulfan II	4.37	5.23	272160	347686	2.134	2.013
15) T	4,4'-DDD	4.22	5.11	226855	275194	2.037	1.916
16) T	Endrin aldehyde	4.78	5.59	255034	310952	2.306	2.091
17) T	Endosulfan sulfa	5.22	5.89	254643	297809	2.229	2.070m
18) T	4,4'-DDT	4.49	5.45	161515	167003	1.699	1.518m
19) T	Endrin ketone	5.50	6.49	333837	422533	2.276	2.189m
20) T	Methoxychlor	4.98	6.21	80757	99312	1.773	1.769
21) T	alpha-Chlordane	3.60	4.35	297335	380125	2.095	1.994
22) T	gamma-Chlordane	3.49	4.20	300581	376158	2.041	1.918
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

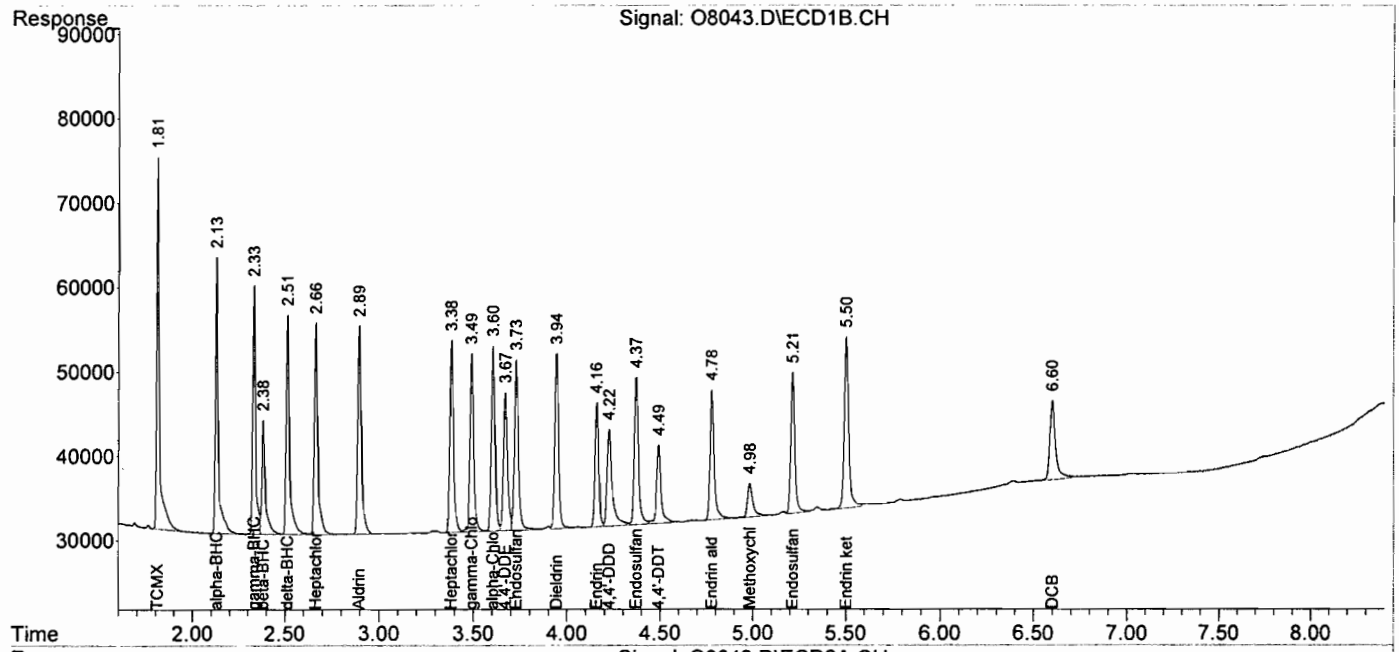
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

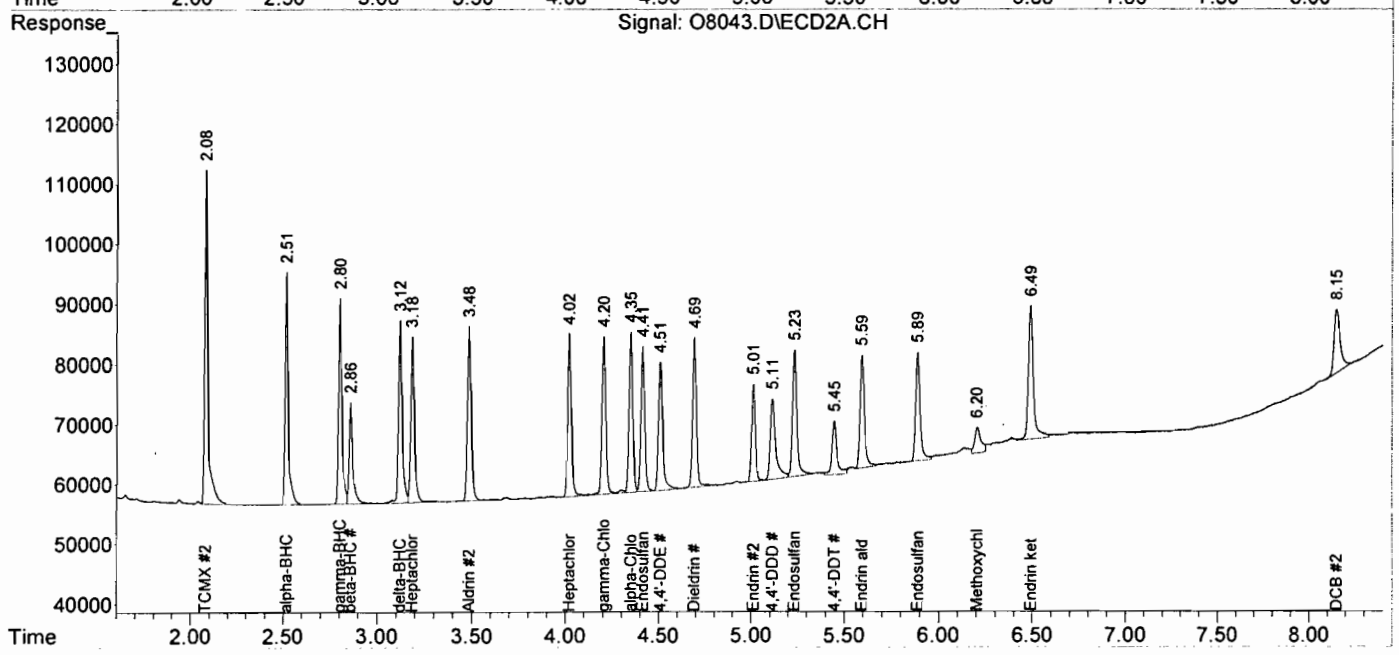
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:47
Operator : IB
Sample : ICC_PEST_L1_IAS_5117,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:33:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22096756	33003329	212.369	216.276
Spiked Amount 200.000	Range 10 - 180		Recovery =		106.18%	108.14%
2) S DCB	6.60	8.15	9166910	13080479	206.478	228.323
Spiked Amount 200.000	Range 10 - 180		Recovery =		103.24%	114.16%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.76	5.32	2020596	2501650	500.000	500.000
29) L2 Toxaphene {2}	4.88	5.60	1643777	2103447	500.000	500.000
30) L2 Toxaphene {3}	5.11	5.88	2149758	1328192	500.000	500.000
31) L2 Toxaphene {4}	5.48	6.16	2053754	2731958	500.000	500.000
32) L2 Toxaphene {5}	5.64	6.60	965479	1904599	500.000	500.000
Sum Toxaphene			8833364	10569846	2500.000	2500.000
Average Toxaphene					500.000	500.000

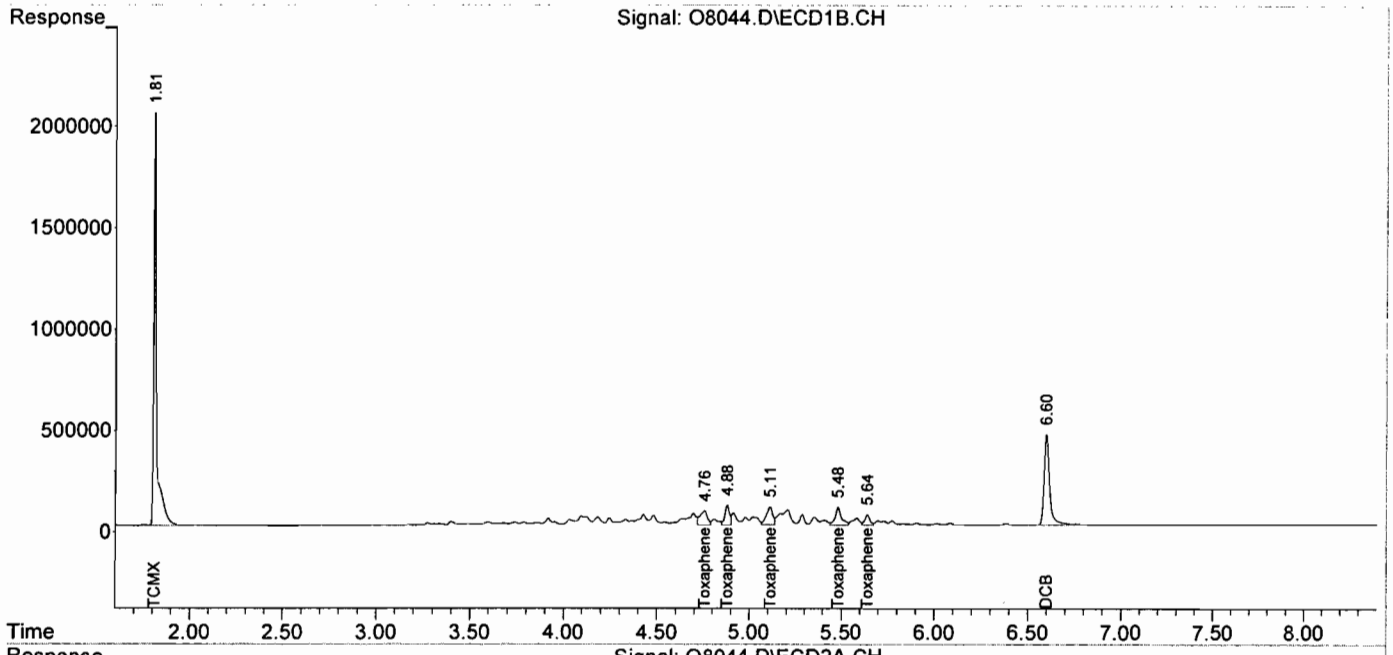
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:33:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 12:12
Operator : IB
Sample : ICC_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:34:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:34:23 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	20160938	29675894	197.438	198.805
Spiked Amount 200.000	Range 10 - 180		Recovery =		98.72%	99.40%
2) S DCB	6.60	8.15	8350765	10720503	191.618	195.169
Spiked Amount 200.000	Range 10 - 180		Recovery =		95.81%	97.58%
Target Compounds						
23) L1 Chlordane	2.61	3.06	2126085	3110685	500.000	500.000
24) L1 Chlordane {2}	3.00	3.61	2690912	3209361	500.000	500.000
25) L1 Chlordane {3}	3.49	4.20	7890068	10025995	500.000	500.000
26) L1 Chlordane {4}	3.60	4.29	12489117	7727480	500.000	500.000
27) L1 Chlordane {5}	4.31	4.35	2021637	8363619	500.000	500.000
Sum Chlordane			27217818	32437139	2500.000	2500.000
Average Chlordane					500.000	500.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

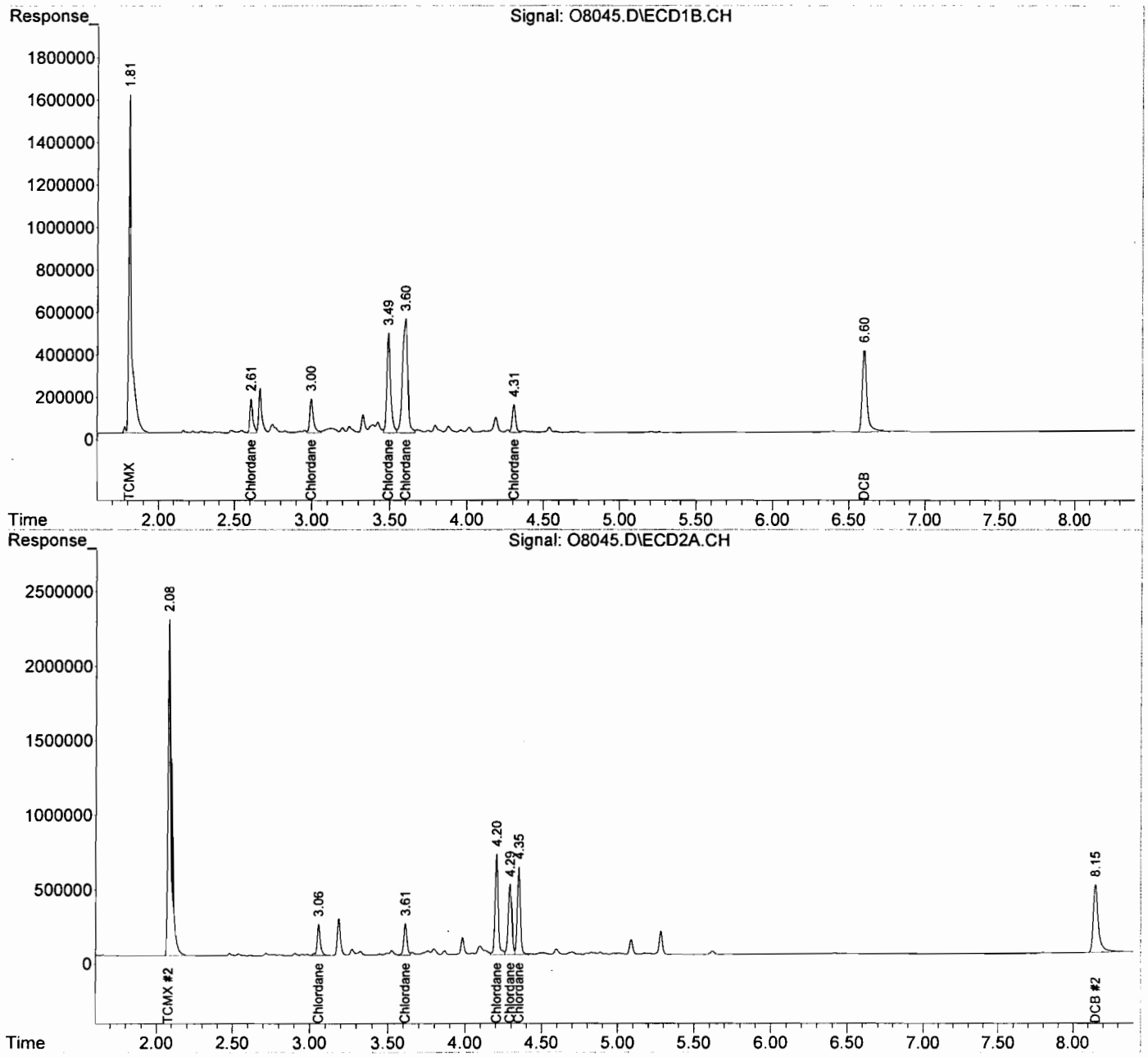
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 12:12
Operator : IB
Sample : ICC_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:34:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:34:23 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 15:50
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 16:00:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:35:07 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	20607039	30806062	202.242	206.778
	Spiked Amount 200.000	Range 10 - 180		Recovery =		101.12%	103.39%
2) S	DCB	6.60	8.16	8792194	10828118	201.374	192.695
	Spiked Amount 200.000	Range 10 - 180		Recovery =		100.69%	96.35%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	18995513	25906202	101.464	103.112
4) T	beta-BHC	2.38	2.86	7891252	9871347	93.536	94.064
5) T	gamma-BHC (Linda	2.33	2.80	16312829	23781495	104.661	105.724
6) T	delta-BHC	2.51	3.12	16913422	22098679	100.082	99.843
7) T	Heptachlor	2.66	3.19	15140289	20718481	98.301	102.173
8) T	Aldrin	2.89	3.49	16233389	22216031	101.451	103.494
9) T	Heptachlor epoxi	3.38	4.02	14477038	19624647	100.170	101.447
10) T	Endosulfan I	3.73	4.42	14701416	18154614	103.901	103.094
11) T	4,4'-DDE	3.67	4.51	13101367	18949801	101.524	103.344
12) T	Dieldrin	3.94	4.70	13032806	17518768	88.041	90.169
13) T	Endrin	4.16	5.01	10484527	12989349	97.610	97.865
14) T	Endosulfan II	4.37	5.24	12754969	17920142	99.990	103.776
15) T	4,4'-DDD	4.22	5.12	10820556	13726055	97.156	95.584
16) T	Endrin aldehyde	4.78	5.60	10839646	13991248	98.020	94.105
17) T	Endosulfan sulfa	5.22	5.89	11080896	14570792	97.006	99.744
18) T	4,4'-DDT	4.49	5.45	9876692	11408110	103.919	102.629
19) T	Endrin ketone	5.50	6.50	14737582	19937517	100.487	102.231
20) T	Methoxychlor	4.98	6.21	4602861	5535376	101.047	98.578
21) T	alpha-Chlordane	3.61	4.35	14134405	19289725	99.581	101.188
22) T	gamma-Chlordane	3.49	4.21	14681477	19924771	99.700	101.569
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

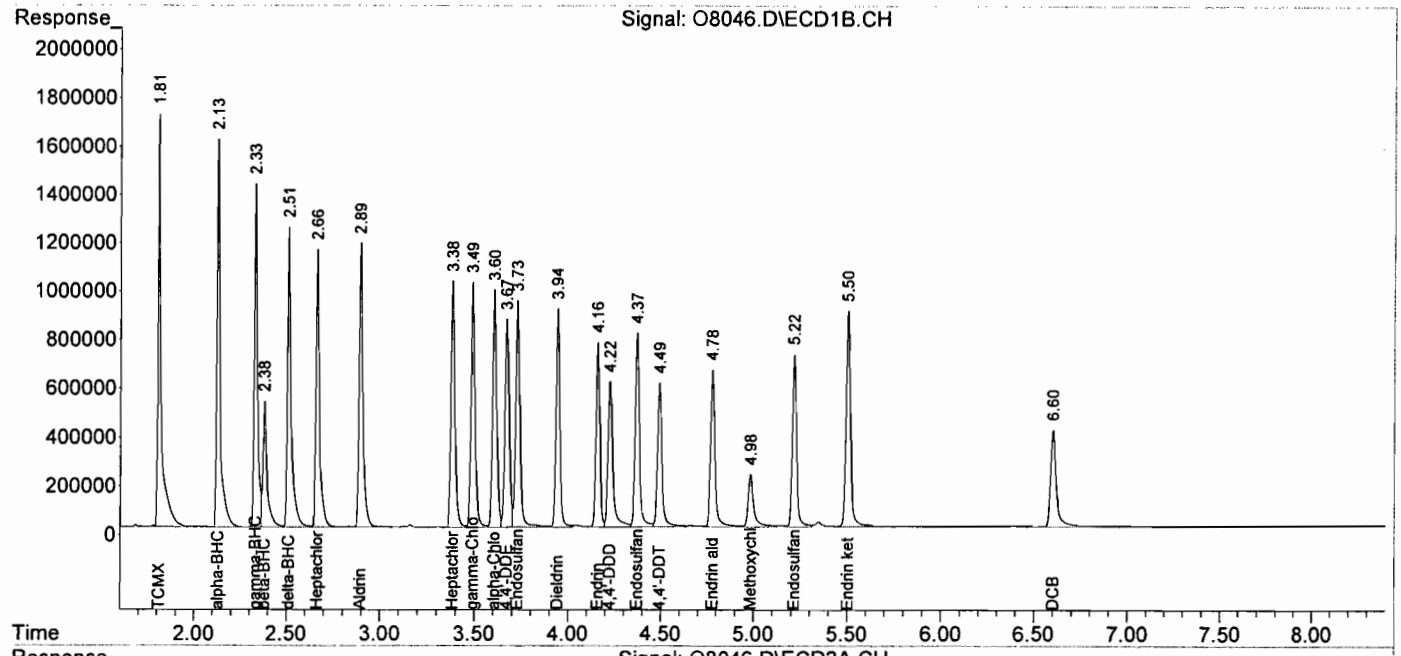
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

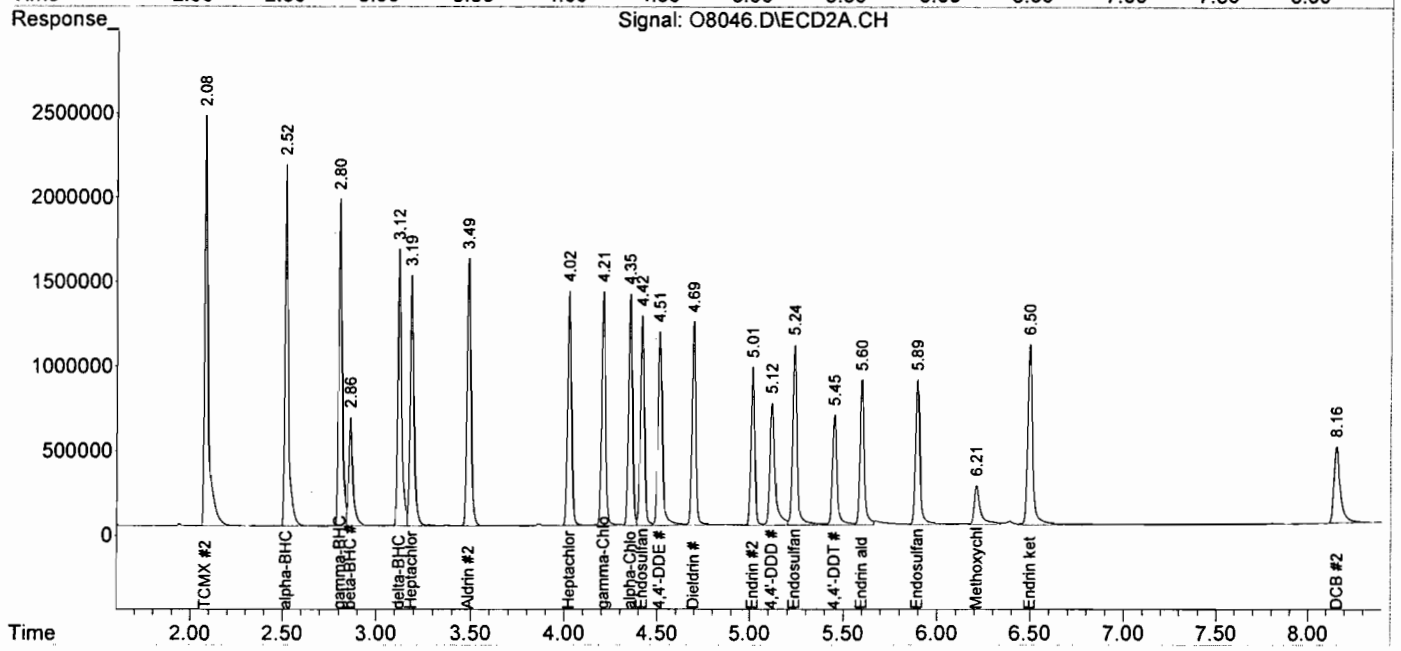
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 15:50
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 16:00:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:35:07 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0142.D V0141.D V0140.D V0139.D V0138.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.24	2.24	2.23	2.23	2.23	2.23	2.17	2.29
beta-BHC	2.50	2.50	2.49	2.49	2.49	2.49	2.43	2.55
gamma-BHC	2.45	2.45	2.43	2.43	2.43	2.44	2.38	2.50
delta-BHC	2.62	2.62	2.61	2.61	2.61	2.62	2.56	2.68
Heptachlor	2.77	2.77	2.76	2.76	2.76	2.76	2.68	2.84
Aldrin	2.98	2.98	2.97	2.97	2.97	2.97	2.89	3.05
Heptachlor epoxide	3.40	3.40	3.40	3.40	3.40	3.40	3.32	3.48
Endosulfan I	3.69	3.69	3.68	3.68	3.69	3.69	3.61	3.77
4,4'-DDE	3.64	3.64	3.64	3.64	3.64	3.64	3.54	3.74
Dieldrin	3.86	3.86	3.86	3.86	3.86	3.86	3.76	3.96
Endrin	4.04	4.03	4.03	4.03	4.03	4.03	3.93	4.13
Endosulfan II	4.21	4.21	4.20	4.20	4.20	4.20	4.10	4.30
4,4'-DDD	4.08	4.08	4.08	4.08	4.08	4.08	3.98	4.18
Endrin aldehyde	4.54	4.54	4.53	4.53	4.54	4.54	4.42	4.66
Endosulfan sulfate	4.90	4.90	4.90	4.90	4.90	4.90	4.78	5.02
4,4'-DDT	4.30	4.30	4.30	4.30	4.30	4.30	4.18	4.42
Endrin ketone	5.14	5.14	5.14	5.14	5.14	5.14	5.02	5.26
Methoxychlor	4.70	4.69	4.69	4.69	4.69	4.69	4.57	4.81
alpha-Chlordane	3.59	3.59	3.58	3.58	3.59	3.59	3.51	3.67
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.72				2.64	2.80
Chlordane {2}			3.07				2.99	3.15
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.58				3.50	3.66
Chlordane {5}			4.16				4.08	4.24
Toxaphene 500 ppb			4.25				4.17	4.33
Toxaphene {2}			4.62				4.54	4.70
Toxaphene {3}			4.81				4.73	4.89
Toxaphene {4}			5.12				5.04	5.20
Toxaphene {5}			5.26				5.18	5.34

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0142.D V0141.D V0140.D V0139.D V0138.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	1490806	1315254	1677693	1805919	1786419	1615218	12.95
beta-BHC	749370	521498	616779	637538	632276	631492	12.83
gamma-BHC	1350968	1160763	1467100	1573893	1545616	1419668	11.87
delta-BHC	1659760	1199451	1482492	1566030	1558405	1493227	11.78
Heptachlor	1246297	1021491	1275676	1323870	1292470	1231961	9.82
Aldrin	1318317	1101752	1358112	1411211	1377722	1313423	9.37
Heptachlor epoxide	1229299	944767	1131869	1137535	1091060	1106906	9.38
Endosulfan I	1199168	929059	1110680	1127419	1085040	1090273	9.13
4,4'-DDE	1046482	891920	1105418	1161201	1138099	1068624	10.09
Dieldrin	1184844	948963	1156761	1175237	1133206	1119802	8.71
Endrin	907919	736978	911146	942853	898999	879579	9.26
Endosulfan II	1121538	789177	938549	951741	919341	944069	12.55
4,4'-DDD	997843	820219	961492	994042	982501	951219	7.84
Endrin aldehyde	1033927	656371	758910	763612	738717	790308	18.08
Endosulfan sulfate	1102064	688721	802919	813043	792745	839898	18.44
4,4'-DDT	600830	570942	745949	821267	820537	711905	16.79
Endrin ketone	1117407	767860	888243	896418	876623	909310	14.02
Methoxychlor	302225	270032	329945	347031	339610	317769	9.95
alpha-Chlordane	1198067	941178	1157238	1214181	1188556	1139844	9.91
gamma-Chlordane	1251101	993597	1220211	1285668	1260949	1202305	9.90
Chlordane 500 ppb			32032				
Chlordane {2}			37842				
Chlordane {3}			107838				
Chlordane {4}			168665				
Chlordane {5}			26670				
Toxaphene 500 ppb			19362				
Toxaphene {2}			22154				
Toxaphene {3}			26890				
Toxaphene {4}			23364				
Toxaphene {5}			9817				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0142.C V0141.C V0140.C V0139.C V0138.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.49	2.49	2.48	2.48	2.48	2.48	2.42	2.54
beta-BHC	2.80	2.80	2.79	2.79	2.79	2.79	2.73	2.85
gamma-BHC	2.75	2.75	2.73	2.74	2.74	2.74	2.68	2.80
delta-BHC	3.01	3.01	3.01	3.01	3.01	3.01	2.95	3.07
Heptachlor	3.08	3.08	3.07	3.07	3.07	3.08	3.00	3.16
Aldrin	3.32	3.32	3.32	3.32	3.32	3.32	3.24	3.40
Heptachlor epoxide	3.74	3.74	3.74	3.74	3.74	3.74	3.66	3.82
Endosulfan I	4.04	4.04	4.04	4.04	4.04	4.04	3.96	4.12
4,4'-DDE	4.12	4.12	4.11	4.11	4.12	4.12	4.02	4.22
Dieldrin	4.26	4.26	4.26	4.26	4.26	4.26	4.16	4.36
Endrin	4.50	4.51	4.50	4.50	4.50	4.50	4.40	4.60
Endosulfan II	4.68	4.68	4.68	4.68	4.68	4.68	4.58	4.78
4,4'-DDD	4.58	4.58	4.58	4.58	4.58	4.58	4.48	4.68
Endrin aldehyde	4.96	4.96	4.96	4.96	4.96	4.96	4.84	5.08
Endosulfan sulfate	5.21	5.21	5.21	5.21	5.21	5.21	5.09	5.33
4,4'-DDT	4.85	4.85	4.85	4.85	4.85	4.85	4.73	4.97
Endrin ketone	5.70	5.70	5.70	5.70	5.70	5.70	5.58	5.82
Methoxychlor	5.46	5.46	5.46	5.46	5.46	5.46	5.34	5.58
alpha-Chlordane	4.00	4.00	3.99	3.99	3.99	3.99	3.91	4.07
gamma-Chlordane	3.88	3.88	3.88	3.88	3.88	3.88	3.80	3.96
Chlordane 500 ppb			2.97				2.89	3.05
Chlordane {2}			3.42				3.34	3.50
Chlordane {3}			3.89				3.81	3.97
Chlordane {4}			3.96				3.88	4.04
Chlordane {5}			4.00				3.92	4.08
Toxaphene 500 ppb			4.75				4.67	4.83
Toxaphene {2}			4.97				4.89	5.05
Toxaphene {3}			5.17				5.09	5.25
Toxaphene {4}			5.44				5.36	5.52
Toxaphene {5}			5.81				5.73	5.89

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0142.C V0141.C V0140.C V0139.C V0138.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	394026	329664	419732	452148	445723	408258	12.15
beta-BHC	202996	125862	146849	153436	152167	156262	18.16
gamma-BHC	368951	284926	359451	387895	380868	356418	11.62
delta-BHC	438173	283723	352586	375663	371091	364247	15.20
Heptachlor	352100	258730	324421	348193	345478	325784	11.97
Aldrin	369724	271015	335295	359721	355594	338270	11.72
Heptachlor epoxide	327869	239266	293007	312470	308203	296163	11.53
Endosulfan I	306367	220231	268548	284016	281215	272075	11.77
4,4'-DDE	305347	227327	275202	294219	293179	279055	11.06
Dieldrin	317178	238941	295431	316853	314901	296661	11.30
Endrin	233548	181712	227902	247840	243972	226995	11.69
Endosulfan II	296233	203172	246353	260009	258210	252795	13.23
4,4'-DDD	247656	197010	230950	244269	245147	233006	9.08
Endrin aldehyde	263192	161738	191278	199111	198765	202817	18.28
Endosulfan sulfate	298605	181279	216342	226662	227151	230008	18.56
4,4'-DDT	154216	135295	176987	198954	201598	173410	16.52
Endrin ketone	282760	204303	241395	253247	255815	247504	11.51
Methoxychlor	77864	61652	76927	84091	83964	76900	11.90
alpha-Chlordane	315478	224523	274763	294027	290774	279913	12.22
gamma-Chlordane	314778	240793	295052	316237	313540	296080	10.84
Chlordane 500 ppb			8966				
Chlordane {2}			8016				
Chlordane {3}			24538				
Chlordane {4}			19537				
Chlordane {5}			21308				
Toxaphene 500 ppb			4788				
Toxaphene {2}			4935				
Toxaphene {3}			3998				
Toxaphene {4}			4670				
Toxaphene {5}			3547				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:52
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.88	2.06	461.7E6	122.1E6	611.562	614.992
	Spiked Amount 200.000			Recovery	=	305.78%	307.50%
2) S	DCB	6.05	6.73	166.2E6	51207076	588.041	629.565
	Spiked Amount 200.000			Recovery	=	294.02%	314.78%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	535.9E6	133.7E6	330.201	327.530
4) T	beta-BHC	2.49	2.79	189.7E6	45650015	300.373	292.138
5) T	gamma-BHC (Linda	2.43	2.74	463.7E6	114.3E6	326.615	320.580
6) T	delta-BHC	2.61	3.01	467.5E6	111.3E6	313.095	305.637
7) T	Heptachlor	2.76	3.07	387.7E6	103.6E6	314.735	318.135
8) T	Aldrin	2.97	3.32	413.3E6	106.7E6	314.687	315.364
9) T	Heptachlor epoxi	3.40	3.74	327.3E6	92460808	295.705	312.196
10) T	Endosulfan I	3.69	4.04	325.5E6	84364548	298.560	310.078
11) T	4,4'-DDE	3.64	4.12	341.4E6	87953799	319.504	315.185
12) T	Dieldrin	3.86	4.26	340.0E6	94470200	303.591	318.445
13) T	Endrin	4.03	4.50	269.7E6	73191556	306.624	322.437
14) T	Endosulfan II	4.20	4.68	275.8E6	77462956	292.142	306.425
15) T	4,4'-DDD	4.08	4.58	294.8E6	73544020	309.866	315.631
16) T	Endrin aldehyde	4.54	4.96	221.6E6	59629568	281.209	291.913
17) T	Endosulfan sulfa	4.90	5.21	237.8E6	68145182	283.593	297.504
18) T	4,4'-DDT	4.30	4.85	246.2E6	60479461	345.778	348.765
19) T	Endrin ketone	5.14	5.70	263.0E6	76744485	289.216	310.074
20) T	Methoxychlor	4.69	5.46	101.9E6	25189298	320.620	325.108
21) T	alpha-Chlordane	3.59	3.99	356.6E6	87232066	312.821	311.640
22) T	gamma-Chlordane	3.49	3.88	378.3E6	94062082	314.633	317.691
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

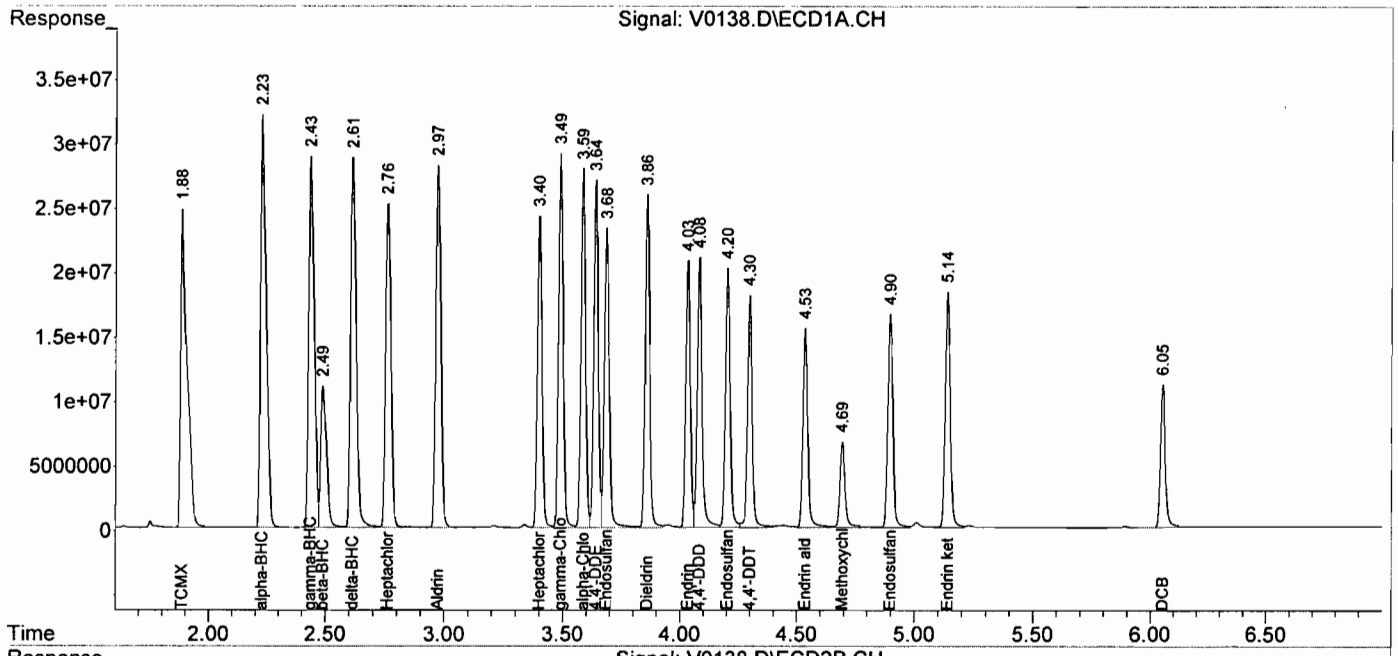
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

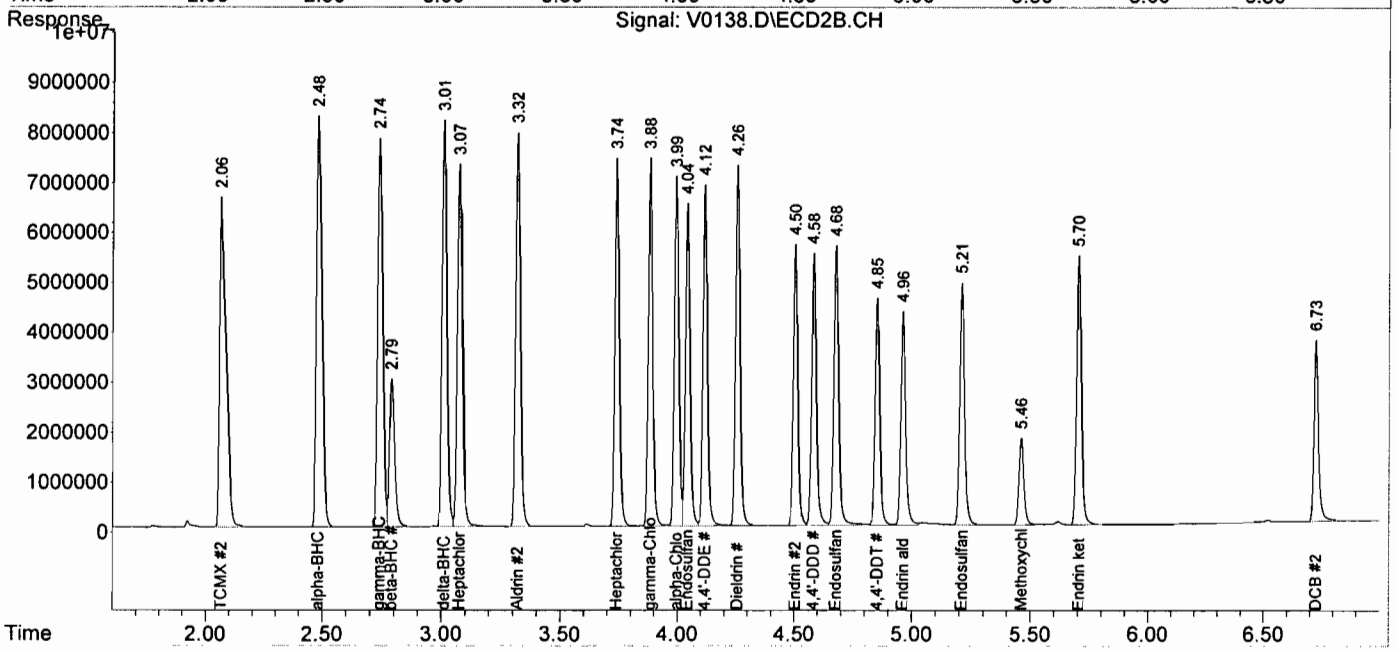
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:52
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:03
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1)	S	TCMX	1.89	2.06	313.2E6	82577214	414.885	415.973
	Spiked Amount	200.000			Recovery	=	207.44%	207.99%
2)	S	DCB	6.05	6.73	113.2E6	34072272	400.629	418.901
	Spiked Amount	200.000			Recovery	=	200.31%	209.45%
	Target Compounds							
3)	T	alpha-BHC	2.23	2.48	361.2E6	90429523	222.537	221.501
4)	T	beta-BHC	2.49	2.79	127.5E6	30687231	201.915	196.383
5)	T	gamma-BHC (Linda	2.43	2.74	314.8E6	77578910	221.727	217.663
6)	T	delta-BHC	2.61	3.01	313.2E6	75132548	209.751	206.268
7)	T	Heptachlor	2.76	3.07	264.8E6	69638551	214.921	213.757
8)	T	Aldrin	2.97	3.32	282.2E6	71944236	214.891	212.683
9)	T	Heptachlor epoxi	3.40	3.74	227.5E6	62493962	205.534	211.012
10)	T	Endosulfan I	3.68	4.04	225.5E6	56803252	206.814	208.778
11)	T	4,4'-DDE	3.64	4.11	232.2E6	58843794	217.326	210.868
12)	T	Dieldrin	3.86	4.26	235.0E6	63370544	209.901	213.613
13)	T	Endrin	4.03	4.50	188.6E6	49568013	214.387	218.366
14)	T	Endosulfan II	4.20	4.68	190.3E6	52001816	201.625	205.707
15)	T	4,4'-DDD	4.08	4.58	198.8E6	48853879	209.004	209.667
16)	T	Endrin aldehyde	4.53	4.96	152.7E6	39822247	193.791	194.948
17)	T	Endosulfan sulfa	4.90	5.21	162.6E6	45332490	193.903	197.910
18)	T	4,4'-DDT	4.30	4.85	164.3E6	39790863	230.724	229.461
19)	T	Endrin ketone	5.14	5.70	179.3E6	50649426	197.164	204.641
20)	T	Methoxychlor	4.69	5.46	69406268	16818170	218.418	217.065
21)	T	alpha-Chlordane	3.58	3.99	242.8E6	58805395	213.043	210.085
22)	T	gamma-Chlordane	3.49	3.88	257.1E6	63247489	213.867	213.616
	Sum Chlordane				0	0	N.D.	N.D.
Average	Chlordane						0.000	0.000
	Sum Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

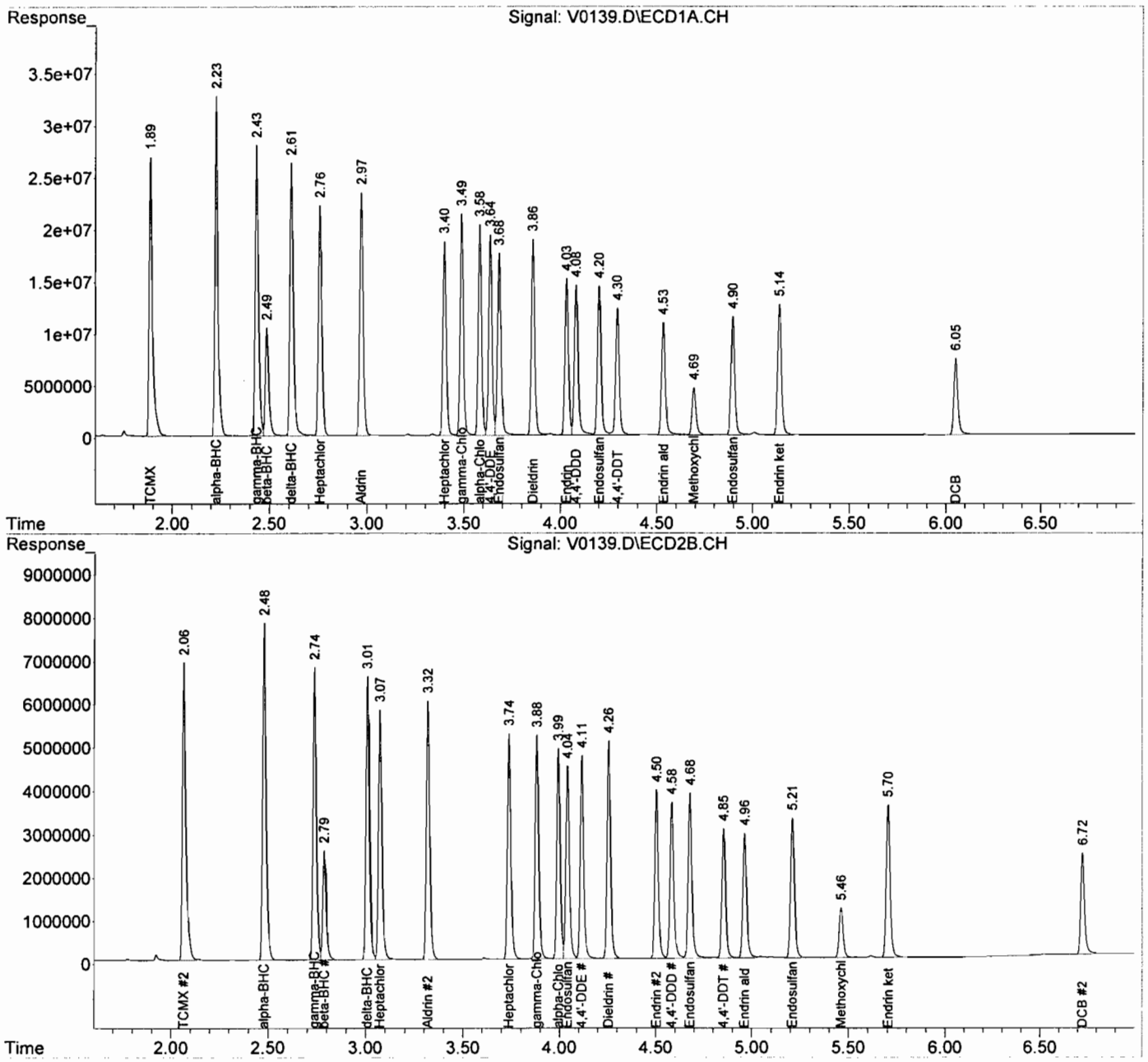
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:03
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:14
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 12:59:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

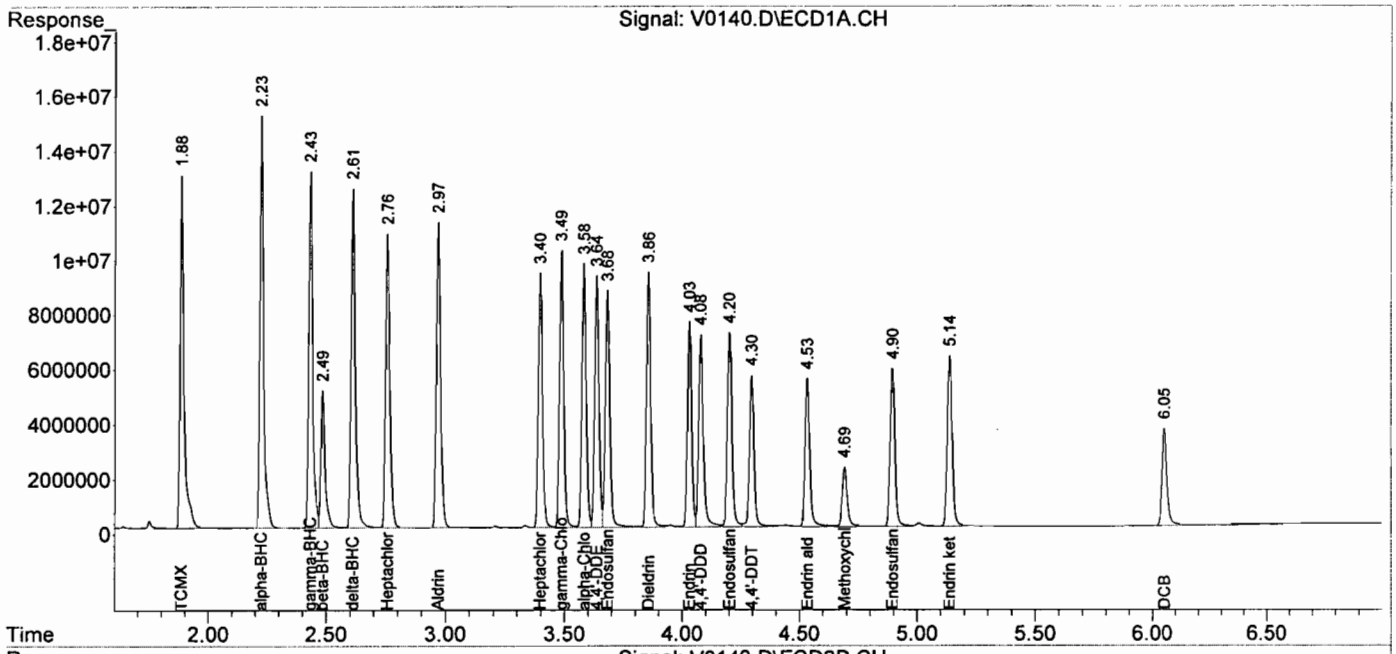
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	149.5E6	39258190	198.048	197.758
	Spiked Amount 200.000			Recovery	=	99.02%	98.88%
2) S	DCB	6.05	6.73	55028412	16505326	194.717	202.924
	Spiked Amount 200.000			Recovery	=	97.36%	101.46%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	167.8E6	41973186	103.368	102.810
4) T	beta-BHC	2.49	2.79	61677891	14684854	97.670	93.976
5) T	gamma-BHC (Linda	2.43	2.73	146.7E6	35945095	103.341	100.851
6) T	delta-BHC	2.61	3.01	148.2E6	35258575	99.281	96.798
7) T	Heptachlor	2.76	3.07	127.6E6	32442092	103.548	99.582
8) T	Aldrin	2.97	3.32	135.8E6	33529481	103.403	99.121
9) T	Heptachlor epoxi	3.40	3.74	113.2E6	29300745	102.255	98.935
10) T	Endosulfan I	3.68	4.04	111.1E6	26854772	101.872	98.703
11) T	4,4'-DDE	3.64	4.11	110.5E6	27520163	103.443	98.619
12) T	Dieldrin	3.86	4.26	115.7E6	29543110	103.301	99.586
13) T	Endrin	4.03	4.50	91114640	22790163	103.589	100.400
14) T	Endosulfan II	4.20	4.68	93854871	24635338	99.415	97.452
15) T	4,4'-DDD	4.08	4.58	96149207	23094976	101.080	99.117
16) T	Endrin aldehyde	4.53	4.96	75891005	19127761	96.299	93.639
17) T	Endosulfan sulfa	4.90	5.21	80291885	21634159	95.744	94.449
18) T	4,4'-DDT	4.30	4.85	74594890	17698711	104.782	102.063
19) T	Endrin ketone	5.14	5.70	88824290	24139464	97.683	97.532
20) T	Methoxychlor	4.69	5.46	32994496	7692748	103.832	99.287
21) T	alpha-Chlordane	3.58	3.99	115.7E6	27476289	101.526	98.160
22) T	gamma-Chlordane	3.49	3.88	122.0E6	29505185	101.489	99.653
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

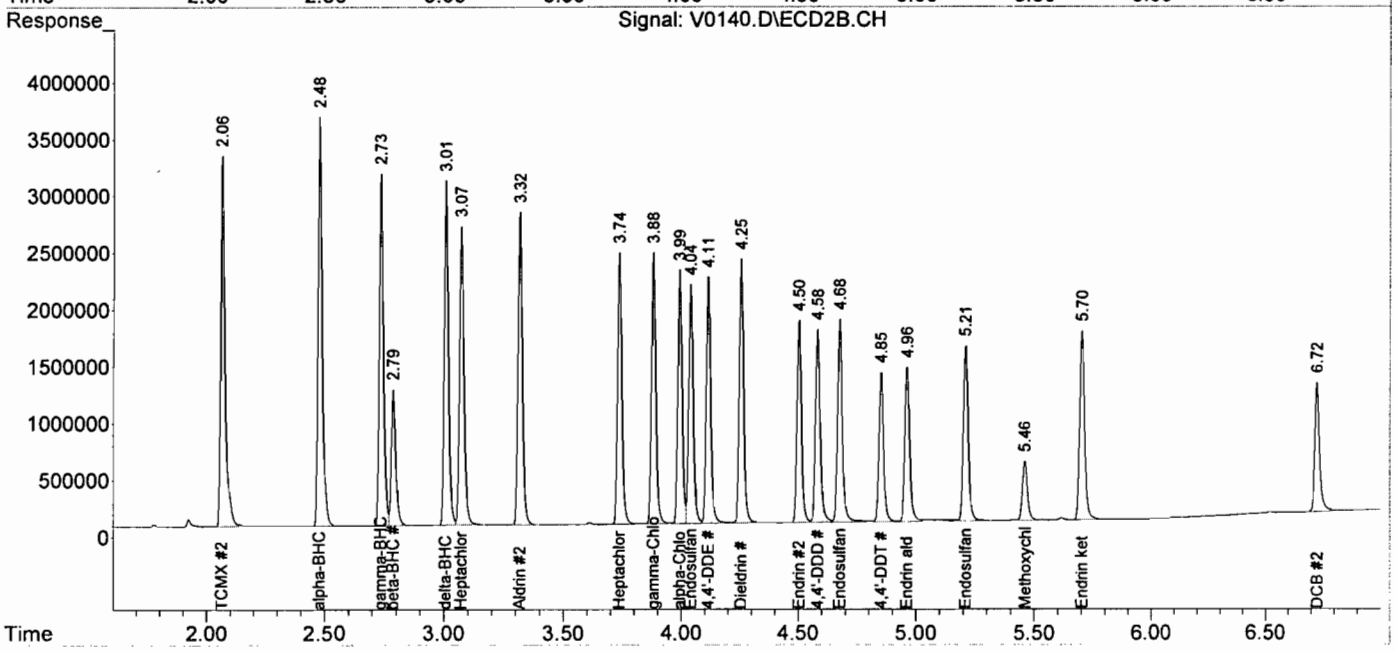
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:14
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 12:59:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:25
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1) S	TCMX		1.91	2.08	62828120	16260504	83.226m	81.910
Spiked Amount		200.000			Recovery	=	41.61%	40.95%
2) S	DCB		6.05	6.73	23990791	7041963	84.891	86.577
Spiked Amount		200.000			Recovery	=	42.45%	43.29%
	Target Compounds							
3) T	alpha-BHC		2.24	2.49	65762705	16483205	40.519	40.374
4) T	beta-BHC		2.50	2.80	26074884	6293110	41.291	40.273
5) T	gamma-BHC (Linda		2.45	2.75	58038162	14246302	40.882	39.971
6) T	delta-BHC		2.62	3.01	59972529	14186159	40.163	38.947
7) T	Heptachlor		2.77	3.08	51074570	12936500	41.458	39.709
8) T	Aldrin		2.98	3.32	55087610	13550741	41.942	40.059
9) T	Heptachlor epoxi		3.40	3.74	47238354	11963305	42.676	40.394
10) T	Endosulfan I		3.69	4.04	46452927	11011542	42.607	40.472
11) T	4,4'-DDE		3.64	4.12	44595995	11366351	41.732	40.732
12) T	Dieldrin		3.86	4.26	47448148	11947062	42.372	40.272
13) T	Endrin		4.03	4.51	36848908	9085608	41.894	40.026
14) T	Endosulfan II		4.21	4.68	39458870	10158597	41.797	40.185
15) T	4,4'-DDD		4.08	4.58	41010945	9850520	43.114	42.276
16) T	Endrin aldehyde		4.54	4.96	32818570	8086884	41.644	39.589
17) T	Endosulfan sulfa		4.90	5.21	34436032	9063964	41.063	39.571
18) T	4,4'-DDT		4.30	4.85	28547102	6764752	40.100	39.010
19) T	Endrin ketone		5.14	5.70	38393023	10215153	42.222	41.273
20) T	Methoxychlor		4.69	5.46	13501607	3082624	42.489	39.786
21) T	alpha-Chlordane		3.59	4.00	47058921	11226140	41.285	40.106
22) T	gamma-Chlordane		3.49	3.88	49679851	12039654	41.320	40.663
Sum	Chlordane				0	0	N.D.	N.D.
Average	Chlordane						0.000	0.000
Sum	Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

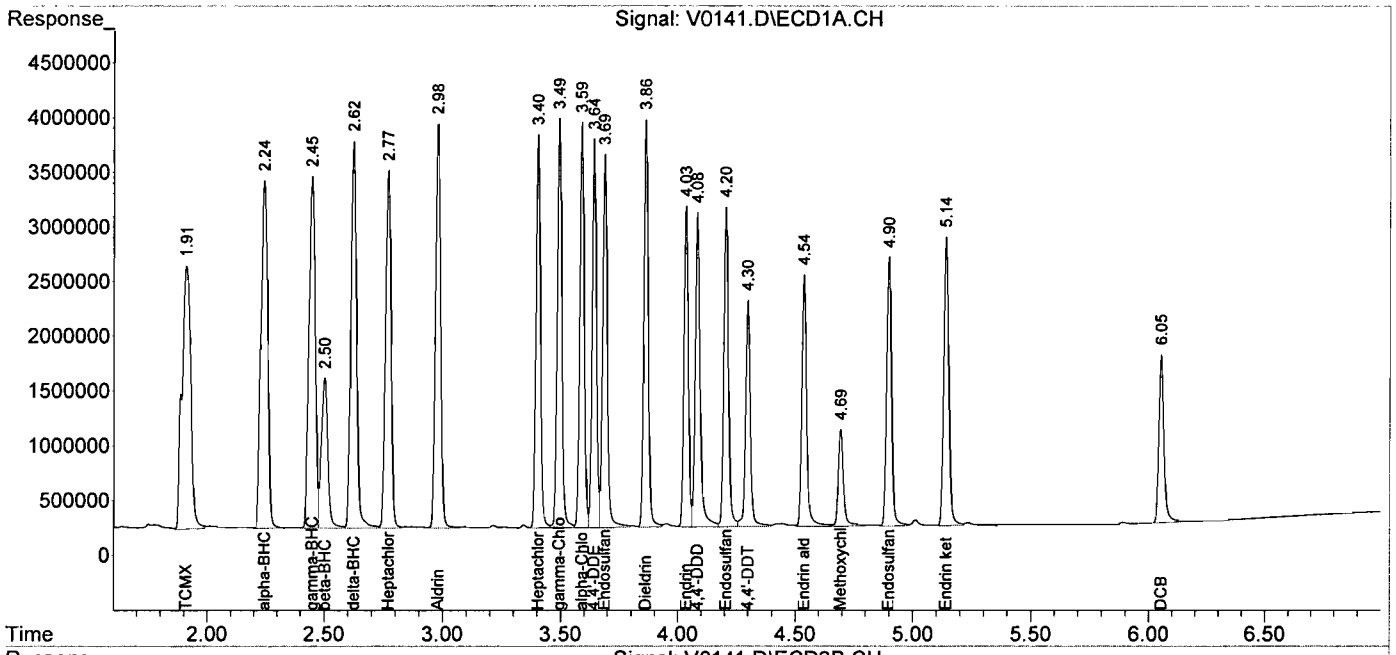
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

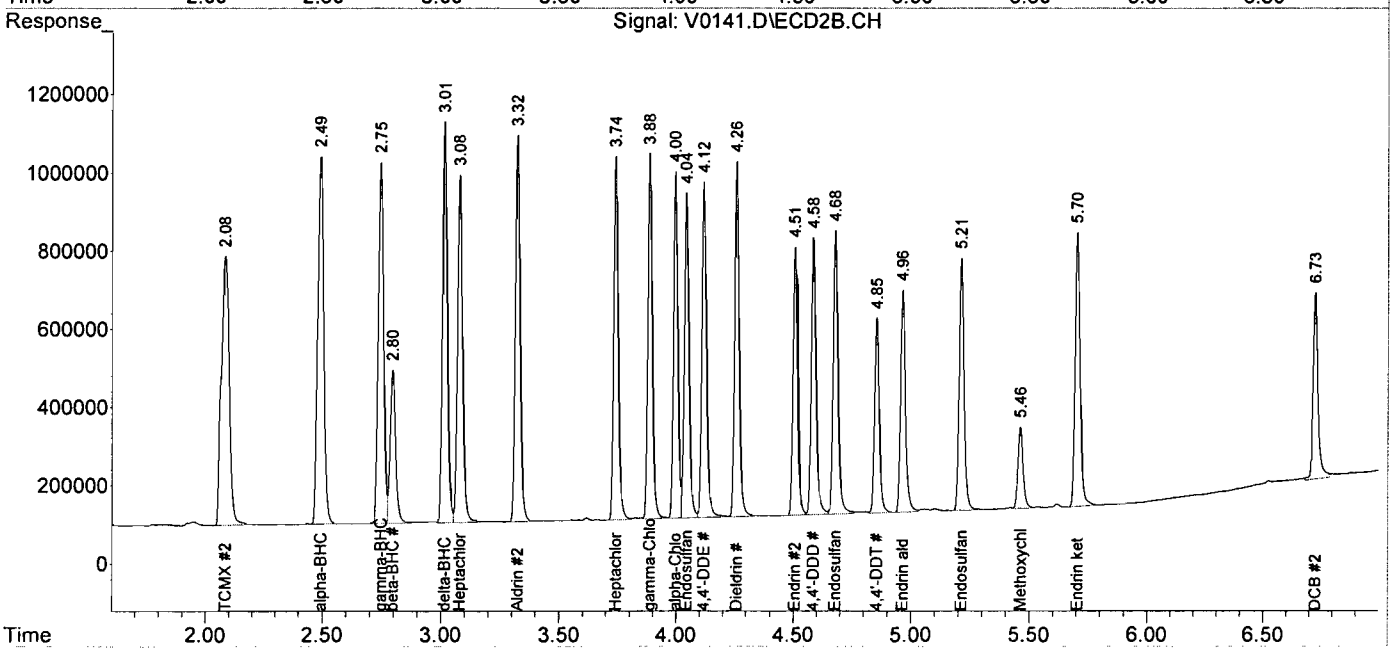
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:25
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:37
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.91	2.08	3357303	862737	4.447m	4.346m
	Spiked Amount 200.000			Recovery =		2.22%	2.17%
2) S	DCB	6.05	6.73	1351841	341063	4.783	4.193m
	Spiked Amount 200.000			Recovery =		2.39%	2.10%
	Target Compounds						
3) T	alpha-BHC	2.24	2.49	2981612	788052	1.837m	1.930
4) T	beta-BHC	2.50	2.80	1498739	405991	2.373	2.598
5) T	gamma-BHC (Linda	2.45	2.75	2701935	737901	1.903	2.070
6) T	delta-BHC	2.62	3.01	3319520	876347	2.223	2.406
7) T	Heptachlor	2.77	3.08	2492594	704200	2.023	2.162
8) T	Aldrin	2.98	3.32	2636633	739447	2.007	2.186
9) T	Heptachlor epoxi	3.40	3.74	2458599	655737	2.221	2.214
10) T	Endosulfan I	3.69	4.04	2398335	612733	2.200	2.252
11) T	4,4'-DDE	3.64	4.12	2092963	610693	1.959	2.188
12) T	Dieldrin	3.86	4.26	2369687	634356	2.116	2.138
13) T	Endrin	4.04	4.50	1815838	467096	2.064	2.058
14) T	Endosulfan II	4.21	4.68	2243076	592466	2.376	2.344
15) T	4,4'-DDD	4.08	4.58	1995687	495312	2.098	2.126
16) T	Endrin aldehyde	4.54	4.96	2067854	526385	2.624m	2.577m
17) T	Endosulfan sulfa	4.90	5.21	2204128	597209	2.628m	2.607m
18) T	4,4'-DDT	4.30	4.85	1201659	308432	1.688	1.779
19) T	Endrin ketone	5.14	5.70	2234814	565520	2.458	2.285
20) T	Methoxychlor	4.70	5.46	604451	155728	1.902	2.010m
21) T	alpha-Chlordane	3.59	4.00	2396133	630956	2.102	2.254
22) T	gamma-Chlordane	3.49	3.88	2502201	629556	2.081	2.126
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

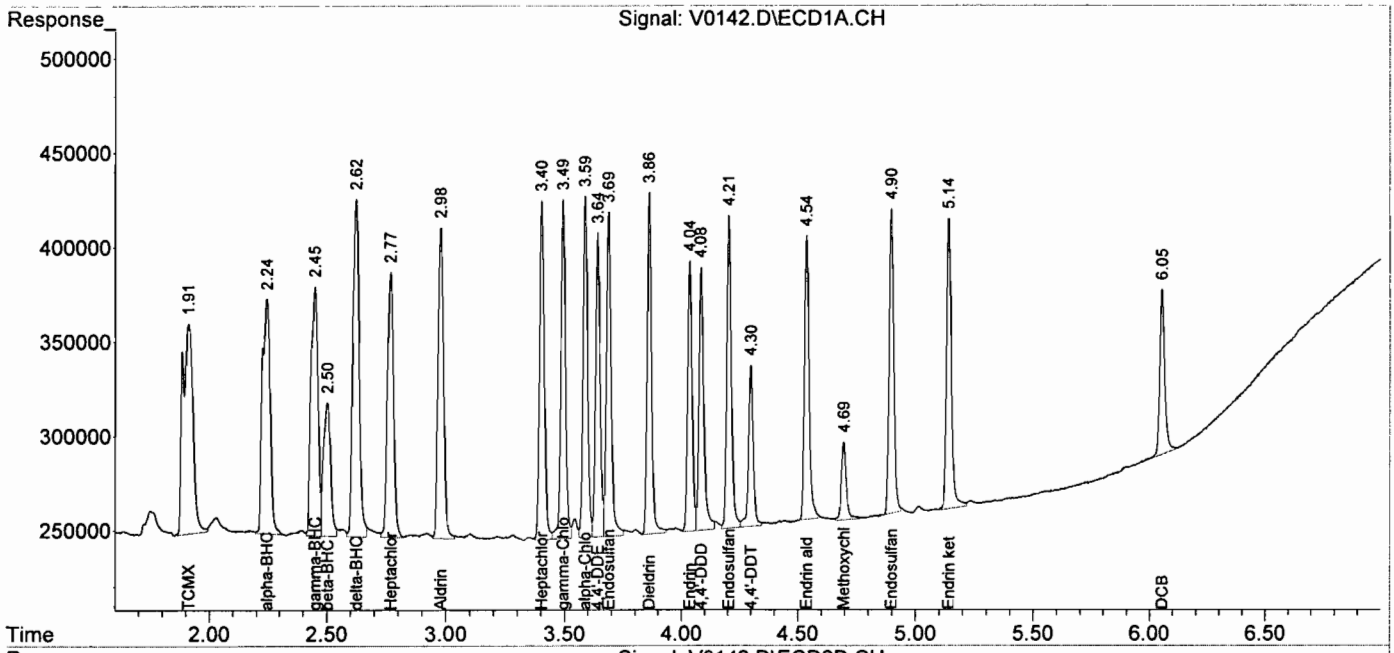
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

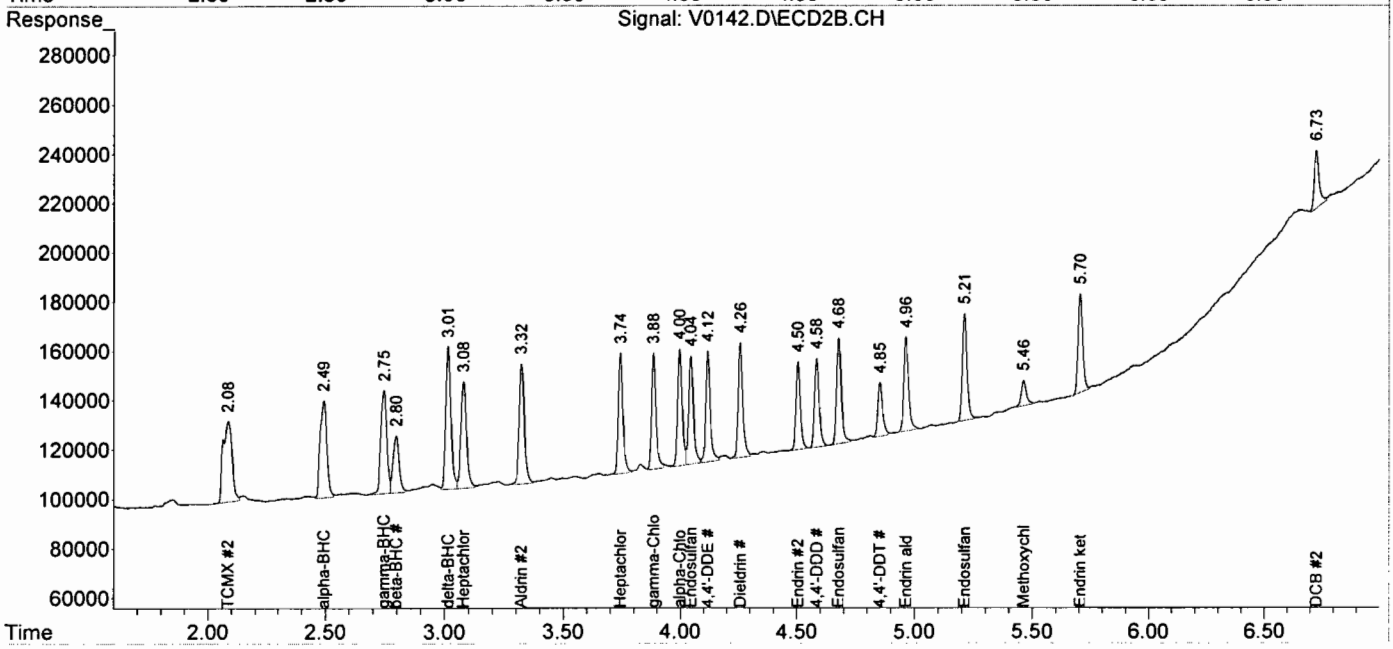
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:37
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:49:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:28:26 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.91	2.09	162.0E6	42113628	211.798m	210.931m
Spiked Amount 200.000			Recovery	=	105.90%	105.47%
2) S DCB	6.05	6.73	52780439	15136214	188.260	188.312
Spiked Amount 200.000			Recovery	=	94.13%	94.16%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.25	4.75	9680800	2393767	500.000	500.000
29) L2 Toxaphene {2}	4.62	4.97	11077130	2467280	500.000	500.000
30) L2 Toxaphene {3}	4.81	5.17	13445107	1998806	500.000	500.000
31) L2 Toxaphene {4}	5.12	5.44	11681853	2335065	500.000	500.000
32) L2 Toxaphene {5}	5.26	5.81	4908452	1773569	500.000	500.000
Sum Toxaphene			50793342	10968487	2500.000	2500.000
Average Toxaphene					500.000	500.000

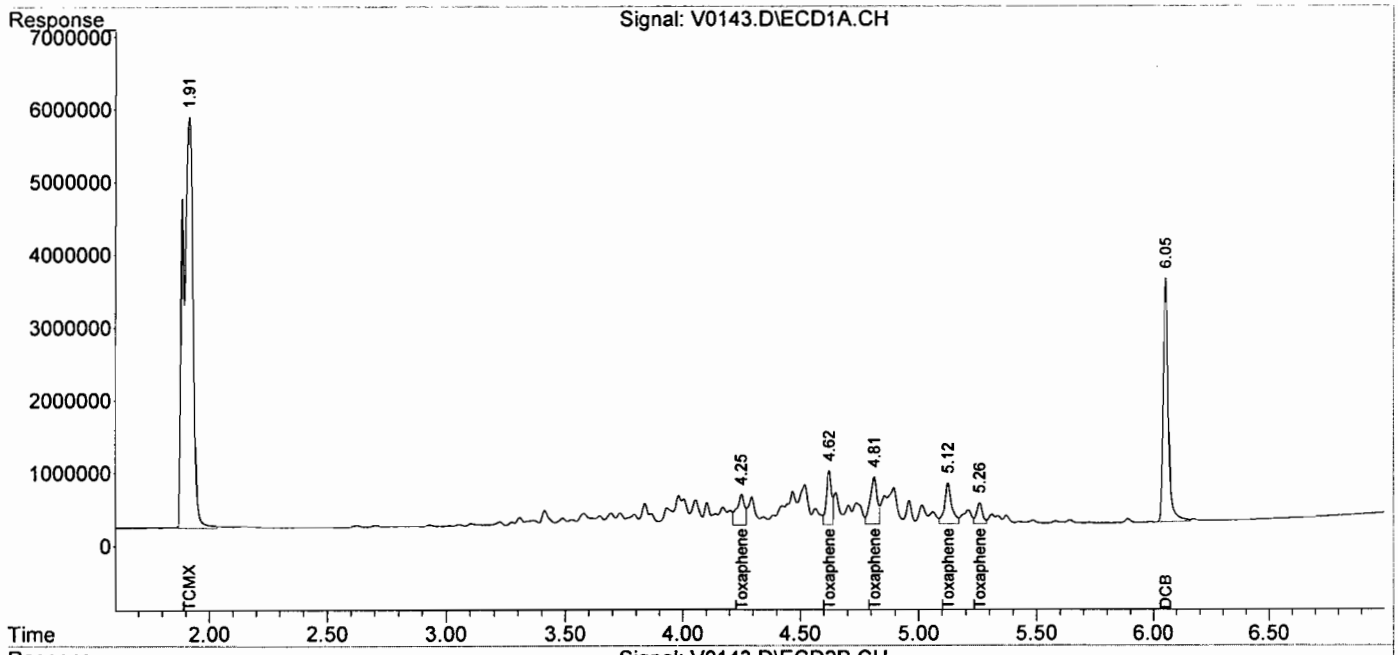
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

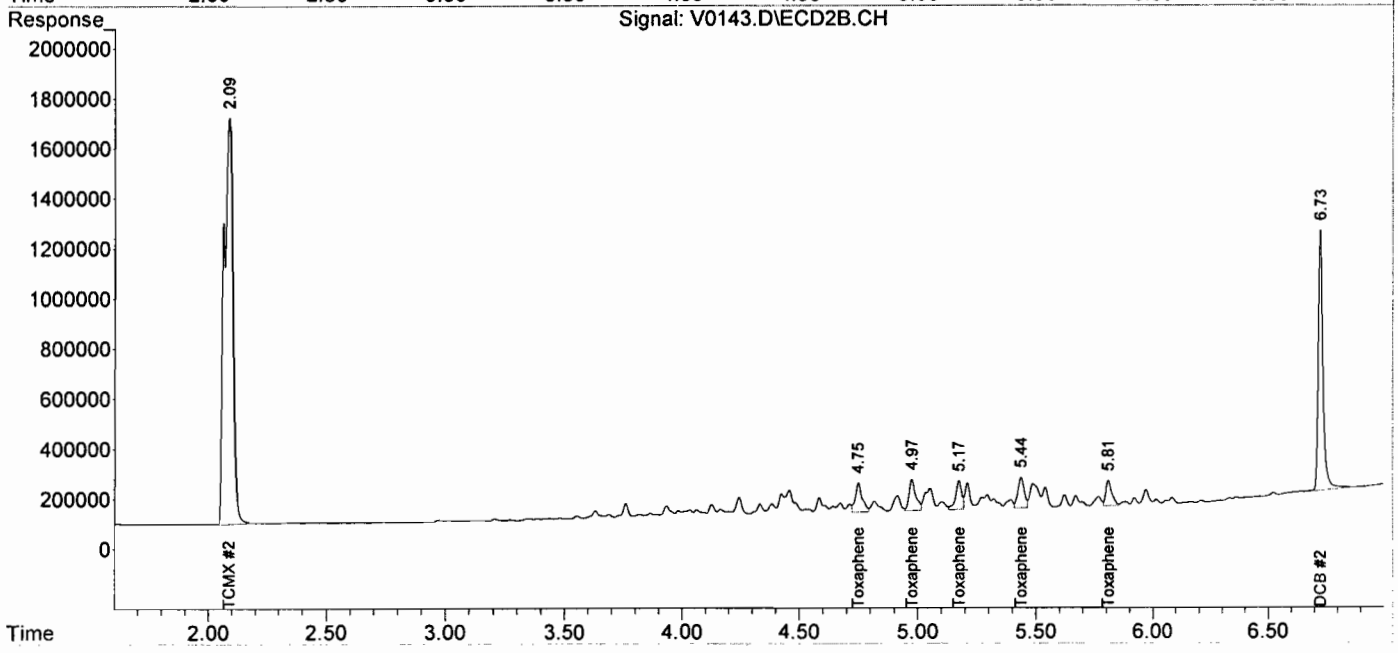
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:49:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:28:26 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0144.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:10
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:50:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1)	S TCMX		1.91	2.09	146.4E6	37579334	195.168m	192.496
	Spiked Amount	200.000			Recovery	=	97.58%	96.25%
2)	S DCB		6.05	6.73	54182345	15950783	192.299	196.455
	Spiked Amount	200.000			Recovery	=	96.15%	98.23%
	Target Compounds							
23)	L1 Chlordane		2.72	2.97	16015918	4482787	500.000	500.000
24)	L1 Chlordane {2}		3.07	3.42	18921053	4007936	500.000	500.000
25)	L1 Chlordane {3}		3.49	3.89	53918914	12268809	500.000	500.000
26)	L1 Chlordane {4}		3.58	3.96	84332346	9768633	500.000	500.000
27)	L1 Chlordane {5}		4.16	4.00	13335198	10653956	500.000	500.000
	Sum Chlordane				186.5E6	41182122	2500.000	2500.000
Average	Chlordane						500.000	500.000
	Sum Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

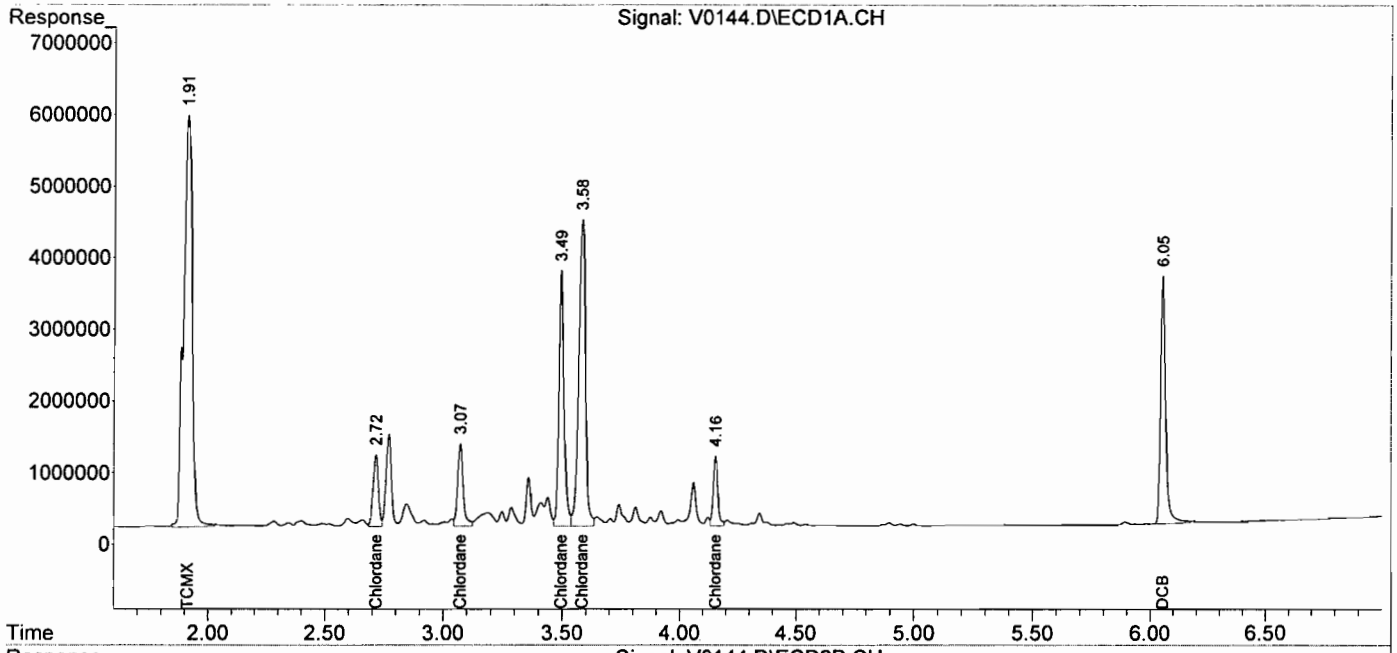
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

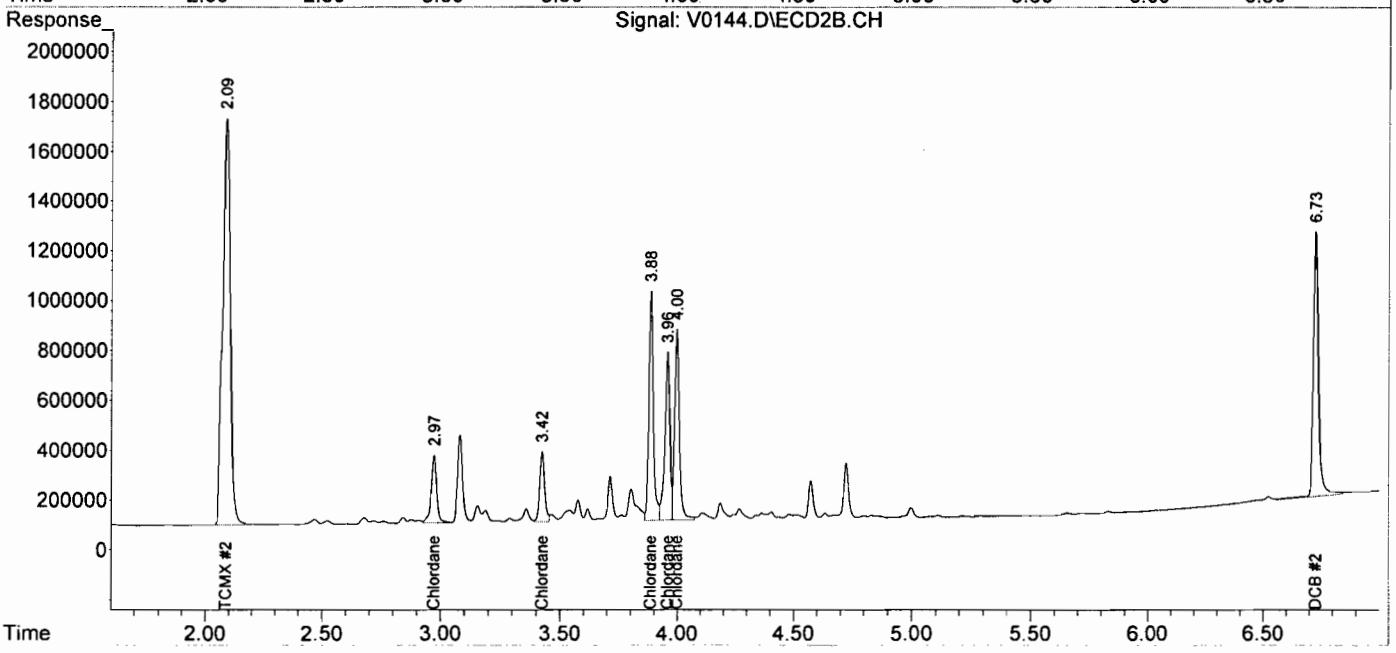
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0144.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:10
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:50:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0145.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.25	2.17	2.29	1615218	1520144	5.89
beta-BHC	2.51	2.43	2.55	631492	538468	14.73
gamma-BHC	2.46	2.38	2.50	1419668	1377834	2.95
delta-BHC	2.63	2.56	2.68	1493227	1345053	9.92
Heptachlor	2.78	2.68	2.84	1231961	1177862	4.39
Aldrin	2.99	2.89	3.05	1313423	1239175	5.65
Heptachlor epoxide	3.41	3.32	3.48	1106906	1022031	7.67
Endosulfan I	3.70	3.61	3.77	1090273	1004520	7.87
4,4'-DDE	3.65	3.54	3.74	1068624	1004625	5.99
Dieldrin	3.87	3.76	3.96	1119802	907427	18.97
Endrin	4.04	3.93	4.13	879579	825745	6.12
Endosulfan II	4.22	4.10	4.30	944069	832950	11.77
4,4'-DDD	4.09	3.98	4.18	951219	869444	8.60
Endrin aldehyde	4.55	4.42	4.66	790308	650632	17.67
Endosulfan sulfate	4.91	4.78	5.02	839898	697119	17.00
4,4'-DDT	4.31	4.18	4.42	711905	676393	4.99
Endrin ketone	5.15	5.02	5.26	909310	777691	14.47
Methoxychlor	4.71	4.57	4.81	317769	288359	9.26
alpha-Chlordane	3.60	3.51	3.67	1139844	1040143	8.75
gamma-Chlordane	3.50	3.41	3.57	1202305	1099139	8.58

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0145.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.49	2.42	2.54	408258	384471	5.83
beta-BHC	2.80	2.73	2.85	156262	132639	15.12
gamma-BHC	2.75	2.68	2.80	356418	345100	3.18
delta-BHC	3.02	2.95	3.07	364247	322559	11.45
Heptachlor	3.08	3.00	3.16	325784	308213	5.39
Aldrin	3.33	3.24	3.40	338270	314785	6.94
Heptachlor epoxide	3.74	3.66	3.82	296163	269955	8.85
Endosulfan I	4.05	3.96	4.12	272075	247993	8.85
4,4'-DDE	4.12	4.02	4.22	279055	260755	6.56
Dieldrin	4.26	4.16	4.36	296661	238161	19.72
Endrin	4.51	4.40	4.60	226995	213334	6.02
Endosulfan II	4.68	4.58	4.78	252795	224795	11.08
4,4'-DDD	4.59	4.48	4.68	233006	214912	7.77
Endrin aldehyde	4.97	4.84	5.08	202817	172292	15.05
Endosulfan sulfate	5.22	5.09	5.33	230008	197838	13.99
4,4'-DDT	4.86	4.73	4.97	173410	166518	3.97
Endrin ketone	5.71	5.58	5.82	247504	225926	8.72
Methoxychlor	5.47	5.34	5.58	76900	73859	3.95
alpha-Chlordane	4.00	3.91	4.07	279913	251945	9.99
gamma-Chlordane	3.89	3.80	3.96	296080	268015	9.48

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0150.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.23	2.17	2.29	1615218	1675051	3.70
beta-BHC	2.49	2.43	2.55	631492	591410	6.35
gamma-BHC	2.44	2.38	2.50	1419668	1514335	6.67
delta-BHC	2.62	2.56	2.68	1493227	1468790	1.64
Heptachlor	2.77	2.68	2.84	1231961	1285234	4.32
Aldrin	2.98	2.89	3.05	1313423	1350065	2.79
Heptachlor epoxide	3.41	3.32	3.48	1106906	1120065	1.19
Endosulfan I	3.69	3.61	3.77	1090273	1099427	0.84
4,4'-DDE	3.65	3.54	3.74	1068624	1092146	2.20
Dieldrin	3.87	3.76	3.96	1119802	987475	11.82
Endrin	4.04	3.93	4.13	879579	885730	0.70
Endosulfan II	4.21	4.10	4.30	944069	922628	2.27
4,4'-DDD	4.09	3.98	4.18	951219	947263	0.42
Endrin aldehyde	4.55	4.42	4.66	790308	733704	7.16
Endosulfan sulfate	4.91	4.78	5.02	839898	783796	6.68
4,4'-DDT	4.31	4.18	4.42	711905	750582	5.43
Endrin ketone	5.15	5.02	5.26	909310	885167	2.66
Methoxychlor	4.70	4.57	4.81	317769	326417	2.72
alpha-Chlordane	3.59	3.51	3.67	1139844	1142094	0.20
gamma-Chlordane	3.50	3.41	3.57	1202305	1204888	0.21

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0150.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.48	2.42	2.54	408258	440269	7.84
beta-BHC	2.79	2.73	2.85	156262	147763	5.44
gamma-BHC	2.74	2.68	2.80	356418	391251	9.77
delta-BHC	3.01	2.95	3.07	364247	361937	0.63
Heptachlor	3.08	3.00	3.16	325784	341731	4.89
Aldrin	3.32	3.24	3.40	338270	355459	5.08
Heptachlor epoxide	3.74	3.66	3.82	296163	304380	2.77
Endosulfan I	4.04	3.96	4.12	272075	276997	1.81
4,4'-DDE	4.12	4.02	4.22	279055	292395	4.78
Dieldrin	4.26	4.16	4.36	296661	268928	9.35
Endrin	4.51	4.40	4.60	226995	236579	4.22
Endosulfan II	4.68	4.58	4.78	252795	254117	0.52
4,4'-DDD	4.59	4.48	4.68	233006	241324	3.57
Endrin aldehyde	4.97	4.84	5.08	202817	196430	3.15
Endosulfan sulfate	5.22	5.09	5.33	230008	224712	2.30
4,4'-DDT	4.86	4.73	4.97	173410	190806	10.03
Endrin ketone	5.71	5.58	5.82	247504	259241	4.74
Methoxychlor	5.47	5.34	5.58	76900	87918	14.33
alpha-Chlordane	4.00	3.91	4.07	279913	283276	1.20
gamma-Chlordane	3.89	3.80	3.96	296080	301203	1.73

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:54
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 14:03:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.91	2.09	159.7E6	43097627	212.853m	220.763
	Spiked Amount 200.000			Recovery	=	106.43%	110.38%
2) S	DCB	6.06	6.73	42166271	14994009	149.653	184.671
	Spiked Amount 200.000			Recovery	=	74.83%	92.34%
	Target Compounds						
3) T	alpha-BHC	2.25	2.49	152.0E6	38447106	94.114	94.173
4) T	beta-BHC	2.51	2.80	53846804	13263904	85.269	84.883
5) T	gamma-BHC (Linda	2.46	2.75	137.8E6	34510017	97.053	96.825
6) T	delta-BHC	2.63	3.02	134.5E6	32255891	90.077	88.555
7) T	Heptachlor	2.78	3.08	117.8E6	30821255	95.609	94.606
8) T	Aldrin	2.99	3.33	123.9E6	31478529	94.347	93.057
9) T	Heptachlor epoxi	3.41	3.74	102.2E6	26995530	92.332	91.151
10) T	Endosulfan I	3.70	4.05	100.5E6	24799296	92.135	91.149
11) T	4,4'-DDE	3.65	4.12	100.5E6	26075506	94.011	93.442
12) T	Dieldrin	3.87	4.26	90742662	23816081	81.035	80.281
13) T	Endrin	4.04	4.51	82574492	21333370	93.880	93.982
14) T	Endosulfan II	4.22	4.68	83295023	22479541	88.230	88.924
15) T	4,4'-DDD	4.09	4.59	86944381	21491250	91.403	92.235
16) T	Endrin aldehyde	4.55	4.97	65063162	17229151	82.326	84.949
17) T	Endosulfan sulfa	4.91	5.22	69711868	19783803	83.000	86.014
18) T	4,4'-DDT	4.31	4.86	67639265	16651842	95.012	96.026
19) T	Endrin ketone	5.15	5.71	77769120	22592649	85.525	91.282
20) T	Methoxychlor	4.71	5.47	28835879	7385852	90.745	96.045
21) T	alpha-Chlordane	3.60	4.00	104.0E6	25194515	91.253	90.008
22) T	gamma-Chlordane	3.50	3.89	109.9E6	26801461	91.419	90.521
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

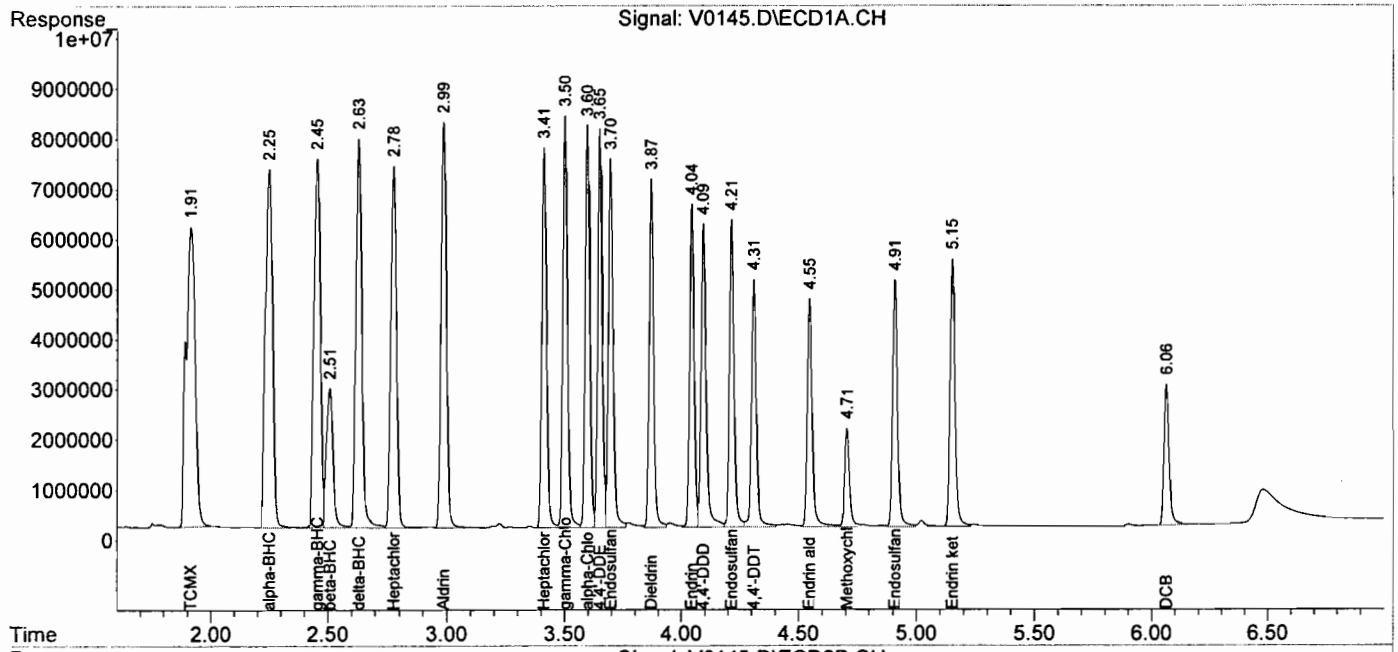
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

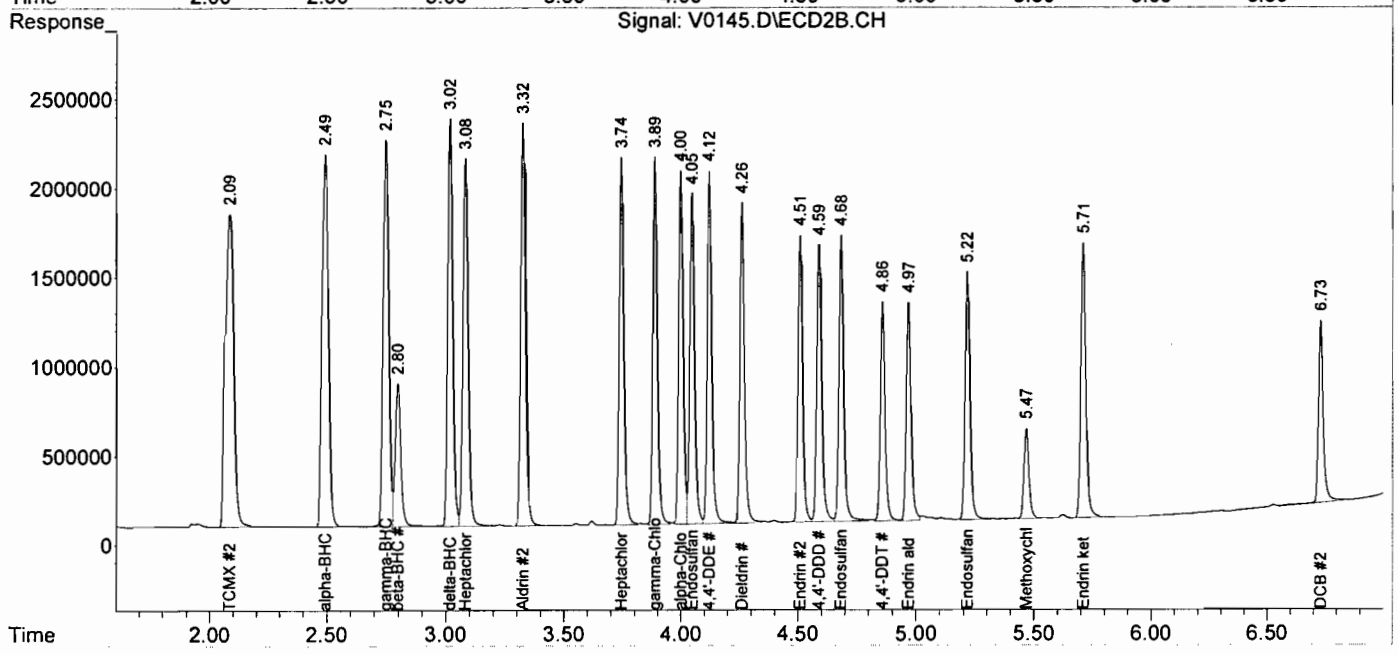
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:54
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 14:03:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0150.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 17:00
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:32:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	168.5E6	48231478	224.610	247.061
Spiked Amount	200.000			Recovery	=	112.31%	123.53%
2) S	DCB	6.06	6.73	50660103	17144947	179.798	211.163
Spiked Amount	200.000			Recovery	=	89.90%	105.58%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	167.5E6	44026916	103.704	107.841
4) T	beta-BHC	2.49	2.79	59141025	14776319	93.653	94.561
5) T	gamma-BHC (Linda	2.44	2.74	151.4E6	39125148	106.668	109.773
6) T	delta-BHC	2.62	3.01	146.9E6	36193685	98.363	99.366
7) T	Heptachlor	2.77	3.08	128.5E6	34173107	104.324	104.895
8) T	Aldrin	2.98	3.32	135.0E6	35545853	102.790	105.081
9) T	Heptachlor epoxi	3.41	3.74	112.0E6	30438042	101.189	102.775
10) T	Endosulfan I	3.69	4.04	109.9E6	27699658	100.840	101.809
11) T	4,4'-DDE	3.65	4.12	109.2E6	29239474	102.201	104.780
12) T	Dieldrin	3.87	4.26	98747544	26892818	88.183	90.652
13) T	Endrin	4.04	4.51	88572984	23657913	100.699	104.222
14) T	Endosulfan II	4.21	4.68	92262794	25411717	97.729	100.523
15) T	4,4'-DDD	4.09	4.59	94726342	24132433	99.584	103.570
16) T	Endrin aldehyde	4.55	4.97	73370370	19643034	92.838	96.851
17) T	Endosulfan sulfa	4.91	5.22	78379638	22471154	93.320	97.697
18) T	4,4'-DDT	4.31	4.86	75058249	19080629	105.433	110.032
19) T	Endrin ketone	5.15	5.71	88516676	25924140	97.345	104.742
20) T	Methoxychlor	4.70	5.47	32641684	8791765	102.722	114.328
21) T	alpha-Chlordane	3.59	4.00	114.2E6	28327582	100.197	101.201
22) T	gamma-Chlordane	3.50	3.89	120.5E6	30120298	100.215	101.730
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

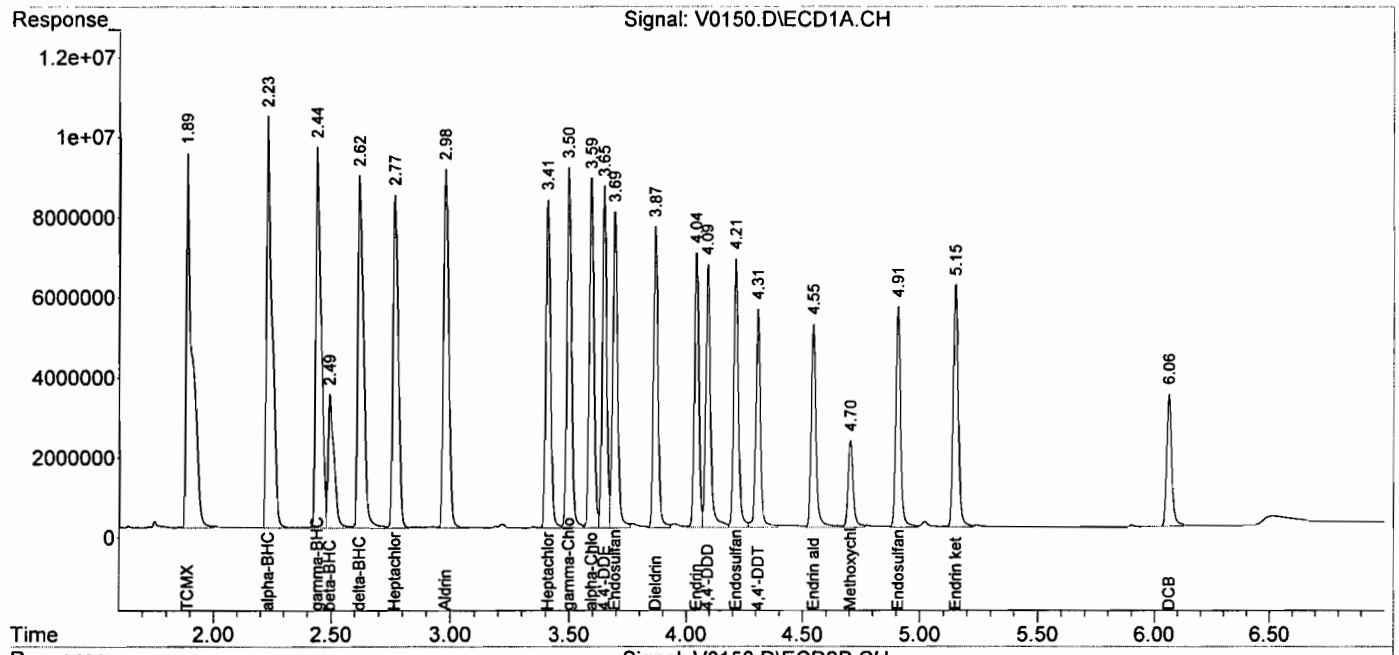
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

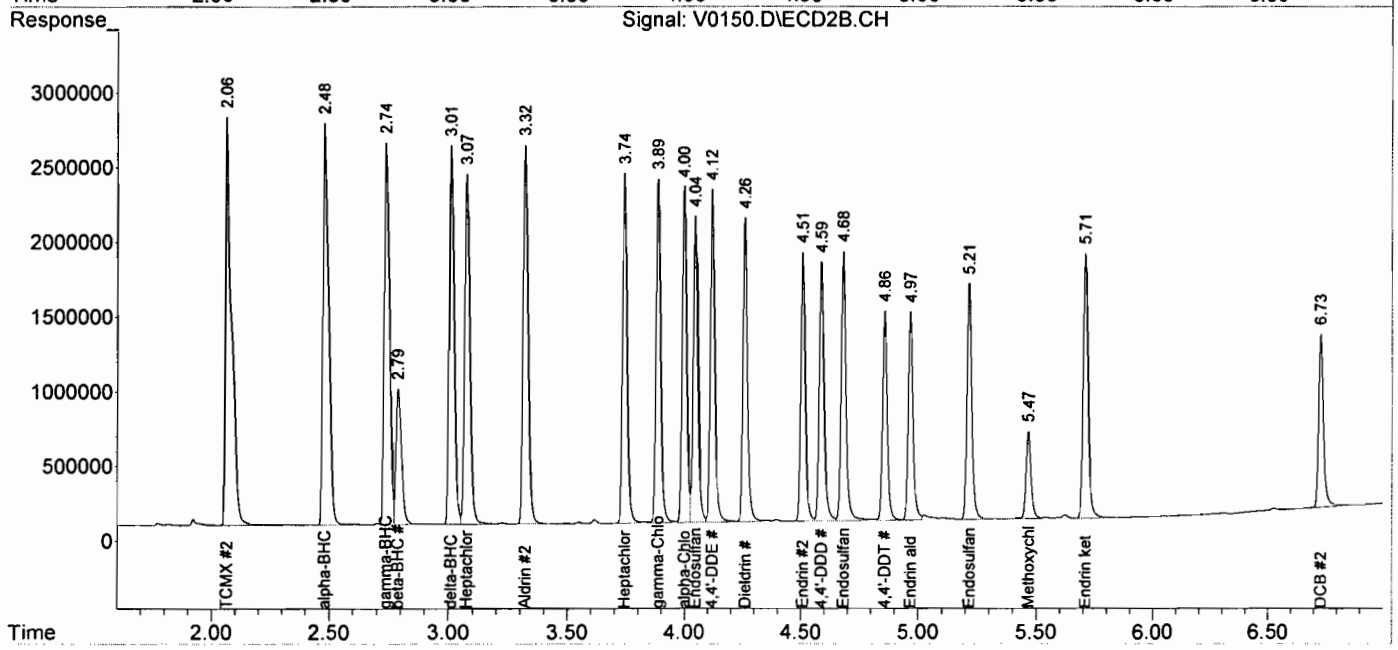
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0150.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 17:00
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:32:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8177.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.07	2.19	187214	179093	4.34
beta-BHC	2.38	2.32	2.44	84366	71174	15.64
gamma-BHC	2.33	2.27	2.39	155864	157096	0.79
delta-BHC	2.51	2.45	2.57	168995	162155	4.05
Heptachlor	2.66	2.58	2.74	154019	148655	3.48
Aldrin	2.89	2.82	2.98	160012	151819	5.12
Heptachlor epoxide	3.38	3.30	3.46	144525	134581	6.88
Endosulfan I	3.73	3.65	3.81	141495	129838	8.24
4,4'-DDE	3.67	3.57	3.77	129047	125939	2.41
Dieldrin	3.94	3.84	4.04	148030	122234	17.43
Endrin	4.16	4.06	4.26	107412	121079	12.72
Endosulfan II	4.37	4.27	4.47	127562	118150	7.38
4,4'-DDD	4.22	4.12	4.32	111373	105485	5.29
Endrin aldehyde	4.78	4.66	4.90	110586	94559	14.49
Endosulfan sulfate	5.21	5.10	5.34	114229	104174	8.80
4,4'-DDT	4.49	4.37	4.61	95042	99403	4.59
Endrin ketone	5.50	5.38	5.62	146662	130665	10.91
Methoxychlor	4.98	4.86	5.10	45552	50208	10.22
alpha-Chlordane	3.60	3.53	3.69	141939	131168	7.59
gamma-Chlordane	3.49	3.41	3.57	147256	136437	7.35
Chlordane 500 ppb	2.61	2.53	2.69	4252	4933	16.01
Chlordane {2}	3.00	2.92	3.08	5382	6026	11.98
Chlordane {3}	3.49	3.41	3.57	15780	17921	13.57
Chlordane {4}	3.60	3.52	3.68	24978	28044	12.27
Chlordane {5}	4.30	4.23	4.39	4043	4456	10.20
Toxaphene 500 ppb	4.75	4.68	4.84	4041	4431	9.66
Toxaphene {2}	4.88	4.80	4.96	3288	3511	6.81
Toxaphene {3}	5.11	5.03	5.19	4300	4524	5.22
Toxaphene {4}	5.48	5.40	5.56	4108	4496	9.47
Toxaphene {5}	5.64	5.56	5.72	1931	2297	18.94

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8177.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.52	2.46	2.58	251243	246345	1.95
beta-BHC	2.86	2.80	2.92	104943	91894	12.43
gamma-BHC	2.81	2.74	2.86	224938	230452	2.45
delta-BHC	3.12	3.06	3.18	221335	218184	1.42
Heptachlor	3.19	3.11	3.27	202778	207076	2.12
Aldrin	3.49	3.40	3.56	214661	209049	2.61
Heptachlor epoxide	4.03	3.94	4.10	193448	184620	4.56
Endosulfan I	4.42	4.33	4.49	176098	169187	3.92
4,4'-DDE	4.51	4.41	4.61	183365	178721	2.53
Dieldrin	4.70	4.59	4.79	194289	162164	16.53
Endrin	5.02	4.91	5.11	132728	155043	16.81
Endosulfan II	5.24	5.13	5.33	172680	162291	6.02
4,4'-DDD	5.12	5.01	5.21	143601	135411	5.70
Endrin aldehyde	5.60	5.47	5.71	148677	125585	15.53
Endosulfan sulfate	5.90	5.77	6.01	146081	143519	1.75
4,4'-DDT	5.45	5.33	5.57	111159	123742	11.32
Endrin ketone	6.50	6.37	6.61	195024	176104	9.70
Methoxychlor	6.21	6.08	6.32	56152	65799	17.18
alpha-Chlordane	4.36	4.27	4.43	190632	179156	6.02
gamma-Chlordane	4.21	4.12	4.28	196170	185157	5.61
Chlordane 500 ppb	3.06	2.98	3.14	6221	7447	19.70
Chlordane {2}	3.61	3.53	3.69	6419	7257	13.06
Chlordane {3}	4.20	4.12	4.28	20052	22977	14.59
Chlordane {4}	4.29	4.21	4.37	15455	17386	12.49
Chlordane {5}	4.35	4.27	4.43	16727	18976	13.44
Toxaphene 500 ppb	5.32	5.24	5.40	5003	5415	8.23
Toxaphene {2}	5.60	5.52	5.68	4207	4916	16.86
Toxaphene {3}	5.89	5.80	5.96	2656	3115	17.25
Toxaphene {4}	6.17	6.08	6.24	5464	5104	6.59
Toxaphene {5}	6.61	6.52	6.68	3809	4205	10.40

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8187.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.07	2.19	187214	175033	6.51
beta-BHC	2.38	2.32	2.44	84366	84559	0.23
gamma-BHC	2.33	2.27	2.39	155864	137074	12.06
delta-BHC	2.51	2.45	2.57	168995	161126	4.66
Heptachlor	2.66	2.58	2.74	154019	148188	3.79
Aldrin	2.89	2.82	2.98	160012	150085	6.20
Heptachlor epoxide	3.38	3.30	3.46	144525	134723	6.78
Endosulfan I	3.73	3.65	3.81	141495	132177	6.59
4,4'-DDE	3.67	3.57	3.77	129047	126059	2.32
Dieldrin	3.94	3.84	4.04	148030	123655	16.47
Endrin	4.16	4.06	4.26	107412	121440	13.06
Endosulfan II	4.37	4.27	4.47	127562	120520	5.52
4,4'-DDD	4.22	4.12	4.32	111373	106573	4.31
Endrin aldehyde	4.78	4.66	4.90	110586	96516	12.72
Endosulfan sulfate	5.21	5.10	5.34	114229	109732	3.94
4,4'-DDT	4.49	4.37	4.61	95042	103294	8.68
Endrin ketone	5.50	5.38	5.62	146662	138112	5.83
Methoxychlor	4.98	4.86	5.10	45552	50634	11.16
alpha-Chlordane	3.60	3.53	3.69	141939	132685	6.52
gamma-Chlordane	3.49	3.41	3.57	147256	137251	6.79

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8187.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.52	2.46	2.58	251243	241327	3.95
beta-BHC	2.86	2.80	2.92	104943	99838	4.86
gamma-BHC	2.80	2.74	2.86	224938	223881	0.47
delta-BHC	3.12	3.06	3.18	221335	216995	1.96
Heptachlor	3.19	3.11	3.27	202778	212741	4.91
Aldrin	3.49	3.40	3.56	214661	208777	2.74
Heptachlor epoxide	4.03	3.94	4.10	193448	186138	3.78
Endosulfan I	4.42	4.33	4.49	176098	172682	1.94
4,4'-DDE	4.51	4.41	4.61	183365	182081	0.70
Dieldrin	4.70	4.59	4.79	194289	166712	14.19
Endrin	5.02	4.91	5.11	132728	158350	19.30
Endosulfan II	5.24	5.13	5.33	172680	170099	1.50
4,4'-DDD	5.12	5.01	5.21	143601	138718	3.40
Endrin aldehyde	5.60	5.47	5.71	148677	129548	12.87
Endosulfan sulfate	5.90	5.77	6.01	146081	152676	4.51
4,4'-DDT	5.45	5.33	5.57	111159	127574	14.77
Endrin ketone	6.50	6.37	6.61	195024	188452	3.37
Methoxychlor	6.21	6.08	6.32	56152	63524	13.13
alpha-Chlordane	4.36	4.27	4.43	190632	182607	4.21
gamma-Chlordane	4.21	4.12	4.28	196170	187566	4.39

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8177.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 10:45
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 11:45:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19351303	29199425	189.918	195.994
	Spiked Amount 200.000	Range 10 - 180		Recovery =		94.96%	98.00%
2) S	DCB	6.60	8.16	7940130	9825831	181.859	174.858
	Spiked Amount 200.000	Range 10 - 180		Recovery =		90.93%	87.43%
	Target Compounds						
3) T	alpha-BHC	2.12	2.52	17909344	24634507	95.662	98.050
4) T	beta-BHC	2.38	2.86	7117386	9189356	84.363	87.565
5) T	gamma-BHC (Linda	2.33	2.81	15709583	23045197	100.791	102.451
6) T	delta-BHC	2.51	3.12	16215473	21818421	95.952	98.576
7) T	Heptachlor	2.66	3.19	14865488	20707564	96.517	102.119
8) T	Aldrin	2.89	3.49	15181946	20904929	94.880	97.386
9) T	Heptachlor epoxi	3.38	4.03	13458114	18461965	93.120	95.436
10) T	Endosulfan I	3.73	4.42	12983776	16918673	91.761	96.075
11) T	4,4'-DDE	3.67	4.51	12593909	17872059	97.592	97.467
12) T	Dieldrin	3.94	4.70	12223365	16216427	82.573	83.465
13) T	Endrin	4.16	5.02	12107923	15504263	112.724	116.812
14) T	Endosulfan II	4.37	5.24	11815002	16229097	92.622	93.984
15) T	4,4'-DDD	4.22	5.12	10548531	13541094	94.714	94.296
16) T	Endrin aldehyde	4.78	5.60	9455940	12558479	85.507	84.468
17) T	Endosulfan sulfa	5.21	5.90	10417380	14351876	91.198	98.246
18) T	4,4'-DDT	4.49	5.45	9940290	12374196	104.588	111.320
19) T	Endrin ketone	5.50	6.50	13066450	17610426	89.093	90.299
20) T	Methoxychlor	4.98	6.21	5020791	6579864	110.221	117.179
21) T	alpha-Chlordane	3.60	4.36	13116794	17915648	92.412	93.980
22) T	gamma-Chlordane	3.49	4.21	13643701	18515694	92.653	94.386
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

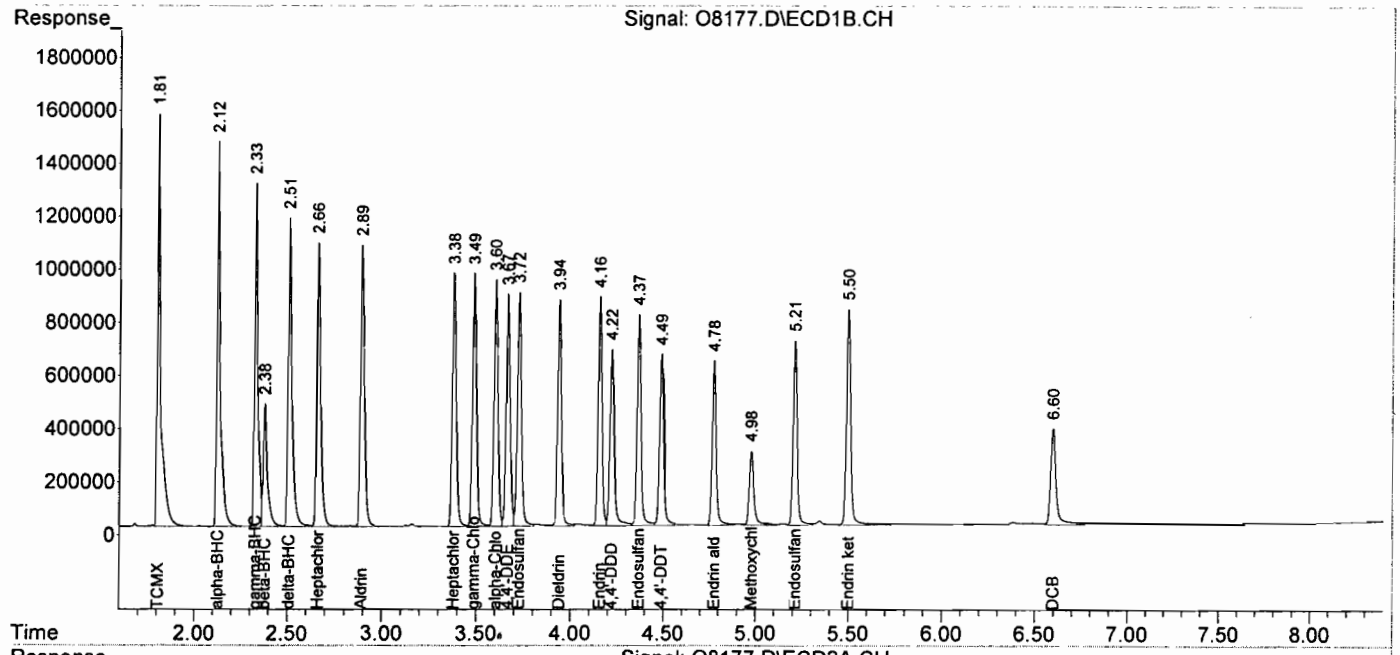
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

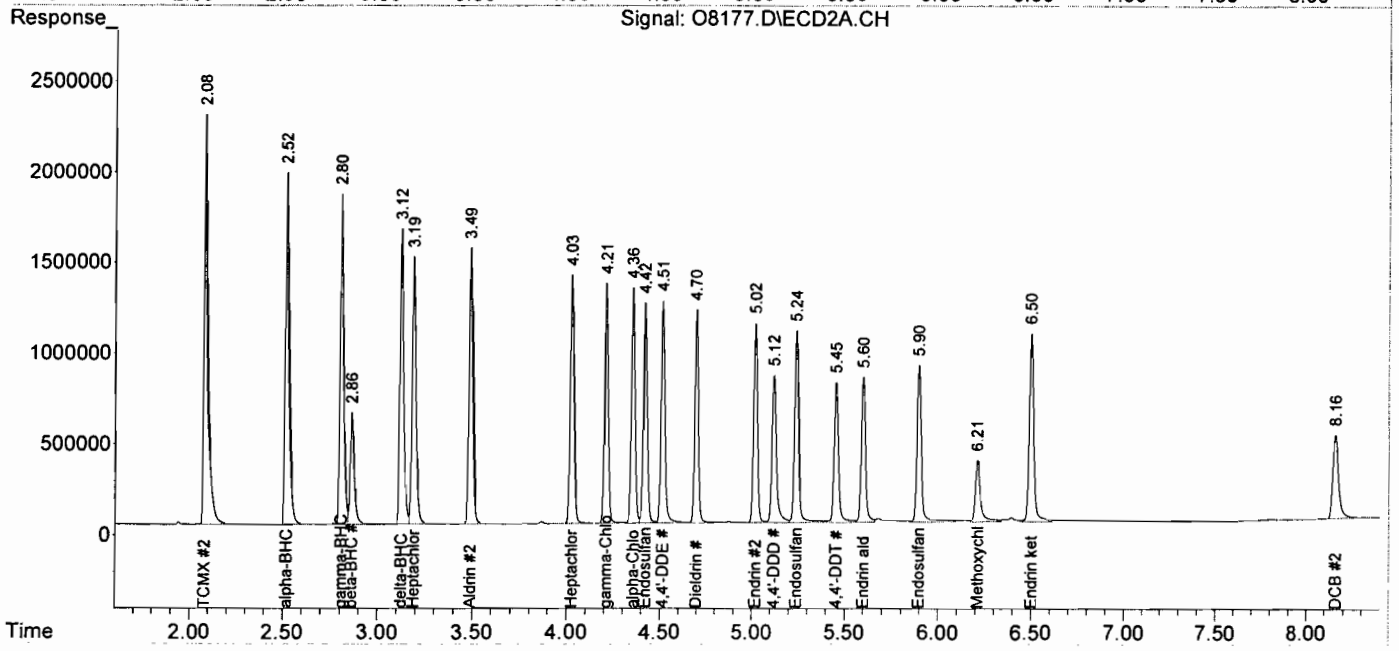
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8177.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 10:45
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 11:45:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08178.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 11:47
Operator : IB
Sample : CCV_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	23521783	35737825	230.848	239.881
Spiked Amount 200.000	Range 10 - 180		Recovery =		115.42%	119.94%
2) S DCB	6.60	8.16	8520613	14168992	195.154	252.148 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		97.58%	126.07%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.75	5.32	2215693	2707507	548.277	541.144
29) L2 Toxaphene {2}	4.88	5.60	1755693	2458067	534.042	584.295
30) L2 Toxaphene {3}	5.11	5.89	2261930	1557284	526.089	586.242m
31) L2 Toxaphene {4}	5.48	6.17	2248162	2551939	547.330	467.053m
32) L2 Toxaphene {5}	5.64	6.61	1148381	2102682	594.721	552.001
Sum Toxaphene			9629859	11377480	2750.460	2730.736
Average Toxaphene					550.092	546.147

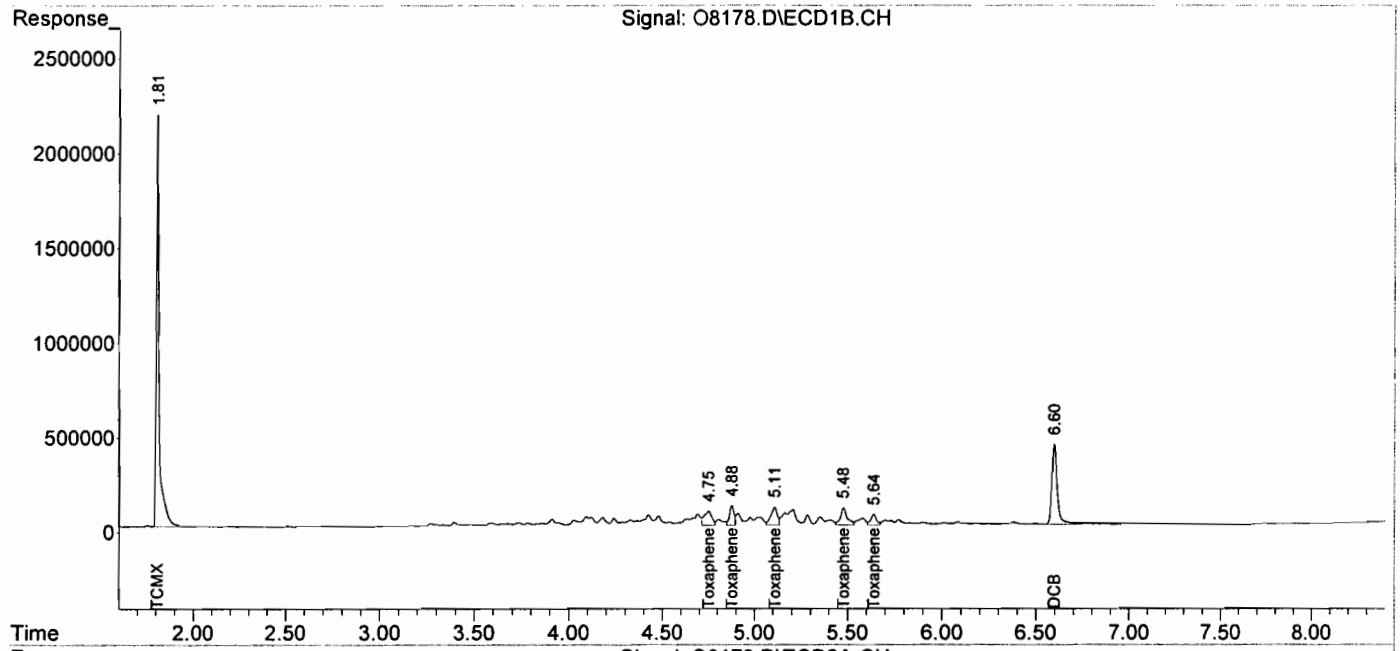
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8178.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 11:47
Operator : IB
Sample : CCV_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8179.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:00
Operator : IB
Sample : CCV_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22367276	34301965	219.518	230.243
Spiked Amount 200.000	Range 10 - 180		Recovery =		109.76%	115.12%
2) S DCB	6.60	8.15	8701652	11508571	199.300	204.804
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.65%	102.40%
Target Compounds						
23) L1 Chlordane	2.61	3.06	2466504	3723627	580.058	598.522
24) L1 Chlordane {2}	3.00	3.61	3013244	3628476	559.893	565.296
25) L1 Chlordane {3}	3.49	4.20	8960496	11488353	567.834	572.928
26) L1 Chlordane {4}	3.60	4.29	14021761	8692892	561.359	562.466
27) L1 Chlordane {5}	4.30	4.35	2227930	9487957	551.021	567.216
Sum Chlordane			30689934	37021305	2820.165	2866.428
Average Chlordane					564.033	573.286
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

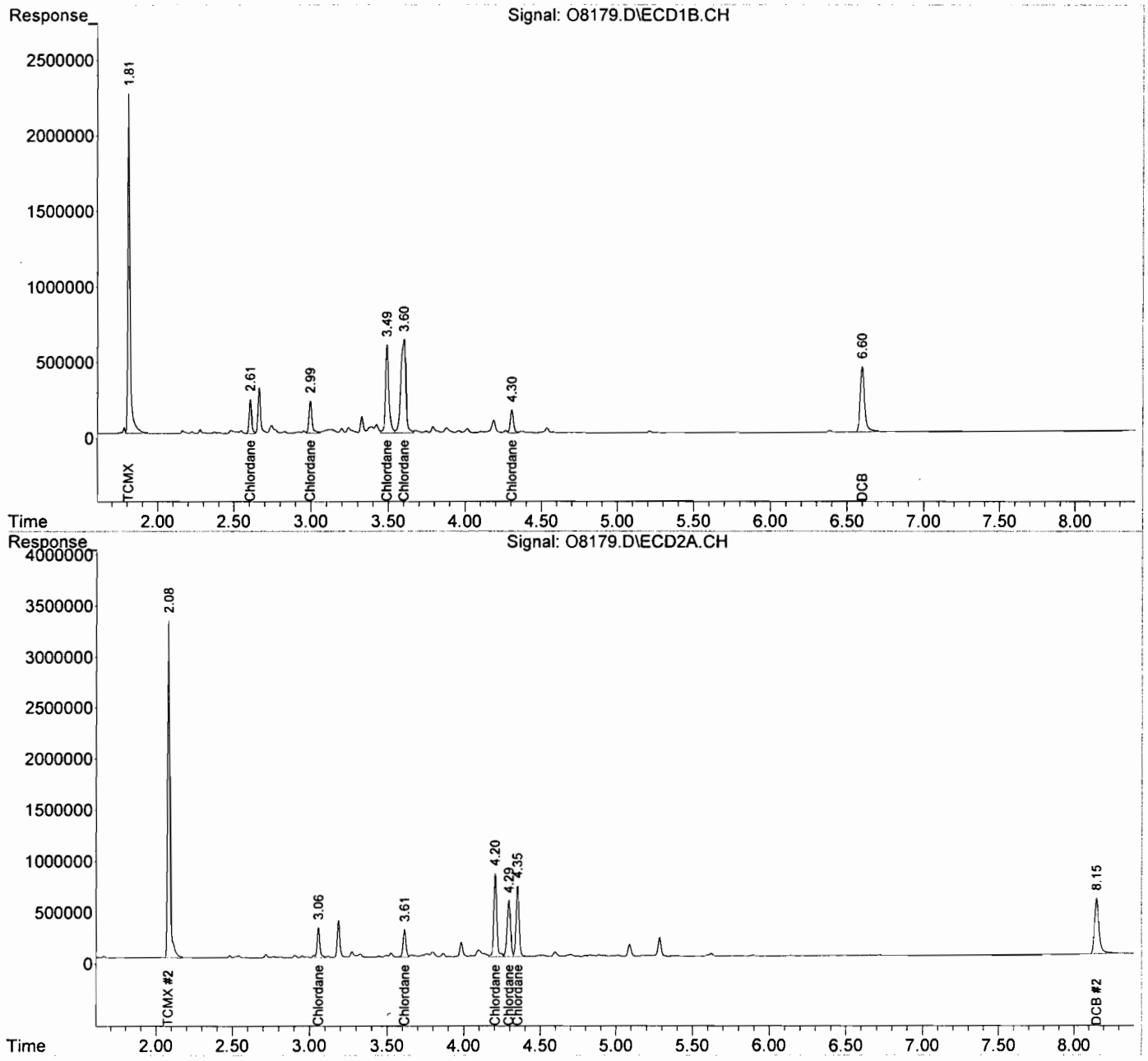
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8179.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:00
Operator : IB
Sample : CCV_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8187.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 16:06
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 16:18:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18990286	28571892	186.375m	191.781m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		93.19%	95.89%
2) S	DCB	6.60	8.16	8659947	10778980	198.345	191.820
	Spiked Amount 200.000	Range 10 - 180		Recovery =		99.17%	95.91%
	Target Compounds						
3) T	alpha-BHC	2.12	2.52	17503280	24132656	93.493	96.053
4) T	beta-BHC	2.38	2.86	8455887	9983797	100.228m	95.135
5) T	gamma-BHC (Linda	2.33	2.80	13707381	22388121	87.945m	99.530
6) T	delta-BHC	2.51	3.12	16112634	21699467	95.344	98.039
7) T	Heptachlor	2.66	3.19	14818835	21274119	96.214	104.913
8) T	Aldrin	2.89	3.49	15008476	20877682	93.796	97.259
9) T	Heptachlor epoxi	3.38	4.03	13472254	18613833	93.218	96.222
10) T	Endosulfan I	3.73	4.42	13217683	17268220	93.414	98.060
11) T	4,4'-DDE	3.67	4.51	12605906	18208090	97.685	99.300
12) T	Dieldrin	3.94	4.70	12365496	16671161	83.534	85.806
13) T	Endrin	4.16	5.02	12143981	15834959	113.059	119.304
14) T	Endosulfan II	4.37	5.24	12052012	17009853	94.480	98.505
15) T	4,4'-DDD	4.22	5.12	10657253	13871771	95.690	96.599
16) T	Endrin aldehyde	4.78	5.60	9651627	12954812	87.277	87.134
17) T	Endosulfan sulfa	5.21	5.90	10973165	15267580	96.063	104.514
18) T	4,4'-DDT	4.49	5.45	10329443	12757428	108.683	114.768
19) T	Endrin ketone	5.50	6.50	13811232	18845194	94.171	96.630
20) T	Methoxychlor	4.98	6.21	5063431	6352388	111.158m	113.128m
21) T	alpha-Chlordane	3.60	4.36	13268466	18260652	93.480	95.790
22) T	gamma-Chlordane	3.49	4.21	13725062	18756606	93.205	95.614
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

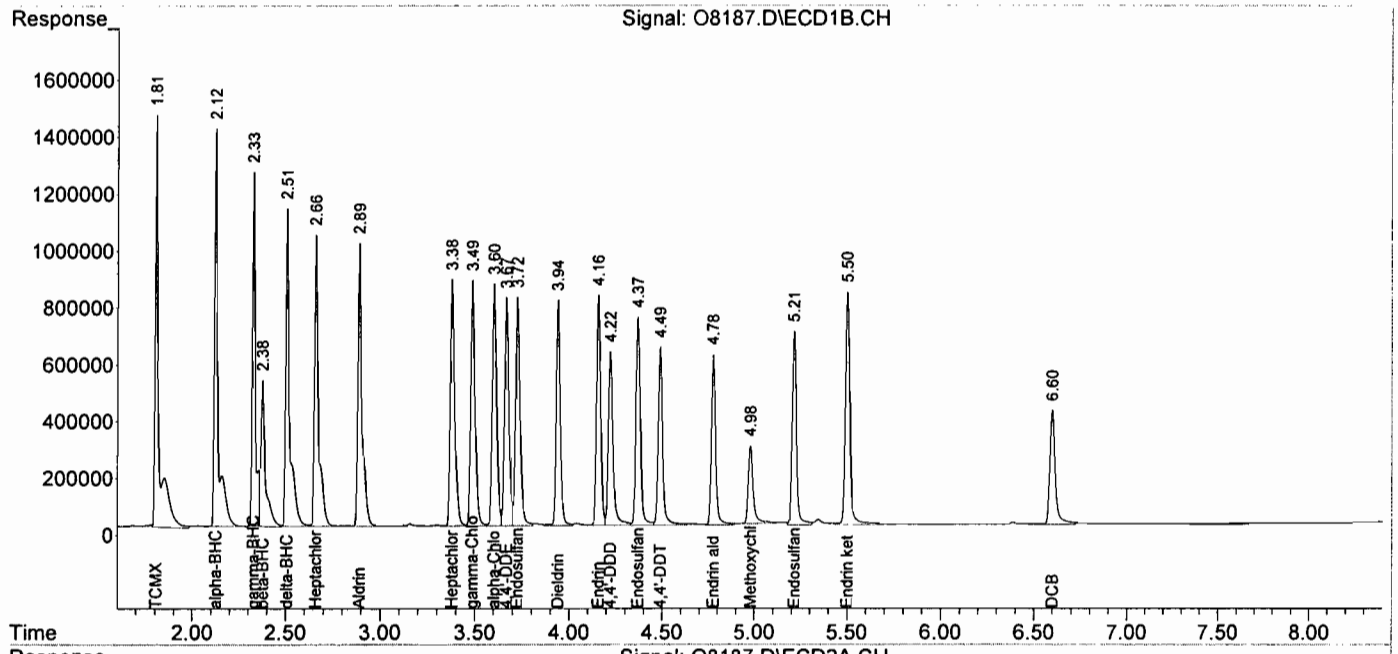
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

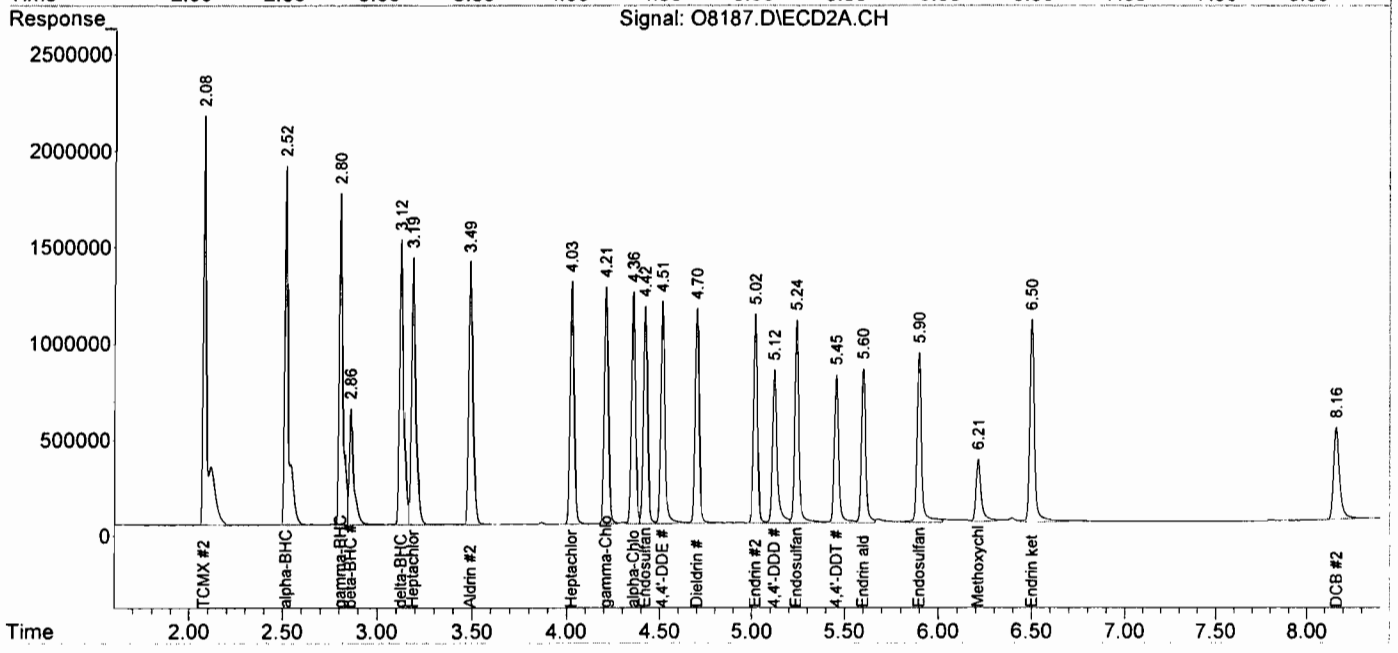
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8187.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 16:06
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 16:18:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150209-14	02/10/2015	12:12	1.81		6.60		2.08		8.15	
Pest	TCLP150206	02/10/2015	12:25	1.81		6.60		2.08		8.15	
Pest	00895-001MS	02/10/2015	12:50	1.81		6.60		2.08		8.15	
Pest	00895-001MSD	02/10/2015	13:03	1.81		6.60		2.08		8.15	
GROWES_W	E15-00895-001	02/10/2015	13:15	1.81		6.60		2.08		8.15	
TSCA_W.C	E15-00896-001	02/10/2015	13:28	1.81		6.60		2.08		8.15	
Pest	LCSA150209-14	02/10/2015	14:19	1.81		6.60		2.08		8.16	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-V **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.89 **DCB 1** 6.06 **TCMX 2** 2.06 **DCB 2** 6.73

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150223-08	02/23/2015	14:38	1.89		6.06		2.06		6.73	
Pest	TCLP150219	02/23/2015	14:49	1.89		6.05		2.06		6.73	
Pest	LCSA150223-08	02/23/2015	15:01	1.89		6.05		2.06		6.73	
GPEC-WC1	E15-01273-001	02/23/2015	15:12	1.88		6.05		2.06		6.73	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 02/10/2015

Data file: O8175.D Tue Feb 10 09:31:45 2015

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	9120388	Endrin (1)	10611303	4.36	5.20
DDD	267522	Endrin ketone	424868		
DDE	148625	Endrin aldehyde	157184		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	11436185	Endrin (2)	13615409	2.36	4.84
DDD	276343	Endrin ketone	503100		
DDE	0	Endrin aldehyde	189958		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08175.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 9:09
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 09:31:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.67	0.00	148625	0	1.152	N.D. d#
13) T	Endrin	4.16	5.02	10611303	13615409	98.790	102.581
15) T	4,4'-DDD	4.22	5.12	267522	276343	2.402m	1.924m
16) T	Endrin aldehyde	4.78	5.60	157184	189958	1.421m	1.278m
18) T	4,4'-DDT	4.49	5.45	9120388	11436185	95.961	102.881m
19) T	Endrin ketone	5.50	6.50	424868	503100	2.897m	2.580m
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

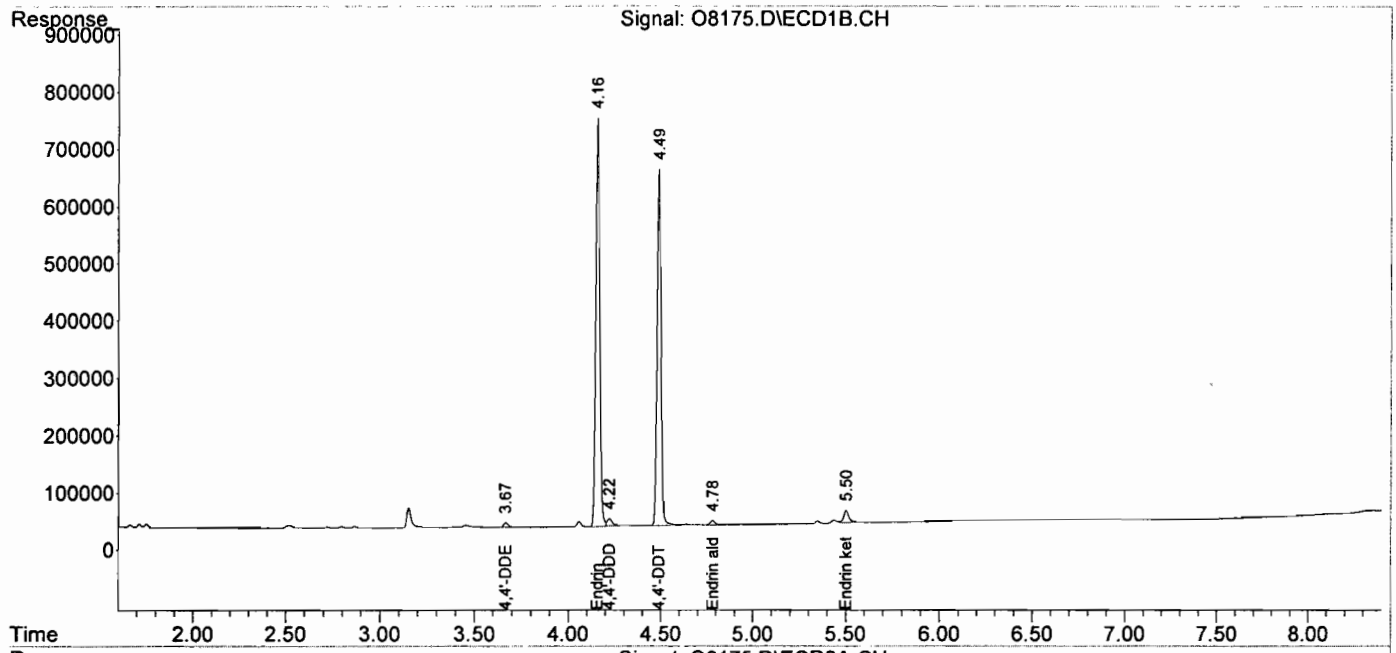
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

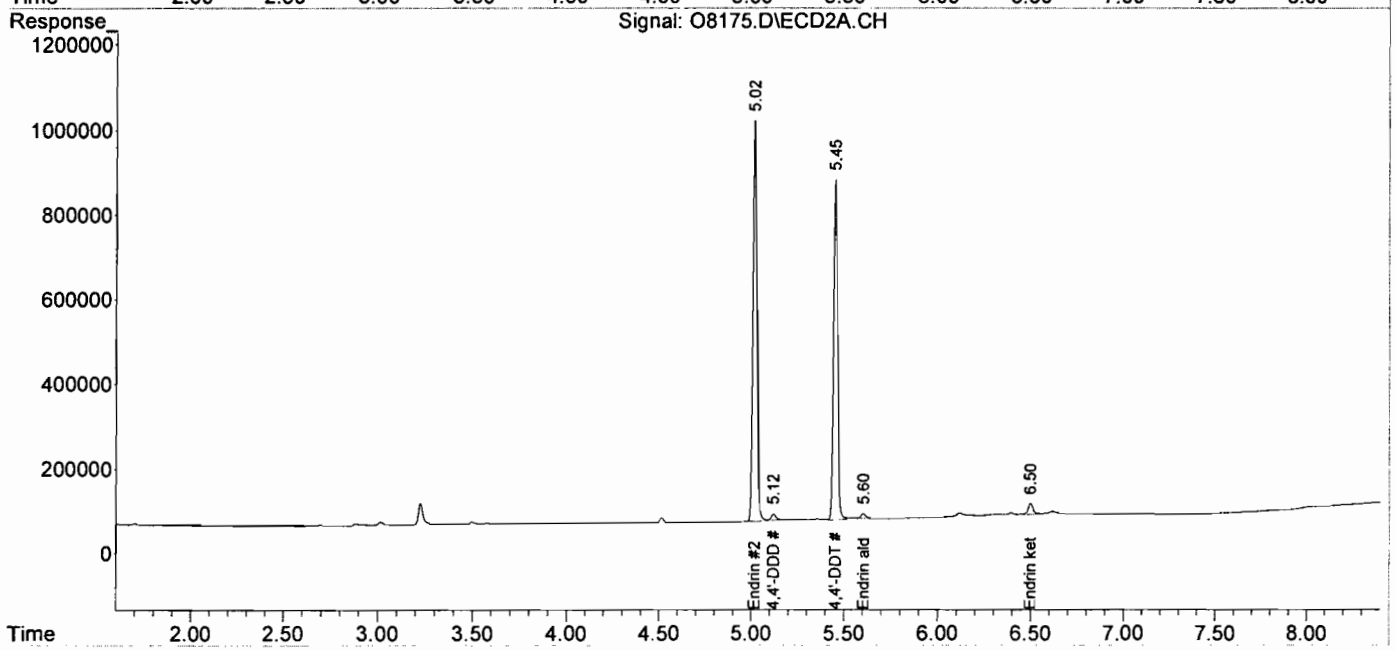
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8175.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 9:09
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 09:31:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Date Analyzed: 02/23/2015

Data file: V0134.D	Mon Feb 23 11:18:11 2015			**% Breakdown**	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	48882465	Endrin (1)	62258396	7.22	5.85
DDD	2814555	Endrin ketone	2325520		
DDE	992014	Endrin aldehyde	1540538		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	13977162	Endrin (2)	17603713	7.80	6.17
DDD	893816	Endrin ketone	704579		
DDE	289103	Endrin aldehyde	452195		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:08
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 11:18:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Wed Jan 28 10:17:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.65	4.12	992014	289103	1.045m	1.256m
13) T	Endrin	4.04	4.51	62258396	17603713	75.318	84.379
15) T	4,4'-DDD	4.09	4.59	2814555	893816	3.455m	4.743m#
16) T	Endrin aldehyde	4.55	4.97	1540538	452195	2.247m	2.824m#
18) T	4,4'-DDT	4.31	4.86	48882465	13977162	68.045	85.122 #
19) T	Endrin ketone	5.15	5.71	2325520	704579	2.816	3.627 #
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

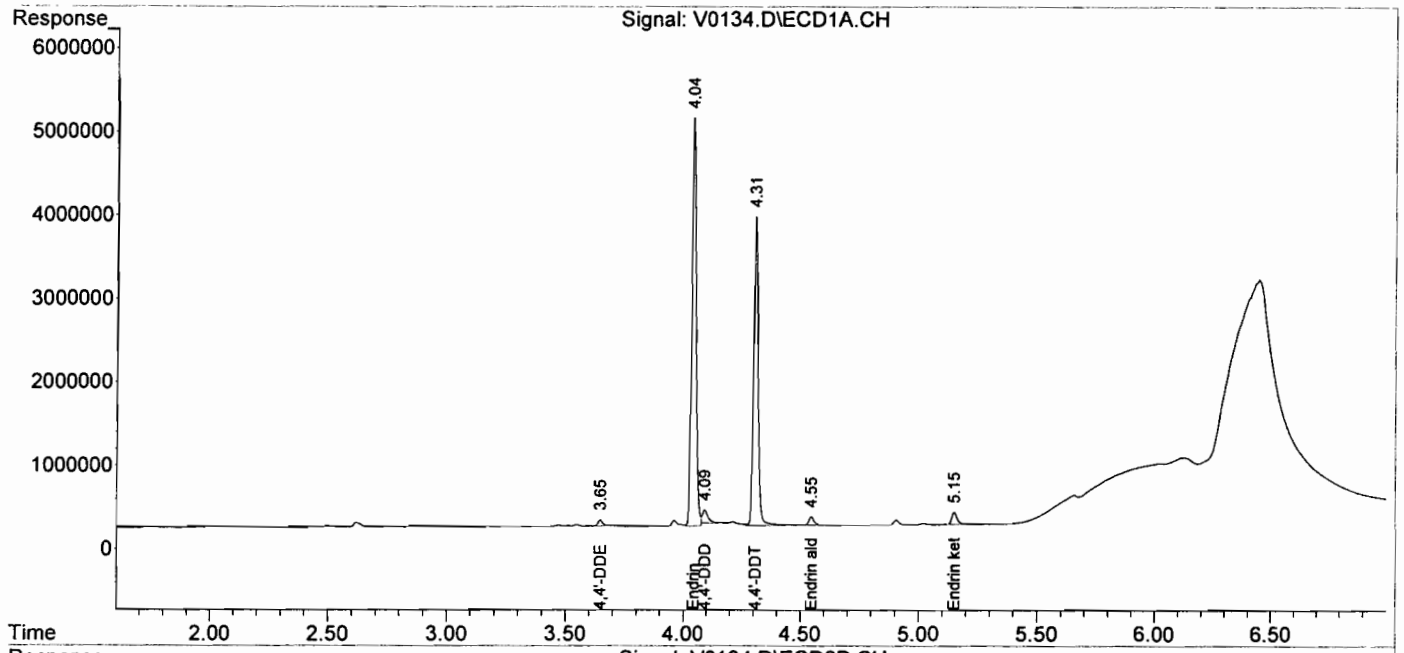
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

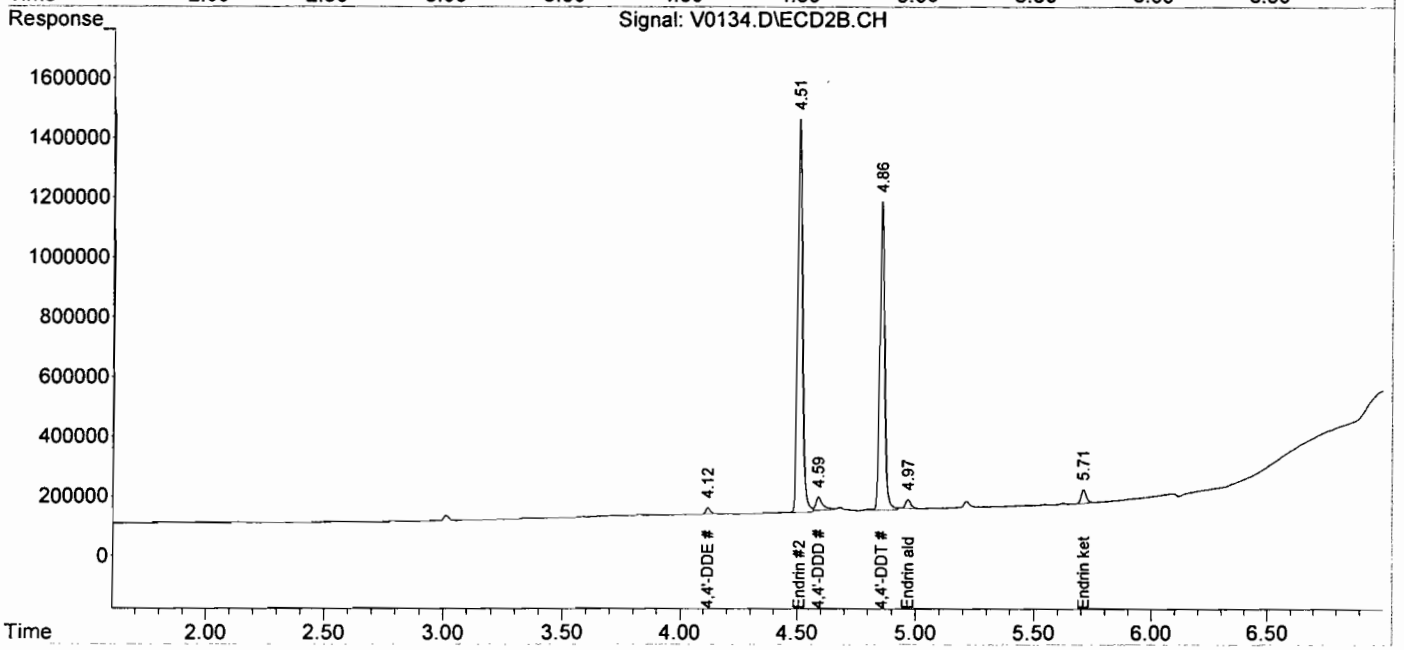
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:08
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 11:18:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Wed Jan 28 10:17:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: BLKA150209-14
Client ID: Pest
Date Received: NA
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
Data file: O8180.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: TCLP150206
Client ID: Pest
Date Received: NA
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
Data file: O8181.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8180.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:12
Operator : IB
Sample : Pest,BLKA150209-14,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17935087	26742769	176.019	179.504
Spiked Amount 200.000	Range 10 - 180		Recovery =		88.01%	89.75%
2) S DCB	6.60	8.15	7522600	9204441	172.296	163.800
Spiked Amount 200.000	Range 10 - 180		Recovery =		86.15%	81.90%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

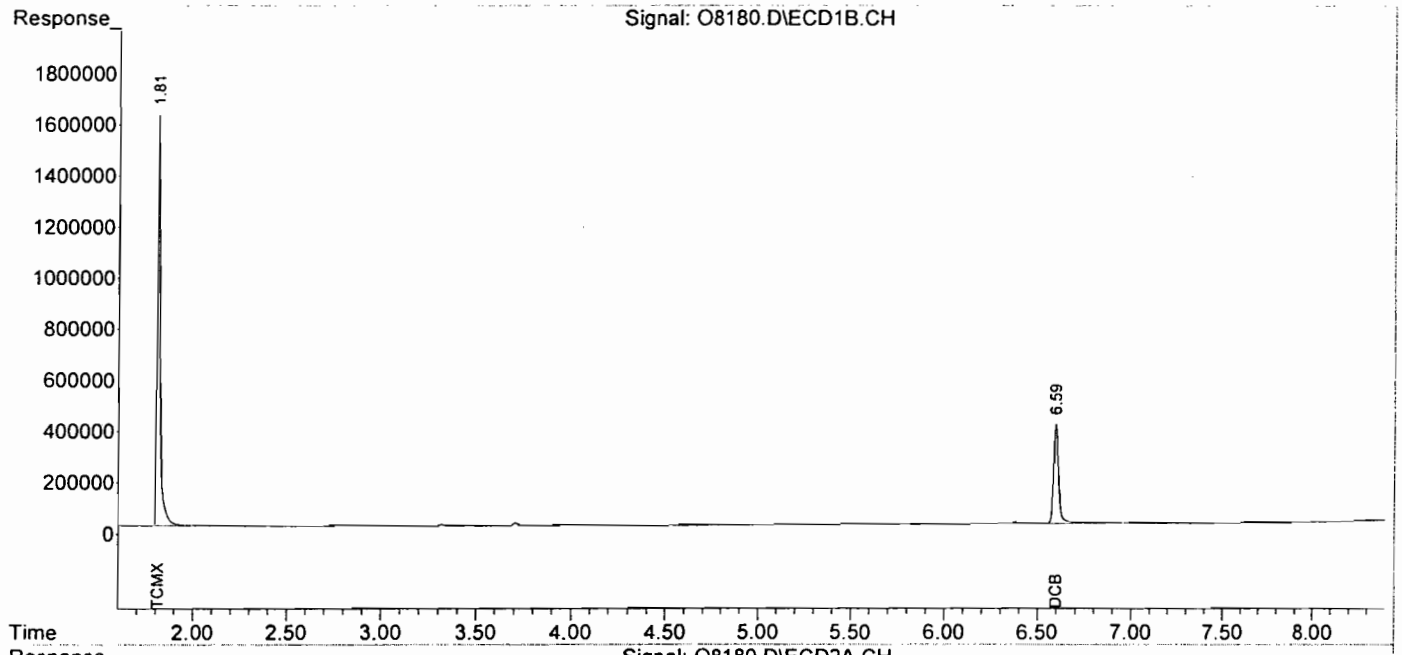
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

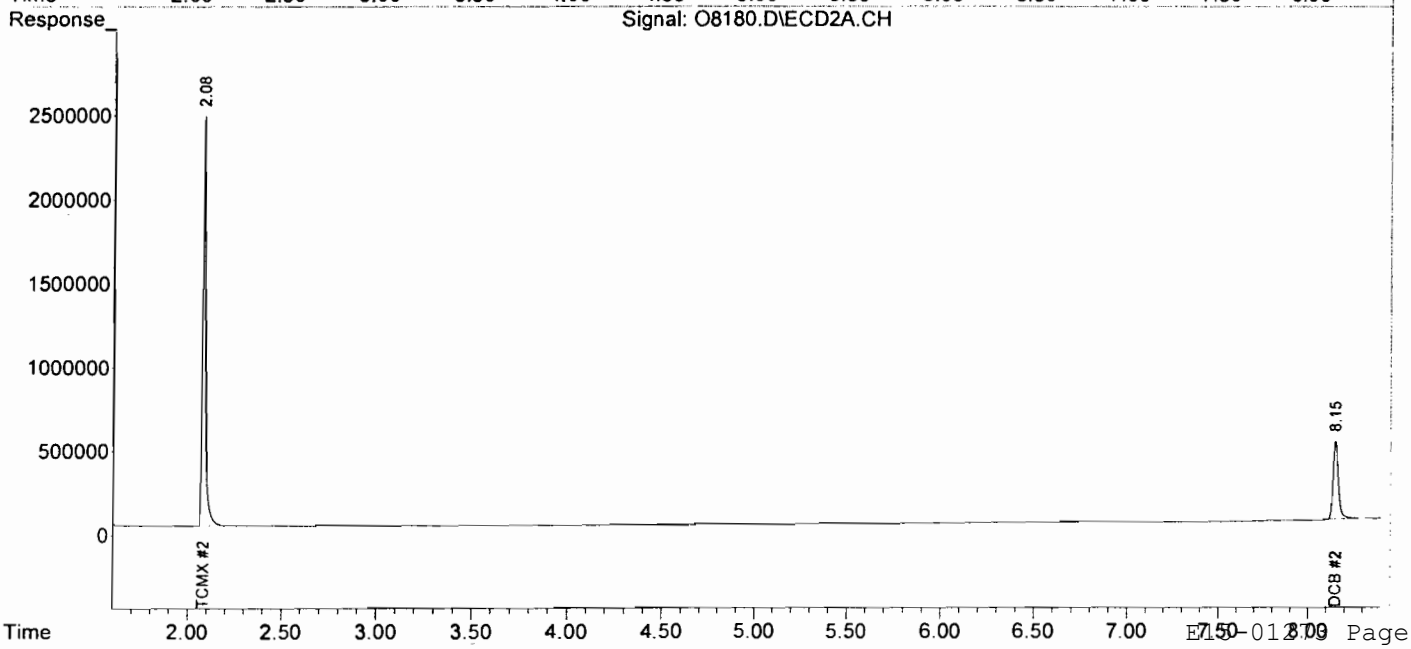
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8180.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:12
Operator : IB
Sample : Pest,BLKA150209-14,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08181.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:25
Operator : IB
Sample : Pest,TCLP150206,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17962059	26647623	176.284	178.865
Spiked Amount 200.000	Range 10 - 180		Recovery =		88.14%	89.43%
2) S DCB	6.60	8.15	7349012	9957501	168.320	177.201m
Spiked Amount 200.000	Range 10 - 180		Recovery =		84.16%	88.60%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

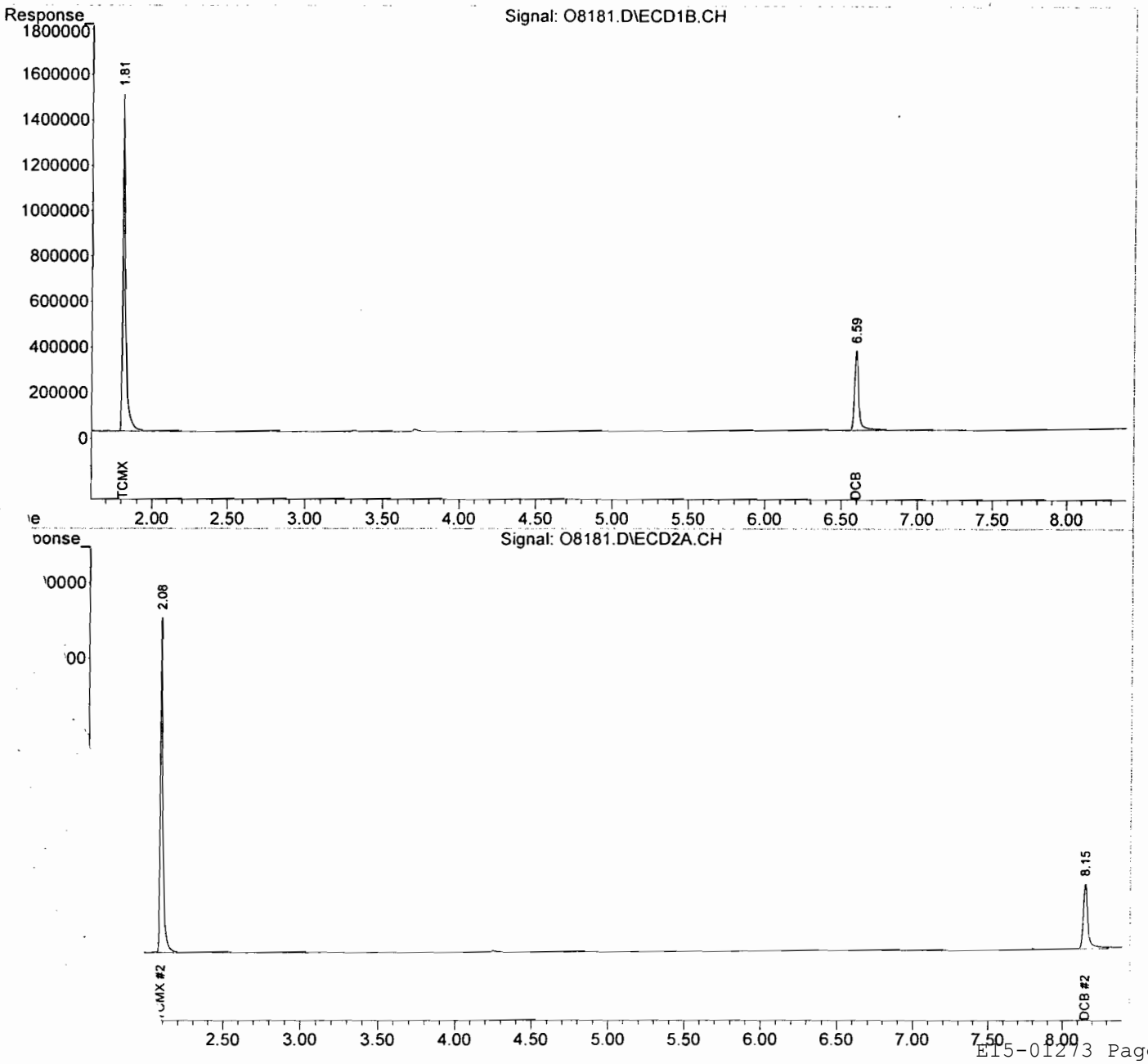
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8181.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:25
Operator : IB
Sample : Pest,TCLP150206,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: BLKA150223-08
Client ID: Pest
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0146.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: TCLP150219
Client ID: Pest
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0147.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0146.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:38
Operator : IB
Sample : Pest,BLKA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:44:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.89	2.06	152.4E6	40933898	203.156	209.680
Spiked Amount 200.000			Recovery	=	101.58%	104.84%
2) S DCB	6.06	6.73	51597696	15526898	183.126	191.234
Spiked Amount 200.000			Recovery	=	91.56%	95.62%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

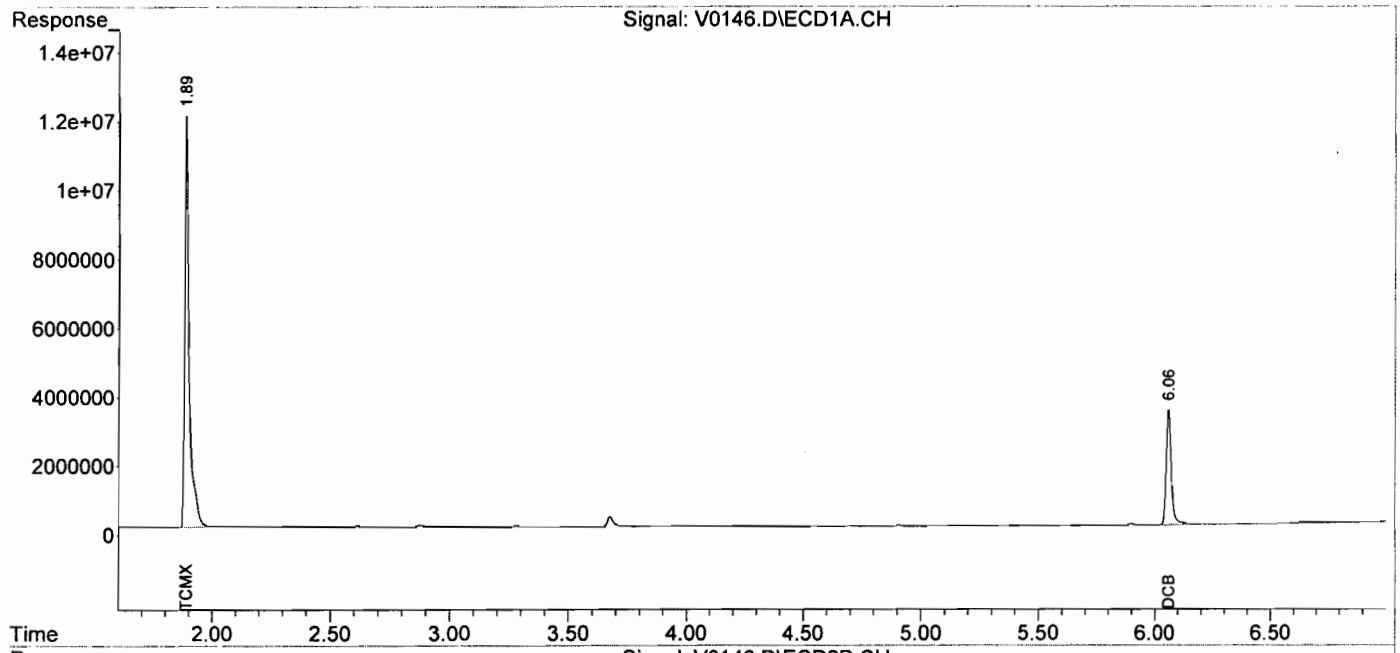
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

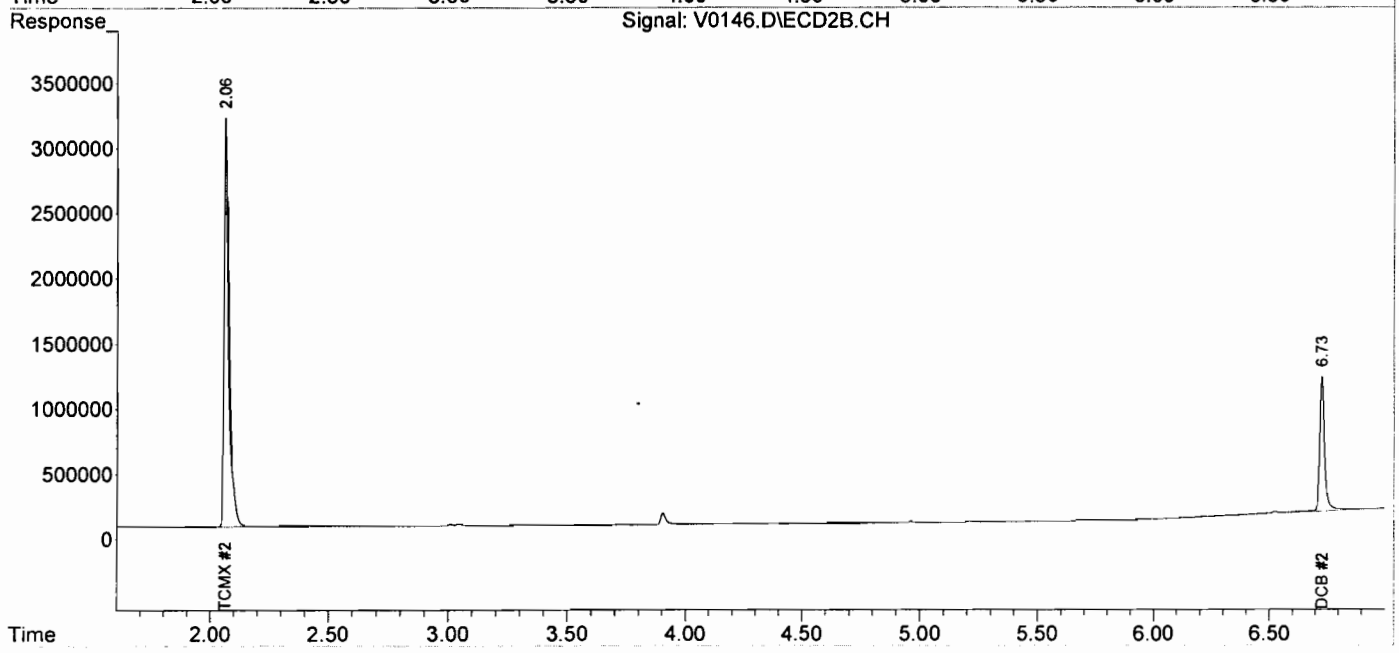
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0146.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:38
Operator : IB
Sample : Pest,BLKA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:44:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0147.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:49
Operator : IB
Sample : Pest,TCLP150219,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:41:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.89	2.06	154.5E6	42035396	205.881	215.322
Spiked Amount 200.000			Recovery	=	102.94%	107.66%
2) S DCB	6.05	6.73	54239725	15255234	192.503	187.888
Spiked Amount 200.000			Recovery	=	96.25%	93.94%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

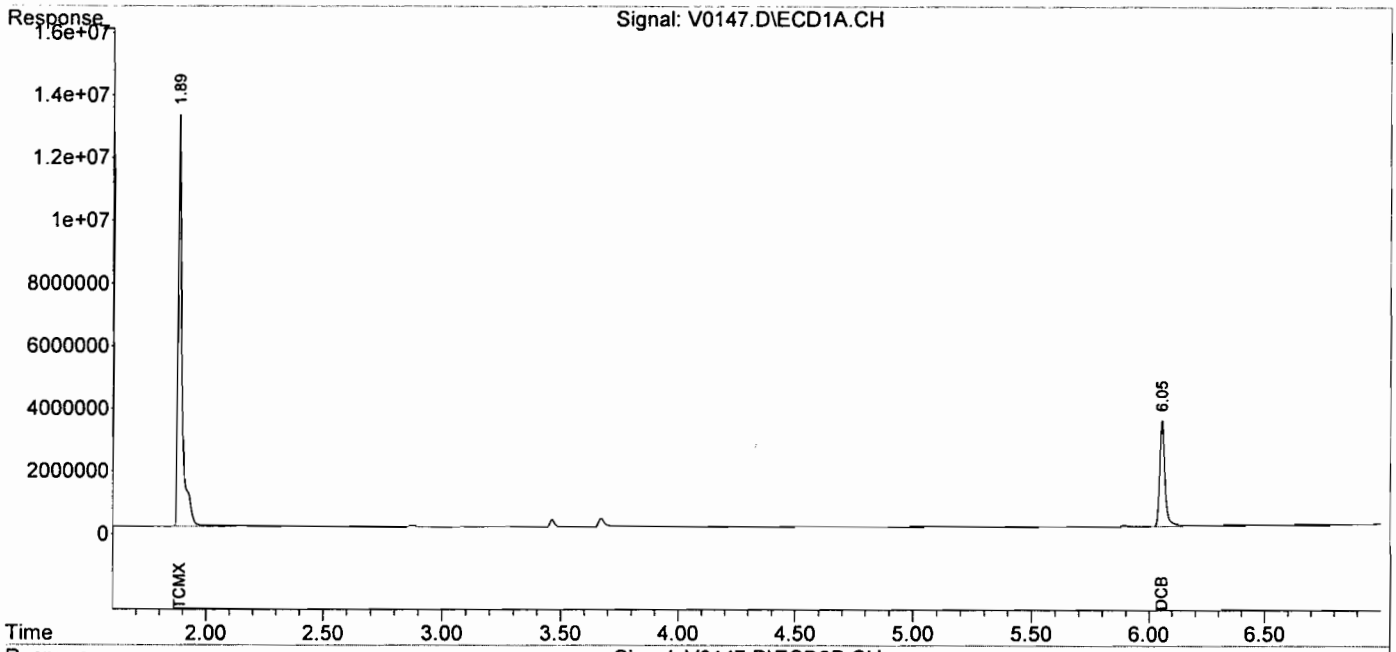
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

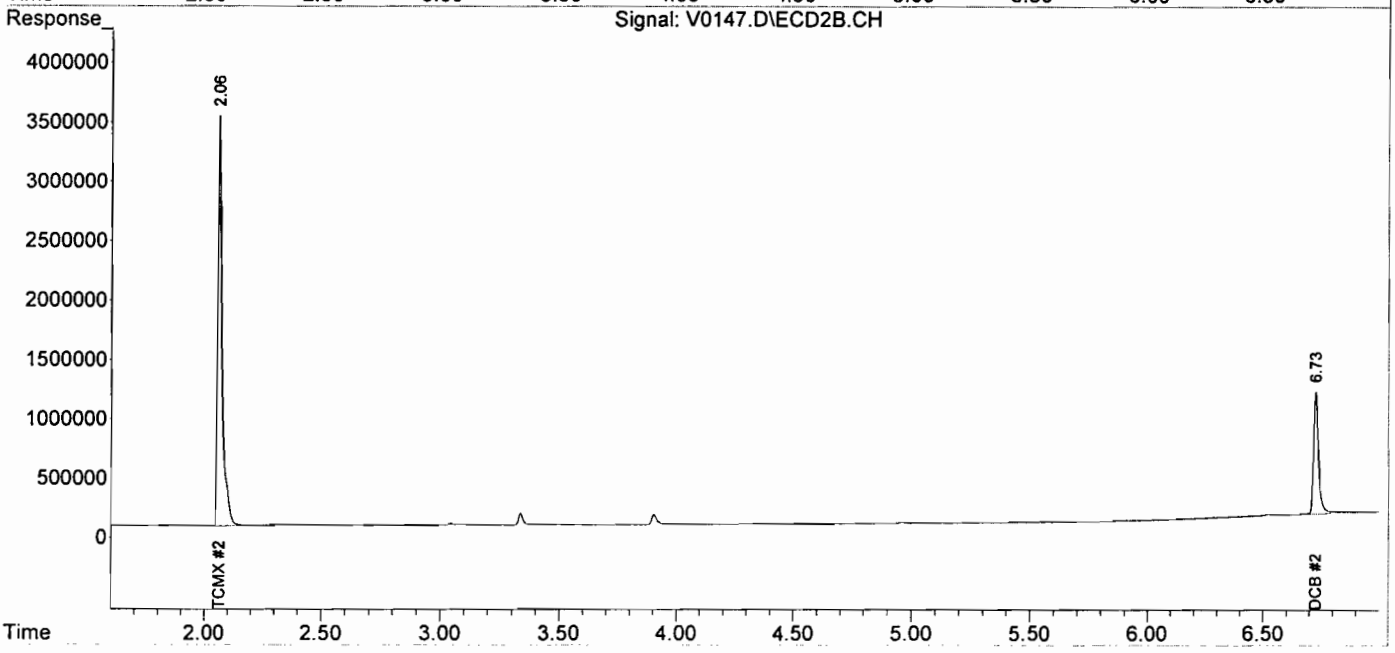
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0147.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:49
Operator : IB
Sample : Pest,TCLP150219,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:41:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8182.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:50
Operator : IB
Sample : Pest,00895-001MS,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18083534	27540303	177.476	184.857
	Spiked Amount 200.000	Range 10 - 180		Recovery =		88.74%	92.43%
2) S	DCB	6.60	8.15	9078537	11801646	207.932	210.019
	Spiked Amount 200.000	Range 10 - 180		Recovery =		103.97%	105.01%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	12635080	18072353	67.490	71.932
4) T	beta-BHC	2.38	2.86	4937394	6807957	58.523	64.873
5) T	gamma-BHC (Linda	2.33	2.80	11616594	16913298	74.530	75.191
6) T	delta-BHC	2.51	3.12	11426171	15901234	67.612	71.842
7) T	Heptachlor	2.66	3.18	11424221	16018628	74.174	78.996
8) T	Aldrin	2.89	3.48	11523546	16260367	72.017	75.749
9) T	Heptachlor epoxi	3.38	4.02	10638946	14792010	73.613	76.465
10) T	Endosulfan I	3.73	4.41	10852553	13790519	76.699	78.311
11) T	4,4'-DDE	3.67	4.51	10158718	14355478	78.721	78.289
12) T	Dieldrin	3.94	4.69	9869678	13308791	66.673	68.500
13) T	Endrin	4.16	5.01	9914725	12988666	92.305	97.859
14) T	Endosulfan II	4.37	5.23	9355410	13092705	73.340	75.821
15) T	4,4'-DDD	4.22	5.11	7990309	11065656	71.744	77.058
16) T	Endrin aldehyde	4.78	5.59	7072383	9516624	63.954	64.009
17) T	Endosulfan sulfa	5.21	5.89	8245088	10918741	72.181	74.744
18) T	4,4'-DDT	4.49	5.45	8217881	10441997	86.466	93.938
19) T	Endrin ketone	5.50	6.49	10163330	14096368	69.298	72.280
20) T	Methoxychlor	4.98	6.20	4285084	5515539	94.070	98.225
21) T	alpha-Chlordane	3.60	4.35	10547008	14635048	74.307	76.771
22) T	gamma-Chlordane	3.49	4.20	11194402	15522628	76.020	79.128
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

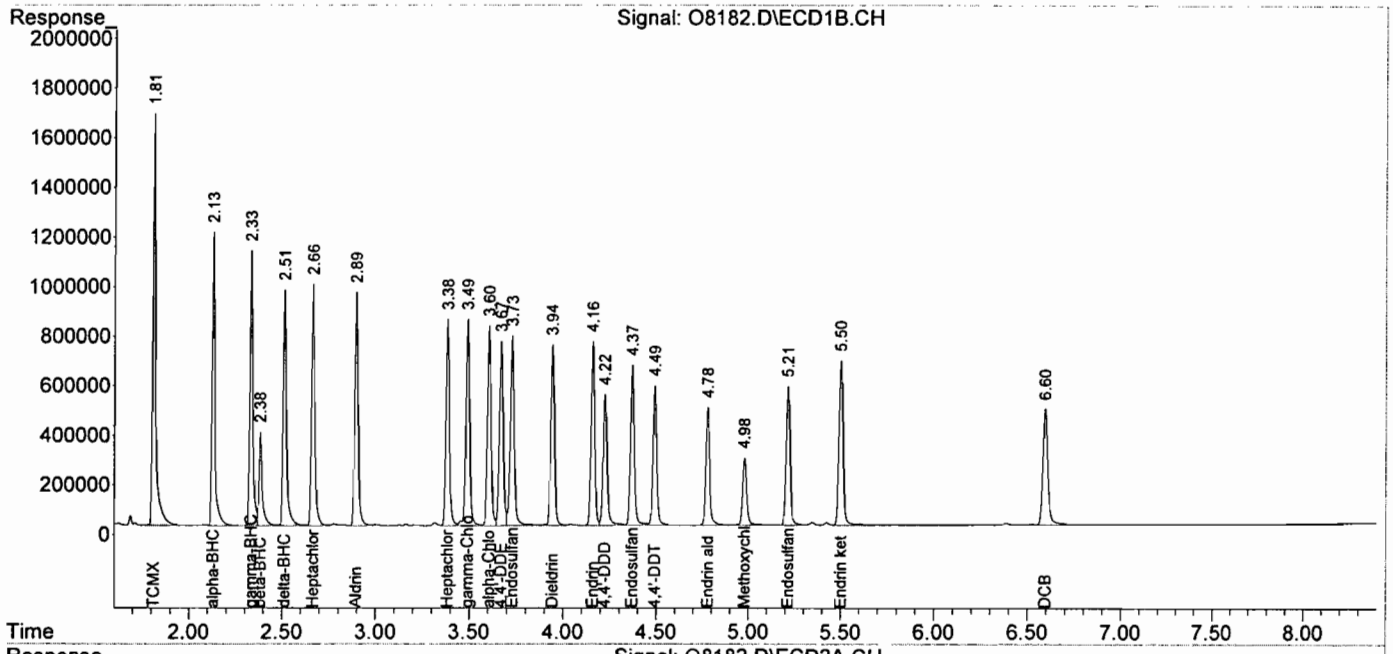
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

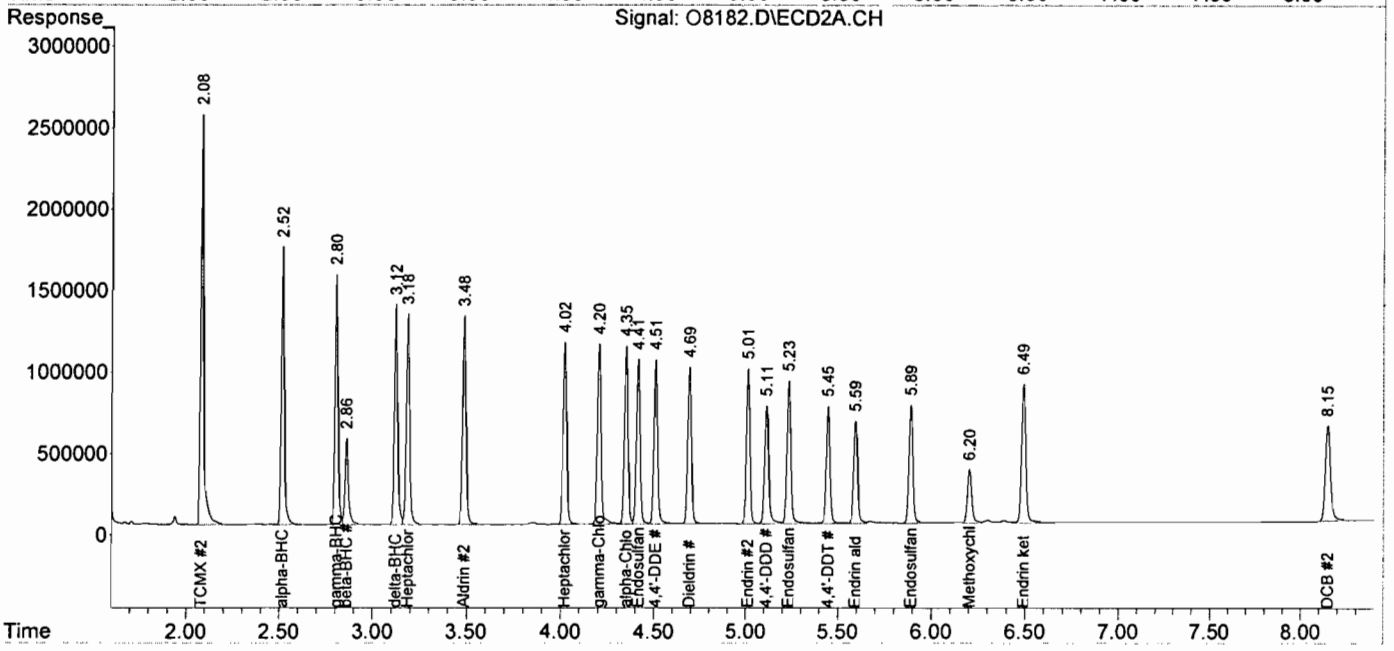
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8182.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:50
Operator : IB
Sample : Pest,00895-001MS,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8183.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:03
Operator : IB
Sample : Pest,00895-001MSD,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18274433	27785428	179.350	186.503
Spiked Amount	200.000	Range	10 - 180	Recovery	=	89.67%	93.25%
2) S	DCB	6.60	8.15	8942231	11731282	204.811	208.767
Spiked Amount	200.000	Range	10 - 180	Recovery	=	102.41%	104.38%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	13259680	18698354	70.826	74.423
4) T	beta-BHC	2.38	2.86	5456322	7334095	64.674	69.886
5) T	gamma-BHC (Linda	2.33	2.80	11977768	17494723	76.848	77.776
6) T	delta-BHC	2.51	3.12	12056592	16829909	71.343	76.038
7) T	Heptachlor	2.66	3.18	11927827	16693332	77.444	82.323
8) T	Aldrin	2.89	3.48	11897374	16666721	74.353	77.642
9) T	Heptachlor epoxi	3.38	4.02	10862960	15136006	75.163	78.243
10) T	Endosulfan I	3.73	4.41	11068938	14092324	78.228	80.025
11) T	4,4'-DDE	3.67	4.51	10542574	14741090	81.696	80.392
12) T	Dieldrin	3.94	4.69	10069610	13618113	68.024	70.092
13) T	Endrin	4.16	5.01	10186117	13373937	94.832	100.762
14) T	Endosulfan II	4.37	5.23	9708145	13573542	76.105	78.605
15) T	4,4'-DDD	4.22	5.11	8211821	11525520	73.733	80.261
16) T	Endrin aldehyde	4.78	5.59	7374435	9924458	66.685	66.752
17) T	Endosulfan sulfa	5.21	5.89	8725902	11610772	76.390	79.482
18) T	4,4'-DDT	4.49	5.45	8689146	11093160	91.424	99.796
19) T	Endrin ketone	5.50	6.49	10619847	14889880	72.411	76.349
20) T	Methoxychlor	4.98	6.20	4601272	6152005	101.012	109.560
21) T	alpha-Chlordane	3.60	4.35	10728404	14944648	75.585	78.395
22) T	gamma-Chlordane	3.49	4.20	11403719	15949507	77.441	81.304
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

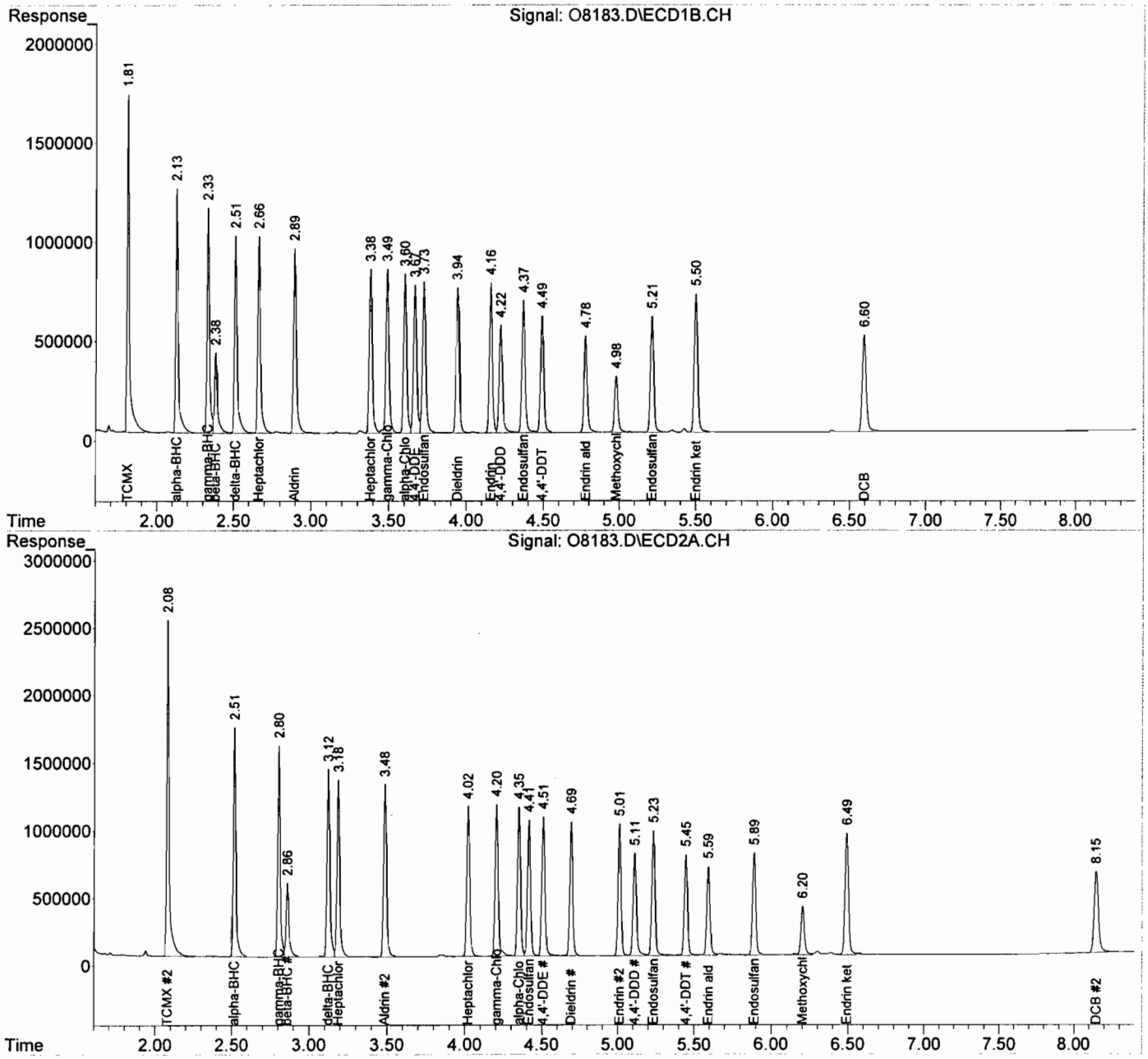
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8183.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:03
Operator : IB
Sample : Pest,00895-001MSD,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8184.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:15
Operator : IB
Sample : GROWES_W,E15-00895-001,T,200ml,100,5
Misc : 150209-14,02/09/15,02/05/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:21:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	16552148	25630332	162.447	172.037
Spiked Amount 200.000	Range 10 - 180		Recovery =		81.22%	86.02%
2) S DCB	6.60	8.15	7903218	10436883	181.013	185.732
Spiked Amount 200.000	Range 10 - 180		Recovery =		90.51%	92.87%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

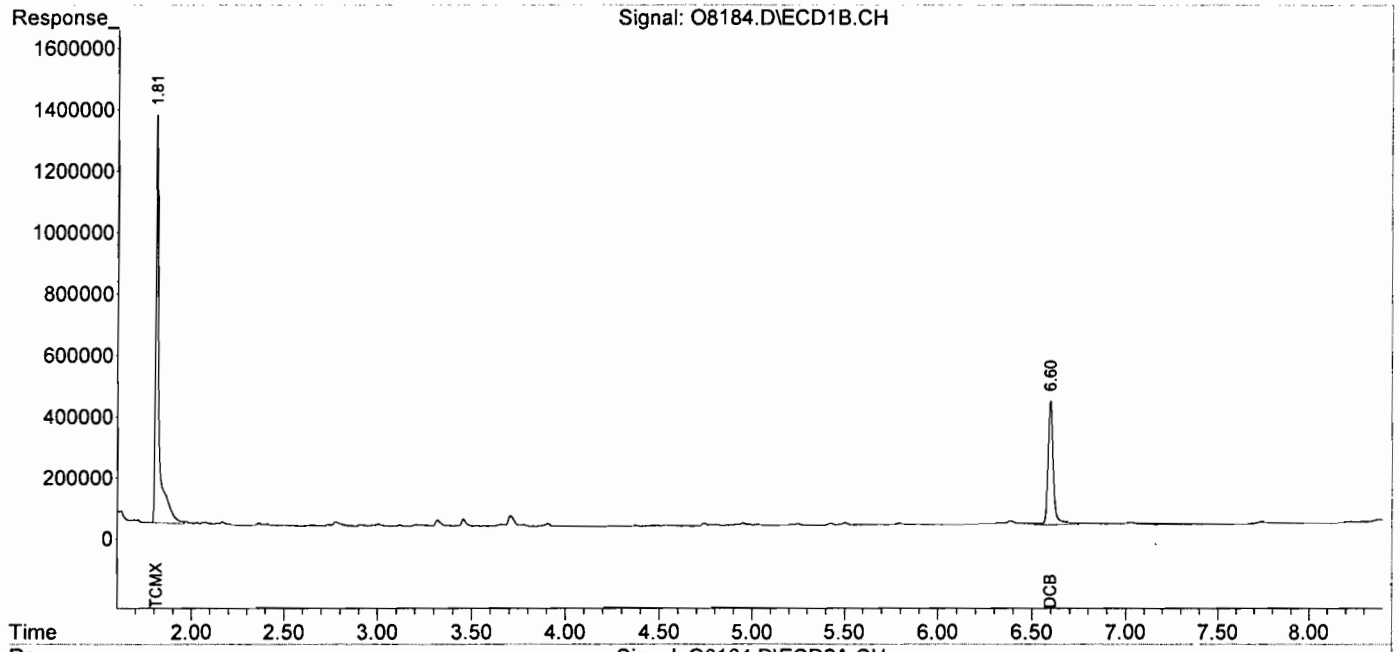
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

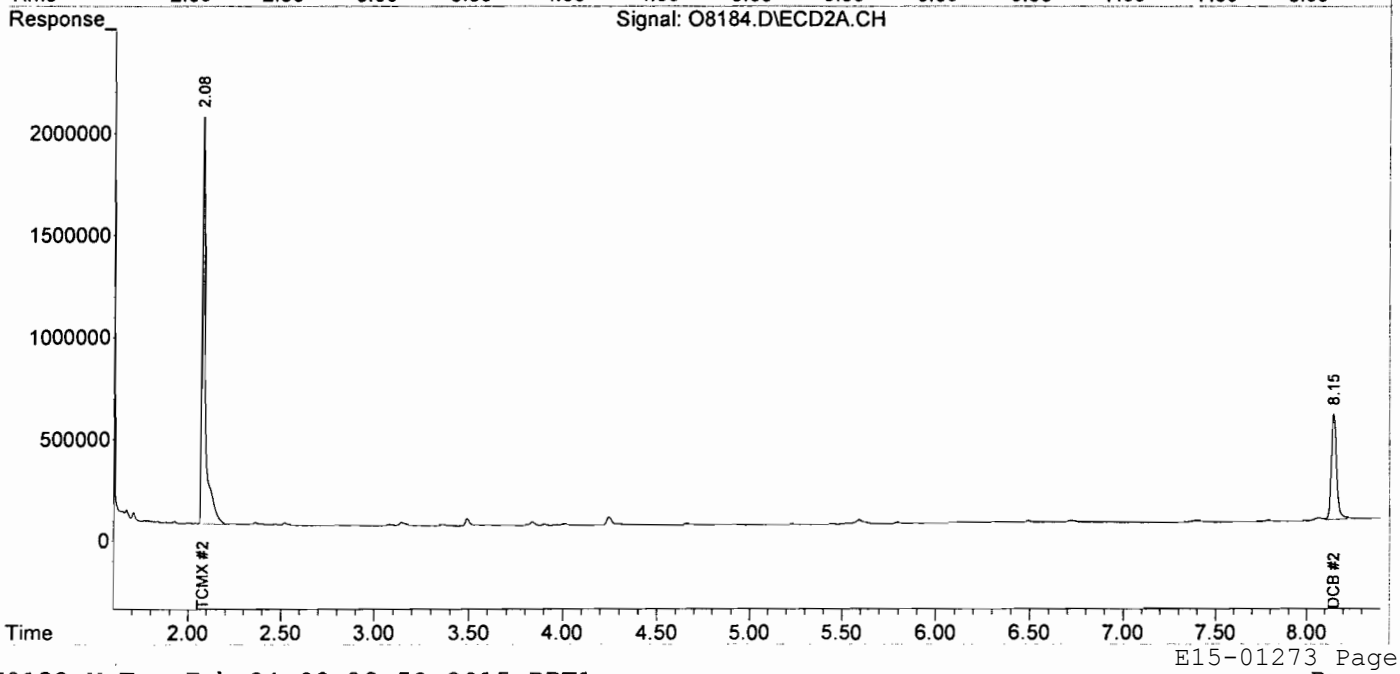
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8184.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:15
Operator : IB
Sample : GROWES_W,E15-00895-001,T,200ml,100,5
Misc : 150209-14,02/09/15,02/05/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:21:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0148.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:01
Operator : IB
Sample : Pest,LCSA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	155.4E6	42365609	207.154	217.014
	Spiked Amount 200.000			Recovery	=	103.58%	108.51%
2) S	DCB	6.05	6.73	55202401	15892649	195.919	195.739
	Spiked Amount 200.000			Recovery	=	97.96%	97.87%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	119.5E6	31301194	73.978	76.670
4) T	beta-BHC	2.49	2.79	42192720	10499189	66.814	67.190
5) T	gamma-BHC (Linda	2.43	2.73	107.1E6	27496942	75.468	77.148
6) T	delta-BHC	2.61	3.01	102.3E6	25447022	68.527	69.862
7) T	Heptachlor	2.76	3.07	90421542	24263018	73.396	74.476
8) T	Aldrin	2.97	3.32	100.4E6	25960005	76.472	76.744
9) T	Heptachlor epoxi	3.40	3.74	83359916	22453775	75.309	75.816
10) T	Endosulfan I	3.69	4.04	85836395	20845255	78.729	76.616
11) T	4,4'-DDE	3.64	4.12	82752090	21574805	77.438	77.314
12) T	Dieldrin	3.86	4.26	75832396	19839561	67.719	66.876
13) T	Endrin	4.03	4.50	66064312	17098807	75.109	75.327
14) T	Endosulfan II	4.21	4.68	70174778	18915411	74.332	74.825
15) T	4,4'-DDD	4.08	4.58	71849317	17827422	75.534	76.510
16) T	Endrin aldehyde	4.54	4.96	54809260	13854716	69.352	68.311
17) T	Endosulfan sulfa	4.90	5.21	60725092	16107084	72.301	70.028
18) T	4,4'-DDT	4.30	4.85	54418308	13228742	76.440	76.286
19) T	Endrin ketone	5.14	5.70	69743083	18803460	76.699	75.972
20) T	Methoxychlor	4.70	5.46	25882696	6305254	81.451	81.993
21) T	alpha-Chlordane	3.59	3.99	85427599	21177203	74.947	75.656
22) T	gamma-Chlordane	3.49	3.88	90671584	23842077	75.415	80.526
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

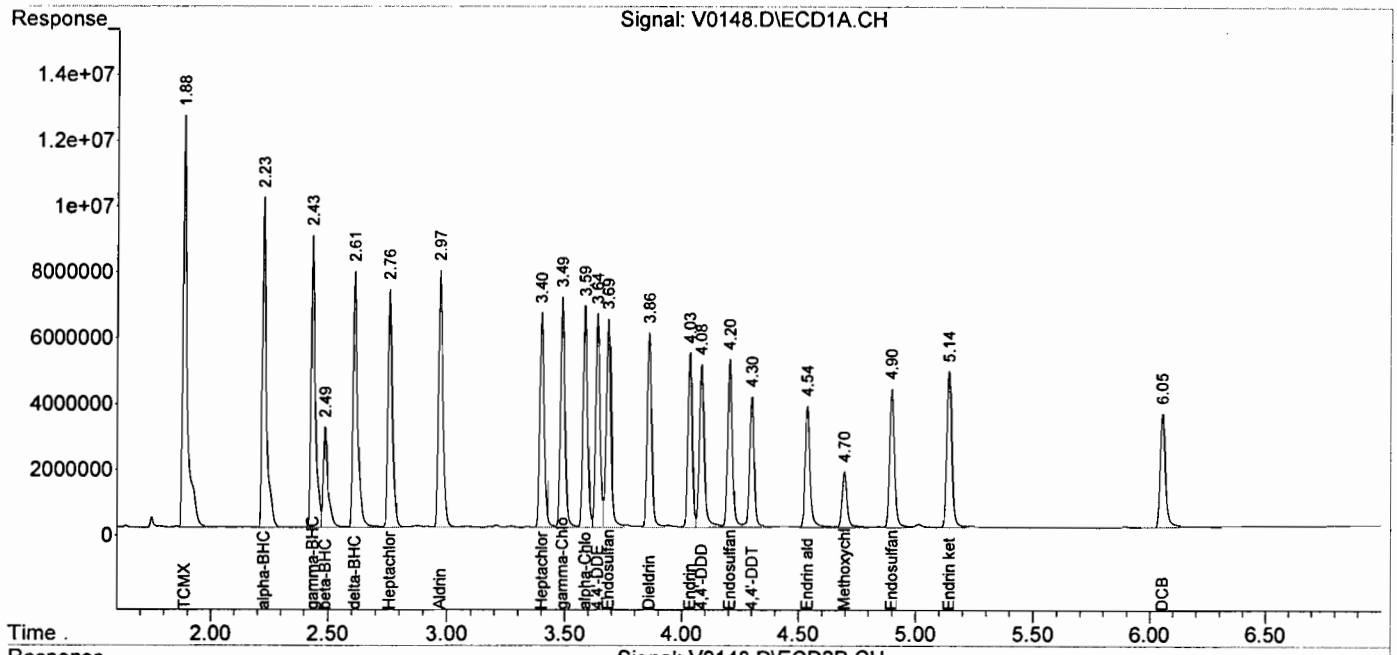
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

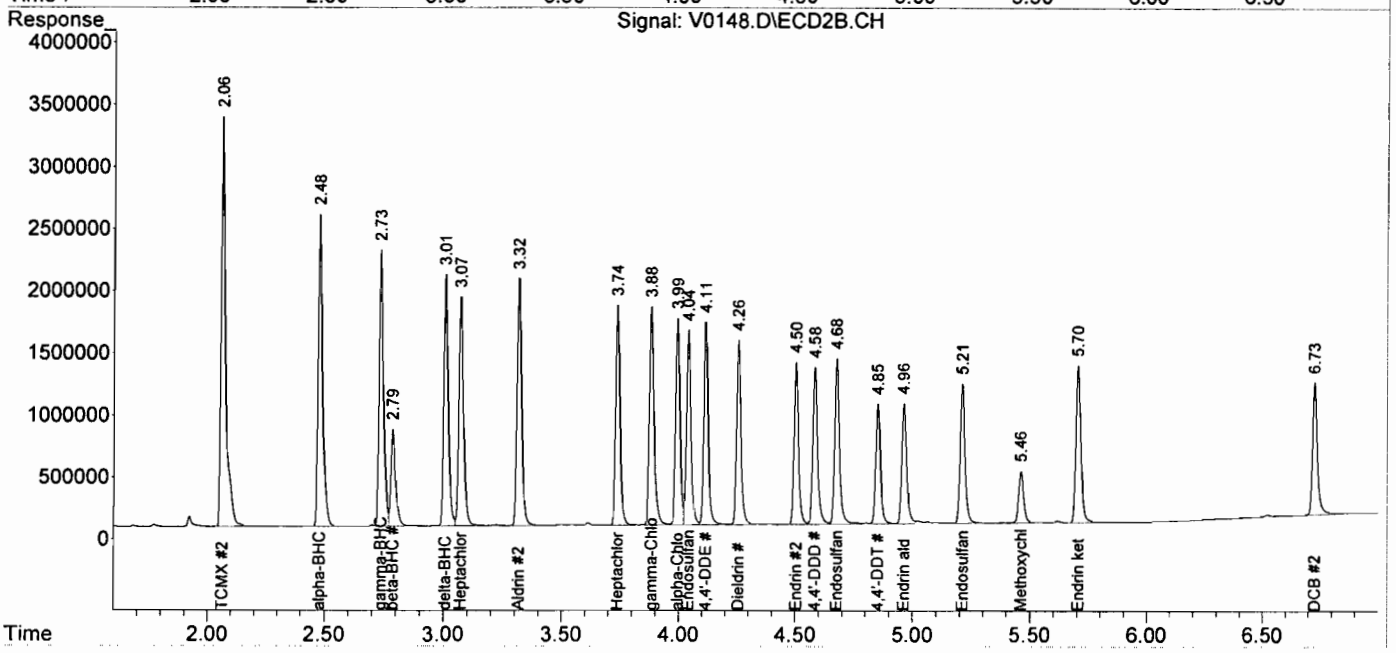
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0148.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:01
Operator : IB
Sample : Pest,LCSA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Aqueous)

Extraction Date/Time: 02/09/2015 16:27

Batch ID: **150209-14**

Tray: 19

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150209-14	TCLP Pesticides	200	5	10	1			
LCSA150209-14	TCLP Pesticides	200	5	10	1		25	
00895-001MS	TCLP Pesticides	50	5	10	1		25	TCLP150206
00895-001MSD	TCLP Pesticides	50	5	10	1		25	TCLP150206
TCLP150206	TCLP Pesticides	200	5	10	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-17
Surrogate	IAS#5134
SPK 1	
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	00895-001	TCLP Pesticides	200	5	10	1	0	TCLP150206		00895-001MS / 150209-14
2	00896-001	TCLP Pesticides	200	5	10	1	0	TCLP150206		00895-001MS / 150209-14
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/09/2015 16:27
Weighed	Archie	02/09/2015 16:49
Surrogated	Archie	02/09/2015 16:50
Filtered	Archie	02/09/2015 17:46
Transferred	Archie	02/09/2015 17:46
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Aqueous)

Extraction Date/Time: 02/23/2015 13:38

Batch ID: **150223-08**

Tray: **47**

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150223-08	TCLP Pesticides	200	5	10	1			
LCSA150223-08	TCLP Pesticides	200	5	10	1		25	
TCLP150219	TCLP Pesticides	200	5	10	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-17
Surrogate	#5134
SPK 1	
SPK 2	#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TCLP Pesticides	200	5	10	1	10.6	R-72; TCLP150219		00895-001MS / 150209-14
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/23/2015 13:38
Weighed	Archie	02/23/2015 13:39
Surrogated	Archie	02/23/2015 13:40
Filtered	Archie	02/23/2015 13:51
Transferred	Archie	02/23/2015 13:51
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Pest

DATE	1/22/2015 9:19	**Extra. Batch**	
INSTRUMENT	O		
METHOD	OPST0122		
SYS METHOD	8081B (eg. 8015B M, 3810)		
ANALYST	Iwona		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8035		ENDRIN/DDT						1			
2	100	O8036		HEXANE						1			
3	99	O8037		ISOOCTANE						1			
4	95	O8038		PRIMER						1			
5	5	O8039	ICC_PEST_L5_IAS_5113,300_PPB							1			
6	6	O8040	ICC_PEST_L4_IAS_5114,200_PPB							1			
7	9	O8041	ICC_PEST_L3_IAS_5115,100_PPB							1			
8	7	O8042	ICC_PEST_L2_IAS_5116,50_PPB							1			
9	8	O8043	ICC_PEST_L1_IAS_5117,2_PPB							1			
10	3	O8044	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	O8045	ICC_CHLOR_C_IAS_5118,0.5_PPM							1			
12	2	O8046	ICV_PEST_C_IAS_5171,100_PPB							1			

LABORATORY CHRONICLE - GC

Pest

DATE 2/23/2015 15:00 **Extra. Batch** 150223-08 BA Aqueous

INSTRUMENT V

METHOD VPST0223

SYS METHOD 8081B (eg. 8015B M, 3810)

ANALYST Iwona

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	V0134		ENDRIN/DDT						1			
2	##	V0135		HEXANE						1			
3	99	V0136		ISOOCTANE						1			
4	95	V0137		PRIMER						1			
5	5	V0138	ICC_PEST_L5_IAS_5248,300_PPB							1			
6	6	V0139	ICC_PEST_L4_IAS_5249,200_PPB							1			
7	9	V0140	ICC_PEST_L3_IAS_5250,100_PPB							1			
8	7	V0141	ICC_PEST_L2_IAS_5251,50_PPB							1			
9	8	V0142	ICC_PEST_L1_IAS_5252,2_PPB							1			
10	3	V0143	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	V0144	ICC_CHLOR_C_IAS_5254,0.5_PPM							1			
12	2	V0145	ICV_PEST_C_IAS_5171,100_PPB							1			
13	10	V0146		BLKA150223-08		1	200	5	A			2/23/15	100
14	11	V0147		TCLP150219		1	200	5	A			2/23/15	100
15	12	V0148		LCSA150223-08		1	200	5	A			2/23/15	100
16	13	V0149		01273	1	1	200	5	T	2/18/15	2/19/15	2/23/15	100
17	2	V0150	CCV_PEST_C_IAS_5171,100_PPB							1			

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-~~4809~~ 8097JS	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 mg/mL (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500 µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl TOX (IAS# 5167) 20 µl surr (IAS# 5134) → 10ml (isooctane)			500 PPB (Tox) / 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Post L-2		
5116				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:20			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Post L-1		
5117				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:500			2PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Chlordane Hold. Std		
5118				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 4968	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
JB ~~05/07/15~~ 02/28/15	500ml (IAS# 4968) chlor 200ml (IAS# 5078) surr. → 10ml isooctane			500PPB Chlord 200 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	DRO spike 1		
5119				
~~STD.PREP.DATE~~	~~Co.NAME~~	~~CAT. No.~~	~~LOT No.~~	INITIAL CONCENTRATION
11/11/14	colson	~~PA#~~	(wet chem)	neat
STD.EXP.DATE	DILUTION			~~FINAL CONCENTRATION~~
5/11/15	1g of fuel oil #2 → 10ml			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	Hexane			BM

STANDARD IAS#	STANDARD NAME:	Pest Stock		
5113				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	ULTRA	PPM-808C-1	CL-1069	1000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~11/07/15~~ 02/28/15	10µl (ULTRA) + 200µl (surr. IAS#5078) → 10ml isooctane			1000PPB 2000 PPB surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-5		
5113				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:3,33			300PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/08/24 04 JB	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-4		
5114				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:5			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-3		
5115				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl of Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10542B3 DCB B2-20924	3168100 2188800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ml of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS#5135 + 400 µl of SURR. IAS#5134 → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep.	ACE-8081-S	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			IM ~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	Pest L-1		
5252				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:500			2PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Stock		
5253				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	SUPELCO	48065-U	LC01899	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/20/16	100 µl (SUPELCO) → 10ml isooctane			10 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Hale. Std.		
5254				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5253	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl (IAS# 5253) Chlad 200 µl (IAS# 5134) Surr. → 10ml isooctane			500PPB Chlordane 200PPB surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Endrin / DDT Hale. std.		
5255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5056	—	—	5PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/28/15	1:50			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-5		
5248				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5246 5247	—	—	1000PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:3,33			300 PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-4		
5249				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000 PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:5			200 PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-3		
5250				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000 PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:10			100PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-2		
5251				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:20			50PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 Holding Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~			VOID	
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-2081-5	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10ml (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPM 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-~~4809~~ 8097 JS	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500µl TOX (IAS# 5167) 20µl surr (IAS# 5134) → 10ml (Isooctane)			500PPB (Tox) / 2000PB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl of Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10562B3 DCB B2-2094	31G3100 21588DO	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ML of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS# 5135 + 400 µl of SURR. IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Pest SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~JS 5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

LABORATORY CHRONICLE - GC

Pest

DATE	2/10/2015 9:19	**Extra. Batch**	**150209-14**	BA	Aqueous
INSTRUMENT	**O**		**150209-10**	BS	Soil (Sonic)
METHOD	**OPST0122**				
SYS METHOD	**8081B** (eg. 8015B M, 3810)				
ANALYST	**Iwona**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8175		ENDRIN/DDT						1			
2	95	O8176		PRIME									
3	2	O8177	CCV_PEST_C_IAS_5171,100_PPB							1			
4	3	O8178	CCV_TOX_C_IAS_5168,0.5_PPM							1			
5	4	O8179	CCV_CHLOR_C_IAS_5118,0.5_PPM							1			
6	5	O8180		BLKA150209-14		1	200	5	A			2/9/15	100
7	6	O8181		TCLP150206		1	200	5	A			2/9/15	100
8	8	O8182		00895-001MS		1	50	5	T			2/9/15	100
9	9	O8183		00895-001MSD		1	50	5	T			2/9/15	100
10	10	O8184		00895	1	1	200	5	T	2/5/15	2/5/15	2/9/15	100
11	11	O8185		00896	1	1	200	5	T	2/5/15	2/5/15	2/9/15	100
12	7	O8186		LCSA150209-14		1	200	5	A			2/9/15	100
13	2	O8187	CCV_PEST_C_IAS_5171,100_PPB							1			
14	12	O8188		BLKS150209-10		1	30.00	5	S			2/9/15	0
15	13	O8189		LCSS150209-10		1	30.00	5	S			2/9/15	0
16	14	O8190		01008	1	5	30.01	5	S	2/6/15	2/6/15	2/9/15	17.3
17	15	O8191		01008	2	1	30.61	5	S	2/6/15	2/6/15	2/9/15	20.9
18	16	O8192		01008	3	5	30.91	5	S	2/6/15	2/6/15	2/9/15	13.4
19	17	O8193		01008	4	5	30.26	5	S	2/6/15	2/6/15	2/9/15	20.1
20	18	O8194		01008	5	5	30.14	5	S	2/6/15	2/6/15	2/9/15	13.2
21	19	O8195		01008	7	1	30.41	5	S	2/6/15	2/6/15	2/9/15	13.4
22	20	O8196		01008	8	1	30.66	5	S	2/6/15	2/6/15	2/9/15	18.1
23	2	O8197	CCV_PEST_C_IAS_5171,100_PPB							1			

HERBICIDE DATA

HERBICIDE QC SUMMARY

HERBICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/23/2015

Client ID	Lab Sample ID	Matrix	DCPA 1 % rec	#	DCPA 2 % rec	#
Herb	BLKS150220-11	SOIL	76		79	
GPEC-WC1	E15-01273-001	SOIL	79		89	
Herb	LCSS150220-11	SOIL	88		98	

Surrogate QC Limits	Soil	Aqueous/Leachate
DCPA = 2,4-Dichlorophenylacetic acid	30-150	30-150
	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150220-11
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2564.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
Dalapon	200.0	0.0	163.2	82	
Dicamba	200.0	0.0	176.1	88	
2,4-D	200.0	0.0	143.1	72	
2,4,5-TP (Silvex)	200.0	0.0	197.2	99	
2,4,5-T	200.0	0.0	211.3	106	
2,4-DB	200.0	0.0	134.8	67	
Dinoseb	200.0	0.0	111.7	56	

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01088-007
Date Received: 02/11/2015
Date Extracted: 02/17/2015
Date Analyzed: 02/18/2015
MS Data file: W2552.D
MSD Data file: W2553.D

GC Column: DB-5/DB1701P
Sample wt/vol: 15.34g
Matrix-Units: Soil-mg/Kg
% Moisture: 9.90
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
Dalapon	200.00	0.0	143.5	72		137.9	69	4
Dicamba	200.00	0.0	134.0	67		143.9	72	7
2,4-D	200.00	0.0	102.4	51		120.9	60	17
2,4,5-TP (Silvex)	200.00	0.0	147.9	74		163.6	82	10
2,4,5-T	200.00	0.0	150.6	75		157.7	79	5
2,4-DB	200.00	0.0	110.8	55		125.1	63	12
Dinoseb	200.00	0.0	93.2	47		72.9	36	24

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2550.D	Instrument ID:	GC-W
Date Extracted:	02/17/2015	Matrix:	SOIL
Date Analyzed:	02/18/2015	Time Analyzed:	09:33

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	LCSS150217-07	02/18/2015	09:47
Herb	01088-007MS	02/18/2015	10:01
Herb	01088-007MSD	02/18/2015	10:14
JA_DB_CO	E15-01128-007	02/18/2015	10:28
JA_MH_A_	E15-01129-007	02/18/2015	10:42
DS_MH-A_	E15-01087-007	02/18/2015	10:56
DS_DB-A_	E15-01088-007	02/18/2015	11:10

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2562.D	Instrument ID:	GC-W
Date Extracted:	02/20/2015	Matrix:	SOIL
Date Analyzed:	02/23/2015	Time Analyzed:	13:59

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1	E15-01273-001	02/23/2015	14:27
Herb	LCSS150220-11	02/23/2015	16:44

HERBICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

DCPA 1 **5.06** **DCPA 2** **4.85**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	DCPA 1 RT	#	DCPA 2 RT	#
Herb	BLKS150220-11	02/23/2015	13:59	5.06		4.85	
GPEC-WC1	E15-01273-001	02/23/2015	14:27	5.06		4.84	
Herb	LCSS150220-11	02/23/2015	16:44	5.06		4.84	

Surrogate QC Limits

DCPA = 2,4-Dichlorophenylacetic acid (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

HERBICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2563.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 14:27
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,15.50g,10.6,5
Misc : 150220-11,02/20/15,02/19/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 15:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	189.4E6	40525711	79.093	88.743
Spiked Amount	100.000			Recovery	=	79.09%	88.74%
	Target Compounds						

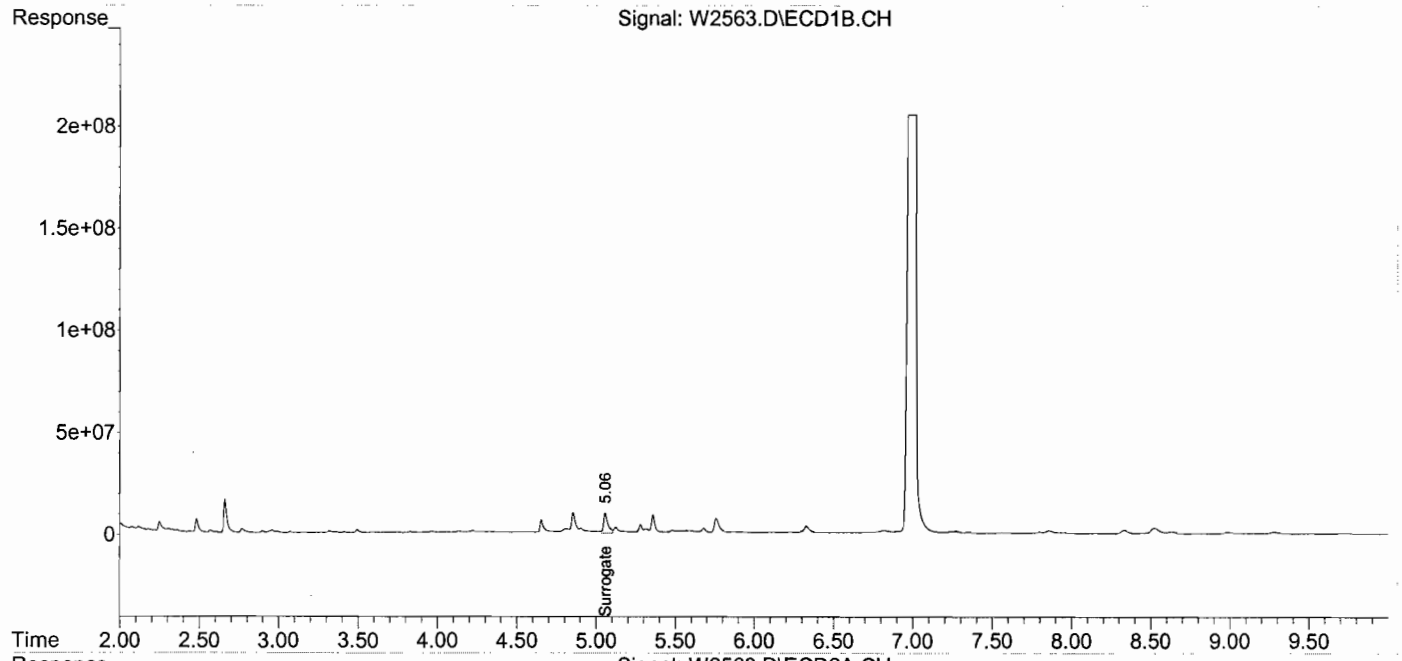
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

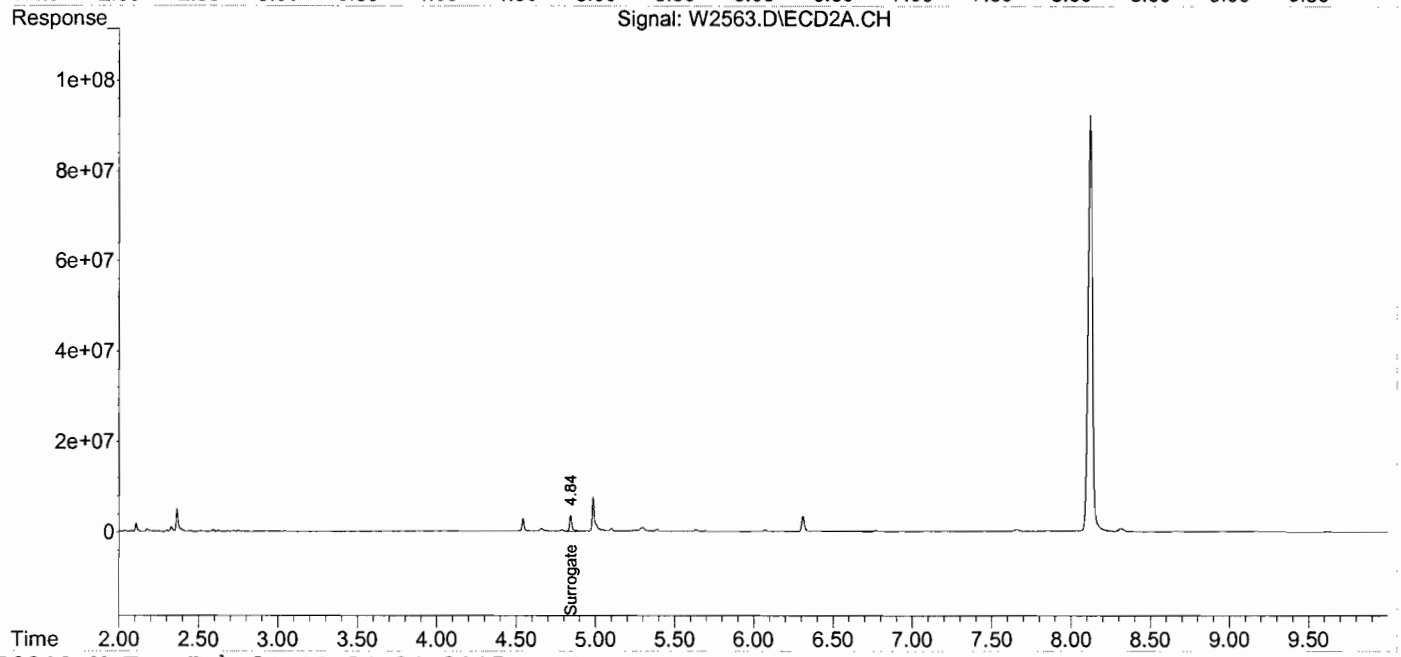
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2563.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 14:27
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,15.50g,10.6,5
Misc : 150220-11,02/20/15,02/19/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 15:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE STANDARDS

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.45	2.45	2.45	2.45	2.45	2.45	2.38	2.52
Dicamba	5.17	5.17	5.17	5.17	5.17	5.17	5.10	5.24
2,4-D	5.68	5.68	5.68	5.68	5.67	5.68	5.60	5.76
2,4,5-TP (Silvex)	6.18	6.18	6.18	6.18	6.18	6.18	6.09	6.27
2,4,5-T	6.37	6.36	6.36	6.36	6.36	6.36	6.27	6.45
2,4-DB	6.75	6.75	6.75	6.74	6.74	6.75	6.66	6.84
Dinoseb	7.76	7.76	7.76	7.76	7.76	7.76	7.67	7.85

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.10	2.10	2.10	2.10	2.10	2.10	2.03	2.17
Dicamba	4.94	4.94	4.94	4.94	4.94	4.94	4.87	5.01
2,4-D	5.44	5.44	5.44	5.44	5.44	5.44	5.36	5.52
2,4,5-TP (Silvex)	5.89	5.89	5.89	5.89	5.89	5.89	5.80	5.98
2,4,5-T	6.11	6.11	6.11	6.11	6.11	6.11	6.02	6.20
2,4-DB	6.44	6.44	6.43	6.43	6.43	6.44	6.35	6.53
Dinoseb	6.67	6.67	6.67	6.67	6.67	6.67	6.58	6.76

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	903207	875903	896803	952818	830288	891804	4.99
Dicamba	2414762	2144372	2181960	2375414	2142152	2251732	5.89
2,4-D	1030492	895263	777527	831600	676964	842369	15.69
Silvex	3142754	3193771	3290176	3665519	3207793	3300003	6.40
2,4,5-T	3329848	3179782	3105259	3374720	2873510	3172624	6.30
2,4-DB	673628	691239	665854	714327	578164	664642	7.79
Dinoseb	2645710	2307269	2293579	2550211	2193909	2398136	7.95

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	152894	151228	159265	171230	151149	157153	5.44
Dicamba	370790	390680	405277	447236	398737	402544	6.99
2,4-D	116908	127719	116341	123187	107739	118379	6.40
Silvex	580383	613234	633347	694311	620480	628351	6.64
2,4,5-T	508107	525218	543977	589855	527488	538929	5.78
2,4-DB	80559	78679	80096	80710	72375	78484	4.47
Dinoseb	385779	371992	406005	438700	394625	399420	6.32

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

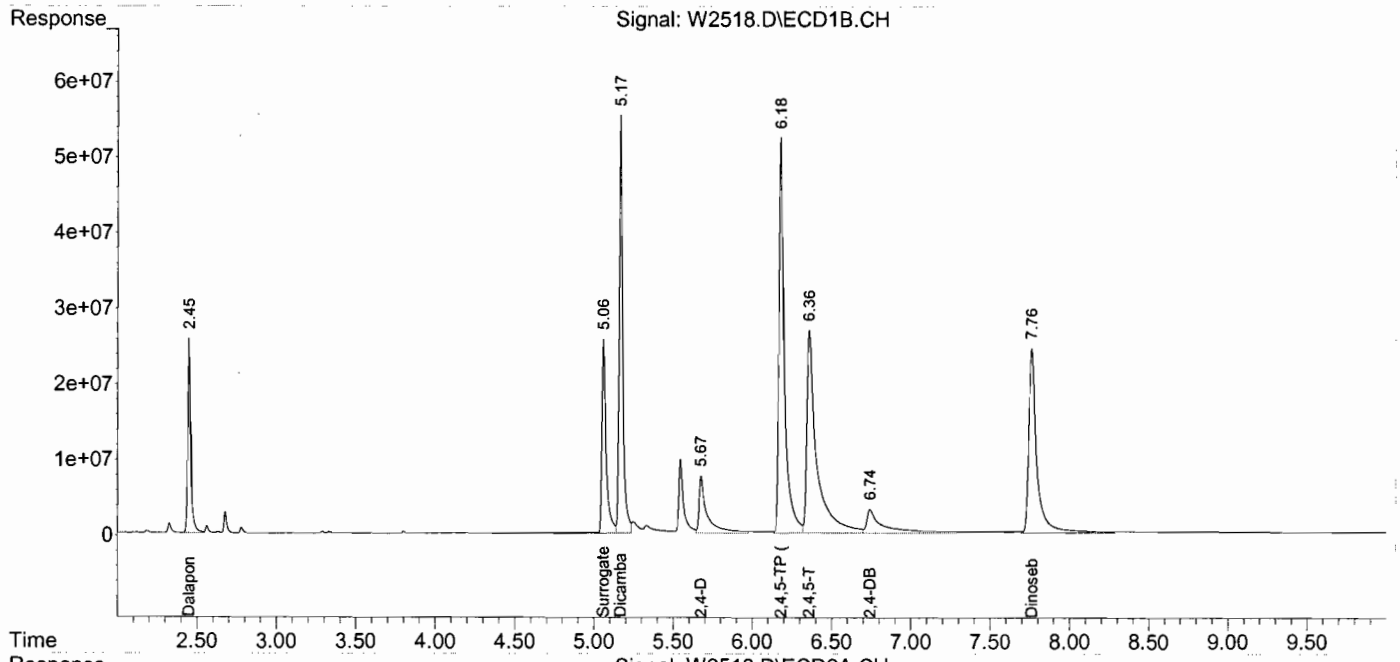
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	463.8E6	88855081	193.644	194.575
	Spiked Amount 100.000			Recovery	=	193.64%	194.57%
	Target Compounds						
2) T	Dalapon	2.45	2.10	332.1E6	60459496	372.408	393.905m
3) T	Dicamba	5.17	4.94	856.9E6	159.5E6	380.534	396.217
7) T	2,4-D	5.67	5.44	270.8E6	43095683	321.457	364.048
8) T	2,4,5-TP (Silvex	6.18	5.89	1283.1E6	248.2E6	388.823	394.989
9) T	2,4,5-T	6.36	6.11	1149.4E6	211.0E6	362.288	391.508
10) T	2,4-DB	6.74	6.43	231.3E6	28949933	354.335	368.864
11) T	Dinoseb	7.76	6.67	877.6E6	157.9E6	365.936	395.198

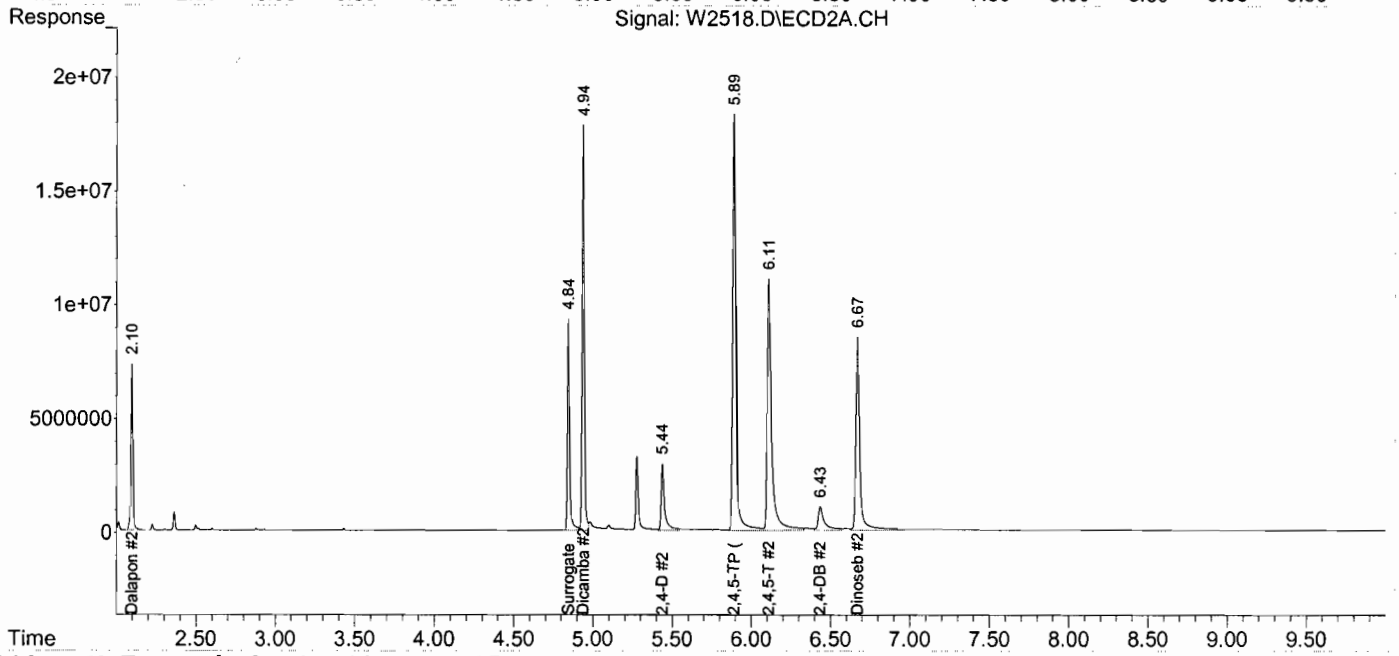
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	323.7E6	62261589	135.161	136.341
		Spiked Amount 100.000			Recovery	=	135.16%	136.34%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	238.2E6	42807415	267.104	278.898m
3)	T	Dicamba	5.17	4.94	593.9E6	111.8E6	263.732	277.756
7)	T	2,4-D	5.68	5.44	207.9E6	30796847	246.804	260.155
8)	T	2,4,5-TP (Silvex	6.18	5.89	916.4E6	173.6E6	277.691	276.243
9)	T	2,4,5-T	6.36	6.11	843.7E6	147.5E6	265.925	273.624
10)	T	2,4-DB	6.74	6.43	178.6E6	20177583	273.615	257.092
11)	T	Dinoseb	7.76	6.67	637.6E6	109.7E6	265.853	274.586

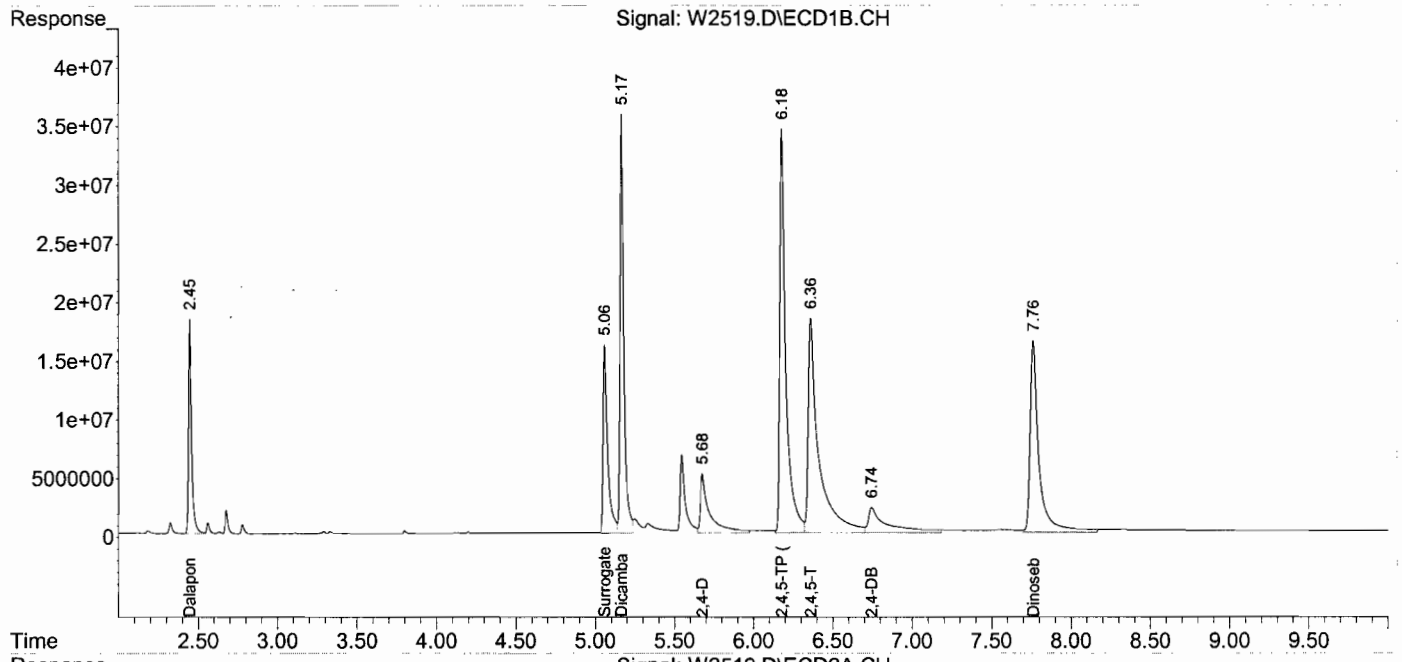
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

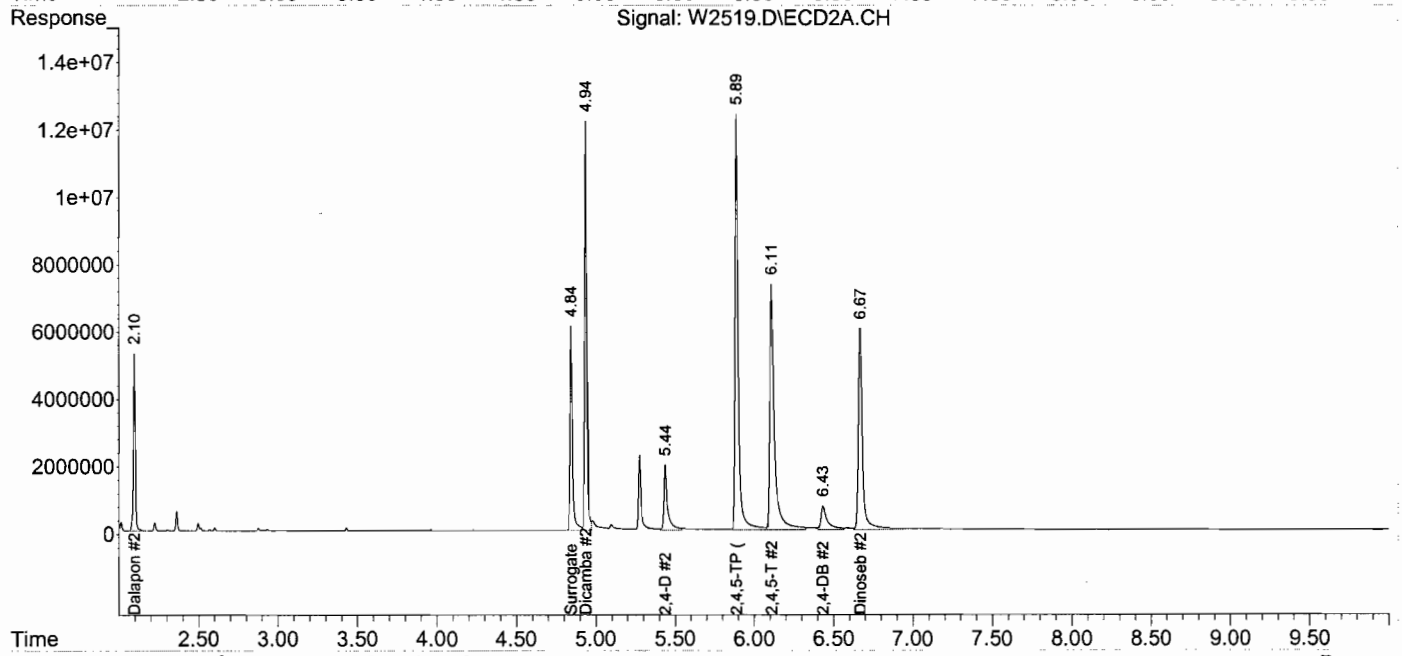
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	240.9E6	45325512	100.565	99.254
		Spiked Amount 100.000			Recovery	=	100.57%	99.25%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	179.4E6	31853010	201.121	207.528m
3)	T	Dicamba	5.17	4.94	436.4E6	81055369	193.803	201.358
7)	T	2,4-D	5.68	5.44	155.5E6	23268227	184.605	196.557
8)	T	2,4,5-TP (Silvex	6.18	5.89	658.0E6	126.7E6	199.404	201.590
9)	T	2,4,5-T	6.36	6.11	621.1E6	108.8E6	195.753	201.873
10)	T	2,4-DB	6.75	6.43	133.2E6	16019235	204.038	204.108
11)	T	Dinoseb	7.76	6.67	458.7E6	81201099	191.280	203.297

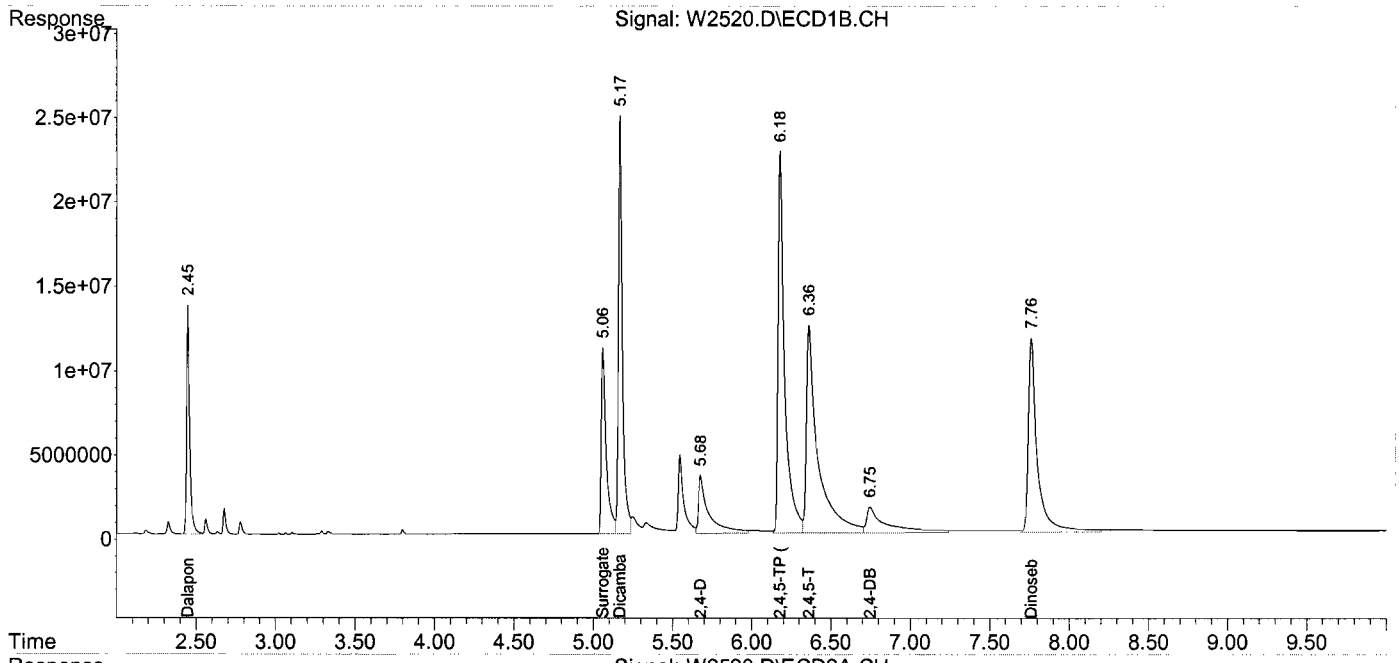
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

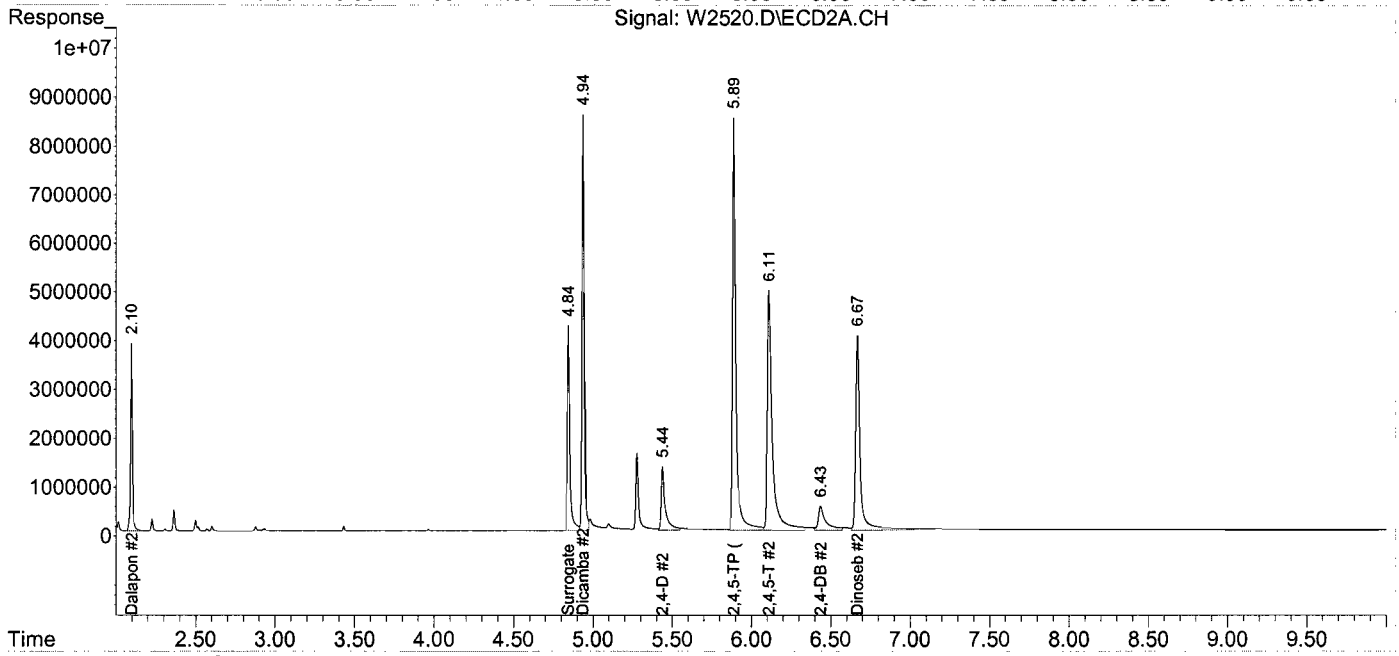
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	118.8E6	22486106	49.600	49.240
	Spiked Amount 100.000			Recovery	=	49.60%	49.24%
	Target Compounds						
2) T	Dalapon	2.45	2.10	87590319	15122838	98.217	98.528m
3) T	Dicamba	5.17	4.94	214.4E6	39067980	95.232	97.053
7) T	2,4-D	5.68	5.44	89526306	12771920	106.279	107.890
8) T	2,4,5-TP (Silvex	6.18	5.89	319.4E6	61323350	96.781	97.594
9) T	2,4,5-T	6.36	6.11	318.0E6	52521844	100.226	97.456
10) T	2,4-DB	6.75	6.44	69123888	7867947	105.909m	100.249
11) T	Dinoseb	7.76	6.67	230.7E6	37199216	96.211	93.133

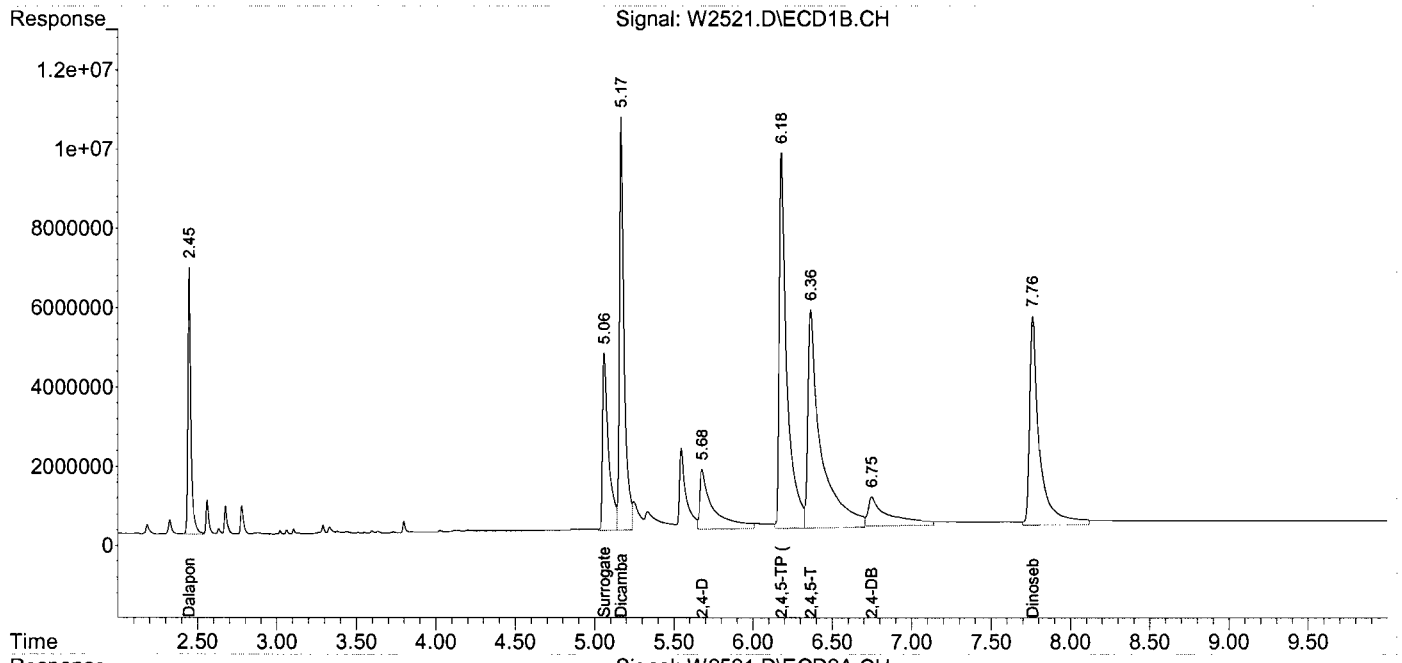
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

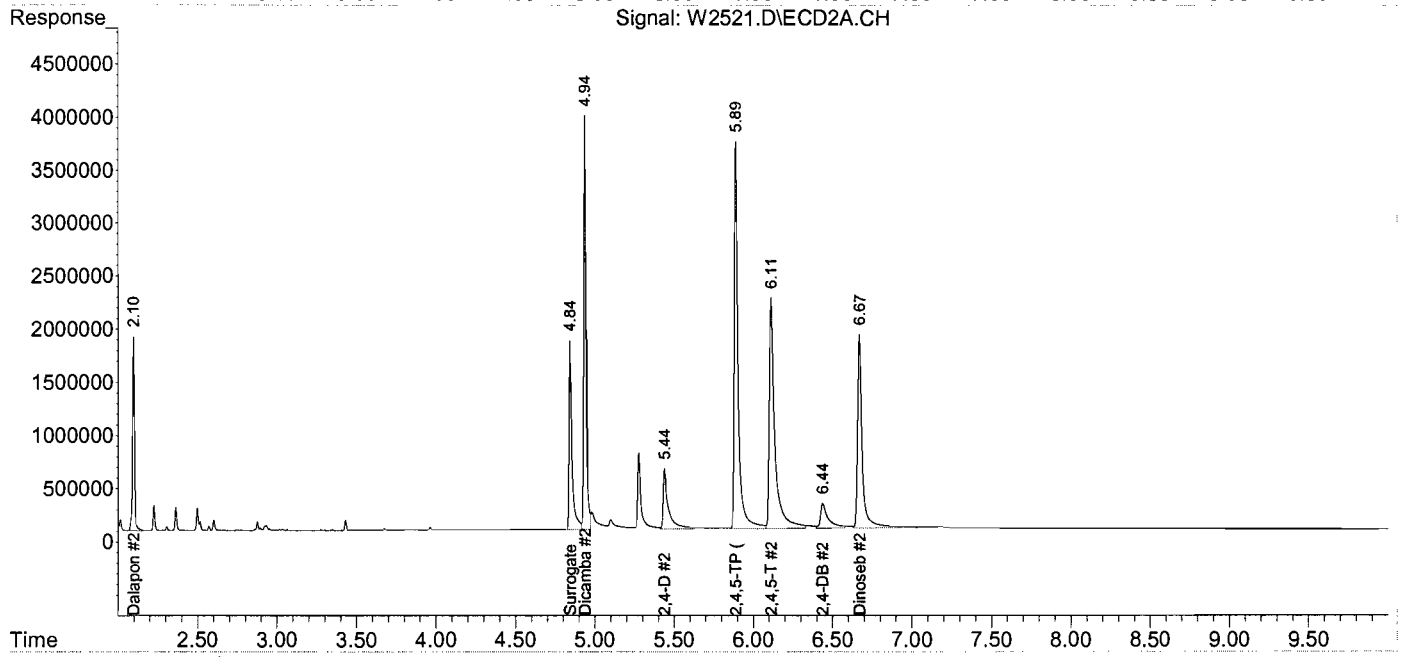
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	57052341	10949160	23.821	23.976
	Spiked Amount 100.000			Recovery	=	23.82%	23.98%
	Target Compounds						
2) T	Dalapon	2.45	2.10	45160353	7644706	50.639	49.807m
3) T	Dicamba	5.17	4.94	120.7E6	18539504	53.620	46.056
7) T	2,4-D	5.68	5.44	51524595	5845395	61.166	49.379
8) T	2,4,5-TP (Silvex	6.18	5.89	157.1E6	29019174	47.617	46.183
9) T	2,4,5-T	6.37	6.11	166.5E6	25405343	52.478	47.140
10) T	2,4-DB	6.75	6.44	33681400	4027968	51.605m	51.322
11) T	Dinoseb	7.76	6.67	132.3E6	19288965	55.162	48.292

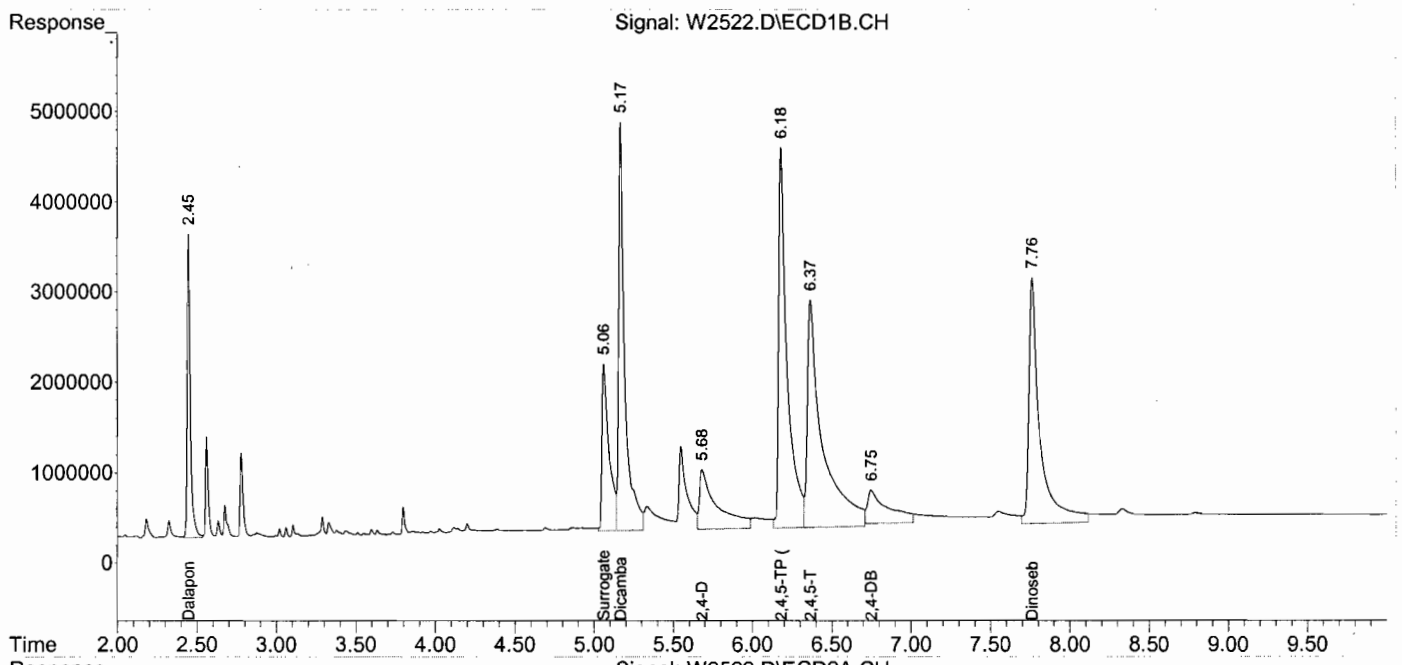
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

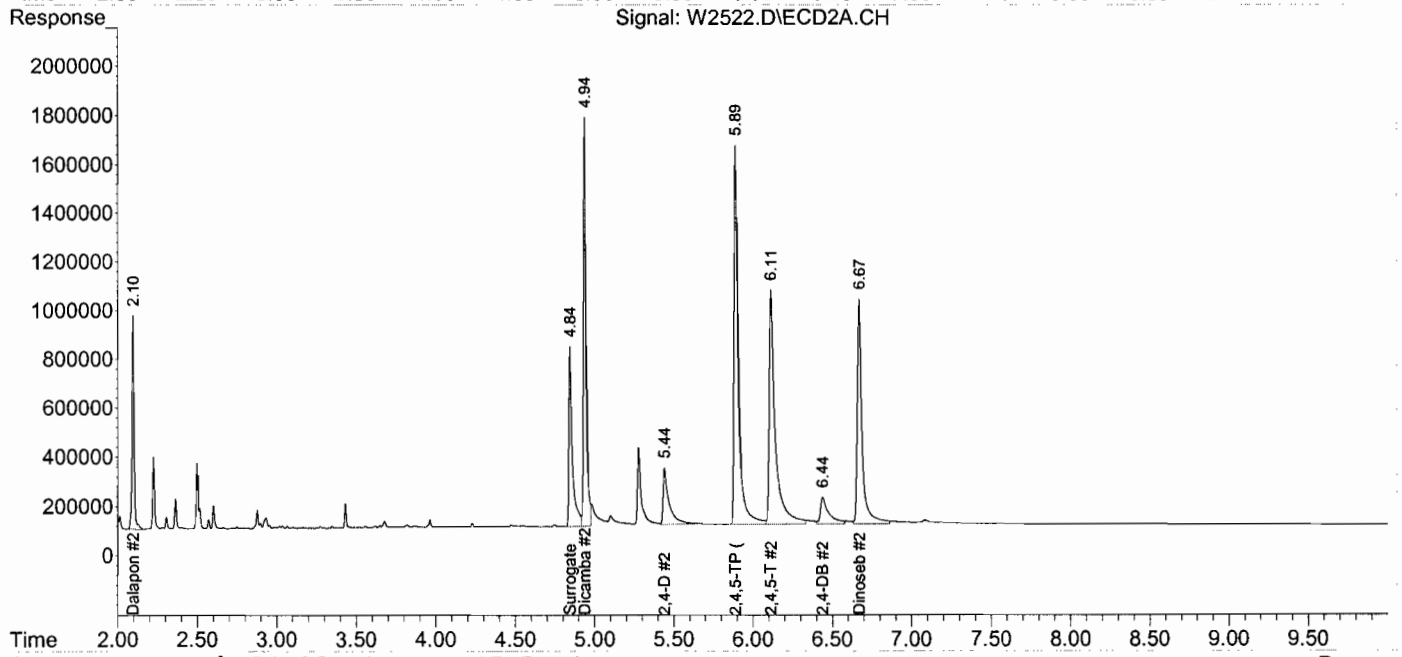
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/13/2015 **Instrument ID:** GC-W

Data File: W2523.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	885073	0.75
Dicamba	5.17	5.10	5.24	2251732	2164694	3.87
2,4-D	5.68	5.60	5.76	842369	775793	7.90
Silvex	6.18	6.09	6.27	3300003	3181521	3.59
2,4,5-T	6.36	6.27	6.45	3172624	3069412	3.25
2,4-DB	6.75	6.66	6.84	664642	660089	0.69
Dinoseb	7.76	7.67	7.85	2398136	2351998	1.92

GC Column (2nd): RTX-CLP2

Data File: W2523.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	155435	1.09
Dicamba	4.94	4.87	5.01	402544	398337	1.05
2,4-D	5.44	5.36	5.52	118379	113194	4.38
Silvex	5.89	5.80	5.98	628351	619519	1.41
2,4,5-T	6.11	6.02	6.20	538929	540251	0.25
2,4-DB	6.44	6.35	6.53	78484	76061	3.09
Dinoseb	6.67	6.58	6.76	399420	407471	2.02

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-W

Data File: W2549.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	843992	5.36
Dicamba	5.17	5.10	5.24	2251732	2264565	0.57
2,4-D	5.68	5.60	5.76	842369	789449	6.28
Silvex	6.18	6.09	6.27	3300003	3373629	2.23
2,4,5-T	6.36	6.27	6.45	3172624	3082462	2.84
2,4-DB	6.75	6.66	6.84	664642	694438	4.48
Dinoseb	7.76	7.67	7.85	2398136	2305691	3.85

GC Column (2nd): RTX-CLP2

Data File: W2549.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	165220	5.13
Dicamba	4.94	4.87	5.01	402544	464877	15.48
2,4-D	5.44	5.36	5.52	118379	126396	6.77
Silvex	5.89	5.80	5.98	628351	718146	14.29
2,4,5-T	6.11	6.02	6.20	538929	606353	12.51
2,4-DB	6.44	6.35	6.53	78484	82870	5.59
Dinoseb	6.67	6.58	6.76	399420	431824	8.11

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-W

Data File: W2559.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	889221	0.29
Dicamba	5.17	5.10	5.24	2251732	2377163	5.57
2,4-D	5.68	5.60	5.76	842369	849164	0.81
Silvex	6.18	6.09	6.27	3300003	3558360	7.83
2,4,5-T	6.36	6.27	6.45	3172624	3229983	1.81
2,4-DB	6.75	6.66	6.84	664642	664758	0.02
Dinoseb	7.76	7.67	7.85	2398136	2403182	0.21

GC Column (2nd): RTX-CLP2

Data File: W2559.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.09	2.03	2.17	157153	166554	5.98
Dicamba	4.94	4.87	5.01	402544	471016	17.01
2,4-D	5.44	5.36	5.52	118379	126813	7.12
Silvex	5.89	5.80	5.98	628351	723587	15.16
2,4,5-T	6.11	6.02	6.20	538929	605403	12.33
2,4-DB	6.44	6.35	6.53	78484	81117	3.35
Dinoseb	6.67	6.58	6.76	399420	426490	6.78

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/23/2015 **Instrument ID:** GC-W

Data File: W2561.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	783106	12.19
Dicamba	5.17	5.10	5.24	2251732	2222269	1.31
2,4-D	5.68	5.60	5.76	842369	853451	1.32
Silvex	6.18	6.09	6.27	3300003	3364896	1.97
2,4,5-T	6.36	6.27	6.45	3172624	3139475	1.04
2,4-DB	6.75	6.66	6.84	664642	686349	3.27
Dinoseb	7.76	7.67	7.85	2398136	2434103	1.50

GC Column (2nd): RTX-CLP2

Data File: W2561.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	137733	12.36
Dicamba	4.94	4.87	5.01	402544	408462	1.47
2,4-D	5.44	5.36	5.52	118379	115527	2.41
Silvex	5.90	5.80	5.98	628351	647391	3.03
2,4,5-T	6.12	6.02	6.20	538929	557811	3.50
2,4-DB	6.44	6.35	6.53	78484	85293	8.68
Dinoseb	6.68	6.58	6.76	399420	423995	6.15

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/23/2015 **Instrument ID:** GC-W

Data File: W2565.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	782233	12.29
Dicamba	5.17	5.10	5.24	2251732	2167185	3.75
2,4-D	5.67	5.60	5.76	842369	765786	9.09
Silvex	6.18	6.09	6.27	3300003	3249315	1.54
2,4,5-T	6.36	6.27	6.45	3172624	2992298	5.68
2,4-DB	6.74	6.66	6.84	664642	641561	3.47
Dinoseb	7.76	7.67	7.85	2398136	2288497	4.57

GC Column (2nd): RTX-CLP2

Data File: W2565.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	137375	12.59
Dicamba	4.94	4.87	5.01	402544	414693	3.02
2,4-D	5.44	5.36	5.52	118379	121822	2.91
Silvex	5.89	5.80	5.98	628351	668218	6.34
2,4,5-T	6.11	6.02	6.20	538929	582424	8.07
2,4-DB	6.43	6.35	6.53	78484	85782	9.30
Dinoseb	6.67	6.58	6.76	399420	439935	10.14

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	238.5E6	44438391	99.589	97.311
	Spiked Amount 100.000			Recovery	=	99.59%	97.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	177.0E6	31087017	198.491	197.813
3) T	Dicamba	5.17	4.94	432.9E6	79667336	192.269	197.910
7) T	2,4-D	5.68	5.44	155.2E6	22638862	184.193	191.241
8) T	2,4,5-TP (Silvex	6.18	5.89	636.3E6	123.9E6	192.819	197.189
9) T	2,4,5-T	6.36	6.11	613.9E6	108.1E6	193.494	200.491
10) T	2,4-DB	6.75	6.44	132.0E6	15212252	198.630	193.826
11) T	Dinoseb	7.76	6.67	470.4E6	81494177	196.152	204.031

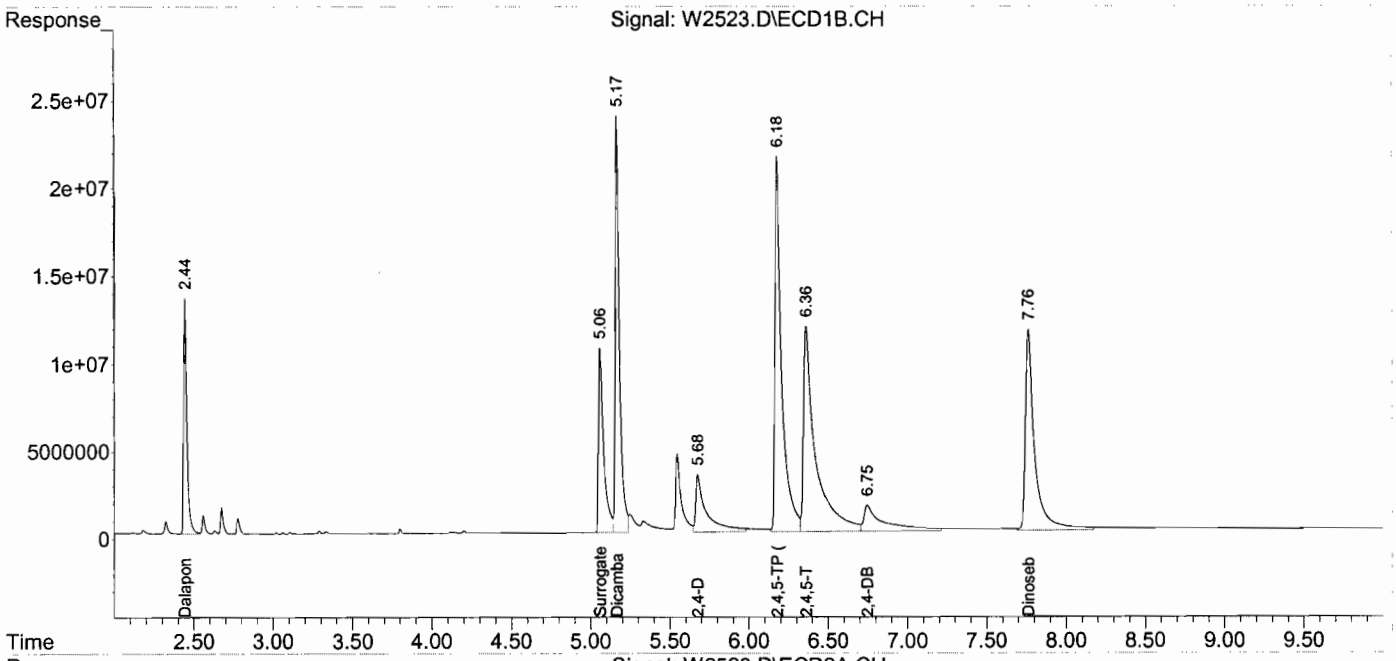
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

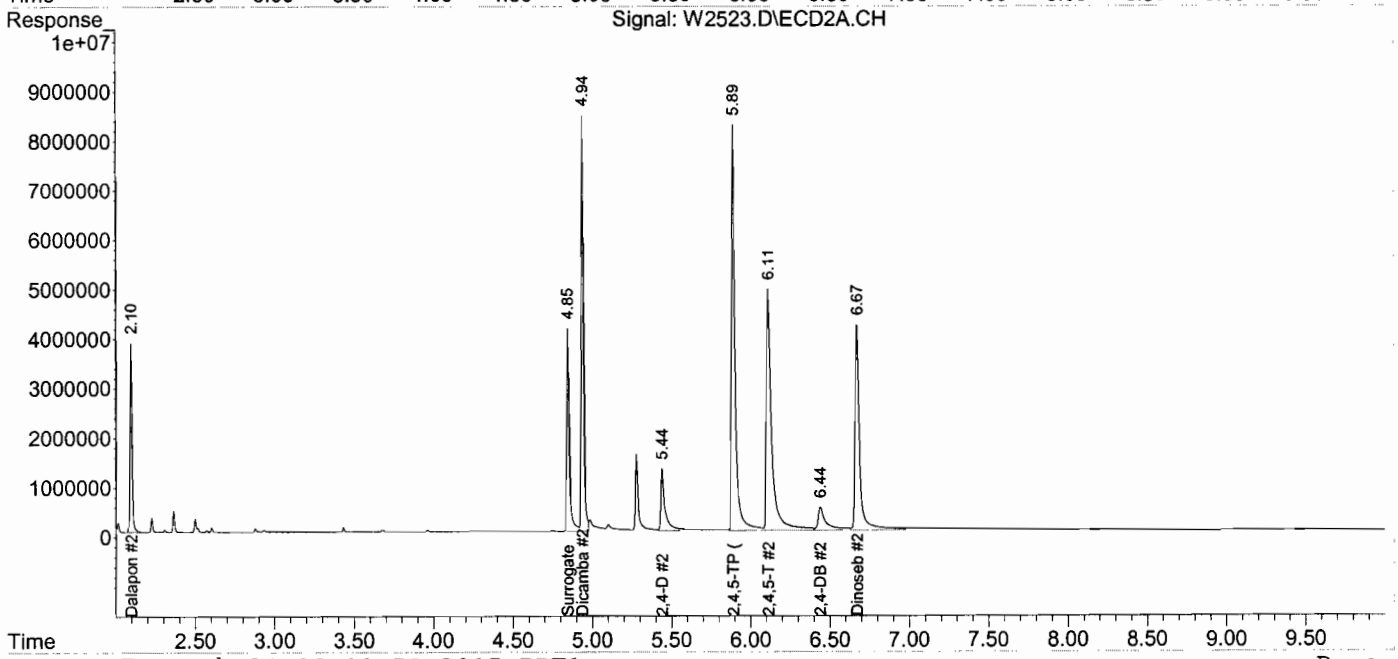
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:18
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:31:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	246.0E6	51287766	102.702	112.310
	Spiked Amount 100.000			Recovery	=	102.70%	112.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	168.8E6	33043937	189.277	210.266m
3) T	Dicamba	5.17	4.94	452.9E6	92975494	201.140	230.970
7) T	2,4-D	5.68	5.44	157.9E6	25279243	187.435	213.545
8) T	2,4,5-TP (Silvex	6.18	5.89	674.7E6	143.6E6	204.462	228.581
9) T	2,4,5-T	6.36	6.11	616.5E6	121.3E6	194.316	225.021
10) T	2,4-DB	6.75	6.44	138.9E6	16574015	208.966	211.177
11) T	Dinoseb	7.76	6.67	461.1E6	86364887	192.290	216.225

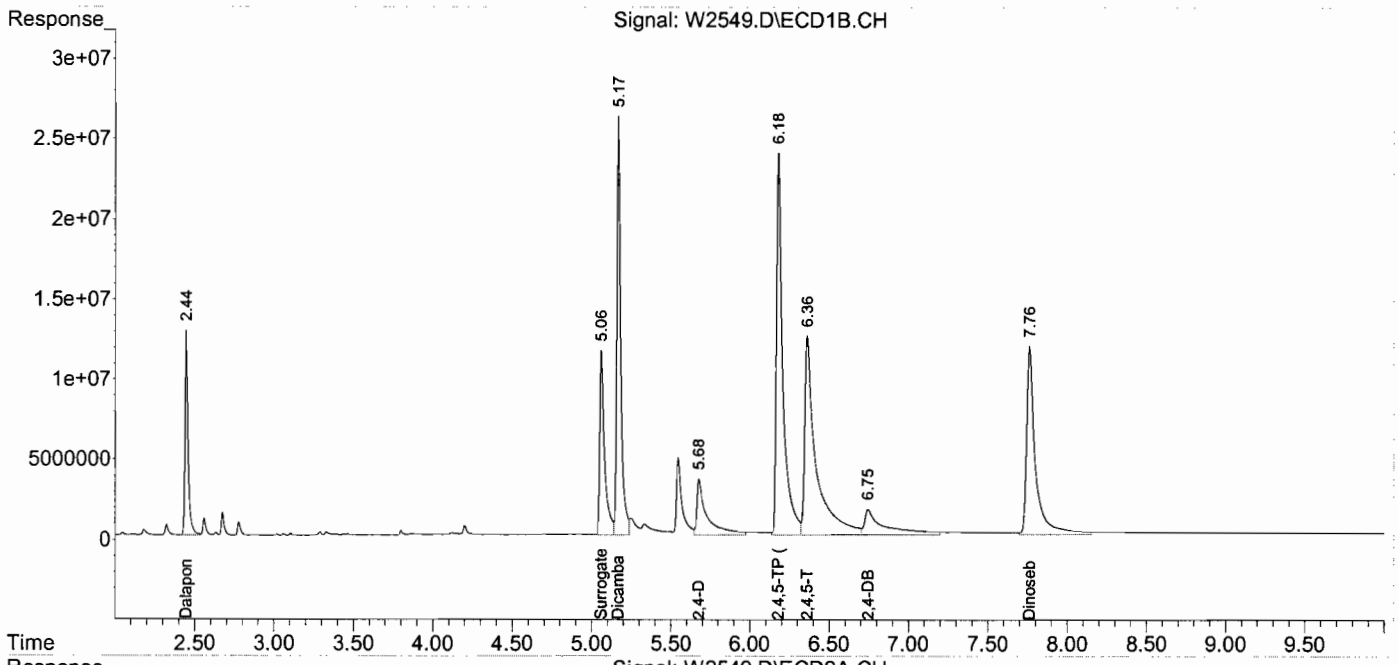
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

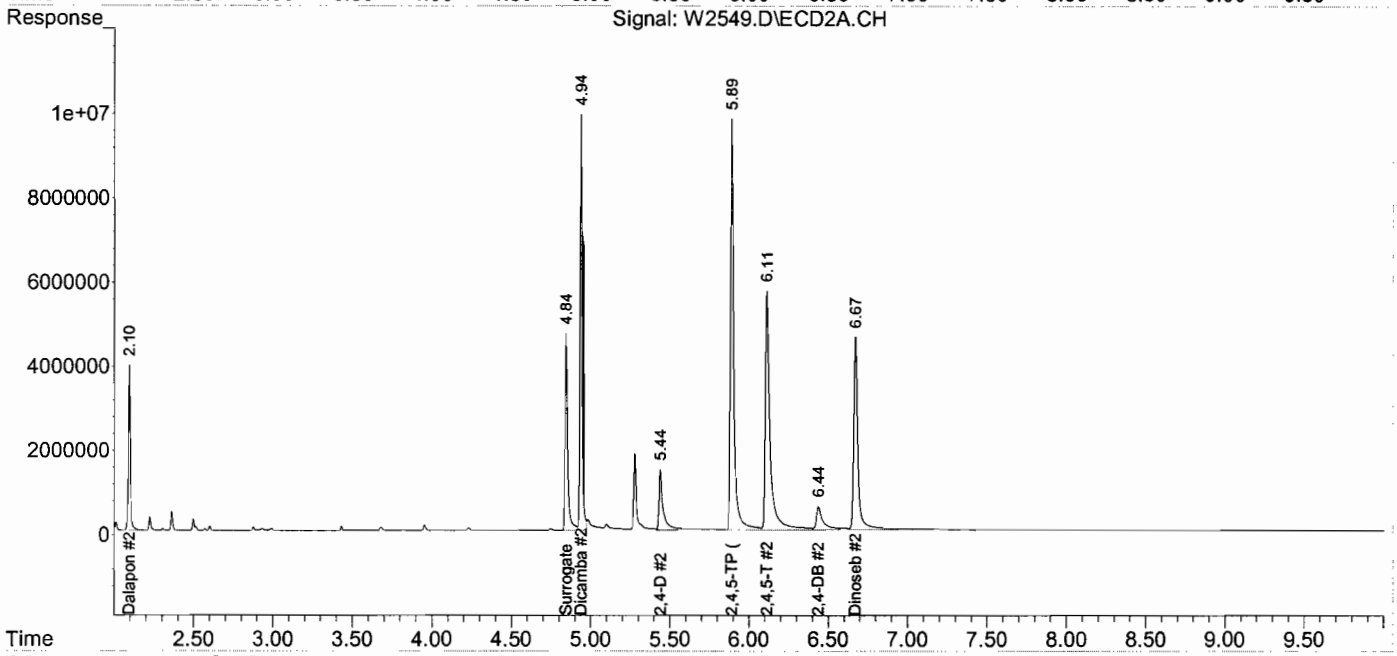
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:18
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:31:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2559.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:38
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:50:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	259.8E6	52050451	108.478	113.980
	Spiked Amount 100.000			Recovery	=	108.48%	113.98%
	Target Compounds						
2) T	Dalapon	2.45	2.09	177.8E6	33310840	199.421	211.964m
3) T	Dicamba	5.17	4.94	475.4E6	94203115	211.141	234.019
7) T	2,4-D	5.68	5.44	169.8E6	25362576	201.613	214.249
8) T	2,4,5-TP (Silvex	6.18	5.89	711.7E6	144.7E6	215.658	230.313
9) T	2,4,5-T	6.36	6.11	646.0E6	121.1E6	203.616	224.669
10) T	2,4-DB	6.75	6.44	133.0E6	16223413	200.035	206.710
11) T	Dinoseb	7.76	6.67	480.6E6	85297962	200.421	213.554

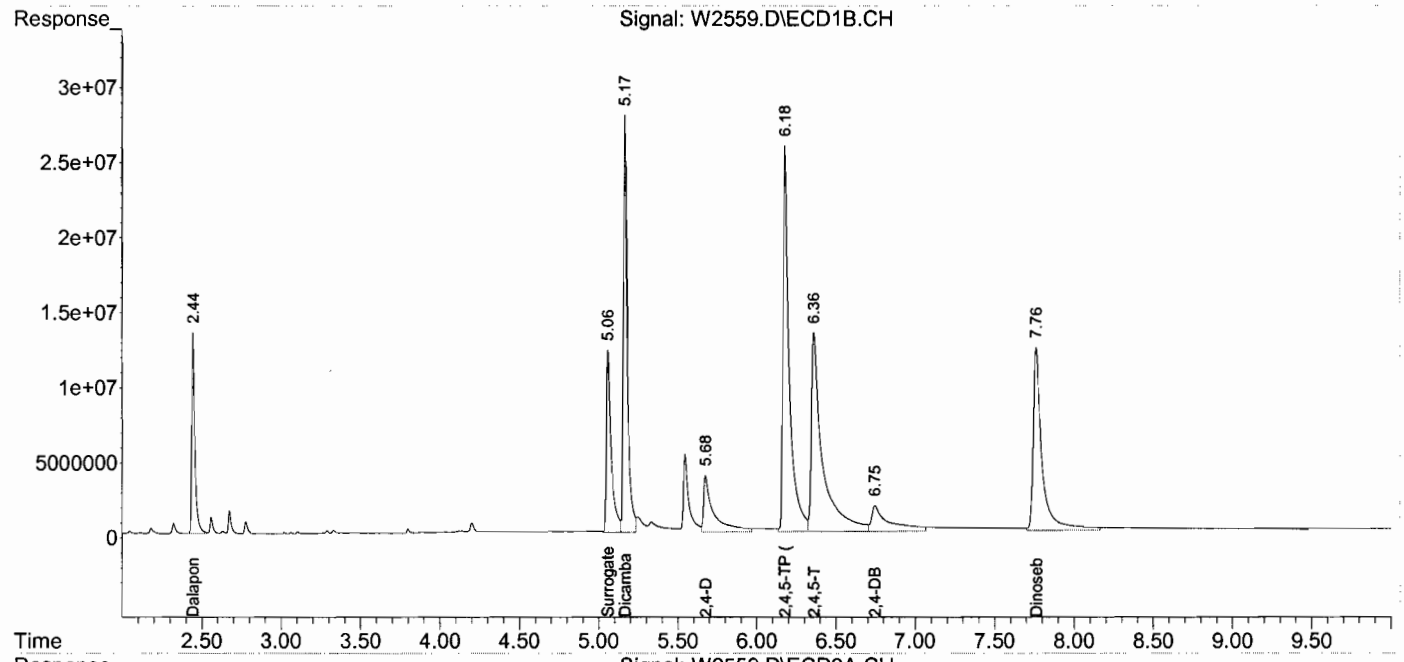
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

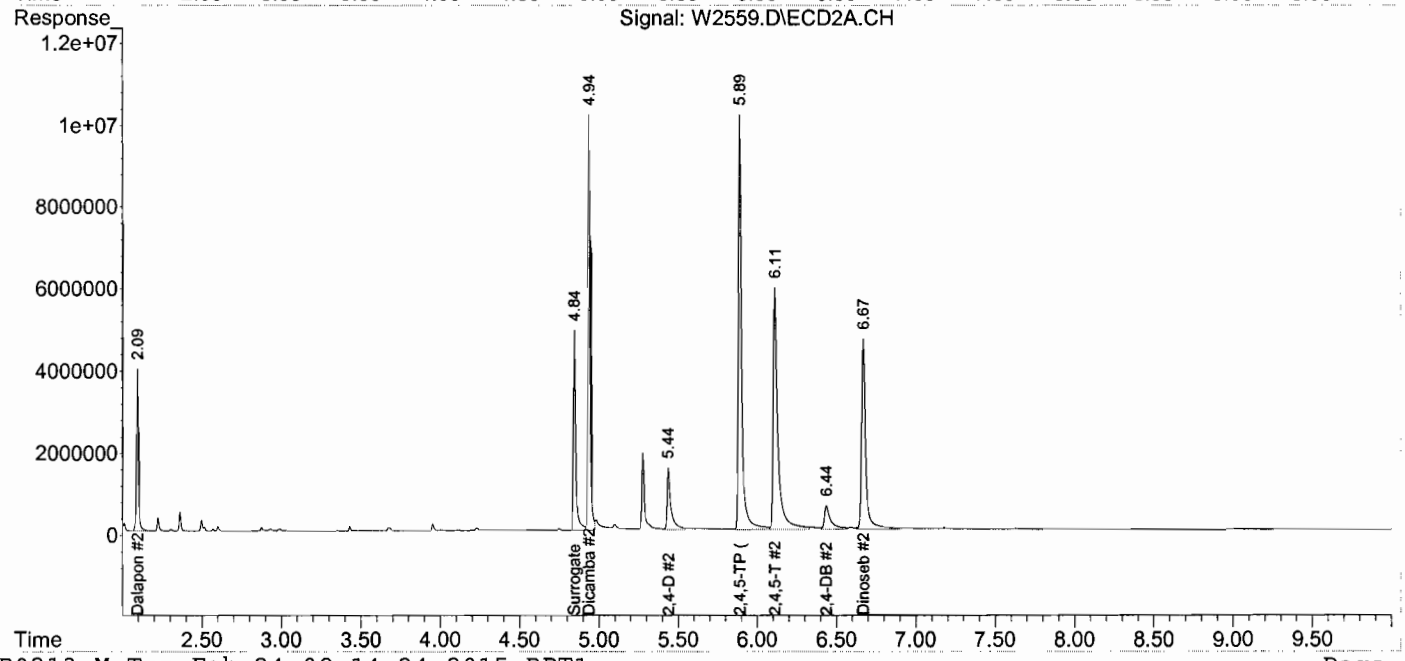
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2559.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:38
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:50:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2561.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 9:39
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 09:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.85	251.5E6	45678401	105.020	100.027
		Spiked Amount 100.000			Recovery	=	105.02%	100.03%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	156.6E6	27546687	175.623	175.286
3)	T	Dicamba	5.17	4.94	444.5E6	81692392	197.383	202.940
7)	T	2,4-D	5.68	5.44	170.7E6	23105437	202.631	195.182
8)	T	2,4,5-TP (Silvex	6.18	5.90	673.0E6	129.5E6	203.933	206.060
9)	T	2,4,5-T	6.36	6.12	627.9E6	111.6E6	197.910	207.007
10)	T	2,4-DB	6.75	6.44	137.3E6	17058620	206.532	217.351
11)	T	Dinoseb	7.76	6.68	486.8E6	84799091	203.000	212.305

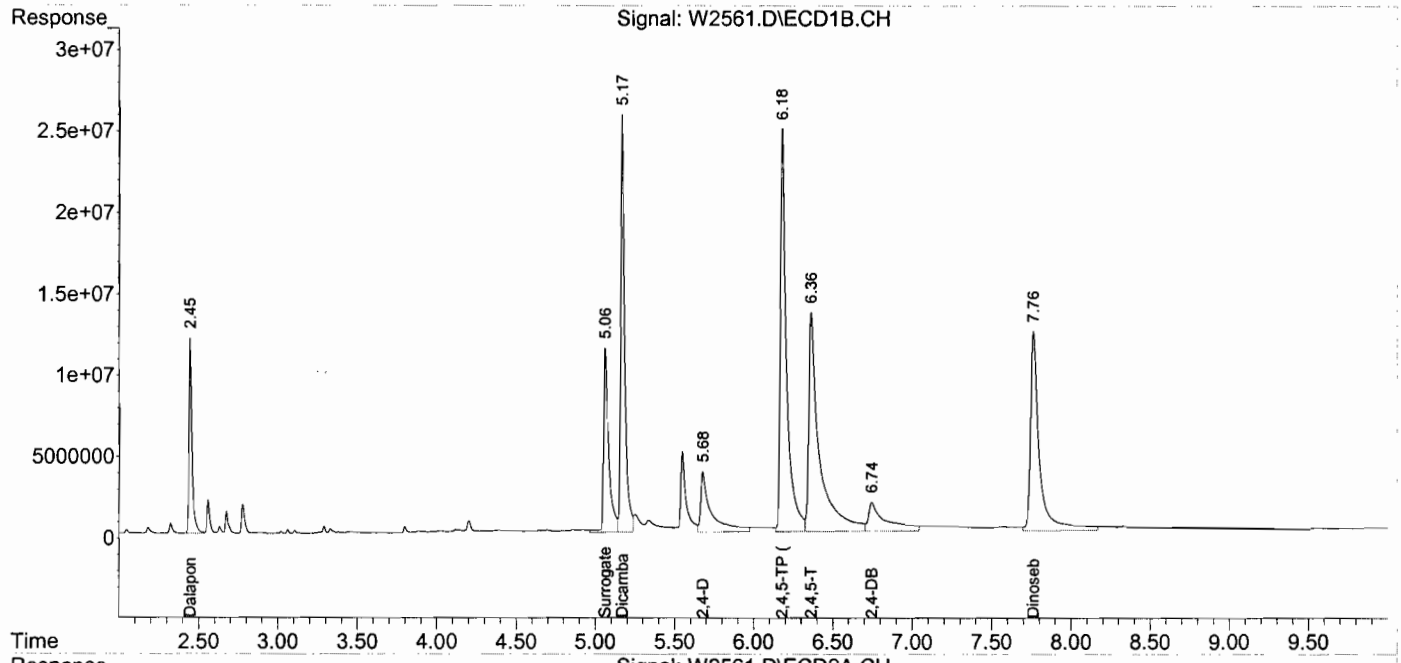
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

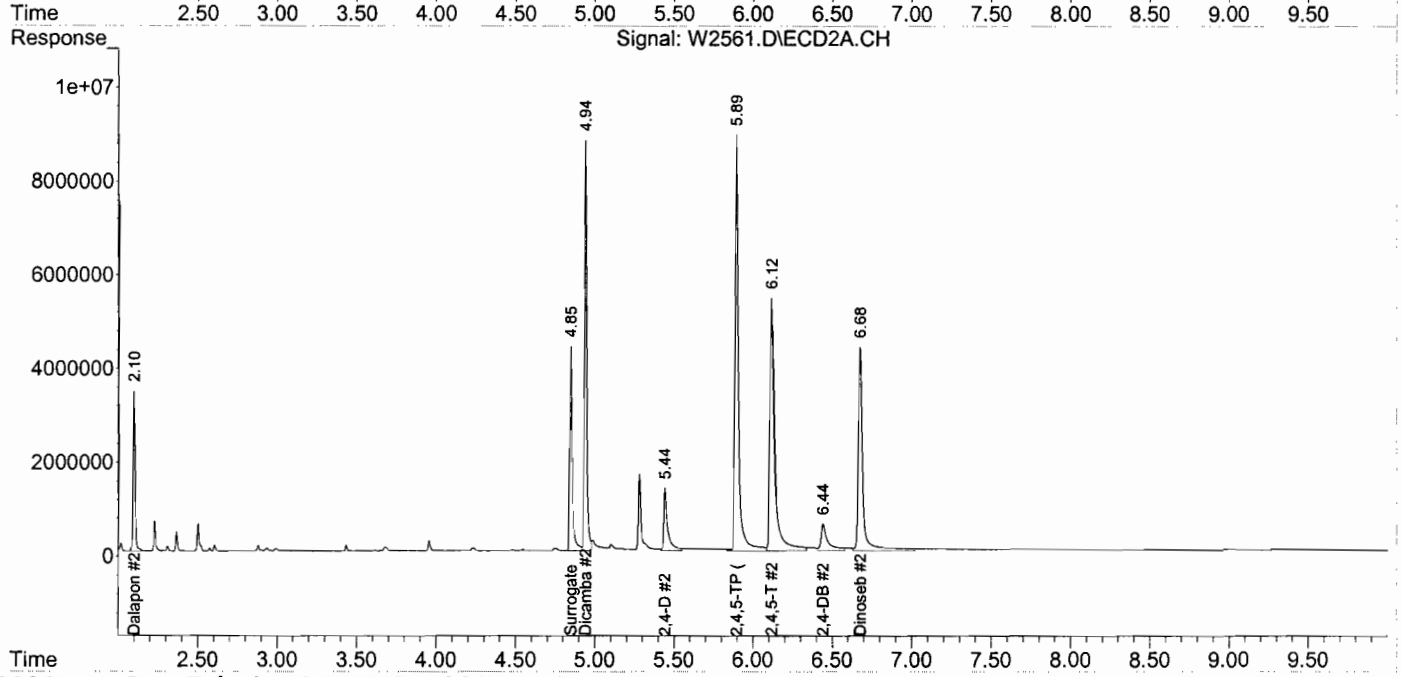
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2561.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 9:39
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 09:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2565.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:58
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 08:59:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	240.9E6	46451559	100.588	101.720
	Spiked Amount 100.000			Recovery	=	100.59%	101.72%
	Target Compounds						
2) T	Dalapon	2.45	2.10	156.4E6	27475062	175.427	174.830
3) T	Dicamba	5.17	4.94	433.4E6	82938648	192.490	206.036
7) T	2,4-D	5.67	5.44	153.2E6	24364435	181.817	205.817
8) T	2,4,5-TP (Silvex	6.18	5.89	649.9E6	133.6E6	196.928	212.689
9) T	2,4,5-T	6.36	6.11	598.5E6	116.5E6	188.632	216.141
10) T	2,4-DB	6.74	6.43	128.3E6	17156311	193.055	218.596
11) T	Dinoseb	7.76	6.67	457.7E6	87986976	190.856	220.287

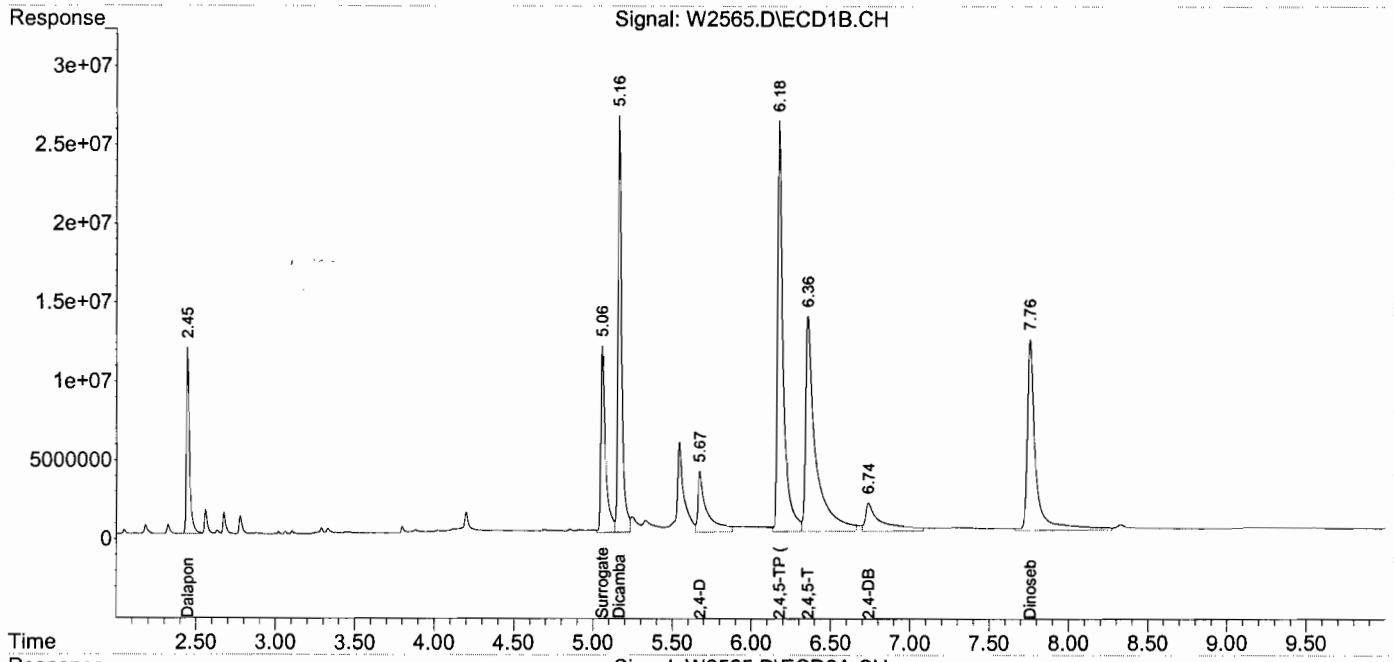
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

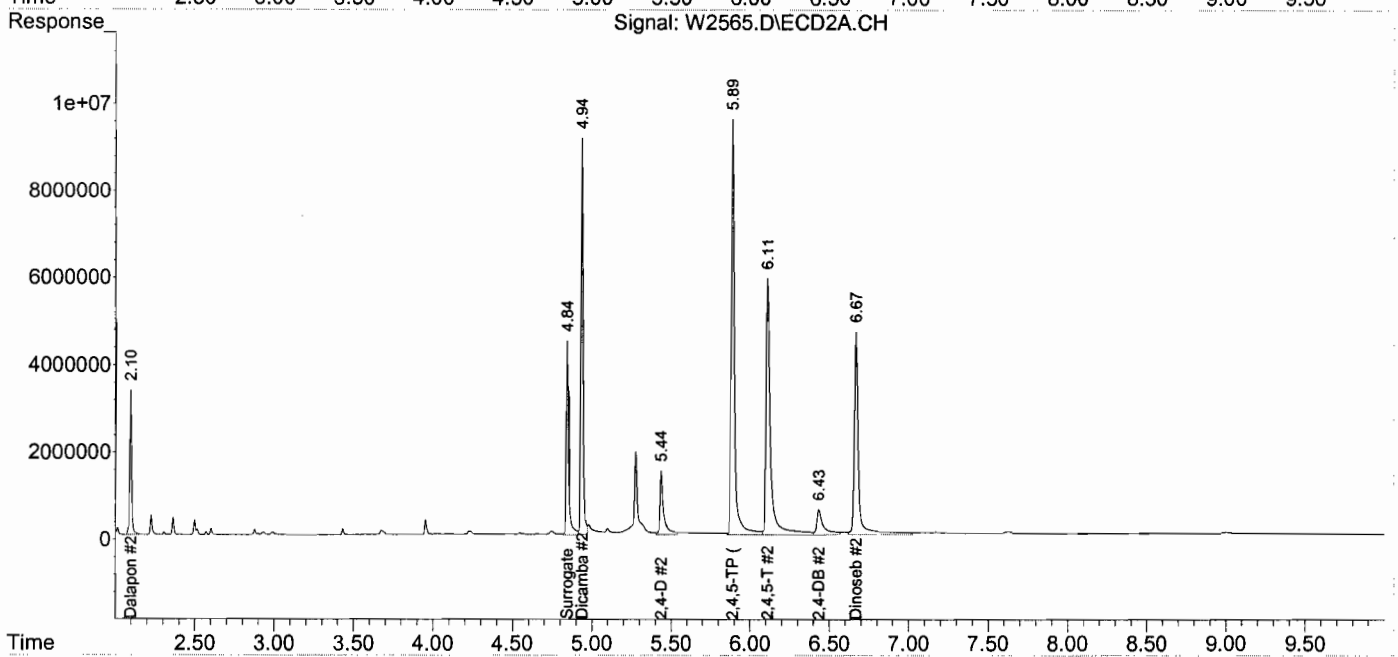
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2565.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:58
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 08:59:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: BLKS150217-07
Client ID: Herb
Date Received: NA
Date Extracted: 02/17/2015
Date Analyzed: 02/18/2015
Data file: W2550.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.00835	0.00334
Dicamba	ND		0.00835	0.00334
2,4-D	ND		0.00835	0.00334
2,4,5-TP (Silvex)	ND		0.00835	0.00334
2,4,5-T	ND		0.00835	0.00334
2,4-DB	ND		0.00835	0.00334
Dinoseb	ND		0.00835	0.00334

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:33
Operator : JS
Sample : Herb,BLKS150217-07,S,30g,0,5
Misc : NA,02/17/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:59:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	160.2E6	35445507	66.896m	77.619
Spiked Amount	100.000			Recovery	=	66.90%	77.62%
	Target Compounds						

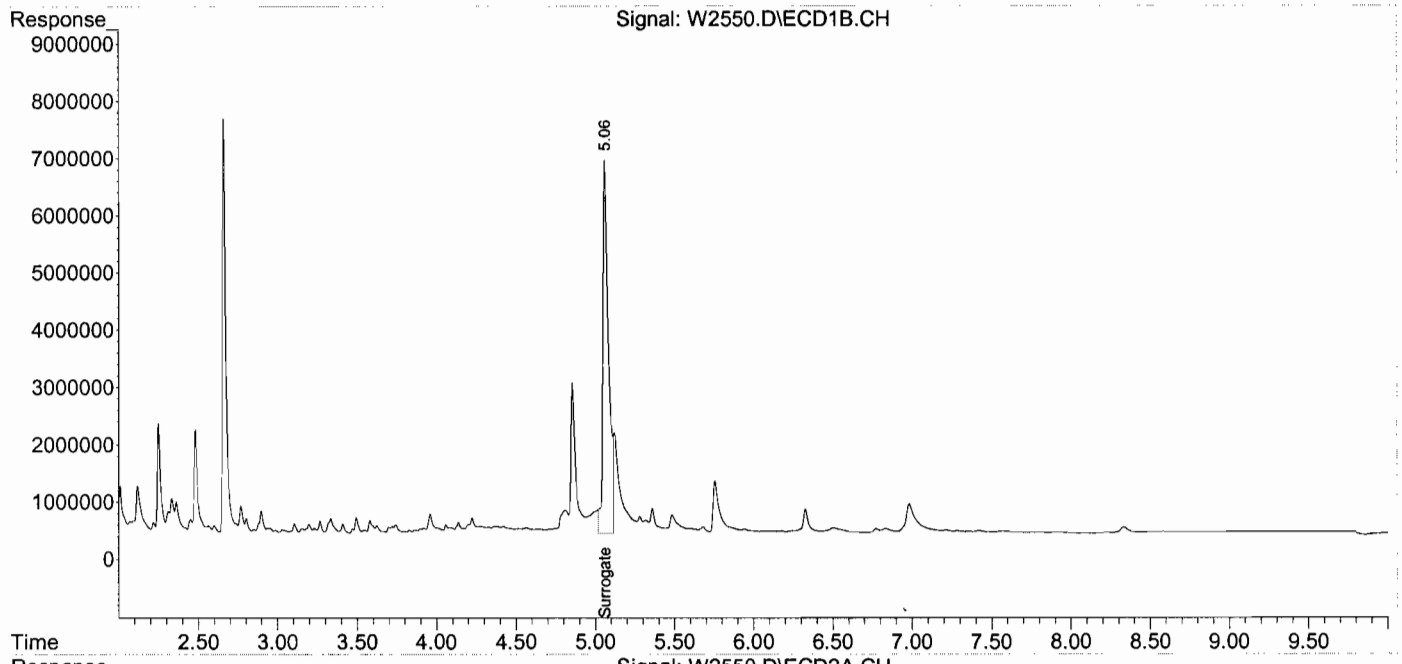
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

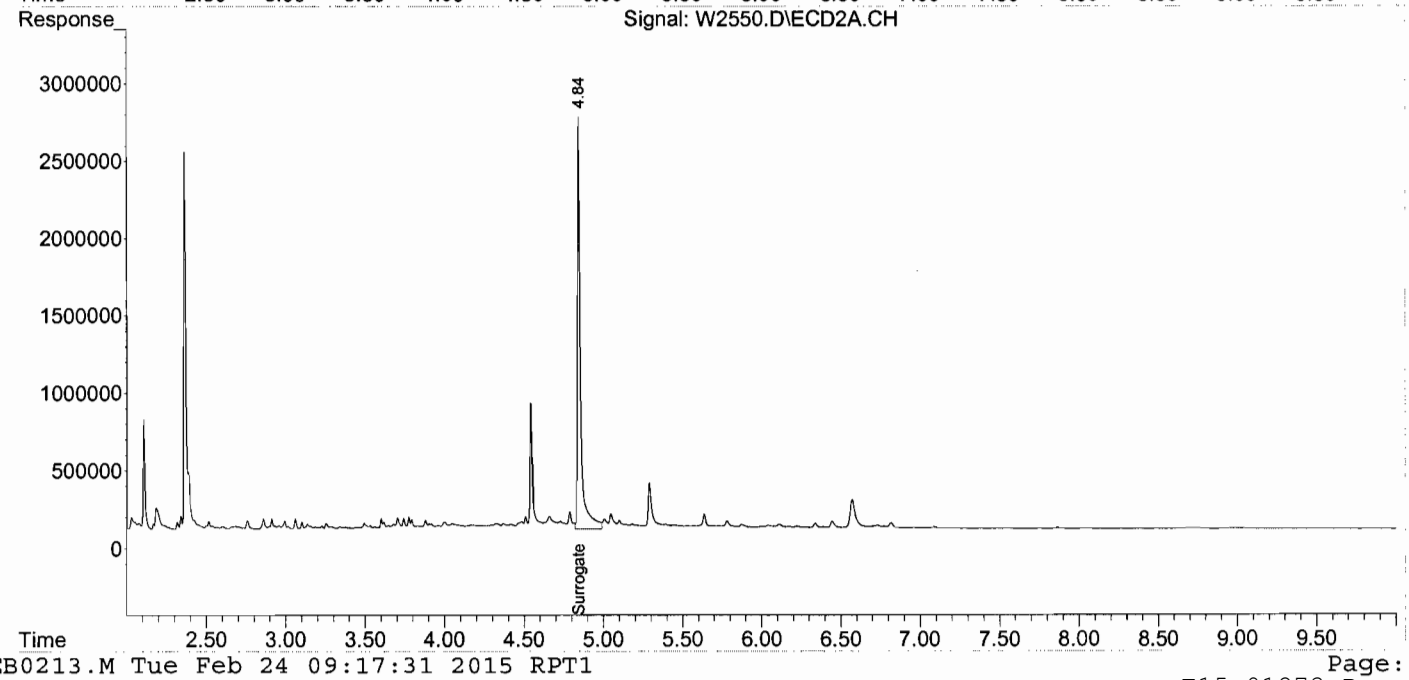
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:33
Operator : JS
Sample : Herb,BLKS150217-07,S,30g,0,5
Misc : NA,02/17/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:59:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: BLKS150220-11
Client ID: Herb
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2562.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.00835	0.00334
Dicamba	ND		0.00835	0.00334
2,4-D	ND		0.00835	0.00334
2,4,5-TP (Silvex)	ND		0.00835	0.00334
2,4,5-T	ND		0.00835	0.00334
2,4-DB	ND		0.00835	0.00334
Dinoseb	ND		0.00835	0.00334

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2562.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 13:59
Operator : JS
Sample : Herb,BLKS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 14:12:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S Surrogate	5.06	4.85	183.0E6	36110691	76.406	79.075
Spiked Amount 100.000			Recovery =		76.41%	79.08%
Target Compounds						

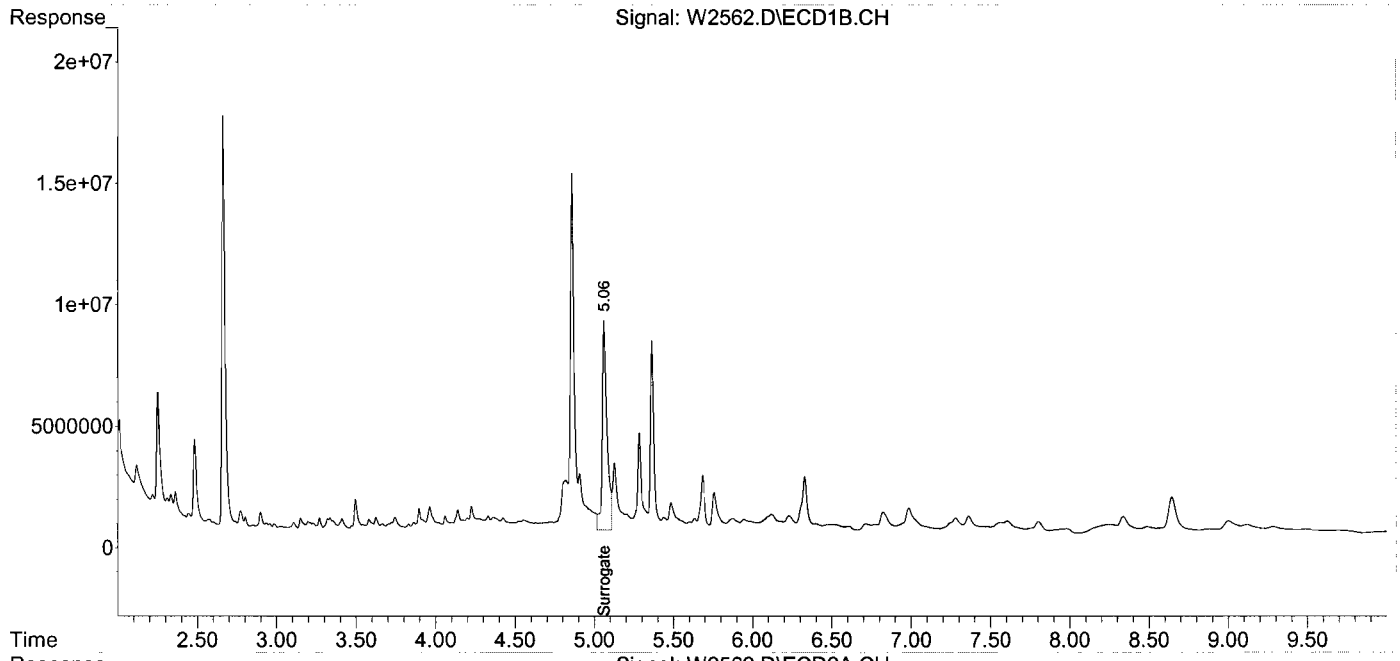
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

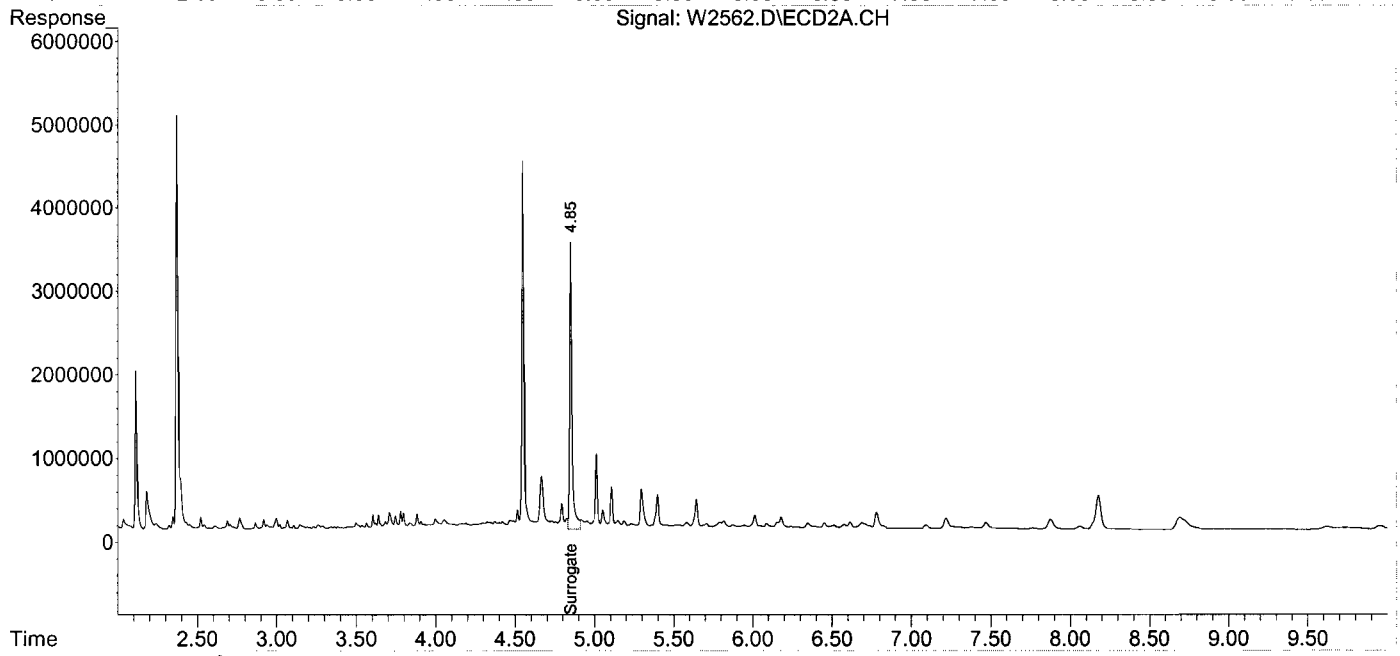
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2562.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 13:59
Operator : JS
Sample : Herb,BLKS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 14:12:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2564.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:44
Operator : JS
Sample : Herb,LCSS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 16:55:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	210.2E6	44894051	87.767	98.309
	Spiked Amount 100.000			Recovery	=	87.77%	98.31%
	Target Compounds						
2) T	Dalapon	2.43	2.08	145.6E6	29420154	163.215	187.207m
3) T	Dicamba	5.16	4.94	396.4E6	78234220	176.045	194.350
7) T	2,4-D	5.67	5.43	120.5E6	25681642	143.104	216.944 #
8) T	2,4,5-TP (Silvex	6.18	5.89	650.7E6	125.6E6	197.180	199.933
9) T	2,4,5-T	6.35	6.11	672.0E6	113.9E6	211.814	211.320
10) T	2,4-DB	6.74	6.43	89582816	18383964	134.783	234.238 #
11) T	Dinoseb	7.76	6.67	267.8E6	52934814	111.655	132.529

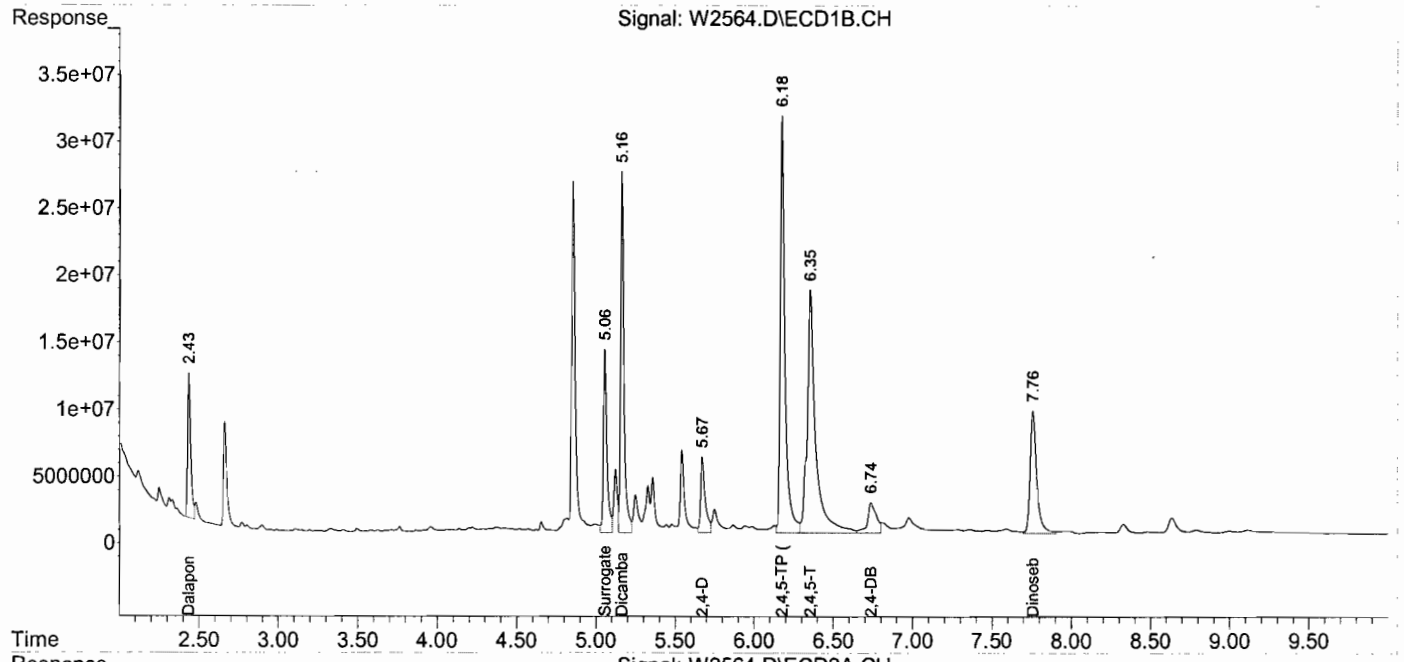
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

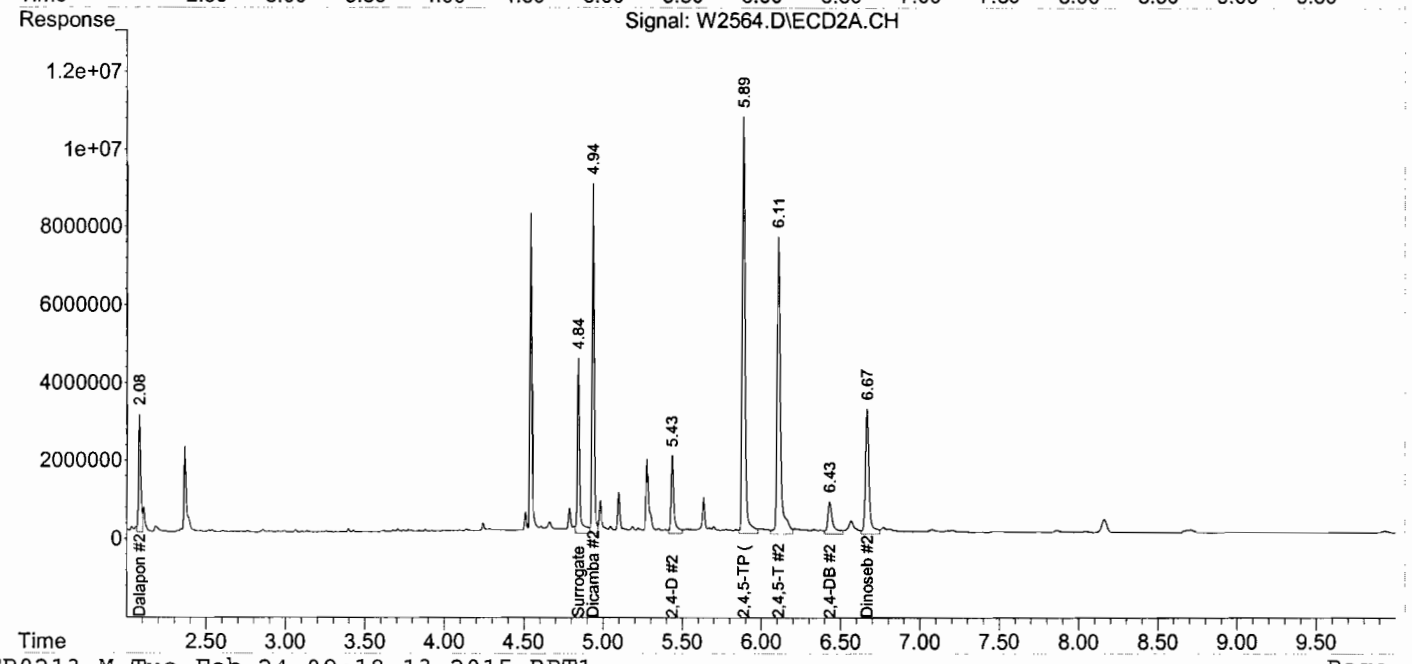
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2564.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:44
Operator : JS
Sample : Herb,LCSS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 16:55:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2552.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:01
Operator : JS
Sample : Herb,01088-007MS,S,15.17g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:42:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	155.9E6	33834230	65.110m	74.090
		Spiked Amount 100.000			Recovery	=	65.11%	74.09%
		Target Compounds						
2)	T	Dalapon	2.43	2.08	128.0E6	24936831	143.540m	158.678m
3)	T	Dicamba	5.16	4.94	301.7E6	64017286	133.991m	159.032
7)	T	2,4-D	5.67	5.44	86291457	20835627	102.439m	176.008 #
8)	T	2,4,5-TP (Silvex	6.18	5.89	488.2E6	102.1E6	147.925m	162.507
9)	T	2,4,5-T	6.36	6.11	477.7E6	95511070	150.564m	177.224
10)	T	2,4-DB	6.74	6.43	73638647	13382489	110.794m	170.512 #
11)	T	Dinoseb	7.76	6.67	223.5E6	44991389	93.192m	112.642

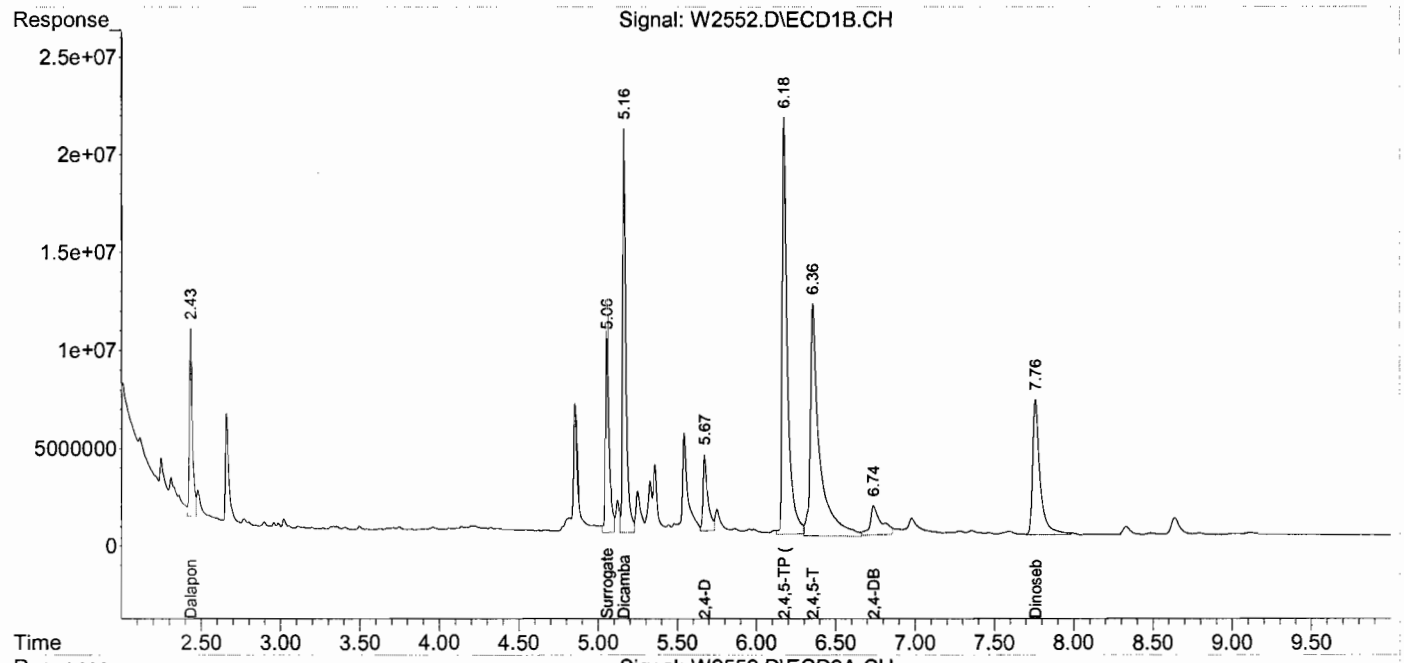
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

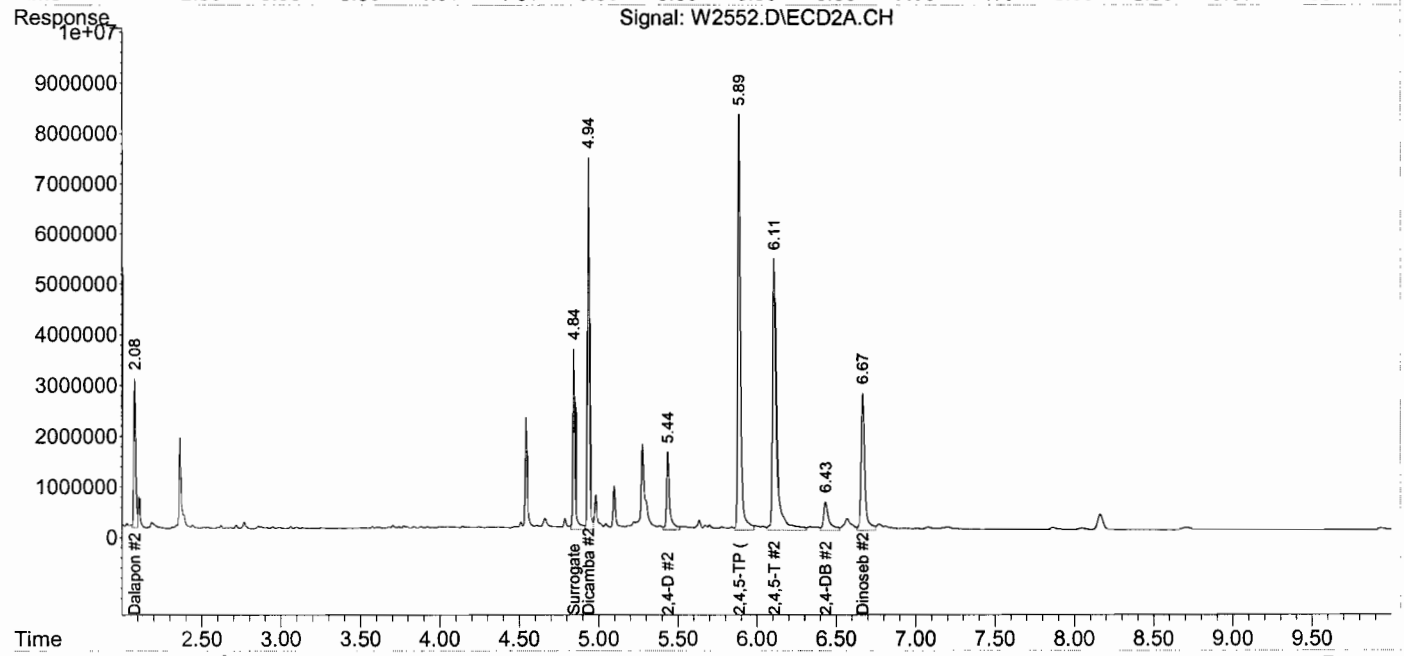
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2552.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:01
Operator : JS
Sample : Herb,01088-007MS,S,15.17g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:42:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2553.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:14
Operator : JS
Sample : Herb,01088-007MSD,S,15.29g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 10:52:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	173.6E6	36661574	72.494	80.282
	Spiked Amount 100.000			Recovery	=	72.49%	80.28%
	Target Compounds						
2) T	Dalapon	2.43	2.08	123.0E6	27485144	137.896	174.894m#
3) T	Dicamba	5.16	4.94	324.0E6	69069007	143.873	171.581
7) T	2,4-D	5.67	5.44	101.8E6	21944582	120.877	185.376 #
8) T	2,4,5-TP (Silvex	6.18	5.89	539.9E6	110.4E6	163.595	175.627
9) T	2,4,5-T	6.36	6.11	500.4E6	99705961	157.733	185.008
10) T	2,4-DB	6.74	6.43	83128500	13843182	125.073m	176.382 #
11) T	Dinoseb	7.76	6.67	174.7E6	32067232	72.857	80.284

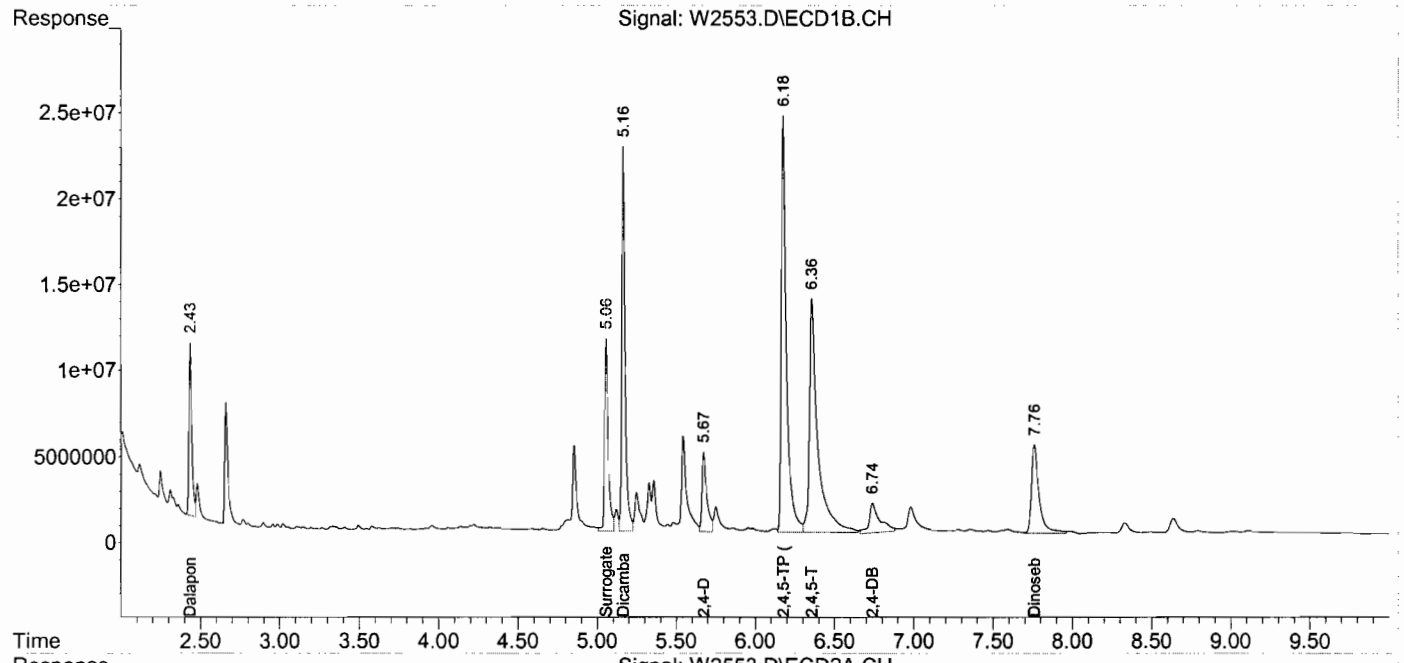
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

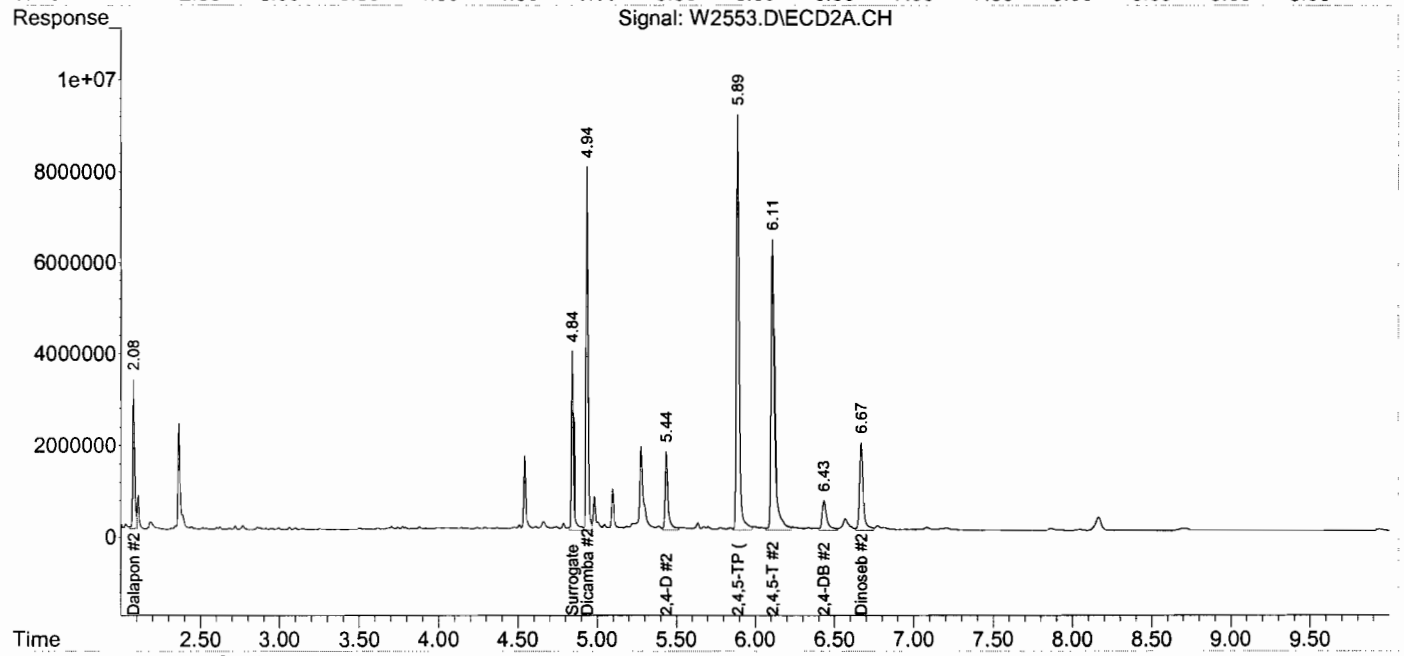
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2553.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:14
Operator : JS
Sample : Herb,01088-007MSD,S,15.29g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 10:52:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Soil)

Extraction Date/Time: 02/17/2015 10:43

Batch ID: **150217-07**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150217-07	Herbicides	30	5	25	1			
LCSS150217-07	Herbicides	30	5	25	1	10		
01088-007MS	Herbicides	15.17	5	25	1	10		R-72
01088-007MSD	Herbicides	15.29	5	25	1	10		R-72

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	#5082
SPK 1	#~~5163~~ 5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01128-007	Herbicides	15.65	5	25	2	12.3	R-72	01088-007MS / 150217-07	
2	01129-007	Herbicides	15.33	5	25	2	10.4	R-72	01088-007MS / 150217-07	
3	01087-007	Herbicides	15.90	5	25	1	12.3	R-72	01088-007MS / 150217-07	
4	01088-007	Herbicides	15.34	5	25	1	9.90	R-72	01088-007MS / 150217-07	
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/17/2015 10:43
Weighed	Archie	02/17/2015 10:59
Surrogated	Archie	02/17/2015 17:23
Filtered	Archie	02/17/2015 17:37
Transferred	Archie	02/17/2015 17:37
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Soil (Sonic))

Extraction Date/Time: 02/20/2015 16:28

Batch ID: **150220-11**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150220-11	Herbicides	30.00	5	25	1			
LCSS150220-11	Herbicides	30.00	5	25	1	10		
01088-007 ~~01273-001~~MS	Herbicides	~~0000~~ 15.17	5	~~0000~~ 25	1	~~0000~~ 10		
01088-007 ~~01273-001~~MSD	Herbicides	~~0000~~ 15.29	5	~~0000~~ 25	1	~~0000~~ 10		

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	IAS#5082
SPK 1	IAS#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	Herbicides	15.50	5	25	4	10.6	RE-EXTRACT BATCH: 150219-05; R-48 01273-001MS / 150220-11		
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/20/2015 16:28
Weighed	Archie	02/20/2015 18:45
Surrogated	Archie	02/20/2015 18:45
Filtered	Archie	02/20/2015 19:05
Transferred	Archie	02/20/2015 19:05
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Herb

DATE	2/13/2015 0:00	**Extra. Batch**	
INSTRUMENT	W		
METHOD	WHEB0213		
SYS METHOD	8151A (eg. 8015B M, 3810)		
ANALYST	Justyna		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2517	HEXANE										
2	1	W2518	ICC_HERB_L5_IAS_5095,400_PPB										
3	2	W2519	ICC_HERB_L4_IAS_5096,250_PPB										
4	3	W2520	ICC_HERB_L3_IAS_5097,200_PPB										
5	4	W2521	ICC_HERB_L2_IAS_5098,100_PPB										
6	5	W2522	ICC_HERB_L1_IAS_5099,50_PPB										
7	6	W2523	ICV_HERB_C_IAS_5101,200_PPB										

LABORATORY CHRONICLE - GC

Herb

DATE 2/18/2015 0:00 **Extra. Batch** 150217-07 BS **Soil**

INSTRUMENT W

METHOD WHEB0213

SYS METHOD 8151A (eg. 8015B M, 3810)

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2548		HEXANE									
2	1	W2549		CCV_HERB_C_IAS_5101,200_PPB		1							
3	2	W2550		BLKS150217-07		1	30	5	S			2/17/15	0
4	3	W2551		LCSS150217-07		1	30	5	S			2/17/15	0
5	4	W2552		01088-007MS		1	15.17	5	S			2/17/15	9.90
6	5	W2553		01088-007MSD		1	15.29	5	S			2/17/15	9.90
7	6	W2554		01128	7	1	15.65	5	S	2/11/15	2/12/15	2/17/15	12.3
8	7	W2555		01129	7	1	15.33	5	S	2/11/15	2/12/15	2/17/15	10.4
9	8	W2556		01087	7	1	15.90	5	S	2/10/15	2/11/15	2/17/15	12.3
10	9	W2557		01088	7	1	15.34	5	S	2/10/15	2/11/15	2/17/15	9.90
11	100	W2558		HEXANE									
12	1	W2559		CCV_HERB_C_IAS_5101,200_PPB		1							

LABORATORY CHRONICLE - GC

Herb

DATE 2/23/2015 0:00 **Extra. Batch** 150220-11 BS **oil (Sonic)**

INSTRUMENT W

METHOD WHEB0213

SYS METHOD 8151A (eg. 8015B M, 3810)

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2560		HEXANE									
2	1	W2561		CCV_HERB_C_IAS_5101,200_PPB		1							
3	6	W2562		BLKS150220-11		1	30.00	5	S			2/20/15	0
4	8	W2563		01273	1	1	15.50	5	S	2/18/15	2/19/15	2/20/15	10.6
5	7	W2564		LCSS150220-11		1	30.00	5	S			2/20/15	0
6	1	W2565		CCV_HERB_C_IAS_5101,200_PPB		1							

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) + 10µl of (32057) ~~+10µl of core~~ → 10ml HEX			2000PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	~~IAS~~ # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

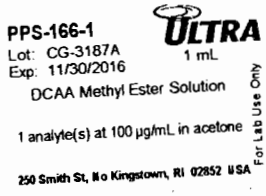
STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
Lot: CG-3187A
Exp: 11/30/2016
ULTRA
1 mL
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR.STD.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# ~~5092~~ SOLL + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/6/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

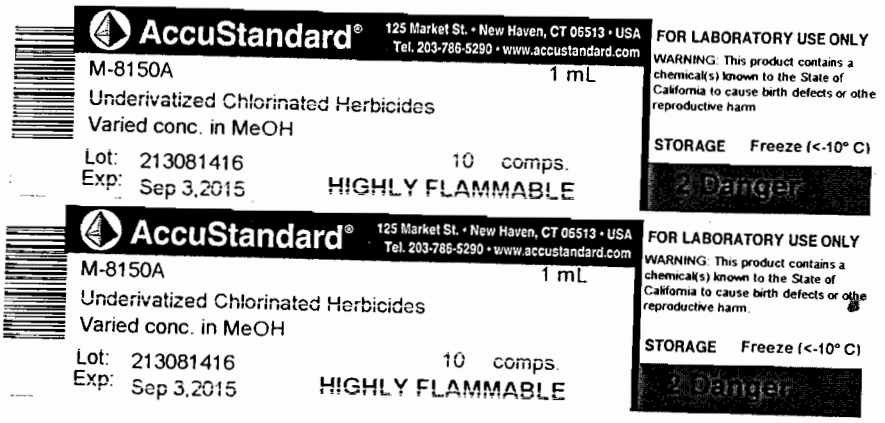
For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS



SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000 µg/mL	Aldrin
1000 µg/mL	alpha-BHC
1000 µg/mL	alpha-Chlordane
1000 µg/mL	beta-BHC
1000 µg/mL	delta-BHC
1000 µg/mL	Dieldrin
1000 µg/mL	Endosulfan I
1000 µg/mL	Endosulfan II
1000 µg/mL	Endosulfan sulfate
1000 µg/mL	Endrin
1000 µg/mL	Endrin aldehyde
1000 µg/mL	Endrin ketone
1000 µg/mL	gamma-BHC
1000 µg/mL	gamma-Chlordane
1000 µg/mL	Heptachlor
1000 µg/mL	Heptachlor epoxide (Isomer B)
1000 µg/mL	Methoxychlor
1000 µg/mL	p,p'-DDD
1000 µg/mL	p,p'-DDE
1000 µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE
Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:	8011 Working Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-8081-5	T1111006012	1000 PPM (mg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

13

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

T1111006012 ACE-8081-S

FREEZER ITEM

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-165-1
Lot: CL-2302
Exp: 07/31/2016

ULTRA
1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, N. Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~1.25 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

S-11086J4-5ML Exp 12/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 1111790

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

S-11092J4-5ML Exp 3/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-

Arochlor 1260 Solution

Lot: 664400

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

PPS-166-1

Lot: CG-3187

Exp: 10/31/2014

ULTRA

1 mL

DCAA Methyl Ester Solution

1 analyte(s) at 100 µg/mL in acetone

250 Smith St, No Kingstown, RI 02852 USA

For Lab Use Only

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog# 32055

This product is photosensitive.

Herbicide Mix #1/ME (Methyl Ester)

200 ug/mL each in Hexane

Lot# A095323 Exp. Date: 05/2020 Store: 10°C or colder

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog# 32057

This product is photosensitive.

Herbicide Mix #2/ME (Methyl Ester)

2000 ug/mL each in Hexane

Lot# A094613 Exp. Date: 04/2020 Store: 10°C or colder

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) Cat # + 8µl of (32057) Cat # ~~+10µl of EASH~~ → 10ml HEX JS			2000 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

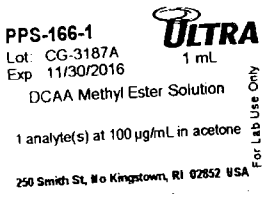
STANDARD IAS#	STANDARD NAME:	PCB LS (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2 PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
Lot: CG-3187A
Exp 11/30/2016
ULTRA
1 mL
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR. STD.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# 5092 ~~5092~~ + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides
Varied conc. in MeOH

Lot: 213081416 10 comps.
Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or othe reproductive harm.

STORAGE Freeze (<-10° C)

2 Danger

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides
Varied conc. in MeOH

Lot: 213081416 10 comps.
Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or othe reproductive harm.

STORAGE Freeze (<-10° C)

2 Danger

SPEX CertiPrep
Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in [Benzene:Hexane:Toluene]

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE
Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:	8011 Working Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-2081-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 Surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

T1111006012 ACE-8081-S

FREEZER ITEM

—WARNING—CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-166-1
Lot: CL-2302
Exp: 07/31/2016

ULTRA 1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, N Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chem Service	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

TCLP
HERBICIDE DATA

TCLP
HERBICIDE QC SUMMARY

HERBICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/24/2015

Client ID	Lab Sample ID	Matrix	DCPA 1 % rec	#	DCPA 2 % rec	#
Herb	BLKA150223-05	AQUEOUS	66		66	
Herb	LCSA150223-05	AQUEOUS	78		74	
Herb	TCLP150219	AQUEOUS	58		72	
GPEC-WC1	E15-01273-001	LEACHATE	15	M	20	M

Surrogate QC Limits	Soil	Aqueous/Leachate
DCPA = 2,4-Dichlorophenylacetic acid	30-150	30-150
	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150223-05
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2569.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
Dalapon	200.0	0.0	136.3	68	
Dicamba	200.0	0.0	151.9	76	
2,4-D	200.0	0.0	118.8	59	
2,4,5-TP (Silvex)	200.0	0.0	164.7	82	
2,4,5-T	200.0	0.0	161.4	81	
2,4-DB	200.0	0.0	110.0	55	
Dinoseb	200.0	0.0	127.5	64	

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01088-007
Date Received: 02/11/2015
Date Extracted: 02/13/2015
Date Analyzed: 02/17/2015
MS Data file: W2529.D
MSD Data file: W2530.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dalapon	200.00	0.0	51.7	26	*	61.3	31		17	
Dicamba	200.00	0.0	49.1	25	*	74.5	37		41	*
2,4-D	200.00	0.0	87.1	44		86.4	43		1	
2,4,5-TP (Silvex)	200.00	0.0	85.2	43		98.8	49		15	
2,4,5-T	200.00	0.0	108.3	54		120.3	60		10	
2,4-DB	200.00	0.0	74.0	37		70.2	35		5	
Dinoseb	200.00	0.0	17.9	9	*	32.6	16	*	58	*

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2526.D	Instrument ID:	GC-W
Date Extracted:	02/13/2015	Matrix:	AQUEOUS
Date Analyzed:	02/17/2015	Time Analyzed:	09:27

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	TCLP150211	02/17/2015	09:41
Herb	LCSA150213-04	02/17/2015	09:54
Herb	01088-007MS	02/17/2015	10:08
Herb	01088-007MSD	02/17/2015	10:22
DS_MH-A_	E15-01087-007	02/17/2015	10:36
DS_DB-A_	E15-01088-007	02/17/2015	10:50

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2568.D	Instrument ID:	GC-W
Date Extracted:	02/23/2015	Matrix:	AQUEOUS
Date Analyzed:	02/24/2015	Time Analyzed:	10:13

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	LCSA150223-05	02/24/2015	10:27
Herb	TCLP150219	02/24/2015	10:41
GPEC-WC1	E15-01273-001	02/24/2015	10:55

HERBICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

DCPA 1 5.06 **DCPA 2** 4.85

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	DCPA 1 RT	#	DCPA 2 RT	#
Herb	BLKA150223-05	02/24/2015	10:13	5.06		4.85	
Herb	LCSA150223-05	02/24/2015	10:27	5.06		4.84	
Herb	TCLP150219	02/24/2015	10:41	5.06		4.84	
GPEC-WC1	E15-01273-001	02/24/2015	10:55	5.06		4.84	

Surrogate QC Limits

DCPA = 2,4-Dichlorophenylacetic acid (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

TCLP
HERBICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2571.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:55
Operator : JS
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-05,02/23/15,02/19/15,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 11:24:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S Surrogate	5.06	4.84	34718939	9068756	14.496m	19.859 #
Spiked Amount 100.000			Recovery	=	14.50%	19.86%
Target Compounds						

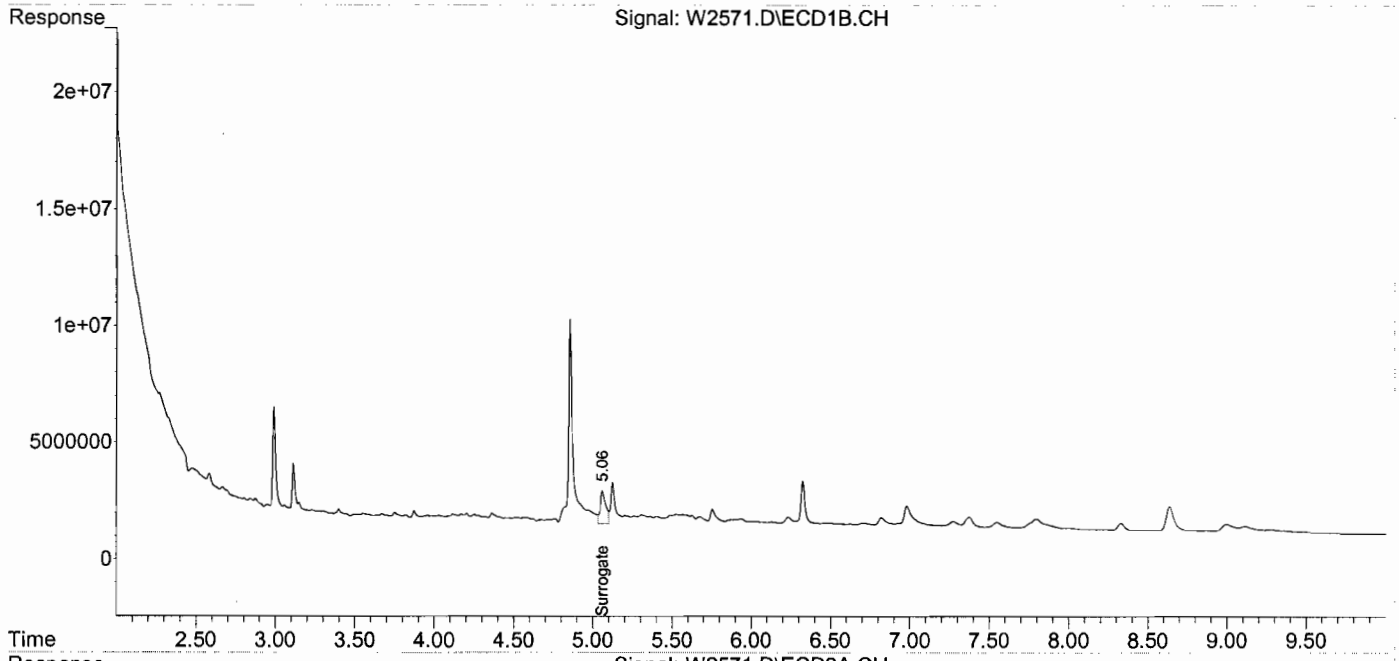
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

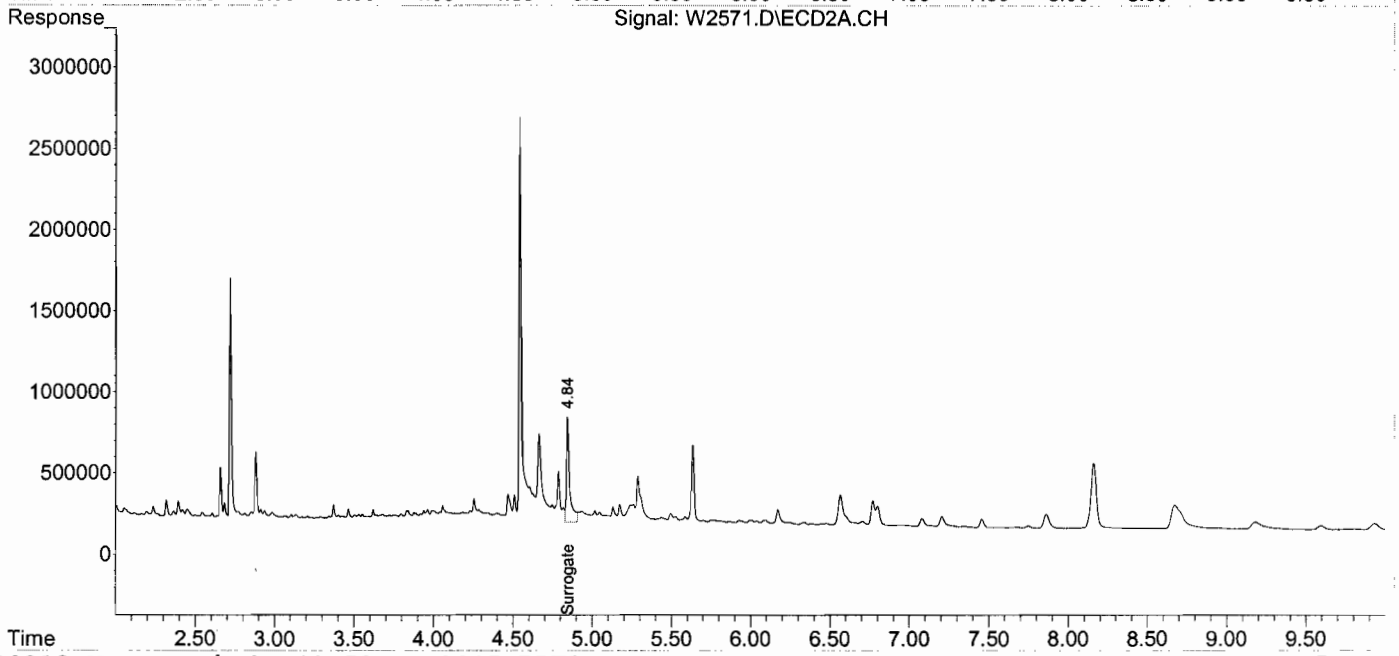
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2571.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:55
Operator : JS
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-05,02/23/15,02/19/15,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 11:24:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
HERBICIDE STANDARDS

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 Instrument ID: GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.45	2.45	2.45	2.45	2.45	2.45	2.38	2.52
Dicamba	5.17	5.17	5.17	5.17	5.17	5.17	5.10	5.24
2,4-D	5.68	5.68	5.68	5.68	5.67	5.68	5.60	5.76
2,4,5-TP (Silvex)	6.18	6.18	6.18	6.18	6.18	6.18	6.09	6.27
2,4,5-T	6.37	6.36	6.36	6.36	6.36	6.36	6.27	6.45
2,4-DB	6.75	6.75	6.75	6.74	6.74	6.75	6.66	6.84
Dinoseb	7.76	7.76	7.76	7.76	7.76	7.76	7.67	7.85

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.10	2.10	2.10	2.10	2.10	2.10	2.03	2.17
Dicamba	4.94	4.94	4.94	4.94	4.94	4.94	4.87	5.01
2,4-D	5.44	5.44	5.44	5.44	5.44	5.44	5.36	5.52
2,4,5-TP (Silvex)	5.89	5.89	5.89	5.89	5.89	5.89	5.80	5.98
2,4,5-T	6.11	6.11	6.11	6.11	6.11	6.11	6.02	6.20
2,4-DB	6.44	6.44	6.43	6.43	6.43	6.44	6.35	6.53
Dinoseb	6.67	6.67	6.67	6.67	6.67	6.67	6.58	6.76

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	903207	875903	896803	952818	830288	891804	4.99
Dicamba	2414762	2144372	2181960	2375414	2142152	2251732	5.89
2,4-D	1030492	895263	777527	831600	676964	842369	15.69
Silvex	3142754	3193771	3290176	3665519	3207793	3300003	6.40
2,4,5-T	3329848	3179782	3105259	3374720	2873510	3172624	6.30
2,4-DB	673628	691239	665854	714327	578164	664642	7.79
Dinoseb	2645710	2307269	2293579	2550211	2193909	2398136	7.95

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	152894	151228	159265	171230	151149	157153	5.44
Dicamba	370790	390680	405277	447236	398737	402544	6.99
2,4-D	116908	127719	116341	123187	107739	118379	6.40
Silvex	580383	613234	633347	694311	620480	628351	6.64
2,4,5-T	508107	525218	543977	589855	527488	538929	5.78
2,4-DB	80559	78679	80096	80710	72375	78484	4.47
Dinoseb	385779	371992	406005	438700	394625	399420	6.32

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	463.8E6	88855081	193.644	194.575
		Spiked Amount 100.000			Recovery	=	193.64%	194.57%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	332.1E6	60459496	372.408	393.905m
3)	T	Dicamba	5.17	4.94	856.9E6	159.5E6	380.534	396.217
7)	T	2,4-D	5.67	5.44	270.8E6	43095683	321.457	364.048
8)	T	2,4,5-TP (Silvex	6.18	5.89	1283.1E6	248.2E6	388.823	394.989
9)	T	2,4,5-T	6.36	6.11	1149.4E6	211.0E6	362.288	391.508
10)	T	2,4-DB	6.74	6.43	231.3E6	28949933	354.335	368.864
11)	T	Dinoseb	7.76	6.67	877.6E6	157.9E6	365.936	395.198

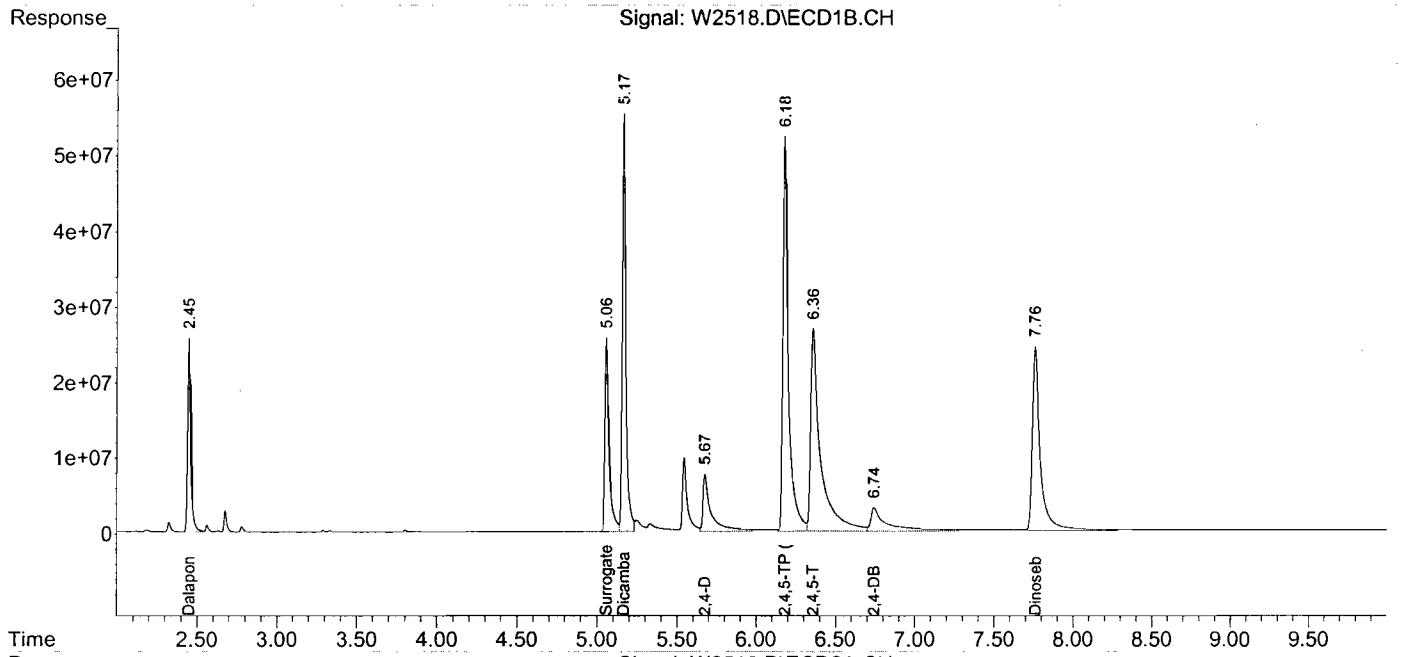
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

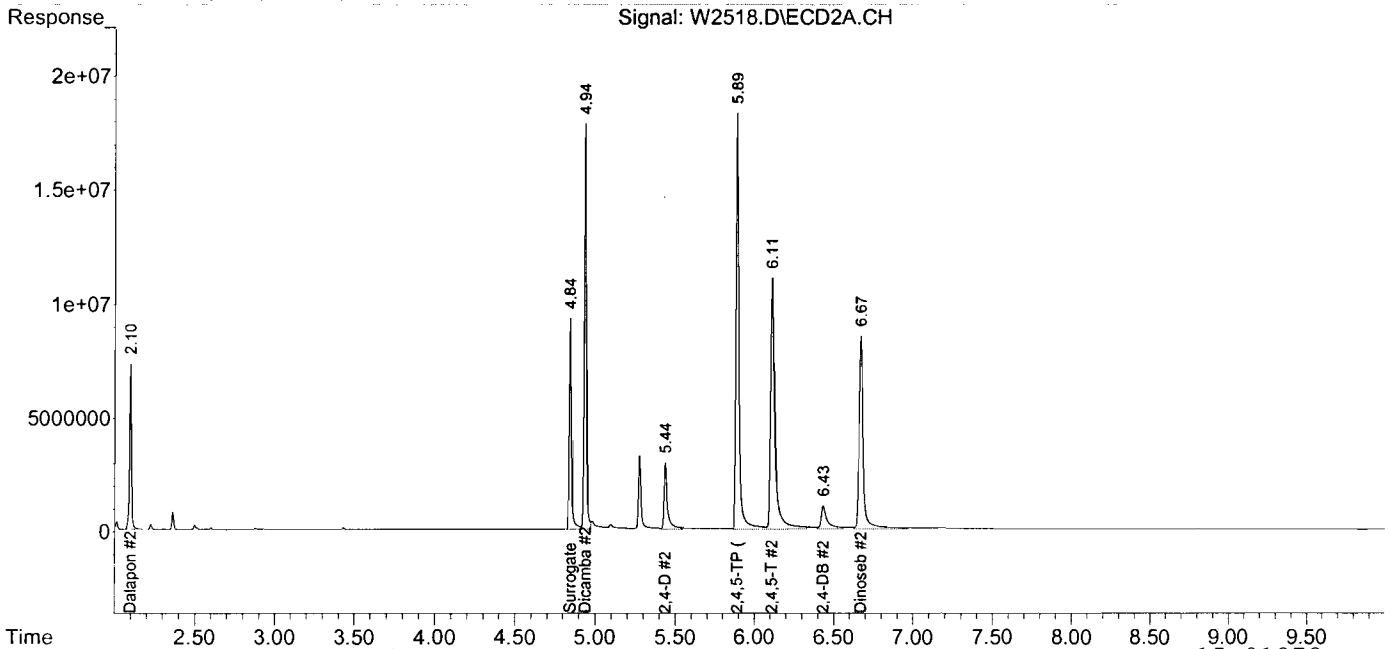
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	323.7E6	62261589	135.161	136.341
	Spiked Amount 100.000			Recovery	=	135.16%	136.34%
	Target Compounds						
2) T	Dalapon	2.45	2.10	238.2E6	42807415	267.104	278.898m
3) T	Dicamba	5.17	4.94	593.9E6	111.8E6	263.732	277.756
7) T	2,4-D	5.68	5.44	207.9E6	30796847	246.804	260.155
8) T	2,4,5-TP (Silvex	6.18	5.89	916.4E6	173.6E6	277.691	276.243
9) T	2,4,5-T	6.36	6.11	843.7E6	147.5E6	265.925	273.624
10) T	2,4-DB	6.74	6.43	178.6E6	20177583	273.615	257.092
11) T	Dinoseb	7.76	6.67	637.6E6	109.7E6	265.853	274.586

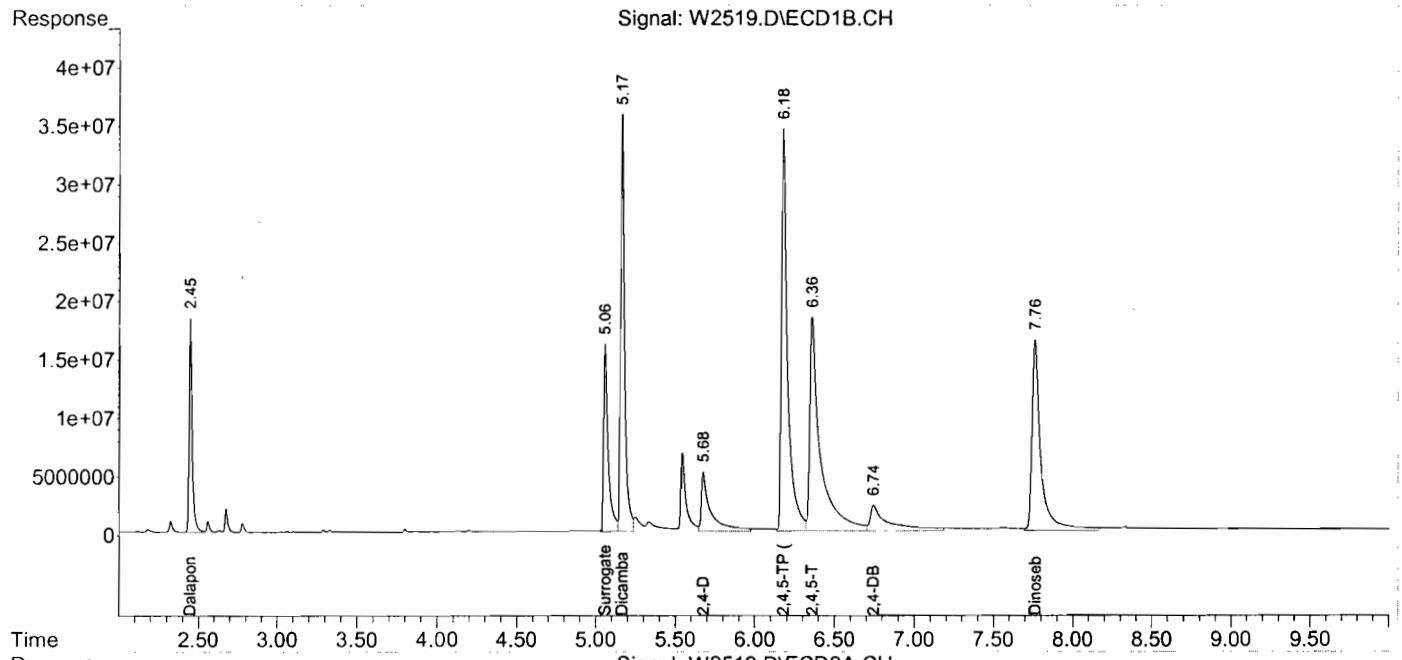
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

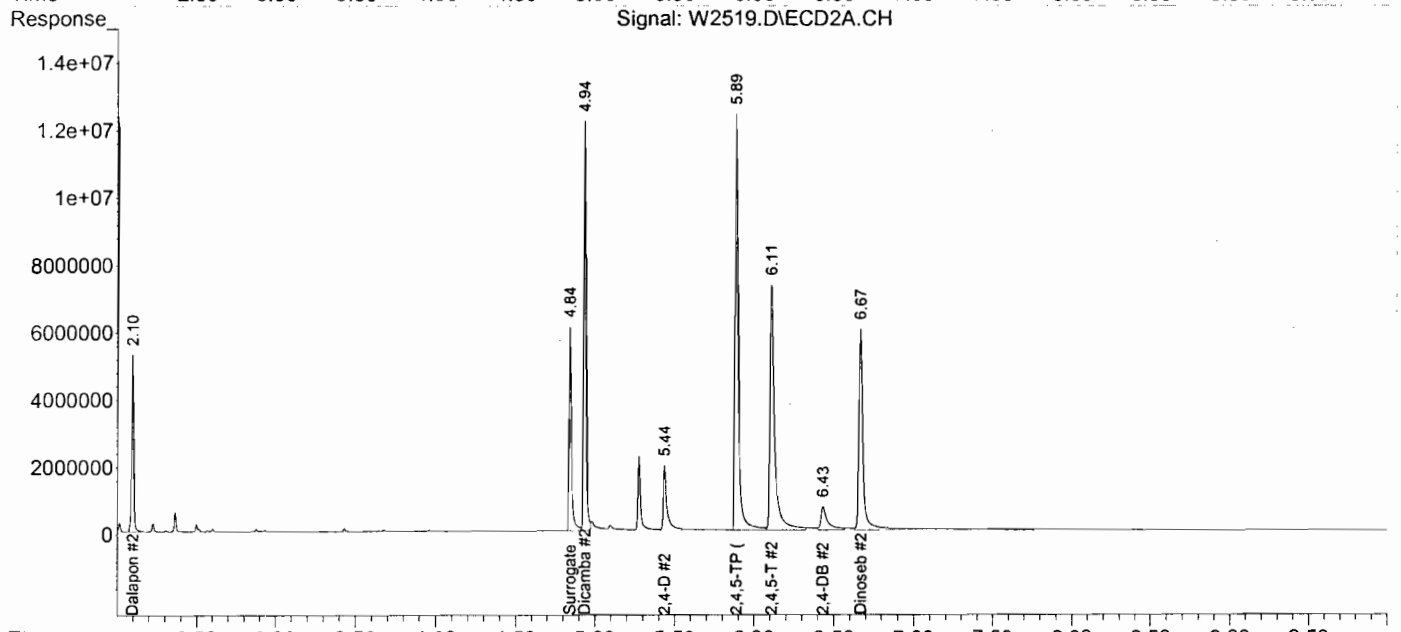
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	240.9E6	45325512	100.565	99.254
		Spiked Amount 100.000			Recovery	=	100.57%	99.25%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	179.4E6	31853010	201.121	207.528m
3)	T	Dicamba	5.17	4.94	436.4E6	81055369	193.803	201.358
7)	T	2,4-D	5.68	5.44	155.5E6	23268227	184.605	196.557
8)	T	2,4,5-TP (Silvex	6.18	5.89	658.0E6	126.7E6	199.404	201.590
9)	T	2,4,5-T	6.36	6.11	621.1E6	108.8E6	195.753	201.873
10)	T	2,4-DB	6.75	6.43	133.2E6	16019235	204.038	204.108
11)	T	Dinoseb	7.76	6.67	458.7E6	81201099	191.280	203.297

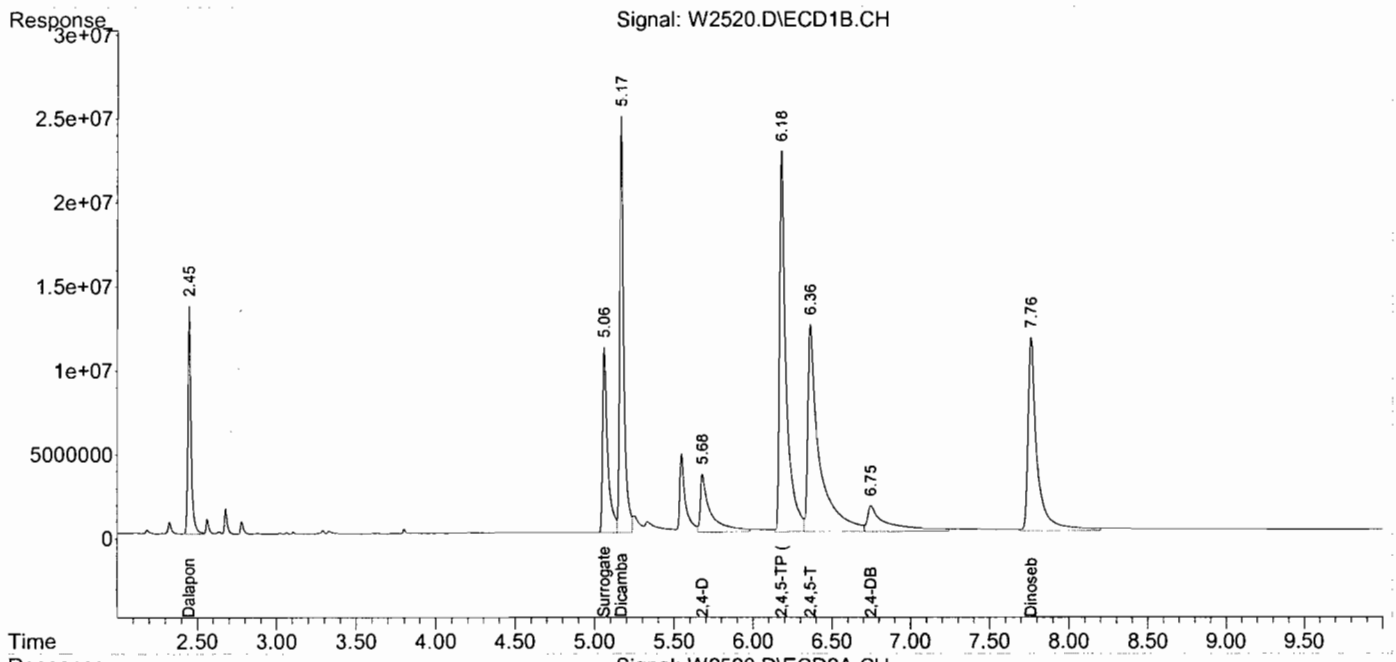
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

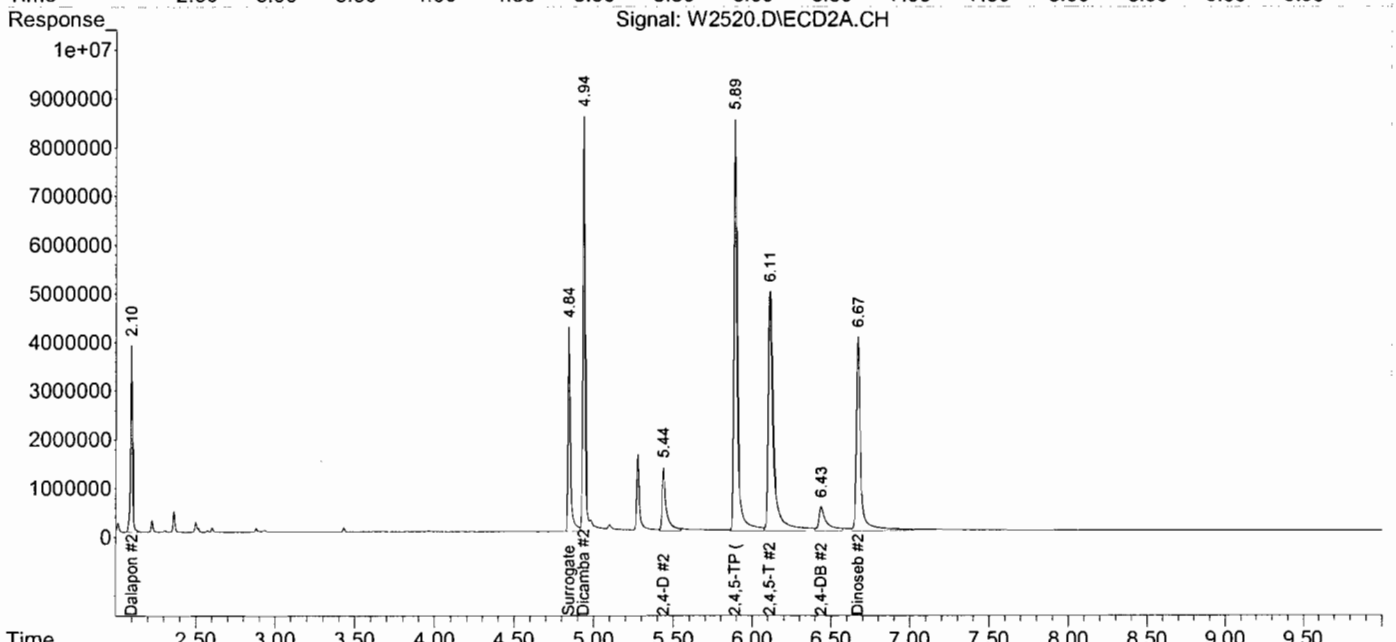
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	118.8E6	22486106	49.600	49.240
	Spiked Amount 100.000			Recovery	=	49.60%	49.24%
	Target Compounds						
2) T	Dalapon	2.45	2.10	87590319	15122838	98.217	98.528m
3) T	Dicamba	5.17	4.94	214.4E6	39067980	95.232	97.053
7) T	2,4-D	5.68	5.44	89526306	12771920	106.279	107.890
8) T	2,4,5-TP (Silvex	6.18	5.89	319.4E6	61323350	96.781	97.594
9) T	2,4,5-T	6.36	6.11	318.0E6	52521844	100.226	97.456
10) T	2,4-DB	6.75	6.44	69123888	7867947	105.909m	100.249
11) T	Dinoseb	7.76	6.67	230.7E6	37199216	96.211	93.133

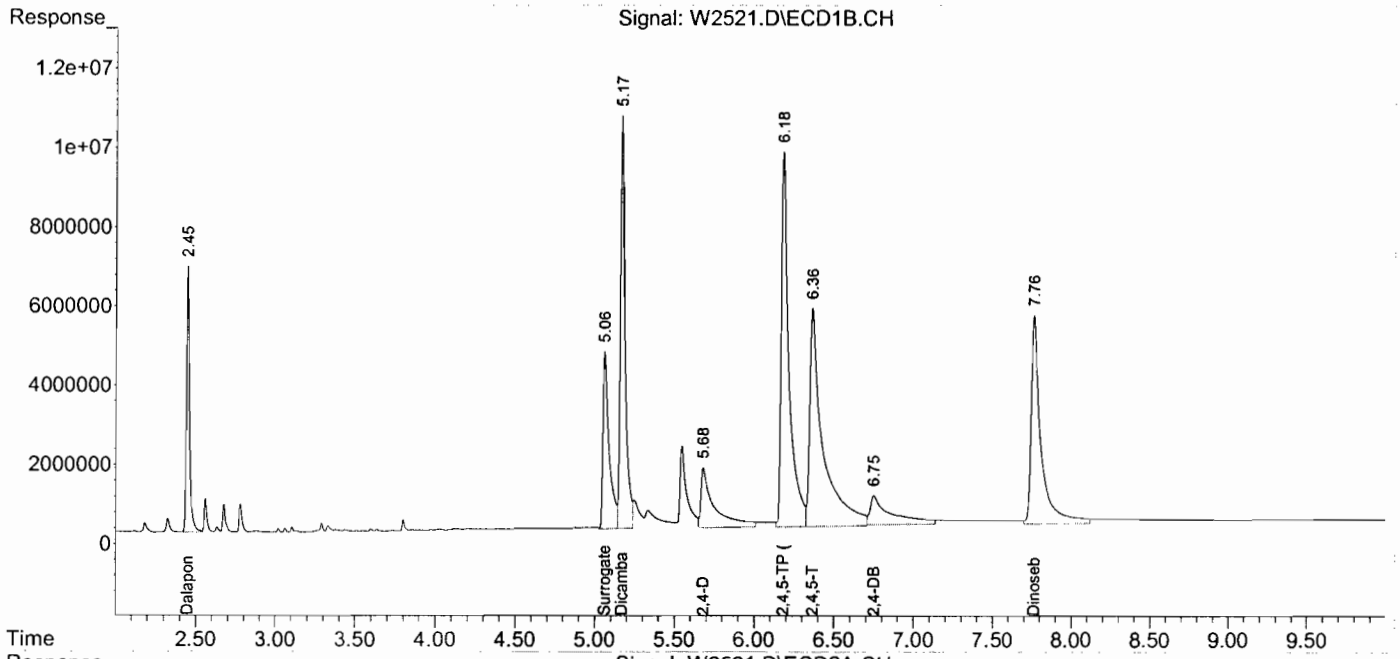
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

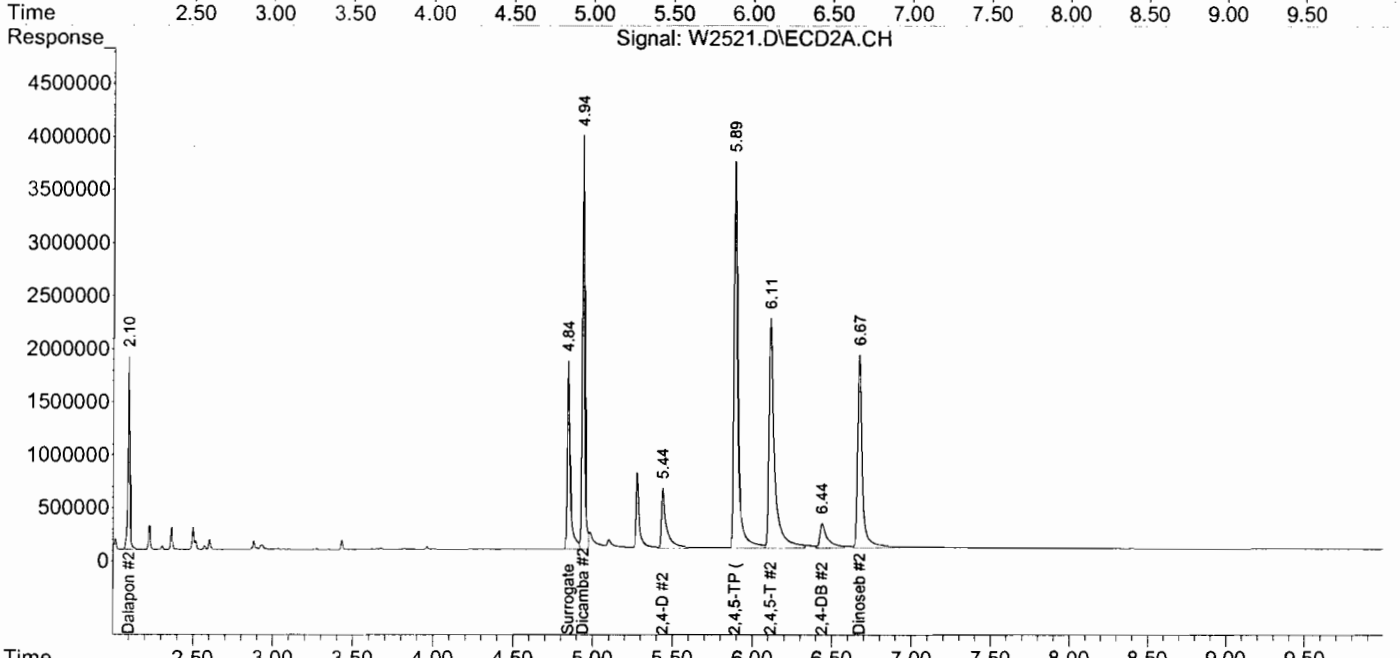
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	57052341	10949160	23.821	23.976
	Spiked Amount 100.000			Recovery	=	23.82%	23.98%
	Target Compounds						
2) T	Dalapon	2.45	2.10	45160353	7644706	50.639	49.807m
3) T	Dicamba	5.17	4.94	120.7E6	18539504	53.620	46.056
7) T	2,4-D	5.68	5.44	51524595	5845395	61.166	49.379
8) T	2,4,5-TP (Silvex	6.18	5.89	157.1E6	29019174	47.617	46.183
9) T	2,4,5-T	6.37	6.11	166.5E6	25405343	52.478	47.140
10) T	2,4-DB	6.75	6.44	33681400	4027968	51.605m	51.322
11) T	Dinoseb	7.76	6.67	132.3E6	19288965	55.162	48.292

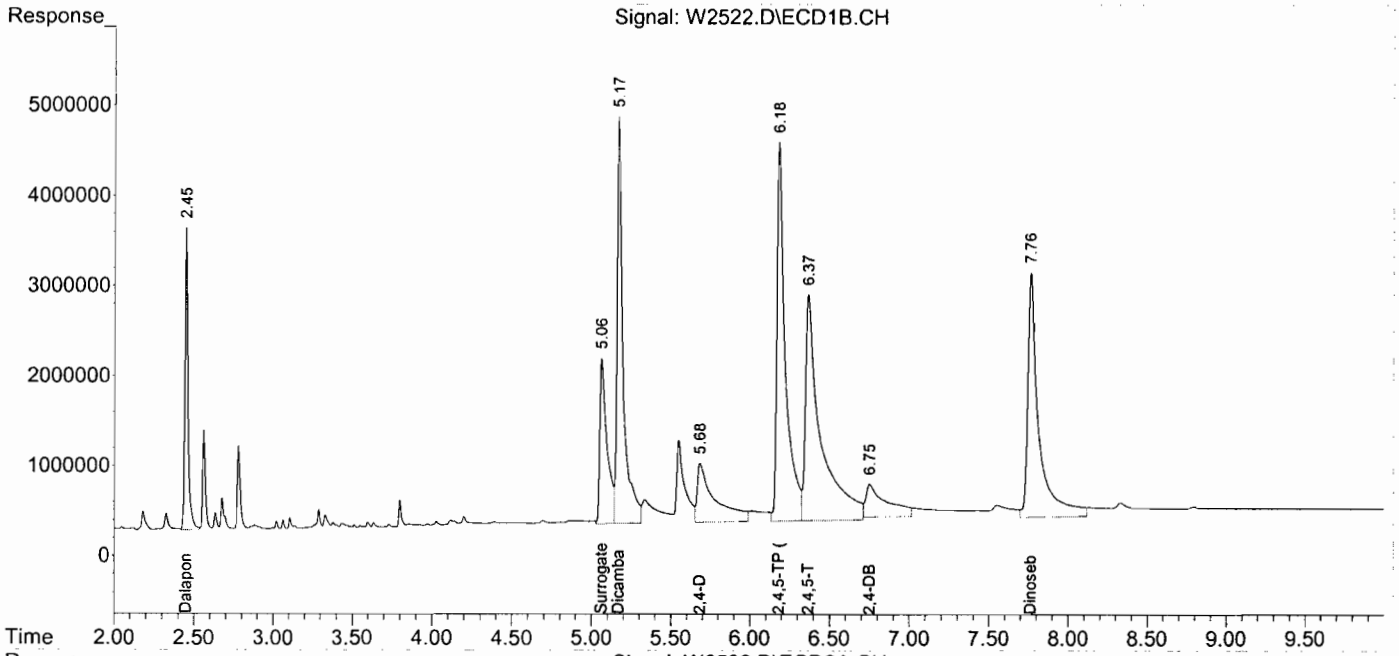
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

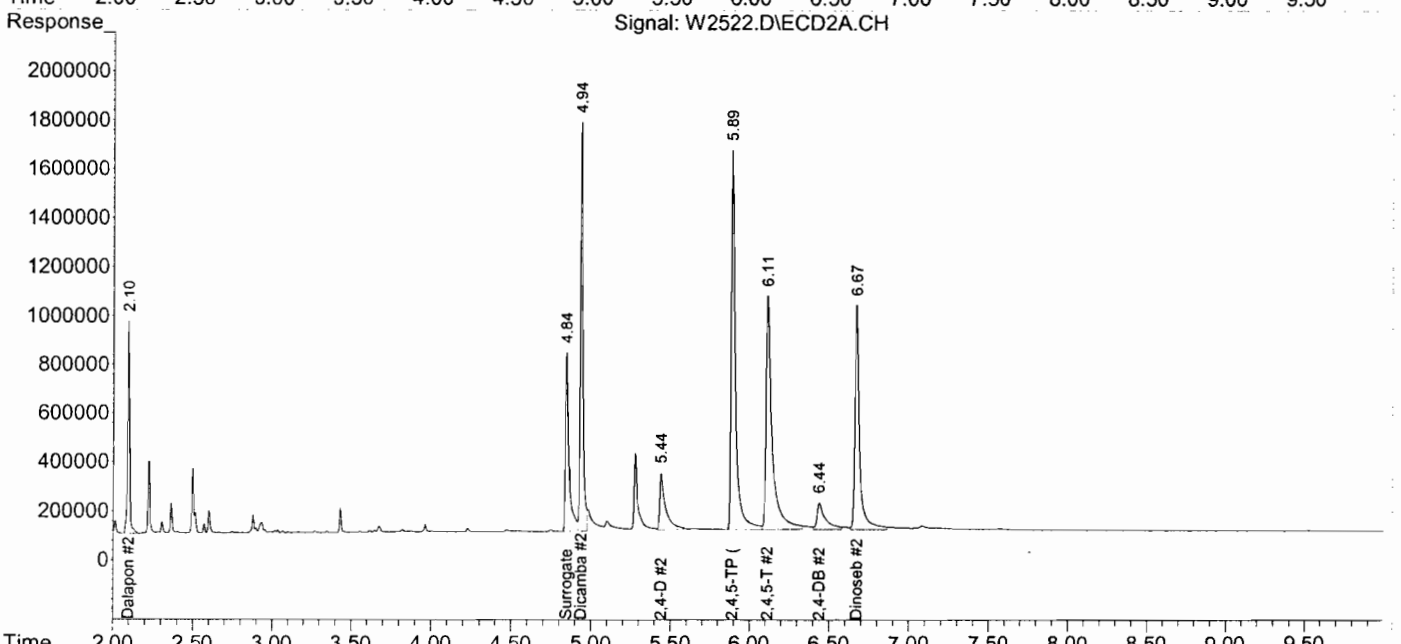
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/13/2015 **Instrument ID:** GC-W

Data File: W2523.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	885073	0.75
Dicamba	5.17	5.10	5.24	2251732	2164694	3.87
2,4-D	5.68	5.60	5.76	842369	775793	7.90
Silvex	6.18	6.09	6.27	3300003	3181521	3.59
2,4,5-T	6.36	6.27	6.45	3172624	3069412	3.25
2,4-DB	6.75	6.66	6.84	664642	660089	0.69
Dinoseb	7.76	7.67	7.85	2398136	2351998	1.92

GC Column (2nd): RTX-CLP2

Data File: W2523.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	155435	1.09
Dicamba	4.94	4.87	5.01	402544	398337	1.05
2,4-D	5.44	5.36	5.52	118379	113194	4.38
Silvex	5.89	5.80	5.98	628351	619519	1.41
2,4,5-T	6.11	6.02	6.20	538929	540251	0.25
2,4-DB	6.44	6.35	6.53	78484	76061	3.09
Dinoseb	6.67	6.58	6.76	399420	407471	2.02

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/17/2015 **Instrument ID:** GC-W

Data File: W2525.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	897407	0.63
Dicamba	5.17	5.10	5.24	2251732	2213478	1.70
2,4-D	5.68	5.60	5.76	842369	809416	3.91
Silvex	6.18	6.09	6.27	3300003	3382992	2.51
2,4,5-T	6.36	6.27	6.45	3172624	3128596	1.39
2,4-DB	6.75	6.66	6.84	664642	688537	3.60
Dinoseb	7.76	7.67	7.85	2398136	2377675	0.85

GC Column (2nd): RTX-CLP2

Data File: W2525.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	153015	2.63
Dicamba	4.94	4.87	5.01	402544	416289	3.41
2,4-D	5.44	5.36	5.52	118379	114055	3.65
Silvex	5.89	5.80	5.98	628351	638345	1.59
2,4,5-T	6.11	6.02	6.20	538929	527755	2.07
2,4-DB	6.44	6.35	6.53	78484	79853	1.74
Dinoseb	6.67	6.58	6.76	399420	390730	2.18

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/17/2015 **Instrument ID:** GC-W

Data File: W2537.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	733283	17.78
Dicamba	5.17	5.10	5.24	2251732	1871661	16.88
2,4-D	5.68	5.60	5.76	842369	678117	19.50
Silvex	6.18	6.09	6.27	3300003	2818232	14.60
2,4,5-T	6.36	6.27	6.45	3172624	2617136	17.51
2,4-DB	6.75	6.66	6.84	664642	620825	6.59
Dinoseb	7.76	7.67	7.85	2398136	2004814	16.40

GC Column (2nd): RTX-CLP2

Data File: W2537.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	169170	7.65
Dicamba	4.94	4.87	5.01	402544	440335	9.39
2,4-D	5.44	5.36	5.52	118379	120121	1.47
Silvex	5.89	5.80	5.98	628351	675123	7.44
2,4,5-T	6.11	6.02	6.20	538929	570131	5.79
2,4-DB	6.44	6.35	6.53	78484	77111	1.75
Dinoseb	6.67	6.58	6.76	399420	399620	0.05

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/24/2015 **Instrument ID:** GC-W

Data File: W2567.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	758346	14.96
Dicamba	5.17	5.10	5.24	2251732	2279182	1.22
2,4-D	5.67	5.60	5.76	842369	815700	3.17
Silvex	6.18	6.09	6.27	3300003	3474974	5.30
2,4,5-T	6.36	6.27	6.45	3172624	3207108	1.09
2,4-DB	6.74	6.66	6.84	664642	730029	9.84
Dinoseb	7.76	7.67	7.85	2398136	2376985	0.88

GC Column (2nd): RTX-CLP2

Data File: W2567.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	130253	17.12
Dicamba	4.94	4.87	5.01	402544	417561	3.73
2,4-D	5.44	5.36	5.52	118379	118324	0.05
Silvex	5.89	5.80	5.98	628351	664996	5.83
2,4,5-T	6.11	6.02	6.20	538929	570348	5.83
2,4-DB	6.43	6.35	6.53	78484	83385	6.24
Dinoseb	6.67	6.58	6.76	399420	427585	7.05

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/24/2015 **Instrument ID:** GC-W

Data File: W2574.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	892618	0.09
Dicamba	5.17	5.10	5.24	2251732	2266514	0.66
2,4-D	5.68	5.60	5.76	842369	748681	11.12
Silvex	6.18	6.09	6.27	3300003	3382757	2.51
2,4,5-T	6.36	6.27	6.45	3172624	3064715	3.40
2,4-DB	6.74	6.66	6.84	664642	632916	4.77
Dinoseb	7.76	7.67	7.85	2398136	2017352	15.88

GC Column (2nd): RTX-CLP2

Data File: W2574.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.09	2.03	2.17	157153	173188	10.20
Dicamba	4.94	4.87	5.01	402544	464448	15.38
2,4-D	5.44	5.36	5.52	118379	129757	9.61
Silvex	5.89	5.80	5.98	628351	731245	16.38
2,4,5-T	6.11	6.02	6.20	538929	618883	14.84
2,4-DB	6.43	6.35	6.53	78484	89158	13.60
Dinoseb	6.67	6.58	6.76	399420	396380	0.76

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	238.5E6	44438391	99.589	97.311
	Spiked Amount 100.000			Recovery	=	99.59%	97.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	177.0E6	31087017	198.491	197.813
3) T	Dicamba	5.17	4.94	432.9E6	79667336	192.269	197.910
7) T	2,4-D	5.68	5.44	155.2E6	22638862	184.193	191.241
8) T	2,4,5-TP (Silvex	6.18	5.89	636.3E6	123.9E6	192.819	197.189
9) T	2,4,5-T	6.36	6.11	613.9E6	108.1E6	193.494	200.491
10) T	2,4-DB	6.75	6.44	132.0E6	15212252	198.630	193.826
11) T	Dinoseb	7.76	6.67	470.4E6	81494177	196.152	204.031

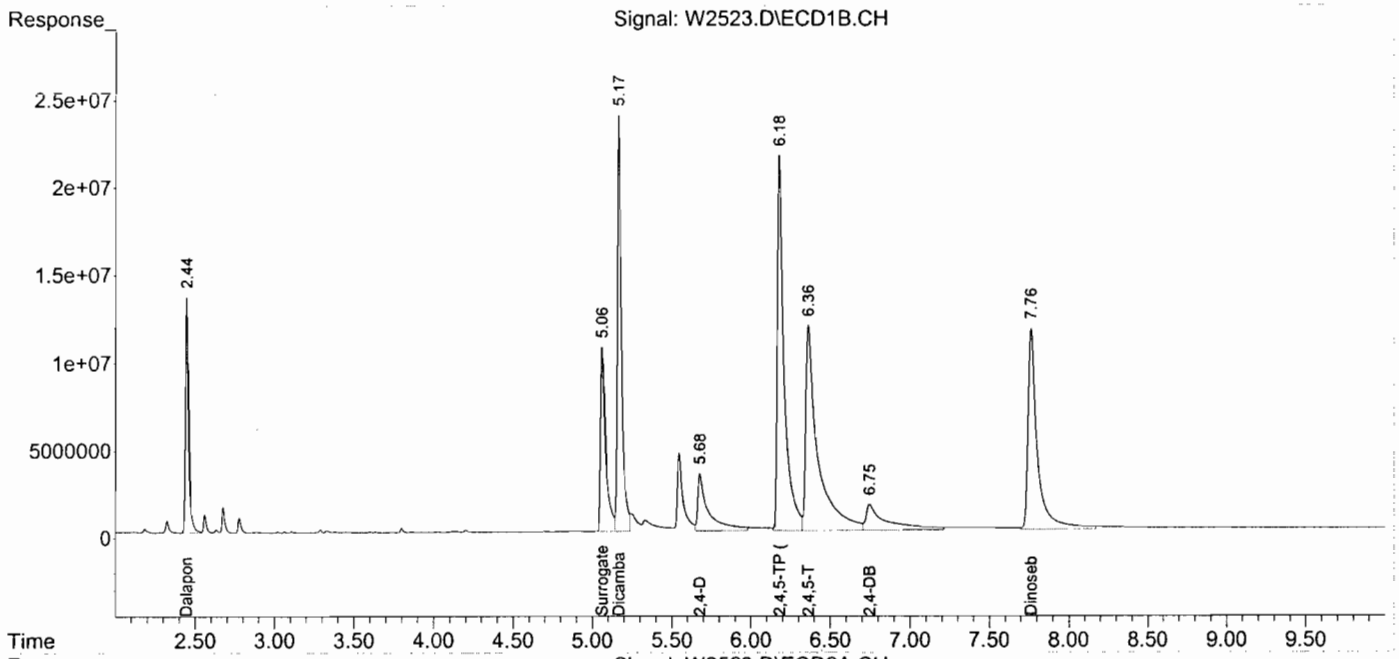
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

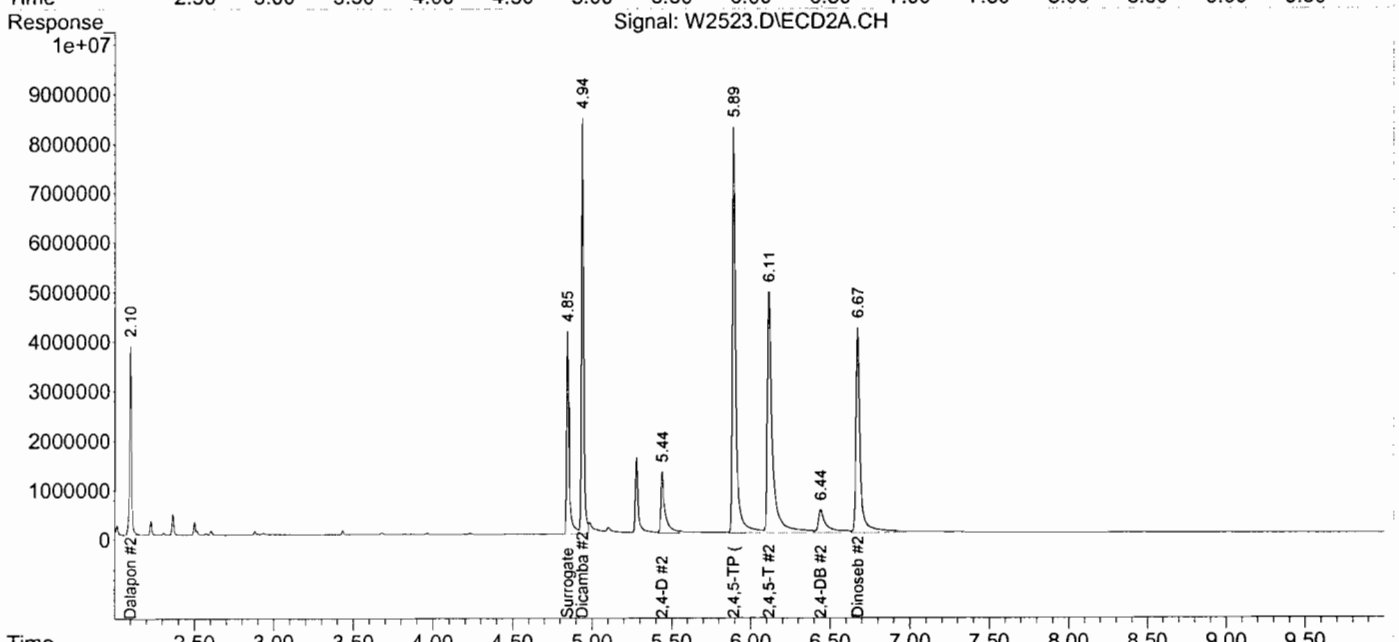
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2525.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:00
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 09:11:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	245.1E6	45709987	102.317	100.096
	Spiked Amount 100.000			Recovery	=	102.32%	100.10%
	Target Compounds						
2) T	Dalapon	2.45	2.10	179.5E6	30603040	201.257	194.734
3) T	Dicamba	5.17	4.94	442.7E6	83257725	196.602	206.829
7) T	2,4-D	5.68	5.44	161.9E6	22811025	192.176	192.695
8) T	2,4,5-TP (Silvex	6.18	5.89	676.6E6	127.7E6	205.030	203.181
9) T	2,4,5-T	6.36	6.11	625.7E6	105.6E6	197.225	195.853
10) T	2,4-DB	6.75	6.44	137.7E6	15970549	207.190	203.488
11) T	Dinoseb	7.76	6.67	475.5E6	78146000	198.294	195.648

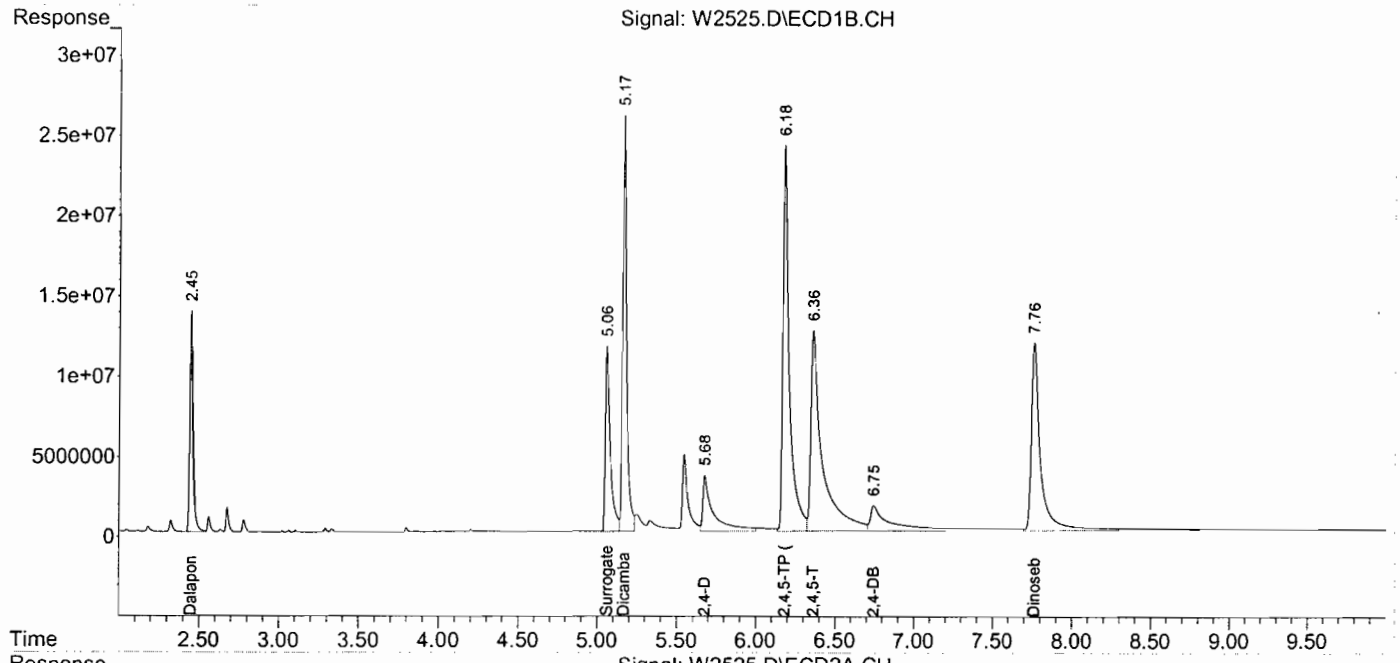
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

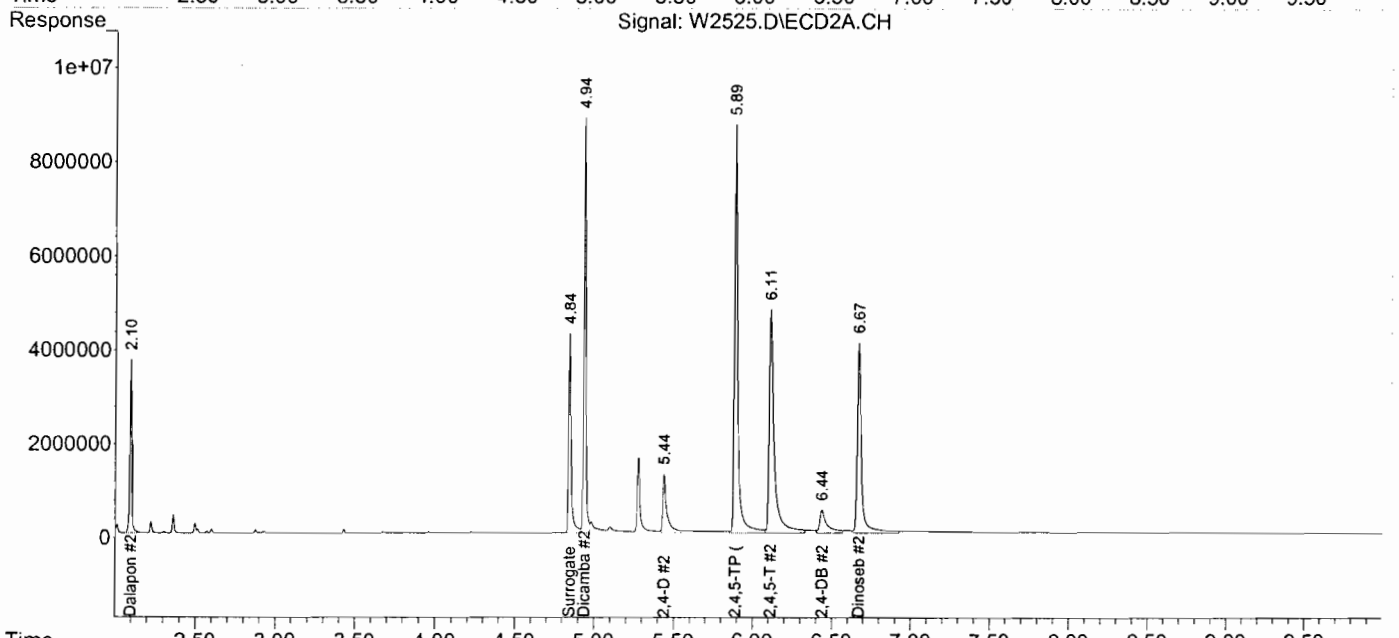
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2525.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:00
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 09:11:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 13:15
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 13:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	208.4E6	49293556	87.012	107.943
	Spiked Amount 100.000			Recovery =		87.01%	107.94%
	Target Compounds						
2) T	Dalapon	2.45	2.10	146.7E6	33834026	164.449	215.293m#
3) T	Dicamba	5.17	4.94	374.3E6	88067023	166.242	218.776 #
7) T	2,4-D	5.68	5.44	135.6E6	24024155	161.002	202.943 #
8) T	2,4,5-TP (Silvex	6.18	5.89	563.6E6	135.0E6	170.802	214.887 #
9) T	2,4,5-T	6.36	6.11	523.4E6	114.0E6	164.982	211.579 #
10) T	2,4-DB	6.75	6.44	124.2E6	15422189	186.815	196.501
11) T	Dinoseb	7.76	6.67	401.0E6	79923940	167.198	200.100

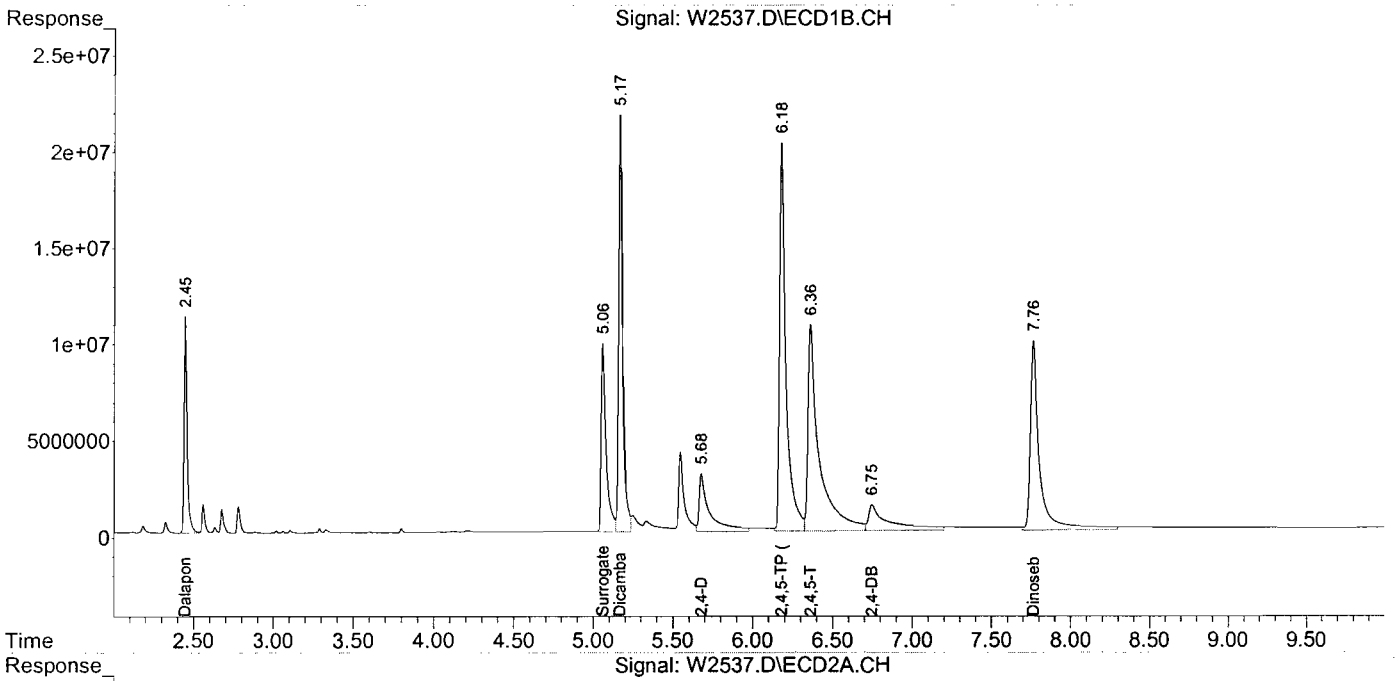
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

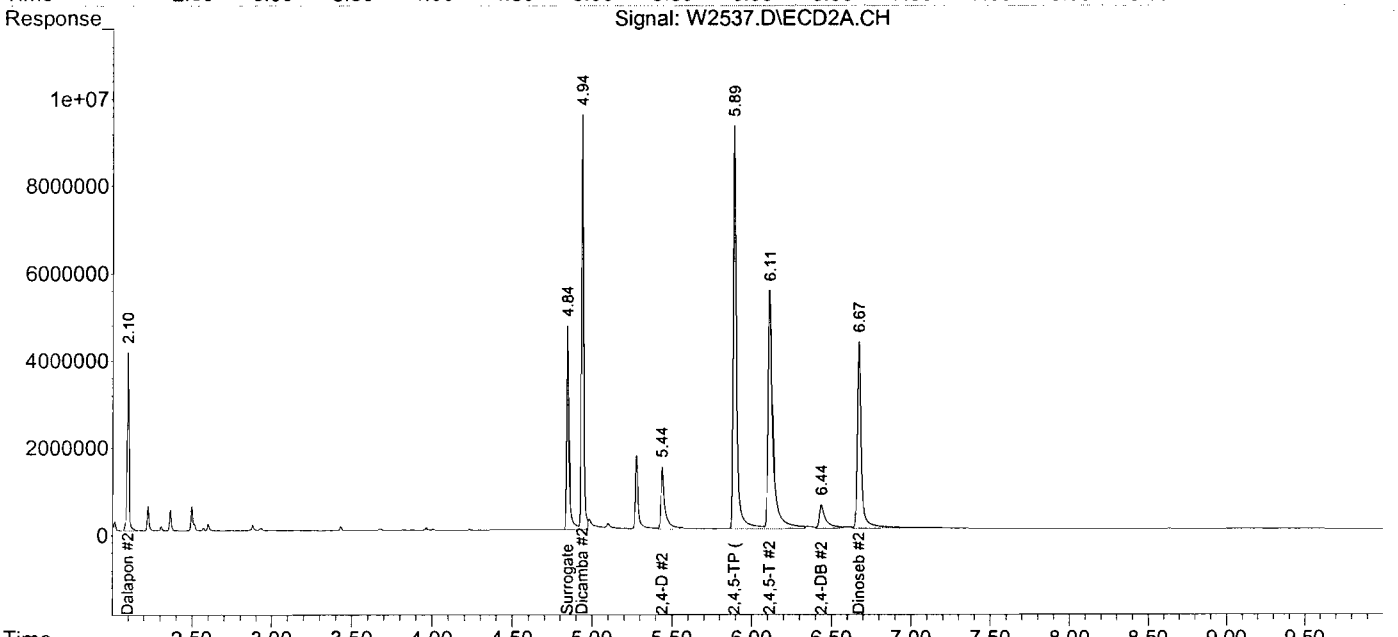
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 13:15
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 13:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2567.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 9:52
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:06:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	252.8E6	46511780	105.557	101.852
	Spiked Amount 100.000			Recovery	=	105.56%	101.85%
	Target Compounds						
2) T	Dalapon	2.45	2.10	151.7E6	26050560	170.070	165.765m
3) T	Dicamba	5.17	4.94	455.8E6	83512118	202.438	207.461
7) T	2,4-D	5.67	5.44	163.1E6	23664815	193.668	199.907
8) T	2,4,5-TP (Silvex	6.18	5.89	695.0E6	133.0E6	210.604	211.664
9) T	2,4,5-T	6.36	6.11	641.4E6	114.1E6	202.174	211.660
10) T	2,4-DB	6.74	6.43	146.0E6	16677059	219.676	212.490
11) T	Dinoseb	7.76	6.67	475.4E6	85516914	198.236	214.102

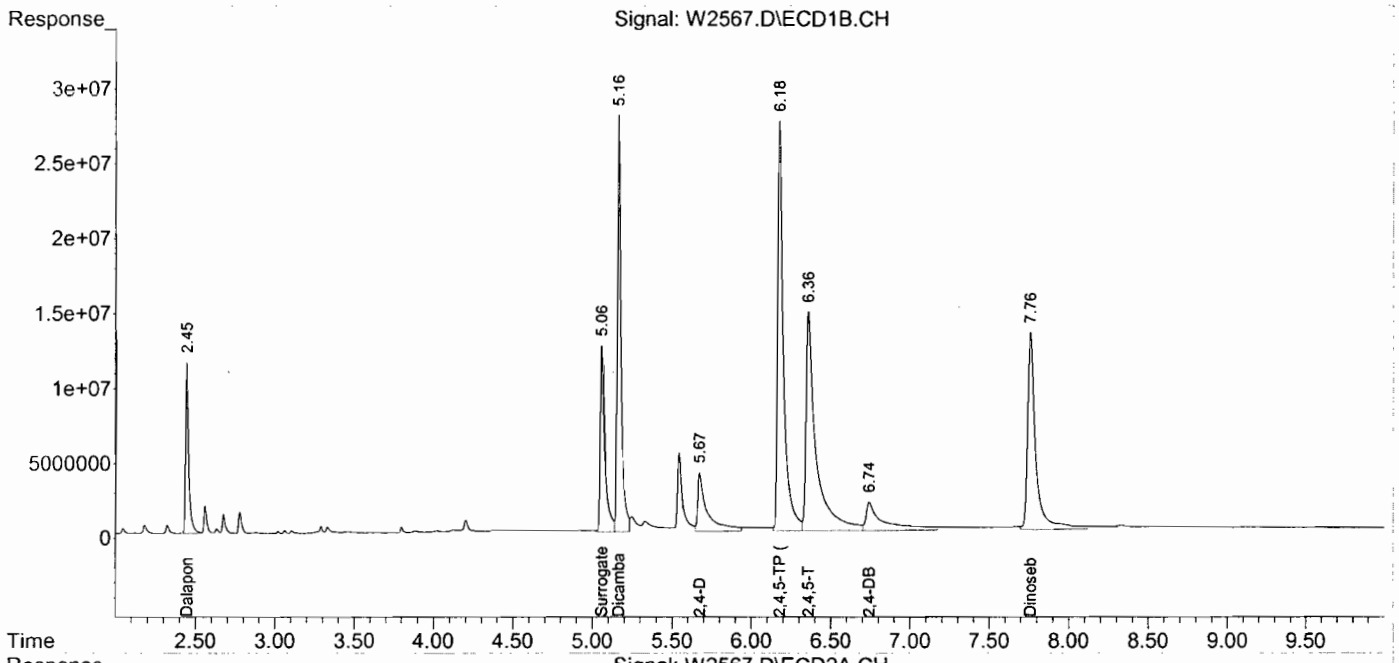
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

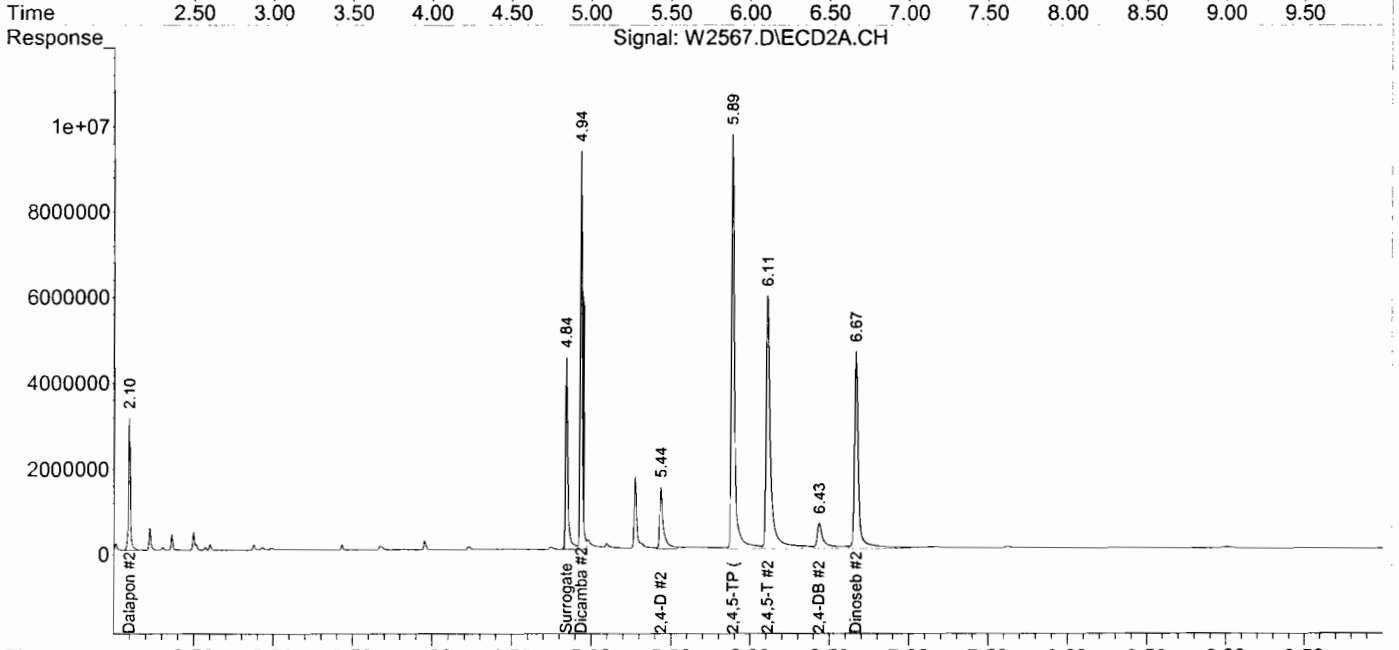
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2567.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 9:52
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:06:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 13:46
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 13:57:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

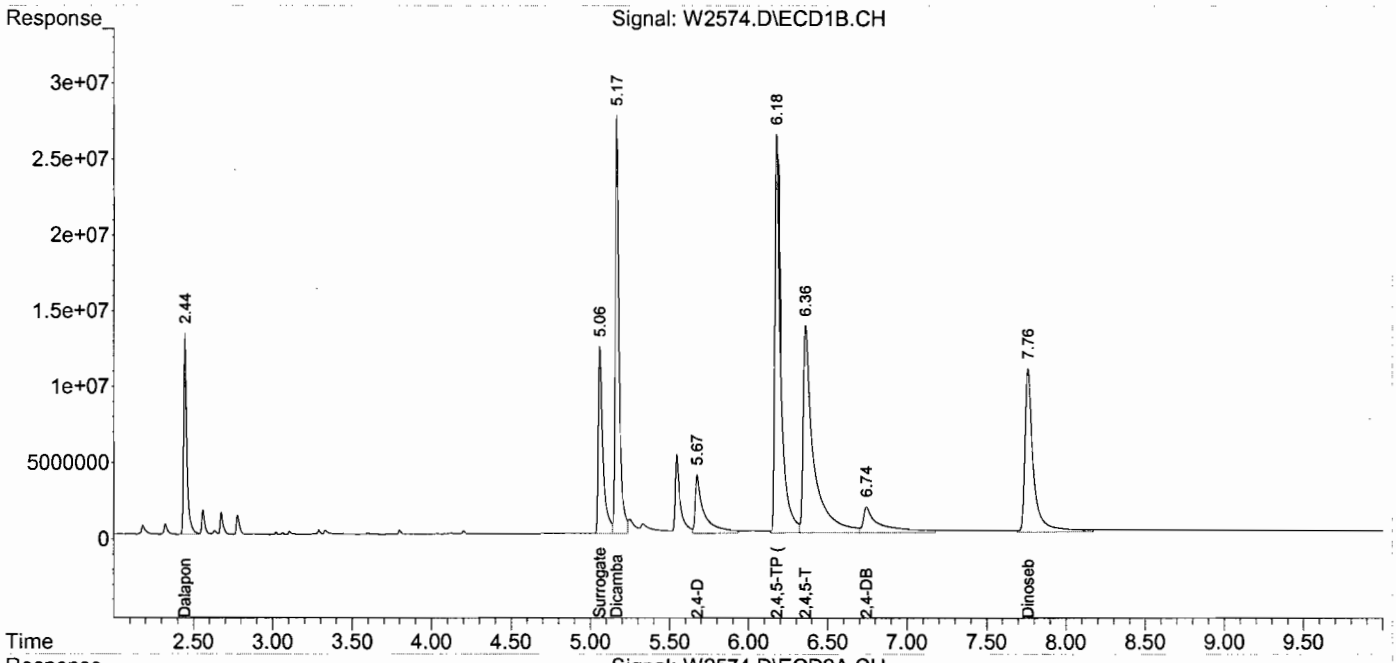
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	248.3E6	51849811	103.688	113.541
	Spiked Amount 100.000			Recovery	=	103.69%	113.54%
	Target Compounds						
2) T	Dalapon	2.45	2.09	178.5E6	34637504	200.183	220.406m
3) T	Dicamba	5.17	4.94	453.3E6	92889544	201.313	230.756
7) T	2,4-D	5.67	5.44	149.7E6	25951326	177.756	219.222
8) T	2,4,5-TP (Silvex	6.18	5.89	676.6E6	146.2E6	205.015	232.751
9) T	2,4,5-T	6.36	6.11	612.9E6	123.8E6	193.198	229.671
10) T	2,4-DB	6.74	6.43	126.6E6	17831560	190.453	227.200
11) T	Dinoseb	7.76	6.67	403.5E6	79276046	168.243	198.478

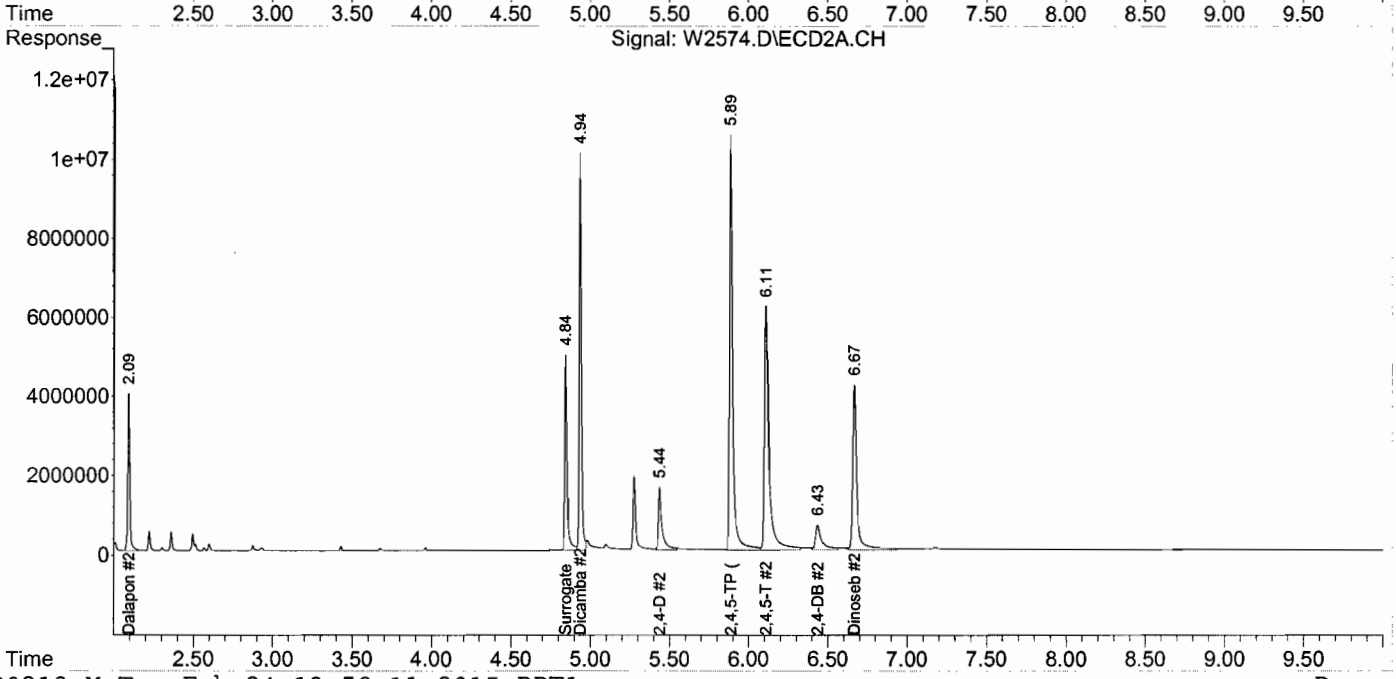
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 13:46
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 13:57:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
HERBICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: BLKA150213-04
Client ID: Herb
Date Received: NA
Date Extracted: 02/13/2015
Date Analyzed: 02/17/2015
Data file: W2526.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2526.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:27
Operator : JS
Sample : Herb,BLKA150213-04,A,200ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 10:11:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	159.4E6	33376035	66.562	73.087
	Spiked Amount 100.000			Recovery	=	66.56%	73.09%
	Target Compounds						

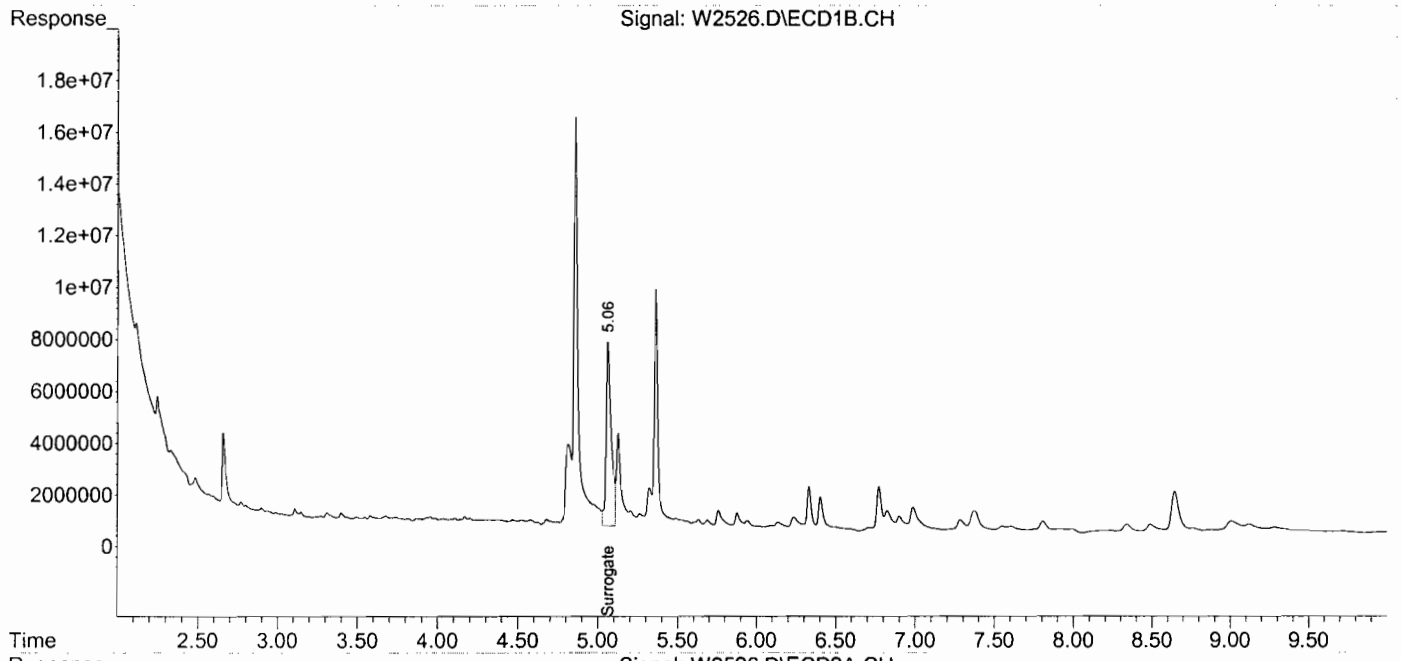
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

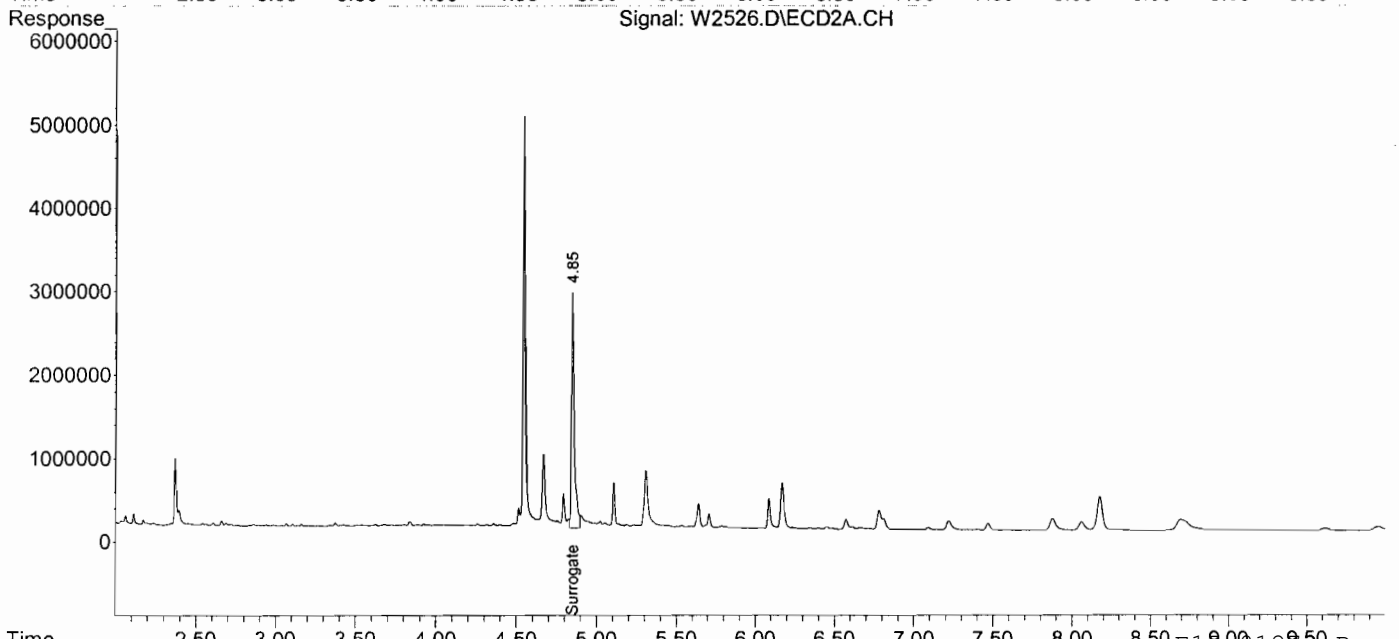
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2526.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:27
Operator : JS
Sample : Herb,BLKA150213-04,A,200ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 10:11:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: BLKA150223-05
Client ID: Herb
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2568.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2568.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:13
Operator : JS
Sample : Herb,BLKA150223-05,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:26:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	157.4E6	30081879	65.704m	65.873
	Spiked Amount 100.000			Recovery	=	65.70%	65.87%
	Target Compounds						

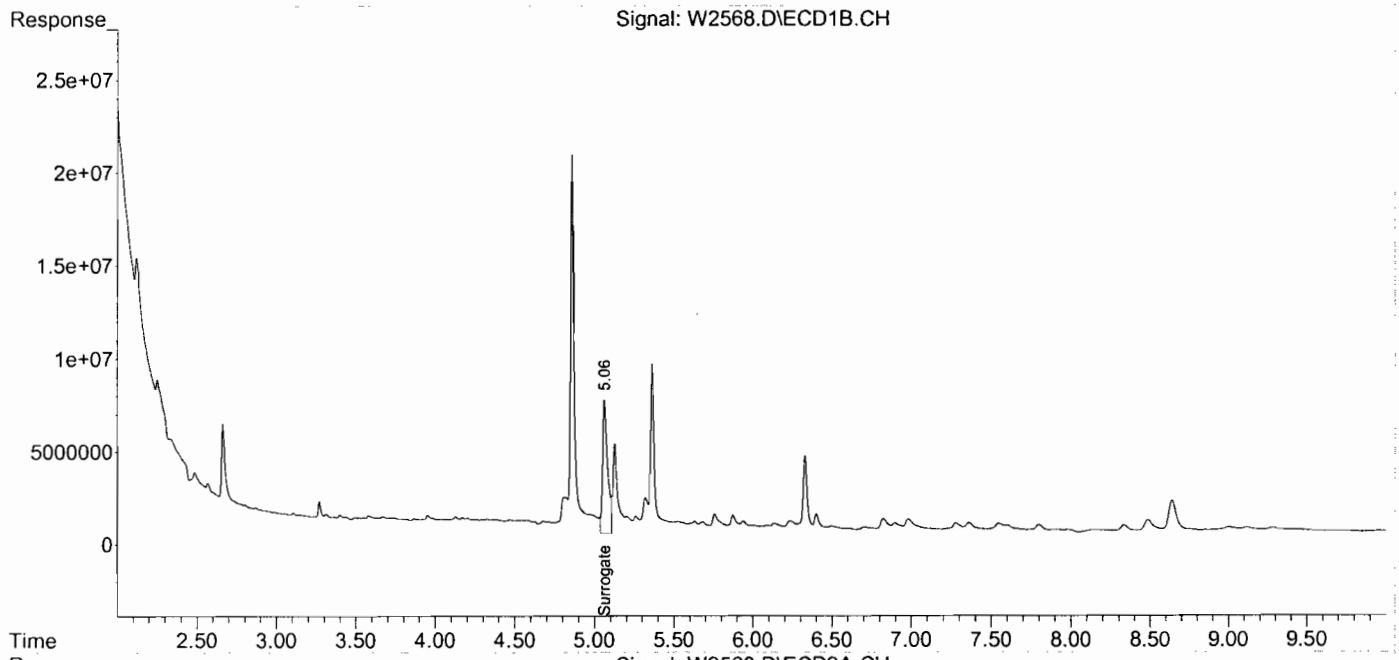
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

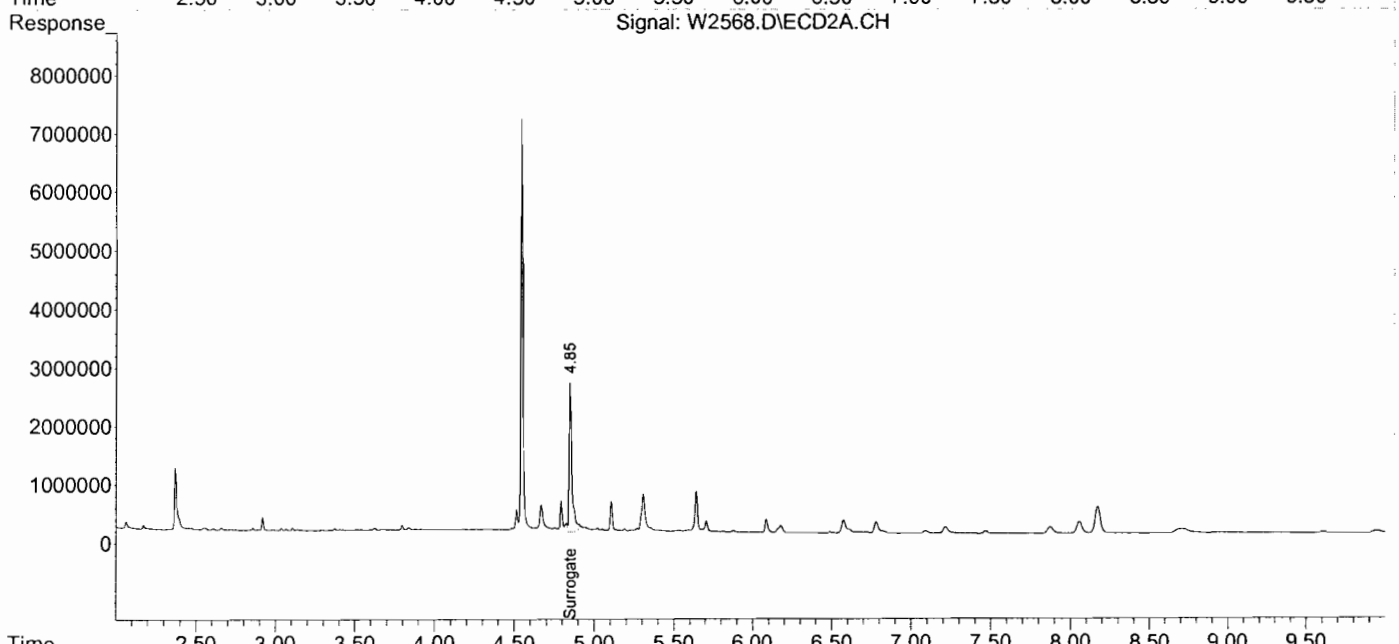
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2568.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:13
Operator : JS
Sample : Herb,BLKA150223-05,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:26:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:27
Operator : JS
Sample : Herb,LCSA150223-05,A,1000ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:40:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	Surrogate	5.06	4.84	185.9E6	33967778	77.624m	74.383	
	Spiked Amount 100.000			Recovery	=	77.62%	74.38%	
	Target Compounds							
2) T	Dalapon	2.44	2.08	121.6E6	26331365	136.306	167.552	
3) T	Dicamba	5.16	4.94	342.1E6	65128014	151.943m	161.791	
7) T	2,4-D	5.67	5.44	100.1E6	19443334	118.801m	164.247	#
8) T	2,4,5-TP (Silvex	6.18	5.89	551.0E6	103.5E6	166.965m	164.688	
9) T	2,4,5-T	6.36	6.11	511.9E6	94304686	161.352m	174.985	
10) T	2,4-DB	6.74	6.43	73119669	10888061	110.014m	138.730	#
11) T	Dinoseb	7.76	6.67	309.1E6	50927309	128.907m	127.503	

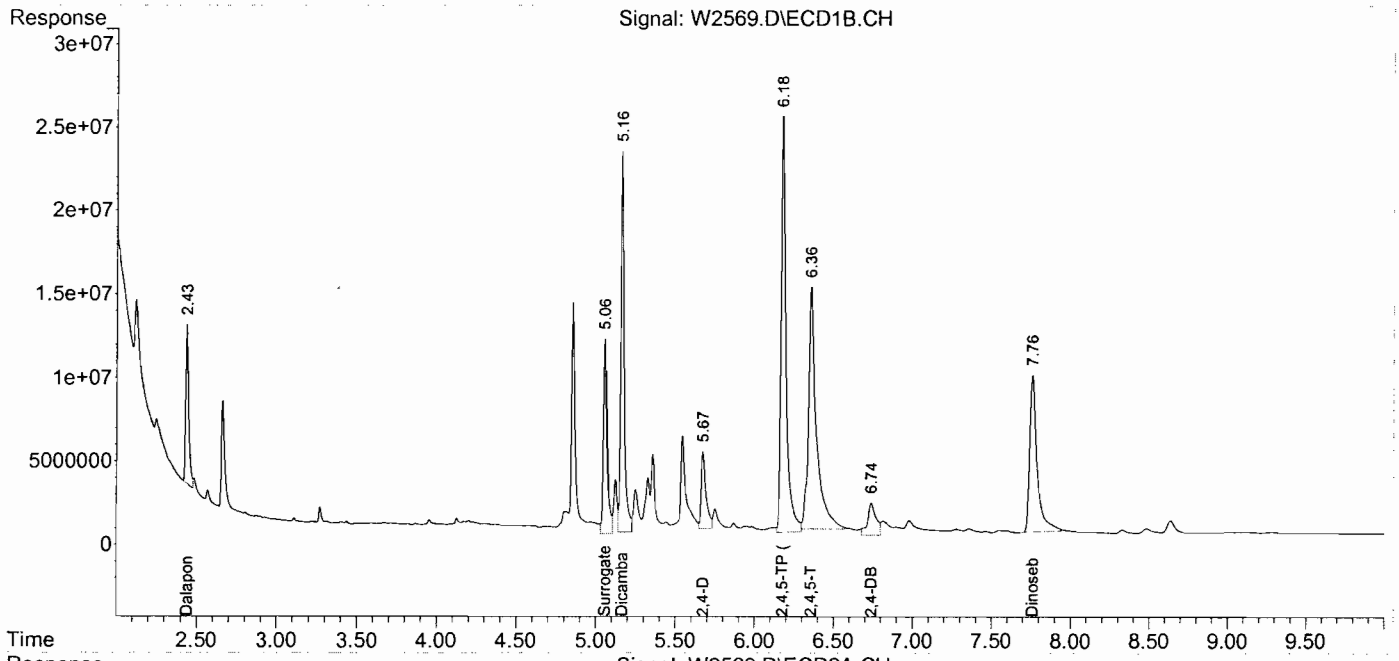
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

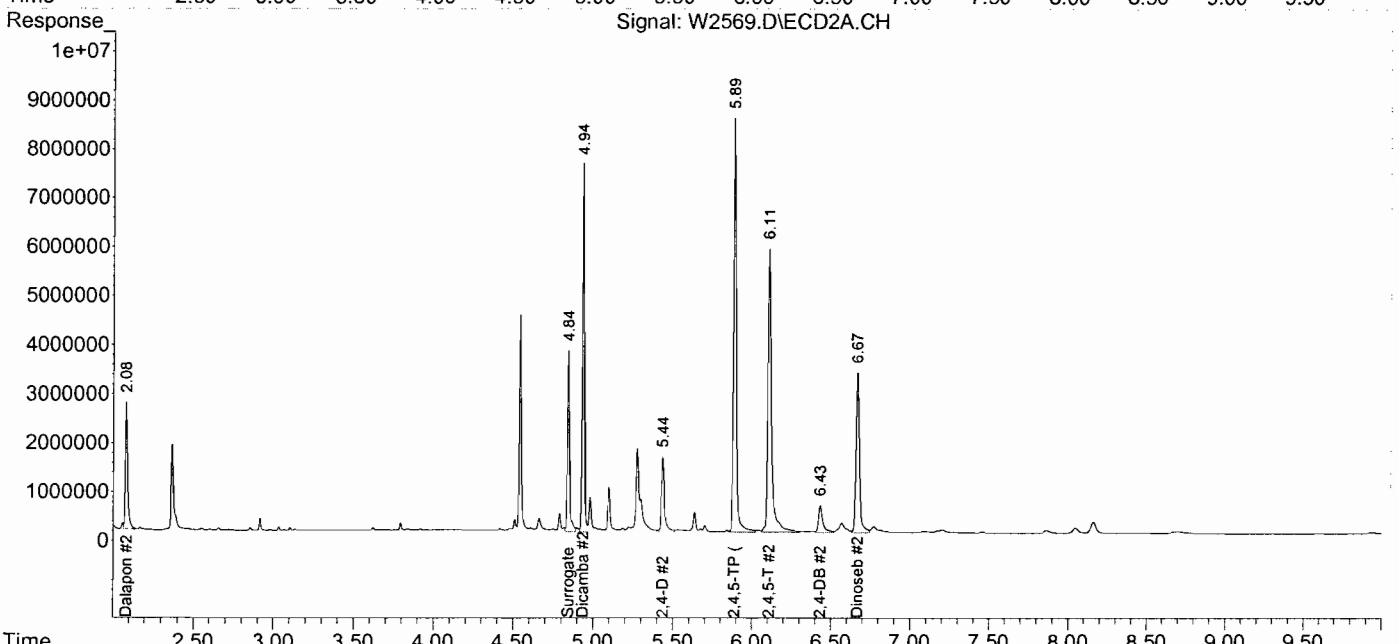
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:27
Operator : JS
Sample : Herb,LCSA150223-05,A,1000ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:40:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:08
Operator : JS
Sample : Herb,01088-007MS,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:17:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	Surrogate	5.04	4.84	156.0E6	14367095	65.140m	31.461	#
	Spiked Amount 100.000			Recovery	=	65.14%	31.46%	
	Target Compounds							
2) T	Dalapon	2.44	2.08	46110973	12092507	51.705m	76.947	#
3) T	Dicamba	5.16	4.94	110.4E6	23716845	49.045m	58.917	
7) T	2,4-D	5.67	5.44	73397592	18194329	87.132m	153.696	#
8) T	2,4,5-TP (Silvex	6.18	5.89	281.1E6	63210221	85.196m	100.597	
9) T	2,4,5-T	6.36	6.11	343.6E6	68203661	108.290m	126.554	
10) T	2,4-DB	6.74	6.43	49209521	12525196	74.039m	159.589	#
11) T	Dinoseb	7.76	6.67	43520053	7145638	18.147m	17.890	

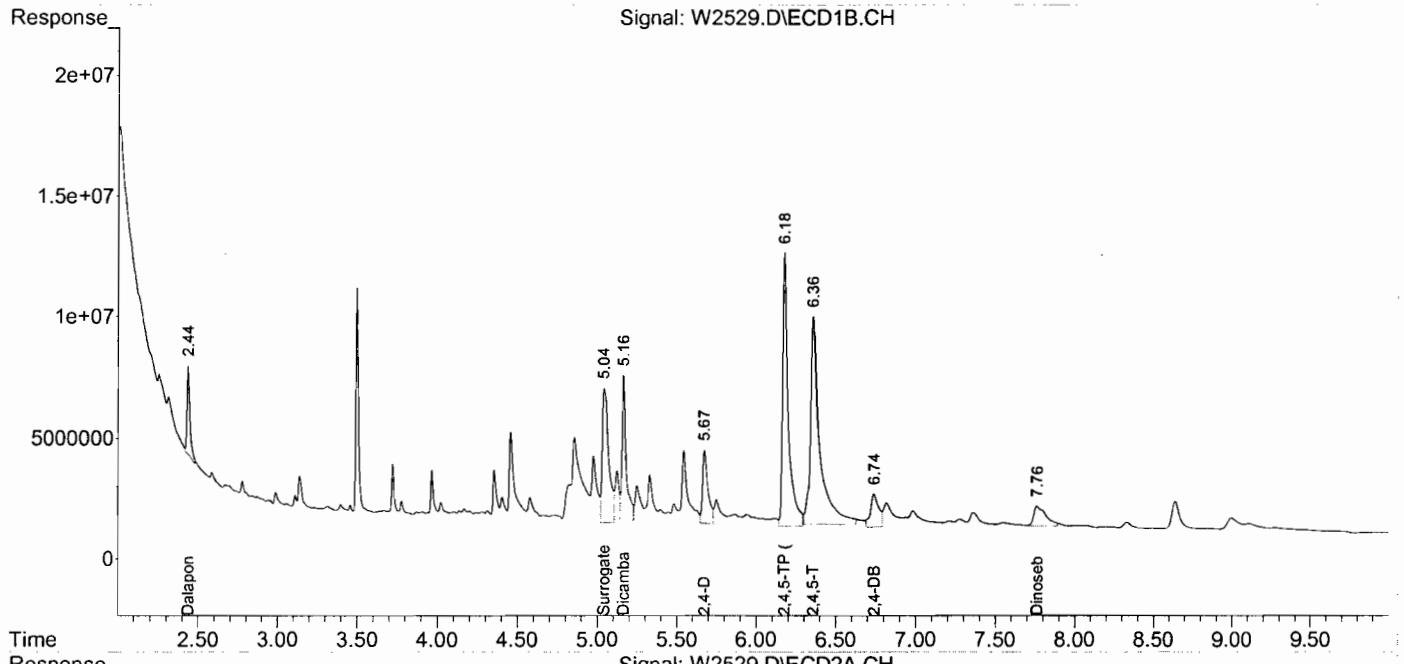
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

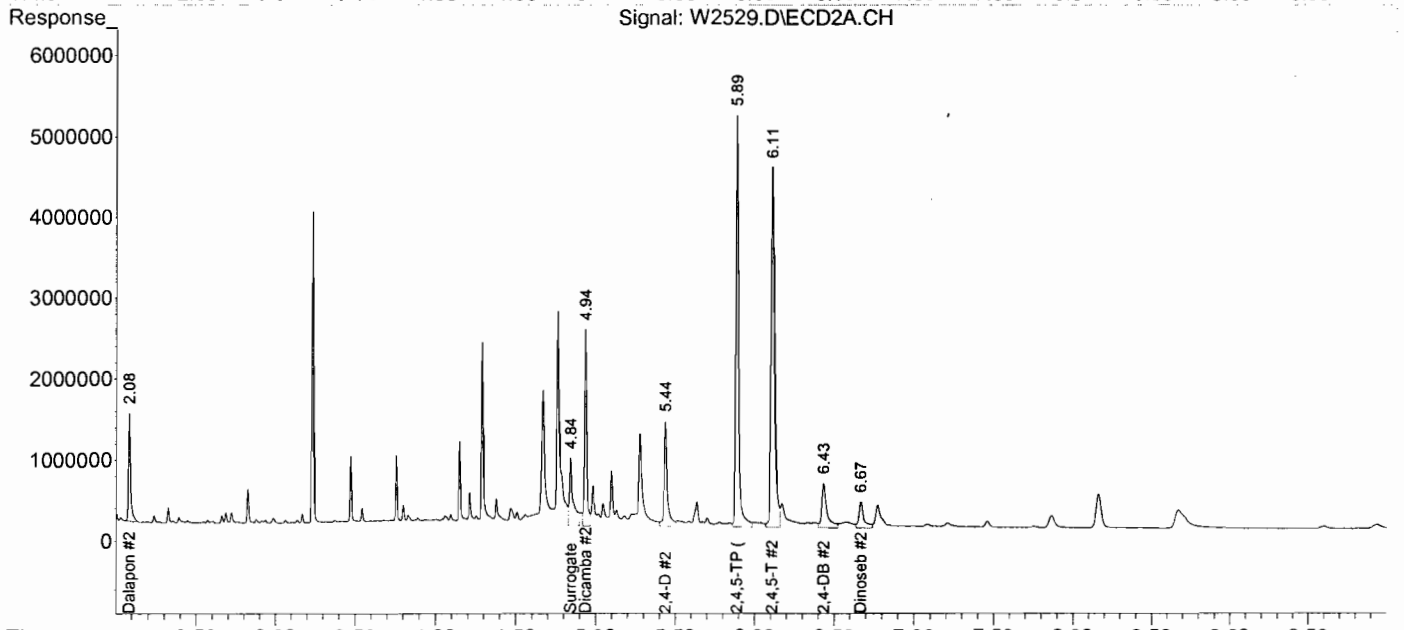
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:08
Operator : JS
Sample : Herb,01088-007MS,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:17:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:22
Operator : JS
Sample : Herb,01088-007MSD,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:20:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	124.6E6	18569193	52.020	40.663
	Spiked Amount 100.000			Recovery	=	52.02%	40.66%
	Target Compounds						
2) T	Dalapon	2.44	2.08	54644381	15925883	61.274m	101.340m#
3) T	Dicamba	5.16	4.94	167.8E6	39082539	74.529m	97.089 #
7) T	2,4-D	5.67	5.44	72792597	17864615	86.414	150.910 #
8) T	2,4,5-TP (Silvex	6.18	5.89	326.0E6	76878746	98.777	122.350
9) T	2,4,5-T	6.36	6.11	381.7E6	74664671	120.311	138.543
10) T	2,4-DB	6.74	6.43	46622946	11578707	70.147	147.529 #
11) T	Dinoseb	7.76	6.67	79582217	13038694	33.185	32.644

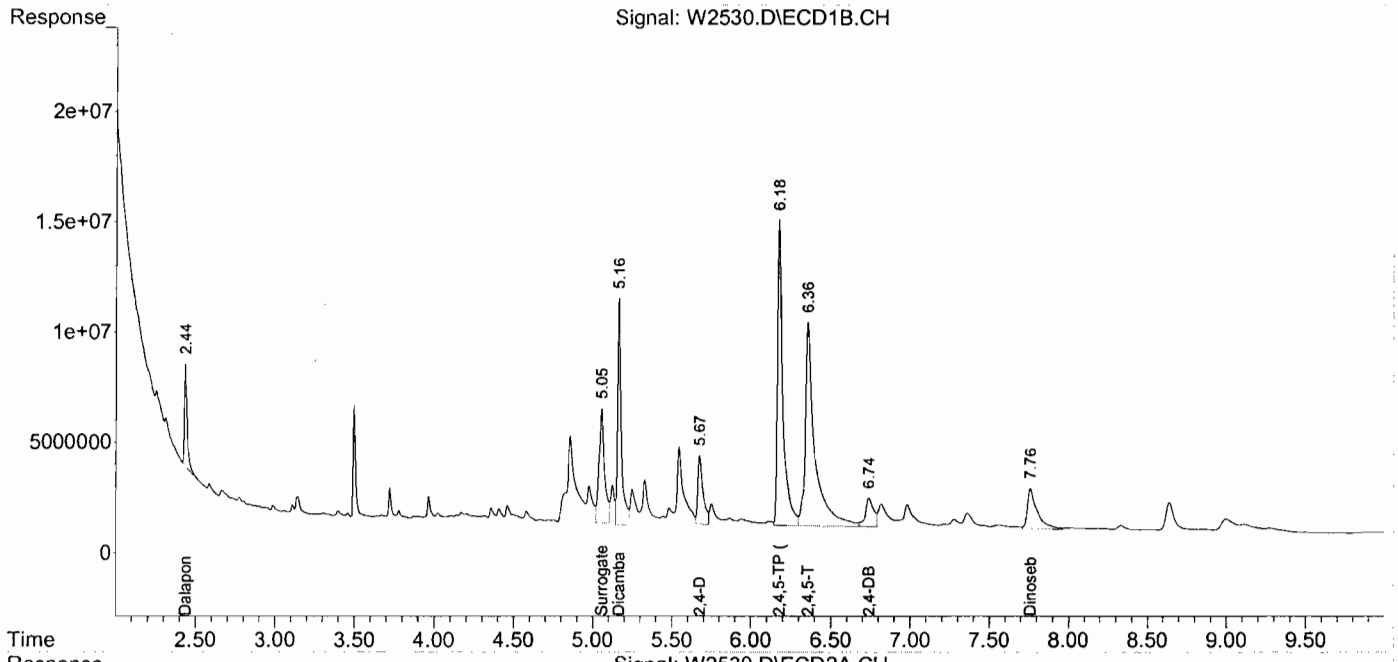
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

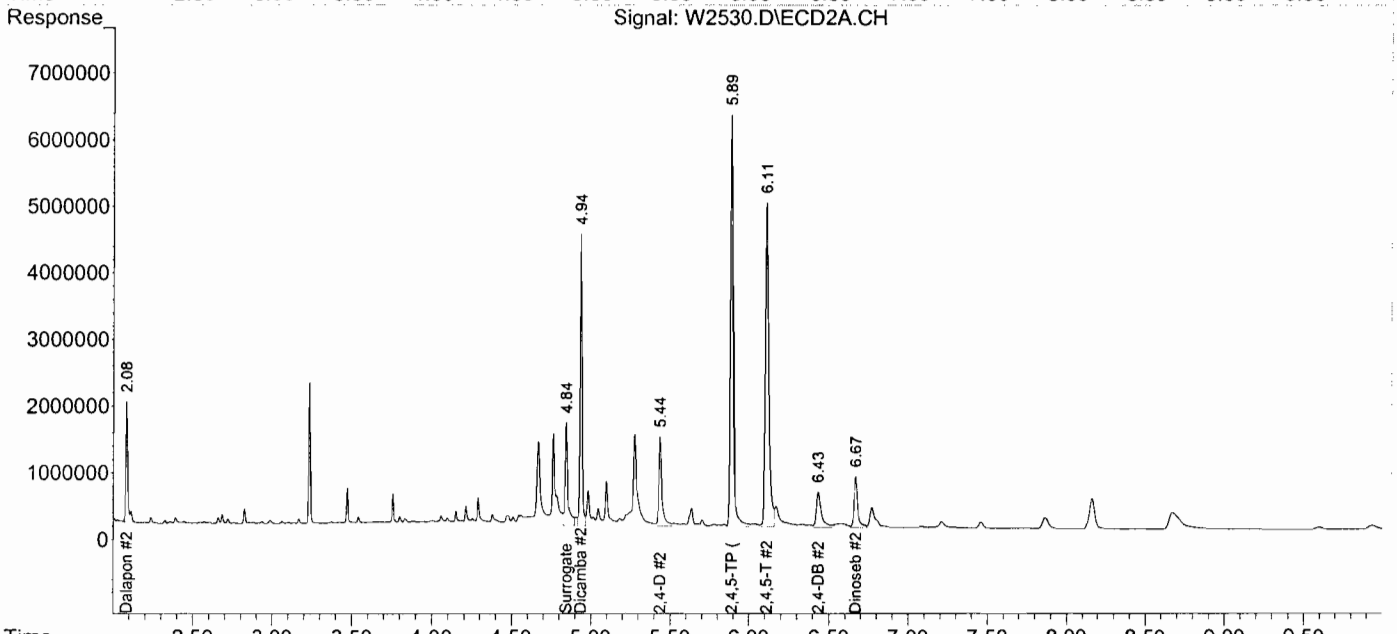
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:22
Operator : JS
Sample : Herb,01088-007MSD,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:20:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP HERBICIDE
RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Aqueous)

Extraction Date/Time: 02/13/2015 10:43

Batch ID: **150213-04**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150213-04	TCLP Herbicides	200	5	25	1			
LCSA150213-04	Herbicides	1000	5	25	1	10		
01088-007MS	TCLP Herbicides	100	5	25	1	10		R-72; TCLP150211
01088-007MSD	TCLP Herbicides	100	5	25	1	10		R-72; TCLP150211
TCLP150211	TCLP Herbicides	200	5	25	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-1
Surrogate	#5082
SPK 1	#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01087-007	TCLP Herbicides	200	5	25	1	12.3	R-72; TCLP150211	01088-007MS / 150213-04	
2	01088-007	TCLP Herbicides	200	5	25	1	9.90	R-72; TCLP150211	01088-007MS / 150213-04	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/13/2015 10:43
Weighed	Archie	02/13/2015 16:52
Surrogated	Archie	02/13/2015 16:52
Filtered	Archie	02/13/2015 16:52
Transferred	Archie	02/13/2015 16:52
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Aqueous)

Extraction Date/Time: 02/23/2015 10:46

Batch ID: **150223-05**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150223-05	TCLP Herbicides	200	5	25	1			
LCSA150223-05	Herbicides	1000	5	25	1	10		
TCLP150219	TCLP Herbicides	200	5	25	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	#5082
SPK 1	#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TCLP Herbicides	200	5	25	1	10.6	R-72; TCLP150219	01088-007MS / 150213-04	
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/23/2015 10:46
Weighed	Archie	02/23/2015 10:47
Surrogated	Archie	02/23/2015 17:25
Filtered	Archie	02/23/2015 17:25
Transferred	Archie	02/23/2015 17:25
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Herb

DATE	2/13/2015 0:00	**Extra. Batch**	
INSTRUMENT	**W**		
METHOD	**WHEB0213**		
SYS METHOD	**8151A** (eg. 8015B M, 3810)		
ANALYST	**Justyna**		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2517	HEXANE										
2	1	W2518	ICC_HERB_L5_IAS_5095,400_PPB										
3	2	W2519	ICC_HERB_L4_IAS_5096,250_PPB										
4	3	W2520	ICC_HERB_L3_IAS_5097,200_PPB										
5	4	W2521	ICC_HERB_L2_IAS_5098,100_PPB										
6	5	W2522	ICC_HERB_L1_IAS_5099,50_PPB										
7	6	W2523	ICV_HERB_C_IAS_5101,200_PPB										

LABORATORY CHRONICLE - GC

Herb

DATE	2/17/2015 0:00	**Extra. Batch**	**150213-04**	BA	**Aqueous**
INSTRUMENT	**W**		**150212-07**	BS	Soil (Sonic)
METHOD	**WHEB0213**		**150217-08**	BA	Aqueous
SYS METHOD	**8151A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2524		HEXANE									
2	1	W2525		CCV_HERB_C_IAS_5101,200_PPB		1							
3	2	W2526		BLKA150213-04		1	200	5	A			2/13/15	100
4	3	W2527		TCLP150211		1	200	5	A			2/13/15	100
5	4	W2528		LCSA150213-04		1	1000	5	A			2/13/15	100
6	5	W2529		01088-007MS		1	100	5	T			2/13/15	100
7	6	W2530		01088-007MSD		1	100	5	T			2/13/15	100
8	7	W2531		01087	7	1	200	5	T	2/10/15	2/11/15	2/13/15	100
9	8	W2532		01088	7	1	200	5	T	2/10/15	2/11/15	2/13/15	100
10	100	W2533		HEXANE									
11	100	W2534		HEXANE									
12	9	W2535		BLKS150212-07		1	30.00	5	S			2/12/15	0
13	10	W2536		LCSS150212-07		1	30.00	5	S			2/12/15	0
14	1	W2537		CCV_HERB_C_IAS_5101,200_PPB		1							

S-11086J4-5ML Exp 12/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 1111790

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

S-11092J4-5ML Exp 3/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-

Arochlor 1260 Solution

Lot: 664400

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

PPS-166-1

Lot: CG-3187

Exp: 10/31/2014

ULTRA

1 mL

DCAA Methyl Ester Solution

1 analyte(s) at 100 µg/mL in acetone

250 Smith St, No Kingstown, RI 02852 USA

For Lab Use Only

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Cataloq# 32055

This product is photosensitive.

Herbicide Mix #1/ME (Methyl Ester)

200 ug/mL each in Hexane

Lot# A095323 Exp. Date: 05/2020 Store: 10°C or colder

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Cataloq# 32057

This product is photosensitive.

Herbicide Mix #2/ME (Methyl Ester)

2000 ug/mL each in Hexane

Lot# A094619 Exp. Date: 04/2020 Store: 10°C or colder

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) + 0µl of (32057) ~~+0µl of EAS#~~ → 10ml HEX JS			2000PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	EAS # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

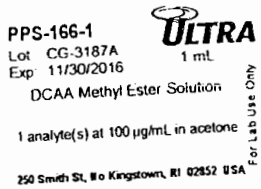
STANDARD IAS#	STANDARD NAME:	PCB LS (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
ULTRA
Lot CG-3187A
1 mL
Exp 11/30/2016
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
For Lab Use Only
250 Smith St, N o Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR. SS
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# 5092 FULL + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

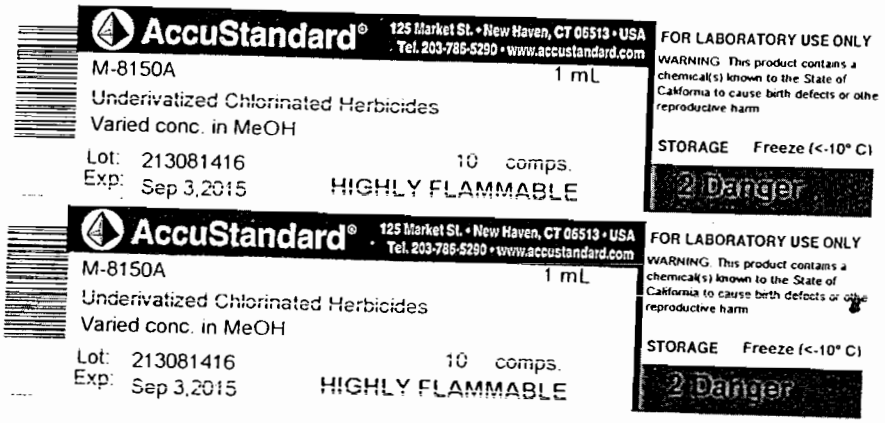
For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS



AccuStandard® 125 Market St. • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides

Varied conc. in MeOH

Lot: 213081416 10 comps.

Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY

WARNING This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm

STORAGE Freeze (<-10° C)

2 Danger

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides

Varied conc. in MeOH

Lot: 213081416 10 comps.

Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY

WARNING This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm

STORAGE Freeze (<-10° C)

2 Danger

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S

Lot# T1111006012

Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000 µg/mL	Aldrin
1000 µg/mL	alpha-BHC
1000 µg/mL	alpha-Chlordane
1000 µg/mL	beta-BHC
1000 µg/mL	delta-BHC
1000 µg/mL	Dieldrin
1000 µg/mL	Endosulfan I
1000 µg/mL	Endosulfan II
1000 µg/mL	Endosulfan sulfate
1000 µg/mL	Endrin
1000 µg/mL	Endrin aldehyde
1000 µg/mL	Endrin ketone
1000 µg/mL	gamma-BHC
1000 µg/mL	gamma-Chlordane
1000 µg/mL	Heptachlor
1000 µg/mL	Heptachlor epoxide (Isomer B)
1000 µg/mL	Methoxychlor
1000 µg/mL	p,p'-DDD
1000 µg/mL	p,p'-DDE
1000 µg/mL	p,p'-DDT

ACE-8081-S T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE

Contains Materials Known

Or Suspected to Cause Cancer

DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:			
5169		SOIL Working Std (2nd so		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~			VOID	
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATIOI
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	AXE-3081-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

13

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-165-1
Lot CL-2302
Exp 07/31/2016

ULTRA
1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, No Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-S	FIII/006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	+8 1:50			~~1:25 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:

DBC 4.96

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
TPH-DRO	BLKS150219-08	SOIL	02/20/2015	13:21	84	4.98	
GPEC-WC1	01273-001	SOIL	02/20/2015	13:34	87	4.96	
TPH-DRO	LCSS150219-08	SOIL	02/20/2015	13:48	81	4.96	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.1 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS150219-08

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	902	90.2		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 01126-001MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	972	97.2		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	960	96.0		1.25		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB0622.D
Instrument ID: GC-Q
Date Extracted: 02/13/2015
Matrix: SOIL
Date Analyzed: 02/13/2015
Time Analyzed: 17:14

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B-1/2/3/	01126-001	02/13/2015	17:28
B-1/2/3/	01127-001	02/13/2015	17:42
JA_DB_GR	01128-002	02/13/2015	17:55
JA_DB_GR	01128-003	02/13/2015	18:09
JA_DB_GR	01128-004	02/13/2015	18:23
JA_DB_GR	01128-005	02/13/2015	18:36
JA_DB_GR	01128-006	02/13/2015	18:50
JA_MH_A_	01129-002	02/13/2015	19:04
JA_MH_A_	01129-003	02/13/2015	19:18
JA_MH_A_	01129-004	02/13/2015	19:31
JA_MH_A_	01129-005	02/13/2015	19:45
JA_MH_A_	01129-006	02/13/2015	19:58
B-1/2/3/	01142-001	02/13/2015	20:12
TPH-DRO	01126-001MS	02/13/2015	20:26
TPH-DRO	01126-001MSD	02/13/2015	20:39
TPH-DRO	LCSS150213-01	02/13/2015	20:53

TPH METHOD BLANK SUMMARY

Lab File ID: QB0771.D
Instrument ID: GC-Q
Date Extracted: 02/19/2015
Matrix: SOIL
Date Analyzed: 02/20/2015
Time Analyzed: 13:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1	01273-001	02/20/2015	13:34
TPH-DRO	LCSS150219-08	02/20/2015	13:48

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0772.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:34 pm
Operator : RG
Sample : GPEC-WC1,01273-001,S,10.71g,10.6,02/19/15,15
Misc : 150219-08,02/18/15,02/19/15,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	15936788	87.093 ng
Spiked Amount 100.000		Recovery =	87.09%
Target Compounds			
3) H TPH-DRO	3.300	83400172	229.156 ng

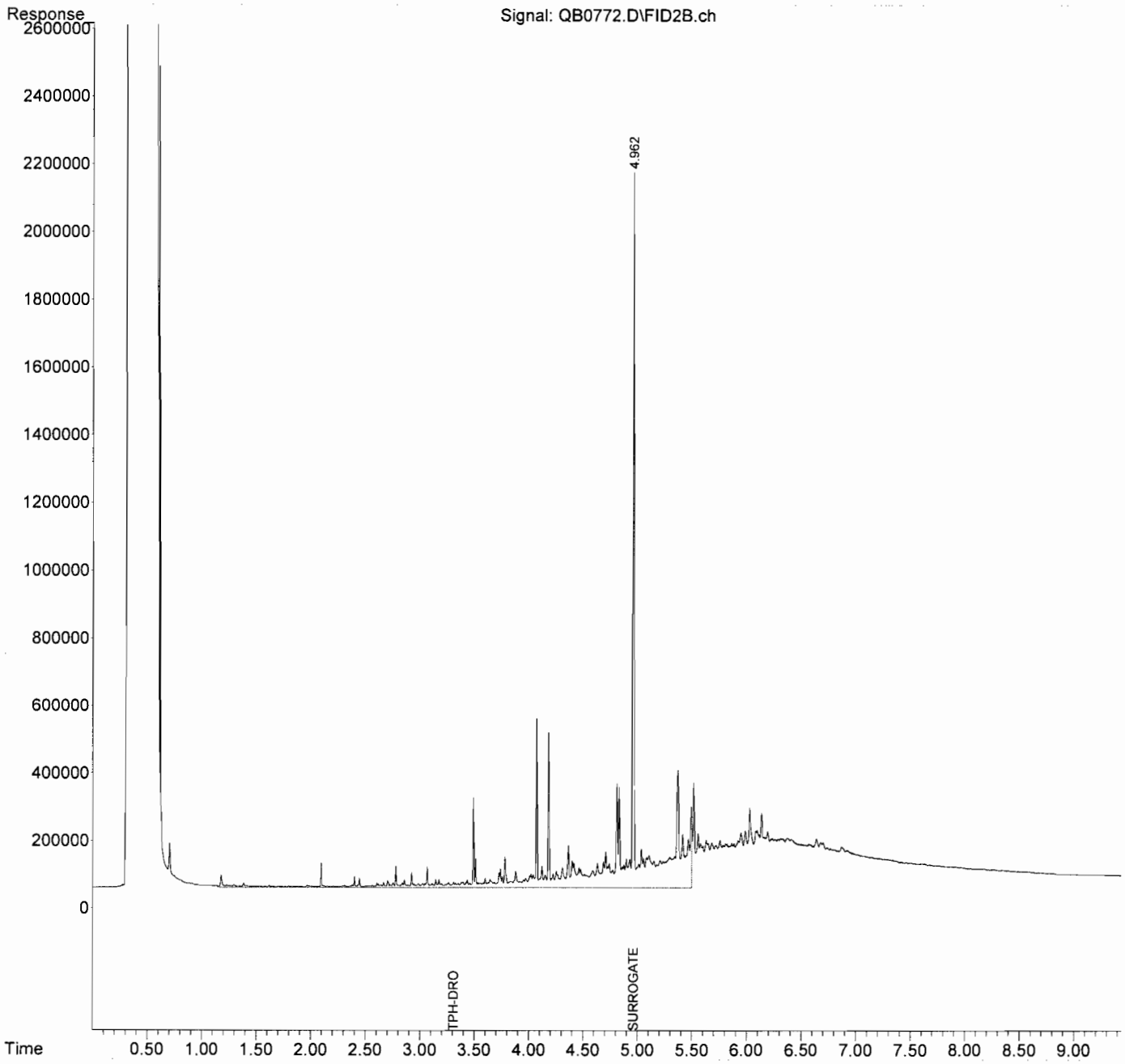
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0772.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:34 pm
Operator : RG
Sample : GPEC-WC1,01273-001,S,10.71g,10.6,02/19/15,15
Misc : 150219-08,02/18/15,02/19/15,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/04/2015 Instrument ID: GC-Q

Date File: QB0443.D QB0442.D QB0441.D QB0440.D QB0439.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.20	3.40

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RF	%RSD
TPH-DRO	42.6	32.9	31.6	41.8	33.1	36.4	14.7

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 12:04

Date File: QB0767.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		36.4	36.2	0.549

Date Analyzed: 02/20/2015 14:02

Date File: QB0774.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		36.4	35.3	3.02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0443.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:44 pm
Operator : BM
Sample : DRO_L1_IAS_5090,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:56 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.963	784231	4.283	ng	m
Spiked Amount 100.000		Recovery = 4.28%			
Target Compounds					
3) H TPH-DRO	3.300	17022511	46.774	ng	

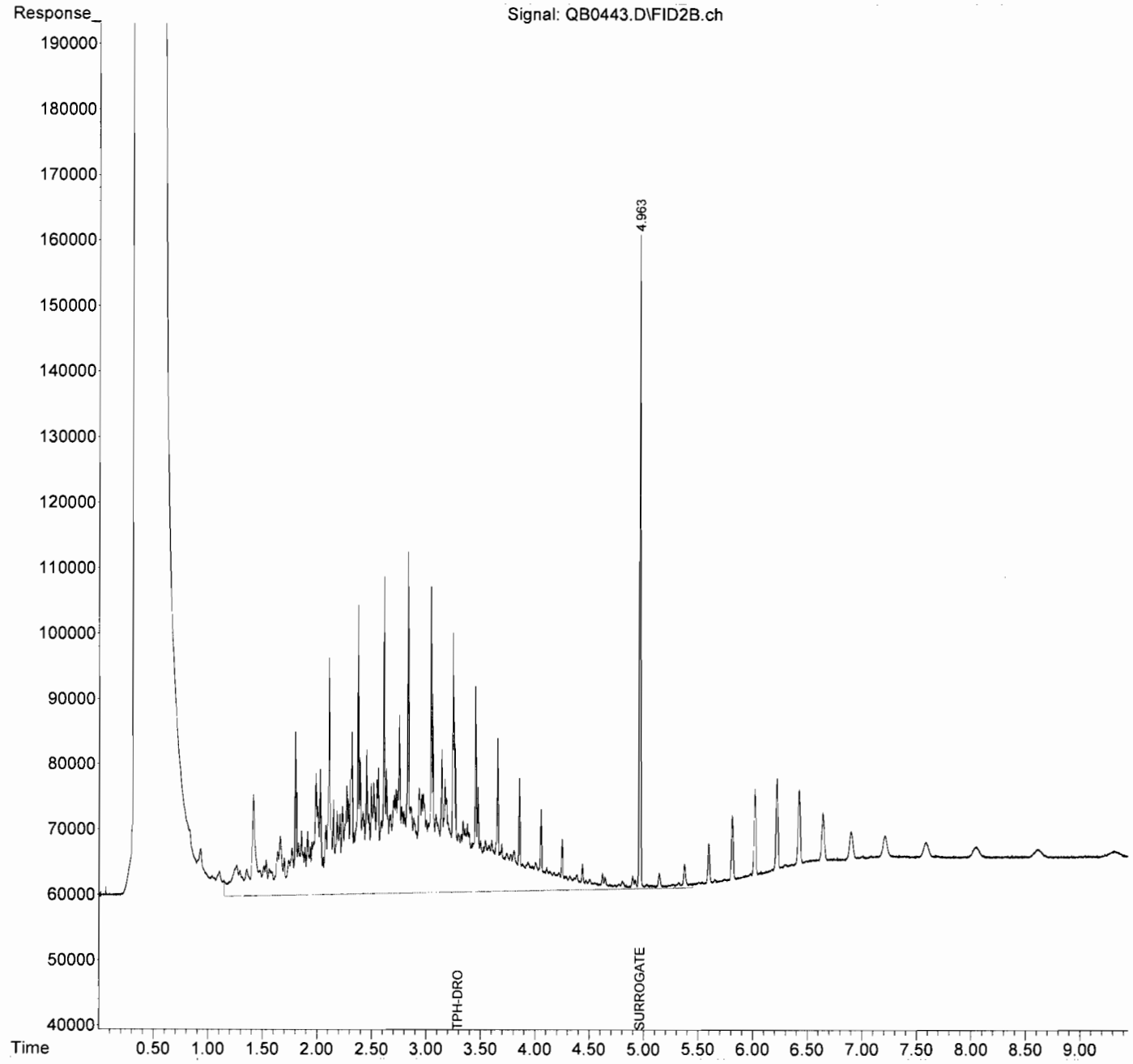
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0443.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:44 pm
Operator : BM
Sample : DRO_L1_IAS_5090,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:56 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0442.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:29 pm
Operator : BM
Sample : DRO_L2_IAS_5089,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:25 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.951	8322689	45.452 ng
Spiked Amount 100.000		Recovery =	45.45%
Target Compounds			
3) H TPH-DRO	3.300	164744951	452.679 ng

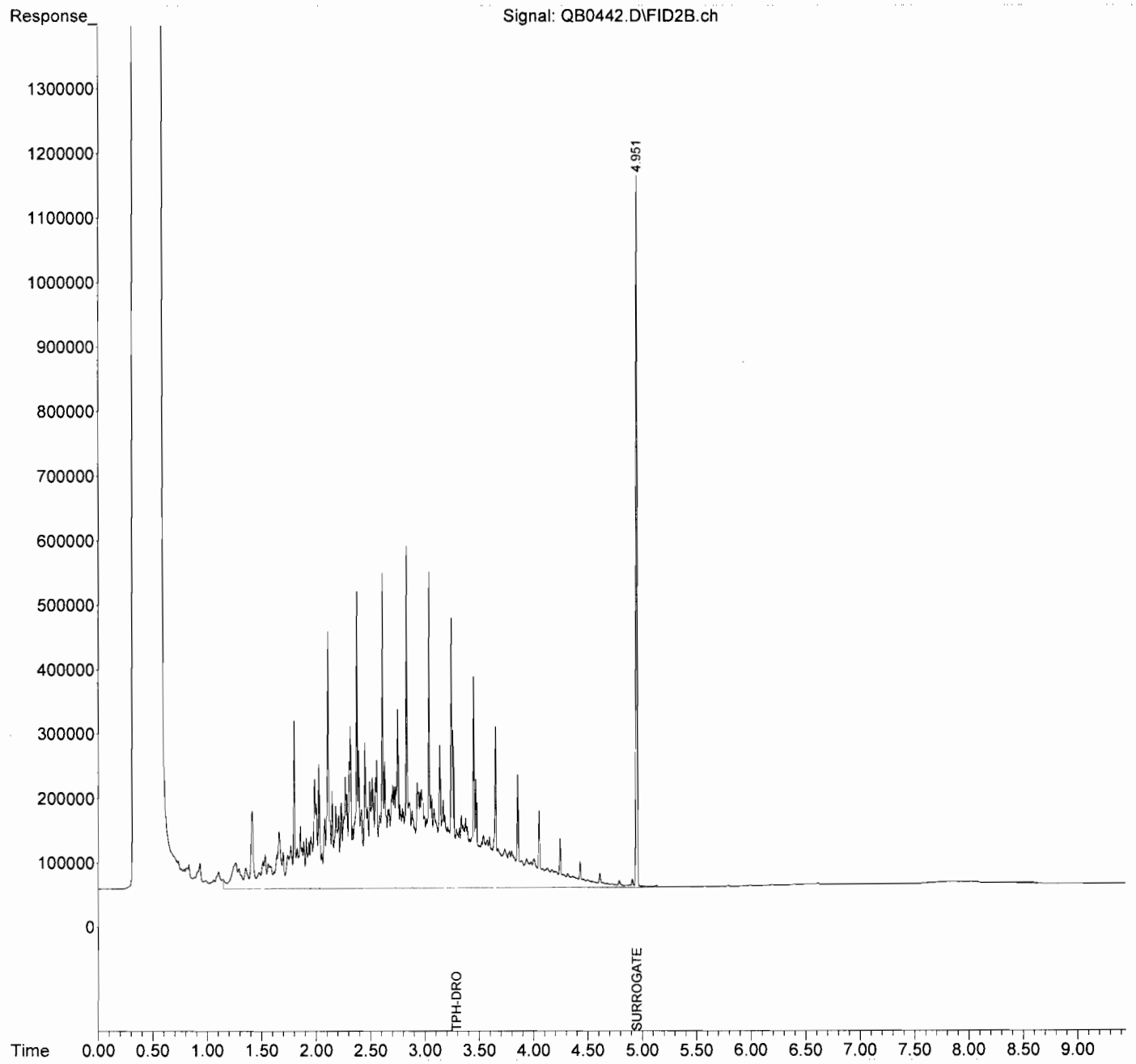
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0442.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:29 pm
Operator : BM
Sample : DRO_L2_IAS_5089,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:25 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0441.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:15 pm
Operator : BM
Sample : DRO_L3_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:06 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.971	17194026	93.899 ng
Spiked Amount 100.000		Recovery =	93.90%
Target Compounds			
3) H TPH-DRO	3.300	315700589	867.469 ng

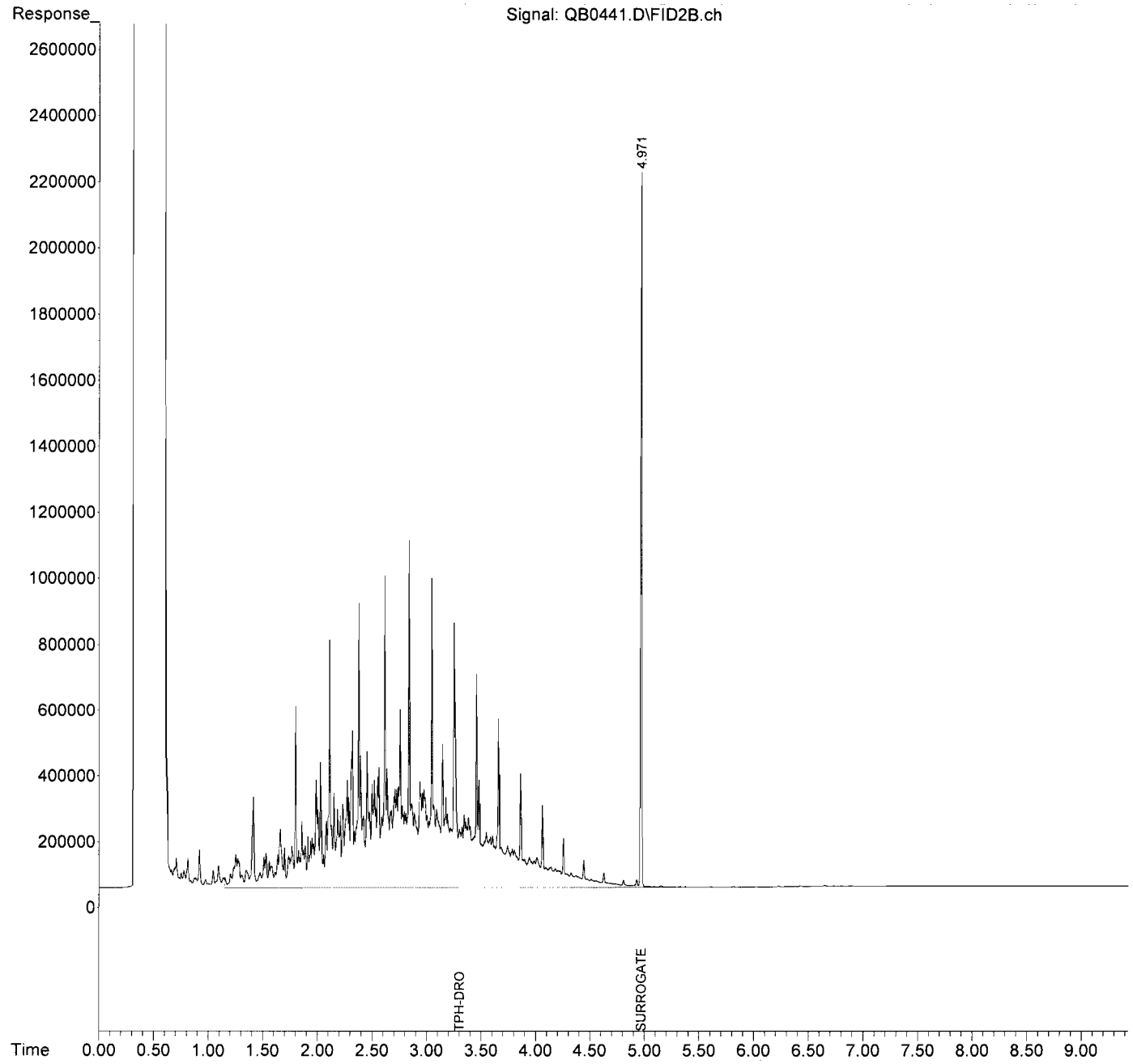
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0441.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:15 pm
Operator : BM
Sample : DRO_L3_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:06 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0440.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:02 pm
Operator : BM
Sample : DRO_L4_IAS_5087,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:47 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.967	42249310	230.730 ng
Spiked Amount 100.000		Recovery = 230.73%	
Target Compounds			
3) H TPH-DRO	3.300	836932743	2299.688 ng

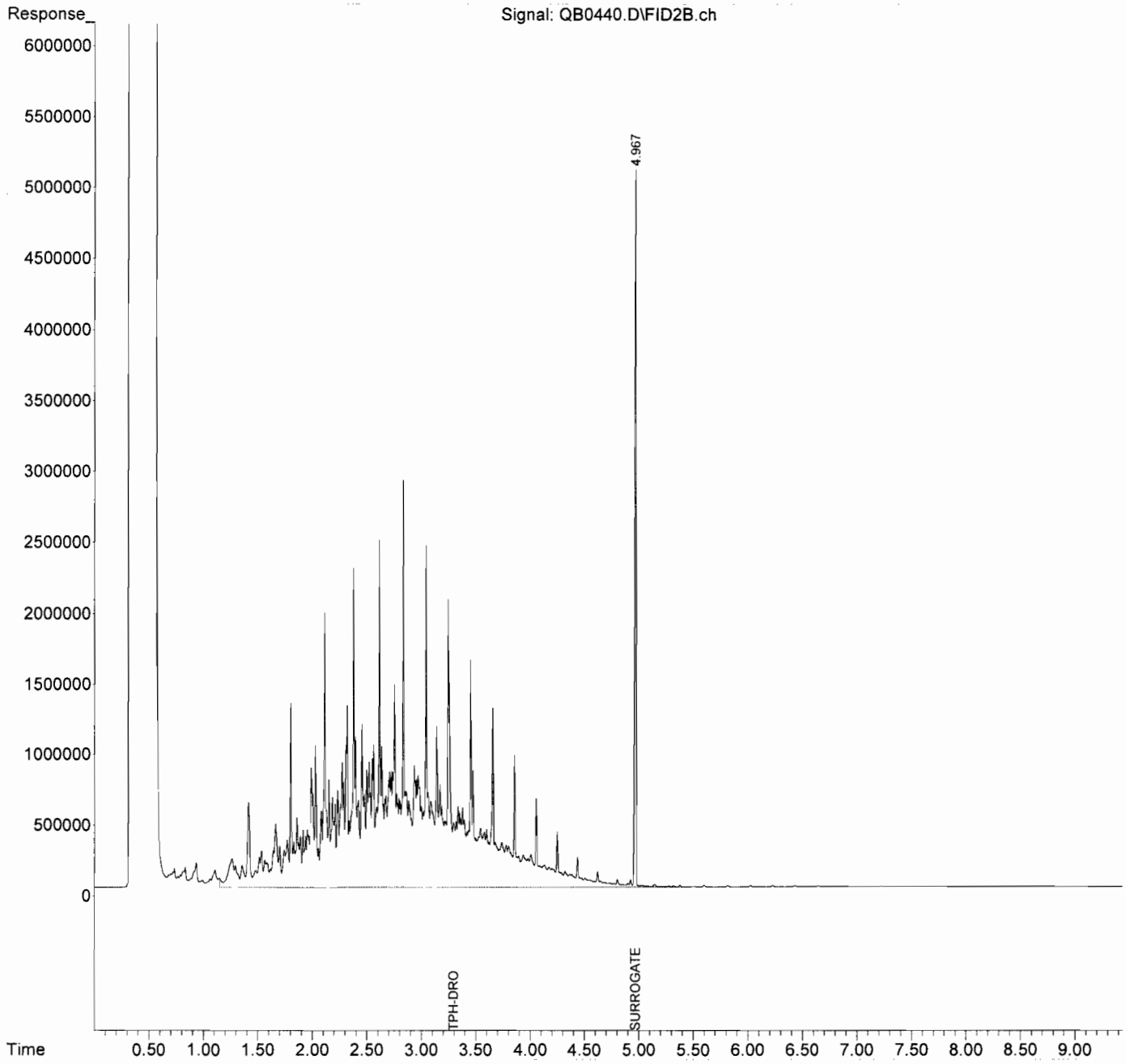
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0440.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:02 pm
Operator : BM
Sample : DRO_L4_IAS_5087,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:47 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0439.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 12:48 pm
Operator : BM
Sample : DRO_L5_IAS_5086,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:28 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.985	84614240	462.092 ng
Spiked Amount 100.000		Recovery = 462.09%	
Target Compounds			
3) H TPH-DRO	3.300	1652545295	4540.794 ng

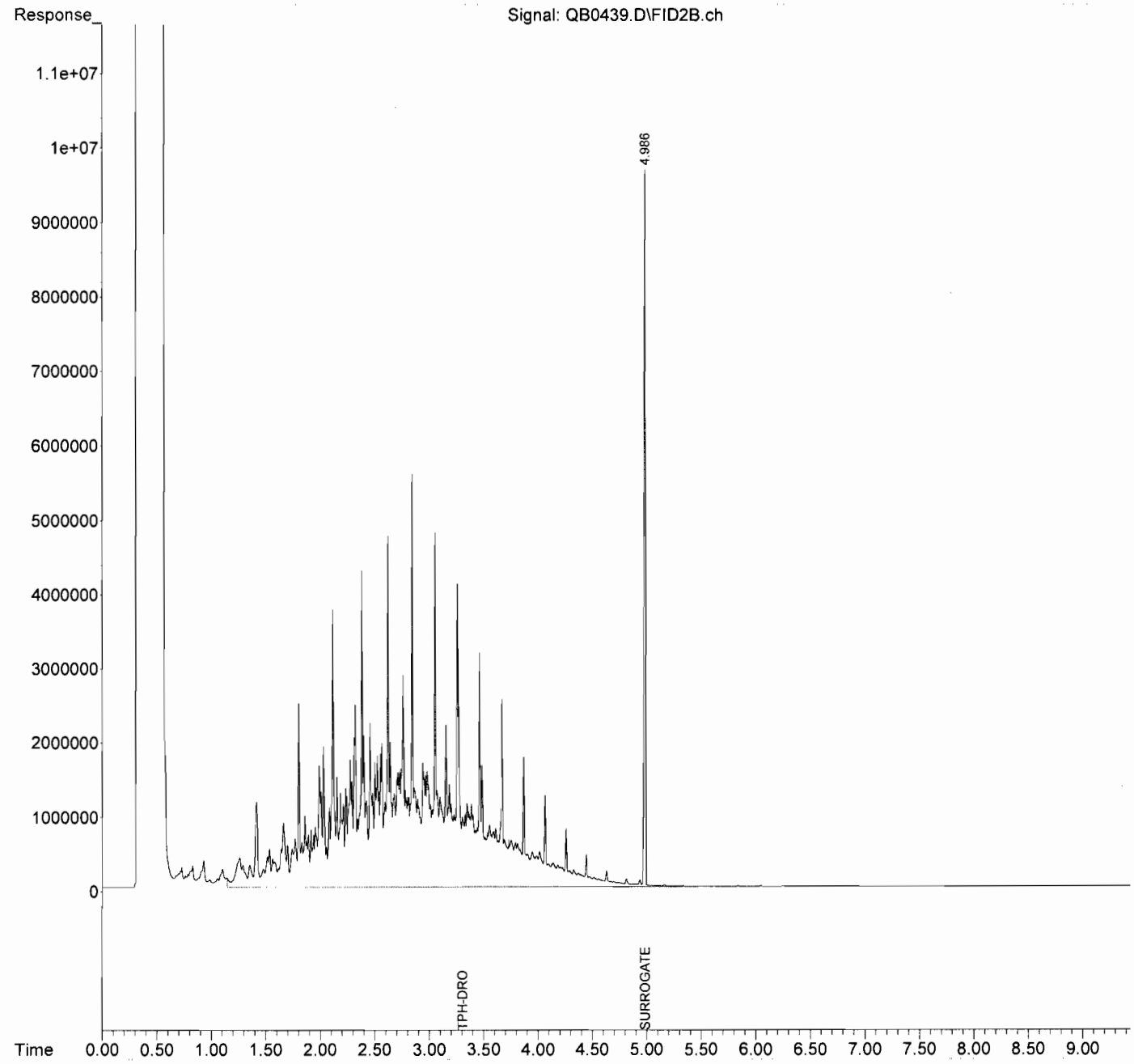
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0439.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 12:48 pm
Operator : BM
Sample : DRO_L5_IAS_5086,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:28 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0444.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 2:31 pm
Operator : BM
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:45:59 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.990	17200317	93.998 ng
Spiked Amount 100.000		Recovery = 94.00%	
Target Compounds			
3) H TPH-DRO	3.300	314560424	864.306 ng

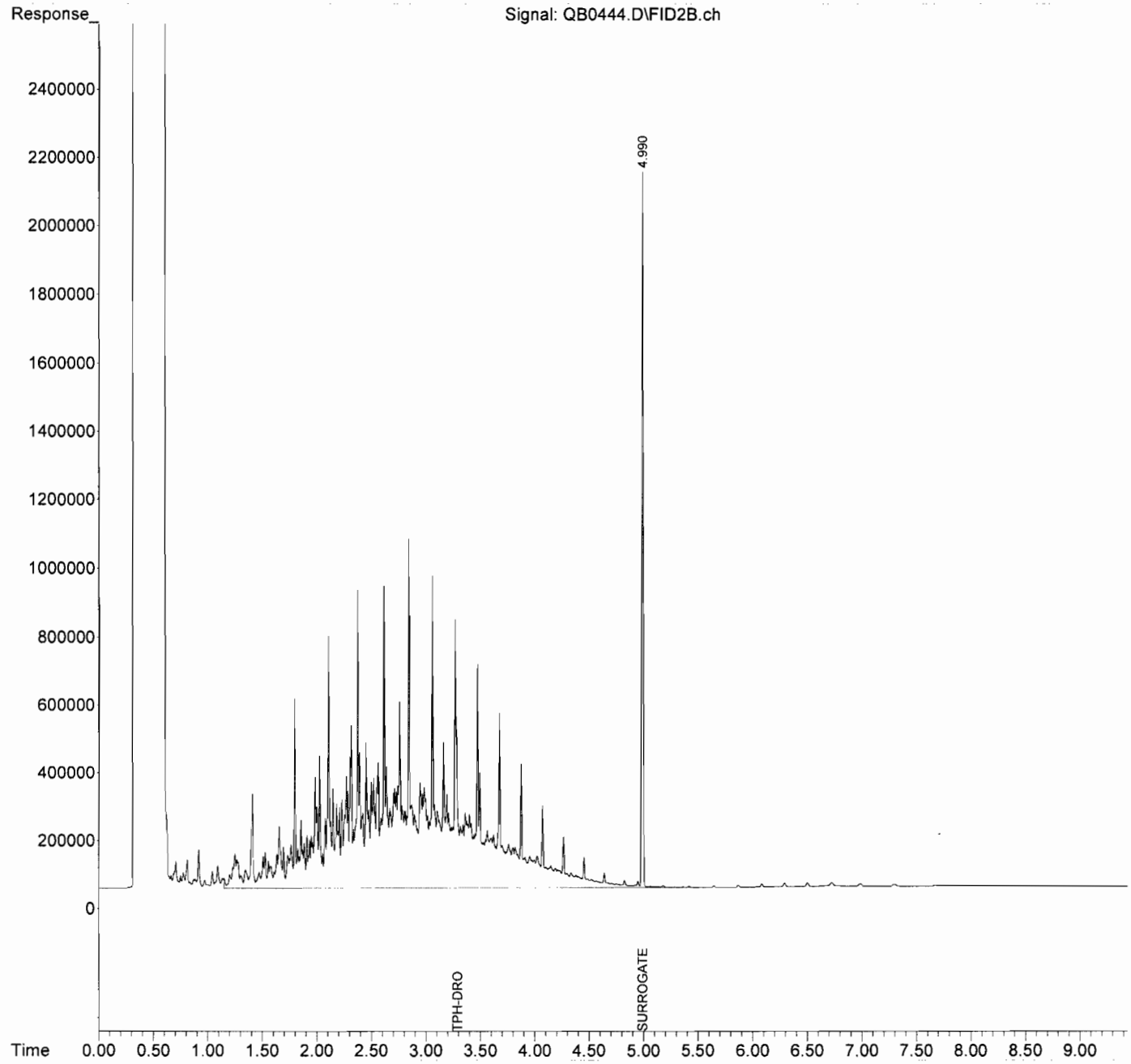
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0444.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 2:31 pm
Operator : BM
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:45:59 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0767.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 12:04 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 12:39:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	20582619	112.482 ng
Spiked Amount 100.000		Recovery = 112.48%	
Target Compounds			
3) H TPH-DRO	3.300	361665036	993.733 ng

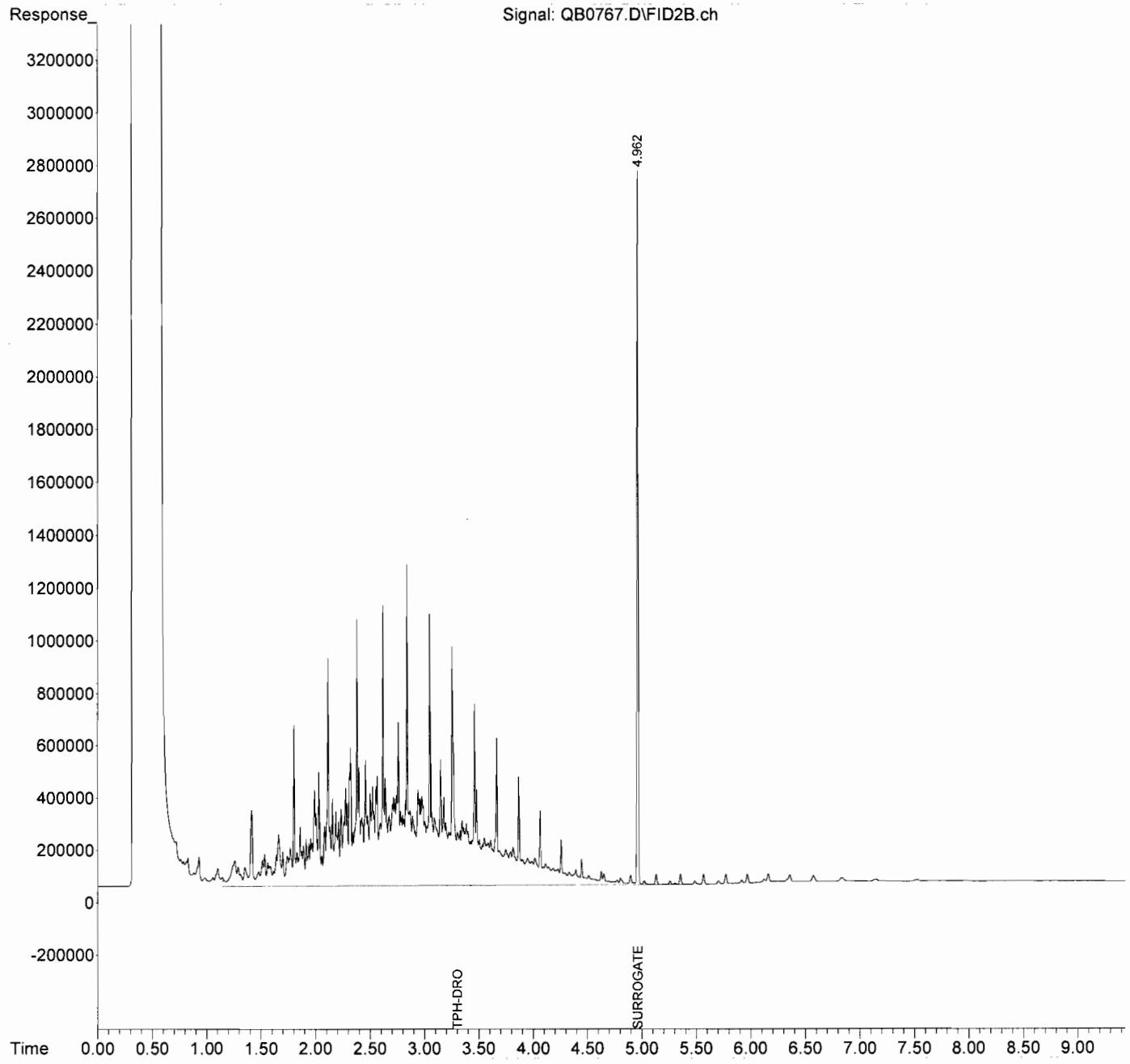
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0767.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 12:04 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 12:39:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0774.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 2:02 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 14:21:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.964	20772026	113.517 ng
Spiked Amount 100.000		Recovery = 113.52%	
Target Compounds			
3) H TPH-DRO	3.300	352775468	969.308 ng

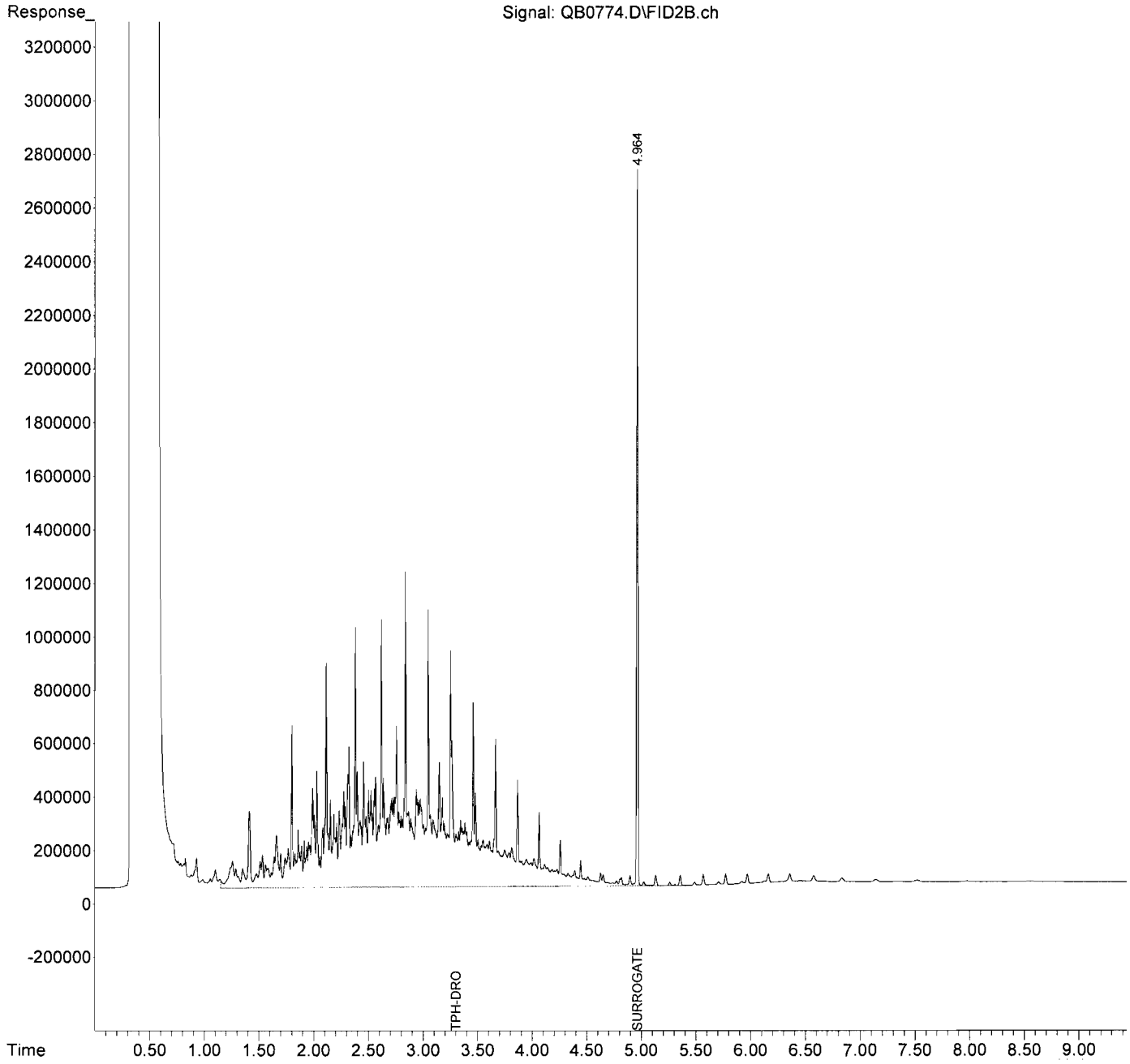
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0774.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 2:02 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 14:21:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS150213-01	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/13/2015	Dilution Factor:	1
Date Analyzed:	02/13/2015	% Moisture:	0
Data File:	QB0622.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS150219-08	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/19/2015	Dilution Factor:	1
Date Analyzed:	02/20/2015	% Moisture:	0
Data File:	QB0771.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0771.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:21 pm
Operator : RG
Sample : TPH-DRO,BLKS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:57:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.976	15414342	84.238 ng
Spiked Amount 100.000		Recovery =	84.24%
Target Compounds			

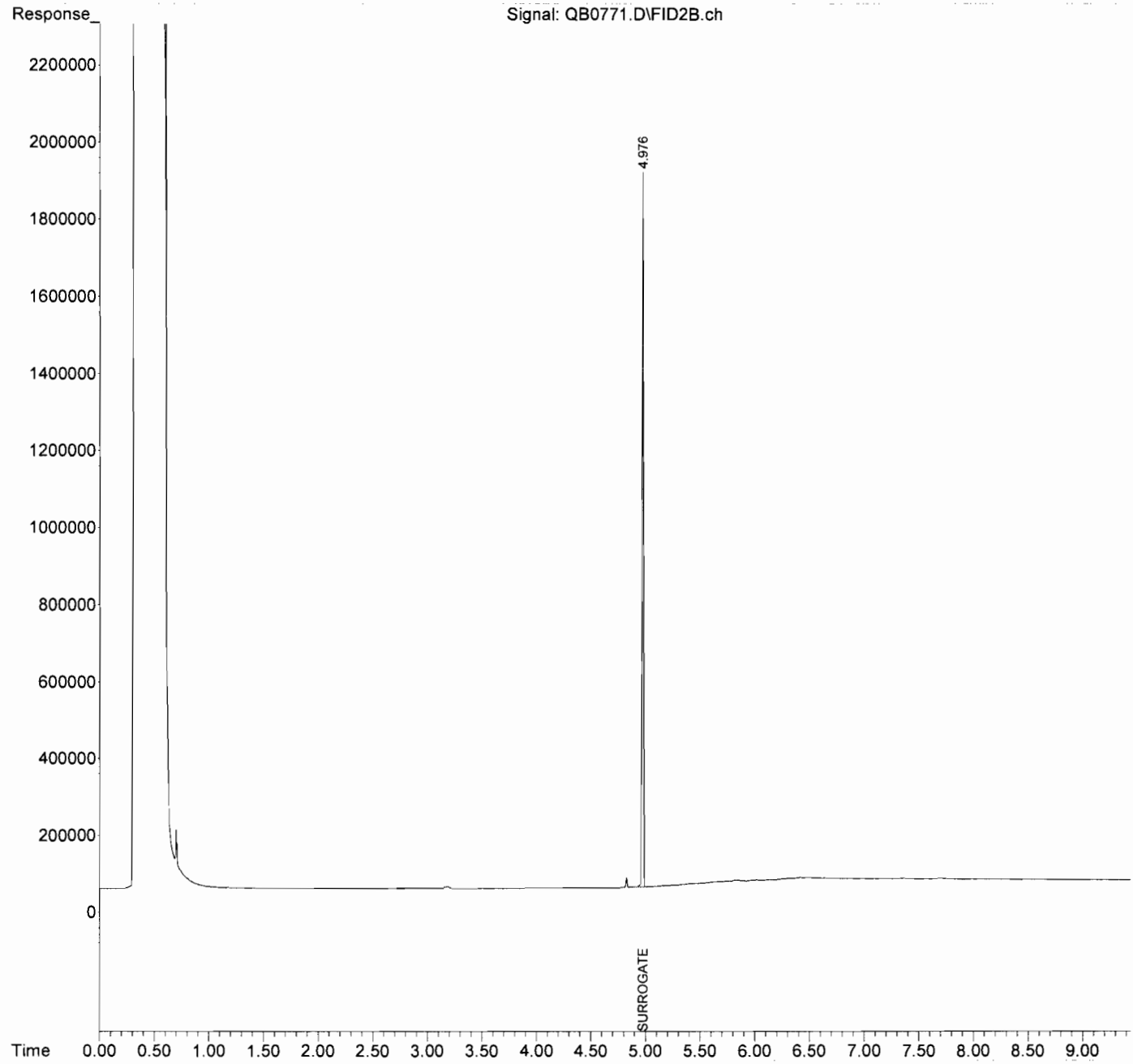
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0771.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:21 pm
Operator : RG
Sample : TPH-DRO,BLKS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:57:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0773.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:48 pm
Operator : RG
Sample : TPH-DRO,LCSS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:59:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.960	14883844	81.339 ng
Spiked Amount 100.000		Recovery =	81.34%
Target Compounds			
3) H TPH-DRO	3.300	328364282	902.234 ng

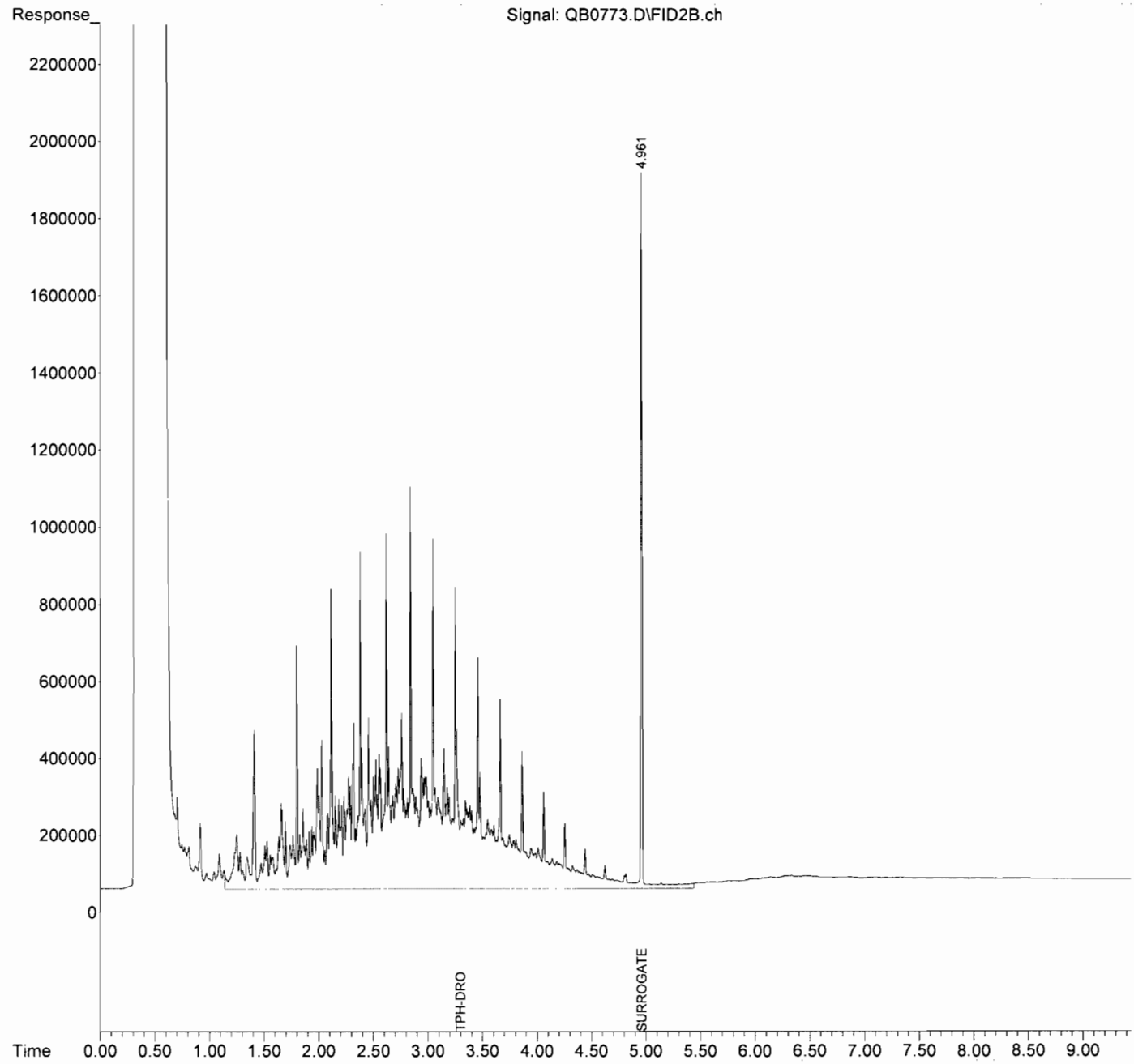
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0773.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:48 pm
Operator : RG
Sample : TPH-DRO,LCSS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:59:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0636.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:26 pm
Operator : RG
Sample : TPH-DRO,01126-001MS,S,10.24g,5.10,02/13/15,15
Misc : 150213-01,NA,NA,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.954	15213823	83.142 ng
Spiked Amount 100.000		Recovery =	83.14%
Target Compounds			
3) H TPH-DRO	3.300	353850074	972.261 ng

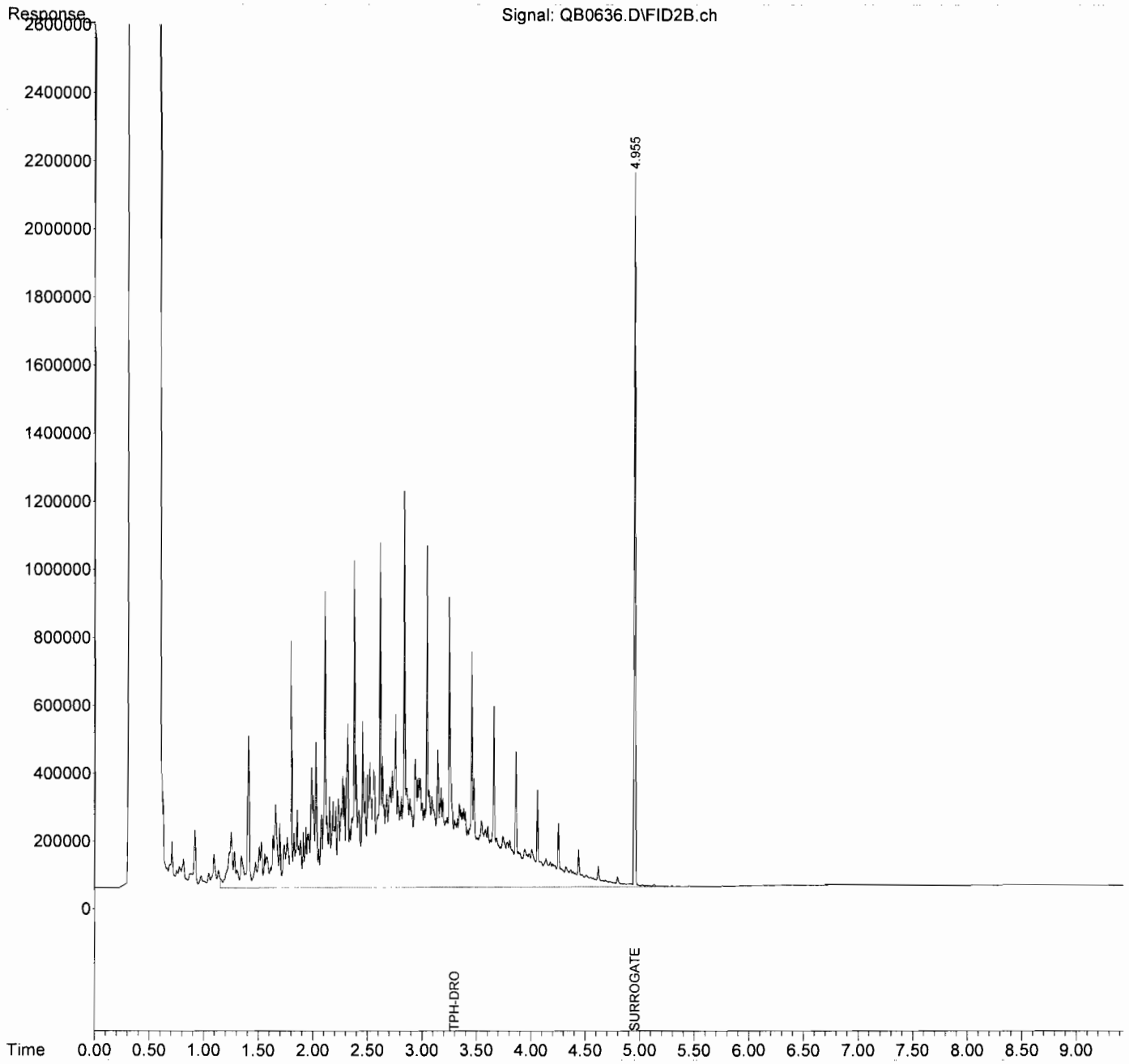
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0636.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:26 pm
Operator : RG
Sample : TPH-DRO,01126-001MS,S,10.24g,5.10,02/13/15,15
Misc : 150213-01,NA,NA,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0637.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:39 pm
Operator : RG
Sample : TPH-DRO,01126-001MSD,S,10.24g,5.10,02/13/15,1
Misc : 150213-01,NA,NA,1
ALS Vial : 69 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.954	14988910	81.913 ng
Spiked Amount 100.000		Recovery =	81.91%
Target Compounds			
3) H TPH-DRO	3.300	349457791	960.192 ng

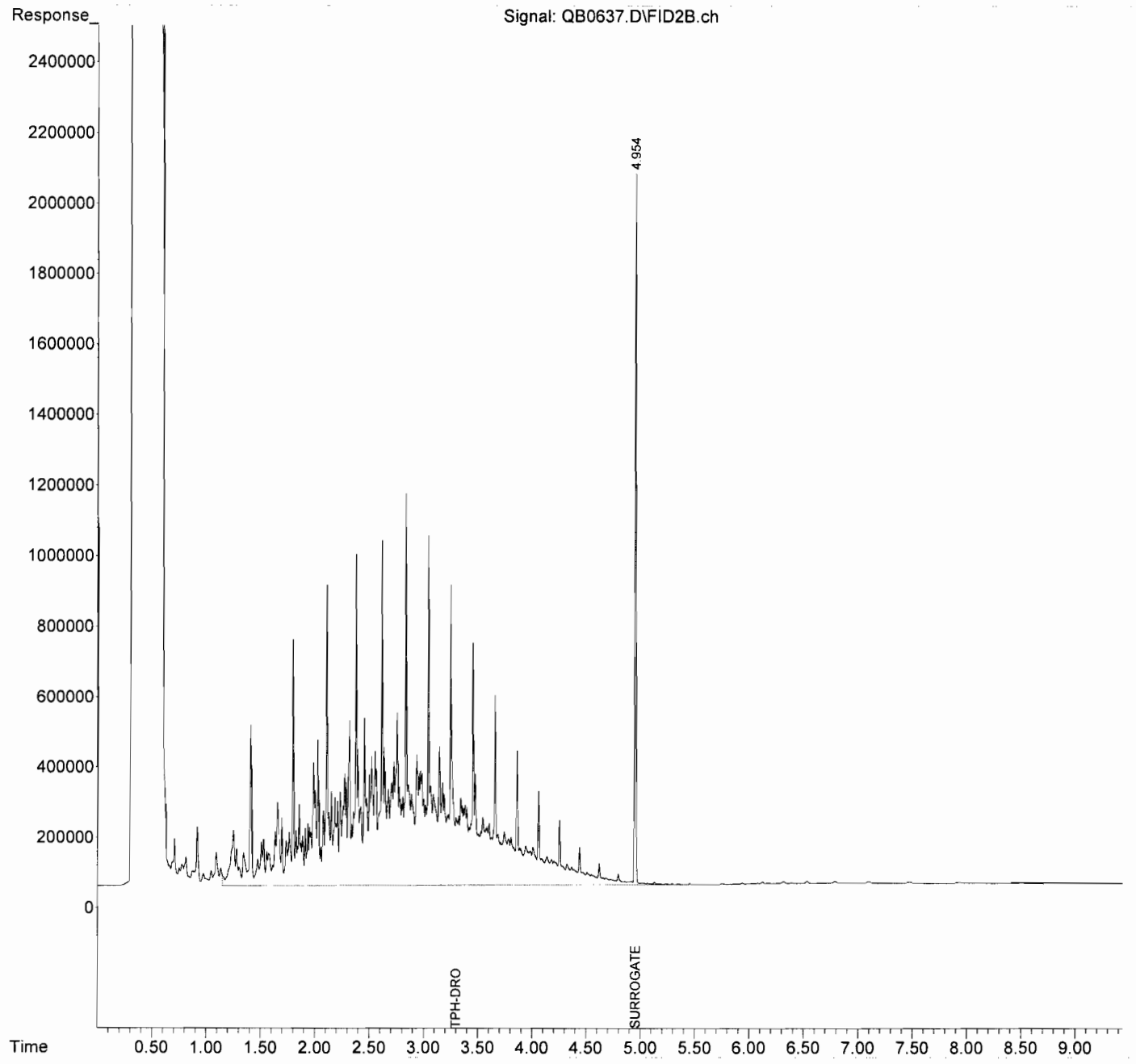
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0637.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:39 pm
Operator : RG
Sample : TPH-DRO,01126-001MSD,S,10.24g,5.10,02/13/15,1
Misc : 150213-01,NA,NA,1
ALS Vial : 69 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

TPH-DRO (Soil)

Extraction Date/Time: 02/19/2015 16:20

Batch ID: **150219-08**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-08	TPH-DRO	10	15	10				
LCSS150219-08	TPH-DRO	10	15	10		150		

Standard Info	Surrogate IAS #
Solvent	71-18/74-17
Surrogate	5084
SPK 1	5120
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TPH-DRO	10.71	15	10			R-48	01126-001MS / 150213-01	
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Elma	02/19/2015 16:20
Weighed	Elma	02/19/2015 16:25
Surrogated	Elma	02/19/2015 16:25
Filtered		
Transferred		
Fractionated		

Comments:

55-57

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

DATE: 2/4/2015 12:00 **CURVE**

INSTRUMENT: Q TPH-ITPH-DRO

TEST GROUP: TPH-DRO TPH-DRO

METHOD QBDR0204

System Method: 8015 D (eg. 8015B M, 3810, QAM-025)

ANALYST: Bei DRO/ NJ-EPH-DRO

Initial

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
51	QB0437		CH2CL2									
52	QB0438		DRO_RT_IAS_5231,100_PPM									
53	QB0439		DRO_L5_IAS_5086,5000_PPM									
54	QB0440		DRO_L4_IAS_5087,2000_PPM									
55	QB0441		DRO_L3_IAS_5088,1000_PPM									
56	QB0442		DRO_L2_IAS_5089,500_PPM									
57	QB0443		DRO_L1_IAS_5090,40_PPM									
55	QB0444		DRO_C_IAS_5088,1000_PPM									

DATE:	2/20/2015 0:00		**150219-08**	BS	Soil
INSTRUMENT:	Q	TPH-ITPH-DRO	**150219-04**		
TEST GROUP:	TPH-DRO	TPH-DRO			
METHOD	QBDR0204				
System Method:	8015 D	(eg. 8015B M, 3810, QAM-025)			
ANALYST:	Rachael ~~Latha~~	DRO/ NJ-EPH-DRO			
		Initial			

2/20/2015

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	51	QB0765		CH2CL2		1			S	15			100
2	53	QB0766		DRO_RT_IAS_5231,10(		1			S	15			100
3	54	QB0767		DRO_C_IAS_5088,100(		1			S	15			100
1	55	QB0771		BLKS150219-08		1	10.0	2/19/15	S	15			0
2	56	QB0772		01273	1	1	10.71	2/19/15	S	15	2/18/15	2/19/15	10.6
3	57	QB0773		LCSS150219-08		1	10.0	2/19/15	S	15			0
4	54	QB0774		DRO_C_IAS_5088,100(		1			S	15			100

STANDARD IAS#	STANDARD NAME:	8011 L-3		
5228				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPM/4PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	5 µl (IAS# 5225) → 10ml Isooctane			1PPb/2PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 L-2		
5229				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPM/4PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	2.5 µl (IAS# 5225) → 10ml Isooctane			0.5PPb/1PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 L-1		
5230				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPb 2PPM/4PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	1.25 µl (IAS# 5225) → 10ml Isooctane			0.25PPb/0.5PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	DP10 RT standard		
5231				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/12/2015	Restek	31482	A076690	200 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/12/2015	1:2			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
7/30/2024	Hexane		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 1		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/16/2014	Chem Service	N-11638-1G	2884300	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/16/2015	1g → 10ml of CH_2Cl_2			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5085				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/16/2014	Chem Service IAS: 5084	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/16/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L5		
5086				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	Accustandard	DRO-ALL-102-LCS-10X-R1	212061335	50,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1ml stock + 500µl surr2(#5085) + 8500µl CH_2Cl_2			5,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L4		
5087				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	# 5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:2.5			2,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			2/23/15 09:48		2/23/15 10:44		2/23/15 11:37		2/23/15 12:30	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	25.1	100	25.5	102	24.8	99.2	25.0	100
Antimony	0.250	25.0	23.2	92.8	23.6	94.4	23.2	92.8	23.6	94.4
Arsenic	0.250	25.0	23.0	92.0	23.3	93.2	23.1	92.4	23.2	92.8
Barium	0.500	25.0	23.5	94.0	23.2	92.8	23.5	94.0	23.0	92.0
Beryllium	0.200	25.0	24.8	99.2	24.6	98.4	24.3	97.2	24.2	96.8
Cadmium	0.125	25.0	23.6	94.4	23.5	94.0	23.9	95.6	22.7	90.8
Calcium	5.00	250	243	97.2	241	96.4	239	95.6	249	99.6
Chromium	0.500	25.0	23.5	94.0	23.7	94.8	23.7	94.8	24.0	96.0
Cobalt	0.500	25.0	23.4	93.6	23.6	94.4	23.8	95.2	23.7	94.8
Copper	0.500	25.0	23.5	94.0	23.5	94.0	24.8	99.2	23.9	95.6
Iron	5.00	250	234	93.6	237	94.8	237	94.8	235	94.0
Lead	0.500	25.0	23.4	93.6	23.4	93.6	23.5	94.0	23.1	92.4
Magnesium	5.00	250	242	96.8	244	97.6	241	96.4	247	98.8
Manganese	0.250	25.0	24.2	96.8	24.4	97.6	24.1	96.4	24.3	97.2
Mercury	0.120	5.00	5.00	100	5.00	100	4.77	95.4	5.35	107
Nickel	0.500	25.0	23.2	92.8	23.5	94.0	23.7	94.8	23.7	94.8
Potassium	5.00	250	239	95.6	243	97.2	240	96.0	247	98.8
Selenium	0.500	25.0	23.7	94.8	25.5	102	24.1	96.4	24.7	98.8
Silver	0.125	25.0	25.1	100	25.1	100	25.0	100	24.8	99.2
Sodium	5.00	250	246	98.4	248	99.2	246	98.4	258	103
Thallium	0.125	25.0	23.4	93.6	23.6	94.4	23.5	94.0	23.0	92.0
Vanadium	0.500	25.0	23.8	95.2	24.2	96.8	23.7	94.8	24.1	96.4
Zinc	0.500	25.0	24.1	96.4	24.3	97.2	24.3	97.2	24.1	96.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

2/23/15 13:22

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	24.7	98.8						
Antimony	0.250	25.0	23.9	95.6						
Arsenic	0.250	25.0	22.7	90.8						
Barium	0.500	25.0	23.4	93.6						
Beryllium	0.200	25.0	24.3	97.2						
Cadmium	0.125	25.0	23.5	94.0						
Calcium	5.00	250	274	110						
Chromium	0.500	25.0	22.9	91.6						
Cobalt	0.500	25.0	23.2	92.8						
Copper	0.500	25.0	25.1	100						
Iron	5.00	250	274	110						
Lead	0.500	25.0	23.4	93.6						
Magnesium	5.00	250	269	108						
Manganese	0.250	25.0	23.3	93.2						
Nickel	0.500	25.0	23.0	92.0						
Potassium	5.00	250	255	102						
Selenium	0.500	25.0	23.5	94.0						
Silver	0.125	25.0	25.1	100						
Sodium	5.00	250	270	108						
Thallium	0.125	25.0	23.6	94.4						
Vanadium	0.500	25.0	23.5	94.0						
Zinc	0.500	25.0	23.3	93.2						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

		2/23/15 09:56	2/23/15 10:49	2/23/15 11:42	2/23/15 12:34	2/23/15 13:27	
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Aluminum	0.0005	ND	ND	ND	ND	ND	
Antimony	0.00025	ND	ND	ND	ND	ND	
Arsenic	0.00025	ND	ND	ND	ND	ND	
Barium	0.0005	ND	ND	ND	ND	ND	
Beryllium	0.0002	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Calcium	0.005	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Cobalt	0.0005	ND	ND	ND	ND	ND	
Copper	0.0005	ND	ND	ND	ND	ND	
Iron	0.005	ND	ND	ND	ND	ND	
Lead	0.0005	ND	ND	ND	ND	ND	
Magnesium	0.005	ND	ND	ND	ND	ND	
Manganese	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00012	ND	ND	ND	ND		
Nickel	0.0005	ND	ND	ND	ND	ND	
Potassium	0.005	ND	ND	ND	ND	ND	
Selenium	0.0005	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	
Sodium	0.005	ND	ND	ND	ND	ND	
Thallium	0.000125	ND	ND	ND	ND	ND	
Vanadium	0.0005	ND	ND	ND	ND	ND	
Zinc	0.0005	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

02/23/2015 10:01 AM

Batch (Page) #: 079
Associated Lab Case for Blank 1: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Unit: ppm (mg/kg) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKS150220-01
Aluminum	0.500	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.500	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	5.00	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	5.00	ND
Lead	0.500	ND
Magnesium	5.00	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	5.00	ND
Selenium	0.500	ND
Silver	0.125	ND
Sodium	5.00	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	0.500	ND

Associated Sample for Blank 1:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	95100	92000	92.0	NA
Calcium	100000	-	96800	94500	94.5	NA
Iron	100000	-	96100	93700	93.7	NA
Potassium	100000	-	97300	94900	94.9	NA
Magnesium	100000	-	96800	93500	93.5	NA
Sodium	100000	-	101000	97800	97.8	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2380	2340	117	NA
Titanium	2000	-	2050	1990	99.5	NA
Silver	-	20.0	-	21.0	105	80-120
Arsenic	-	20.0	-	20.5	103	80-120
Cadmium	-	20.0	-	19.5	97.5	80-120
Cobalt	-	20.0	-	20.8	104	80-120
Chromium	-	20.0	-	20.4	102	80-120
Copper	-	20.0	-	20.8	104	80-120
Manganese	-	20.0	-	21.4	107	80-120
Nickel	-	20.0	-	19.9	99.5	80-120
Zinc	-	20.0	-	19.9	99.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS150220-01 TRUE	LCSS150220-01 FOUND	LCSS150220-01 %R(1)	TRUE	FOUND	%R(1)
Aluminum	200	202	101			
Antimony	40.0	40.2	101			
Arsenic	40.0	40.6	102			
Barium	40.0	40.6	102			
Beryllium	40.0	43.7	109			
Cadmium	40.0	41.1	103			
Calcium	200	202	101			
Chromium	40.0	41.7	104			
Cobalt	40.0	40.2	101			
Copper	40.0	42.1	105			
Iron	200	203	102			
Lead	40.0	42.4	106			
Magnesium	200	208	104			
Manganese	40.0	39.7	99.3			
Mercury	0.500	0.596	119			
Nickel	40.0	41.8	105			
Potassium	200	200	100			
Selenium	40.0	41.7	104			
Silver	40.0	44.3	111			
Sodium	200	216	108			
Thallium	40.0	39.3	98.3			
Vanadium	40.0	40.4	101			
Zinc	40.0	39.7	99.3			

(1) Control Limits % Recovery = 80-120%

LCSS150220-01 2/23/15 10:05

01158-021~022; 01224-001; 01273-001; 01281-001

01281-002~016

METALS QUALITY CONTROL

LOW LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

2/23/15 09:52

ANALYTE	INST. MDL	LLICV TRUE	LLICV FOUND	LLICV % R
Aluminum	0.500	0.500	0.515	103
Antimony	0.250	0.500	0.535	107
Arsenic	0.250	0.500	0.488	97.6
Barium	0.500	0.500	0.591	118
Beryllium	0.200	0.500	0.577	115
Cadmium	0.125	0.500	0.557	111
Calcium	5.00	5.00	5.37	107
Chromium	0.500	0.500	0.618	124
Cobalt	0.500	0.500	0.537	107
Copper	0.500	0.500	0.539	108
Iron	5.00	5.00	5.43	109
Lead	0.500	0.500	0.549	110
Magnesium	5.00	5.00	5.34	107
Manganese	0.250	0.500	0.508	102
Nickel	0.500	0.500	0.606	121
Potassium	5.00	5.00	5.20	104
Selenium	0.500	0.500	0.454	90.8
Silver	0.125	0.500	0.500	100
Sodium	5.00	5.00	6.12	122
Thallium	0.125	0.500	0.588	118
Vanadium	0.500	0.500	0.494	98.8
Zinc	0.500	0.500	0.596	119

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	2/23/15 10:23 SSR1	2/23/15 10:09 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	12300	11800	NC	242					75-125
Antimony	48.1	0.485	98.4	48.4					75-125
Arsenic	50.2	3.24	97.0	48.4					75-125
Barium	224	171	110	48.4					75-125
Beryllium	51.4	0.488	105	48.4					75-125
Cadmium	48.0	0.157	98.8	48.4					75-125
Calcium	1430	1180	103	242					75-125
Chromium	65.0	16.1	101	48.4					75-125
Cobalt	53.4	6.29	97.3	48.4					75-125
Copper	60.9	11.9	101	48.4					75-125
Iron	16500	15800	NC	242					75-125
Lead	71.8	20.5	106	48.4					75-125
Magnesium	2330	2050	116	242					75-125
Manganese	202	153	101	48.4					75-125
Mercury	0.754	0.049	117	0.605					75-125
Nickel	60.2	11.4	101	48.4					75-125
Potassium	1050	803	102	242					75-125
Selenium	50.6	2.21	100.0	48.4					75-125
Silver	60.2	ND	124	48.4					75-125
Sodium	337	87.1	103	242					75-125
Thallium	46.7	0.767	94.9	48.4					75-125
Vanadium	78.1	29.7	100	48.4					75-125
Zinc	157	110	97.1	48.4					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E15-01158-021
% Solids: 82.6
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	2/23/15 10:09 S1	2/23/15 10:14 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	11800	12100	2.51				
Antimony	20	0.485	0.465	4.21				
Arsenic	20	3.24	3.43	5.70				
Barium	20	171	173	1.16				
Beryllium	20	0.488	0.463	5.26				
Cadmium	20	0.157	0.164	4.36				
Calcium	20	1180	1230	4.15				
Chromium	20	16.1	16.3	1.23				
Cobalt	20	6.29	6.45	2.51				
Copper	20	11.9	12.0	0.837				
Iron	20	15800	16200	2.50				
Lead	20	20.5	21.0	2.41				
Magnesium	20	2050	2100	2.41				
Manganese	20	153	157	2.58				
Mercury	20	0.049	0.047	4.17				
Nickel	20	11.4	11.8	3.45				
Potassium	20	803	825	2.70				
Selenium	20	2.21	2.00	9.98				
Silver	NA	ND	ND	NC				
Sodium	20	87.1	92.4	5.91				
Thallium	20	0.767	0.747	2.64				
Vanadium	20	29.7	30.6	2.99				
Zinc	20	110	113	2.69				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E15-01158-021
% Solids: 82.6
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	2/23/15 10:09 SR	2/23/15 10:18 SDR	% Difference	2/23/15 10:27 SPR	SA	% Recovery
Aluminum	11800	12400	4.96			
Antimony	0.485	ND	NC	40.5	48.4	82.7
Arsenic	3.24	3.29	1.53	43.4	48.4	83.0
Barium	171	169	1.18			
Beryllium	0.488	ND	NC	40.6	48.4	82.9
Cadmium	0.157	ND	NC	39.1	48.4	80.5
Calcium	1180	1170	0.851			
Chromium	16.1	16.5	2.45			
Cobalt	6.29	6.32	0.476	46.7	48.4	83.5
Copper	11.9	11.8	0.844			
Iron	15800	16100	1.88			
Lead	20.5	20.6	0.487			
Magnesium	2050	2170	5.69			
Manganese	153	156	1.94			
Nickel	11.4	12.0	5.13			
Potassium	803	809	0.744			
Selenium	2.21	ND	NC	41.7	48.4	81.6
Silver	ND	ND	NC	38.9	48.4	80.4
Sodium	87.1	90.5	3.83	869	968	80.8
Thallium	0.767	0.781	1.81	41.1	48.4	83.3
Vanadium	29.7	29.5	0.676			
Zinc	110	113	2.69			

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

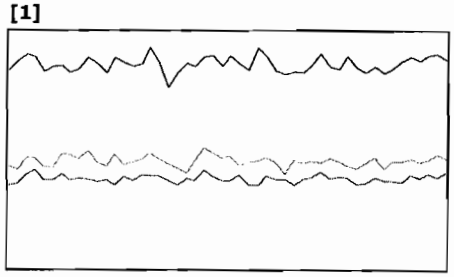
Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E15-01158-021
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

Tune Report

Batch Folder D:\Data\6020\pg079a.b
Report Comment
Instrument Name G3281A JP12382037

[1]



Mass	Range	Count	RSD%	Background
59	5000	1897	4.454	1.700
89	5000	2270	5.070	1.400
205	5000	4314	3.812	2.500

Ratio (oxide) 156/140 0.369 % **Ratio (2+)** 70/140 3.250 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.31

Tune Parameters
Plasma Paramters

RF Power	1550 W	Carrier Gas	1.01 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-2.0 V	Omega Lens	8.3 V	Deflect	1.8 V
Extract 2	-190.0 V	Cell Entrance	-24 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7	5000	3724	3.329	7.800
89	20000	15221	4.763	5.300
205	10000	6165	3.667	14.500
59	10000	7064	3.711	2.500

Ratio (oxide) 156/140 1.031 % **Ratio (2+)** 70/140 10.769 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.413

Mass	Peak Height	Axis	W-50%	W-X%
7	3735.23	7.00	0.64	0.733
89	14755.72	89.00	0.61	0.731
205	6097.19	205.00	0.60	0.741
59	7000.51	58.95	0.65	0.735

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Tune Report

RF Power	1550 W	Carrier Gas	1.05 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-3.1 V	Omega Lens	7.8 V	Deflect	12.8 V
Extract 2	-185.0 V	Cell Entrance	-26 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-54 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

METALS INTERNAL STANDARD AREA SUMMARY
2015 PG079
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	1901180		126570		931750		5993003		7388471		4361567		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1330826	70	88599	70	652225	70	4195102	70	5171930	70	3053097	70	
	Upper Limit	2281416	120	151884	120	1118100	120	7191604	120	8866165	120	5233880	120	
004CALS.d	STD1	1915213	101	126085	100	938468	101	5988787	100	7365679	100	4360863	100	
005CALS.d	STD2	1927728	101	127323	101	927762	100	5974588	100	7319475	99	4338819	99	
006CALS.d	STD3	1882785	99	125465	99	918376	99	5920615	99	7328306	99	4359299	100	
007CALS.d	STD4	1917539	101	125213	99	928233	100	6038235	101	7430978	101	4459298	102	
008CALS.d	STD5	1933870	102	124397	98	918862	99	5973631	100	7412976	100	4446332	102	
010_CCV.d	ICV	1932746	102	125357	99	923635	99	5961066	99	7394132	100	4370877	100	
011LCCV.d	LLICV	1936903	102	125978	100	926323	99	5956048	99	7334681	99	4353359	100	
012_ICB.d	ICB	1930896	102	124999	99	929893	100	5998603	100	7351095	99	4366528	100	
013SMPL.d	BLKS150220-01	1929562	101	122993	97	915461	98	5873781	98	7259933	98	4293540	98	
014SMPL.d	LCSS150220-01	1920046	101	122607	97	921148	99	5908339	99	7311647	99	4310515	99	
015SMPL.d	E15-01158-021	2013130	106	127272	101	956500	103	5909876	99	7425119	100	4330447	99	
016SMPL.d	E15-01158-021DUP	2042827	107	128144	101	970160	104	6018828	100	7542394	102	4355923	100	
017SMPL.d	E15-01158-021SD	2062415	108	129999	103	972512	104	6182814	103	7578020	103	4469564	102	
018SMPL.d	E15-01158-021MS	2064113	109	129747	103	978886	105	6084533	102	7628597	103	4430768	102	
019SMPL.d	E15-01158-021PS	2053738	108	128442	101	983162	106	6115259	102	7646376	103	4444203	102	
022SMPL.d	E15-01273-001	2022177	106	126909	100	986418	106	6061472	101	7592311	103	4430851	102	
023_CCV.d	CCV	2019218	106	129999	103	969270	104	6228002	104	7539941	102	4429153	102	
024_CCB.d	CCB	1967398	103	126780	100	951871	102	6100274	102	7435989	101	4389644	101	
025SMPL.d	E15-01158-022	2051378	108	128824	102	973866	105	6070190	101	7543434	102	4388274	101	
026SMPL.d	E15-01281-001	1984046	104	131499	104	1058006	114	5951981	99	7453895	101	4394041	101	
027SMPL.d	E15-01281-002	1860739	98	112852	89	922163	99	5610921	94	7242457	98	4351469	100	
028SMPL.d	E15-01281-003	1882282	99	115595	91	946324	102	5668933	95	7359123	100	4406212	101	
029SMPL.d	E15-01281-004	1849302	97	115963	92	977796	105	5669824	95	7337508	99	4362039	100	
030SMPL.d	E15-01281-005	1929070	101	115209	91	973684	105	5724804	96	7344474	99	4401482	101	
031SMPL.d	E15-01281-006	1842548	97	130752	103	911138	98	5731985	96	7359640	100	4387337	101	
032SMPL.d	E15-01281-007	1850980	97	116169	92	986258	106	5715596	95	7330366	99	4414873	101	
033SMPL.d	E15-01281-008	1863064	98	117342	93	947450	102	5692861	95	7409386	100	4373906	100	
034SMPL.d	E15-01281-009	1882739	99	114649	91	942265	101	5708464	95	7509506	102	4436383	102	
035_CCV.d	CCV	2012212	106	121878	96	967729	104	6209502	104	7748994	105	4568640	105	
036_CCB.d	CCB	2018997	106	123138	97	967752	104	6258581	104	7711496	104	4550401	104	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

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METALS INTERNAL STANDARD AREA SUMMARY
2015 PG079
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	1901180		126570		931750		5993003		7388471		4361567		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1330826	70	88599	70	652225	70	4195102	70	5171930	70	3053097	70	
	Upper Limit	2281416	120	151884	120	1118100	120	7191604	120	8866165	120	5233880	120	
037SMPL.d	E15-01281-010	1953808	103	119877	95	992264	106	5905431	99	7595900	103	4521687	104	
038SMPL.d	E15-01281-011	2003991	105	120799	95	1004452	108	5945230	99	7664278	104	4597045	105	
039SMPL.d	E15-01281-012	1983257	104	119423	94	1003728	108	5920724	99	7610848	103	4517369	104	
040SMPL.d	E15-01281-013	2033892	107	119757	95	992356	107	5982734	100	7633326	103	4434585	102	
041SMPL.d	E15-01281-014	2035213	107	120414	95	997427	107	6046663	101	7697941	104	4442092	102	
042SMPL.d	E15-01281-015	2040651	107	121840	96	985115	106	6001742	100	7645745	103	4433998	102	
043SMPL.d	E15-01281-016	1962250	103	117972	93	981635	105	5887117	98	7384497	100	4288805	98	
044SMPL.d	E15-01224-001	2054490	108	118831	94	996656	107	5850452	98	7447997	101	4209643	97	
047_CCV.d	CCV	2126776	112	126798	100	1034810	111	6402457	107	7758915	105	4534694	104	
048_CCB.d	CCB	2106194	111	129251	102	1024902	110	6391850	107	7701153	104	4468439	102	
049SMPL.d	E15-01281-001	2151106	113	128995	102	1021514	110	6282920	105	7679107	104	4501612	103	
050SMPL.d	E15-01281-002	2174625	114	126265	100	1014789	109	6342478	106	7720360	104	4508185	103	
051SMPL.d	E15-01281-003	2198265	116	126417	100	1006118	108	6255430	104	7645524	103	4490295	103	
052SMPL.d	E15-01281-004	2163933	114	124476	98	1004167	108	6235913	104	7617753	103	4480394	103	
053SMPL.d	E15-01281-005	2196943	116	124269	98	1001868	108	6197299	103	7549179	102	4435709	102	
054SMPL.d	E15-01281-007	2188391	115	123203	97	990719	106	6167901	103	7528672	102	4425767	101	
055SMPL.d	E15-01281-011	2164220	114	114796	91	1001869	108	6206153	104	7566511	102	4412096	101	
057ICSA.d	ICSA	1914010	101	125010	99	1054498	113	5509853	92	7395562	100	3907130	90	
058ICSB.d	ICSAB	1922097	101	129375	102	1086444	117	5624381	94	7484678	101	3927738	90	
059_CCV.d	CCV	2076299	109	131331	104	1036899	111	6551042	109	7986442	108	4641439	106	
060_CCB.d	CCB	2046039	108	113263	89	1027725	110	6475247	108	7854946	106	4585057	105	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

METALS RAW DATA

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:17:45-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	46740	0.00
Mg	24	1	1	632	2.22
Al	27	1	1	453	2.88
K	39	1	1	48312	0.00
Ca	44	1	1	559	2.86
Ti	47	1	1	7	750.38
V	51	1	1	1448	0.55
Cr	52	1	1	3076	0.05
Mn	55	1	1	586	1.04
Fe	56	1	1	17506	0.00
Co	59	1	1	169	13.94
Ni	60	1	1	976	1.32
Cu	63	1	1	31611	0.01
Zn	66	1	1	1340	0.65
As	75	1	1	61	45.79
Se	78	1	1	29	140.24
Be	9	2	2	56	71.98
B	11	2	2	40497	0.01
Mo	95	2	2	567	1.51
Ag	107	2	2	433	6.82
Cd	111	2	2	41	102.22
Sn	118	2	2	4186	0.25
Sb	121	2	2	270	6.14
Ba	137	2	2	267	5.63
Tl	205	2	2	1300	0.50
Pb	208	2	2	3056	0.26

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	126570	0.12
Li	6	2	2	1901180	0.14
Ge	72	2	2	931750	0.47
Rh	103	2	2	5993003	0.26
Tb	159	2	2	7388471	0.48
Bi	209	2	2	4361567	0.20

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:22:04-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	56629	0.00
Mg	24	1	1	4981	0.02
Al	27	1	1	731	0.73
K	39	1	1	51996	0.00
Ca	44	1	1	746	0.93
Ti	47	1	1	146	17.54
V	51	1	1	5903	0.03
Cr	52	1	1	8937	0.03
Mn	55	1	1	3851	0.08
Fe	56	1	1	66490	0.00
Co	59	1	1	10003	0.03
Ni	60	1	1	3847	0.03
Cu	63	1	1	38612	0.01
Zn	66	1	1	2484	0.20
As	75	1	1	763	0.81
Se	78	1	1	81	46.79
Be	9	2	2	5087	0.06
B	11	2	2	43472	0.01
Mo	95	2	2	9008	0.04
Ag	107	2	2	4601	0.10
Cd	111	2	2	3690	0.09
Sn	118	2	2	15837	0.02
Sb	121	2	2	15844	0.03
Ba	137	2	2	5902	0.07
Tl	205	2	2	33015	0.00
Pb	208	2	2	27153	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126085	1.14	126570	99.62	70	120	
Li	6	2	2	1915213	0.59	1901180	100.74	70	120	
Ge	72	2	2	938468	0.40	931750	100.72	70	120	
Rh	103	2	2	5988787	1.24	5993003	99.93	70	120	
Tb	159	2	2	7365679	0.87	7388471	99.69	70	120	
Bi	209	2	2	4360863	0.77	4361567	99.98	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:26:28-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	125342	0.00
Mg	24	1	1	43691	0.00
Al	27	1	1	2356	0.08
K	39	1	1	85101	0.00
Ca	44	1	1	2416	0.34
Ti	47	1	1	1361	0.41
V	51	1	1	45820	0.00
Cr	52	1	1	59837	0.00
Mn	55	1	1	31005	0.00
Fe	56	1	1	499385	0.00
Co	59	1	1	94628	0.00
Ni	60	1	1	27158	0.01
Cu	63	1	1	100327	0.00
Zn	66	1	1	11637	0.02
As	75	1	1	7467	0.03
Se	78	1	1	468	0.99
Be	9	2	2	52083	0.00
B	11	2	2	68707	0.00
Mo	95	2	2	80976	0.00
Ag	107	2	2	53080	0.01
Cd	111	2	2	39858	0.00
Sn	118	2	2	118716	0.00
Sb	121	2	2	157966	0.00
Ba	137	2	2	57144	0.00
Tl	205	2	2	322427	0.00
Pb	208	2	2	230998	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	127323	0.64	126570	100.60	70	120	
Li	6	2	2	1927728	0.69	1901180	101.40	70	120	
Ge	72	2	2	927762	0.43	931750	99.57	70	120	
Rh	103	2	2	5974588	0.48	5993003	99.69	70	120	
Tb	159	2	2	7319475	0.63	7388471	99.07	70	120	
Bi	209	2	2	4338819	0.73	4361567	99.48	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:30:47-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	428120	0.00
Mg	24	1	1	204485	0.00
Al	27	1	1	9104	0.01
K	39	1	1	226294	0.00
Ca	44	1	1	9856	0.02
Ti	47	1	1	6585	0.09
V	51	1	1	213825	0.00
Cr	52	1	1	273959	0.00
Mn	55	1	1	147598	0.00
Fe	56	1	1	2332081	0.00
Co	59	1	1	449279	0.00
Ni	60	1	1	126388	0.00
Cu	63	1	1	368360	0.00
Zn	66	1	1	51776	0.00
As	75	1	1	35199	0.01
Se	78	1	1	2259	0.33
Be	9	2	2	250433	0.00
B	11	2	2	188403	0.00
Mo	95	2	2	391551	0.00
Ag	107	2	2	265219	0.00
Cd	111	2	2	193256	0.00
Sn	118	2	2	562278	0.00
Sb	121	2	2	767049	0.00
Ba	137	2	2	278806	0.00
Tl	205	2	2	1587476	0.00
Pb	208	2	2	1101186	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125465	1.01	126570	99.13	70	120	
Li	6	2	2	1882785	1.20	1901180	99.03	70	120	
Ge	72	2	2	918376	0.42	931750	98.56	70	120	
Rh	103	2	2	5920615	0.68	5993003	98.79	70	120	
Tb	159	2	2	7328306	0.30	7388471	99.19	70	120	
Bi	209	2	2	4359299	0.65	4361567	99.95	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:35:09-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	823011	0.00
Mg	24	1	1	415926	0.00
Al	27	1	1	18167	0.01
K	39	1	1	413076	0.00
Ca	44	1	1	19367	0.01
Ti	47	1	1	13566	0.03
V	51	1	1	433255	0.00
Cr	52	1	1	552491	0.00
Mn	55	1	1	299875	0.00
Fe	56	1	1	4745431	0.00
Co	59	1	1	910105	0.00
Ni	60	1	1	256171	0.00
Cu	63	1	1	719651	0.00
Zn	66	1	1	102149	0.00
As	75	1	1	71029	0.00
Se	78	1	1	4399	0.10
Be	9	2	2	512907	0.00
B	11	2	2	338911	0.00
Mo	95	2	2	793710	0.00
Ag	107	2	2	540777	0.00
Cd	111	2	2	394477	0.00
Sn	118	2	2	1137127	0.00
Sb	121	2	2	1572702	0.00
Ba	137	2	2	560260	0.00
Tl	205	2	2	3272314	0.00
Pb	208	2	2	2339594	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125213	0.12	126570	98.93	70	120	
Li	6	2	2	1917539	0.10	1901180	100.86	70	120	
Ge	72	2	2	928233	0.98	931750	99.62	70	120	
Rh	103	2	2	6038235	1.19	5993003	100.75	70	120	
Tb	159	2	2	7430978	0.79	7388471	100.58	70	120	
Bi	209	2	2	4459298	0.69	4361567	102.24	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:39:28-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	1521202	0.00
Mg	24	1	1	820373	0.00
Al	27	1	1	34734	0.00
K	39	1	1	766961	0.00
Ca	44	1	1	38290	0.00
Ti	47	1	1	26824	0.01
V	51	1	1	856246	0.00
Cr	52	1	1	1090919	0.00
Mn	55	1	1	594462	0.00
Fe	56	1	1	9352642	0.00
Co	59	1	1	1789307	0.00
Ni	60	1	1	498488	0.00
Cu	63	1	1	1364345	0.00
Zn	66	1	1	201195	0.00
As	75	1	1	140644	0.00
Se	78	1	1	8781	0.04
Be	9	2	2	940231	0.00
B	11	2	2	645268	0.00
Mo	95	2	2	1571062	0.00
Ag	107	2	2	1065675	0.00
Cd	111	2	2	781204	0.00
Sn	118	2	2	2289608	0.00
Sb	121	2	2	3134023	0.00
Ba	137	2	2	1112041	0.00
Tl	205	2	2	6492182	0.00
Pb	208	2	2	4646177	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	124397	0.70	126570	98.28	70	120	
Li	6	2	2	1933870	0.59	1901180	101.72	70	120	
Ge	72	2	2	918862	0.80	931750	98.62	70	120	
Rh	103	2	2	5973631	1.12	5993003	99.68	70	120	
Tb	159	2	2	7412976	0.74	7388471	100.33	70	120	
Bi	209	2	2	4446332	0.54	4361567	101.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:48:10-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	246.062	ppb	1.355	415797	0.45	250	98.4	90	110	
Mg	24	1	1	242.081	ppb	1.930	200727	1.17	250	96.8	90	110	
Al	27	1	1	25.081	ppb	2.436	11450	1.65	25	100.3	90	110	
K	39	1	1	239.016	ppb	2.576	221283	1.29	250	95.6	90	110	
Ca	44	1	1	243.198	ppb	1.373	9176	1.86	250	97.3	90	110	
Ti	47	1	1	23.973	ppb	2.412	6483	2.31	25	95.9	90	110	
V	51	1	1	23.775	ppb	2.015	206232	1.25	25	95.1	90	110	
Cr	52	1	1	23.527	ppb	0.876	261005	0.44	25	94.1	90	110	
Mn	55	1	1	24.162	ppb	1.231	139745	0.95	25	96.6	90	110	
Fe	56	1	1	234.489	ppb	1.318	2310325	0.61	250	93.8	90	110	
Co	59	1	1	23.386	ppb	1.139	422575	0.46	25	93.5	90	110	
Ni	60	1	1	23.203	ppb	2.058	117719	1.43	25	92.8	90	110	
Cu	63	1	1	23.508	ppb	1.366	348737	0.61	25	94.0	90	110	
Zn	66	1	1	24.076	ppb	1.339	48046	0.82	25	96.3	90	110	
As	75	1	1	22.983	ppb	1.299	32631	2.01	25	91.9	90	110	
Se	78	1	1	23.741	ppb	6.336	1969	5.52	25	95.0	90	110	
Be	9	2	2	24.836	ppb	1.814	238945	1.39	25	99.3	90	110	
B	11	2	2	23.586	ppb	1.140	183464	0.37	25	94.3	90	110	
Mo	95	2	2	23.486	ppb	0.307	368680	0.35	25	93.9	90	110	
Ag	107	2	2	25.093	ppb	0.644	906877	0.02	25	100.4	90	110	
Cd	111	2	2	23.609	ppb	0.779	185321	1.00	25	94.4	90	110	
Sn	118	2	2	23.486	ppb	1.428	537439	1.01	25	93.9	90	110	
Sb	121	2	2	23.187	ppb	0.993	724827	0.27	25	92.7	90	110	
Ba	137	2	2	23.536	ppb	0.332	261373	0.78	25	94.1	90	110	
Tl	205	2	2	23.383	ppb	0.831	1494573	1.03	25	93.5	90	110	
Pb	208	2	2	23.369	ppb	0.725	1029199	1.05	25	93.5	90	110	
Si	29	2	2	559.990	ppb	0.639	493115	0.47	536	104.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125357	0.75	126570	99.04	70	120	
Li	6	2	2	1932746	0.60	1901180	101.66	70	120	
Ge	72	2	2	923635	0.29	931750	99.13	70	120	
Rh	103	2	2	5961066	0.63	5993003	99.47	70	120	
Tb	159	2	2	7394132	0.76	7388471	100.08	70	120	
Bi	209	2	2	4370877	0.34	4361567	100.21	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:52:32-05:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	6.115	6.332	69427	1.07	5	122.3	70	130	
Mg	24	1	1	5.340	1.511	7031	0.93	5	106.8	70	130	
Al	27	1	1	0.515	6.935	1626	5.21	0.5	103.0	70	130	
K	39	1	1	5.197	10.741	55003	0.72	5	103.9	70	130	
Ca	44	1	1	5.373	0.972	1542	1.62	5	107.5	70	130	
Ti	47	1	1	0.556	14.955	158	15.28	0.5	111.2	70	130	
V	51	1	1	0.494	6.188	5717	4.18	0.5	98.8	70	130	
Cr	52	1	1	0.618	1.762	9867	1.42	0.5	123.5	70	130	
Mn	55	1	1	0.508	1.965	4982	2.69	0.5	101.5	70	130	
Fe	56	1	1	5.430	1.759	111211	0.51	5	108.6	70	130	
Co	59	1	1	0.537	0.839	9917	0.32	0.5	107.4	70	130	
Ni	60	1	1	0.606	2.017	5403	1.72	0.5	121.2	70	130	
Cu	63	1	1	0.539	14.619	38786	3.66	0.5	107.8	70	130	
Zn	66	1	1	0.596	13.991	3074	6.90	0.5	119.2	70	130	
As	75	1	1	0.488	3.596	756	3.98	0.5	97.6	70	130	
Se	78	1	1	0.454	41.000	87	26.93	0.5	90.9	70	130	
Be	9	2	2	0.577	7.188	5620	6.74	0.5	115.5	70	130	
B	11	2	2	0.863	8.422	46477	0.84	0.5	172.7	70	130	> +- 30%
Mo	95	2	2	0.561	2.965	9342	2.79	0.5	112.1	70	130	
Ag	107	2	2	0.500	4.226	19772	3.93	0.5	99.9	70	130	
Cd	111	2	2	0.557	5.555	4424	5.80	0.5	111.4	70	130	
Sn	118	2	2	0.936	4.335	25396	4.20	0.5	187.2	70	130	> +- 30%
Sb	121	2	2	0.535	3.520	16868	3.74	0.5	107.1	70	130	
Ba	137	2	2	0.591	5.520	6814	5.14	0.5	118.2	70	130	
Tl	205	2	2	0.588	3.207	38696	2.63	0.5	117.6	70	130	
Pb	208	2	2	0.549	4.409	27973	3.54	0.5	109.8	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125978	1.11	126570	99.53	70	120	
Li	6	2	2	1936903	0.82	1901180	101.88	70	120	
Ge	72	2	2	926323	0.65	931750	99.42	70	120	
Rh	103	2	2	5956048	0.59	5993003	99.38	70	120	
Tb	159	2	2	7334681	0.42	7388471	99.27	70	120	
Bi	209	2	2	4353359	0.70	4361567	99.81	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:56:51-05:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.618	ppb	140.3	54088	20.7	5	
Mg	24	1	1	0.408	ppb	11.2	1110	4.7	5	
Al	27	1	1	0.120	ppb	17.0	1200	8.9	0.5	
K	39	1	1	-0.038	ppb	-256.5	47477	1.1	5	
Ca	44	1	1	-0.377	ppb	-20.6	483	2.8	5	
Ti	47	1	1	0.033	ppb	119.5	16	68.9	0.5	
V	51	1	1	-0.013	ppb	-43.6	1319	3.5	0.5	
Cr	52	1	1	0.041	ppb	100.8	3483	12.8	0.5	
Mn	55	1	1	0.244	ppb	3.1	2679	2.3	0.5	
Fe	56	1	1	1.180	ppb	3.5	37509	2.1	5	
Co	59	1	1	0.022	ppb	3.5	561	2.4	0.5	
Ni	60	1	1	0.069	ppb	8.1	1465	3.0	0.5	
Cu	63	1	1	-0.036	ppb	-36.7	27083	5.4	0.5	
Zn	66	1	1	-0.069	ppb	-74.4	1123	13.4	0.5	
As	75	1	1	0.012	ppb	80.0	78	17.8	0.5	
Se	78	1	1	0.073	ppb	41.3	38	10.2	0.5	
Be	9	2	2	0.021	ppb	23.5	259	17.8	0.5	
B	11	2	2	-0.218	ppb	-165.5	39818	5.5	0.5	
Mo	95	2	2	0.045	ppb	16.3	1271	9.6	0.5	
Ag	107	2	2	0.011	ppb	34.9	856	17.5	0.5	
Cd	111	2	2	0.018	ppb	20.8	182	15.4	0.5	
Sn	118	2	2	0.101	ppb	21.4	6499	7.9	0.5	
Sb	121	2	2	0.015	ppb	14.7	737	10.0	0.5	
Ba	137	2	2	0.028	ppb	44.8	582	23.9	0.5	
Tl	205	2	2	0.050	ppb	7.4	4461	5.9	0.125	
Pb	208	2	2	0.030	ppb	25.5	4424	7.6	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	124999	0.20	126570	98.76	70	120	
Li	6	2	2	1930896	0.72	1901180	101.56	70	120	
Ge	72	2	2	929893	0.76	931750	99.80	70	120	
Rh	103	2	2	5998603	0.70	5993003	100.09	70	120	
Tb	159	2	2	7351095	0.90	7388471	99.49	70	120	
Bi	209	2	2	4366528	0.64	4361567	100.11	70	120	

Sample Report

Sample Table

Sample Name	BLKS150220-01
Data File Name	013SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:01:15-05:00
Sample Type	Sample
Dilution	1000
Comment	079;S150220-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	3.815	3815.066	ppb	23.14	59258	50000	
Mg	24	72	1	1	1.851	1851.402	ppb	5.44	2116	50000	
Al	27	72	1	1	0.364	363.894	ppb	1.43	744	20000	
K	39	72	1	1	-0.154	-153.555	ppb	-265.99	46837	50000	
Ca	44	72	1	1	0.100	100.238	ppb	1645.15	547	150000	
Ti	47	72	1	1	-0.003	-3.482	ppb	-417.62	6	15000	
V	51	72	1	1	0.011	11.296	ppb	55.13	1502	20000	
Cr	52	72	1	1	0.067	66.905	ppb	18.83	3708	20000	
Mn	55	72	1	1	0.019	19.084	ppb	32.70	681	20000	
Fe	56	72	1	1	0.561	560.660	ppb	6.21	22189	50000	
Co	59	72	1	1	0.003	2.968	ppb	18.37	217	20000	
Ni	60	72	1	1	0.050	49.974	ppb	34.35	1195	20000	
Cu	63	72	1	1	-0.109	-108.501	ppb	-98.36	29284	20000	
Zn	66	72	1	1	-0.031	-31.214	ppb	-198.60	1240	15000	
As	75	72	1	1	-0.003	-2.662	ppb	-1064.38	56	20000	
Se	78	72	1	1	0.112	112.380	ppb	71.82	38	20000	
Be	9	6	2	2	0.003	3.388	ppb	35.20	89	20000	
B	11	6	2	2	-0.116	-116.406	ppb	-189.18	40397	15000	
Mo	95	103	2	2	0.016	15.615	ppb	55.29	796	20000	
Ag	107	103	2	2	0.016	15.572	ppb	51.54	915	1000	
Cd	111	72	2	2	0.003	3.435	ppb	150.86	67	15000	
Sn	118	103	2	2	0.296	296.130	ppb	9.61	10728	15000	
Sb	121	159	2	2	0.002	2.323	ppb	79.04	337	20000	
Ba	137	103	2	2	0.019	18.773	ppb	52.79	467	20000	
Tl	205	209	2	2	0.025	24.668	ppb	10.12	2827	20000	
Pb	208	209	2	2	0.006	6.218	ppb	91.59	3286	20000	
Si	29	72	2	2	61.089	61088.904	ppb	143.58	195503	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	122993	0.54	126570	97.17	70	120	
Li	6	2	1929562	0.38	1901180	101.49	70	120	
Ge	72	2	915461	0.90	931750	98.25	70	120	
Rh	103	2	5873781	0.27	5993003	98.01	70	120	
Tb	159	2	7259933	0.46	7388471	98.26	70	120	
Bi	209	2	4293540	0.77	4361567	98.44	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCSS150220-01
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:05:32-05:00
Sample Type	Sample
Dilution	1000
Comment	079;S150220-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	216.413	216413.314	ppb	1.66	363136	50000	
Mg	24	72	1	1	207.642	207641.793	ppb	1.49	168492	50000	
Al	27	72	1	1	202.159	202159.393	ppb	1.14	69120	20000	
K	39	72	1	1	200.227	200226.683	ppb	1.83	188911	50000	
Ca	44	72	1	1	202.259	202259.329	ppb	1.28	8044	150000	
Ti	47	72	1	1	41.620	41620.075	ppb	0.73	11003	15000	
V	51	72	1	1	40.427	40427.097	ppb	0.95	342021	20000	
Cr	52	72	1	1	41.693	41693.138	ppb	1.17	450087	20000	
Mn	55	72	1	1	39.664	39663.559	ppb	1.14	232592	20000	
Fe	56	72	1	1	203.309	203308.635	ppb	1.76	1888375	50000	
Co	59	72	1	1	40.210	40210.331	ppb	1.35	710542	20000	
Ni	60	72	1	1	41.805	41804.518	ppb	0.90	206702	20000	
Cu	63	72	1	1	42.056	42056.103	ppb	0.91	586068	20000	
Zn	66	72	1	1	39.717	39716.922	ppb	1.15	79578	15000	
As	75	72	1	1	40.641	40640.908	ppb	1.02	56386	20000	
Se	78	72	1	1	41.736	41736.091	ppb	4.58	3624	20000	
Be	9	6	2	2	43.702	43701.859	ppb	0.99	417672	20000	
B	11	6	2	2	-0.034	-33.507	ppb	-522.80	40702	15000	
Mo	95	103	2	2	40.573	40572.964	ppb	0.35	630883	20000	
Ag	107	103	2	2	44.292	44292.436	ppb	0.86	1586238	1000	
Cd	111	72	2	2	41.150	41149.909	ppb	0.60	322106	15000	
Sn	118	103	2	2	0.307	307.124	ppb	2.86	11039	15000	
Sb	121	159	2	2	40.158	40158.255	ppb	0.06	1241226	20000	
Ba	137	103	2	2	40.636	40636.106	ppb	0.57	447089	20000	
Tl	205	209	2	2	39.313	39312.641	ppb	1.26	2476871	20000	
Pb	208	209	2	2	42.370	42369.747	ppb	1.16	1908113	20000	
Si	29	72	2	2	17.446	17446.365	ppb	187.80	170976	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	122607	0.75	126570	96.87	70	120	
Li	6	2	1920046	0.54	1901180	100.99	70	120	
Ge	72	2	921148	0.71	931750	98.86	70	120	
Rh	103	2	5908339	0.81	5993003	98.59	70	120	
Tb	159	2	7311647	0.81	7388471	98.96	70	120	
Bi	209	2	4310515	1.22	4361567	98.83	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:09:55-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	72.023	87147.304	ppb	2.61	156800	50000	
Mg	24	72	1	1	1695.870	2052003.179	ppb	1.84	1423856	50000	
Al	27	72	1	1	9782.621	11836971.778	ppb	1.86	3450318	20000	
K	39	72	1	1	663.555	802901.361	ppb	1.87	537443	50000	
Ca	44	72	1	1	971.948	1176057.389	ppb	2.05	37981	150000	
Ti	47	72	1	1	223.064	269907.302	ppb	0.86	61187	15000	
V	51	72	1	1	24.552	29708.393	ppb	1.82	216182	20000	
Cr	52	72	1	1	13.265	16050.521	ppb	1.54	150751	20000	
Mn	55	72	1	1	126.716	153325.951	ppb	1.81	770027	20000	
Fe	56	72	1	1	13092.372	15841769.636	ppb	1.79	125114120	50000	
Co	59	72	1	1	5.199	6290.465	ppb	2.29	95504	20000	
Ni	60	72	1	1	9.451	11435.863	ppb	1.27	49266	20000	
Cu	63	72	1	1	9.830	11894.289	ppb	0.61	166562	20000	
Zn	66	72	1	1	90.645	109680.738	ppb	1.83	186797	15000	
As	75	72	1	1	2.681	3244.202	ppb	6.13	3920	20000	
Se	78	72	1	1	1.826	2208.992	ppb	16.24	192	20000	
Be	9	6	2	2	0.404	488.450	ppb	11.35	4105	20000	
B	11	6	2	2	2.765	3346.155	ppb	9.14	60258	15000	
Mo	95	103	2	2	0.400	483.529	ppb	4.57	6769	20000	
Ag	107	103	2	2	0.161	194.403	ppb	12.63	2123	1000	
Cd	111	72	2	2	0.129	156.649	ppb	21.13	1093	15000	
Sn	118	103	2	2	0.792	958.652	ppb	0.76	21964	15000	
Sb	121	159	2	2	0.401	484.621	ppb	3.02	12841	20000	
Ba	137	103	2	2	140.988	170595.309	ppb	0.73	1550952	20000	
Tl	205	209	2	2	0.634	767.034	ppb	0.61	41397	20000	
Pb	208	209	2	2	16.975	20539.387	ppb	0.48	769875	20000	
Si	29	72	2	2	537.785	650719.359	ppb	2.71	497043	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	127272	0.72	126570	100.55	70	120	
Li	6	2	2013130	0.58	1901180	105.89	70	120	
Ge	72	2	956500	0.91	931750	102.66	70	120	
Rh	103	2	5909876	0.41	5993003	98.61	70	120	
Tb	159	2	7425119	0.56	7388471	100.50	70	120	
Bi	209	2	4330447	0.87	4361567	99.29	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021DUP
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:14:16-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	76.342	92373.470	ppb	1.06	164519	50000	
Mg	24	72	1	1	1734.786	2099091.621	ppb	0.22	1466621	50000	
Al	27	72	1	1	10034.740	12142035.165	ppb	0.67	3563794	20000	
K	39	72	1	1	682.078	825314.740	ppb	1.55	554911	50000	
Ca	44	72	1	1	1013.783	1226677.468	ppb	0.45	39866	150000	
Ti	47	72	1	1	228.369	276326.946	ppb	1.60	63074	15000	
V	51	72	1	1	25.251	30553.614	ppb	0.63	223835	20000	
Cr	52	72	1	1	13.481	16312.331	ppb	0.70	154220	20000	
Mn	55	72	1	1	129.630	156852.729	ppb	0.41	793193	20000	
Fe	56	72	1	1	13398.450	16212124.932	ppb	0.39	128927245	50000	
Co	59	72	1	1	5.328	6447.052	ppb	1.19	98557	20000	
Ni	60	72	1	1	9.719	11759.579	ppb	1.06	50983	20000	
Cu	63	72	1	1	9.914	11995.943	ppb	0.78	168861	20000	
Zn	66	72	1	1	93.078	112624.347	ppb	0.14	193103	15000	
As	75	72	1	1	2.831	3425.616	ppb	2.24	4163	20000	
Se	78	72	1	1	1.649	1995.474	ppb	14.58	178	20000	
Be	9	6	2	2	0.383	463.114	ppb	7.20	3953	20000	
B	11	6	2	2	2.675	3237.207	ppb	7.78	60584	15000	
Mo	95	103	2	2	0.366	442.749	ppb	6.30	6362	20000	
Ag	107	103	2	2	0.045	54.728	ppb	6.08	1893	1000	
Cd	111	72	2	2	0.136	164.001	ppb	12.95	1159	15000	
Sn	118	103	2	2	0.760	919.810	ppb	3.02	21630	15000	
Sb	121	159	2	2	0.385	465.351	ppb	3.07	12537	20000	
Ba	137	103	2	2	142.717	172688.153	ppb	0.24	1598936	20000	
Tl	205	209	2	2	0.617	746.520	ppb	3.77	18130	20000	
Pb	208	209	2	2	17.342	20984.390	ppb	0.51	791105	20000	
Si	29	72	2	2	560.862	678643.069	ppb	1.91	518513	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	128144	0.09	126570	101.24	70	120	
Li	6	2	2042827	1.04	1901180	107.45	70	120	
Ge	72	2	970160	0.35	931750	104.12	70	120	
Rh	103	2	6018828	0.67	5993003	100.43	70	120	
Tb	159	2	7542394	0.54	7388471	102.08	70	120	
Bi	209	2	4355923	0.57	4361567	99.87	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021SD
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:18:42-05:00
Sample Type	Sample
Dilution	6050
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	14.966	90547.021	ppb	1.33	81835	50000	
Mg	24	72	1	1	358.344	2167983.645	ppb	1.75	307821	50000	
Al	27	72	1	1	2047.941	12390043.100	ppb	1.09	738167	20000	
K	39	72	1	1	133.706	808923.498	ppb	2.51	150233	50000	
Ca	44	72	1	1	194.153	1174623.501	ppb	4.08	8208	150000	
Ti	47	72	1	1	44.999	272241.884	ppb	1.85	12612	15000	
V	51	72	1	1	4.875	29496.185	ppb	0.56	45042	20000	
Cr	52	72	1	1	2.727	16501.243	ppb	1.94	34170	20000	
Mn	55	72	1	1	25.769	155903.290	ppb	0.58	160438	20000	
Fe	56	72	1	1	2663.766	16115784.178	ppb	1.04	26016256	50000	
Co	59	72	1	1	1.044	6316.751	ppb	2.23	19730	20000	
Ni	60	72	1	1	1.987	12018.685	ppb	0.67	11369	20000	
Cu	63	72	1	1	1.950	11795.681	ppb	2.20	59776	20000	
Zn	66	72	1	1	18.694	113100.115	ppb	2.40	40442	15000	
As	75	72	1	1	0.543	3286.926	ppb	3.78	861	20000	
Se	78	72	1	1	0.367	2222.174	ppb	74.06	63	20000	
Be	9	6	2	2	0.080	481.654	ppb	9.99	878	20000	
B	11	6	2	2	0.143	868.099	ppb	190.61	44850	15000	
Mo	95	103	2	2	0.077	467.643	ppb	10.36	1841	20000	
Ag	107	103	2	2	0.021	124.713	ppb	47.07	1130	1000	
Cd	111	72	2	2	0.023	137.068	ppb	20.98	230	15000	
Sn	118	103	2	2	0.113	684.013	ppb	13.21	6981	15000	
Sb	121	159	2	2	0.085	514.485	ppb	11.16	3001	20000	
Ba	137	103	2	2	27.852	168501.647	ppb	0.27	320758	20000	
Tl	205	209	2	2	0.129	781.333	ppb	3.76	9156	20000	
Pb	208	209	2	2	3.404	20596.600	ppb	0.97	161863	20000	
Si	29	72	2	2	127.542	771629.357	ppb	12.25	249340	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	129999	0.85	126570	102.71	70	120	
Li	6	2	2062415	0.84	1901180	108.48	70	120	
Ge	72	2	972512	0.42	931750	104.37	70	120	
Rh	103	2	6182814	0.23	5993003	103.17	70	120	
Tb	159	2	7578020	0.19	7388471	102.57	70	120	
Bi	209	2	4469564	0.57	4361567	102.48	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021MS
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:23:00-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	278.161	336575.111	ppb	1.99	480239	50000	
Mg	24	72	1	1	1928.964	2334046.449	ppb	1.91	1650940	50000	
Al	27	72	1	1	10143.242	12273322.642	ppb	1.34	3647119	20000	
K	39	72	1	1	866.494	1048457.564	ppb	1.68	700312	50000	
Ca	44	72	1	1	1178.593	1426097.572	ppb	1.40	46830	150000	
Ti	47	72	1	1	266.051	321921.286	ppb	1.79	74391	15000	
V	51	72	1	1	64.517	78065.873	ppb	1.63	576704	20000	
Cr	52	72	1	1	53.683	64956.186	ppb	1.73	612334	20000	
Mn	55	72	1	1	166.677	201679.520	ppb	1.10	1032403	20000	
Fe	56	72	1	1	13611.089	16469418.125	ppb	1.61	132599947	50000	
Co	59	72	1	1	44.133	53401.214	ppb	1.74	825240	20000	
Ni	60	72	1	1	49.747	60194.295	ppb	1.05	260100	20000	
Cu	63	72	1	1	50.323	60891.203	ppb	1.38	735726	20000	
Zn	66	72	1	1	130.020	157324.584	ppb	2.02	272550	15000	
As	75	72	1	1	41.478	50188.838	ppb	2.70	60894	20000	
Se	78	72	1	1	41.858	50647.723	ppb	3.36	3846	20000	
Be	9	6	2	2	42.514	51442.460	ppb	0.59	436810	20000	
B	11	6	2	2	3.041	3679.794	ppb	2.54	63563	15000	
Mo	95	103	2	2	40.651	49188.170	ppb	0.62	650942	20000	
Ag	107	103	2	2	149.156	180479.117	ppb	0.17	1620204	1000	
Cd	111	72	2	2	39.643	47968.428	ppb	0.85	329776	15000	
Sn	118	103	2	2	1.084	1312.222	ppb	2.94	29389	15000	
Sb	121	159	2	2	39.769	48120.215	ppb	0.93	1282460	20000	
Ba	137	103	2	2	185.269	224175.698	ppb	0.99	2098220	20000	
Tl	205	209	2	2	38.609	46716.353	ppb	0.83	2500592	20000	
Pb	208	209	2	2	59.379	71848.257	ppb	0.20	2747709	20000	
Si	29	72	2	2	531.124	642660.345	ppb	2.45	504461	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	129747	0.83	126570	102.51	70	120	
Li	6	2	2064113	0.44	1901180	108.57	70	120	
Ge	72	2	978886	0.78	931750	105.06	70	120	
Rh	103	2	6084533	0.67	5993003	101.53	70	120	
Tb	159	2	7628597	0.96	7388471	103.25	70	120	
Bi	209	2	4430768	0.41	4361567	101.59	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021PS
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:27:27-05:00
Sample Type	Sample
Dilution	968
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	897.494	868774.220	ppb	2.62	1428199	50000	
Mg	24	72	1	1	2693.697	2607498.570	ppb	2.09	2281917	50000	
Al	27	72	1	1	10890.514	10542017.640	ppb	1.83	3876187	20000	
K	39	72	1	1	1529.425	1480483.565	ppb	4.41	1185949	50000	
Ca	44	72	1	1	1904.981	1844021.905	ppb	1.32	74582	150000	
Ti	47	72	1	1	250.420	242406.209	ppb	1.53	69316	15000	
V	51	72	1	1	66.697	64562.696	ppb	1.87	590116	20000	
Cr	52	72	1	1	53.613	51897.233	ppb	1.93	605366	20000	
Mn	55	72	1	1	178.733	173013.269	ppb	1.69	1095836	20000	
Fe	56	72	1	1	15412.617	14919413.065	ppb	1.76	148633052	50000	
Co	59	72	1	1	48.266	46721.299	ppb	1.68	828855	20000	
Ni	60	72	1	1	49.148	47575.562	ppb	1.07	254391	20000	
Cu	63	72	1	1	49.270	47693.485	ppb	1.36	713740	20000	
Zn	66	72	1	1	139.636	135168.074	ppb	1.52	289659	15000	
As	75	72	1	1	44.872	43435.627	ppb	2.67	60503	20000	
Se	78	72	1	1	43.109	41729.607	ppb	4.80	3641	20000	
Be	9	6	2	2	41.895	40554.651	ppb	0.77	428288	20000	
B	11	6	2	2	3.408	3298.563	ppb	5.33	65590	15000	
Mo	95	103	2	2	40.332	39040.985	ppb	0.52	649110	20000	
Ag	107	103	2	2	40.174	38888.056	ppb	1.03	1315792	1000	
Cd	111	72	2	2	40.399	39106.447	ppb	0.80	313185	15000	
Sn	118	103	2	2	1.143	1106.330	ppb	3.75	30896	15000	
Sb	121	159	2	2	41.854	40514.761	ppb	0.71	1255292	20000	
Ba	137	103	2	2	194.632	188403.839	ppb	0.32	2215427	20000	
Tl	205	209	2	2	42.461	41102.599	ppb	0.05	2559387	20000	
Pb	208	209	2	2	59.066	57175.418	ppb	0.66	2741499	20000	
Si	29	72	2	2	688.759	666718.876	ppb	4.46	606077	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	128442	1.03	126570	101.48	70	120	
Li	6	2	2053738	0.45	1901180	108.02	70	120	
Ge	72	2	983162	0.69	931750	105.52	70	120	
Rh	103	2	6115259	0.59	5993003	102.04	70	120	
Tb	159	2	7646376	0.53	7388471	103.49	70	120	
Bi	209	2	4444203	0.73	4361567	101.89	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001
Data File Name	022SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:40:30-05:00
Sample Type	Sample
Dilution	1181.434599
Comment	079;S150220-01;1.12;2.37g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	671.933	793844.337	ppb	1.83	1068331	50000	
Mg	24	72	1	1	1885.595	2227707.728	ppb	1.95	1578489	50000	
Al	27	72	1	1	5375.742	6351087.397	ppb	0.32	1890937	20000	
K	39	72	1	1	687.046	811699.735	ppb	0.87	553240	50000	
Ca	44	72	1	1	6761.854	7988688.829	ppb	1.07	260145	150000	
Ti	47	72	1	1	282.171	333366.630	ppb	1.26	77174	15000	
V	51	72	1	1	22.966	27133.206	ppb	2.21	201721	20000	
Cr	52	72	1	1	15.914	18801.917	ppb	1.20	179730	20000	
Mn	55	72	1	1	285.178	336919.106	ppb	1.37	1727294	20000	
Fe	56	72	1	1	15052.416	17783444.920	ppb	1.29	143431678	50000	
Co	59	72	1	1	5.490	6486.504	ppb	1.52	100564	20000	
Ni	60	72	1	1	17.974	21234.585	ppb	1.88	92536	20000	
Cu	63	72	1	1	149.255	176334.571	ppb	1.45	2072003	20000	
Zn	66	72	1	1	266.827	315239.113	ppb	1.51	545674	15000	
As	75	72	1	1	12.336	14574.192	ppb	0.08	17759	20000	
Se	78	72	1	1	1.305	1541.304	ppb	31.90	146	20000	
Be	9	6	2	2	0.406	479.785	ppb	4.08	4146	20000	
B	11	6	2	2	3.014	3560.443	ppb	7.90	62105	15000	
Mo	95	103	2	2	0.902	1065.103	ppb	3.91	14943	20000	
Ag	107	103	2	2	1.341	1584.063	ppb	1.62	14943	1000	
Cd	111	72	2	2	0.551	651.031	ppb	6.47	4661	15000	
Sn	118	103	2	2	12.886	15224.465	ppb	0.49	301783	15000	
Sb	121	159	2	2	4.625	5464.369	ppb	0.74	148689	20000	
Ba	137	103	2	2	152.007	179586.552	ppb	0.31	1715059	20000	
Tl	205	209	2	2	0.239	281.829	ppb	2.52	16765	20000	
Pb	208	209	2	2	253.168	299101.742	ppb	0.39	11705129	20000	
Si	29	72	2	2	420.905	497271.232	ppb	5.57	438530	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	126909	1.04	126570	100.27	70	120	
Li	6	2	2022177	0.71	1901180	106.36	70	120	
Ge	72	2	986418	0.61	931750	105.87	70	120	
Rh	103	2	6061472	0.37	5993003	101.14	70	120	
Tb	159	2	7592311	0.36	7388471	102.76	70	120	
Bi	209	2	4430851	0.67	4361567	101.59	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:44:57-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	247.574	ppb	1.503	433557	0.80	250	99.0	90	110	
Mg	24	1	1	243.578	ppb	0.523	209461	0.05	250	97.4	90	110	
Al	27	1	1	25.462	ppb	2.071	12048	1.63	25	101.8	90	110	
K	39	1	1	243.362	ppb	1.675	232761	0.82	250	97.3	90	110	
Ca	44	1	1	241.301	ppb	2.077	9445	1.39	250	96.5	90	110	
Ti	47	1	1	24.089	ppb	2.246	6755	1.98	25	96.4	90	110	
V	51	1	1	24.200	ppb	1.141	217679	0.69	25	96.8	90	110	
Cr	52	1	1	23.748	ppb	0.880	273186	0.33	25	95.0	90	110	
Mn	55	1	1	24.372	ppb	1.011	146176	0.72	25	97.5	90	110	
Fe	56	1	1	237.096	ppb	0.669	2422415	0.12	250	94.8	90	110	
Co	59	1	1	23.609	ppb	0.634	442422	0.28	25	94.4	90	110	
Ni	60	1	1	23.510	ppb	1.539	123687	0.97	25	94.0	90	110	
Cu	63	1	1	23.527	ppb	0.594	361935	0.14	25	94.1	90	110	
Zn	66	1	1	24.280	ppb	2.664	50233	2.03	25	97.1	90	110	
As	75	1	1	23.285	ppb	0.219	34282	0.57	25	93.1	90	110	
Se	78	1	1	25.452	ppb	10.270	2187	9.58	25	101.8	90	110	
Be	9	2	2	24.552	ppb	0.377	246797	0.62	25	98.2	90	110	
B	11	2	2	23.609	ppb	3.863	191793	2.16	25	94.4	90	110	
Mo	95	2	2	23.354	ppb	0.564	383032	0.05	25	93.4	90	110	
Ag	107	2	2	25.073	ppb	0.122	946744	0.48	25	100.3	90	110	
Cd	111	2	2	23.503	ppb	0.606	193606	0.21	25	94.0	90	110	
Sn	118	2	2	23.384	ppb	0.699	559113	0.46	25	93.5	90	110	
Sb	121	2	2	23.611	ppb	0.764	752677	0.52	25	94.4	90	110	
Ba	137	2	2	23.246	ppb	1.168	269715	1.15	25	93.0	90	110	
Tl	205	2	2	23.585	ppb	0.451	1527544	0.58	25	94.3	90	110	
Pb	208	2	2	23.447	ppb	0.419	1046389	0.13	25	93.8	90	110	
Si	29	2	2	556.658	ppb	1.834	515391	0.92	536	103.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129999	0.56	126570	102.71	70	120	
Li	6	2	2	2019218	0.98	1901180	106.21	70	120	
Ge	72	2	2	969270	0.49	931750	104.03	70	120	
Rh	103	2	2	6228002	0.51	5993003	103.92	70	120	
Tb	159	2	2	7539941	0.29	7388471	102.05	70	120	
Bi	209	2	2	4429153	0.47	4361567	101.55	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:49:14-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.641	ppb	95.65	55134	14.2	5	
Mg	24	1	1	0.567	ppb	15.80	1318	8.4	5	
Al	27	1	1	0.121	ppb	22.90	1222	11.7	0.5	
K	39	1	1	0.218	ppb	57.53	49757	1.5	5	
Ca	44	1	1	-0.342	ppb	-44.75	497	5.5	5	
Ti	47	1	1	0.037	ppb	88.26	17	52.9	0.5	
V	51	1	1	-0.034	ppb	-30.15	1157	7.5	0.5	
Cr	52	1	1	0.035	ppb	56.17	3469	6.5	0.5	
Mn	55	1	1	0.268	ppb	2.29	2920	2.0	0.5	
Fe	56	1	1	1.333	ppb	2.83	40710	1.6	5	
Co	59	1	1	0.021	ppb	16.83	560	11.7	0.5	
Ni	60	1	1	0.076	ppb	9.90	1536	3.4	0.5	
Cu	63	1	1	-0.063	ppb	-11.90	24273	3.8	0.5	
Zn	66	1	1	-0.099	ppb	-9.99	1052	2.5	0.5	
As	75	1	1	0.012	ppb	106.44	79	24.0	0.5	
Se	78	1	1	0.000	ppb	-39494.60	29	54.5	0.5	
Be	9	2	2	0.016	ppb	21.98	219	15.5	0.5	
B	11	2	2	-0.249	ppb	-72.50	40375	2.1	0.5	
Mo	95	2	2	0.039	ppb	50.36	1200	26.6	0.5	
Ag	107	2	2	0.016	ppb	14.47	1067	7.9	0.5	
Cd	111	2	2	0.013	ppb	18.56	144	13.3	0.5	
Sn	118	2	2	0.103	ppb	7.92	6654	2.8	0.5	
Sb	121	2	2	0.025	ppb	17.63	1056	12.4	0.5	
Ba	137	2	2	0.021	ppb	31.09	515	14.0	0.5	
Tl	205	2	2	0.091	ppb	5.17	7148	5.1	0.125	
Pb	208	2	2	0.036	ppb	18.07	4716	5.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126780	0.21	126570	100.17	70	120	
Li	6	2	2	1967398	0.65	1901180	103.48	70	120	
Ge	72	2	2	951871	0.50	931750	102.16	70	120	
Rh	103	2	2	6100274	0.69	5993003	101.79	70	120	
Tb	159	2	2	7435989	1.07	7388471	100.64	70	120	
Bi	209	2	2	4389644	1.09	4361567	100.64	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T12:30:34-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	258.318	ppb	2.701	439224	4.50	250	103.3	90	110	
Mg	24	1	1	246.960	ppb	3.243	206969	0.55	250	98.8	90	110	
Al	27	1	1	24.954	ppb	6.154	11510	2.50	25	99.8	90	110	
K	39	1	1	247.448	ppb	4.016	229859	0.65	250	99.0	90	110	
Ca	44	1	1	249.194	ppb	1.662	9493	2.39	250	99.7	90	110	
Ti	47	1	1	23.742	ppb	6.021	6486	3.22	25	95.0	90	110	
V	51	1	1	24.074	ppb	3.870	211030	0.35	25	96.3	90	110	
Cr	52	1	1	24.042	ppb	3.893	269467	0.27	25	96.2	90	110	
Mn	55	1	1	24.313	ppb	3.264	142125	0.60	25	97.3	90	110	
Fe	56	1	1	234.953	ppb	3.947	2339383	0.56	250	94.0	90	110	
Co	59	1	1	23.729	ppb	3.886	433324	0.24	25	94.9	90	110	
Ni	60	1	1	23.721	ppb	2.970	121642	1.70	25	94.9	90	110	
Cu	63	1	1	23.861	ppb	3.593	357299	0.48	25	95.4	90	110	
Zn	66	1	1	24.140	ppb	4.650	48672	0.78	25	96.6	90	110	
As	75	1	1	23.150	ppb	3.481	33218	1.56	25	92.6	90	110	
Se	78	1	1	24.746	ppb	8.330	2071	4.56	25	99.0	90	110	
Be	9	2	2	24.233	ppb	1.238	256555	1.53	25	96.9	90	110	
B	11	2	2	22.850	ppb	4.877	196937	2.39	25	91.4	90	110	
Mo	95	2	2	23.371	ppb	0.572	394054	0.27	25	93.5	90	110	
Ag	107	2	2	24.773	ppb	0.674	961635	0.28	25	99.1	90	110	
Cd	111	2	2	22.749	ppb	2.722	200055	2.34	25	91.0	90	110	
Sn	118	2	2	23.387	ppb	0.195	574847	0.58	25	93.5	90	110	
Sb	121	2	2	23.630	ppb	1.064	775107	0.10	25	94.5	90	110	
Ba	137	2	2	23.040	ppb	0.567	274818	0.35	25	92.2	90	110	
Tl	205	2	2	23.020	ppb	0.339	1526463	0.47	25	92.1	90	110	
Pb	208	2	2	23.089	ppb	0.256	1055029	0.52	25	92.4	90	110	
Si	29	2	2	550.117	ppb	1.158	545906	0.65	536	102.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126798	3.72	126570	100.18	70	120	
Li	6	2	2	2126776	1.36	1901180	111.87	70	120	
Ge	72	2	2	1034810	0.46	931750	111.06	70	120	
Rh	103	2	2	6402457	0.41	5993003	106.83	70	120	
Tb	159	2	2	7758915	1.08	7388471	105.01	70	120	
Bi	209	2	2	4534694	0.75	4361567	103.97	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T12:34:50-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.276	ppb	17.12	51383	0.8	5	
Mg	24	1	1	0.549	ppb	5.04	1321	3.8	5	
Al	27	1	1	0.109	ppb	22.20	1181	12.1	0.5	
K	39	1	1	0.423	ppb	12.00	52044	1.7	5	
Ca	44	1	1	0.098	ppb	264.90	589	7.2	5	
Ti	47	1	1	0.019	ppb	33.05	12	15.7	0.5	
V	51	1	1	-0.073	ppb	-11.06	828	7.5	0.5	
Cr	52	1	1	0.020	ppb	69.39	3368	4.8	0.5	
Mn	55	1	1	0.223	ppb	10.57	2577	6.9	0.5	
Fe	56	1	1	1.371	ppb	2.86	42169	1.3	5	
Co	59	1	1	0.021	ppb	19.30	568	12.4	0.5	
Ni	60	1	1	0.071	ppb	16.82	1531	4.8	0.5	
Cu	63	1	1	-0.015	ppb	-72.12	30529	2.9	0.5	
Zn	66	1	1	-0.179	ppb	-10.89	832	6.7	0.5	
As	75	1	1	0.003	ppb	471.81	67	30.4	0.5	
Se	78	1	1	0.073	ppb	198.72	39	47.2	0.5	
Be	9	2	2	0.017	ppb	35.57	237	27.1	0.5	
B	11	2	2	-0.576	ppb	-7.70	41077	0.2	0.5	
Mo	95	2	2	0.047	ppb	33.88	1389	18.7	0.5	
Ag	107	2	2	0.016	ppb	23.58	1126	13.5	0.5	
Cd	111	2	2	0.020	ppb	11.88	222	10.0	0.5	
Sn	118	2	2	0.132	ppb	9.35	7670	4.3	0.5	
Sb	121	2	2	0.026	ppb	23.73	1122	17.9	0.5	
Ba	137	2	2	0.027	ppb	27.11	611	14.4	0.5	
Tl	205	2	2	0.027	ppb	17.59	3123	9.7	0.125	
Pb	208	2	2	0.030	ppb	1.04	4520	0.4	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129251	1.35	126570	102.12	70	120	
Li	6	2	2	2106194	0.79	1901180	110.78	70	120	
Ge	72	2	2	1024902	0.57	931750	110.00	70	120	
Rh	103	2	2	6391850	0.40	5993003	106.66	70	120	
Tb	159	2	2	7701153	0.29	7388471	104.23	70	120	
Bi	209	2	2	4468439	0.41	4361567	102.45	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	057ICSA.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T13:13:54-05:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	95148.365	ppb	32961550.6	1.2	5000000	
Ti	47	1	1	2047.424	ppb	551594.7	0.8	50000	
V	51	1	1	-0.044	ppb	1055.6	8.8	5	
Cr	52	1	1	1.180	ppb	15937.8	0.2	5	
Mn	55	1	1	2.288	ppb	14224.9	1.7	5	
Co	59	1	1	1.794	ppb	32475.2	1.1	5	
Ni	60	1	1	1.754	ppb	9763.5	0.6	5	
Cu	63	1	1	1.429	ppb	50468.9	1.4	5	
Zn	66	1	1	1.432	ppb	4200.8	4.4	5	
As	75	1	1	0.225	ppb	377.8	10.2	5	
Se	78	1	1	0.117	ppb	38.9	57.1	5	
Be	9	2	2	0.000	ppb	55.6	69.3	5	
B	11	2	2	-0.133	ppb	39977.5	2.4	5	
Mo	95	2	2	2378.079	ppb	34446853.5	0.2	50000	
Ag	107	2	2	0.073	ppb	2548.8	7.5	5	
Cd	111	2	2	2.303	ppb	20680.6	5.5	5	
Sn	118	2	2	0.242	ppb	8930.0	3.5	5	
Sb	121	2	2	0.775	ppb	24487.0	1.4	5	
Ba	137	2	2	0.608	ppb	6480.2	4.8	5	
Tl	205	2	2	0.015	ppb	2015.3	6.8	1.25	
Pb	208	2	2	0.280	ppb	14161.5	0.7	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125010	0.38	126570	98.77	70	120	
Li	6	2	2	1914010	1.25	1901180	100.67	70	120	
Ge	72	2	2	1054498	1.60	931750	113.17	70	120	
Rh	103	2	2	5509853	1.74	5993003	91.94	70	120	
Tb	159	2	2	7395562	0.80	7388471	100.10	70	120	
Bi	209	2	2	3907130	1.01	4361567	89.58	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	058ICSB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:18:19-05:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	91979.054	1.485	32975206	1.27	100000	92.0	-1000	1000	
Ti	47	1	1	1993.566	1.585	555825	1.35	5000	39.9	-1000	1000	
V	51	1	1	-0.045	-24.536	1082	8.91	0.5	-8.9	-1000	1000	
Cr	52	1	1	20.424	1.196	234265	0.97	20	102.1	80	120	
Mn	55	1	1	21.365	1.463	132486	1.23	20	106.8	80	120	
Co	59	1	1	20.754	1.420	387071	1.20	20	103.8	80	120	
Ni	60	1	1	19.935	1.244	104531	1.05	20	99.7	80	120	
Cu	63	1	1	20.821	1.552	322491	1.18	20	104.1	80	120	
Zn	66	1	1	19.873	2.157	42702	1.88	20	99.4	80	120	
As	75	1	1	20.471	1.646	30000	1.41	20	102.4	80	120	
Se	78	1	1	0.188	33.243	47	12.37	0.5	37.7	-1000	1000	
Be	9	2	2	0.001	412.249	63	44.41	0.5	0.1	-1000	1000	
B	11	2	2	0.053	398.726	41258	3.04	2	2.6	-1000	1000	
Mo	95	2	2	2338.250	0.780	34579842	0.23	5000	46.8	-1000	1000	
Ag	107	2	2	21.019	0.461	768780	0.79	20	105.1	80	120	
Cd	111	2	2	19.492	0.887	179991	1.33	20	97.5	80	120	
Sn	118	2	2	0.224	12.435	8733	6.35	0.5	44.9	-1000	1000	
Sb	121	2	2	0.773	2.172	24736	2.03	0.5	154.7	-1000	1000	
Ba	137	2	2	0.575	3.894	6273	4.04	0.5	115.1	-1000	1000	
Tl	205	2	2	0.012	47.601	1875	17.93	0.125	9.8	-1000	1000	
Pb	208	2	2	0.245	7.429	12801	5.93	0.125	196.2	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129375	0.23	126570	102.22	70	120	
Li	6	2	2	1922097	0.21	1901180	101.10	70	120	
Ge	72	2	2	1086444	0.57	931750	116.60	70	120	
Rh	103	2	2	5624381	0.56	5993003	93.85	70	120	
Tb	159	2	2	7484678	0.78	7388471	101.30	70	120	
Bi	209	2	2	3927738	0.11	4361567	90.05	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	059_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:22:50-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	269.798	ppb	1.736	472953	1.63	250	107.9	90	110	
Mg	24	1	1	269.425	ppb	5.556	233992	5.74	250	107.8	90	110	
Al	27	1	1	24.739	ppb	31.769	27533	31.75	25	99.0	90	110	
K	39	1	1	255.205	ppb	1.681	244132	0.71	250	102.1	90	110	
Ca	44	1	1	274.011	ppb	8.388	10759	8.26	250	109.6	90	110	
Ti	47	1	1	24.267	ppb	3.196	6873	1.73	25	97.1	90	110	
V	51	1	1	23.472	ppb	2.166	213308	1.09	25	93.9	90	110	
Cr	52	1	1	22.937	ppb	1.236	266649	0.54	25	91.7	90	110	
Mn	55	1	1	23.293	ppb	1.633	141148	0.78	25	93.2	90	110	
Fe	56	1	1	274.001	ppb	7.778	2825385	7.93	250	109.6	90	110	
Co	59	1	1	23.160	ppb	1.818	438406	0.82	25	92.6	90	110	
Ni	60	1	1	22.975	ppb	1.176	122126	0.31	25	91.9	90	110	
Cu	63	1	1	25.149	ppb	1.427	388550	0.18	25	100.6	90	110	
Zn	66	1	1	23.276	ppb	0.705	48708	0.80	25	93.1	90	110	
As	75	1	1	22.727	ppb	1.602	33803	2.03	25	90.9	90	110	
Se	78	1	1	23.487	ppb	4.167	2042	5.31	25	93.9	90	110	
Be	9	2	2	24.262	ppb	1.300	250764	0.80	25	97.0	90	110	
B	11	2	2	23.754	ppb	0.457	198189	0.92	25	95.0	90	110	
Mo	95	2	2	24.371	ppb	0.679	420425	0.44	25	97.5	90	110	
Ag	107	2	2	25.079	ppb	0.898	996098	0.63	25	100.3	90	110	
Cd	111	2	2	23.468	ppb	0.780	206802	0.48	25	93.9	90	110	
Sn	118	2	2	23.681	ppb	1.228	595523	0.87	25	94.7	90	110	
Sb	121	2	2	23.901	ppb	0.691	807017	0.44	25	95.6	90	110	
Ba	137	2	2	23.411	ppb	1.278	285724	1.17	25	93.6	90	110	
Tl	205	2	2	23.593	ppb	0.542	1601265	0.44	25	94.4	90	110	
Pb	208	2	2	23.428	ppb	0.460	1095673	0.18	25	93.7	90	110	
Si	29	2	2	563.035	ppb	0.302	555614	0.48	536	105.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	131331	1.47	126570	103.76	70	120	
Li	6	2	2	2076299	0.83	1901180	109.21	70	120	
Ge	72	2	2	1036899	0.31	931750	111.29	70	120	
Rh	103	2	2	6551042	0.35	5993003	109.31	70	120	
Tb	159	2	2	7986442	0.46	7388471	108.09	70	120	
Bi	209	2	2	4641439	0.30	4361567	106.42	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	060_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:27:06-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	1.931	ppb	36.27	63666	6.7	5	
Mg	24	1	1	3.242	ppb	25.06	3992	9.8	5	
Al	27	1	1	0.317	ppb	16.31	1981	0.8	0.5	
K	39	1	1	2.593	ppb	53.19	57156	1.0	5	
Ca	44	1	1	0.744	ppb	53.74	618	3.3	5	
Ti	47	1	1	0.184	ppb	53.11	52	51.6	0.5	
V	51	1	1	0.057	ppb	156.33	1686	28.3	0.5	
Cr	52	1	1	0.199	ppb	60.61	4626	13.3	0.5	
Mn	55	1	1	0.346	ppb	23.91	3170	8.4	0.5	
Fe	56	1	1	3.828	ppb	23.30	74032	6.0	5	
Co	59	1	1	0.150	ppb	60.90	2478	45.4	0.5	
Ni	60	1	1	0.237	ppb	44.11	2376	15.5	0.5	
Cu	63	1	1	0.254	ppb	35.55	54205	4.8	0.5	
Zn	66	1	1	-0.008	ppb	-875.08	1162	5.0	0.5	
As	75	1	1	0.102	ppb	80.44	177	46.5	0.5	
Se	78	1	1	0.247	ppb	64.94	53	31.2	0.5	
Be	9	2	2	0.024	ppb	37.47	304	31.1	0.5	
B	11	2	2	0.038	ppb	91.38	43825	0.8	0.5	
Mo	95	2	2	0.353	ppb	9.12	6628	8.5	0.5	
Ag	107	2	2	0.021	ppb	5.23	1360	2.9	0.5	
Cd	111	2	2	0.016	ppb	34.11	189	27.0	0.5	
Sn	118	2	2	0.147	ppb	3.37	8155	1.0	0.5	
Sb	121	2	2	0.028	ppb	25.57	1222	19.2	0.5	
Ba	137	2	2	0.044	ppb	6.75	822	4.7	0.5	
Tl	205	2	2	0.031	ppb	4.43	3416	3.3	0.125	
Pb	208	2	2	0.043	ppb	16.55	5254	5.9	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	113263	11.76	126570	89.49	70	120	
Li	6	2	2	2046039	1.18	1901180	107.62	70	120	
Ge	72	2	2	1027725	1.17	931750	110.30	70	120	
Rh	103	2	2	6475247	0.65	5993003	108.05	70	120	
Tb	159	2	2	7854946	0.69	7388471	106.31	70	120	
Bi	209	2	2	4585057	0.64	4361567	105.12	70	120	

Analytical Sequence

Method : 7471B Soil

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		BLKS150220-01-079
10	10		LCSS150220-01-079
11	11		E15-01158-021
12	12		E15-01158-021DUP
13	13		E15-01158-021MS
14	14		E15-01273-001
15	15		E15-01158-022
16	16		E15-01281-001x100
17	17		E15-01281-002x100
18	18		E15-01281-003x100
19	2	QC	CCV
20	1	QC	CCB
21	19		E15-01281-004x100
22	20		E15-01281-005x100
23	21		E15-01281-006
24	22		E15-01281-007x100
25	23		E15-01281-008x10
26	24		E15-01281-009x10
27	25		E15-01281-010x10
28	26		E15-01281-011x10
29	27		E15-01281-012x10
30	28		E15-01281-013x10
31	2	QC	CCV
32	1	QC	CCB
33	29		E15-01281-014
34	30		E15-01281-015x10
35	31		E15-01281-016x100
36	32		E15-01224-001
37	2	QC	CCV
38	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\079.SIF
Batch ID: 079SOIL
Results Data Set: pg079bhg_15
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 2/20/2015 3:52:31 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	0.0000	0.0000	15:53:24	Yes
2		[0.00]	0.0060	0.0060	0.0005	15:53:57	Yes
3		[0.00]	0.0062	0.0062	0.0005	15:54:30	Yes
Mean:		[0.00]	0.0040				
SD:		0.00	0.0035				
%RSD:		0.00	86.63				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 2/20/2015 3:54:49 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0146	0.0186	0.0026	15:55:43	Yes
2		[0.25]	0.0138	0.0178	0.0026	15:56:15	Yes
3		[0.25]	0.0134	0.0174	0.0026	15:56:48	Yes
Mean:		[0.25]	0.0139				
SD:		0.00	0.0006				
%RSD:		0.00	4.49				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.05563 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 2/20/2015 3:57:08 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1181	0.1221	0.0233	15:58:02	Yes
2		[2.500]	0.1208	0.1248	0.0239	15:58:35	Yes
3		[2.500]	0.1219	0.1260	0.0240	15:59:08	Yes
Mean:		[2.500]	0.1203				
SD:		0.000	0.0020				
%RSD:		0.000	1.64				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999888 Slope: 0.04777 Intercept: 0.00093

Sequence No.: 4
Autosampler Location: 5
Sample ID: Calib Std 3
Date Collected: 2/20/2015 3:59:29 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2252	0.2293	0.0449	16:00:23	Yes
2		[5.000]	0.2332	0.2373	0.0463	16:00:57	Yes
3		[5.000]	0.2320	0.2361	0.0459	16:01:29	Yes
Mean:		[5.000]	0.2301				
SD:		0.000	0.0043				
%RSD:		0.000	1.87				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999736 Slope: 0.04596 Intercept: 0.00203

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: Calib Std 4 **Date Collected: 2/20/2015 4:01:51 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 4

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.3256	0.3297	0.0653	16:02:46	Yes
2		[7.500]	0.3356	0.3397	0.0664	16:03:19	Yes
3		[7.500]	0.3363	0.3403	0.0668	16:03:52	Yes
Mean:		[7.500]	0.3325				
SD:		0.000	0.0060				
%RSD:		0.000	1.80				

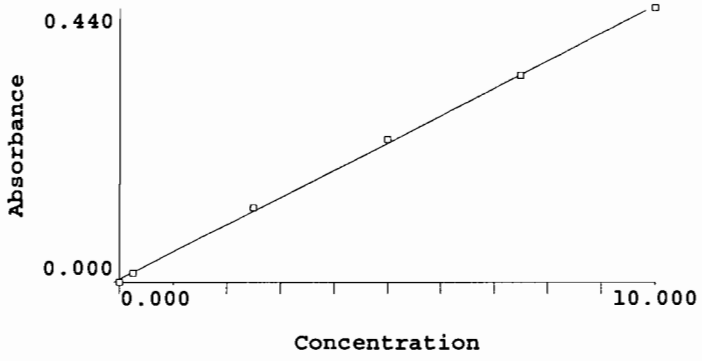
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999491 Slope: 0.04442 Intercept: 0.00389

Sequence No.: 6 **Autosampler Location: 7**
Sample ID: Calib Std 5 **Date Collected: 2/20/2015 4:04:13 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 5

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4300	0.4341	0.0857	16:05:09	Yes
2		[10.000]	0.4451	0.4491	0.0876	16:05:42	Yes
3		[10.000]	0.4453	0.4494	0.0878	16:06:15	Yes
Mean:		[10.000]	0.4401				
SD:		0.000	0.0087				
%RSD:		0.000	1.99				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999652 Slope: 0.04385 Intercept: 0.00494



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank 1	0.0000	0	-0.11275	0.00	86.6
Calib Std 1	0.0139	0.25	0.20436	0.00	4.5
Calib Std 2	0.1203	2.500	2.62960	0.00	1.6
Calib Std 3	0.2301	5.000	5.13533	0.00	1.9
Calib Std 4	0.3325	7.500	7.46952	0.01	1.8

Calib Std 5 0.4401 10.000 9.92394 0.01 2.0
Correlation Coef.: 0.999652 Slope: 0.04385 Intercept: 0.00494

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 2/20/2015 4:06:58 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.9166	0.2206	0.2246	0.0442	16:07:52	Yes
2		5.0334	0.2257	0.2297	0.0450	16:08:24	Yes
3		5.0487	0.2263	0.2304	0.0451	16:08:57	Yes
Mean:		4.9996	0.2242				
SD:		0.07226	0.0032				
%RSD:		1.4453	1.41				

QC value within limits for Hg 253.7 Recovery = 99.99%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/20/2015 4:09:17 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.08586	0.0012	0.0052	0.0004	16:10:10	Yes
2		-0.10941	0.0001	0.0042	0.0003	16:10:43	Yes
3		-0.12100	-0.0004	0.0037	0.0003	16:11:15	Yes
Mean:		-0.10542	0.0003				
SD:		0.01790	0.0008				
%RSD:		16.982	244.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BLKS150220-01-079 **Date Collected: 2/20/2015 4:11:35 PM**
Analyst: DK **Data Type: Original**

Replicate Data: BLKS150220-01-079

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00977	-0.09766	0.0007	0.0047	0.0004	16:12:27	Yes
2	-0.00992	-0.09922	0.0006	0.0046	0.0004	16:13:00	Yes
3	-0.01041	-0.10409	0.0004	0.0044	0.0004	16:13:33	Yes
Mean:	-0.01003	-0.10032	0.0005				
SD:	0.00034	0.00335	0.0001				
%RSD:	3.3435	3.3435	26.99				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: LCSS150220-01-079 **Date Collected: 2/20/2015 4:13:52 PM**
Analyst: DK **Data Type: Original**

Replicate Data: LCSS150220-01-079

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.58170	5.8170	0.2835	0.2849	0.0575	16:14:44	Yes
2	0.60141	6.0141	0.2931	0.2945	0.0594	16:15:17	Yes
3	0.60433	6.0433	0.2945	0.2959	0.0593	16:15:50	Yes
Mean:	0.59581	5.9581	0.2904				
SD:	0.01231	0.12312	0.0060				
%RSD:	2.0664	2.0664	2.07				

Sequence No.: 11
Sample ID: E15-01158-021
Analyst: DK
Autosampler Location: 11
Date Collected: 2/20/2015 4:16:09 PM
Data Type: Original

Replicate Data: E15-01158-021

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.05042	0.41670	0.0232	0.0273	0.0048	16:17:02	Yes
2	0.04837	0.39977	0.0225	0.0265	0.0049	16:17:35	Yes
3	0.04748	0.39240	0.0222	0.0262	0.0049	16:18:08	Yes
Mean:	0.04876	0.40296	0.0226				
SD:	0.00151	0.01246	0.0005				
%RSD:	3.0925	3.0925	2.42				

Sequence No.: 12
Sample ID: E15-01158-021DUP
Analyst: DK
Autosampler Location: 12
Date Collected: 2/20/2015 4:18:28 PM
Data Type: Original

Replicate Data: E15-01158-021DUP

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.04709	0.38920	0.0220	0.0261	0.0048	16:19:21	Yes
2	0.04685	0.38722	0.0219	0.0260	0.0049	16:19:53	Yes
3	0.04548	0.37587	0.0214	0.0255	0.0049	16:20:26	Yes
Mean:	0.04648	0.38410	0.0218				
SD:	0.00087	0.00719	0.0003				
%RSD:	1.8722	1.8722	1.45				

Sequence No.: 13
Sample ID: E15-01158-021MS
Analyst: DK
Autosampler Location: 13
Date Collected: 2/20/2015 4:20:45 PM
Data Type: Original

Replicate Data: E15-01158-021MS

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.74536	6.1600	0.2751	0.2791	0.0569	16:21:39	Yes
2	0.76022	6.2828	0.2805	0.2845	0.0580	16:22:12	Yes
3	0.75526	6.2418	0.2787	0.2827	0.0575	16:22:45	Yes
Mean:	0.75361	6.2282	0.2781				
SD:	0.00757	0.06254	0.0027				
%RSD:	1.0042	1.0042	0.99				

Sequence No.: 14
Sample ID: E15-01273-001
Analyst: DK
Autosampler Location: 14
Date Collected: 2/20/2015 4:23:05 PM
Data Type: Original

Replicate Data: E15-01273-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.2669	12.669	0.5605	0.5646	0.1213	16:23:59	Yes
	Sample concentration is greater than that of the highest standard.						
2	1.2242	12.242	0.5418	0.5458	0.1219	16:24:31	Yes
	Sample concentration is greater than that of the highest standard.						
3	1.2284	12.284	0.5436	0.5477	0.1219	16:25:04	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	1.2398	12.398	0.5487				
SD:	0.02356	0.23556	0.0103				
%RSD:	1.9000	1.9000	1.88				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 15
Sample ID: E15-01158-022
Analyst: DK
Autosampler Location: 15
Date Collected: 2/20/2015 4:25:46 PM
Data Type: Original

Replicate Data: E15-01158-022

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.07349	0.68334	0.0349	0.0390	0.0075	16:26:40	Yes
2	0.07293	0.67817	0.0347	0.0387	0.0076	16:27:13	Yes
3	0.07278	0.67674	0.0346	0.0387	0.0077	16:27:46	Yes
Mean:	0.07307	0.67942	0.0347				
SD:	0.00037	0.00347	0.0002				
%RSD:	0.51115	0.51115	0.44				

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: E15-01281-001x100 **Date Collected: 2/20/2015 4:28:06 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-001x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	324.00	21.886	0.9647	0.9688	0.1982	16:29:00	Yes
	Sample concentration is greater than that of the highest standard.						
2	331.57	22.398	0.9872	0.9912	0.2017	16:29:33	Yes
	Sample concentration is greater than that of the highest standard.						
3	333.59	22.534	0.9931	0.9972	0.2016	16:30:06	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	329.72	22.272	0.9817				
SD:	5.0561	0.34154	0.0150				
%RSD:	1.5334	1.5334	1.53				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: E15-01281-002x100 **Date Collected: 2/20/2015 4:30:48 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-002x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	162.89	13.804	0.6103	0.6144	0.1241	16:31:42	Yes
	Sample concentration is greater than that of the highest standard.						
2	155.24	13.156	0.5819	0.5859	0.1144	16:32:15	Yes
	Sample concentration is greater than that of the highest standard.						
3	115.01	9.7468	0.4324	0.4364	0.0859	16:32:48	Yes
Mean:	144.38	12.236	0.5415				
SD:	25.720	2.1797	0.0956				
%RSD:	17.814	17.814	17.65				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: E15-01281-003x100 **Date Collected: 2/20/2015 4:33:31 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-003x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	109.90	9.1274	0.4052	0.4093	0.0824	16:34:25	Yes
2	112.65	9.3554	0.4152	0.4193	0.0846	16:34:58	Yes
3	112.40	9.3346	0.4143	0.4183	0.0842	16:35:31	Yes
Mean:	111.65	9.2724	0.4116				
SD:	1.5176	0.12604	0.0055				
%RSD:	1.3593	1.3593	1.34				

Sequence No.: 19 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 4:36:14 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.8852	0.2192	0.2232	0.0444	16:37:07	Yes
2		5.0651	0.2271	0.2311	0.0459	16:37:40	Yes
3		5.0423	0.2261	0.2301	0.0458	16:38:12	Yes
Mean:		4.9976	0.2241				
SD:		0.09794	0.0043				
%RSD:		1.9599	1.92				

QC value within limits for Hg 253.7 Recovery = 99.95%
All analyte(s) passed QC.

==========

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 4:38:32 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.13331	-0.0009	0.0031	0.0003	16:39:25	Yes
2		-0.14000	-0.0012	0.0029	0.0002	16:39:58	Yes
3		-0.14276	-0.0013	0.0027	0.0002	16:40:30	Yes
Mean:		-0.13869	-0.0011				
SD:		0.00486	0.0002				
%RSD:		3.5017	18.72				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 21 **Autosampler Location: 19**
Sample ID: E15-01281-004x100 **Date Collected: 2/20/2015 4:40:50 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-004x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	165.93	12.804	0.5664	0.5705	0.1148	16:41:44	Yes
	Sample concentration is greater than that of the highest standard.						
2	171.64	13.245	0.5858	0.5898	0.1185	16:42:17	Yes
	Sample concentration is greater than that of the highest standard.						
3	167.36	12.914	0.5713	0.5753	0.1153	16:42:50	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	168.31	12.988	0.5745				
SD:	2.9752	0.22958	0.0101				
%RSD:	1.7677	1.7677	1.75				

Sample concentration is greater than that of the highest standard.

==========

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: E15-01281-005x100 **Date Collected: 2/20/2015 4:43:33 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-005x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	546.71	36.683	1.6136	1.6177	0.3204	16:44:28	Yes
	Sample concentration is greater than that of the highest standard.						
2	560.59	37.613	1.6544	1.6585	0.3283	16:45:01	Yes
	Sample concentration is greater than that of the highest standard.						
3	562.08	37.714	1.6588	1.6629	0.3280	16:45:33	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	556.46	37.337	1.6423				
SD:	8.4742	0.56859	0.0249				
%RSD:	1.5229	1.5229	1.52				

Sample concentration is greater than that of the highest standard.

==========

Sequence No.: 23 **Autosampler Location: 21**

Sample ID: E15-01281-006 Date Collected: 2/20/2015 4:46:16 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-006

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	8.7883	71.450	3.1383	3.1423	0.6044	16:47:12	Yes
	Sample concentration is greater than that of the highest standard.						
2	8.9018	72.372	3.1787	3.1828	0.6124	16:47:45	Yes
	Sample concentration is greater than that of the highest standard.						
3	8.8918	72.291	3.1752	3.1792	0.6147	16:48:18	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	8.8606	72.038	3.1641				
SD:	0.06283	0.51084	0.0224				
%RSD:	0.70913	0.70913	0.71				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 24 Autosampler Location: 22
Sample ID: E15-01281-007x100 Date Collected: 2/20/2015 4:49:01 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-007x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	149.83	11.891	0.5264	0.5305	0.1048	16:49:57	Yes
	Sample concentration is greater than that of the highest standard.						
2	150.83	11.970	0.5299	0.5339	0.1067	16:50:30	Yes
	Sample concentration is greater than that of the highest standard.						
3	152.14	12.074	0.5345	0.5385	0.1071	16:51:02	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	150.93	11.979	0.5303				
SD:	1.1581	0.09191	0.0040				
%RSD:	0.76728	0.76728	0.76				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 25 Autosampler Location: 23
Sample ID: E15-01281-008x10 Date Collected: 2/20/2015 4:51:46 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-008x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	54.841	41.329	1.8174	1.8214	0.3637	16:52:42	Yes
	Sample concentration is greater than that of the highest standard.						
2	57.470	43.311	1.9043	1.9083	0.3826	16:53:14	Yes
	Sample concentration is greater than that of the highest standard.						
3	58.330	43.959	1.9327	1.9368	0.3880	16:53:47	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	56.880	42.866	1.8848				
SD:	1.8179	1.3700	0.0601				
%RSD:	3.1959	3.1959	3.19				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 26 Autosampler Location: 24
Sample ID: E15-01281-009x10 Date Collected: 2/20/2015 4:54:31 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-009x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	37.850	24.748	1.0902	1.0943	0.2221	16:55:23	Yes
	Sample concentration is greater than that of the highest standard.						
2	38.641	25.265	1.1129	1.1170	0.2286	16:55:56	Yes
	Sample concentration is greater than that of the highest standard.						
3	39.076	25.550	1.1254	1.1294	0.2285	16:56:29	Yes

Sample concentration is greater than that of the highest standard.

Mean:	38.522	25.188	1.1095
SD:	0.62149	0.40636	0.0178
%RSD:	1.6133	1.6133	1.61

Sample concentration is greater than that of the highest standard.

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: E15-01281-010x10 **Date Collected: 2/20/2015 4:57:09 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-010x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	21.502	14.243	0.6296	0.6336	0.1298	16:58:02	Yes
	Sample concentration is greater than that of the highest standard.						
2	22.658	15.009	0.6631	0.6672	0.1376	16:58:35	Yes
	Sample concentration is greater than that of the highest standard.						
3	23.197	15.366	0.6788	0.6829	0.1399	16:59:08	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	22.452	14.873	0.6572				
SD:	0.86589	0.57359	0.0252				
%RSD:	3.8566	3.8566	3.83				

Sample concentration is greater than that of the highest standard.

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: E15-01281-011x10 **Date Collected: 2/20/2015 4:59:48 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-011x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	16.011	9.9447	0.4411	0.4451	0.0897	17:00:40	Yes
2	16.934	10.518	0.4662	0.4702	0.0933	17:01:13	Yes
3	17.306	10.749	0.4763	0.4804	0.0959	17:01:46	Yes
Mean:	16.751	10.404	0.4612				
SD:	0.66694	0.41425	0.0182				
%RSD:	3.9816	3.9816	3.94				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: E15-01281-012x10 **Date Collected: 2/20/2015 5:02:27 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-012x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	13.567	9.0449	0.4016	0.4056	0.0815	17:03:20	Yes
2	13.885	9.2567	0.4109	0.4149	0.0827	17:03:53	Yes
3	13.788	9.1923	0.4081	0.4121	0.0819	17:04:26	Yes
Mean:	13.747	9.1647	0.4068				
SD:	0.16289	0.10859	0.0048				
%RSD:	1.1849	1.1849	1.17				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: E15-01281-013x10 **Date Collected: 2/20/2015 5:05:06 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-013x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	32.537	21.979	0.9688	0.9728	0.1940	17:06:00	Yes
	Sample concentration is greater than that of the highest standard.						
2	33.673	22.746	1.0024	1.0065	0.1996	17:06:32	Yes
	Sample concentration is greater than that of the highest standard.						
3	34.179	23.088	1.0174	1.0215	0.2031	17:07:05	Yes

Sample concentration is greater than that of the highest standard.

Mean:	33.463	22.604	0.9962
SD:	0.84095	0.56806	0.0249
%RSD:	2.5131	2.5131	2.50

Sample concentration is greater than that of the highest standard.

Sequence No.: 31 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 5:07:46 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.6651	0.2095	0.2136	0.0429	17:08:40	Yes
2		4.8246	0.2165	0.2206	0.0435	17:09:12	Yes
3		4.8158	0.2161	0.2202	0.0435	17:09:45	Yes
Mean:		4.7685	0.2141				
SD:		0.08961	0.0039				
%RSD:		1.8792	1.84				

QC value within limits for Hg 253.7 Recovery = 95.37%
All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 5:10:05 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.13228	-0.0009	0.0032	0.0003	17:10:58	Yes
2		-0.12944	-0.0007	0.0033	0.0003	17:11:30	Yes
3		-0.14118	-0.0012	0.0028	0.0002	17:12:03	Yes
Mean:		-0.13430	-0.0009				
SD:		0.00612	0.0003				
%RSD:		4.5595	28.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33 **Autosampler Location: 29**
Sample ID: E15-01281-014 **Date Collected: 2/20/2015 5:12:22 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-014

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.2507	33.095	1.4563	1.4603	0.2974	17:13:16	Yes
	Sample concentration is greater than that of the highest standard.						
2	5.1587	32.516	1.4309	1.4349	0.2993	17:13:48	Yes
	Sample concentration is greater than that of the highest standard.						
3	5.2820	33.292	1.4649	1.4690	0.3032	17:14:21	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	5.2304	32.968	1.4507				
SD:	0.06406	0.40379	0.0177				
%RSD:	1.2248	1.2248	1.22				

Sample concentration is greater than that of the highest standard.

Sequence No.: 34 **Autosampler Location: 30**
Sample ID: E15-01281-015x10 **Date Collected: 2/20/2015 5:15:02 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-015x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	44.439	26.140	1.1513	1.1553	0.2256	17:15:56	Yes

Sample concentration is greater than that of the highest standard.

2	44.887	26.404	1.1629	1.1669	0.2293	17:16:29	Yes
	Sample concentration is greater than that of the highest standard.						
3	45.192	26.584	1.1707	1.1748	0.2290	17:17:02	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	44.839	26.376	1.1616				
SD:	0.37888	0.22287	0.0098				
%RSD:	0.84497	0.84497	0.84				

Sample concentration is greater than that of the highest standard.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: E15-01281-016x100 **Date Collected: 2/20/2015 5:17:43 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-016x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	94.617	6.5706	0.2931	0.2971	0.0599	17:18:37	Yes
2	95.769	6.6506	0.2966	0.3006	0.0606	17:19:10	Yes
3	96.069	6.6715	0.2975	0.3016	0.0606	17:19:43	Yes
Mean:	95.485	6.6309	0.2957				
SD:	0.76682	0.05325	0.0023				
%RSD:	0.80309	0.80309	0.79				

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: E15-01224-001 **Date Collected: 2/20/2015 5:20:03 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01224-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01620	0.12857	0.0106	0.0146	0.0024	17:20:57	Yes
2	0.01639	0.13014	0.0107	0.0147	0.0024	17:21:30	Yes
3	0.01178	0.09354	0.0090	0.0131	0.0023	17:22:03	Yes
Mean:	0.01479	0.11742	0.0101				
SD:	0.00261	0.02069	0.0009				
%RSD:	17.622	17.622	8.99				

Sequence No.: 37 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 5:22:23 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		7.2437	0.3226	0.3267	0.0456	17:23:17	Yes
2		4.3807	0.1971	0.2011	0.0432	17:23:49	Yes
3		4.4377	0.1996	0.2036	0.0430	17:24:22	Yes
Mean:		5.3541	0.2397				
SD:		1.6368	0.0718				
%RSD:		30.571	29.94				

QC value within limits for Hg 253.7 Recovery = 107.08%
All analyte(s) passed QC.

Sequence No.: 38 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 5:24:42 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.48446	-0.0163	-0.0123	-0.0001	17:25:34	Yes
2		-0.23560	-0.0054	-0.0013	0.0002	17:26:07	Yes
3		-0.25698	-0.0063	-0.0023	0.0002	17:26:40	Yes

Mean:	-0.32568	-0.0093
SD:	0.13792	0.0060
%RSD:	42.349	64.77

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

METALS PREP LOGS
STANDARD PREP LOGS

2015 PG: 079 METALS'S DIGESTION LOG

Date: 02/20/15 07:30

MATRIX: SOIL	PREP. SOLUTION	DATE	LOT #	ANALYSIS METHOD: 6020A	Hg DIG. DATE: 2/20/15
DIGESTION METHOD: 3050B	NaCl:	1/5/15	134874	Hg ANAL. METHOD: 7471B	
SPIKES: 1.0ml M507, M508	Hydroxylamine:	1/5/15	138012	LOT# HNO3: 143747	ICPMS ICV: M331
Hg DIGESTION METHOD: 7471B	KMnO4:	1/7/15	133921	LOT# H2SO4:143680	ICPMS Cal. Stds.: M327,M361
Hg SPIKE: 2.50 PPB M493-3	1:1 HNO3:	2/6/15		LOT# HCL: 146027	
Hg ICV: 2.50 PPB M455-1	AQUAREGIA:	2/20/15			

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (g)	BASE final vol ml	Hg (g)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						0.5	50			M493-3		
Hg	STD2 2.50 PPB						0.5	50			M493-3		
Hg	STD3 5.00 PPB						0.5	50			M493-3		
Hg	STD4 7.50 PPB						0.5	50			M493-3		
Hg	STD5 10.0 PPB						0.5	50			M493-3		
Hg	ICV 5.00 PPB						0.5	50			M455-1		
	BLKS150220-01			1	2.50	50	0.50	50			BMS1		
	LCSS150220-01			1	2.50	50	0.50	50			BSS1		
TAL	E15-01158-021		Y	1.21	2.50	50	0.500	50	U1	3/3			
	E15-01158-021DUP		Y	1.21	2.50	50	0.500	50	U1				
	E15-01158-021MS		Y	1.21	2.50	50	0.500	50	U1				
TAL	E15-01273-001		B	1.12	2.37	50	0.560	50	U1	2/23	R-48(2/23 11:00)		
TAL	E15-01158-022		Y	1.14	2.35	50	0.530	50	U1	3/3			
TAL	E15-01281-001		Y	1.51	2.26	50	0.510	50	U1	2/24	R-72(2/24 16:00)		
TAL	E15-01281-002		Y	1.18	2.44	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-003		Y	1.18	2.35	50	0.490	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-004		Y	1.27	2.25	50	0.490	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-005		Y	1.55	2.27	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-006		Y	1.23	2.31	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-007		Y	1.26	2.26	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-008		Y	1.38	2.28	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-009		Y	1.56	2.38	50	0.510	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-010		Y	1.57	2.26	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-011		Y	1.61	2.35	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-012		Y	1.56	2.41	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-013		Y	1.51	2.27	50	0.510	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-014		Y	1.65	2.41	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-015		Y	1.70	2.42	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-016		Y	1.44	2.25	50	0.500	50	U1		R-72(2/24 16:00)		
PPM	E15-01224-001		N	1.31	2.34	50	0.520	50	U1	2/24	R-1WK		

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/20/15 - 1105	Received by:	2/20/15 11[illegible]
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/20/15 - 0900	Received by:	2/20/15 0900
Relinquished by:		Received by:	
Disposal:			

	SAMPLE	2101		BLKS150220-01	1000
	SAMPLE	2102		LCSS150220-01	1000
	SAMPLE	2103		E15-01158-021	1210
	SAMPLE	2104		E15-01158-021DUP	1210
	SAMPLE	2105		E15-01158-021SD	6050
	SAMPLE	2106		E15-01158-021MS	1210
	SAMPLE	2107		E15-01158-021PS	968
	SAMPLE	2108		E15-01273-001	1181.435
	SAMPLE	2109		E15-01158-022	1212.766
	SAMPLE	2110		E15-01281-001	1670.354
	SAMPLE	2111		E15-01281-002	1209.016
	SAMPLE	2112		E15-01281-003	1255.319
	SAMPLE	2201		E15-01281-004	1411.111
	SAMPLE	2202		E15-01281-005	1707.048
	SAMPLE	2203		E15-01281-006	1331.169
	SAMPLE	2204		E15-01281-007	1393.805
	SAMPLE	2205		E15-01281-008	1513.158
	SAMPLE	2206		E15-01281-009	1638.655
	SAMPLE	2207		E15-01281-010	1736.726
	SAMPLE	2208		E15-01281-011	1712.766
	SAMPLE	2209		E15-01281-012	1618.257
	SAMPLE	2210		E15-01281-013	1662.996
	SAMPLE	2211		E15-01281-014	1711.618
	SAMPLE	2212		E15-01281-015	1756.198
	SAMPLE	2301		E15-01281-016	1600
	SAMPLE	2302		E15-01224-001	1399.573

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 020315

Standard Name	020315-01	020315-02	020315-03	020315-04	020315-05	020315-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15
Standard Name	020315-07	020315-08	020315-09	020315-10	020315-11	020315-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15
Standard Name	020315-13	020315-14	020315-15	020315-16	020315-17	020315-18
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15
Standard Name	020315-19	020315-20	020315-21	020315-22	020315-23	020315-24
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Agilent 7700 prep 1

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-3	CL10-122YPY	M-506	8/30/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-905	S140424021	M-499	4/2015	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-486	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL11-99YPY	M-514	11/30/2015	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

INITIAL

2/3/15
DATE

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			2/23/15 17:15		2/23/15 18:11		2/23/15 18:29			
	INST.	ICV & CCV	ICV		CCV		CCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	25.0	23.7	94.8	23.2	92.8	23.2	92.8		
Barium	0.500	25.0	23.6	94.4	24.2	96.8	24.0	96.0		
Cadmium	0.125	25.0	24.2	96.8	24.4	97.6	24.3	97.2		
Chromium	0.500	25.0	22.9	91.6	26.0	104	25.7	103		
Lead	0.250	25.0	22.8	91.2	22.9	91.6	22.8	91.2		
Mercury	0.150	5.00	4.63	92.6	4.63	92.6				
Selenium	0.500	25.0	23.5	94.0	24.7	98.8	25.7	103		
Silver	0.125	25.0	25.0	100	25.1	100	25.1	100		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Concentration/Units: ppm (mg/L)

		2/23/15 17:23	2/23/15 18:15	2/23/15 18:33			
ANALYTE	INST. MDL	ICB	CCB	CCB			
Arsenic	0.0005	ND	ND	ND			
Barium	0.0005	ND	ND	ND			
Cadmium	0.000125	ND	ND	ND			
Chromium	0.0005	ND	ND	ND			
Lead	0.00025	ND	ND	ND			
Mercury	0.00015	ND	ND				
Selenium	0.0005	ND	ND	ND			
Silver	0.000125	ND	ND	ND			

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

02/23/2015 05:32 PM

Batch (Page) #: 083
Associated Lab Case for Blank 1: E15-01273

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKT150223-01
Arsenic	0.100	ND
Barium	0.100	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Selenium	0.100	ND
Silver	0.025	ND

Associated Sample for Blank 1:

01273-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 083
SDG #: E15-01273

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	104000	101000	101	NA
Calcium	100000	-	99100	97000	97.0	NA
Iron	100000	-	97900	96000	96.0	NA
Potassium	100000	-	95900	94300	94.3	NA
Magnesium	100000	-	95600	94100	94.1	NA
Sodium	100000	-	101000	100000	100	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2280	2310	116	NA
Titanium	2000	-	2030	1970	98.5	NA
Silver	-	20.0	-	25.5	118.0	80-120
Arsenic	-	20.0	-	20.4	102	80-120
Cadmium	-	20.0	-	20.5	103	80-120
Cobalt	-	20.0	-	20.7	104	80-120
Chromium	-	20.0	-	19.7	98.5	80-120
Copper	-	20.0	-	19.3	96.5	80-120
Manganese	-	20.0	-	20.6	103	80-120
Nickel	-	20.0	-	19.2	96.0	80-120
Zinc	-	20.0	-	18.9	94.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Unit: ppm (mg/L)

ANALYTE	LCST150223-01 TRUE	LCST150223-01 FOUND	LCST150223-01 %R(1)	TRUE	FOUND	%R(1)
Arsenic	4.00	3.94	98.5			
Barium	4.00	3.94	98.5			
Cadmium	4.00	4.06	102			
Chromium	4.00	3.80	95.0			
Lead	4.00	3.97	99.3			
Mercury	0.010	0.010	100			
Selenium	4.00	4.01	100			
Silver	4.00	4.63	116			

(1) Control Limits % Recovery = 80-120%

LCST150223-01 2/23/15 17:36
01273-001

METALS QUALITY CONTROL

LOW LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

2/23/15 17:19

ANALYTE	INST. MDL	LLICV TRUE	LLICV FOUND	LLICV % R
Arsenic	0.500	0.500	0.537	107
Barium	0.500	0.500	0.550	110
Cadmium	0.125	0.500	0.513	103
Chromium	0.500	0.500	0.489	97.8
Lead	0.250	0.500	0.533	107
Selenium	0.500	0.500	0.541	108
Silver	0.125	0.500	0.627	125

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	2/23/15 17:54 SSR1	2/23/15 17:41 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	3.88	ND	97.0	4.00					75-125
Barium	4.60	0.779	95.5	4.00					75-125
Cadmium	4.05	ND	101	4.00					75-125
Chromium	3.77	ND	94.3	4.00					75-125
Lead	4.13	0.303	95.7	4.00					75-125
Mercury	0.00944	ND	94.4	0.010					75-125
Selenium	4.24	ND	106	4.00					75-125
Silver	4.51	ND	113	4.00					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E15-01273-001
% Solids: NA
QC Sample 1 for following samples:
01273-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	2/23/15 17:41 S1	2/23/15 17:45 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	20	0.779	0.759	2.60				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Lead	20	0.303	0.290	4.38				
Mercury	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E15-01273-001
% Solids: NA
QC Sample 1 for following samples:
01273-001

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	2/23/15 17:41 SR	2/23/15 17:49 SDR	% Difference	2/23/15 17:58 SPR	SA	% Recovery
Arsenic	ND	ND	NC	3.92	4.00	98.0
Barium	0.779	0.763	2.08	4.64	4.00	96.5
Cadmium	ND	ND	NC	4.10	4.00	103
Chromium	ND	ND	NC	3.83	4.00	95.8
Lead	0.303	0.299	1.33	4.18	4.00	96.9
Selenium	ND	ND	NC	3.89	4.00	97.3
Silver	ND	ND	NC	4.55	4.00	114

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

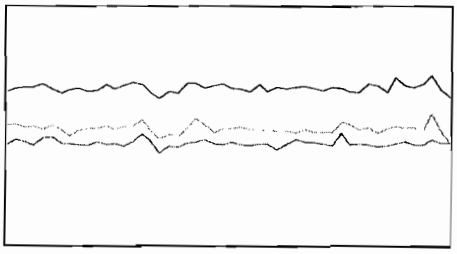
Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E15-01273-001
QC Sample 1 for following samples:
01273-001

Tune Report

Batch Folder D:\Data\6020\pg083.b
Report Comment
Instrument Name G3281A JP12382037

[1]



Mass	Range	Count	RSD%	Background
59	5000	2149	3.336	0.300
89	5000	2452	4.232	0.400
205	10000	6613	2.665	1.800

Ratio (oxide) 156/140 0.354 % **Ratio (2+)** 70/140 3.155 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.31

Tune Parameters
Plasma Paramters

RF Power	1550 W	Carrier Gas	1.01 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	0.0 V	Omega Lens	6.5 V	Deflect	2.6 V
Extract 2	-195.0 V	Cell Entrance	-38 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-68 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7	5000	4097	3.738	7.700
89	20000	16542	3.319	6.500
205	10000	8880	2.674	14.900
59	10000	7877	3.531	2.700

Ratio (oxide) 156/140 1.053 % **Ratio (2+)** 70/140 10.719 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.413

Mass	Peak Height	Axis	W-50%	W-X%
7	4025.36	6.95	0.66	0.740
89	16376.78	88.95	0.59	0.708
205	8563.10	205.00	0.58	0.727
59	7789.39	58.90	0.64	0.759

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Tune Report

RF Power	1550 W	Carrier Gas	1.03 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-3.1 V	Omega Lens	9.0 V	Deflect	12.6 V
Extract 2	-200.0 V	Cell Entrance	-28 V	Plate Bias	-45 V
Omega Bias	-100 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

E15-01273 Page 1006

METALS INTERNAL STANDARD AREA SUMMARY
2015 PG083
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	2043742		146432		1086423		6695900		8185004		4868813		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1430619	70	102502	70	760496	70	4687130	70	5729503	70	3408169	70	
	Upper Limit	2452490	120	175718	120	1303708	120	8035080	120	9822005	120	5842576	120	
004CALS.d	STD1	2043901	100	142563	97	1078683	99	6694266	100	8129207	99	4892648	100	
005CALS.d	STD2	2044743	100	144783	99	1072590	99	6724510	100	8164192	100	4896084	101	
006CALS.d	STD3	2043168	100	141323	97	1054540	97	6680710	100	8135753	99	4918234	101	
007CALS.d	STD4	2030145	99	138785	95	1054728	97	6630311	99	8133140	99	4858869	100	
008CALS.d	STD5	2052912	100	140513	96	1063528	98	6627269	99	8199255	100	4912131	101	
010_CCV.d	ICV	2029721	99	139660	95	1038297	96	6597450	99	8106235	99	4836054	99	
011LCCV.d	LLICV	2031782	99	140287	96	1057452	97	6595765	99	8084860	99	4848011	100	
012_ICB.d	ICB	1999999	98	138512	95	1050858	97	6558967	98	8035311	98	4808393	99	
013SMPL.d	TCLP150219	2010550	98	139276	95	1051378	97	6595471	99	8091160	99	4864031	100	
014SMPL.d	BLKT150223-01	1998112	98	139668	95	1041058	96	6573894	98	7990756	98	4828291	99	
015SMPL.d	LCST150223-01	2034129	100	139383	95	1048343	96	6597398	99	8132072	99	4854241	100	
016SMPL.d	E15-01273-001	2010465	98	137107	94	1033581	95	6494453	97	8069797	99	4850569	100	
017SMPL.d	E15-01273-001DUP	2012038	98	137162	94	1037325	95	6493466	97	8012365	98	4842405	99	
018SMPL.d	E15-01273-001SD	2008304	98	138851	95	1036595	95	6480596	97	7985633	98	4804368	99	
019SMPL.d	E15-01273-001MS	1982419	97	135340	92	1019748	94	6408419	96	7936107	97	4774058	98	
020SMPL.d	E15-01273-001PS	2018064	99	135923	93	1033902	95	6505775	97	8115304	99	4860538	100	
022ICSA.d	ICSA	1821268	89	131752	90	1097259	101	5723408	85	7839380	96	4357910	90	
023_CCV.d	CCV	1937068	95	134218	92	1030732	95	6547654	98	8233855	101	4918121	101	
024_CCB.d	CCB	1929321	94	134669	92	1041501	96	6599649	99	8184945	100	4956591	102	
025ICSB.d	ICSAB	1797955	88	133269	91	1120560	103	5838879	87	8035904	98	4405708	90	
027_CCV.d	FINAL CCV	1930448	94	137962	94	1045433	96	6658889	99	8375945	102	5024609	103	
028_CCB.d	FINAL CCB	1918719	94	138225	94	1055690	97	6665769	100	8324531	102	5029614	103	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

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TCLP
METALS RAW DATA

	SAMPLE	2101		TCLP150219	200
	SAMPLE	2102		BLKT150223-01	200
	SAMPLE	2103		LCST150223-01	200
	SAMPLE	2104		E15-01273-001	200
	SAMPLE	2105		E15-01273-001DUP	200
	SAMPLE	2106		E15-01273-001SD	1000
	SAMPLE	2107		E15-01273-001MS	200
	SAMPLE	2108		E15-01273-001PS	200

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	001SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:36:07-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	002SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:40:25-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

TuneStep	TuneModeName
1	1
2	2

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:44:47-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	84723	0.02
Mg	24	1	1	4429	0.89
Al	27	1	1	2964	1.34
K	39	1	1	53314	0.00
Ca	44	1	1	2256	1.81
Ti	47	1	1	20	220.50
V	51	1	1	1259	1.19
Cr	52	1	1	18295	0.27
Mn	55	1	1	10491	0.61
Fe	56	1	1	200935	0.04
Co	59	1	1	906	6.12
Ni	60	1	1	7486	0.50
Cu	63	1	1	36944	0.04
Zn	66	1	1	6827	0.59
As	75	1	1	66	23.69
Se	78	1	1	30	133.55
Be	9	2	2	78	66.21
B	11	2	2	41834	0.01
Mo	95	2	2	845	1.65
Ag	107	2	2	482	0.73
Cd	111	2	2	22	389.75
Sn	118	2	2	1361016	0.00
Sb	121	2	2	282	8.45
Ba	137	2	2	1108	1.07
Tl	205	2	2	22291	0.01
Pb	208	2	2	6243	0.05

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	146432	38.14
Li	6	2	2	2043742	0.24
Ge	72	2	2	1086423	1.05
Rh	103	2	2	6695900	0.13
Tb	159	2	2	8185004	0.75
Bi	209	2	2	4868813	0.10

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:49:04-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	65396	0.00
Mg	24	1	1	6520	0.02
Al	27	1	1	1218	0.06
K	39	1	1	54236	0.00
Ca	44	1	1	1570	0.46
Ti	47	1	1	153	19.07
V	51	1	1	6035	0.02
Cr	52	1	1	13144	0.02
Mn	55	1	1	5615	0.07
Fe	56	1	1	99172	0.00
Co	59	1	1	11350	0.02
Ni	60	1	1	5555	0.06
Cu	63	1	1	35649	0.00
Zn	66	1	1	3458	0.12
As	75	1	1	888	0.66
Se	78	1	1	89	28.71
Be	9	2	2	5909	0.11
B	11	2	2	45107	0.01
Mo	95	2	2	9208	0.02
Ag	107	2	2	5965	0.13
Cd	111	2	2	4487	0.23
Sn	118	2	2	302589	0.00
Sb	121	2	2	17535	0.01
Ba	137	2	2	6962	0.06
Tl	205	2	2	55818	0.00
Pb	208	2	2	29566	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	142563	0.26	146432	97.36	70	120	
Li	6	2	2	2043901	0.24	2043742	100.01	70	120	
Ge	72	2	2	1078683	0.60	1086423	99.29	70	120	
Rh	103	2	2	6694266	0.59	6695900	99.98	70	120	
Tb	159	2	2	8129207	0.96	8185004	99.32	70	120	
Bi	209	2	2	4892648	0.46	4868813	100.49	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:53:26-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	141350	0.00
Mg	24	1	1	50006	0.00
Al	27	1	1	2755	0.12
K	39	1	1	90366	0.00
Ca	44	1	1	3763	0.75
Ti	47	1	1	1540	0.03
V	51	1	1	50389	0.00
Cr	52	1	1	68475	0.00
Mn	55	1	1	35527	0.00
Fe	56	1	1	568436	0.00
Co	59	1	1	108274	0.00
Ni	60	1	1	31839	0.01
Cu	63	1	1	107856	0.00
Zn	66	1	1	13649	0.00
As	75	1	1	8267	0.01
Se	78	1	1	538	0.77
Be	9	2	2	58763	0.00
B	11	2	2	76074	0.00
Mo	95	2	2	88633	0.00
Ag	107	2	2	59635	0.00
Cd	111	2	2	44413	0.01
Sn	118	2	2	302610	0.00
Sb	121	2	2	176100	0.00
Ba	137	2	2	62360	0.00
Tl	205	2	2	365769	0.00
Pb	208	2	2	248270	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	144783	1.26	146432	98.87	70	120	
Li	6	2	2	2044743	0.41	2043742	100.05	70	120	
Ge	72	2	2	1072590	0.72	1086423	98.73	70	120	
Rh	103	2	2	6724510	0.42	6695900	100.43	70	120	
Tb	159	2	2	8164192	0.82	8185004	99.75	70	120	
Bi	209	2	2	4896084	0.61	4868813	100.56	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:57:43-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	490369	0.00
Mg	24	1	1	234831	0.00
Al	27	1	1	10336	0.00
K	39	1	1	246389	0.00
Ca	44	1	1	11059	0.03
Ti	47	1	1	7606	0.04
V	51	1	1	241667	0.00
Cr	52	1	1	311518	0.00
Mn	55	1	1	165351	0.00
Fe	56	1	1	2660539	0.00
Co	59	1	1	519578	0.00
Ni	60	1	1	148869	0.00
Cu	63	1	1	422190	0.00
Zn	66	1	1	60303	0.00
As	75	1	1	39660	0.00
Se	78	1	1	2525	0.11
Be	9	2	2	285586	0.00
B	11	2	2	209487	0.00
Mo	95	2	2	421953	0.00
Ag	107	2	2	293236	0.00
Cd	111	2	2	213588	0.00
Sn	118	2	2	764075	0.00
Sb	121	2	2	861597	0.00
Ba	137	2	2	301775	0.00
Tl	205	2	2	1742029	0.00
Pb	208	2	2	1194852	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	141323	0.77	146432	96.51	70	120	
Li	6	2	2	2043168	0.10	2043742	99.97	70	120	
Ge	72	2	2	1054540	0.11	1086423	97.07	70	120	
Rh	103	2	2	6680710	0.71	6695900	99.77	70	120	
Tb	159	2	2	8135753	0.45	8185004	99.40	70	120	
Bi	209	2	2	4918234	0.73	4868813	101.02	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:02:06-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	923076	0.00
Mg	24	1	1	466161	0.00
Al	27	1	1	20139	0.00
K	39	1	1	443586	0.00
Ca	44	1	1	21729	0.00
Ti	47	1	1	14524	0.01
V	51	1	1	478252	0.00
Cr	52	1	1	616606	0.00
Mn	55	1	1	325741	0.00
Fe	56	1	1	5264392	0.00
Co	59	1	1	1029777	0.00
Ni	60	1	1	292220	0.00
Cu	63	1	1	809211	0.00
Zn	66	1	1	115601	0.00
As	75	1	1	78609	0.00
Se	78	1	1	4790	0.13
Be	9	2	2	572132	0.00
B	11	2	2	375634	0.00
Mo	95	2	2	847670	0.00
Ag	107	2	2	591524	0.00
Cd	111	2	2	431822	0.00
Sn	118	2	2	1402888	0.00
Sb	121	2	2	1747309	0.00
Ba	137	2	2	599463	0.00
Tl	205	2	2	3461623	0.00
Pb	208	2	2	2442365	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138785	0.60	146432	94.78	70	120	
Li	6	2	2	2030145	0.70	2043742	99.33	70	120	
Ge	72	2	2	1054728	0.82	1086423	97.08	70	120	
Rh	103	2	2	6630311	0.04	6695900	99.02	70	120	
Tb	159	2	2	8133140	0.60	8185004	99.37	70	120	
Bi	209	2	2	4858869	0.84	4868813	99.80	70	120	

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Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:06:24-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	1738492	0.00
Mg	24	1	1	933940	0.00
Al	27	1	1	39035	0.00
K	39	1	1	840930	0.00
Ca	44	1	1	42197	0.00
Ti	47	1	1	29769	0.00
V	51	1	1	960894	0.00
Cr	52	1	1	1234695	0.00
Mn	55	1	1	652178	0.00
Fe	56	1	1	10476748	0.00
Co	59	1	1	2067510	0.00
Ni	60	1	1	585193	0.00
Cu	63	1	1	1583831	0.00
Zn	66	1	1	230973	0.00
As	75	1	1	156721	0.00
Se	78	1	1	9699	0.04
Be	9	2	2	1055215	0.00
B	11	2	2	712657	0.00
Mo	95	2	2	1681130	0.00
Ag	107	2	2	1165692	0.00
Cd	111	2	2	859536	0.00
Sn	118	2	2	2663486	0.00
Sb	121	2	2	3477305	0.00
Ba	137	2	2	1193226	0.00
Tl	205	2	2	6846386	0.00
Pb	208	2	2	4884582	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	140513	0.93	146432	95.96	70	120	
Li	6	2	2	2052912	0.92	2043742	100.45	70	120	
Ge	72	2	2	1063528	1.21	1086423	97.89	70	120	
Rh	103	2	2	6627269	0.95	6695900	98.98	70	120	
Tb	159	2	2	8199255	1.59	8185004	100.17	70	120	
Bi	209	2	2	4912131	0.95	4868813	100.89	70	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	009SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:10:48-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-9.437	-9.437	ppb	-3.25	71213	50000	
Mg	24	72	1	1	1.463	1.463	ppb	9.32	5647	50000	
Al	27	72	1	1	-0.079	-0.079	ppb	-193.17	2832	20000	
K	39	72	1	1	-6.152	-6.152	ppb	-2.16	51855	50000	
Ca	44	72	1	1	-17.730	-17.730	ppb	-10.12	1459	150000	
Ti	47	72	1	1	0.089	0.089	ppb	93.16	46	15000	
V	51	72	1	1	-0.023	-0.023	ppb	-18.70	1088	20000	
Cr	52	72	1	1	-0.823	-0.823	ppb	-1.04	7153	20000	
Mn	55	72	1	1	-1.162	-1.162	ppb	-1.55	2070	20000	
Fe	56	72	1	1	-7.156	-7.156	ppb	-1.01	103384	50000	
Co	59	72	1	1	-0.011	-0.011	ppb	-35.50	621	20000	
Ni	60	72	1	1	-0.753	-0.753	ppb	-2.35	2874	20000	
Cu	63	72	1	1	-0.522	-0.522	ppb	-5.47	29950	20000	
Zn	66	72	1	1	-2.127	-2.127	ppb	-4.11	1798	15000	
As	75	72	1	1	0.019	0.019	ppb	50.31	99	20000	
Se	78	72	1	1	-0.004	-0.004	ppb	-1931.98	32	20000	
Be	9	6	2	2	0.019	0.019	ppb	32.50	282	20000	
B	11	6	2	2	1.293	1.293	ppb	11.56	49680	15000	
Mo	95	103	2	2	0.123	0.123	ppb	11.38	2908	20000	
Ag	107	103	2	2	0.030	0.030	ppb	17.44	1545	1000	
Cd	111	72	2	2	0.011	0.011	ppb	38.33	115	15000	
Sn	118	103	2	2	-136.272	-136.272	ppb	-0.08	166389	15000	
Sb	121	159	2	2	0.010	0.010	ppb	15.39	633	20000	
Ba	137	103	2	2	-0.022	-0.022	ppb	-16.27	833	20000	
Tl	205	209	2	2	0.301	0.301	ppb	3.36	42389	20000	
Pb	208	209	2	2	-0.009	-0.009	ppb	-55.55	5761	20000	
Si	29	72	2	2	54.622	54.622	ppb	6.84	208726	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	141557	0.42	146432	96.67	70	120	
Li	6	2	2011234	0.65	2043742	98.41	70	120	
Ge	72	2	1049410	0.76	1086423	96.59	70	120	
Rh	103	2	6630539	0.27	6695900	99.02	70	120	
Tb	159	2	8083308	0.72	8185004	98.76	70	120	
Bi	209	2	4831912	0.38	4868813	99.24	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:15:05-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	230.104	ppb	1.641	464782	0.67	250	92.0	90	110	
Mg	24	1	1	239.887	ppb	1.440	225978	0.74	250	96.0	90	110	
Al	27	1	1	25.710	ppb	3.977	13014	2.64	25	102.8	90	110	
K	39	1	1	233.770	ppb	0.880	237905	0.12	250	93.5	90	110	
Ca	44	1	1	250.032	ppb	3.338	10672	2.19	250	100.0	90	110	
Ti	47	1	1	23.578	ppb	1.801	6979	1.36	25	94.3	90	110	
V	51	1	1	23.696	ppb	1.604	227533	1.06	25	94.8	90	110	
Cr	52	1	1	22.876	ppb	0.906	293094	0.55	25	91.5	90	110	
Mn	55	1	1	25.888	ppb	0.895	151858	0.21	25	103.6	90	110	
Fe	56	1	1	234.348	ppb	1.358	2568677	0.63	250	93.7	90	110	
Co	59	1	1	23.426	ppb	1.772	482737	1.11	25	93.7	90	110	
Ni	60	1	1	22.528	ppb	0.348	136349	0.76	25	90.1	90	110	
Cu	63	1	1	22.942	ppb	1.047	390554	0.46	25	91.8	90	110	
Zn	66	1	1	25.359	ppb	0.840	55073	0.06	25	101.4	90	110	
As	75	1	1	23.722	ppb	2.377	37120	1.89	25	94.9	90	110	
Se	78	1	1	23.534	ppb	4.981	2295	4.54	25	94.1	90	110	
Be	9	2	2	24.651	ppb	0.596	263122	0.78	25	98.6	90	110	
B	11	2	2	23.982	ppb	0.883	200853	0.95	25	95.9	90	110	
Mo	95	2	2	23.414	ppb	0.871	393006	0.65	25	93.7	90	110	
Ag	107	2	2	24.954	ppb	0.374	986166	0.35	25	99.8	90	110	
Cd	111	2	2	24.189	ppb	1.027	203572	1.55	25	96.8	90	110	
Sn	118	2	2	25.678	ppb	0.357	696668	0.28	25	102.7	90	110	
Sb	121	2	2	23.462	ppb	0.174	809009	0.11	25	93.8	90	110	
Ba	137	2	2	23.586	ppb	0.736	281228	0.84	25	94.3	90	110	
Tl	205	2	2	23.688	ppb	0.323	1620045	0.04	25	94.8	90	110	
Pb	208	2	2	22.827	ppb	0.660	1103273	0.62	25	91.3	90	110	
Si	29	2	2	534.178	ppb	2.962	554467	1.53	536	99.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	139660	0.68	146432	95.38	70	120	
Li	6	2	2	2029721	0.41	2043742	99.31	70	120	
Ge	72	2	2	1038297	0.52	1086423	95.57	70	120	
Rh	103	2	2	6597450	0.23	6695900	98.53	70	120	
Tb	159	2	2	8106235	0.13	8185004	99.04	70	120	
Bi	209	2	2	4836054	0.36	4868813	99.33	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:19:27-05:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	4.836	0.476	74743	0.74	5	96.7	70	130	
Mg	24	1	1	4.789	0.252	8685	0.71	5	95.8	70	130	
Al	27	1	1	0.467	1.663	1935	2.25	0.5	93.4	70	130	
K	39	1	1	5.048	29.602	57476	1.18	5	101.0	70	130	
Ca	44	1	1	5.319	45.607	2225	1.12	5	106.4	70	130	
Ti	47	1	1	0.453	34.143	153	30.20	0.5	90.7	70	130	
V	51	1	1	0.473	1.792	5840	2.21	0.5	94.6	70	130	
Cr	52	1	1	0.489	2.118	12327	1.40	0.5	97.9	70	130	
Mn	55	1	1	0.572	0.844	6252	1.53	0.5	114.3	70	130	
Fe	56	1	1	4.776	0.521	136917	0.33	5	95.5	70	130	
Co	59	1	1	0.520	2.273	11584	1.34	0.5	104.0	70	130	
Ni	60	1	1	0.530	5.916	6552	5.17	0.5	105.9	70	130	
Cu	63	1	1	0.515	4.888	35017	4.19	0.5	103.0	70	130	
Zn	66	1	1	0.522	1.474	3895	1.88	0.5	104.3	70	130	
As	75	1	1	0.537	7.042	910	6.51	0.5	107.3	70	130	
Se	78	1	1	0.541	33.318	84	19.87	0.5	108.2	70	130	
Be	9	2	2	0.561	7.634	6072	7.75	0.5	112.2	70	130	
B	11	2	2	0.553	10.244	47273	0.92	0.5	110.6	70	130	
Mo	95	2	2	0.543	4.988	9931	4.63	0.5	108.7	70	130	
Ag	107	2	2	0.627	1.801	22361	1.91	0.5	125.5	70	130	
Cd	111	2	2	0.513	5.852	4420	5.14	0.5	102.7	70	130	
Sn	118	2	2	0.484	3.733	142783	3.85	0.5	96.8	70	130	
Sb	121	2	2	0.541	1.706	18874	1.42	0.5	108.2	70	130	
Ba	137	2	2	0.550	1.713	7622	1.66	0.5	110.0	70	130	
Tl	205	2	2	0.555	1.938	59729	1.19	0.5	111.0	70	130	
Pb	208	2	2	0.533	6.473	31879	5.22	0.5	106.5	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	140287	0.82	146432	95.80	70	120	
Li	6	2	2	2031782	0.31	2043742	99.41	70	120	
Ge	72	2	2	1057452	0.70	1086423	97.33	70	120	
Rh	103	2	2	6595765	0.19	6695900	98.50	70	120	
Tb	159	2	2	8084860	0.27	8185004	98.78	70	120	
Bi	209	2	2	4848011	0.11	4868813	99.57	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:23:45-05:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-22.085	ppb	-1.3	49022	1.1	5	
Mg	24	1	1	-2.639	ppb	-7.5	1765	10.5	5	
Al	27	1	1	-3.728	ppb	-2.5	1490	2.5	0.5	
K	39	1	1	-8.909	ppb	-8.1	48613	1.4	5	
Ca	44	1	1	-27.764	ppb	-7.6	1035	7.7	5	
Ti	47	1	1	0.020	ppb	286.4	24	68.6	0.5	
V	51	1	1	-0.008	ppb	-59.6	1209	3.5	0.5	
Cr	52	1	1	-0.970	ppb	-0.6	5244	1.6	0.5	
Mn	55	1	1	-0.943	ppb	-1.1	3408	2.0	0.5	
Fe	56	1	1	-11.883	ppb	-0.7	53275	1.3	5	
Co	59	1	1	-0.007	ppb	-29.0	681	5.9	0.5	
Ni	60	1	1	-0.935	ppb	-2.2	1777	6.8	0.5	
Cu	63	1	1	-1.008	ppb	-1.7	21877	1.5	0.5	
Zn	66	1	1	-2.281	ppb	-2.1	1419	7.7	0.5	
As	75	1	1	0.019	ppb	75.3	97	22.6	0.5	
Se	78	1	1	0.074	ppb	146.2	39	26.2	0.5	
Be	9	2	2	0.028	ppb	12.0	374	9.5	0.5	
B	11	2	2	0.172	ppb	15.8	42065	0.9	0.5	
Mo	95	2	2	0.026	ppb	54.7	1260	18.9	0.5	
Ag	107	2	2	0.026	ppb	18.5	1385	12.3	0.5	
Cd	111	2	2	0.018	ppb	14.5	178	12.5	0.5	
Sn	118	2	2	-141.709	ppb	-0.1	117971	1.3	0.5	
Sb	121	2	2	0.022	ppb	15.3	1019	11.7	0.5	
Ba	137	2	2	-0.034	ppb	-20.0	682	12.0	0.5	
Tl	205	2	2	0.037	ppb	25.5	24511	2.3	0.125	
Pb	208	2	2	-0.008	ppb	-35.4	5773	2.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138512	0.32	146432	94.59	70	120	
Li	6	2	2	1999999	0.49	2043742	97.86	70	120	
Ge	72	2	2	1050858	0.25	1086423	96.73	70	120	
Rh	103	2	2	6558967	0.20	6695900	97.95	70	120	
Tb	159	2	2	8035311	0.76	8185004	98.17	70	120	
Bi	209	2	2	4808393	0.30	4868813	98.76	70	120	

Sample Report

Sample Table

Sample Name	TCLP150219
Data File Name	013SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:28:07-05:00
Sample Type	Sample
Dilution	200
Comment	083;;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-25.254	-5050.758	ppb	-2.78	44079	50000	
Mg	24	72	1	1	-2.167	-433.497	ppb	-4.54	2208	50000	
Al	27	72	1	1	-5.452	-1090.342	ppb	-3.72	890	20000	
K	39	72	1	1	-10.086	-2017.230	ppb	-10.82	47962	50000	
Ca	44	72	1	1	-29.970	-5994.063	ppb	-2.52	953	150000	
Ti	47	72	1	1	-0.011	-2.152	ppb	-156.16	16	15000	
V	51	72	1	1	-0.010	-1.957	ppb	-23.05	1200	20000	
Cr	52	72	1	1	-0.924	-184.850	ppb	-1.75	5821	20000	
Mn	55	72	1	1	-1.311	-262.249	ppb	-0.91	1090	20000	
Fe	56	72	1	1	-14.467	-2893.385	ppb	-0.27	27254	50000	
Co	59	72	1	1	-0.030	-6.071	ppb	-2.12	207	20000	
Ni	60	72	1	1	-1.023	-204.592	ppb	-2.55	1283	20000	
Cu	63	72	1	1	-0.924	-184.755	ppb	-1.01	23295	20000	
Zn	66	72	1	1	-2.474	-494.841	ppb	-0.78	1000	15000	
As	75	72	1	1	-0.012	-2.424	ppb	-34.96	49	20000	
Se	78	72	1	1	-0.008	-1.635	ppb	-2885.25	31	20000	
Be	9	6	2	2	0.003	0.651	ppb	222.47	111	20000	
B	11	6	2	2	0.020	4.047	ppb	1668.54	41285	15000	
Mo	95	103	2	2	-0.013	-2.680	ppb	-45.38	608	20000	
Ag	107	103	2	2	0.014	2.739	ppb	22.13	952	1000	
Cd	111	72	2	2	0.005	1.055	ppb	65.04	67	15000	
Sn	118	103	2	2	-140.966	-28193.111	ppb	-0.17	125033	15000	
Sb	121	159	2	2	0.000	-0.025	ppb	-144.87	274	20000	
Ba	137	103	2	2	-0.061	-12.265	ppb	-13.53	363	20000	
Tl	205	209	2	2	0.008	1.539	ppb	124.26	22792	20000	
Pb	208	209	2	2	-0.040	-8.025	ppb	-12.43	4298	20000	
Si	29	72	2	2	45.528	9105.564	ppb	6.42	203252	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139276	1.03	146432	95.11	70	120	
Li	6	2	2010550	0.34	2043742	98.38	70	120	
Ge	72	2	1051378	0.71	1086423	96.77	70	120	
Rh	103	2	6595471	0.30	6695900	98.50	70	120	
Tb	159	2	8091160	0.29	8185004	98.85	70	120	
Bi	209	2	4864031	0.24	4868813	99.90	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	BLKT150223-01
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:32:25-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-26.158	-5231.670	ppb	-1.72	42720	50000	
Mg	24	72	1	1	-2.420	-483.951	ppb	-3.67	1981	50000	
Al	27	72	1	1	-5.769	-1153.870	ppb	-3.35	780	20000	
K	39	72	1	1	-10.334	-2066.747	ppb	-4.47	47910	50000	
Ca	44	72	1	1	-30.890	-6178.007	ppb	-7.30	920	150000	
Ti	47	72	1	1	-0.045	-8.936	ppb	-14.50	6	15000	
V	51	72	1	1	-0.007	-1.379	ppb	-47.49	1231	20000	
Cr	52	72	1	1	-0.939	-187.815	ppb	-2.07	5660	20000	
Mn	55	72	1	1	-1.316	-263.227	ppb	-0.14	1062	20000	
Fe	56	72	1	1	-14.640	-2928.012	ppb	-0.27	25560	50000	
Co	59	72	1	1	-0.031	-6.206	ppb	-4.37	193	20000	
Ni	60	72	1	1	-1.002	-200.407	ppb	-0.61	1407	20000	
Cu	63	72	1	1	-0.979	-195.887	ppb	-2.10	22504	20000	
Zn	66	72	1	1	-2.503	-500.527	ppb	-0.70	940	15000	
As	75	72	1	1	0.003	0.686	ppb	265.06	73	20000	
Se	78	72	1	1	-0.103	-20.594	ppb	-70.55	22	20000	
Be	9	6	2	2	0.000	0.037	ppb	3482.88	78	20000	
B	11	6	2	2	0.176	35.229	ppb	87.53	42050	15000	
Mo	95	103	2	2	-0.022	-4.347	ppb	-15.52	467	20000	
Ag	107	103	2	2	0.020	4.011	ppb	24.07	1171	1000	
Cd	111	72	2	2	0.005	1.067	ppb	126.83	67	15000	
Sn	118	103	2	2	-142.426	-28485.254	ppb	-0.24	112067	15000	
Sb	121	159	2	2	-0.002	-0.417	ppb	-111.23	204	20000	
Ba	137	103	2	2	-0.063	-12.624	ppb	-15.77	341	20000	
Tl	205	209	2	2	-0.010	-1.902	ppb	-108.19	21464	20000	
Pb	208	209	2	2	-0.044	-8.774	ppb	-17.79	4086	20000	
Si	29	72	2	2	49.216	9843.273	ppb	7.42	203611	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139668	0.41	146432	95.38	70	120	
Li	6	2	1998112	0.71	2043742	97.77	70	120	
Ge	72	2	1041058	0.68	1086423	95.82	70	120	
Rh	103	2	6573894	0.51	6695900	98.18	70	120	
Tb	159	2	7990756	0.44	8185004	97.63	70	120	
Bi	209	2	4828291	0.19	4868813	99.17	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCST150223-01
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:36:48-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	75.817	15163.311	ppb	2.52	210242	50000	
Mg	24	72	1	1	95.785	19156.908	ppb	1.54	92576	50000	
Al	27	72	1	1	97.546	19509.196	ppb	4.46	37252	20000	
K	39	72	1	1	85.574	17114.815	ppb	1.97	122306	50000	
Ca	44	72	1	1	65.305	13060.955	ppb	11.11	4708	150000	
Ti	47	72	1	1	19.108	3821.550	ppb	5.15	5646	15000	
V	51	72	1	1	18.999	3799.892	ppb	1.28	182328	20000	
Cr	52	72	1	1	19.004	3800.829	ppb	1.20	245857	20000	
Mn	55	72	1	1	17.797	3559.454	ppb	0.98	122574	20000	
Fe	56	72	1	1	82.593	16518.649	ppb	1.65	1016616	50000	
Co	59	72	1	1	19.108	3821.699	ppb	1.21	393136	20000	
Ni	60	72	1	1	18.910	3782.084	ppb	1.82	115360	20000	
Cu	63	72	1	1	19.188	3837.572	ppb	1.74	332105	20000	
Zn	66	72	1	1	17.216	3443.219	ppb	1.22	44576	15000	
As	75	72	1	1	19.690	3938.031	ppb	1.33	30761	20000	
Se	78	72	1	1	20.053	4010.608	ppb	6.54	1956	20000	
Be	9	6	2	2	20.716	4143.199	ppb	0.41	221613	20000	
B	11	6	2	2	0.054	10.766	ppb	227.87	41998	15000	
Mo	95	103	2	2	19.364	3872.884	ppb	0.34	325174	20000	
Ag	107	103	2	2	23.174	4634.858	ppb	0.44	809093	1000	
Cd	111	72	2	2	20.321	4064.164	ppb	0.84	172662	15000	
Sn	118	103	2	2	-146.155	-29230.995	ppb	-0.11	80312	15000	
Sb	121	159	2	2	19.600	3919.966	ppb	0.73	678008	20000	
Ba	137	103	2	2	19.704	3940.801	ppb	1.32	235114	20000	
Tl	205	209	2	2	20.350	4069.928	ppb	1.63	1400211	20000	
Pb	208	209	2	2	19.828	3965.581	ppb	0.26	962762	20000	
Si	29	72	2	2	45.546	9109.142	ppb	11.32	202685	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139383	1.21	146432	95.19	70	120	
Li	6	2	2034129	0.30	2043742	99.53	70	120	
Ge	72	2	1048343	0.68	1086423	96.49	70	120	
Rh	103	2	6597398	0.95	6695900	98.53	70	120	
Tb	159	2	8132072	0.72	8185004	99.35	70	120	
Bi	209	2	4854241	0.64	4868813	99.70	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:41:06-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6343.994	1268798.800	ppb	1.37	10342303	50000	
Mg	24	72	1	1	34.116	6823.234	ppb	2.01	35104	50000	
Al	27	72	1	1	2.173	434.659	ppb	10.39	3525	20000	
K	39	72	1	1	1.326	265.166	ppb	69.72	55940	50000	
Ca	44	72	1	1	1455.484	291096.890	ppb	1.06	58531	150000	
Ti	47	72	1	1	-0.029	-5.803	ppb	-68.49	10	15000	
V	51	72	1	1	-0.006	-1.161	ppb	-129.59	1219	20000	
Cr	52	72	1	1	-0.951	-190.150	ppb	-1.62	5418	20000	
Mn	55	72	1	1	23.389	4677.848	ppb	0.50	155547	20000	
Fe	56	72	1	1	-11.015	-2203.078	ppb	-8.34	61425	50000	
Co	59	72	1	1	0.114	22.874	ppb	4.85	3127	20000	
Ni	60	72	1	1	-0.812	-162.380	ppb	-1.36	2451	20000	
Cu	63	72	1	1	-0.097	-19.437	ppb	-8.73	35418	20000	
Zn	66	72	1	1	6.617	1323.366	ppb	2.23	20776	15000	
As	75	72	1	1	0.025	4.923	ppb	97.22	104	20000	
Se	78	72	1	1	-0.087	-17.328	ppb	-227.79	23	20000	
Be	9	6	2	2	0.006	1.143	ppb	58.12	137	20000	
B	11	6	2	2	0.315	62.966	ppb	80.58	43231	15000	
Mo	95	103	2	2	-0.004	-0.813	ppb	-217.23	752	20000	
Ag	107	103	2	2	0.025	5.066	ppb	10.62	1337	1000	
Cd	111	72	2	2	0.046	9.137	ppb	35.41	404	15000	
Sn	118	103	2	2	-146.308	-29261.592	ppb	-0.07	77755	15000	
Sb	121	159	2	2	0.050	9.935	ppb	8.67	1982	20000	
Ba	137	103	2	2	3.894	778.839	ppb	2.31	46603	20000	
Tl	205	209	2	2	-0.012	-2.324	ppb	-108.27	21420	20000	
Pb	208	209	2	2	1.517	303.311	ppb	0.51	79327	20000	
Si	29	72	2	2	105.537	21107.484	ppb	11.88	237884	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	137107	0.27	146432	93.63	70	120	
Li	6	2	2010465	0.45	2043742	98.37	70	120	
Ge	72	2	1033581	0.38	1086423	95.14	70	120	
Rh	103	2	6494453	0.66	6695900	96.99	70	120	
Tb	159	2	8069797	0.23	8185004	98.59	70	120	
Bi	209	2	4850569	0.73	4868813	99.63	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001DUP
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:45:29-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6143.306	1228661.189	ppb	0.16	10022103	50000	
Mg	24	72	1	1	32.594	6518.772	ppb	1.27	33739	50000	
Al	27	72	1	1	1.573	314.509	ppb	31.91	3318	20000	
K	39	72	1	1	1.436	287.190	ppb	18.70	56046	50000	
Ca	44	72	1	1	1419.939	283987.784	ppb	1.03	57179	150000	
Ti	47	72	1	1	-0.056	-11.172	ppb	-11.83	2	15000	
V	51	72	1	1	0.007	1.483	ppb	30.83	1343	20000	
Cr	52	72	1	1	-0.946	-189.206	ppb	-1.54	5477	20000	
Mn	55	72	1	1	22.660	4531.987	ppb	0.69	151044	20000	
Fe	56	72	1	1	-11.694	-2338.871	ppb	-0.64	54649	50000	
Co	59	72	1	1	0.100	19.916	ppb	6.44	2829	20000	
Ni	60	72	1	1	-0.842	-168.461	ppb	-4.18	2280	20000	
Cu	63	72	1	1	-0.147	-29.305	ppb	-12.18	34686	20000	
Zn	66	72	1	1	6.415	1282.913	ppb	1.34	20345	15000	
As	75	72	1	1	0.022	4.329	ppb	90.39	100	20000	
Se	78	72	1	1	-0.029	-5.721	ppb	-248.72	29	20000	
Be	9	6	2	2	0.004	0.856	ppb	151.05	122	20000	
B	11	6	2	2	0.283	56.613	ppb	42.65	43049	15000	
Mo	95	103	2	2	-0.010	-2.028	ppb	-55.83	652	20000	
Ag	107	103	2	2	0.021	4.249	ppb	10.36	1197	1000	
Cd	111	72	2	2	0.053	10.593	ppb	8.12	467	15000	
Sn	118	103	2	2	-145.311	-29062.135	ppb	-0.05	86212	15000	
Sb	121	159	2	2	0.046	9.299	ppb	10.17	1860	20000	
Ba	137	103	2	2	3.793	758.644	ppb	1.03	45417	20000	
Tl	205	209	2	2	-0.036	-7.263	ppb	-6.10	19717	20000	
Pb	208	209	2	2	1.451	290.277	ppb	2.73	76054	20000	
Si	29	72	2	2	98.657	19731.331	ppb	3.74	234374	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	137162	0.82	146432	93.67	70	120	
Li	6	2	2012038	0.73	2043742	98.45	70	120	
Ge	72	2	1037325	0.53	1086423	95.48	70	120	
Rh	103	2	6493466	0.57	6695900	96.98	70	120	
Tb	159	2	8012365	0.05	8185004	97.89	70	120	
Bi	209	2	4842405	0.30	4868813	99.46	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001SD
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:49:47-05:00
Sample Type	Sample
Dilution	1000
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1189.415	1189414.679	ppb	1.56	2033199	50000	
Mg	24	72	1	1	4.641	4640.878	ppb	14.09	8463	50000	
Al	27	72	1	1	-4.246	-4245.525	ppb	-8.66	1312	20000	
K	39	72	1	1	-7.750	-7749.642	ppb	-8.76	49630	50000	
Ca	44	72	1	1	260.171	260171.026	ppb	0.57	12343	150000	
Ti	47	72	1	1	0.012	11.916	ppb	517.71	22	15000	
V	51	72	1	1	0.036	36.326	ppb	138.91	1637	20000	
Cr	52	72	1	1	-0.916	-915.659	ppb	-5.09	5910	20000	
Mn	55	72	1	1	3.402	3401.688	ppb	2.31	30939	20000	
Fe	56	72	1	1	-14.049	-14049.057	ppb	-2.96	31435	50000	
Co	59	72	1	1	0.027	26.803	ppb	184.27	1380	20000	
Ni	60	72	1	1	-0.947	-947.238	ppb	-9.28	1714	20000	
Cu	63	72	1	1	-0.787	-787.060	ppb	-6.44	25320	20000	
Zn	66	72	1	1	-0.689	-689.325	ppb	-23.97	4934	15000	
As	75	72	1	1	0.038	37.800	ppb	136.45	127	20000	
Se	78	72	1	1	0.014	13.799	ppb	1135.95	33	20000	
Be	9	6	2	2	0.002	2.232	ppb	216.29	100	20000	
B	11	6	2	2	-0.064	-64.091	ppb	-157.33	40690	15000	
Mo	95	103	2	2	-0.018	-17.946	ppb	-13.19	522	20000	
Ag	107	103	2	2	0.016	16.232	ppb	5.46	1022	1000	
Cd	111	72	2	2	0.019	18.622	ppb	18.64	178	15000	
Sn	118	103	2	2	-144.928	-144928.399	ppb	-0.08	89281	15000	
Sb	121	159	2	2	0.006	6.205	ppb	24.70	485	20000	
Ba	137	103	2	2	0.763	762.798	ppb	8.68	9034	20000	
Tl	205	209	2	2	-0.019	-18.680	ppb	-42.41	20744	20000	
Pb	208	209	2	2	0.299	299.409	ppb	7.27	18497	20000	
Si	29	72	2	2	49.704	49704.221	ppb	5.99	203045	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	138851	0.81	146432	94.82	70	120	
Li	6	2	2008304	0.26	2043742	98.27	70	120	
Ge	72	2	1036595	0.62	1086423	95.41	70	120	
Rh	103	2	6480596	0.31	6695900	96.78	70	120	
Tb	159	2	7985633	0.46	8185004	97.56	70	120	
Bi	209	2	4804368	0.61	4868813	98.68	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001MS
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:54:09-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6349.082	1269816.408	ppb	2.11	10215760	50000	
Mg	24	72	1	1	128.671	25734.278	ppb	1.29	119354	50000	
Al	27	72	1	1	103.136	20627.133	ppb	1.61	38096	20000	
K	39	72	1	1	96.846	19369.199	ppb	1.78	127262	50000	
Ca	44	72	1	1	1519.022	303804.347	ppb	1.45	60204	150000	
Ti	47	72	1	1	19.142	3828.468	ppb	2.05	5493	15000	
V	51	72	1	1	19.004	3800.860	ppb	1.55	177084	20000	
Cr	52	72	1	1	18.846	3769.130	ppb	0.59	236884	20000	
Mn	55	72	1	1	41.740	8348.053	ppb	2.02	266793	20000	
Fe	56	72	1	1	84.013	16802.652	ppb	1.95	1001164	50000	
Co	59	72	1	1	18.964	3792.787	ppb	1.14	378857	20000	
Ni	60	72	1	1	18.907	3781.402	ppb	0.89	112003	20000	
Cu	63	72	1	1	20.003	4000.523	ppb	1.68	334625	20000	
Zn	66	72	1	1	25.943	5188.607	ppb	3.29	62028	15000	
As	75	72	1	1	19.395	3879.098	ppb	2.73	29424	20000	
Se	78	72	1	1	21.193	4238.509	ppb	8.45	2005	20000	
Be	9	6	2	2	20.673	4134.699	ppb	1.35	215529	20000	
B	11	6	2	2	0.136	27.181	ppb	129.02	41459	15000	
Mo	95	103	2	2	18.995	3799.022	ppb	0.90	309857	20000	
Ag	107	103	2	2	22.560	4511.954	ppb	0.97	765077	1000	
Cd	111	72	2	2	20.234	4046.836	ppb	2.27	167230	15000	
Sn	118	103	2	2	-145.538	-29107.501	ppb	-0.17	83183	15000	
Sb	121	159	2	2	19.228	3845.652	ppb	1.40	649123	20000	
Ba	137	103	2	2	23.007	4601.456	ppb	0.56	266497	20000	
Tl	205	209	2	2	19.292	3858.418	ppb	0.52	1306565	20000	
Pb	208	209	2	2	20.655	4131.022	ppb	0.54	986131	20000	
Si	29	72	2	2	98.353	19670.546	ppb	2.85	230220	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135340	1.11	146432	92.43	70	120	
Li	6	2	1982419	0.45	2043742	97.00	70	120	
Ge	72	2	1019748	0.49	1086423	93.86	70	120	
Rh	103	2	6408419	0.52	6695900	95.71	70	120	
Tb	159	2	7936107	0.47	8185004	96.96	70	120	
Bi	209	2	4774058	0.98	4868813	98.05	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001PS
Data File Name	020SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:58:27-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6379.903	1275980.634	ppb	1.60	10310169	50000	
Mg	24	72	1	1	131.082	26216.492	ppb	1.59	122042	50000	
Al	27	72	1	1	104.390	20878.070	ppb	0.93	38695	20000	
K	39	72	1	1	99.746	19949.108	ppb	1.38	130012	50000	
Ca	44	72	1	1	1533.007	306601.369	ppb	1.56	61003	150000	
Ti	47	72	1	1	18.840	3767.984	ppb	2.69	5431	15000	
V	51	72	1	1	19.223	3844.621	ppb	0.83	179893	20000	
Cr	52	72	1	1	19.143	3828.620	ppb	1.39	241398	20000	
Mn	55	72	1	1	42.277	8455.417	ppb	1.47	271295	20000	
Fe	56	72	1	1	84.990	16997.927	ppb	1.49	1015261	50000	
Co	59	72	1	1	19.252	3850.321	ppb	1.28	386262	20000	
Ni	60	72	1	1	19.243	3848.580	ppb	2.69	114359	20000	
Cu	63	72	1	1	20.241	4048.269	ppb	1.05	339667	20000	
Zn	66	72	1	1	26.616	5323.238	ppb	0.81	63759	15000	
As	75	72	1	1	19.586	3917.167	ppb	1.76	29840	20000	
Se	78	72	1	1	19.459	3891.711	ppb	4.64	1852	20000	
Be	9	6	2	2	20.561	4112.116	ppb	3.34	218157	20000	
B	11	6	2	2	0.333	66.575	ppb	44.27	43517	15000	
Mo	95	103	2	2	19.188	3837.613	ppb	3.42	317640	20000	
Ag	107	103	2	2	22.769	4553.780	ppb	2.81	783673	1000	
Cd	111	72	2	2	20.484	4096.714	ppb	4.50	171576	15000	
Sn	118	103	2	2	-146.816	-29363.297	ppb	-0.23	73593	15000	
Sb	121	159	2	2	19.420	3884.003	ppb	3.06	670211	20000	
Ba	137	103	2	2	23.190	4638.013	ppb	4.10	272566	20000	
Tl	205	209	2	2	19.389	3877.811	ppb	3.13	1336351	20000	
Pb	208	209	2	2	20.887	4177.416	ppb	3.38	1014805	20000	
Si	29	72	2	2	108.736	21747.102	ppb	6.89	239962	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135923	0.51	146432	92.82	70	120	
Li	6	2	2018064	1.26	2043742	98.74	70	120	
Ge	72	2	1033902	1.50	1086423	95.17	70	120	
Rh	103	2	6505775	1.61	6695900	97.16	70	120	
Tb	159	2	8115304	1.57	8185004	99.15	70	120	
Bi	209	2	4860538	1.66	4868813	99.83	70	120	

TuneStep	TuneModeName
1	1
2	2

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Sample Report

Sample Table

Sample Name	RINSE
Data File Name	021SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:02:50-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-8.732	-8.732	ppb	-3.46	69208	50000	
Mg	24	72	1	1	1.395	1.395	ppb	12.85	5338	50000	
Al	27	72	1	1	-0.491	-0.491	ppb	-20.95	2566	20000	
K	39	72	1	1	-4.069	-4.069	ppb	-23.55	51145	50000	
Ca	44	72	1	1	-21.488	-21.488	ppb	-6.40	1251	150000	
Ti	47	72	1	1	0.084	0.084	ppb	15.26	42	15000	
V	51	72	1	1	0.011	0.011	ppb	157.38	1355	20000	
Cr	52	72	1	1	-0.894	-0.894	ppb	-2.00	6013	20000	
Mn	55	72	1	1	-1.214	-1.214	ppb	-1.86	1662	20000	
Fe	56	72	1	1	-7.911	-7.911	ppb	-1.72	91368	50000	
Co	59	72	1	1	-0.012	-0.012	ppb	-18.71	571	20000	
Ni	60	72	1	1	-0.797	-0.797	ppb	-1.44	2501	20000	
Cu	63	72	1	1	-0.853	-0.853	ppb	-1.22	23689	20000	
Zn	66	72	1	1	-2.163	-2.163	ppb	-3.09	1641	15000	
As	75	72	1	1	-0.014	-0.014	ppb	-79.68	44	20000	
Se	78	72	1	1	-0.024	-0.024	ppb	-305.64	29	20000	
Be	9	6	2	2	0.155	0.155	ppb	146.61	1749	20000	
B	11	6	2	2	0.454	0.454	ppb	49.55	44623	15000	
Mo	95	103	2	2	0.229	0.229	ppb	93.37	4703	20000	
Ag	107	103	2	2	0.192	0.192	ppb	131.39	7261	1000	
Cd	111	72	2	2	0.160	0.160	ppb	145.12	1393	15000	
Sn	118	103	2	2	-146.568	-146.568	ppb	-0.18	76701	15000	
Sb	121	159	2	2	0.139	0.139	ppb	154.91	5139	20000	
Ba	137	103	2	2	0.118	0.118	ppb	183.29	2523	20000	
Tl	205	209	2	2	0.122	0.122	ppb	176.11	30854	20000	
Pb	208	209	2	2	0.119	0.119	ppb	189.68	12169	20000	
Si	29	72	2	2	38.097	38.097	ppb	8.42	197225	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135334	0.51	146432	92.42	70	120	
Li	6	2	2032767	0.74	2043742	99.46	70	120	
Ge	72	2	1044946	0.99	1086423	96.18	70	120	
Rh	103	2	6591113	1.77	6695900	98.44	70	120	
Tb	159	2	8102658	1.38	8185004	98.99	70	120	
Bi	209	2	4899404	1.42	4868813	100.63	70	120	

TuneStep	TuneModeName
1	1
2	2

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	022ICSA.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:07:07-05:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	103742.056	ppb	34631880.6	1.1	5000000	
Ti	47	1	1	2030.972	ppb	565597.8	0.1	50000	
V	51	1	1	-0.006	ppb	1172.3	9.8	5	
Cr	52	1	1	0.217	ppb	18507.3	1.6	5	
Mn	55	1	1	1.056	ppb	15258.1	1.6	5	
Co	59	1	1	1.739	ppb	34541.7	1.4	5	
Ni	60	1	1	0.778	ppb	10955.4	2.3	5	
Cu	63	1	1	0.520	ppb	42992.5	0.3	5	
Zn	66	1	1	-0.597	ppb	4873.2	0.6	5	
As	75	1	1	0.236	ppb	412.3	6.5	5	
Se	78	1	1	0.045	ppb	34.4	29.6	5	
Be	9	2	2	0.108	ppb	1126.4	154.4	5	
B	11	2	2	0.382	ppb	39561.9	3.5	5	
Mo	95	2	2	2282.166	ppb	33140841.3	2.5	50000	
Ag	107	2	2	0.186	ppb	6122.9	98.5	5	
Cd	111	2	2	2.376	ppb	21166.6	8.6	5	
Sn	118	2	2	-146.129	ppb	69884.9	3.8	5	
Sb	121	2	2	0.809	ppb	27263.3	15.9	5	
Ba	137	2	2	0.706	ppb	8244.6	25.7	5	
Tl	205	2	2	0.059	ppb	23656.5	44.5	1.25	
Pb	208	2	2	0.282	ppb	17873.7	42.4	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	131752	0.55	146432	89.97	70	120	
Li	6	2	2	1821268	1.81	2043742	89.11	70	120	
Ge	72	2	2	1097259	1.60	1086423	101.00	70	120	
Rh	103	2	2	5723408	2.15	6695900	85.48	70	120	
Tb	159	2	2	7839380	1.50	8185004	95.78	70	120	
Bi	209	2	2	4357910	1.38	4868813	89.51	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:11:37-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	234.028	ppb	0.343	452912	0.39	250	93.6	90	110	
Mg	24	1	1	234.448	ppb	0.231	212355	0.18	250	93.8	90	110	
Al	27	1	1	25.130	ppb	4.290	12286	3.12	25	100.5	90	110	
K	39	1	1	229.285	ppb	1.120	225285	0.61	250	91.7	90	110	
Ca	44	1	1	236.549	ppb	1.750	9815	1.14	250	94.6	90	110	
Ti	47	1	1	22.801	ppb	3.288	6486	3.04	25	91.2	90	110	
V	51	1	1	23.507	ppb	0.149	216949	0.20	25	94.0	90	110	
Cr	52	1	1	26.013	ppb	0.579	276899	0.42	25	104.1	90	110	
Mn	55	1	1	25.343	ppb	0.925	143063	0.76	25	101.4	90	110	
Fe	56	1	1	231.562	ppb	0.854	2441370	0.73	250	92.6	90	110	
Co	59	1	1	23.291	ppb	0.799	461304	0.58	25	93.2	90	110	
Ni	60	1	1	25.954	ppb	1.195	130388	0.96	25	103.8	90	110	
Cu	63	1	1	23.869	ppb	0.655	389051	0.37	25	95.5	90	110	
Zn	66	1	1	24.913	ppb	0.839	52107	0.89	25	99.7	90	110	
As	75	1	1	23.220	ppb	0.494	34923	0.72	25	92.9	90	110	
Se	78	1	1	24.705	ppb	6.058	2001	5.76	25	98.8	90	110	
Be	9	2	2	24.854	ppb	0.611	253170	0.84	25	99.4	90	110	
B	11	2	2	24.105	ppb	0.880	192460	0.25	25	96.4	90	110	
Mo	95	2	2	23.728	ppb	0.308	395269	0.33	25	94.9	90	110	
Ag	107	2	2	25.124	ppb	0.342	985410	0.16	25	100.5	90	110	
Cd	111	2	2	24.419	ppb	0.970	203988	0.74	25	97.7	90	110	
Sn	118	2	2	23.915	ppb	0.731	643969	0.89	25	95.7	90	110	
Sb	121	2	2	23.224	ppb	0.473	813391	0.64	25	92.9	90	110	
Ba	137	2	2	24.176	ppb	0.934	286065	1.08	25	96.7	90	110	
Tl	205	2	2	23.751	ppb	0.268	1651890	0.35	25	95.0	90	110	
Pb	208	2	2	22.939	ppb	0.534	1127486	0.33	25	91.8	90	110	
Si	29	2	2	500.366	ppb	0.864	526411	1.15	536	93.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	134218	0.24	146432	91.66	70	120	
Li	6	2	2	1937068	0.94	2043742	94.78	70	120	
Ge	72	2	2	1030732	1.01	1086423	94.87	70	120	
Rh	103	2	2	6547654	0.25	6695900	97.79	70	120	
Tb	159	2	2	8233855	0.37	8185004	100.60	70	120	
Bi	209	2	2	4918121	0.36	4868813	101.01	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:15:54-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-16.435	ppb	-2.23	56632	0.3	5	
Mg	24	1	1	-1.716	ppb	-5.51	2538	3.7	5	
Al	27	1	1	-2.880	ppb	-4.06	1738	2.4	0.5	
K	39	1	1	-6.442	ppb	-13.16	49111	0.4	5	
Ca	44	1	1	-28.965	ppb	-3.29	960	3.1	5	
Ti	47	1	1	0.081	ppb	82.43	41	46.1	0.5	
V	51	1	1	-0.043	ppb	-21.43	857	9.4	0.5	
Cr	52	1	1	-1.015	ppb	-0.30	4573	1.6	0.5	
Mn	55	1	1	-0.952	ppb	-1.47	3261	1.8	0.5	
Fe	56	1	1	-10.998	ppb	-0.65	60511	0.3	5	
Co	59	1	1	-0.010	ppb	-21.99	603	7.1	0.5	
Ni	60	1	1	-0.893	ppb	-1.27	1961	2.4	0.5	
Cu	63	1	1	-0.032	ppb	-157.23	35760	2.6	0.5	
Zn	66	1	1	-2.390	ppb	-1.99	1147	8.7	0.5	
As	75	1	1	0.006	ppb	283.86	74	33.9	0.5	
Se	78	1	1	-0.142	ppb	-30.22	18	21.7	0.5	
Be	9	2	2	0.019	ppb	14.78	263	9.8	0.5	
B	11	2	2	0.122	ppb	73.15	40264	2.0	0.5	
Mo	95	2	2	0.144	ppb	8.73	3253	7.0	0.5	
Ag	107	2	2	0.028	ppb	6.09	1460	3.8	0.5	
Cd	111	2	2	0.018	ppb	8.87	174	7.4	0.5	
Sn	118	2	2	-147.225	ppb	-0.11	71097	1.4	0.5	
Sb	121	2	2	0.022	ppb	18.29	1034	14.0	0.5	
Ba	137	2	2	-0.033	ppb	-30.93	700	16.8	0.5	
Tl	205	2	2	-0.004	ppb	-3.21	22422	0.8	0.125	
Pb	208	2	2	-0.015	ppb	-24.19	5598	4.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	134669	0.87	146432	91.97	70	120	
Li	6	2	2	1929321	1.25	2043742	94.40	70	120	
Ge	72	2	2	1041501	0.99	1086423	95.87	70	120	
Rh	103	2	2	6599649	0.54	6695900	98.56	70	120	
Tb	159	2	2	8184945	0.69	8185004	100.00	70	120	
Bi	209	2	2	4956591	0.76	4868813	101.80	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	025ICSB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:20:16-05:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	100813.910	1.761	34039723	0.93	100000	100.8	-1000	1000	
Ti	47	1	1	1973.607	1.451	555918	0.65	5000	39.5	-1000	1000	
V	51	1	1	-0.017	-29.941	1087	4.13	0.5	-3.3	-1000	1000	
Cr	52	1	1	19.697	1.836	243053	1.09	20	98.5	80	120	
Mn	55	1	1	20.625	1.173	134386	0.67	20	103.1	80	120	
Co	59	1	1	20.706	1.365	407266	0.53	20	103.5	80	120	
Ni	60	1	1	19.243	1.806	112122	0.85	20	96.2	80	120	
Cu	63	1	1	19.271	1.395	318783	0.85	20	96.4	80	120	
Zn	66	1	1	18.907	2.280	46198	1.30	20	94.5	80	120	
As	75	1	1	20.400	1.494	30470	0.87	20	102.0	80	120	
Se	78	1	1	0.066	169.509	37	27.27	0.5	13.2	-1000	1000	
Be	9	2	2	0.004	129.447	104	43.30	0.5	0.8	-1000	1000	
B	11	2	2	0.522	39.650	39870	2.29	2	26.1	-1000	1000	
Mo	95	2	2	2307.667	0.349	34209456	0.58	5000	46.2	-1000	1000	
Ag	107	2	2	25.489	0.310	787553	0.19	20	127.4	80	120	> +-20%
Cd	111	2	2	20.533	1.163	186492	1.75	20	102.7	80	120	
Sn	118	2	2	-146.170	-0.426	70963	6.66	0.5	-29234.0	-1000	1000	> +-20%
Sb	121	2	2	0.738	2.834	25504	2.49	0.5	147.7	-1000	1000	
Ba	137	2	2	0.578	4.593	7044	3.74	0.5	115.6	-1000	1000	
Tl	205	2	2	-0.064	-6.503	16264	1.44	0.125	-50.9	-1000	1000	
Pb	208	2	2	0.163	4.077	12778	2.09	0.125	130.3	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	133269	0.84	146432	91.01	70	120	
Li	6	2	2	1797955	0.87	2043742	87.97	70	120	
Ge	72	2	2	1120560	0.77	1086423	103.14	70	120	
Rh	103	2	2	5838879	0.26	6695900	87.20	70	120	
Tb	159	2	2	8035904	0.34	8185004	98.18	70	120	
Bi	209	2	2	4405708	0.26	4868813	90.49	70	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	026SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:24:41-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	5.262	5.262	ppb	22.67	93461	50000	
Mg	24	72	1	1	1.922	1.922	ppb	6.91	5931	50000	
Al	27	72	1	1	-0.505	-0.505	ppb	-29.60	2615	20000	
K	39	72	1	1	2.699	2.699	ppb	5.76	57430	50000	
Ca	44	72	1	1	-21.301	-21.301	ppb	-11.96	1285	150000	
Ti	47	72	1	1	0.142	0.142	ppb	44.55	60	15000	
V	51	72	1	1	-0.031	-0.031	ppb	-5.89	995	20000	
Cr	52	72	1	1	-0.902	-0.902	ppb	-4.96	6040	20000	
Mn	55	72	1	1	-1.197	-1.197	ppb	-2.52	1803	20000	
Fe	56	72	1	1	-6.344	-6.344	ppb	-6.16	109127	50000	
Co	59	72	1	1	-0.013	-0.013	ppb	-31.97	566	20000	
Ni	60	72	1	1	-0.711	-0.711	ppb	-1.83	3040	20000	
Cu	63	72	1	1	1.776	1.776	ppb	6.56	64208	20000	
Zn	66	72	1	1	-2.216	-2.216	ppb	-0.64	1558	15000	
As	75	72	1	1	0.003	0.003	ppb	364.82	72	20000	
Se	78	72	1	1	-0.007	-0.007	ppb	-1692.86	31	20000	
Be	9	6	2	2	0.007	0.007	ppb	32.54	144	20000	
B	11	6	2	2	0.674	0.674	ppb	14.46	43774	15000	
Mo	95	103	2	2	0.536	0.536	ppb	5.11	9909	20000	
Ag	107	103	2	2	0.036	0.036	ppb	7.28	1763	1000	
Cd	111	72	2	2	0.018	0.018	ppb	48.95	174	15000	
Sn	118	103	2	2	-146.600	-146.600	ppb	-0.13	77214	15000	
Sb	121	159	2	2	0.003	0.003	ppb	116.80	396	20000	
Ba	137	103	2	2	-0.040	-0.040	ppb	-28.78	626	20000	
Tl	205	209	2	2	-0.050	-0.050	ppb	-10.85	19561	20000	
Pb	208	209	2	2	-0.019	-0.019	ppb	-42.11	5524	20000	
Si	29	72	2	2	30.589	30.589	ppb	7.33	194800	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	138169	0.15	146432	94.36	70	120	
Li	6	2	1930436	0.63	2043742	94.46	70	120	
Ge	72	2	1057852	0.62	1086423	97.37	70	120	
Rh	103	2	6661739	0.72	6695900	99.49	70	120	
Tb	159	2	8355714	0.41	8185004	102.09	70	120	
Bi	209	2	5035342	0.60	4868813	103.42	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	Final CCV
Data File Name	027_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:29:03-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	230.658	ppb	0.822	460069	1.09	250	92.3	90	110	
Mg	24	1	1	233.220	ppb	0.710	217159	0.96	250	93.3	90	110	
Al	27	1	1	25.563	ppb	2.902	12799	2.28	25	102.3	90	110	
K	39	1	1	258.971	ppb	0.779	227210	0.54	250	103.6	90	110	
Ca	44	1	1	230.781	ppb	2.813	9895	2.64	250	92.3	90	110	
Ti	47	1	1	22.612	ppb	2.403	6613	2.83	25	90.4	90	110	
V	51	1	1	23.216	ppb	0.200	220254	0.30	25	92.9	90	110	
Cr	52	1	1	25.708	ppb	0.562	281477	0.25	25	102.8	90	110	
Mn	55	1	1	24.996	ppb	0.489	145168	0.35	25	100.0	90	110	
Fe	56	1	1	228.811	ppb	0.300	2481710	0.48	250	91.5	90	110	
Co	59	1	1	23.047	ppb	0.332	469209	0.14	25	92.2	90	110	
Ni	60	1	1	25.801	ppb	0.456	133277	0.78	25	103.2	90	110	
Cu	63	1	1	24.360	ppb	0.635	407363	0.24	25	97.4	90	110	
Zn	66	1	1	24.944	ppb	1.217	53620	1.38	25	99.8	90	110	
As	75	1	1	23.234	ppb	1.620	35920	1.89	25	92.9	90	110	
Se	78	1	1	25.690	ppb	1.090	2138	0.63	25	102.8	90	110	
Be	9	2	2	24.683	ppb	1.188	250586	1.69	25	98.7	90	110	
B	11	2	2	24.575	ppb	1.438	194783	1.39	25	98.3	90	110	
Mo	95	2	2	23.547	ppb	1.078	398922	1.12	25	94.2	90	110	
Ag	107	2	2	25.118	ppb	0.768	1001894	0.81	25	100.5	90	110	
Cd	111	2	2	24.298	ppb	0.622	205887	0.58	25	97.2	90	110	
Sn	118	2	2	24.070	ppb	0.341	659144	0.37	25	96.3	90	110	
Sb	121	2	2	23.363	ppb	0.823	832370	0.89	25	93.5	90	110	
Ba	137	2	2	23.995	ppb	0.507	288750	0.39	25	96.0	90	110	
Tl	205	2	2	23.503	ppb	0.851	1670349	1.69	25	94.0	90	110	
Pb	208	2	2	22.817	ppb	0.139	1145825	0.94	25	91.3	90	110	
Si	29	2	2	539.416	ppb	1.448	519194	0.81	536	100.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	137962	0.45	146432	94.22	70	120	
Li	6	2	2	1930448	0.56	2043742	94.46	70	120	
Ge	72	2	2	1045433	0.55	1086423	96.23	70	120	
Rh	103	2	2	6658889	0.11	6695900	99.45	70	120	
Tb	159	2	2	8375945	0.52	8185004	102.33	70	120	
Bi	209	2	2	5024609	0.99	4868813	103.20	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Final CCB
Data File Name	028_CCB.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:33:20-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.919	ppb	33.20	297358	23.3	5	
Mg	24	1	1	0.937	ppb	29.76	126314	28.4	5	
Al	27	1	1	0.100	ppb	29.68	51320	27.6	0.5	
K	39	1	1	0.903	ppb	30.80	154186	19.3	5	
Ca	44	1	1	0.775	ppb	38.39	6391	25.2	5	
Ti	47	1	1	0.155	ppb	37.85	829	36.6	0.5	
V	51	1	1	0.018	ppb	95.40	1452	10.7	0.5	
Cr	52	1	1	-1.039	ppb	-4.12	6100	6.7	0.5	
Mn	55	1	1	-0.987	ppb	-3.55	3975	4.5	0.5	
Fe	56	1	1	1.010	ppb	32.86	1439447	28.5	5	
Co	59	1	1	0.074	ppb	35.84	2320	22.7	0.5	
Ni	60	1	1	-0.908	ppb	-2.38	2628	3.5	0.5	
Cu	63	1	1	0.038	ppb	8.93	47524	2.1	0.5	
Zn	66	1	1	-2.658	ppb	-1.19	1382	3.9	0.5	
As	75	1	1	0.080	ppb	29.57	191	18.8	0.5	
Se	78	1	1	0.182	ppb	141.07	47	44.6	0.5	
Be	9	2	2	0.019	ppb	28.08	263	20.0	0.5	
B	11	2	2	0.298	ppb	33.23	41151	2.4	0.5	
Mo	95	2	2	0.089	ppb	10.38	2349	6.4	0.5	
Ag	107	2	2	0.029	ppb	15.17	1641	10.6	0.5	
Cd	111	2	2	0.025	ppb	35.78	237	31.9	0.5	
Sn	118	2	2	0.140	ppb	0.27	73022	0.3	0.5	
Sb	121	2	2	0.018	ppb	22.77	926	16.3	0.5	
Ba	137	2	2	-0.033	ppb	-26.87	708	14.6	0.5	
Tl	205	2	2	-0.012	ppb	-140.02	22210	4.8	0.125	
Pb	208	2	2	-0.011	ppb	-133.86	5884	13.3	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138225	0.51	146432	94.40	70	120	
Li	6	2	2	1918719	0.90	2043742	93.88	70	120	
Ge	72	2	2	1055690	0.61	1086423	97.17	70	120	
Rh	103	2	2	6665769	0.52	6695900	99.55	70	120	
Tb	159	2	2	8324531	0.62	8185004	101.70	70	120	
Bi	209	2	2	5029614	0.43	4868813	103.30	70	120	

Analytical Sequence

Method : 7470A TCLP

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		TCLP150219-083
10	10		BLKT150223-01-083
11	11		LCST150223-01-083
12	12		E15-01273-001
13	13		E15-01273-001DUP
14	14		E15-01273-001MS
15	2	QC	CCV
16	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\083.SIF
Batch ID: 083LEACHATE (TCLP)
Results Data Set: pg083ahg_15
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Method Loaded
Method Name: 7470A TCLP
Method Last Saved: 7/16/2013 2:55:27 PM
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 2/23/2015 12:36:01 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0013	0.0013	0.0001	12:36:54	Yes
2		[0.00]	0.0009	0.0009	0.0001	12:37:26	Yes
3		[0.00]	0.0015	0.0015	0.0001	12:37:58	Yes
Mean:		[0.00]	0.0012				
SD:		0.00	0.0003				
%RSD:		0.00	23.33				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 2/23/2015 12:38:18 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0112	0.0124	0.0021	12:39:11	Yes
2		[0.25]	0.0113	0.0125	0.0021	12:39:43	Yes
3		[0.25]	0.0110	0.0123	0.0021	12:40:16	Yes
Mean:		[0.25]	0.0112				
SD:		0.00	0.0001				
%RSD:		0.00	0.97				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.04461 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 2/23/2015 12:40:36 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1093	0.1106	0.0202	12:41:30	Yes
2		[2.500]	0.1137	0.1149	0.0209	12:42:03	Yes
3		[2.500]	0.1137	0.1150	0.0208	12:42:36	Yes
Mean:		[2.500]	0.1123				
SD:		0.000	0.0025				
%RSD:		0.000	2.25				

Standard number 2 applied. [2.500]
Correlation Coef.: 1.000000 Slope: 0.04492 Intercept: -0.00004

Sequence No.: 4
Autosampler Location: 5

Sample ID: Calib Std 3
Analyst:
Date Collected: 2/23/2015 12:42:56 PM
Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2212	0.2225	0.0406	12:43:51	Yes
2		[5.000]	0.2266	0.2278	0.0416	12:44:24	Yes
3		[5.000]	0.2275	0.2287	0.0417	12:44:57	Yes
Mean:		[5.000]	0.2251				
SD:		0.000	0.0034				
%RSD:		0.000	1.50				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999999 Slope: 0.04502 Intercept: -0.00010

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Autosampler Location: 6
Date Collected: 2/23/2015 12:45:18 PM
Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.3213	0.3225	0.0587	12:46:13	Yes
2		[7.500]	0.3328	0.3340	0.0611	12:46:46	Yes
3		[7.500]	0.3367	0.3380	0.0614	12:47:18	Yes
Mean:		[7.500]	0.3302				
SD:		0.000	0.0080				
%RSD:		0.000	2.43				

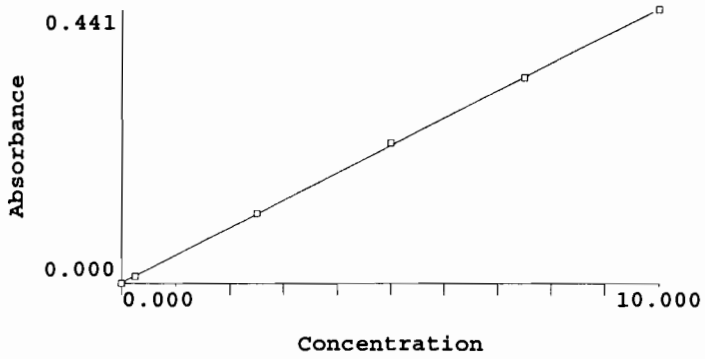
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999894 Slope: 0.04423 Intercept: 0.00086

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:
Autosampler Location: 7
Date Collected: 2/23/2015 12:47:40 PM
Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4319	0.4331	0.0789	12:48:35	Yes
2		[10.000]	0.4455	0.4468	0.0809	12:49:08	Yes
3		[10.000]	0.4457	0.4469	0.0809	12:49:41	Yes
Mean:		[10.000]	0.4410				
SD:		0.000	0.0079				
%RSD:		0.000	1.80				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999940 Slope: 0.04408 Intercept: 0.00114



Calibration data for Hg 253.7
Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

Calib Blank 1	0.0000	0	-0.02575	0.00	23.3
Calib Std 1	0.0112	0.25	0.22728	0.00	1.0
Calib Std 2	0.1123	2.500	2.52097	0.00	2.3
Calib Std 3	0.2251	5.000	5.08115	0.00	1.5
Calib Std 4	0.3302	7.500	7.46642	0.01	2.4
Calib Std 5	0.4410	10.000	9.97994	0.01	1.8

Correlation Coef.: 0.999940 Slope: 0.04408 Intercept: 0.00114

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 2/23/2015 12:50:03 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00455	4.5453	0.2015	0.2027	0.0374	12:50:56	Yes
2	0.00468	4.6789	0.2074	0.2086	0.0380	12:51:29	Yes
3	0.00467	4.6746	0.2072	0.2084	0.0384	12:52:02	Yes
Mean:	0.00463	4.6329	0.2053				
SD:	0.00008	0.07595	0.0033				
%RSD:	1.6393	1.6393	1.63				

QC value within limits for Hg 253.7 Recovery = 92.66%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/23/2015 12:52:21 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00208	0.0010	0.0023	0.0002	12:53:14	Yes
2	-0.00003	-0.02584	-0.0000	0.0012	0.0001	12:53:47	Yes
3	-0.00003	-0.03402	-0.0004	0.0009	0.0001	12:54:19	Yes
Mean:	-0.00002	-0.02064	0.0002				
SD:	0.00002	0.01659	0.0007				
%RSD:	80.367	80.367	324.93				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: TCLP150219-083 **Date Collected: 2/23/2015 12:54:39 PM**
Analyst: DK **Data Type: Original**

Replicate Data: TCLP150219-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00005	-0.02281	0.0001	0.0014	0.0001	12:55:31	Yes
2	-0.00005	-0.02715	-0.0001	0.0012	0.0001	12:56:04	Yes
3	-0.00004	-0.02114	0.0002	0.0014	0.0001	12:56:36	Yes
Mean:	-0.00005	-0.02370	0.0001				
SD:	0.00001	0.00310	0.0001				
%RSD:	13.098	13.098	151.48				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: BLKT150223-01-083 **Date Collected: 2/23/2015 12:56:55 PM**
Analyst: DK **Data Type: Original**

Replicate Data: BLKT150223-01-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00006	-0.02795	-0.0001	0.0011	0.0001	12:57:48	Yes
2	-0.00006	-0.02982	-0.0002	0.0011	0.0001	12:58:20	Yes
3	-0.00007	-0.03610	-0.0005	0.0008	0.0001	12:58:53	Yes

Mean:	-0.00006	-0.03129	-0.0002
SD:	0.00001	0.00427	0.0002
%RSD:	13.643	13.643	77.05

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: LCST150223-01-083 **Date Collected: 2/23/2015 12:59:12 PM**
Analyst: DK **Data Type: Original**

Replicate Data: LCST150223-01-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01008	5.0391	0.2233	0.2245	0.0411	13:00:05	Yes
2	0.01033	5.1666	0.2289	0.2301	0.0419	13:00:38	Yes
3	0.01041	5.2071	0.2307	0.2319	0.0418	13:01:11	Yes
Mean:	0.01028	5.1376	0.2276				
SD:	0.00018	0.08769	0.0039				
%RSD:	1.7069	1.7069	1.70				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: E15-01273-001 **Date Collected: 2/23/2015 1:01:30 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00009	0.04564	0.0031	0.0044	0.0004	13:02:23	Yes
2	-0.00001	-0.00287	0.0010	0.0022	0.0002	13:02:56	Yes
3	0.00000	-0.00241	0.0010	0.0023	0.0002	13:03:29	Yes
Mean:	0.00003	0.01345	0.0017				
SD:	0.00006	0.02788	0.0012				
%RSD:	207.25	207.25	71.11				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: E15-01273-001DUP **Date Collected: 2/23/2015 1:03:49 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001DUP

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00012	0.05959	0.0038	0.0050	0.0003	13:04:42	Yes
2	-0.00005	-0.02260	0.0001	0.0014	0.0001	13:05:15	Yes
3	-0.00007	-0.03383	-0.0004	0.0009	0.0001	13:05:48	Yes
Mean:	0.00000	0.00106	0.0012				
SD:	0.00010	0.05100	0.0022				
%RSD:	>999.9%	>999.9%	190.26				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: E15-01273-001MS **Date Collected: 2/23/2015 1:06:08 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001MS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00926	4.6287	0.2052	0.2064	0.0380	13:07:02	Yes
2	0.00950	4.7509	0.2105	0.2118	0.0389	13:07:35	Yes
3	0.00957	4.7853	0.2121	0.2133	0.0390	13:08:07	Yes
Mean:	0.00944	4.7216	0.2093				
SD:	0.00016	0.08233	0.0036				
%RSD:	1.7436	1.7436	1.73				

Sequence No.: 15 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/23/2015 1:08:28 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00452	4.5210	0.2004	0.2017	0.0373	13:09:22	Yes
2	0.00469	4.6898	0.2079	0.2091	0.0385	13:09:54	Yes
3	0.00468	4.6837	0.2076	0.2088	0.0380	13:10:27	Yes
Mean:	0.00463	4.6315	0.2053				
SD:	0.00010	0.09575	0.0042				
%RSD:	2.0674	2.0674	2.06				

QC value within limits for Hg 253.7 Recovery = 92.63%
All analyte(s) passed QC.

Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2015 1:10:47 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.01726	0.0004	0.0016	0.0002	13:11:39	Yes
2	-0.00002	-0.02097	0.0002	0.0015	0.0001	13:12:12	Yes
3	-0.00003	-0.03419	-0.0004	0.0009	0.0001	13:12:45	Yes
Mean:	-0.00002	-0.02414	0.0001				
SD:	0.00001	0.00890	0.0004				
%RSD:	36.862	36.862	552.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP METALS
PREP LOGS
STANDARD PREP LOGS

2015 PG: 083

METALS'S DIGESTION LOG

Date: 02/23/15 07:30

MATRIX: LEACHATE (TCLP)
DIGESTION METHOD: 3010A
SPIKES: 1.00ml M473
Hg DIGESTION METHOD: 7470A
Hg SPIKE: 2.50 PPB M493-3
Hg ICV: 2.50 PPB M455-1

PREP. SOLUTION	DATE	LOT #
NaCl:	2/6/15	134874
Hydroxylamine:	2/6/15	138012
KMnO4:	2/6/15	133921
K2S2O8:	12/30/14	117411

ANALYSIS METHOD: 6020A
Hg ANAL. METHOD: 1311/7470A
LOT# HNO3: 143747
LOT# H2SO4: 143680
LOT# HCL: 146027

Hg DIG. DATE: 2/23/15
ICPMS ICV: M331
ICPMS Cal. Stds.: M327,M361

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M493-3		
Hg	STD2 2.50 PPB						25	50			M493-3		
Hg	STD3 5.00 PPB						25	50			M493-3		
Hg	STD4 7.50 PPB						25	50			M493-3		
Hg	STD5 10.0 PPB						25	50			M493-3		
Hg	ICV 5.00 PPB						25	50			M455-1		
	TCLP150219				25	50	25	50					
	BLKT150223-01				25	50	25	50			BMT1		
	LCST150223-01				25	50	25	50			BST1		
TCLP	E15-01273-001	*	B		25	50	25	50	U1-LT	2/24	R-72(2/24 11:00); TCLP150219		
	E15-01273-001DUP	*	B		25	50	25	50	U1-LT				
	E15-01273-001MS	*	B		25	50	25	50	U1-LT				

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/23/15 - 0900 - [signature]	Received by:	2/23/15 9:00 OK
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/23/15 - 1100 - [signature]	Received by:	2/23/15 11:00 OK
Relinquished by:		Received by:	
Disposal:			

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 020315

Standard Name	020315-01	020315-02	020315-03	020315-04	020315-05	020315-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15
Standard Name	020315-07	020315-08	020315-09	020315-10	020315-11	020315-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15
Standard Name	020315-13	020315-14	020315-15	020315-16	020315-17	020315-18
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15
Standard Name	020315-19	020315-20	020315-21	020315-22	020315-23	020315-24
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-3	CL10-122YPY	M-506	8/30/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-905	S140424021	M-499	4/2015	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-486	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL11-99YPY	M-514	11/30/2015	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

INITIAL

2/3/15
DATE

GENERAL ANALYTICAL CHEMISTRY

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Free Cyanide

Matrix: Soil
Unit: mg/Kg

Batch: AP150-0001
Method: 9016

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 1.50	NA	NA	NA	NA	NA
LCS	LCSS150220	51.1	50	NA	NA	102	80-120
SAMPLE	E15-01273-001	< 1.70	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 1.70	NA	NC	NC	NA	NA
MS	E15-01273-001MS	56.5	55.9	NA	NA	101	75-125
MSD	E15-01273-001MSD	55.9	55.9	1.07	20	100	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

pH/Corrosivity

Matrix: Soil
Unit: SU

Batch: AP023-0041
Method: 9045C

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
LCS	LCSS150220	7.03	7	NA	NA	100	90-110
SAMPLE	E15-01273-001	7.73	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	7.75	NA	0.258	20	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION VERIFICATION

pH/Corrosivity

Batch: AP023-0041	Date & Time: 02/20/2015 08:26
Method: 9045C	Analyst: Deborah Szachara

	True Value	Result (mg/Kg)	% REC

	True Value	Result (mg/L)	% REC
CCV.14	7.00	7.06	101

NJDEP FORM M-9A (12/94)

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Organic Halides (TOX)

Matrix: Soil
Unit: mg/Kg

Batch: AP067-0004
Method: 9023

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 10.0	NA	NA	NA	NA	NA
LCS	LCSS150220	2.29	2.5	NA	NA	91.6	88-112
SAMPLE	E15-01273-001	< 11.2	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 11.2	NA	NC	NC	NA	NA
MS	E15-01273-001MS	101	112	NA	NA	90.2	75-125
MSD	E15-01273-001MSD	109	112	7.62	20	97.3	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Organic Carbon (TOC)

Matrix: Soil
Unit: mg/Kg

Batch: AP030-0008
Method: Lloyd Kahn

Date: 02/23/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150223	< 588	NA	NA	NA	NA	NA
SAMPLE	E15-01273-001	91800	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	100000	NA	8.55	20	NA	NA
MS	E15-01273-001MS	148000	54100	NA	NA	104	75-125
MSD	E15-01273-001MSD	151000	51300	2.01	20	115	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Cyanide, Reactive

Matrix: Soil
Unit: mg/Kg

Batch: AP045-0004
Method: 7.3.3.2

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 10.0	NA	NA	NA	NA	NA
LCS	LCSS150220	33.0	250	NA	NA	13.2	NO LIMIT
SAMPLE	E15-01273-001	< 11.2	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 11.2	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Ignitability

Matrix: Soil
Unit: Yes/No

Batch: AP068-0004
Method: 1030

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
SAMPLE	E15-01301-001	NO	NA	NA	NA	NA	NA
DUP	E15-01301-001DUP	NO	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01301-001
E15-01301-002
E15-01301-003
E15-01301-004
E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfide, Reactive

Matrix: Soil
Unit: mg/Kg

Batch: AP044-0004
Method: 7.3.4.2

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 16.0	NA	NA	NA	NA	NA
LCS	LCSS150220	448	500	NA	NA	89.6	NO LIMIT
SAMPLE	E15-01273-001	< 17.9	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 17.9	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

GENERAL ANALYTICAL CHEMISTRY
RAW DATA
INSTRUMENT LOGS

IAL

Free Cyanide

SW846 9016

4.1g/l NaOH	RA 65-10/2/19/15	stockCN_WCCNS/	RA 60-19/1/13/15
2.05g/L NaOH	RA 65-10/2/19/15	InterCN sol. WCCNint/	2/20/15
Phosphate Buffer	WCCNbuff/ 2/19/15	second source stock_WCCNS2/	RA 60-13/1/13/15
Acidified Buffer	WCAcidCNbuff/ 2/19/15	second source Inter. WCCNint2/	2/20/15
Pyridine-Barb.	WCCNpyr/ 2/19/15	Chloramine T	2/20/15

date analyzed 2/20/15 15:00 Water Calc 0.433 x ug/L from curve x dil. factor = ug/L free CN

analyst [signature] Soil Calc. ug/l free CN x (0.5L/sample wt (g)(tot. solids pct.))= mg/Kg Free CN

Set A, Set B	Cl2 +/-	S +/-	Abs. Set A	Abs. Set B	Abs. Average	Result ug/l or mg/Kg
S300, S300	-	-	.680	.675	.678	
S150, S150	-	-	.317	.324	.320	
S100, S100	-	-	.221	.213	.220	CC = 0.99949
S50, S50	-	-	.122	.117	.120	M = 0.00224
S25, S25	-	-	.047	.049	.048	B = -0.0021
S10, S10	-	-	.020	.020	.020	
S5, S5	-	-	.010	.013	.012	
S2, S2	-	-	.004	.003	.004	
S0, S0	-	-	.000	.000	.000	
ICV	-	-				
ICB	-	-				
CCV	-	-				
CCB	-	-				
MB, MB	-	-				
LCS, LCS	-	-				
MDL 5ug	—	—	.020			9.9 x 0.433 = 4.3ug/L
MDL 5ug	—	—	.019			9.4 x 0.433 = 4.1
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.019			9.4 x 0.433 = 4.1
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.017			8.5 x 0.433 = 3.7

9 = 0.2ug/L

3.9 x 0.2 = 0.6ug/L

IAL

Free Cyanide

SW846 9016

4.1g/l NaOH	RA 65-10 2/19/15	stockCN_WCCNS/	RA 60-19 1/13/15
2.05g/L NaOH	RA 65-10 2/19/15	InterCN sol.	WCCNint/ 2/20/15
Phosphate Buffer	WCCNbuff/ 2/19/15	second source	stock_WCCNS2/ RA 60-13 1/13/15
Acidified Buffer	WCAcidCNbuff/ 2/19/15	second source	Inter. WCCNint2/ 2/20/15
Pyridine-Barb.	WCCNpyr/ 2/19/15	Chloramine T	2/20/15

date analyzed 2/20/15 17:30 Water Calc 0.433 x ug/L from curve x dil. factor = ug/L free CN

analyst Soil Calc. ug/l free CN x (0.5L/sample wt (g)(tot. solids pct.))= mg/Kg Free CN

Spk - 55.9 mg/L

Set A, Set B	Cl2 +/-	S +/-	Abs. Set A	Abs. Set B	Abs. Average	Result ug/l or mg/Kg
S300, S300	-	-				
S150, S150	-	-				
S100, S100	-	-		2/20/15		CC = 0.99945
S50, S50	-	-				M = 0.00224
S25, S25	-	-				B = -0.0021
S10, S10	-	-				
S5, S5	-	-				
S2, S2	-	-				
S0, S0	-	-				
ICV -2	-	-	.214			96 ug/L (96%)
ICB	-	-	.000			< 3 ug/L
CCV -1	-	-	.222			100 ug/L (100%)
CCB	-	-	.000			< 3 ug/L
MB, MB	-	-	.000			< 1.5 mg/kg (100%)
LCS, LCS -2	-	-	.526			236 x 0.433 = 102 x 0.5 = 51.1 mg/kg
89.4 1273-001	—	—	.000			< 1.7 mg/kg
89.4 -001D	—	—	.000			< 1.7 mg/kg (101%)
89.4 -001S	—	—	.522			234 x 0.433 = 101 x 0.559 = 56.5
89.4 -001SD	—	—	.518			232 x 0.433 = 100 x 0.559 = 55.9
RI std	—	—	.017			8.5 x 0.433 = 3.7 x 0.5 = 1.8 (100%)
CCV - 2	—	—	.222			100 ug/L (96%)
CCB -	—	—	.000			< 3 ug/L

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 15:00

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
Free Cyanide	0.000	300	150	100	50.0	25.0, 10.0	5.00, 2.00	100	96

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 15:00

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
Free Cyanide	96	100	100	100	100		
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
Free Cyanide							
ANALYTE		CCV7	% REC	CCV8	% REC		
Free Cyanide							

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
Free Cyanide	<3.0	<3.0	<3.0			<1.5
Free Cyanide		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: Soil

CONTRACT NO: _____

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
Free Cyanide	RESULTS	ADDED	CONC.	% REC				
LCSS	<1.5	50.0	51.1	102	85-115%			

NJDEP FORM G-2 (12/94)

2/18/15 pH 4.00 7.02 10.06 97% 20C
DS RA 69-8 RA 72-8 RA 69-10
pH 7.02 7.03
1232-003 11.55
↓-003D 11.56
4500HB 1232-004 11.50
AP023-0036 1235-001 9.42
1231-001 7.26
↓-002 ~~7.37 7.4~~ 7.54
1234-001 10.31
↓-002 10.28
pH 7.02 7.01
pH 7.02 7.01
9045C AP023-0037 246-006 6.62
↓-006D 6.63
1174-0011 7.02
pH 7.02 7.03

2/19/15 pH 4.00 7.03 10.09 97% 18C
DS RA 69-8 RA 72-8 RA 69-10
AP023-0038 pH 7.03 7.04
1233-001 8.99
4500HB ↓-001D 9.03
pH 7.03 7.06
AP023-0039 pH 7.03 7.03
1224-001 7.24
9045C ↓-001D 7.25
pH 7.03 7.00

2/20/15 pH 4.00 7.04 10.12 96% 21C 82.6
DS RA 69-8 RA 72-8 RA 69-10
4500HB pH 7.04 7.04
1250-001 5.79

2/20/15 1256-001 5.73
DS ↓-002/002D 7.15/7.18
-003 7.19
AP023-0040 -004 7.29
-005 7.10
-006 7.11
↓-007 7.62
1280-001 7.34
↓-002 7.54
↓-003 7.42
pH ~~7.03 7~~ 7.04 7.03
pH ~~7.03~~ 7.04 7.03
1273-001 7.73
↓001D 7.75
9045C AP023-0041 pH 7.04 7.06

1517 1518 1519 1520 1521 1523 1524 1525 1526 1529 1528 1534 1538 1536 1537
1009 1011 1012 1013 1014 1019 1020 1021
827 843 843
8 44 852/853 854 855 856 857 858 859 904 906 907 908 945 946 949

E15-02273 Page 105

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 8:26

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
pH		4.00	7.04	10.12				7.04	7.03

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 8:26

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
pH	7.03	7.06	100				
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
pH							
ANALYTE		CCV7	% REC	CCV8	% REC		
pH							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/L CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
pH						
		5	6	7	8	

NJDEP FORM M-10 (12/94)

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO:

MATRIX: WATER

CONTRACT NO:

UNITS (circle one): (mg/L)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
pH	RESULTS	ADDED	CONC.	% REC				
ICV	NA	7.04	7.06	100	90-110%			

NJDEP FORM G-2 (12/94)

EOX

Method 9023

Trichlorobenzene Stock (1ul = 10ug)- WCEOXtcbS/ 1/9/15
Trichlorobenzene Standard (1ul = 0.1ug)- WCEOXtcbStd/ 1/9/15
Acetate- RA 55-6
um Chloride Stock (1ul = 1ug)- WCEOXCIS/ 65-70 / 1-12-15
trolyte Solution- WCEOXelect/ 7/9/14 7/9/14

1M KCl- WCEOXkcl/ 7/6/14
10% KNO3- WCEOXkno3/ 7/6/14
Conc. Sulfuric Acid- RA 55-25

e Extracted 3/20/15 11:00
e Analyzed 3/20/15
lyst

Tichlorobenzene Standard Checks (2.2-2.8ug)
1) 2.2963
2) 2.2904
3) 2.2837
RSD (<5) <5

Ethyl Acetate Blank (<0.1ug) <0.1

culation
g Cl/Vol.Inject *L*)*Vol. Extract *L*)/(weight *g**((%TS)/100)) = EOX mg/Kg 11 mg/kg SM

mple ID	weight (g)	Vol. Extract (ml)	%TS	Vol. Inject (uL)	ug Cl	Result (mg/Kg)
BLKS	1.00	5.0	100	25	0.0189	< 10.0
1873-001	1.00		89.4		0.0152	< 11.2
-001D	1.00		89.4		0.0236	< 11.2
-001S	1.00		89.4		0.4499	101
-001SD	1.00		89.4		0.4867	109
MSLK	1.00		100		0.1221	24.4 (81%)

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 11:00

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
TOX								2.5000	2.2863

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 11:00

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
TOX	2.2863						
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
TOX							
ANALYTE		CCV7	% REC	CCV8	% REC		
TOX							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
TOX						<10.0
TOX		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: Soil

CONTRACT NO: _____

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
TOX	RESULTS	ADDED	CONC.	% REC				
ICV	ND	2.5000	2.2863	91	88-112			

NJDEP FORM G-2 (12/94)

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL PROJECT NO: _____
INITIAL CALIBRATION DATE: 2/23/15 CONTRACT NO: _____
INITIAL CALIBRATION TIME: 9:15

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
TOC(S)	<588							4000	3760

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/23/15
INITIAL CALIBRATION TIME: 9:15

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
TOC(S)	3760	3699	92.5				
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
TOC							
ANALYTE		CCV7	% REC	CCV8	% REC		
TOC							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
TOC(S)						<588
TOC		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO:

MATRIX: Soil

CONTRACT NO:

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
TOC(S)	RESULTS	ADDED	CONC.	% REC				
ICV	<588	4000	3760	94	90 - 110			

NJDEP FORM G-2 (12/94)

Calibration Report Print Date/Time: 2015/02/23 11:24:44

Cal. Curve ID: TOCSOIL061902
Created: 01/30/2015 11:24
Calibration Factor (m): 6.655e+04
Y Intercept (b): 860714
r-squared: 0.99506

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
S0	78576	0.000	-11.753	Low Sample De	01/30/2015 10:23
S50	4293566	50.000	51.583		01/30/2015 10:29
S100	7798682	100.000	104.252	Max Integrati	01/30/2015 10:39
S200	14160743	200.000	199.851	Max Integrati	01/30/2015 11:06
S300	20435956	300.000	294.145	Max Integrati	01/30/2015 11:11
S400	29434174	400.000	429.355	Max Integrati	01/30/2015 11:17
s600	39630384	600.000	582.567	Max Integrati	01/30/2015 11:23

IAL **TOC Soils** *Lloyd Kahn, 1988*

US Region II

KHP 1st Source-1 (20000mg/L)	WCTOCsoil1/01-30-15
KHP 2nd Source-2 (20000mg/L)	WCTOCsoil2/01-30-15
Phosphoric Acid (1:1)	1/30/2015
Analyst	ED
Date/Time Analyzed	2/23/15 915-1210

Calibration Date	01/30/15
Slope	6.655 E+04
Intercept	860714
Correlation Coefficient	0.99506

TOC mg/Kg = ug/(weight(g))

*** samples are dried at 103°C w/ phosphoric acid***

BATCH # AP030-0008(S)

Sample ID	weight (g)	TS%	ug (from instrument)	Result (mg/Kg)	MDL (mg/Kg)	% Rec.
ICV2-4000	0.0500		187.8930	3760		94%
BLKS150223	0.0500		0.2483	<588		
01273-001	0.0059		541.5410	91800	sd = 3814	RPD=8.55
01273-001	0.0050		500.7225	100100	x̄ = 95025	
01273-001	0.0050		475.4367	95800	rsd = 4.01	
01273-001	0.0037		341.7242	92400		
01273-001S	0.0037		548.2773	148200 (Spk=54100)		104%
01273-001SD	0.0040		609.8187	OVER. RANGE		RPD=2.01
01273-001SD	0.0039		588.7785	151000 (Spk=51300)		115%
CCV2-4000	0.0500		184.9480	3699		92.5%
RLS001-1000	0.0500		45.0484	901		90.1%

Ignitability Method 1030

AP068-0004

2/20/15 ED				
1530	01301-001	SOIL	RPD=NC	NO
	-001D			NO
	-002			NO
	-003			NO
	-004			NO
	01273-001			NO
2/23/15 ED				
1645	01311-003	SOIL		NO
	01309-007			NO

IAL

Reactive Cyanide Log

lot No.

SW846 Chpt. 7, 9014
Method7.3.3.2

1000mg/L Cyanide Sol.- WCCNS/ 011315
D (0.0192N)AgNO3 WCCNAgNO3/ 011315
Rhodanine WCCNRhod/ RA # 67-13

Batch ID# AP045-0004(S)

Analyst ED
date distilled 2/20/15 Scrubber- E mg/L Cyanide = (A-B)/C*D*2*26.02*1000
date analyzed 2/20/15 1600 Result HCN mg/Kg = E*0.05/(F*(100-G/100))
Total volume of scrubber is 50ml

Sample ID	sample vol. (g or ml) F	%Moist G	scrubber volume used (ml) C	ml titrated AgNO3 scrubber A	ml titrate AgNO3 blank(ml) B	Result (mg/Kg) or (mg/L)
BLKS 150220	10g		25.0	0.10	0.05	ND
LCSS150220			50.0	0.38		33.0
01273-001			25.0	0.10		ND
01273-001D				0.10		ND
01301-001				0.10		ND
-002				0.10		ND
-003				0.10		ND
-004				0.10		ND

L

Reactive Sulfide Log

lot No.

SW846 Chpt. 7, 9034
Method 7.3.4.2

Starch RA# 61-12

)0mg/L Sulfide Sol.- WcsulfideS/ 021905

HCl RA# 65-3

Batch ID# AP044-0004(S)

)25N Iodine RA# 69-16 Standardized 01/23/15

)25N Na2S2O3 RA# 69-7 Standardized 12/23/14

ıalyst DJ

ıte distilled 2/20/15

ıte analyzed 2/20/15 1645

Scrubber- D mg/L Sulfide = 400(A-B)/C

Result H2S mg/Kg= D*0.05/(E*(100-F/100))

)tal volume of scrubber is 50ml

ample ID	sample vol. (g or ml) E	%Moist F	scrubber volume used (ml) C	0.025N Iodine (ml) A	0.025N Na2S2O3 (ml) B	Result (mg/Kg) or (mg/L)
BLKS150220	10g		25.0	5.0	4.9	ND
LCSS150220	↓		50.0	15.0	3.8	448
01273-001			25.0	5.0	4.7	ND
↓ -001D			↓	5.0	4.7	ND
01301-001				5.0	4.8	ND
-002				5.0	4.7	ND
-003				5.0	4.7	ND
-004	↓		↓	5.0	4.8	ND

GENERAL ANALYTICAL CHEMISTRY
STANDARD PREP LOGS

Analyst/Date [signature] 2/19/15

NaOH extract solution/ 2/19/15 pH of solution 12.6

PbCO3/ M39-2

Extract volume is 500ml

Date samples filtered

No.	Sample ID	sample wt.(g)	Time start	Time End	pH at 5 min. pH 12.3-12.5	pH at 60 min. pH ≥ 11
1	MB	1.000	14:00	15:00	yes	yes
2	LCS	1.000	↓	↓	yes	yes
3	01273-001	1.000			yes	yes
4	-001D	1.000			yes	yes
5	-001S	1.000			yes	yes
6	-001SD	1.000			yes	yes
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

RA 60-19

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by DNV Certificate number CERT-08052-2006-AQ-HOU-ANAB

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P223**	**Mfg. Date**	**11/21/2011**
Lot Number	**115392**		
Description	**POTASSIUM CYANIDE, CERTIFIED**		
Country of Origin	**United States**	**Recommended Retest Date**	**Nov-2016**

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE GRANULES
ASSAY	%	>= 98	99.6
CHLORIDE	%	<= 0.5	<0.5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.03	<0.030
LEAD (Pb)	ppm	<= 2	<2.0
PHOSPHATE (PO4)	%	<= 0.02	<0.020
SODIUM (Na)	%	<= 1.0	<1.0
SULFATE (SO4)	%	<= 0.04	<0.040
SULFIDE	%	<= 0.002	<0.0020
THIOCYANATE (SCN)	PASS/FAIL	= P.T. (ABOUT 0.02%)	P.T. (ABOUT 0.02%)

Edgar E. Hess

Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

RA 60-18

Potassium cyanide, ACS, 96.0% min

Stock Number: 12136
Lot Number: D07W007

Analysis

Test	Limits	Results
Assay	96.0 % min	98.4 %
Chloride	0.5 % max	< 0.5 %
Phosphate	0.005 % max	< 0.005 %
Sulfate	0.04 % max	< 0.04 %
Sulfide	0.003 % max	< 0.003 %
Thiocyanate	To pass test	Passes test
Iron	0.03 % max	< 0.03 %
Sodium	0.5 % max	< 0.5 %
Lead	0.0002 % max	< 0.0002 %

Certified by:

Quality Control

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Email: salesko@alfa-asia.com

Free Cyanide Standards

Standard Cyanide Solution (2mg/L) Pipet the calculated value (approx 2ml) of 1000mg/L stock cyanide solution into a 1-L volumetric flask and dilute to volume using 4.1mg/l NaOH solution. This solution is used in the preparation of the standards

Second Source Cyanide Solution (2mg/L) Pipet the calculated value (approx 2ml) of 1000mg/L stock cyanide solution into a 1-L volumetric flask and dilute to volume using 4.1mg/l NaOH solution. This solution is used in the preparation of the ICV.

Preparation of Calibration Standards

	Conc. ug/L	mls 2mg/l standard solution added to 100ml volumetric flask	
1	S0	0	dilute each standard to volume with 4.1g/L NaOH
2	S2	0.1	
3	S5	0.25	
4	S10	0.5	
5	S25	1.25	
6	S50	2.5	
7	S100	5	
8	S150	7.5	
9	S300	15	

Preparation of ICV		mls 2mg/l second source solution added to 100ml volumetric flask	
1	S100	5	dilute ICV standard to volume with 4.1g/L NaOH

Preparation of CCV		mls 2mg/l standard solution added to 100ml volumetric flask	
1	S100	5	dilute each standard to volume with 4.1g/L NaOH

Preparation of RLSTD		mls 2mg/l standard solution added to 100ml volumetric flask	
1	S2	0.1	dilute each standard to volume with 4.1g/L NaOH

For soil spikes		mls 2mg/l standard solution added to 500ml extraction fluid
1	50mg/Kg	25

For soil RLSTD		mls 2mg/l standard solution added to 500ml extraction fluid
1	1mg/Kg	0.5

Pyridine-barbituric acid reagent- Add 15.0g of barbituric acid to a 250ml volumetric flask. Wash down the sides of the flask with just enough dist. water to moisten the barbituric acid. Add 75ml of pyridine and swirl to mix. Slowly add 15ml of conc. hydrochloric acid and swirl to mix. Using additional dist. water, bring volume to approximately 230ml. Stir to dissolve and cool the solution to room temperature. Dilute to final volume with dist. water and mix. It is recommended the reagent be prepared weekly and stored in a dark place. Discard and prepare a new batch if a precipitate develops.

RA No Barb Acid	RA No Pyridine	RA No HCl	Date Prep.	Init.
MA 73-03	MA 74-02	MA 72-13	2/19/15	B

Potassium Phosphate Solution (190g/L)- Add 400ml of dist. water to a 2-L beaker. Next, measure 19ml of 50% NaOH solution, transfer to beaker, and dissolve. Add 190g of potassium phospate monobasic and stir to dissolve. Bring the volume to approximately 950ml to aid in the dissolution. Adjust the pH of the solution so that it is within the range of 5.9-6.1, using 100-g/L NaOH or conc. phosphoric acid. Transfer the solution to a 1-L volumetric flask, and dilute to volume with dist. water.

RA No KH2PO4	RA No NaOH	Date Prep	pH	Init.
~~RA 58-12~~ RA 44-29 c/m	RA 53-3	7/16/12	6.0	
RA 44-29	RA 60-9	11/26/12	6.0	
RA 44-29	RA 60-9	2/17/14	6.0	
~~RA 73-~~ RA 69-11	RA 65-10	8/3/14	6.0	
RA 73-8	RA 65-10	7/19/15	6.0	

Acidified Potassium Phosphate Buffer- Add 8.0ml of concentrated phosphoric acid to 100ml of 190g/L potassium phosphate solution.

RA No KH2PO4	RA No H3PO4	Date Prep		Init.
RA 44-29	RA 55-12	6/14/12		
RA 44-29	RA 55-12	7/16/12		
RA 44-29	RA 55-12	8/21/12		
RA 44-29	RA 55-12	11/26/12		
RA 44-29	RA 55-12	1/17/14		
~~RA 73-1~~ RA 69-11	RA 70-12	8/3/14		
RA 73-8	RA 70-12	7/19/15		

Sodium Hydroxide Solution (2.05g/L) - Measure 2.68ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. This solution is used only for the preparation of initial demonstration of proficiency samples, method blanks, matrix spikes, and LCS.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
~~RA 53-3~~ RA 60-9 11/26/12	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	9/19/15				

Sodium Hydroxide Extraction Solution (pH 12.3-12.5)(for soils) - Measure 1.65ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. Using ph paper, check to ensure that the extraction solution is in the proper pH range. Add additional 50% NaOH, if necessary, to adjust the pH to the proper range.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12 (pH 12.5)		RA 65-10	8/7/14 12.6	
RA 53-3	7/6/12 (pH 12.6)		RA 65-10	8/14/14 12.7	
RA 53-3	7/17/12 (pH 12.6)		RA 65-10	8/15/14 12.7	
~~RA 53-3~~ RA 60-9 11/26/12	8/21/12 (pH 12.5)		RA 65-10	8/15/14 12.7	
RA 60-9	11/26/12 (12.6)		RA 65-10	8/18/14 12.7	
RA 60-9	11/30/12 12.5		RA 65-10	8/21/14 12.3	
RA 60-9	—		RA 65-10	8/29/14 12.4	
			RA 65-10	9/4/14 12.5	
			RA 65-10	9/15/14 12.5	
			RA 65-10	9/22/14 12.5	
			RA 65-10	9/24/14 12.5	
			RA 65-10	9/30/14 12.5	
			RA 65-10	10/6/14 12.6	

20L

Sodium Hydroxide Extraction Solution (pH 12.3-12.5)(for soils) - Measure 1.65ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. Using ph paper, check to ensure that the extraction solution is in the proper pH range. Add additional 50% NaOH, if necessary, to adjust the pH to the proper range.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
~~RA 60-9~~ RA 65-10	10/16/14	12.6			
RA 65-10	10/21/14	12.6			
RA 65-10	2/19/15	12.6			

50% Sodium hydroxide solution- dissolve 100g of NaOH into 100ml of dist. water. Mix. Cool. Bring to volume with dist. water in a 200ml volumetric flask

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Sodium Hydroxide Solution (4.1g/L)- Measure 5.36ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Second Source Stock Cyanide Solution (1000mg/l) - Add 500ml of 4.1g/L sodium hydroxide solution in a 1-L flask. Dissolve in 2.51g KCN. Bring to volume with dist. water using additional 4.1g/L sodium hydroxide solution.

RA No KCN	Date Prep	Init.	RA No KCN	Date Prep	Init.
8196 - EM Science	6/7/12				
RA 60-13	11/5/12	GK			
RA 60-13	1/17/14				
RA 60-13	8/3/14				
RA 60-18	1/13/15	KA			

Sodium Hydroxide Solution (100g/L) - weigh 100g of NaOH into 800ml dist. water. Stir until dissolved. Cool. Bring to volume with distilled water in a 1-L volumetric flask.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Silver Nitrate Solution, 0.0192N - Prepare by crushing approximately 5g of AgNO3 crystals, Mallinckrodt, AR, and drying to a constant weight at 40°C. Dissolve 3.2647g of dried AgNO3 in 800ml distilled water in a 1000ml volumetric flask. Bring to volume with distilled water.

RA No AgNO3	Date Prep	Init.	RA No AgNO3	Date Prep	Init.
RA 44-4	6/7/12	EK			
RA 44-4	7/6/12	EK			
RA 44-4	8/21/12	EK			
RA 44-4	11/20/12	EK			
RA 65-21 rec.	1/15/14 exp. 5/20/15	EK			
RA 65-21	exp 5/20/15	EK			

Stock Cyanide Solution (1000mg/l) - Add 500ml of 4.1g/L sodium hydroxide solution in a 1-L flask. Dissolve in 2.51g KCN. Bring to volume with dist. water using additional 4.1g/L sodium hydroxide solution.

RA No KCN	Date Prep	Init.	RA No KCN	Date Prep	Init.
B2608DP-Alkal	6/7/12	EK			
RA 60-19	11/5/12	EK			
RA 60-19	1/17/14	EK			
RA 60-19	8/3/14	EK			
RA 60-19	1/13/15	KA			

	Receipt date	open date	exp. date
RA 69-8 pH 4	01/07/14	5/01/14	12/31/17
RA 72-8 pH 7	7/15/14	8/15/14	5/2016
RA 69-10 pH 10	01/09/14	5/21/14	12/31/14
RA 74-9 pH 2	12/04/14	12/4/14	09/2016
RA 74-15 pH 10	11/18/14	12/17/14	11/2015
RA 75-7 pH 12	01/22/15		10/31/2015

HACH COMPANY

P.O.Box 389
Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

RA-69-8
Rec'd 01/07/14

Certificate of Analysis

COMMODITY: **Buffer Solution pH 4.01**
COMMODITY NUMBER: **22834-56** MANUFACTURE DATE: **12/12/2013** DATE OF ANALYSIS: **12/13/2013**
LOT NUMBER: **A3345**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution @25C	3.985 to 4.025	4.0110

The expiration date is Dec 2017

The item 2283456 is traceable to NIST standards SRM 185h Potassium Hydrogen Phthalate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

HACH COMPANY

PA72 8
Lcd 7/15/14

P.O.Box 389
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(970) 669-3050

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Certificate of Analysis

COMMODITY:**Buffer Solution pH 7.00**
COMMODITY NUMBER: **22835-56** MANUFACTURE DATE: **5/23/2014** DATE OF ANALYSIS: **5/23/2014**
LOT NUMBER: **A4142**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution @ 25C	6.98 to 7.02	7.006

The expiration date is May 2016

The item 2283556 is traceable to NIST standards SRM 186-I-g, 186-II-g Potassium Dihydrogen Phosphate and Disodium Hydrogen Phosphate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

HACH COMPANY

An ISO 9001 Certified Company

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(970) 669-3050

RA 69-10
recd 01/07/14

Certificate of Analysis

COMMODITY: **Buffer Solution pH 10.01**
COMMODITY NUMBER: **22836-56** MANUFACTURE DATE: **12/16/2013** DATE OF ANALYSIS: **12/16/2013**
LOT NUMBER: **A3346**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution	9.995 to 10.035	10.0240

The expiration date is Dec 2014

The item 2283656 is traceable to NIST standards SRM 191d-1, 191d-11 Sodium Bicarbonate and Sodium Carbonate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

AL

EOX Reagents and Standards

Electrolyte Solution- Dissolve 1.35g of Sodium Acetate, EM Science, suprapur, in 850ml glacial acetic acid, Fisher, ACS. Bring to volume in a 1000ml erlenmeyer flask with dist. water

WCEOXelect/ date prep

Sodium Acetate RA No.	Glacial Acetic Acid RA No.	date prep	
RA 13-1	RA 41-13	11/11/09	
RA 13-1	RA 41-18	4/5/10	
RA 13-1	Lot 4R2274	9/13/10	
RA 13-1	RA 41-13	6/17/11	
RA 13-1	RA 41-8	3/19/12	
RA 63-05	RA 63-14	3/13/13	
RA 63-25	RA 63-14	7/13/13	
RA 63-25	RA 63-14	2/19/14	

Trichlorobenzene Stock (10000~~ug~~mg/L)- Add 1170ul 1,2,4, trichlorobenzene, Aldrich, 99+%, to 80ml ethyl acetate, Aldrich, 99.8%, anhydrous, in a 100ml volumetric flask. Bring to volume with ethyl acetate.

10ml

WCEOXtcbS/ date prep

1ml = 100mg

1,2,4 Trichlorobenzene RA No.	Ethyl Acetate RA No.	date prep	
RA 3-7	RA 30-1	3/5/09	
RA 3-7	RA 30-1	10/21/09	
RA 3-7	RA 30-1	4/5/10	
RA 3-7	RA 30-1	11/5/10	
RA 3-7	RA 30-1	1/28/11	
RA 3-7	RA 55-6	3/30/11	
RA 3-7	RA 55-6	10/24/11	
RA 3-7	RA 55-6	4/5/12	
~~RA 3-~~ RA 55-10	~~RA 55-10~~ RA55-9	10/8/13	
RA 55-10	RA 55-6	2/26/13	
RA 55-10	RA 55-6	1/9/14	
RA 55-10	RA 55-6	6/23/14	
RA 55-10	RA 55-6	1/9/15	

10000mg / 1000 mL

10 mg / 1 mL

10mg / 1mL

0.10g / 1mL

10mL = 0.1g 100 mg

10mL = 100mg

100g → 5mL

100 mg/kg Spike

0001

EOX Reagents and Standards

4L

mg
richlorobenzene Standard (100~~ug~~/L)- Add 1000ul WCEOXtcbS to 90ml ethyl acetate
a 100ml volumetric flask. Bring to volume with ethyl acetate.
1ul = 0.1ug)
25ul = 2.5ug)

WCEOXtcbStd/ date prep

Ethyl Acetate

WCEOXtcbS date prep	RA No.	date prep
3/5/09	LA 30-1	3/5/09
10/22/09	RA 30-1	10/22/09
4/5/10	RA 30-1	4/5/10
11/5/10	RA 30-1	4/5/10
11/28/11	RA 30-1	11/28/11
3/30/11	RA 55-6	3/30/11
10/4/11	RA 55-6	10/4/11
4/5/12	RA 55-6	4/5/12
10/8/12	~~RA 55-10~~ RA 55-9	10/8/12
2/26/13	RA 55-6	2/26/13
10/9/13	RA 55-6	10/9/13
6/23/14	RA 55-6	6/23/14
1/8/15	RA 55-6	1/8/15

Conc. Sulfuric Acid- RA. No.

Sodium Chloride Stock (1000mg/L)- Dissolve 0.1648g of sodium chloride, Fisher, ACS, into a 100ml volumetric flask. Bring to volume with distilled water.

WCEOXCIS/ date prep

Sodium Chloride

RA No.	date prep
RA 47-3	2/3/09
RA-47-3	8/14/09
RA 47-3	4/5/10
RA 47-3	3/10/11
RA 47-3	01/10/11
RA 47-3	3/10/12
RA 35-5	1/10/13
RA 35-5	1/10/13
RA 35-5	1/5/14
RA 35-5	2/10/14
RA 65-20	1/12/15

IAL

EOX Reagents and Standards

1M KCl- Dissolve 7.4551g into 100ml dist. water.

KCl

WCEOXkcl/date prep

RA. No.	date prep
Baker	9/13/28
Baker	4/5/10
Baker	4/8/11
Baker RA3-22	3/13/12
Fisher RA-25-13	3/23/13
Baker RA-25-13	7/16/14

10% KNO3- Dissolve 100g of KNO3 into 1000ml dist. water

KNO3

WCEOXkno3/date prep

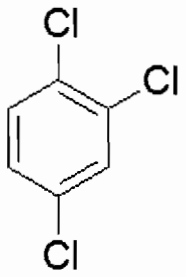
RA. No.	date prep
Aldrich	11/10/28
Aldrich	4/5/10
Fisher RA-4B-4	3/30/11
Fisher RA-4B-4	3/26/12
Fisher RA-4-04	3/28/13
Fisher RA-4B-4	7/16/14

3050 Spruce Street,Saint Louis,MO 63103,USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
1,2,4-Trichlorobenzene - anhydrous, ≥99%

Product Number:	**296104**
Lot Number:	**69596LMV**
Brand:	SIAL
CAS Number:	120-82-1
MDL Number:	MFCD00000547
Formula:	C6H3Cl3
Formula Weight:	181.45 g/mol
Quality Release Date:	06 OCT 2010



Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Solid or Liquid	Liquid
Infrared spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.0 %	99.5 %
Water (by Karl Fischer)	≤ 0.002 %	< 0.001 %

Jennifer Baughman, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certificate of Analysis

Date of Release: *11/1/2012*

Product: ***Sodium Chloride GR ACS, Crystals***

Catalog No.: ***SX0420 all size codes***

Grade: ***Meets ACS Specifications, Meets Reagent Specifications for testing USP/NF monographs***

CAS #: ***7647-14-5***

Country of Origin: ***USA***

FW: ***58.44***

Lot No.: ***VJ30C***

NaCl

	Requirement			
Characteristic	**Minimum**	**Maximum**	**Results**	**UOM**
Assay (argentometric)	99.0		99.99	%
Barium (Ba)	Passes test (about 0.001%)		Passes	%
Bromide (Br)		0.01	0.01	%
Calcium (Ca)		0.002	0.002	%
Chlorate and nitrate (as NO3)		0.003	0.003	%
Heavy metals (as Pb)		5	2.0	ppm
Insoluble matter		0.005	0.0032	%
Iodide (I)		0.002	0.002	%
Iron (Fe)		2	0.1	ppm
Magnesium (Mg)		0.001	0.0001	%
pH of a 5% solution at 25C	5.0	9.0	5.96	
Phosphate (PO4)		5	5	ppm
Potassium (K)		0.005	0.005	%
Sulfate (SO4)		0.004	0.004	%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Chemicals Inc.
480 South Democrat Road
Gibbstown, NJ 08027
Phone: 856-423-6300
Fax: 856-423-4389
www.emdchemicals.com

IAL *TOC soils Standards*

Injection Weights (ug)	Injection Volumes of WCTOCsoilS1 (ul)
0	0
50	2.5
100	5
200	10
300	15
400	20
600	30

ICV2/CCV2 concentration
400 ug 20 ul.

Spike(MS1/MSD1) concentration
200 ug 10 ul.

RLSTD1 concentartion
50 µg 2.50µl.

ssium Biphthalate(KHP)- (20000mg/L)- Dissolve 4.256g of Potassium Biphthalate into 80ml dist water in a 100ml volumetric flask. Bring to volume with dist. water.

WCTOCsoilS/date prep

RA No.	date prep	RA No.	date prep
56-21	06-27-13 ED		
56-21	12-18-13 ED		
96-21	7-3-14 ED		
56-21	1-30-15 ED		

Add 10ul of WCTOCsoilS for Spike, directly into boat- on top of soil.

* for spikes (MS + MSD, CCV & RLSTD. as of 1/24/14. 1st source for MS/MSD, RLSTD

Second Source Potassium Biphthalate (KHP)- (20000mg/L)- Dissolve 4.256g of Second Source Potassium ithalate into 80ml dist water in a 100ml volumetric flask. Bring to volume with dist. water.

WCTOCsoilS2/date prep

RA No.	date prep	RA No.	date prep
44-21 06CO	06-27-13 ED		
44-21	12-18-13 ED		
Hfq 51-19	7-3-14 ED		
Hfq 51-19	1-30-15 ED		

Add 10ul of WCTOCsoilS2 for LCSS, directly into boat- on top of sand or blank soil.

* for ICV. as of 1/24/14. 2nd source for ICV2 CCV2

Phosphoric Acid (1:1)- Add 50ml of conc H3PO4 to 30ml of dist. water in a 100ml volumetric flask. Bring to volume with dist. water.

RA # 55-12 / 01-15-13 ED
RA # 44-12 / 01-20-14 ED
RA # 44-12 / 01-30-15 ED

RA No. /Date prep

AA 56-21

Potassium Phthalate, Crystal

AR®, A.C.S., Primary Standard

Product No. 6704
Specifications current as of: Jun 4 2012

TEST	SPECIFICATION
Meets ACS Reagent Chemical Requirements	
For Laboratory Research or Manufacturing Use	
ACS - Assay ($1\text{-}KOCOC_6H_4\text{-}2\text{-}COOH$)	99.95 - 100.05 %
ACS - Chlorine Compounds (as Cl)	<= 0.003 %
ACS - Heavy Metals (as Pb)	<= 5 ppm
ACS - Insoluble Matter	<= 0.005 %
ACS - Iron (Fe)	<= 5 ppm
ACS - pH of 0.05M Solution at 25°C	4.00 - 4.02
ACS - Sodium (Na)	<= 0.005 %
ACS - Sulfur Compounds (as S)	<= 0.002 %
Traceable to NIST	
Appearance (white crystals)	

http://app.avantormaterials.com/DistributorRedirect/DistributorRedirect.aspx?a=avantor&l... 6/4/2012

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

RA# 51-19

Potassium hydrogen phthalate, primary standard, ACS, 99.95-100.05%

Stock Number: 33351
Lot Number: G31U018

Analysis

Test	Limits	Results
Insoluble matter	0.005 % max	0.002 %
Assay	99.95 - 100.05 %	99.98 %
pH of 0.05 M soln at 25°C	4.00 - 4.02	4.01
Heavy metals	5 ppm max	< 5 ppm
Iron	5 ppm max	< 5 ppm
Sulfur compounds	0.002 % max	< 0.002 %
Chlorine compounds	0.003 % max	< 0.003 %
Sodium	0.005 % max	0.005 %

Certified by:

Quality Control

NORTH AMERICA
Tel: 1-800-343-0660 or 1-978-521-6300
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Fax: 0800 10 20 67
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Fax: +86 (010) 8567-8601
Email: saleschina@alfa-asia.com

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Email: salesKorea@alfa-asia.com

Hexavalent Chromium

HEXAVALENT CHROMIUM QC SUMMARY

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Hexavalent Chromium

Matrix: Soil
Unit: mg/Kg

Batch: AP011-0015
Method: 3060A/7196A

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
ICV	ICV	0.462	0.5	NA	NA	92.4	90-110
ICB	ICB	< 0.004	NA	NA	NA	NA	NA
BLK	BLKS150220	< 0.167	NA	NA	NA	NA	NA
LCS	LCSS150220	33.6	40	NA	NA	84.0	80-120
SAMPLE	E15-01273-001	< 0.187	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 0.187	NA	NC	NC	NA	NA
MS	E15-01273-001MS	19.9	44.7	NA	NA	44.5	75-125
INS	E15-01273-001INS	1040	1080	NA	NA	96.3	75-125
PS	E15-01273-001PS	40.4	44.7	NA	NA	90.4	85-115

The above blank result applies to the follow samples:

E15-01273-001
E15-00620-008

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Hexavalent Chromium
RAW DATA
INSTRUMENT LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Cal Batch ID: 150220S1
Method: 3060A/7196A
Matrix: Soil
Date & Time: 02/20/2015 14:32
Analyst: Deborah Szachara

Batch ID: AP011-0015
Date & Time: 02/20/2015 14:32

((abs.-blankabs.)-b)/m=mg/L
((mg/L)*0.1)/kg sample*(%TS/100)=Cr6 mg/Kg -dwb

m:	1.05459	RL (mg/Kg):	1.00
b:	0.006088	MDL (mg/Kg):	0.167
Wt. Cr (mg):	0.1	Spike Added (mg/Kg):	44.7
PbCrO4 (mg):	15	Spike Added (mg/Kg):	1080

Data Loc	Sample ID	Color dig.	3060A 7.0-8.0 pH adj.	7196A 1.5-2.5 pH adj.	Blank 1.5-2.5 pH adj.	Vol	DF	% Moist	unit	Abs.	Blank Abs.	Corr. Abs.	Result mg/L	Result (1)	Result (2)	MDL	RL	Q	Unit (2)
001	S0.000	Clear	7.2	2.2	-	100	1	100	ml	0.000	-	-	-	-	-	-	-	-	-
002	S0.025	Clear	7.2	2.3	-	100	1	100	ml	0.026	-	-	-	-	-	-	-	-	-
003	S0.050	Clear	7.3	2.4	-	100	1	100	ml	0.069	-	-	-	-	-	-	-	-	-
004	S0.100	Clear	7.4	2.2	-	100	1	100	ml	0.115	-	-	-	-	-	-	-	-	-
005	S0.200	Clear	7.2	2.1	-	100	1	100	ml	0.213	-	-	-	-	-	-	-	-	-
006	S0.500	Clear	7.3	2.2	-	100	1	100	ml	0.531	-	-	-	-	-	-	-	-	-
007	S0.750	Clear	7.4	2.3	-	100	1	100	ml	0.813	-	-	-	-	-	-	-	-	-
008	S1.000	Clear	7.3	2.3	-	100	1	100	ml	1.050	-	-	-	-	-	-	-	-	-
009	ICV	Clear	7.3	2.3	-	100	1	100	ml	0.493	0.000	0.493	0.462	0.462	0.462	0.004	0.025		Aqueous-mg/L
010	ICB	Clear	7.4	2.4	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L
011	CCV	Clear	7.3	2.2	-	100	1	100	ml	0.495	0.000	0.495	0.464	0.464	0.464	0.004	0.025		Aqueous-mg/L
012	CCB	Clear	7.3	2.3	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L
013	BLKS150220	Clear	7.3	2.2	-	2.5	1	0	g	0.000	0.000	0.000	-0.006	-0.231	ND	0.167	1.00		Soil-mg/Kg
014	LCSS150220	Clear	7.4	1.9	-	2.5	1	0	g	0.891	0.000	0.891	0.839	33.564	33.6	0.167	1.00		Soil-mg/Kg
015	RLSTD	Clear	7.3	1.9	-	2.5	1	0	g	0.023	0.000	0.023	0.016	0.641	0.641	0.167	1.00	J	Soil-mg/Kg
016	E15-01273-001	Clear	7.2	2.5	2.5	2.5	1	10.6	g	0.007	0.007	0.000	-0.006	-0.258	ND	0.187	1.12		Soil-mg/Kg
017	E15-01273-001DUP	Clear	7.0	1.8	1.8	2.5	1	10.6	g	0.006	0.006	0.000	-0.006	-0.258	ND	0.187	1.12		Soil-mg/Kg
018	E15-01273-001MS	Clear	7.2	2.3	2.3	2.5	1	10.6	g	0.481	0.006	0.475	0.445	19.894	19.9	0.187	1.12		Soil-mg/Kg
019	E15-01273-001INS	Yellow	7.3	2.5	2.5	2.5	50	10.6	g	0.498	0.000	0.498	0.466	1043.509	1040	9.34	55.9		Soil-mg/Kg
020	E15-01273-001PS	Clear	7.3	2.4	2.4	2.5	1	10.6	g	0.966	0.007	0.959	0.904	40.429	40.4	0.187	1.12		Soil-mg/Kg
021	E15-00620-008	Yellow	7.2	2.4	2.4	2.5	1	72.3	g	0.035	0.033	0.002	-0.004	-0.560	ND	0.603	3.61		Soil-mg/Kg
022	CCV	Clear	7.4	2.3	-	100	1	100	ml	0.497	0.000	0.497	0.466	0.466	0.466	0.004	0.025		Aqueous-mg/L
023	CCB	Clear	7.2	2.3	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Calibration Log

Test:	**Hexavalent Chromium**	Analyst:	**Deborah Szachara**
Method:	**3060A/7196A**	Date:	**02/20/2015 14:32**
Matrix:	**Soil**	Cal. Batch:	**150220S1**

mg/L	Abs.
0.000	0.000
0.025	0.026
0.050	0.069
0.100	0.115
0.200	0.213
0.500	0.531
0.750	0.813
1.000	1.050

R^2=	0.99974
Slope=	1.0546
Intercept=	0.0061

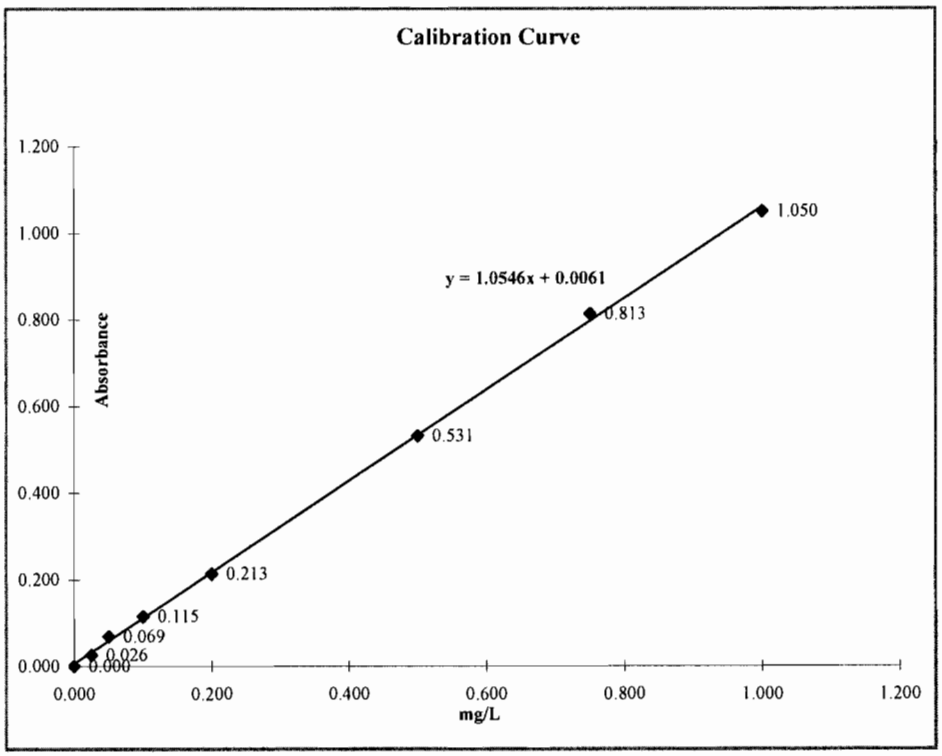
INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Date:	**Friday, 02/20/2015**
Method:	**3060A/7196A**
Matrix:	**Soil**
Analyst:	**Deborah Szachara**

mg/L	Abs.
0.000	0.000
0.025	0.026
0.050	0.069
0.100	0.115
0.200	0.213
0.500	0.531
0.750	0.813
1.000	1.050

R^2=	**0.99974**
Slope=	**1.0546**
Intercept=	**0.0061**



Comments:

Cal. Batch ID: 150220S1

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION VERIFICATION

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara

	True Value	Result (mg/Kg)	% REC
BLKS150220		< 0.167	

	True Value	Result (mg/L)	% REC
ICV.009	0.500	0.462	92.4
CCV.011	0.500	0.464	92.8
CCV.022	0.500	0.466	93.2

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara

	Result (mg/Kg)
BLKS150220	< 0.167

	Result (mg/L)
ICB.010	< 0.004
CCB.012	< 0.004
CCB.023	< 0.004

NJDEP FORM M-9A (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

MATRIX SPIKE RECOVERY DATA SHEET

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara
Matrix: Soil	Unit: mg/Kg

	SAMPLE	AMOUNT	SPIKE		CONTROL
	RESULTS	ADDED	CONC.	% REC	LIMIT
E15-01273-001MS	< 0.187	44.7	19.9	44.5	75-125
E15-01273-001INS	< 0.187	1080	1040	96.3	75-125
E15-01273-001PS	< 0.187	44.7	40.4	90.4	85-115

NJDEP FORM G-2 (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara
Matrix: Soil	Unit: mg/Kg

	SAMPLE	AMOUNT	SPIKE		CONTROL
	RESULTS	ADDED	CONC.	% REC	LIMIT
LCSS150220	< 0.167	40.0	33.6	84.0	80-120%

NJDEP FORM G-2 (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Characterization Log

Test:	**Cr-VI (Hexavalent Chromium)**	Analyst:	**Deborah Szachara**
Matrix:	**3060A/7196A**	Date:	**2/20/2015**
Method:	**Soil**	Batch ID:	**AP011-0015**

	Date/Time	Analyst
S2-pH-Eh	**2/20/2015 9:45**	**Deborah Szachara**
COD	**2/20/2015 14:00**	**Deborah Szachara**

Sample ID	S2 odor (POS/NEG)	pH (SU)	Eh (mV)	pH, Eh temp-°C	COD (mg/Kg)	Characterization Reducing or Oxidizing
E15-01273-001	NEG	7.73	400	17	84100	Reducing
E15-01273-001DUP	NEG	7.75	399	17		Reducing
E15-00620-008	NEG	6.97	242	17		Reducing

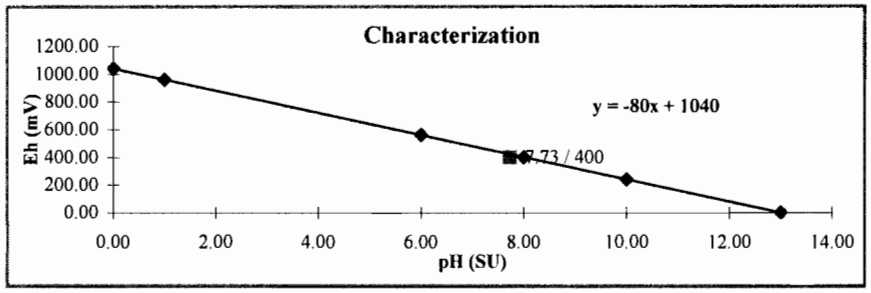
INTEGRATED ANALYTICAL LABORATORIES, LLC.

Characterization

pH (SU)	Eh (mV)
0.00	1040.00
1.00	960.00
6.00	560.00
8.00	400.00
10.00	240.00
13.00	0.00

R2=	-1
Slope=	-80
Intercept=	1040

pH (SU)	Eh (mV)		Sample ID
7.73	**400**	**Reducing**	**E15-01273-001**



INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture Log

Sample ID	Matrix	Pan Wt.	Wet Wt.	Dry Wt.	% Solids	% Moist	Factor	Jar
E15-01273-001	Soil	0.95	5.29	4.83	89.4	10.6	1.12	U2

HEXAVALENT CHROMIUM
STANDARD & DIGESTION LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Digestion Log

Test:	**Cr-VI (Hexavalent Chromium)**	Analyst:	**Deborah Szachara**
Method:	**3060A/7196A**	Date:	**02/20/2015**
Matrix:	**Soil**	Batch:	**AP011-0015**

*alkaline digestion must be at least 60 min, and have a temperature of 90-95°C

No.	Sample ID	Date	Time Start	Time End*	Temp (°C)
1	BLKS150220	02/20/2015	07:45	08:45	94
2	LCSS150220	02/20/2015	07:45	08:45	94
3	RLSTD	02/20/2015	07:45	08:45	94
4	E15-01273-001	02/20/2015	07:45	08:45	94
5	E15-01273-001DUP	02/20/2015	07:45	08:45	94
6	E15-01273-001MS	02/20/2015	07:45	08:45	94
7	E15-01273-001INS	02/20/2015	07:45	08:45	94
8	E15-00620-008	02/20/2015	09:00	10:00	94
9					
10					
11					
12					
13					
14					
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25					
26					

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Date Analyzed 02/20/2015 **Method 3060A/7196A**

5.0M Nitric Acid	RA	71-23/Fisher
Magnesium Chloride	RA	71-17/Alfa Aesar
Phosphate Buffer	WCCr6Buff/	09/22/2014
Lead Chromate	RA	43-19/Fluka
Digestion Solution	WCCr6Dig./	02/04/2015

Potassium Dichromate Stock (50mg/L)	WCCr6S/	12/29/2014
Potassium Dichromate Int. (5mg/L)	WCCr6SInt/	02/20/2015
Potassium Dichromate Second Source (50mg/L)	WCCr6S2/	12/29/2014
Potassium Dichromate Second Source Int.(5mg/L)	WCCr6S2Int/	02/20/2015

10% Sulfuric Acid	RA	72-14/Fisher
Diphenylcarbazide Sol.	WCCr6DPC/	02/05/2015

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

rec'd 4/14/16

RA SO-7

Potassium dichromate, ACS, 99.0% min

Stock Number: 13450
Lot Number: F17U021

Analysis

Test	Limits	Results
Assay	99.0 % min	101.07 %
Insoluble matter	0.005 % max	0.003 %
Loss on drying	0.05 % max	0.032 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	0.0007 %
Calcium	0.003 % max	0.001 %
Sodium	0.02 % max	0.0025 %
Appearance		Orange-red crystals
Identification		Passes

Certified by:

Quality Control

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EMD™

Certificate of Analysis

LA 50-6

EMD Chemicals Inc.
480 S. Democrat Road
Gibbstown, NJ 08027
Phone 856-423-6300
Fax 856-423-4389

Name: Potassium Dichromate
GR ACS
Meets ACS Specifications

Formula: $K_2Cr_2O_7$

Item Number: PX1445-1, PX1445-11, PX1445-2, PX1445-20, PX1445-5, PX1445-7, PX1445-901

Formula Wt: 294.18

Lot Number: 47250933

Data Order No: 000410980

CHARACTERISTIC	REQUIREMENT		RESULTS	UNITS
	Min.	Max.		
Assay (Iodometric)	99.0		99.73	%
Insoluble matter		0.005	< 0.0005	%
Chloride (Cl)		0.001	0.0005	%
Sulfate (SO4)		0.005	0.0008	%
Calcium (Ca)		0.003	0.0010	%
Iron (Fe)		0.001	< 0.0001	%
Sodium (Na)		0.02	0.0050	%
Loss on drying (105°C)		0.05	0.02	%

Charles M. Wilson,
Quality Assurance Manager

Release Date: 9/20/2007

EMD Chemicals Inc.
(Formerly EM Science, A Division of EM Industries, Inc.)
An Affiliate of Merck KGaA, Darmstadt, Germany

Potassium Dichromate Stock (50mg/L)- Dissolve 141.4 mg of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

WCCr6S/ date prep

K2Cr2O7				K2Cr2O7			
RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-7	AlfaAesar	1/14/13	DS	50-7	AlfaAesar	3/20/14	DS
50-7	AlfaAesar	7/09/13	DS	50-7	AlfaAesar	9/22/14	DS
50-7	AlfaAesar	12/18/13	DS	50-7	AlfaAesar	12/29/14	DS

Potassium Dichromate Int. (5mg/L)- Dilute 10.00ml of potassium dichromate stock solution to 100ml in a 100ml volumetric flask.

WCCr6SInt./ date prep

Potassium Dichromate Second Source (50mg/L)- Dissolve 141.4 mg of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

WCCr6S2/ date prep

K2Cr2O7				K2Cr2O7			
RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-6	EMD	1/14/13	DS	50-6	EMD	3/20/14	DS
50-6	EMD	7/9/13	DS	50-6	EMD	9/20/14	DS
50-6	EMD	12/18/13	DS	50-6	EMD	12/09/14	DS

Potassium Dichromate Second Source Int. (5mg/L)- Dilute 10.00ml of potassium dichromate second source stock solution to a 100ml in a 100ml volumetric flask.

WCCr6S2Int./ date prep

Standards-

Conc. mg/L	5mg/L Int. added to 100ml volumetric + 50ml digestion sol. (ml)	
0.000	0.0	(digestion solution added for soil analysis only)
0.025	0.5	
0.050	1.0	
0.100	2.0	
0.200	4.0	
0.500	10.0	Bring standards to volume with dist. water.
0.750	15.0	
1.00	20.0	

2nd Source Check

Conc. mg/L	2nd, 5mg/L Int. added to 100ml volumetric + 50ml digestion sol. (ml)	
0.50	10.0	(digestion solution added for soil analysis only)
		Bring standards to volume with dist. water.

Spike

Conc. mg/L	5mg/L Int. added to 100ml volumetric	
0.50	10.0	
		Bring spike to volume with sample .

IAL Hexavalent Chromium Reagents

½ Sulfuric Acid- Add 100ml of conc. H2SO4 to 500ml dist. water. Bring to 1000ml with dist. water

RA No. / date prep

Diphenylcarbazide Solution- Dissolve 250mg of 1,5 diphenylcarbazide in 50ml acetone. Store in a brown bottle. Discard when the solution becomes discolored.

WCCr6DPC/ date prep

Acetone		1,5 DPC			
RA Number	Supplier	RA Number	Supplier	Date Prep	Prep by
63-7	MaCron	64-19	AlfaAesar	5/06/13	DS
63-7	Macron	64-19	AlfaAesar	5/24/13	DS
63-7	Macron	52-24	AlfaAesar	7/9/13	DS
63-7	Macronchem	52-24	AlfaAesar	8/15/13	DS
63-7	Macronchem	64-19	AlfaAesar	9/16/13	DS
63-7	Macronchem	64-19	AlfaAesar	10/02/13	DS
63-7	Macronchem	52-24	AlfaAesar	10/24/13	DS
63-7	macronchem	52-24	AlfaAesar	11/20/13	DS
66-4	macronchem	64-19	AlfaAesar	12/17/13	DS
66-4	macronchem	64-19	AlfaAesar	01/07/14	DS
66-4	Macronchem	64-19	AlfaAesar	02/14/14	DS
66-4	Macronchem	64-19	AlfaAesar	04/02/14	DS
66-4	Macronchem	64-19	AlfaAesar	4/16/14	DS
66-4	Macronchem	64-19	AlfaAesar	5/15/14	DS
66-4	Macronchem	64-19	AlfaAesar	6/25/14	DS
66-4	Macronchem	64-19	AlfaAesar	7/21/14	DS
66-4	Macronchem	64-19	AlfaAesar	8/14/14	DS
66-4	Macronchem	64-19	AlfaAesar	9/2/14	DS
66-4	Macronchem	64-19	AlfaAesar	9/22/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	~~9/23/14~~ 10/22/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	11/04/14	DS 11/04/14
66-4	Mallinckrodt	64-19	AlfaAesar	12/08/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	01/09/15	DS
66-4	Mallinckrodt	64-19	AlfaAesar	02/03/15	DS
71-18	Macron	64-19	AlfaAesar	02/05/15	DS

5.0M HNO3- Add 320ml of conc HNO3 to 500ml dist. water. Bring to a 1000ml with dist. water.

RA No./date prep.

0.5M K2HPO4/0.5M KH2PO4 Buffer 7- Dissolve 87.09g of K2HPO4 and 68.04g KH2PO4 into 700ml of dist. water. Transfer to a 1L volumetric flask and bring to volume with dist. water

WCCr6Buff/ date prep

K2HPO4			KH2PO4			
RA Number	Supplier	Date Prep	RA Number	Supplier	Date Prep	Prep by
			5			

Digestion Solution- Dissolve 20.0 +/- 0.05g NAOH and 30.0 +/- 0.05g Na2CO3 in dist. water in a 1L volumetric flask. Bring to volume with dist. water. The pH of the digestion solution must be checked before using. The pH must be 11.5 or greater, if not, discard. Prepare fresh monthly.

WCCr6Dig./ date prep

NaOH		Na2CO3			
RA Number	Supplier	RA Number	Supplier	pH	DATE/ INIT
65-10	Fisher	71-7	Fisher	12.7	7/21/14 DS
65-10	Fisher	71-7	Fisher	12.8	8/21/14 DS
65-10	Fisher	71-7	Fisher	12.7	9/22/14 DS
65-10	Fisher	71-7	Fisher	12.8	10/22/14 DS
65-10	Fisher	71-7	Fisher	12.7	11/21/14 DS
65-10	Fisher	71-7	Fisher	12.6	12/08/14 DS
65-10	Fisher	71-7	Fisher	12.8	1/08/15 DS
65-10	Fisher	71-7	Fisher	12.9	02/04/15 DS

5.0M HNO3- Add 320ml of conc HNO3 to 500ml dist. water. Bring to a 1000ml with dist. water.

RA No./date prep.

0.5M K2HPO4/0.5M KH2PO4 Buffer 7- Dissolve 87.09g of K2HPO4 and 68.04g KH2PO4 into 700ml of dist. water. Transfer to a 1L volumetric flask and bring to volume with dist. water

WCCr6Buff/ date prep

K2HPO4 / KH2PO4

RA Number	Supplier	Date Prep	RA Number	Supplier	Date Prep	Prep by
B420492	Mall. Kredit	2/2/11	47-24	Mall. Kredit	2/9/11	DS
K03W024	Alfa Aesar	1/10/12	49-22	Mall. Kredit	1/9/12	
K03W024	Alfa Aesar	1/9/13	49-22	Mall. Kredit	1/9/13	
K03W024	Alfa Aesar	01/07/14	53-16	Mallinckrodt	01/07/14	DS
K03W024	Alfa Aesar	09/22/14	53-16	mallinckrodt	9/23/14	DS
~~K03W024~~	~~Alfa Aesar~~	~~10/2/14~~	~~53-16~~		10/22/14	DS 11/4/14

Digestion Solution- Dissolve 20.0 +/- 0.05g NAOH and 30.0 +/- 0.05g Na2CO3 in dist. water in a 1L volumetric flask. Bring to volume with dist. water. The pH of the digestion solution must be checked before using. The pH must be 11.5 or greater, if not, discard. Prepare fresh monthly.

WCCr6Dig./ date prep

NaOH / Na2CO3

RA Number	Supplier	RA Number	Supplier	pH	DATE/ INIT
RA53-3	Baker	RA53-6	Alfa Aesar	12.5	8/11/11
RA53-3	Baker	RA53-6	Alfa Aesar	13.1	9/12/11
RA53-3	Baker	RA53-6	Alfa Aesar	12.9	10/17/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.4	11/3/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	11/10/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.5	12/13/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	~~6/15/12~~ 01/05/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.7	1/25/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.9	3/1/12
RA53-3	Baker	RA55-23	Alfa Aesar	~~13.0~~ 12.8	3/13/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	4/3/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.9	5/1/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.6	5/8/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.5	6/12/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.6	7/11/12

Potassium Dichromate Spiking Solution (1000mg/L)- Dissolve 2.829g of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

1ml = 1mg WCCr6S/ date prep

K2Cr2O7 K2Cr2O7

RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-6	EMD	8/23/11	B				

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants Inc
Address: 1 Greenwood Ave Ste 210
Montclair NJ 07042
Telephone #: 9738737710
Fax #: 9735059625
Project Manager: Jerry Zak
EMAIL Address: jzak@geiconsultants.com
Sampled by: M Sweet

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Project Name: Greenpoint
Project Location (State): New York
Bottle Order #:

REPORTING INFO

REPORT TO: Jaimie Wargo
Address:
datagroup@geiconsultants.com
Attn:
FAX #

INVOICE TO: Sandra St Hilaire
Address:
geipayables@geiconsultants.com
Attn:
PO # 125180-2-1207
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-2015 (3-5 day TAT) QAM025

Verbal/Fax: ~~Std 2 wk~~ unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify):
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%...
72 hr - 50%....
96 hr - 35%...
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only	NJ SRP format
NY Cat A	
NJ Reduced	NYSDEC
NJ Regulatory	
NY Cat B	lab approved custom EDD
15% Surcharge applies	
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #
GPEC-WC1-021815		2/18/15	13:35	S	3	1

ANALYTICAL PARAMETERS
See Attached List of Parameters

 # BOTTLES & PRESERVATIVES

HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
						3	

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req:
NJ GWQS
NJ IGW
NJ SRS
NY TOGS
NY CP51
NY Part 375 Restricted
NY Part 375 Unrestricted
Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time		Signature/Company	Date	Time
Relinquished by:		2/19/15	10:56	Received by:		2/19/15	10:56
Relinquished by:		2/19/15	11:52	Received by:		2/19/15	11:52
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 1273

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\COCs\2013 COC

01/2013 rev

E5-02233 Page 1 of 1

201-575-1715

On Feb 18, 2015, at 3:29 PM, Zak, Jerry <JZak@geiconsultants.com> wrote:

Matt:

I talked to Kim James at IAL. She will email us a list of all the parameters that go for 40 CFR. She knows we want them, plus all of the following (there may be some redundancy): (Kim pls confirm you got this.)

- VOCs 8260
- SVOCs 8270
- TAL Metals 6000/7000
- Herbicides 8151A
- Pesticides 8081A
- Free Cyanide 9016
- PCBs 8082
- Hex chromium 3060/7196
- TOC (Lloyd Kahn)
- Reactivity – Sulfur and Cyanide
- Ignitability
- Ph or Corrosivity
- Extractable Organic Halides
- TCLP VOC
- TCLP SVOC
- TCLP Metals and Hg
- TCLP Pesticides
- TCLP Herbicides
- % Solids / % Moisture

TCLP TAT is 72 hrs. None TCLP will be 48 hours.

Thanks.

Jerry

Jerry Zak
Senior Project Manager
<image002.jpg>
GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201 | Glastonbury, CT 06033
T: 860.368.5404 | **M:** 860.558.3866 | **F:** 860.368.5307
www.geiconsultants.com | LinkedIn | Twitter | Facebook

Please consider the environment before printing this e-mail.

RUSH

PROJECT INFORMATION

E15-01273: GREENPOINT WC

To: Jerry Zak
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: jzak@geiconsultants.com;msweet@

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Jerry Zak

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category B	IECT #125180-2-	Feb 19, 2015 @ 11:52	Feb 23, 2015	Feb 23, 2015	Mar 12, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01273-001	GPEC-WC1-021815	NA	02/18/15@13:35	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	RUSH 48 HRS	3/4/2015
	TCLP VO	Analyze	1311/8260C	RUSH 72 HRS	3/4/2015
	TPH-GRO	Analyze	8260C	RUSH 48 HRS	3/4/2015
	TCLP BNA	Analyze	1311/8270D	RUSH 72 HRS	3/4/2015
	TCL BNA	Analyze	8270D	RUSH 48 HRS	3/4/2015
	TCL PCB	Analyze	8082A	RUSH 48 HRS	3/4/2015
	TPH-DRO-48 HR	Analyze	8015D	RUSH 48 HRS	3/4/2015
	TCLP Pesticides	Analyze	1311/8081B	RUSH 72 HRS	3/4/2015
	TCLP Herbicides	Analyze	1311/8151A	RUSH 72 HRS	3/4/2015
	TCL Pesticides	Analyze	8081B	RUSH 48 HRS	3/4/2015
	Herbicides	Analyze	8151A	RUSH 48 HRS	3/4/2015
	TCLP Metals	Analyze	1311/6020A/7470A	RUSH 72 HRS	3/18/2015
	TAL Metals	Analyze	6020A/7471B	RUSH 48 HRS	3/18/2015
	Free Cyanide	Analyze	9016	RUSH 48 HRS	3/4/2015
	TOC	Analyze	Lloyd Kahn	RUSH 48 HRS	3/4/2015
	% Moisture	Analyze	D2216-71	RUSH 48 HRS	2/18/2015
	Ignitability	Analyze	1030	RUSH 48 HRS	3/18/2015
	pH/Corrosivity	Analyze	9045C	RUSH 48 HRS	3/18/2015
	Cyanide, Reactive	Analyze	7.3.3.2	RUSH 48 HRS	3/4/2015
	TOX (Total Organic Halides)	Analyze	9023	RUSH 48 HRS	3/18/2015
	Cr-VI (Hexavalent Chromium)	Analyze	3060A/7196A	RUSH 48 HRS	3/20/2015

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

PROJECT INFORMATION

RUSH

E15-01273: GREENPOINT WC

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	Sulfide, Reactive	Analyze	7.3.4.2	RUSH 48 HRS	2/25/2015

Project Notes:

NOTE 1 taken by Ellen on 02/19/2015 12:15
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

NOTE 2 taken by Ellen on 02/19/2015 12:18
ANY E QUALIFIED RESULTS NEED A COMBINED FORM 1.

NOTE 3 taken by Ellen on 02/19/2015 12:37
TCLP PARAMETERS ON 72 HR TAT, RESULTS DUE 2/24.

REV 1 taken by kim on 02/19/2015 04:11
PER MATT SWEET, ADD TPH (DRO/GRO) TO SAMPLE 001, 48 HR RUSH.

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **01273** CLIENT: Weston Consultants

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 2/18/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KG DATE 2/19/15

Laboratory Custody Chronicle

IAL Case No.

E15-01273

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 2/19/2015@11:52

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	01273-001	Soil	n/a	n/a	2/19/15	Mei
TCLP VO	-001	Soil	n/a	n/a	2/20/15	Mei
TPH-GRO	-001	Soil	n/a	n/a	2/20/15	Xing

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	2/19/15	Kou-Liang	2/20/15	Eleanor
TCLP BNA	-001	Soil	2/20/15	Kou-Liang	2/23/15	Dana

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Herbicides	-001	Soil	2/20/15	Archimede	2/23/15	Margaret
TCL PCB	-001	Soil	2/19/15	Archimede	2/19/15	Justyna
TCL Pesticides	-001	Soil	2/19/15	Archimede	2/20/15	Iwona
TCLP Herbicides	-001	Soil	2/23/15	Archimede	2/24/15	Margaret
TCLP Pesticides	-001	Soil	2/23/15	Archimede	2/23/15	Iwona
TPH-DRO-48 HR	-001	Soil	2/19/15	Archimede	2/20/15	Latha

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TAL Metals	-001	Soil	2/20/15	Frank	2/23/15	Danielle
TCLP Metals	-001	Soil	2/23/15	Frank	2/23/15	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
% Moisture	-001	Soil	n/a	n/a	2/19/15@14:03	Lucy
Cr-Vl (Hexavalent Chromium)	-001	Soil	n/a	n/a	2/20/15	Debbie
Cyanide, Reactive	-001	Soil	n/a	n/a	2/20/15	Elma
Free Cyanide	-001	Soil	n/a	n/a	2/20/15	Robert
Ignitability	-001	Soil	n/a	n/a	2/20/15	Elma
Sulfide, Reactive	-001	Soil	n/a	n/a	2/20/15	Elma
TOC	-001	Soil	n/a	n/a	2/23/15	Elma
TOX (Total Organic Halides)	-001	Soil	n/a	n/a	2/20/15	Robert
pH/Corrosivity	-001	Soil	n/a	n/a	2/20/15	Debbie

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles-Special List

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/16/12

Compound	Conc	Q	RL	MDL
Chloromethane	ND		0.115	0.026
Vinyl chloride	ND		0.115	0.076
Bromomethane	ND		0.115	0.063
Chloroethane	ND		0.115	0.048
Trichlorofluoromethane	ND		0.115	0.054
Acrolein	ND		2.31	0.275
1,1-Dichloroethene	ND		0.115	0.096
Acetone	ND		0.231	0.043
Methylene chloride	ND		0.231	0.228
Acrylonitrile	ND		2.31	0.181
trans-1,2-Dichloroethene	ND		0.115	0.059
1,1-Dichloroethane	ND		0.115	0.047
cis-1,2-Dichloroethene	ND		0.115	0.043
2-Butanone (MEK)	ND		0.115	0.107
Chloroform	ND		0.115	0.043
1,1,1-Trichloroethane	ND		0.115	0.054
Carbon tetrachloride	ND		0.115	0.082
1,2-Dichloroethane (EDC)	ND		0.115	0.028
Benzene	0.197		0.115	0.028
Trichloroethene	ND		0.115	0.055
1,2-Dichloropropane	ND		0.115	0.043
Bromodichloromethane	ND		0.115	0.036
2-Chloroethyl vinyl ether	ND		0.115	0.040
cis-1,3-Dichloropropene	ND		0.115	0.030
4-Methyl-2-pentanone (MIBK)	ND		0.115	0.030
Toluene	0.090	J	0.115	0.026
trans-1,3-Dichloropropene	ND		0.115	0.025

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
Continued on next page

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles-Special List

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/16/12

Compound	Conc	Q	RL	MDL
1,1,2-Trichloroethane	ND		0.115	0.031
Tetrachloroethene	ND		0.115	0.058
Dibromochloromethane	ND		0.115	0.036
Chlorobenzene	ND		0.115	0.038
1,1,1,2-Tetrachloroethane	ND		0.115	0.028
Ethylbenzene	ND		0.115	0.041
Total Xylenes	ND		0.231	0.080
Styrene	ND		0.115	0.028
Bromoform	ND		0.115	0.026
1,1,2,2-Tetrachloroethane	ND		0.115	0.028
1,3-Dichlorobenzene	ND		0.115	0.038
1,4-Dichlorobenzene	ND		0.115	0.032
1,2-Dichlorobenzene	ND		0.115	0.038
1,2,4-Trichlorobenzene	ND		0.115	0.039
TOTAL VO's:	0.287	J		

Semivolatiles - BNA

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/18/12

Compound	Conc	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.038	0.026
Phenol	ND		0.038	0.017
Bis(2-chloroethyl) ether	ND		0.038	0.027
2-Chlorophenol	ND		0.038	0.016

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
Continued on next page

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Semivolatiles - BNA

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/18/12

Compound	Conc	Q	RL	MDL
1,3-Dichlorobenzene	ND		0.038	0.017
1,4-Dichlorobenzene	ND		0.038	0.014
1,2-Dichlorobenzene	ND		0.038	0.014
Bis(2-chloroisopropyl) ether	ND		0.038	0.014
N-Nitrosodi-n-propylamine	ND		0.038	0.025
Hexachloroethane	ND		0.038	0.014
Nitrobenzene	ND		0.038	0.034
Isophorone	ND		0.038	0.025
2-Nitrophenol	ND		0.038	0.028
2,4-Dimethylphenol	ND		0.038	0.030
Bis(2-chloroethoxy) methane	ND		0.038	0.032
2,4-Dichlorophenol	ND		0.038	0.037
1,2,4-Trichlorobenzene	ND		0.038	0.030
Naphthalene	0.506		0.038	0.029
Hexachlorobutadiene	ND		0.038	0.037
4-Chloro-3-methylphenol	ND		0.038	0.034
Hexachlorocyclopentadiene	ND		0.038	0.012
2,4,6-Trichlorophenol	ND		0.038	0.012
2-Chloronaphthalene	ND		0.038	0.036
Dimethyl phthalate	ND		0.038	0.011
2,6-Dinitrotoluene	ND		0.038	0.022
Acenaphthylene	0.066		0.038	0.027
Acenaphthene	0.220		0.038	0.030
2,4-Dinitrophenol	ND		0.038	0.014
4-Nitrophenol	ND		0.038	0.028
2,4-Dinitrotoluene	ND		0.038	0.033
Diethyl phthalate	ND		0.038	0.028

ND = Analyzed for but Not Detected at the MDL
Continued on next page

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Semivolatiles - BNA

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/18/12

Compound	Conc	Q	RL	MDL
Fluorene	0.184		0.038	0.021
4-Chlorophenyl phenyl ether	ND		0.038	0.018
4,6-Dinitro-2-methylphenol	ND		0.038	0.022
N-Nitrosodiphenylamine	ND		0.038	0.016
1,2-Diphenylhydrazine	ND		0.038	0.035
4-Bromophenyl phenyl ether	ND		0.038	0.022
Hexachlorobenzene	ND		0.038	0.027
Pentachlorophenol	ND		0.038	0.016
Phenanthrene	1.45		0.038	0.025
Anthracene	0.359		0.038	0.037
Di-n-butyl phthalate	ND		0.038	0.027
Fluoranthene	1.96		0.038	0.015
Benzidine	ND		0.038	0.036
Pyrene	1.85		0.038	0.028
Butyl benzyl phthalate	ND		0.038	0.024
3,3'-Dichlorobenzidine	ND		0.038	0.027
Benzo[a]anthracene	1.11		0.038	0.036
Chrysene	1.19		0.038	0.026
Bis(2-ethylhexyl) phthalate	0.123		0.038	0.018
Di-n-octyl phthalate	ND		0.038	0.015
Benzo[b]fluoranthene	1.45		0.038	0.020
Benzo[k]fluoranthene	1.12		0.038	0.014
Benzo[a]pyrene	1.59		0.038	0.021
Indeno[1,2,3-cd]pyrene	1.20		0.038	0.019
Dibenz[a,h]anthracene	0.462		0.038	0.023
Benzo[g,h,i]perylene	1.39		0.038	0.012
TOTAL BNA'S:	16.2			

ND = Analyzed for but Not Detected at the MDL
Continued on next page

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

PCB's

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/16/12

Compound	Conc	Q	RL	MDL
Aroclor-1016	ND		0.039	0.015
Aroclor-1221	ND		0.039	0.015
Aroclor-1232	ND		0.039	0.015
Aroclor-1242	ND		0.039	0.015
Aroclor-1248	ND		0.039	0.015
Aroclor-1254	ND		0.039	0.015
Aroclor-1260	ND		0.039	0.015
PCBs	ND		0.039	0.015

Hydrocarbons

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/17/12

Compound	Conc	Q	RL	MDL
TPH-DRO	139		85.3	68.2

Hydrocarbons

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/17/12

Compound	Conc	Q	RL	MDL
TPH-GRO	ND		5.77	2.31

ND = Analyzed for but Not Detected at the MDL

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Project Name: GREENPOINT WASTE CLASS
Lab Case Number: E12-04813

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Metals

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00
Date Analyzed: 5/17/12

Parameter	Result	Q	RL	MDL
Antimony	ND		1.19	0.298
Arsenic	4.04		0.596	0.298
Beryllium	0.344	J	0.596	0.239
Cadmium	1.33		0.596	0.149
Chromium	36.4		2.39	0.596
Copper	584		2.39	0.596
Lead	179		0.596	0.149
Mercury	ND		0.015	0.00697
Nickel	52.2		1.19	0.596
Selenium	ND		2.39	1.19
Silver	0.318	J	0.596	0.149
Thallium	0.645		0.596	0.149
Zinc	379		2.39	2.39

General Analytical

Lab ID: 04813-001
Client ID: GPEC-WC 051412
Percent Moisture: 13.3

Date Sampled: 5/14/2012
Time Sampled: 11:00

Parameter	Result	RL	MDL	Matrix-Units	Date Analyzed
Sulfur as S	ND	1080	896	Soil-mg/Kg	5/18/2012 9:00

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

These data have been reviewed and accepted by:

Michael H Leftin, Ph.D
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants, INC	REPORT TO:	DATA GROUP
Address:	1 Greenwood Ave, Suite 20	Address:	Attn: Jamie Cargo
	Montclair, NJ 07042		JCargo@geiconsultants.com
Telephone #:	973-873-7110	Attn:	
Fax #:	973-509-9625	FAX #	
Project Manager:	MIKE ZUKAUSKAS	INVOICE TO:	GEI CONSULTANTS, INC
EMAIL Address:	MZUKAUSKAS@GEICONSULTANTS.COM	Address:	400 Unicorn Park Drive
Sampler:	CHRIS ANASTASIOU		Woburn, MA 01801
Project Name:	GREENPOINT WASTE CLASS		
Project Location (State):	NY	Attn:	ACCOUNTING
Bottle Order #:	BO1699	PO #	
Quote # :			

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) | NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) | QAM025 (5 day TAT)

Rush TAT Charge **: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day 10%

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** | 48 hr** | 72 hr** | 96 hr** | (1 wk**)
Other** (specify):

Hard Copy: Std 3 week * | Other - call for price

Report Format	EDDs
(Results Only)	NJ SRP format
Reduced	NYSDEC
Regulatory - 15% Surcharge applies	lab approved custom EDD
Other (describe)	(NO EDD/CD REQ'D)

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	TPH 8015 Gro/DRO	VOC 8260B	SVOC 8270	PCB 8082	Cyanide Total Amenable	Sulfur	Mercury	BCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPTC-WC 051412	GRAB	5/14/12	11:00	SOIL	2	1	—													4	

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Known Hazard: Yes or No Describe:
Conc. Expected: Low Med High
MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	5/14/12	11:15	Received by: FEDEX	5/15/12	1030
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		

Comments: BAY SHORE COAL TAR
MGP WASTE CLASS

Lab Case # 04813

PAGE: of

AB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

PROJECT INFORMATION

** RUSH **

E 1 2 - 0 4 8 1 3

Case No. E12-04813 **Project** GREENPOINT WASTE CLASS

Customer	**GEI Consultants Inc. - Montclair**	**P.O. #**	
Contact	Michael Zukauskas	**Received**	5/15/2012 10:30
EMail	mzukauskas@geiconsultants.com ☑ EMail EDDs	**Verbal Due**	5/22/2012
Phone	datagroup@geiconsultants.com; (973) 825-7410 **Fax** 1(973) 509-9625	**Report Due**	6/6/2012
Report To	mlsweet@geiconsultants.com; mbelkin@ialonline.com	**Bill To**	
1 Greenwood Ave.		400 Unicorn Park Drive	
Suite 210		Woburn, MA 01801	
Montclair, NJ 07042			
Attn: Michael Zukauskas		Attn: Sandra St. Hilaire	

Report Format **Result Only**

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
04813-001	GPEC-WC 051412	n/a	5/14/2012@11:00	Soil	mg/Kg	4

Sample #	Tests	Status	QA Method
001	Special VOA	Complete	8260B
"	TPH-GRO	Complete	8260B
"	PP BNA	Complete	8270C
"	PP/PCB	Complete	8082
"	TPH-DRO	Complete	8015B M
"	PP Metals	Complete	6020/7471A
"	Sulfur	Complete	D129

05/15/2012 12:23 by Ellen - PKNOTE 1

For VO Analyze & Report PP VO+Acetone, 2-Butanone, Cis-1,2-Dichloroethene, 4-Methyl-2-Pentanone, Styrene, 1,1,1,2-Tetrachloroethane & 1,2,4-Trichlorobenzene

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May 22, 2012

E12-04813

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 12** **04813** CLIENT: GET

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY
✓ = YES/NA
✗ = NO

~~Q~~ Received 4 jars (2-802, 2-202)

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 5/15/12

CORRECTIVE ACTION REQUIRED: **YES** [ ] (SEE BELOW) **NO** [ ]

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KU DATE 5/15/12

E12-04813

REV 03/2009

Laboratory Custody Chronicle

IAL Case No.

E12-04813

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WASTE CLASS

Received On 5/15/2012@10:30

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VOA	04813-001	Soil	n/a	n/a	5/16/12	Mei
TPH-GRO	-001	Soil	n/a	n/a	5/16/12	Mei
Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP BNA	-001	Soil	5/18/12	Kou-Liang	5/18/12	Eleanor
Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	5/15/12	Archimede	5/16/12	Julia
TPH-DRO	-001	Soil	5/16/12	Archimede	5/17/12	Shannon
Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	5/16/12	Lisa	5/17/12	En
Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur	-001	Soil	n/a	n/a	5/18/12	Robert

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREEN POINT ENERGY CENTER**
IAL Case Number: **E13-05895**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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Sample Summary

IAL Case No.

E13-05895

Client GEI Consultants Inc. - Montclair

Project GREEN POINT ENERGY CENTER

Received On 6/21/2013@17:12

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
05895-001	GPEC SW-WC 001	n/a	6/20/2013@10:30	Aqueous	6

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on July 01, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) aqueous sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E13-05895, Project: GREEN POINT ENERGY CENTER) on June 21, 2013 for the analysis of:

(1) TCL VO
(1) TCL PCB
(1) Metal - RCRA Metals
(1) Flash Point

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

7/1/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

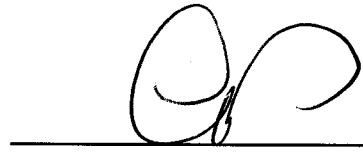
SDG#: E13-05895

Volatiles By 8260B

Batch ID: 130628	**Matrix: Aqueous**

QC
- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E13-05895
- All samples were analyzed within holding time.
- no dilutuion needed



6/29/2013

Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05895

PCB By 8082

Batch ID: 130627-11	**Matrix: Aqueous**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001
- The following samples were cleaned up using method 3665A: 001

E13-05895

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed.

Signature

6/28/2013
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05895

METALS By Method 6020

Matrix: AQUEOUS	Batch ID: 277A

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- Laboratory Control Sample Recovery met criteria.
- Matrix Spike Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E13-05895
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- Sample(s) used for aqueous metals analyses contained varying levels of sediment. Precautions were taken to use an aqueous representative of the sample. However, our experience has demonstrated that samples of this nature are very difficult to duplicate because the metals numbers are basically tied into the level of sediment present in the original sample. Additionally, as the remainder of the sample is stored under acidic conditions, some of the metals may continue to leach out into the water making any reproduction of the original number impossible. The rough amount of sediment present in the samples is as follows:
  05895-001: Trace;
- All samples were analyzed as a straight run and no further dilutions were required.

Thursday, June 27, 2013 12:16PM

DK 6/27/13
Signature Date

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREEN POINT ENERGY CENTER
Lab Case No.: E13-05895

Lab ID:	**05895-001**		
Client ID:	**GPEC SW-WC 001**		
Matrix:	**Aqueous**		
Sampled Date	**6/20/13**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	***(ug/L-ppb)***		
Dichlorodifluoromethane	ND		0.340
Chloromethane	ND		0.490
Vinyl chloride	ND		0.350
Bromomethane	ND		0.480
Chloroethane	ND		0.380
Trichlorofluoromethane	ND		0.410
1,1-Dichloroethene	ND		0.380
Acetone	ND		0.760
Carbon disulfide	ND		0.490
Methylene chloride	ND		1.98
trans-1,2-Dichloroethene	ND		0.420
Methyl tert-butyl ether (MTBE)	ND		0.380
1,1-Dichloroethane	ND		0.370
cis-1,2-Dichloroethene	ND		0.380
2-Butanone (MEK)	ND		0.540
Bromochloromethane	ND		0.440
Chloroform	ND		0.360
1,1,1-Trichloroethane	ND		0.380
Carbon tetrachloride	ND		0.310
1,2-Dichloroethane (EDC)	ND		0.490
Benzene	ND		0.370
Trichloroethene	ND		0.490
1,2-Dichloropropane	ND		0.490
1,4-Dioxane	ND		33.2
Bromodichloromethane	ND		0.380
cis-1,3-Dichloropropene	ND		0.450
4-Methyl-2-pentanone (MIBK)	ND		0.480
Toluene	ND		0.390
trans-1,3-Dichloropropene	ND		0.510
1,1,2-Trichloroethane	ND		0.440
Tetrachloroethene	ND		0.440
2-Hexanone	ND		0.480
Dibromochloromethane	ND		0.450
1,2-Dibromoethane (EDB)	ND		0.300
Chlorobenzene	ND		0.450
Ethylbenzene	ND		0.390
Total Xylenes	ND		1.30
Styrene	ND		0.440
Bromoform	ND		0.500
Isopropylbenzene	ND		0.440
1,1,2,2-Tetrachloroethane	ND		0.370
1,3-Dichlorobenzene	ND		0.470
1,4-Dichlorobenzene	ND		0.470
1,2-Dichlorobenzene	ND		0.490
1,2-Dibromo-3-chloropropane	ND		0.500

ND = Analyzed for but Not Detected at the MDL

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREEN POINT ENERGY CENTER
Lab Case No.: E13-05895

Lab ID:	**05895-001**		
Client ID:	**GPEC SW-WC 001**		
Matrix:	**Aqueous**		
Sampled Date	**6/20/13**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	***(ug/L-ppb)***		
1,2,4-Trichlorobenzene	ND		0.500
1,2,3-Trichlorobenzene	ND		0.420
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.480
Methyl acetate	ND		0.330
Cyclohexane	ND		0.260
Methylcyclohexane	ND		0.320
1,3-Dichloropropene (cis- and trans-)	ND		0.510
TOTAL VO's:	ND		
PCB's (Units)	***(ug/L-ppb)***		
Aroclor-1016	ND		0.020
Aroclor-1221	ND		0.020
Aroclor-1232	ND		0.020
Aroclor-1242	ND		0.020
Aroclor-1248	0.610		0.020
Aroclor-1254	ND		0.020
Aroclor-1260	ND		0.020
Aroclor-1262	ND		0.020
Aroclor-1268	ND		0.020
PCBs	0.610		0.020
Metals (Units)	***(ug/L-ppb)***		
Arsenic	7.26		1.00
Barium	228		10.0
Cadmium	ND		0.500
Chromium	ND		2.00
Lead	25.9		0.500
Mercury	ND		0.300
Selenium	ND		4.00
Silver	ND		0.500
General Analytical (Units)			
Flash Point(°C)	No Flash @100C		20.0

ND = Analyzed for but Not Detected at the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05895-001
Client ID: GPEC_SW-WC_0
Date Received: 06/21/2013
Date Analyzed: 06/28/2013
Data file: G9722.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.340
Chloromethane	ND		1.00	0.490
Vinyl chloride	ND		1.00	0.350
Bromomethane	ND		1.00	0.480
Chloroethane	ND		1.00	0.380
Trichlorofluoromethane	ND		1.00	0.410
1,1-Dichloroethene	ND		1.00	0.380
Acetone	ND		2.00	0.760
Carbon disulfide	ND		1.00	0.490
Methylene chloride	ND		2.00	1.98
trans-1,2-Dichloroethene	ND		1.00	0.420
Methyl tert-butyl ether (MTBE)	ND		1.00	0.380
1,1-Dichloroethane	ND		1.00	0.370
cis-1,2-Dichloroethene	ND		1.00	0.380
2-Butanone (MEK)	ND		1.00	0.540
Bromochloromethane	ND		1.00	0.440
Chloroform	ND		1.00	0.360
1,1,1-Trichloroethane	ND		1.00	0.380
Carbon tetrachloride	ND		1.00	0.310
1,2-Dichloroethane (EDC)	ND		1.00	0.490
Benzene	ND		1.00	0.370
Trichloroethene	ND		1.00	0.490
1,2-Dichloropropane	ND		1.00	0.490
1,4-Dioxane	ND		200	33.2
Bromodichloromethane	ND		1.00	0.380
cis-1,3-Dichloropropene	ND		1.00	0.450
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.480

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05895-001
Client ID: GPEC_SW-WC_0
Date Received: 06/21/2013
Date Analyzed: 06/28/2013
Data file: G9722.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.390
trans-1,3-Dichloropropene	ND		1.00	0.510
1,1,2-Trichloroethane	ND		1.00	0.440
Tetrachloroethene	ND		1.00	0.440
2-Hexanone	ND		1.00	0.480
Dibromochloromethane	ND		1.00	0.450
1,2-Dibromoethane (EDB)	ND		1.00	0.300
Chlorobenzene	ND		1.00	0.450
Ethylbenzene	ND		1.00	0.390
Total Xylenes	ND		2.00	1.30
Styrene	ND		1.00	0.440
Bromoform	ND		1.00	0.500
Isopropylbenzene	ND		1.00	0.440
1,1,2,2-Tetrachloroethane	ND		1.00	0.370
1,3-Dichlorobenzene	ND		1.00	0.470
1,4-Dichlorobenzene	ND		1.00	0.470
1,2-Dichlorobenzene	ND		1.00	0.490
1,2-Dibromo-3-chloropropane	ND		1.00	0.500
1,2,4-Trichlorobenzene	ND		1.00	0.500
1,2,3-Trichlorobenzene	ND		1.00	0.420
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.480
Methyl acetate	ND		1.00	0.330
Cyclohexane	ND		2.00	0.260
Methylcyclohexane	ND		1.00	0.320
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.510

Total Target Compounds (52): 0

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: 05895-001
Client ID: GPEC_SW-WC
Date Received: 06/21/2013
Date Extracted: 06/27/2013
Date Analyzed: 06/28/2013
Data file: Y9711.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	0.610		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	0.610		0.050	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREEN POINT ENERGY CENTER

Lab ID: E13-05895-001
Client ID: GPEC SW-WC 001
Date Collected: 06/20/13 10:30
Date Received: 06/21/13 17:12
Matrix-Units: Aqueous-ug/L (ppb)
% Moisture: 100
Batch #: 277

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Arsenic	7.26		1	2.00	1.00	06/25/13 21:32	6020
Barium	228		1	40.0	10.0	06/25/13 21:32	6020
Cadmium	ND		1	2.00	0.500	06/25/13 21:32	6020
Chromium	ND		1	8.00	2.00	06/25/13 21:32	6020
Lead	25.9		1	2.00	0.500	06/25/13 21:32	6020
Mercury	ND		1	0.500	0.300	06/25/13 13:16	7470A
Selenium	ND		1	8.00	4.00	06/25/13 21:32	6020
Silver	ND		1	2.00	0.500	06/25/13 21:32	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Flash Point

Client/Project: GEI-MTCLR/GREEN POINT ENERGY CENTER

Date Received: 06/21/13 17:12
Method: 1010

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E13-05895-001	GPEC SW-WC 001	No Flash @100C		1	Aqueous-°C	20.0	20.0	0	06/20/13 10:30	07/01/13 09:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/28/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA130627a	AQUEOUS	G9721.D	114	101	106
05895-001	AQUEOUS	G9722.D	114	106	101
05870-002	AQUEOUS	G9723.D	110	102	104
05962-003	AQUEOUS	G9724.D	113	96	103
06017-006	AQUEOUS	G9725.D	117	103	101
06017-008	AQUEOUS	G9726.D	114	102	101
05903-001	AQUEOUS	G9727.D	116	100	102
05903-003	AQUEOUS	G9729.D	118	97	105
05903-004	AQUEOUS	G9730.D	114	103	101
05903-005	AQUEOUS	G9731.D	108	96	104
05905-001	AQUEOUS	G9732.D	111	94	109
05905-002	AQUEOUS	G9733.D	109	96	106
05906-001	AQUEOUS	G9734.D	106	89	113
05906-002	AQUEOUS	G9735.D	114	93	107
05906-003	AQUEOUS	G9736.D	114	90	105
05906-004	AQUEOUS	G9737.D	118	98	101
05903-006	AQUEOUS	G9739.D	119	99	102
05793-005	AQUEOUS	G9740.D	112	100	105
LCSA130628a	AQUEOUS	G9741.D	113	103	104
MS05903-004	AQUEOUS	G9742.D	110	104	104
MSD05903-004	AQUEOUS	G9743.D	108	106	103

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	59-138	43-133
SMC2 = Toluene-d8	50 ppb	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	42-152	45-145

Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

8260LCS

LCS ACCURACY REPORT

Lab ID: LCSA130628a
Date Received: NA
Date Analyzed: 06/28/2013
LCS Data file: G9741.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.00	47.2	94
Chloromethane	50.0	0.00	41.7	83
Vinyl chloride	50.0	0.00	43.6	87
Bromomethane	50.0	0.00	47.4	95
Chloroethane	50.0	0.00	50.3	101
Trichlorofluoromethane	50.0	0.00	56.7	113
Acrolein	150	0.00	142.2	95
1,1-Dichloroethene	50.0	0.00	50.6	101
Acetone	50.0	0.00	50.5	101
Carbon disulfide	50.0	0.00	48.0	96
Vinyl acetate	50.0	0.00	45.0	90
Methylene chloride	50.0	0.00	49.1	98
Acrylonitrile	150.0	0.00	179.8	120
tert-Butyl alcohol (TBA)	100.0	0.00	102.2	102
trans-1,2-Dichloroethene	50.0	0.00	49.0	98
Methyl tert-butyl ether (MTBE)	50.0	0.00	54.5	109
1,1-Dichloroethane	50.0	0.00	52.4	105
Diisopropyl ether (DIPE)	50.0	0.00	54.9	110
cis-1,2-Dichloroethene	50.0	0.00	52.0	104
2,2-Dichloropropane	50.0	0.00	52.1	104
2-Butanone (MEK)	50.0	0.00	51.9	104
Bromochloromethane	50.0	0.00	52.8	106
Chloroform	50.0	0.00	55.3	111
1,1,1-Trichloroethane	50.0	0.00	57.7	115
Carbon tetrachloride	50.0	0.00	56.1	112
1,1-Dichloropropene	50.0	0.00	52.9	106
1,2-Dichloroethane (EDC)	50.0	0.00	56.0	112
Benzene	50.0	0.00	50.2	100
Trichloroethene	50.0	0.00	54.2	108
1,2-Dichloropropane	50.0	0.00	52.5	105
Dibromomethane	50.0	0.00	54.9	110
1,4-Dioxane	1500	0.00	1321	88
Bromodichloromethane	50.0	0.00	55.5	111
2-Chloroethyl vinyl ether	50.0	0.00	49.2	98
cis-1,3-Dichloropropene	50.0	0.00	50.7	101
4-Methyl-2-pentanone (MIBK)	50.0	0.00	56.9	114
Toluene	50.0	0.00	50.6	101
trans-1,3-Dichloropropene	50.0	0.00	48.8	98
1,1,2-Trichloroethane	50.0	0.00	51.9	104
Tetrachloroethene	50.0	0.00	48.7	97
1,3-Dichloropropane	50.0	0.00	50.5	101

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA130628a
Date Received: NA
Date Analyzed: 06/28/2013
LCS Data file: G9741.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.00	51.7	103
Dibromochloromethane	50.0	0.00	51.8	104
1,2-Dibromoethane (EDB)	50.0	0.00	50.8	102
Chlorobenzene	50.0	0.00	50.1	100
1,1,1,2-Tetrachloroethane	50.0	0.00	54.8	110
Ethylbenzene	50.0	0.00	53.1	106
m,p-Xylene	100.0	0.00	106.8	107
o-Xylene	50.0	0.00	56.0	112
Styrene	50.0	0.00	54.7	109
Bromoform	50.0	0.00	45.4	91
Isopropylbenzene	50.0	0.00	56.2	112
1,1,2,2-Tetrachloroethane	50.0	0.00	49.1	98
Bromobenzene	50.0	0.00	49.0	98
1,2,3-Trichloropropane	50.0	0.00	51.8	104
n-Propylbenzene	50.0	0.00	54.3	109
2-Chlorotoluene	50.0	0.00	52.0	104
1,3,5-Trimethylbenzene	50.0	0.00	54.3	109
4-Chlorotoluene	50.0	0.00	52.0	104
tert-Butylbenzene	50.0	0.00	56.7	113
1,2,4-Trimethylbenzene	50.0	0.00	54.5	109
sec-Butylbenzene	50.0	0.00	54.1	108
1,3-Dichlorobenzene	50.0	0.00	48.5	97
4-Isopropyltoluene	50.0	0.00	53.8	108
1,4-Dichlorobenzene	50.0	0.00	50.7	101
n-Butylbenzene	50.0	0.00	55.4	111
1,2-Dichlorobenzene	50.0	0.00	52.3	105
1,2-Dibromo-3-chloropropane	50.0	0.00	53.4	107
1,2,4-Trichlorobenzene	50.0	0.00	52.5	105
Hexachlorobutadiene	50.0	0.00	55.9	112
Naphthalene	50.0	0.00	56.6	113
1,2,3-Trichlorobenzene	50.0	0.00	57.6	115
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	48.6	97
Methyl acetate	50.0	0.00	48.7	97
Cyclohexane	50.0	0.00	51.0	102
Methylcyclohexane	50.0	0.00	48.8	98

	Aqueous	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD

MS/MSD SPIKE REPORT

Lab ID: 05903-004
Client ID: MW-14D
Date Received: NA
Date Analyzed: 06/28/2013
MS Data file: G9742.D
MSD Data file: G9743.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	36.0	72		43.3	87		18	
Chloromethane	50	0.0	42.2	84		44.4	89		5	
Vinyl chloride	50	0.0	42.7	85		40.7	81		5	
Bromomethane	50	0.0	45.0	90		41.2	82		9	
Chloroethane	50	0.0	48.8	98		44.0	88		10	
Trichlorofluoromethane	50	0.0	53.9	108		47.5	95		13	
Acrolein	150	0.0	145	97		159	106		9	
1,1-Dichloroethene	50	0.0	51.6	103		48.9	98		5	
Acetone	50	0.0	49.7	99		48.7	97		2	
Carbon disulfide	50	0.0	47.4	95		43.3	87		9	
Vinyl acetate	50	0.0	43.0	86		40.6	81		6	
Methylene chloride	50	0.0	47.9	96		44.7	89		7	
Acrylonitrile	150	0.0	175	117		166	111		5	
tert-Butyl alcohol (TBA)	100	0.0	97.5	98		99.1	99		2	
trans-1,2-Dichloroethene	50	0.0	48.2	96		45.7	91		5	
Methyl tert-butyl ether (MTE	50	0.0	53.4	107		51.4	103		4	
1,1-Dichloroethane	50	0.0	51.3	103		48.2	96		6	
Diisopropyl ether (DIPE)	50	0.0	53.5	107		51.6	103		4	
cis-1,2-Dichloroethene	50	0.0	51.1	102		48.4	97		5	
2,2-Dichloropropane	50	0.0	46.0	92		41.0	82		11	
2-Butanone (MEK)	50	0.0	52.4	105		52.0	104		1	
Bromochloromethane	50	0.0	50.3	101		49.1	98		2	
Chloroform	50	0.0	53.8	108		51.1	102		5	
1,1,1-Trichloroethane	50	0.0	55.3	111		50.3	101		9	
Carbon tetrachloride	50	0.0	53.3	107		48.9	98		9	
1,1-Dichloropropene	50	0.0	51.5	103		49.3	99		4	
1,2-Dichloroethane (EDC)	50	0.0	55.5	111		54.1	108		3	
Benzene	50	0.0	51.5	103		49.7	99		4	
Trichloroethene	50	0.0	54.5	109		52.8	106		3	
1,2-Dichloropropane	50	0.0	53.0	106		51.7	103		2	
Dibromomethane	50	0.0	54.8	110		53.9	108		2	
1,4-Dioxane	1,500	0.0	1377	92		1644	110		18	
Bromodichloromethane	50	0.0	55.8	112		55.8	112		0	
cis-1,3-Dichloropropene	50	0.0	52.3	105		54.8	110		5	
4-Methyl-2-pentanone (MIBI	50	0.0	54.8	110		58.3	117		6	
Toluene	50	0.0	52.8	106		53.5	107		1	
trans-1,3-Dichloropropene	50	0.0	51.7	103		56.6	113		9	
1,1,2-Trichloroethane	50	0.0	52.8	106		55.0	110		4	
Tetrachloroethene	50	0.0	50.3	101		51.0	102		1	
1,3-Dichloropropane	50	0.0	53.8	108		56.9	114		6	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05903-004
Client ID: MW-14D
Date Received: NA
Date Analyzed: 06/28/2013
MS Data file: G9742.D
MSD Data file: G9743.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	54.6	109		61.1	122		11	
Dibromochloromethane	50	0.00	54.6	109		57.7	115		6	
1,2-Dibromoethane (EDB)	50	0.00	53.6	107		55.6	111		4	
Chlorobenzene	50	0.00	51.1	102		49.7	99		3	
1,1,1,2-Tetrachloroethane	50	0.00	53.6	107		49.2	98		9	
Ethylbenzene	50	0.00	53.5	107		52.1	104		3	
m,p-Xylene	100	0.00	106.6	107		103.6	104		3	
o-Xylene	50	0.00	55.5	111		52.4	105		6	
Styrene	50	0.00	54.2	108		53.7	107		1	
Bromoform	50	0.00	46.4	93		47.2	94		2	
Isopropylbenzene	50	0.00	55.9	112		52.6	105		6	
1,1,2,2-Tetrachloroethane	50	0.00	48.1	96		46.3	93		4	
Bromobenzene	50	0.00	49.9	100		47.9	96		4	
1,2,3-Trichloropropane	50	0.00	49.9	100		49.7	99		0	
n-Propylbenzene	50	0.00	54.0	108		51.3	103		5	
2-Chlorotoluene	50	0.00	52.4	105		49.7	99		5	
1,3,5-Trimethylbenzene	50	0.00	54.7	109		50.8	102		7	
4-Chlorotoluene	50	0.00	52.4	105		49.7	99		5	
tert-Butylbenzene	50	0.00	55.9	112		52.1	104		7	
1,2,4-Trimethylbenzene	50	0.00	54.1	108		50.6	101		7	
sec-Butylbenzene	50	0.00	53.9	108		50.2	100		7	
1,3-Dichlorobenzene	50	0.00	48.3	97		45.8	92		5	
4-Isopropyltoluene	50	0.00	54.3	109		49.9	100		8	
1,4-Dichlorobenzene	50	0.00	49.3	99		47.5	95		4	
n-Butylbenzene	50	0.00	54.1	108		50.1	100		8	
1,2-Dichlorobenzene	50	0.00	51.4	103		47.2	94		9	
1,2-Dibromo-3-chloropropan	50	0.00	50.9	102		47.8	96		6	
1,2,4-Trichlorobenzene	50	0.00	52.7	105		46.4	93		13	
Hexachlorobutadiene	50	0.00	55.7	111		51.1	102		9	
Naphthalene	50	0.00	56.3	113		51.5	103		9	
1,2,3-Trichlorobenzene	50	0.00	60.7	121		55.8	112		8	
1,1,2-Trichloro-1,2,2-trifluor	50	0.00	45.5	91		40.2	80		12	
Methyl acetate	50	0.00	49.1	98		44.7	89		9	
Cyclohexane	50	0.00	49.2	98		43.6	87		12	
Methylcyclohexane	50	0.00	48.2	96		41.7	83		14	

	Aqueous	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: G9721.D Instrument ID: MSD_G

Date Analyzed: 06/28/2013 Time Analyzed: 10:12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC_SW-WC_0	05895-001	06/28/2013	10:40
MW-5	05870-002	06/28/2013	11:08
MW-3	05962-003	06/28/2013	11:36
AEI-B7	06017-006	06/28/2013	12:04
AEI-B8	06017-008	06/28/2013	12:32
FB	05903-001	06/28/2013	13:00
MW-10	05903-003	06/28/2013	13:56
MW-14D	05903-004	06/28/2013	14:24
MW-6	05903-005	06/28/2013	14:51
MW-7D	05905-001	06/28/2013	15:18
MW-2D	05905-002	06/28/2013	15:46
TB	05906-001	06/28/2013	16:14
FB	05906-002	06/28/2013	16:41
MW-1	05906-003	06/28/2013	17:08
MW-8DD	05906-004	06/28/2013	17:36
MW-8	05903-006	06/28/2013	18:31
MW_7D/12.82	05793-005	06/28/2013	18:59
LCSA130628a	LCSA130628a	06/28/2013	19:26
MS05903-004	MS05903-004	06/28/2013	19:54
MSD05903-004	MSD05903-004	06/28/2013	20:22

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G9666.D

BFB Injection Date: 06/27/2013

Inst ID: MSD_G

BFB Injection Time: 8:39

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.6			
75	30.0 - 60.0% of mass 95	55.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	69.4			
175	5.0 - 9.0% of mass 174	5.8	(	8.3	)1
176	95.0 - 101.0% of mass 174	68.3	(	98.4	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.5	)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC100	ICC100	G9671.D	06/27/2013	10:58
ICC001	ICC001	G9667.D	06/27/2013	9:07
ICC002	ICC002	G9668.D	06/27/2013	9:35
ICC005	ICC005	G9669.D	06/27/2013	10:03
ICC020	ICC020	G9670.D	06/27/2013	10:30
ICC150	ICC150	G9672.D	06/27/2013	11:25
ICC200	ICC200	G9673.D	06/27/2013	11:53
ICV100	ICV100	G9674.D	06/27/2013	12:20
BLKA130627a	BLKA130627a	G9677.D	06/27/2013	13:42
GW-1/6.00	05614-002	G9678.D	06/27/2013	14:09
217_W._39TH	05827-001	G9679.D	06/27/2013	14:36
MW1/7	05727-003	G9680.D	06/27/2013	15:03
FIELD_BLANK	05962-004	G9681.D	06/27/2013	15:31
TRIP_BLANK	05962-005	G9682.D	06/27/2013	15:59
MW-2	05962-001	G9683.D	06/27/2013	16:26
MW-1R	05962-002	G9684.D	06/27/2013	16:54
FB	05999-002	G9686.D	06/27/2013	17:50
TB	05999-003	G9687.D	06/27/2013	18:18
MW-1	05999-001	G9688.D	06/27/2013	18:46
LCSA130627a	LCSA130627a	G9689.D	06/27/2013	19:14

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G9666.D

BFB Injection Date : 06/27/201

Inst ID: MSD_G

BFB Injection Time: 8:39

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.6			
75	30.0 - 60.0% of mass 95	55.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	69.4			
175	5.0 - 9.0% of mass 174	5.8	(	8.3	)1
176	95.0 - 101.0% of mass 174	68.3	(	98.4	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MS05827-001	MS05827-001	G9690.D	06/27/2013	19:41
MSD05827-001	MSD05827-001	G9691.D	06/27/2013	20:09

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G9718.D

BFB Injection Date: 06/28/2013

Inst ID: MSD_G

BFB Injection Time: 8:44

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.9			
75	30.0 - 60.0% of mass 95	59.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	67.8			
175	5.0 - 9.0% of mass 174	5.3	(	7.8	)1
176	95.0 - 101.0% of mass 174	66.4	(	98.0	)1
177	5.0 - 9.0% of mass 176	4.5	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	G9719.D	06/28/2013	9:12
BLKA130627a	BLKA130627a	G9721.D	06/28/2013	10:12
GPEC_SW-WC_0	05895-001	G9722.D	06/28/2013	10:40
MW-5	05870-002	G9723.D	06/28/2013	11:08
MW-3	05962-003	G9724.D	06/28/2013	11:36
AEI-B7	06017-006	G9725.D	06/28/2013	12:04
AEI-B8	06017-008	G9726.D	06/28/2013	12:32
FB	05903-001	G9727.D	06/28/2013	13:00
MW-10	05903-003	G9729.D	06/28/2013	13:56
MW-14D	05903-004	G9730.D	06/28/2013	14:24
MW-6	05903-005	G9731.D	06/28/2013	14:51
MW-7D	05905-001	G9732.D	06/28/2013	15:18
MW-2D	05905-002	G9733.D	06/28/2013	15:46
TB	05906-001	G9734.D	06/28/2013	16:14
FB	05906-002	G9735.D	06/28/2013	16:41
MW-1	05906-003	G9736.D	06/28/2013	17:08
MW-8DD	05906-004	G9737.D	06/28/2013	17:36
MW-8	05903-006	G9739.D	06/28/2013	18:31
MW_7D/12.82	05793-005	G9740.D	06/28/2013	18:59
LCSA130628a	LCSA130628a	G9741.D	06/28/2013	19:26

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G9718.D

BFB Injection Date : 06/28/201

Inst ID: MSD_G

BFB Injection Time: 8:44

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.9			
75	30.0 - 60.0% of mass 95	59.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	67.8			
175	5.0 - 9.0% of mass 174	5.3	(	7.8	)1
176	95.0 - 101.0% of mass 174	66.4	(	98.0	)1
177	5.0 - 9.0% of mass 176	4.5	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MS05903-004	MS05903-004	G9742.D	06/28/2013	19:54
MSD05903-004	MSD05903-004	G9743.D	06/28/2013	20:22

Response Factor Report MSD_G

Method Path : C:\MSDCHEM\1\METHODS\
Method File : G8062713.M
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Thu Jun 27 16:26:14 2013
Response Via : Initial Calibration

Calibration Files
1 =G9667.D 2 =G9668.D 5 =G9669.D
20 =G9670.D 100 =G9671.D 150 =G9672.D 200 =G9673.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.605	0.682	0.537	0.620	0.571	0.539	0.516	0.581	10.05
3)	P	Chloromethane	0.484	0.417	0.369	0.444	0.445	0.424	0.399	0.426	8.64
4)	C	Vinyl chloride	0.607	0.579	0.524	0.576	0.586	0.568	0.521	0.566	5.67
5)	T	Bromomethane	0.331	0.409	0.362	0.426	0.426	0.456	0.418	0.404	10.58
6)	T	Chloroethane	0.256	0.322	0.295	0.353	0.363	0.366	0.339	0.328	12.25
7)	T	Trichlorofluorome	1.242	1.161	0.967	1.242	1.223	1.283	1.185	1.186	8.81
8)	T	Acrolein	0.027	0.027	0.033	0.027	0.024	0.028	0.035	0.029	13.65
9)	MC	1,1-Dichloroethen	0.512	0.568	0.507	0.559	0.568	0.572	0.578	0.552	5.39
10)	T	Acetone		0.321	0.285	0.317	0.305	0.309	0.303	0.307	4.08
11)	T	Carbon disulfide	1.792	1.589	1.269	1.627	1.623	1.600	1.548	1.578	9.92
12)	T	Vinyl acetate	1.479	1.399	1.024	1.428	1.453	1.453	1.388	1.375	11.49
13)	T	Methylene chlorid		0.669	0.467	0.572	0.554	0.549	0.517	0.555	12.08
14)	T	Acrylonitrile	0.077	0.070	0.064	0.085	0.090	0.090	0.087	0.080	13.08
15)	T	tert-Butyl alcoho		0.071	0.059	0.070	0.069	0.069	0.065	0.067	7.06
16)	T	trans-1,2-Dichlor	0.625	0.607	0.438	0.541	0.542	0.542	0.522	0.545	11.18
17)	T	Methyl tert-butyl	2.341	2.540	1.962	2.468	2.573	2.569	2.478	2.419	8.97
18)	P	1,1-Dichloroethan	0.952	0.922	0.662	0.879	0.883	0.876	0.839	0.859	10.94
19)	T	Diisopropyl ether	1.018	1.171	0.813	1.190	1.251	1.207	1.189	1.120	13.73
20)	T	cis-1,2-Dichloroe	0.598	0.617	0.458	0.581	0.594	0.555	0.562	0.566	9.25
21)	T	2,2-Dichloropropa	0.723	0.749	0.524	0.696	0.670	0.633	0.533	0.647	13.74
22)	T	2-Butanone (MEK)	0.185	0.199	0.161	0.208	0.220	0.200	0.216	0.198	10.24
23)	T	Bromochloromethan	0.325	0.351	0.282	0.325	0.321	0.304	0.306	0.317	6.85
25)	C	Chloroform	1.094	1.215	0.932	1.103	1.104	1.012	1.047	1.072	8.23
26)	T	1,1,1-Trichloroet	1.190	1.161	0.923	1.091	1.087	1.039	0.991	1.069	8.75
27)	T	Carbon tetrachlor	1.147	1.093	0.903	1.023	1.029	1.011	1.009	1.031	7.35
28)	T	1,1-Dichloroprope	0.786	0.853	0.665	0.749	0.746	0.693	0.738	0.747	8.17
29)	T	1,2-Dichloroethan	1.064	1.094	0.888	1.014	1.020	0.973	1.002	1.008	6.58
30)	S	1,2-Dichloroethan	0.782	0.780	0.694	0.759	0.760	0.705	0.725	0.743	4.80
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.183	1.207	1.144	1.155	1.168	1.056	1.175	1.155	4.19
33)	M	Trichloroethene	0.403	0.408	0.357	0.366	0.363	0.357	0.366	0.374	5.80
34)	C	1,2-Dichloropropa	0.259	0.268	0.225	0.247	0.252	0.232	0.247	0.247	6.02
35)	T	Dibromomethane	0.232	0.228	0.201	0.223	0.217	0.212	0.212	0.218	4.88
36)	T	1,4-Dioxane	0.002	0.003	0.003	0.003	0.004	0.003	0.003	0.003	14.21
37)	T	Bromodichlorometh	0.488	0.499	0.465	0.498	0.512	0.492	0.484	0.491	2.97
38)	T	2-Chloroethyl vin	0.094	0.098	0.105	0.107	0.125	0.113	0.123	0.109	10.84
39)	T	cis-1,3-Dichlorop	0.439	0.427	0.425	0.473	0.505	0.484	0.462	0.459	6.63
40)	T	4-Methyl-2-pentan	0.192	0.199	0.193	0.196	0.223	0.202	0.205	0.202	5.21
41)	S	Toluene-d8	1.040	1.064	1.193	1.030	1.110	1.055	1.070	1.080	5.18
42)	MC	Toluene	0.782	0.727	0.865	0.674	0.739	0.717	0.707	0.744	8.38
43)	T	trans-1,3-Dichlor	0.393	0.424	0.530	0.430	0.482	0.480	0.510	0.464	10.69
44)	T	1,1,2-Trichloroet	0.205	0.193	0.220	0.189	0.205	0.207	0.198	0.203	5.07
45)	T	Tetrachloroethene	0.391	0.333	0.340	0.295	0.310	0.325	0.313	0.330	9.45
46)	T	1,3-Dichloropropa	0.383	0.433	0.468	0.361	0.418	0.448	0.397	0.415	9.04
47)	T	2-Hexanone	0.146	0.140	0.157	0.134	0.162	0.160	0.181	0.154	10.27
48)	T	Dibromochlorometh	0.346	0.359	0.392	0.363	0.390	0.401	0.402	0.379	5.94
49)	T	1,2-Dibromoethane	0.286	0.298	0.314	0.258	0.286	0.292	0.296	0.290	5.82
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.095	1.127	1.086	1.015	1.047	1.051	1.044	1.066	3.55
52)	T	1,1,1,2-Tetrachlo	0.498	0.459	0.419	0.446	0.456	0.463	0.454	0.456	5.18

53)	C	Ethylbenzene	1.735	1.749	1.526	1.565	1.699	1.705	1.723	1.672	5.30
54)	T	m,p-Xylene	0.677	0.678	0.606	0.619	0.659	0.666	0.675	0.654	4.55
55)	T	o-Xylene		0.657	0.606	0.633	0.663	0.704	0.680	0.657	5.28
56)	T	Styrene	1.056	1.065	1.046	1.064	1.112	1.201	1.188	1.104	5.87
57)	P	Bromoform	0.323	0.253	0.277	0.278	0.285	0.309	0.335	0.294	9.88
58)	T	Isopropylbenzene	1.518	1.400	1.355	1.471	1.507	1.627	1.632	1.501	6.98
59)	S	Bromofluorobenzen	0.697	0.676	0.697	0.664	0.696	0.703	0.712	0.692	2.37
60)	P	1,1,2,2-Tetrachlo	0.501	0.409	0.365	0.348	0.361	0.389	0.373	0.392	13.24
61)	T	Bromobenzene	0.555	0.486	0.477	0.470	0.461	0.492	0.499	0.491	6.28
62)	T	1,2,3-Trichloropr	0.499	0.376	0.370	0.340	0.341	0.371	0.361	0.380	14.34
63)	T	n-Propylbenzene	1.982	1.679	1.624	1.621	1.647	1.792	1.752	1.728	7.49
64)	T	2-Chlorotoluene	1.352	1.247	1.275	1.168	1.237	1.398	1.213	1.270	6.30
65)	T	1,3,5-Trimethylbe	1.545	1.348	1.428	1.408	1.440	1.641	1.489	1.472	6.59
66)	T	4-Chlorotoluene	1.352	1.247	1.275	1.168	1.237	1.398	1.213	1.270	6.30
67)	T	tert-Butylbenzene	1.259	1.013	1.112	1.122	1.114	1.234	1.198	1.150	7.38
68)	T	1,2,4-Trimethylbe	1.611	1.334	1.397	1.403	1.386	1.515	1.599	1.464	7.56
69)	T	sec-Butylbenzene	1.610	1.443	1.456	1.398	1.486	1.594	1.494	1.497	5.22
70)	T	1,3-Dichlorobenze	1.094	0.915	0.863	0.841	0.820	0.865	0:925	0.903	10.20
71)	T	4-Isopropyltoluen	1.528	1.264	1.333	1.333	1.337	1.450	1.532	1.397	7.61
72)	T	1,4-Dichlorobenze	1.107	0.876	0.827	0.830	0.838	0.870	0.890	0.891	11.03
73)	T	n-Butylbenzene	1.147	1.000	0.892	0.965	0.970	1.103	1.086	1.023	8.88
74)	T	1,2-Dichlorobenze	1.053	0.843	0.786	0.817	0.766	0.833	0.818	0.845	11.30
75)	T	1,2-Dibromo-3-chl	0.111	0.112	0.105	0.113	0.085	0.118	0.110	0.108	9.94
76)	T	1,2,4-Trichlorobe	0.316	0.418	0.372	0.400	0.332	0.403	0.376	0.374	10.18
77)	T	Hexachlorobutadie	0.150	0.128	0.194	0.169	0.152	0.171	0.180	0.163	13.43
78)	T	Naphthalene	1.048	1.031	0.928	1.074	0.890	1.184	1.041	1.028	9.38
79)	T	1,2,3-Trichlorobe	0.266	0.209	0.280	0.217	0.264	0.303	0.285	0.261	13.49
80)	T	1,1,2-Trichloro-1	0.577	0.536	0.459	0.527	0.454	0.482	0.477	0.502	9.13
81)	T	Methyl acetate	0.263	0.285	0.218	0.314	0.268	0.276	0.273	0.271	10.65
82)	T	Cyclohexane		0.486	0.486	0.550	0.476	0.412	0.483	0.482	9.06
83)	T	Methylcyclohexane	0.556	0.500	0.373	0.481	0.437	0.422	0.453	0.460	12.82

(#) = Out of Range ### Number of calibration levels exceeded format ###

G8062713.M Thu Jun 27 16:26:19 2013 1

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\06-27-13\
Data File : G9674.D
Acq On : 27 Jun 2013 12:20
Operator : Sylvia
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 28 10:37:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	109	0.00
2	T	Dichlorodifluoromethane	0.581	0.468	19.4	89	0.00
3	P	Chloromethane	0.426	0.389	8.7	95	0.00
4	C	Vinyl chloride	0.566	0.513	9.4	96	0.02
5	T	Bromomethane	0.404	0.391	3.2	100	0.00
6	T	Chloroethane	0.328	0.343	-4.6	103	0.00
7	T	Trichlorofluoromethane	1.186	1.034	12.8	92	0.00
8	T	Acrolein	0.029	0.028	3.4	125	0.00
9	MC	1,1-Dichloroethene	0.552	0.541	2.0	104	0.00
10	T	Acetone	0.307	0.342	-11.4	122	0.00
11	T	Carbon disulfide	1.578	1.533	2.9	103	-0.02
12	T	Vinyl acetate	1.375	1.371	0.3	103	0.00
13	T	Methylene chloride	0.555	0.510	8.1	100	0.00
14	T	Acrylonitrile	0.080	0.095	-18.8	115	0.00
15	T	tert-Butyl alcohol (TBA)	0.067	0.071	-6.0	112	0.01
16	T	trans-1,2-Dichloroethene	0.545	0.494	9.4	99	0.00
17	T	Methyl tert-butyl ether (MT	2.419	2.524	-4.3	107	0.00
18	P	1,1-Dichloroethane	0.859	0.842	2.0	104	0.00
19	T	Diisopropyl ether (DIPE)	1.120	1.266	-13.0	111	0.00
20	T	cis-1,2-Dichloroethene	0.566	0.559	1.2	103	0.00
21	T	2,2-Dichloropropane	0.647	0.537	17.0	87	0.00
22	T	2-Butanone (MEK)	0.198	0.232	-17.2	115	0.00
23	T	Bromochloromethane	0.317	0.307	3.2	105	0.00
25	C	Chloroform	1.072	1.029	4.0	102	0.00
26	T	1,1,1-Trichloroethane	1.069	0.937	12.3	94	0.00
27	T	Carbon tetrachloride	1.031	0.887	14.0	94	0.00
28	T	1,1-Dichloropropene	0.747	0.687	8.0	101	0.00
29	T	1,2-Dichloroethane (EDC)	1.008	0.984	2.4	105	0.00
30	S	1,2-Dichloroethane-d4	0.743	0.743	0.0	107	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	111	0.00
32	M	Benzene	1.155	1.120	3.0	106	0.00
33	M	Trichloroethene	0.374	0.343	8.3	105	0.00
34	C	1,2-Dichloropropane	0.247	0.264	-6.9	116	0.00
35	T	Dibromomethane	0.218	0.220	-0.9	113	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	93	0.00
37	T	Bromodichloromethane	0.491	0.494	-0.6	107	0.00
38	T	2-Chloroethyl vinyl ether	0.109	0.128	-17.4	113	0.00
39	T	cis-1,3-Dichloropropene	0.459	0.515	-12.2	113	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.202	0.236	-16.8	117	0.00
41	S	Toluene-d8	1.080	1.152	-6.7	115	0.00
42	MC	Toluene	0.744	0.740	0.5	111	0.00
43	T	trans-1,3-Dichloropropene	0.464	0.518	-11.6	119	0.00
44	T	1,1,2-Trichloroethane	0.203	0.223	-9.9	120	0.00
45	T	Tetrachloroethene	0.330	0.285	13.6	102	0.00
46	T	1,3-Dichloropropane	0.415	0.463	-11.6	123	0.00

47	T	2-Hexanone	0.154	0.144	6.5	98	0.00
48	T	Dibromochloromethane	0.379	0.401	-5.8	114	0.00
49	T	1,2-Dibromoethane (EDB)	0.290	0.313	-7.9	121	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	122	0.00
51	MP	Chlorobenzene	1.066	1.000	6.2	117	0.00
52	T	1,1,1,2-Tetrachloroethane	0.456	0.409	10.3	109	0.00
53	C	Ethylbenzene	1.672	1.615	3.4	116	0.00
54	T	m,p-Xylene	0.654	0.628	4.0	116	0.00
55	T	o-Xylene	0.657	0.651	0.9	120	0.00
56	T	Styrene	1.104	1.124	-1.8	123	0.00
57	P	Bromoform	0.294	0.268	8.8	115	0.00
58	T	Isopropylbenzene	1.501	1.426	5.0	116	0.00
59	S	Bromofluorobenzene	0.692	0.695	-0.4	122	0.00
60	P	1,1,2,2-Tetrachloroethane	0.392	0.396	-1.0	134	0.00
61	T	Bromobenzene	0.491	0.432	12.0	115	0.00
62	T	1,2,3-Trichloropropane	0.380	0.370	2.6	133	0.00
63	T	n-Propylbenzene	1.728	1.625	6.0	120	0.00
64	T	2-Chlorotoluene	1.270	1.157	8.9	114	0.00
65	T	1,3,5-Trimethylbenzene	1.472	1.338	9.1	113	0.00
66	T	4-Chlorotoluene	1.270	1.157	8.9	114	0.00
67	T	tert-Butylbenzene	1.150	1.052	8.5	115	0.00
68	T	1,2,4-Trimethylbenzene	1.464	1.340	8.5	118	0.00
69	T	sec-Butylbenzene	1.497	1.326	11.4	109	0.00
70	T	1,3-Dichlorobenzene	0.903	0.745	17.5	111	0.00
71	T	4-Isopropyltoluene	1.397	1.226	12.2	112	0.00
72	T	1,4-Dichlorobenzene	0.891	0.752	15.6	110	0.00
73	T	n-Butylbenzene	1.023	0.956	6.5	120	0.00
74	T	1,2-Dichlorobenzene	0.845	0.728	13.8	116	0.00
75	T	1,2-Dibromo-3-chloropropane	0.108	0.094	13.0	136	0.00
76	T	1,2,4-Trichlorobenzene	0.374	0.317	15.2	117	0.00
77	T	Hexachlorobutadiene	0.163	0.137	16.0	110	0.00
78	T	Naphthalene	1.028	1.048	-1.9	144	0.00
79	T	1,2,3-Trichlorobenzene	0.261	0.270	-3.4	125	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.502	0.459	8.6	124	-0.01
81	T	Methyl acetate	0.271	0.254	6.3	116	0.00
82	T	Cyclohexane	0.482	0.396	17.8	102	0.01
83	T	Methylcyclohexane	0.460	0.373	18.9	104	0.01
84		Pentane	0.000	0.000	0.0	93	-0.06

(#) = Out of Range

38062713.M Fri Jun 28 10:37:09 2013 1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-28-13\
Data File : G9719.D
Acq On : 28 Jun 2013 9:12
Operator : Sylvia
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 28 15:14:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	80	0.00
2	T	Dichlorodifluoromethane	0.581	0.488	16.0	68	0.00
3	P	Chloromethane	0.426	0.384	9.9	69	0.00
4	C	Vinyl chloride	0.566	0.453	20.0	62	0.02
5	T	Bromomethane	0.404	0.399	1.2	75	-0.01
6	T	Chloroethane	0.328	0.301	8.2	66	0.00
7	T	Trichlorofluoromethane	1.186	1.190	-0.3	78	0.00
8	T	Acrolein	0.029	0.029	0.0	96	0.00
9	MC	1,1-Dichloroethene	0.552	0.501	9.2	70	-0.02
10	T	Acetone	0.307	0.274	10.7	72	0.01
11	T	Carbon disulfide	1.578	1.349	14.5	66	-0.01
12	T	Vinyl acetate	1.375	1.518	-10.4	83	0.00
13	T	Methylene chloride	0.555	0.494	11.0	71	0.00
14	T	Acrylonitrile	0.080	0.085	-6.3	75	0.00
15	T	tert-Butyl alcohol (TBA)	0.067	0.063	6.0	73	0.02
16	T	trans-1,2-Dichloroethene	0.545	0.504	7.5	74	0.00
17	T	Methyl tert-butyl ether (MT	2.419	2.500	-3.3	78	0.00
18	P	1,1-Dichloroethane	0.859	0.825	4.0	75	0.00
19	T	Diisopropyl ether (DIPE)	1.120	1.153	-2.9	74	0.00
20	T	cis-1,2-Dichloroethene	0.566	0.544	3.9	73	0.00
21	T	2,2-Dichloropropane	0.647	0.628	2.9	75	0.00
22	T	2-Butanone (MEK)	0.198	0.203	-2.5	74	0.00
23	T	Bromochloromethane	0.317	0.305	3.8	76	-0.01
25	C	Chloroform	1.072	1.082	-0.9	78	0.00
26	T	1,1,1-Trichloroethane	1.069	1.088	-1.8	80	0.00
27	T	Carbon tetrachloride	1.031	1.088	-5.5	84	0.00
28	T	1,1-Dichloropropene	0.747	0.719	3.7	77	0.00
29	T	1,2-Dichloroethane (EDC)	1.008	1.084	-7.5	85	0.00
30	S	1,2-Dichloroethane-d4	0.743	0.796	-7.1	84	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	76	0.00
32	M	Benzene	1.155	1.142	1.1	74	0.00
33	M	Trichloroethene	0.374	0.373	0.3	78	0.00
34	C	1,2-Dichloropropane	0.247	0.254	-2.8	76	0.00
35	T	Dibromomethane	0.218	0.239	-9.6	84	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	60	0.00
37	T	Bromodichloromethane	0.491	0.561	-14.3	83	0.00
38	T	2-Chloroethyl vinyl ether	0.109	0.116	-6.4	70	0.00
39	T	cis-1,3-Dichloropropene	0.459	0.542	-18.1	81	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.202	0.230	-13.9	78	0.00
41	S	Toluene-d8	1.080	1.163	-7.7	79	0.00
42	MC	Toluene	0.744	0.795	-6.9	81	0.00
43	T	trans-1,3-Dichloropropene	0.464	0.527	-13.6	83	0.00
44	T	1,1,2-Trichloroethane	0.203	0.221	-8.9	82	0.00
45	T	Tetrachloroethene	0.330	0.335	-1.5	82	0.00
46	T	1,3-Dichloropropane	0.415	0.465	-12.0	84	0.00

47	T	2-Hexanone	0.154	0.174	-13.0	81	0.00
48	T	Dibromochloromethane	0.379	0.444	-17.2	86	0.00
49	T	1,2-Dibromoethane (EDB)	0.290	0.321	-10.7	85	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
51	MP	Chlorobenzene	1.066	1.085	-1.8	87	0.00
52	T	1,1,1,2-Tetrachloroethane	0.456	0.471	-3.3	87	0.00
53	C	Ethylbenzene	1.672	1.758	-5.1	87	0.00
54	T	m,p-Xylene	0.654	0.680	-4.0	87	0.00
55	T	o-Xylene	0.657	0.704	-7.2	89	0.00
56	T	Styrene	1.104	1.214	-10.0	92	0.00
57	P	Bromoform	0.294	0.307	-4.4	91	0.00
58	T	Isopropylbenzene	1.501	1.623	-8.1	91	0.00
59	S	Bromofluorobenzene	0.692	0.725	-4.8	88	0.00
60	P	1,1,2,2-Tetrachloroethane	0.392	0.379	3.3	88	0.00
61	T	Bromobenzene	0.491	0.490	0.2	90	0.00
62	T	1,2,3-Trichloropropane	0.380	0.370	2.6	91	0.00
63	T	n-Propylbenzene	1.728	1.821	-5.4	93	0.00
64	T	2-Chlorotoluene	1.270	1.289	-1.5	88	0.00
65	T	1,3,5-Trimethylbenzene	1.472	1.529	-3.9	89	0.00
66	T	4-Chlorotoluene	1.270	1.289	-1.5	88	0.00
67	T	tert-Butylbenzene	1.150	1.212	-5.4	92	0.00
68	T	1,2,4-Trimethylbenzene	1.464	1.528	-4.4	93	0.00
69	T	sec-Butylbenzene	1.497	1.514	-1.1	86	0.00
70	T	1,3-Dichlorobenzene	0.903	0.848	6.1	87	0.00
71	T	4-Isopropyltoluene	1.397	1.417	-1.4	89	0.00
72	T	1,4-Dichlorobenzene	0.891	0.856	3.9	86	0.00
73	T	n-Butylbenzene	1.023	1.080	-5.6	94	0.00
74	T	1,2-Dichlorobenzene	0.845	0.817	3.3	90	0.00
75	T	1,2-Dibromo-3-chloropropane	0.108	0.094	13.0	93	0.00
76	T	1,2,4-Trichlorobenzene	0.374	0.337	9.9	85	0.00
77	T	Hexachlorobutadiene	0.163	0.154	5.5	85	0.00
78	T	Naphthalene	1.028	0.939	8.7	89	0.00
79	T	1,2,3-Trichlorobenzene	0.261	0.262	-0.4	83	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.502	0.412	17.9	76	-0.01
81	T	Methyl acetate	0.271	0.230	15.1	72	0.00
82	T	Cyclohexane	0.482	0.401	16.8	71	0.01
83	T	Methylcyclohexane	0.460	0.393	14.6	76	0.00

(#) = Out of Range

G8062713.M Fri Jun 28 15:14:09 2013 1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): G9671.D

Date Analyzed: 06/27/2013

Instrument ID: MSD_G

Time Analyzed: 10:58

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	310826	6.18	527805	7.00	413107	10.34
	UPPER LIMIT	621652	6.68	1055610	7.50	826214	10.84
	LOWER LIMIT	155413	5.68	263902.5	6.50	206553.5	9.84
	LAB SAMPLE ID						
01	ICC001	307760	6.18	511687	7.00	378525	10.34
02	ICC002	304914	6.18	517541	7.00	400953	10.34
03	ICC005	316623	6.18	457663	7.00	386640	10.34
04	ICC020	310507	6.18	521511	7.00	381929	10.34
05	ICC150	302477	6.18	508948	7.00	399894	10.35
06	ICC200	326768	6.18	535180	7.00	413981	10.34
07	ICV100	339411	6.18	584993	7.00	504374	10.34
08	BLKA130627a	292165	6.18	495482	7.00	396120	10.34
09	05614-002	287514	6.18	474713	7.00	372726	10.34
10	05827-001	281868	6.18	475628	7.00	375811	10.34
11	05727-003	263936	6.18	415952	7.00	323534	10.34
12	05962-004	258538	6.18	417277	7.00	319976	10.34
13	05962-005	270840	6.18	479430	7.00	340398	10.34
14	05962-001	264424	6.18	441082	7.00	351704	10.34
15	05962-002	275193	6.18	471650	7.00	376323	10.34
16	05999-002	269870	6.18	477059	7.00	377706	10.34
17	05999-003	263606	6.18	453027	7.00	382935	10.34
18	05999-001	243126	6.18	420323	7.00	339224	10.34
19	LCSA130627a	304358	6.18	520501	7.00	441253	10.34
20	MS05827-001	296553	6.18	496298	7.00	408007	10.34
21	MSD05827-001	300137	6.18	498656	7.00	401095	10.34
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): G9719.D

Date Analyzed: 06/28/2013

Instrument ID: MSD_G

Time Analyzed: 9:12

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	248226		6.18		399149		7.00		347750		10.34	
	UPPER LIMIT	496452		6.68		798298		7.50		695500		10.84	
	LOWER LIMIT	124113		5.68		199574.5		6.50		173875		9.84	
	LAB SAMPLE ID												
01	BLKA130627a	230537		6.18		381134		7.00		313623		10.34	
02	05895-001	236510		6.18		393847		7.00		342805		10.34	
03	05870-002	234186		6.18		385131		7.00		325940		10.34	
04	05962-003	230204		6.18		371256		7.00		296074		10.34	
05	06017-006	225048		6.18		376626		7.00		320990		10.34	
06	06017-008	230892		6.18		382195		7.00		326884		10.34	
07	05903-001	223094		6.18		369729		7.00		311752		10.34	
08	05903-003	211337		6.18		352729		7.00		286520		10.34	
09	05903-004	223011		6.18		368952		7.00		311649		10.34	
10	05903-005	214722		6.18		320963		7.00		256184		10.34	
11	05905-001	191644		6.18		335665		7.00		244325		10.34	
12	05905-002	207983		6.18		306710		7.00		242277		10.34	
13	05906-001	206426		6.18		331417		7.00		249801		10.34	
14	05906-002	210701		6.18		340356		7.00		256303		10.34	
15	05906-003	203113		6.18		320122		7.00		243168		10.34	
16	05906-004	216436		6.18		359453		7.00		278911		10.34	
17	05903-006	222622		6.18		380623		7.00		307837		10.34	
18	05793-005	234881		6.18		378204		7.00		312056		10.34	
19	LCSA130628a	237191		6.18		396355		7.00		322127		10.34	
20	MS05903-004	243940		6.18		403653		7.00		335139		10.34	
21	MSD05903-004	254239		6.18		414065		7.00		362841		10.34	
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-28-13\
Data File : G9722.D
Acq On : 28 Jun 2013 10:40
Operator : Sylvia
Sample : GPEC_SW-WC_0,05895-001,A,5mL,100
Misc : GEI-MTCLR/GREEN_PO,06/20/13,06/21/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 28 15:18:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.18	168	236510	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.00	114	393847	50.00	UG	0.00
50) Chlorobenzene-d5	10.34	117	342805	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.51	65	200499	57.01	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 114.02%			
41) Toluene-d8	8.67	98	449494	52.82	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.64%			
59) Bromofluorobenzene	11.75	95	238768	50.31	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 100.62%			

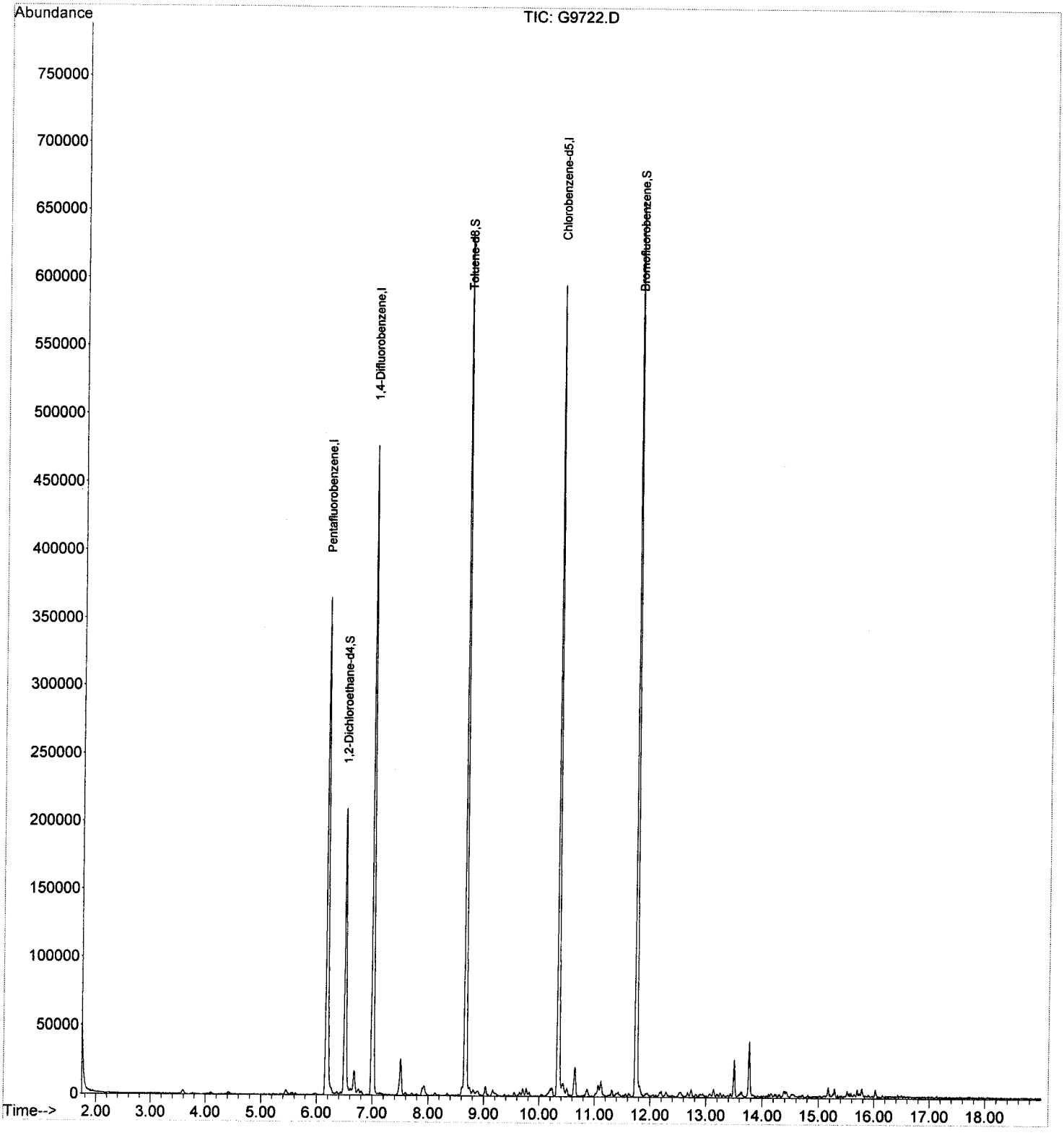
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-28-13\
Data File : G9722.D
Acq On : 28 Jun 2013 10:40
Operator : Sylvia
Sample : GPEC_SW-WC_0,05895-001,A,5mL,100
Misc : GEI-MTCLR/GREEN_PO,06/20/13,06/21/13,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 28 15:18:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA130627a
Client ID: BLKA130627a
Date Received: NA
Date Analyzed: 06/28/2013
Data file: G9721.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.340
Chloromethane	ND		1.00	0.490
Vinyl chloride	ND		1.00	0.350
Bromomethane	ND		1.00	0.480
Chloroethane	ND		1.00	0.380
Trichlorofluoromethane	ND		1.00	0.410
1,1-Dichloroethene	ND		1.00	0.380
Acetone	ND		2.00	0.760
Carbon disulfide	ND		1.00	0.490
Methylene chloride	ND		2.00	1.98
tert-Butyl alcohol (TBA)	ND		4.00	2.51
trans-1,2-Dichloroethene	ND		1.00	0.420
Methyl tert-butyl ether (MTBE)	ND		1.00	0.380
1,1-Dichloroethane	ND		1.00	0.370
cis-1,2-Dichloroethene	ND		1.00	0.380
2-Butanone (MEK)	ND		1.00	0.540
Bromochloromethane	ND		1.00	0.440
Chloroform	ND		1.00	0.360
1,1,1-Trichloroethane	ND		1.00	0.380
Carbon tetrachloride	ND		1.00	0.310
1,2-Dichloroethane (EDC)	ND		1.00	0.490
Benzene	ND		1.00	0.370
Trichloroethene	ND		1.00	0.490
1,2-Dichloropropane	ND		1.00	0.490
1,4-Dioxane	ND		200	33.2
Bromodichloromethane	ND		1.00	0.380
cis-1,3-Dichloropropene	ND		1.00	0.450
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.480

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA130627a
Client ID: BLKA130627a
Date Received: NA
Date Analyzed: 06/28/2013
Data file: G9721.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.390
trans-1,3-Dichloropropene	ND		1.00	0.510
1,1,2-Trichloroethane	ND		1.00	0.440
Tetrachloroethene	ND		1.00	0.440
2-Hexanone	ND		1.00	0.480
Dibromochloromethane	ND		1.00	0.450
1,2-Dibromoethane (EDB)	ND		1.00	0.300
Chlorobenzene	ND		1.00	0.450
Ethylbenzene	ND		1.00	0.390
Total Xylenes	ND		2.00	1.30
Styrene	ND		1.00	0.440
Bromoform	ND		1.00	0.500
Isopropylbenzene	ND		1.00	0.440
1,1,2,2-Tetrachloroethane	ND		1.00	0.370
1,3-Dichlorobenzene	ND		1.00	0.470
1,4-Dichlorobenzene	ND		1.00	0.470
1,2-Dichlorobenzene	ND		1.00	0.490
1,2-Dibromo-3-chloropropane	ND		1.00	0.500
1,2,4-Trichlorobenzene	ND		1.00	0.500
1,2,3-Trichlorobenzene	ND		1.00	0.420
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.480
Methyl acetate	ND		1.00	0.330
Cyclohexane	ND		2.00	0.260
Methylcyclohexane	ND		1.00	0.320
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.510

Total Target Compounds (53): 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-28-13\
Data File : G9721.D
Acq On : 28 Jun 2013 10:12
Operator : Sylvia
Sample : BLKA130627a,BLKA130627a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 15:16:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.18	168	230537	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.00	114	381134	50.00	UG	0.00
50) Chlorobenzene-d5	10.34	117	313623	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.51	65	194729	56.80	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 113.60%			
41) Toluene-d8	8.67	98	413907	50.26	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.52%			
59) Bromofluorobenzene	11.75	95	229127	52.77	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 105.54%			

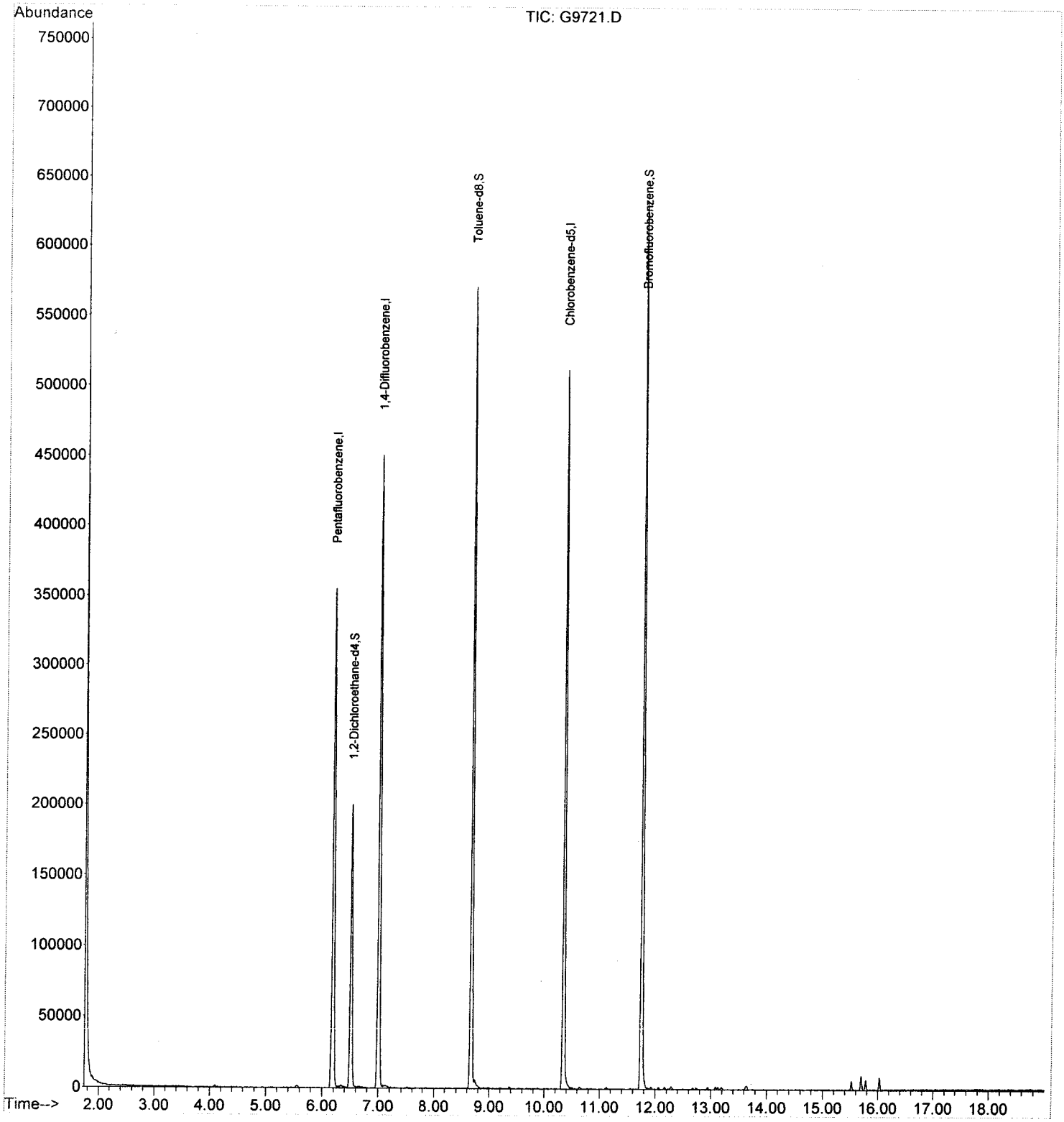
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-28-13\
Data File : G9721.D
Acq On : 28 Jun 2013 10:12
Operator : Sylvia
Sample : BLKA130627a,BLKA130627a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 15:16:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\G8062713.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 624
QLast Update : Fri Jun 28 08:12:26 2013
Response via : Initial Calibration



PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/26/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA130625-19	AQUEOUS	87		91		93		97	
FB	05768-009	AQUEOUS	93		96		100		115	
FB061913	05808-009	AQUEOUS	97		114		106		123	
MW-10	05876-001	AQUEOUS	71		95		74		104	
MW-4	05876-002	AQUEOUS	85		112		92		108	
MW-2	05876-003	AQUEOUS	65		99		73		116	
MW-9	05876-004	AQUEOUS	77		108		83		119	
FB	05876-005	AQUEOUS	88		106		96		101	
MW-1	05949-001	AQUEOUS	82		114		89		112	
FB	05949-002	AQUEOUS	81		98		88		106	
PCB	05949-001MS	AQUEOUS	56		99		63		106	
PCB	05949-001MSD	AQUEOUS	55		104		63		113	
PCB	LCSA130625-19	AQUEOUS	88		93		94		99	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/28/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA130627-11	AQUEOUS	136		125		150		149	
GPEC_SW-WC	05895-001	AQUEOUS	121		129		129		149	
FIELD_BLAN	05904-018	AQUEOUS	124		112		138		139	
PCB	LCSA130627-11	AQUEOUS	122		137		135		140	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSA130627-11

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	364.3	73	40 - 140
Aroclor-1260	500.0	0.0	393.5	79	40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

AQUEOUS PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: 05949-001

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	260.5	52	40 - 140
Aroclor-1260	500.0	0.0	403.1	81	40 - 140

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	257.8	52	0	50	40 - 140
Aroclor-1260	0.0	400.9	80	1	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: R1437.D

Instrument ID: GC-R

Date Extracted: 06/25/2013

Matrix: AQUEOUS

Date Analyzed: 06/26/2013

Time Analyzed: 18:59

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
FB	05768-009	06/26/2013	19:16
FB061913	05808-009	06/26/2013	19:33
MW-10	05876-001	06/26/2013	19:51
MW-4	05876-002	06/26/2013	20:08
MW-2	05876-003	06/26/2013	20:26
MW-9	05876-004	06/26/2013	20:43
FB	05876-005	06/26/2013	21:00
MW-1	05949-001	06/26/2013	21:18
FB	05949-002	06/26/2013	21:35
PCB	05949-001MS	06/26/2013	21:52
PCB	05949-001MSD	06/26/2013	22:09
PCB	LCSA130625-19	06/26/2013	22:44

PCB METHOD BLANK SUMMARY

Lab File ID:	Y9710.D	Instrument ID:	GC-Y
Date Extracted:	06/27/2013	Matrix:	AQUEOUS
Date Analyzed:	06/28/2013	Time Analyzed:	13:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC_SW-WC	05895-001	06/28/2013	14:16
FIELD_BLAN	05904-018	06/28/2013	14:33
PCB	LCSA130627-11	06/28/2013	14:51

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R1148.D R1147.D R1146.D R1145.D R1144.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.22	3.22	3.22	3.22	3.21	3.22	3.15	3.29
Aroclor-1016 {2}	4.05	4.05	4.05	4.05	4.05	4.05	3.98	4.12
Aroclor-1016 {3}	4.60	4.60	4.60	4.60	4.60	4.60	4.53	4.67
Aroclor-1016 {4}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {5}	5.50	5.50	5.50	5.50	5.50	5.50	5.43	5.57
Aroclor-1221			2.12				2.05	2.19
Aroclor-1221 {2}			3.01				2.94	3.08
Aroclor-1221 {3}			3.14				3.07	3.21
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.22				3.15	3.29
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.31				5.24	5.38
Aroclor-1232 {5}			5.50				5.43	5.57
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.99				4.92	5.06
Aroclor-1242 {3}			5.31				5.24	5.38
Aroclor-1242 {4}			6.01				5.94	6.08
Aroclor-1242 {5}			6.28				6.21	6.35
Aroclor-1248			4.45				4.37	4.53
Aroclor-1248 {2}			4.99				4.91	5.07
Aroclor-1248 {3}			5.31				5.23	5.39
Aroclor-1248 {4}			6.01				5.93	6.09
Aroclor-1248 {5}			6.28				6.20	6.36
Aroclor-1254			6.40				6.32	6.48
Aroclor-1254 {2}			6.84				6.76	6.92
Aroclor-1254 {3}			7.01				6.92	7.10
Aroclor-1254 {4}			7.45				7.36	7.54
Aroclor-1254 {5}			8.30				8.21	8.39
Aroclor-1260	8.30	8.30	8.30	8.29	8.30	8.30	7.40	9.20
Aroclor-1260 {2}	8.97	8.97	8.97	8.97	8.97	8.97	8.07	9.87
Aroclor-1260 {3}	9.45	9.45	9.45	9.45	9.45	9.45	8.55	10.35
Aroclor-1260 {4}	9.94	9.93	9.93	9.93	9.93	9.93	9.03	10.83
Aroclor-1260 {5}	11.00	11.00	11.00	11.00	11.00	11.00	10.10	11.90

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R1148.D R1147.D R1146.D R1145.D R1144.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	280105	244601	244281	231730	231211	246386	8.09
Aroclor-1016 {2}	373254	317048	323464	309028	310991	326757	8.14
Aroclor-1016 {3}	465046	403469	411287	397453	402904	416032	6.69
Aroclor-1016 {4}	219398	190146	191207	181280	180759	192558	8.19
Aroclor-1016 {5}	344496	301455	315337	306350	314389	316405	5.29
Aroclor-1221			108667				
Aroclor-1221 {2}			185273				
Aroclor-1221 {3}			110390				
Aroclor-1221 {4}			384966				
Aroclor-1221 {5}			80760				
Aroclor-1232			262470				
Aroclor-1232 {2}			147430				
Aroclor-1232 {3}			127600				
Aroclor-1232 {4}			133784				
Aroclor-1232 {5}			169202				
Aroclor-1242			257073				
Aroclor-1242 {2}			155859				
Aroclor-1242 {3}			216418				
Aroclor-1242 {4}			313983				
Aroclor-1242 {5}			269331				
Aroclor-1248			543810				
Aroclor-1248 {2}			303069				
Aroclor-1248 {3}			390517				
Aroclor-1248 {4}			602314				
Aroclor-1248 {5}			453751				
Aroclor-1254			633039				
Aroclor-1254 {2}			402315				
Aroclor-1254 {3}			738999				
Aroclor-1254 {4}			775676				
Aroclor-1254 {5}			667821				
Aroclor-1260	812750	731508	787155	798449	835402	793053	4.90
Aroclor-1260 {2}	388051	343146	363852	367229	384533	369362	4.88
Aroclor-1260 {3}	881795	818402	889506	890149	941115	884193	4.94
Aroclor-1260 {4}	401124	407906	452708	470380	501686	446761	9.50
Aroclor-1260 {5}	172444	168560	182597	186682	199729	182002	6.78
					Average %RSD		6.74

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R1148.C R1147.C R1146.C R1145.C R1144.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.41	3.41	3.41	3.41	3.41	3.41	3.34	3.48
Aroclor-1016 {2}	3.97	3.97	3.98	3.98	3.98	3.98	3.91	4.05
Aroclor-1016 {3}	4.70	4.70	4.70	4.70	4.70	4.70	4.63	4.77
Aroclor-1016 {4}	4.90	4.90	4.90	4.90	4.90	4.90	4.83	4.97
Aroclor-1016 {5}	5.07	5.07	5.07	5.07	5.07	5.07	5.00	5.14
Aroclor-1221			2.20				2.13	2.27
Aroclor-1221 {2}			3.11				3.04	3.18
Aroclor-1221 {3}			3.33				3.26	3.40
Aroclor-1221 {4}			3.42				3.35	3.49
Aroclor-1221 {5}			4.71				4.64	4.78
Aroclor-1232			3.41				3.34	3.48
Aroclor-1232 {2}			4.34				4.27	4.41
Aroclor-1232 {3}			4.90				4.83	4.97
Aroclor-1232 {4}			5.07				5.00	5.14
Aroclor-1232 {5}			5.65				5.58	5.72
Aroclor-1242			4.34				4.27	4.41
Aroclor-1242 {2}			5.07				5.00	5.14
Aroclor-1242 {3}			5.65				5.58	5.72
Aroclor-1242 {4}			5.80				5.73	5.87
Aroclor-1242 {5}			6.34				6.27	6.41
Aroclor-1248			4.69				4.61	4.77
Aroclor-1248 {2}			5.26				5.18	5.34
Aroclor-1248 {3}			5.65				5.57	5.73
Aroclor-1248 {4}			5.80				5.72	5.88
Aroclor-1248 {5}			6.14				6.06	6.22
Aroclor-1254			6.63				6.55	6.71
Aroclor-1254 {2}			7.21				7.13	7.29
Aroclor-1254 {3}			7.64				7.55	7.73
Aroclor-1254 {4}			7.82				7.73	7.91
Aroclor-1254 {5}			8.63				8.54	8.72
Aroclor-1260	7.39	7.39	7.39	7.39	7.39	7.39	6.49	8.29
Aroclor-1260 {2}	7.64	7.64	7.64	7.64	7.64	7.64	6.74	8.54
Aroclor-1260 {3}	9.22	9.22	9.22	9.22	9.22	9.22	8.32	10.12
Aroclor-1260 {4}	9.73	9.73	9.73	9.73	9.73	9.73	8.83	10.63
Aroclor-1260 {5}	10.32	10.32	10.32	10.32	10.32	10.32	9.42	11.22

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R1148.C R1147.C R1146.C R1145.C R1144.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	437370	353323	313842	295930	292487	338590	17.80
Aroclor-1016 {2}	861819	670201	604631	569376	566667	654539	18.82
Aroclor-1016 {3}	1759875	1380511	1367528	1317090	1330645	1431130	12.97
Aroclor-1016 {4}	775839	636424	567707	539228	544052	612650	16.18
Aroclor-1016 {5}	584458	478288	442130	423053	427293	471044	14.23
Aroclor-1221			142951				
Aroclor-1221 {2}			217627				
Aroclor-1221 {3}			134097				
Aroclor-1221 {4}			503146				
Aroclor-1221 {5}			90995				
Aroclor-1232			340167				
Aroclor-1232 {2}			128511				
Aroclor-1232 {3}			263790				
Aroclor-1232 {4}			203072				
Aroclor-1232 {5}			276734				
Aroclor-1242			215767				
Aroclor-1242 {2}			349460				
Aroclor-1242 {3}			449166				
Aroclor-1242 {4}			363819				
Aroclor-1242 {5}			707409				
Aroclor-1248			709317				
Aroclor-1248 {2}			1040455				
Aroclor-1248 {3}			738327				
Aroclor-1248 {4}			667076				
Aroclor-1248 {5}			367537				
Aroclor-1254			876195				
Aroclor-1254 {2}			681868				
Aroclor-1254 {3}			442161				
Aroclor-1254 {4}			659706				
Aroclor-1254 {5}			909765				
Aroclor-1260	548340	507839	455991	442758	457896	482565	9.19
Aroclor-1260 {2}	859256	732091	665009	645917	663170	713089	12.35
Aroclor-1260 {3}	700882	593927	549444	548694	577003	593990	10.56
Aroclor-1260 {4}	1275954	1192759	1157141	1178400	1248206	1210492	4.11
Aroclor-1260 {5}	853105	922418	830534	847904	906192	872031	4.58
					Average %RSD		12.08

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R1148.D R1147.D R1146.D R1145.D R1144.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.67				8.55	8.79
Aroclor-1262 {2}			9.45				9.33	9.57
Aroclor-1262 {3}			10.08				9.96	10.20
Aroclor-1262 {4}			10.17				10.05	10.29
Aroclor-1262 {5}			11.00				10.88	11.12
Aroclor-1268			10.08				9.96	10.20
Aroclor-1268 {2}			10.17				10.05	10.29
Aroclor-1268 {3}			10.64				10.52	10.76
Aroclor-1268 {4}			10.77				10.65	10.89
Aroclor-1268 {5}			11.61				11.49	11.73

GC Column (2nd): DB-1701P

Data File: R1148.C R1147.C R1146.C R1145.C R1144.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.22				9.10	9.34
Aroclor-1262 {2}			9.73				9.61	9.85
Aroclor-1262 {3}			10.22				10.10	10.34
Aroclor-1262 {4}			10.31				10.19	10.43
Aroclor-1262 {5}			10.91				10.79	11.03
Aroclor-1268			10.22				10.10	10.34
Aroclor-1268 {2}			10.30				10.18	10.42
Aroclor-1268 {3}			10.55				10.43	10.67
Aroclor-1268 {4}			10.70				10.58	10.82
Aroclor-1268 {5}			11.78				11.66	11.90

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/14/2013 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R1148.D R1147.D R1146.D R1145.D R1144.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			261021				
Aroclor-1262 {2}			1048057				
Aroclor-1262 {3}			405048				
Aroclor-1262 {4}			438154				
Aroclor-1262 {5}			343740				
Aroclor-1268			1098863				
Aroclor-1268 {2}			1104923				
Aroclor-1268 {3}			873583				
Aroclor-1268 {4}			223997				
Aroclor-1268 {5}			2692372				

GC Column (2nd): DB-1701P

Data File: R1148.C R1147.C R1146.C R1145.C R1144.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			652314				
Aroclor-1262 {2}			1404539				
Aroclor-1262 {3}			467562				
Aroclor-1262 {4}			957426				
Aroclor-1262 {5}			168870				
Aroclor-1268			1369731				
Aroclor-1268 {2}			1391342				
Aroclor-1268 {3}			1119383				
Aroclor-1268 {4}			290182				
Aroclor-1268 {5}			3386568				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/26/2013 **Instrument ID:** GC-R

Data File: R1436.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	246386	213983	13.15
Aroclor-1016 {2}	4.05	3.98	4.12	326757	286358	12.36
Aroclor-1016 {3}	4.61	4.53	4.67	416032	374601	9.96
Aroclor-1016 {4}	5.11	5.04	5.18	192558	179444	6.81
Aroclor-1016 {5}	5.51	5.43	5.57	316405	293782	7.15
Aroclor-1260	8.30	7.40	9.20	793053	821927	3.64
Aroclor-1260 {2}	8.98	8.07	9.87	369362	380585	3.04
Aroclor-1260 {3}	9.46	8.55	10.35	884193	940903	6.41
Aroclor-1260 {4}	9.94	9.03	10.83	446761	477694	6.92
Aroclor-1260 {5}	11.01	10.10	11.90	182002	186256	2.34

Data File: R1436.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.41	3.34	3.48	338590	301203	11.04
Aroclor-1016 {2}	3.98	3.91	4.05	654539	580158	11.36
Aroclor-1016 {3}	4.70	4.63	4.77	1431130	1336986	6.58
Aroclor-1016 {4}	4.90	4.83	4.97	612650	557353	9.03
Aroclor-1016 {5}	5.07	5.00	5.14	471044	432163	8.25
Aroclor-1260	7.39	6.49	8.29	482565	483318	0.16
Aroclor-1260 {2}	7.64	6.74	8.54	713089	706190	0.97
Aroclor-1260 {3}	9.23	8.32	10.12	593990	613132	3.22
Aroclor-1260 {4}	9.73	8.83	10.63	1210492	1277170	5.51
Aroclor-1260 {5}	10.32	9.42	11.22	872031	895978	2.75

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/26/2013 **Instrument ID:** GC-R

Data File: R1450.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	246386	213317	13.42
Aroclor-1016 {2}	4.05	3.98	4.12	326757	285516	12.62
Aroclor-1016 {3}	4.61	4.53	4.67	416032	374668	9.94
Aroclor-1016 {4}	5.12	5.04	5.18	192558	179857	6.60
Aroclor-1016 {5}	5.51	5.43	5.57	316405	294485	6.93
Aroclor-1260	8.30	7.40	9.20	793053	837121	5.56
Aroclor-1260 {2}	8.98	8.07	9.87	369362	387939	5.03
Aroclor-1260 {3}	9.46	8.55	10.35	884193	964212	9.05
Aroclor-1260 {4}	9.94	9.03	10.83	446761	492002	10.13
Aroclor-1260 {5}	11.01	10.10	11.90	182002	209528	15.12

Data File: R1450.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.41	3.34	3.48	338590	301725	10.89
Aroclor-1016 {2}	3.98	3.91	4.05	654539	582935	10.94
Aroclor-1016 {3}	4.70	4.63	4.77	1431130	1345225	6.00
Aroclor-1016 {4}	4.90	4.83	4.97	612650	561748	8.31
Aroclor-1016 {5}	5.07	5.00	5.14	471044	433371	8.00
Aroclor-1260	7.39	6.49	8.29	482565	496437	2.87
Aroclor-1260 {2}	7.64	6.74	8.54	713089	729853	2.35
Aroclor-1260 {3}	9.22	8.32	10.12	593990	641026	7.92
Aroclor-1260 {4}	9.73	8.83	10.63	1210492	1350111	11.53
Aroclor-1260 {5}	10.32	9.42	11.22	872031	951206	9.08

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013

Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y9386.D Y9385.D Y9384.D Y9383.D Y9382.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.22	3.22	3.23	3.23	3.23	3.22	3.15	3.29
Aroclor-1016 {2}	4.05	4.04	4.05	4.05	4.05	4.05	3.98	4.12
Aroclor-1016 {3}	4.59	4.59	4.60	4.60	4.59	4.59	4.52	4.66
Aroclor-1016 {4}	5.10	5.09	5.10	5.10	5.10	5.10	5.03	5.17
Aroclor-1016 {5}	5.49	5.48	5.49	5.49	5.49	5.49	5.42	5.56
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.02				2.95	3.09
Aroclor-1221 {3}			3.15				3.08	3.22
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.23				3.16	3.30
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			5.49				5.42	5.56
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.98				4.91	5.05
Aroclor-1242 {3}			5.30				5.23	5.37
Aroclor-1242 {4}			5.99				5.92	6.06
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.44				4.36	4.52
Aroclor-1248 {2}			4.98				4.90	5.06
Aroclor-1248 {3}			5.30				5.22	5.38
Aroclor-1248 {4}			5.99				5.91	6.07
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.38				6.30	6.46
Aroclor-1254 {2}			6.82				6.74	6.90
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.41				7.32	7.50
Aroclor-1254 {5}			8.26				8.17	8.35
Aroclor-1260	8.25	8.25	8.26	8.25	8.26	8.25	7.35	9.15
Aroclor-1260 {2}	8.93	8.92	8.93	8.93	8.93	8.93	8.03	9.83
Aroclor-1260 {3}	9.40	9.40	9.40	9.40	9.40	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.94	10.94	10.94	10.94	10.94	10.94	10.04	11.84

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y9386.D Y9385.D Y9384.D Y9383.D Y9382.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	181212	139113	152233	145815	141983	152071	11.19
Aroclor-1016 {2}	252778	190651	209460	200749	196406	210009	11.84
Aroclor-1016 {3}	332115	252064	275634	263386	257741	276188	11.75
Aroclor-1016 {4}	161866	125259	134687	125961	119546	133464	12.57
Aroclor-1016 {5}	258140	203666	230832	217094	210424	224031	9.62
Aroclor-1221			64247				
Aroclor-1221 {2}			91788				
Aroclor-1221 {3}			66572				
Aroclor-1221 {4}			213879				
Aroclor-1221 {5}			55496				
Aroclor-1232			149019				
Aroclor-1232 {2}			92276				
Aroclor-1232 {3}			85055				
Aroclor-1232 {4}			98775				
Aroclor-1232 {5}			120352				
Aroclor-1242			154494				
Aroclor-1242 {2}			111442				
Aroclor-1242 {3}			150952				
Aroclor-1242 {4}			215065				
Aroclor-1242 {5}			198627				
Aroclor-1248			303290				
Aroclor-1248 {2}			189942				
Aroclor-1248 {3}			239915				
Aroclor-1248 {4}			359991				
Aroclor-1248 {5}			297831				
Aroclor-1254			359793				
Aroclor-1254 {2}			292172				
Aroclor-1254 {3}			516542				
Aroclor-1254 {4}			587647				
Aroclor-1254 {5}			532297				
Aroclor-1260	879394	639259	699722	647286	625799	698292	15.04
Aroclor-1260 {2}	411350	326158	351406	320680	307239	343367	12.01
Aroclor-1260 {3}	1057030	753549	836285	768389	737780	830607	15.90
Aroclor-1260 {4}	574049	413777	473156	432881	413299	461432	14.63
Aroclor-1260 {5}	210141	185348	224591	208332	189701	203622	7.89
					Average %RSD		12.24

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013

Instrument ID: GC-Y

GC Column (2nd): DB-1701P

Data File: Y9386.C Y9385.C Y9384.C Y9383.C Y9382.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.79	3.79	3.78	3.78	3.78	3.79	3.72	3.86
Aroclor-1016 {2}	4.39	4.39	4.38	4.38	4.38	4.39	4.32	4.46
Aroclor-1016 {3}	5.14	5.14	5.13	5.13	5.13	5.14	5.07	5.21
Aroclor-1016 {4}	5.35	5.35	5.34	5.34	5.34	5.35	5.28	5.42
Aroclor-1016 {5}	5.52	5.53	5.52	5.52	5.52	5.52	5.45	5.59
Aroclor-1221			2.46				2.39	2.53
Aroclor-1221 {2}			3.46				3.39	3.53
Aroclor-1221 {3}			3.70				3.63	3.77
Aroclor-1221 {4}			3.79				3.72	3.86
Aroclor-1221 {5}			5.14				5.07	5.21
Aroclor-1232			3.78				3.71	3.85
Aroclor-1232 {2}			4.77				4.70	4.84
Aroclor-1232 {3}			5.34				5.27	5.41
Aroclor-1232 {4}			5.52				5.45	5.59
Aroclor-1232 {5}			6.12				6.05	6.19
Aroclor-1242			4.77				4.70	4.84
Aroclor-1242 {2}			5.52				5.45	5.59
Aroclor-1242 {3}			6.12				6.05	6.19
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.81				6.74	6.88
Aroclor-1248			5.13				5.05	5.21
Aroclor-1248 {2}			5.72				5.64	5.80
Aroclor-1248 {3}			6.12				6.04	6.20
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.62				6.54	6.70
Aroclor-1254			7.11				7.03	7.19
Aroclor-1254 {2}			7.70				7.62	7.78
Aroclor-1254 {3}			8.31				8.22	8.40
Aroclor-1254 {4}			8.54				8.45	8.63
Aroclor-1254 {5}			9.13				9.04	9.22
Aroclor-1260	7.89	7.89	7.88	7.88	7.88	7.89	6.99	8.79
Aroclor-1260 {2}	8.14	8.15	8.14	8.14	8.14	8.14	7.24	9.04
Aroclor-1260 {3}	9.73	9.74	9.73	9.73	9.73	9.73	8.83	10.63
Aroclor-1260 {4}	10.24	10.24	10.24	10.24	10.24	10.24	9.34	11.14
Aroclor-1260 {5}	10.83	10.83	10.83	10.83	10.83	10.83	9.93	11.73

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y9386.C Y9385.C Y9384.C Y9383.C Y9382.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	313630	241233	288496	283471	277369	280840	9.29
Aroclor-1016 {2}	668745	490540	576629	558898	545267	568016	11.42
Aroclor-1016 {3}	1584434	1098966	1332646	1281365	1259117	1311306	13.41
Aroclor-1016 {4}	590904	482717	584353	559775	553093	554168	7.76
Aroclor-1016 {5}	463911	374029	453416	436485	432579	432084	8.07
Aroclor-1221			119903				
Aroclor-1221 {2}			171993				
Aroclor-1221 {3}			116813				
Aroclor-1221 {4}			420548				
Aroclor-1221 {5}			83488				
Aroclor-1232			284980				
Aroclor-1232 {2}			107506				
Aroclor-1232 {3}			249118				
Aroclor-1232 {4}			194451				
Aroclor-1232 {5}			273836				
Aroclor-1242			184438				
Aroclor-1242 {2}			333917				
Aroclor-1242 {3}			442298				
Aroclor-1242 {4}			373574				
Aroclor-1242 {5}			750406				
Aroclor-1248			605977				
Aroclor-1248 {2}			911368				
Aroclor-1248 {3}			662496				
Aroclor-1248 {4}			570341				
Aroclor-1248 {5}			338303				
Aroclor-1254			935904				
Aroclor-1254 {2}			730637				
Aroclor-1254 {3}			765187				
Aroclor-1254 {4}			425853				
Aroclor-1254 {5}			1061495				
Aroclor-1260	543720	482284	540568	505370	495620	513512	5.34
Aroclor-1260 {2}	897230	655996	776687	722082	704204	751240	12.29
Aroclor-1260 {3}	729422	591826	722477	672018	650570	673263	8.38
Aroclor-1260 {4}	1505518	1248254	1563449	1461286	1444780	1444657	8.24
Aroclor-1260 {5}	1029570	904753	1180553	1106293	1090470	1062328	9.71
					Average %RSD		9.39

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y9386.D Y9385.D Y9384.D Y9383.D Y9382.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.55				8.43	8.67
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.94				10.82	11.06
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.11				9.99	10.23
Aroclor-1268 {3}			10.58				10.46	10.70
Aroclor-1268 {4}			11.54				11.42	11.66
Aroclor-1268 {5}			12.03				11.91	12.15

GC Column (2nd): DB-1701P

Data File: Y9386.C Y9385.C Y9384.C Y9383.C Y9382.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.73				9.61	9.85
Aroclor-1262 {2}			10.24				10.12	10.36
Aroclor-1262 {3}			10.73				10.61	10.85
Aroclor-1262 {4}			10.82				10.70	10.94
Aroclor-1262 {5}			11.42				11.30	11.54
Aroclor-1268			10.73				10.61	10.85
Aroclor-1268 {2}			10.82				10.70	10.94
Aroclor-1268 {3}			11.07				10.95	11.19
Aroclor-1268 {4}			12.29				12.17	12.41
Aroclor-1268 {5}			12.52				12.40	12.64

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/18/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y9386.D Y9385.D Y9384.D Y9383.D Y9382.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			465662				
Aroclor-1262 {2}			861791				
Aroclor-1262 {3}			373657				
Aroclor-1262 {4}			390116				
Aroclor-1262 {5}			317059				
Aroclor-1268			949842				
Aroclor-1268 {2}			911190				
Aroclor-1268 {3}			759207				
Aroclor-1268 {4}			2263617				
Aroclor-1268 {5}			1347403				

GC Column (2nd): DB-1701P

Data File: Y9386.C Y9385.C Y9384.C Y9383.C Y9382.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			795206				
Aroclor-1262 {2}			1743275				
Aroclor-1262 {3}			652722				
Aroclor-1262 {4}			1240787				
Aroclor-1262 {5}			240503				
Aroclor-1268			1861796				
Aroclor-1268 {2}			1873006				
Aroclor-1268 {3}			1565087				
Aroclor-1268 {4}			4942415				
Aroclor-1268 {5}			2902375				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/28/2013 **Instrument ID:** GC-Y

Data File: Y9709.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.23	3.15	3.29	152071	125868	17.23
Aroclor-1016 {2}	4.05	3.98	4.12	210009	174188	17.06
Aroclor-1016 {3}	4.59	4.52	4.66	276188	229557	16.88
Aroclor-1016 {4}	5.10	5.03	5.17	133464	113132	15.23
Aroclor-1016 {5}	5.49	5.42	5.56	224031	192574	14.04
Aroclor-1260	8.25	7.35	9.15	698292	572938	17.95
Aroclor-1260 {2}	8.92	8.03	9.83	343367	286625	16.53
Aroclor-1260 {3}	9.40	8.50	10.30	830607	675279	18.70
Aroclor-1260 {4}	9.88	8.98	10.78	461432	374463	18.85
Aroclor-1260 {5}	10.93	10.04	11.84	203622	170225	16.40

Data File: Y9709.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.78	3.72	3.86	280840	290365	3.39
Aroclor-1016 {2}	4.38	4.32	4.46	568016	572964	0.87
Aroclor-1016 {3}	5.13	5.07	5.21	1311306	1303848	0.57
Aroclor-1016 {4}	5.34	5.28	5.42	554168	573271	3.45
Aroclor-1016 {5}	5.51	5.45	5.59	432084	442404	2.39
Aroclor-1260	7.88	6.99	8.79	513512	531578	3.52
Aroclor-1260 {2}	8.13	7.24	9.04	751240	767673	2.19
Aroclor-1260 {3}	9.72	8.83	10.63	673263	702800	4.39
Aroclor-1260 {4}	10.23	9.34	11.14	1444657	1560630	8.03
Aroclor-1260 {5}	10.82	9.93	11.73	1062328	1123530	5.76

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/28/2013 **Instrument ID:** GC-Y

Data File: Y9714.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	152071	127391	16.23
Aroclor-1016 {2}	4.04	3.98	4.12	210009	177022	15.71
Aroclor-1016 {3}	4.59	4.52	4.66	276188	234743	15.01
Aroclor-1016 {4}	5.09	5.03	5.17	133464	116004	13.08
Aroclor-1016 {5}	5.49	5.42	5.56	224031	198533	11.38
Aroclor-1260	8.25	7.35	9.15	698292	597495	14.43
Aroclor-1260 {2}	8.92	8.03	9.83	343367	300566	12.47
Aroclor-1260 {3}	9.40	8.50	10.30	830607	699785	15.75
Aroclor-1260 {4}	9.87	8.98	10.78	461432	395944	14.19
Aroclor-1260 {5}	10.93	10.04	11.84	203622	203681	0.03

Data File: Y9714.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.78	3.72	3.86	280840	291671	3.86
Aroclor-1016 {2}	4.38	4.32	4.46	568016	582361	2.53
Aroclor-1016 {3}	5.13	5.07	5.21	1311306	1341935	2.34
Aroclor-1016 {4}	5.34	5.28	5.42	554168	590299	6.52
Aroclor-1016 {5}	5.52	5.45	5.59	432084	456764	5.71
Aroclor-1260	7.88	6.99	8.79	513512	557066	8.48
Aroclor-1260 {2}	8.14	7.24	9.04	751240	804692	7.12
Aroclor-1260 {3}	9.73	8.83	10.63	673263	742191	10.24
Aroclor-1260 {4}	10.23	9.34	11.14	1444657	1644763	13.85
Aroclor-1260 {5}	10.82	9.93	11.73	1062328	1202609	13.21

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.76 **DCB 1** 12.10 **TCMX 2** 2.60 **DCB 2** 12.00

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA130625-19	06/26/2013	18:59	2.76		12.10		2.60		12.00	
FB	05768-009	06/26/2013	19:16	2.76		12.10		2.60		12.00	
FB061913	05808-009	06/26/2013	19:33	2.76		12.10		2.60		12.00	
MW-10	05876-001	06/26/2013	19:51	2.76		12.10		2.60		12.00	
MW-4	05876-002	06/26/2013	20:08	2.76		12.10		2.60		12.00	
MW-2	05876-003	06/26/2013	20:26	2.76		12.10		2.60		12.00	
MW-9	05876-004	06/26/2013	20:43	2.76		12.10		2.60		12.00	
FB	05876-005	06/26/2013	21:00	2.76		12.10		2.60		12.00	
MW-1	05949-001	06/26/2013	21:18	2.76		12.10		2.60		12.00	
FB	05949-002	06/26/2013	21:35	2.76		12.10		2.60		12.00	
PCB	05949-001MS	06/26/2013	21:52	2.76		12.10		2.60		12.00	
PCB	05949-001MSD	06/26/2013	22:09	2.76		12.10		2.60		12.00	
PCB	LCSA130625-19	06/26/2013	22:44	2.76		12.10		2.60		12.00	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.03 **TCMX 2** 2.90 **DCB 2** 12.51

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA130627-11	06/28/2013	13:58	2.77		12.03		2.90		12.51	
GPEC_SW-WC	05895-001	06/28/2013	14:16	2.77		12.03		2.90		12.51	
FIELD_BLAN	05904-018	06/28/2013	14:33	2.77		12.02		2.90		12.51	
PCB	LCSA130627-11	06/28/2013	14:51	2.77		12.03		2.90		12.51	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-28-13\
Data File : Y9711.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 28 Jun 2013 14:16
Operator : NG
Sample : GPEC_SW-WC,05895-001,A,1000ml,100,06/27/13,1
Misc : 130627-11,06/20/13,06/21/13,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 28 14:52:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0618.M
Quant Title :
QLast Update : Tue Jun 18 16:14:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	1059.3E6	2112.4E6	240.941	258.614
Spiked Amount 200.000			Recovery	=	120.47%	129.31%
2) S DCB	12.03	12.51	493.6E6	1119.2E6	257.966	298.452m
Spiked Amount 200.000			Recovery	=	128.98%	149.23%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.45	5.13	56686661	109.9E6	186.906	181.307
24) L6 Aroclor-1248 {2}	4.98	5.71	24346146	123.7E6	128.177	135.690
25) L6 Aroclor-1248 {3}	5.29	6.11	31426371	89084460	130.989	134.468
26) L6 Aroclor-1248 {4}	6.01	6.26	63326587	61245801	175.912	107.385 #
27) L6 Aroclor-1248 {5}	6.26	6.61	9980784	17451653	33.512	51.586 #
Sum Aroclor-1248			185.8E6	401.3E6	655.495	610.435
Average Aroclor-1248					131.099	122.087
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

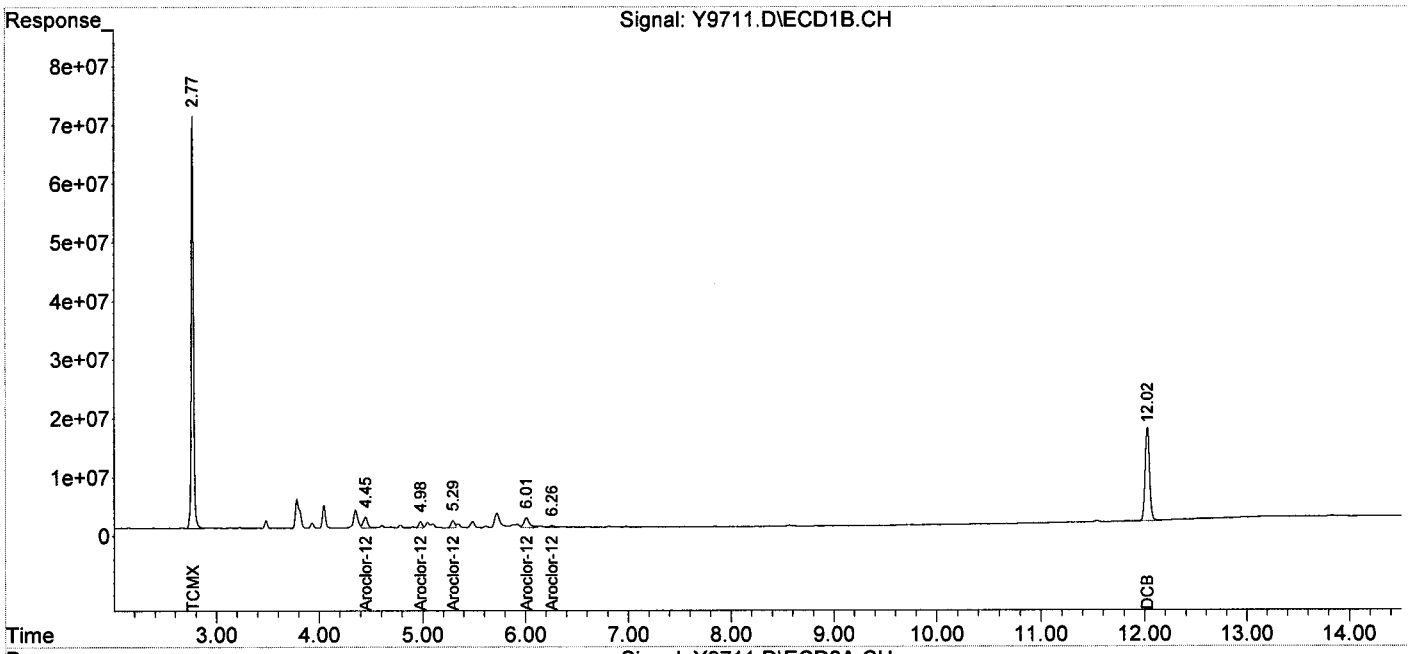
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

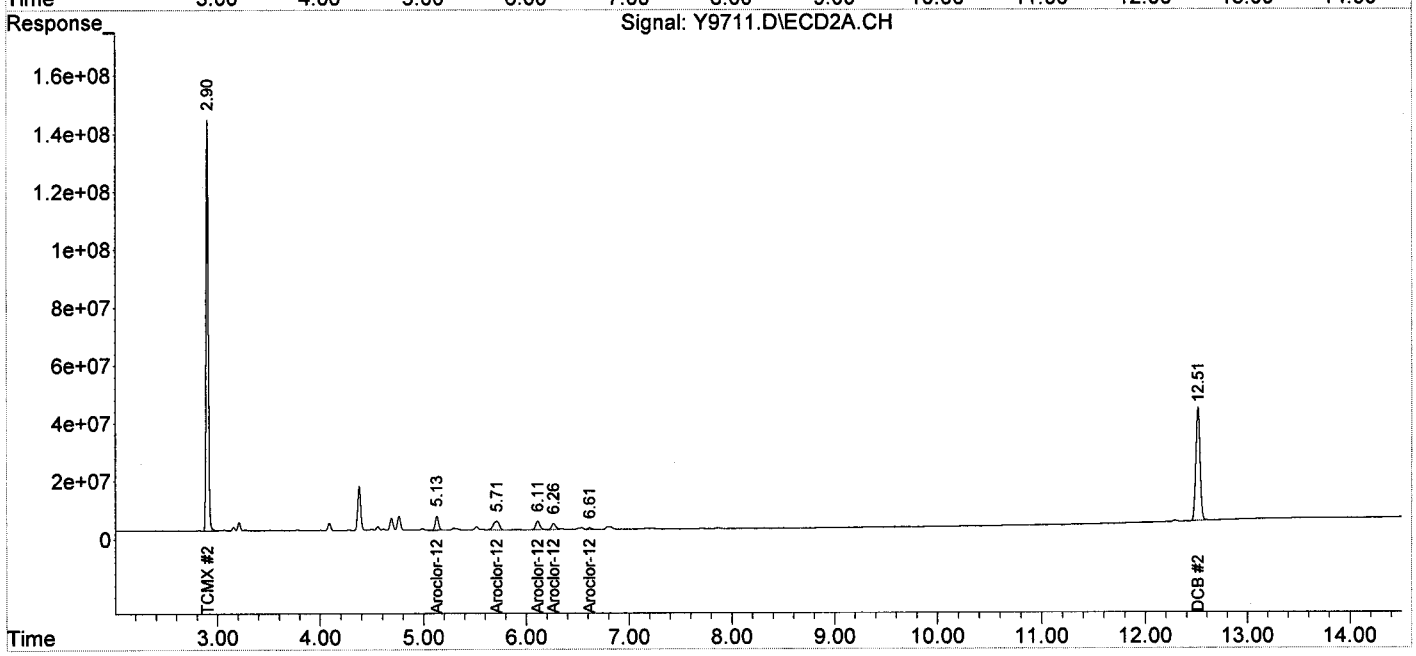
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-28-13\
Data File : Y9711.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 28 Jun 2013 14:16
Operator : NG
Sample : GPEC_SW-WC,05895-001,A,1000ml,100,06/27/13,1
Misc : 130627-11,06/20/13,06/21/13,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 28 14:52:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0618.M
Quant Title :
QLast Update : Tue Jun 18 16:14:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA130625-19
Client ID: PCB
Date Received: NA
Date Extracted: 06/25/2013
Date Analyzed: 06/26/2013
Data file: R1437.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA130627-11
Client ID: PCB
Date Received: NA
Date Extracted: 06/27/2013
Date Analyzed: 06/28/2013
Data file: Y9710.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-28-13\
Data File : Y9710.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 28 Jun 2013 13:58
Operator : NG
Sample : PCB,BLKA130627-11,A,1000ml,100,06/27/13,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 28 14:16:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0618.M
Quant Title :
QLast Update : Tue Jun 18 16:14:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	1192.1E6	2445.6E6	271.149	299.399
Spiked Amount 200.000			Recovery	=	135.57%	149.70%
2) S DCB	12.03	12.51	480.0E6	1114.1E6	250.877	297.084m
Spiked Amount 200.000			Recovery	=	125.44%	148.54%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

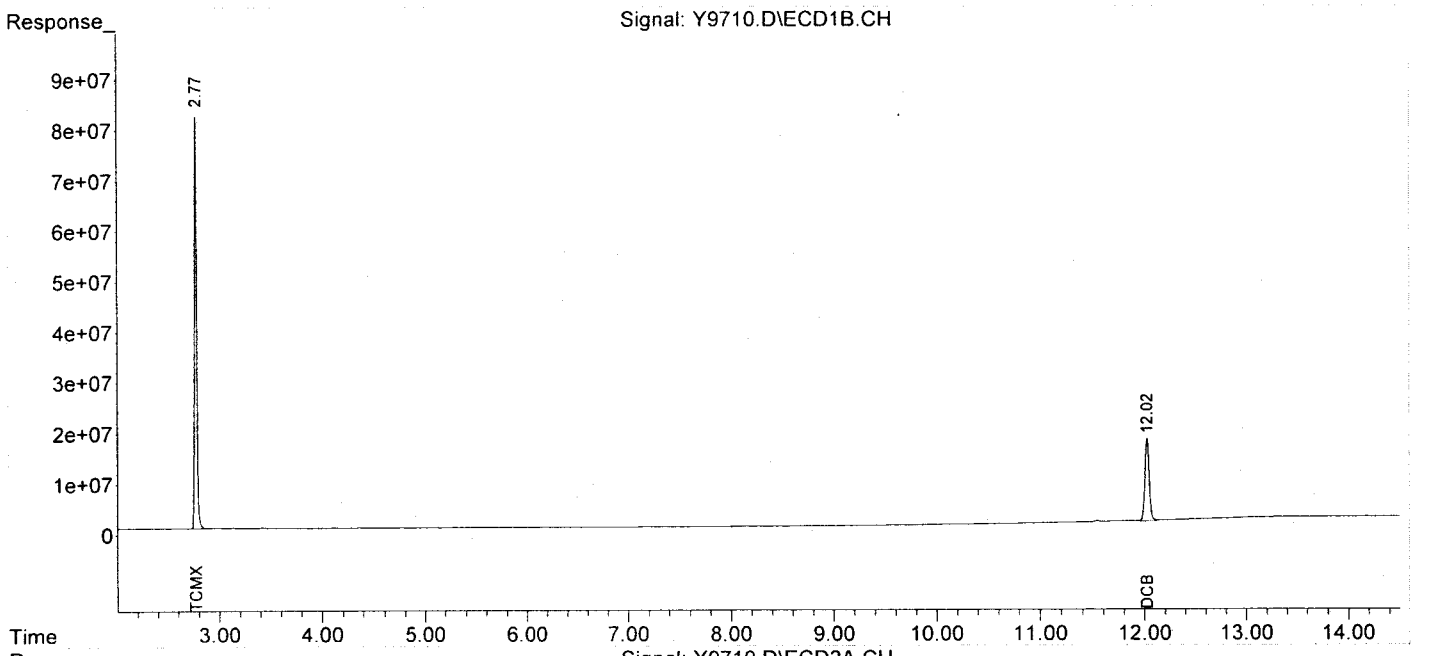
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

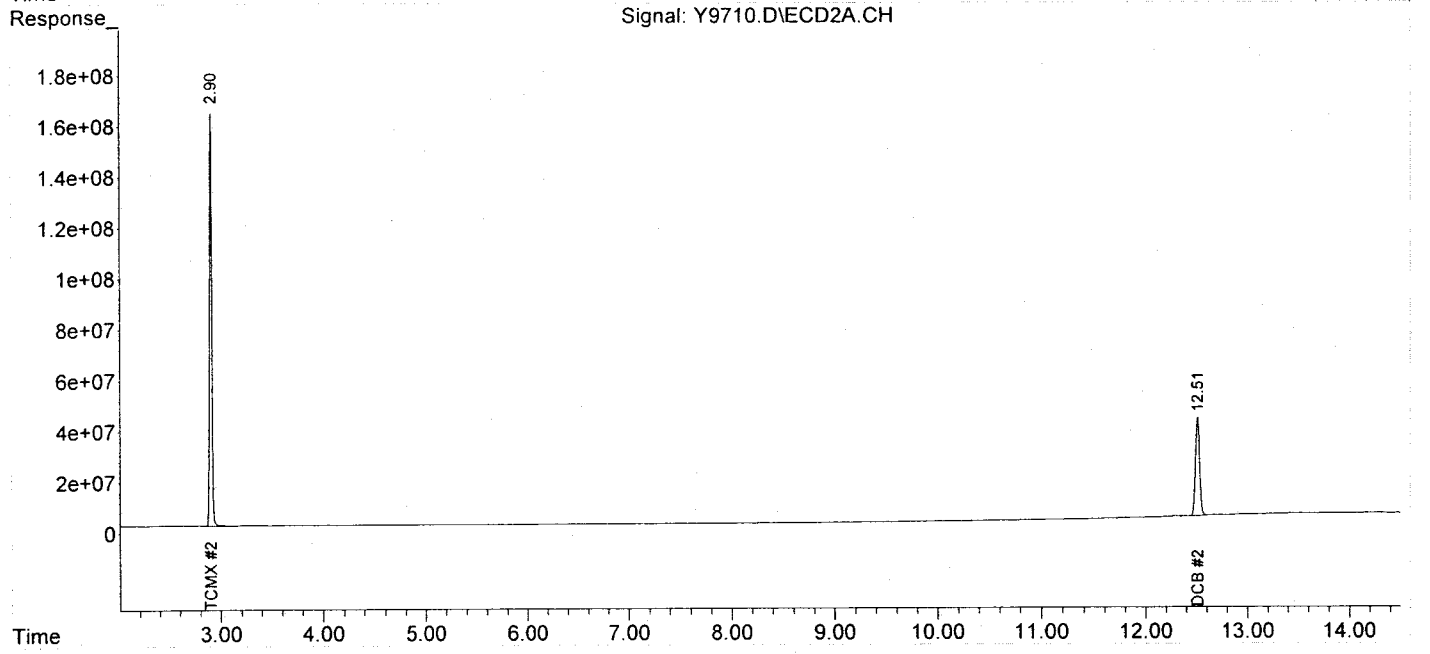
E13-05895 0074

Data Path : C:\MSDCHEM\1\DATA\06-28-13\
Data File : Y9710.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 28 Jun 2013 13:58
Operator : NG
Sample : PCB,BLKA130627-11,A,1000ml,100,06/27/13,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 28 14:16:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0618.M
Quant Title :
QLast Update : Tue Jun 18 16:14:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 277

SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898

Matrix: Aqueous Method: 6020 Units: ppb (ug/L)

			6/25/13 19:23		6/25/13 19:47		6/25/13 20:34		6/25/13 21:20	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	53.7	107	54.1	108	50.9	102	50.4	101
Antimony	0.250	50.0	52.5	105	52.9	106	53.0	106	52.5	105
Arsenic	0.250	50.0	52.1	104	54.7	109	51.4	103	50.9	102
Barium	2.50	50.0	50.7	101	51.0	102	51.8	104	52.1	104
Beryllium	0.250	50.0	48.2	96.4	49.1	98.2	49.7	99.4	49.3	98.6
Cadmium	0.125	50.0	50.0	100	50.4	101	50.9	102	50.3	101
Calcium	25.0	500	526	105	541	108	518	104	537	107
Chromium	0.500	50.0	50.6	101	54.0	108	50.9	102	50.2	100
Cobalt	0.500	50.0	51.2	102	54.5	109	50.6	101	51.1	102
Copper	1.00	50.0	52.0	104	54.7	109	52.0	104	51.7	103
Iron	12.5	500	509	102	544	109	497	99.4	505	101
Lead	0.125	50.0	50.9	102	51.1	102	52.0	104	51.8	104
Magnesium	12.5	500	517	103	541	108	509	102	512	102
Manganese	0.500	50.0	51.1	102	54.3	109	50.8	102	50.5	101
Mercury	0.150	5.00	5.79	116	4.76	95.2	4.83	96.6	4.84	96.8
Nickel	0.250	50.0	51.3	103	54.5	109	51.1	102	50.6	101
Potassium	12.5	500	530	106	536	107	523	105	523	105
Selenium	1.00	50.0	51.9	104	54.2	108	52.7	105	52.2	104
Silver	0.125	10.0	9.10	91.0	9.16	91.6	9.25	92.5	9.00	90.0
Sodium	25.0	500	500	100	515	103	497	99.4	499	99.8
Thallium	0.125	50.0	51.3	103	51.3	103	51.7	103	52.3	105
Vanadium	0.500	50.0	52.1	104	54.6	109	51.3	103	51.8	104
Zinc	1.00	50.0	51.1	102	54.0	108	50.9	102	50.4	101

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 277
SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898
Matrix: Aqueous Method: 6020 Units: ppb (ug/L)

			6/25/13 22:07		6/25/13 22:54		6/25/13 23:41		6/25/13 23:53	
	INST.	ICV & CCV	CCV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	51.6	103	52.0	104	48.6	97.2	53.9	108
Antimony	0.250	50.0	54.9	110	53.4	107	53.2	106	54.2	108
Arsenic	0.250	50.0	51.3	103	51.9	104	50.4	101	50.8	102
Barium	2.50	50.0	53.5	107	52.4	105	52.3	105	53.2	106
Beryllium	0.250	50.0	51.0	102	50.6	101	51.5	103	48.1	96.2
Cadmium	0.125	50.0	52.3	105	51.3	103	51.9	104	50.1	100
Calcium	25.0	500	512	102	520	104	496	99.2	525	105
Chromium	0.500	50.0	51.3	103	51.3	103	49.9	99.8	50.1	100
Cobalt	0.500	50.0	51.3	103	51.9	104	50.6	101	50.9	102
Copper	1.00	50.0	52.6	105	52.7	105	51.7	103	51.1	102
Iron	12.5	500	514	103	525	105	496	99.2	521	104
Lead	0.125	50.0	54.5	109	52.2	104	52.7	105	52.8	106
Magnesium	12.5	500	520	104	509	102	496	99.2	518	104
Manganese	0.500	50.0	51.8	104	51.2	102	50.6	101	51.2	102
Mercury	0.150	5.00	4.97	99.4	4.86	97.2				
Nickel	0.250	50.0	51.4	103	51.9	104	50.4	101	50.9	102
Potassium	12.5	500	528	106	522	104	509	102	538	108
Selenium	1.00	50.0	53.3	107	51.8	104	52.7	105	50.6	101
Silver	0.125	10.0	9.57	95.7	9.14	91.4	9.29	92.9	9.47	94.7
Sodium	25.0	500	503	101	490	98.0	481	96.2	541	108
Thallium	0.125	50.0	54.5	109	52.2	104	52.6	105	53.0	106
Vanadium	0.500	50.0	52.2	104	51.8	104	51.0	102	51.5	103
Zinc	1.00	50.0	50.4	101	50.2	100	50.0	100	48.9	97.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 277

SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898

Matrix: Aqueous Method: 6020 Units: ppb (ug/L)

			6/26/13 10:53		6/26/13 11:17		6/26/13 12:04		6/26/13 12:50	
	INST.	ICV & CCV	CCV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	54.1	108	49.4	98.8	50.0	100	51.7	103
Antimony	0.250	50.0	53.3	107	49.5	99.0	52.3	105	52.4	105
Arsenic	0.250	50.0	54.2	108	53.0	106	52.5	105	51.9	104
Barium	2.50	50.0	50.4	101	47.3	94.6	50.2	100	50.3	101
Beryllium	0.250	50.0	51.5	103	52.4	105	52.6	105	50.4	101
Cadmium	0.125	50.0	50.6	101	50.3	101	52.8	106	50.8	102
Calcium	25.0	500	535	107	511	102	518	104	540	108
Chromium	0.500	50.0	54.7	109	51.7	103	52.3	105	52.4	105
Cobalt	0.500	50.0	54.4	109	51.7	103	52.7	105	52.3	105
Copper	1.00	50.0	54.7	109	51.6	103	52.6	105	52.2	104
Iron	12.5	500	548	110	519	104	529	106	531	106
Lead	0.125	50.0	51.3	103	49.8	99.6	51.5	103	51.4	103
Magnesium	12.5	500	544	109	503	101	529	106	534	107
Manganese	0.500	50.0	54.5	109	51.7	103	53.0	106	52.3	105
Nickel	0.250	50.0	54.6	109	52.8	106	52.9	106	52.9	106
Potassium	12.5	500	539	108	494	98.8	524	105	536	107
Selenium	1.00	50.0	54.2	108	52.1	104	51.7	103	53.1	106
Silver	0.125	10.0	9.41	94.1	9.19	91.9	9.84	98.4	9.56	95.6
Sodium	25.0	500	520	104	477	95.4	516	103	541	108
Thallium	0.125	50.0	50.9	102	49.4	98.8	51.9	104	51.7	103
Vanadium	0.500	50.0	54.5	109	52.0	104	52.9	106	53.0	106
Zinc	1.00	50.0	54.4	109	51.7	103	51.8	104	51.7	103

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 277

SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898

Matrix: Aqueous Method: 6020 Units: ppb (ug/L)

			6/26/13 13:37		6/26/13 14:01					
	INST.	ICV & CCV	CCV		CCV					
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	51.8	104	47.6	95.2				
Antimony	0.250	50.0	51.8	104	53.2	106				
Arsenic	0.250	50.0	53.1	106	51.4	103				
Barium	2.50	50.0	49.7	99.4	50.4	101				
Beryllium	0.250	50.0	51.9	104	54.0	108				
Cadmium	0.125	50.0	52.3	105	53.1	106				
Calcium	25.0	500	530	106	506	101				
Chromium	0.500	50.0	53.0	106	50.7	101				
Cobalt	0.500	50.0	52.9	106	50.7	101				
Copper	1.00	50.0	52.4	105	50.5	101				
Iron	12.5	500	533	107	524	105				
Lead	0.125	50.0	50.8	102	52.4	105				
Magnesium	12.5	500	530	106	503	101				
Manganese	0.500	50.0	53.3	107	51.2	102				
Nickel	0.250	50.0	53.3	107	51.6	103				
Potassium	12.5	500	524	105	506	101				
Selenium	1.00	50.0	52.9	106	51.4	103				
Silver	0.125	10.0	9.51	95.1	9.39	93.9				
Sodium	25.0	500	514	103	485	97.0				
Thallium	0.125	50.0	51.7	103	53.0	106				
Vanadium	0.500	50.0	53.4	107	51.2	102				
Zinc	1.00	50.0	52.7	105	50.6	101				

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 277

SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898

Matrix: Aqueous Method: 6020 Concentration/Units: ppb (µg/L)

		6/25/13 19:27	6/25/13 19:51	6/25/13 20:37	6/25/13 21:24	6/25/13 22:11	6/25/13 22:58
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Aluminum	5.00	ND	ND	ND	ND	ND	ND
Antimony	0.250	ND	ND	ND	ND	ND	ND
Arsenic	0.250	ND	ND	ND	ND	ND	ND
Barium	2.50	ND	ND	ND	ND	ND	ND
Beryllium	0.250	ND	ND	ND	ND	ND	ND
Cadmium	0.125	ND	ND	ND	ND	ND	ND
Calcium	25.0	ND	ND	ND	ND	ND	ND
Chromium	0.500	ND	ND	ND	ND	ND	ND
Cobalt	0.500	ND	ND	ND	ND	ND	ND
Copper	1.00	ND	ND	ND	ND	ND	ND
Iron	12.5	ND	ND	ND	ND	ND	ND
Lead	0.125	ND	ND	ND	ND	ND	ND
Magnesium	12.5	ND	ND	ND	ND	ND	ND
Manganese	0.500	ND	ND	ND	ND	ND	ND
Mercury	0.150	ND	ND	ND	ND	ND	ND
Nickel	0.250	ND	ND	ND	ND	ND	ND
Potassium	12.5	ND	ND	ND	ND	ND	ND
Selenium	1.00	ND	ND	ND	ND	ND	ND
Silver	0.125	ND	ND	ND	ND	ND	ND
Sodium	25.0	ND	ND	ND	ND	ND	ND
Thallium	0.125	ND	ND	ND	ND	ND	ND
Vanadium	0.500	ND	ND	ND	ND	ND	ND
Zinc	1.00	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 277

SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898

Matrix: Aqueous Method: 6020 Concentration/Units: ppb (µg/L)

		6/25/13 23:45	6/25/13 23:57	6/26/13 10:57	6/26/13 11:21	6/26/13 12:07	6/26/13 12:54
ANALYTE	INST. MDL	CCB	CCB	CCB	CCB	CCB	CCB
Aluminum	5.00	ND	ND	ND	ND	ND	ND
Antimony	0.250	ND	ND	ND	ND	ND	ND
Arsenic	0.250	ND	ND	ND	ND	ND	ND
Barium	2.50	ND	ND	ND	ND	ND	ND
Beryllium	0.250	ND	ND	ND	ND	ND	ND
Cadmium	0.125	ND	ND	ND	ND	ND	ND
Calcium	25.0	ND	ND	ND	ND	ND	ND
Chromium	0.500	ND	ND	ND	ND	ND	ND
Cobalt	0.500	ND	ND	ND	ND	ND	ND
Copper	1.00	ND	ND	ND	ND	ND	ND
Iron	12.5	ND	ND	ND	ND	ND	ND
Lead	0.125	ND	ND	ND	ND	ND	ND
Magnesium	12.5	ND	ND	ND	ND	ND	ND
Manganese	0.500	ND	ND	ND	ND	ND	ND
Nickel	0.250	ND	ND	ND	ND	ND	ND
Potassium	12.5	ND	ND	ND	ND	ND	ND
Selenium	1.00	ND	ND	ND	ND	ND	ND
Silver	0.125	ND	ND	ND	ND	ND	ND
Sodium	25.0	ND	ND	ND	ND	ND	ND
Thallium	0.125	ND	ND	ND	ND	ND	ND
Vanadium	0.500	ND	ND	ND	ND	ND	ND
Zinc	1.00	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 277
SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05895
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05854
E13-05893, E13-05894, E13-05898
Matrix: Aqueous Method: 6020 Concentration/Units: ppb (µg/L)

		6/26/13 13:41	6/26/13 14:05				
ANALYTE	INST. MDL	CCB	CCB				
Aluminum	5.00	ND	ND				
Antimony	0.250	ND	ND				
Arsenic	0.250	ND	ND				
Barium	2.50	ND	ND				
Beryllium	0.250	ND	ND				
Cadmium	0.125	ND	ND				
Calcium	25.0	ND	ND				
Chromium	0.500	ND	ND				
Cobalt	0.500	ND	ND				
Copper	1.00	ND	ND				
Iron	12.5	ND	ND				
Lead	0.125	ND	ND				
Magnesium	12.5	ND	ND				
Manganese	0.500	ND	ND				
Nickel	0.250	ND	ND				
Potassium	12.5	ND	ND				
Selenium	1.00	ND	ND				
Silver	0.125	ND	ND				
Sodium	25.0	ND	ND				
Thallium	0.125	ND	ND				
Vanadium	0.500	ND	ND				
Zinc	1.00	ND	ND				

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

06/25/2013 07:31 PM

Batch (Page) #: 277
Associated Lab Case for Blank 1: E13-05803, E13-05805, E13-05808, E13-05864, E13-05876, E13-05895

Matrix: Aqueous Unit: ppb (µg/L) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKA130625-01
Aluminum	20.0	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	10.0	ND
Beryllium	1.00	ND
Cadmium	0.500	ND
Calcium	100	ND
Chromium	2.00	ND
Cobalt	2.00	ND
Copper	4.00	ND
Iron	50.0	ND
Lead	0.500	ND
Magnesium	50.0	ND
Manganese	2.00	ND
Mercury	0.300	ND
Nickel	1.00	ND
Potassium	50.0	ND
Selenium	4.00	ND
Silver	0.500	ND
Sodium	100	ND
Thallium	0.500	ND
Vanadium	2.00	ND
Zinc	4.00	ND

Associated Sample for Blank 1:
05803-010,014; 05805-001~011; 05808-009; 05864-003
05876-002~005; 05895-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7500
Batch (Page) #: 277
SDG #: E13-05805, E13-05808, E13-05876, E13-05805, E13-05803, E13-05864, E13-05876, E13-05
E13-05803, E13-05727, E13-05904, E13-05803, E13-05727, E13-05804, E13-05807, E13-05
E13-05893, E13-05894, E13-05898
Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL LIMIT %R
	SOL A	SOL B	SOL A	SOL A+B	%R	
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	94300	89200	89.2	NA
Calcium	100000	-	90800	87200	87.2	NA
Iron	100000	-	92000	86900	86.9	NA
Potassium	100000	-	85100	83000	83.0	NA
Magnesium	100000	-	88400	83800	83.8	NA
Sodium	100000	-	89500	86300	86.3	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2100	2030	102	NA
Titanium	2000	-	2060	1950	97.5	NA
Silver	-	20.0	-	17.3	86.5	80-120
Arsenic	-	20.0	-	21.4	107	80-120
Cadmium	-	20.0	-	18.4	92.0	80-120
Cobalt	-	20.0	-	20.2	101	80-120
Chromium	-	20.0	-	20.5	103	80-120
Copper	-	20.0	-	19.1	95.5	80-120
Manganese	-	20.0	-	22.6	113	80-120
Nickel	-	20.0	-	20.6	103	80-120
Zinc	-	20.0	-	22.3	112	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 277

SDG #: E13-05803, E13-05805, E13-05808, E13-05864, E13-05876, E13-05895, E13-05727
E13-05804, E13-05807, E13-05854, E13-05893, E13-05894, E13-05898, E13-05904

Matrix: Aqueous Unit: ppb (µg/L)

ANALYTE	LCSA130625-01			LCSA130625-02		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	400	438	110			
Antimony	400	418	105			
Arsenic	400	418	105	400	413	103
Barium	400	415	104			
Beryllium	400	427	107	400	422	106
Cadmium	400	406	102			
Calcium	8000	8430	105			
Chromium	400	426	107			
Cobalt	400	427	107			
Copper	400	423	106			
Iron	8000	8340	104	8000	8380	105
Lead	400	413	103	400	415	104
Magnesium	8000	8580	107			
Manganese	400	426	107	400	431	108
Mercury	10.0	8.65	86.5			
Nickel	400	428	107	400	431	108
Potassium	8000	8060	101			
Selenium	400	424	106			
Silver	400	350	87.5			
Sodium	8000	8280	104			
Thallium	400	420	105			
Vanadium	400	430	108			
Zinc	400	420	105			

(1) Control Limits % Recovery = 85-115%

LCSA130625-01 6/25/13 19:35
05803-010,014; 05805-001~011; 05808-009; 05864-003
05876-002~005; 05895-001

LCSA130625-02 6/25/13 21:44
05727-002~005; 05803-009,011; 05804-007~009
05807-001~004; 05854-001; 05893-001; 05894-001
05894-002; 05898-001~002; 05904-018

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 277

SDG #: E13-05803, E13-05805, E13-05808, E13-05864, E13-05876, E13-05895, E13-05727
E13-05804, E13-05807, E13-05854, E13-05893, E13-05894, E13-05898, E13-05904

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	6/25/13 19:58 SSR1	6/25/13 19:39 SR1	%R1	SA1	6/25/13 21:59 SSR2	6/25/13 21:48 SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	538	146	98.0	400					75-125
Antimony	427	1.23	106	400					75-125
Arsenic	414	1.57	103	400	444	3.33	110	400	75-125
Barium	812	386	107	400					75-125
Beryllium	426	ND	107	400	450	ND	113	400	75-125
Cadmium	388	7.66	95.1	400					75-125
Calcium	389000	398000	NC	8000					75-125
Chromium	405	ND	101	400					75-125
Cobalt	398	ND	99.5	400					75-125
Copper	389	ND	97.3	400					75-125
Iron	71000	65800	NC	8000	20400	10700	121	8000	75-125
Lead	430	1.35	107	400	428	2.47	106	400	75-125
Magnesium	34900	29500	NC	8000					75-125
Manganese	4880	4710	NC	400	1870	1370	125	400	75-125
Mercury	11.7	ND	117	10.0					75-125
Nickel	390	ND	97.5	400	449	ND	112	400	75-125
Potassium	37000	30300	83.8	8000					75-125
Selenium	399	ND	99.8	400					75-125
Silver	326	ND	81.5	400					75-125
Sodium	512000	520000	NC	8000					75-125
Thallium	432	ND	108	400					75-125
Vanadium	424	ND	106	400					75-125
Zinc	400	14.1	96.5	400					75-125

SSR = Spike Sample Result
SA = Spike Added
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

SR = Sample Result
%R = Percent Recovery

QC Sample 1: E13-05805-001
% Solids: 0
QC Sample 1 for following samples:
05803-010,014; 05805-001~011; 05808-009; 05864-003
05876-002~005; 05895-001

QC Sample 2: E13-05803-009
% Solids: 0
QC Sample 2 for following samples:
05727-002~005; 05803-009,011; 05804-007~009
05807-001~004; 05854-001; 05893-001; 05894-001
05894-002; 05898-001~002; 05904-018

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 277

SDG #: E13-05803, E13-05805, E13-05808, E13-05864, E13-05876, E13-05895, E13-05727
E13-05804, E13-05807, E13-05854, E13-05893, E13-05894, E13-05898, E13-05904

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	6/25/13 19:39 S1	6/25/13 19:43 D1	RPD1	CONTROL LIMIT 2	6/25/13 21:48 S2	6/25/13 21:52 D2	RPD2
Aluminum	20	146	136	7.09				
Antimony	20	1.23	1.27	3.20				
Arsenic	20	1.57	1.58	0.635	20	3.33	3.27	1.82
Barium	20	386	382	1.04				
Beryllium	NA	ND	ND	NC	NA	ND	ND	NC
Cadmium	20	7.66	7.33	4.40				
Calcium	20	398000	375000	5.95				
Chromium	NA	ND	ND	NC				
Cobalt	NA	ND	ND	NC				
Copper	NA	ND	ND	NC				
Iron	20	65800	62200	5.63	20	10700	11000	2.76
Lead	20	1.35	1.31	3.01	20	2.47	2.38	3.71
Magnesium	20	29500	28000	5.22				
Manganese	20	4710	4450	5.68	20	1370	1440	4.98
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC	NA	ND	ND	NC
Potassium	20	30300	29500	2.68				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Sodium	20	520000	501000	3.72				
Thallium	NA	ND	ND	NC				
Vanadium	NA	ND	ND	NC				
Zinc	20	14.1	12.8	9.67				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E13-05805-001
% Solids: 0
QC Sample 1 for following samples:
05803-010,014; 05805-001~011; 05808-009; 05864-003
05876-002~005; 05895-001

QC Sample 2: E13-05803-009
% Solids: 0
QC Sample 2 for following samples:
05727-002~005; 05803-009,011; 05804-007~009
05807-001~004; 05854-001; 05893-001; 05894-001
05894-002; 05898-001~002; 05904-018

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 277
SDG #: E13-05803, E13-05805, E13-05808, E13-05864, E13-05876, E13-05895

Matrix: Aqueous Concentration/Units: ppb (µg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	6/25/13 19:39 SR	6/25/13 19:55 SDR	% Difference	6/25/13 20:02 SPR	SA	% Recovery
Aluminum	146	147	0.683	566	400	105.0
Antimony	1.23	ND	NC	433	400	108.0
Arsenic	1.57	ND	NC	428	400	107.0
Barium	386	398	3.06			
Beryllium	ND	ND	NC	431	400	108
Cadmium	7.66	7.76	1.30	379	400	92.8
Calcium	398000	436000	9.11			
Chromium	ND	ND	NC	419	400	105
Cobalt	ND	ND	NC	410	400	103
Copper	ND	ND	NC	399	400	99.8
Iron	65800	67600	2.70			
Lead	1.35	ND	NC	427	400	106.0
Magnesium	29500	29400	0.340			
Manganese	4710	5190	9.70			
Nickel	ND	ND	NC	404	400	101
Potassium	30300	29900	1.33			
Selenium	ND	ND	NC	418	400	105
Silver	ND	ND	NC	321	400	80.3
Sodium	520000	543000	4.33			
Thallium	ND	ND	NC	433	400	108
Vanadium	ND	ND	NC	438	400	110
Zinc	14.1	ND	NC	407	400	98.2

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1: E13-05805-001
QC Sample 1 for following samples:
05803-010,014; 05805-001~011; 05808-009; 05864-003
05876-002~005; 05895-001

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG277
June 25, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.D	STD BLANK	312763		33917		151389		1018763		1780851		1049683		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		218934	70	23742	70	105972	70	713134	70	1246596	70	734778	70	
QC Lower Limit		250210	80	27134	80	121111	80	815010	80	1424681	80	839746	80	
Sample & QC Upper Limit		375316	120	40700	120	181667	120	1222516	120	2137021	120	1259620	120	
004CALS.D	STD1	300977	96	33553	99	148033	98	1016553	100	1756713	99	1033499	98	
005CALS.D	STD2	303597	97	33341	98	147119	97	993880	98	1727626	97	1012225	96	
006CALS.D	STD3	313418	100	33528	99	149782	99	1005348	99	1764525	99	1009241	96	
007CALS.D	STD4	317549	102	33920	100	150568	99	1019184	100	1753476	98	999874	95	
009ICSA.D	ICSA	347820	111	36993	109	175566	116	917825	90	1630183	92	823182	78	
010ICSB.D	ICSAB	370925	119	37843	112	180318	119	952063	93	1676302	94	847862	81	
012_ICV.D	ICV	**387437**	**124**	35628	105	166884	110	1113393	109	1891651	106	1084194	103	**A**
013_ICB.D	ICB	**376878**	**120**	36682	108	167149	110	1119127	110	1849916	104	1087417	104	**A**
014SMPL.D	BLKA130625-01	**375691**	**120**	36324	107	168243	111	1122151	110	1897169	107	1104990	105	**A**
015SMPL.D	LCSA130625-01	367359	117	36064	106	164963	109	1101253	108	1889129	106	1068810	102	
016SMPL.D	E13-05805-001	304338	97	33680	99	151741	100	961092	94	1688259	95	909696	87	
017SMPL.D	E13-05805-001DUP	312406	100	33930	100	154196	102	979762	96	1705789	96	923131	88	
0186CCV.D	CCV	350946	112	35638	105	161923	107	1086121	107	1849841	104	1074877	102	
0196CCB.D	CCB	346853	111	35723	105	158909	105	1053735	103	1780505	100	1060370	101	
020SMPL.D	E13-05805-001SD	331475	106	33983	100	157305	104	1014362	100	1786891	100	1024782	98	
021SMPL.D	E13-05805-001MS	308713	99	34016	100	152069	100	941066	92	1665676	94	882330	84	
022SMPL.D	E13-05805-001PS	334185	107	34037	100	158663	105	973991	96	1693675	95	899248	86	
024SMPL.D	E13-05805-008	373675	119	36894	109	171141	113	1135732	111	1897043	107	1125532	107	
025SMPL.D	E13-05805-009	360377	115	36373	107	164250	108	1094436	107	1842349	103	1096787	104	
026SMPL.D	E13-05808-009	365506	117	36787	108	166968	110	1129108	111	1884456	106	1129505	108	
027SMPL.D	E13-05876-005	360664	115	35897	106	163865	108	1094897	107	1861632	105	1097726	105	
028SMPL.D	E13-05805-002	342614	110	35035	103	162957	108	994648	98	1838569	103	997630	95	
029SMPL.D	E13-05805-003	346100	111	35402	104	164403	109	1002914	98	1832752	103	1010306	96	
0306CCV.D	CCV	371451	119	36886	109	166485	110	1116952	110	1906673	107	1103937	105	
0316CCB.D	CCB	369455	118	36126	107	164999	109	1120155	110	1895069	106	1106303	105	
032SMPL.D	E13-05805-004	348593	111	35372	104	166826	110	1062513	104	1876505	105	1063671	101	
033SMPL.D	E13-05805-005	331574	106	35087	103	159681	105	989173	97	1824399	102	993972	95	
034SMPL.D	E13-05805-006	357954	114	34824	103	160862	106	994745	98	1753782	98	931681	89	
035SMPL.D	E13-05805-007	370071	118	35556	105	169864	112	987818	97	1774040	100	955455	91	
036SMPL.D	E13-05805-010	**396114**	**127**	35858	106	179100	118	1105127	108	1953495	110	1071606	102	**A**

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E13-05895
0091

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG277
June 25, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.D	STD BLANK	312763		33917		151389		1018763		1780851		1049683		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		218934	70	23742	70	105972	70	713134	70	1246596	70	734778	70	
QC Lower Limit		250210	80	27134	80	121111	80	815010	80	1424681	80	839746	80	
Sample & QC Upper Limit		375316	120	40700	120	181667	120	1222516	120	2137021	120	1259620	120	
037SMPL.D	E13-05805-011	382575	122	35897	106	170612	113	1030096	101	1859550	104	1005654	96	A
038SMPL.D	E13-05803-010	375395	120	36799	108	168392	111	1091979	107	1897793	107	1090672	104	A
039SMPL.D	E13-05803-014	355752	114	36114	106	169014	112	1065241	105	1924712	108	1073565	102	
040SMPL.D	E13-05876-002	296073	95	36152	107	138850	92	905729	89	1584545	89	910013	87	
041SMPL.D	E13-05876-003	350150	112	35863	106	163896	108	1023603	100	1841317	103	1015072	97	
0426CCV.D	CCV	383054	122	37175	110	170495	113	1151951	113	1946571	109	1127458	107	A
0436CCB.D	CCB	385387	123	37145	110	173246	114	1143189	112	1952470	110	1156898	110	A
044SMPL.D	E13-05876-004	360084	115	36370	107	169074	112	1076882	106	1929527	108	1086513	104	
045SMPL.D	E13-05895-001	390787	125	32795	97	156862	104	988827	97	1719629	97	893189	85	A
047SMPL.D	BLKA130625-02	447837	143	38594	114	178421	118	1195253	117	1958376	110	1159002	110	A
048SMPL.D	LCSA130625-02	428158	137	38159	113	176837	117	1153040	113	1970784	111	1134010	108	A
049SMPL.D	E13-05803-009	386597	124	37322	110	172306	114	1111067	109	1939518	109	1120587	107	A
050SMPL.D	E13-05803-009DUP	381037	122	36034	106	172555	114	1119978	110	1970743	111	1124239	107	A
051SMPL.D	E13-05803-009SD	395428	126	37855	112	175849	116	1153385	113	1975339	111	1157539	110	A
052SMPL.D	E13-05803-009MS	370645	119	36627	108	172069	114	1086140	107	1913368	107	1067975	102	
053SMPL.D	E13-05803-009PS	373816	120	36365	107	171231	113	1092017	107	1933623	109	1086840	104	
0546CCV.D	CCV	372975	119	37218	110	164474	109	1104300	108	1880907	106	1076041	103	
0556CCB.D	CCB	397145	127	37108	109	172907	114	1154302	113	1936070	109	1117449	106	A
057SMPL.D	E13-05727-002	415926	133	36954	109	178336	118	1193696	117	1987133	112	1179698	112	A
058SMPL.D	E13-05904-018	408479	131	38044	112	174135	115	1159949	114	1967343	110	1142958	109	A
059SMPL.D	E13-05803-011	355415	114	36548	108	170239	112	1093782	107	1949327	109	1130963	108	
060SMPL.D	E13-05727-003	331955	106	35409	104	164480	109	1040078	102	1882925	106	1058627	101	
061SMPL.D	E13-05727-004	336110	107	37833	112	169511	112	1111515	109	1936349	109	1108056	106	
062SMPL.D	E13-05727-005	337869	108	35484	105	164922	109	1068055	105	1914929	108	1069735	102	
063SMPL.D	E13-05804-007	328747	105	36172	107	164065	108	1004393	99	1859613	104	1007952	96	
064SMPL.D	E13-05804-008	331466	106	36989	109	172517	114	1057745	104	1911063	107	1046538	100	
065SMPL.D	E13-05804-009	322411	103	37033	109	174261	115	1039630	102	1836770	103	1017295	97	
0666CCV.D	CCV	357725	114	36874	109	172152	114	1159890	114	1950828	110	1120705	107	
0676CCB.D	CCB	368199	118	37300	110	171716	113	1156003	113	1946508	109	1128463	108	
068SMPL.D	E13-05807-001	325988	104	36695	108	159984	106	1049341	103	1836785	103	1052923	100	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E13-05895 0092

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG277
June 25, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.D	STD BLANK	312763		33917		151389		1018763		1780851		1049683		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		218934	70	23742	70	105972	70	713134	70	1246596	70	734778	70	
QC Lower Limit		250210	80	27134	80	121111	80	815010	80	1424681	80	839746	80	
Sample & QC Upper Limit		375316	120	40700	120	181667	120	1222516	120	2137021	120	1259620	120	
069SMPL.D	E13-05807-002	309384	99	35947	106	163327	108	1067113	105	1921308	108	1099261	105	
070SMPL.D	E13-05807-003	301761	96	34365	101	160207	106	1074542	105	1884657	106	1102514	105	
071SMPL.D	E13-05807-004	300004	96	35289	104	160589	106	1067108	105	1907842	107	1093023	104	
072SMPL.D	E13-05854-001	308597	99	35934	106	162396	107	1087701	107	1921487	108	1102404	105	
073SMPL.D	E13-05893-001	361454	116	36356	107	172014	114	1166748	115	1962085	110	1134659	108	
074SMPL.D	E13-05894-001	370644	119	35910	106	169940	112	1094105	107	1906118	107	1051155	100	
075SMPL.D	E13-05894-002	375148	120	36027	106	168700	111	1051923	103	1870747	105	1035012	99	
076SMPL.D	E13-05898-001	**380642**	**122**	36766	108	171233	113	1155617	113	1974747	111	1110134	106	**A**
077SMPL.D	E13-05898-002	364278	116	37392	110	170094	112	1150585	113	1922406	108	1112410	106	
0786CCV.D	CCV	357421	114	37330	110	168595	111	1134321	111	1955591	110	1104471	105	
0796CCB.D	CCB	350592	112	37307	110	171147	113	1133007	111	1939745	109	1125192	107	
080SMPL.D	E13-05864-003	**377113**	**121**	35396	104	174868	116	930642	91	1643798	92	787032	75	**A**
0816CCV.D	FINAL CCV	**432849**	**138**	39437	116	180463	119	1186834	116	1976330	111	1115184	106	**A**
0826CCB.D	FINAL CCB	**420439**	**134**	38365	113	180984	120	1200913	118	2002058	112	1151660	110	**A**

E13-05895 0093

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG277
June 25, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.D	STD BLANK	286756		30977		150461		1024869		1654002		1041550		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		200729	70	21684	70	105323	70	717408	70	1157801	70	729085	70	
QC Lower Limit		229405	80	24782	80	120369	80	819895	80	1323202	80	833240	80	
Sample & QC Upper Limit		344107	120	37172	120	180553	120	1229843	120	1984802	120	1249860	120	
004CALS.D	STD1	283152	99	32173	104	148896	99	998907	97	1659596	100	1048614	101	
005CALS.D	STD2	283192	99	31452	102	148394	99	1001441	98	1645728	99	1037541	100	
006CALS.D	STD3	273468	95	31836	103	147091	98	1010697	99	1663919	101	1036678	100	
007CALS.D	STD4	266377	93	33222	107	148805	99	983216	96	1656732	100	1027076	99	
012_ICV.D	ICV	257988	90	32262	104	151963	101	1020244	100	1696452	103	1061618	102	
013_ICB.D	CCB	247220	86	32192	104	150017	100	1016661	99	1686217	102	1060989	102	
017SMPL.D	BLKA130625-01	232981	81	31901	103	145816	97	1016531	99	1690873	102	1059744	102	
0186CCV.D	CCV	234509	82	33062	107	152276	101	1044219	102	1801969	109	1086509	104	
0196CCB.D	CCB	232861	81	32664	105	146453	97	1021017	100	1719959	104	1084592	104	
020SMPL.D	LCSA130625-01	231552	81	33210	107	145923	97	1011985	99	1708513	103	1045814	100	
022SMPL.D	E13-05805-001	204405	71	29553	95	141082	94	889795	87	1576526	95	903855	87	
023SMPL.D	E13-05805-001DUP	219183	76	30588	99	144371	96	909616	89	1589560	96	902260	87	
024SMPL.D	E13-05805-001SD	242848	85	31783	103	147947	98	985709	96	1688009	102	1012693	97	
025SMPL.D	E13-05805-001MS	233594	81	30445	98	144592	96	897735	88	1590464	96	882989	85	
026SMPL.D	E13-05805-001PS	240182	84	31074	100	147068	98	902564	88	1586230	96	882476	85	
028SMPL.D	E13-05805-008	263475	92	32576	105	149964	100	1005181	98	1678621	101	1036941	100	
029SMPL.D	E13-05805-009	264744	92	31788	103	152254	101	1019447	99	1709210	103	1057312	102	
0306CCV.D	CCV	246563	86	31806	103	146883	98	995853	97	1725971	104	1040997	100	
0316CCB.D	CCB	246550	86	31749	102	148039	98	1026372	100	1740606	105	1050833	101	
032SMPL.D	E13-05808-009	248032	86	31619	102	148856	99	999719	98	1733334	105	1052583	101	
033SMPL.D	E13-05876-005	251024	88	31891	103	148672	99	1029647	100	1732853	105	1049519	101	
034SMPL.D	E13-05805-002	234041	82	30861	100	147865	98	959815	94	1691714	102	947796	91	
035SMPL.D	E13-05805-003	236690	83	30735	99	145616	97	951689	93	1675682	101	936496	90	
036SMPL.D	E13-05805-004	244549	85	25000	81	149727	100	981668	96	1709515	103	987704	95	
037SMPL.D	E13-05805-005	233669	81	31331	101	147887	98	954386	93	1659906	100	938486	90	
038SMPL.D	E13-05805-006	253506	88	30116	97	144803	96	916466	89	1598855	97	863454	83	
039SMPL.D	E13-05805-007	264291	92	31996	103	153067	102	940509	92	1648301	100	895702	86	
040SMPL.D	E13-05805-010	272540	95	32180	104	153248	102	988808	96	1693927	102	955814	92	
041SMPL.D	E13-05805-011	274032	96	31495	102	152523	101	971165	95	1686542	102	927293	89	

E13-05895
0094

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG277
June 25, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.D	STD BLANK	286756		30977		150461		1024869		1654002		1041550		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		200729	70	21684	70	105323	70	717408	70	1157801	70	729085	70	
QC Lower Limit		229405	80	24782	80	120369	80	819895	80	1323202	80	833240	80	
Sample & QC Upper Limit		344107	120	37172	120	180553	120	1229843	120	1984802	120	1249860	120	
0426CCV.D	CCV	278789	97	32648	105	154001	102	1026008	100	1740390	105	1018526	98	
0436CCB.D	CCB	277621	97	31853	103	154421	103	1024150	100	1741336	105	1030412	99	
044SMPL.D	E13-05803-010	245892	86	30824	100	147108	98	987446	96	1700340	103	981560	94	
045SMPL.D	E13-05803-014	229184	80	31886	103	142403	95	948704	93	1671903	101	943560	91	
046SMPL.D	E13-05876-002	236851	83	30797	99	147975	98	988255	96	1725070	104	992395	95	
047SMPL.D	E13-05876-003	230593	80	31378	101	145843	97	949222	93	1649789	100	919629	88	
048SMPL.D	E13-05876-004	238288	83	30218	98	148600	99	980582	96	1700496	103	965568	93	
050SMPL.D	BLKA130625-02	256730	90	32447	105	147745	98	1021375	100	1736265	105	1019133	98	
051SMPL.D	LCSA130625-02	251067	88	31427	101	149040	99	996982	97	1725606	104	995409	96	
052SMPL.D	E13-05803-009	231972	81	31697	102	144254	96	973326	95	1713922	104	981728	94	
053SMPL.D	E13-05803-009DUP	224221	78	30739	99	144225	96	965609	94	1675746	101	949969	91	
0546CCV.D	CCV	244454	85	31502	102	149115	99	1030528	101	1754329	106	1012617	97	
0556CCB.D	CCB	244353	85	31532	102	150068	100	1017899	99	1733267	105	1011767	97	
056SMPL.D	E13-05803-009SD	237802	83	31836	103	149901	100	1016131	99	1725199	104	1013917	97	
057SMPL.D	E13-05803-009MS	218797	76	30216	98	141416	94	959256	94	1680085	102	923756	89	
058SMPL.D	E13-05803-009PS	216794	76	30865	100	142932	95	960886	94	1687029	102	914691	88	
059SMPL.D	E13-05904-018	247064	86	32006	103	150324	100	1038489	101	1750389	106	1003065	96	
0606CCV.D	FINAL CCV	228737	80	32656	105	143383	95	1005312	98	1692945	102	959343	92	
0616CCB.D	FINAL CCB	239539	84	31495	102	145879	97	1012171	99	1723763	104	990035	95	

Note: Internal Standards failed, no affected data was reported from this analysis.

E13-05895 0095

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

GENERAL ANALYTICAL CHEMISTRY

E13-05895 0096

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Flash Point

Matrix: Aqueous
Unit: °C

Batch: AP069-0021
Method: 1010

Date: 07/01/2013

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKA130701	NO FLASH @100C	NA	NA	NA	NA	NA
LCS	LCSA130701	28.0	27	NA	NA	104	90-110
SAMPLE	E13-05895-001	NO FLASH @100C	NA	NA	NA	NA	NA
DUP	E13-05895-001DUP	NO FLASH @100C	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E13-05895-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants
Address: 1 Greenwood Ave suite 240
Montclair NJ 07042
Telephone #: 973 893 7140
Fax #:
Project Manager: Mike Zukauskas
EMAIL Address: MZukauskas@geiconsultants.com
Sampled by: Amin Adeghayi
COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental
Project Name: Greenpoint Energy Center
Project Location (State): Brooklyn NY.
Bottle Order #:

REPORTING INFO

REPORT TO: datagroup@
Address: geiconsultants.com
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify): _____
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only / NY Cat A	NJ SRP format
NJ Reduced	NYSDEC
NJ Regulatory / NY Cat B / 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 6 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

 # BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	VOCs	PCB	RCRA Metals	Flash Point	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPEC SW-WC 001		06/20/2013	1030	AQ	6	1	X	X	X	X	2	1					3	

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req: NJ GWQS / NJ IGW / NJ SRS / NY TOGS / NY CP51 / NY Part 375 Restricted / NY Part 375 Unrestricted
Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	06/20/2013	0530	Received by:	6/21/13	10:45
Relinquished by:	6/21/13	1712	Received by:	6/21/13	1712
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		

Comments: Please send results to datagroup@geiconsultants.com
1 week TAT

Lab Case # 5895

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2013 COC

01/2013 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E13-05895: GREEN POINT ENERGY CENTER

To: Michael Zukauskas
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mzukauskas@geiconsultants.com; d

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Michael Zukauskas

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Jun 21, 2013 @ 17:12	NA	Jul 01, 2013	Jul 16, 2013 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05895-001	GPEC SW-WC 001	NA	06/20/13@10:30	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260B	RUSH 1 WK	7/4/2013
	TCL PCB	Analyze	8082	RUSH 1 WK	6/27/2013
	RCRA Metals	Analyze	6020/7470A	RUSH 1 WK	7/18/2013
	Flash Point	Analyze	1010	RUSH 1 WK	7/18/2013

Project Notes:

NOTE 1 taken by Ellen on 06/24/2013 02:45
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **05895** CLIENT: GLI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 6/21/13

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [ ] DATE 6/24/13

Laboratory Custody Chronicle

IAL Case No.

E13-05895

Client GEI Consultants Inc. - Montclair

Project GREEN POINT ENERGY CENTER

Received On 6/21/2013@17:12

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	05895-001	Aqueous	n/a	n/a	6/28/13	Sylvia

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	-001	Aqueous	6/27/13	Archimede	6/28/13	Justyna

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
RCRA Metals	-001	Aqueous	6/25/13	Lisa	6/25/13	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Flash Point	-001	Aqueous	n/a	n/a	7/ 1/13	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/23/12

Compound	Conc	Q	RL	MDL
Chloromethane	ND		0.00579	0.00237
Vinyl chloride	ND		0.00579	0.00278
Bromomethane	ND		0.00579	0.00203
Chloroethane	ND		0.00579	0.00261
Trichlorofluoromethane	ND		0.00579	0.00237
Acrolein	ND		0.116	0.00828
1,1-Dichloroethene	ND		0.00579	0.0029
Acetone	ND		0.029	0.00405
Methylene chloride	ND		0.012	0.012
Acrylonitrile	ND		0.116	0.011
trans-1,2-Dichloroethene	ND		0.00579	0.00249
1,1-Dichloroethane	ND		0.00579	0.00156
cis-1,2-Dichloroethene	ND		0.00579	0.00179
2-Butanone (MEK)	ND		0.012	0.00214
Chloroform	ND		0.012	0.00168
1,1,1-Trichloroethane	ND		0.00579	0.00191
Carbon tetrachloride	ND		0.00579	0.00237
1,2-Dichloroethane (EDC)	ND		0.00579	0.00122
Benzene	ND		0.00579	0.00139
Trichloroethene	ND		0.00579	0.00185
1,2-Dichloropropane	ND		0.00579	0.00127
Bromodichloromethane	ND		0.00579	0.00185
2-Chloroethyl vinyl ether	ND		0.00579	0.00133
cis-1,3-Dichloropropene	ND		0.00579	0.00151
4-Methyl-2-pentanone (MIBK)	ND		0.00579	0.00139
Toluene	ND		0.00579	0.00145

ND = Analyzed for but Not Detected at the MDL
Continued on Next Page

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/23/12

Compound	Conc	Q	RL	MDL
trans-1,3-Dichloropropene	ND		0.00579	0.00151
1,1,2-Trichloroethane	ND		0.00579	0.00116
Tetrachloroethene	ND		0.00579	0.00151
Dibromochloromethane	ND		0.00579	0.00127
Chlorobenzene	ND		0.00579	0.00127
1,1,1,2-Tetrachloroethane	ND		0.00579	0.00272
Ethylbenzene	ND		0.00579	0.00179
Total Xylenes	ND		0.012	0.00614
Styrene	ND		0.00579	0.00174
Bromoform	ND		0.00579	0.00185
1,1,2,2-Tetrachloroethane	ND		0.00579	0.00133
1,3-Dichlorobenzene	ND		0.00579	0.00179
1,4-Dichlorobenzene	ND		0.00579	0.00179
1,2-Dichlorobenzene	ND		0.00579	0.00208
1,2,4-Trichlorobenzene	ND		0.00579	0.00301
TOTAL VO's:	ND			

Semivolatiles - BNA

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/23/12

Compound	Conc	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.038	0.014
Phenol	ND		0.038	0.014
Bis(2-chloroethyl) ether	ND		0.038	0.014
2-Chlorophenol	ND		0.038	0.012
1,3-Dichlorobenzene	ND		0.038	0.020
1,4-Dichlorobenzene	ND		0.038	0.012

ND = Analyzed for but Not Detected at the MDL
Continued on Next Page

273 Franklin Road
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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Semivolatiles - BNA

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/23/12

Compound	Conc	Q	RL	MDL
1,2-Dichlorobenzene	ND		0.038	0.012
Bis(2-chloroisopropyl) ether	ND		0.038	0.018
N-Nitrosodi-n-propylamine	ND		0.038	0.014
Hexachloroethane	ND		0.038	0.011
Nitrobenzene	ND		0.038	0.014
Isophorone	ND		0.038	0.018
2-Nitrophenol	ND		0.038	0.014
2,4-Dimethylphenol	ND		0.038	0.012
Bis(2-chloroethoxy) methane	ND		0.038	0.012
2,4-Dichlorophenol	ND		0.038	0.012
1,2,4-Trichlorobenzene	ND		0.038	0.011
Naphthalene	ND		0.038	0.011
Hexachlorobutadiene	ND		0.038	0.012
4-Chloro-3-methylphenol	ND		0.038	0.013
Hexachlorocyclopentadiene	ND		0.038	0.012
2,4,6-Trichlorophenol	ND		0.038	0.013
2-Chloronaphthalene	ND		0.038	0.013
Dimethyl phthalate	ND		0.038	0.014
2,6-Dinitrotoluene	ND		0.038	0.012
Acenaphthylene	0.057		0.038	0.016
Acenaphthene	ND		0.038	0.011
2,4-Dinitrophenol	ND		0.038	0.016
4-Nitrophenol	ND		0.038	0.016
2,4-Dinitrotoluene	ND		0.038	0.012
Diethyl phthalate	ND		0.038	0.012
Fluorene	ND		0.038	0.012
4-Chlorophenyl phenyl ether	ND		0.038	0.012

ND = Analyzed for but Not Detected at the MDL
Continued on Next Page

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Semivolatiles - BNA

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/23/12

Compound	Conc	Q	RL	MDL
4,6-Dinitro-2-methylphenol	ND		0.038	0.014
N-Nitrosodiphenylamine	ND		0.038	0.012
1,2-Diphenylhydrazine	ND		0.038	0.015
4-Bromophenyl phenyl ether	ND		0.038	0.013
Hexachlorobenzene	ND		0.038	0.016
Pentachlorophenol	ND		0.038	0.014
Phenanthrene	0.021	J	0.038	0.012
Anthracene	0.080		0.038	0.016
Di-n-butyl phthalate	ND		0.038	0.012
Fluoranthene	ND		0.038	0.014
Benzidine	ND		0.038	0.012
Pyrene	ND		0.038	0.012
Butyl benzyl phthalate	ND		0.038	0.011
3,3'-Dichlorobenzidine	ND		0.038	0.013
Benzo[a]anthracene	ND		0.038	0.017
Chrysene	ND		0.038	0.014
Bis(2-ethylhexyl) phthalate	ND		0.038	0.019
Di-n-octyl phthalate	ND		0.038	0.014
Benzo[b]fluoranthene	0.043		0.038	0.020
Benzo[k]fluoranthene	0.041		0.038	0.020
Benzo[a]pyrene	0.141		0.038	0.017
Indeno[1,2,3-cd]pyrene	0.421		0.038	0.011
Dibenz[a,h]anthracene	0.195		0.038	0.012
Benzo[g,h,i]perylene	0.604		0.038	0.016
TOTAL BNA'S:	1.60	J		

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11376), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

PCB's

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/25/12

Compound	Conc	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
PCBs	ND		0.041	0.016

Hydrocarbons

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/25/12

Compound	Conc	Q	RL	MDL
TPH-DRO	ND		82.6	66.1

Hydrocarbons

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/25/12

Compound	Conc	Q	RL	MDL
TPH-GRO	ND		0.290	0.116

ND = Analyzed for but Not Detected at the MDL

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11376), Pennsylvania (68-00773) and in the Department of Navy in QAT Program

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Metals

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: Soil-mg/Kg
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/24/12

Parameter	Result	Q	RL	MDL
Antimony	ND		1.26	0.315
Arsenic	1.40		0.630	0.315
Beryllium	0.387	J	0.630	0.252
Cadmium	ND		0.630	0.158
Chromium	13.5		2.52	0.630
Copper	14.6		2.52	0.630
Lead	5.76		0.630	0.158
Mercury	ND		0.015	0.00703
Nickel	9.97		1.26	0.630
Selenium	ND		2.52	1.26
Silver	ND		0.630	0.158
Thallium	ND		0.630	0.158
Zinc	25.9		2.52	2.52

TCLP Metals

Lab ID: 07194-001
Client ID: GPECWC071712
Matrix-Units: TCLP Leachate-mg/L
Percent Moisture: NA

Date Sampled: 7/17/2012
Time Sampled: 14:00
Date Analyzed: 7/24/12

Compound	Conc	Q	RL	MDL
TCLP Lead	ND		0.100	0.050

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

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Randolph, NJ 07869
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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07194

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

General Analytical

Lab ID: 07194-001
Client ID: GPECWC071712
Percent Moisture: 13.6

Date Sampled: 7/17/2012
Time Sampled: 14:00

Parameter	Result	RL	MDL	Matrix-Units	Date Analyzed
Sulfur as S	1920	1140	955	Soil-mg/Kg	7/25/2012 13:00

These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants Inc	REPORT TO:	Data Group
Address:	1 Greenwood Ave Ste 2b	Address:	datagroup@geiconsultants.com
	Montclair NJ 07042		
Telephone #:	973 873 7110	Attn:	Jaimie Wargo
Fax #:	973 509 9625	FAX #	
Project Manager:	Maria Stepanova	INVOICE TO:	Accounting
EMAIL Address:	mstepanova@geiconsultants.com	Address:	400 Unicorn Park Dr Woburn MA 01801
Sampler:	Matt Sheet		
Project Name:	Greenpoint	Attn:	Sandra St Hilaire
Project Location (State):	NY	PO #	125180-1102
Bottle Order #:			
Quote # :			

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) | NJ EPH Fractionated (5 day TAT) | NJ EPH - C40 (5 day TAT) | DRO-8015 (3-5 day TAT) | QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** 1 wk**

Other** (specify): STE

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **: 24 hr - 100%.... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day 10%

Report Format: Results Only (Required) | Regulatory - 15% Surcharge applies | Other (describe)

EDDs: SRP format | lab approved custom EDD | NO EDD/CD REQ'D

Cooler Temp 4 °C

Sample Matrix

DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

SAMPLE INFORMATION

ANALYTICAL PARAMETERS

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	TPH FO15 GRO/DRO	Total VOC 8260B	Total SVOC 8270C	PCB 8082	PPM Metals 6010B	Sulfur	Merc	TCLP Lead	# BOTTLES & PRESERVATIVES: HCL	HNO3	MeOH	Other	None	Encore
GPECWC07712	—	7/17/12	14:00	S	3	1	X	X	X	X	X	X	X	X						

Known Hazard: Yes or No Describe:

Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): _____ IAL Courier _____ Client Courier _____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		7/19/12	0745	Received by:	7/19/12	1120
Relinquished by:		7/19/12	1200	Received by:	7/19/12	1200
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 07194

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

10 REV COC

10/2010 rev

PROJECT INFORMATION

** RUSH **

E12-07194

Case No. E12-07194 **Project** GREENPOINT PHASE I

Customer	GEI Consultants Inc. - Montclair	**P.O. #**	125180-1-1102
Contact	Maria Stepanova	**Received**	7/19/2012 12:00
EMail	mstepanova@geiconsultants.com ☑ EMail EDDs	**Verbal Due**	7/26/2012
Phone	msweet@geiconsultants.com (973) 509-9650 alambeikin@talonline.com **Fax** 1(973) 509-9625	**Report Due**	8/9/2012

Report To

1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

400 Unicorn Park Drive
Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format Result Only

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
07194-001	GPECWC071712	n/a	7/17/2012@14:00	Soil	mg/Kg	3

Sample #	Tests	Status	QA Method
001	Special VOA	Run	8260B
"	TPH-GRO	Run	8260B
"	PP BNA	Run	8270C
"	PP/PCB	Run	8082
"	TPH-DRO	Run	8015B M
"	PP Metals	Run	6020/7471A
"	TCLP Lead - Pb	Run	1311/6020
"	Sulfur	Run	D129

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 12** **07194** CLIENT: GBI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 7/19/12

CORRECTIVE ACTION REQUIRED: **YES** (SEE BELOW) **NO**

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES Date/ Time: NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL VL DATE 7/19/12

Laboratory Custody Chronicle

IAL Case No.

E12-07194

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE I

Received On 7/19/2012@12:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	07194-001	Soil	n/a	n/a	7/23/12	Xing
TPH-GRO	-001	Soil	n/a	n/a	7/23/12	Xing

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP BNA	-001	Soil	7/23/12	Kou-Liang	7/23/12	JC

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	7/23/12	Archimede	7/25/12	Julia
TPH-DRO	-001	Soil	7/23/12	Archimede	7/25/12	Margaret

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	n/a	n/a	7/24/12	En
TCLP Lead - Pb	-001	Soil	7/24/12	Lisa	7/24/12	En

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	7/25/12	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREENPOINT PHASE I
Lab Case Number: E12-07378

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

PCB's

Lab ID: 07378-001
Client ID: GPECWC072312
Matrix-Units: Aqueous-ug/L
Percent Moisture: 100

Date Sampled: 7/23/2012
Time Sampled: 14:45
Date Analyzed: 7/26/12

Compound	Conc	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

ND = Analyzed for but Not Detected at the MDL

These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants	REPORT TO:	Data Group
Address:	1 Greenwood Ave Ste 210 Montclair NJ 07042	Address:	datagroup@geiconsultants.com
Telephone #:	973 873 7110	Attn:	Jaimie Wago
Fax #:	973 509 9625	FAX #	
Project Manager:	Maria Stepanova	INVOICE TO:	Accounting
EMAIL Address:	mstepanova@	Address:	400 Unicorn Pk Dr
Sampler:	Matt Sweet		
Project Name:	Greenpoint RI		
Project Location (State):	NY	Attn:	Sandra St Hilaire
Bottle Order #:		PO #	125180-1-1102
Quote # :			

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)

NJ EPH - C40 (5 day TAT)

DRO-8015 (3-5 day TAT) QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** 1 wk**

Other** (specify):

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **: 24 hr - 100%.... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day 10%

Report Format: Results Only; Reduced; Regulatory - 15% Surcharge applies; Other (describe)

EDDs: SRP format; lab approved custom EDD; NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	PCB 8082									HCL	HNO3	MeOH	Other	None	Encore
GPECWC072312		7/23/12	14:45	AQ	2	1	X													2	
GPECSB211(37-38)		7/16/12	10:15	S	1	2							put on hold							1	
GPECSB215(36-37)		7/16/12	11:10	S	1	3							put on hold							1	

Known Hazard: Yes or No Describe:

Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): X IAL Courier ___ Client Courier ___ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		7/24/12	0600	Received by:	7/24/12	11:12
Relinquished by:		7/24/12	12:15	Received by:	7/24/12	1215
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Send results to datagroup@geiconsultants.com waste class sample

Lab Case # 07378

PAGE: 1 of 1

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Please put samples SB11(37-38) and SB215(36-37) on hold to be shipped to META shortly

PROJECT INFORMATION

** RUSH **

E12-07378

Case No. E12-07378 **Project** GREENPOINT PHASE I

Customer	GEI Consultants Inc. - Montclair	**P.O. #**	125180-1-1102
Contact	Maria Stepanova	**Received**	7/24/2012 12:15
EMail	mstepanova@geiconsultants.com; msweet@geiconsultants.com; alaroche@alsonline.com ☑ EMail EDDs	**Verbal Due**	7/26/2012
Phone	(973) 509-9650 **Fax** 1(973) 509-9625	**Report Due**	8/14/2012

Report To

1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

400 Unicorn Park Drive
Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format Result Only

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
07378-001	GPECWC072312	n/a	7/23/2012@14:45	Aqueous	ug/L	2
07378-002	GPECSB211 (37-38)	37 / 38	7/16/2012@10:15	Soil	mg/Kg	1
07378-003	GPECSB215 (36-37)	36 / 37	7/16/2012@11:10	Soil	mg/Kg	1

Sample #	Tests	Status	QA Method
001	TCL PCB	In Process	8082

07/25/2012 09:25 by kim - NOTE 3

SAMPLES 002 & 003 SHIPPED TO META ENVIRONMENTAL 7/25/12.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 12** **07378** CLIENT: CBI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY
✓ = YES/NA
✗ = NO

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [JL] DATE 7/24/12

CORRECTIVE ACTION REQUIRED: **YES** [ ] (SEE BELOW) **NO** [ ]

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [KG] DATE 7/25/12

Laboratory Custody Chronicle

IAL Case No.

E12-07378

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE I

Received On 7/24/2012@12:15

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	07378-001	Aqueous	7/25/12	Archimede	7/26/12	Julia

Jul 26 2012 @ 11:56

E12-07378

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT**
IAL Case Number: **E13-10601**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Sample Summary

IAL Case No.

E13-10601

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 10/24/2013@17:10

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
10601-001	GPEC WC 102313	n/a	10/23/2013@08:00	Soil	3

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on November 08, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) soil sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E13-10601, Project: GREENPOINT) on October 24, 2013 for the analysis of:

(1) Special VO
(1) PP/PAH
(1) PP/PCB
(1) TPH-DRO
(1) PP Metals
(1) Metal - TCLP Lead
(1) Sulfur as S

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

11/8/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-10601

Volatiles By 8260C

Batch ID: J131028	**Matrix: MEOH**

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery did not meet QC criteria. Dichlorodifluoromethane failed for MS/MSD due to matrix interference.

E13-10601

- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- #001 run straight.

Signature

10/29/2013
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-10601

Semivolatiles By **8270D/625**

Batch ID: 131025-02	**Matrix:** Soil

QC
- Calibration Curve met criteria.
- Internal standard recovery met criteria.
- Surrogate recovery met criteria.
- Method blank met criteria.
- Laboratory control sample recovery met criteria.
- Matrix Spike / Matrix Spike Duplicate recoveries met criteria.

E13-10601
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-diphenylhydrazine will be directly compared to the applicable criteria for azobenzene and/or 1,2-diphenylhydrazine.

John

Signature

10/28/2013

Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-10601

PCB By 8082A

Batch ID: 131028-12	**Matrix: Soil**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001

E13-10601

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 10601 -001.

10/29/2013

Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

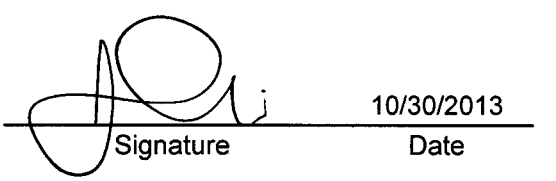
SDG#: E13-10601

DRO/GRO By 8015D

Batch ID: 131025-13	**Matrix: Soil**

QC
- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.

E13-10601
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- 10601-1 was run straight.



Signature

10/30/2013
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-10601

METALS By 6020A/7471B

Batch ID: S131025-01 (PG500)	**Matrix:** Soil

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- Laboratory Control Sample Recovery met criteria.
- Matrix Spike Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E13-10601
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

10/29/2013

Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-10601

METALS By 1311/6020A/7470A

Batch ID: T131106-01 (PG517)	**Matrix:** TCLP Leachate

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- Laboratory Control Sample Recovery met criteria.
- Matrix Spike Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E13-10601
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

11/7/2013

Signature Date

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles Special List (Units)	*(mg/Kg-ppm)*		
Chloromethane	ND		0.060
Vinyl chloride	ND		0.064
Bromomethane	ND		0.065
Chloroethane	ND		0.063
Trichlorofluoromethane	ND		0.072
Acrolein	ND		0.243
1,1-Dichloroethene	ND		0.053
Acetone	ND		0.056
Methylene chloride	ND		0.212
Acrylonitrile	ND		0.241
trans-1,2-Dichloroethene	ND		0.056
1,1-Dichloroethane	ND		0.051
cis-1,2-Dichloroethene	ND		0.052
2-Butanone (MEK)	ND		0.088
Chloroform	ND		0.061
1,1,1-Trichloroethane	ND		0.052
Carbon tetrachloride	ND		0.061
1,2-Dichloroethane (EDC)	ND		0.045
Benzene	ND		0.029
Trichloroethene	ND		0.029
1,2-Dichloropropane	ND		0.063
Bromodichloromethane	ND		0.043
2-Chloroethyl vinyl ether	ND		0.058
cis-1,3-Dichloropropene	ND		0.046
4-Methyl-2-pentanone (MIBK)	ND		0.049
Toluene	0.038	J	0.028
trans-1,3-Dichloropropene	ND		0.037
1,1,2-Trichloroethane	ND		0.036
Tetrachloroethene	ND		0.030
Dibromochloromethane	ND		0.043
Chlorobenzene	ND		0.049
1,1,1,2-Tetrachloroethane	ND		0.045
Ethylbenzene	ND		0.054
Total Xylenes	ND		0.080
Styrene	ND		0.047
Bromoform	ND		0.051
1,1,2,2-Tetrachloroethane	ND		0.044
1,3-Dichlorobenzene	ND		0.046
1,4-Dichlorobenzene	ND		0.045
1,2-Dichlorobenzene	ND		0.054
1,2,4-Trichlorobenzene	ND		0.060
TOTAL VO's:	0.038	J	

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - PAH (Units)	***(mg/Kg-ppm)***		
Naphthalene	0.079		0.021
Acenaphthylene	0.223		0.025
Acenaphthene	0.052		0.028
Fluorene	0.075		0.021
Phenanthrene	0.987		0.023
Anthracene	0.274		0.035
Fluoranthene	2.10		0.021
Pyrene	1.75		0.026
Benzo[a]anthracene	1.08		0.034
Chrysene	1.12		0.024
Benzo[b]fluoranthene	1.31		0.022
Benzo[k]fluoranthene	1.15		0.033
Benzo[a]pyrene	1.37		0.021
Indeno[1,2,3-cd]pyrene	0.456		0.023
Dibenz[a,h]anthracene	0.203		0.026
Benzo[g,h,i]perylene	0.373		0.032
PCB's (Units)	***(mg/Kg-ppm)***		
Aroclor-1016	ND		0.016
Aroclor-1221	ND		0.016
Aroclor-1232	ND		0.016
Aroclor-1242	ND		0.016
Aroclor-1248	ND		0.016
Aroclor-1254	ND		0.016
Aroclor-1260	ND		0.016
PCBs	ND		
Hydrocarbons (Units)	***(mg/Kg-ppm)***		
TPH-DRO	ND		62.5

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Metals (Units)	***(mg/Kg-ppm)***		
Antimony	ND		0.291
Arsenic	9.94		0.291
Beryllium	0.359	J	0.233
Cadmium	0.309	J	0.145
Chromium	19.2		0.582
Copper	61.9		0.582
Lead	127		0.582
Mercury	1.40		0.024
Nickel	67.8		0.582
Selenium	0.900		0.582
Silver	ND		0.145
Thallium	0.159	J	0.145
Zinc	120		0.582
TCLP Metals (Units)	***(mg/L-ppm)***		
TCLP Lead	0.100		0.050
General Analytical (Units)			
Sulfur as S(mg/Kg-ppm)	ND		881

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 10601-001
Client ID: GPEC_WC_102313
Date Received: 10/24/2013
Date Analyzed: 10/28/2013
Data file: J0017.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 6.40

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.107	0.060
Vinyl chloride	ND		0.107	0.064
Bromomethane	ND		0.107	0.065
Chloroethane	ND		0.107	0.063
Trichlorofluoromethane	ND		0.107	0.072
Acrolein	ND		2.14	0.243
1,1-Dichloroethene	ND		0.107	0.053
Acetone	ND		0.107	0.056
Methylene chloride	ND		0.214	0.212
Acrylonitrile	ND		2.14	0.241
trans-1,2-Dichloroethene	ND		0.107	0.056
1,1-Dichloroethane	ND		0.107	0.051
cis-1,2-Dichloroethene	ND		0.107	0.052
2-Butanone (MEK)	ND		0.107	0.088
Chloroform	ND		0.107	0.061
1,1,1-Trichloroethane	ND		0.107	0.052
Carbon tetrachloride	ND		0.107	0.061
1,2-Dichloroethane (EDC)	ND		0.107	0.045
Benzene	ND		0.107	0.029
Trichloroethene	ND		0.107	0.029
1,2-Dichloropropane	ND		0.107	0.063
Bromodichloromethane	ND		0.107	0.043
2-Chloroethyl vinyl ether	ND		0.107	0.058
cis-1,3-Dichloropropene	ND		0.107	0.046
4-Methyl-2-pentanone (MIBK)	ND		0.107	0.049

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 10601-001
Client ID: GPEC_WC_102313
Date Received: 10/24/2013
Date Analyzed: 10/28/2013
Data file: J0017.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 6.40

Compound	Concentration	Q	RL	MDL
Toluene	0.038	J	0.107	0.028
trans-1,3-Dichloropropene	ND		0.107	0.037
1,1,2-Trichloroethane	ND		0.107	0.036
Tetrachloroethene	ND		0.107	0.030
Dibromochloromethane	ND		0.107	0.043
Chlorobenzene	ND		0.107	0.049
1,1,1,2-Tetrachloroethane	ND		0.107	0.045
Ethylbenzene	ND		0.107	0.054
Total Xylenes	ND		0.214	0.080
Styrene	ND		0.107	0.047
Bromoform	ND		0.107	0.051
1,1,2,2-Tetrachloroethane	ND		0.107	0.044
1,3-Dichlorobenzene	ND		0.107	0.046
1,4-Dichlorobenzene	ND		0.107	0.045
1,2-Dichlorobenzene	ND		0.107	0.054
1,2,4-Trichlorobenzene	ND		0.107	0.060
Total Target Compounds (41):	0.038	J		

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E13-10601-001
Client ID: GPEC_WC_
Date Received: 10/24/2013
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1247.D

GC/MS Column: DB-5
Sample wt/vol: 15.10g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 6.4

Compound	Concentration	Q	RL	MDL
Naphthalene	0.079		0.035	0.021
Acenaphthylene	0.223		0.035	0.025
Acenaphthene	0.052		0.035	0.028
Fluorene	0.075		0.035	0.021
Phenanthrene	0.987		0.035	0.023
Anthracene	0.274		0.035	0.035
Fluoranthene	2.10		0.035	0.021
Pyrene	1.75		0.035	0.026
Benzo[a]anthracene	1.08		0.035	0.034
Chrysene	1.12		0.035	0.024
Benzo[b]fluoranthene	1.31		0.035	0.022
Benzo[k]fluoranthene	1.15		0.035	0.033
Benzo[a]pyrene	1.37		0.035	0.021
Indeno[1,2,3-cd]pyrene	0.456		0.035	0.023
Dibenz[a,h]anthracene	0.203		0.035	0.026
Benzo[g,h,i]perylene	0.373		0.035	0.032

Total Target Compounds (16): 12.6

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E13-10601-001
Client ID: GPEC_WC_
Date Received: 10/24/2013
Date Extracted: 10/28/2013
Date Analyzed: 10/29/2013
Data file: Y2549.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.21g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 6.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	10601-001	GC Column:	RTX-5
Client ID:	GPEC WC 102313	Sample wt/vol:	10.25g
Date Received:	10/24/2013	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	10/25/2013	Dilution Factor:	1
Date Analyzed:	10/29/2013	%Moisture:	6.40
Data File:	QB9914.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		78.2	62.5

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID: E13-10601-001
Client ID: GPEC WC 102313
Date Collected: 10/23/13 08:00
Date Received: 10/24/13 17:10
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 6.40
Batch #: 500

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	ND		1	0.582	0.291	10/28/13 10:48	6020A
Arsenic	9.94		1	0.582	0.291	10/28/13 10:48	6020A
Beryllium	0.359	J	1	0.582	0.233	10/28/13 10:48	6020A
Cadmium	0.309	J	1	0.582	0.145	10/28/13 10:48	6020A
Chromium	19.2		1	0.582	0.582	10/28/13 10:48	6020A
Copper	61.9		1	0.582	0.582	10/28/13 10:48	6020A
Lead	127		1	0.582	0.582	10/28/13 10:48	6020A
Mercury	1.40		1	0.050	0.024	10/29/13 14:43	7471B
Nickel	67.8		1	0.582	0.582	10/28/13 10:48	6020A
Selenium	0.900		1	0.582	0.582	10/28/13 10:48	6020A
Silver	ND		1	0.582	0.145	10/28/13 10:48	6020A
Thallium	0.159	J	1	0.582	0.145	10/28/13 10:48	6020A
Zinc	120		1	0.582	0.582	10/28/13 10:48	6020A

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP Lead

Client/Project: GEI-MTCLRGREENPOINT

Batch #: 517
Date Received: 10/24/13 17:10
Method: 1311/6020A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E13-10601-001	GPEC WC 102313	0.100		1	TCLP Leachate mg/L	0.100	0.050	NA	10/23/13 08:00	11/06/13 19:17

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREENPOINT

Date Received: 10/24/13 17:10
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E13-10601-001	GPEC WC 102313	ND		1	Soil-mg/Kg	881	1060	93.6	10/23/13 08:00	11/01/13 09:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/28/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS131028	MEOH	J0005.D	104	105	104
10582-022	MEOH	J0006.D	111	103	105
10582-034	MEOH	J0007.D	112	102	106
10582-037	MEOH	J0008.D	114	104	103
10582-038	MEOH	J0009.D	111	92	104
10582-040	MEOH	J0010.D	99	104	104
10582-042	MEOH	J0011.D	112	102	103
10582-036	MEOH	J0012.D	109	104	112
LCSS131028	MEOH	J0013.D	105	107	105
10601-001MS	MEOH	J0014.D	110	106	104
10601-001MSD	MEOH	J0015.D	110	106	104
10601-001	MEOH	J0017.D	111	104	104
10605-001	MEOH	J0018.D	114	103	104
10583-001	MEOH	J0019.D	112	105	105
10583-002	MEOH	J0020.D	110	105	104
10583-003	MEOH	J0021.D	114	106	104
10583-005	MEOH	J0022.D	110	107	103
10583-006	MEOH	J0023.D	110	106	103
10583-004	MEOH	J0024.D	113	105	105
10528-006	MEOH	J0025.D	110	102	106

	Concentration	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	59-138	43-133
SMC2 = Toluene-d8	50 ppb	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	42-152	45-145

Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

8260LCS **LCS ACCURACY REPORT**

Lab ID: LCSS131028
Date Received:
Date Analyzed: 10/28/2013
LCS Data file: J0013.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-μg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.00	40.7	81
Chloromethane	50.0	0.00	45.1	90
Vinyl chloride	50.0	0.00	51.5	103
Bromomethane	50.0	0.00	60.4	121
Chloroethane	50.0	0.00	54.6	109
Trichlorofluoromethane	50.0	0.00	53.0	106
Acrolein	150	0.00	142.9	95
1,1-Dichloroethene	50.0	0.00	55.6	111
Acetone	50.0	0.00	59.2	118
Carbon disulfide	50.0	0.00	51.7	103
Vinyl acetate	50.0	0.00	60.7	121
Methylene chloride	50.0	0.00	56.1	112
Acrylonitrile	150.0	0.00	179.5	120
tert-Butyl alcohol (TBA)	100.0	0.00	125.0	125
trans-1,2-Dichloroethene	50.0	0.00	51.9	104
Methyl tert-butyl ether (MTBE)	50.0	0.00	57.6	115
1,1-Dichloroethane	50.0	0.00	52.6	105
Diisopropyl ether (DIPE)	50.0	0.00	53.6	107
cis-1,2-Dichloroethene	50.0	0.00	49.1	98
2,2-Dichloropropane	50.0	0.00	51.7	103
2-Butanone (MEK)	50.0	0.00	48.4	97
Bromochloromethane	50.0	0.00	49.4	99
Chloroform	50.0	0.00	49.8	100
1,1,1-Trichloroethane	50.0	0.00	47.4	95
Carbon tetrachloride	50.0	0.00	45.7	91
1,1-Dichloropropene	50.0	0.00	45.9	92
1,2-Dichloroethane (EDC)	50.0	0.00	49.9	100
Benzene	50.0	0.00	45.7	91
Trichloroethene	50.0	0.00	45.2	90
1,2-Dichloropropane	50.0	0.00	46.3	93
Dibromomethane	50.0	0.00	48.9	98
1,4-Dioxane	1500	0.00	1649	110
Bromodichloromethane	50.0	0.00	47.9	96
2-Chloroethyl vinyl ether	50.0	0.00	52.6	105
cis-1,3-Dichloropropene	50.0	0.00	49.8	100
4-Methyl-2-pentanone (MIBK)	50.0	0.00	49.1	98
Toluene	50.0	0.00	46.1	92
trans-1,3-Dichloropropene	50.0	0.00	50.3	101
1,1,2-Trichloroethane	50.0	0.00	49.6	99
Tetrachloroethene	50.0	0.00	43.6	87
1,3-Dichloropropane	50.0	0.00	49.8	100

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS131028
Date Received:
Date Analyzed: 10/28/2013
LCS Data file: J0013.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.00	49.4	99
Dibromochloromethane	50.0	0.00	49.8	100
1,2-Dibromoethane (EDB)	50.0	0.00	49.2	98
Chlorobenzene	50.0	0.00	38.6	77
1,1,1,2-Tetrachloroethane	50.0	0.00	39.0	78
Ethylbenzene	50.0	0.00	39.4	79
m,p-Xylene	100.0	0.00	78.8	79
o-Xylene	50.0	0.00	40.5	81
Styrene	50.0	0.00	42.4	85
Bromoform	50.0	0.00	43.2	86
Isopropylbenzene	50.0	0.00	38.8	78
1,1,2,2-Tetrachloroethane	50.0	0.00	42.0	84
Bromobenzene	50.0	0.00	39.5	79
1,2,3-Trichloropropane	50.0	0.00	41.5	83
n-Propylbenzene	50.0	0.00	38.3	77
2-Chlorotoluene	50.0	0.00	38.3	77
1,3,5-Trimethylbenzene	50.0	0.00	39.0	78
4-Chlorotoluene	50.0	0.00	39.3	79
tert-Butylbenzene	50.0	0.00	37.6	75
1,2,4-Trimethylbenzene	50.0	0.00	39.3	79
sec-Butylbenzene	50.0	0.00	37.0	74
1,3-Dichlorobenzene	50.0	0.00	38.9	78
4-Isopropyltoluene	50.0	0.00	38.4	77
1,4-Dichlorobenzene	50.0	0.00	38.3	77
n-Butylbenzene	50.0	0.00	38.9	78
1,2-Dichlorobenzene	50.0	0.00	38.7	77
1,2-Dibromo-3-chloropropane	50.0	0.00	52.2	104
1,2,4-Trichlorobenzene	50.0	0.00	36.8	74
Hexachlorobutadiene	50.0	0.00	53.6	107
Naphthalene	50.0	0.00	46.2	92
1,2,3-Trichlorobenzene	50.0	0.00	49.0	98
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	40.6	81
Methyl acetate	50.0	0.00	47.9	96
Cyclohexane	50.0	0.00	44.0	88
Methylcyclohexane	50.0	0.00	37.7	75

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD **MS/MSD SPIKE REPORT**

Lab ID: 10601-001
Client ID: GPEC_WC_102313
Date Received: 10/24/2013
Date Analyzed: 10/28/2013
MS Data file: J0014.D
MSD Data file: J0015.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 6.40
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	26.6	53	*	20.4	41	*	26	
Chloromethane	50	0.0	37.3	75		37.3	75		0	
Vinyl chloride	50	0.0	49.2	98		47.1	94		4	
Bromomethane	50	0.0	59.0	118		58.9	118		0	
Chloroethane	50	0.0	57.7	115		57.6	115		0	
Trichlorofluoromethane	50	0.0	60.3	121		58.8	118		3	
Acrolein	150	0.0	137	91		133	89		3	
1,1-Dichloroethene	50	0.0	62.3	125		59.8	120		4	
Acetone	50	0.0	56.8	114		64.6	129		13	
Carbon disulfide	50	0.0	54.3	109		53.0	106		2	
Vinyl acetate	50	0.0	47.4	95		44.3	89		7	
Methylene chloride	50	0.0	61.1	122		61.9	124		1	
Acrylonitrile	150	0.0	179	119		185	123		3	
tert-Butyl alcohol (TBA)	100	0.0	116.6	117		126.6	127		8	
trans-1,2-Dichloroethene	50	0.0	60.1	120		60.0	120		0	
Methyl tert-butyl ether (MTB	50	0.0	63.3	127		65.0	130		3	
1,1-Dichloroethane	50	0.0	56.0	112		54.9	110		2	
Diisopropyl ether (DIPE)	50	0.0	60.6	121		59.7	119		1	
cis-1,2-Dichloroethene	50	0.0	55.1	110		54.1	108		2	
2,2-Dichloropropane	50	0.0	52.0	104		50.2	100		4	
2-Butanone (MEK)	50	0.0	57.1	114		56.7	113		1	
Bromochloromethane	50	0.0	54.9	110		54.9	110		0	
Chloroform	50	0.0	56.2	112		56.1	112		0	
1,1,1-Trichloroethane	50	0.0	53.7	107		53.3	107		1	
Carbon tetrachloride	50	0.0	53.4	107		53.7	107		1	
1,1-Dichloropropene	50	0.0	51.7	103		51.3	103		1	
1,2-Dichloroethane (EDC)	50	0.0	57.9	116		57.4	115		1	
Benzene	50	0.0	50.9	102		49.7	99		2	
Trichloroethene	50	0.0	50.7	101		50.9	102		0	
1,2-Dichloropropane	50	0.0	53.0	106		52.7	105		1	
Dibromomethane	50	0.0	53.1	106		53.2	106		0	
1,4-Dioxane	1,500	0.0	1585	106		1592	106		0	
Bromodichloromethane	50	0.0	53.6	107		53.5	107		0	
2-Chloroethyl vinyl ether	50	0.0	55.4	111		56.3	113		2	
cis-1,3-Dichloropropene	50	0.0	53.3	107		52.9	106		1	
4-Methyl-2-pentanone (MIBK	50	0.0	56.1	112		56.2	112		0	
Toluene	50	0.4	50.8	101		50.3	100		1	
trans-1,3-Dichloropropene	50	0.0	54.3	109		54.7	109		1	
1,1,2-Trichloroethane	50	0.0	53.0	106		53.9	108		2	
Tetrachloroethene	50	0.0	48.5	97		48.7	97		0	
1,3-Dichloropropane	50	0.0	53.6	107		53.7	107		0	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 10601-001
Client ID: GPEC_WC_102313
Date Received: 10/24/2013
Date Analyzed: 10/28/2013
MS Data file: J0014.D
MSD Data file: J0015.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 6.40
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	58.6	117		58.8	118		0	
Dibromochloromethane	50	0.00	55.0	110		55.6	111		1	
1,2-Dibromoethane (EDB)	50	0.00	52.9	106		52.4	105		1	
Chlorobenzene	50	0.00	43.3	87		42.8	86		1	
1,1,1,2-Tetrachloroethane	50	0.00	45.2	90		43.5	87		4	
Ethylbenzene	50	0.00	43.5	87		42.8	86		2	
m,p-Xylene	100	0.00	87.8	88		86.4	86		2	
o-Xylene	50	0.00	44.5	89		43.6	87		2	
Styrene	50	0.00	46.3	93		45.8	92		1	
Bromoform	50	0.00	47.9	96		47.4	95		1	
Isopropylbenzene	50	0.00	42.6	85		41.9	84		2	
1,1,2,2-Tetrachloroethane	50	0.00	44.4	89		43.0	86		3	
Bromobenzene	50	0.00	44.2	88		42.9	86		3	
1,2,3-Trichloropropane	50	0.00	44.4	89		43.9	88		1	
n-Propylbenzene	50	0.00	42.1	84		41.5	83		1	
2-Chlorotoluene	50	0.00	42.3	85		41.7	83		1	
1,3,5-Trimethylbenzene	50	0.00	43.6	87		42.7	85		2	
4-Chlorotoluene	50	0.00	43.5	87		43.2	86		1	
tert-Butylbenzene	50	0.00	41.8	84		40.7	81		3	
1,2,4-Trimethylbenzene	50	0.00	43.8	88		42.8	86		2	
sec-Butylbenzene	50	0.00	41.1	82		40.5	81		1	
1,3-Dichlorobenzene	50	0.00	42.8	86		42.3	85		1	
4-Isopropyltoluene	50	0.00	42.4	85		41.6	83		2	
1,4-Dichlorobenzene	50	0.00	42.8	86		42.5	85		1	
n-Butylbenzene	50	0.00	41.8	84		40.8	82		2	
1,2-Dichlorobenzene	50	0.00	43.2	86		42.8	86		1	
1,2-Dibromo-3-chloropropan	50	0.00	58.2	116		57.6	115		1	
1,2,4-Trichlorobenzene	50	0.00	41.7	83		40.1	80		4	
Hexachlorobutadiene	50	0.00	57.6	115		57.0	114		1	
Naphthalene	50	0.00	52.2	104		51.2	102		2	
1,2,3-Trichlorobenzene	50	0.00	54.5	109		53.7	107		1	
1,1,2-Trichloro-1,2,2-trifluo	50	0.00	47.8	96		44.7	89		7	
Methyl acetate	50	0.00	57.5	115		56.1	112		2	
Cyclohexane	50	0.00	52.7	105		51.4	103		2	
Methylcyclohexane	50	0.00	45.7	91		44.5	89		3	

	Leachate Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J0005.D

Instrument ID: MSD_J

Date Analyzed: 10/28/2013

Time Analyzed: 11:37

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PX-22	10582-022	10/28/2013	12:04
PX-33	10582-034	10/28/2013	12:31
PX-36	10582-037	10/28/2013	12:58
PX-37	10582-038	10/28/2013	13:25
PX-39	10582-040	10/28/2013	13:52
PX-41	10582-042	10/28/2013	14:18
PX-35	10582-036	10/28/2013	14:45
LCS-50PPB	LCSS131028	10/28/2013	15:12
MS	10601-001MS	10/28/2013	15:39
MSD	10601-001MSD	10/28/2013	16:05
GPEC_WC_102313	10601-001	10/28/2013	16:59
T1/6-6.5	10605-001	10/28/2013	17:26
CL-1	10583-001	10/28/2013	17:52
CL-2	10583-002	10/28/2013	18:20
CL-3	10583-003	10/28/2013	18:46
SW-2	10583-005	10/28/2013	19:13
SW-3	10583-006	10/28/2013	19:40
SW-1	10583-004	10/28/2013	20:07
WASTE_CLASS	10528-006	10/28/2013	20:34

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J9652.D

BFB Injection Date: 10/08/2013

Inst ID: MSD_J

BFB Injection Time: 9:57

m/z	Ion Abudance Criteria	%Relative Abundance		
50	15 - 40.0% of mass 95	23.2		
75	30.0 - 60.0% of mass 95	48.2		
95	Base peak, 100% relative abundance	100.0		
96	5.0 - 9.0% of mass 95	6.7		
173	Less than 2.0% of mass 174	0.5	(0.8	)1
174	Great than 50.0% of mass 95	65.9		
175	5.0 - 9.0% of mass 174	5.1	(7.7	)1
176	95.0 - 101.0% of mass 174	63.0	(95.6	)1
177	5.0 - 9.0% of mass 176	4.3	(6.9	)2
	1-Value is % mass 174	2-Value is % mass 176		

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC5	ICC5	J9655.D	10/08/2013	11:51
ICC20	ICC20	J9656.D	10/08/2013	12:31
ICC100	ICC100	J9657.D	10/08/2013	12:58
ICC150	ICC150	J9658.D	10/08/2013	13:25
ICC200	ICC200	J9659.D	10/08/2013	13:51
ICC1	ICC1	J9662.D	10/08/2013	16:52
ICC2	ICC2	J9663.D	10/08/2013	17:19
ICV100	ICV100	J9664.D	10/08/2013	18:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J0001.D

BFB Injection Date: 10/28/2013

Inst ID: MSD_J

BFB Injection Time: 9:49

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	23.6			
75	30.0 - 60.0% of mass 95	48.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.1	(	0.2	)1
174	Great than 50.0% of mass 95	71.7			
175	5.0 - 9.0% of mass 174	5.3	(	7.4	)1
176	95.0 - 101.0% of mass 174	68.2	(	95.1	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	J0002.D	10/28/2013	10:16
BLKS131028	BLKS131028	J0005.D	10/28/2013	11:37
PX-22	10582-022	J0006.D	10/28/2013	12:04
PX-33	10582-034	J0007.D	10/28/2013	12:31
PX-36	10582-037	J0008.D	10/28/2013	12:58
PX-37	10582-038	J0009.D	10/28/2013	13:25
PX-39	10582-040	J0010.D	10/28/2013	13:52
PX-41	10582-042	J0011.D	10/28/2013	14:18
PX-35	10582-036	J0012.D	10/28/2013	14:45
LCS-50PPB	LCSS131028	J0013.D	10/28/2013	15:12
MS	10601-001MS	J0014.D	10/28/2013	15:39
MSD	10601-001MSD	J0015.D	10/28/2013	16:05
GPEC_WC_102313	10601-001	J0017.D	10/28/2013	16:59
T1/6-6.5	10605-001	J0018.D	10/28/2013	17:26
CL-1	10583-001	J0019.D	10/28/2013	17:52
CL-2	10583-002	J0020.D	10/28/2013	18:20
CL-3	10583-003	J0021.D	10/28/2013	18:46
SW-2	10583-005	J0022.D	10/28/2013	19:13
SW-3	10583-006	J0023.D	10/28/2013	19:40
SW-1	10583-004	J0024.D	10/28/2013	20:07

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J0001.D

BFB Injection Date : 10/28/201

Inst ID: MSD_J

BFB Injection Time: 9:49

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	23.6			
75	30.0 - 60.0% of mass 95	48.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.1	(	0.2	)1
174	Great than 50.0% of mass 95	71.7			
175	5.0 - 9.0% of mass 174	5.3	(	7.4	)1
176	95.0 - 101.0% of mass 174	68.2	(	95.1	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
WASTE_CLASS	10528-006	J0025.D	10/28/2013	20:34

E13-10601 0033

Response Factor Report MSD_J

Method Path : C:\MSDCHEM\1\METHODS\
Method File : JM100813.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Thu Oct 10 10:11:54 2013
Response Via : Initial Calibration

Calibration Files
1 =J9662.D 2 =J9663.D 5 =J9655.D
20 =J9656.D 100 =J9657.D 200 =J9659.D 150 =J9658.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.387	0.432	0.360	0.449	0.446	0.485	0.507	0.438	11.77
3)	P	Chloromethane	1.677	1.632	1.365	1.266	1.291	1.333	1.317	1.411	12.01
4)	C	Vinyl chloride	1.138	1.059	0.919	1.120	1.171	1.198	1.123	1.104	8.39
5)	T	Bromomethane	0.525	0.550	0.607	0.564	0.495	0.480	0.444	0.523	10.57
6)	T	Chloroethane	0.796	0.843	0.623	0.665	0.662	0.639	0.654	0.697	12.29
7)	T	Trichlorofluorome	0.912	0.898	0.600	0.874	0.984	0.914	0.831	0.859	14.34
8)	T	Acrolein	0.123	0.128	0.132	0.110	0.129	0.134	0.139	0.128	7.37
9)	MC	1,1-Dichloroethen	0.685	0.711	0.554	0.688	0.734	0.742	0.704	0.688	9.13
10)	T	Acetone	0.349	0.384	0.499	0.356	0.359	0.346	0.386	0.383	14.04
11)	T	Carbon disulfide	2.934	2.873	2.259	2.519	2.639	2.722	2.609	2.651	8.54
12)	T	Vinyl acetate	3.523	3.312	3.382	3.211	3.010	2.996	3.168	3.229	5.97
13)	T	Methylene chlorid		1.121	1.110	0.952	0.905	0.946	0.957	0.998	9.26
14)	T	Acrylonitrile	0.478	0.675	0.600	0.447	0.490	0.519	0.535	0.535	14.73
15)	T	tert-Butyl alcoho	0.174	0.190	0.172	0.157	0.150	0.155	0.166	0.166	8.27
16)	T	trans-1,2-Dichlor	1.235	1.177	0.959	0.951	0.952	0.978	0.971	1.032	11.69
17)	T	Methyl tert-butyl	3.615	3.660	3.497	3.139	3.033	3.121	3.205	3.324	7.79
18)	P	1,1-Dichloroethan	2.611	2.587	2.273	2.163	2.147	2.213	2.213	2.315	8.56
19)	T	Diisopropyl ether	5.777	5.952	5.703	5.110	4.868	4.971	5.067	5.350	8.30
20)	T	cis-1,2-Dichloroe	1.287	1.282	1.154	1.067	1.072	1.115	1.122	1.157	7.95
21)	T	2,2-Dichloropropa	1.157	1.212	0.942	1.046	1.020	0.964	0.951	1.042	10.14
22)	T	2-Butanone (MEK)	0.730	0.833	0.850	0.689	0.738	0.710	0.774	0.760	8.07
23)	T	Bromochloromethan	0.608	0.555	0.582	0.518	0.514	0.538	0.539	0.551	6.22
25)	C	Chloroform	2.009	1.985	1.803	1.676	1.640	1.713	1.716	1.792	8.30
26)	T	1,1,1-Trichloroet	1.652	1.636	1.101	1.270	1.316	1.345	1.294	1.374	14.63
27)	T	Carbon tetrachlor	1.310	1.336	0.912	1.035	1.120	1.118	1.055	1.127	13.44
28)	T	1,1-Dichloroprope	1.608	1.529	1.144	1.185	1.247	1.258	1.202	1.310	13.88
29)	T	1,2-Dichloroethan	1.896	1.924	1.836	1.634	1.557	1.588	1.628	1.723	9.05
30)	S	1,2-Dichloroethan	0.738	0.739	0.713	0.707	0.695	0.665	0.681	0.705	3.94
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	2.680	2.793	2.359	2.227	2.228	2.364	2.335	2.427	9.13
33)	M	Trichloroethene	0.648	0.651	0.508	0.521	0.540	0.574	0.556	0.571	10.13
34)	C	1,2-Dichloropropa	0.793	0.870	0.787	0.716	0.705	0.751	0.751	0.768	7.24
35)	T	Dibromomethane	0.359	0.390	0.378	0.343	0.340	0.360	0.362	0.362	4.95
36)	T	1,4-Dioxane	0.011	0.010	0.008	0.008	0.008	0.008	0.008	0.009	14.47
37)	T	Bromodichlorometh	0.767	0.821	0.798	0.729	0.740	0.794	0.790	0.777	4.25
38)	T	2-Chloroethyl vin	0.476	0.503	0.504	0.460	0.482	0.528	0.534	0.498	5.41
39)	T	cis-1,3-Dichlorop	0.981	1.009	1.009	0.941	0.954	1.037	1.033	0.995	3.77
40)	T	4-Methyl-2-pentan	0.859	0.889	0.911	0.806	0.819	0.857	0.888	0.861	4.43
41)	S	Toluene-d8	1.282	1.296	1.282	1.294	1.296	1.312	1.310	1.296	0.91
42)	MC	Toluene	1.589	1.550	1.346	1.276	1.292	1.404	1.387	1.406	8.62
43)	T	trans-1,3-Dichlor	0.880	0.918	0.898	0.858	0.869	0.938	0.939	0.900	3.63
44)	T	1,1,2-Trichloroet	0.447	0.454	0.445	0.406	0.405	0.438	0.440	0.433	4.59
45)	T	Tetrachloroethene	0.491	0.516	0.353	0.400	0.422	0.445	0.427	0.436	12.57
46)	T	1,3-Dichloropropa	0.978	0.931	0.948	0.870	0.864	0.929	0.934	0.922	4.46
47)	T	2-Hexanone	0.512	0.532	0.586	0.514	0.528	0.565	0.582	0.545	5.78
48)	T	Dibromochlorometh	0.505	0.566	0.543	0.525	0.549	0.599	0.602	0.556	6.50
49)	T	1,2-Dibromoethane	0.527	0.538	0.542	0.482	0.489	0.529	0.535	0.520	4.71
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.300	1.296	1.187	1.079	1.071	1.137	1.144	1.174	8.01
52)	T	1,1,1,2-Tetrachlo	0.406	0.428	0.433	0.387	0.389	0.410	0.416	0.410	4.61

53)	C	Ethylbenzene	2.048	2.015	1.687	1.689	1.731	1.838	1.817	1.832	8.10
54)	T	m,p-Xylene	0.765	0.757	0.651	0.646	0.657	0.686	0.685	0.692	7.15
55)	T	o-Xylene	0.709	0.770	0.690	0.657	0.664	0.694	0.698	0.697	5.31
56)	T	Styrene	1.211	1.209	1.205	1.113	1.176	1.237	1.251	1.200	3.77
57)	P	Bromoform	0.222	0.248	0.262	0.241	0.260	0.282	0.289	0.258	9.00
58)	T	Isopropylbenzene	1.590	1.637	1.275	1.374	1.429	1.505	1.471	1.469	8.44
59)	S	Bromofluorobenzen	0.707	0.719	0.719	0.702	0.699	0.697	0.701	0.706	1.28
60)	P	1,1,2,2-Tetrachlo	0.575	0.610	0.601	0.534	0.518	0.537	0.561	0.562	6.22
61)	T	Bromobenzene	0.466	0.484	0.463	0.409	0.414	0.443	0.445	0.446	6.15
62)	T	1,2,3-Trichloropr	0.548	0.545	0.535	0.459	0.437	0.457	0.478	0.494	9.48
63)	T	n-Propylbenzene	1.873	1.886	1.444	1.502	1.561	1.659	1.622	1.650	10.46
64)	T	2-Chlorotoluene	1.309	1.281	1.142	1.033	1.046	1.127	1.113	1.150	9.31
65)	T	1,3,5-Trimethylbe	1.300	1.286	1.117	1.125	1.161	1.233	1.218	1.206	6.10
66)	T	4-Chlorotoluene	1.514	1.508	1.380	1.232	1.232	1.322	1.313	1.357	8.63
67)	T	tert-Butylbenzene	0.913	0.917	0.703	0.767	0.801	0.867	0.830	0.829	9.43
68)	T	1,2,4-Trimethylbe	1.360	1.313	1.208	1.182	1.194	1.288	1.282	1.261	5.33
69)	T	sec-Butylbenzene	1.475	1.424	1.013	1.150	1.217	1.282	1.232	1.256	12.53
70)	T	1,3-Dichlorobenze	0.675	0.798	0.754	0.655	0.649	0.696	0.695	0.703	7.76
71)	T	4-Isopropyltoluen	1.152	1.159	0.933	1.005	1.049	1.125	1.095	1.074	7.76
72)	T	1,4-Dichlorobenze	0.746	0.829	0.798	0.690	0.674	0.726	0.725	0.741	7.51
73)	T	n-Butylbenzene	0.594	0.561	0.427	0.468	0.492	0.522	0.505	0.510	10.99
74)	T	1,2-Dichlorobenze	0.725	0.810	0.762	0.680	0.659	0.708	0.711	0.722	7.02
75)	T	1,2-Dibromo-3-chl	0.061	0.057	0.074	0.067	0.072	0.070	0.075	0.068	10.13
76)	T	1,2,4-Trichlorobe	0.321	0.275	0.261	0.338	0.262	0.317	0.303	0.297	10.36
77)	T	Hexachlorobutadie		0.066	0.083	0.092	0.086	0.090	0.095	0.085	12.07
78)	T	Naphthalene	0.792	0.715	0.888	0.790	0.761	0.928	0.900	0.825	9.74
79)	T	1,2,3-Trichlorobe	0.193	0.191	0.197	0.175	0.188	0.192	0.161	0.185	6.89
80)	T	1,1,2-Trichloro-1	0.204	0.219	0.185	0.214	0.246	0.217	0.194	0.211	9.34
81)	T	Methyl acetate	0.527	0.539	0.492	0.422	0.414	0.420	0.442	0.465	11.47
82)	T	Cyclohexane		0.472	0.363	0.489	0.519	0.522	0.536	0.484	13.11
83)	T	Methylcyclohexane	0.383	0.412	0.258	0.378	0.391	0.374	0.341	0.362	14.02

(#) = Out of Range ### Number of calibration levels exceeded format ###

JM100813.M Wed Oct 23 10:50:01 2013 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-08-13\
Data File : J9664.D
Acq On : 8 Oct 2013 18:12
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 10 10:12:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	96	0.00
2	T	Dichlorodifluoromethane	0.438	0.515	-17.6	110	0.00
3	P	Chloromethane	1.411	1.332	5.6	99	0.00
4	C	Vinyl chloride	1.104	1.156	-4.7	94	0.00
5	T	Bromomethane	0.523	0.513	1.9	99	0.00
6	T	Chloroethane	0.697	0.674	3.3	97	0.00
7	T	Trichlorofluoromethane	0.859	0.885	-3.0	86	0.01
8	T	Acrolein	0.128	0.131	-2.3	97	0.00
9	MC	1,1-Dichloroethene	0.688	0.715	-3.9	93	0.00
10	T	Acetone	0.383	0.390	-1.8	104	0.01
11	T	Carbon disulfide	2.651	2.610	1.5	95	0.00
12	T	Vinyl acetate	3.229	3.104	3.9	99	0.00
13	T	Methylene chloride	0.998	0.968	3.0	102	0.00
14	T	Acrylonitrile	0.535	0.511	4.5	100	0.00
15	T	tert-Butyl alcohol (TBA)	0.166	0.157	5.4	100	0.00
16	T	trans-1,2-Dichloroethene	1.032	0.976	5.4	98	0.00
17	T	Methyl tert-butyl ether (MT	3.324	3.177	4.4	100	0.00
18	P	1,1-Dichloroethane	2.315	2.240	3.2	100	0.00
19	T	Diisopropyl ether (DIPE)	5.350	5.175	3.3	102	0.00
20	T	cis-1,2-Dichloroethene	1.157	1.114	3.7	99	0.00
21	T	2,2-Dichloropropane	1.042	0.974	6.5	91	0.00
22	T	2-Butanone (MEK)	0.760	0.767	-0.9	99	0.00
23	T	Bromochloromethane	0.551	0.539	2.2	100	0.00
25	C	Chloroform	1.792	1.720	4.0	100	0.00
26	T	1,1,1-Trichloroethane	1.374	1.313	4.4	95	0.00
27	T	Carbon tetrachloride	1.127	1.091	3.2	93	0.00
28	T	1,1-Dichloropropene	1.310	1.237	5.6	95	0.00
29	T	1,2-Dichloroethane (EDC)	1.723	1.643	4.6	101	0.00
30	S	1,2-Dichloroethane-d4	0.705	0.682	3.3	94	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	0.00
32	M	Benzene	2.427	2.349	3.2	100	0.00
33	M	Trichloroethene	0.571	0.559	2.1	98	0.00
34	C	1,2-Dichloropropane	0.768	0.752	2.1	101	0.00
35	T	Dibromomethane	0.362	0.363	-0.3	101	0.00
36	T	1,4-Dioxane	0.009	0.008	11.1	94	0.00
37	T	Bromodichloromethane	0.777	0.785	-1.0	100	0.00
38	T	2-Chloroethyl vinyl ether	0.498	0.511	-2.6	100	0.00
39	T	cis-1,3-Dichloropropene	0.995	1.017	-2.2	101	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.861	0.876	-1.7	101	0.00
41	S	Toluene-d8	1.296	1.296	0.0	95	0.00
42	MC	Toluene	1.406	1.365	2.9	100	0.00
43	T	trans-1,3-Dichloropropene	0.900	0.917	-1.9	100	0.00
44	T	1,1,2-Trichloroethane	0.433	0.430	0.7	101	0.00
45	T	Tetrachloroethene	0.436	0.435	0.2	97	0.00
46	T	1,3-Dichloropropane	0.922	0.914	0.9	100	0.00

47	T	2-Hexanone	0.545	0.560	-2.8	100	0.00
48	T	Dibromochloromethane	0.556	0.582	-4.7	100	0.00
49	T	1,2-Dibromoethane (EDB)	0.520	0.518	0.4	100	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
51	MP	Chlorobenzene	1.174	1.147	2.3	101	0.00
52	T	1,1,1,2-Tetrachloroethane	0.410	0.418	-2.0	101	0.00
53	C	Ethylbenzene	1.832	1.817	0.8	99	0.00
54	T	m,p-Xylene	0.692	0.695	-0.4	100	0.00
55	T	o-Xylene	0.697	0.709	-1.7	101	0.00
56	T	Styrene	1.200	1.249	-4.1	100	0.00
57	P	Bromoform	0.258	0.277	-7.4	100	0.00
58	T	Isopropylbenzene	1.469	1.482	-0.9	98	0.00
59	S	Bromofluorobenzene	0.706	0.709	-0.4	96	0.00
60	P	1,1,2,2-Tetrachloroethane	0.562	0.550	2.1	100	0.00
61	T	Bromobenzene	0.446	0.446	0.0	102	0.00
62	T	1,2,3-Trichloropropane	0.494	0.472	4.5	102	0.00
63	T	n-Propylbenzene	1.650	1.622	1.7	98	0.01
64	T	2-Chlorotoluene	1.150	1.118	2.8	101	0.00
65	T	1,3,5-Trimethylbenzene	1.206	1.210	-0.3	98	0.00
66	T	4-Chlorotoluene	1.357	1.319	2.8	101	0.00
67	T	tert-Butylbenzene	0.829	0.833	-0.5	98	0.00
68	T	1,2,4-Trimethylbenzene	1.261	1.267	-0.5	100	0.00
69	T	sec-Butylbenzene	1.256	1.243	1.0	96	0.00
70	T	1,3-Dichlorobenzene	0.703	0.697	0.9	101	0.00
71	T	4-Isopropyltoluene	1.074	1.089	-1.4	98	0.00
72	T	1,4-Dichlorobenzene	0.741	0.721	2.7	101	0.00
73	T	n-Butylbenzene	0.510	0.503	1.4	96	0.00
74	T	1,2-Dichlorobenzene	0.722	0.708	1.9	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.068	0.080	-17.6	105	0.00
76	T	1,2,4-Trichlorobenzene	0.297	0.292	1.7	105	0.00
77	T	Hexachlorobutadiene	0.085	0.101	-18.8	110	0.00
78	T	Naphthalene	0.825	0.860	-4.2	106	0.00
79	T	1,2,3-Trichlorobenzene	0.185	0.214	-15.7	107	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.211	0.224	-6.2	86	0.00
81	T	Methyl acetate	0.465	0.440	5.4	100	0.00
82	T	Cyclohexane	0.484	0.544	-12.4	99	0.00
83	T	Methylcyclohexane	0.362	0.389	-7.5	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM100813.M Wed Oct 23 10:50:55 2013 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0002.D
Acq On : 28 Oct 2013 10:16
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 29 05:49:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	70	0.00
2	T	Dichlorodifluoromethane	0.438	0.364	16.9	57	0.00
3	P	Chloromethane	1.411	1.143	19.0	62	0.00
4	C	Vinyl chloride	1.104	1.163	-5.3	69	0.00
5	T	Bromomethane	0.523	0.564	-7.8	80	0.00
6	T	Chloroethane	0.697	0.803	-15.2	85	0.00
7	T	Trichlorofluoromethane	0.859	0.953	-10.9	68	0.00
8	T	Acrolein	0.128	0.151	-18.0	82	0.00
9	MC	1,1-Dichloroethene	0.688	0.776	-12.8	74	0.00
10	T	Acetone	0.383	0.438	-14.4	85	0.00
11	T	Carbon disulfide	2.651	3.067	-15.7	81	0.00
12	T	Vinyl acetate	3.229	3.374	-4.5	78	0.00
13	T	Methylene chloride	0.998	1.185	-18.7	92	0.00
14	T	Acrylonitrile	0.535	0.637	-19.1	91	0.00
15	T	tert-Butyl alcohol (TBA)	0.166	0.195	-17.5	90	0.00
16	T	trans-1,2-Dichloroethene	1.032	1.227	-18.9	90	0.00
17	T	Methyl tert-butyl ether (MT	3.324	3.948	-18.8	91	0.00
18	P	1,1-Dichloroethane	2.315	2.503	-8.1	82	0.00
19	T	Diisopropyl ether (DIPE)	5.350	6.028	-12.7	87	0.00
20	T	cis-1,2-Dichloroethene	1.157	1.227	-6.1	80	0.00
21	T	2,2-Dichloropropane	1.042	1.178	-13.1	81	0.00
22	T	2-Butanone (MEK)	0.760	0.829	-9.1	79	0.00
23	T	Bromochloromethane	0.551	0.588	-6.7	80	0.00
25	C	Chloroform	1.792	1.942	-8.4	83	0.00
26	T	1,1,1-Trichloroethane	1.374	1.495	-8.8	79	0.00
27	T	Carbon tetrachloride	1.127	1.232	-9.3	77	0.00
28	T	1,1-Dichloropropene	1.310	1.380	-5.3	77	0.00
29	T	1,2-Dichloroethane (EDC)	1.723	1.863	-8.1	84	0.00
30	S	1,2-Dichloroethane-d4	0.705	0.790	-12.1	79	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	75	0.00
32	M	Benzene	2.427	2.393	1.4	81	0.00
33	M	Trichloroethene	0.571	0.565	1.1	79	0.00
34	C	1,2-Dichloropropane	0.768	0.775	-0.9	83	0.00
35	T	Dibromomethane	0.362	0.372	-2.8	83	0.00
36	T	1,4-Dioxane	0.009	0.008	11.1	79	0.00
37	T	Bromodichloromethane	0.777	0.812	-4.5	83	0.00
38	T	2-Chloroethyl vinyl ether	0.498	0.519	-4.2	81	0.00
39	T	cis-1,3-Dichloropropene	0.995	1.027	-3.2	81	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.861	0.953	-10.7	88	0.00
41	S	Toluene-d8	1.296	1.369	-5.6	80	0.00
42	MC	Toluene	1.406	1.386	1.4	81	0.00
43	T	trans-1,3-Dichloropropene	0.900	0.934	-3.8	81	0.00
44	T	1,1,2-Trichloroethane	0.433	0.437	-0.9	81	0.00
45	T	Tetrachloroethene	0.436	0.428	1.8	76	0.00
46	T	1,3-Dichloropropane	0.922	0.936	-1.5	82	0.00

47	T	2-Hexanone	0.545	0.633	-16.1	90	0.00
48	T	Dibromochloromethane	0.556	0.591	-6.3	81	0.00
49	T	1,2-Dibromoethane (EDB)	0.520	0.518	0.4	80	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
51	MP	Chlorobenzene	1.174	0.979	16.6	80	0.00
52	T	1,1,1,2-Tetrachloroethane	0.410	0.361	12.0	82	0.00
53	C	Ethylbenzene	1.832	1.582	13.6	80	0.00
54	T	m,p-Xylene	0.692	0.601	13.2	81	0.00
55	T	o-Xylene	0.697	0.611	12.3	81	0.00
56	T	Styrene	1.200	1.089	9.3	82	0.00
57	P	Bromoform	0.258	0.244	5.4	83	0.00
58	T	Isopropylbenzene	1.469	1.279	12.9	79	0.00
59	S	Bromofluorobenzene	0.706	0.723	-2.4	91	0.00
60	P	1,1,2,2-Tetrachloroethane	0.562	0.501	10.9	85	0.00
61	T	Bromobenzene	0.446	0.382	14.3	81	0.00
62	T	1,2,3-Trichloropropane	0.494	0.428	13.4	86	0.00
63	T	n-Propylbenzene	1.650	1.425	13.6	80	0.00
64	T	2-Chlorotoluene	1.150	0.966	16.0	81	0.00
65	T	1,3,5-Trimethylbenzene	1.206	1.065	11.7	81	0.00
66	T	4-Chlorotoluene	1.357	1.166	14.1	83	0.00
67	T	tert-Butylbenzene	0.829	0.716	13.6	79	0.00
68	T	1,2,4-Trimethylbenzene	1.261	1.101	12.7	81	0.00
69	T	sec-Butylbenzene	1.256	1.097	12.7	79	0.00
70	T	1,3-Dichlorobenzene	0.703	0.587	16.5	80	0.00
71	T	4-Isopropyltoluene	1.074	0.964	10.2	81	0.00
72	T	1,4-Dichlorobenzene	0.741	0.625	15.7	82	0.00
73	T	n-Butylbenzene	0.510	0.449	12.0	80	0.00
74	T	1,2-Dichlorobenzene	0.722	0.616	14.7	82	0.00
75	T	1,2-Dibromo-3-chloropropane	0.068	0.079	-16.2	96	0.00
76	T	1,2,4-Trichlorobenzene	0.297	0.256	13.8	86	0.00
77	T	Hexachlorobutadiene	0.085	0.102	-20.0	105	0.00
78	T	Naphthalene	0.825	0.870	-5.5	101	0.00
79	T	1,2,3-Trichlorobenzene	0.185	0.202	-9.2	95	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.211	0.220	-4.3	79	0.00
81	T	Methyl acetate	0.465	0.524	-12.7	111	0.00
82	T	Cyclohexane	0.484	0.536	-10.7	91	0.00
83	T	Methylcyclohexane	0.362	0.358	1.1	81	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM100813.M Tue Oct 29 08:04:21 2013 RT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J9657.D

Date Analyzed: 10/08/2013

Instrument ID: MSD_J

Time Analyzed: 12:58

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	153676	6.09	270873	6.91	345635	10.25
	UPPER LIMIT	307352	6.59	541746	7.41	691270	10.75
	LOWER LIMIT	76838	5.59	135436.5	6.41	172817.5	9.75
	LAB SAMPLE ID						
01	ICC5	141289	6.09	249879	6.91	318144	10.25
02	ICC20	144630	6.09	255184	6.91	325936	10.25
03	ICC150	146636	6.09	257486	6.91	333411	10.25
04	ICC200	146618	6.09	256205	6.91	337193	10.25
05	ICC1	146233	6.09	260599	6.91	333187	10.25
06	ICC2	150627	6.09	265730	6.91	336700	10.25
07	ICV100	146817	6.09	256300	6.91	325745	10.25
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J0002.D

Date Analyzed: 10/28/2013

Instrument ID: MSD_J

Time Analyzed: 10:16

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	107461	6.09	204071	6.90	304208	10.25
	UPPER LIMIT	214922	6.59	408142	7.40	608416	10.75
	LOWER LIMIT	53730.5	5.59	102035.5	6.40	152104	9.75
	LAB SAMPLE ID						
01	BLKS131028	115189	6.09	196401	6.91	298665	10.25
02	10582-022	103015	6.08	196536	6.90	291094	10.25
03	10582-034	118904	6.09	226840	6.91	294986	10.25
04	10582-037	149646	6.08	292300	6.90	433554	10.24
05	10582-038	150090	6.08	286748	6.90	378010	10.24
06	10582-040	138846	6.08	236209	6.90	353768	10.24
07	10582-042	127423	6.08	242326	6.90	353428	10.24
08	10582-036	137415	6.09	268316	6.90	405959	10.24
09	LCSS131028	116357	6.09	222845	6.90	340438	10.25
10	10601-001MS	131489	6.09	253957	6.90	381306	10.24
11	10601-001MSD	131739	6.09	254730	6.90	388865	10.24
12	10601-001	136737	6.08	261732	6.90	388803	10.24
13	10605-001	124538	6.08	243074	6.90	358783	10.24
14	10583-001	126923	6.08	244648	6.90	369156	10.24
15	10583-002	151601	6.08	263554	6.90	394629	10.24
16	10583-003	134033	6.08	265553	6.90	404908	10.24
17	10583-005	130625	6.09	256561	6.90	388816	10.24
18	10583-006	132974	6.09	263487	6.90	398018	10.24
19	10583-004	132518	6.08	262355	6.90	403669	10.24
20	10528-006	127317	6.08	247685	6.90	365063	10.24
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0017.D
Acq On : 28 Oct 2013 16:59
Operator : MEI
Sample : GPEC_WC_102313,10601-001,M,0.05g,6.40
Misc : GEI-MTCLR/GREENPOI,10/23/13,10/24/13,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 28 15:05:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration

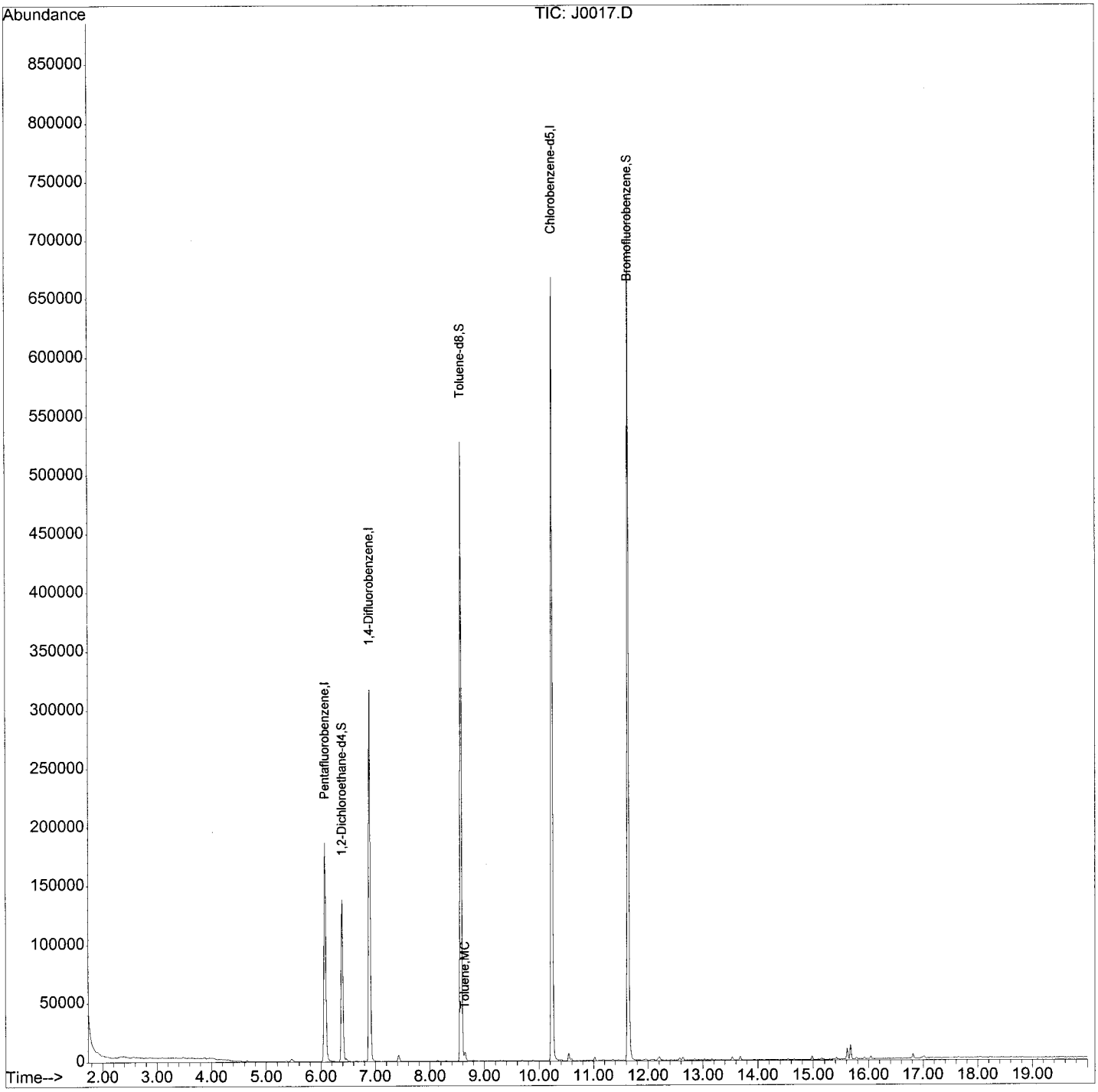
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.08	168	136737	50.00	UG	-0.01
31) 1,4-Difluorobenzene	6.90	114	261732	50.00	UG	-0.01
50) Chlorobenzene-d5	10.24	117	388803	50.00	UG	-0.01
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.39	65	107215	55.58	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 111.16%			
41) Toluene-d8	8.57	98	352525	51.97	UG	-0.01
Spiked Amount 50.000	Range 39 - 137		Recovery = 103.94%			
59) Bromofluorobenzene	11.64	95	286017	52.07	UG	-0.01
Spiked Amount 50.000	Range 23 - 145		Recovery = 104.14%			
Target Compounds						Qvalue
42) Toluene	8.64	92	2639	0.36	UG	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0017.D
Acq On : 28 Oct 2013 16:59
Operator : MEI
Sample : GPEC_WC_102313,10601-001,M,0.05g,6.40
Misc : GEI-MTCLR/GREENPOI,10/23/13,10/24/13,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 28 15:05:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS131028
Client ID: BLKS131028
Date Received:
Date Analyzed: 10/28/2013
Data file: J0005.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.050	0.028
Vinyl chloride	ND		0.050	0.030
Bromomethane	ND		0.050	0.030
Chloroethane	ND		0.050	0.030
Trichlorofluoromethane	ND		0.050	0.034
Acrolein	ND		1.00	0.114
1,1-Dichloroethene	ND		0.050	0.025
Acetone	ND		0.050	0.026
Methylene chloride	ND		0.100	0.099
Acrylonitrile	ND		1.00	0.113
trans-1,2-Dichloroethene	ND		0.050	0.026
1,1-Dichloroethane	ND		0.050	0.024
cis-1,2-Dichloroethene	ND		0.050	0.024
2-Butanone (MEK)	ND		0.050	0.041
Chloroform	ND		0.050	0.028
1,1,1-Trichloroethane	ND		0.050	0.024
Carbon tetrachloride	ND		0.050	0.028
1,2-Dichloroethane (EDC)	ND		0.050	0.021
Benzene	ND		0.050	0.013
Trichloroethene	ND		0.050	0.014
1,2-Dichloropropane	ND		0.050	0.030
Bromodichloromethane	ND		0.050	0.020
2-Chloroethyl vinyl ether	ND		0.050	0.027
cis-1,3-Dichloropropene	ND		0.050	0.022
4-Methyl-2-pentanone (MIBK)	ND		0.050	0.023

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS131028
Client ID: BLKS131028
Date Received:
Date Analyzed: 10/28/2013
Data file: J0005.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.013
trans-1,3-Dichloropropene	ND		0.050	0.018
1,1,2-Trichloroethane	ND		0.050	0.017
Tetrachloroethene	ND		0.050	0.014
Dibromochloromethane	ND		0.050	0.020
Chlorobenzene	ND		0.050	0.023
1,1,1,2-Tetrachloroethane	ND		0.050	0.021
Ethylbenzene	ND		0.050	0.025
Total Xylenes	ND		0.100	0.038
Styrene	ND		0.050	0.022
Bromoform	ND		0.050	0.024
1,1,2,2-Tetrachloroethane	ND		0.050	0.021
1,3-Dichlorobenzene	ND		0.050	0.022
1,4-Dichlorobenzene	ND		0.050	0.021
1,2-Dichlorobenzene	ND		0.050	0.025
1,2,4-Trichlorobenzene	ND		0.050	0.028

Total Target Compounds (41): 0

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS131028
Client ID: BLKS131028
Date Received:
Date Analyzed: 10/28/2013
Data file: J0005.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0005.D
Acq On : 28 Oct 2013 11:37
Operator : MEI
Sample : BLKS131028,BLKS131028,M,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 29 05:50:47 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	115189	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	196401	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	298665	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	84405	51.94	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 103.88%			
41) Toluene-d8	8.58	98	266808	52.42	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 104.84%			
59) Bromofluorobenzene	11.65	95	219520	52.03	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 104.06%			

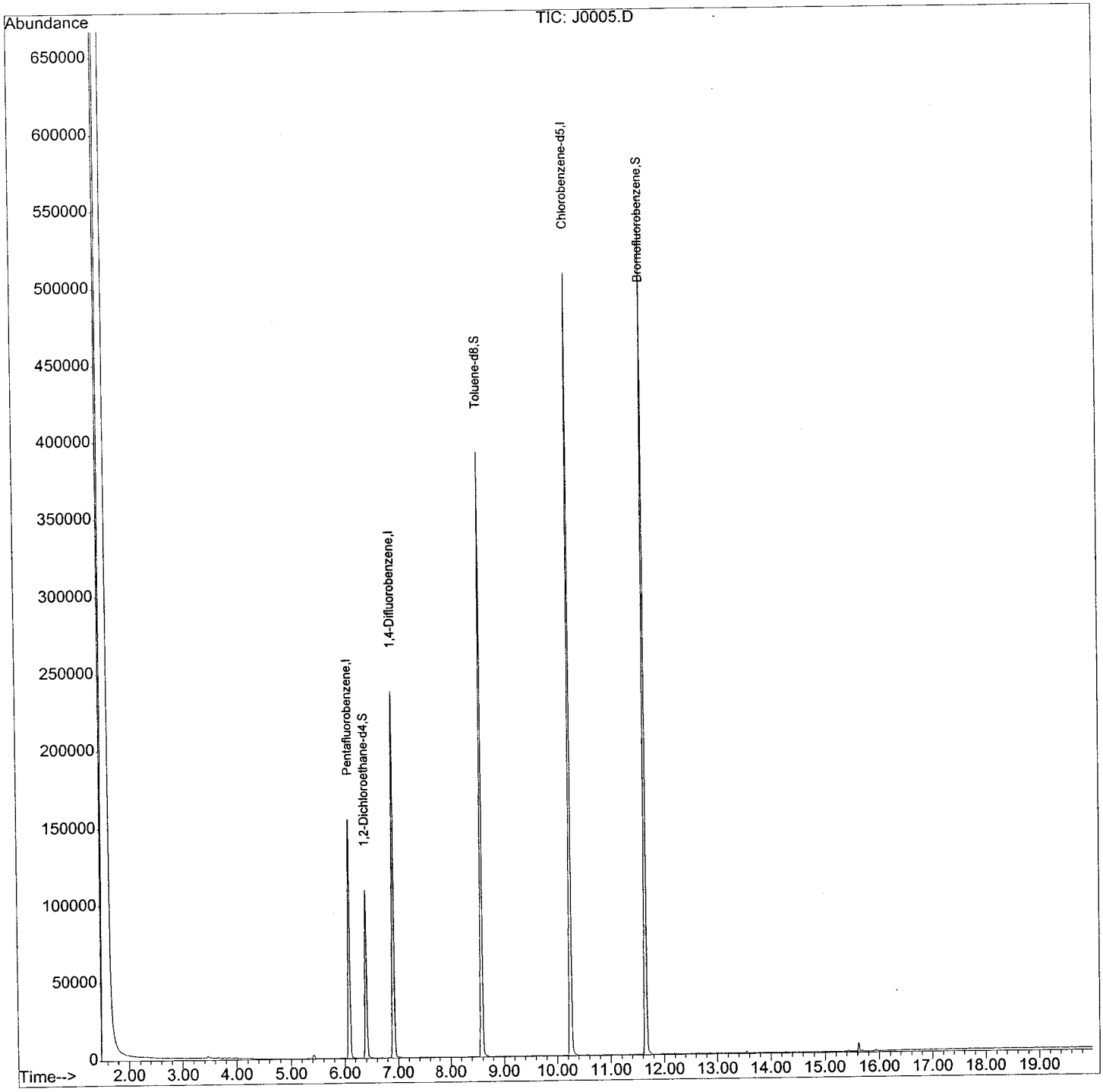
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0005.D
Acq On : 28 Oct 2013 11:37
Operator : MEI
Sample : BLKS131028,BLKS131028,M,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 29 05:50:47 2013
Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Thu Oct 10 10:11:54 2013
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0005.D
Acq On : 28 Oct 2013 11:37
Operator : MEI
Sample : BLKS131028,BLKS131028,M,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.001
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM100813.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.092	448	456	472	rBB	155110	344363	34.32%	9.100%
2	6.396	481	486	500	rBB	109001	237359	23.66%	6.273%
3	6.913	531	537	553	rBB	237227	489696	48.81%	12.941%
4	8.583	693	702	719	rBB	391811	739042	73.66%	19.530%
5	10.254	861	867	881	rBB	507915	970342	96.71%	25.642%
6	11.652	1000	1005	1018	rBB	556077	1003318	100.00%	26.514%

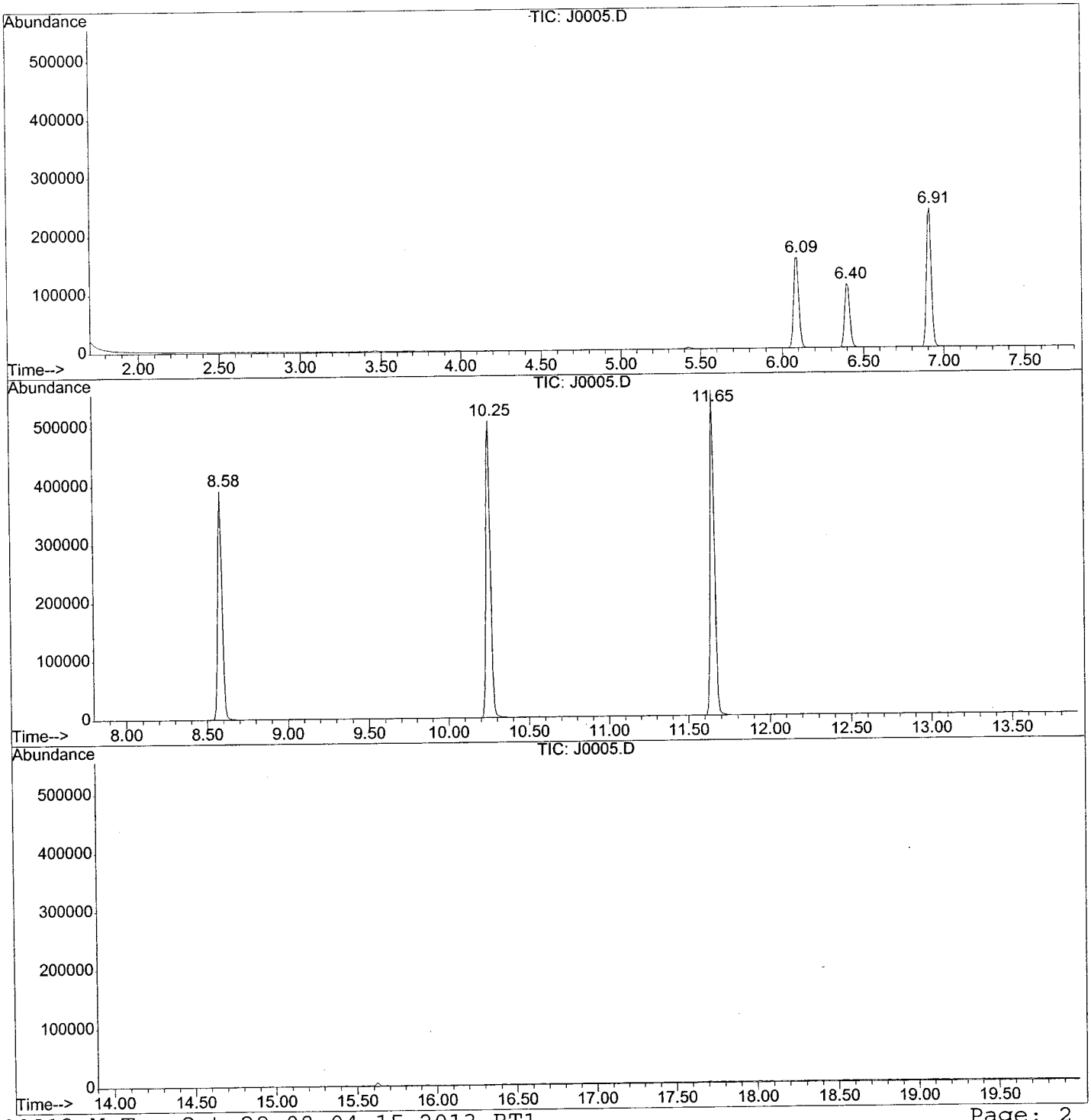
Sum of corrected areas: 3784120

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\10-28-13\
Data File : J0005.D
Acq On : 28 Oct 2013 11:37
Operator : MEI
Sample : BLKS131028,BLKS131028,M,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM100813.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/25/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
CCV040BNA2		C1224.D	N/A	N/A	N/A	N/A	N/A	N/A
BLKS131025-02	SOIL	C1225.D	62	82	84	83	77	118
LCSS131025-02	SOIL	C1226.D	54	70	87	90	82	112
E13-10559-001MS	SOIL	C1227.D	47	62	82	88	70	85
E13-10559-001MSD	SOIL	C1228.D	50	66	86	86	74	83
E13-10323-004	SOIL	C1229.D	N/A	N/A	89	52	N/A	58
E13-10323-005	SOIL	C1230.D	N/A	N/A	77	89	N/A	78
E13-10582-011	SOIL	C1231.D	N/A	N/A	83	90	N/A	72
E13-10582-012	SOIL	C1232.D	N/A	N/A	82	89	N/A	79
E13-10582-013	SOIL	C1233.D	N/A	N/A	86	90	N/A	81
E13-10582-014	SOIL	C1234.D	N/A	N/A	78	87	N/A	69
E13-10582-015	SOIL	C1235.D	N/A	N/A	83	87	N/A	98
E13-10431-001	SOIL	C1236.D	N/A	N/A	66	86	N/A	68
E13-10431-003	SOIL	C1237.D	N/A	N/A	67	88	N/A	71
E13-10431-005	SOIL	C1238.D	N/A	N/A	60	70	N/A	70
E13-10433-001	SOIL	C1239.D	N/A	N/A	80	80	N/A	60
E13-10433-002	SOIL	C1240.D	N/A	N/A	89	85	N/A	78
E13-10580-001	SOIL	C1241.D	N/A	N/A	65	67	N/A	88
E13-10471-001	SOIL	C1242.D	N/A	N/A	90	84	N/A	72
E13-10471-002	SOIL	C1243.D	N/A	N/A	84	91	N/A	70
E13-10471-003	SOIL	C1244.D	N/A	N/A	86	90	N/A	64
E13-10471-004	SOIL	C1245.D	N/A	N/A	60	70	N/A	50

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/25/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
E13-10471-005	SOIL	C1246.D	N/A	N/A	83	89	N/A	69
E13-10601-001	SOIL	C1247.D	N/A	N/A	85	88	N/A	75
E13-10559-001	SOIL	C1248.D	52	63	81	89	65	70
E13-10323-004DL	SOIL	C1249.D	N/A	N/A	70	65	N/A	60

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS131025-02
Date Received: NA
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1226.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	35.3	71		40 - 140
Pyridine	50.0	28.6	57		20 - 120
Benzaldehyde	50.0	5.0	10		10 - 110
Phenol	50.0	36.5	73		30 - 140
Aniline	50.0	41.6	83		40 - 140
Bis(2-chloroethyl) ether	50.0	37.0	74		40 - 140
2-Chlorophenol	50.0	30.2	60		30 - 140
1,3-Dichlorobenzene	50.0	29.3	59		40 - 140
1,4-Dichlorobenzene	50.0	28.7	57		40 - 140
Benzyl alcohol	50.0	34.7	69		40 - 140
1,2-Dichlorobenzene	50.0	30.1	60		40 - 140
2-Methylphenol	50.0	38.4	77		30 - 140
Bis(2-chloroisopropyl) ether	50.0	40.3	81		40 - 140
4-Methylphenol	50.0	39.8	80		30 - 140
N-Nitrosodi-n-propylamine	50.0	41.0	82		40 - 140
Acetophenone	50.0	39.5	79		40 - 140
3-Methylphenol	50.0	39.8	80		30 - 140
Hexachloroethane	50.0	29.9	60		40 - 140
Nitrobenzene	50.0	35.6	71		40 - 140
Isophorone	50.0	41.8	84		40 - 140
2-Nitrophenol	50.0	33.3	67		30 - 140
2,4-Dimethylphenol	50.0	38.0	76		30 - 140
Bis(2-chloroethoxy) methane	50.0	36.0	72		40 - 140
Benzoic acid	50.0	42.4	85		30 - 140
2,4-Dimethylaniline	50.0	30.4	61		40 - 140
2,4-Dichlorophenol	50.0	34.8	70		30 - 140
1,2,4-Trichlorobenzene	50.0	28.3	57		40 - 140
Naphthalene	50.0	32.7	65		40 - 140
4-Chloroaniline	50.0	33.2	66		40 - 140
Hexachlorobutadiene	50.0	26.5	53		40 - 140
Caprolactam	50.0	56.3	113		40 - 140
4-Chloro-3-methylphenol	50.0	43.4	87		30 - 140
2-Methylnaphthalene	50.0	34.2	68		40 - 140
Hexachlorocyclopentadiene	50.0	23.1	46		5 - 105
2,4,6-Trichlorophenol	50.0	36.7	73		30 - 140
2,4,5-Trichlorophenol	50.0	42.3	85		30 - 140
1,1'-Biphenyl	50.0	41.9	84		40 - 140
2-Chloronaphthalene	50.0	37.1	74		40 - 140
2-Nitroaniline	50.0	55.8	112		40 - 140
Dimethyl phthalate	50.0	45.5	91		40 - 140
2,6-Dinitrotoluene	50.0	46.7	93		40 - 140
Acenaphthylene	50.0	42.2	84		40 - 140
3-Nitroaniline	50.0	46.9	94		40 - 140
Acenaphthene	50.0	43.0	86		40 - 140
2,4-Dinitrophenol	50.0	42.7	85		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS131025-02
Date Received: NA
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1226.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	52.5	105		30 - 140
2,4-Dinitrotoluene	50.0	51.3	103		40 - 140
Dibenzofuran	50.0	42.0	84		40 - 140
Diethyl phthalate	50.0	46.5	93		40 - 140
Fluorene	50.0	44.7	89		40 - 140
4-Chlorophenyl phenyl ether	50.0	41.1	82		40 - 140
4-Nitroaniline	50.0	48.5	97		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	32.3	65		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	34.8	70		40 - 140
4,6-Dinitro-2-methylphenol	50.0	40.1	80		10 - 110
N-Nitrosodiphenylamine	50.0	47.3	95		40 - 140
1,2-Diphenylhydrazine	50.0	44.9	90		40 - 140
4-Bromophenyl phenyl ether	50.0	41.3	83		40 - 140
Hexachlorobenzene	50.0	39.9	80		40 - 140
Atrazine	50.0	47.3	95		20 - 120
Pentachlorophenol	50.0	32.0	64		30 - 140
Phenanthrene	50.0	47.3	95		40 - 140
Anthracene	50.0	51.4	103		40 - 140
Carbazole	50.0	45.4	91		40 - 140
Di-n-butyl phthalate	50.0	52.5	105		40 - 140
Fluoranthene	50.0	45.2	90		40 - 140
Benzidine	50.0	5.3	11		5 - 105
Pyrene	50.0	53.0	106		40 - 140
3,3'-Dimethylbenzidine	50.0	18.5	37		5 - 105
Butyl benzyl phthalate	50.0	57.8	116		40 - 140
3,3'-Dichlorobenzidine	50.0	54.3	109		40 - 140
Benzo[a]anthracene	50.0	47.8	96		40 - 140
Chrysene	50.0	39.7	79		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	61.6	123		40 - 140
Di-n-octyl phthalate	50.0	68.4	137		40 - 140
Benzo[b]fluoranthene	50.0	52.6	105		40 - 140
Benzo[k]fluoranthene	50.0	58.2	116		40 - 140
Benzo[a]pyrene	50.0	58.2	116		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	53.1	106		40 - 140
Dibenz[a,h]anthracene	50.0	51.3	103		40 - 140
Benzo[g,h,i]perylene	50.0	46.5	93		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E13-10559-001
Date Received: 10/24/2013
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
MS Data file: C1227.D
MSD Data file: C1228.D

GC/MS Column: DB-5
Sample wt/vol: 15.06g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 12.2
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
N-Nitrosodimethylamine	50.0	0.00	30.40	61		31.00	62		2		40-140/30
Pyridine	50.0	0.00	22.40	45		20.10	40		11		20-120/30
Benzaldehyde	50.0	0.00	5.00	10		5.00	10		0		10-110/30
Phenol	50.0	0.00	32.10	64		32.10	64		0		30-140/30
Aniline	50.0	0.00	33.70	67		32.80	66		3		40-140/30
Bis(2-chloroethyl) ether	50.0	0.00	32.50	65		32.70	65		1		40-140/30
2-Chlorophenol	50.0	0.00	27.50	55		27.00	54		2		30-140/30
1,3-Dichlorobenzene	50.0	0.00	25.60	51		24.80	50		3		40-140/30
1,4-Dichlorobenzene	50.0	0.00	25.90	52		25.90	52		0		40-140/30
Benzyl alcohol	50.0	0.00	30.10	60		29.60	59		2		40-140/30
1,2-Dichlorobenzene	50.0	0.00	26.90	54		26.10	52		3		40-140/30
2-Methylphenol	50.0	0.00	33.80	68		33.40	67		1		30-140/30
Bis(2-chloroisopropyl) ether	50.0	0.00	35.80	72		35.00	70		2		40-140/30
4-Methylphenol	50.0	0.00	33.30	67		33.20	66		0		30-140/30
N-Nitrosodi-n-propylamine	50.0	0.00	35.60	71		35.20	70		1		40-140/30
Acetophenone	50.0	0.00	34.00	68		33.80	68		1		40-140/30
3-Methylphenol	50.0	0.00	33.30	67		33.20	66		0		30-140/30
Hexachloroethane	50.0	0.00	27.70	55		26.60	53		4		40-140/30
Nitrobenzene	50.0	0.00	33.70	67		35.10	70		4		40-140/30
Isophorone	50.0	0.00	36.30	73		36.70	73		1		40-140/30
2-Nitrophenol	50.0	0.00	31.50	63		31.90	64		1		30-140/30
2,4-Dimethylphenol	50.0	0.00	30.70	61		30.80	62		0		30-140/30
Bis(2-chloroethoxy) methane	50.0	0.00	33.60	67		34.70	69		3		40-140/30
Benzoic acid	50.0	0.00	15.80	32		16.10	32		2		30-140/30
2,4-Dimethylaniline	50.0	0.00	24.10	48		23.70	47		2		40-140/30
2,4-Dichlorophenol	50.0	0.00	32.70	65		33.80	68		3		30-140/30
1,2,4-Trichlorobenzene	50.0	0.00	28.00	56		27.60	55		1		40-140/30
Naphthalene	50.0	0.00	31.70	63		31.30	63		1		40-140/30
4-Chloroaniline	50.0	0.00	27.70	55		27.50	55		1		40-140/30
Hexachlorobutadiene	50.0	0.00	26.00	52		26.10	52		0		40-140/30
Caprolactam	50.0	0.00	42.00	84		41.20	82		2		40-140/30
4-Chloro-3-methylphenol	50.0	0.00	35.30	71		36.40	73		3		30-140/30
2-Methylnaphthalene	50.0	0.00	38.10	76		32.90	66		15		40-140/30
Hexachlorocyclopentadiene	50.0	0.00	23.90	48		18.70	37		24		5-105/30
2,4,6-Trichlorophenol	50.0	0.00	35.00	70		34.70	69		1		30-140/30
2,4,5-Trichlorophenol	50.0	0.00	33.00	66		32.80	66		1		30-140/30
1,1'-Biphenyl	50.0	0.00	41.30	83		40.20	80		3		40-140/30
2-Chloronaphthalene	50.0	0.00	36.30	73		35.20	70		3		40-140/30
2-Nitroaniline	50.0	0.00	50.10	100		50.80	102		1		40-140/30
Dimethyl phthalate	50.0	0.00	38.70	77		38.40	77		1		40-140/30
2,6-Dinitrotoluene	50.0	0.00	39.50	79		39.60	79		0		40-140/30
Acenaphthylene	50.0	1.70	39.30	75		38.60	74		2		40-140/30
3-Nitroaniline	50.0	0.00	40.20	80		39.60	79		2		40-140/30
Acenaphthene	50.0	0.00	39.20	78		38.90	78		1		40-140/30
2,4-Dinitrophenol	50.0	0.00	8.00	16		6.70	13		18		5-105/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E13-10559-001
Date Received: 10/24/2013
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
MS Data file: C1227.D
MSD Data file: C1228.D

GC/MS Column: DB-5
Sample wt/vol: 15.06g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 12.2
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
4-Nitrophenol	50.0	0.00	34.30	69		32.10	64		7		30-140/30
2,4-Dinitrotoluene	50.0	0.00	41.80	84		39.70	79		5		40-140/30
Dibenzofuran	50.0	0.00	38.80	78		37.20	74		4		40-140/30
Diethyl phthalate	50.0	0.00	41.60	83		42.30	85		2		40-140/30
Fluorene	50.0	0.00	39.40	79		36.40	73		8		40-140/30
4-Chlorophenyl phenyl ether	50.0	0.00	35.20	70		35.40	71		1		40-140/30
4-Nitroaniline	50.0	0.00	25.20	50		26.70	53		6		40-140/30
1,2,4,5-Tetrachlorobenzene	50.0	0.00	32.10	64		32.10	64		0		40-140/30
2,3,4,6-Tetrachlorophenol	50.0	0.00	26.30	53		25.20	50		4		40-140/30
4,6-Dinitro-2-methylphenol	50.0	0.00	27.60	55		20.90	42		28		10-110/30
N-Nitrosodiphenylamine	50.0	0.00	41.20	82		42.90	86		4		40-140/30
1,2-Diphenylhydrazine	50.0	0.00	41.00	82		42.90	86		5		40-140/30
4-Bromophenyl phenyl ether	50.0	0.00	36.80	74		36.70	73		0		40-140/30
Hexachlorobenzene	50.0	0.00	34.90	70		34.30	69		2		40-140/30
Atrazine	50.0	0.00	43.10	86		41.00	82		5		20-120/30
Pentachlorophenol	50.0	0.00	20.80	42		20.40	41		2		30-140/30
Phenanthrene	50.0	6.90	55.50	97		46.60	79		17		40-140/30
Anthracene	50.0	2.30	46.50	88		43.40	82		7		40-140/30
Carbazole	50.0	0.00	38.90	78		37.20	74		4		40-140/30
Di-n-butyl phthalate	50.0	0.00	45.80	92		46.10	92		1		40-140/30
Fluoranthene	50.0	15.50	59.40	88		47.70	64		22		40-140/30
Benzidine	50.0	0.00	2.80	6		2.90	6		4		5-105/30
Pyrene	50.0	12.20	63.30	102		51.70	79		20		40-140/30
3,3'-Dimethylbenzidine	50.0	0.00	7.10	14		5.50	11		25		5-105/30
Butyl benzyl phthalate	50.0	0.00	44.80	90		44.10	88		2		40-140/30
3,3'-Dichlorobenzidine	50.0	0.00	44.30	89		44.60	89		1		40-140/30
Benzo[a]anthracene	50.0	8.10	53.50	91		47.20	78		13		40-140/30
Chrysene	50.0	8.90	47.50	77		41.00	64		15		40-140/30
Bis(2-ethylhexyl) phthalate	50.0	2.50	48.80	93		47.90	91		2		40-140/30
Di-n-octyl phthalate	50.0	0.00	63.90	128		63.10	126		1		40-140/30
Benzo[b]fluoranthene	50.0	9.10	63.50	109		59.40	101		7		40-140/30
Benzo[k]fluoranthene	50.0	9.50	64.80	111		56.70	94		13		40-140/30
Benzo[a]pyrene	50.0	10.40	68.90	117		63.70	107		8		40-140/30
Indeno[1,2,3-cd]pyrene	50.0	2.50	59.90	115		56.30	108		6		40-140/30
Dibenz[a,h]anthracene	50.0	1.90	52.40	101		50.60	97		3		40-140/30
Benzo[g,h,i]perylene	50.0	4.10	57.50	107		51.70	95		11		40-140/30

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C1225.D

Instrument ID: MSDC

Date Extracted: 10/25/13

Matrix: SOIL

Date Analyzed: 10/25/2013

Time Analyzed: 14:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS131025-02	10/25/2013	14:37
.	E13-10559-001MS	10/25/2013	14:52
.	E13-10559-001MSD	10/25/2013	15:08
HLT-4/5-	E13-10323-004	10/25/2013	15:24
HLT-5/5-	E13-10323-005	10/25/2013	15:39
PX-11	E13-10582-011	10/25/2013	15:55
PX-12	E13-10582-012	10/25/2013	16:11
PX-13	E13-10582-013	10/25/2013	16:26
PX-14	E13-10582-014	10/25/2013	16:42
PX-15	E13-10582-015	10/25/2013	16:58
PE-1/6.5	E13-10431-001	10/25/2013	17:13
PE-3/6.5	E13-10431-003	10/25/2013	17:29
PE-5/7.0	E13-10431-005	10/25/2013	17:45
S-1	E13-10433-001	10/25/2013	18:00
S-2	E13-10433-002	10/25/2013	18:16
PE-21/15	E13-10580-001	10/25/2013	18:31
SB-1_QUA	E13-10471-001	10/25/2013	18:47
SB-2_QUA	E13-10471-002	10/25/2013	19:03
SB-3_QUA	E13-10471-003	10/25/2013	19:18
SB-4_QUA	E13-10471-004	10/25/2013	19:34
SB-5_QUA	E13-10471-005	10/25/2013	19:49
GPEC_WC_	E13-10601-001	10/25/2013	20:05
13-185	E13-10559-001	10/25/2013	20:20
HLT-4/5-	E13-10323-004DL	10/25/2013	20:36

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C0866.D DFTPP Injection Date : 10/16/2013

Inst ID: MSDC DFTPP Injection Time: 09:44

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	35.3	
68	Less than 2.0% of mass 69	0.6	(1.8)1
69	Mass 69 relative abundance	33.3	
70	Less than 2.0% of mass 69	0.3	(0.9)1
127	40.0 - 60.0% of mass 198	46.2	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 30.0% of mass 198	25.9	
365	Greater than 1.0% of mass 198	2.7	
441	Present, but less than mass 443	12.28	(77.0)3
442	40.0 - 100.0% of mass 198	81.8	
443	17.0 - 23.0% of mass 442	16.0	(19.5)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN061.13	ICC040BNA1	C0867.D	10/16/2013	09:55
ABN058.13	ICC001BNA1	C0868.D	10/16/2013	10:11
ABN059.13	ICC010BNA1	C0869.D	10/16/2013	10:27
ABN060.13	ICC020BNA1	C0870.D	10/16/2013	10:43
ABN062.13	ICC080BNA1	C0871.D	10/16/2013	10:59
ABN063.13	ICC120BNA1	C0872.D	10/16/2013	11:15
ABN070.13	ICV040BNA1	C0873.D	10/16/2013	11:32
ABN069.13	ICC120BNA2	C0874.D	10/16/2013	11:48
ABN068.13	ICC080BNA2	C0875.D	10/16/2013	12:04
ABN067.13	ICC040BNA2	C0876.D	10/16/2013	12:20
ABN066.13	ICC020BNA2	C0877.D	10/16/2013	12:36
ABN065.13	ICC010BNA2	C0878.D	10/16/2013	12:52
ABN064.13	ICC001BNA2	C0879.D	10/16/2013	13:08
ABN071.13	ICV040BNA2	C0880.D	10/16/2013	13:25

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C1222.D

DFTPP Injection Date : 10/25/2013

Inst ID: MSDC

DFTPP Injection Time: 11:28

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	36.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	33.5	
70	Less than 2.0% of mass 69	0.2	(0.6)1
127	40.0 - 60.0% of mass 198	46.6	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	5.7	
275	10.0 - 30.0% of mass 198	27.7	
365	Greater than 1.0% of mass 198	2.5	
441	Present, but less than mass 443	6.97	(79.7)3
442	40.0 - 100.0% of mass 198	43.7	
443	17.0 - 23.0% of mass 442	8.7	(20.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN070.13	CCV040BNA1	C1223.D	10/25/2013	11:38
ABN071.13	CCV040BNA2	C1224.D	10/25/2013	11:54
.	BLKS131025-02	C1225.D	10/25/2013	14:21
.	LCSS131025-02	C1226.D	10/25/2013	14:37
.	E13-10559-001MS	C1227.D	10/25/2013	14:52
.	E13-10559-001MSD	C1228.D	10/25/2013	15:08
HLT-4/5-	E13-10323-004	C1229.D	10/25/2013	15:24
HLT-5/5-	E13-10323-005	C1230.D	10/25/2013	15:39
PX-11	E13-10582-011	C1231.D	10/25/2013	15:55
PX-12	E13-10582-012	C1232.D	10/25/2013	16:11
PX-13	E13-10582-013	C1233.D	10/25/2013	16:26
PX-14	E13-10582-014	C1234.D	10/25/2013	16:42
PX-15	E13-10582-015	C1235.D	10/25/2013	16:58
PE-1/6.5	E13-10431-001	C1236.D	10/25/2013	17:13
PE-3/6.5	E13-10431-003	C1237.D	10/25/2013	17:29
PE-5/7.0	E13-10431-005	C1238.D	10/25/2013	17:45
S-1	E13-10433-001	C1239.D	10/25/2013	18:00
S-2	E13-10433-002	C1240.D	10/25/2013	18:16
PE-21/15	E13-10580-001	C1241.D	10/25/2013	18:31
SB-1_QUA	E13-10471-001	C1242.D	10/25/2013	18:47
SB-2_QUA	E13-10471-002	C1243.D	10/25/2013	19:03
SB-3_QUA	E13-10471-003	C1244.D	10/25/2013	19:18
SB-4_QUA	E13-10471-004	C1245.D	10/25/2013	19:34

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C1222.D

DFTPP Injection Date : 10/25/2013

Inst ID: MSDC

DFTPP Injection Time: 11:28

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	36.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	33.5	
70	Less than 2.0% of mass 69	0.2	(0.6)1
127	40.0 - 60.0% of mass 198	46.6	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	5.7	
275	10.0 - 30.0% of mass 198	27.7	
365	Greater than 1.0% of mass 198	2.5	
441	Present, but less than mass 443	6.97	(79.7)3
442	40.0 - 100.0% of mass 198	43.7	
443	17.0 - 23.0% of mass 442	8.7	(20.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SB-5_QUA	E13-10471-005	C1246.D	10/25/2013	19:49
GPEC_WC_	E13-10601-001	C1247.D	10/25/2013	20:05
13-185	E13-10559-001	C1248.D	10/25/2013	20:20
HLT-4/5-	E13-10323-004DL	C1249.D	10/25/2013	20:36

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS2413.M
Title : BNA CALIBRATION METHOD
Last Update : Wed Oct 16 14:04:19 2013
Response Via : Initial Calibration

Calibration Files
1 =C0868.D 10 =C0869.D 20 =C0870.D
40 =C0867.D 80 =C0871.D 120 =C0872.D =

		Compound	1	10	20	40	80	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	N-Nitrosodimethyl	0.722	0.655	0.688	0.761	0.679	0.672	0.696	5.57
3)	T	Pyridine	1.086	0.861	0.879	1.025	0.925	1.069	0.974	10.10
4)	S	2-Fluorophenol	1.405	1.390	1.403	1.330	1.275	1.214	1.336	5.89
5)	T	Benzaldehyde	1.041	0.857	0.834	0.644	0.777	0.779	0.822	15.86
6)	S	Phenol-d5	1.572	1.543	1.592	1.663	1.554	1.362	1.548	6.49
7)	MC	Phenol	2.007	1.650	1.459	1.617	1.502	1.508	1.624	12.42
8)	T	Aniline	0.754	0.672	0.636	0.663	0.658	0.603	0.664	7.58
9)	T	Bis(2-chloroethyl	0.982	0.907	0.881	0.865	0.896	0.938	0.912	4.65
10)	M	2-Chlorophenol	1.561	1.383	1.382	1.416	1.401	1.537	1.447	5.58
11)	T	1,3-Dichlorobenze	1.628	1.525	1.488	1.524	1.484	1.894	1.590	9.90
12)	MC	1,4-Dichlorobenze	1.680	1.478	1.394	1.565	1.739	1.558	1.569	8.07
13)	T	Benzyl alcohol	0.912	0.830	0.842	0.836	0.895	0.871	0.864	3.93
14)	T	1,2-Dichlorobenze	1.563	1.350	1.335	1.470	1.546	1.598	1.477	7.61
15)	T	2-Methylphenol	1.259	1.049	1.078	1.140	1.075	1.110	1.118	6.79
16)	T	Bis(2-chloroisopr	1.710	1.486	1.418	1.512	1.537	1.582	1.541	6.44
17)	T	4-Methylphenol	1.315	1.156	1.187	1.232	1.160	1.230	1.213	4.91
18)	MP	N-Nitrosodi-n-pro	0.949	0.882	0.918	1.001	0.985	1.007	0.957	5.20
19)	T	Acetophenone	1.946	1.688	1.684	1.868	1.916	1.981	1.847	7.05
20)	T	3-Methylphenol	1.313	1.158	1.187	1.235	1.160	1.229	1.214	4.84
21)	T	Hexachloroethane	0.661	0.563	0.526	0.546	0.526	0.569	0.565	8.88
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	ISTD							
24)	S	Nitrobenzene-d5	0.309	0.308	0.331	0.338	0.373	0.407	0.344	11.26
25)	T	Nitrobenzene	0.413	0.283	0.284	0.327	0.287	0.341	0.323	15.76
26)	T	Isophorone	0.604	0.551	0.598	0.602	0.594	0.624	0.595	4.05
27)	TC	2-Nitrophenol	0.170	0.168	0.173	0.182	0.195	0.188	0.180	5.96
28)	T	2,4-Dimethylpheno	0.323	0.275	0.320	0.324	0.347	0.337	0.321	7.71
29)	T	Bis(2-chloroethox	0.354	0.319	0.325	0.365	0.364	0.386	0.352	7.20
30)	T	Benzoic acid	0.139	0.159	0.186	0.196	0.163	0.207	0.175	14.69
31)	T	2,4-Dimethylanili	0.377	0.344	0.388	0.376	0.367	0.375	0.371	4.04
32)	TC	2,4-Dichloropheno	0.257	0.259	0.253	0.286	0.261	0.288	0.267	5.79
33)	M	1,2,4-Trichlorobe	0.322	0.285	0.303	0.331	0.337	0.350	0.321	7.39
34)	T	Naphthalene	1.116	0.998	1.058	1.136	1.152	0.931	1.065	8.16
35)	T	4-Chloroaniline	0.580	0.520	0.540	0.577	0.600	0.679	0.583	9.51
36)	T	4-Aminotoluene	0.576	0.524	0.553	0.568	0.558	0.629	0.568	6.09
37)	TC	Hexachlorobutadie	0.212	0.174	0.175	0.186	0.190	0.221	0.193	10.19
38)	T	Caprolactam	0.124	0.114	0.114	0.115	0.112	0.119	0.116	3.90
39)	T	2-Aminotoluene	0.576	0.524	0.553	0.568	0.558	0.629	0.568	6.09
40)	MC	4-Chloro-3-methyl	0.282	0.253	0.261	0.278	0.281	0.269	0.271	4.38
41)	T	2-Methylnaphthale	0.713	0.678	0.640	0.663	0.743	0.712	0.691	5.47
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	ISTD							
44)	TP	Hexachlorocyclope	0.219	0.220	0.223	0.264	0.275	0.329	0.255	17.08
45)	TC	2,4,6-Trichloroph	0.320	0.329	0.317	0.338	0.342	0.395	0.340	8.36
46)	T	2,4,5-Trichloroph	0.349	0.363	0.338	0.364	0.364	0.386	0.361	4.52
47)	S	2-Fluorobiphenyl	1.423	1.467	1.353	1.339	1.252	1.365	1.366	5.40
48)	T	1,1'-Biphenyl	1.369	1.308	1.201	1.336	1.416	1.238	1.311	6.14
49)	T	2-Chloronaphthale	1.033	1.009	0.966	0.988	1.087	1.130	1.036	6.02
50)	T	2-Nitroaniline	0.214	0.240	0.238	0.241	0.250	0.254	0.239	5.79
51)	T	Dimethyl phthalat	1.146	1.152	1.005	1.098	1.051	1.121	1.096	5.27

52)	T	2,6-Dinitrotoluen	0.174	0.221	0.220	0.240	0.224	0.265		0.224	13.24
53)	T	Acenaphthylene	1.546	1.578	1.454	1.550	1.577	1.611		1.553	3.46
54)	T	3-Nitroaniline	0.229	0.264	0.245	0.271	0.246	0.246		0.250	5.99
55)	MC	Acenaphthene	1.110	1.074	1.011	1.060	1.114	1.214		1.097	6.24
56)	TP	2,4-Dinitrophenol	0.089	0.081	0.085	0.114	0.107	0.121		0.100	16.62
57)	MP	4-Nitrophenol	0.227	0.212	0.183	0.201	0.206	0.224		0.209	7.65
58)	M	2,4-Dinitrotoluen	0.221	0.290	0.281	0.306	0.302	0.326		0.287	12.53
59)	T	Dibenzofuran	1.505	1.469	1.403	1.443	1.404	1.343		1.428	4.00
60)	T	Diethyl phthalate	1.034	1.063	0.996	1.037	1.040	1.096		1.045	3.18
61)	T	Fluorene	1.232	1.190	1.127	1.201	1.168	1.431		1.225	8.74
62)	T	4-Chlorophenyl ph	0.650	0.590	0.558	0.567	0.598	0.613		0.596	5.61
63)	T	4-Nitroaniline	0.238	0.264	0.254	0.268	0.254	0.298		0.263	7.70
64)		1,2,4,5-Tetrachlo	0.607	0.560	0.528	0.579	0.597	0.760		0.605	13.34
65)	T	2,3,4,6-Tetrachlo	0.372	0.298	0.285	0.290	0.284	0.308		0.306	10.89
66)	I	Phenanthrene-d10	----------ISTD----------								
67)	T	4,6-Dinitro-2-met	0.097	0.090	0.099	0.126	0.134	0.126		0.112	16.74
68)	TC	N-Nitrosodiphenyl	0.519	0.519	0.494	0.555	0.581	0.677		0.558	11.82
69)	T	1,2-Diphenylhydra	0.703	0.770	0.764	0.852	0.877	1.031		0.833	13.93
70)	S	2,4,6-Tribromophe	0.161	0.160	0.168	0.162	0.155	0.164		0.162	2.63
71)	T	4-Bromophenyl phe	0.232	0.217	0.221	0.234	0.241	0.294		0.240	11.66
72)	T	Hexachlorobenzene	0.301	0.261	0.259	0.266	0.273	0.320		0.280	8.84
73)	T	Atrazine	0.188	0.194	0.192	0.195	0.198	0.212		0.197	4.17
74)	MC	Pentachlorophenol	0.166	0.158	0.161	0.179	0.178	0.198		0.173	8.54
75)	T	Phenanthrene	1.069	1.009	0.994	1.042	1.079	1.134		1.055	4.86
76)	T	Anthracene	1.019	0.959	0.956	1.038	1.122	1.095		1.031	6.63
77)	T	Carbazole	0.932	0.929	0.907	0.941	0.984	1.040		0.955	5.06
78)	T	Di-n-butyl phthal	0.951	1.020	1.001	1.115	1.195	1.192		1.079	9.60
79)	TC	Fluoranthene	1.055	1.078	1.019	1.089	1.075	1.178		1.082	4.91
80)	T	Benzidine	0.436	0.413	0.559	0.474	0.555	0.576		0.502	13.95
81)		4-Aminoaniline								0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------								
83)	M	Pyrene	1.082	1.039	1.085	1.309	1.382	1.490		1.231	15.24
84)	S	Terphenyl-d14	0.969	1.021	1.059	1.111	1.151	1.147		1.076	6.79
85)	T	3,3'-Dimethylbenz	0.513	0.548	0.761	0.716	0.658	0.795		0.665	17.24
86)	T	Butyl benzyl phth	0.370	0.411	0.405	0.457	0.463	0.499		0.434	10.82
87)	T	3,3'-Dichlorobenz	0.285	0.334	0.332	0.348	0.310	0.294		0.317	7.84
88)	T	Benzo[a]anthracen	1.078	0.981	0.976	1.025	1.050	1.116		1.038	5.31
89)	T	Chrysene	1.073	0.977	0.956	1.008	0.981	1.085		1.013	5.28
90)	T	Bis(2-ethylhexyl)	0.594	0.516	0.538	0.626	0.661	0.749		0.614	13.88
91)	T	3,3'-Dimethoxyben								0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------								
93)	TC	Di-n-octyl phthal	1.117	1.234	1.286	1.561	1.447	1.522		1.361	12.93
94)	T	Benzo[b]fluoranth	1.493	1.592	1.566	1.508	1.542	1.744		1.574	5.77
95)	T	Benzo[k]fluoranth	1.575	1.595	1.473	1.661	1.550	1.591		1.574	3.92
96)	TC	Benzo[a]pyrene	1.234	1.284	1.237	1.432	1.417	1.547		1.359	9.32
97)	T	Indeno[1,2,3-cd]p	1.445	1.399	1.490	1.861	1.885	2.053		1.689	16.40
98)	T	Dibenz[a,h]anthra	1.263	1.157	1.233	1.528	1.551	1.693		1.404	15.29
99)	T	Benzo[g,h,i]peryl	1.241	1.216	1.268	1.551	1.591	1.710		1.430	14.91

(#) = Out of Range

CS2413.M Wed Oct 16 14:05:09 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-16-13\
Data File : C0873.D
Acq On : 16 Oct 2013 11:32
Operator : EDM
Sample : ABN070.13,ICV040BNA1
Misc : NA,10/16/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Oct 16 11:43:00 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 11:31:26 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
2	T	N-Nitrosodimethylamine	0.696	0.708	-1.7	80	0.00
3	T	Pyridine	0.974	0.959	1.5	81	0.00
4	S	2-Fluorophenol	1.336	1.409	-5.5	91	0.00
5	T	Benzaldehyde	0.822	0.748	9.0	119	0.00
6	S	Phenol-d5	1.548	1.694	-9.4	88	0.00
7	MC	Phenol	1.624	1.551	4.5	83	0.00
8	T	Aniline	0.664	0.687	-3.5	89	0.00
9	T	Bis(2-chloroethyl) ether	0.912	0.907	0.5	90	0.00
10	M	2-Chlorophenol	1.447	1.443	0.3	88	0.00
11	T	1,3-Dichlorobenzene	1.590	1.565	1.6	89	0.00
12	MC	1,4-Dichlorobenzene	1.569	1.570	-0.1	87	0.00
13	T	Benzyl alcohol	0.864	0.878	-1.6	91	0.00
14	T	1,2-Dichlorobenzene	1.477	1.452	1.7	85	0.00
15	T	2-Methylphenol	1.118	1.159	-3.7	88	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.541	1.559	-1.2	89	0.00
17	T	4-Methylphenol	1.213	1.216	-0.2	85	0.00
18	MP	N-Nitrosodi-n-propylamine	0.957	0.990	-3.4	85	0.00
19	T	Acetophenone	1.847	1.912	-3.5	88	0.00
20	T	3-Methylphenol	1.214	1.215	-0.1	85	0.00
21	T	Hexachloroethane	0.565	0.548	3.0	87	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00
24	S	Nitrobenzene-d5	0.344	0.345	-0.3	90	0.00
25	T	Nitrobenzene	0.323	0.325	-0.6	87	0.00
26	T	Isophorone	0.595	0.612	-2.9	89	0.00
27	TC	2-Nitrophenol	0.180	0.185	-2.8	89	0.00
28	T	2,4-Dimethylphenol	0.321	0.334	-4.0	90	0.00
29	T	Bis(2-chloroethoxy) methane	0.352	0.363	-3.1	87	0.00
30	T	Benzoic acid	0.175	0.189	-8.0	85	0.00
31	T	2,4-Dimethylaniline	0.371	0.378	-1.9	88	0.00
32	TC	2,4-Dichlorophenol	0.267	0.282	-5.6	86	0.00
33	M	1,2,4-Trichlorobenzene	0.321	0.319	0.6	85	0.00
34	T	Naphthalene	1.065	1.158	-8.7	89	0.00
35	T	4-Chloroaniline	0.583	0.579	0.7	88	0.00
36	T	4-Aminotoluene	0.568	0.549	3.3	85	0.00
37	TC	Hexachlorobutadiene	0.193	0.183	5.2	87	0.00
38	T	Caprolactam	0.116	0.115	0.9	87	0.00
39	T	2-Aminotoluene	0.568	0.549	3.3	85	0.00
40	MC	4-Chloro-3-methylphenol	0.271	0.287	-5.9	90	0.00
41	T	2-Methylnaphthalene	0.691	0.665	3.8	88	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00
44	TP	Hexachlorocyclopentadiene	0.255	0.245	3.9	79	0.00
45	TC	2,4,6-Trichlorophenol	0.340	0.342	-0.6	87	0.00

46	T	2,4,5-Trichlorophenol	0.361	0.368	-1.9	87	0.00
47	S	2-Fluorobiphenyl	1.366	1.327	2.9	85	0.00
48	T	1,1'-Biphenyl	1.311	1.365	-4.1	87	0.00
49	T	2-Chloronaphthalene	1.036	1.022	1.4	88	0.00
50	T	2-Nitroaniline	0.239	0.257	-7.5	91	0.00
51	T	Dimethyl phthalate	1.096	1.123	-2.5	87	0.00
52	T	2,6-Dinitrotoluene	0.224	0.261	-16.5	93	0.00
53	T	Acenaphthylene	1.553	1.627	-4.8	90	0.00
54	T	3-Nitroaniline	0.250	0.287	-14.8	90	0.00
55	MC	Acenaphthene	1.097	1.073	2.2	87	0.00
56	TP	2,4-Dinitrophenol	0.100	0.109	-9.0	82	0.00
57	MP	4-Nitrophenol	0.209	0.209	0.0	89	0.00
58	M	2,4-Dinitrotoluene	0.287	0.319	-11.1	89	0.00
59	T	Dibenzofuran	1.428	1.440	-0.8	85	0.00
60	T	Diethyl phthalate	1.045	1.097	-5.0	90	0.00
61	T	Fluorene	1.225	1.242	-1.4	88	0.00
62	T	4-Chlorophenyl phenyl ether	0.596	0.600	-0.7	90	0.00
63	T	4-Nitroaniline	0.263	0.272	-3.4	87	0.00
64		1,2,4,5-Tetrachlorobenzene	0.605	0.580	4.1	86	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.306	0.298	2.6	88	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00
67	T	4,6-Dinitro-2-methylphenol	0.112	0.122	-8.9	85	0.00
68	TC	N-Nitrosodiphenylamine	0.558	0.553	0.9	88	0.00
69	T	1,2-Diphenylhydrazine	0.833	0.855	-2.6	89	0.00
70	S	2,4,6-Tribromophenol	0.162	0.158	2.5	86	0.00
71	T	4-Bromophenyl phenyl ether	0.240	0.227	5.4	86	0.00
72	T	Hexachlorobenzene	0.280	0.264	5.7	88	0.00
73	T	Atrazine	0.197	0.196	0.5	89	0.00
74	MC	Pentachlorophenol	0.173	0.178	-2.9	88	0.00
75	T	Phenanthrene	1.055	1.060	-0.5	90	0.00
76	T	Anthracene	1.031	1.031	0.0	88	0.00
77	T	Carbazole	0.955	0.958	-0.3	90	0.00
78	T	Di-n-butyl phthalate	1.079	1.114	-3.2	88	0.00
79	TC	Fluoranthene	1.082	1.133	-4.7	92	0.00
80	T	Benzidine	0.502	0.453	9.8	99	0.00
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	93	0.00
83	M	Pyrene	1.231	1.253	-1.8	89	0.00
84	S	Terphenyl-d14	1.076	1.086	-0.9	91	0.00
85	T	3,3'-Dimethylbenzidine	0.665	0.624	6.2	96	-0.01
86	T	Butyl benzyl phthalate	0.434	0.456	-5.1	93	0.00
87	T	3,3'-Dichlorobenzidine	0.317	0.353	-11.4	94	0.00
88	T	Benzo[a]anthracene	1.038	1.039	-0.1	95	0.00
89	T	Chrysene	1.013	1.006	0.7	93	0.00
90	T	Bis(2-ethylhexyl) phthalate	0.614	0.636	-3.6	95	0.00
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	95	0.00
93	TC	Di-n-octyl phthalate	1.361	1.530	-12.4	93	0.00
94	T	Benzo[b]fluoranthene	1.574	1.631	-3.6	103	0.00
95	T	Benzo[k]fluoranthene	1.574	1.568	0.4	90	0.00
96	TC	Benzo[a]pyrene	1.359	1.434	-5.5	95	0.00
97	T	Indeno[1,2,3-cd]pyrene	1.689	1.789	-5.9	92	0.02
98	T	Dibenz[a,h]anthracene	1.404	1.476	-5.1	92	0.02
99	T	Benzo[g,h,i]perylene	1.430	1.511	-5.7	93	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS2413.M Wed Oct 16 14:06:01 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1223.D
Acq On : 25 Oct 2013 11:38
Operator : EDM
Sample : ABN070.13,CCV040BNA1
Misc : NA,10/25/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Oct 25 11:53:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 14:04:19 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	77	0.00
2	T	N-Nitrosodimethylamine	0.696	0.760	-9.2	76	-0.01
3	T	Pyridine	0.974	1.044	-7.2	78	0.00
4	S	2-Fluorophenol	1.336	1.293	3.2	74	0.00
5	T	Benzaldehyde	0.822	0.806	1.9	102	0.00
6	S	Phenol-d5	1.548	1.670	-7.9	77	0.00
7	MC	Phenol	1.624	1.674	-3.1	79	0.00
8	T	Aniline	0.664	0.739	-11.3	85	0.00
9	T	Bis(2-chloroethyl) ether	0.912	0.978	-7.2	87	0.00
10	M	2-Chlorophenol	1.447	1.460	-0.9	79	0.00
11	T	1,3-Dichlorobenzene	1.590	1.541	3.1	77	0.00
12	MC	1,4-Dichlorobenzene	1.569	1.502	4.3	74	-0.01
13	T	Benzyl alcohol	0.864	0.855	1.0	78	0.00
14	T	1,2-Dichlorobenzene	1.477	1.418	4.0	74	0.00
15	T	2-Methylphenol	1.118	1.185	-6.0	80	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.541	1.717	-11.4	87	-0.01
17	T	4-Methylphenol	1.213	1.310	-8.0	81	0.00
18	MP	N-Nitrosodi-n-propylamine	0.957	1.056	-10.3	81	-0.01
19	T	Acetophenone	1.847	1.909	-3.4	78	0.00
20	T	3-Methylphenol	1.214	1.309	-7.8	81	0.00
21	T	Hexachloroethane	0.565	0.559	1.1	78	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	80	0.00
24	S	Nitrobenzene-d5	0.344	0.363	-5.5	87	0.00
25	T	Nitrobenzene	0.323	0.335	-3.7	82	0.00
26	T	Isophorone	0.595	0.672	-12.9	90	0.00
27	TC	2-Nitrophenol	0.180	0.183	-1.7	81	0.00
28	T	2,4-Dimethylphenol	0.321	0.333	-3.7	83	0.00
29	T	Bis(2-chloroethoxy) methane	0.352	0.347	1.4	77	-0.01
30	T	Benzoic acid	0.175	0.214	-22.3	88	0.00
31	T	2,4-Dimethylaniline	0.371	0.376	-1.3	80	0.00
32	TC	2,4-Dichlorophenol	0.267	0.267	0.0	75	0.00
33	M	1,2,4-Trichlorobenzene	0.321	0.298	7.2	72	-0.01
34	T	Naphthalene	1.065	1.080	-1.4	76	0.00
35	T	4-Chloroaniline	0.583	0.553	5.1	77	0.00
36	T	4-Aminotoluene	0.568	0.551	3.0	78	-0.01
37	TC	Hexachlorobutadiene	0.193	0.167	13.5	72	0.00
38	T	Caprolactam	0.116	0.128	-10.3	89	0.00
39	T	2-Aminotoluene	0.568	0.551	3.0	78	-0.01
40	MC	4-Chloro-3-methylphenol	0.271	0.288	-6.3	83	0.00
41	T	2-Methylnaphthalene	0.691	0.666	3.6	81	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	75	-0.01
44	TP	Hexachlorocyclopentadiene	0.255	0.197	22.7	56	-0.01
45	TC	2,4,6-Trichlorophenol	0.340	0.334	1.8	75	0.00

46	T	2,4,5-Trichlorophenol	0.361	0.385	-6.6	80	0.00
47	S	2-Fluorobiphenyl	1.366	1.396	-2.2	79	-0.01
48	T	1,1'-Biphenyl	1.311	1.423	-8.5	80	-0.01
49	T	2-Chloronaphthalene	1.036	0.998	3.7	76	-0.01
50	T	2-Nitroaniline	0.239	0.298	-24.7	93	0.00
51	T	Dimethyl phthalate	1.096	1.101	-0.5	76	-0.01
52	T	2,6-Dinitrotoluene	0.224	0.256	-14.3	81	-0.02
53	T	Acenaphthylene	1.553	1.579	-1.7	77	-0.02
54	T	3-Nitroaniline	0.250	0.294	-17.6	82	-0.01
55	MC	Acenaphthene	1.097	1.120	-2.1	80	-0.01
56	TP	2,4-Dinitrophenol	0.100	0.087	13.0	58	-0.01
57	MP	4-Nitrophenol	0.209	0.245	-17.2	92	0.00
58	M	2,4-Dinitrotoluene	0.287	0.322	-12.2	79	-0.01
59	T	Dibenzofuran	1.428	1.461	-2.3	76	-0.01
60	T	Diethyl phthalate	1.045	1.075	-2.9	78	-0.02
61	T	Fluorene	1.225	1.259	-2.8	79	-0.02
62	T	4-Chlorophenyl phenyl ether	0.596	0.562	5.7	75	-0.02
63	T	4-Nitroaniline	0.263	0.301	-14.4	85	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.605	0.556	8.1	72	-0.01
65	T	2,3,4,6-Tetrachlorophenol	0.306	0.288	5.9	75	-0.01
66	I	Phenanthrene-d10	1.000	1.000	0.0	76	-0.02
67	T	4,6-Dinitro-2-methylphenol	0.112	0.108	3.6	65	-0.01
68	TC	N-Nitrosodiphenylamine	0.558	0.568	-1.8	78	-0.02
69	T	1,2-Diphenylhydrazine	0.833	0.987	-18.5	89	-0.02
70	S	2,4,6-Tribromophenol	0.162	0.163	-0.6	77	-0.02
71	T	4-Bromophenyl phenyl ether	0.240	0.230	4.2	75	-0.02
72	T	Hexachlorobenzene	0.280	0.258	7.9	74	-0.02
73	T	Atrazine	0.197	0.190	3.6	75	-0.02
74	MC	Pentachlorophenol	0.173	0.155	10.4	66	-0.02
75	T	Phenanthrene	1.055	1.063	-0.8	78	-0.02
76	T	Anthracene	1.031	1.049	-1.7	77	-0.02
77	T	Carbazole	0.955	0.975	-2.1	79	-0.02
78	T	Di-n-butyl phthalate	1.079	1.128	-4.5	77	-0.03
79	TC	Fluoranthene	1.082	1.078	0.4	76	-0.03
80	T	Benzidine	0.502	0.583	-16.1	111	-0.06
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	74	-0.03
83	M	Pyrene	1.231	1.325	-7.6	75	-0.03
84	S	Terphenyl-d14	1.076	1.051	2.3	70	-0.04
85	T	3,3'-Dimethylbenzidine	0.665	0.643	3.3	91	-0.09
86	T	Butyl benzyl phthalate	0.434	0.477	-9.9	77	-0.05
87	T	3,3'-Dichlorobenzidine	0.317	0.370	-16.7	79	-0.03
88	T	Benzo[a]anthracene	1.038	1.025	1.3	74	-0.03
89	T	Chrysene	1.013	1.030	-1.7	76	-0.03
90	T	Bis(2-ethylhexyl) phthalate	0.614	0.660	-7.5	78	-0.04
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	82	-0.01
93	TC	Di-n-octyl phthalate	1.361	1.636	-20.2	86	-0.03
94	T	Benzo[b]fluoranthene	1.574	1.509	4.1	82	-0.02
95	T	Benzo[k]fluoranthene	1.574	1.628	-3.4	80	-0.02
96	TC	Benzo[a]pyrene	1.359	1.455	-7.1	83	-0.01
97	T	Indeno[1,2,3-cd]pyrene	1.689	1.942	-15.0	85	0.02
98	T	Dibenz[a,h]anthracene	1.404	1.638	-16.7	88	0.01
99	T	Benzo[g,h,i]perylene	1.430	1.521	-6.4	80	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS2413.M Fri Oct 25 12:19:26 2013 RPT1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0867.D

Date Analyzed: 10/16/2013

Instrument ID: MSDC

Time Analyzed: 09:55

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	385793		2.48		1573440		3.03		997677		3.85	
	UPPER LIMIT	771586		2.98		3146880		3.53		1995354		4.35	
	LOWER LIMIT	192897		1.98		786720		2.53		498839		3.35	
	LAB SAMPLE ID												
01	ICC001BNA1	348258		2.48		1478461		3.03		910973		3.85	
02	ICC010BNA1	328990		2.48		1431140		3.03		833908		3.84	
03	ICC020BNA1	337853		2.48		1366354		3.03		871504		3.85	
04	ICC080BNA1	387967		2.49		1582294		3.04		988745		3.85	
05	ICC120BNA1	432201		2.49		1725573		3.04		1037439		3.85	
06	ICV040BNA1	333017		2.48		1378825		3.03		852946		3.85	
07	ICC120BNA2	340078		2.48		1436693		3.03		870061		3.85	
08	ICC080BNA2	342637		2.48		1532278		3.03		910529		3.85	
09	ICC040BNA2	324172		2.48		1383533		3.03		836212		3.85	
10	ICC020BNA2	389392		2.48		1622175		3.03		993609		3.85	
11	ICC010BNA2	335297		2.48		1440436		3.03		882654		3.85	
12	ICC001BNA2	341142		2.48		1437419		3.03		890783		3.84	
13	ICV040BNA2	393546		2.48		1623107		3.03		924976		3.84	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0867.D Date Analyzed: 10/16/2013

Instrument ID: MSDC Time Analyzed: 09:55

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	1492250	4.61	1255301	6.38	656635	7.73
	UPPER LIMIT	2984500	5.11	2510602	6.88	1313270	8.23
	LOWER LIMIT	746125	4.11	627651	5.88	328318	7.23
	LAB SAMPLE ID						
01	ICC001BNA1	1538383	4.61	1561546	6.37	873722	7.73
02	ICC010BNA1	1415834	4.61	1438753	6.38	760857	7.73
03	ICC020BNA1	1367682	4.62	1299115	6.40	684479	7.75
04	ICC080BNA1	1363528	4.61	1034520	6.37	601982	7.75
05	ICC120BNA1	1323300	4.61	975322	6.38	619987	7.75
06	ICV040BNA1	1321434	4.61	1170350	6.38	625948	7.74
07	ICC120BNA2	1459749	4.61	1292525	6.38	656129	7.73
08	ICC080BNA2	1522648	4.61	1371160	6.37	664377	7.72
09	ICC040BNA2	1388369	4.61	1368315	6.38	698636	7.73
10	ICC020BNA2	1670604	4.61	1582245	6.37	772487	7.73
11	ICC010BNA2	1516315	4.61	1452400	6.38	726459	7.73
12	ICC001BNA2	1467023	4.60	1398021	6.36	734249	7.72
13	ICV040BNA2	1551489	4.61	1377864	6.37	685768	7.73
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1223.D

Date Analyzed: 10/25/2013

Instrument ID: MSDC

Time Analyzed: 11:38

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	295482	2.48	1266202	3.02	752133	3.84
	UPPER LIMIT	590964	2.98	2532404	3.52	1504266	4.34
	LOWER LIMIT	147741	1.98	633101	2.52	376067	3.34
	LAB SAMPLE ID						
01	CCV040BNA2	313917	2.48	1282973	3.02	791076	3.82
02	BLKS131025-02	367507	2.48	1549374	3.03	949261	3.86
03	LCSS131025-02	273035	2.48	1222980	3.02	742835	3.83
04	E13-10559-001MS	285880	2.48	1192695	3.02	750960	3.82
05	E13-10559-001MSD	300788	2.48	1218445	3.02	665338	3.82
06	E13-10323-004	233880	2.48	946314	3.02	876125	3.83
07	E13-10323-005	402014	2.48	1692817	3.02	890741	3.83
08	E13-10582-011	452436	2.48	1807985	3.02	916571	3.83
09	E13-10582-012	395171	2.49	1570859	3.02	820260	3.82
10	E13-10582-013	382897	2.48	1532942	3.02	791142	3.82
11	E13-10582-014	400938	2.48	1569548	3.02	793674	3.82
12	E13-10582-015	373195	2.48	1543252	3.02	818635	3.82
13	E13-10431-001	487390	2.48	2243558	3.02	1131287	3.83
14	E13-10431-003	383965	2.48	2191187	3.04	1109050	3.90
15	E13-10431-005	461791	2.48	2068481	3.03	1055855	3.84
16	E13-10433-001	457179	2.48	2207129	3.02	1135265	3.84
17	E13-10433-002	390892	2.48	2235713	3.04	1192150	3.88
18	E13-10580-001	356378	2.48	1504744	3.02	816481	3.83
19	E13-10471-001	525707	2.48	2010544	3.03	1008007	3.87
20	E13-10471-002	347539	2.48	1306032	3.02	623191	3.84
21	E13-10471-003	419456	2.48	1609387	3.03	820439	3.87
22	E13-10471-004	379353	2.48	1487789	3.02	720324	3.84

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1223.D

Date Analyzed: 10/25/2013

Instrument ID: MSDC

Time Analyzed: 11:38

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	1141027	4.59	930499	6.36	537250	7.72
	UPPER LIMIT	2282054	5.09	1860998	6.86	1074500	8.22
	LOWER LIMIT	570514	4.09	465250	5.86	268625	7.22
	LAB SAMPLE ID						
01	CCV040BNA2	1348183	4.56	1269849	6.33	623233	7.69
02	BLKS131025-02	1610154	4.64	1129494	6.42	581850	7.78
03	LCSS131025-02	1120058	4.58	857797	6.35	385762	7.72
04	E13-10559-001MS	1053759	4.56	829401	6.33	423752	7.69
05	E13-10559-001MSD	889925	4.56	704982	6.32	369723	7.69
06	E13-10323-004	1290139	4.60	570985	6.44	606231	7.93
07	E13-10323-005	1249807	4.57	1111331	6.34	525537	7.72
08	E13-10582-011	1428791	4.58	1675177	6.36	636558	7.76
09	E13-10582-012	1136997	4.57	1116061	6.34	531132	7.72
10	E13-10582-013	1135981	4.57	1334742	6.34	530735	7.73
11	E13-10582-014	1146293	4.56	1383475	6.34	552943	7.73
12	E13-10582-015	1046361	4.56	718262	6.32	382702	7.69
13	E13-10431-001	1363966	4.57	917698	6.33	496055	7.69
14	E13-10431-003	1176170	4.71	947930	6.50	432256	7.88
15	E13-10431-005	1404728	4.60	901214	6.36	475287	7.72
16	E13-10433-001	1321195	4.61	855227	6.36	480209	7.76
17	E13-10433-002	1165044	4.67	936368	6.45	427740	7.83
18	E13-10580-001	1092319	4.58	745922	6.34	410890	7.70
19	E13-10471-001	1303588	4.66	1529781	6.46	638589	7.84
20	E13-10471-002	817253	4.59	809125	6.36	435190	7.73
21	E13-10471-003	1086472	4.66	1216268	6.46	517453	7.87
22	E13-10471-004	961513	4.59	1059377	6.36	507170	7.73

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1223.D

Date Analyzed: 10/25/2013

Instrument ID: MSDC

Time Analyzed: 11:38

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	295482	2.48	1266202	3.02	752133	3.84
	UPPER LIMIT	590964	2.98	2532404	3.52	1504266	4.34
	LOWER LIMIT	147741	1.98	633101	2.52	376067	3.34
	LAB SAMPLE ID						
01	E13-10471-005	333872	2.48	1269616	3.02	603527	3.83
02	E13-10601-001	366939	2.48	1378241	3.02	646320	3.83
03	E13-10559-001	317833	2.48	1126803	3.02	535193	3.83
04	E13-10323-004DL	349299	2.48	1311814	3.02	704583	3.83
05							
06							
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21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C1223.D

Date Analyzed: 10/25/2013

Instrument ID: MSDC

Time Analyzed: 11:38

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	1141027	4.59	930499	6.36	537250	7.72
	UPPER LIMIT	2282054	5.09	1860998	6.86	1074500	8.22
	LOWER LIMIT	570514	4.09	465250	5.86	268625	7.22
	LAB SAMPLE ID						
01	E13-10471-005	823332	4.58	919224	6.36	410514	7.72
02	E13-10601-001	868719	4.58	936879	6.34	398127	7.71
03	E13-10559-001	713831	4.57	790116	6.34	362416	7.7
04	E13-10323-004DL	1303853	4.58	1792364	6.37	610475	7.77
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII SV-2

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1247.D
Acq On : 25 Oct 2013 20:05
Operator : EDM
Sample : GPEC_WC_,E13-10601-001,S,15.10g,6.4,0.5
Misc : 131025-02,10/25/13,10/24/13,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 28 09:59:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 14:04:19 2013
Response via : Initial Calibration

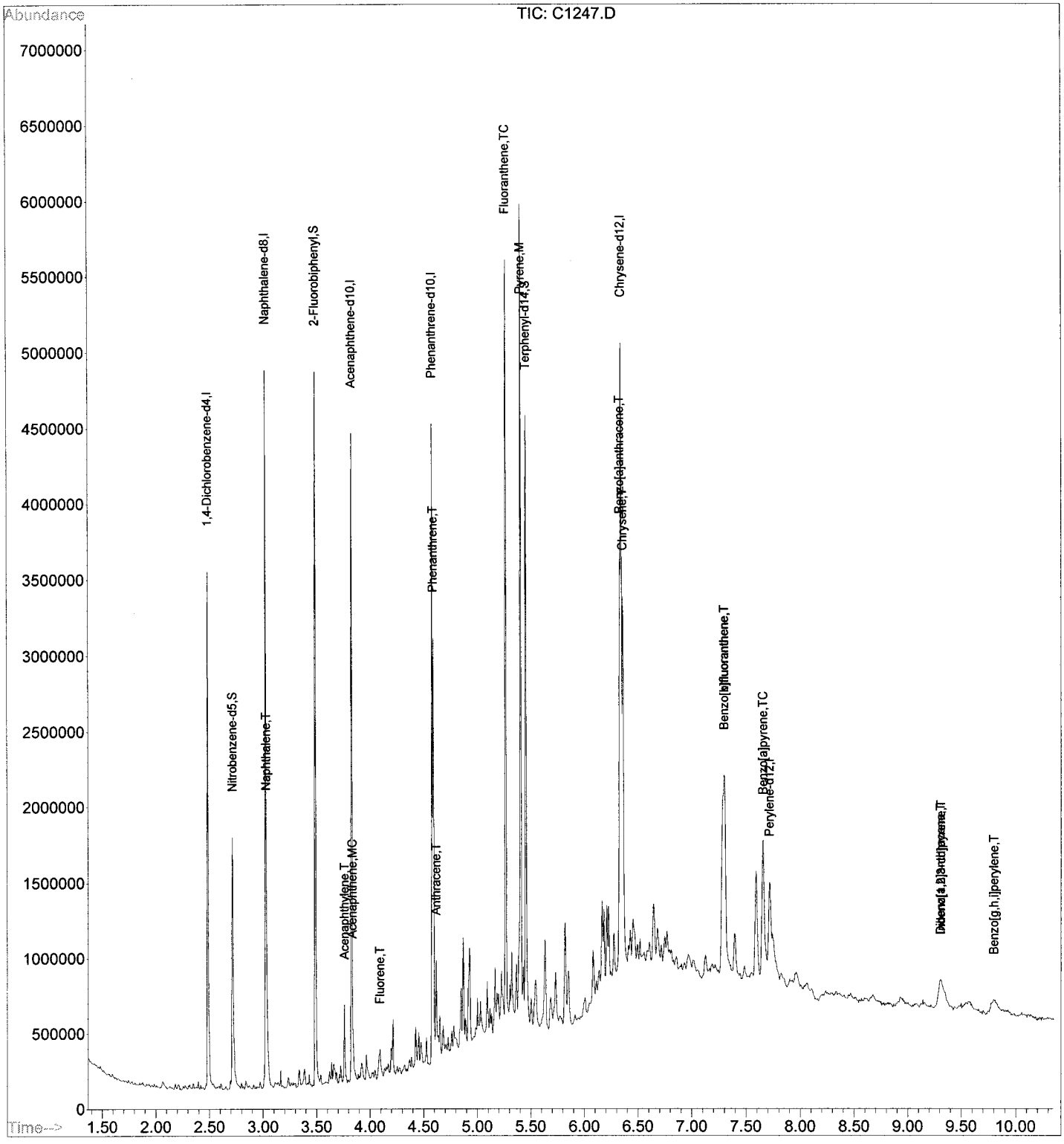
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	366939	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	1378241	40.00	UG	0.00
43) Acenaphthene-d10	3.83	164	646320	40.00	UG	-0.02
66) Phenanthrene-d10	4.58	188	868719	40.00	UG	-0.03
82) Chrysene-d12	6.34	240	936879	40.00	UG	-0.04
92) Perylene-d12	7.71	264	398127	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 108		Recovery = 0.00%#			
24) Nitrobenzene-d5	2.71	82	506769	42.73	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 85.46%			
47) 2-Fluorobiphenyl	3.49	172	967294m	43.81	UG	-0.01
Spiked Amount 50.000	Range 33 - 91		Recovery = 87.62%			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 37 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	5.46	244	945900	37.52	UG	-0.06
Spiked Amount 50.000	Range 15 - 122		Recovery = 75.04%			
Target Compounds						Qvalue
34) Naphthalene	3.04	128	82359	2.24	UG	# 56
53) Acenaphthylene	3.76	152	158127	6.30	UG	96
55) Acenaphthene	3.84	153	26188	1.48	UG	92
61) Fluorene	4.09	166	41750	2.11	UG	# 88
75) Phenanthrene	4.59	178	639003	27.90	UG	99
76) Anthracene	4.62	178	173775m	7.76	UG	
79) Fluoranthene	5.27	202	1397662	59.46	UG	# 88
83) Pyrene	5.41	202	1430024	49.60	UG	# 82
88) Benzo[a]anthracene	6.33	228	742841	30.57	UG	# 88
89) Chrysene	6.36	228	750209	31.61	UG	# 90
94) Benzo[b]fluoranthene	7.29	252	581366m	37.10	UG	
95) Benzo[k]fluoranthene	7.30	252	507823m	32.41	UG	
96) Benzo[a]pyrene	7.66	252	524004	38.75	UG	# 95
97) Indeno[1,2,3-cd]pyrene	9.31	276	216888m	12.90	UG	
98) Dibenz[a,h]anthracene	9.30	278	80263m	5.74	UG	
99) Benzo[g,h,i]perylene	9.80	276	150063m	10.55	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1247.D
Acq On : 25 Oct 2013 20:05
Operator : EDM
Sample : GPEC_WC_,E13-10601-001,S,15.10g,6.4,0.5
Misc : 131025-02,10/25/13,10/24/13,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 28 09:59:17 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 14:04:19 2013
Response via : Initial Calibration



E13-10601 0078

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS131025-02
Client ID: .
Date Received: NA
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1225.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.028
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.020
Aniline	ND		0.033	0.026
Bis(2-chloroethyl) ether	ND		0.033	0.023
2-Chlorophenol	ND		0.033	0.020
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.020
Benzyl alcohol	ND		0.033	0.021
1,2-Dichlorobenzene	ND		0.033	0.020
2-Methylphenol	ND		0.033	0.027
Bis(2-chloroisopropyl) ether	ND		0.033	0.020
4-Methylphenol **	ND		0.033	0.020
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.020
3-Methylphenol	ND		0.033	0.020
Hexachloroethane	ND		0.033	0.020
Nitrobenzene	ND		0.033	0.033
Isophorone	ND		0.033	0.022
2-Nitrophenol	ND		0.033	0.025
2,4-Dimethylphenol	ND		0.033	0.026
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.020
2,4-Dimethylaniline	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.031
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.031
4-Aminotoluene	ND		0.033	0.028
Hexachlorobutadiene	ND		0.033	0.020
Caprolactam	ND		0.033	0.020
2-Aminotoluene	ND		0.033	0.028
4-Chloro-3-methylphenol	ND		0.033	0.031
2-Methylnaphthalene	ND		0.033	0.028
Hexachlorocyclopentadiene	ND		0.033	0.022
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.031
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.020

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS131025-02
Client ID: .
Date Received: NA
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1225.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.028
Acenaphthene	ND		0.033	0.027
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.025
2,4-Dinitrotoluene	ND		0.033	0.022
Dibenzofuran	ND		0.033	0.020
Diethyl phthalate	ND		0.033	0.025
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.027
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.031
4,6-Dinitro-2-methylphenol	ND		0.033	0.026
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.026
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.027
Atrazine	ND		0.033	0.023
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.022
Anthracene	ND		0.033	0.033
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.030
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.025
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.021
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.032
Chrysene	ND		0.033	0.023
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.030
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.031
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.022
Dibenz[a,h]anthracene	ND		0.033	0.024
Benzo[g,h,i]perylene	ND		0.033	0.030

Total Target Compounds (82): 0

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination
D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS131025-02
Client ID: .
Date Received: NA
Date Extracted: 10/25/2013
Date Analyzed: 10/25/2013
Data file: C1225.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1225.D
Acq On : 25 Oct 2013 14:21
Operator : EDM
Sample : .,BLKS131025-02,S,15.00g,0,0.5
Misc : 131025-02,10/25/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 14:34:21 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 14:04:19 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	367507	40.00	UG	0.00
23) Naphthalene-d8	3.03	136	1549374	40.00	UG	0.00
43) Acenaphthene-d10	3.86	164	949261	40.00	UG	0.02
66) Phenanthrene-d10	4.64	188	1610154	40.00	UG	0.03
82) Chrysene-d12	6.42	240	1129494	40.00	UG	0.04
92) Perylene-d12	7.78	264	581850	40.00	UG	0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.96	112	761759	62.05	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 62.05%			
6) Phenol-d5	2.30	99	1159940	81.57	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 81.57%			
24) Nitrobenzene-d5	2.71	82	562474	42.19	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 84.38%			
47) 2-Fluorobiphenyl	3.51	172	1338585	41.28	UG	0.00
Spiked Amount 50.000	Range 33 - 91		Recovery = 82.56%			
70) 2,4,6-Tribromophenol	4.27	330	497769	76.51	UG	0.03
Spiked Amount 100.000	Range 37 - 115		Recovery = 76.51%			
84) Terphenyl-d14	5.57	244	1793399	59.00	UG	0.05
Spiked Amount 50.000	Range 15 - 122		Recovery = 118.00%			

Target Compounds	Qvalue

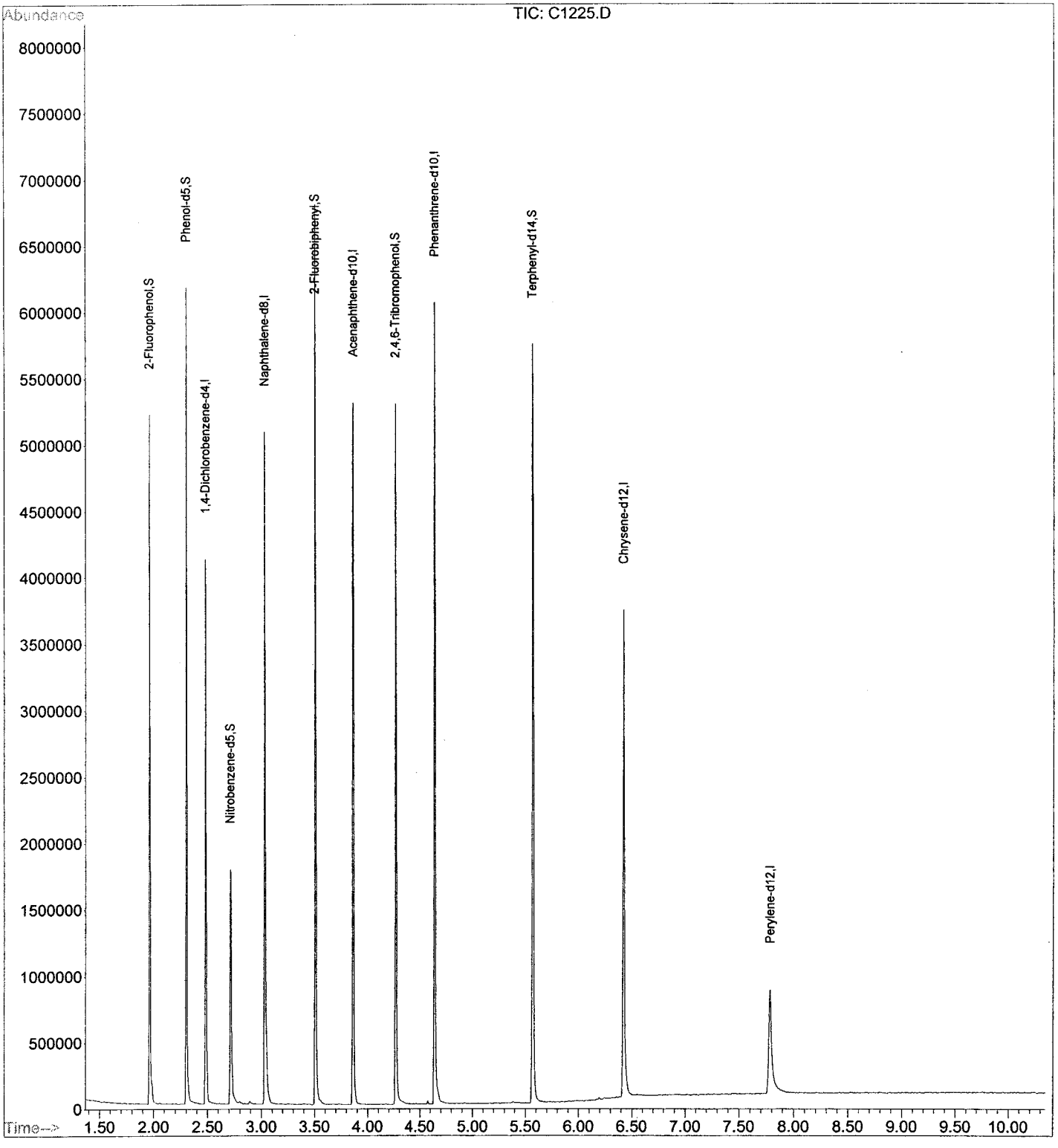
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E13-10601 0082

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1225.D
Acq On : 25 Oct 2013 14:21
Operator : EDM
Sample : .,BLKS131025-02,S,15.00g,0,0.5
Misc : 131025-02,10/25/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 25 14:34:21 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Oct 16 14:04:19 2013
Response via : Initial Calibration



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\10-25-13\
Data File : C1225.D
Acq On : 25 Oct 2013 14:21
Operator : EDM
Sample : .,BLKS131025-02,S,15.00g,0,0.5
Misc : 131025-02,10/25/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS2413.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS2413.M Fri Oct 25 14:34:40 2013 RPT1

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/29/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS131028-12	SOIL	92		59		87		74	
PCB	LCSS131028-12	SOIL	95		69		88		84	
96-1023-	E13-10579-001	SOIL	94		64		87		80	
GPEC_WC_	E13-10601-001	SOIL	89		63		81		75	
PCB	10601-001MS	SOIL	89		64		81		77	
PCB	10601-001MSD	SOIL	88		65		80		80	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS131028-12

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	466.7	93	40 - 140
Aroclor-1260	500.0	0.0	525.6	105	40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E13-10601-001

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	395.7	79	40 - 140
Aroclor-1260	500.0	0.0	451.5	90	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	390.2	78	1	50	40 - 140
Aroclor-1260	0.0	445.1	89	1	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID:	Y2546.D	Instrument ID:	GC-Y
Date Extracted:	10/28/2013	Matrix:	SOIL
Date Analyzed:	10/29/2013	Time Analyzed:	10:42

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS131028-12	10/29/2013	11:00
96-1023-	E13-10579-001	10/29/2013	11:17
GPEC_WC_	E13-10601-001	10/29/2013	11:34
PCB	10601-001MS	10/29/2013	11:52
PCB	10601-001MSD	10/29/2013	12:09

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013

Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.22	3.22	3.22	3.22	3.22	3.22	3.15	3.29
Aroclor-1016 {2}	4.04	4.04	4.04	4.04	4.04	4.04	3.97	4.11
Aroclor-1016 {3}	4.59	4.59	4.59	4.59	4.59	4.59	4.52	4.66
Aroclor-1016 {4}	5.10	5.09	5.09	5.09	5.09	5.09	5.02	5.16
Aroclor-1016 {5}	5.48	5.48	5.49	5.49	5.49	5.48	5.41	5.55
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.02				2.95	3.09
Aroclor-1221 {3}			3.15				3.08	3.22
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.22				3.15	3.29
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			5.49				5.42	5.56
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.98				4.91	5.05
Aroclor-1242 {3}			5.30				5.23	5.37
Aroclor-1242 {4}			5.99				5.92	6.06
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.44				4.36	4.52
Aroclor-1248 {2}			4.98				4.90	5.06
Aroclor-1248 {3}			5.30				5.22	5.38
Aroclor-1248 {4}			5.99				5.91	6.07
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.38				6.30	6.46
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.42				7.33	7.51
Aroclor-1254 {5}			8.26				8.17	8.35
Aroclor-1260	8.26	8.25	8.25	8.25	8.25	8.25	7.35	9.15
Aroclor-1260 {2}	8.93	8.93	8.93	8.93	8.93	8.93	8.03	9.83
Aroclor-1260 {3}	9.40	9.40	9.40	9.40	9.40	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.94	10.94	10.94	10.94	10.94	10.94	10.04	11.84

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	447576	450365	388612	345786	323686	391205	14.74
Aroclor-1016 {2}	627708	605785	540310	484438	452371	542122	13.92
Aroclor-1016 {3}	874719	765872	684369	615358	580856	704235	16.86
Aroclor-1016 {4}	397732	395187	335989	294619	274788	339663	16.59
Aroclor-1016 {5}	650000	629542	566447	507766	477446	566240	13.19
Aroclor-1221			192071				
Aroclor-1221 {2}			294477				
Aroclor-1221 {3}			194494				
Aroclor-1221 {4}			645697				
Aroclor-1221 {5}			155613				
Aroclor-1232			485451				
Aroclor-1232 {2}			295113				
Aroclor-1232 {3}			259888				
Aroclor-1232 {4}			289070				
Aroclor-1232 {5}			363887				
Aroclor-1242			436017				
Aroclor-1242 {2}			286372				
Aroclor-1242 {3}			394744				
Aroclor-1242 {4}			571815				
Aroclor-1242 {5}			506345				
Aroclor-1248			1024891				
Aroclor-1248 {2}			610408				
Aroclor-1248 {3}			783514				
Aroclor-1248 {4}			1193332				
Aroclor-1248 {5}			943616				
Aroclor-1254			1201203				
Aroclor-1254 {2}			793076				
Aroclor-1254 {3}			1437056				
Aroclor-1254 {4}			1570039				
Aroclor-1254 {5}			1434237				
Aroclor-1260	2164689	1822060	1649814	1491973	1376386	1700984	18.15
Aroclor-1260 {2}	1017786	828195	794125	753368	686484	815992	15.26
Aroclor-1260 {3}	2276656	1959820	1965580	1727080	1567462	1899320	14.18
Aroclor-1260 {4}	1326111	1138653	1050773	938551	874861	1065790	16.65
Aroclor-1260 {5}	427655	497378	493376	416237	392419	445413	10.64
					Average %RSD		15.02

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.77	3.76	3.76	3.76	3.76	3.76	3.69	3.83
Aroclor-1016 {2}	4.36	4.36	4.36	4.36	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {4}	5.32	5.32	5.31	5.31	5.31	5.32	5.25	5.39
Aroclor-1016 {5}	5.50	5.50	5.49	5.49	5.49	5.49	5.42	5.56
Aroclor-1221			2.44				2.37	2.51
Aroclor-1221 {2}			3.44				3.37	3.51
Aroclor-1221 {3}			3.67				3.60	3.74
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.11				5.04	5.18
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.32				5.25	5.39
Aroclor-1232 {4}			5.49				5.42	5.56
Aroclor-1232 {5}			6.09				6.02	6.16
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.49				5.42	5.56
Aroclor-1242 {3}			6.09				6.02	6.16
Aroclor-1242 {4}			6.24				6.17	6.31
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.11				5.03	5.19
Aroclor-1248 {2}			5.69				5.61	5.77
Aroclor-1248 {3}			6.09				6.01	6.17
Aroclor-1248 {4}			6.24				6.16	6.32
Aroclor-1248 {5}			6.59				6.51	6.67
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.28				8.19	8.37
Aroclor-1254 {4}			8.51				8.42	8.60
Aroclor-1254 {5}			9.10				9.01	9.19
Aroclor-1260	7.86	7.86	7.85	7.85	7.85	7.85	6.95	8.75
Aroclor-1260 {2}	8.11	8.11	8.10	8.10	8.11	8.11	7.21	9.01
Aroclor-1260 {3}	9.70	9.70	9.70	9.70	9.70	9.70	8.80	10.60
Aroclor-1260 {4}	10.21	10.21	10.20	10.20	10.20	10.20	9.30	11.10
Aroclor-1260 {5}	10.79	10.79	10.79	10.79	10.79	10.79	9.89	11.69

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1077370	953453	804609	701121	709556	849222	19.20
Aroclor-1016 {2}	1918671	1960329	1608123	1381664	1325023	1638762	17.98
Aroclor-1016 {3}	4324478	4205440	4062198	3620367	3349029	3912303	10.54
Aroclor-1016 {4}	1861148	1868934	1815999	1632266	1512673	1738204	9.11
Aroclor-1016 {5}	1430926	1439767	1411203	1275811	1190022	1349546	8.24
Aroclor-1221			361519				
Aroclor-1221 {2}			570497				
Aroclor-1221 {3}			440309				
Aroclor-1221 {4}			1560405				
Aroclor-1221 {5}			298298				
Aroclor-1232			997030				
Aroclor-1232 {2}			442734				
Aroclor-1232 {3}			973980				
Aroclor-1232 {4}			762359				
Aroclor-1232 {5}			1048394				
Aroclor-1242			664309				
Aroclor-1242 {2}			1138194				
Aroclor-1242 {3}			1485300				
Aroclor-1242 {4}			1259374				
Aroclor-1242 {5}			2420970				
Aroclor-1248			2492251				
Aroclor-1248 {2}			3757343				
Aroclor-1248 {3}			2697779				
Aroclor-1248 {4}			2357309				
Aroclor-1248 {5}			1352106				
Aroclor-1254			3041071				
Aroclor-1254 {2}			2368537				
Aroclor-1254 {3}			2266311				
Aroclor-1254 {4}			1381114				
Aroclor-1254 {5}			3490970				
Aroclor-1260	1756745	1609704	1667033	1492660	1384278	1582084	9.25
Aroclor-1260 {2}	2514617	2346239	2396908	2136545	1972010	2273264	9.54
Aroclor-1260 {3}	2272642	2216880	2173205	1982348	1847768	2098568	8.47
Aroclor-1260 {4}	5104232	4840602	4813333	4433949	4194747	4677373	7.70
Aroclor-1260 {5}	3460295	3482324	3518699	3226187	3070976	3351696	5.80
					Average %RSD		10.58

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013

Instrument ID: GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.55				8.43	8.67
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.94				10.82	11.06
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			11.55				11.43	11.67
Aroclor-1268 {5}			12.03				11.91	12.15

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.69				9.57	9.81
Aroclor-1262 {2}			10.20				10.08	10.32
Aroclor-1262 {3}			10.70				10.58	10.82
Aroclor-1262 {4}			10.79				10.67	10.91
Aroclor-1262 {5}			11.39				11.27	11.51
Aroclor-1268			10.70				10.58	10.82
Aroclor-1268 {2}			10.78				10.66	10.90
Aroclor-1268 {3}			11.03				10.91	11.15
Aroclor-1268 {4}			12.25				12.13	12.37
Aroclor-1268 {5}			12.48				12.36	12.60

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1354994				
Aroclor-1262 {2}			2620645				
Aroclor-1262 {3}			1033050				
Aroclor-1262 {4}			1158982				
Aroclor-1262 {5}			1018815				
Aroclor-1268			2640310				
Aroclor-1268 {2}			2756865				
Aroclor-1268 {3}			2304087				
Aroclor-1268 {4}			7029273				
Aroclor-1268 {5}			4052302				

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2852689				
Aroclor-1262 {2}			6641766				
Aroclor-1262 {3}			2469488				
Aroclor-1262 {4}			4736320				
Aroclor-1262 {5}			986321				
Aroclor-1268			7175428				
Aroclor-1268 {2}			7449976				
Aroclor-1268 {3}			6194617				
Aroclor-1268 {4}			17839550				
Aroclor-1268 {5}			10591825				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/29/2013 **Instrument ID:** GC-Y

Data File: Y2545.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	391205	380736	2.68
Aroclor-1016 {2}	4.04	3.97	4.11	542122	528230	2.56
Aroclor-1016 {3}	4.59	4.52	4.66	704235	675271	4.11
Aroclor-1016 {4}	5.09	5.02	5.16	339663	340401	0.22
Aroclor-1016 {5}	5.49	5.41	5.55	566240	567351	0.20
Aroclor-1260	8.26	7.35	9.15	1700984	1709232	0.48
Aroclor-1260 {2}	8.93	8.03	9.83	815992	811192	0.59
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1926110	1.41
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	1042930	2.14
Aroclor-1260 {5}	10.94	10.04	11.84	445413	427783	3.96

Data File: Y2545.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.69	3.83	849222	956947	12.69
Aroclor-1016 {2}	4.37	4.29	4.43	1638762	1885257	15.04
Aroclor-1016 {3}	5.12	5.04	5.18	3912303	4246129	8.53
Aroclor-1016 {4}	5.33	5.25	5.39	1738204	1869096	7.53
Aroclor-1016 {5}	5.50	5.42	5.56	1349546	1464253	8.50
Aroclor-1260	7.86	6.95	8.75	1582084	1772904	12.06
Aroclor-1260 {2}	8.11	7.21	9.01	2273264	2534371	11.49
Aroclor-1260 {3}	9.70	8.80	10.60	2098568	2270867	8.21
Aroclor-1260 {4}	10.20	9.30	11.10	4677373	4935008	5.51
Aroclor-1260 {5}	10.79	9.89	11.69	3351696	3424249	2.16

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/29/2013 **Instrument ID:** GC-Y

Data File: Y2552.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.23	3.15	3.29	391205	349506	10.66
Aroclor-1016 {2}	4.05	3.97	4.11	542122	483932	10.73
Aroclor-1016 {3}	4.60	4.52	4.66	704235	612949	12.96
Aroclor-1016 {4}	5.10	5.02	5.16	339663	308960	9.04
Aroclor-1016 {5}	5.49	5.41	5.55	566240	511249	9.71
Aroclor-1260	8.26	7.35	9.15	1700984	1523209	10.45
Aroclor-1260 {2}	8.93	8.03	9.83	815992	717440	12.08
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1796673	5.40
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	963021	9.64
Aroclor-1260 {5}	10.94	10.04	11.84	445413	410015	7.95

Data File: Y2552.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.69	3.83	849222	709383	16.47
Aroclor-1016 {2}	4.36	4.29	4.43	1638762	1390434	15.15
Aroclor-1016 {3}	5.11	5.04	5.18	3912303	3586786	8.32
Aroclor-1016 {4}	5.31	5.25	5.39	1738204	1578643	9.18
Aroclor-1016 {5}	5.49	5.42	5.56	1349546	1230147	8.85
Aroclor-1260	7.85	6.95	8.75	1582084	1464138	7.46
Aroclor-1260 {2}	8.10	7.21	9.01	2273264	2090440	8.04
Aroclor-1260 {3}	9.69	8.80	10.60	2098568	1911616	8.91
Aroclor-1260 {4}	10.20	9.30	11.10	4677373	4378547	6.39
Aroclor-1260 {5}	10.78	9.89	11.69	3351696	3180223	5.12

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.03 **TCMX 2** 2.90 **DCB 2** 12.47

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS131028-12	10/29/2013	10:42	2.77		12.03		2.90		12.47	
PCB	LCSS131028-12	10/29/2013	11:00	2.77		12.03		2.89		12.47	
96-1023-	E13-10579-001	10/29/2013	11:17	2.77		12.03		2.89		12.47	
GPEC_WC_	E13-10601-001	10/29/2013	11:34	2.77		12.03		2.89		12.47	
PCB	10601-001MS	10/29/2013	11:52	2.77		12.03		2.89		12.47	
PCB	10601-001MSD	10/29/2013	12:09	2.77		12.03		2.89		12.47	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-29-13\
Data File : Y2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Oct 2013 11:34
Operator : JS
Sample : GPEC_WC_,E13-10601-001,S,5.21g,6.40,20
Misc : 131028-12,10/28/13,10/24/13,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 29 13:21:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Thu Oct 24 16:10:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.89	3223.2E6	6739.0E6	177.588	161.002
Spiked Amount 200.000			Recovery	=	88.79%	80.50%
2) S DCB	12.03	12.47	924.1E6	2348.9E6	126.703	149.566
Spiked Amount 200.000			Recovery	=	63.35%	74.78%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

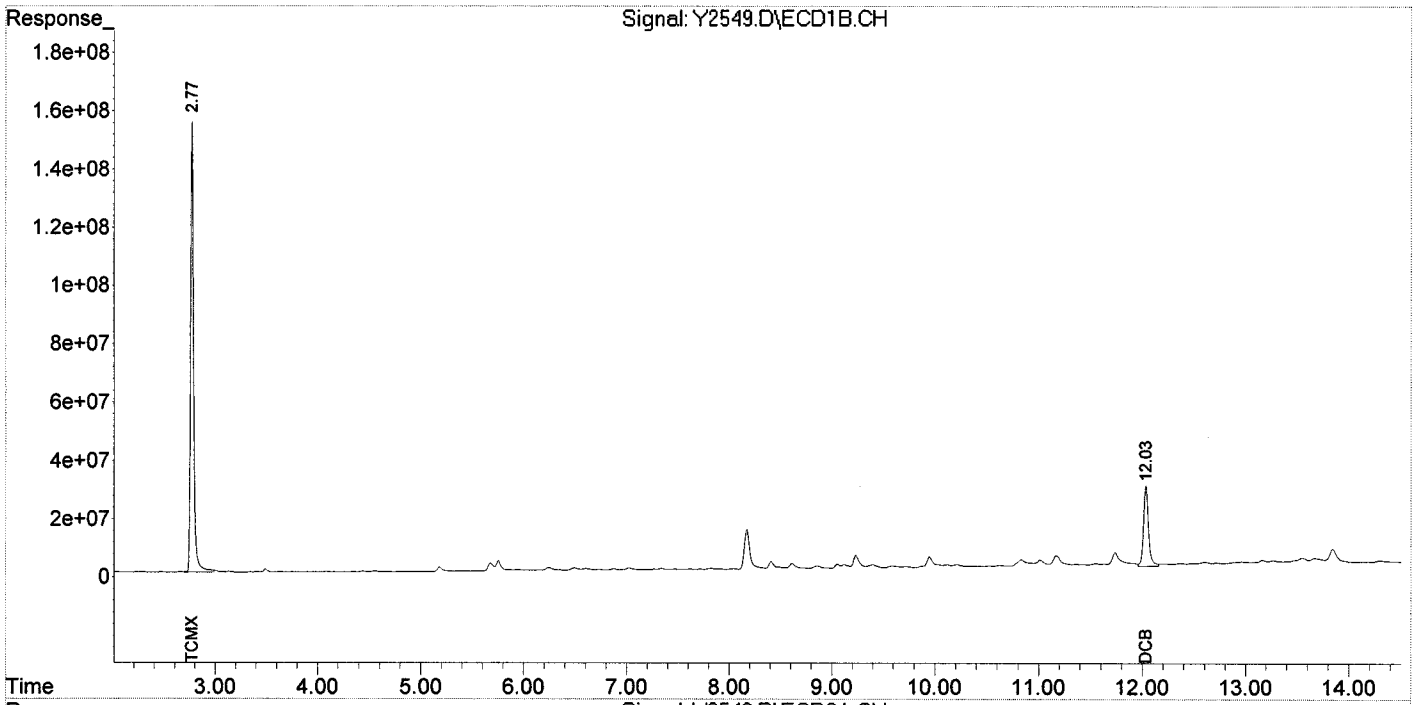
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

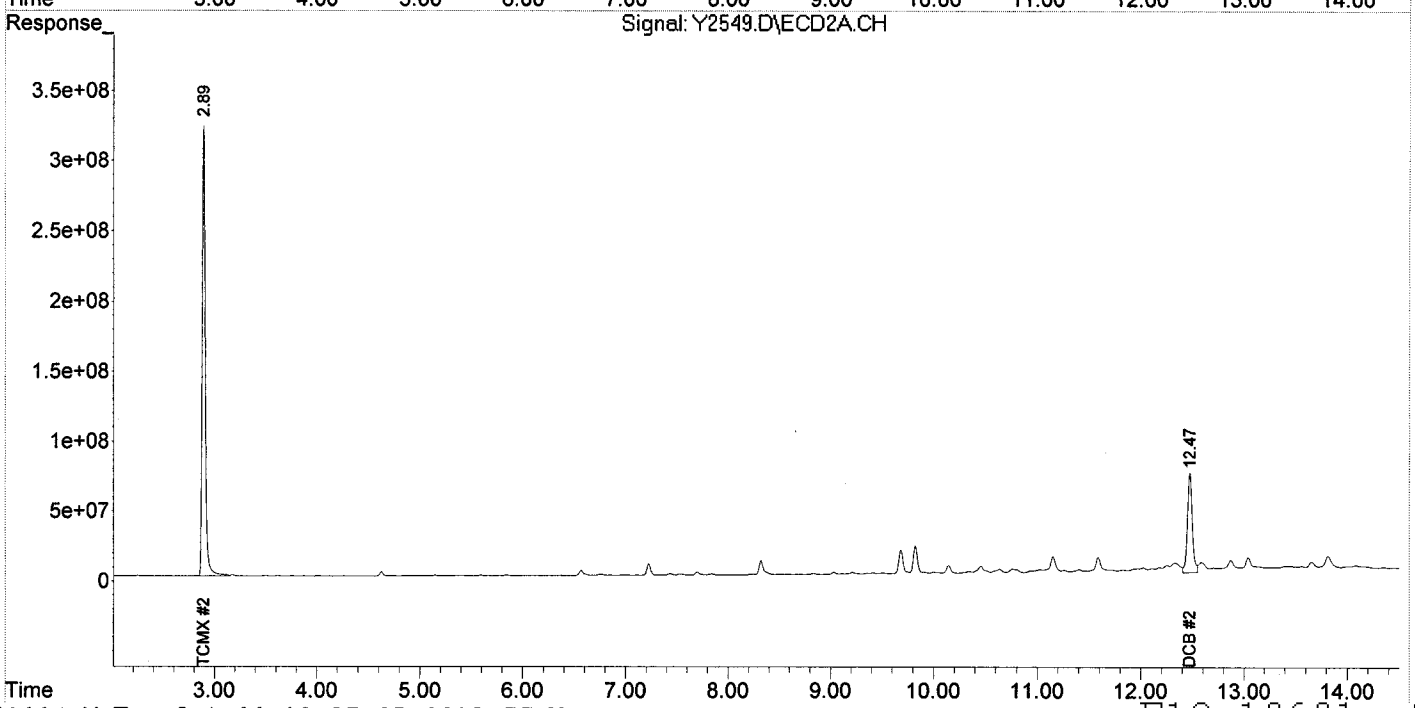
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-29-13\
Data File : Y2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Oct 2013 11:34
Operator : JS
Sample : GPEC_WC_,E13-10601-001,S,5.21g,6.40,20
Misc : 131028-12,10/28/13,10/24/13,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 29 13:21:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Thu Oct 24 16:10:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS131028-12
Client ID: PCB
Date Received: NA
Date Extracted: 10/28/2013
Date Analyzed: 10/29/2013
Data file: Y2546.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-29-13\
Data File : Y2546.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Oct 2013 10:42
Operator : JS
Sample : PCB,BLKS131028-12,S,5.00g,0,20
Misc : NA,10/28/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 29 13:07:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Thu Oct 24 16:10:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	3347.6E6	7277.9E6	184.439	173.877
Spiked Amount 200.000			Recovery	=	92.22%	86.94%
2) S DCB	12.03	12.47	857.4E6	2308.6E6	117.566	147.000 #
Spiked Amount 200.000			Recovery	=	58.78%	73.50%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

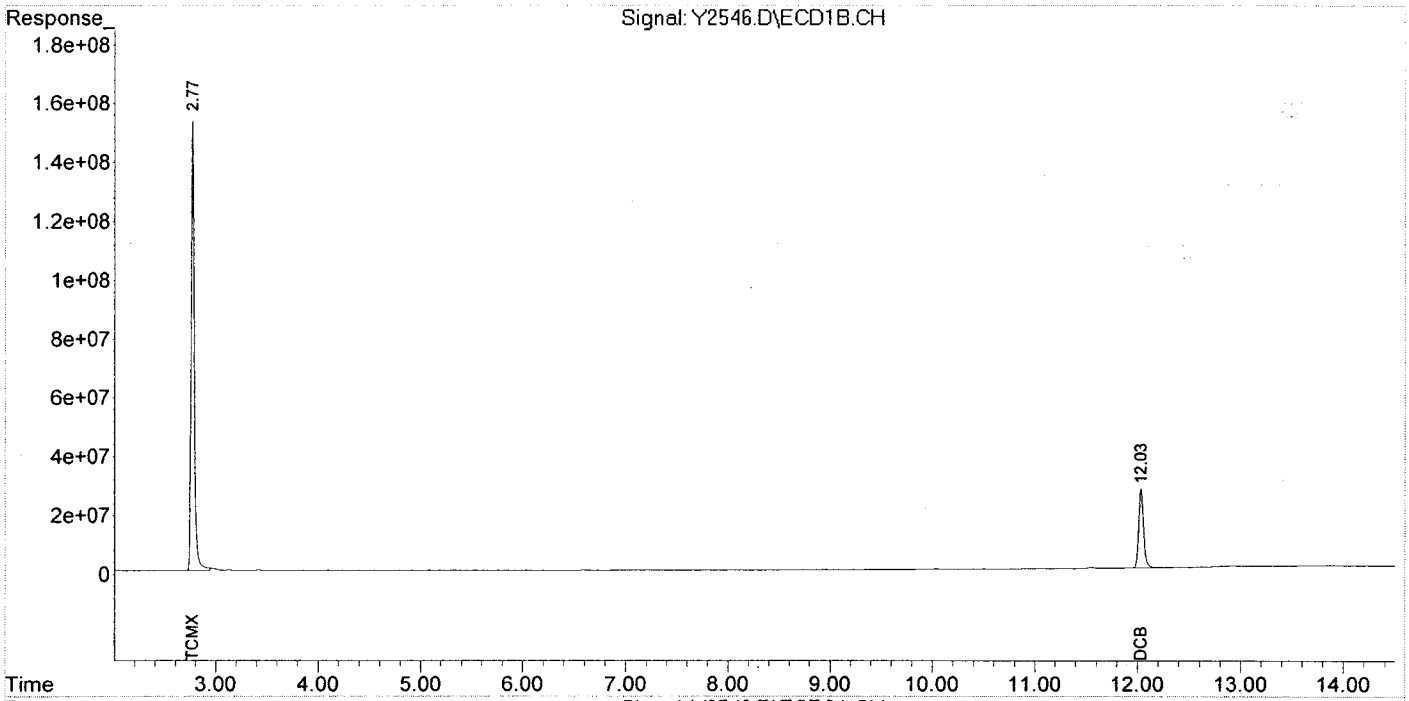
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

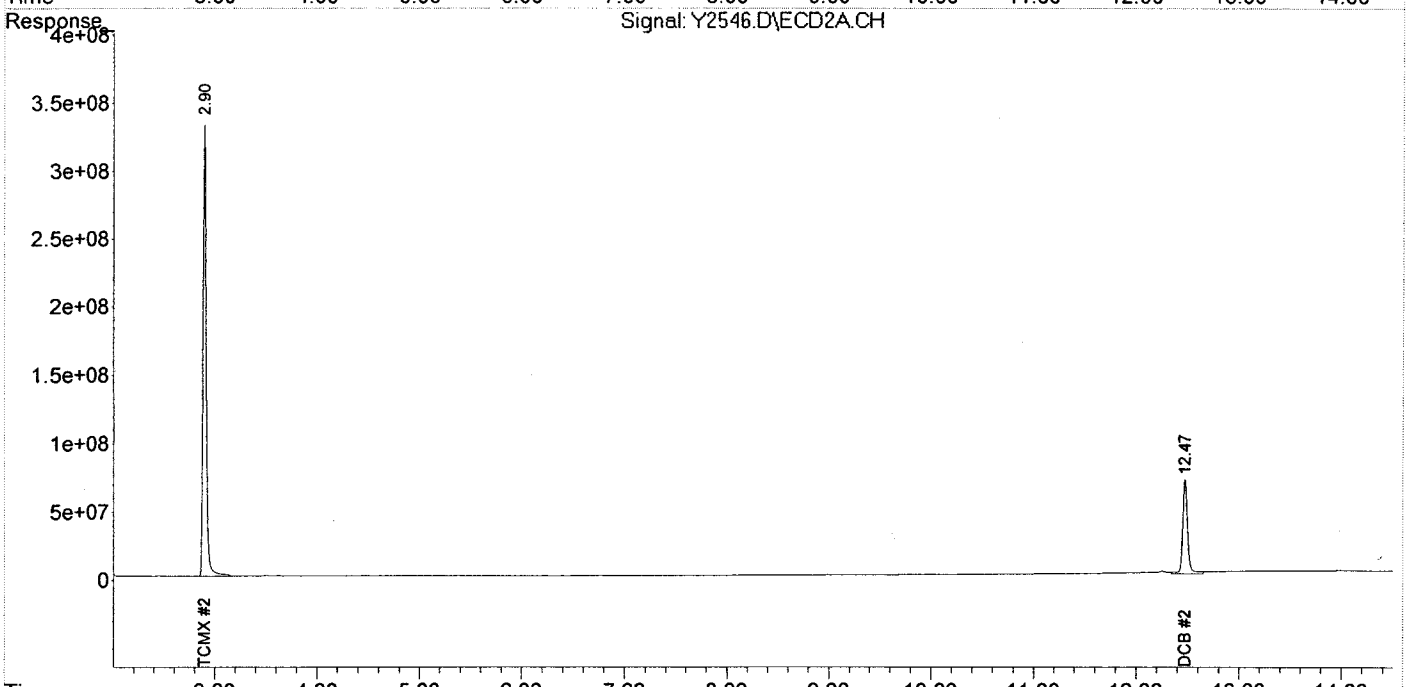
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-29-13\
Data File : Y2546.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Oct 2013 10:42
Operator : JS
Sample : PCB,BLKS131028-12,S,5.00g,0,20
Misc : NA,10/28/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 29 13:07:20 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Thu Oct 24 16:10:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:

DBC 4.83

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
DRO	BLKS131025-13	SOIL	10/29/2013	0:14	51	4.82	
GPEC_WC_	10601-001	SOIL	10/29/2013	0:28	49	4.82	
BR-PR_3B	10631-002	SOIL	10/29/2013	0:56	50	4.82	
BR-PR_3C	10631-003	SOIL	10/29/2013	1:10	50	4.82	
BR-PR_4B	10631-005	SOIL	10/29/2013	1:37	49	4.82	
BR-PR_4C	10631-006	SOIL	10/29/2013	1:51	49	4.82	
BR-PR_5B	10631-008	SOIL	10/29/2013	2:19	50	4.82	
BR-PR_5C	10631-009	SOIL	10/29/2013	2:32	48	4.82	
BR-PR_5D	10631-010	SOIL	10/29/2013	2:46	50	4.82	
BR-PR_6B	10631-012	SOIL	10/29/2013	3:14	56	4.82	
BR-PR_6C	10631-013	SOIL	10/29/2013	3:27	49	4.82	
BR-PR_6D	10631-014	SOIL	10/29/2013	3:41	49	4.82	
DRO/GRO	10631-014MS	SOIL	10/29/2013	3:55	47	4.82	
DRO/GRO	10631-014MSD	SOIL	10/29/2013	4:08	50	4.82	
DRO/GRO	LCSS131025-13	SOIL	10/29/2013	4:22	49	4.82	
BR-PR_3A	10631-001	SOIL	10/29/2013	11:15	48	4.81	
BR-PR_4A	10631-004	SOIL	10/29/2013	11:29	52	4.82	
BR-PR_5A	10631-007	SOIL	10/29/2013	11:43	50	4.81	
BR-PR_6A	10631-011	SOIL	10/29/2013	11:57	53	4.81	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.080 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS131025-13

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	584	58.4		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 10631-014MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	530	53.0		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	594	59.4		11.3		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB9913.D

Date Extracted: 10/25/2013

Date Analyzed: 10/29/2013

Instrument ID: GC-Q

Matrix: SOIL

Time Analyzed: 0:14

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC_WC_	10601-001	10/29/2013	0:28
BR-PR_3B	10631-002	10/29/2013	0:56
BR-PR_3C	10631-003	10/29/2013	1:10
BR-PR_4B	10631-005	10/29/2013	1:37
BR-PR_4C	10631-006	10/29/2013	1:51
BR-PR_5B	10631-008	10/29/2013	2:19
BR-PR_5C	10631-009	10/29/2013	2:32
BR-PR_5D	10631-010	10/29/2013	2:46
BR-PR_6B	10631-012	10/29/2013	3:14
BR-PR_6C	10631-013	10/29/2013	3:27
BR-PR_6D	10631-014	10/29/2013	3:41
DRO/GRO	10631-014MS	10/29/2013	3:55
DRO/GRO	10631-014MSD	10/29/2013	4:08
DRO/GRO	LCSS131025-13	10/29/2013	4:22
BR-PR_3A	10631-001	10/29/2013	11:15
BR-PR_4A	10631-004	10/29/2013	11:29
BR-PR_5A	10631-007	10/29/2013	11:43
BR-PR_6A	10631-011	10/29/2013	11:57

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/04/2013 Instrument ID: GC-Q

Date File: QB9385.D QB9384.D QB9383.D QB9382.D QB9381.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.23	3.37

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RF	%RSD
TPH-DRO	82.3	62.2	59.0	57.3	63.1	64.8	15.5

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/28/2013 23:47

Date File: QB9912.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.30	3.23	3.37		64.8	62.3	3.86

Date Analyzed: 10/29/2013 4:36

Date File: QB9932.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.30	3.23	3.37		64.8	65.4	0.926

Date Analyzed: 10/29/2013 11:02

Date File: QB9935.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.30	3.23	3.37		64.8	66.9	3.24

Date Analyzed: 10/29/2013 12:10

Date File: QB9940.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.30	3.23	3.37		64.8	66.4	2.47

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\10-28-13\
Data File : QB9914.D
Signal(s) : FID2B.ch
Acq On : 29 Oct 13 12:28 am
Operator : JN
Sample : GPEC_WC_,10601-001,S,10.25g,6.40,10/25/13,15
Misc : 131025-13,10/23/13,10/24/13,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 29 10:02:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR1004.M
Quant Title :
QLast Update : Fri Oct 04 15:40:12 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.819	57439210	48.706 ng
Spiked Amount 100.000		Recovery =	48.71%
Target Compounds			

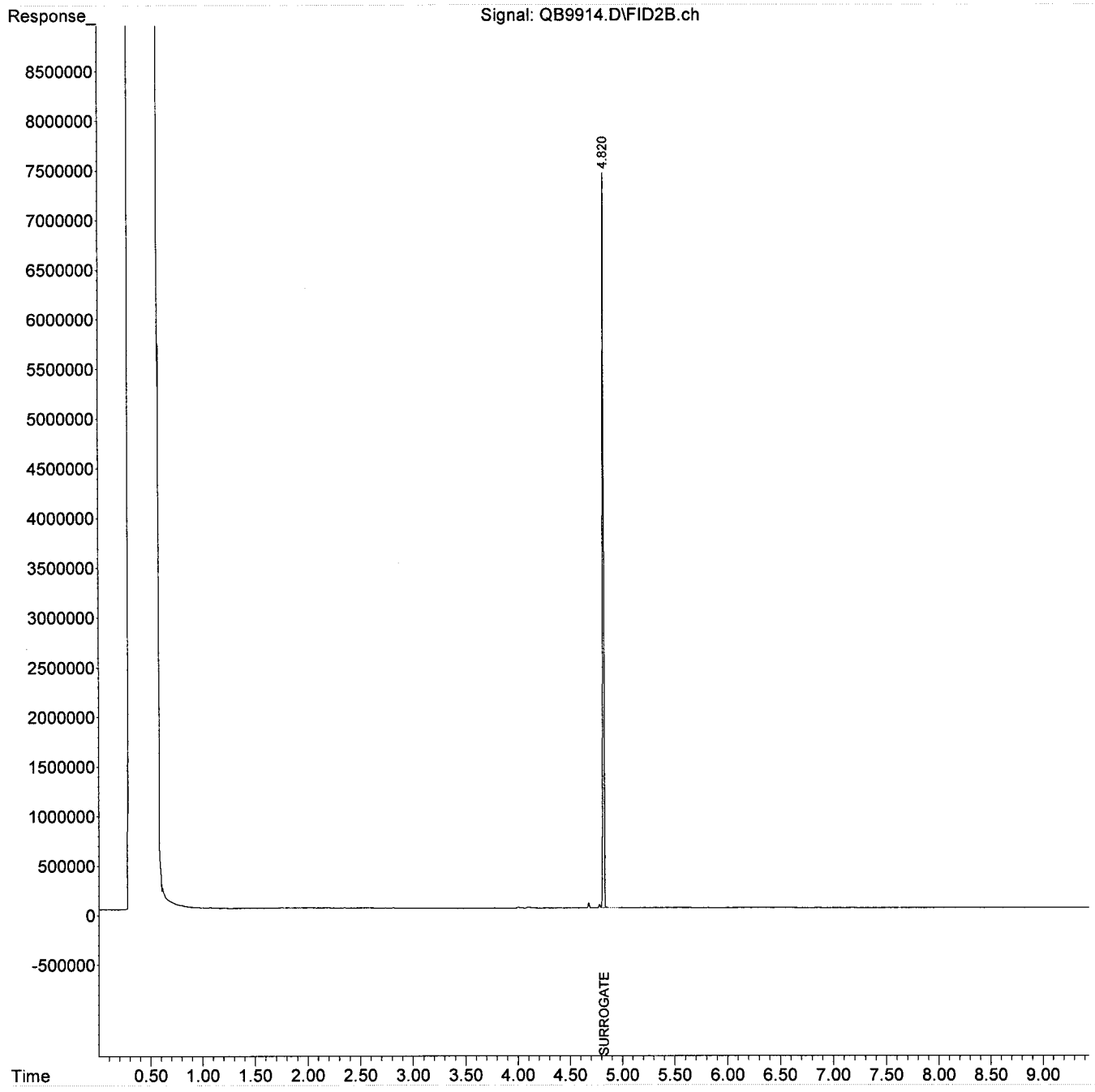
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\10-28-13\
Data File : QB9914.D
Signal(s) : FID2B.ch
Acq On : 29 Oct 13 12:28 am
Operator : JN
Sample : GPEC_WC_,10601-001,S,10.25g,6.40,10/25/13,15
Misc : 131025-13,10/23/13,10/24/13,1
ALS Vial : 78 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 29 10:02:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR1004.M
Quant Title :
QLast Update : Fri Oct 04 15:40:12 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS131025-13	GC Column:	RTX-5
Client ID:	DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	10/25/2013	Dilution Factor:	1
Date Analyzed:	10/29/2013	% Moisture:	0
Data File:	QB9913.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\10-28-13\
Data File : QB9913.D
Signal(s) : FID2B.ch
Acq On : 29 Oct 13 12:14 am
Operator : JN
Sample : DRO,BLKS131025-13,S,10.0g,0,10/25/13,15
Misc : 131025-13,NA,NA,1
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 29 10:01:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR1004.M
Quant Title :
QLast Update : Fri Oct 04 15:40:12 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.819	60197459	51.045 ng
Spiked Amount 100.000		Recovery =	51.05%
Target Compounds			

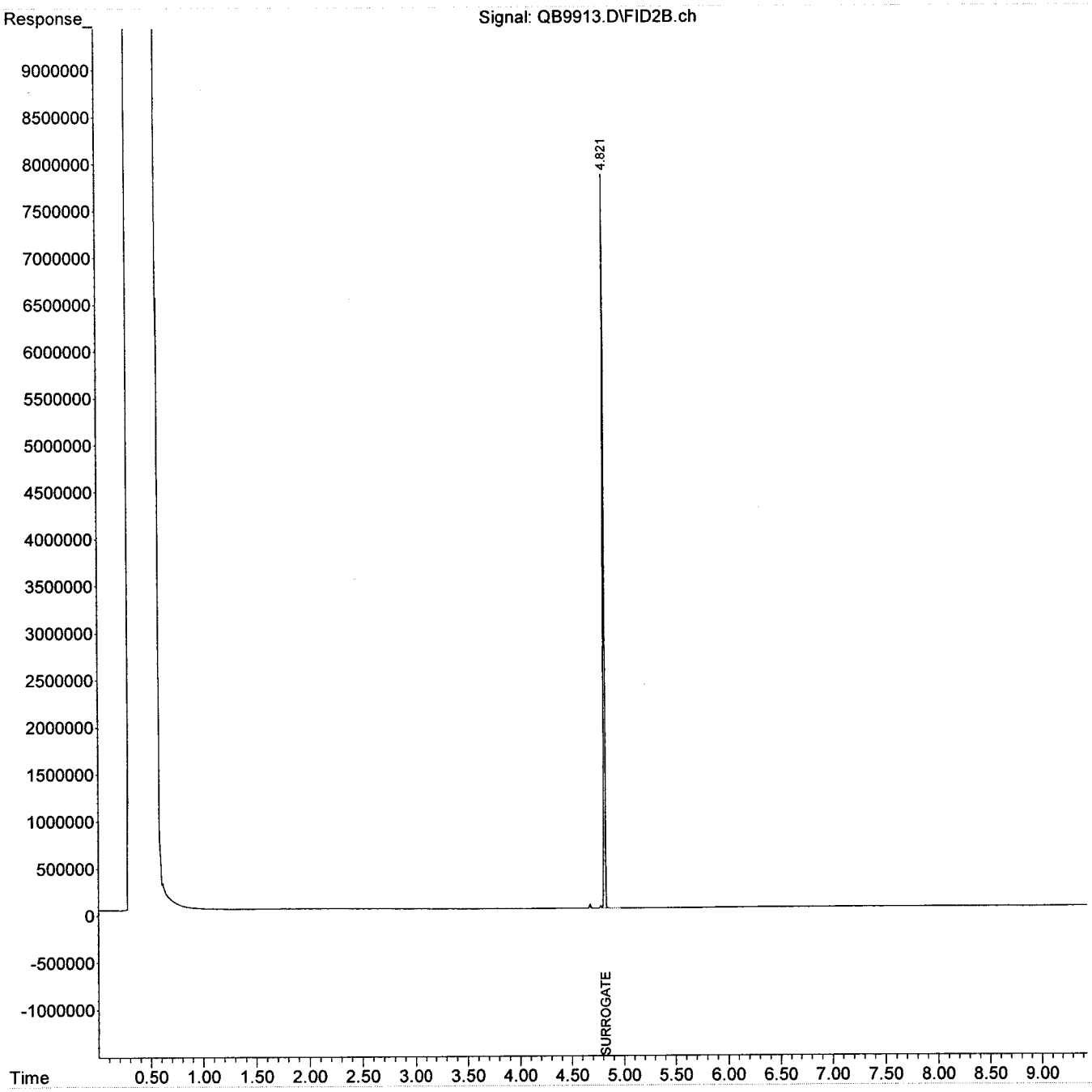
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\10-28-13\
Data File : QB9913.D
Signal(s) : FID2B.ch
Acq On : 29 Oct 13 12:14 am
Operator : JN
Sample : DRO,BLKS131025-13,S,10.0g,0,10/25/13,15
Misc : 131025-13,NA,NA,1
ALS Vial : 77 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 29 10:01:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR1004.M
Quant Title :
QLast Update : Fri Oct 04 15:40:12 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			10/28/13 08:55		10/28/13 09:23		10/28/13 10:24		10/28/13 11:25	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	27.0	108	26.3	105	26.4	106	26.9	108
Antimony	0.250	25.0	25.2	101	25.6	102	25.7	103	25.6	102
Arsenic	0.250	25.0	27.3	109	27.4	110	27.1	108	27.1	108
Barium	0.500	25.0	25.0	100	25.1	100	25.5	102	25.5	102
Beryllium	0.200	25.0	23.6	94.4	24.7	98.8	24.4	97.6	24.8	99.2
Cadmium	0.125	25.0	23.8	95.2	25.0	100	24.6	98.4	24.6	98.4
Calcium	5.00	250	262	105	266	106	275	110	264	106
Chromium	0.500	25.0	26.6	106	26.4	106	26.1	104	26.0	104
Cobalt	0.500	25.0	25.5	102	25.4	102	25.4	102	25.1	100
Copper	0.500	25.0	26.0	104	26.2	105	26.0	104	25.8	103
Iron	5.00	250	266	106	263	105	264	106	261	104
Lead	0.500	25.0	22.8	91.2	23.4	93.6	24.5	98.0	25.8	103
Magnesium	5.00	250	262	105	256	102	258	103	256	102
Manganese	0.250	25.0	26.1	104	26.1	104	25.8	103	25.7	103
Mercury	0.120	5.00	4.80	96.0	4.88	97.6	4.94	98.8	4.93	98.6
Nickel	0.500	25.0	26.0	104	25.8	103	25.6	102	25.7	103
Potassium	5.00	250	255	102	250	100	252	101	256	102
Selenium	0.500	25.0	26.6	106	27.3	109	26.6	106	27.1	108
Silver	0.125	5.00	4.83	96.6	5.12	102	4.64	92.8	4.63	92.6
Sodium	5.00	250	269	108	263	105	264	106	260	104
Thallium	0.125	25.0	23.9	95.6	24.3	97.2	25.3	101	26.8	107
Vanadium	0.500	25.0	26.0	104	25.8	103	25.7	103	25.6	102
Zinc	0.500	25.0	27.3	109	27.4	110	27.0	108	26.6	106

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			10/28/13 12:26		10/28/13 13:27		10/28/13 14:14			
	INST.	ICV & CCV	CCV		CCV		CCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	25.7	103	27.0	108	25.9	104		
Antimony	0.250	25.0	26.4	106	27.1	108	25.5	102		
Arsenic	0.250	25.0	27.0	108	26.8	107	27.1	108		
Barium	0.500	25.0	26.4	106	27.2	109	25.8	103		
Beryllium	0.200	25.0	24.8	99.2	27.3	109	26.1	104		
Cadmium	0.125	25.0	25.7	103	25.6	102	24.7	98.8		
Calcium	5.00	250	262	105	271	108	258	103		
Chromium	0.500	25.0	25.8	103	26.0	104	26.3	105		
Cobalt	0.500	25.0	25.2	101	25.2	101	25.2	101		
Copper	0.500	25.0	25.7	103	25.6	102	25.8	103		
Iron	5.00	250	260	104	258	103	262	105		
Lead	0.500	25.0	24.6	98.4	26.3	105	24.0	96.0		
Magnesium	5.00	250	261	104	270	108	274	110		
Manganese	0.250	25.0	25.6	102	26.1	104	26.4	106		
Nickel	0.500	25.0	25.5	102	25.6	102	25.6	102		
Potassium	5.00	250	259	104	264	106	270	108		
Selenium	0.500	25.0	26.9	108	26.9	108	27.3	109		
Silver	0.125	5.00	5.19	104	4.95	99.0	4.64	92.8		
Sodium	5.00	250	266	106	273	109	269	108		
Thallium	0.125	25.0	25.5	102	23.7	94.8	23.3	93.2		
Vanadium	0.500	25.0	25.6	102	25.7	103	25.8	103		
Zinc	0.500	25.0	26.5	106	26.7	107	26.8	107		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

		10/28/13 09:04	10/28/13 09:33	10/28/13 10:34	10/28/13 11:35	10/28/13 12:36	10/28/13 13:36
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Aluminum	0.0005	ND	ND	ND	ND	ND	ND
Antimony	0.00025	ND	ND	ND	ND	ND	ND
Arsenic	0.00025	ND	ND	ND	ND	ND	ND
Barium	0.0005	ND	ND	ND	ND	ND	ND
Beryllium	0.0002	ND	ND	ND	ND	ND	ND
Cadmium	0.000125	ND	ND	ND	ND	ND	ND
Calcium	0.005	ND	ND	ND	ND	ND	ND
Chromium	0.0005	ND	ND	ND	ND	ND	ND
Cobalt	0.0005	ND	ND	ND	ND	ND	ND
Copper	0.0005	ND	ND	ND	ND	ND	ND
Iron	0.005	ND	ND	ND	ND	ND	ND
Lead	0.0005	ND	ND	ND	ND	ND	ND
Magnesium	0.005	ND	ND	ND	ND	ND	ND
Manganese	0.00025	ND	ND	ND	ND	ND	ND
Mercury	0.00012	ND	ND	ND	ND		
Nickel	0.0005	ND	ND	ND	ND	ND	ND
Potassium	0.005	ND	ND	ND	ND	ND	ND
Selenium	0.0005	ND	ND	ND	ND	ND	ND
Silver	0.000125	ND	ND	ND	ND	ND	ND
Sodium	0.005	ND	ND	ND	ND	ND	ND
Thallium	0.000125	ND	ND	ND	ND	ND	ND
Vanadium	0.0005	ND	ND	ND	ND	ND	ND
Zinc	0.0005	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

10/28/13 14:23

ANALYTE	INST. MDL	CCB					
Aluminum	0.0005	ND					
Antimony	0.00025	ND					
Arsenic	0.00025	ND					
Barium	0.0005	ND					
Beryllium	0.0002	ND					
Cadmium	0.000125	ND					
Calcium	0.005	ND					
Chromium	0.0005	ND					
Cobalt	0.0005	ND					
Copper	0.0005	ND					
Iron	0.005	ND					
Lead	0.0005	ND					
Magnesium	0.005	ND					
Manganese	0.00025	ND					
Nickel	0.0005	ND					
Potassium	0.005	ND					
Selenium	0.0005	ND					
Silver	0.000125	ND					
Sodium	0.005	ND					
Thallium	0.000125	ND					
Vanadium	0.0005	ND					
Zinc	0.0005	ND					

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

10/28/2013 09:09 AM

Batch (Page) #: 500
Associated Lab Case for Blank 1: E13-10411, E13-10480, E13-10524, E13-10555, E13-10559, E13-10565, E13-10582
E13-10601

Matrix: Soil Unit: ppm (mg/kg) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKS131025-01
Aluminum	0.500	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.500	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	5.00	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	5.00	ND
Lead	0.500	ND
Magnesium	5.00	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	5.00	ND
Selenium	0.500	ND
Silver	0.125	ND
Sodium	5.00	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	0.500	ND

Associated Sample for Blank 1:
10411-001~002; 10480-001; 10524-001~003; 10555-006
10555-007; 10559-001; 10565-001; 10582-025~031
10582-062~063; 10601-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7500
Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	82800	93900	93.9	NA
Calcium	100000	-	77200	85000	85.0	NA
Iron	100000	-	77200	82400	82.4	NA
Potassium	100000	-	82200	91000	91.0	NA
Magnesium	100000	-	76800	85900	85.9	NA
Sodium	100000	-	83600	93300	93.3	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2070	2320	116	NA
Titanium	2000	-	1770	1940	97.0	NA
Silver	-	20.0	-	20.9	105	80-120
Arsenic	-	20.0	-	17.6	88.0	80-120
Cadmium	-	20.0	-	18.7	93.5	80-120
Cobalt	-	20.0	-	18.5	92.5	80-120
Chromium	-	20.0	-	19.7	98.5	80-120
Copper	-	20.0	-	16.8	84.0	80-120
Manganese	-	20.0	-	20.6	103	80-120
Nickel	-	20.0	-	17.8	89.0	80-120
Zinc	-	20.0	-	16.7	83.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 500
SDG #: E13-10411, E13-10480, E13-10524, E13-10555, E13-10559, E13-10565, E13-10582
E13-10601

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS131025-01			LCSS131025-02		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	231	116			
Antimony	40.0	37.6	94.0			
Arsenic	40.0	42.6	107	40.0	42.0	105
Barium	40.0	38.0	95.0			
Beryllium	40.0	37.0	92.5			
Cadmium	40.0	37.6	94.0	40.0	38.7	96.8
Calcium	200	211	106			
Chromium	40.0	44.2	111			
Cobalt	40.0	43.0	108			
Copper	40.0	43.5	109	40.0	43.2	108
Iron	200	220	110			
Lead	40.0	35.8	89.5	40.0	40.8	102
Magnesium	200	226	113			
Manganese	40.0	43.8	110			
Mercury	1.00	0.957	95.7			
Nickel	40.0	43.5	109	40.0	43.2	108
Potassium	200	226	113			
Selenium	40.0	42.7	107			
Silver	40.0	34.9	87.3	40.0	37.7	94.3
Sodium	200	239	120			
Thallium	40.0	32.9	82.3			
Vanadium	40.0	44.1	110			
Zinc	40.0	42.0	105	40.0	41.0	103

(1) Control Limits % Recovery = 80-120%

LCSS131025-01 10/28/13 09:14
10411-001~002; 10480-001; 10524-001~003; 10555-006
10555-007; 10559-001; 10565-001; 10582-025~031
10582-062~063; 10601-001

LCSS131025-02 10/28/13 11:58
10582-006~020,032,064~065

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			10/28/13 09:00		10/28/13 09:28		10/28/13 10:29		10/28/13 11:30	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.351	70.2	0.566	113	0.451	90.2	0.467	93.4
Antimony	0.250	0.500	0.510	102	0.528	106	0.512	102	0.547	109
Arsenic	0.250	0.500	0.602	120	0.626	125	0.637	127	0.628	126
Barium	0.500	0.500	0.517	103	0.563	113	0.561	112	0.586	117
Beryllium	0.200	0.500	0.474	94.8	0.544	109	0.494	98.8	0.552	110
Cadmium	0.125	0.500	0.454	90.8	0.525	105	0.509	102	0.526	105
Calcium	5.00	5.00	3.67	73.4	5.43	109	5.11	102	5.18	104
Chromium	0.500	0.500	0.583	117	0.569	114	0.577	115	0.585	117
Cobalt	0.500	0.500	0.615	123	0.605	121	0.613	123	0.630	126
Copper	0.500	0.500	0.569	114	0.552	110	0.608	122	0.594	119
Iron	5.00	5.00	5.04	101	4.45	89.0	5.39	108	5.65	113
Lead	0.500	0.500	0.443	88.6	0.517	103	0.525	105	0.580	116
Magnesium	5.00	5.00	3.97	79.4	4.92	98.4	4.51	90.2	4.33	86.6
Manganese	0.250	0.500	0.554	111	0.558	112	0.559	112	0.600	120
Nickel	0.500	0.500	0.582	116	0.562	112	0.581	116	0.595	119
Potassium	5.00	5.00	3.96	79.2	3.78	75.6	3.98	79.6	5.03	101
Selenium	0.500	0.500	0.385	77.0	0.434	86.8	0.448	89.6	0.481	96.2
Silver	0.125	0.500	0.352	70.4	0.409	81.8	0.389	77.8	0.452	90.4
Sodium	5.00	5.00	4.56	91.2	5.20	104	5.16	103	4.64	92.8
Thallium	0.125	0.500	0.452	90.4	0.489	97.8	0.508	102	0.537	107
Vanadium	0.500	0.500	0.567	113	0.530	106	0.546	109	0.540	108
Zinc	0.500	0.500	0.604	121	0.585	117	0.584	117	0.603	121

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 500
SDG #: E13-10411, E13-10524, E13-10555, E13-10559, E13-10565, E13-10601, E13-10480, E13-10582

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			10/28/13 12:31		10/28/13 13:32		10/28/13 14:18			
	INST.	ICV & CCV	LLCCV		LLCCV		LLCCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.612	122	0.423	84.6	0.479	95.8		
Antimony	0.250	0.500	0.609	122	0.617	123	0.613	123		
Arsenic	0.250	0.500	0.602	120	0.624	125	0.615	123		
Barium	0.500	0.500	0.595	119	0.579	116	0.640	128		
Beryllium	0.200	0.500	0.548	110	0.542	108	0.525	105		
Cadmium	0.125	0.500	0.524	105	0.525	105	0.546	109		
Calcium	5.00	5.00	4.47	89.4	5.82	116	5.80	116		
Chromium	0.500	0.500	0.588	118	0.563	113	0.582	116		
Cobalt	0.500	0.500	0.616	123	0.607	121	0.624	125		
Copper	0.500	0.500	0.579	116	0.568	114	0.584	117		
Iron	5.00	5.00	5.31	106	5.46	109	5.64	113		
Lead	0.500	0.500	0.553	111	0.550	110	0.547	109		
Magnesium	5.00	5.00	3.94	78.8	4.68	93.6	4.80	96.0		
Manganese	0.250	0.500	0.586	117	0.589	118	0.604	121		
Nickel	0.500	0.500	0.589	118	0.594	119	0.596	119		
Potassium	5.00	5.00	4.67	93.4	5.26	105	5.64	113		
Selenium	0.500	0.500	0.439	87.8	0.416	83.2	0.493	98.6		
Silver	0.125	0.500	0.532	106	0.474	94.8	0.538	108		
Sodium	5.00	5.00	4.07	81.4	4.94	98.8	5.08	102		
Thallium	0.125	0.500	0.534	107	0.536	107	0.506	101		
Vanadium	0.500	0.500	0.542	108	0.548	110	0.582	116		
Zinc	0.500	0.500	0.569	114	0.603	121	0.589	118		

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 500
SDG #: E13-10411, E13-10480, E13-10524, E13-10555, E13-10559, E13-10565, E13-10582
E13-10601

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	10/28/13 09:47 SSR1	10/28/13 09:19 SR1	%R1	SA1	10/28/13 12:17 SSR2	10/28/13 12:03 SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	3790	3440	NC	222					75-125
Antimony	51.3	ND	116	44.4					75-125
Arsenic	46.7	1.83	101	44.4	45.7	1.67	97.4	45.2	75-125
Barium	81.7	29.6	117	44.4					75-125
Beryllium	53.9	0.415	120	44.4					75-125
Cadmium	52.0	ND	117	44.4	48.1	0.199	106	45.2	75-125
Calcium	24400	23200	NC	222					75-125
Chromium	55.7	8.85	106	44.4					75-125
Cobalt	46.5	1.92	100	44.4					75-125
Copper	55.3	10.9	100	44.4	79.3	35.8	96.2	45.2	75-125
Iron	7350	6830	NC	222					75-125
Lead	57.3	3.62	121	44.4	66.2	14.9	113	45.2	75-125
Magnesium	2890	2620	122	222					75-125
Manganese	158	111	106	44.4					75-125
Mercury	1.13	0.013	101	1.11					75-125
Nickel	51.2	6.38	101	44.4	66.2	22.1	97.6	45.2	75-125
Potassium	1300	1040	117	222					75-125
Selenium	45.0	ND	101	44.4					75-125
Silver	53.6	ND	121	44.4	50.8	0.222	112	45.2	75-125
Sodium	1150	901	112	222					75-125
Thallium	52.3	ND	118	44.4					75-125
Vanadium	55.8	8.08	107	44.4					75-125
Zinc	55.3	12.2	97.1	44.4	105	65.1	88.3	45.2	75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E13-10411-001
% Solids: 90.2
QC Sample 1 for following samples:
10411-001~002; 10480-001; 10524-001~003; 10555-006
10555-007; 10559-001; 10565-001; 10582-025~031
10582-062~063; 10601-001

QC Sample 2: E13-10582-006
% Solids: 88.7
QC Sample 2 for following samples:
10582-006~020,032,064~065

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 500
SDG #: E13-10411, E13-10480, E13-10524, E13-10555, E13-10559, E13-10565, E13-10582
E13-10601

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	10/28/13 09:19 S1	10/28/13 09:38 D1	RPD1	CONTROL LIMIT 2	10/28/13 12:03 S2	10/28/13 12:07 D2	RPD2
Aluminum	20	3440	3630	5.37				
Antimony	NA	ND	ND	NC				
Arsenic	20	1.83	1.90	3.75	20	1.67	1.55	7.45
Barium	20	29.6	27.6	6.99				
Beryllium	20	0.415	0.369	11.7				
Cadmium	NA	ND	ND	NC	20	0.199	0.202	1.50
Calcium	20	23200	24100	3.81				
Chromium	20	8.85	9.46	6.66				
Cobalt	20	1.92	2.02	5.08				
Copper	20	10.9	11.5	5.36	20	35.8	33.4	6.94
Iron	20	6830	7210	5.41				
Lead	20	3.62	3.23	11.4	20	14.9	16.1	7.74
Magnesium	20	2620	2740	4.48				
Manganese	20	111	119	6.96				
Mercury	20	0.013	0.014	7.41				
Nickel	20	6.38	6.73	5.34	20	22.1	20.5	7.51
Potassium	20	1040	1100	5.61				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC	20	0.222	0.220	0.905
Sodium	20	901	937	3.92				
Thallium	NA	ND	ND	NC				
Vanadium	20	8.08	8.58	6.00				
Zinc	20	12.2	13.1	7.11	20	65.1	60.5	7.32

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E13-10411-001
% Solids: 90.2
QC Sample 1 for following samples:
10411-001~002; 10480-001; 10524-001~003; 10555-006
10555-007; 10559-001; 10565-001; 10582-025~031
10582-062~063; 10601-001

QC Sample 2: E13-10582-006
% Solids: 88.7
QC Sample 2 for following samples:
10582-006~020,032,064~065

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 500
SDG #: E13-10411, E13-10480, E13-10524, E13-10555, E13-10559, E13-10565, E13-10582
E13-10601

Matrix: Soil Concentration/Units: ppm (mg/kg)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	10/28/13 09:19 SR	10/28/13 09:42 SDR	% Difference	10/28/13 09:51 SPR	SA	% Recovery
Aluminum	3440	3430	0.291			
Antimony	ND	ND	NC	50.8	44.4	114
Arsenic	1.83	1.76	3.90	46.6	44.4	101.0
Barium	29.6	29.8	0.673			
Beryllium	0.415	ND	NC	54.0	44.4	121.0
Cadmium	ND	ND	NC	50.8	44.4	114
Calcium	23200	25500	9.45			
Chromium	8.85	9.56	7.71	57.1	44.4	109.0
Cobalt	1.92	ND	NC	46.8	44.4	101.0
Copper	10.9	11.3	3.60			
Iron	6830	7200	5.27			
Lead	3.62	3.63	0.276	55.2	44.4	116.0
Magnesium	2620	2750	4.84			
Manganese	111	117	5.26			
Nickel	6.38	6.85	7.11	51.5	44.4	102.0
Potassium	1040	1140	9.17			
Selenium	ND	ND	NC	44.4	44.4	100
Silver	ND	ND	NC	49.6	44.4	112
Sodium	901	911	1.10			
Thallium	ND	ND	NC	48.5	44.4	109
Vanadium	8.08	8.36	3.41	55.9	44.4	108.0
Zinc	12.2	12.6	3.23			

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E13-10411-001
QC Sample 1 for following samples:
10411-001~002; 10480-001; 10524-001~003; 10555-006
10555-007; 10559-001; 10565-001; 10582-025~031
10582-062~063; 10601-001

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG500
October 28, 2013
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
004CALB.D	STD BLANK	468811		83852		293376		1814783		2043248		986476		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	328168	70	58696	70	205363	70	1270348	70	1430274	70	690533	70	
	Upper Limit	562573	120	100622	120	352051	120	2177740	120	2451898	120	1183771	120	
005CALS.D	STD1	459087	98	83277	99	290404	99	1803952	99	2032703	99	951177	96	
006CALS.D	STD2	442010	94	82031	98	283939	97	1761111	97	1975625	97	929862	94	
007CALS.D	STD3	441993	94	81881	98	284425	97	1771385	98	2021272	99	895027	91	
008CALS.D	STD4	427209	91	81639	97	289578	99	1798109	99	2047650	100	1040047	105	
009CALS.D	STD5	442123	94	78838	94	277822	95	1739109	96	1998074	98	932008	94	
011ICSA.D	ICSA	450248	96	78889	94	339260	116	1564036	86	1944076	95	761487	77	
012ICSB.D	ICSAB	465064	99	83365	99	343734	117	1543265	85	1907620	93	733564	74	
014_ICV.D	ICV	487491	104	84210	100	294161	100	1787891	99	2031060	99	1035571	105	
015LCCV.D	LLICV	489955	105	83533	100	303687	104	1861594	103	2128844	104	1092997	111	
016_ICB.D	ICB	471182	101	82473	98	298136	102	1831485	101	2087048	102	1054631	107	
017SMPL.D	BLKS131025-01	466447	99	82914	99	297106	101	1837718	101	2119125	104	1090144	111	
018SMPL.D	LCSS131025-01	453140	97	80721	96	289481	99	1790671	99	2064522	101	1062049	108	
019SMPL.D	E13-10411-001	426786	91	83068	99	276264	94	1637039	90	1937950	95	921213	93	
020_CCV.D	CCV	438988	94	78863	94	284932	97	1753140	97	2042656	100	1060578	108	
021LCCV.D	LLCCV	437540	93	80086	96	282440	96	1735888	96	2036120	100	1020154	103	
0226CCB.D	CCB	444042	95	79832	95	285531	97	1785737	98	2079431	102	1033597	105	
023SMPL.D	E13-10411-001DUP	428059	91	77970	93	282735	96	1693243	93	2045061	100	992674	101	
024SMPL.D	E13-10411-001SD	410776	88	79574	95	280728	96	1709376	94	2025040	99	1018214	103	
025SMPL.D	E13-10411-001MS	415938	89	78619	94	274187	93	1653514	91	2019145	99	900157	91	
026SMPL.D	E13-10411-001PS	398645	85	76860	92	271680	93	1615303	89	1970915	96	943924	96	
027SMPL.D	E13-10411-002	424250	90	84067	100	288505	98	1694417	93	2019199	99	986272	100	
028SMPL.D	E13-10524-001	421204	90	81943	98	288750	98	1693064	93	1997044	98	933988	95	
029SMPL.D	E13-10524-002	433823	93	81006	97	289623	99	1729686	95	2039963	100	993648	101	
030SMPL.D	E13-10524-003	445581	95	83445	100	292654	100	1750604	96	2038496	100	1006412	102	
031SMPL.D	E13-10555-006	440682	94	83547	100	293421	100	1724472	95	2024949	99	952290	97	
032SMPL.D	E13-10555-007	424207	90	87518	104	296285	101	1708332	94	2019672	99	895571	91	
033_CCV.D	CCV	425175	91	80728	96	277207	94	1696068	93	1925829	94	962197	98	
034LCCV.D	LLCCV	429419	92	81311	97	287330	98	1771128	98	2011941	98	982033	100	
0356CCB.D	CCB	425036	91	82657	99	286990	98	1765642	97	2016304	99	972686	99	
036SMPL.D	E13-10559-001	416724	89	81687	97	288358	98	1687285	93	2003240	98	891479	90	

E13-10601

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

O13-34

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG500
October 28, 2013
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
004CALB.D	STD BLANK	468811		83852		293376		1814783		2043248		986476		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	328168	70	58696	70	205363	70	1270348	70	1430274	70	690533	70	
	Upper Limit	562573	120	100622	120	352051	120	2177740	120	2451898	120	1183771	120	
037SMPL.D	E13-10565-001	382893	82	81298	97	282781	96	1609515	89	1961214	96	852614	86	
038SMPL.D	E13-10601-001	407178	87	79409	95	279485	95	1671202	92	1957312	96	900910	91	
039SMPL.D	E13-10480-001	413509	88	82679	99	291316	99	1691457	93	2000919	98	964450	98	
040SMPL.D	E13-10582-025	407646	87	82983	99	294273	100	1720552	95	2035686	100	970397	98	
041SMPL.D	E13-10582-026	439033	94	85185	102	298112	102	1726152	95	2038949	100	1004587	102	
042SMPL.D	E13-10582-027	440650	94	82078	98	292904	100	1760402	97	2069807	101	1056347	107	
043SMPL.D	E13-10582-028	441382	94	83216	99	294173	100	1739699	96	2053480	101	1006372	102	
044SMPL.D	E13-10582-029	436538	93	85044	101	298986	102	1736669	96	2031184	99	961675	97	
045SMPL.D	E13-10582-030	442605	94	87561	104	315818	108	1814312	100	2078834	102	1007736	102	
046_CCV.D	CCV	433257	92	83760	100	289766	99	1790263	99	2031655	99	982459	100	
047LCCV.D	LLCCV	425640	91	81589	97	289918	99	1772445	98	2009243	98	952901	97	
0486CCB.D	CCB	400108	85	82302	98	290533	99	1775922	98	2006148	98	1008920	102	
049SMPL.D	E13-10582-031	421818	90	88428	105	300833	103	1752999	97	2023373	99	923137	94	
050SMPL.D	E13-10582-062	418171	89	85311	102	296738	101	1741537	96	2005904	98	926352	94	
051SMPL.D	E13-10582-063	424859	91	88246	105	301222	103	1750791	96	2021281	99	919554	93	
052SMPL.D	BLKS131025-02	434265	93	84592	101	294796	100	1808812	100	2035343	100	1018359	103	
053SMPL.D	LCSS131025-02	427192	91	83662	100	289791	99	1783655	98	2054739	101	982380	100	
054SMPL.D	E13-10582-006	425886	91	86155	103	297522	101	1734662	96	2000608	98	985038	100	
055SMPL.D	E13-10582-006DUP	436997	93	89495	107	295977	101	1718724	95	2015191	99	914338	93	
056SMPL.D	E13-10582-006SD	449312	96	85694	102	301186	103	1819873	100	2076923	102	1034396	105	
057SMPL.D	E13-10582-006MS	439917	94	85690	102	292629	100	1730735	95	2054015	101	986345	100	
058SMPL.D	E13-10582-006PS	429200	92	86238	103	303309	103	1740506	96	2056761	101	959059	97	
059_CCV.D	CCV	446060	95	84032	100	289775	99	1753616	97	2040817	100	1058318	107	
060LCCV.D	LLCCV	443954	95	84516	101	292764	100	1790546	99	2045241	100	1012982	103	
0616CCB.D	CCB	414875	88	85312	102	289600	99	1773238	98	2015155	99	1026354	104	
062SMPL.D	E13-10582-064	435128	93	85404	102	299859	102	1737608	96	2044293	100	954983	97	
063SMPL.D	E13-10582-065	439896	94	86256	103	299354	102	1754250	97	2049620	100	944142	96	
064SMPL.D	E13-10582-016	435489	93	87345	104	301612	103	1739743	96	2015028	99	957035	97	
065SMPL.D	E13-10582-017	453694	97	87538	104	305703	104	1777986	98	2092661	102	1012597	103	
066SMPL.D	E13-10582-018	377355	80	87277	104	266720	91	1528577	84	1791673	88	844426	86	

E13-10601

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

01135

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG500
October 28, 2013
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
004CALB.D	STD BLANK	468811		83852		293376		1814783		2043248		986476		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	328168	70	58696	70	205363	70	1270348	70	1430274	70	690533	70	
	Upper Limit	562573	120	100622	120	352051	120	2177740	120	2451898	120	1183771	120	
067SMPL.D	E13-10582-019	436302	93	88115	105	306815	105	1774850	98	2068247	101	976722	99	
068SMPL.D	E13-10582-020	449299	96	90330	108	299650	102	1739211	96	2022045	99	943816	96	
069SMPL.D	E13-10582-032	463712	99	88059	105	307813	105	1767324	97	2083346	102	943235	96	
070SMPL.D	E13-10582-007	462795	99	87814	105	305974	104	1775354	98	2075131	102	946845	96	
071SMPL.D	E13-10582-008	456542	97	87954	105	304359	104	1737267	96	2022843	99	929698	94	
072_CCV.D	CCV	443614	95	84631	101	280794	96	1702700	94	1932500	95	989896	100	
073LCCV.D	LLCCV	433103	92	85597	102	294336	100	1784528	98	2045350	100	1011665	103	
0746CCB.D	CCB	459245	98	84696	101	298807	102	1824696	101	2073961	102	1076902	109	
075SMPL.D	E13-10582-009	449252	96	88303	105	301272	103	1736909	96	2045202	100	1022383	104	
076SMPL.D	E13-10582-010	453155	97	88630	106	303683	104	1745548	96	2040049	100	992920	101	
077SMPL.D	E13-10582-011	460964	98	89161	106	305665	104	1756045	97	2090090	102	937381	95	
078SMPL.D	E13-10582-012	465179	99	87829	105	310241	106	1786698	98	2076801	102	976843	99	
079SMPL.D	E13-10582-013	474274	101	88738	106	306045	104	1780661	98	2069838	101	1016455	103	
080SMPL.D	E13-10582-014	469214	100	88966	106	312531	107	1774858	98	2100924	103	944204	96	
081SMPL.D	E13-10582-015	472039	101	88170	105	308586	105	1765667	97	2067520	101	952136	97	
082_CCV.D	FINAL CCV	462221	99	84400	101	291727	99	1779820	98	2036489	100	1069847	108	
083LCCV.D	FINAL LLCCV	476390	102	85126	102	301880	103	1825044	101	2090152	102	1105371	112	
0846CCB.D	FINAL CCB	458931	98	85586	102	298825	102	1811400	100	2079594	102	1058687	107	

E13-10601 O136

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 517
SDG #: E13-10832, E13-10831, E13-10834, E13-10536, E13-10601, E13-10876

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			11/6/13 17:22		11/6/13 17:51		11/6/13 18:53		11/6/13 19:26	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	25.0	26.0	104	24.5	98.0	24.8	99.2	24.6	98.4
Barium	0.500	25.0	24.3	97.2	24.9	99.6	25.9	104	24.9	99.6
Beryllium	0.250	25.0	23.6	94.4	24.9	99.6	25.4	102	24.5	98.0
Cadmium	0.125	25.0	23.8	95.2	23.9	95.6	24.8	99.2	23.8	95.2
Chromium	0.500	25.0	26.2	105	24.4	97.6	24.2	96.8	23.9	95.6
Copper	0.500	25.0	26.1	104	24.5	98.0	24.7	98.8	24.6	98.4
Lead	0.250	25.0	25.4	102	26.2	105	26.8	107	25.9	104
Mercury	0.150	5.00	5.23	105	5.36	107	5.34	107		
Nickel	0.500	25.0	26.1	104	24.5	98.0	24.7	98.8	24.3	97.2
Selenium	0.500	25.0	25.8	103	24.3	97.2	24.7	98.8	24.8	99.2
Silver	0.125	5.00	5.24	105	5.08	102	5.05	101	4.81	96.2
Zinc	0.500	25.0	25.6	102	24.0	96.0	24.4	97.6	24.2	96.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 517
SDG #: E13-10832, E13-10831, E13-10834, E13-10536, E13-10601, E13-10876

Matrix: TCLP Method: 6020A Concentration/Units: ppm (mg/L)

		11/6/13 17:32	11/6/13 18:01	11/6/13 19:03	11/6/13 19:36		
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB		
Arsenic	0.0005	ND	ND	ND	ND		
Barium	0.0005	ND	ND	ND	ND		
Beryllium	0.00025	ND	ND	ND	ND		
Cadmium	0.000125	ND	ND	ND	ND		
Chromium	0.0005	ND	ND	ND	ND		
Copper	0.0005	ND	ND	ND	ND		
Lead	0.00025	ND	ND	ND	ND		
Mercury	0.00015	ND	ND	ND			
Nickel	0.0005	ND	ND	ND	ND		
Selenium	0.0005	ND	ND	ND	ND		
Silver	0.000125	ND	ND	ND	ND		
Zinc	0.0005	ND	ND	ND	ND		

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

11/06/2013 05:46 PM

Batch (Page) #: 517
Associated Lab Case for Blank 1: E13-10536, E13-10601, E13-10831, E13-10832, E13-10834, E13-10876

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKT131106-01
Arsenic	0.100	ND
Barium	0.100	ND
Beryllium	0.050	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Copper	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.100	ND
Silver	0.025	ND
Zinc	0.100	ND

Associated Sample for Blank 1:
10536-003; 10601-001; 10831-001~004; 10832-001
10834-001; 10876-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7500
Batch (Page) #: 517
SDG #: E13-10832, E13-10831, E13-10834, E13-10536, E13-10601, E13-10876

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	> LRG	> LRG	NA	NA
Calcium	100000	-	76500	79100	79.1	NA
Iron	100000	-	-	-	-	NA
Potassium	100000	-	> LRG	> LRG	NA	NA
Magnesium	100000	-	> LRG	> LRG	NA	NA
Sodium	100000	-	> LRG	> LRG	NA	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2740	2780	139	NA
Titanium	2000	-	1700	1750	87.5	NA
Silver	-	20.0	-	21.7	109	80-120
Arsenic	-	20.0	-	17.2	86.0	80-120
Cadmium	-	20.0	-	19.4	97.0	80-120
Cobalt	-	20.0	-	16.5	82.5	80-120
Chromium	-	20.0	-	16.1	80.5	80-120
Copper	-	20.0	-	16.2	81.0	80-120
Manganese	-	20.0	-	17.8	89.0	80-120
Nickel	-	20.0	-	16.7	83.5	80-120
Zinc	-	20.0	-	17.3	86.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 517
SDG #: E13-10536, E13-10601, E13-10831, E13-10832, E13-10834, E13-10876

Matrix: TCLP Unit: ppm (mg/L)

ANALYTE	LCST131106-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	4.00	3.93	98.3			
Barium	4.00	3.62	90.5			
Beryllium	4.00	3.59	89.8			
Cadmium	4.00	3.49	87.3			
Chromium	4.00	3.85	96.3			
Copper	4.00	3.93	98.3			
Lead	4.00	3.84	96.0			
Mercury	0.010	0.010	100			
Nickel	4.00	3.90	97.5			
Selenium	4.00	3.98	99.5			
Silver	4.00	3.95	98.8			
Zinc	4.00	3.77	94.3			

(1) Control Limits % Recovery = 80-120%

LCST131106-01 11/6/13 18:05

10536-003; 10601-001; 10831-001~004; 10832-001
10834-001; 10876-001

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 517
SDG #: E13-10832, E13-10831, E13-10834, E13-10536, E13-10601, E13-10876

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			11/6/13 17:27		11/6/13 17:56		11/6/13 18:58		11/6/13 19:31	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	0.500	0.506	101	0.490	98.0	0.468	93.6	0.467	93.4
Barium	0.500	0.500	0.453	90.6	0.532	106	0.519	104	0.523	105
Beryllium	0.250	0.500	0.386	77.2	0.462	92.4	0.452	90.4	0.456	91.2
Cadmium	0.125	0.500	0.423	84.6	0.452	90.4	0.435	87.0	0.407	81.4
Chromium	0.500	0.500	0.473	94.6	0.446	89.2	0.405	81.0	0.424	84.8
Copper	0.500	0.500	0.616	123	0.577	115	0.536	107	0.510	102
Lead	0.250	0.500	0.438	87.6	0.515	103	0.512	102	0.460	92.0
Nickel	0.500	0.500	0.478	95.6	0.464	92.8	0.469	93.8	0.475	95.0
Selenium	0.500	0.500	0.472	94.4	0.418	83.6	0.475	95.0	0.495	99.0
Silver	0.125	0.500	0.369	73.8	0.482	96.4	0.543	109	0.374	74.8
Zinc	0.500	0.500	0.479	95.8	0.389	77.8	0.477	95.4	0.356	71.2

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 517
SDG #: E13-10536, E13-10601, E13-10831, E13-10832, E13-10834, E13-10876

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	11/6/13 18:24 SSR1	11/6/13 18:10 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	3.90	ND	97.5	4.00					75-125
Barium	4.93	0.857	102	4.00					75-125
Beryllium	4.05	ND	101	4.00					75-125
Cadmium	3.92	ND	98.0	4.00					75-125
Chromium	3.79	ND	94.8	4.00					75-125
Copper	3.89	ND	97.3	4.00					75-125
Lead	4.55	ND	114	4.00					75-125
Mercury	0.011	ND	110	0.010					75-125
Nickel	3.86	ND	96.5	4.00					75-125
Selenium	3.87	ND	96.8	4.00					75-125
Silver	4.69	0.025	117	4.00					75-125
Zinc	3.87	ND	96.8	4.00					75-125

SSR = Spike Sample Result
SR = Sample Result
SA = Spike Added
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E13-10832-001
% Solids: NA
QC Sample 1 for following samples:
10536-003; 10601-001; 10831-001~004; 10832-001
10834-001; 10876-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 517
SDG #: E13-10536, E13-10601, E13-10831, E13-10832, E13-10834, E13-10876

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	11/6/13 18:10 S1	11/6/13 18:15 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	20	0.857	0.835	2.60				
Beryllium	NA	ND	ND	NC				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Copper	NA	ND	ND	NC				
Lead	NA	ND	ND	NC				
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	20	0.025	0.026	3.92				
Zinc	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E13-10832-001
% Solids: NA
QC Sample 1 for following samples:
10536-003; 10601-001; 10831-001~004; 10832-001
10834-001; 10876-001

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 517
SDG #: E13-10536, E13-10601, E13-10831, E13-10832, E13-10834, E13-10876

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	SERIAL DILUTION 11/6/13 18:10 SR	SERIAL DILUTION 11/6/13 18:20 SDR	% Difference	POST SPIKE 11/6/13 18:29 SPR	POST SPIKE SA	% Recovery
Arsenic	ND	ND	NC	3.96	4.00	99.0
Barium	0.857	0.899	4.78	4.75	4.00	97.3
Beryllium	ND	ND	NC	3.89	4.00	97.3
Cadmium	ND	ND	NC	3.73	4.00	93.3
Chromium	ND	ND	NC	3.85	4.00	96.3
Copper	ND	ND	NC	3.95	4.00	98.8
Lead	ND	ND	NC	4.41	4.00	110
Nickel	ND	ND	NC	3.92	4.00	98.0
Selenium	ND	ND	NC	4.01	4.00	100
Silver	0.025	ND	NC	4.47	4.00	111.0
Zinc	ND	ND	NC	3.90	4.00	97.5

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E13-10832-001
QC Sample 1 for following samples:
10536-003; 10601-001; 10831-001~004; 10832-001
10834-001; 10876-001

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG517
November 6, 2013
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
004CALB.D	STD BLANK	394997		66077		231270		1525689		1915911		859199		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	276498	70	46254	70	161889	70	1067982	70	1341138	70	601439	70	
	Upper Limit	473996	120	79292	120	277524	120	1830827	120	2299093	120	1031039	120	
005CALS.D	STD1	389546	99	65106	99	233175	101	1556977	102	1939185	101	916182	107	
006CALS.D	STD2	385897	98	65006	98	232480	101	1562283	102	1946157	102	865491	101	
007CALS.D	STD3	383625	97	64252	97	228379	99	1514144	99	1910987	100	832136	97	
008CALS.D	STD4	383669	97	63667	96	227834	99	1536183	101	1956038	102	915649	107	
009CALS.D	STD5	365792	93	62387	94	220603	95	1477749	97	1887828	99	892964	104	
011ICSA.D	ICSA	365395	93	74640	113	297385	120	1327610	87	1746370	91	637306	74	
012ICSB.D	ICSAB	364172	92	74702	113	292283	119	1301157	85	1754341	92	629438	73	
014_ICV.D	ICV	403027	102	66507	101	231486	100	1529994	100	1936533	101	851397	99	
015LCCV.D	LLICV	396277	100	65769	100	236445	102	1554078	102	1959237	102	955957	111	
016_ICB.D	ICB	385762	98	65860	100	231709	100	1533838	101	1927255	101	861992	100	
017SMPL.D	TCLP131031	373338	95	64743	98	228494	99	1520518	100	1889031	99	839205	98	
018SMPL.D	TCLP131105	377528	96	64952	98	231222	100	1536702	101	1922396	100	787589	92	
019SMPL.D	BLKT131106-01	370898	94	65933	100	237687	103	1581997	104	1910464	100	787811	92	
020_CCV.D	CCV	362143	92	68420	104	230688	100	1568440	103	1887784	99	765288	89	
021LCCV.D	LLCCV	359590	91	66093	100	231103	100	1554184	102	1872859	98	811000	94	
0226CCB.D	CCB	350688	89	68029	103	236927	102	1602129	105	1841928	96	756942	88	
023SMPL.D	LCST131106-01	355302	90	65148	99	227239	98	1545003	101	1873060	98	814656	95	
024SMPL.D	E13-10832-001	354593	90	65328	99	230191	100	1549241	102	1870329	98	770544	90	
025SMPL.D	E13-10832-001DUP	367869	93	66087	100	235185	102	1555012	102	1882536	98	836101	97	
026SMPL.D	E13-10832-001SD	353338	89	65755	100	228089	99	1546093	101	1854723	97	770351	90	
027SMPL.D	E13-10832-001MS	357892	91	65686	99	231194	100	1557214	102	1906006	99	770649	90	
028SMPL.D	E13-10832-001PS	362197	92	64687	98	232502	101	1550381	102	1914052	100	768746	89	
029SMPL.D	E13-10831-001	364731	92	65387	99	232552	101	1570112	103	1896502	99	775858	90	
030SMPL.D	E13-10831-002	361172	91	65402	99	233143	101	1554376	102	1888940	99	775042	90	
031SMPL.D	E13-10831-003	357393	90	64642	98	231495	100	1543587	101	1864246	97	764497	89	
032SMPL.D	E13-10831-004	354257	90	65731	99	229845	99	1541122	101	1847188	96	755213	88	
033_CCV.D	CCV	347105	88	65272	99	225801	98	1547015	101	1846239	96	760184	88	
034LCCV.D	LLCCV	348523	88	65665	99	228144	99	1547997	101	1873814	98	779291	91	
0356CCB.D	CCB	342437	87	65134	99	225863	98	1521719	100	1839206	96	757909	88	
036SMPL.D	E13-10834-001	345248	87	64905	98	227115	98	1533175	100	1853377	97	768737	89	

E13-10601

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

01148

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG517
November 6, 2013
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
004CALB.D	STD BLANK	394997		66077		231270		1525689		1915911		859199		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	276498	70	46254	70	161889	70	1067982	70	1341138	70	601439	70	
	Upper Limit	473996	120	79292	120	277524	120	1830827	120	2299093	120	1031039	120	
037SMPL.D	E13-10536-003	347396	88	64821	98	227364	98	1533329	101	1838091	96	764501	89	
038SMPL.D	E13-10601-001	350767	89	64622	98	228317	99	1547098	101	1888509	99	781955	91	
039SMPL.D	E13-10876-001	348583	88	65332	99	227608	98	1535650	101	1856570	97	774240	90	
040_CCV.D	FINAL CCV	339610	86	65263	99	225049	97	1516559	99	1852949	97	804406	94	
041LCCV.D	FINAL LLCCV	315809	80	64767	98	221494	96	1493243	98	1810688	95	816479	95	
0426CCB.D	FINAL CCB	329958	84	65098	99	221777	96	1496362	98	1803684	94	762431	89	

E13-10601 01 46

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

METALS QUALITY CONTROL

TUMBLE BLANK RESULTS SUMMARY

Batch (Page) #: 517
Associated Lab Case: 10536, 10601

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	TCLP131105 BLANK
Arsenic	0.1	ND
Barium	0.1	ND
Beryllium	0.05	ND
Cadmium	0.025	ND
Chromium	0.1	ND
Copper	0.1	ND
Lead	0.05	ND
Mercury	0.0003	ND
Nickel	0.1	ND
Selenium	0.1	ND
Silver	0.025	ND
Zinc	0.1	ND

Associated Sample ID:

10536-003, 10601-001

GENERAL ANALYTICAL CHEMISTRY

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfur as S

Matrix: Soil
Unit: mg/Kg

Batch: AP091-0025
Method: D129

Date: 11/01/2013

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS131101	< 825	NA	NA	NA	NA	NA
LCS	LCSS131101	276000	333000	NA	NA	82.9	80-120
SAMPLE	E13-10601-001	< 881	NA	NA	NA	NA	NA
DUP	E13-10601-001DUP	< 881	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E13-10601-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants	REPORT TO:	Matt Sweet
Address:	1 Greenwood Ave #26 Montclair NJ 07042	Address:	msweet@geiconsultants.com
Telephone #:	973 873 7116	Attn:	
Fax #:	973 509 9625	FAX #	
Project Manager:	M Zukauskas	INVOICE TO:	GEI Consultants
EMAIL Address:	mzukauskas@gei.com	Address:	400 Unicorn Park Dr Woburn MA
Sampler:	Matt Sweet		
Project Name:	Greenpoint	Attn:	Sandra St Hilaire
Project Location (State):	NY	PO #	093260-1-1104
Bottle Order #:			
Quote # :			

Turnaround Time (starts the following day **if samples rec'd at lab > 5PM**)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) | NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) | QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** (1 wk**)
Other** (specify):

Hard Copy: Std 3 week * | Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
~~96 hr - 35%...~~
5 day - 25%...
6-9 day 10%

Report Format
Results Only
(Reduced)
Regulatory - 15% Surcharge applies
Other (describe)

EDDs
SRP format
lab approved custom EDD
NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

 # BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	Bay shore WC	Contingency TCLP	HCL	HNO3	MeOH	Other	None	Encore
GPEC WC 1023/13	(NA)	10/23/13	0800	Soil	3	1	X	X						

Known Hazard: Yes or No Describe:

Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): _____ IAL Courier _____ Client Courier _____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	Matt Sweet	10/24	11:00	Received by:	10/24/13	1100
Relinquished by:		10/24/13	1710	Received by:	10/24/13	1710
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Analyze TCLP on contingency basis on 20 times Rule

Lab Case # 10601

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

E13-10601 0155

I:\2010 REV COC

10/2010 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E13-10601: GREENPOINT

To: Maria Stepanova
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mstepanova@geiconsultants.com;da

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

GEI Consultants Inc. - Montclair
PO Box 3

Hooksett, NH 03106
Attn: Maria Stepanova

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced	093260-1-1104	Oct 24, 2013 @ 17:10	Nov 1, 2013	Nov 08, 2013	Nov 15, 2013 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
10601-001	GPEC WC 102313	NA	10/23/13@08:00	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCLP VO	Cancel	1311/8260C	RUSH 1 WK	11/6/2013
	Special VO	Analyze	8260C	RUSH 1 WK	11/6/2013
	TCLP BNA	Cancel	1311/8270D	RUSH 1 WK	11/6/2013
	PP/PAH	Analyze	8270D	RUSH 1 WK	11/6/2013
	TCLP Herbicides	Cancel	1311/8151A	RUSH 1 WK	11/6/2013
	TCLP Pesticides	Cancel	1311/8081B	RUSH 1 WK	11/6/2013
	PP/PCB	Analyze	8082A	RUSH 1 WK	11/6/2013
	TPH-DRO	Analyze	8015D	RUSH 1 WK	11/6/2013
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	4/21/2014
	TCLP Metals	Cancel	1311/6020A/7470A	RUSH 1 WK	11/20/2013
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	11/20/2013
	Sulfur as S	Analyze	D129	RUSH 1 WK	11/20/2013

Project Notes:

PKNOTE 1 taken by Ellen on 10/25/2013 09:22
For VO Analyze & Report PP VO+Acetone, 2-Butanone, Cis-1,2-Dichloroethene, 4-Methyl-2-Pentanone, Styrene, 1,1,1,2-Tetrachloroethane & 1,2,4-Trichlorobenzene

NOTE 2 taken by Ellen on 10/25/2013 09:23
BAYSHORE W.C. LOGGED IN FOR COAL TAR/ASPHALT/MGP AS PER PREVIOUS JOBS.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E13-10601: GREENPOINT

REV 1 taken by kim on 11/01/2013 02:32

REV 01 DUE 11/8

PER MATT SWEET, ANALYZE SAMPLE 001 FOR TCLP LEAD.

CANCEL OTHERS ON HOLD.

ORIGINAL RESULTS SENT 11/1

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **10601** CLIENT: GEI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 10/24/13

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 10.26.13

Laboratory Custody Chronicle

IAL Case No.

E13-10601

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 10/24/2013@17:10

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	10601-001	Soil	n/a	n/a	10/28/13	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PAH	-001	Soil	10/25/13	Kou-Liang	10/25/13	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	10/28/13	Archimede	10/29/13	Nicole
TPH-DRO	-001	Soil	10/25/13	Archimede	10/29/13	Jamie

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	10/25/13	Lisa	10/28/13	Danielle
TCLP Lead - Pb	-001	Soil	11/ 6/13	Lisa	11/ 6/13	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	11/ 1/13	Robert

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **NATIONAL GRID WC**
IAL Case Number: **E13-11089**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
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IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Sample Summary

IAL Case No.

E13-11089

Client GEI Consultants Inc. - Montclair

Project NATIONAL GRID WC

Received On 11/ 6/2013@16:25

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
11089-001	GPEC WC110513	n/a	11/ 5/2013@13:00	Aqueous	2

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on November 13, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) aqueous sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E13-11089, Project: NATIONAL GRID WC) on November 6, 2013 for the analysis of:

(1) TCL PCB

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

11/13/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-11089

PCB By 8082A

Batch ID: 131108-12	**Matrix: Aqueous**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001
- The following samples were cleaned up using method 3665A: 001

E13-11089

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample -001.

Nicole Coon 11/12/2013

Signature Date

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: NATIONAL GRID WC
Lab Case No.: E13-11089

	Lab ID:	11089-001		
	Client ID:	GPEC WC110513		
	Matrix:	Aqueous		
	Sampled Date	11/5/13		
PARAMETER(Units)		Conc	Q	MDL
PCB's (Units)		*(ug/L-ppb)*		
Aroclor-1016		ND		0.020
Aroclor-1221		ND		0.020
Aroclor-1232		ND		0.020
Aroclor-1242		ND		0.020
Aroclor-1248		ND		0.020
Aroclor-1254		ND		0.020
Aroclor-1260		ND		0.020
Aroclor-1262		ND		0.020
Aroclor-1268		ND		0.020
PCBs		ND		0.020

ND = Analyzed for but Not Detected at the MDL

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E13-11089-001
Client ID: GPEC_WC1
Date Received: 11/06/2013
Date Extracted: 11/08/2013
Date Analyzed: 11/11/2013
Data file: Y2871.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 11/11/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA131108-12	AQUEOUS	84		53		75		67	
PCB	LCSA131108-12	AQUEOUS	81		58		72		63	
FB-11051	E13-11118-015	AQUEOUS	84		57		78		68	
GPEC_WC1	E13-11089-001	AQUEOUS	58		54		53		65	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSA131108-12

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	479.3	96	40 - 140
Aroclor-1260	500.0	0.0	487.2	97	40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

AQUEOUS PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: 10848-003

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	339.4	68	40 - 140
Aroclor-1260	500.0	0.0	369.0	74	40 - 140

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	392.1	78	14	50	40 - 140
Aroclor-1260	0.0	441.4	88	17	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: Y2857.D

Instrument ID: GC-Y

Date Extracted: 11/06/2013

Matrix: AQUEOUS

Date Analyzed: 11/08/2013

Time Analyzed: 17:50

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA131106-12	11/08/2013	18:08
VPN-S	10848-003	11/08/2013	18:25
FIELD_BL	E13-10903-008	11/08/2013	18:42
DOWN_STR	E13-10903-019	11/08/2013	19:00
DOWN_STR	E13-10903-020	11/08/2013	19:17
DOWN_STR	E13-10903-021	11/08/2013	19:34
PCB	10848-003MS	11/08/2013	19:52
PCB	10848-003MSD	11/08/2013	20:09

PCB METHOD BLANK SUMMARY

Lab File ID: Y2868.D

Instrument ID: GC-Y

Date Extracted: 11/08/2013

Matrix: AQUEOUS

Date Analyzed: 11/11/2013

Time Analyzed: 14:59

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA131108-12	11/11/2013	15:16
FB-11051	E13-11118-015	11/11/2013	15:36
GPEC_WC1	E13-11089-001	11/11/2013	15:54

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.22	3.22	3.22	3.22	3.22	3.22	3.15	3.29
Aroclor-1016 {2}	4.04	4.04	4.04	4.04	4.04	4.04	3.97	4.11
Aroclor-1016 {3}	4.59	4.59	4.59	4.59	4.59	4.59	4.52	4.66
Aroclor-1016 {4}	5.10	5.09	5.09	5.09	5.09	5.09	5.02	5.16
Aroclor-1016 {5}	5.48	5.48	5.49	5.49	5.49	5.48	5.41	5.55
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.02				2.95	3.09
Aroclor-1221 {3}			3.15				3.08	3.22
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.22				3.15	3.29
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			5.49				5.42	5.56
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.98				4.91	5.05
Aroclor-1242 {3}			5.30				5.23	5.37
Aroclor-1242 {4}			5.99				5.92	6.06
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.44				4.36	4.52
Aroclor-1248 {2}			4.98				4.90	5.06
Aroclor-1248 {3}			5.30				5.22	5.38
Aroclor-1248 {4}			5.99				5.91	6.07
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.38				6.30	6.46
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.42				7.33	7.51
Aroclor-1254 {5}			8.26				8.17	8.35
Aroclor-1260	8.26	8.25	8.25	8.25	8.25	8.25	7.35	9.15
Aroclor-1260 {2}	8.93	8.93	8.93	8.93	8.93	8.93	8.03	9.83
Aroclor-1260 {3}	9.40	9.40	9.40	9.40	9.40	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.94	10.94	10.94	10.94	10.94	10.94	10.04	11.84

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	447576	450365	388612	345786	323686	391205	14.74
Aroclor-1016 {2}	627708	605785	540310	484438	452371	542122	13.92
Aroclor-1016 {3}	874719	765872	684369	615358	580856	704235	16.86
Aroclor-1016 {4}	397732	395187	335989	294619	274788	339663	16.59
Aroclor-1016 {5}	650000	629542	566447	507766	477446	566240	13.19
Aroclor-1221			192071				
Aroclor-1221 {2}			294477				
Aroclor-1221 {3}			194494				
Aroclor-1221 {4}			645697				
Aroclor-1221 {5}			155613				
Aroclor-1232			485451				
Aroclor-1232 {2}			295113				
Aroclor-1232 {3}			259888				
Aroclor-1232 {4}			289070				
Aroclor-1232 {5}			363887				
Aroclor-1242			436017				
Aroclor-1242 {2}			286372				
Aroclor-1242 {3}			394744				
Aroclor-1242 {4}			571815				
Aroclor-1242 {5}			506345				
Aroclor-1248			1024891				
Aroclor-1248 {2}			610408				
Aroclor-1248 {3}			783514				
Aroclor-1248 {4}			1193332				
Aroclor-1248 {5}			943616				
Aroclor-1254			1201203				
Aroclor-1254 {2}			793076				
Aroclor-1254 {3}			1437056				
Aroclor-1254 {4}			1570039				
Aroclor-1254 {5}			1434237				
Aroclor-1260	2164689	1822060	1649814	1491973	1376386	1700984	18.15
Aroclor-1260 {2}	1017786	828195	794125	753368	686484	815992	15.26
Aroclor-1260 {3}	2276656	1959820	1965580	1727080	1567462	1899320	14.18
Aroclor-1260 {4}	1326111	1138653	1050773	938551	874861	1065790	16.65
Aroclor-1260 {5}	427655	497378	493376	416237	392419	445413	10.64
					Average %RSD		15.02

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013

Instrument ID: GC-Y
GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.77	3.76	3.76	3.76	3.76	3.76	3.69	3.83
Aroclor-1016 {2}	4.36	4.36	4.36	4.36	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {4}	5.32	5.32	5.31	5.31	5.31	5.32	5.25	5.39
Aroclor-1016 {5}	5.50	5.50	5.49	5.49	5.49	5.49	5.42	5.56
Aroclor-1221			2.44				2.37	2.51
Aroclor-1221 {2}			3.44				3.37	3.51
Aroclor-1221 {3}			3.67				3.60	3.74
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.11				5.04	5.18
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.32				5.25	5.39
Aroclor-1232 {4}			5.49				5.42	5.56
Aroclor-1232 {5}			6.09				6.02	6.16
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.49				5.42	5.56
Aroclor-1242 {3}			6.09				6.02	6.16
Aroclor-1242 {4}			6.24				6.17	6.31
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.11				5.03	5.19
Aroclor-1248 {2}			5.69				5.61	5.77
Aroclor-1248 {3}			6.09				6.01	6.17
Aroclor-1248 {4}			6.24				6.16	6.32
Aroclor-1248 {5}			6.59				6.51	6.67
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.28				8.19	8.37
Aroclor-1254 {4}			8.51				8.42	8.60
Aroclor-1254 {5}			9.10				9.01	9.19
Aroclor-1260	7.86	7.86	7.85	7.85	7.85	7.85	6.95	8.75
Aroclor-1260 {2}	8.11	8.11	8.10	8.10	8.11	8.11	7.21	9.01
Aroclor-1260 {3}	9.70	9.70	9.70	9.70	9.70	9.70	8.80	10.60
Aroclor-1260 {4}	10.21	10.21	10.20	10.20	10.20	10.20	9.30	11.10
Aroclor-1260 {5}	10.79	10.79	10.79	10.79	10.79	10.79	9.89	11.69

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1077370	953453	804609	701121	709556	849222	19.20
Aroclor-1016 {2}	1918671	1960329	1608123	1381664	1325023	1638762	17.98
Aroclor-1016 {3}	4324478	4205440	4062198	3620367	3349029	3912303	10.54
Aroclor-1016 {4}	1861148	1868934	1815999	1632266	1512673	1738204	9.11
Aroclor-1016 {5}	1430926	1439767	1411203	1275811	1190022	1349546	8.24
Aroclor-1221			361519				
Aroclor-1221 {2}			570497				
Aroclor-1221 {3}			440309				
Aroclor-1221 {4}			1560405				
Aroclor-1221 {5}			298298				
Aroclor-1232			997030				
Aroclor-1232 {2}			442734				
Aroclor-1232 {3}			973980				
Aroclor-1232 {4}			762359				
Aroclor-1232 {5}			1048394				
Aroclor-1242			664309				
Aroclor-1242 {2}			1138194				
Aroclor-1242 {3}			1485300				
Aroclor-1242 {4}			1259374				
Aroclor-1242 {5}			2420970				
Aroclor-1248			2492251				
Aroclor-1248 {2}			3757343				
Aroclor-1248 {3}			2697779				
Aroclor-1248 {4}			2357309				
Aroclor-1248 {5}			1352106				
Aroclor-1254			3041071				
Aroclor-1254 {2}			2368537				
Aroclor-1254 {3}			2266311				
Aroclor-1254 {4}			1381114				
Aroclor-1254 {5}			3490970				
Aroclor-1260	1756745	1609704	1667033	1492660	1384278	1582084	9.25
Aroclor-1260 {2}	2514617	2346239	2396908	2136545	1972010	2273264	9.54
Aroclor-1260 {3}	2272642	2216880	2173205	1982348	1847768	2098568	8.47
Aroclor-1260 {4}	5104232	4840602	4813333	4433949	4194747	4677373	7.70
Aroclor-1260 {5}	3460295	3482324	3518699	3226187	3070976	3351696	5.80
					Average %RSD		10.58

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.55				8.43	8.67
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.94				10.82	11.06
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			11.55				11.43	11.67
Aroclor-1268 {5}			12.03				11.91	12.15

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.69				9.57	9.81
Aroclor-1262 {2}			10.20				10.08	10.32
Aroclor-1262 {3}			10.70				10.58	10.82
Aroclor-1262 {4}			10.79				10.67	10.91
Aroclor-1262 {5}			11.39				11.27	11.51
Aroclor-1268			10.70				10.58	10.82
Aroclor-1268 {2}			10.78				10.66	10.90
Aroclor-1268 {3}			11.03				10.91	11.15
Aroclor-1268 {4}			12.25				12.13	12.37
Aroclor-1268 {5}			12.48				12.36	12.60

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1354994				
Aroclor-1262 {2}			2620645				
Aroclor-1262 {3}			1033050				
Aroclor-1262 {4}			1158982				
Aroclor-1262 {5}			1018815				
Aroclor-1268			2640310				
Aroclor-1268 {2}			2756865				
Aroclor-1268 {3}			2304087				
Aroclor-1268 {4}			7029273				
Aroclor-1268 {5}			4052302				

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2852689				
Aroclor-1262 {2}			6641766				
Aroclor-1262 {3}			2469488				
Aroclor-1262 {4}			4736320				
Aroclor-1262 {5}			986321				
Aroclor-1268			7175428				
Aroclor-1268 {2}			7449976				
Aroclor-1268 {3}			6194617				
Aroclor-1268 {4}			17839550				
Aroclor-1268 {5}			10591825				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 11/11/2013 **Instrument ID:** GC-Y

Data File: Y2867.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	391205	368022	5.93
Aroclor-1016 {2}	4.04	3.97	4.11	542122	503611	7.10
Aroclor-1016 {3}	4.59	4.52	4.66	704235	636275	9.65
Aroclor-1016 {4}	5.09	5.02	5.16	339663	302442	10.96
Aroclor-1016 {5}	5.49	5.41	5.55	566240	516425	8.80
Aroclor-1260	8.25	7.35	9.15	1700984	1479544	13.02
Aroclor-1260 {2}	8.93	8.03	9.83	815992	706425	13.43
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1728487	8.99
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	935459	12.23
Aroclor-1260 {5}	10.94	10.04	11.84	445413	466591	4.75

Data File: Y2867.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.69	3.83	849222	725728	14.54
Aroclor-1016 {2}	4.35	4.29	4.43	1638762	1424970	13.05
Aroclor-1016 {3}	5.10	5.04	5.18	3912303	3618450	7.51
Aroclor-1016 {4}	5.31	5.25	5.39	1738204	1585038	8.81
Aroclor-1016 {5}	5.48	5.42	5.56	1349546	1227866	9.02
Aroclor-1260	7.84	6.95	8.75	1582084	1325825	16.20
Aroclor-1260 {2}	8.10	7.21	9.01	2273264	1965980	13.52
Aroclor-1260 {3}	9.68	8.80	10.60	2098568	1860066	11.37
Aroclor-1260 {4}	10.19	9.30	11.10	4677373	4116506	11.99
Aroclor-1260 {5}	10.78	9.89	11.69	3351696	2964599	11.55

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 11/11/2013 **Instrument ID:** GC-Y

Data File: Y2872.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	391205	379266	3.05
Aroclor-1016 {2}	4.04	3.97	4.11	542122	519822	4.11
Aroclor-1016 {3}	4.59	4.52	4.66	704235	666825	5.31
Aroclor-1016 {4}	5.09	5.02	5.16	339663	333424	1.84
Aroclor-1016 {5}	5.49	5.41	5.55	566240	552933	2.35
Aroclor-1260	8.25	7.35	9.15	1700984	1590851	6.47
Aroclor-1260 {2}	8.93	8.03	9.83	815992	771581	5.44
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1897919	0.07
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	1028616	3.49
Aroclor-1260 {5}	10.94	10.04	11.84	445413	505695	13.53

Data File: Y2872.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.69	3.83	849222	783574	7.73
Aroclor-1016 {2}	4.35	4.29	4.43	1638762	1524340	6.98
Aroclor-1016 {3}	5.10	5.04	5.18	3912303	3949316	0.95
Aroclor-1016 {4}	5.31	5.25	5.39	1738204	1763020	1.43
Aroclor-1016 {5}	5.48	5.42	5.56	1349546	1365778	1.20
Aroclor-1260	7.84	6.95	8.75	1582084	1629032	2.97
Aroclor-1260 {2}	8.10	7.21	9.01	2273264	2359317	3.79
Aroclor-1260 {3}	9.69	8.80	10.60	2098568	2169687	3.39
Aroclor-1260 {4}	10.19	9.30	11.10	4677373	4887968	4.50
Aroclor-1260 {5}	10.78	9.89	11.69	3351696	3514502	4.86

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.76 **DCB 1** 12.03 **TCMX 2** 2.88 **DCB 2** 12.47

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA131108-12	11/11/2013	14:59	2.76		12.03		2.88		12.47	
PCB	LCSA131108-12	11/11/2013	15:16	2.76		12.03		2.88		12.47	
FB-11051	E13-11118-015	11/11/2013	15:36	2.76		12.03		2.88		12.47	
GPEC_WC1	E13-11089-001	11/11/2013	15:54	2.76		12.03		2.88		12.47	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-11-13\
Data File : Y2871.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Nov 2013 15:54
Operator : NG
Sample : GPEC_WC1,E13-11089-001,A,1000ml,100,5
Misc : 131108-12,11/08/13,11/06/13,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 11 16:18:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.76	2.88	2094.5E6	4461.0E6	115.400	106.578
Spiked Amount 200.000			Recovery	=	57.70%	53.29%
2) S DCB	12.03	12.47	786.1E6	2036.5E6	107.787	129.672
Spiked Amount 200.000			Recovery	=	53.89%	64.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

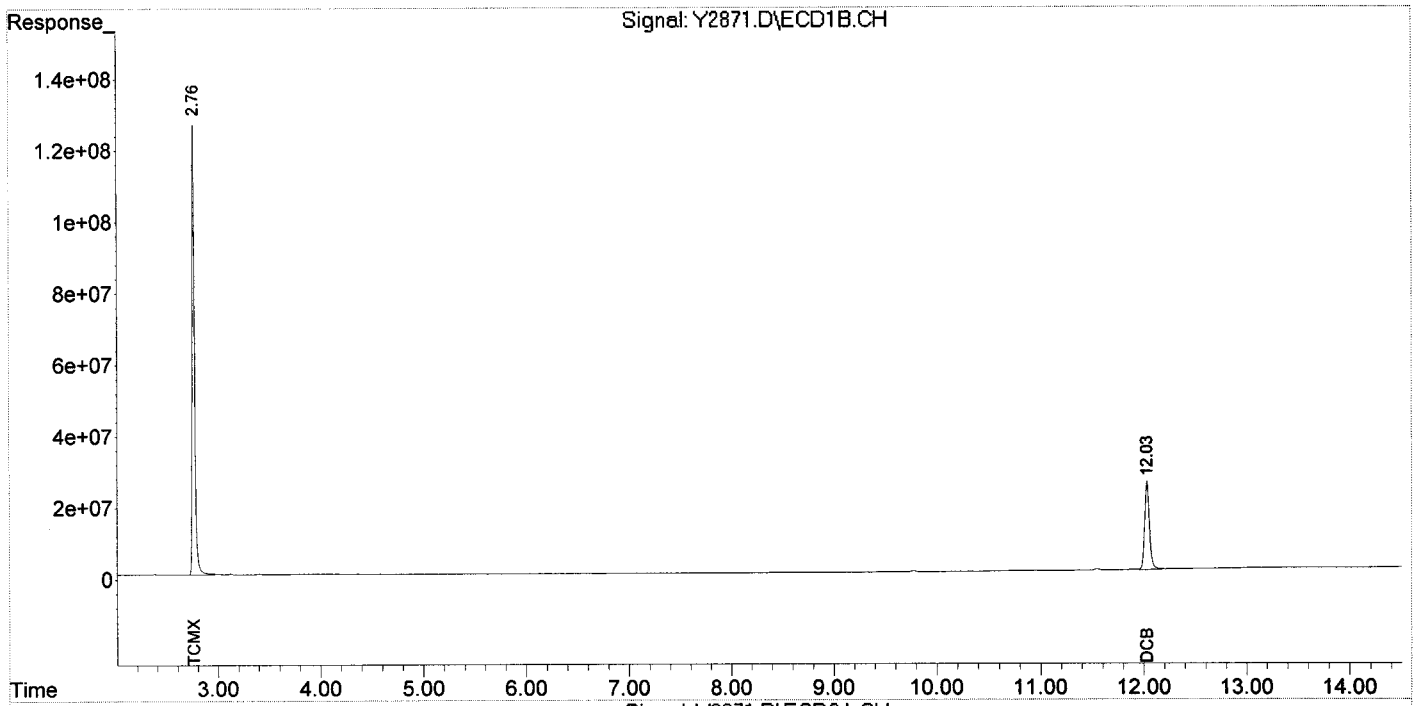
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

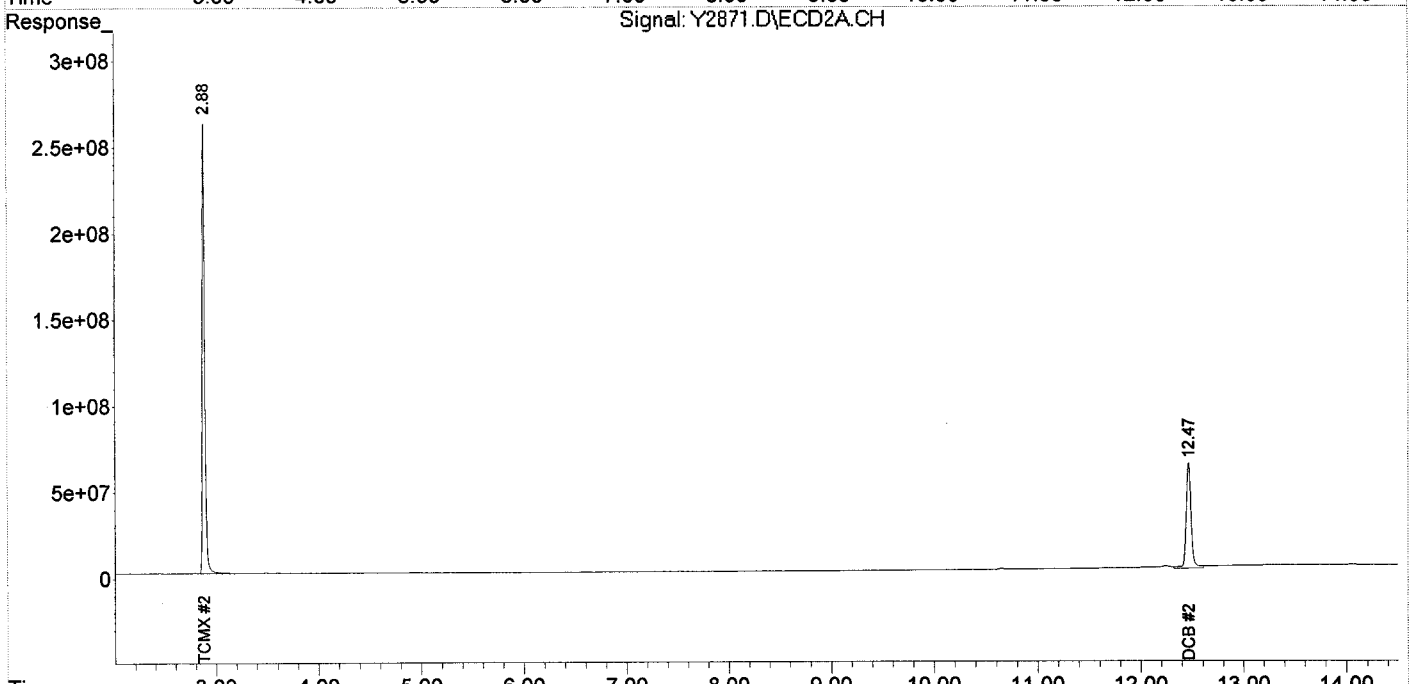
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-11-13\
Data File : Y2871.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Nov 2013 15:54
Operator : NG
Sample : GPEC_WC1,E13-11089-001,A,1000ml,100,5
Misc : 131108-12,11/08/13,11/06/13,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 11 16:18:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA131106-12
Client ID: PCB
Date Received: NA
Date Extracted: 11/06/2013
Date Analyzed: 11/08/2013
Data file: Y2857.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA131108-12
Client ID: PCB
Date Received: NA
Date Extracted: 11/08/2013
Date Analyzed: 11/11/2013
Data file: Y2868.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-11-13\
Data File : Y2868.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Nov 2013 14:59
Operator : NG
Sample : PCB,BLKA131108-12,A,1000ml,100.5
Misc : NA,11/08/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 11 15:17:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.76	2.88	3064.6E6	6241.3E6	168.849	149.111
Spiked Amount 200.000			Recovery	=	84.42%	74.56%
2) S DCB	12.03	12.47	775.7E6	2093.0E6	106.363	133.271 #
Spiked Amount 200.000			Recovery	=	53.18%	66.64%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

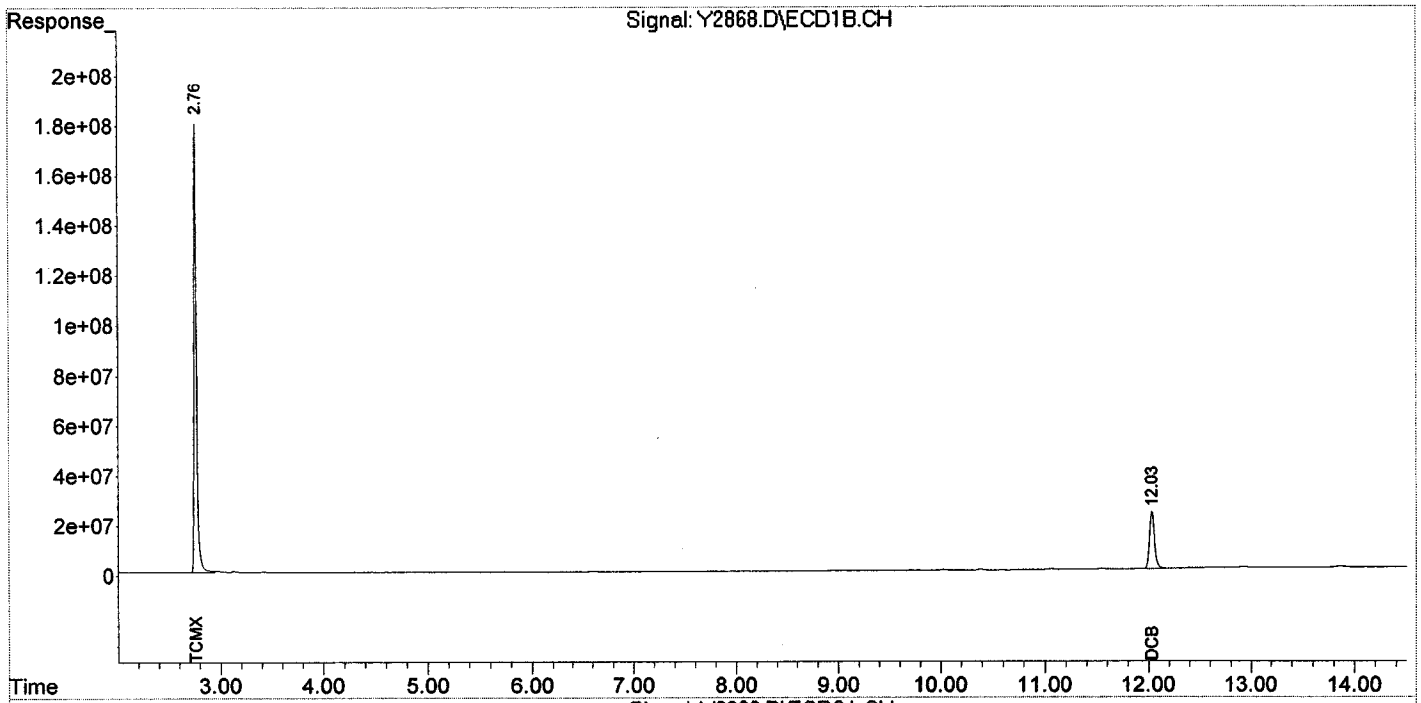
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

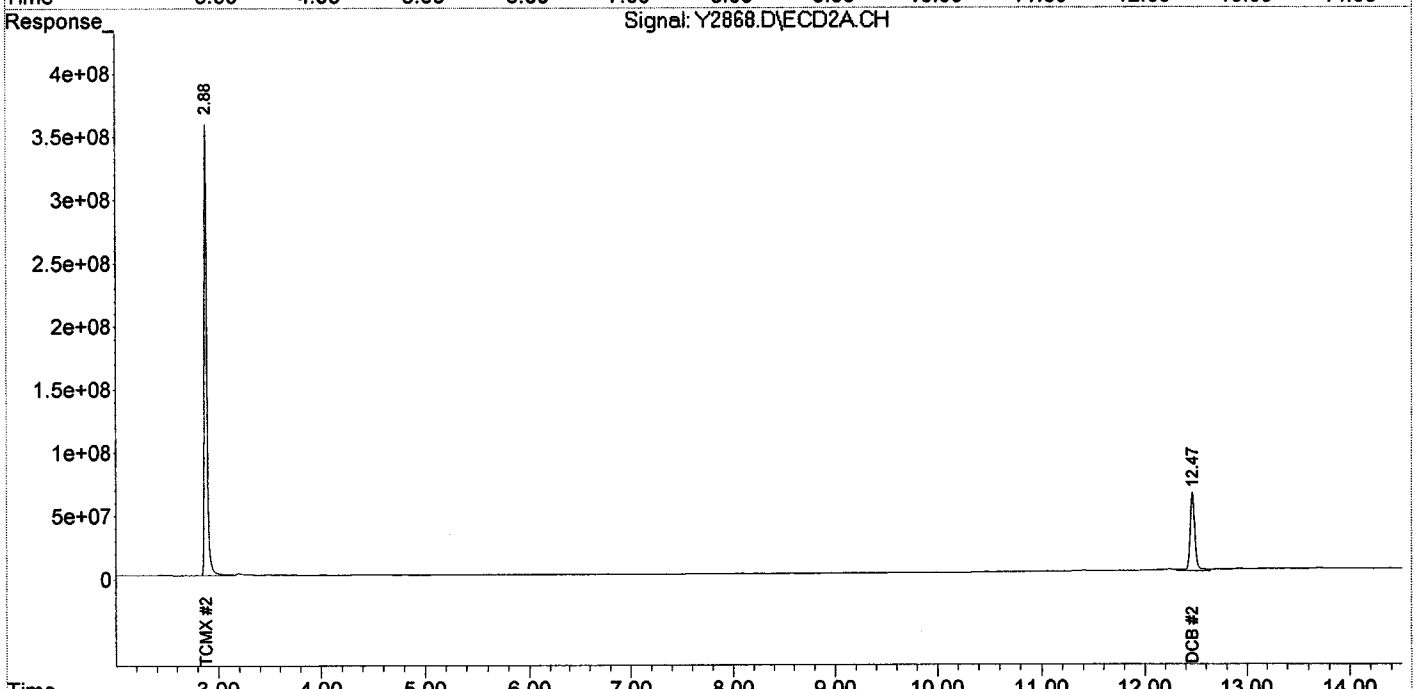
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-11-13\
Data File : Y2868.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Nov 2013 14:59
Operator : NG
Sample : PCB,BLKA131108-12,A,1000ml,100,5
Misc : NA,11/08/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 11 15:17:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants Inc
Address: 1 Greenwood Ave Ste 210
Montclair NJ 07042
Telephone #: 973 873 7110
Fax #: 973 509 9625
Project Manager: M Zukauskas
EMAIL Address: data group@geiconsultants.com
Sampled by: Matt Sweet

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Project Name: National Grid WC
Project Location (State): New York
Bottle Order #:

REPORTING INFO

REPORT TO: Data Group
Address: data group@geiconsultants.com
Attn: Jamie Wargo
FAX #

INVOICE TO: Sandra St Hilaire
Address: GEI Consultants
PO Box 3
Hookset NH 03106
Attn: Sandra St Hilaire
PO # 125180-1-1102
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify): _____
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only / NY Cat A	NJ SRP format
NJ Reduced	NYSDEC
NJ Regulatory / NY Cat B / 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS: PCB	# BOTTLES & PRESERVATIVES: HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPEC WC110513	NA	11/5/13	1300	Aq	2	1	X								

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req:
NJ GWQS
NJ IGW
NJ SRS
NY TOGS
NY CP51
NY Part 375 Restricted
NY Part 375 Unrestricted
Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	Matt Sweet	11/5/13	18:00	Received by: Gold Storage	11/5/13	18:00
Relinquished by:	Alexander Gold	11/6/13	11:52	Received by: IAL	11/6/13	11:52
Relinquished by:	IAL	11/6/13	16:25	Received by: GAL	11/6/13	1625
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Waste Profile for Clean Water of Staten Island

Lab Case # 11085

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\COCs\2013 COC

01/2013 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E13-11089: NATIONAL GRID WC

To: Michael Zukauskas
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mzukauskas@geiconsultants.com; d

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Michael Zukauskas

Bill To

GEI Consultants Inc. - Montclair
PO Box 3

Hooksett, NH 03106
Attn: Sandra St Hilaire

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced	125180-1-1102	Nov 06, 2013 @ 16:25	NA	Nov 13, 2013	Nov 27, 2013 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
11089-001	GPEC WC110513	NA	11/05/13@13:00	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	RUSH 1 WK	11/12/2013

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **11089** CLIENT: CRI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	BI-phasic - Jar Rob B
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS: As per Rob. sample is not biphasic.

SAMPLE(S) VERIFIED BY: INITIAL RR DATE 11/6/13

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KY DATE 11/8/13

Laboratory Custody Chronicle

IAL Case No.

E13-11089

Client GEI Consultants Inc. - Montclair

Project NATIONAL GRID WC

Received On 11/ 6/2013@16:25

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	11089-001	Aqueous	11/ 8/13	Archimede	11/12/13	Nicole

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

E13-11089 0036

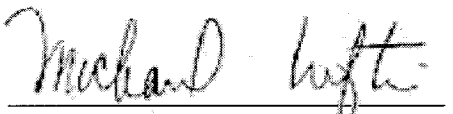
IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **NATIONAL GRID WC**
IAL Case Number: **E13-11090**

These data have been reviewed and accepted by:



Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Sample Summary

IAL Case No.

E13-11090

Client GEI Consultants Inc. - Montclair

Project NATIONAL GRID WC

Received On 11/ 6/2013@16:25

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
11090-001	CGWWC110513	n/a	11/ 6/2013@09:30	Liquid	2

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on November 18, 2013

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) liquid sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E13-11090, Project: NATIONAL GRID WC) on November 6, 2013 for the analysis of:

(1) TCL PCB

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

11/15/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-11090

PCB By 8082A

Batch ID: 131113-05	**Matrix: Liquid**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery did not meet QC criteria. For sample -001, MS, MSD due to matrix interference.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery did not meet QC criteria. Due to matrix interference from the sample.
- RPD between MS/MSD did not meet QC criteria. Due to matrix interference from the sample.
- The following samples were cleaned up using method 3660B to remove sulfur: 001
- The following samples were cleaned up using method 3665A: 001

E13-11090

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- The following samples' retention time shift did not meet QC criteria due to matrix interference: MSD.
- Sample -001 was run with 20x dilution due to potential matrix interference due to sample color.

Signature

11/14/2013
Date

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: NATIONAL GRID WC
Lab Case No.: E13-11090

Lab ID:	**11090-001**		
Client ID:	**CGWWC110513**		
Matrix:	**Liquid**		
Sampled Date	**11/6/13**		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	***(mg/Kg-ppm)***		
Aroclor-1016	ND		0.080
Aroclor-1221	ND		0.080
Aroclor-1232	ND		0.080
Aroclor-1242	ND		0.080
Aroclor-1248	ND		0.080
Aroclor-1254	ND		0.080
Aroclor-1260	ND		0.080
Aroclor-1262	ND		0.080
Aroclor-1268	ND		0.080
PCBs	ND		

ND = Analyzed for but Not Detected at the MDL

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E13-11090-001
Client ID: CGWWC110
Date Received: 11/06/2013
Date Extracted: 11/13/2013
Date Analyzed: 11/13/2013
Data file: Y2930.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.02ml
Matrix-Units: Liquid-mg/Kg (ppm)
Dilution Factor: 20
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.199	0.080
Aroclor-1221	ND		0.199	0.080
Aroclor-1232	ND		0.199	0.080
Aroclor-1242	ND		0.199	0.080
Aroclor-1248	ND		0.199	0.080
Aroclor-1254	ND		0.199	0.080
Aroclor-1260	ND		0.199	0.080
Aroclor-1262	ND		0.199	0.080
Aroclor-1268	ND		0.199	0.080
PCBs	ND		0.199	0.080

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 11/13/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKL131113-05	SOIL	87		62		86		79	
PCB	LCSL131113-05	SOIL	93		63		81		75	
CGWWC110	E13-11090-001	LIQUID	86		376	M	60		94	
PCB	11090-001MS	LIQUID	212	M	1248	M	118		716	M
PCB	11090-001MSD	LIQUID	126		1086	M	62		15174	M

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSL131113-05

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	468.0	94	40 - 140
Aroclor-1260	500.0	0.0	456.3	91	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E13-11090-001

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	NC	NC	40 - 140
Aroclor-1260	500.0	0.0	NC	NC	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	NC	NC	NC	50	40 - 140
Aroclor-1260	0.0	NC	NC	NC	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __2___ out of __2__ outside limits

Spike Recovery: __4___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID:	Y2928.D	Instrument ID:	GC-Y
Date Extracted:	11/13/2013	Matrix:	SOIL
Date Analyzed:	11/13/2013	Time Analyzed:	12:30

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSL131113-05	11/13/2013	12:47
CGWWC110	E13-11090-001	11/13/2013	13:07
PCB	11090-001MS	11/13/2013	13:49
PCB	11090-001MSD	11/13/2013	14:06

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.22	3.22	3.22	3.22	3.22	3.22	3.15	3.29
Aroclor-1016 {2}	4.04	4.04	4.04	4.04	4.04	4.04	3.97	4.11
Aroclor-1016 {3}	4.59	4.59	4.59	4.59	4.59	4.59	4.52	4.66
Aroclor-1016 {4}	5.10	5.09	5.09	5.09	5.09	5.09	5.02	5.16
Aroclor-1016 {5}	5.48	5.48	5.49	5.49	5.49	5.48	5.41	5.55
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.02				2.95	3.09
Aroclor-1221 {3}			3.15				3.08	3.22
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.22				3.15	3.29
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			5.49				5.42	5.56
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.98				4.91	5.05
Aroclor-1242 {3}			5.30				5.23	5.37
Aroclor-1242 {4}			5.99				5.92	6.06
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.44				4.36	4.52
Aroclor-1248 {2}			4.98				4.90	5.06
Aroclor-1248 {3}			5.30				5.22	5.38
Aroclor-1248 {4}			5.99				5.91	6.07
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.38				6.30	6.46
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.42				7.33	7.51
Aroclor-1254 {5}			8.26				8.17	8.35
Aroclor-1260	8.26	8.25	8.25	8.25	8.25	8.25	7.35	9.15
Aroclor-1260 {2}	8.93	8.93	8.93	8.93	8.93	8.93	8.03	9.83
Aroclor-1260 {3}	9.40	9.40	9.40	9.40	9.40	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.94	10.94	10.94	10.94	10.94	10.94	10.04	11.84

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	447576	450365	388612	345786	323686	391205	14.74
Aroclor-1016 {2}	627708	605785	540310	484438	452371	542122	13.92
Aroclor-1016 {3}	874719	765872	684369	615358	580856	704235	16.86
Aroclor-1016 {4}	397732	395187	335989	294619	274788	339663	16.59
Aroclor-1016 {5}	650000	629542	566447	507766	477446	566240	13.19
Aroclor-1221			192071				
Aroclor-1221 {2}			294477				
Aroclor-1221 {3}			194494				
Aroclor-1221 {4}			645697				
Aroclor-1221 {5}			155613				
Aroclor-1232			485451				
Aroclor-1232 {2}			295113				
Aroclor-1232 {3}			259888				
Aroclor-1232 {4}			289070				
Aroclor-1232 {5}			363887				
Aroclor-1242			436017				
Aroclor-1242 {2}			286372				
Aroclor-1242 {3}			394744				
Aroclor-1242 {4}			571815				
Aroclor-1242 {5}			506345				
Aroclor-1248			1024891				
Aroclor-1248 {2}			610408				
Aroclor-1248 {3}			783514				
Aroclor-1248 {4}			1193332				
Aroclor-1248 {5}			943616				
Aroclor-1254			1201203				
Aroclor-1254 {2}			793076				
Aroclor-1254 {3}			1437056				
Aroclor-1254 {4}			1570039				
Aroclor-1254 {5}			1434237				
Aroclor-1260	2164689	1822060	1649814	1491973	1376386	1700984	18.15
Aroclor-1260 {2}	1017786	828195	794125	753368	686484	815992	15.26
Aroclor-1260 {3}	2276656	1959820	1965580	1727080	1567462	1899320	14.18
Aroclor-1260 {4}	1326111	1138653	1050773	938551	874861	1065790	16.65
Aroclor-1260 {5}	427655	497378	493376	416237	392419	445413	10.64
					Average %RSD		15.02

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.77	3.76	3.76	3.76	3.76	3.76	3.69	3.83
Aroclor-1016 {2}	4.36	4.36	4.36	4.36	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {4}	5.32	5.32	5.31	5.31	5.31	5.32	5.25	5.39
Aroclor-1016 {5}	5.50	5.50	5.49	5.49	5.49	5.49	5.42	5.56
Aroclor-1221			2.44				2.37	2.51
Aroclor-1221 {2}			3.44				3.37	3.51
Aroclor-1221 {3}			3.67				3.60	3.74
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.11				5.04	5.18
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.32				5.25	5.39
Aroclor-1232 {4}			5.49				5.42	5.56
Aroclor-1232 {5}			6.09				6.02	6.16
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.49				5.42	5.56
Aroclor-1242 {3}			6.09				6.02	6.16
Aroclor-1242 {4}			6.24				6.17	6.31
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.11				5.03	5.19
Aroclor-1248 {2}			5.69				5.61	5.77
Aroclor-1248 {3}			6.09				6.01	6.17
Aroclor-1248 {4}			6.24				6.16	6.32
Aroclor-1248 {5}			6.59				6.51	6.67
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.28				8.19	8.37
Aroclor-1254 {4}			8.51				8.42	8.60
Aroclor-1254 {5}			9.10				9.01	9.19
Aroclor-1260	7.86	7.86	7.85	7.85	7.85	7.85	6.95	8.75
Aroclor-1260 {2}	8.11	8.11	8.10	8.10	8.11	8.11	7.21	9.01
Aroclor-1260 {3}	9.70	9.70	9.70	9.70	9.70	9.70	8.80	10.60
Aroclor-1260 {4}	10.21	10.21	10.20	10.20	10.20	10.20	9.30	11.10
Aroclor-1260 {5}	10.79	10.79	10.79	10.79	10.79	10.79	9.89	11.69

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1077370	953453	804609	701121	709556	849222	19.20
Aroclor-1016 {2}	1918671	1960329	1608123	1381664	1325023	1638762	17.98
Aroclor-1016 {3}	4324478	4205440	4062198	3620367	3349029	3912303	10.54
Aroclor-1016 {4}	1861148	1868934	1815999	1632266	1512673	1738204	9.11
Aroclor-1016 {5}	1430926	1439767	1411203	1275811	1190022	1349546	8.24
Aroclor-1221			361519				
Aroclor-1221 {2}			570497				
Aroclor-1221 {3}			440309				
Aroclor-1221 {4}			1560405				
Aroclor-1221 {5}			298298				
Aroclor-1232			997030				
Aroclor-1232 {2}			442734				
Aroclor-1232 {3}			973980				
Aroclor-1232 {4}			762359				
Aroclor-1232 {5}			1048394				
Aroclor-1242			664309				
Aroclor-1242 {2}			1138194				
Aroclor-1242 {3}			1485300				
Aroclor-1242 {4}			1259374				
Aroclor-1242 {5}			2420970				
Aroclor-1248			2492251				
Aroclor-1248 {2}			3757343				
Aroclor-1248 {3}			2697779				
Aroclor-1248 {4}			2357309				
Aroclor-1248 {5}			1352106				
Aroclor-1254			3041071				
Aroclor-1254 {2}			2368537				
Aroclor-1254 {3}			2266311				
Aroclor-1254 {4}			1381114				
Aroclor-1254 {5}			3490970				
Aroclor-1260	1756745	1609704	1667033	1492660	1384278	1582084	9.25
Aroclor-1260 {2}	2514617	2346239	2396908	2136545	1972010	2273264	9.54
Aroclor-1260 {3}	2272642	2216880	2173205	1982348	1847768	2098568	8.47
Aroclor-1260 {4}	5104232	4840602	4813333	4433949	4194747	4677373	7.70
Aroclor-1260 {5}	3460295	3482324	3518699	3226187	3070976	3351696	5.80
					Average %RSD		10.58

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.55				8.43	8.67
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.94				10.82	11.06
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			11.55				11.43	11.67
Aroclor-1268 {5}			12.03				11.91	12.15

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.69				9.57	9.81
Aroclor-1262 {2}			10.20				10.08	10.32
Aroclor-1262 {3}			10.70				10.58	10.82
Aroclor-1262 {4}			10.79				10.67	10.91
Aroclor-1262 {5}			11.39				11.27	11.51
Aroclor-1268			10.70				10.58	10.82
Aroclor-1268 {2}			10.78				10.66	10.90
Aroclor-1268 {3}			11.03				10.91	11.15
Aroclor-1268 {4}			12.25				12.13	12.37
Aroclor-1268 {5}			12.48				12.36	12.60

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/24/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2478.D Y2477.D Y2476.D Y2475.D Y2474.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1354994				
Aroclor-1262 {2}			2620645				
Aroclor-1262 {3}			1033050				
Aroclor-1262 {4}			1158982				
Aroclor-1262 {5}			1018815				
Aroclor-1268			2640310				
Aroclor-1268 {2}			2756865				
Aroclor-1268 {3}			2304087				
Aroclor-1268 {4}			7029273				
Aroclor-1268 {5}			4052302				

GC Column (2nd): DB-1701P

Data File: Y2478.C Y2477.C Y2476.C Y2475.C Y2474.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2852689				
Aroclor-1262 {2}			6641766				
Aroclor-1262 {3}			2469488				
Aroclor-1262 {4}			4736320				
Aroclor-1262 {5}			986321				
Aroclor-1268			7175428				
Aroclor-1268 {2}			7449976				
Aroclor-1268 {3}			6194617				
Aroclor-1268 {4}			17839550				
Aroclor-1268 {5}			10591825				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 11/13/2013 **Instrument ID:** GC-Y

Data File: Y2927.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	391205	398075	1.76
Aroclor-1016 {2}	4.04	3.97	4.11	542122	544698	0.48
Aroclor-1016 {3}	4.59	4.52	4.66	704235	687566	2.37
Aroclor-1016 {4}	5.09	5.02	5.16	339663	327448	3.60
Aroclor-1016 {5}	5.49	5.41	5.55	566240	555834	1.84
Aroclor-1260	8.25	7.35	9.15	1700984	1577096	7.28
Aroclor-1260 {2}	8.93	8.03	9.83	815992	732803	10.19
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1828757	3.72
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	978479	8.19
Aroclor-1260 {5}	10.94	10.04	11.84	445413	480567	7.89

Data File: Y2927.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.69	3.83	849222	812517	4.32
Aroclor-1016 {2}	4.35	4.29	4.43	1638762	1576223	3.82
Aroclor-1016 {3}	5.10	5.04	5.18	3912303	4010015	2.50
Aroclor-1016 {4}	5.31	5.25	5.39	1738204	1721542	0.96
Aroclor-1016 {5}	5.48	5.42	5.56	1349546	1342381	0.53
Aroclor-1260	7.84	6.95	8.75	1582084	1463057	7.52
Aroclor-1260 {2}	8.09	7.21	9.01	2273264	2127013	6.43
Aroclor-1260 {3}	9.68	8.80	10.60	2098568	1944755	7.33
Aroclor-1260 {4}	10.19	9.30	11.10	4677373	4296017	8.15
Aroclor-1260 {5}	10.78	9.89	11.69	3351696	3152467	5.94

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 11/13/2013 **Instrument ID:** GC-Y

Data File: Y2933.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.22	3.15	3.29	391205	404608	3.43
Aroclor-1016 {2}	4.05	3.97	4.11	542122	542976	0.16
Aroclor-1016 {3}	4.59	4.52	4.66	704235	684680	2.78
Aroclor-1016 {4}	5.09	5.02	5.16	339663	328917	3.16
Aroclor-1016 {5}	5.49	5.41	5.55	566240	553826	2.19
Aroclor-1260	8.25	7.35	9.15	1700984	1534505	9.79
Aroclor-1260 {2}	8.93	8.03	9.83	815992	703663	13.77
Aroclor-1260 {3}	9.40	8.50	10.30	1899320	1709181	10.01
Aroclor-1260 {4}	9.88	8.98	10.78	1065790	952266	10.65
Aroclor-1260 {5}	10.94	10.04	11.84	445413	412161	7.47

Data File: Y2933.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.69	3.83	849222	796524	6.21
Aroclor-1016 {2}	4.35	4.29	4.43	1638762	1528105	6.75
Aroclor-1016 {3}	5.10	5.04	5.18	3912303	3867417	1.15
Aroclor-1016 {4}	5.31	5.25	5.39	1738204	1662702	4.34
Aroclor-1016 {5}	5.48	5.42	5.56	1349546	1312799	2.72
Aroclor-1260	7.84	6.95	8.75	1582084	1387333	12.31
Aroclor-1260 {2}	8.09	7.21	9.01	2273264	2026808	10.84
Aroclor-1260 {3}	9.68	8.80	10.60	2098568	1769114	15.70
Aroclor-1260 {4}	10.19	9.30	11.10	4677373	4096192	12.43
Aroclor-1260 {5}	10.78	9.89	11.69	3351696	2900275	13.47

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.76 **DCB 1** 12.03 **TCMX 2** 2.89 **DCB 2** 12.47

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKL131113-05	11/13/2013	12:30	2.76		12.03		2.89		12.47	
PCB	LCSL131113-05	11/13/2013	12:47	2.76		12.03		2.88		12.46	
CGWWC110	E13-11090-001	11/13/2013	13:07	2.77		12.07		2.89		12.47	
PCB	11090-001MS	11/13/2013	13:49	2.77		12.07		2.90		12.47	
PCB	11090-001MSD	11/13/2013	14:06	2.77		12.07		2.89		12.34	M

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-13-13\
Data File : Y2930.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Nov 2013 13:07
Operator : NG
Sample : CGWWC110,E13-11090-001,Xs,5.02ml,0,5
Misc : 131113-05,11/13/13,11/06/13,20
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 13 13:51:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.89	154.9E6	251.8E6	8.532m	6.015 #
Spiked Amount 200.000			Recovery	=	4.27%	3.01%
2) S DCB	12.07	12.47	273.5E6	147.7E6	37.505m	9.406m#
Spiked Amount 200.000			Recovery	=	18.75%	4.70%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

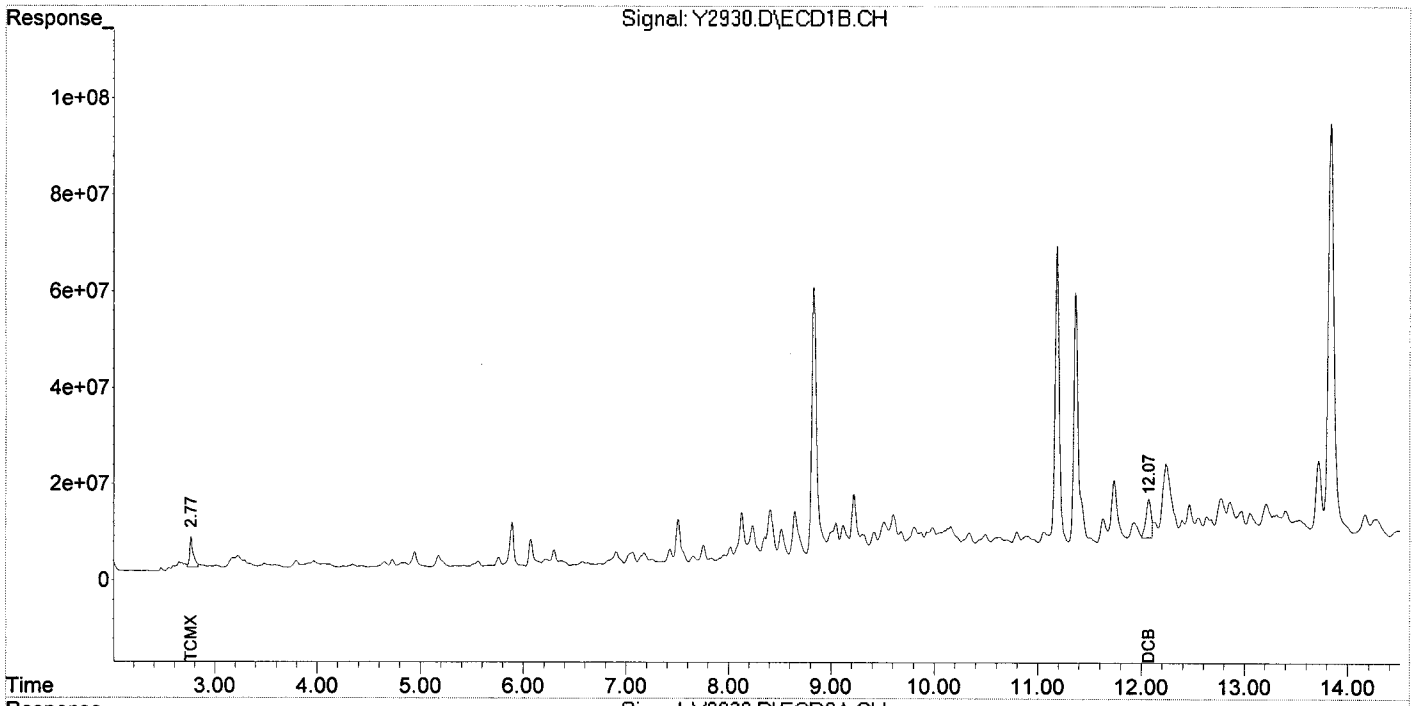
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

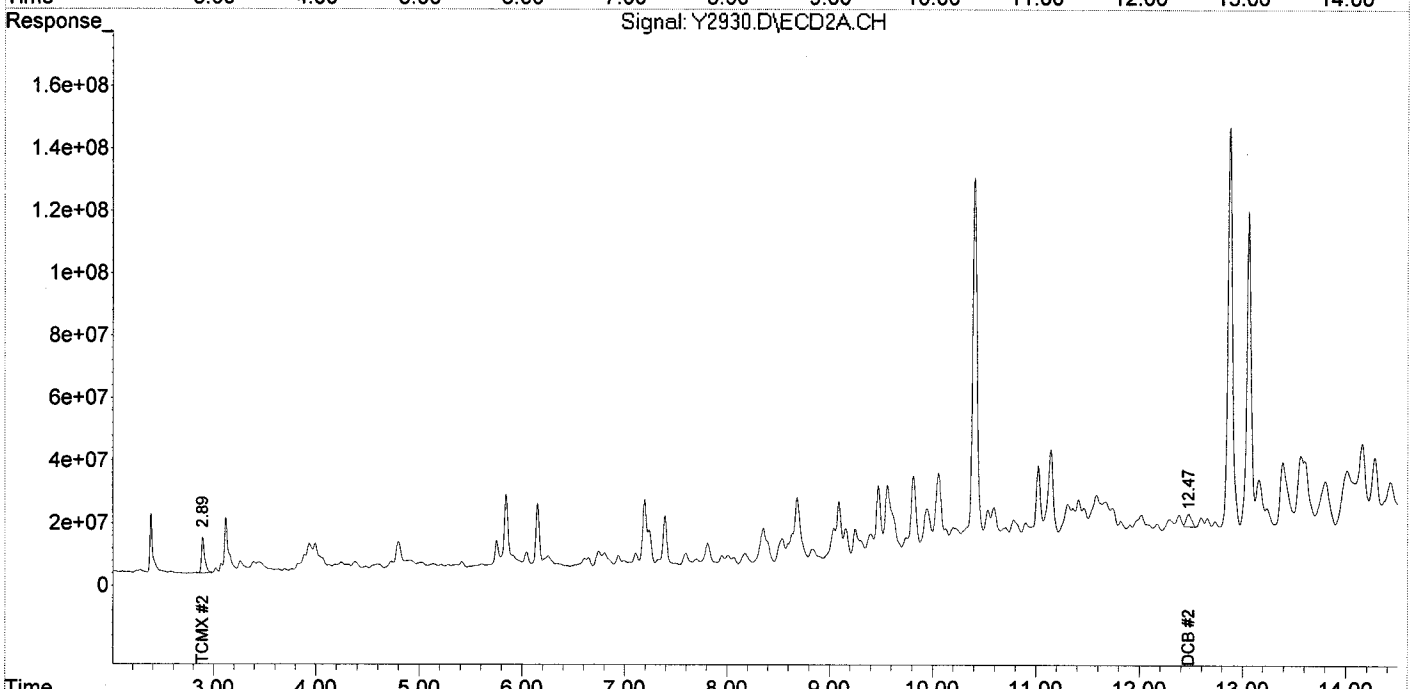
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-13-13\
Data File : Y2930.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Nov 2013 13:07
Operator : NG
Sample : CGWWC110,E13-11090-001,Xs,5.02ml,0,5
Misc : 131113-05,11/13/13,11/06/13,20
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 13 13:51:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKL131113-05
Client ID: PCB
Date Received: NA
Date Extracted: 11/13/2013
Date Analyzed: 11/13/2013
Data file: Y2928.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed
J --- Value Less than RL & great than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-13-13\
Data File : Y2928.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Nov 2013 12:30
Operator : NG
Sample : PCB,BLKL131113-05,S,30.00g,0,5
Misc : NA,11/13/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 13 12:48:21 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB1024.M
Quant Title :
QLast Update : Wed Nov 06 13:35:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.76	2.89	3163.7E6	7234.5E6	174.310	172.840
Spiked Amount 200.000			Recovery	=	87.16%	86.42%
2) S DCB	12.03	12.47	910.0E6	2487.8E6	124.769	158.407 #
Spiked Amount 200.000			Recovery	=	62.38%	79.20%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\11-13-13\
Data File : Y2928.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Nov 2013 12:30
Operator : NG
Sample : PCB,BLKL131113-05,S,30.00g,0,5
Misc : NA,11/13/13,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Nov 13 12:48:21 2013
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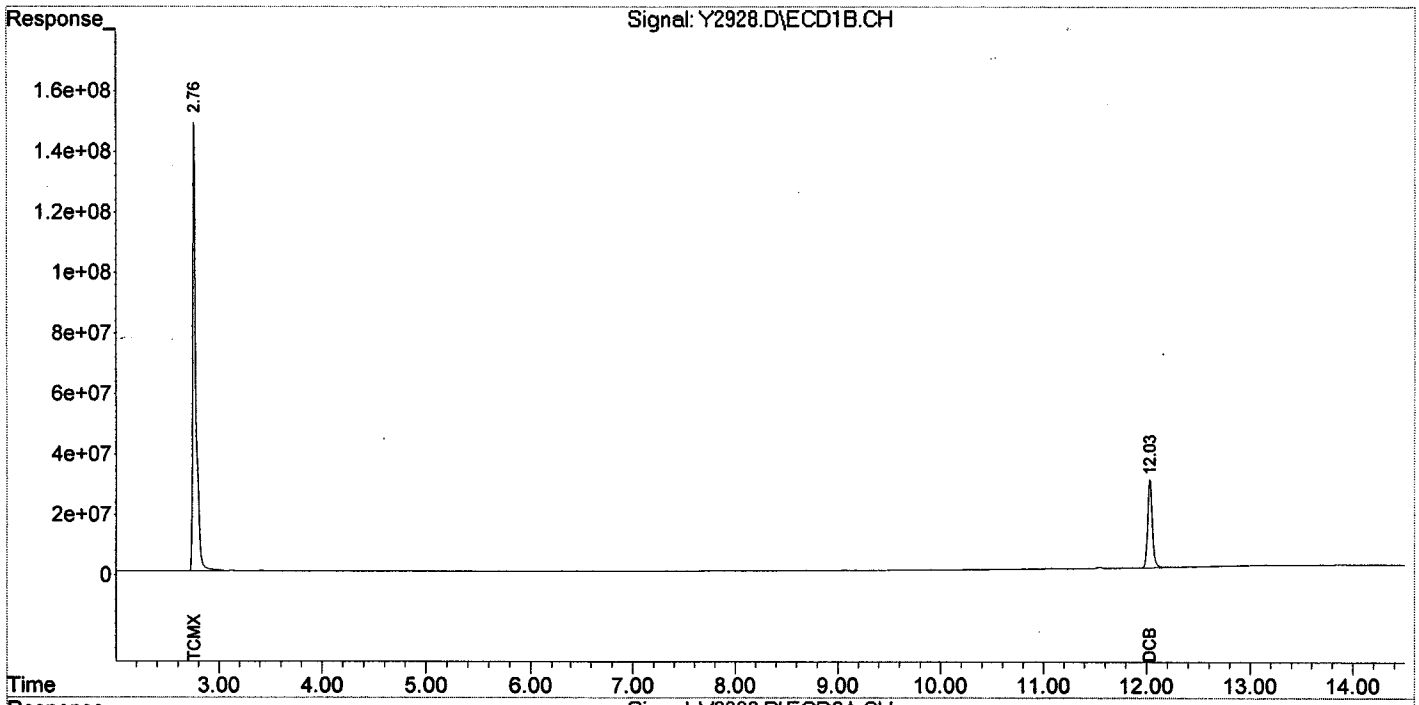
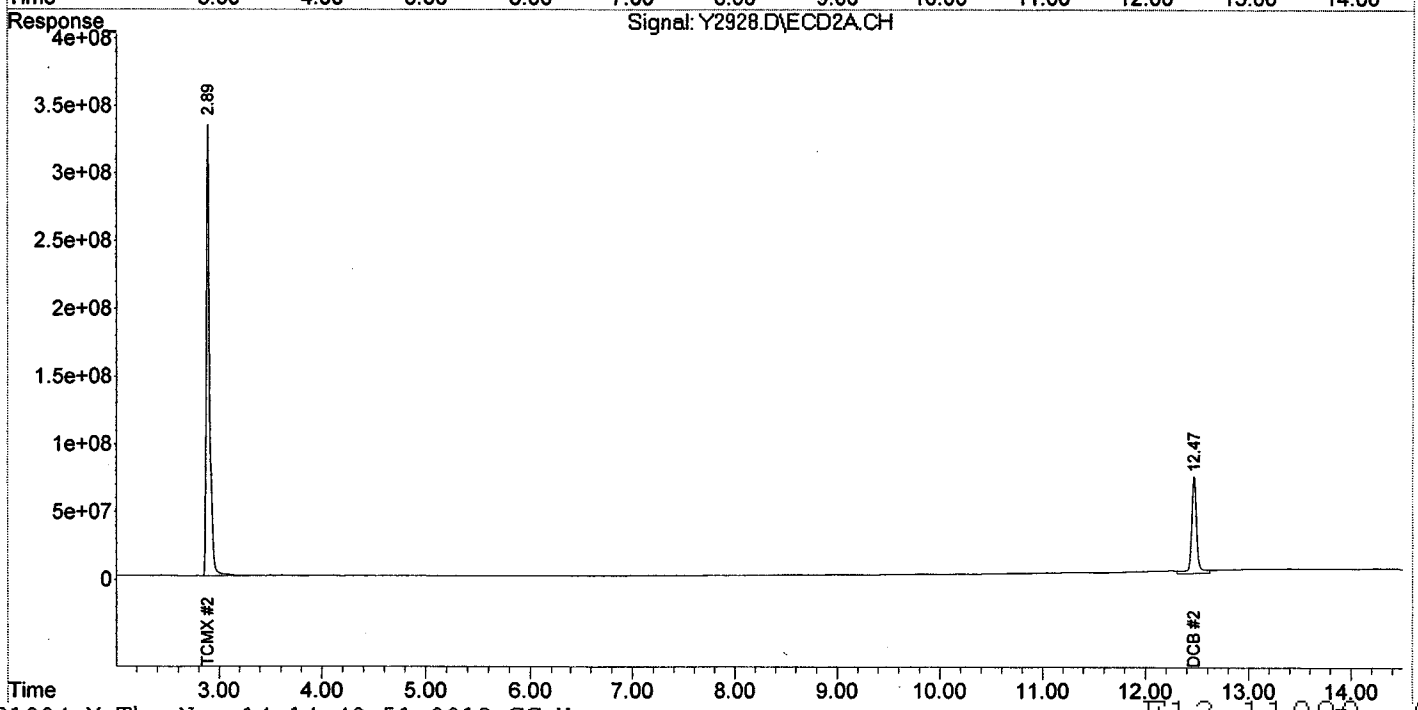
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO	
Company:	GEI Consultants Inc
Address:	1 Greenwood Ave Ste 210 Montclair NJ 07042
Telephone #:	973-873-7110
Fax #:	973-509 9625
Project Manager:	M Zukauskas
EMAIL Address:	datagroup@geiconsultants.com
Sampled by:	Matt Sweet
COMPLETED BY IAL:	____ Field Sampling ____ Equipment Rental
Project Name:	National Grid WC
Project Location (State):	New York
Bottle Order #:	

REPORTING INFO	
REPORT TO:	Data Group
Address:	Datagroup@geiconsultants.com
Attn:	Jaimie Wargo
FAX #	
INVOICE TO:	Sandra St Hilaire
Address:	GEI Consultants PO Box 3 Hookset NH 03106
Attn:	Sandra St Hilaire
PO #	093250-1-1121
Quote #	

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** (1 wk**)

Other** (specify):

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%....
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only / NY Cat A	NJ SRP format
NJ Reduced	NYSDEC
NJ Regulatory / NY Cat B / 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 3 °C

SAMPLE INFORMATION

Sample Matrix

DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS: PCB	# BOTTLES & PRESERVATIVES: HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
CGWWC110513	NA	11/5/13	0930	Aq	2	1	X								
~~GPGCWC110513~~	~~NA~~	11/5/13	1300	Aq	2		X								

Known Hazard: Yes or (No)
Describe:

Conc. Expected: Low Med High

MDL Req: NJ GWQS NJ IGW NJ SRS NY TOGS NY CP51 NY Part 375 Restricted NY Part 375 Unrestricted Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	Matt Sweet	11/5/13	18:00	Received by: Cold Storage	11/5/13	18:00
Relinquished by:	Alexander Bell	11/6/13	11:52	Received by:	11/6/13	11:52
Relinquished by:	IAL	11/6/13	1625	Received by: DAY	11/6/13	1625
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Waste Profile data for Clean Water of Staten Island

Lab Case # 11090

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\COCs\2013 COC

01/2013 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E13-11090: NATIONAL GRID WC

To: Michael Zukauskas
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mzukauskas@geiconsultants.com; d

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Michael Zukauskas

Bill To

GEI Consultants Inc. - Montclair
PO Box 3

Hooksett, NH 03106
Attn: Michael Zukauskas

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced	125180-1-1102	Nov 06, 2013 @ 16:25	NA	Nov 15, 2013	Nov 27, 2013 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. No EDD

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
11090-001	CGWWC110513	NA	11/06/13@09:30	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	RUSH 1 WK	11/13/2013
	Sample Phase Separation	Analyze		RUSH 1 WK	11/6/2013

Project Notes:

NOTE 1 taken by Ellen on 11/08/2013 03:20
SAMPLE PHASE SEPARATION = SAMPLE IS BIPHASIC(AQ/LIQUID). AS PER MARK'S CONVERSATION W/ MIKE Z., ANALYZE LIQUID PHASE ONLY.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **11090** CLIENT: CAI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	Biphasic - sac Rob B.
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 11/6/13

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ✓ Date/ Time: 11/8/13 1500 NO ☐
PROJECT CONTACT: Mike Zukauskas
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS: Run liquid phase only

VERIFIED/TAKEN BY: INITIAL [ ] DATE 11.8.13

Laboratory Custody Chronicle

IAL Case No.

E13-11090

Client GEI Consultants Inc. - Montclair

Project NATIONAL GRID WC

Received On 11/ 6/2013@16:25

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	11090-001	Liquid	11/13/13	Archimede	11/13/13	Nicole

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

ESA_Change Order 2014-02

Unit pricing and T&M Rates for National Grid NYC MGP sites

11/1/2014 and added line on 12/12/14

Increase all labor rates and vehicle charges by 10%
Increase all remaining contract line items by 7.5%
Increase Clean Water by % indicated

TASK	Estimated Quantity	UNIT OF MEASURE	Change Order 2014-01 Unit Price	Change Order 2014-02 Unit Price	
Deliver 20 cu yd lined roll off to Staten Island and return to vendor after transported to disposal/recycling facility	3	Each	$575.00	$618.13	
Deliver 20 cu yd lined roll off to Brooklyn or Queens and return to vendor after transported to disposal/recycling facilit	20	Each	$675.00	$725.63	
Pick up & deliver roll off to Clean Earth facilities from Staten Island	3	Each	$1,075.00	$1,155.63	
Pick up & deliver roll off to Clean Earth facilities from Brooklyn or Queens	20	Each	$1,175.00	$1,263.13	
Pick up & deliver roll off to Bayshore Soil Management from Staten Island	3	Each	$650.00	$698.75	
Pick up & deliver roll off to Bayshore Soil Management from Brooklyn or Queens	20	Each	$750.00	$806.25	
Roll off liner	46	Each	$60.00	$64.50	
Roll off rental	1	Day	$20.00	$21.50	
2 cu yd refuse dumpster, including delivery, return, and weekly trash disposal	10	Month	$275.00	$295.63	
Port-A-John – delivery/pick up all locations	1	Each way	$150.00	$161.25	
Port-A-John – basic unit rental	1	Month	$240.00	$258.00	
Construction trailer - delivery/setup/removal all locations (1)	1	Lump sum	$875.00	$940.63	
Construction trailer rental (1)	10	Month	$290.00	$311.75	
5KW generator delivery, set up and break down	5	Each way	$475.00	$510.63	
5KW generator rental for construction trailer temporary lighting power and portable heater	5	Month	$750.00	$806.25	
Deliver/pick up portable air compressor, 185 cfm, 50' air hose – all locations	1	Each way	$325.00	$349.38	
Air compressor rental – daily	1	Day	$175.00	$188.13	
Air compressor rental – weekly	1	Week	$475.00	$510.63	
Air compressor rental – monthly	1	Month	$1,175.00	$1,263.13	
Diesel caddy & spill pallet for generator or air compressor	1	Month	$425.00	$456.88	
Diesel fuel for generator or air compressor – Cost +	500	Galon	15%		
MGP impacted soil disposal from roll offs at Bayshore Soil Management	200	Ton	$58.00	$62.35	
Deliver/pick up 10K or 21K frac tank – Brooklyn, Queens or Staten Island	20	Each way	$585.00	$628.88	
10K frac tank rental	20	Day	$37.00	$39.78	
21K frac tank rental	20	Day	$42.00	$45.15	
T&D of bulk non-haz MGP impacted groundwater from Brooklyn, Queens or SI to Clean Water of Staten Island (2)	50000	Gallon	$0.38	$0.46	20% (not increased in August 2014)
T&D of bulk hazardous groundwater from Clifton MGP site at 40 Willow Ave, Staten Island NY		Gallon	$0.88	$0.95	
Vac Truck wash fee for Clifton MGP site		Each	$450.00	$483.75	
Truck Demurrage Clifton Haz Water Pump Out		Hour	$165.00	$177.38	
Vac truck and driver (non-union) transportation only	200	Hour	$148.00	$159.10	
Vac truck, driver, and one technician (non-union) transportation only	200	Hour	$188.00	$202.10	
Frac tank clean out 10 K or 21K – non intrusive	20	Lump sum	$2,260.00	$2,429.50	
Frac tank clean out 10K or 21K– confined space entry required	20	Lump sum	$3,375.00	$3,628.13	
Supply DOT approved 55 gallon drums	500	Each	$37.00	$39.78	
Delivery of empty drums to Staten Island	50	Lump sum	$175.00	$188.13	
Delivery of empty drums to Brooklyn or Queens	300	Lump sum	$275.00	$295.63	
Drum disposal – 55 gallon DNAPL Coal Tar (hazardous)	15	Each	$325.00	$349.38	
Drum transportation to Clean Earth New Castle or Clean Water SI (truck & driver)	500	Hour	$162.80	$175.01	
Drum transportation to Clean Earth New Castle (truck, driver and one technician)	500	Hour	$206.80	$222.31	
Drum disposal 55 gallon MGP impacted soil at Clean Earth – New Castle	200	Each	$78.00	$83.85	
Drum disposal 55 gallon MGP impacted soil at ESMI – Bayshore Soil Management	300	Each	$94.00	$101.05	
Drum disposal 55 gallon MGP impacted groundwater at Clean Water	500	Each	$71.50	$78.65	Clean Water = +10% (increased in August 2014)
Drum disposal 55 gallon PPE/absorbents/plastic at Bayshore Soil Management	150	Each	N/A	N/A (3)	Clean Water = +10% (increased in August 2014)
On site Project Supervision	80	Hour	$75.00	$82.50	
Project Superintendent	120	Hour	$90.00	$99.00	
Environmental Technician	120	Hour	$48.00	$52.80	
Project Vehicle	30	Day	$125.00	$137.50	
Additional materials & supplies requested			Cost + 15%		
Drum disposal 55 gallon MGP impacted PPE/Plastic at Clean Water - $77.00/each	1	ea	$77.00	$82.78	
Drum disposal 55 gallon MGP impacted soil at Bayshore Soil Management - $94.00/each	1	ea	$94.00	$101.05	
Drum Disposal non-haz PPE from Williamsburg MPG site - $125.00/each	1	ea	$125.00	$134.38	
Drum Disposal of Hazardous DNAPL 55 gallon drum from Williamsburg MGP site = $325.00/each	1	ea	$325.00	$349.38	

(1) 8'x28' trailer with stairs

(2) 5,000 gallon minimum truck load. If less than 5,000 gallon truck load then $696.00 trans and $0.34/gallon disposal

Clean Water = +20% (not increased in August 2014)

(3) Bayshore is not accepting drummed PPE material at this time due to transfer station closed for repairs

Task	Volume	Unit	Change Order 2014-01 Unit Price	Change Order 2014-02 Unit Price	
Bulk DNAPL disposal - **non haz**	500	gallon	$2.00	$2.15	
Bulk DNAPL transportation	1	Each	$1,500.00	$1,612.50	
Drummed DNAPL disposal - **non-haz**	40	Drum	$225.00	$241.88	
Drummed DNAPL transportation	one to ten	Batch	$950.00	$1,021.25	
Drummed DNAPL transportation - "Second stop/same day"	one to ten	Batch		$475.00	added 12/12/14
Drummed DNAPL transportation	eleven to forty	Batch	$1,800.00	$1,935.00	
Project Manager	4	Hour	$75.00	$82.50	
Project Vehicle	1	Day	$125.00	$137.50	
Bob cat with fork attachment and union operator	1	Day	$1,850.00	$2,035.00	
Incineration	Yes bulk and drums				
364 Permitted Transporter	Yes				
Drummed DNAPL PPE - **non haz**	1	Drum	$125.00	$134.38	
Drummed DNAPL Plastic Tubing - **non haz**	1	Drum	$125.00	$134.38	

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT**
IAL Case Number: **E12-02579**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E12-02579

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 3/14/2012@18:05

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02579-001	GPEC-WC031412	n/a	3/14/2012@10:45	Aqueous	2
02579-002	GPEC-MP1 (0-0.5)	0/0.5	3/14/2012@13:40	Soil	2
02579-003	GPEC-MP2 (0.5-1)	0.5/1	3/14/2012@13:50	Soil	2
02579-004	GPEC-MP3 (0.5-1)	0.5/1	3/14/2012@14:00	Soil	2
02579-005	GPEC-MP4 COMP	n/a	3/14/2012@14:10	Soil	1

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INTEGRATED ANALYTICAL LABORATORIES, LLC

CASE NARRATIVE

IAL SDG No.: E12-02579

Sample Receive Date: 3/14/12

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at

Client ID	Sample Date	IAL Lab No.	Analysis/Method
GPEC-WC031412	3/14/2012	02579-001	PCB(8082)
GPEC-MP1 (0-0.5)	3/14/2012	02579-002	DRO(8015B), S(ASTM D129)
GPEC-MP2 (0.5-1)	3/14/2012	02579-003	DRO(8015B), S(ASTM D129)
GPEC-MP3 (0.5-1)	3/14/2012	02579-004	DRO(8015B), S(ASTM D129)
GPEC-MP4 COMP	3/14/2012	02579-005	TCLP METALS(1311/6020/7470A)

Except as noted below, all method specific requirements and QA/QC criteria were met.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceed the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample.

LCSD Laboratory Control Sample Duplicate.

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants Inc	REPORT TO:	Jaimie Warso
Address:	1 Greenwood Ave Ste 210	Address:	datagroup@
	Montclair NJ 07042		geiconsultants.com
Telephone #:	973 873 7110	Attn:	Jaimie Warso
Fax #:	973 509 9625	FAX #	
Project Manager:	M Zukauskas	INVOICE TO:	Sandra St. Hilaire
EMAIL Address:	mzukauskas@gei.	Address:	400 Unicorn Park
Sampler:	Matthew Sweet		Dr Woburn MA
Project Name:	Greenpoint	Attn:	Sandra St. Hilaire
Project Location (State):	NY	PO #	093260-1-1104
Bottle Order #:			
Quote # :			

Turnaround time starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)

NJ EPH - C40 (5 day TAT)

DRO-8015 (3-5 day TAT) QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** 1 wk**

Other** (specify):

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%....
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
Results Only	NJ SRP format
Reduced	NYSDEC
Regulatory - 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix

DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	PCB 8082	TPH-DRO	Tot Sulfur	TCLP metals	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPEC-WC031412	NA	3/14/12	10:45	Aqu	2	1	X									X		
GPEC-MP1(0-0.5)	0-0.5	3/14/12	13:40	S	2	3		X	X							X		
GPEC-MP2(0.5-1)	0.5-1	3/14/12	13:50	S	2	3		X	X							X		
GPEC-MP3(0.5-1)	0.5-1	3/14/12	14:00	S	2	4		X	X							X		
GPEC-MP4Comp	NA	3/14/12	14:10	S	1	5				X						X		

Known Hazard: Yes or (No) Describe:

Conc. Expected: (Low) Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		3/14/12	1720	Received by:	3/14/12	17:20
Relinquished by:		3/14/12	18:05	Received by:	3/14/12	1805
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 0279

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2012 REV COC

01/2012 rev

PROJECT INFORMATION

** RUSH **

E12-02579

Case No. E12-02579 **Project** GREENPOINT

Customer	GEI Consultants Inc. - Montclair	**P.O. #**	093260-1-1104
Contact	Michael Zukauskas	**Received**	3/14/2012 18:05
EMail	mzukauskas@geiconsultants.com ☑ EMail EDDs	**Verbal Due**	3/19/2012
	datagroup@geiconsultants.com;		
Phone	(973) 575-7110 **Fax** 1(973) 509-9625	**Report Due**	4/5/2012
	msweet@geiconsultants.com;		
	rlinbelkin@jalonline.com		
Report To		**Bill To**	
1 Greenwood Ave.		1 Greenwood Ave.	
Suite 210		Suite 210	
Montclair, NJ 07042		Montclair, NJ 07042	
Attn: Michael Zukauskas		Attn: Michael Zukauskas	

Report Format Regulatory

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional VOA

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
02579-001	GPEC-WC031412	n/a	3/14/2012@10:45	Aqueous	ug/L	2
02579-002	GPEC-MP1 (0-0.5)	0 / 0.5	3/14/2012@13:40	Soil	mg/Kg	2
02579-003	GPEC-MP2 (0.5-1)	0.5 / 1	3/14/2012@13:50	Soil	mg/Kg	2
02579-004	GPEC-MP3 (0.5-1)	0.5 / 1	3/14/2012@14:00	Soil	mg/Kg	2
02579-005	GPEC-MP4 COMP	n/a	3/14/2012@14:10	Soil	mg/Kg	1

Sample #	Tests	Status	QA Method
001	PCB	Run	8082
002	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
003	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
004	TPH-DRO-24 HR	In Process	8015B M
"	Sulfur as S	Run	D129
005	TCLP Metals	Run	1311/6020/7470A

03/15/2012 09:59 by Mark - NOTE 1

FOR WASTE CLASS, SIGNATURE PAGE NEEDED.

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March 16, 2012

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 12** **02579** CLIENT: GEL

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 3/14/12

CORRECTIVE ACTION REQUIRED: **YES** (SEE BELOW) **NO**

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES Date/ Time: NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 3/15/12

Laboratory Custody Chronicle

IAL Case No.

E12-02579

Client GEI Consultants Inc. - Montclair

Project GREENPOINT

Received On 3/14/2012@18:05

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PCB	02579-001	Aqueous	3/15/12	Archimede	3/16/12	Julia
TPH-DRO-24 HR	-002	Soil	3/15/12	Archimede	3/16/12	Shannon
"	-003	"	3/15/12	Archimede	3/16/12	Shannon
"	-004	"	3/15/12	Archimede	3/16/12	Shannon

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCLP Metals	-005	Soil	3/16/12	Lisa	3/16/12	Wei

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-002	Soil	n/a	n/a	3/16/12	Robert
"	-003	"	n/a	n/a	3/16/12	Robert
"	-004	"	n/a	n/a	3/16/12	Robert

E12-02579 0008

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RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E12-02579

	Lab ID:	02579-001			02579-002			02579-003			02579-004			02579-005		
	Client ID:	GPEC-WC031412			GPEC-MP1 (0-0.5)			GPEC-MP2 (0.5-1)			GPEC-MP3 (0.5-1)			GPEC-MP4 COMP		
	Depth:				0/0.5			0.5/1			0.5/1					
	Matrix:	Aqueous			Soil			Soil			Soil			Soil		
	TCLP Matrix:													TCLP Leachate		
	Sampled Date	3/14/12			3/14/12			3/14/12			3/14/12			3/14/12		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(ug/L-ppb)*														
Aroclor-1016		ND		0.020												
Aroclor-1221		ND		0.020												
Aroclor-1232		ND		0.020												
Aroclor-1242		ND		0.020												
Aroclor-1248		ND		0.020												
Aroclor-1254		ND		0.020												
Aroclor-1260		ND		0.020												
PCBs		ND		0.020												
Hydrocarbons (Units)					*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*			*(mg/Kg-ppm)*		
TPH-DRO					72.5	J	61.4	143		64.7	124		61.0	~		~
TCLP Metals (Units)					*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*			*(mg/L-ppm)*		
TCLP Arsenic					~		~	~		~	~		~	ND		0.100
TCLP Barium					~		~	~		~	~		~	1.28	J	0.500
TCLP Cadmium					~		~	~		~	~		~	ND		0.025
TCLP Chromium					~		~	~		~	~		~	ND		0.100
TCLP Lead					~		~	~		~	~		~	ND		0.050
TCLP Mercury					~		~	~		~	~		~	ND		0.0003
TCLP Selenium					~		~	~		~	~		~	ND		0.200
TCLP Silver					~		~	~		~	~		~	ND		0.025
General Analytical (Units)																
Sulfur as S(mg/Kg-ppm)					ND		812	ND		820	ND		804	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D.
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: 031512-10

Lab ID: 02579-001
Client ID: GPEC-WC031
Date Received: 03/14/2012
Date Extracted: 03/15/2012
Date Analyzed: 03/16/2012
Data file: Y3583.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
PCBs	ND		0.050	0.020

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-002	GC Column:	DB-5
Client ID:	GPEC-MP1 (0-0.5)	Sample wt/vol:	10.50g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	7.00
Data File:	Q9973.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	72.5	J	76.8	61.4

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-003	GC Column:	DB-5
Client ID:	GPEC-MP2 (0.5-1)	Sample wt/vol:	10.02g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	7.50
Data File:	Q9974.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	143		80.9	64.7

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	02579-004	GC Column:	DB-5
Client ID:	GPEC-MP3 (0.5-1)	Sample wt/vol:	10.55g
Date Received:	03/14/2012	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	%Moisture:	6.70
Data File:	Q9975.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	124		76.2	61.0

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID: E12-02579-005
Client ID: GPEC-MP4 COMP
Date Received: 3/14/2012
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 117

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Arsenic	ND		1	0.100	0.100	03/16/12	1311/6020
TCLP Barium	1.28	J	1	2.00	0.500	03/16/12	1311/6020
TCLP Cadmium	ND		1	0.100	0.025	03/16/12	1311/6020
TCLP Chromium	ND		1	0.400	0.100	03/16/12	1311/6020
TCLP Lead	ND		1	0.100	0.050	03/16/12	1311/6020
TCLP Mercury	ND		1	0.0005	0.0003	03/16/12	1311/7471A
TCLP Selenium	ND		1	0.400	0.200	03/16/12	1311/6020
TCLP Silver	ND		1	0.100	0.025	03/16/12	1311/6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREENPOINT

Date Received: 03/14/12 18:05

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	RL	% Solid	Date Analyzed
E12-02579-002	GPEC-MP1 (0-0.5)	ND		1	Soil-mg/Kg	812	974	93.0	03/16/12 10:00
E12-02579-003	GPEC-MP2 (0.5-1)	ND		1	Soil-mg/Kg	820	984	92.5	03/16/12 10:00
E12-02579-004	GPEC-MP3 (0.5-1)	ND		1	Soil-mg/Kg	804	964	93.3	03/16/12 10:00

J = The concentration was detected at a value below the RL and above MDL

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/16/2012

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	0315-BLK10	AQUEOUS	72		62		82		74	
AUD-V12-10	02492-001	AQUEOUS	37		44		48		52	
AUD-V12-10	02492-002	AQUEOUS	51		61		65		71	
AUD-V12-10	02492-003	AQUEOUS	43		60		64		72	
AUD-V12-10	02492-004	AQUEOUS	48		62		61		71	
AUD-V12-10	02492-005	AQUEOUS	49		61		64		72	
AUD-V12-10	02492-006	AQUEOUS	35		58		48		72	
PLA-V12-10	02494-001	AQUEOUS	47		63		65		78	
GPEC-WC031	02579-001	AQUEOUS	56		65		70		76	
PCB	02579-001-MS10	AQUEOUS	60		66		70		77	
PCB	02579-001-MSD10	AQUEOUS	63		69		75		80	
PCB	PBA0315-MS10	AQUEOUS	73		62		82		74	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	21-163	11-163
DCB = Decachlorobiphenyl	30-172	13-170

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBA0315-MS10

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	355.7	71	70 - 130
Aroclor-1260	500.0	0.0	400.3	80	70 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

AQUEOUS PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 02579-001-MSD10

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	402.6	81	18 - 174
Aroclor-1260	500.0	0.0	444.6	89	14 - 186

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	401.8	80	1	26	18 - 174
Aroclor-1260	0.0	470.6	94	5	29	14 - 186

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: Y3574.D

Instrument ID: GC-Y

Date Extracted: 03/15/2012

Matrix: AQUEOUS

Date Analyzed: 03/16/2012

Time Analyzed: 18:35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AUD-V12-10	02492-001	03/16/2012	18:52
AUD-V12-10	02492-002	03/16/2012	19:09
AUD-V12-10	02492-003	03/16/2012	19:26
AUD-V12-10	02492-004	03/16/2012	19:43
AUD-V12-10	02492-005	03/16/2012	20:00
AUD-V12-10	02492-006	03/16/2012	20:18
PLA-V12-10	02494-001	03/16/2012	20:52
GPEC-WC031	02579-001	03/16/2012	21:09
PCB	02579-001-MS10	03/16/2012	21:26
PCB	02579-001-MSD10	03/16/2012	21:43
PCB	PBA0315-MS10	03/16/2012	22:00

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.78 **DCB 1** 12.09 **TCMX 2** 2.68 **DCB 2** 12.08

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	0315-BLK10	03/16/2012	18:35	2.78		12.09		2.68		12.08	
AUD-V12-10	02492-001	03/16/2012	18:52	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-002	03/16/2012	19:09	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-003	03/16/2012	19:26	2.78		12.09		2.68		12.08	
AUD-V12-10	02492-004	03/16/2012	19:43	2.79		12.09		2.68		12.08	
AUD-V12-10	02492-005	03/16/2012	20:00	2.79		12.09		2.68		12.07	
AUD-V12-10	02492-006	03/16/2012	20:18	2.79		12.09		2.68		12.07	
PLA-V12-10	02494-001	03/16/2012	20:52	2.79		12.09		2.68		12.08	
GPEC-WC031	02579-001	03/16/2012	21:09	2.79		12.09		2.68		12.08	
PCB	02579-001-MS10	03/16/2012	21:26	2.79		12.09		2.68		12.08	
PCB	02579-001-MSD10	03/16/2012	21:43	2.79		12.09		2.68		12.08	
PCB	PBA0315-MS10	03/16/2012	22:00	2.79		12.09		2.68		12.08	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3583.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:09
Operator : YG
Sample : GPEC-WC031,02579-001,A,1000ml,100,03/15/12,1
Misc : 031512-10,03/14/12,03/14/12,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	9288.2E6	3964.1E6	111.022	139.184 #
Spiked Amount 200.000			Recovery	=	55.51%	69.59%
2) S DCB	12.09	12.08	2542.7E6	1277.2E6	129.720m	152.480m
Spiked Amount 200.000			Recovery	=	64.86%	76.24%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

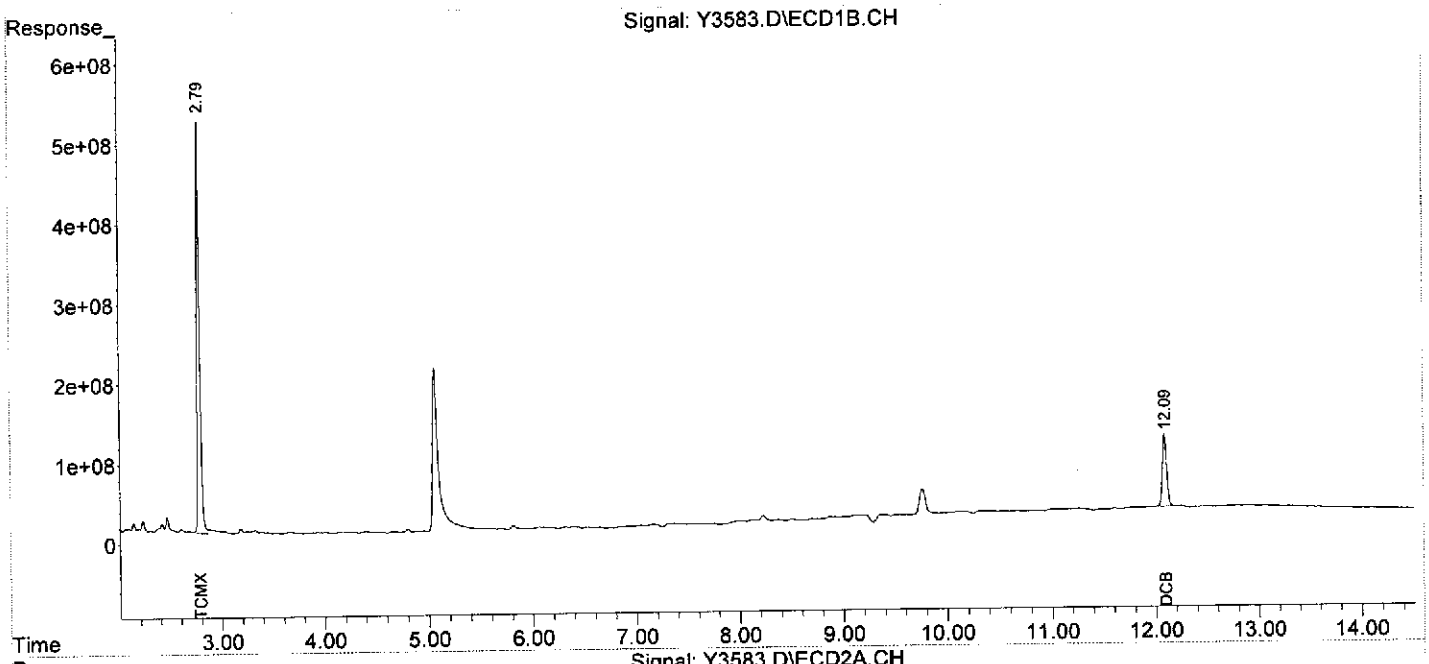
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

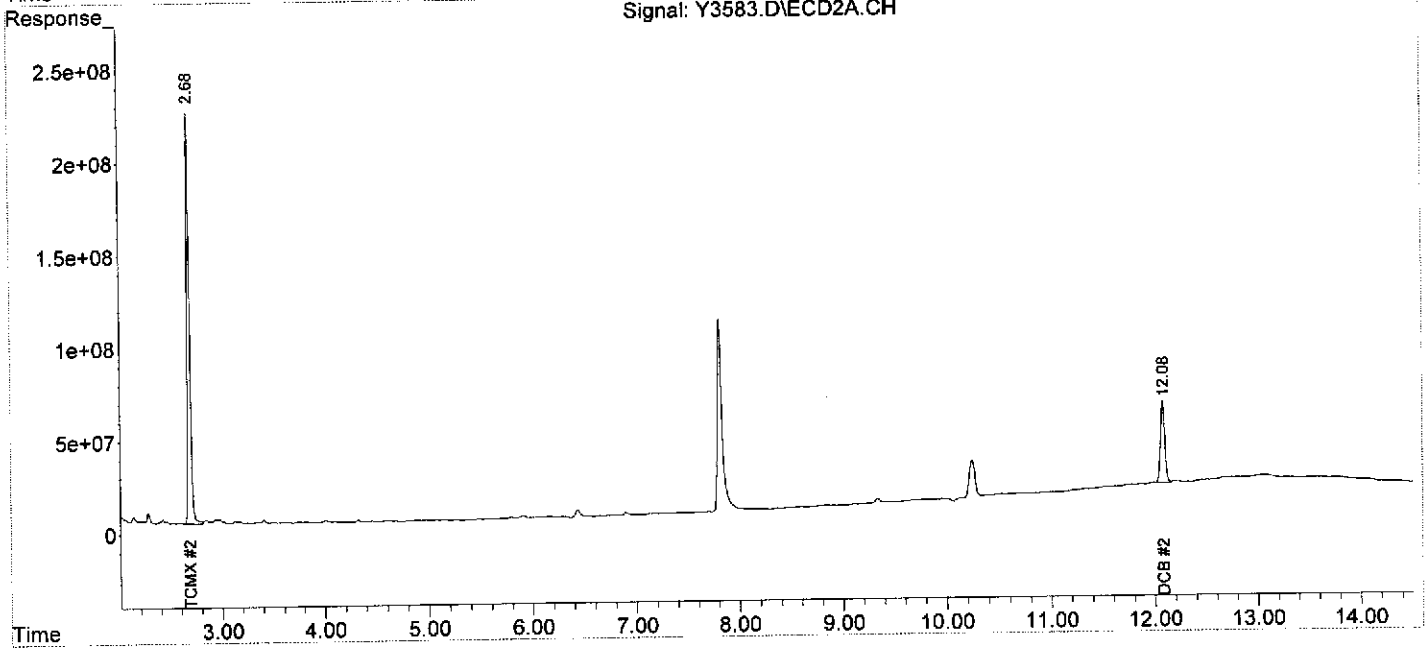
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3583.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:09
Operator : YG
Sample : GPEC-WC031,02579-001,A,1000ml,100,03/15/12,1
Misc : 031512-10,03/14/12,03/14/12,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB STANDARDS

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.25	3.25	3.25	3.25	3.25	3.25	3.18	3.32
Aroclor-1016 {2}	4.08	4.08	4.08	4.08	4.08	4.08	4.01	4.15
Aroclor-1016 {3}	4.64	4.64	4.64	4.64	4.63	4.64	4.57	4.71
Aroclor-1016 {4}	5.14	5.14	5.14	5.14	5.14	5.14	5.07	5.21
Aroclor-1016 {5}	5.54	5.54	5.54	5.54	5.54	5.54	5.47	5.61
Aroclor-1221			2.15				2.08	2.22
Aroclor-1221 {2}			3.05				2.98	3.12
Aroclor-1221 {3}			3.17				3.10	3.24
Aroclor-1221 {4}			3.25				3.18	3.32
Aroclor-1221 {5}			3.84				3.77	3.91
Aroclor-1232			3.25				3.18	3.32
Aroclor-1232 {2}			4.08				4.01	4.15
Aroclor-1232 {3}			4.75				4.68	4.82
Aroclor-1232 {4}			5.34				5.27	5.41
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.08				4.01	4.15
Aroclor-1242 {2}			5.02				4.95	5.09
Aroclor-1242 {3}			5.34				5.27	5.41
Aroclor-1242 {4}			6.04				5.97	6.11
Aroclor-1242 {5}			6.32				6.25	6.39
Aroclor-1248			4.48				4.40	4.56
Aroclor-1248 {2}			5.02				4.94	5.10
Aroclor-1248 {3}			5.34				5.26	5.42
Aroclor-1248 {4}			6.04				5.96	6.12
Aroclor-1248 {5}			6.32				6.24	6.40
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.87				6.79	6.95
Aroclor-1254 {3}			7.04				6.95	7.13
Aroclor-1254 {4}			7.45				7.36	7.54
Aroclor-1254 {5}			8.32				8.23	8.41
Aroclor-1260	8.32	8.32	8.32	8.32	8.32	8.32	7.42	9.22
Aroclor-1260 {2}	8.99	8.99	8.99	8.99	8.99	8.99	8.09	9.89
Aroclor-1260 {3}	9.47	9.47	9.47	9.47	9.46	9.47	8.57	10.37
Aroclor-1260 {4}	9.96	9.95	9.95	9.95	9.95	9.95	9.05	10.85
Aroclor-1260 {5}	11.01	11.01	11.01	11.01	11.00	11.01	10.11	11.91

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1923055	1588951	1545171	1647296	1601872	1661269	9.08
Aroclor-1016 {2}	2148469	2063087	2014083	2259535	2195201	2136075	4.63
Aroclor-1016 {3}	3610168	3012437	2908545	3153563	3037498	3144442	8.73
Aroclor-1016 {4}	1579013	1589399	1451433	1542951	1468812	1526322	4.14
Aroclor-1016 {5}	2448821	2477814	2402565	2627421	2549604	2501245	3.54
Aroclor-1221			668182				
Aroclor-1221 {2}			1109230				
Aroclor-1221 {3}			700918				
Aroclor-1221 {4}			2618404				
Aroclor-1221 {5}			554426				
Aroclor-1232			1569187				
Aroclor-1232 {2}			838727				
Aroclor-1232 {3}			781659				
Aroclor-1232 {4}			818994				
Aroclor-1232 {5}			1142427				
Aroclor-1242			1662968				
Aroclor-1242 {2}			1079324				
Aroclor-1242 {3}			1488301				
Aroclor-1242 {4}			2517459				
Aroclor-1242 {5}			2226421				
Aroclor-1248			3692294				
Aroclor-1248 {2}			2155329				
Aroclor-1248 {3}			2602542				
Aroclor-1248 {4}			5008363				
Aroclor-1248 {5}			3443426				
Aroclor-1254			5056472				
Aroclor-1254 {2}			3183448				
Aroclor-1254 {3}			6441190				
Aroclor-1254 {4}			2393713				
Aroclor-1254 {5}			6390077				
Aroclor-1260	5699087	6218050	6548823	6926600	7034669	6485446	8.41
Aroclor-1260 {2}	2143115	2496994	2407954	2783505	2998589	2566031	12.97
Aroclor-1260 {3}	6469437	7610340	7480141	6983424	8104015	7329471	8.52
Aroclor-1260 {4}	3654089	3954857	3620596	3400682	4047879	3735620	7.05
Aroclor-1260 {5}	1833584	1767360	1669235	1663408	1342234	1655164	11.41
					Average %RSD		7.85

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (2nd): RTX-CLP2

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.51	3.51	3.51	3.51	3.51	3.51	3.44	3.58
Aroclor-1016 {2}	4.08	4.08	4.08	4.08	4.08	4.08	4.01	4.15
Aroclor-1016 {3}	4.81	4.81	4.81	4.81	4.81	4.81	4.74	4.88
Aroclor-1016 {4}	5.01	5.01	5.01	5.01	5.01	5.01	4.94	5.08
Aroclor-1016 {5}	5.18	5.18	5.18	5.18	5.18	5.18	5.11	5.25
Aroclor-1221			2.28				2.21	2.35
Aroclor-1221 {2}			3.21				3.14	3.28
Aroclor-1221 {3}			3.43				3.36	3.50
Aroclor-1221 {4}			3.52				3.45	3.59
Aroclor-1221 {5}			4.39				4.32	4.46
Aroclor-1232			3.51				3.44	3.58
Aroclor-1232 {2}			4.45				4.38	4.52
Aroclor-1232 {3}			5.01				4.94	5.08
Aroclor-1232 {4}			5.18				5.11	5.25
Aroclor-1232 {5}			5.76				5.69	5.83
Aroclor-1242			4.45				4.38	4.52
Aroclor-1242 {2}			5.18				5.11	5.25
Aroclor-1242 {3}			5.76				5.69	5.83
Aroclor-1242 {4}			5.92				5.85	5.99
Aroclor-1242 {5}			6.46				6.39	6.53
Aroclor-1248			4.81				4.73	4.89
Aroclor-1248 {2}			5.37				5.29	5.45
Aroclor-1248 {3}			5.76				5.68	5.84
Aroclor-1248 {4}			5.92				5.84	6.00
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.75				6.67	6.83
Aroclor-1254 {2}			7.32				7.24	7.40
Aroclor-1254 {3}			7.94				7.85	8.03
Aroclor-1254 {4}			8.16				8.07	8.25
Aroclor-1254 {5}			8.74				8.65	8.83
Aroclor-1260	7.75	7.75	7.75	7.75	7.75	7.75	6.85	8.65
Aroclor-1260 {2}	8.16	8.16	8.16	8.16	8.15	8.16	7.26	9.06
Aroclor-1260 {3}	9.33	9.33	9.33	9.33	9.33	9.33	8.43	10.23
Aroclor-1260 {4}	9.83	9.84	9.83	9.83	9.83	9.83	8.93	10.73
Aroclor-1260 {5}	10.42	10.42	10.42	10.42	10.41	10.42	9.52	11.32

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (2nd): RTX-CLP2

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	525722	571605	484964	507835	485442	515113	6.96
Aroclor-1016 {2}	1114025	1148448	970829	1019759	973940	1045400	7.81
Aroclor-1016 {3}	2364110	2430802	2207798	2372886	2274214	2329962	3.79
Aroclor-1016 {4}	1068452	1152594	943375	1023490	962432	1030069	8.21
Aroclor-1016 {5}	783612	853334	736832	795378	758793	785590	5.62
Aroclor-1221			232600				
Aroclor-1221 {2}			341357				
Aroclor-1221 {3}			216723				
Aroclor-1221 {4}			786815				
Aroclor-1221 {5}			30704				
Aroclor-1232			502238				
Aroclor-1232 {2}			190420				
Aroclor-1232 {3}			419922				
Aroclor-1232 {4}			319538				
Aroclor-1232 {5}			447329				
Aroclor-1242			352445				
Aroclor-1242 {2}			604586				
Aroclor-1242 {3}			787031				
Aroclor-1242 {4}			664042				
Aroclor-1242 {5}			1303355				
Aroclor-1248			1214340				
Aroclor-1248 {2}			1873120				
Aroclor-1248 {3}			1339887				
Aroclor-1248 {4}			1229102				
Aroclor-1248 {5}			673200				
Aroclor-1254			1619845				
Aroclor-1254 {2}			1305174				
Aroclor-1254 {3}			1255817				
Aroclor-1254 {4}			926006				
Aroclor-1254 {5}			2152993				
Aroclor-1260	1340720	1425306	1214482	1313943	1255729	1310036	6.19
Aroclor-1260 {2}	1552850	1654199	1412700	1541707	1480407	1528372	5.88
Aroclor-1260 {3}	1244441	1187955	1139814	1256370	1246307	1214977	4.10
Aroclor-1260 {4}	2455592	2548993	2462023	2763305	2735109	2593004	5.69
Aroclor-1260 {5}	1559411	1742021	1804428	1990281	1886029	1796434	9.01
					Average %RSD		6.33

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012

Instrument ID: GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.61				7.71	7.71
Aroclor-1262 {2}			9.47				8.57	8.57
Aroclor-1262 {3}			10.09				9.19	9.19
Aroclor-1262 {4}			10.18				9.18	9.18
Aroclor-1262 {5}			11.01				10.01	10.01
Aroclor-1268			10.10				9.10	9.10
Aroclor-1268 {2}			10.18				9.08	9.08
Aroclor-1268 {3}			10.65				9.55	9.55
Aroclor-1268 {4}			10.78				9.68	9.68
Aroclor-1268 {5}			11.61				10.51	10.51

GC Column (2nd): DB-1701P

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.33				8.43	8.43
Aroclor-1262 {2}			9.83				8.93	8.93
Aroclor-1262 {3}			10.32				9.42	9.42
Aroclor-1262 {4}			10.41				9.41	9.41
Aroclor-1262 {5}			11.01				10.01	10.01
Aroclor-1268			10.32				9.32	9.32
Aroclor-1268 {2}			10.40				9.30	9.30
Aroclor-1268 {3}			10.65				9.55	9.55
Aroclor-1268 {4}			10.79				9.69	9.69
Aroclor-1268 {5}			11.87				10.77	10.77

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/12/2012 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y3421.D Y3420.D Y3419.D Y3418.D Y3417.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5789299				
Aroclor-1262 {2}			11144862				
Aroclor-1262 {3}			3464884				
Aroclor-1262 {4}			4859038				
Aroclor-1262 {5}			3358861				
Aroclor-1268			8946433				
Aroclor-1268 {2}			13676989				
Aroclor-1268 {3}			8598240				
Aroclor-1268 {4}			2670650				
Aroclor-1268 {5}			19995113				

GC Column (2nd): DB-1701P

Data File: Y3421.C Y3420.C Y3419.C Y3418.C Y3417.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1689278				
Aroclor-1262 {2}			3867372				
Aroclor-1262 {3}			1243137				
Aroclor-1262 {4}			2705452				
Aroclor-1262 {5}			446349				
Aroclor-1268			3913692				
Aroclor-1268 {2}			4751027				
Aroclor-1268 {3}			3170423				
Aroclor-1268 {4}			1010255				
Aroclor-1268 {5}			7668000				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.69	59310.4E6	23566.9E6	738.980	871.459
Spiked Amount 200.000			Recovery	=	369.49%	435.73%
2) S DCB	12.09	12.08	14879.1E6	6724.5E6	856.360	898.689
Spiked Amount 200.000			Recovery	=	428.18%	449.34%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	3203.7E6	970.9E6	1928.492	1847.450
4) L2 Aroclor-1016 {2}	4.08	4.08	4390.4E6	1947.9E6	2055.359	1885.805
5) L2 Aroclor-1016 {3}	4.63	4.81	6075.0E6	4548.4E6	2042.689	1973.147
6) L2 Aroclor-1016 {4}	5.14	5.01	2937.6E6	1924.9E6	2011.380	1920.258
7) L2 Aroclor-1016 {5}	5.54	5.18	5099.2E6	1517.6E6	2024.797	1957.359
Sum Aroclor-1016			21706.0E6	10909.6E6	10062.716	9584.019
Average Aroclor-1016					2012.543	1916.804
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	14069.3E6	2511.5E6	2151.221	1917.091
34) L8 Aroclor-1260 {2}	8.99	8.15	5997.2E6	2960.8E6	2277.970	1937.233
35) L8 Aroclor-1260 {3}	9.46	9.33	16208.0E6	2492.6E6	2215.343	2014.621
36) L8 Aroclor-1260 {4}	9.95	9.83	8095.8E6	5470.2E6	2119.157	2162.093
37) L8 Aroclor-1260 {5}	11.00	10.41	2684.5E6	3772.1E6	1636.746	2061.249 #
Sum Aroclor-1260			47054.8E6	17207.2E6	10400.437	10092.288
Average Aroclor-1260					2080.087	2018.458
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

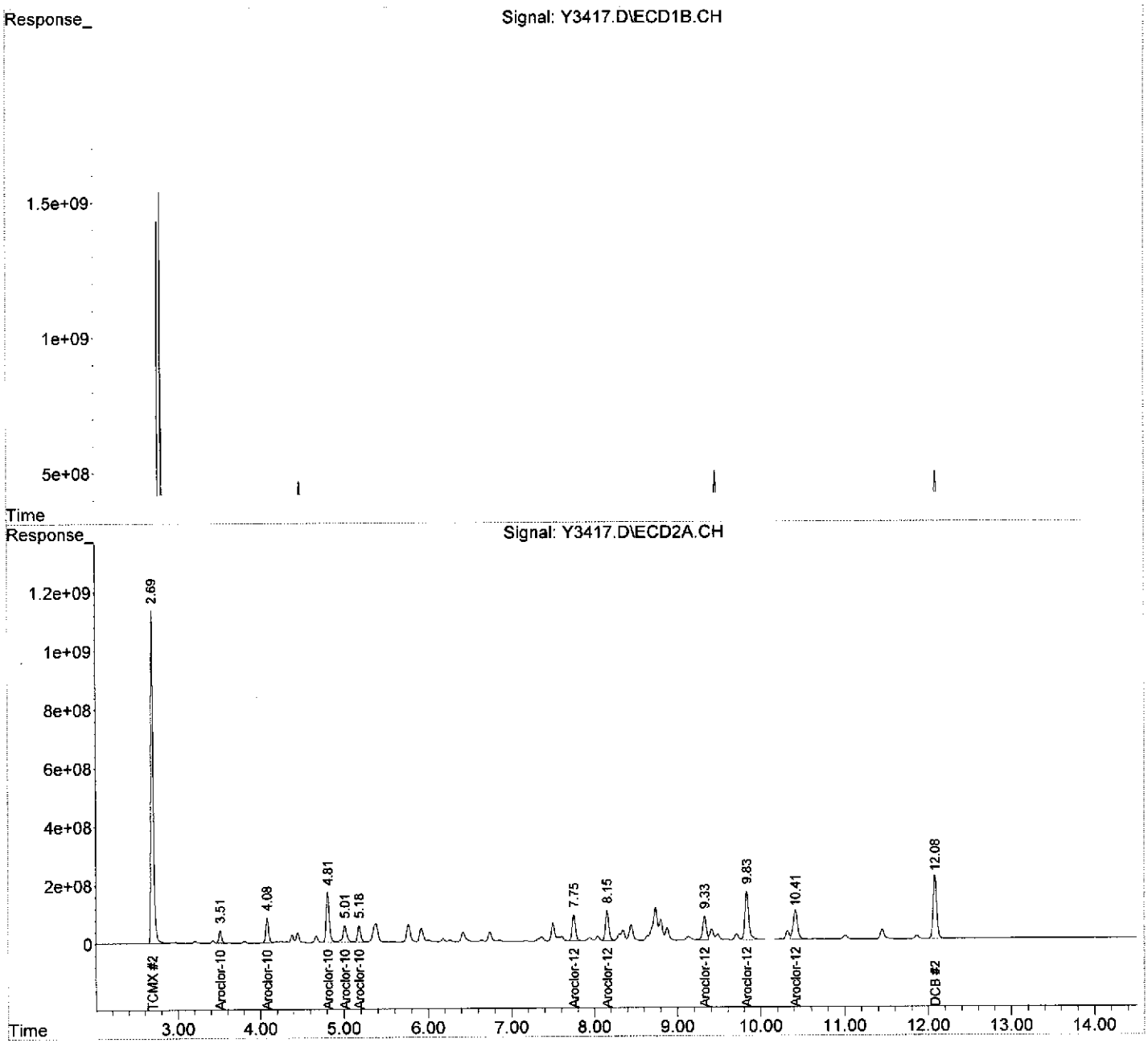
E12-02579 0036

Quantitation Report (QT Reviewed)

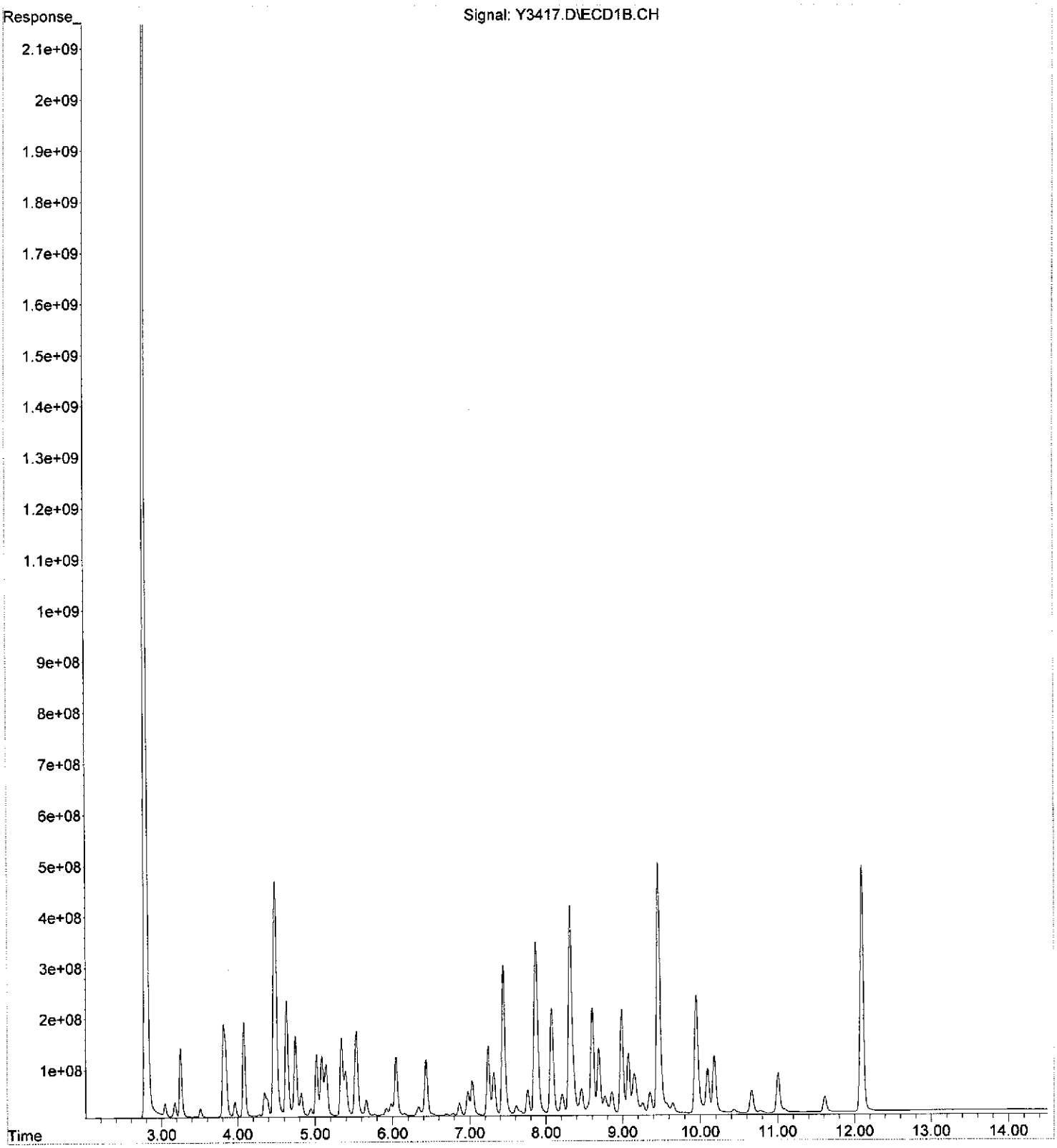
Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3417.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:14
Operator : YG
Sample : 8082_L5_IAS_4219,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:28:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File :C:\MSDCHEM\1\DATA\03-12-12\Y3417.D
Operator : YG
Acquired : 12 Mar 2012 13:14 using AcqMethod YPCB0312.M
Instrument : GC_Y
Sample Name: 8082_L5_IAS_4219,2_PPM
Misc Info : NA,NA,NA,1
Vial Number: 1



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	35459.6E6	11758.3E6	441.811	434.800
Spiked Amount 200.000			Recovery	=	220.91%	217.40%
2) S DCB	12.10	12.08	7427.4E6	3123.4E6	427.481m	417.423m
Spiked Amount 200.000			Recovery	=	213.74%	208.71%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	1647.3E6	507.8E6	991.589	966.335
4) L2 Aroclor-1016 {2}	4.08	4.08	2259.5E6	1019.8E6	1057.798	987.262
5) L2 Aroclor-1016 {3}	4.64	4.81	3153.6E6	2372.9E6	1060.371	1029.378
6) L2 Aroclor-1016 {4}	5.14	5.01	1543.0E6	1023.5E6	1056.453	1021.040
7) L2 Aroclor-1016 {5}	5.54	5.18	2627.4E6	795.4E6	1043.298	1025.866
Sum Aroclor-1016			11230.8E6	5719.3E6	5209.508	5029.881
Average Aroclor-1016					1041.902	1005.976
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	6926.6E6	1313.9E6	1059.087	1002.983
34) L8 Aroclor-1260 {2}	8.99	8.16	2783.5E6	1541.7E6	1057.288	1008.724
35) L8 Aroclor-1260 {3}	9.47	9.33	6983.4E6	1256.4E6	954.507	1015.444
36) L8 Aroclor-1260 {4}	9.95	9.83	3400.7E6	2763.3E6	890.167	1092.191
37) L8 Aroclor-1260 {5}	11.01	10.42	1663.4E6	1990.3E6	1014.195	1087.594
Sum Aroclor-1260			21757.6E6	8865.6E6	4975.244	5206.935
Average Aroclor-1260					995.049	1041.387
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

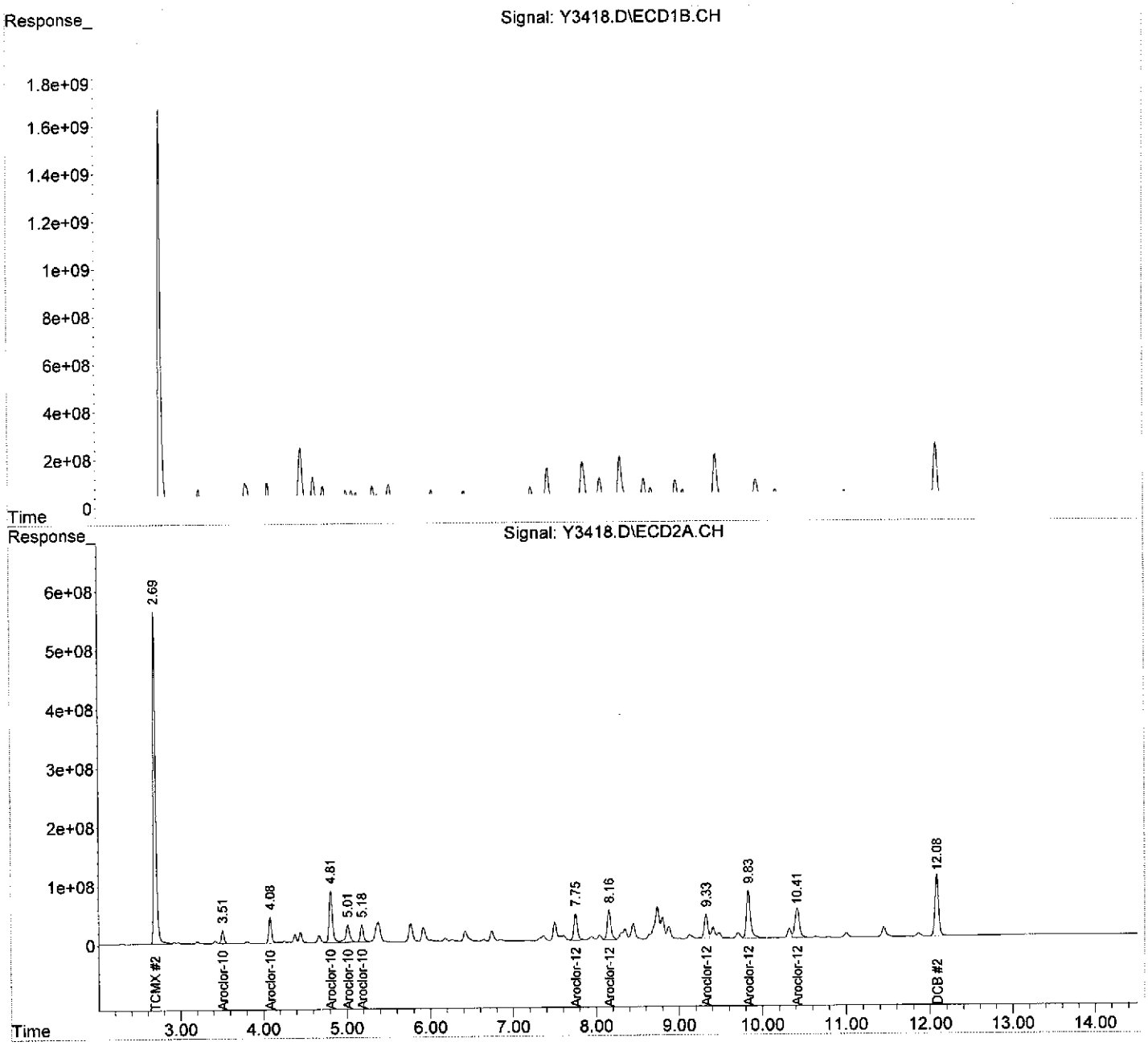
E12-02579 0040

Quantitation Report (QT Reviewed)

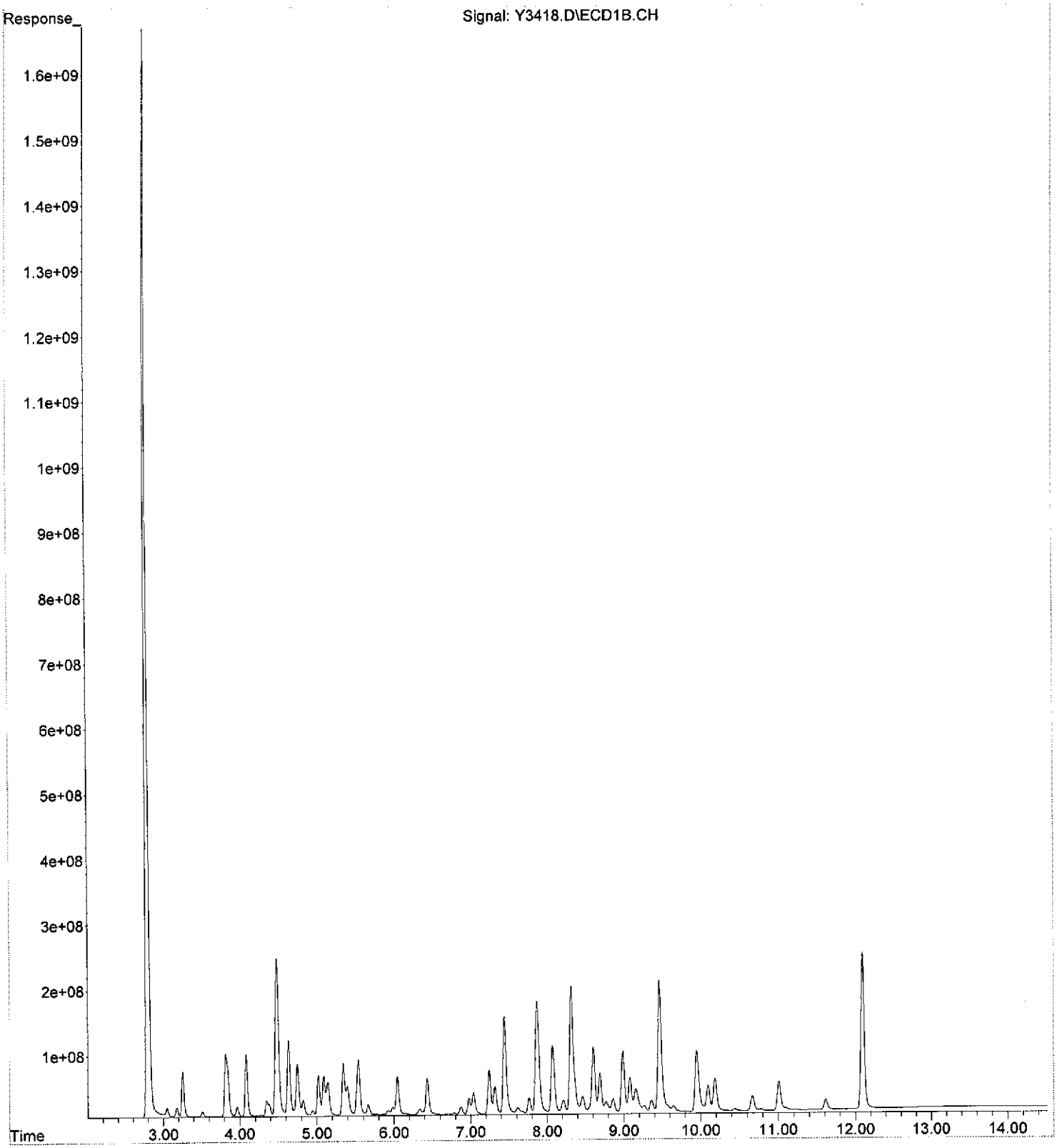
Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3418.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:31
Operator : YG
Sample : 8082_L4_IAS_4220,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:29:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File : C:\MSDCHEM\1\DATA\03-12-12\Y3418.D
Operator : YG
Acquired : 12 Mar 2012 13:31 using AcqMethod YPCB0312.M
Instrument : GC_Y
Sample Name: 8082_L4_IAS_4220,1_PPM
Misc Info : NA,NA,NA,1
Vial Number: 2



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	17001.0E6	5422.0E6	211.824	200.495
Spiked Amount 200.000			Recovery	=	105.91%	100.25%
2) S DCB	12.09	12.08	2924.6E6	1402.2E6	168.324m	187.400m
Spiked Amount 200.000			Recovery	=	84.16%	93.70%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	772.6E6	242.5E6	465.057	461.407
4) L2 Aroclor-1016 {2}	4.08	4.08	1007.0E6	485.4E6	471.445	469.946
5) L2 Aroclor-1016 {3}	4.64	4.81	1454.3E6	1103.9E6	488.992	478.881
6) L2 Aroclor-1016 {4}	5.14	5.01	725.7E6	471.7E6	496.895	470.559
7) L2 Aroclor-1016 {5}	5.54	5.18	1201.3E6	368.4E6	477.006	475.177
Sum Aroclor-1016			5160.9E6	2671.9E6	2399.396	2355.970
Average Aroclor-1016					479.879	471.194
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	3274.4E6	607.2E6	500.662	463.530
34) L8 Aroclor-1260 {2}	8.99	8.16	1204.0E6	706.3E6	457.319	462.158
35) L8 Aroclor-1260 {3}	9.47	9.33	3740.1E6	569.9E6	511.200	460.620
36) L8 Aroclor-1260 {4}	9.95	9.83	1810.3E6	1231.0E6	473.866	486.555
37) L8 Aroclor-1260 {5}	11.01	10.42	834.6E6	902.2E6	508.874	493.017
Sum Aroclor-1260			10863.4E6	4016.7E6	2451.921	2365.880
Average Aroclor-1260					490.384	473.176
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

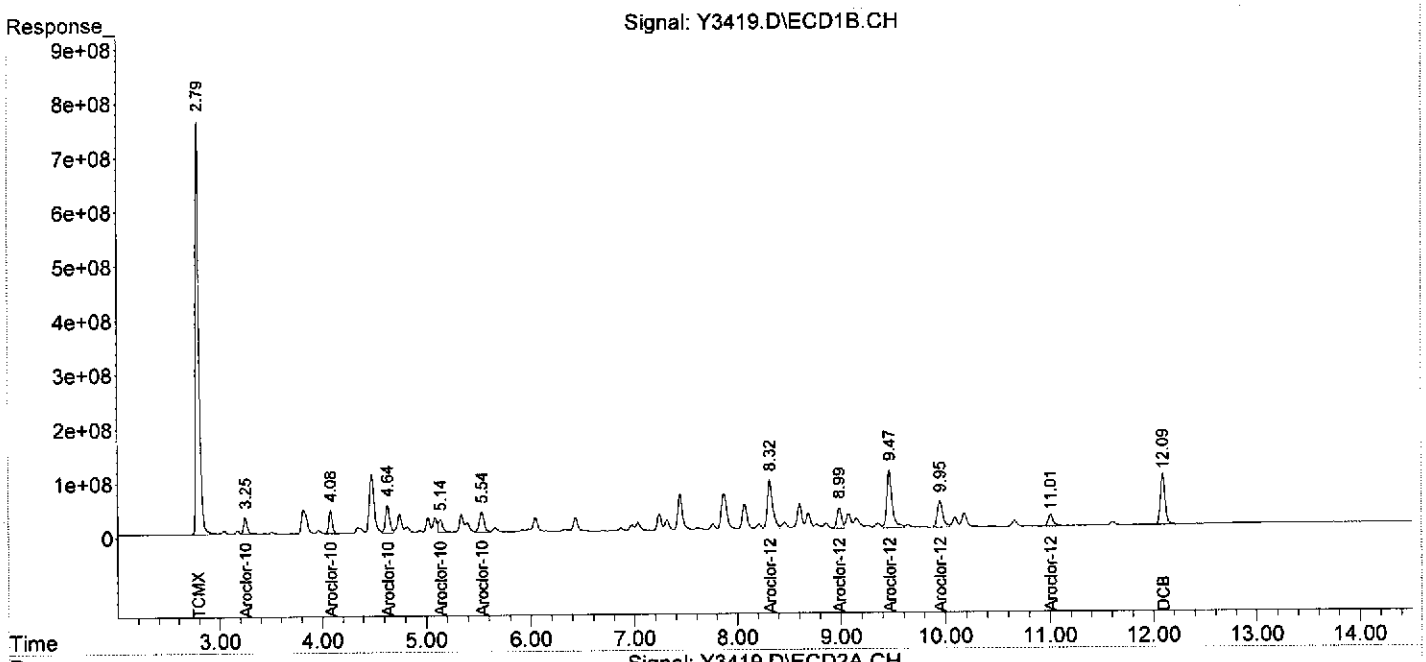
E12-02579 0044

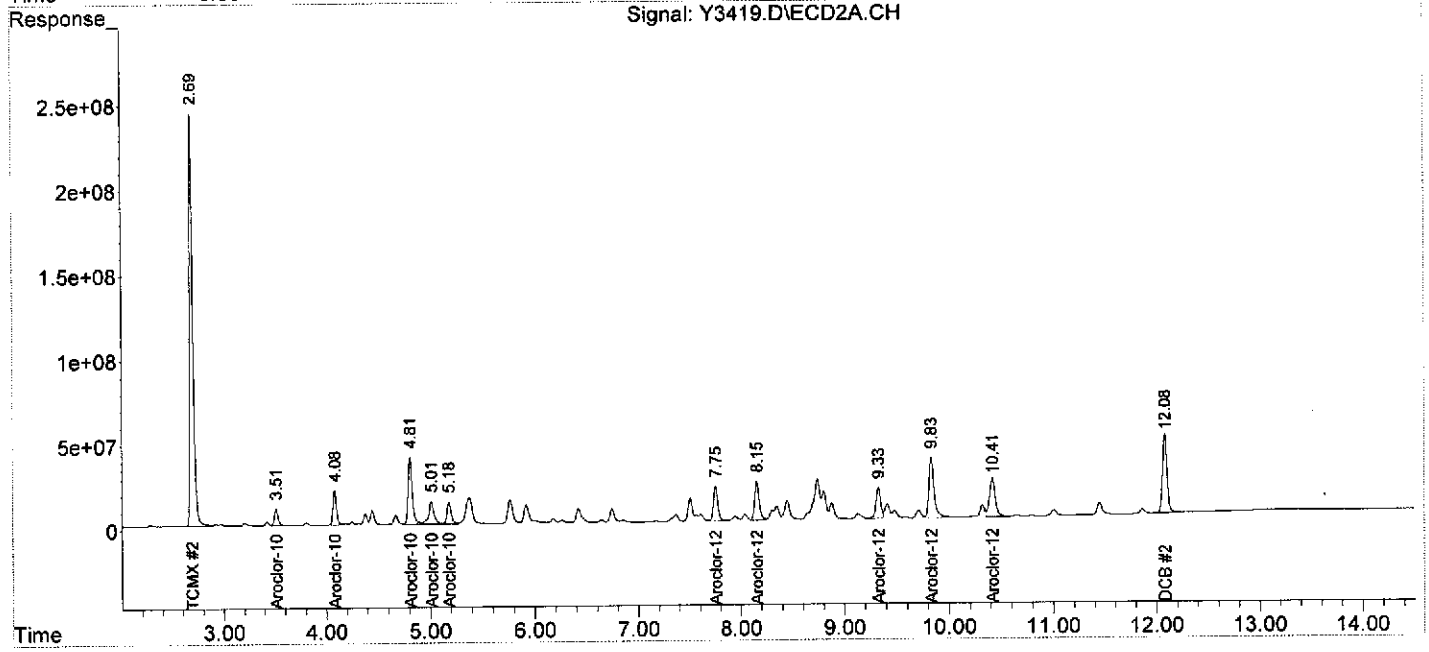
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 13:48
Operator : YG
Sample : 8082_L3_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:30:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	1669.2E6	526.4E6	20.797	19.467
Spiked Amount 200.000			Recovery =		10.40%	9.73%
2) S DCB	12.09	12.08	350.2E6	150.5E6	20.154m	20.109m
Spiked Amount 200.000			Recovery =		10.08%	10.05%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	79447555	28580245	47.823	54.384
4) L2 Aroclor-1016 {2}	4.08	4.08	103.2E6	57422409	48.292	55.593
5) L2 Aroclor-1016 {3}	4.64	4.81	150.6E6	121.5E6	50.646	52.725
6) L2 Aroclor-1016 {4}	5.14	5.01	79469927	57629707	54.413	57.492
7) L2 Aroclor-1016 {5}	5.54	5.18	123.9E6	42666717	49.195	55.031
Sum Aroclor-1016			536.6E6	307.8E6	250.368	275.224
Average Aroclor-1016					50.074	55.045
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	310.9E6	71265277	47.537	54.399
34) L8 Aroclor-1260 {2}	8.99	8.16	124.8E6	82709955	47.423	54.116
35) L8 Aroclor-1260 {3}	9.47	9.33	380.5E6	59397758	52.010	48.007m
36) L8 Aroclor-1260 {4}	9.95	9.84	197.7E6	127.4E6	51.761	50.374m
37) L8 Aroclor-1260 {5}	11.01	10.42	88368009	87101030	53.879m	47.597m
Sum Aroclor-1260			1102.4E6	427.9E6	252.610	254.494
Average Aroclor-1260					50.522	50.899
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

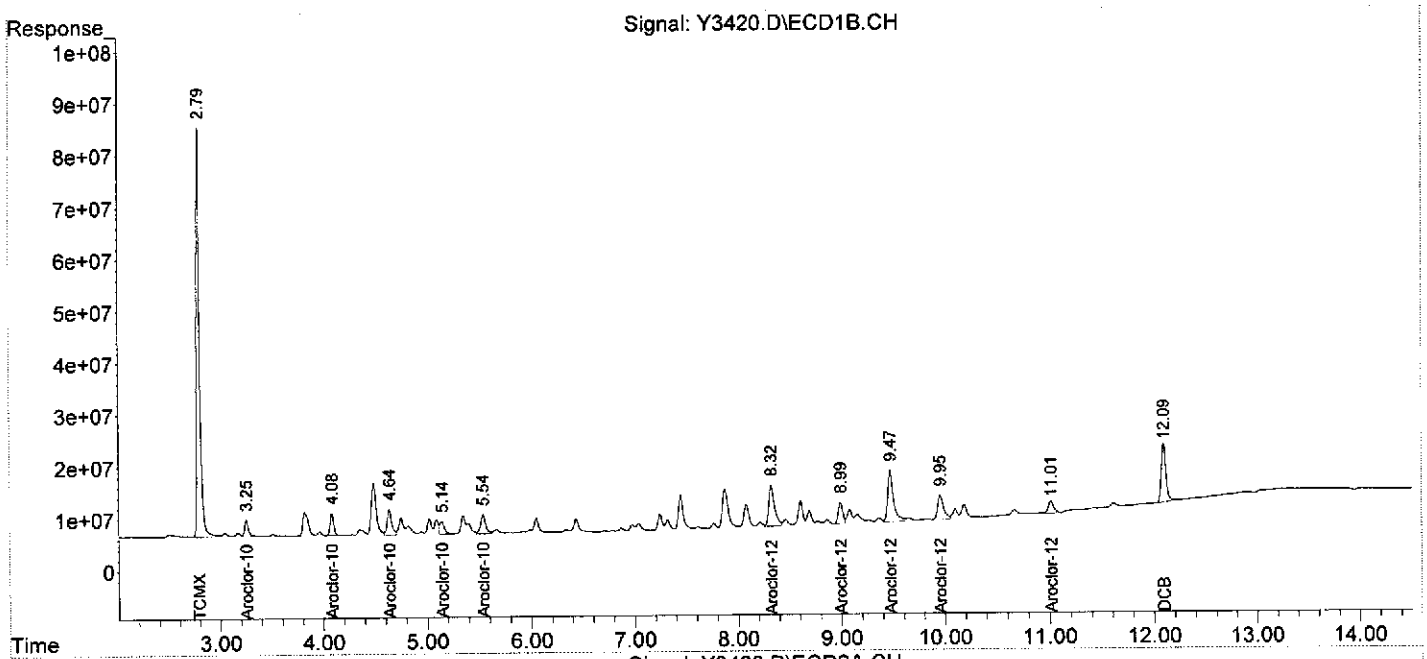
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

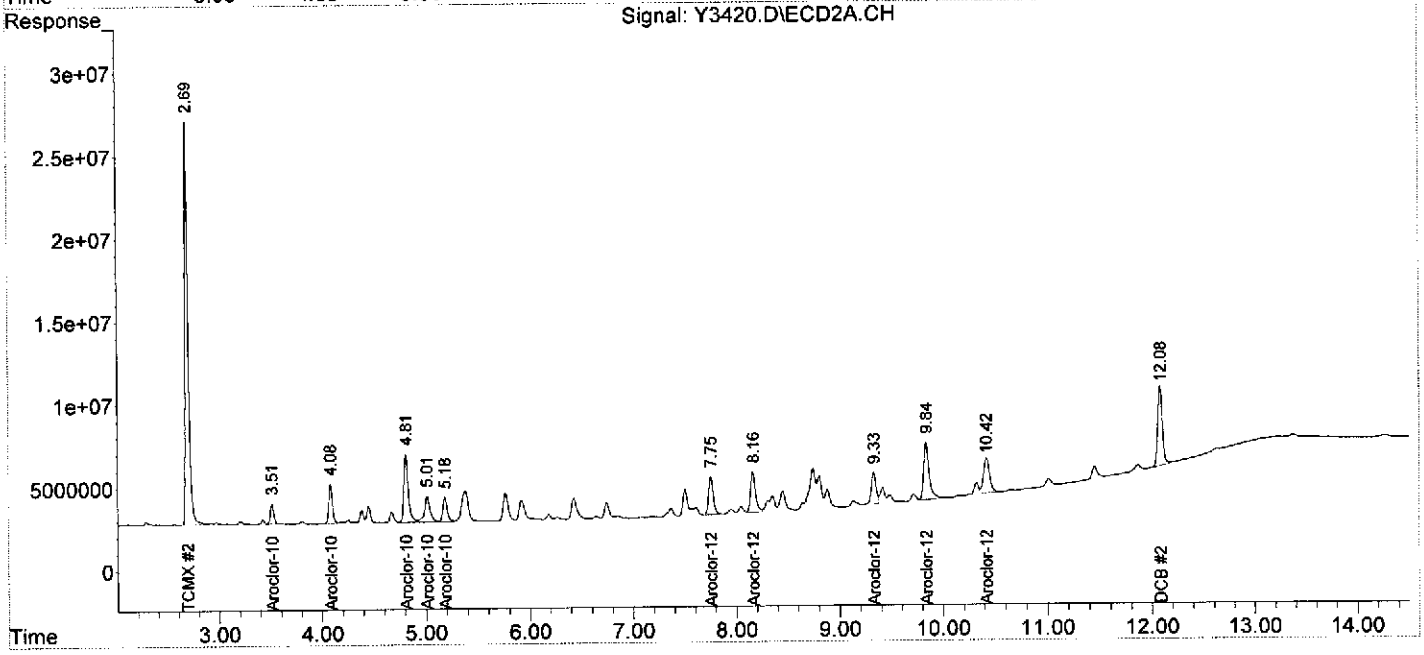
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:05
Operator : YG
Sample : 8082_L2_IAS_4222,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:31:18 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	280.2E6	94780218	3.491m	3.505m
Spiked Amount 200.000			Recovery	=	1.75%	1.75%
2) S DCB	12.10	12.08	79568605	31497676	4.580m	4.209m
Spiked Amount 200.000			Recovery	=	2.29%	2.10%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	19230554	5257221	11.576	10.004
4) L2 Aroclor-1016 {2}	4.08	4.08	21484693	11140247	10.058	10.785
5) L2 Aroclor-1016 {3}	4.64	4.81	36101682	23641099	12.139	10.256
6) L2 Aroclor-1016 {4}	5.14	5.01	15790133	10684518	10.811m	10.659
7) L2 Aroclor-1016 {5}	5.54	5.18	24488209	7836123	9.724m	10.107
Sum Aroclor-1016			117.1E6	58559208	54.308	51.811
Average Aroclor-1016					10.862	10.362
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	56990873	13407202	8.714m	10.234
34) L8 Aroclor-1260 {2}	8.99	8.16	21431149	15528496	8.140m	10.160
35) L8 Aroclor-1260 {3}	9.47	9.33	64694366	12444406	8.843	10.058
36) L8 Aroclor-1260 {4}	9.96	9.83	36540890	24555923	9.565m	9.706m
37) L8 Aroclor-1260 {5}	11.01	10.42	18335842	15594112	11.180m	8.521m
Sum Aroclor-1260			198.0E6	81530138	46.441	48.680
Average Aroclor-1260					9.288	9.736
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

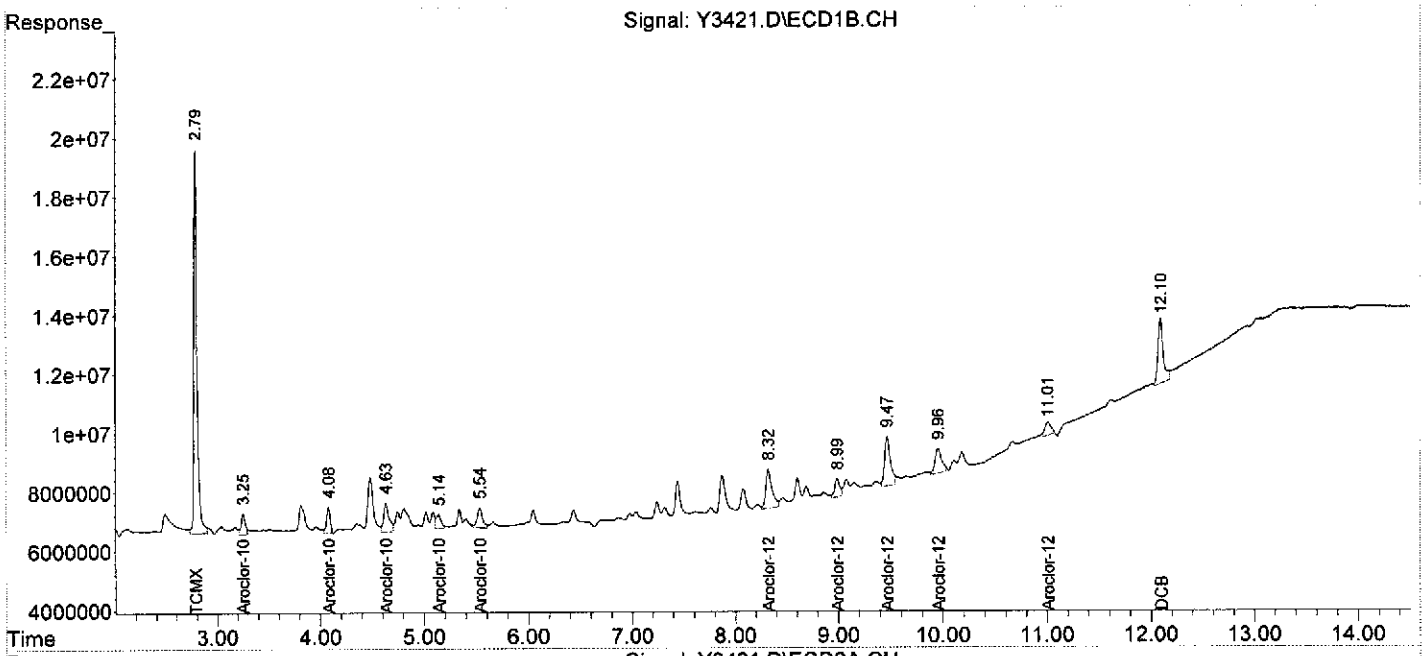
E12-02579 0050

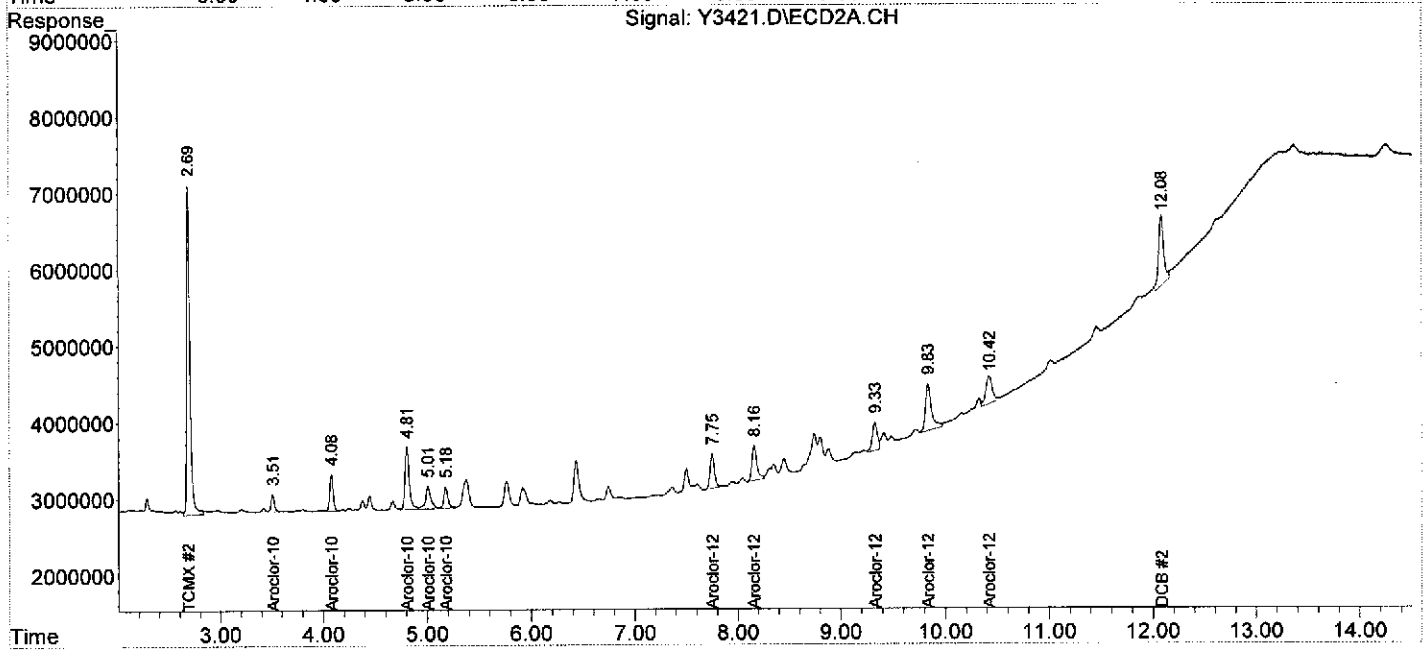
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 14:23
Operator : YG
Sample : 8082_L1_IAS_4223,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:32:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Mon Mar 12 16:15:58 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:17
Operator : YG
Sample : 8082_1221_IAS_4224,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:42:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:34:57 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.70	21938.8E6	6878.7E6	257.505	241.361
Spiked Amount 200.000			Recovery	=	128.75%	120.68%
2) S DCB	12.09	12.09	3040.8E6	1504.8E6	173.887	198.121
Spiked Amount 200.000			Recovery	=	86.94%	99.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
8) L3 Aroclor-1221	2.15	2.28	334.1E6	116.3E6	500.000	500.000
9) L3 Aroclor-1221 {2}	3.05	3.21	554.6E6	170.7E6	500.000	500.000
10) L3 Aroclor-1221 {3}	3.17	3.43	350.5E6	108.4E6	500.000	500.000
11) L3 Aroclor-1221 {4}	3.25	3.52	1309.2E6	393.4E6	500.000	500.000
12) L3 Aroclor-1221 {5}	3.84	4.39	277.2E6	15352109	500.000	500.000
Sum Aroclor-1221			2825.6E6	804.1E6	2500.000	2500.000
Average Aroclor-1221					500.000	500.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

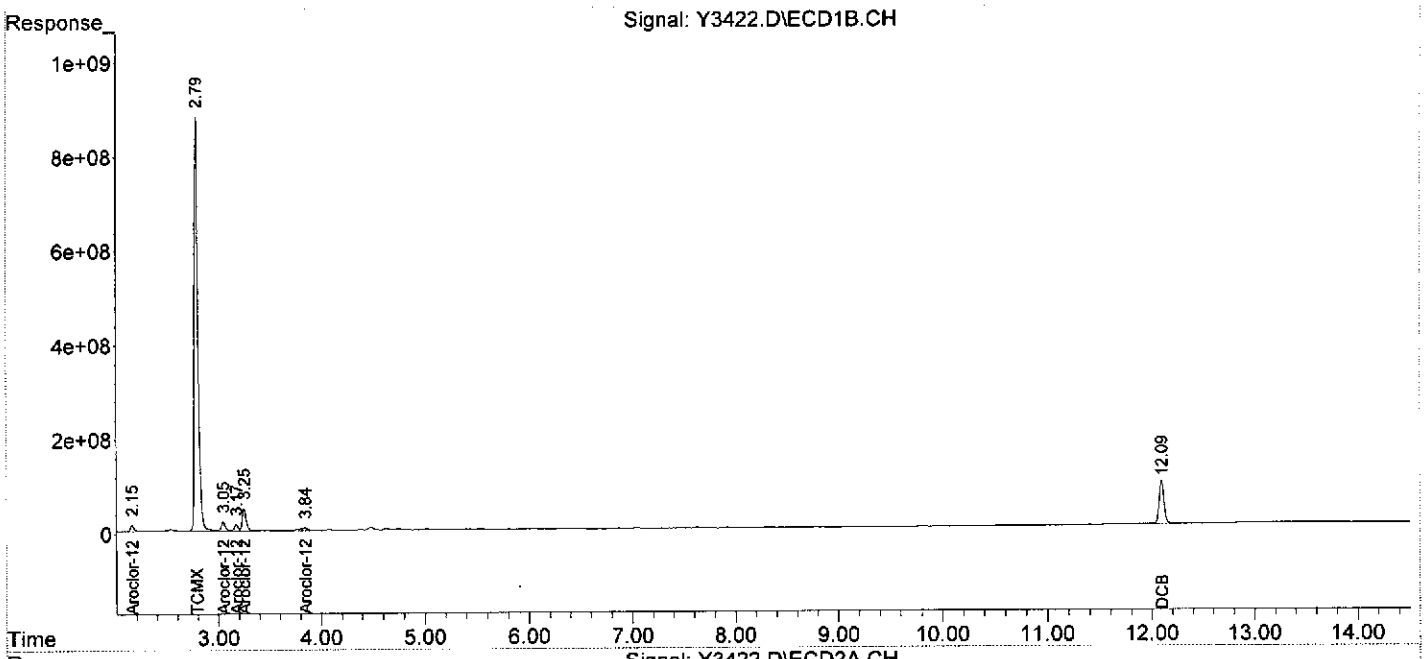
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

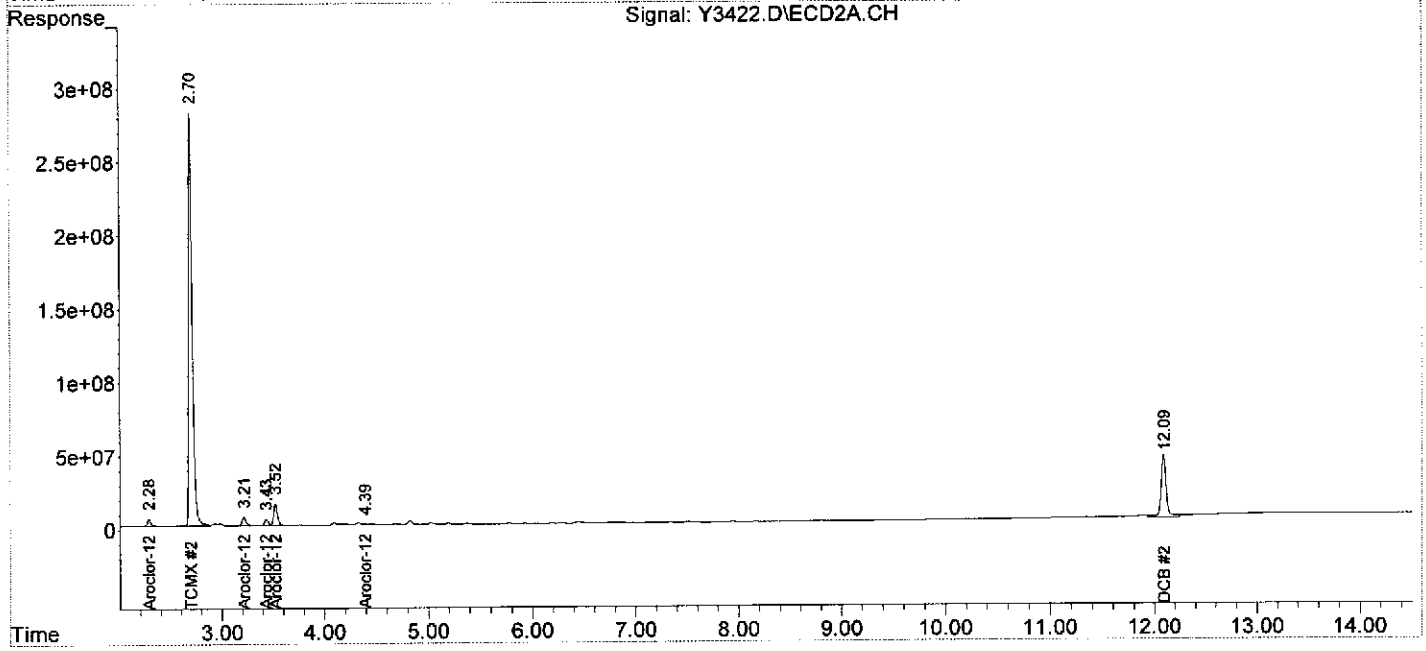
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:17
Operator : YG
Sample : 8082_1221_IAS_4224,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:42:11 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:34:57 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3423.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:34
Operator : YG
Sample : 8082_1232_IAS_4225,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:44:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:43:35 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	18043.1E6	5816.1E6	221.927	211.978
Spiked Amount 200.000			Recovery	=	110.96%	105.99%
2) S DCB	12.09	12.08	3389.9E6	1564.3E6	189.738m	204.715m
Spiked Amount 200.000			Recovery	=	94.87%	102.36%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
13) L4 Aroclor-1232	3.25	3.51	784.6E6	251.1E6	500.000	500.000
14) L4 Aroclor-1232 {2}	4.08	4.45	419.4E6	95209770	500.000	500.000
15) L4 Aroclor-1232 {3}	4.75	5.01	390.8E6	210.0E6	500.000	500.000
16) L4 Aroclor-1232 {4}	5.34	5.18	409.5E6	159.8E6	500.000	500.000
17) L4 Aroclor-1232 {5}	5.53	5.76	571.2E6	223.7E6	500.000	500.000
Sum Aroclor-1232			2575.5E6	939.7E6	2500.000	2500.000
Average Aroclor-1232					500.000	500.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

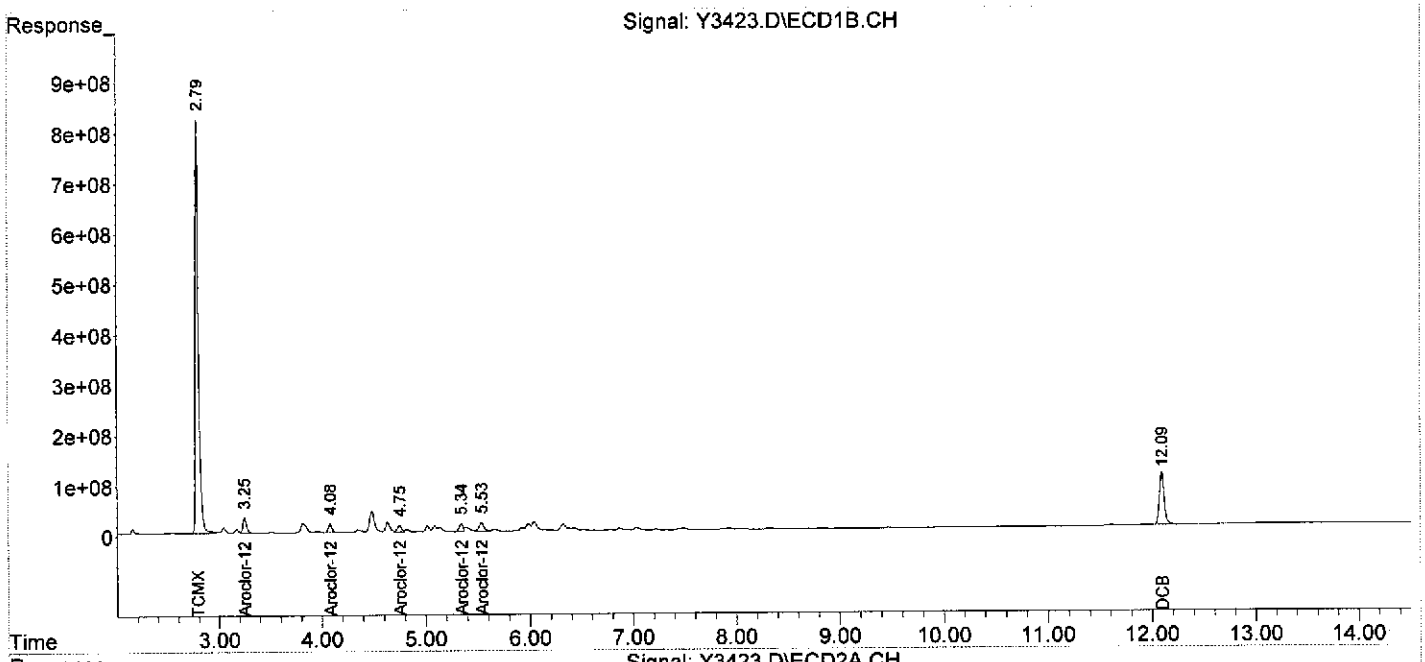
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

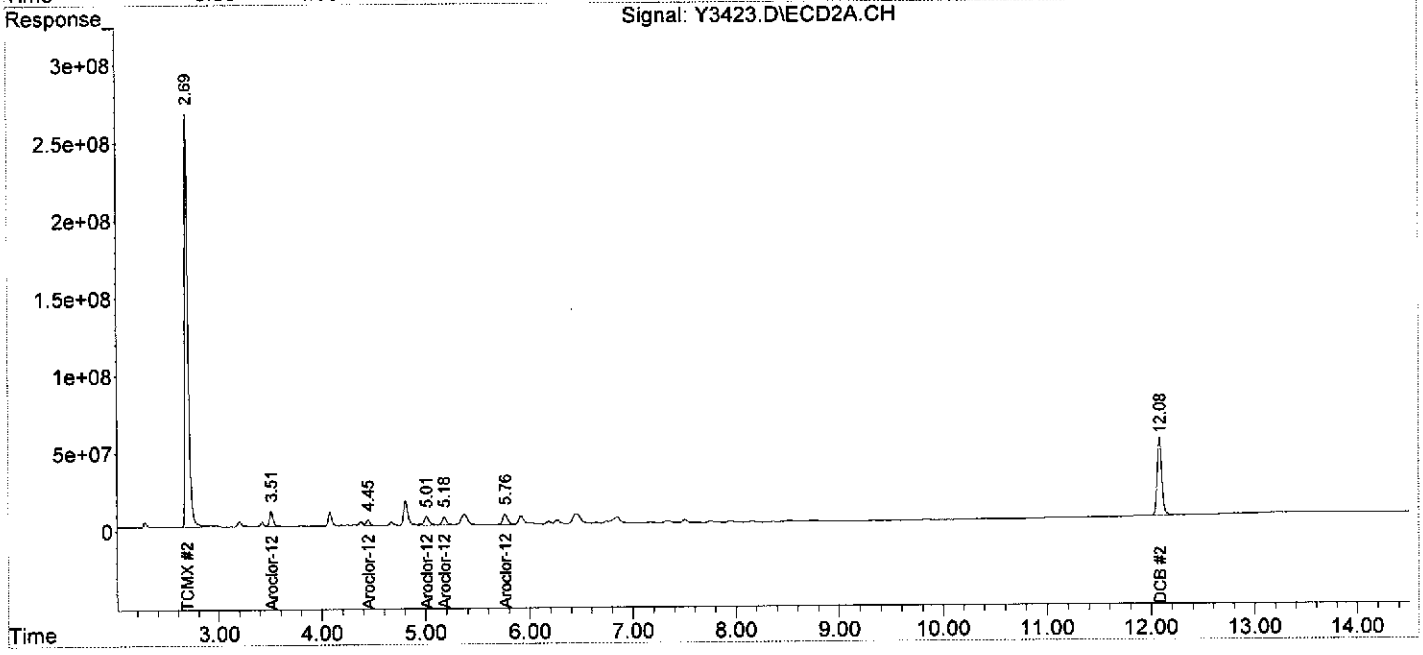
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3423.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:34
Operator : YG
Sample : 8082_1232_IAS_4225,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:44:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:43:35 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3424.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:51
Operator : YG
Sample : 8082_1242_IAS_4226,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:47:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:47:04 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.79	2.69	20638.8E6	6752.1E6	246.000	237.974
Spiked Amount 200.000				Recovery	=	123.00%	118.99%
2) S DCB		12.09	12.08	4032.3E6	1751.7E6	218.137m	223.008m
Spiked Amount 200.000				Recovery	=	109.07%	111.50%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
18) L5 Aroclor-1242		4.08	4.45	831.5E6	176.2E6	500.000	500.000
19) L5 Aroclor-1242	{2}	5.02	5.18	539.7E6	302.3E6	500.000	500.000
20) L5 Aroclor-1242	{3}	5.34	5.76	744.2E6	393.5E6	500.000	500.000
21) L5 Aroclor-1242	{4}	6.04	5.92	1258.7E6	332.0E6	500.000	500.000
22) L5 Aroclor-1242	{5}	6.32	6.46	1113.2E6	651.7E6	500.000	500.000
Sum Aroclor-1242				4487.2E6	1855.7E6	2500.000	2500.000
Average Aroclor-1242						500.000	500.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

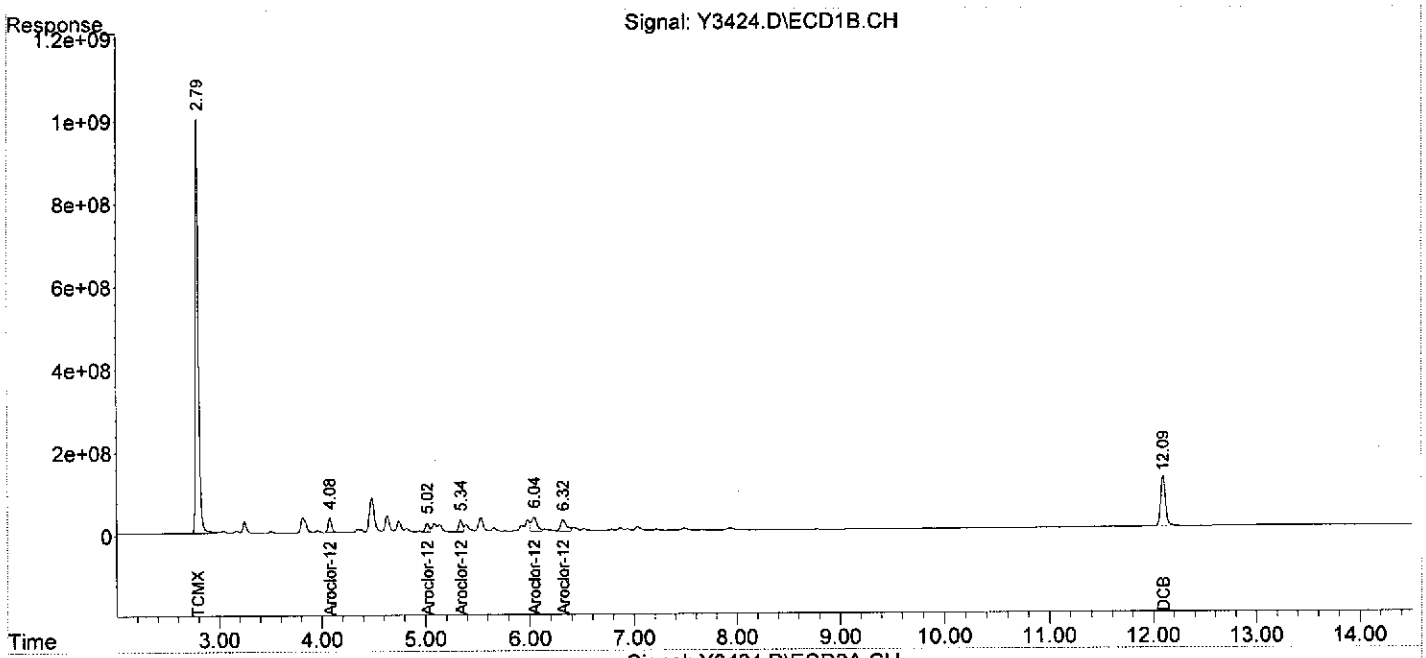
E12-02579 0056

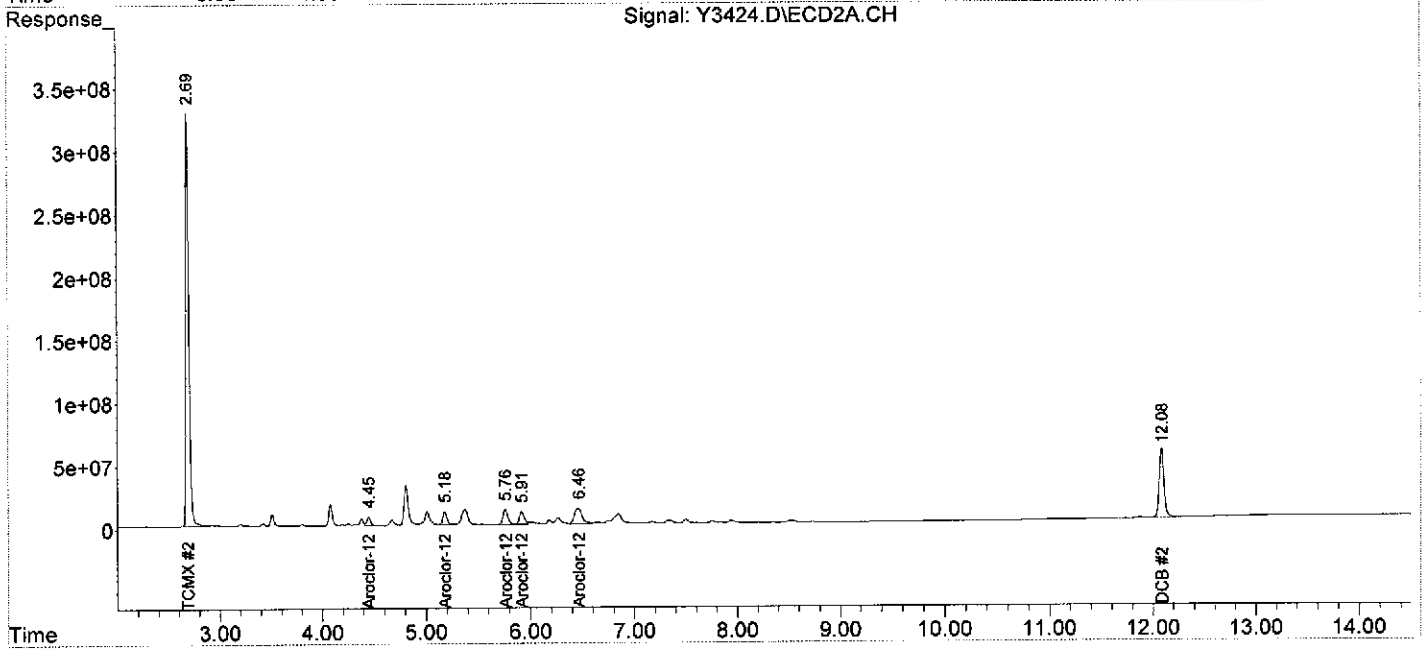
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3424.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 16:51
Operator : YG
Sample : 8082_1242_IAS_4226,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 08:47:33 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 08:47:04 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3425.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:08
Operator : YG
Sample : 8082_1248_IAS_4227,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:49:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:48:34 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	18644.4E6	6179.4E6	227.639	222.276
Spiked Amount 200.000			Recovery	=	113.82%	111.14%
2) S DCB	12.10	12.08	3969.0E6	1667.1E6	215.471m	215.110m
Spiked Amount 200.000			Recovery	=	107.74%	107.56%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.48	4.81	1846.1E6	607.2E6	500.000	500.000
24) L6 Aroclor-1248 {2}	5.02	5.37	1077.7E6	936.6E6	500.000	500.000
25) L6 Aroclor-1248 {3}	5.34	5.76	1301.3E6	669.9E6	500.000	500.000
26) L6 Aroclor-1248 {4}	6.04	5.92	2504.2E6	614.6E6	500.000	500.000
27) L6 Aroclor-1248 {5}	6.32	6.26	1721.7E6	336.6E6	500.000	500.000
Sum Aroclor-1248			8451.0E6	3164.8E6	2500.000	2500.000
Average Aroclor-1248					500.000	500.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

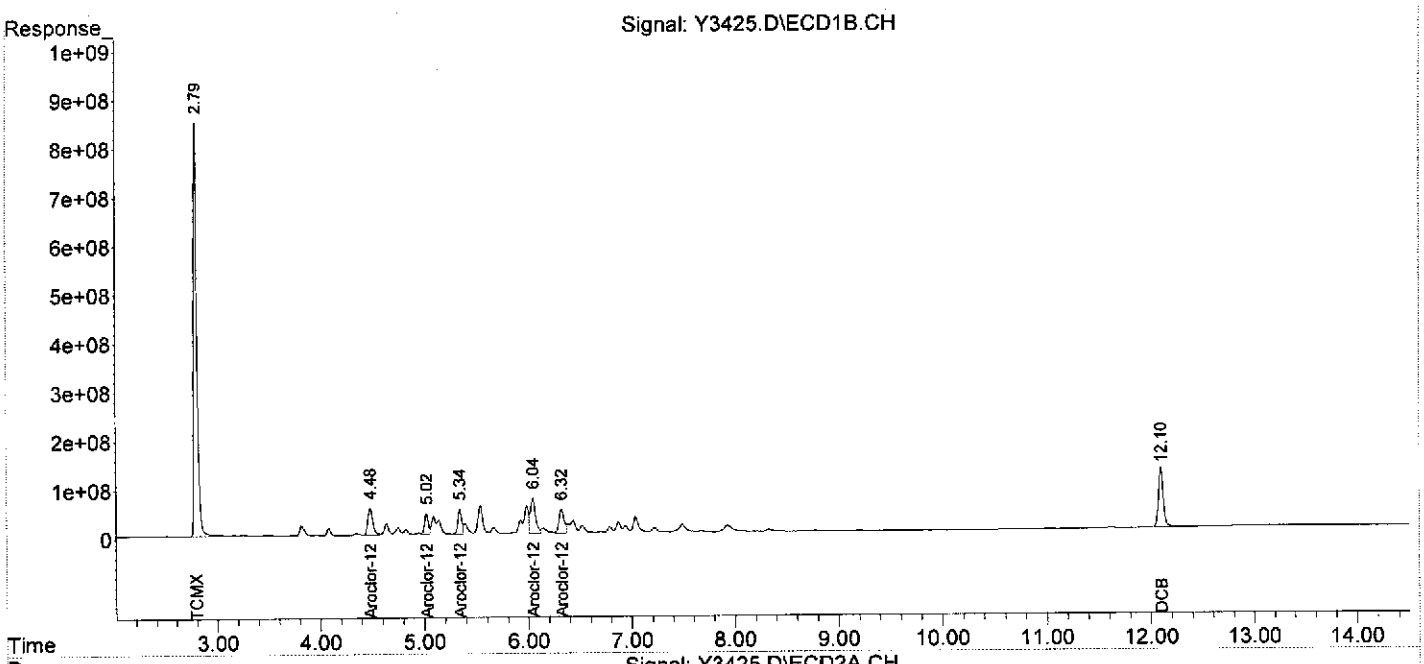
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

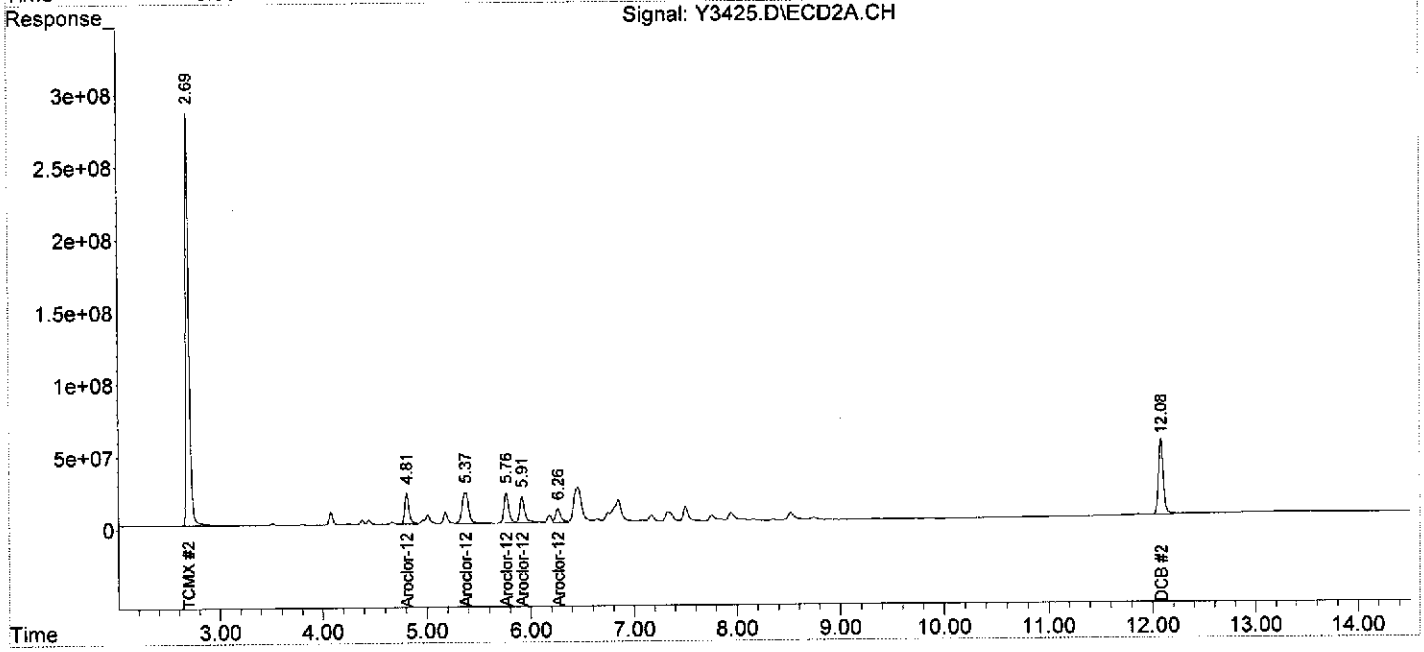
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3425.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:08
Operator : YG
Sample : 8082_1248_IAS_4227,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:49:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:48:34 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3426.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:26
Operator : YG
Sample : 8082_1254_IAS_4228,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:51:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:50:15 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	20266.4E6	6736.7E6	242.638	237.561
Spiked Amount 200.000			Recovery =		121.32%	118.78%
2) S DCB	12.09	12.08	3873.5E6	1795.4E6	211.437	227.678
Spiked Amount 200.000			Recovery =		105.72%	113.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.43	6.75	2528.2E6	809.9E6	500.000	500.000
29) L7 Aroclor-1254 {2}	6.87	7.32	1591.7E6	652.6E6	500.000	500.000
30) L7 Aroclor-1254 {3}	7.04	7.94	3220.6E6	627.9E6	500.000	500.000
31) L7 Aroclor-1254 {4}	7.45	8.16	1196.9E6	463.0E6	500.000	500.000
32) L7 Aroclor-1254 {5}	8.32	8.74	3195.0E6	1076.5E6	500.000	500.000
Sum Aroclor-1254			11732.5E6	3629.9E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

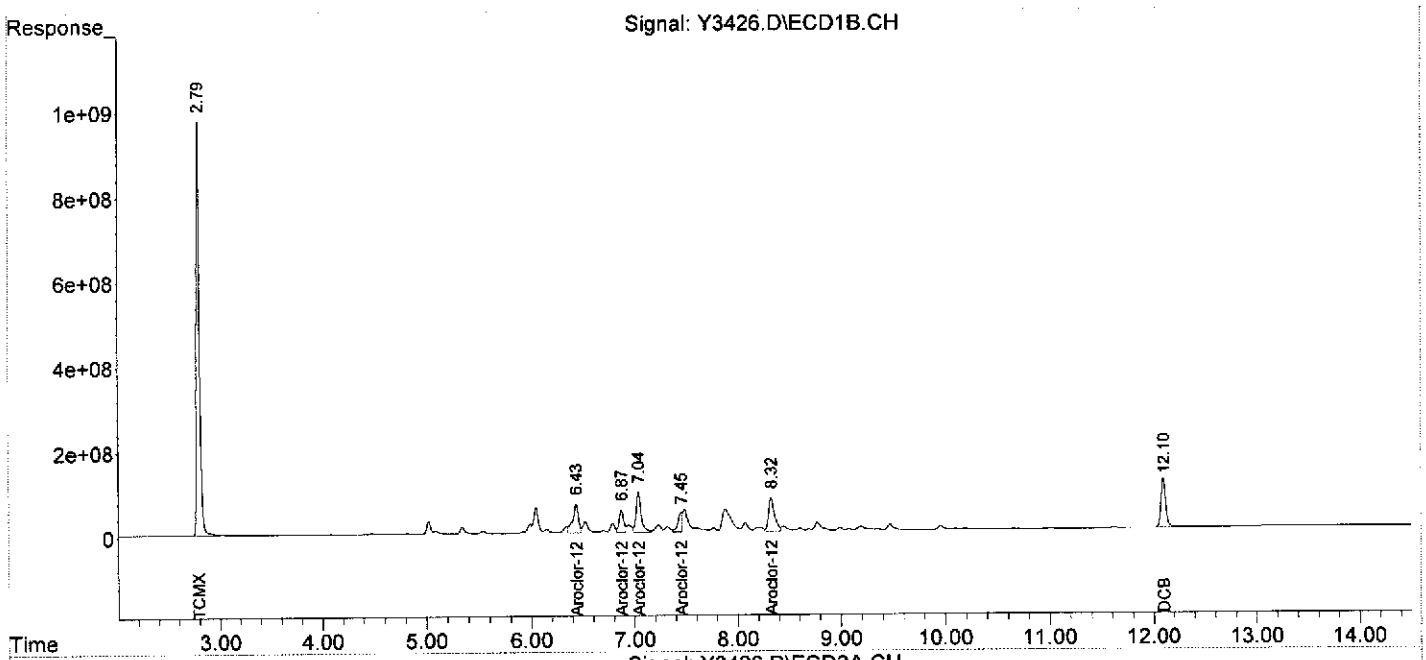
E12-02579 0060

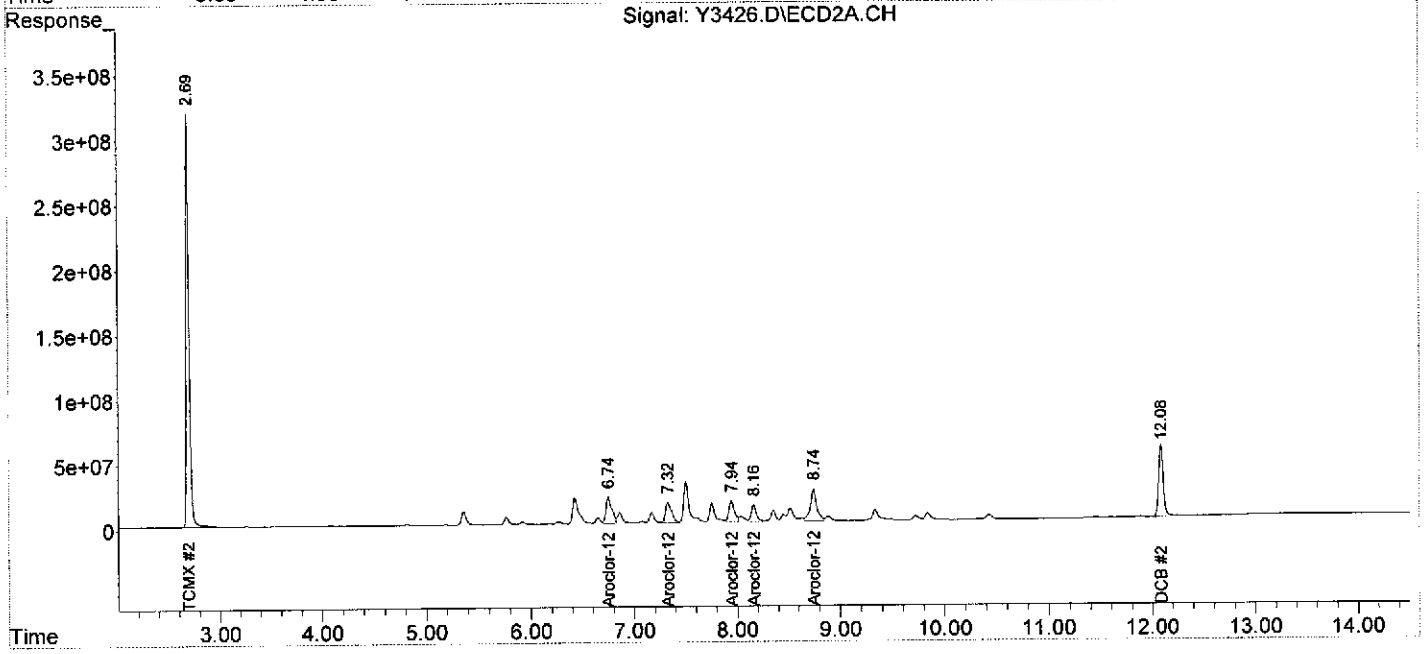
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3426.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:26
Operator : YG
Sample : 8082_1254_IAS_4228,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:51:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:50:15 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3427.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:43
Operator : YG
Sample : 8082_1262_IAS_4229,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:52:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:52:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	19862.7E6	6664.7E6	238.960	235.620
Spiked Amount 200.000			Recovery	=	119.48%	117.81%
2) S DCB	12.09	12.08	4010.2E6	1769.3E6	217.275	225.108
Spiked Amount 200.000			Recovery	=	108.64%	112.55%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
38) L9 Aroclor-1262	8.61	9.33	2894.6E6	844.6E6	500.000	500.000
39) L9 Aroclor-1262 {2}	9.47	9.83	5572.4E6	1933.7E6	500.000	500.000
40) L9 Aroclor-1262 {3}	10.09	10.32	1732.4E6	621.6E6	500.000	500.000
41) L9 Aroclor-1262 {4}	10.18	10.41	2429.5E6	1352.7E6	500.000	500.000
42) L9 Aroclor-1262 {5}	11.01	11.01	1679.4E6	223.2E6	500.000	500.000
Sum Aroclor-1262			14308.5E6	4975.8E6	2500.000	2500.000
Average Aroclor-1262					500.000	500.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

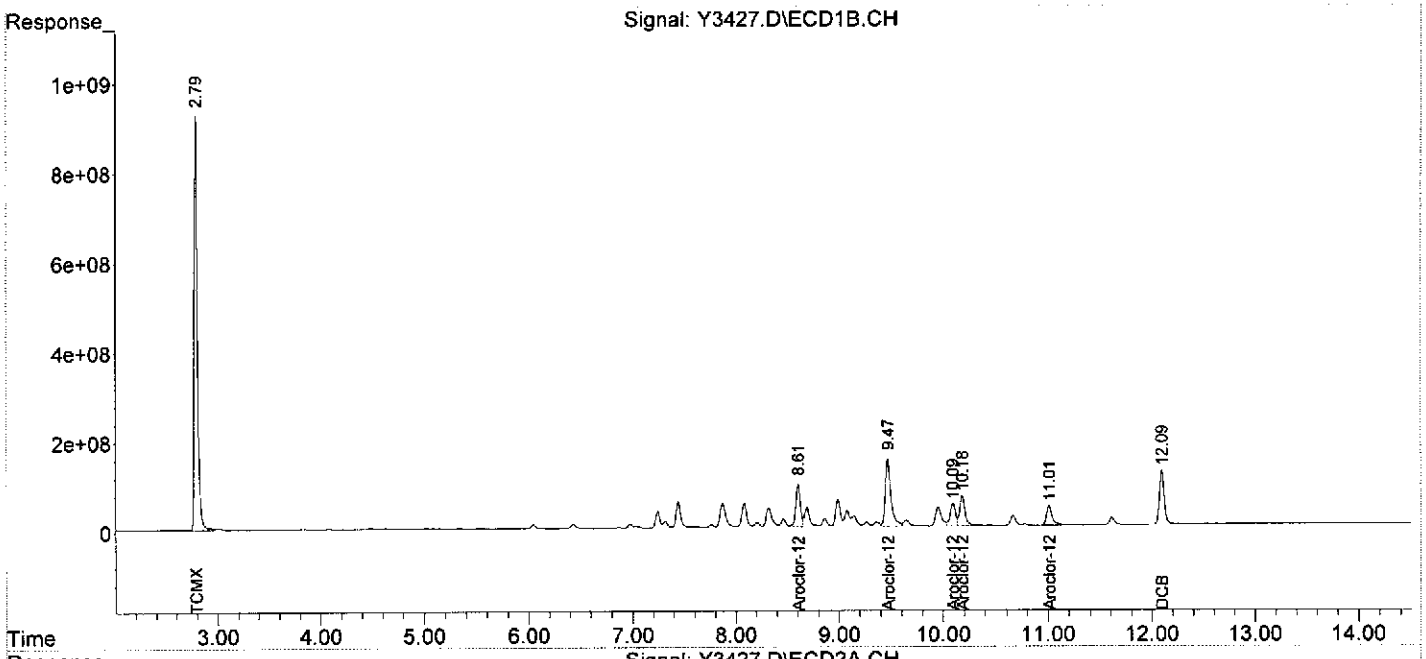
E12-02579 0062

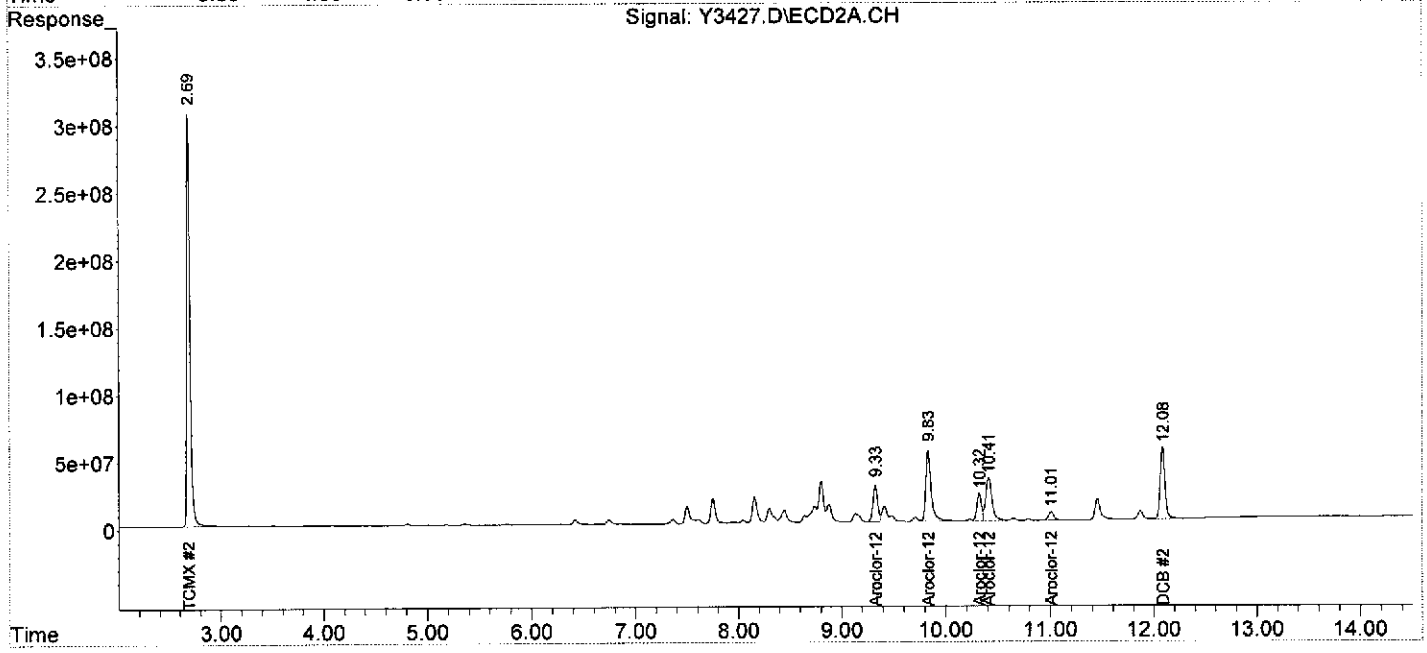
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3427.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 17:43
Operator : YG
Sample : 8082_1262_IAS_4229,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:52:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:52:20 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3428.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:00
Operator : YG
Sample : 8082_1268_IAS_4230,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	20402.1E6	6860.1E6	243.866	240.865
Spiked Amount 200.000			Recovery	=	121.93%	120.43%
2) S DCB	12.09	12.08	5132.6E6	2306.7E6	261.850m	275.391m
Spiked Amount 200.000			Recovery	=	130.93%	137.70%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
43) L10 Aroclor-1268	10.10	10.32	4473.2E6	1956.8E6	500.000	500.000
44) L10 Aroclor-1268 {2}	10.18	10.40	6838.5E6	2375.5E6	500.000	500.000
45) L10 Aroclor-1268 {3}	10.65	10.65	4299.1E6	1585.2E6	500.000	500.000
46) L10 Aroclor-1268 {4}	10.78	10.79	1335.3E6	505.1E6	500.000	500.000
47) L10 Aroclor-1268 {5}	11.61	11.87	9997.6E6	3834.0E6	500.000	500.000
Sum Aroclor-1268			26943.7E6	10256.7E6	2500.000	2500.000
Average Aroclor-1268					500.000	500.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

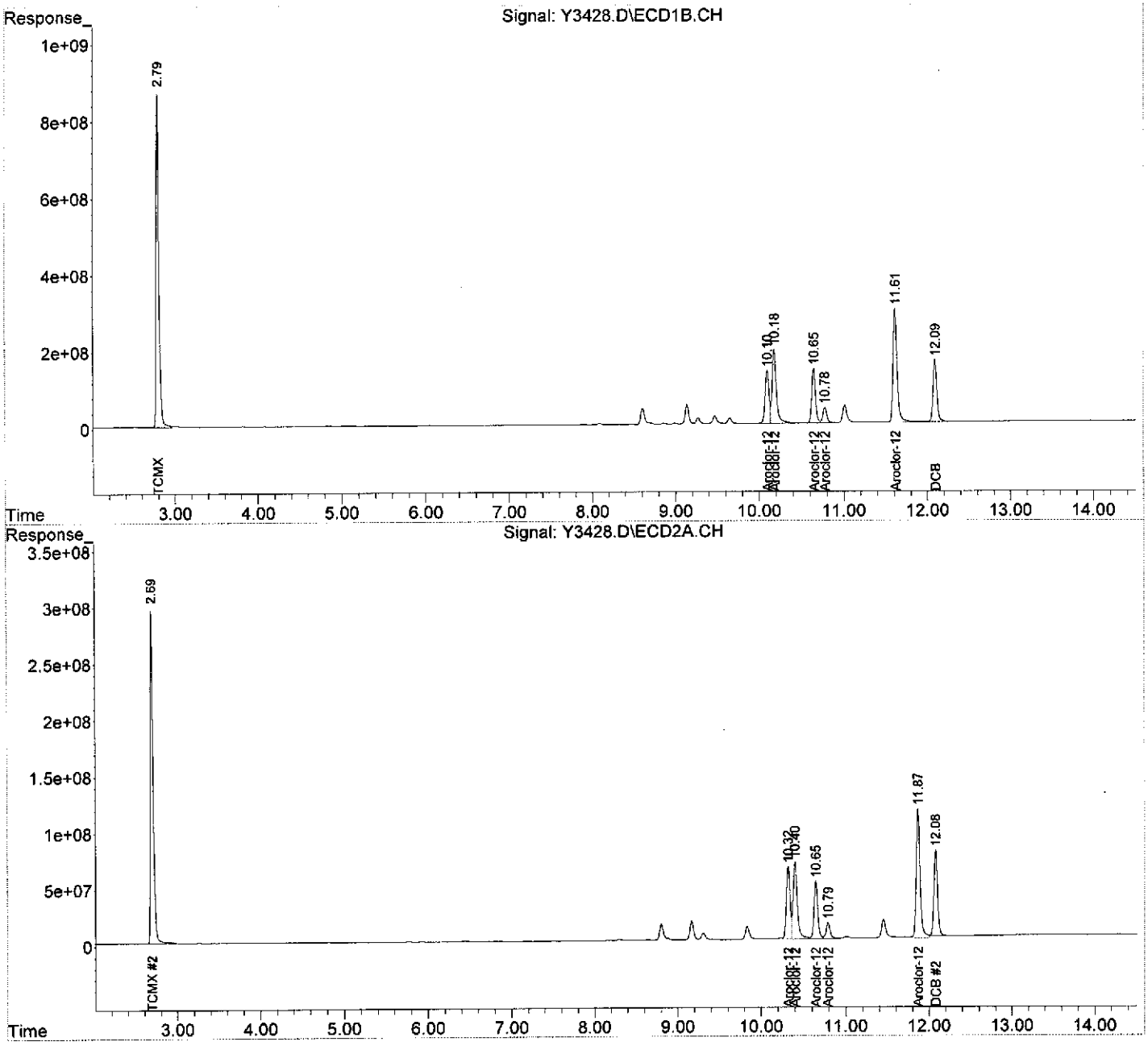
E12-02579 0064

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3428.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:00
Operator : YG
Sample : 8082_1268_IAS_4230,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	15226.7E6	5039.8E6	182.005	176.953
Spiked Amount 200.000			Recovery	=	91.00%	88.48%
2) S DCB	12.10	12.08	3148.5E6	1394.8E6	160.627m	166.522
Spiked Amount 200.000			Recovery	=	80.31%	83.26%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	702.7E6	225.4E6	422.965	428.954
4) L2 Aroclor-1016 {2}	4.08	4.08	903.8E6	449.6E6	423.128	435.242
5) L2 Aroclor-1016 {3}	4.64	4.81	1294.1E6	1014.0E6	435.139	439.877
6) L2 Aroclor-1016 {4}	5.14	5.01	663.6E6	441.7E6	454.338	440.644
7) L2 Aroclor-1016 {5}	5.54	5.18	1068.8E6	342.7E6	424.414	442.061
Sum Aroclor-1016			4633.0E6	2473.4E6	2159.985	2186.778
Average Aroclor-1016					431.997	437.356
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	2945.7E6	571.8E6	450.399	436.463
34) L8 Aroclor-1260 {2}	8.99	8.16	1124.4E6	662.8E6	427.082	433.674
35) L8 Aroclor-1260 {3}	9.47	9.33	3503.0E6	528.9E6	478.792	427.454
36) L8 Aroclor-1260 {4}	9.95	9.84	1725.7E6	1157.0E6	451.709	457.311
37) L8 Aroclor-1260 {5}	11.01	10.42	744.1E6	834.7E6	453.710	456.135
Sum Aroclor-1260			10042.8E6	3755.2E6	2261.692	2211.038
Average Aroclor-1260					452.338	442.208
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

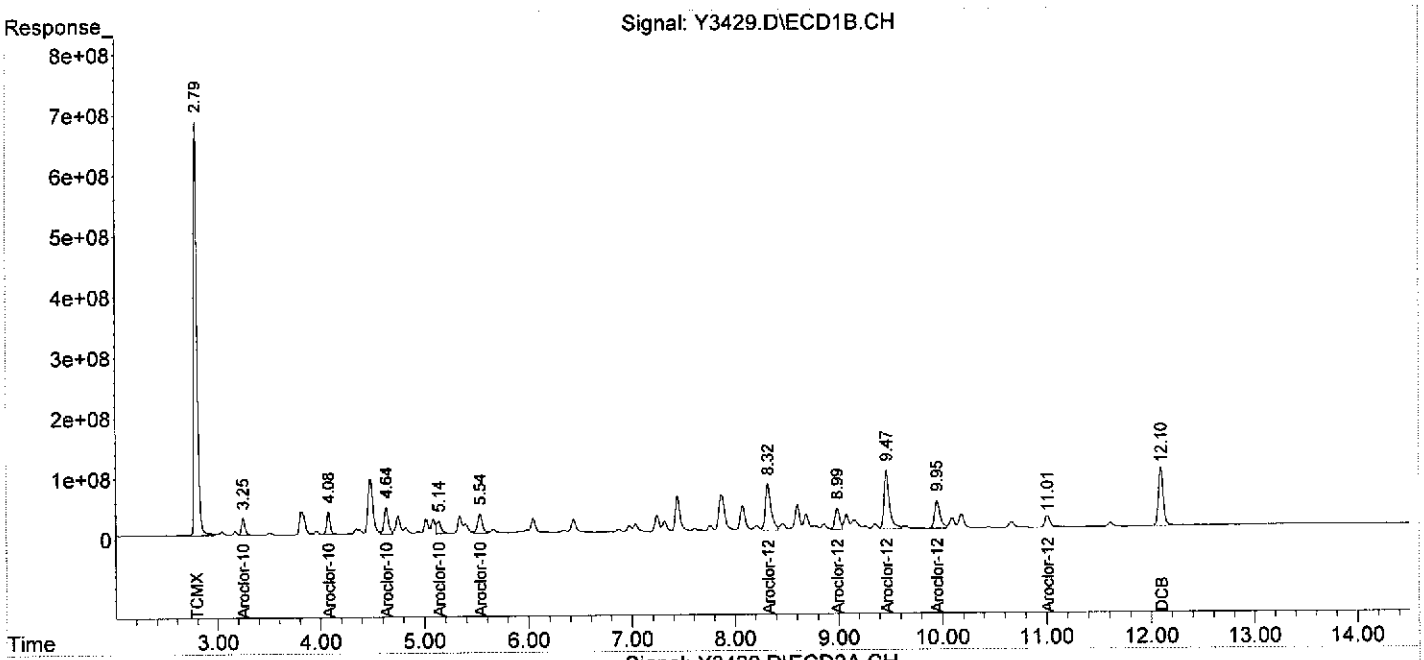
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

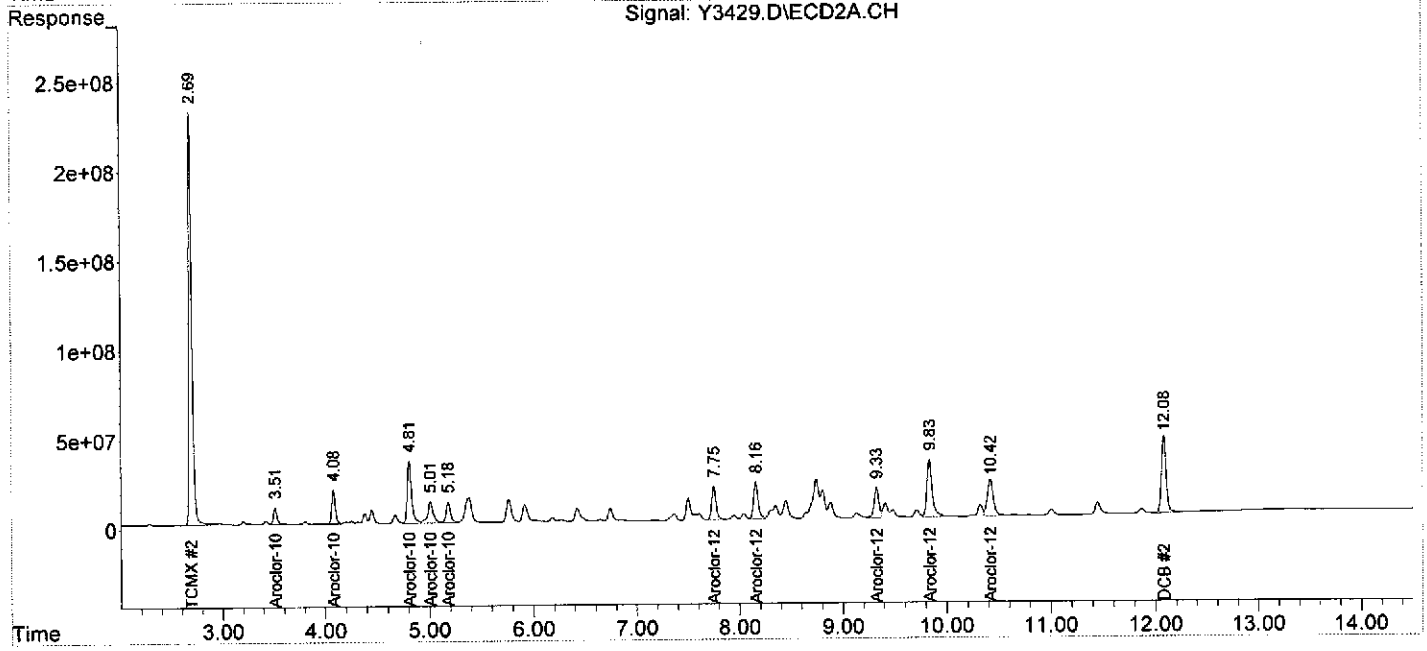
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-12-12\
Data File : Y3429.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 13 09:55:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Tue Mar 13 09:54:18 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/16/2012 **Instrument ID:** GC-Y

Data File: Y3573.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.25	3.18	3.32	1661269	1564372	5.83
Aroclor-1016 {2}	4.08	4.01	4.15	2136075	2104053	1.50
Aroclor-1016 {3}	4.63	4.57	4.71	3144442	2908180	7.51
Aroclor-1016 {4}	5.14	5.07	5.21	1526322	1454798	4.69
Aroclor-1016 {5}	5.53	5.47	5.61	2501245	2414545	3.47
Aroclor-1260	8.31	7.42	9.22	6485446	6010837	7.32
Aroclor-1260 {2}	8.99	8.09	9.89	2566031	2219150	13.52
Aroclor-1260 {3}	9.46	8.57	10.37	7329471	6755996	7.82
Aroclor-1260 {4}	9.95	9.05	10.85	3735620	3265311	12.59
Aroclor-1260 {5}	11.01	10.11	11.91	1655164	1368884	17.30
					Average %D	8.15

Data File: Y3573.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.51	3.44	3.58	515113	552441	7.25
Aroclor-1016 {2}	4.08	4.01	4.15	1045400	1115039	6.66
Aroclor-1016 {3}	4.80	4.74	4.88	2329962	2515352	7.96
Aroclor-1016 {4}	5.01	4.94	5.08	1030069	1060658	2.97
Aroclor-1016 {5}	5.18	5.11	5.25	785590	831090	5.79
Aroclor-1260	7.75	6.85	8.65	1310036	1340084	2.29
Aroclor-1260 {2}	8.15	7.26	9.06	1528372	1528396	0.00
Aroclor-1260 {3}	9.32	8.43	10.23	1214977	1191240	1.95
Aroclor-1260 {4}	9.83	8.93	10.73	2593004	2587610	0.21
Aroclor-1260 {5}	10.42	9.52	11.32	1796434	1903556	5.96
					Average %D	4.10

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/16/2012 **Instrument ID:** GC-Y

Data File: Y3587.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.25	3.18	3.32	1661269	1452970	12.54
Aroclor-1016 {2}	4.08	4.01	4.15	2136075	1986334	7.01
Aroclor-1016 {3}	4.63	4.57	4.71	3144442	2714381	13.68
Aroclor-1016 {4}	5.14	5.07	5.21	1526322	1381804	9.47
Aroclor-1016 {5}	5.53	5.47	5.61	2501245	2259403	9.67
Aroclor-1260	8.32	7.42	9.22	6485446	5687339	12.31
Aroclor-1260 {2}	8.99	8.09	9.89	2566031	2230123	13.09
Aroclor-1260 {3}	9.47	8.57	10.37	7329471	6592310	10.06
Aroclor-1260 {4}	9.95	9.05	10.85	3735620	3248003	13.05
Aroclor-1260 {5}	11.01	10.11	11.91	1655164	1577730	4.68
					Average %D	10.55

Data File: Y3587.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.51	3.44	3.58	515113	530643	3.01
Aroclor-1016 {2}	4.08	4.01	4.15	1045400	1079208	3.23
Aroclor-1016 {3}	4.81	4.74	4.88	2329962	2411302	3.49
Aroclor-1016 {4}	5.01	4.94	5.08	1030069	1022530	0.73
Aroclor-1016 {5}	5.18	5.11	5.25	785590	795695	1.29
Aroclor-1260	7.75	6.85	8.65	1310036	1286457	1.80
Aroclor-1260 {2}	8.15	7.26	9.06	1528372	1459836	4.48
Aroclor-1260 {3}	9.33	8.43	10.23	1214977	1141646	6.04
Aroclor-1260 {4}	9.83	8.93	10.73	2593004	2510019	3.20
Aroclor-1260 {5}	10.42	9.52	11.32	1796434	1817308	1.16
					Average %D	2.84

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	17619.6E6	6307.4E6	210.608	221.460
Spiked Amount 200.000			Recovery =		105.30%	110.73%
2) S DCB	12.09	12.08	3266.7E6	1696.7E6	166.658m	202.564m
Spiked Amount 200.000			Recovery =		83.33%	101.28%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	782.2E6	276.2E6	470.836	525.607
4) L2 Aroclor-1016 (2)	4.08	4.08	1052.0E6	557.5E6	492.504	539.753
5) L2 Aroclor-1016 (3)	4.63	4.80	1454.1E6	1257.7E6	488.931	545.591
6) L2 Aroclor-1016 (4)	5.14	5.01	727.4E6	530.3E6	498.047	529.060
7) L2 Aroclor-1016 (5)	5.53	5.18	1207.3E6	415.5E6	479.384	535.963
Sum Aroclor-1016			5223.0E6	3037.3E6	2429.704	2675.974
Average Aroclor-1016					485.941	535.195
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	3005.4E6	670.0E6	459.533	511.468
34) L8 Aroclor-1260 (2)	8.99	8.15	1109.6E6	764.2E6	421.462m	500.008
35) L8 Aroclor-1260 (3)	9.46	9.32	3378.0E6	595.6E6	461.711	481.402
36) L8 Aroclor-1260 (4)	9.95	9.83	1632.7E6	1293.8E6	427.366	511.374
37) L8 Aroclor-1260 (5)	11.01	10.42	684.4E6	951.8E6	417.311	520.101
Sum Aroclor-1260			9810.1E6	4275.4E6	2187.382	2524.353
Average Aroclor-1260					437.476	504.871
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

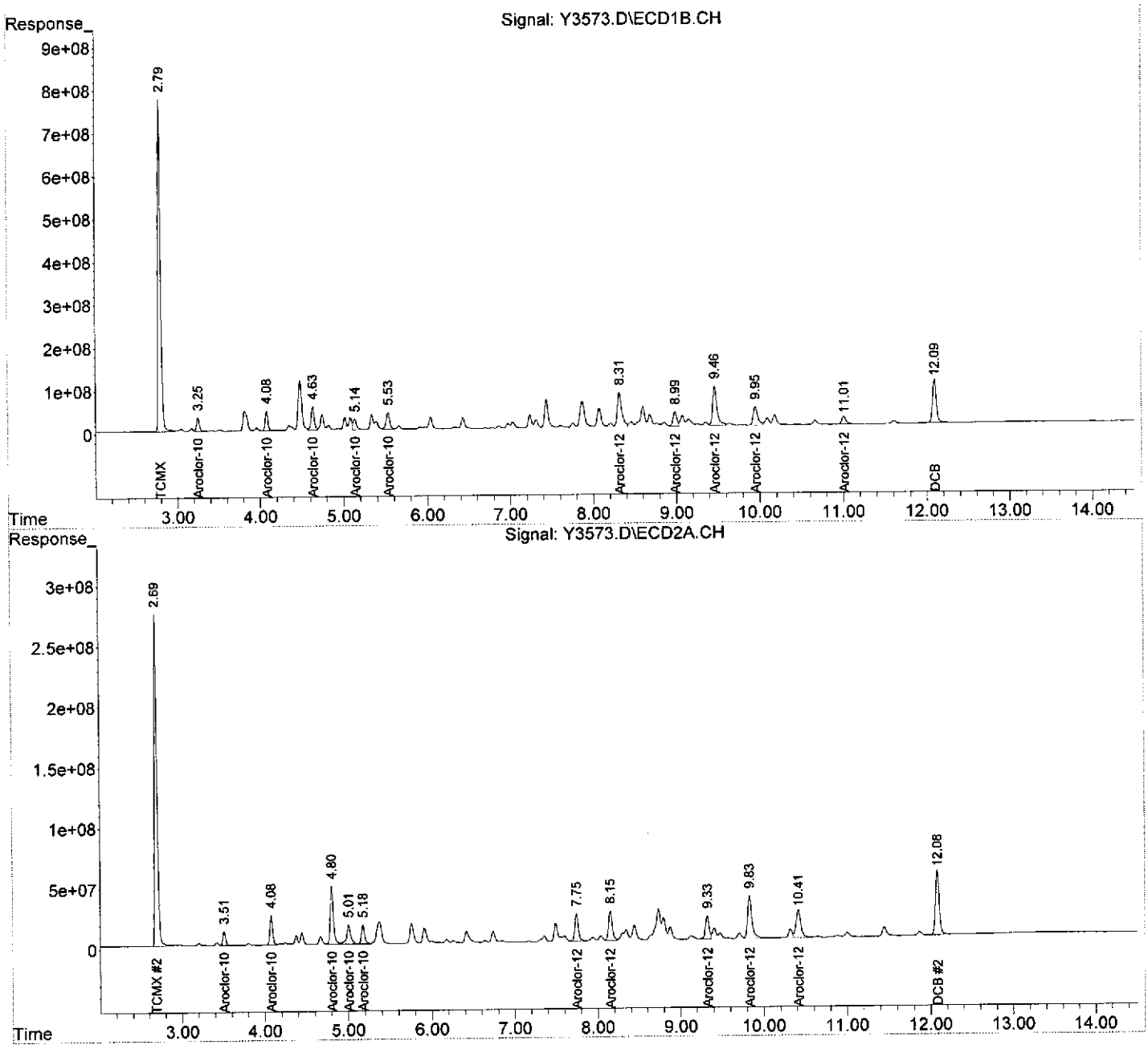
E12-02579 0072

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3573.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:17
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:19:58 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.69	16411.6E6	6117.6E6	196.168	214.794
Spiked Amount 200.000			Recovery	=	98.08%	107.40%
2) S DCB	12.09	12.08	3205.4E6	1681.3E6	163.529m	200.724m
Spiked Amount 200.000			Recovery	=	81.76%	100.36%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	726.5E6	265.3E6	437.307	504.868
4) L2 Aroclor-1016 {2}	4.08	4.08	993.2E6	539.6E6	464.949	522.408
5) L2 Aroclor-1016 {3}	4.63	4.81	1357.2E6	1205.7E6	456.349	523.022
6) L2 Aroclor-1016 {4}	5.14	5.01	690.9E6	511.3E6	473.058	510.041
7) L2 Aroclor-1016 {5}	5.53	5.18	1129.7E6	397.8E6	448.582	513.138
Sum Aroclor-1016			4897.4E6	2919.7E6	2280.246	2573.477
Average Aroclor-1016					456.049	514.695
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.75	2843.7E6	643.2E6	434.801	491.001
34) L8 Aroclor-1260 {2}	8.99	8.15	1115.1E6	729.9E6	423.545m	477.579
35) L8 Aroclor-1260 {3}	9.47	9.33	3296.2E6	570.8E6	450.524	461.360
36) L8 Aroclor-1260 {4}	9.95	9.83	1624.0E6	1255.0E6	425.101	496.040
37) L8 Aroclor-1260 {5}	11.01	10.42	788.9E6	908.7E6	480.978	496.536
Sum Aroclor-1260			9667.8E6	4107.6E6	2214.950	2422.515
Average Aroclor-1260					442.990	484.503
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

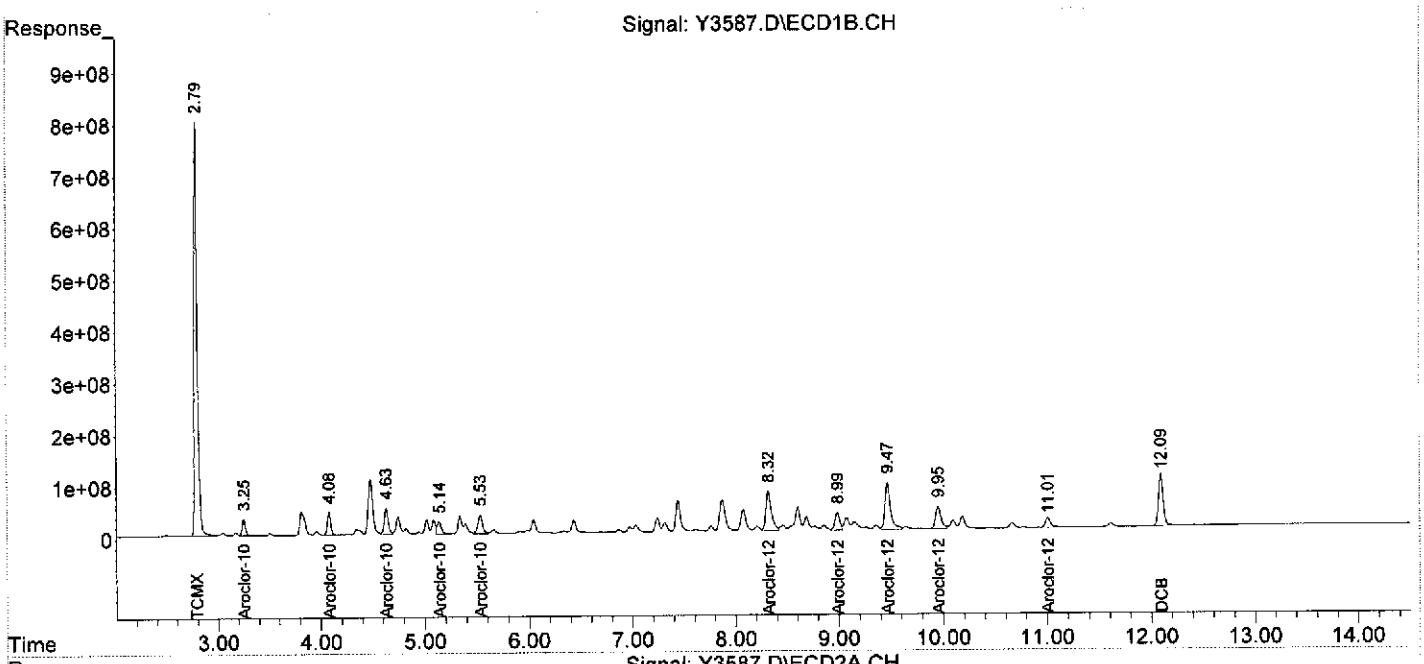
E12-02579 0075

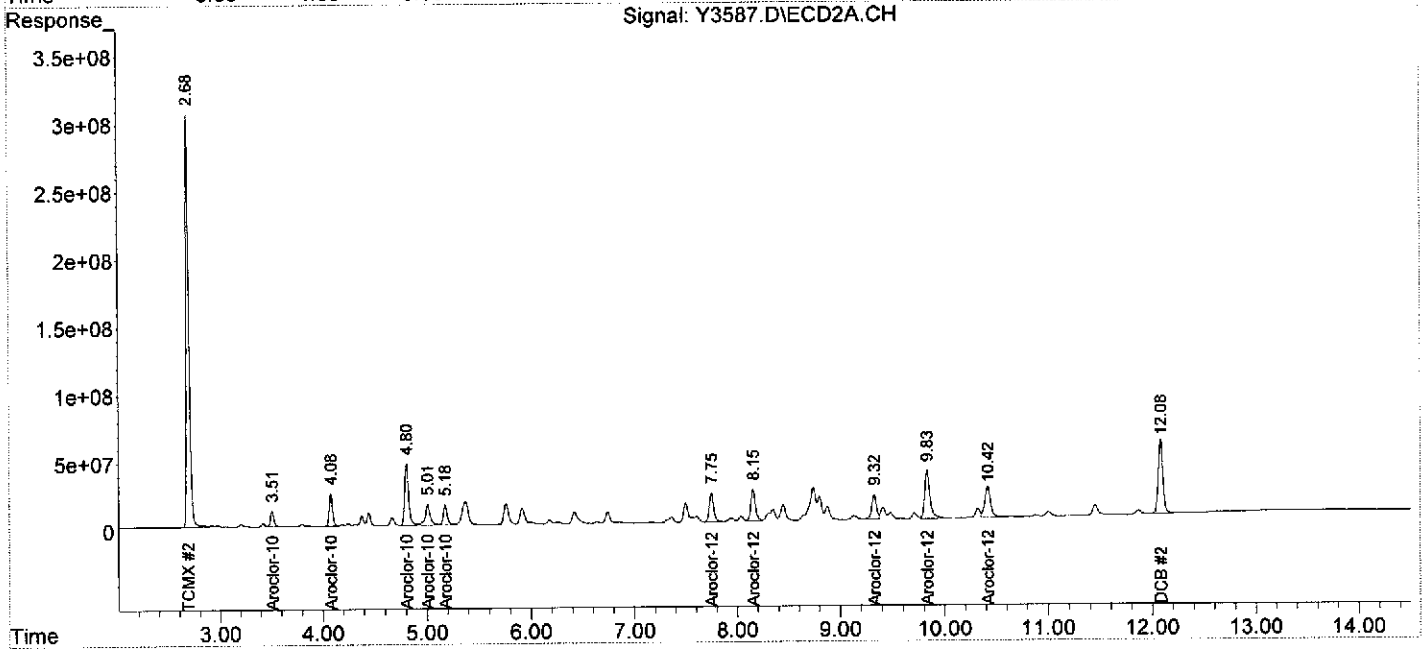
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3587.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:18
Operator : YG
Sample : 8082_C_IAS_4221,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:33:15 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0315-BLK10
Client ID: PCB
Date Received: NA
Date Extracted: 03/15/2012
Date Analyzed: 03/16/2012
Data file: Y3574.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
PCBs	ND		0.050	0.020

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:35
Operator : YG
Sample : PCB,0315-BLK10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:20:31 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.68	11992.8E6	4670.6E6	143.351	163.991
Spiked Amount 200.000			Recovery	=	71.68%	82.00%
2) S DCB	12.09	12.08	2417.4E6	1231.7E6	123.329m	147.050m
Spiked Amount 200.000			Recovery	=	61.66%	73.53%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

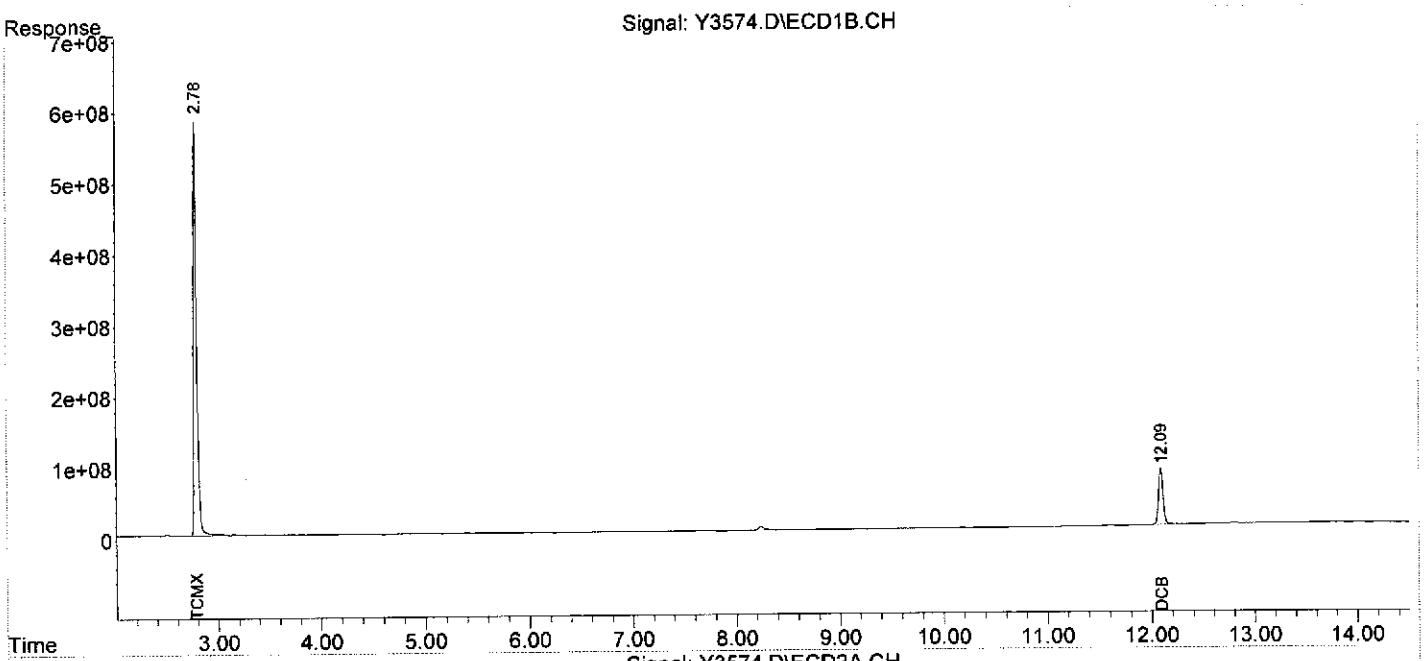
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

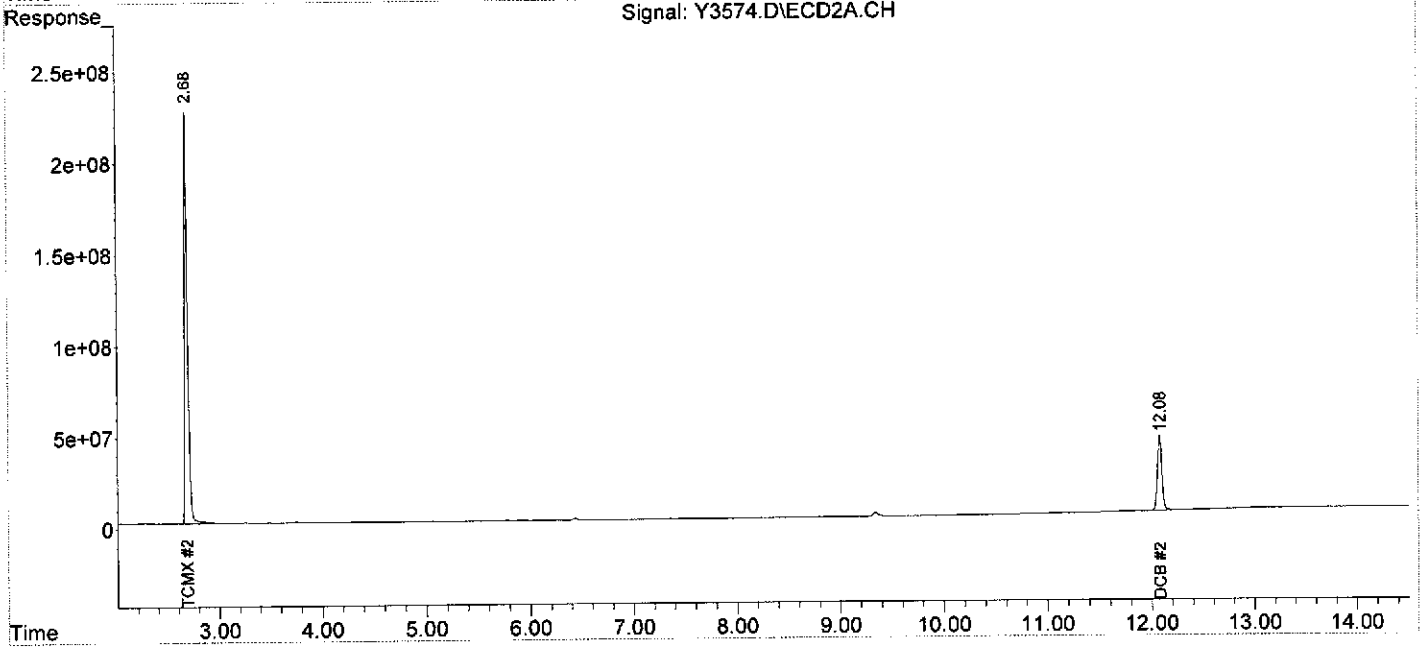
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 18:35
Operator : YG
Sample : PCB,0315-BLK10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:20:31 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	12150.6E6	4649.2E6	145.237	163.238
Spiked Amount 200.000			Recovery =		72.62%	81.62%
2) S DCB	12.09	12.08	2443.3E6	1230.7E6	124.651m	146.935m
Spiked Amount 200.000			Recovery =		62.33%	73.47%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	546.0E6	213.1E6	328.653	405.477
4) L2 Aroclor-1016 {2}	4.08	4.08	807.7E6	423.5E6	378.118	410.048
5) L2 Aroclor-1016 {3}	4.63	4.80	961.9E6	939.3E6	323.434	407.465 #
6) L2 Aroclor-1016 {4}	5.14	5.01	568.9E6	414.3E6	389.525	413.346
7) L2 Aroclor-1016 {5}	5.53	5.18	903.0E6	313.2E6	358.575	404.015
Sum Aroclor-1016			3787.5E6	2303.5E6	1778.305	2040.351
Average Aroclor-1016					355.661	408.070
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	2538.7E6	565.3E6	388.173	431.539
34) L8 Aroclor-1260 {2}	8.99	8.15	1102.8E6	647.2E6	418.899	423.460
35) L8 Aroclor-1260 {3}	9.46	9.32	2719.7E6	560.1E6	371.727	452.723
36) L8 Aroclor-1260 {4}	9.95	9.83	1440.3E6	1080.3E6	377.014	426.998
37) L8 Aroclor-1260 {5}	11.00	10.41	730.8E6	798.0E6	445.583	436.050
Sum Aroclor-1260			8532.3E6	3651.0E6	2001.395	2170.770
Average Aroclor-1260					400.279	434.154
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

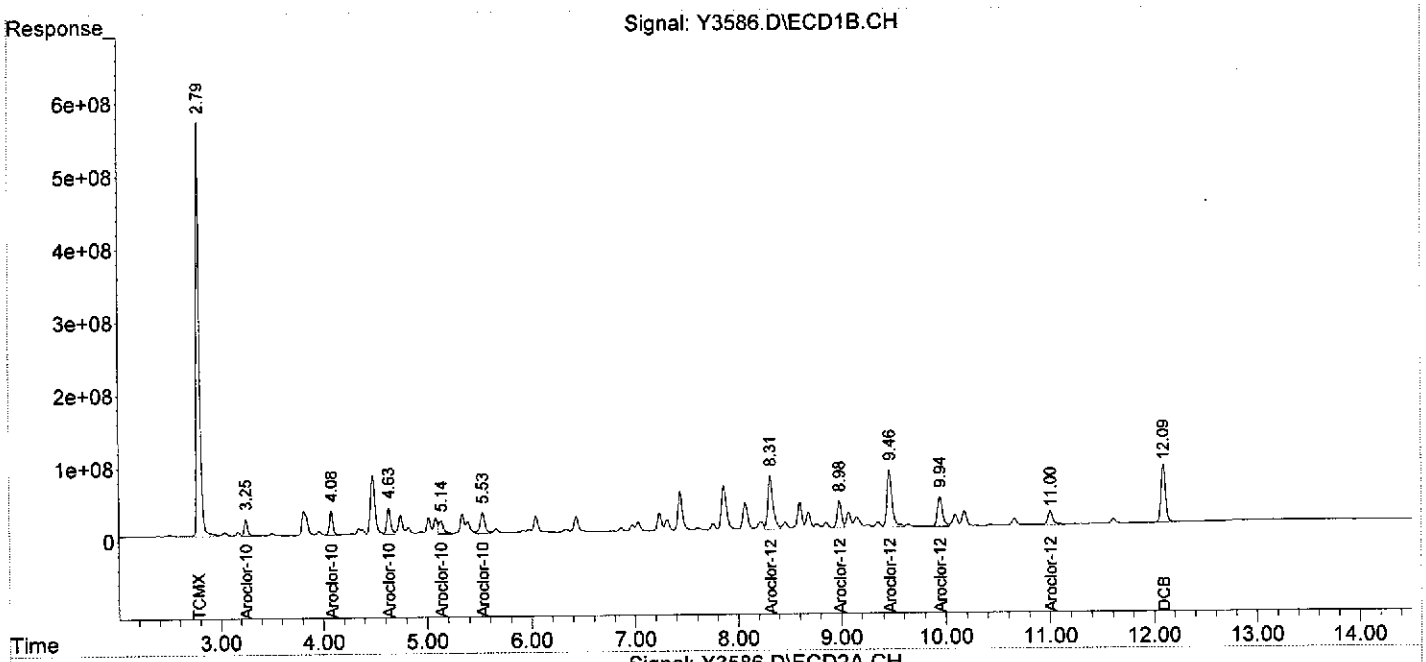
E12-02579 0082

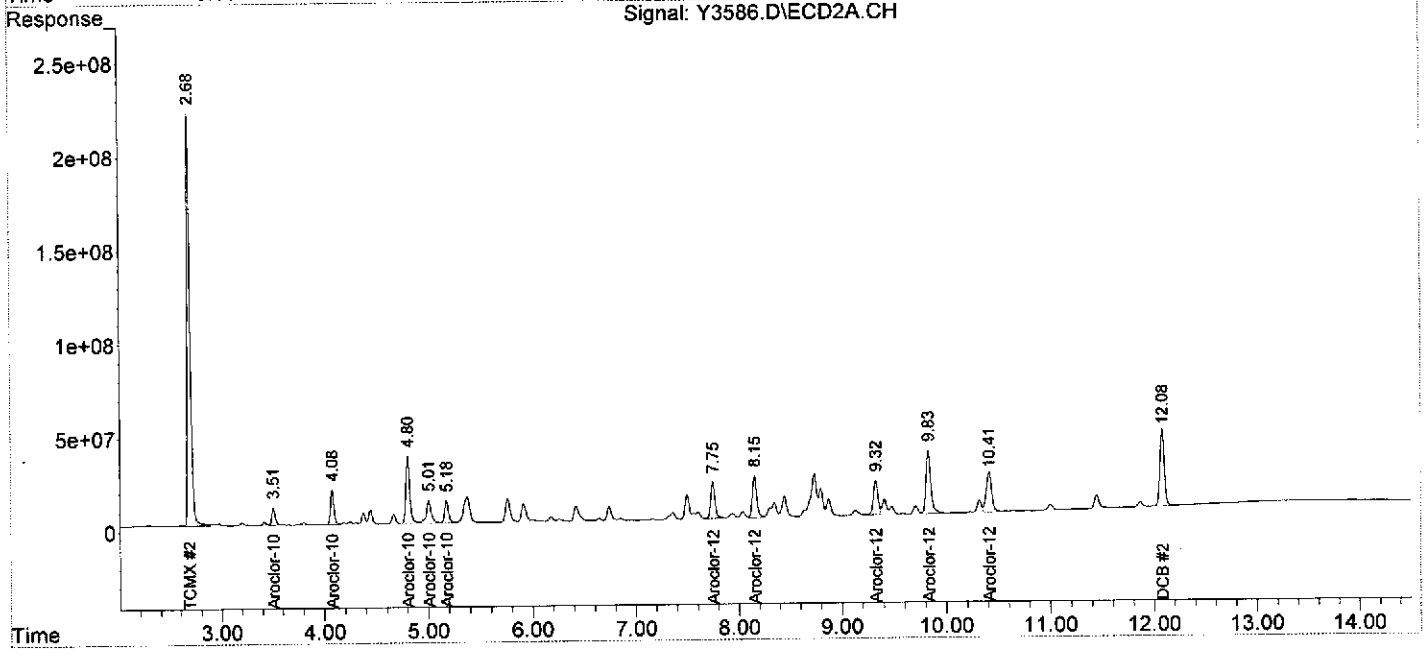
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3586.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 22:00
Operator : YG
Sample : PCB,PBA0315-MS10,A,1000ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:32:30 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.68	9988.0E6	3963.1E6	119.387	139.147
Spiked Amount 200.000			Recovery	=	59.69%	69.57%
2) S DCB	12.09	12.08	2586.3E6	1294.7E6	131.945m	154.568m
Spiked Amount 200.000			Recovery	=	65.97%	77.28%
Target Compounds						
3) L2 Aroclor-1016	3.25	3.51	570.6E6	194.5E6	343.501	370.157
4) L2 Aroclor-1016 {2}	4.08	4.08	759.5E6	411.4E6	355.553	398.290
5) L2 Aroclor-1016 {3}	4.63	4.80	925.7E6	955.6E6	311.273	414.565 #
6) L2 Aroclor-1016 {4}	5.07	5.00	3781.3E6	422.4E6	2589.047	421.397 #
7) L2 Aroclor-1016 {5}	5.53	5.18	988.9E6	316.9E6	392.656	408.759
Sum Aroclor-1016			7026.0E6	2300.9E6	3992.031	2013.168
Average Aroclor-1016					798.406	402.634
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.75	2619.9E6	541.3E6	400.587	413.224
34) L8 Aroclor-1260 {2}	8.98	8.15	1314.7E6	701.5E6	499.381	458.960
35) L8 Aroclor-1260 {3}	9.46	9.32	2919.1E6	617.3E6	398.987	498.905 #
36) L8 Aroclor-1260 {4}	9.94	9.83	1642.2E6	1225.7E6	429.871	484.473
37) L8 Aroclor-1260 {5}	11.00	10.41	810.6E6	950.9E6	494.213	519.606
Sum Aroclor-1260			9306.5E6	4036.7E6	2223.040	2375.168
Average Aroclor-1260					444.608	475.034
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

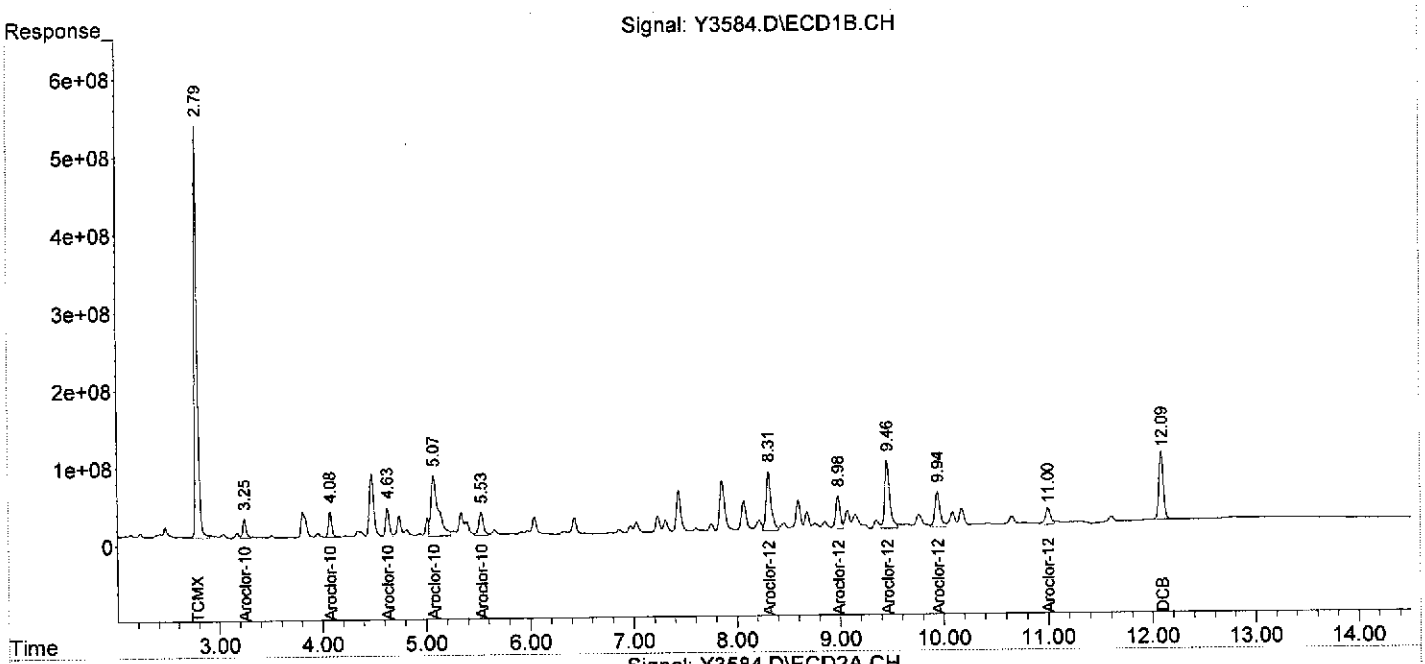
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

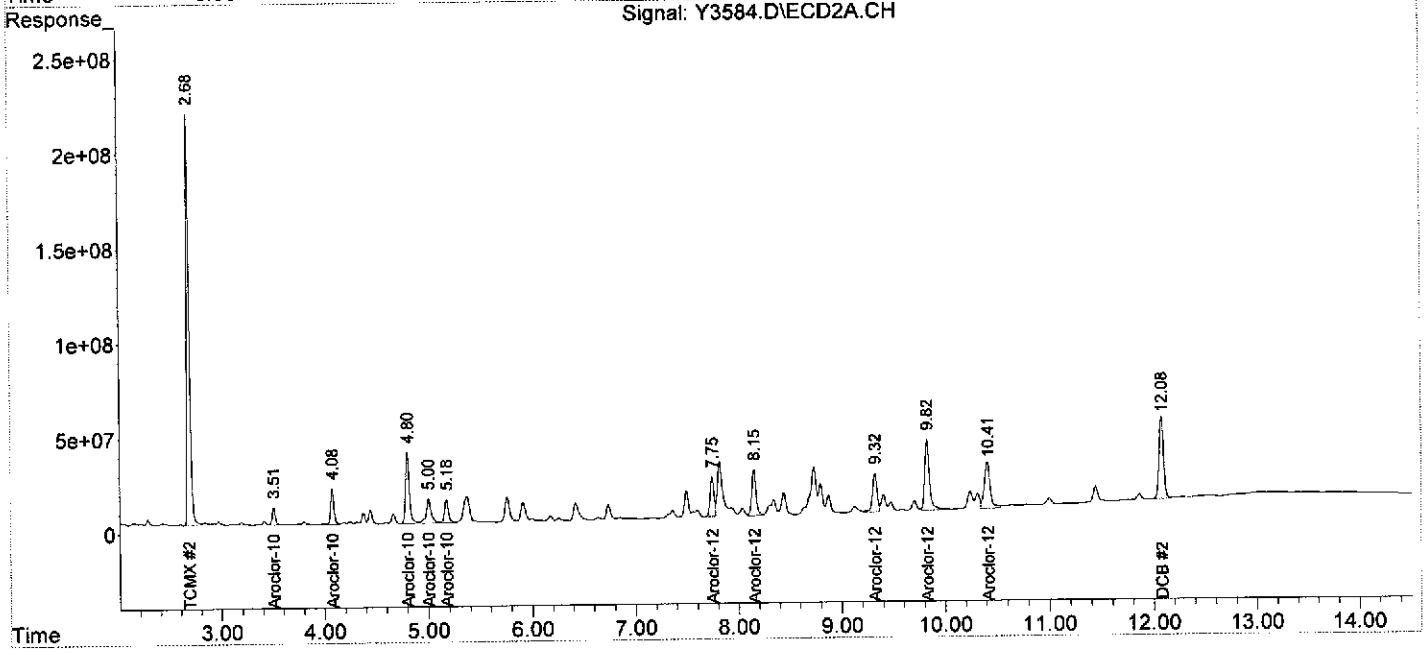
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3584.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:26
Operator : YG
Sample : PCB,02579-001-MS10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:30:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.79	2.68	10600.4E6	4255.9E6	126.706	149.428	
Spiked Amount 200.000			Recovery =		63.35%	74.71%	
2) S DCB	12.09	12.08	2708.1E6	1347.2E6	138.162m	160.840m	
Spiked Amount 200.000			Recovery =		69.08%	80.42%	
Target Compounds							
3) L2 Aroclor-1016	3.25	3.51	634.9E6	193.2E6	382.207	367.690	
4) L2 Aroclor-1016 {2}	4.08	4.08	750.7E6	413.8E6	351.449	400.603	
5) L2 Aroclor-1016 {3}	4.63	4.80	909.6E6	951.8E6	305.858	412.900	#
6) L2 Aroclor-1016 {4}	5.08	5.01	3796.2E6	420.0E6	2599.231	418.994	#
7) L2 Aroclor-1016 {5}	5.53	5.18	969.4E6	316.8E6	384.915	408.609	
Sum Aroclor-1016			7060.8E6	2295.6E6	4023.659	2008.796	
Average Aroclor-1016					804.732	401.759	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.31	7.75	2664.1E6	557.6E6	407.348	425.608	
34) L8 Aroclor-1260 {2}	8.98	8.15	1295.7E6	728.4E6	492.141	476.587	
35) L8 Aroclor-1260 {3}	9.46	9.32	2911.7E6	673.0E6	397.975	543.956	#
36) L8 Aroclor-1260 {4}	9.94	9.83	1784.6E6	1320.8E6	467.152	522.058	
37) L8 Aroclor-1260 {5}	11.00	10.41	965.1E6	1066.1E6	588.440	582.572	
Sum Aroclor-1260			9621.2E6	4345.9E6	2353.056	2550.781	
Average Aroclor-1260					470.611	510.156	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

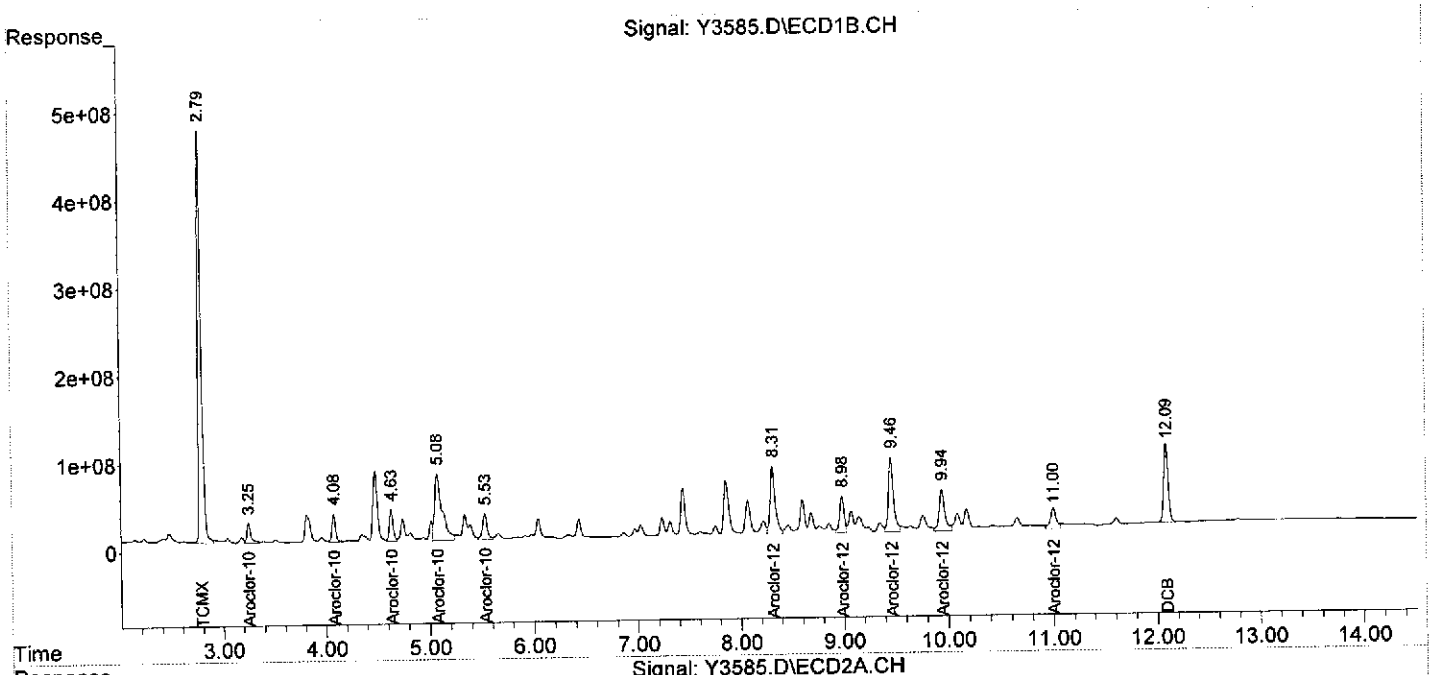
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

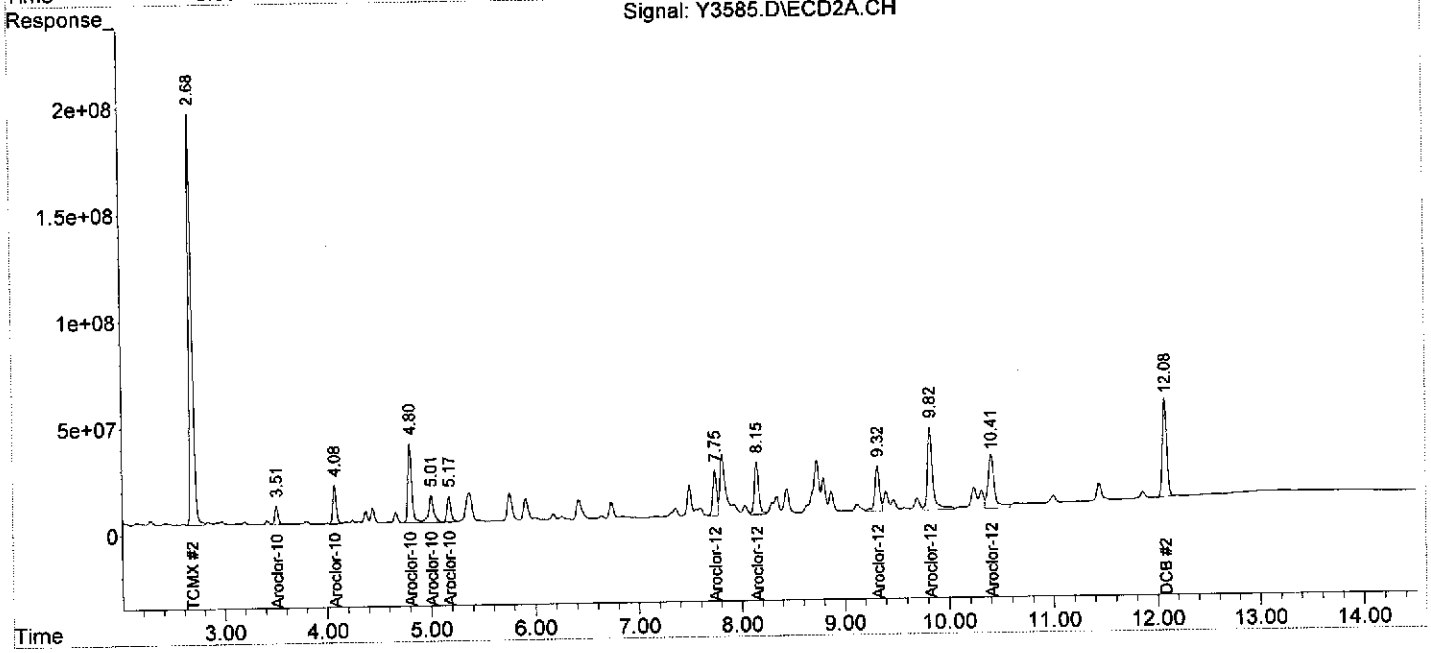
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\03-16-12\
Data File : Y3585.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 16 Mar 2012 21:43
Operator : YG
Sample : PCB,02579-001-MSD10,A,200ml,100,03/15/12,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 19 09:31:50 2012
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0312.M
Quant Title :
QLast Update : Thu Mar 15 13:08:07 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





PCB RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

PCB

DATE	3/12/2012 13:30	**Extra. Batch**	**CURVE**
INSTRUMENT	**Y**		
METHOD	**YPCB0312**		
SYS METHOD	**8082** (eg. 8015B M, 3810)		
ANALYST	**YULIYA**		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist	Client ID
1	100	Y3415		HEXANE										PCB
2	99	Y3416		ISOOCTANE										PCB
3	1	Y3417		8082_L5_IAS_4219,2_PPM										PCB
4	2	Y3418		8082_L4_IAS_4220,1_PPM										PCB
5	3	Y3419		8082_L3_IAS_4221,0.5_PPM										PCB
6	4	Y3420		8082_L2_IAS_4222,0.05_PPM										PCB
7	5	Y3421		8082_L1_IAS_4223,0.01_PPM										PCB
8	6	Y3422		8082_1221_IAS_4224,0.5_PPM										PCB
9	7	Y3423		8082_1232_IAS_4225,0.5_PPM										PCB
10	8	Y3424		8082_1242_IAS_4226,0.5_PPM										PCB
11	9	Y3425		8082_1248_IAS_4227,0.5_PPM										PCB
12	10	Y3426		8082_1254_IAS_4228,0.5_PPM										PCB
13	11	Y3427		8082_1262_IAS_4229,0.5_PPM										PCB
14	12	Y3428		8082_1268_IAS_4230,0.5_PPM										PCB
15	3	Y3429		8082_C_IAS_4221,0.5_PPM										PCB

LABORATORY CHRONICLE - GC

PCB

DATE 3/16/2012 0:00 **Extra. Batch** 031512-10 BA

INSTRUMENT Y

METHOD YPCB0312

SYS METHOD 8082 (eg. 8015B M, 3810)

ANALYST Yuliya

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Y3573	8082_C_IAS_4221,0.5_PPM										
2	2	Y3574	0315-BLK10			1	1000	3/15/12	A	1			100
3	3	Y3575		02492	1	1	200	3/15/12	A	1	3/12/12	3/12/12	100
4	4	Y3576		02492	2	1	200	3/15/12	A	1	3/12/12	3/12/12	100
5	5	Y3577		02492	3	1	200	3/15/12	A	1	3/12/12	3/12/12	100
6	6	Y3578		02492	4	1	200	3/15/12	A	1	3/12/12	3/12/12	100
7	7	Y3579		02492	5	1	200	3/15/12	A	1	3/12/12	3/12/12	100
8	8	Y3580		02492	6	1	200	3/15/12	A	1	3/12/12	3/12/12	100
9	9	Y3581		02493	1	1	200	3/15/12	A	1	3/12/12	3/13/12	100
10	10	Y3582		02494	1	1	200	3/15/12	A	1	3/13/12	3/13/12	100
11	11	Y3583		02579	1	1	1000	3/15/12	A	1	3/14/12	3/14/12	100
12	12	Y3584	02579-001-MS10			1	200	3/15/12	A	1			100
13	13	Y3585	02579-001-MSD10			1	200	3/15/12	A	1			100
14	14	Y3586	PBA0315-MS10			1	1000	3/15/12	A	1			100
15	1	Y3587	8082_C_IAS_4221,0.5_PPM										

STANDARD IAS#	STANDARD NAME:	Pest + Mirex + Aldrin L-2		
IB 4266 4270				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/06/12	IAS# 4266	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/06/12	1:20			50 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K087J06	

STANDARD IAS#	STANDARD NAME:	Pest + Mirex + Aldrin L-1		
4271				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/06/12	IAS# 4266	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/06/13	1:50			2 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K087J06	

STANDARD IAS#	STANDARD NAME:	QAM Surrogate (1)		
4272				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
3/12/12	Aldrich GTP Mallinckrodt Chlorobenzene	T-280-0 4919	13213 MG 4919 KXHM	neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/12/13	1.0539 GTP 1.42 mL Chlorobenzene → 35mL volume			2,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	DK

STANDARD IAS#	STANDARD NAME:	PCB Spike		
4273				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
03/12/12	Chem Service	F11285 1260 F10745 1016	45E-133B 1260 45E-124D 1016	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/12/12	5mL 1016 + 5mL 1260			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

F112BS EXP:01/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution
1000ug/ml In Hexane
Lot: 456-138B

FLAMMABLE-REPRODUCTIVE HAZARD
WARNING!: READ your MSDS before HANDLING chemical.

F107AS EXP:12/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution
1000ug/ml In Hexane
Lot: 456-124D

FLAMMABLE-REPRODUCTIVE HAZARD
WARNING!: READ your MSDS before HANDLING chemical

F2170S EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution
1000ug/ml In Hexane
Lot: 463-21A

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:05/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 456-39B

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:05/12 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 456-39B

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-2		
4255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS#4250	—	—	2ppm + 0.8 ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1:100			0.02ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-3		
4256				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS#4250	—	—	2ppm + 0.8ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1:4			0.5 ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB Mix 2 L-4		
4256 (4256)				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/07/12	IAS# 4250	—	—	2ppm + 0.8ppm surr
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/07/12	1: 2.67 (375 µL → 1mL)			0.75 ppm + surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YT

STANDARD IAS#	STANDARD NAME:	PCB/PEST Surrogate		
4257				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
08/08/12	Chem Service	F-21705 DCB F-90345 TCMX	463-21A DCB 456-39B TCMX	1000 PPM DCB 500 PPM TCMX
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
08/08/12	5mL (DCB) + 10 ml (TCMX) → 50ml Hexane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	KB

NOTEBOOK INSERT LABEL

Aroclor 1016
Lot: LB79830 EXP: OCT/2013 STORAGE: ROOM TEMP. 4-8097 1 x 1ml

DATE RECEIVED: 04/07/11 MB
1000 ppm

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260
Lot: LB80264 EXP: DEC/2013 STORAGE: ROOM TEMP. 4-4809 1 x 1.0ml

DATE RECEIVED: 04/07/11 MB
1000 ppm

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	PCB Stock		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-8097 (1016) 4-4869 (1260)	LB 79830 (1016) LB 80264 (1260)	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:10 (1mL of each → 10mL)			100 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB Working Standard		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4053	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10 stock (1016/1260) + 40mL IAS#4000 (50ng) → 10mL			10ppm + Surrg (4ppm)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-5 (1016/1260)		
4055				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—	—	10ppm + Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:5			2ppm + Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-4 (1016/1260)		
4056				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—	—	10ppm + Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10			1ppm + Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB World Standard		
4218				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4053	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:10 (Stock 1016/1260) + 400 µL IAS #4184 → 10mL			10ppm + surrog (4ppm)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-5 (1016/1260)		
4219				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:5			2ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-4 (1016/1260)		
4220				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:10			1ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-3 (1016/1260)		
4221				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/18/12	IAS #4218	—	—	10 ppm + Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/18/12	1:20			0.5ppm + Surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K08J06	YG

STANDARD IAS#	STANDARD NAME:	PCB L-2 (1016/1260)		
4222				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4221	–	–	0.5ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:10			0.05 ppm + Surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	PCB - L1 (1016/1260)		
4223				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS #4221	–	–	0.5ppm + surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:50			0.01ppm + surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1221 WORKING STANDARD		
4224				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4067	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:20			0.5ppm + 0.2ppm (surrog.)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1232 WORKING STANDARD		
4225				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-18-12	IAS# 4068	–	–	10ppm + 4ppm (surrog)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-18-12	1:20			YB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	05ppm + 0.2ppm (surrog)

YB

STANDARD IAS#	STANDARD NAME:	1242 WORKING STANDARD		
4226				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4069	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1248 WORKING STANDARD		
4227				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4070	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1254 WORKING STANDARD		
4228				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4071	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog.)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

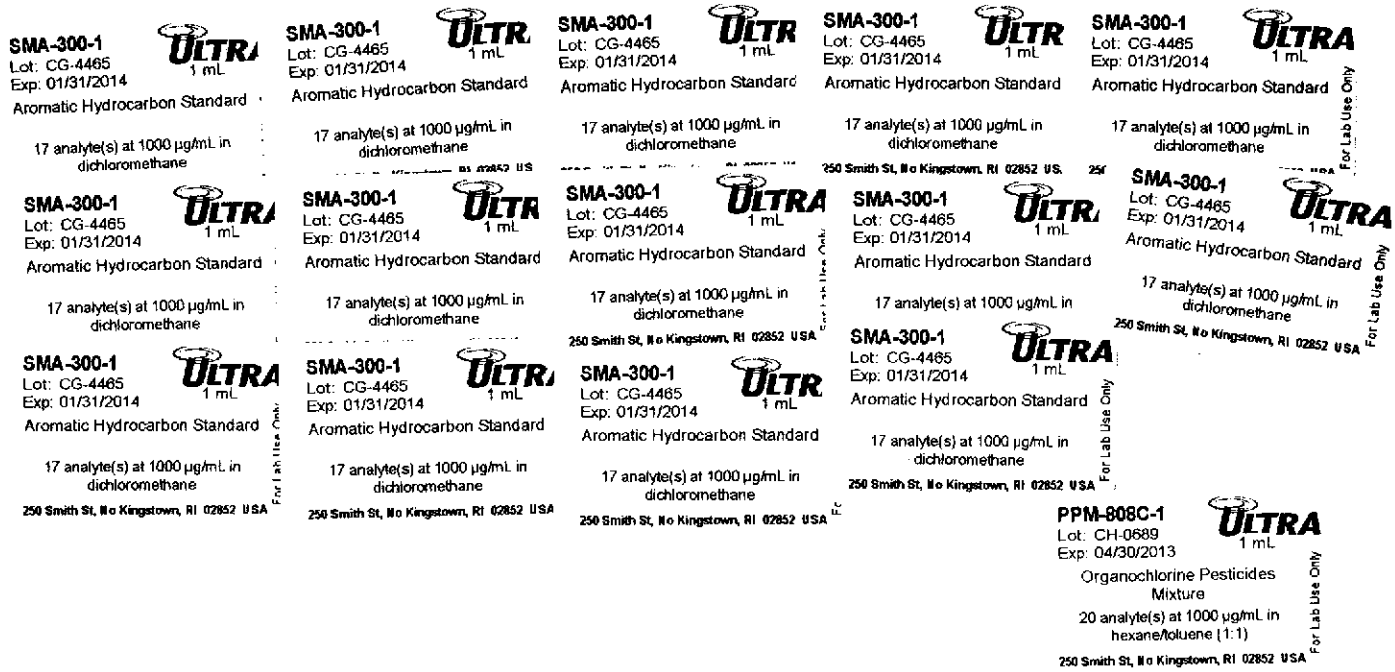
STANDARD IAS#	STANDARD NAME:	1262 WORKING STANDARD		
4229				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS # 4072	–	–	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	1268 WORKING STANDARD		
4230				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS# 4013	—	—	10ppm + 4ppm (surrog.)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:20			0.5ppm + 0.2ppm (surrog)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9-26-21	isooctane		K08J06	YB

STANDARD IAS#	STANDARD NAME:	L-5 504.1		
4231				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4042	—	—	3PPM EDB/DBCP 4PPM 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	10µl of IAS# 4042 → 10ml Hexane			2PPB EDB/DBCP 4PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB

STANDARD IAS#	STANDARD NAME:	L-4 504.1		
4232				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4231	—	—	2PPB EDB/DBCP 4PPB 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	750µl of IAS# 4231 → ~~10ml~~ 1ml Hexane			1.5PPB EDB/DBCP 3PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB

STANDARD IAS#	STANDARD NAME:	L-3 504.1		
4233				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/12	IAS# 4231	—	—	2PPB EDB/DBCP 4PPB 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	500µl of IAS# 4231 → 1ml Hexane			1PPB EDB/DBCP 2PPB 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/02/21	Hexane		107925	YB



F2170S EXP:10/11 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution
1000ug/ml In Hexane
Lot: 431-70A

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 467-155A

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

F903AS EXP:03/13 5ml

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution
500ug/ml In Acetone
Lot: 467-155A

FLAMMABLE-HARMFUL-IRRITANT

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	ARO SPIKE		
4182				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01-04-12	ULTRA SCIENTIFIC ALDRICH (1,2,3 TRIMETHYL Benzene	SMA-800-1 T-75202	CG-4465 03919 JA	1000 ppm / neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07-04-12	1 ml of mix + 1.1 µl of 1,2,3-Trimethylbenzene			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	SH

STANDARD IAS#	STANDARD NAME:	Pest Stock + Mirex		
4183				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ULTRA - Pest ChemService - Mirex	PPM-308C-1 F212RP5	CH-0689 466-109B	1000 PPM (Pest) 100 PPM (Mirex) surrogate-100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/05/13	10µl(ULTRA) + 100µl(ChemService) + 200µl(surrogate) → 10ml(Isooctane)			1000 PPB (Pest) 1000 PPB (Mirex) surrogate-2000 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
09/26/21	Isooctane		K089J06	

STANDARD IAS#	STANDARD NAME:	PCB/Pest Surrogate		
4184				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ChemService			1000 PPM DCB 500 PPM TCMX
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/05/12	5ml(DCB) + 10ml(TCMX) → 50ml(Hexane)			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
07/06/21	Hexane		107825	

STANDARD IAS#	STANDARD NAME:	FR. SURROGATE STOCK		
4185				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/05/12	ALDRICH 2-FBP ALDRICH 2-SNP	102741-25G 103644-5G	09506 PH 12418 HG	neat neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/05/13	1g of each → 10 ml volume			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB64213 EXP: JAN/2012 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 10/6/10 YS
1000ppm

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STANDARD IAS#	STANDARD NAME:	PCB L-3 (1016/1260)		
4057				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4054	—		10ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-2 (1016/1260)		
4058				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4057	—	—	0.5ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:10			0.05ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	PCB L-1 (1016/1260)		
4059				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4057	—	—	0.5ppm+Surrg
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:50			0.01ppm+Surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1221 Stock 1		
4060				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-8098	LB64213	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	—

NOTEBOOK INSERT LABEL

Aroclor 1232
Lot: LB57806 EXP: APR/2013 STORAGE: ROOM TEMP. 4-4805 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

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NOTEBOOK INSERT LABEL

Aroclor 1242
Lot: LB71718 EXP: NOV/2012 STORAGE: ROOM TEMP. 4-4806 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1248
Lot: LB73022 EXP: JAN/2013 STORAGE: ROOM TEMP. 4-4807 1 x 1.0ml

DATE RECEIVED: 05/20/11 YP
1000ppm

SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1254
Lot: LB64150 EXP: JAN/2012 STORAGE: ROOM TEMP. 4-4808 1 x 1.0ml

DATE RECEIVED: 10/6/10 YP
1000ppm

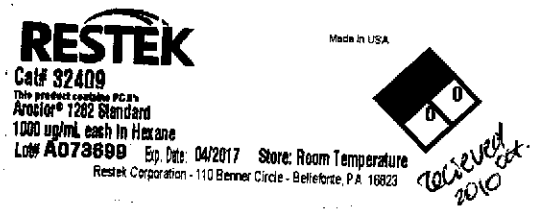
SUPELCO ANALYTICAL
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

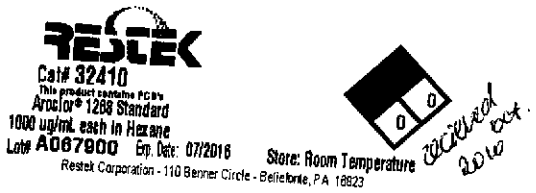
STANDARD IAS#	STANDARD NAME:	1232 Stock 1		
4061				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4805	LB357808	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	~~YB~~

STANDARD IAS#	STANDARD NAME:	1242 Stock 2 1 YB		
4062				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4806	LB 77718	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB

STANDARD IAS#	STANDARD NAME:	1248 Stock 1		
4063				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Supelco	4-4807	~~LB~~ LB73022 YB	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB

STANDARD IAS#	STANDARD NAME:	1254 Stock 1		
4064				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/26/11	Supelco	4-4808	LB64150	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YB


RESTEK
Made in USA
Cat# 32409
This product contains PCB's
Aroclor® 1262 Standard
1000 ug/mL each in Hexane
Lot# A073699 Exp. Date: 04/2017 Store: Room Temperature
Restek Corporation - 110 Benner Circle - Bellefonte, PA 16823
0
0
received oct. 2010


RESTEK
Cat# 32410
This product contains PCB's
Aroclor® 1268 Standard
1000 ug/mL each in Hexane
Lot# A067900 Exp. Date: 07/2016 Store: Room Temperature
Restek Corporation - 110 Benner Circle - Bellefonte, PA 16823
0
0
received oct. 2010

STANDARD IAS#	STANDARD NAME:	1262 Stock 1		
4065				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Restek	32409	A073699	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	LG

STANDARD IAS#	STANDARD NAME:	1268 Stock 1		
4066				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	Restek	32410	A067900	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	YG

STANDARD IAS#	STANDARD NAME:	1221 Stock 2		
4067				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4060	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1221) + 1:25 (IAS# 4000 50ppm) → 1ML			10ppm + 4ppm 50ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1232 Stock 2		
4068				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4061	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1232) + 1:25 (IAS# 4000) → 1ML			10 ppm + 4ppm 50ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YG

STANDARD IAS#	STANDARD NAME:	1242 Stock 2		
4069				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4062	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1242) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1248 Stock 2		
4070				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4063	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1248) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surr
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1254 Stock 2		
4071				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4064	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1254) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1262 Stock 2		
4072				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS# 4065	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1262) + 1:25 (IAS# 4000) → 1 mL			10 ppm + 4ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YS

STANDARD IAS#	STANDARD NAME:	1268 Stock 2		
4073				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4066	—	—	10000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/26/12	1:100 (1262) + 1:25 (IAS#4000) = 1ML			10ppm + 4ppm (surrg)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1221 Working Standard		
4044				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4067	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2 ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1232 Working Standard		
4075				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4068	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

STANDARD IAS#	STANDARD NAME:	1242 Working Standard		
4076				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
07/26/11	IAS#4069	—	—	10ppm + 4ppm (surrg)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/26/12	1:20			0.5ppm + 0.2ppm surrg
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12/22/20	Isooctane		E18H36	YB

INTEGRATED ANALYTICAL LABORATORIES, LLC

Extraction Log - GC
(PCB/Pest)

Extraction Date/Time: 3/15/2012 4:19:00 PM
Technician: A. DelMundo

Tray ID:
Batch ID: 031512-10
Matrix: Aqueous
Factor: 1

Sample ID #	Vap Cell #	Funnel	Test	% Moist	Initial (g/ml)	Final (ml)	Surrogate IAS #:µl	Spike IAS #:µl	Color	%SED	pH	Comments	Done DateTime
BLANK	BLK		PCB	-	1000	5.00	4257 : 10						3/15 18:17
02492-001	01		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-002	02		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-003	03		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-004	04		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-005	05		PCB	100	200	5.00	4257 : 10						3/15 18:17
02492-006	06		PCB	100	200	5.00	4257 : 10						3/15 18:17
02493-001	07		PCB	100	200	5.00	4257 : 10						3/15 18:49
02494-001	08		PCB	100	200	5.00	4257 : 10						3/15 18:49
02579-001	09		PCB	100	1000	5.00	4257 : 10					R-48	3/15 18:49
02579-001-MS	10		PCB	-	200	5.00	4257 : 10	4273 : 5					3/15 18:49
02579-001-MSD	11		PCB	-	200	5.00	4257 : 10	4273 : 5					3/15 18:49
BLK-SPK	BSPK		PCB	-	1000	5.00	4257 : 10	4273 : 5					3/15 18:49

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

Color: 1 = Clear; 2 = Light Yellow;
3 = Yellow - Gold; 4 = Brown; 5 = Black

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:
DBC 4.96

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
DRO	0315-BLK01	SOIL	03/15/2012	12:45	73	4.96	
SS-1	02576-001	SOIL	03/15/2012	12:56	82	4.96	
GPEC-MP1	02579-002	SOIL	03/15/2012	13:06	69	4.96	
GPEC-MP2	02579-003	SOIL	03/15/2012	13:17	70	4.96	
GPEC-MP3	02579-004	SOIL	03/15/2012	13:28	70	4.96	
CONC_031	02531-001	SOIL	03/15/2012	13:38	63	4.96	
SOIL_031	02531-003	SOIL	03/15/2012	13:49	77	4.96	
CARTERET	02524-001	SOIL	03/15/2012	13:59	91	4.96	
PRAISE_P	02538-001	SOIL	03/15/2012	14:20	73	4.96	
WC-1	02562-001	SOIL	03/15/2012	14:31	89	4.96	
STOCKPIL	02507-001	SOIL	03/15/2012	14:42	72	4.96	
DRO	02579-002-MS01	SOIL	03/15/2012	14:52	76	4.96	
DRO	02579-002-MSD01	SOIL	03/15/2012	15:03	78	4.96	
DRO	DBS0315-MS01	SOIL	03/15/2012	15:25	66	4.96	
WC-1	02550-001	SOIL	03/15/2012	15:35	75	4.96	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	54 - 168	± 0.080 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: DBS0315-MS01

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	770	77.0		70 - 130

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 02579-002-MSD01

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	47.2	603	55.6		24 - 158

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	47.2	674	62.7		12.0		30	24 - 158

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: Q9971.D

Date Extracted: 03/15/2012

Date Analyzed: 03/15/2012

Instrument ID: GC-Q

Matrix: SOIL

Time Analyzed: 12:45

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SS-1	02576-001	03/15/2012	12:56
GPEC-MP1	02579-002	03/15/2012	13:06
GPEC-MP2	02579-003	03/15/2012	13:17
GPEC-MP3	02579-004	03/15/2012	13:28
CONC_031	02531-001	03/15/2012	13:38
SOIL_031	02531-003	03/15/2012	13:49
CARTERET	02524-001	03/15/2012	13:59
PRAISE_P	02538-001	03/15/2012	14:20
WC-1	02562-001	03/15/2012	14:31
STOCKPIL	02507-001	03/15/2012	14:42
DRO	02579-002-MS01	03/15/2012	14:52
DRO	02579-002-MSD01	03/15/2012	15:03
DRO	DBS0315-MS01	03/15/2012	15:25
WC-1	02550-001	03/15/2012	15:35

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9973.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:06 pm
Operator : JS
Sample : GPEC-MP1,02579-002,S,10.50g,7.00,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	11335663	69.237 ng m
Spiked Amount 100.000		Recovery =	69.24%
Target Compounds			
3) H TPH-DRO	3.300	21822651	47.202 ng

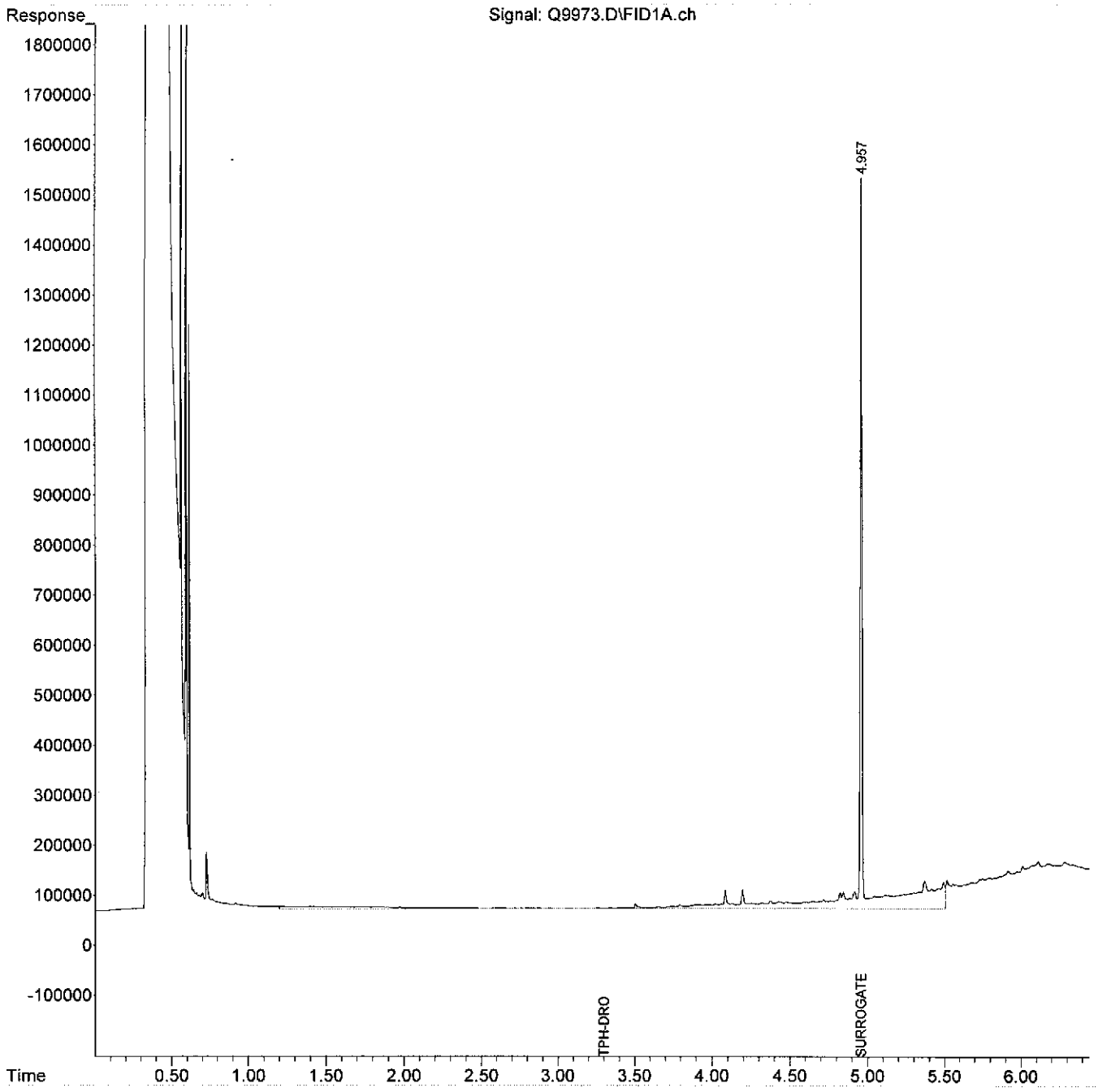
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9973.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:06 pm
Operator : JS
Sample : GPEC-MP1,02579-002,S,10.50g,7.00,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9974.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:17 pm
Operator : JS
Sample : GPEC-MP2,02579-003,S,10.02g,7.50,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	11404279	69.656 ng m
Spiked Amount 100.000		Recovery =	69.66%
Target Compounds			
3) H TPH-DRO	3.300	40989663	88.660 ng

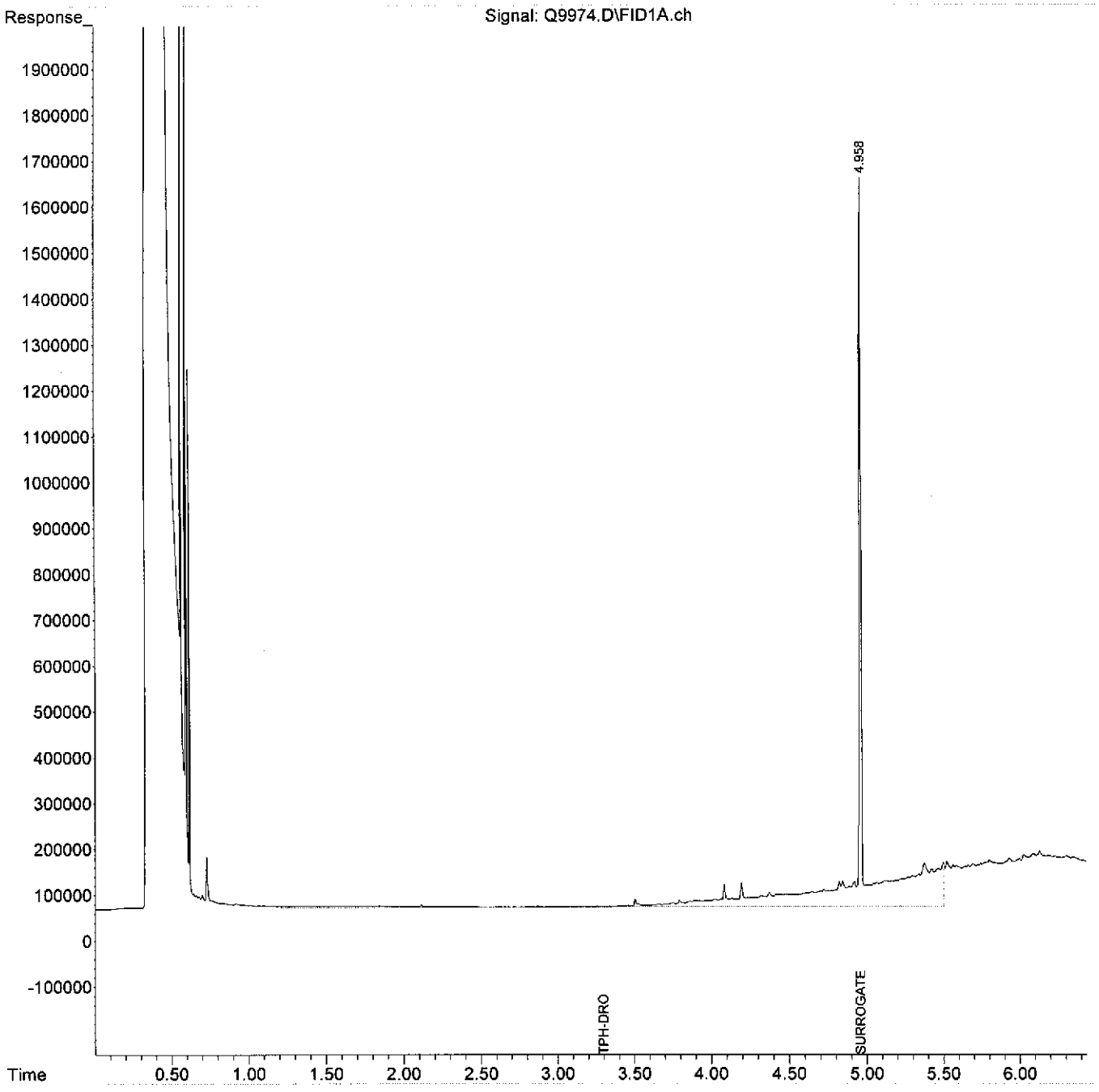
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9974.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:17 pm
Operator : JS
Sample : GPEC-MP2,02579-003,S,10.02g,7.50,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:08 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9975.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:28 pm
Operator : JS
Sample : GPEC-MP3,02579-004,S,10.55g,6.70,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	11417174	69.735 ng m
Spiked Amount 100.000		Recovery =	69.73%
Target Compounds			
3) H TPH-DRO	3.300	37621187	81.374 ng

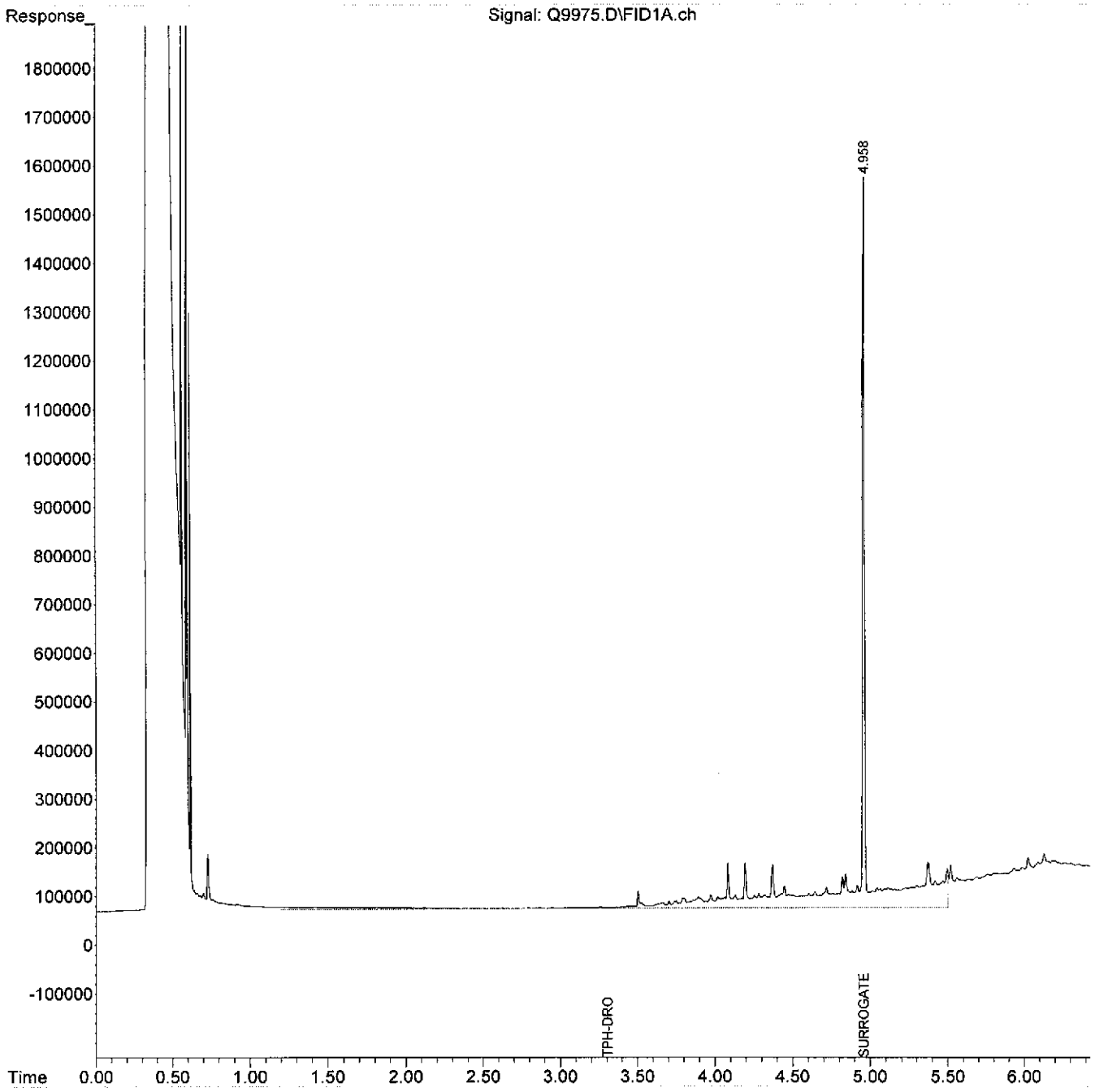
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9975.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 1:28 pm
Operator : JS
Sample : GPEC-MP3,02579-004,S,10.55g,6.70,03/15/12,15
Misc : 031512-01,03/14/12,03/14/12,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:41:19 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/14/2012 Instrument ID: GC-Q

Date File: Q9957.D Q9956.D Q9955.D Q9954.D Q9953.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.23	3.37

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RF	%RSD
TPH-DRO	52.4	44.0	42.7	52.3	39.7	46.2	12.6

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 03/15/2012 12:35

Date File: Q9970.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		46.2	43.0	6.93

Date Analyzed: 03/15/2012 15:46

Date File: Q9987.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		46.2	42.4	8.23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9953.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:25 pm
Operator : JS
Sample : DRO/GRO_L5_IAS_4213,4000_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:39 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	56455190	344.822 ng
Spiked Amount 100.000		Recovery = 344.82%	
Target Compounds			
3) H TPH-DRO	3.300	1586403342	3431.371 ng

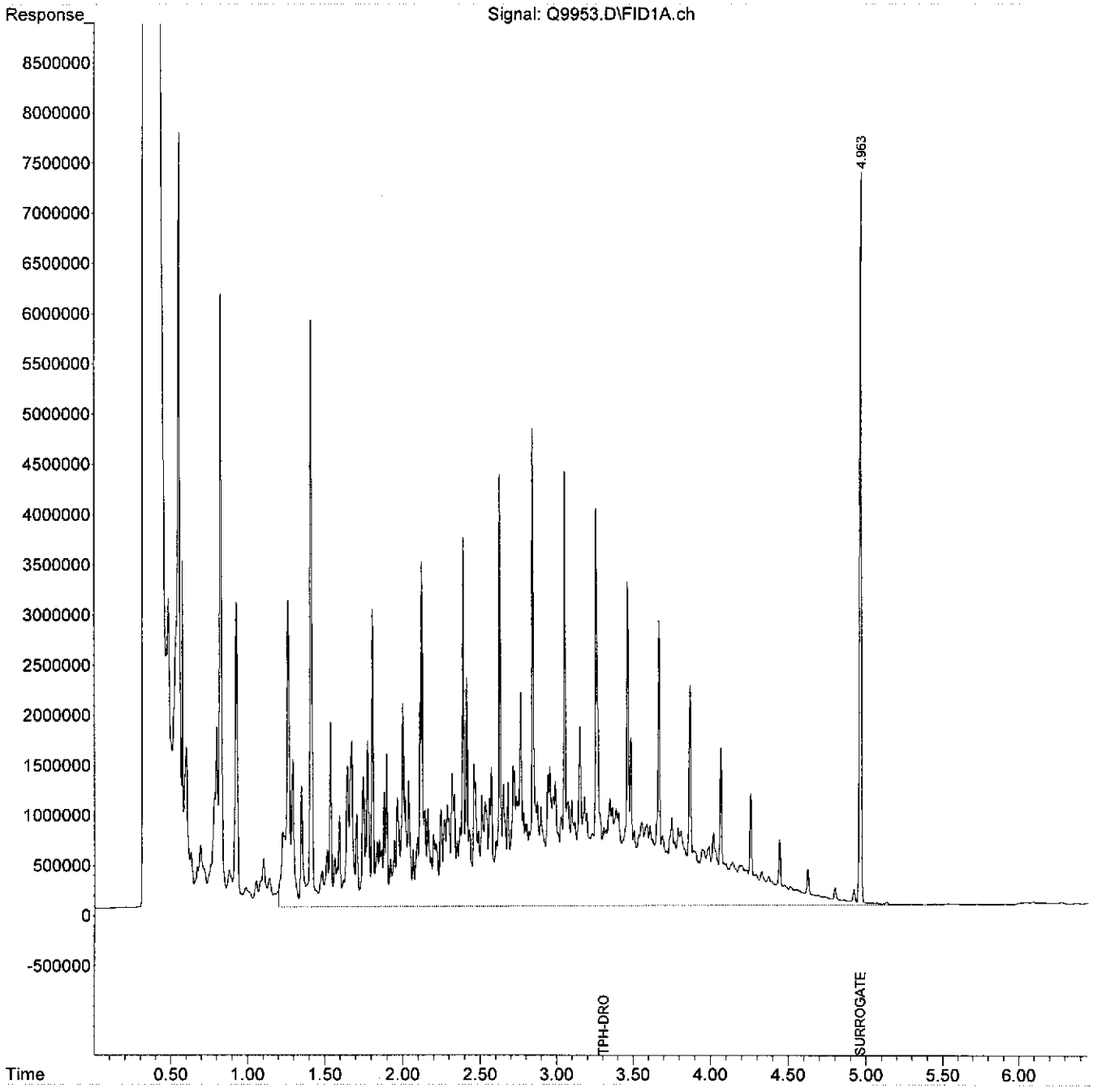
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9953.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:25 pm
Operator : JS
Sample : DRO/GRO_L5_IAS_4213,4000_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:39 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9954.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:36 pm
Operator : JS
Sample : DRO/GRO_L4_IAS_4214,2000_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.959	36672715	223.993 ng
Spiked Amount 100.000		Recovery = 223.99%	
Target Compounds			
3) H TPH-DRO	3.300	1046550950	2263.677 ng

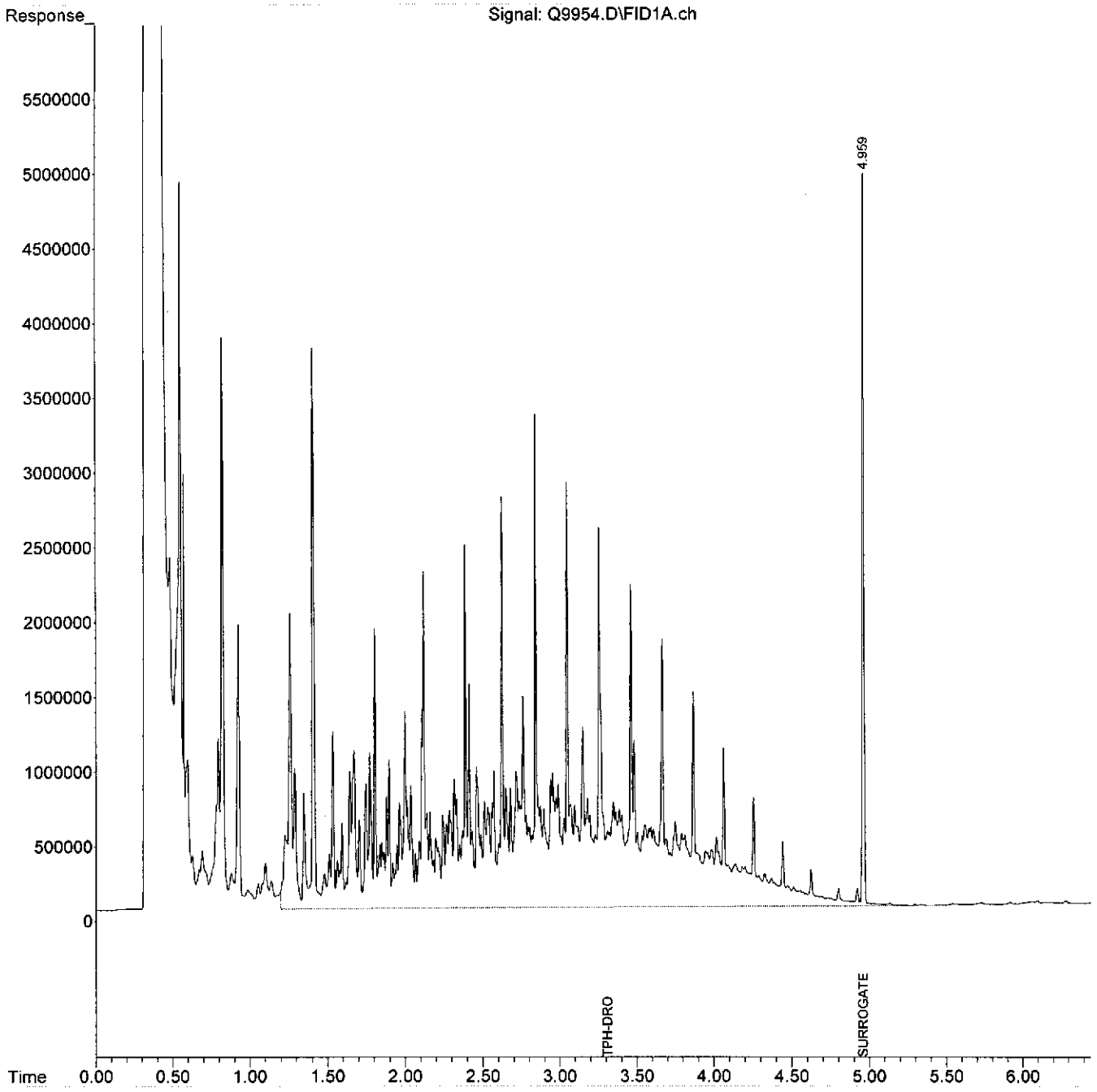
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9954.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:36 pm
Operator : JS
Sample : DRO/GRO_L4_IAS_4214,2000_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:16:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9955.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_L3_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	15071783	92.057 ng m
Spiked Amount 100.000		Recovery =	92.06%
Target Compounds			
3) H TPH-DRO	3.300	427351253	924.356 ng

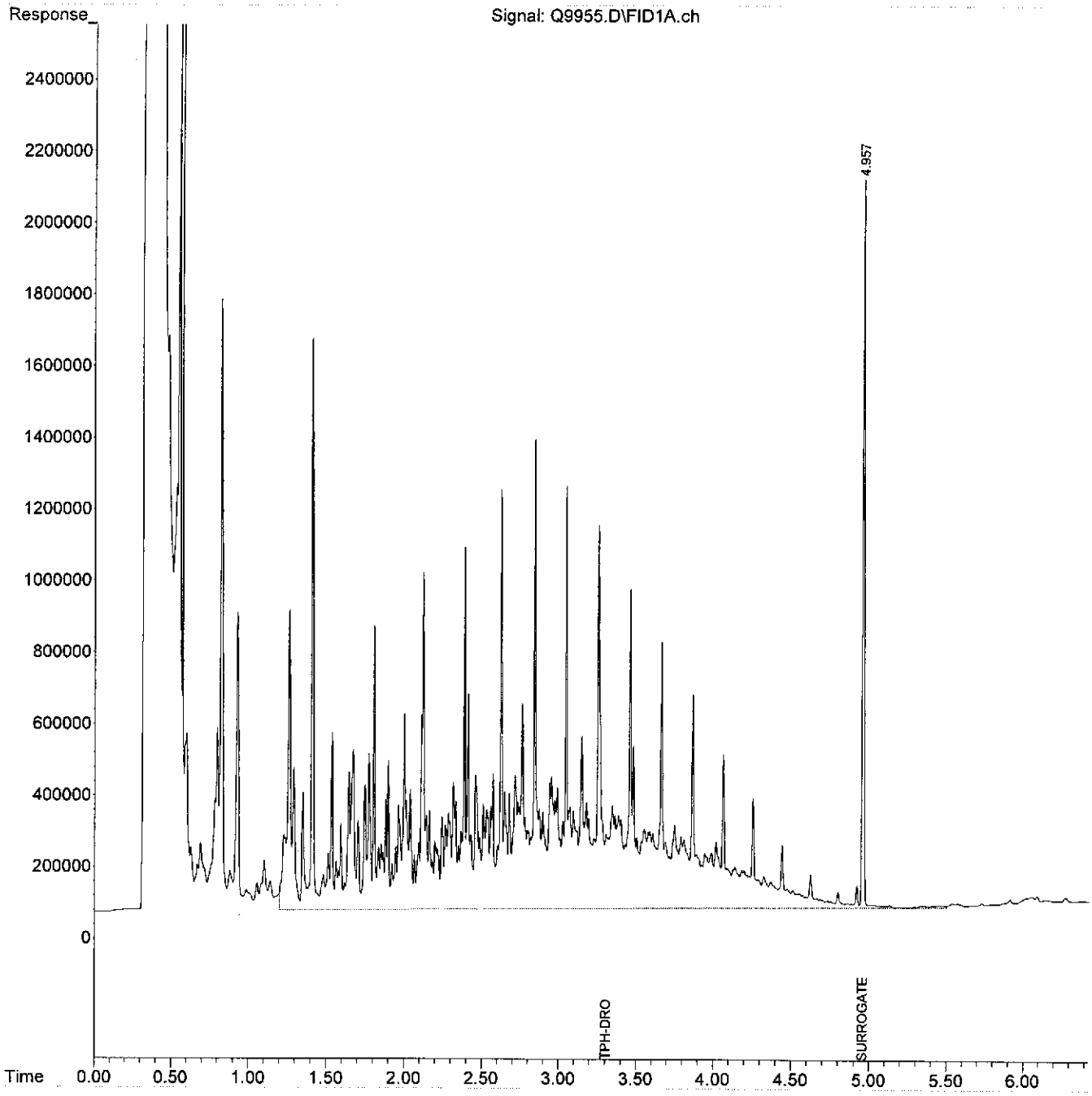
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9955.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_L3_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9956.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:57 pm
Operator : JS
Sample : DRO/GRO_L2_IAS_4216,500_PPM
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.957	7771740	47.469 ng m
Spiked Amount 100.000		Recovery =	47.47%
Target Compounds			
3) H TPH-DRO	3.300	219970607	475.794 ng

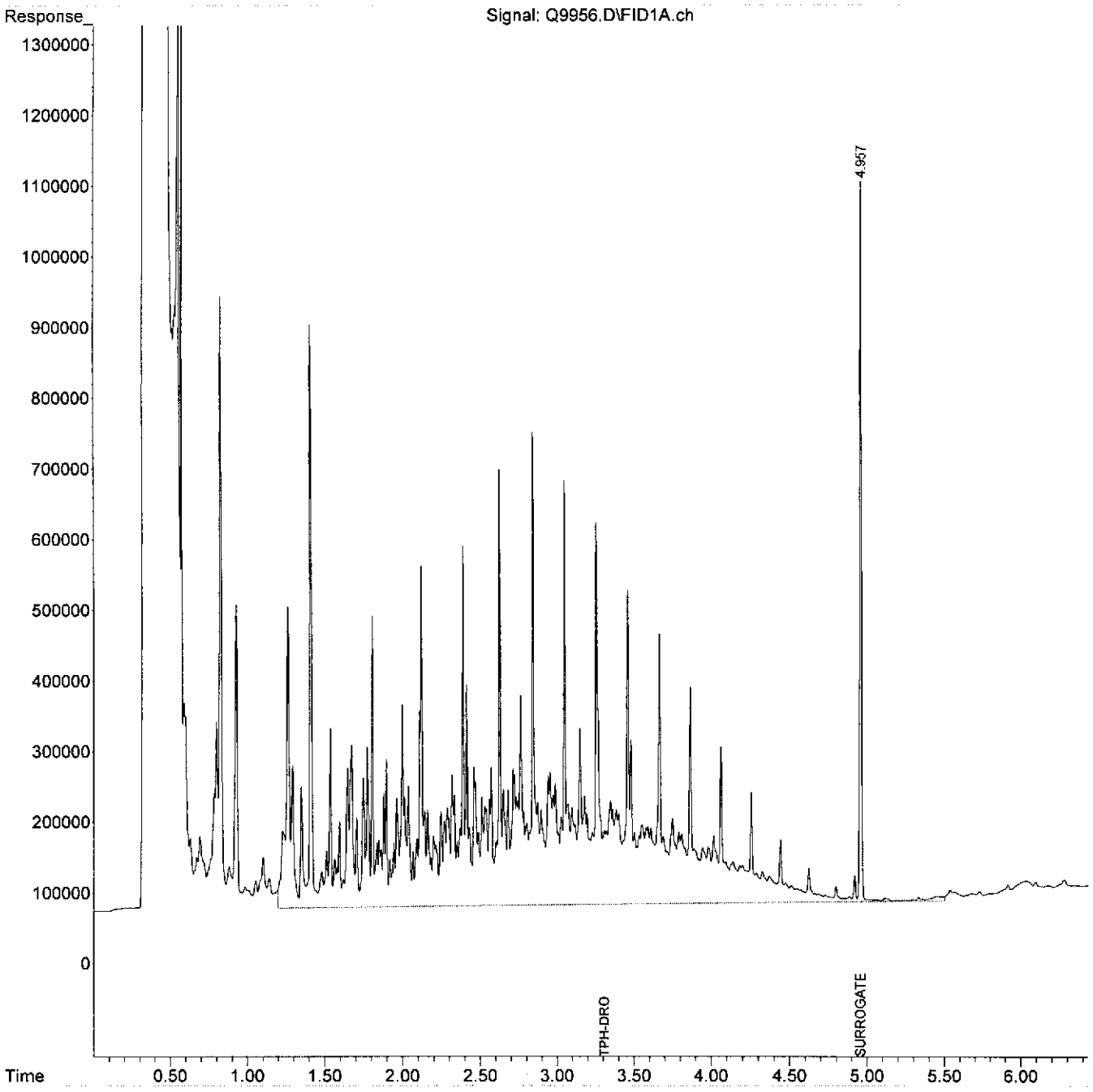
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9956.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 3:57 pm
Operator : JS
Sample : DRO/GRO_L2_IAS_4216,500_PPM
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:17:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9957.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 4:07 pm
Operator : JS
Sample : DRO/GRO_L1_IAS_4217,40_PPM
Misc : NA,NA,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:18:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.956	750535	4.584 ng m
Spiked Amount 100.000		Recovery =	4.58%
Target Compounds			
3) H TPH-DRO	3.300	20979251	45.378 ng

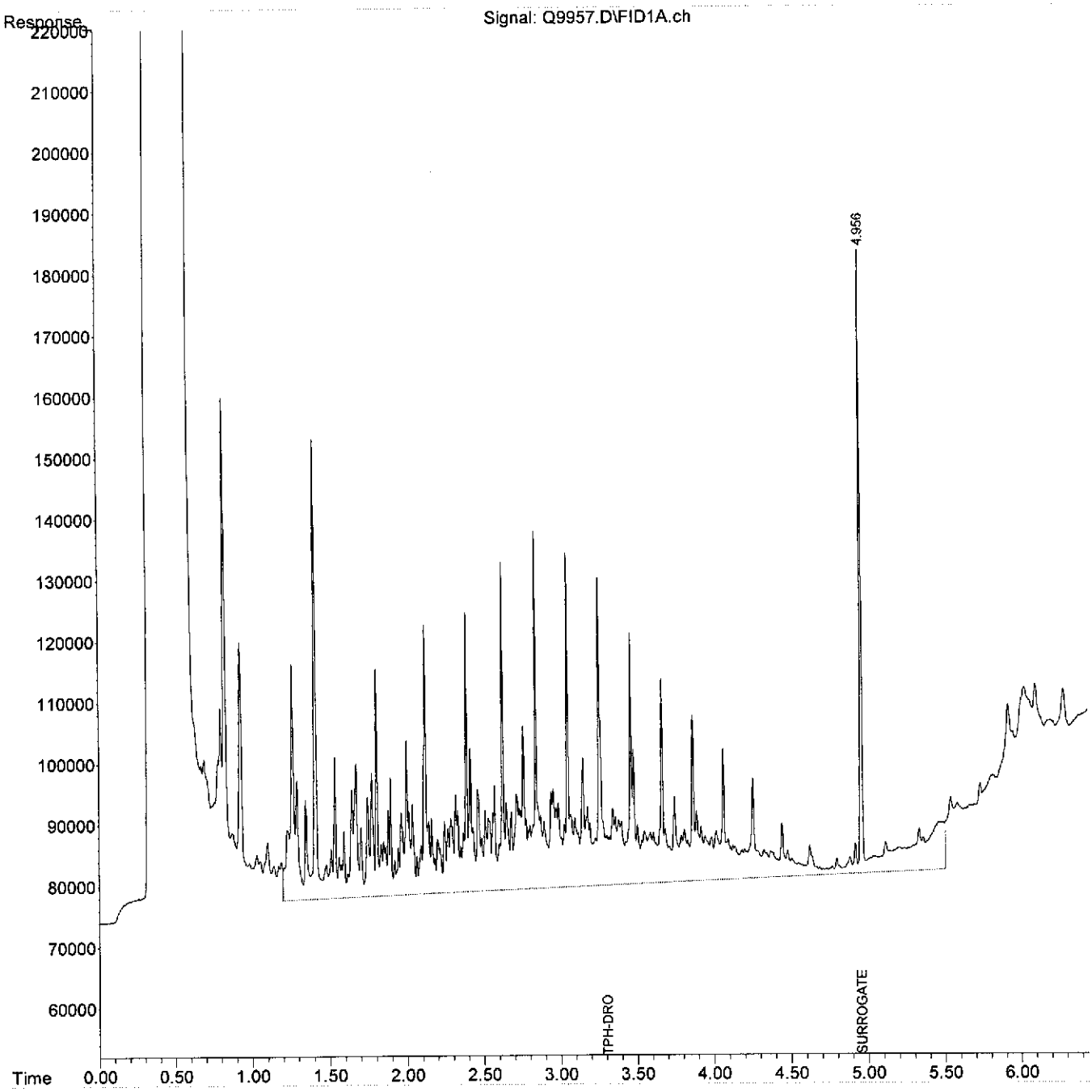
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-14-12\
Data File : Q9957.D
Signal(s) : FID1A.ch
Acq On : 14 Mar 12 4:07 pm
Operator : JS
Sample : DRO/GRO_L1_IAS_4217,40_PPM
Misc : NA,NA,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 14 16:18:01 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Wed Mar 14 16:15:37 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9970.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:35 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	16473499	100.618	ng	m
Spiked Amount 100.000		Recovery = 100.62%			
Target Compounds					
3) H TPH-DRO	3.300	430078790	930.255	ng	

(f)=RT Delta > 1/2 Window (m)=manual int.

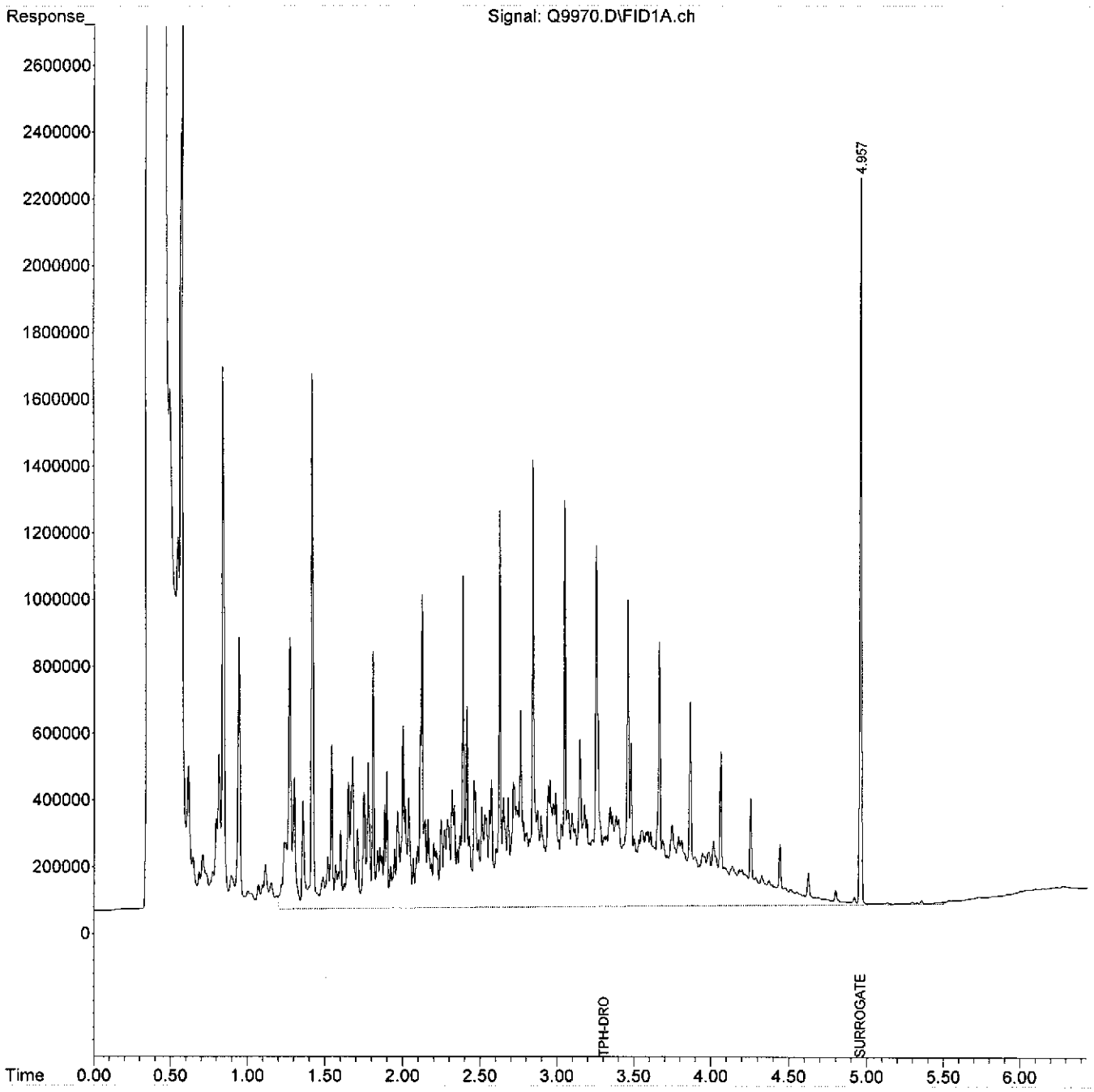
JS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9970.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:35 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:07 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9987.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:54:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	15902866	97.133	ng	m
Spiked Amount 100.000		Recovery = 97.13%			
Target Compounds					
3) H TPH-DRO	3.300	424466494	918.116	ng	

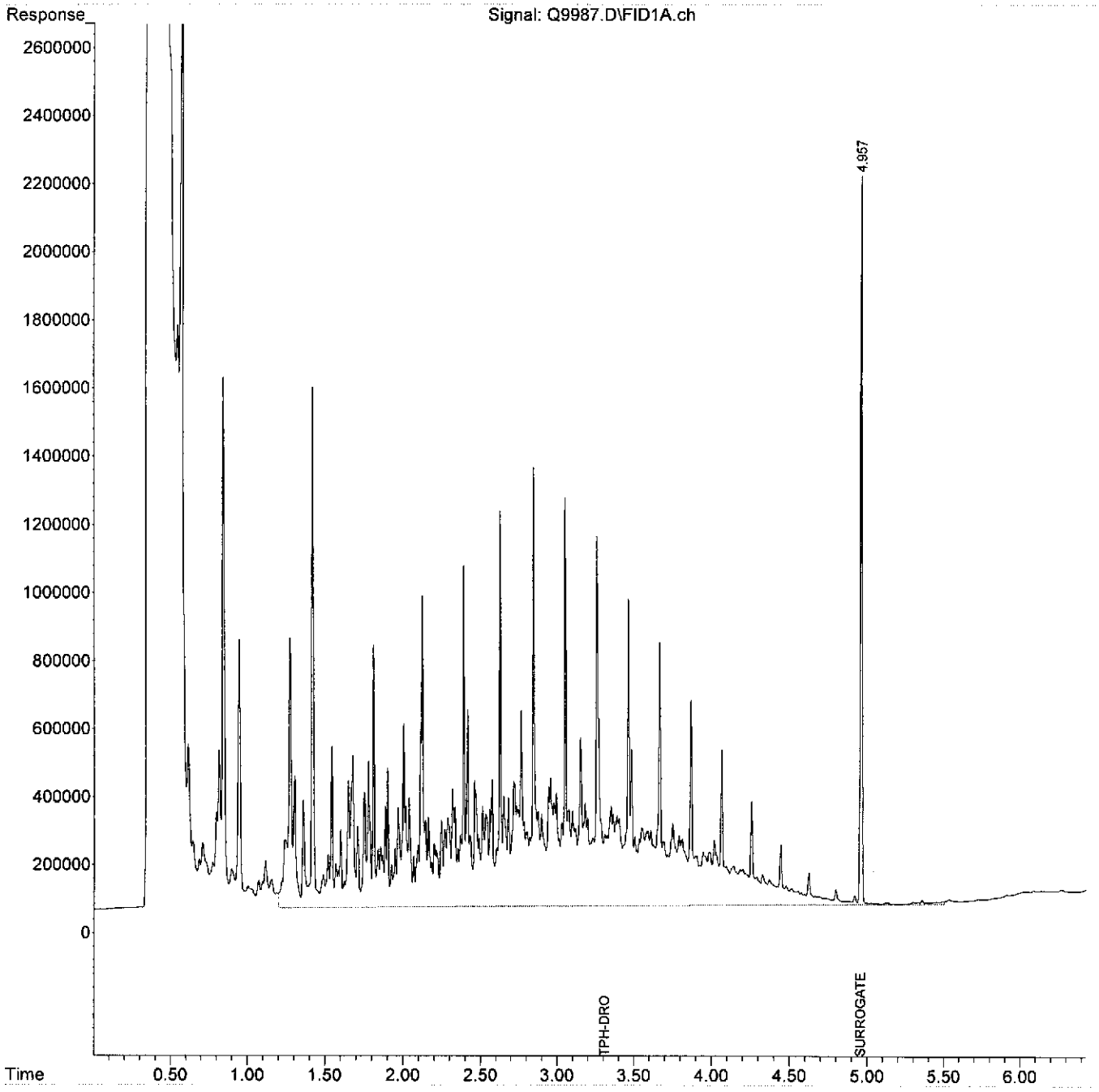
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9987.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:46 pm
Operator : JS
Sample : DRO/GRO_IAS_4215,1000_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:54:05 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	0315-BLK01	GC Column:	RTX-5
Client ID:	DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	03/15/2012	Dilution Factor:	1
Date Analyzed:	03/15/2012	% Moisture:	0
Data File:	Q9971.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9971.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:45 pm
Operator : JS
Sample : DRO,0315-BLK01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	11905811	72.719	ng	m
Spiked Amount 100.000		Recovery = 72.72%			
Target Compounds					

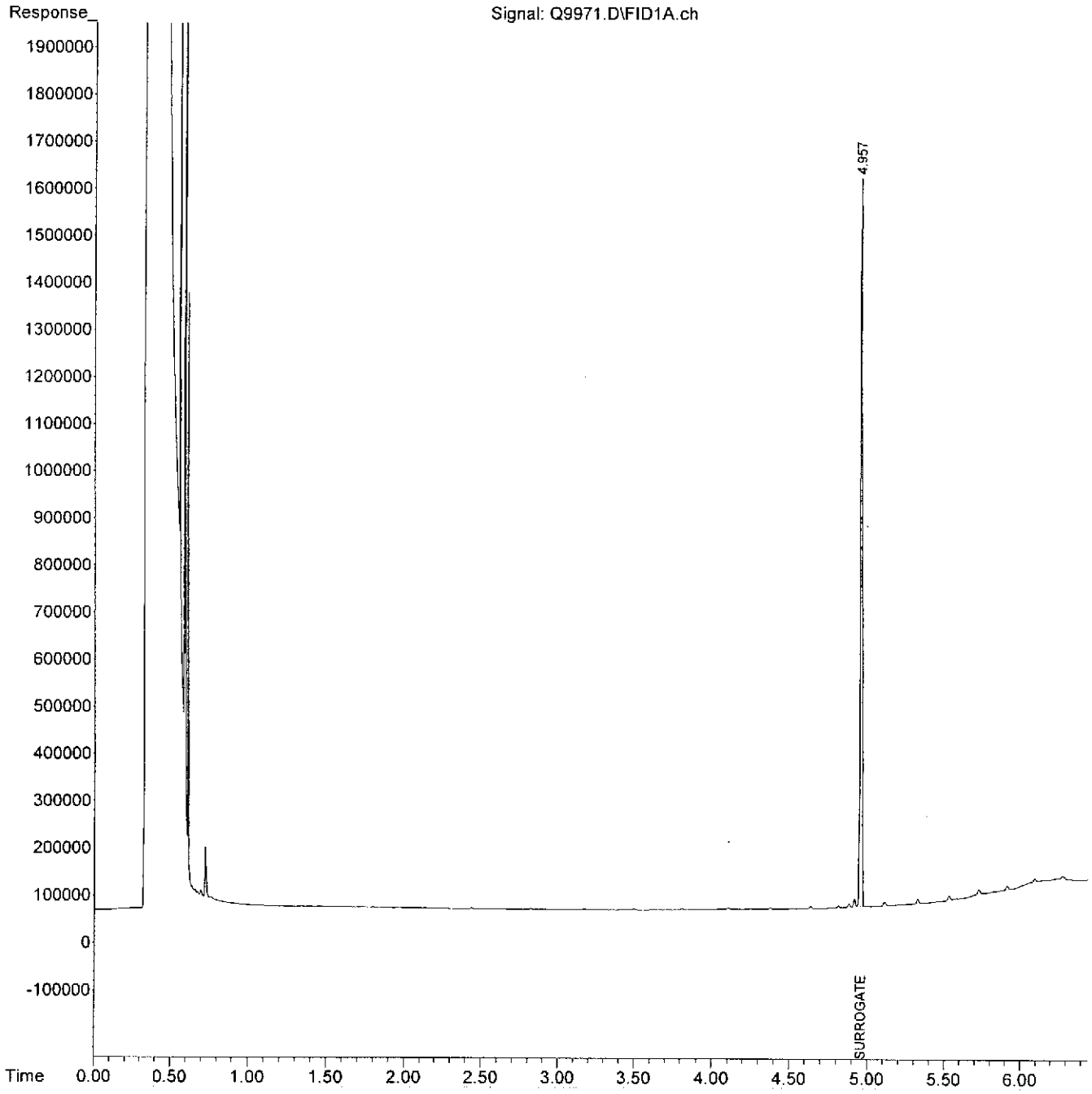
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9971.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 12:45 pm
Operator : JS
Sample : DRO,0315-BLK01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 14:40:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9985.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:25 pm
Operator : JS
Sample : DRO,DBS0315-MS01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:33:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	10826158	66.125	ng	m
Spiked Amount 100.000		Recovery = 66.13%			
Target Compounds					
3) H TPH-DRO	3.300	356110847	770.263	ng	

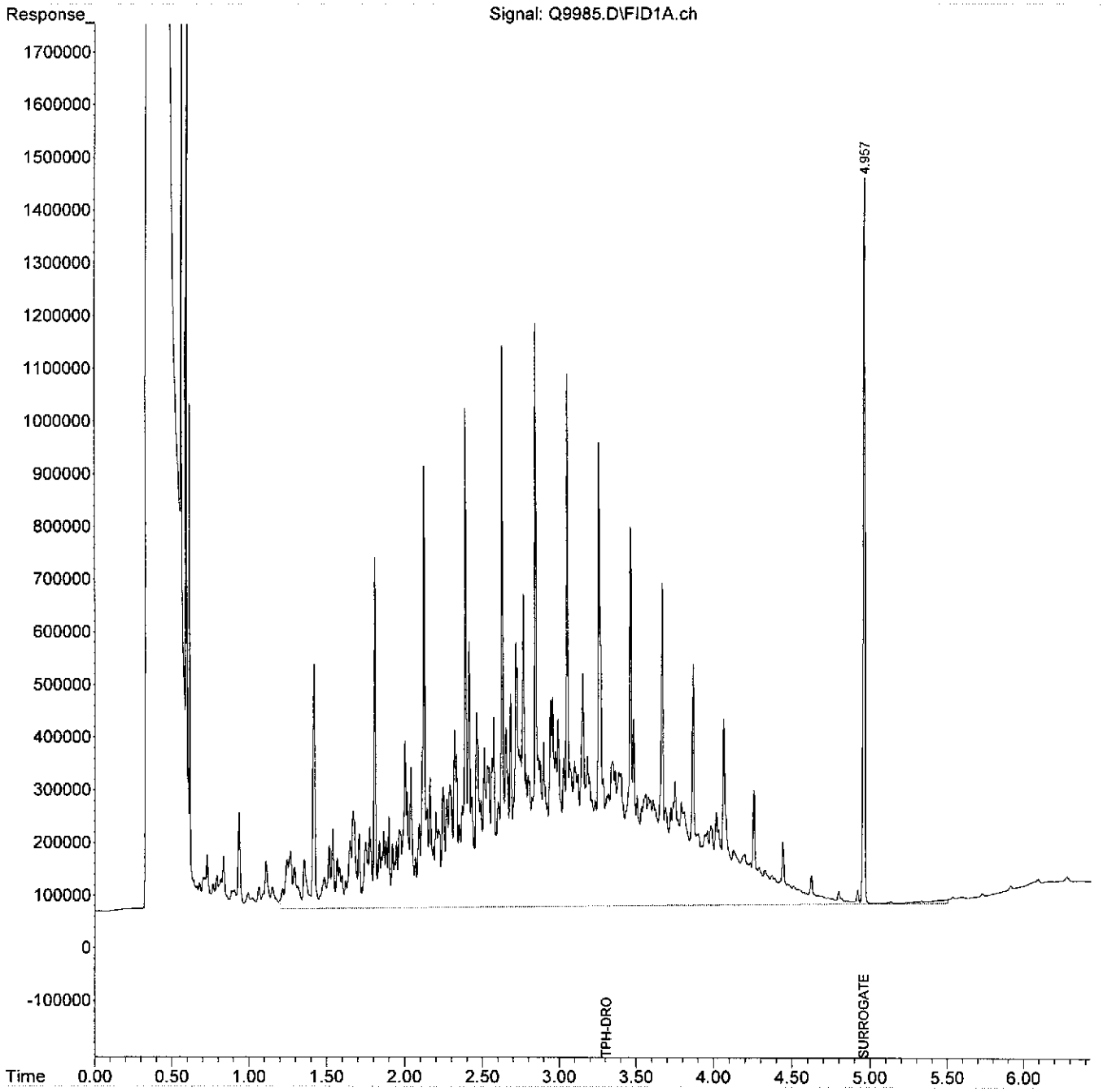
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9985.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:25 pm
Operator : JS
Sample : DRO,DBS0315-MS01,S,10.0g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:33:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9983.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 2:52 pm
Operator : JS
Sample : DRO,02579-002-MS01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.958	12418075	75.848 ng m
Spiked Amount 100.000		Recovery =	75.85%
Target Compounds			
3) H TPH-DRO	3.300	278895105	603.247 ng

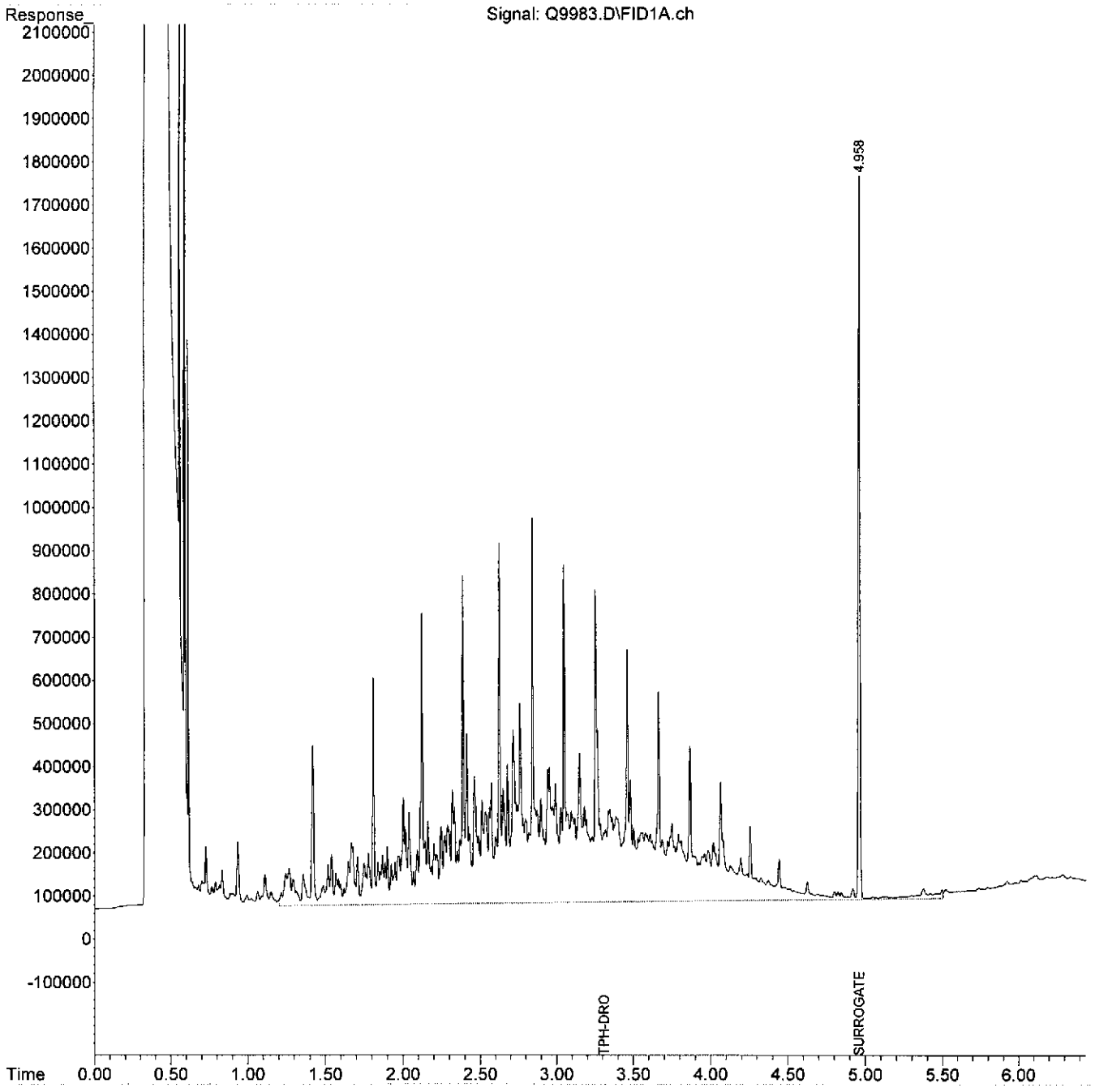
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9983.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 2:52 pm
Operator : JS
Sample : DRO,02579-002-MS01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9984.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:03 pm
Operator : JS
Sample : DRO,02579-002-MSD01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.957	12758656	77.928	ng	m
Spiked Amount 100.000		Recovery = 77.93%			
Target Compounds					
3) H TPH-DRO	3.300	311637617	674.068	ng	

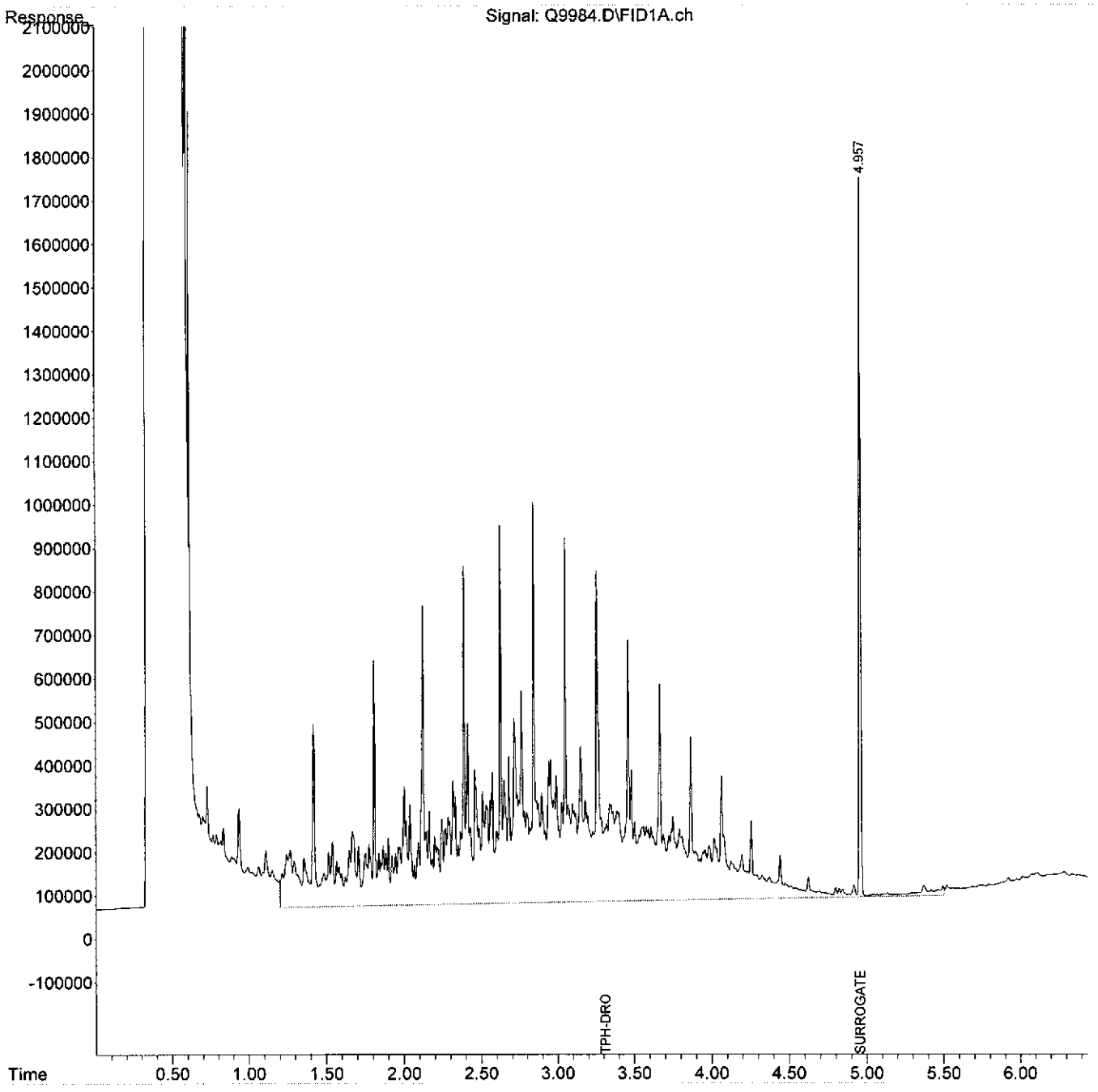
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\03-15-12\
Data File : Q9984.D
Signal(s) : FID1A.ch
Acq On : 15 Mar 12 3:03 pm
Operator : JS
Sample : DRO,02579-002-MSD01,S,10.34g,0,03/15/12,15
Misc : NA,NA,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Mar 15 15:59:20 2012
Quant Method : C:\MSDCHEM\1\METHODS\QDRO0314.M
Quant Title :
QLast Update : Thu Mar 15 12:31:53 2012
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

DATE: 3/14/2012 0:00 **CURVE**

INSTRUMENT: Q DRO/ DRO

TEST GROUP: DRO/GRO

METHOD QDRO0314

System Method: Method 10/08 Rev (eg. 8015B M, 3810, QAM-025)

ANALYST: Justyna DRO/ NJ-EPH-DRO

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Q9951		CH2CL2									
2	2	Q9952		DRO/GRO_RT_IAS_4168,100_PPM									
3	11	Q9953		DRO/GRO_L5_IAS_4213,4000_PPM									
4	12	Q9954		DRO/GRO_L4_IAS_4214,2000_PPM									
5	13	Q9955		DRO/GRO_L3_IAS_4215,1000_PPM									
6	14	Q9956		DRO/GRO_L2_IAS_4216,500_PPM									
7	15	Q9957		DRO/GRO_L1_IAS_4217,40_PPM									
8	13	Q9958		DRO/GRO_L3_IAS_4215,1000_PPM									

LABORATORY CHRONICLE - GC

DATE: 3/15/2012 15:39 **031512-01** BS
INSTRUMENT: Q DRO/ DRO

TEST GROUP: DRO/GRO
METHOD QDRO0314
System Method: /ethod 10/08 Rev (eg. 8015B M, 3810, QAM-025)

ANALYST: Justyna DRO/ NJ-EPH-DRO
Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	1	Q9968		CH2CL2									
2	2	Q9969		DRO/GRO_RT_IAS_4168,100_PPM									
3	3	Q9970		DRO/GRO_IAS_4215,1000_PPM									
4	4	Q9971		0315-BLK01		1	10.0	3/15/12	S	15			0
5	5	Q9972		02576	1	1	10.09	3/15/12	S	15	3/13/12	3/14/12	20.1
6	6	Q9973		02579	2	1	10.50	3/15/12	S	15	3/14/12	3/14/12	7.00
7	7	Q9974		02579	3	1	10.02	3/15/12	S	15	3/14/12	3/14/12	7.50
8	8	Q9975		02579	4	1	10.55	3/15/12	S	15	3/14/12	3/14/12	6.70
9	9	Q9976		02531	1	1	10.31	3/15/12	Xs	15	3/14/12	3/14/12	0
10	10	Q9977		02531	3	1	10.60	3/15/12	S	15	3/14/12	3/14/12	14.4
11	11	Q9978		02524	1	1	10.07	3/15/12	S	15	3/14/12	3/14/12	23.4
12	12	Q9979	5X	02550	1	1	10.19	3/15/12	S	15	3/13/12	3/14/12	14.0
13	13	Q9980		02538	1	1	10.14	3/15/12	S	15	3/13/12	3/14/12	12.5
14	14	Q9981		02562	1	1	10.40	3/15/12	S	15	3/13/12	3/14/12	15.6
15	15	Q9982		02507	1	1	10.05	3/15/12	S	15	3/13/12	3/13/12	10.4
16	16	Q9983		02579-002-MS01		1	10.34	3/15/12	S	15			0
17	17	Q9984		02579-002-MSD01		1	10.34	3/15/12	S	15			0
18	18	Q9985		DBS0315-MS01		1	10.0	3/15/12	S	15			0
12	12	Q9986	RR	02550	1	5	10.19	3/15/12	S	15	3/13/12	3/14/12	14.0
19	3	Q9987		DRO/GRO_IAS_4215,1000_PPM									

STANDARD IAS#	STANDARD NAME:	EPH-DRO FO#2 250ppm		
4210				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/11	IAS 4148 IAS 4180	—	—	10,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/19/12	1:40 (10ml IAS 4180)			250 ppm & 100 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/2/21	Hexane		107925	DK

STANDARD IAS#	STANDARD NAME:	QAM-025 spike		
4211				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12-8-11	Accustandard	S-9310	20712115	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6-8-12	no dilution			2000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	—		—	DK

STANDARD IAS#	STANDARD NAME:	TPH - QAM 025 Ver Std		
4212				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/6/12	Restek	31059	A0476171	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/6/12	1:100 (surr 1:100)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/20/21	CH_2Cl_2		110662	DK

STANDARD IAS#	STANDARD NAME:	DRO L5		
4213				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	AccuStandard	DRX-TX-002-D 40X	B9020237	20 000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:5 (1ml of stock + 200 µL of surrogate + 3800µl CH_2Cl_2)			4 000 ppm
SOLVENT EXP.DATE	SOLVENT USED: 10 000ppm		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

AccuStandard®
125 Market St. · New Haven, CT 06513 · USA
Tel. 203-786-5290 · www.accustandard.com

DRH-TX-002-D-40X 1 mL
Stock Gasoline & Diesel Calibration Solution
20000 µg/mL in CH2Cl2
Lot: B9020237 2 comps.
Exp: **Mar 4, 2019**

FOR LABORATORY USE ONLY

WARNING: This product contains chemicals known to the State of California to cause cancer and bi defects or other reproductive harm

STORAGE Ambient

POISON

DRH-TX-002-D-40X
Lot: B9020237
Exp: Mar 4, 2019

Date opened: 1-18-12

20000 µg/mL in CH2Cl2

STORAGE Ambient

AccuStandard® 203-786-5290 www.accustandard.com

E12-02579 0157

STANDARD IAS#	STANDARD NAME:	DRO L4		
4214				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4 000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:2			2000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L3		
4215				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:4			1 000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L2		
4216				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1:8			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

STANDARD IAS#	STANDARD NAME:	DRO L1		
4217				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1-18-12	IAS 4213	–	–	4000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7-18-12	1400			40 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11-20-21	CH_2Cl_2		110662	JS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Extraction Log - GC
(DRO/GRO)

Extraction Date/Time: 3/15/2012 8:35:00 AM
Technician: J. Liu

Tray ID:
Batch ID: 031512-01
Matrix: Soil
Factor: 15

Sample ID #	Vap Cell #	Funnel	Test	% Moist	Initial (g/ml)	Final (ml)	Surrogate IAS #:µl	Spike IAS #:µl	Color	%SED	pH	Comments	Done DateTime
BLANK	BLK		DRO	-	10.0	15.00	4161 : 15						3/15 11:29
02576-001	01		DRO	20.1	10.09	15.00	4161 : 15		2			R-24	3/15 11:29
02579-002	02		DRO	7.00	10.50	15.00	4161 : 15		4			R-48; R-24	3/15 11:29
02579-003	03		DRO	7.50	10.02	15.00	4161 : 15		3			R-48; R-24	3/15 11:29
02579-004	04		DRO	6.70	10.55	15.00	4161 : 15		4			R-48; R-24	3/15 11:29
02531-001	05		DRO	0	10.31	15.00	4161 : 15		3			R-48	3/15 11:29
02531-003	06		DRO	14.4	10.60	15.00	4161 : 15		4			R-48	3/15 11:29
02524-001	07		DRO	23.4	10.07	15.00	4161 : 15		3				3/15 11:29
02550-001	08		DRO	14.0	10.19	15.00	4161 : 15		2				3/15 11:29
02538-001	09		DRO	12.5	10.14	15.00	4161 : 15		1				3/15 11:29
02562-001	10		DRO	15.6	10.40	15.00	4161 : 15		2				3/15 11:29
02507-001	11		DRO	10.4	10.05	15.00	4161 : 15		1				3/15 11:29
02579-002-MS			DRO	-	10.34	15.00	4161 : 15	4169 : 150					3/15 11:29
02579-002-MSD			DRO	-	10.34	15.00	4161 : 15	4169 : 150					3/15 11:29
BLK-SPK			DRO	-	10.0	15.00	4161 : 15	4169 : 150					3/15 11:29

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

Color: 1 = Clear; 2 = Light Yellow;
3 = Yellow - Gold; 4 = Brown; 5 = Black

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 026(
02602

Matrix: Leachate Method: 6020 Concentration/Units: ppm (mg/L)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Antimony	0.00025	ND	ND	ND	ND	ND	ND
Arsenic	0.0005	ND	ND	ND	ND	ND	ND
Barium	0.0025	ND	ND	ND	ND	ND	ND
Beryllium	0.00025	ND	ND	ND	ND	ND	ND
Cadmium	0.000125	ND	ND	ND	ND	ND	ND
Chromium	0.0005	ND	ND	ND	ND	ND	ND
Copper	0.0005	ND	ND	ND	ND	ND	ND
Lead	0.00025	ND	ND	ND	ND	ND	ND
Mercury	0.00015	ND	ND	ND	ND	ND	
Nickel	0.0005	ND	ND	ND	ND	ND	ND
Selenium	0.001	ND	ND	ND	ND	ND	ND
Silver	0.000125	ND	ND	ND	ND	ND	ND
Thallium	0.000125	ND	ND	ND	ND	ND	ND
Vanadium	0.0005	ND	ND	ND	ND	ND	ND
Zinc	0.001	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601 02602

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Antimony	0.250	50.0	47.1	94.2	46.5	93.0	46.7	93.4	48.0	96.0
Arsenic	0.500	50.0	52.4	105	54.0	108	53.7	107	54.4	109
Barium	2.50	50.0	49.2	98.4	49.1	98.2	49.3	98.6	50.4	101
Beryllium	0.250	50.0	49.7	99.4	53.8	108	51.5	103	52.4	105
Cadmium	0.125	50.0	50.0	100	50.4	101	49.9	99.8	52.0	104
Chromium	0.500	50.0	50.8	102	45.1	90.2	46.9	93.8	49.0	98.0
Copper	0.500	50.0	48.4	96.8	50.9	102	50.3	101	51.8	104
Lead	0.250	50.0	45.5	91.0	45.0	90.0	48.0	96.0	48.5	97.0
Mercury	0.150	5.00	5.23	105	5.26	105	5.38	108	5.52	110
Nickel	0.500	50.0	48.2	96.4	50.5	101	49.6	99.2	50.9	102
Selenium	1.00	50.0	48.9	97.8	49.5	99.0	48.8	97.6	50.3	101
Silver	0.125	10.0	10.8	108	10.7	107	10.2	102	10.3	103
Thallium	0.125	50.0	46.0	92.0	46.3	92.6	51.0	102	51.4	103
Vanadium	0.500	50.0	49.7	99.4	50.8	102	50.2	100	52.2	104
Zinc	1.00	50.0	50.7	101	52.5	105	52.1	104	54.1	108

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601
02602

Matrix: Leachate Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R	CCV FOUND	CCV % R				
Antimony	0.250	50.0	49.3	98.6	48.6	97.2				
Arsenic	0.500	50.0	53.5	107	53.9	108				
Barium	2.50	50.0	52.1	104	50.8	102				
Beryllium	0.250	50.0	48.4	96.8	54.4	109				
Cadmium	0.125	50.0	51.5	103	51.9	104				
Chromium	0.500	50.0	47.3	94.6	47.7	95.4				
Copper	0.500	50.0	49.8	99.6	50.0	100				
Lead	0.250	50.0	49.4	98.8	49.0	98.0				
Mercury	0.150	5.00	5.48	110						
Nickel	0.500	50.0	49.2	98.4	49.1	98.2				
Selenium	1.00	50.0	50.0	100	51.2	102				
Silver	0.125	10.0	10.8	108	10.6	106				
Thallium	0.125	50.0	50.6	101	50.2	100				
Vanadium	0.500	50.0	50.0	100	50.9	102				
Zinc	1.00	50.0	52.3	105	52.9	106				

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

Batch (Page) #: 117
Associated Lab Case for Blank 1: 02521, 02541, 02552, 02553, 02556, 02579, 02580

Matrix: Leachate Unit: ppm (mg/L) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Arsenic	0.100	ND
Barium	0.500	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Copper	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.200	ND
Silver	0.025	ND
Zinc	0.200	ND

Associated Sample for Blank 1:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Batch (Page) #: 117
SDG #: 02579, 02521, 02541, 02552, 02553, 02556, 02580, 02111, 02554, 02599, 02600, 02601
02602

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	> LRG	> LRG	NA	NA
Calcium	100000	-	107000	113000	113	NA
Iron	100000	-	92800	97200	97.2	NA
Potassium	100000	-	> LRG	> LRG	NA	NA
Magnesium	100000	-	> LRG	> LRG	NA	NA
Sodium	100000	-	> LRG	> LRG	NA	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	-	-	-	NA
Titanium	2000	-	2680	2800	140	NA
Silver	-	20.0	-	18.9	94.5	80-120
Arsenic	-	20.0	-	19.1	95.5	80-120
Cadmium	-	20.0	-	20.8	104	80-120
Cobalt	-	20.0	-	16.9	84.5	80-120
Chromium	-	20.0	-	19.0	95.0	80-120
Copper	-	20.0	-	17.0	85.0	80-120
Manganese	-	20.0	-	18.2	91.0	80-120
Nickel	-	20.0	-	16.9	84.5	80-120
Zinc	-	20.0	-	16.7	83.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Unit: ppm (mg/L)

ANALYTE	BST1			BST2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Antimony				4.00	3.67	91.8
Arsenic	4.00	4.02	101	4.00	3.90	97.5
Barium	4.00	4.14	104	4.00	3.88	97.0
Beryllium				4.00	3.94	98.5
Cadmium	4.00	4.03	101	4.00	3.95	98.8
Chromium	4.00	3.72	93.0	4.00	3.57	89.3
Copper	4.00	4.06	102	4.00	3.93	98.3
Lead	4.00	3.69	92.3	4.00	3.65	91.3
Mercury	0.010	0.011	110	0.010	0.011	110
Nickel	4.00	4.04	101	4.00	3.90	97.5
Selenium	4.00	3.95	98.8	4.00	3.90	97.5
Silver	4.00	4.53	113	4.00	4.50	113
Thallium				4.00	3.47	86.8
Vanadium				4.00	3.53	88.3
Zinc	4.00	4.05	101	4.00	3.93	98.3

(1) Control Limits % Recovery = 85-115%

BST1

02521-001~003; 02541-001~003; 02552-001~002
2553-001~003; 02556-001~002; 02579-005; 02580-001~006

BST2

02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Antimony					3.79	ND	94.8	4.00	75-125
Arsenic	4.07	ND	102	4.00	3.99	ND	99.8	4.00	75-125
Barium	5.34	1.28	102	4.00	4.44	ND	111	4.00	75-125
Beryllium					4.08	ND	102	4.00	75-125
Cadmium	4.01	ND	100	4.00	4.10	ND	103	4.00	75-125
Chromium	3.75	ND	93.8	4.00	3.72	ND	93.0	4.00	75-125
Copper	4.19	0.163	101	4.00	4.00	ND	100	4.00	75-125
Lead	3.78	ND	94.5	4.00	3.80	ND	95.0	4.00	75-125
Mercury	0.011	ND	110	0.010	0.00984	ND	98.4	0.010	75-125
Nickel	4.09	ND	102	4.00	3.97	ND	99.3	4.00	75-125
Selenium	3.96	ND	99.0	4.00	4.03	ND	101	4.00	75-125
Silver	4.62	ND	116	4.00	4.54	ND	114	4.00	75-125
Thallium					3.57	ND	89.3	4.00	75-125
Vanadium					3.64	ND	91.0	4.00	75-125
Zinc	5.27	1.23	101	4.00	4.20	0.211	99.7	4.00	75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

QC Sample 2 02111-001
QC Sample 2 for following samples:
02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580, 02111, 02554, 02599
02600, 02601, 02602

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Antimony					NA	ND	ND	NC
Arsenic	NA	ND	ND	NC	NA	ND	ND	NC
Barium	20	1.28	1.44	11.8	NA	ND	ND	NC
Beryllium					NA	ND	ND	NC
Cadmium	NA	ND	ND	NC	NA	ND	ND	NC
Chromium	NA	ND	ND	NC	NA	ND	ND	NC
Copper	20	0.163	0.167	2.42	NA	ND	ND	NC
Lead	NA	ND	ND	NC	NA	ND	ND	NC
Mercury	NA	ND	ND	NC	NA	ND	ND	NC
Nickel	NA	ND	ND	NC	NA	ND	ND	NC
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Thallium					NA	ND	ND	NC
Vanadium					NA	ND	ND	NC
Zinc	20	1.23	1.23	0	20	0.211	0.210	0.475

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

QC Sample 2 02111-001
QC Sample 2 for following samples:
02111-001; 02554-001; 02599-001; 02600-001~002
02601-001; 02602-001

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 117
SDG #: 02521, 02541, 02552, 02553, 02556, 02579, 02580

Matrix: Leachate Concentration/Units: ppm (mg/L)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Arsenic	ND			4.10	4.00	103
Barium	1.28			5.64	4.00	109.0
Cadmium	ND			4.15	4.00	104
Chromium	ND			3.77	4.00	94.3
Copper	0.163			4.28	4.00	103.0
Lead	ND			3.84	4.00	96.0
Nickel	ND			4.18	4.00	105
Selenium	ND			4.02	4.00	101
Silver	ND			4.65	4.00	116
Zinc	1.23			5.36	4.00	103.0

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1 : 02579-005
QC Sample 1 for following samples:
02521-001~003; 02541-001~003; 02552-001~002
02553-001~003; 02556-001~002; 02579-005; 02580-001~006

Instrument Tuning Report

File Name: default.tun
File Path: C:\Elandata\Tuning\default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Mg	23.985	24.028	5669	2079	0.709	
Ar2	75.930	75.929	18288	2135	0.690	
In	114.904	114.928	27769	2178	0.690	
Ce	139.905	139.878	33867	2211	0.703	
Pb	207.977	207.929	50436	2296	0.695	
U	238.050	238.076	57770	2343	0.698	

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Friday, March 16, 2012 14:31:41
Sample Description:
Method File: C:\Elandata\Method\Daily Performance.mth
Dataset File: C:\Elandata\Dataset\Default\Daily Performance Check.166
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 60
Current Dead Time (ns): 60

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	44011.2	44011.249	241.218	0.5
	In	114.9	583326.5	583326.490	1943.862	0.3
	U	238.1	568598.7	568598.655	3085.216	0.5
⌈>	Ce	139.9	489756.8	489756.817	3062.934	0.6
⌊	CeO	155.9	14467.8	0.030	0.000	0.9
⌈>	Ba	137.9	403833.0	403833.033	2360.966	0.6
⌊	Ba++	69.0	4561.2	0.011	0.000	2.5
	220	220.0	0.8	0.833	0.236	28.3
	8.5	8.5	4.4	4.433	1.601	36.1

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow [NEB]
1.50	Auxiliary Gas Flow
17.00	Plasma Gas Flow
6.50	Lens Voltage
1270.00	ICP RF Power
-1750.00	Analog Stage Voltage
800.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset Std [QRO]
-19.00	Cell Rod Offset Std [CRO]
35.00	Discriminator Threshold
-10.00	Cell Path Voltage Std [CPV]
0.00	RPa
0.25	RPq
0.83	DRC Mode NEB
2.00	DRC Mode QRO
-1.00	DRC Mode CRO
-10.00	DRC Mode CPV
0.00	Cell Gas A
225.00	RF Voltage
0.00	DC Voltage
60.00	Service DAC 1
250.00	Axial Field Voltage

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	53	4.5	7379.3
Co	59	53	5.5	180522.3

In	115	53	6.3	705320.8
U	238	53	8.3	641569.2

TCLP
METALS RAW DATA

Run List

Sample File Name: 117.SAM

AS Loc.	Sample ID	Batch Index	Sample Type	Method
10	rinse	1	Sample	6020m_ial_20120104.mth
10	rinse	2	Sample	6020m_ial_20120104.mth
1	L1		Blank	6020m_ial_20120104.mth
2	L2		Standard	6020m_ial_20120104.mth
3	L3		Standard	6020m_ial_20120104.mth
4	L4		Standard	6020m_ial_20120104.mth
5	L5		Standard	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
10	Rinse		QC Std	6020m_ial_20120104.mth
6	ICV		QC Std	6020m_ial_20120104.mth
7	ICB		QC Std	6020m_ial_20120104.mth
8	ICSA		QC Std	6020m_ial_20120104.mth
9	ICSAB		QC Std	6020m_ial_20120104.mth
10	rinse	3	Sample	6020m_ial_20120104.mth
10	rinse	4	Sample	6020m_ial_20120104.mth
11	BMT1	5	Sample	6020m_ial_20120104.mth
13	02579-005	6	Sample	6020m_ial_20120104.mth
14	02579-005R	7	Sample	6020m_ial_20120104.mth
15	02579-005SD	8	Sample	6020m_ial_20120104.mth
12	BST1	9	Sample	6020m_ial_20120104.mth
16	02579-005RS	10	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
17	02579-005PS	11	Sample	6020m_ial_20120104.mth
10	rinse	12	Sample	6020m_ial_20120104.mth
18	02521-001	13	Sample	6020m_ial_20120104.mth
19	02521-002	14	Sample	6020m_ial_20120104.mth
20	02521-003	15	Sample	6020m_ial_20120104.mth
21	02541-001	16	Sample	6020m_ial_20120104.mth
22	02541-002	17	Sample	6020m_ial_20120104.mth
23	02541-003	18	Sample	6020m_ial_20120104.mth
24	02552-001	19	Sample	6020m_ial_20120104.mth
25	02552-002	20	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
26	02553-001	21	Sample	6020m_ial_20120104.mth
27	02553-002	22	Sample	6020m_ial_20120104.mth
28	02553-003	23	Sample	6020m_ial_20120104.mth
29	02556-001	24	Sample	6020m_ial_20120104.mth
30	02556-002	25	Sample	6020m_ial_20120104.mth
31	02580-001	26	Sample	6020m_ial_20120104.mth
32	02580-002	27	Sample	6020m_ial_20120104.mth
33	02580-003	28	Sample	6020m_ial_20120104.mth

34	02580-004	29	Sample	6020m_ial_20120104.mth
35	02580-005	30	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
36	02580-006	31	Sample	6020m_ial_20120104.mth
37	BMT2	32	Sample	6020m_ial_20120104.mth
39	02111-001	33	Sample	6020m_ial_20120104.mth
40	02111-001R	34	Sample	6020m_ial_20120104.mth
41	02111-001SD	35	Sample	6020m_ial_20120104.mth
38	BST2	36	Sample	6020m_ial_20120104.mth
42	02111-001RS	37	Sample	6020m_ial_20120104.mth
43	02111-001PS	38	Sample	6020m_ial_20120104.mth
10	rinse	39	Sample	6020m_ial_20120104.mth
44	02554-001	40	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth
45	02599-001	41	Sample	6020m_ial_20120104.mth
46	02600-001	42	Sample	6020m_ial_20120104.mth
47	02600-002	43	Sample	6020m_ial_20120104.mth
48	02601-001	44	Sample	6020m_ial_20120104.mth
49	02602-001	45	Sample	6020m_ial_20120104.mth
10	rinse	46	Sample	6020m_ial_20120104.mth
6	CCV		QC Std	6020m_ial_20120104.mth
7	CCB		QC Std	6020m_ial_20120104.mth

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L1

Analyzed Date/Time: Friday, March 16, 2012 14:53:38
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L1.003
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84867.589	6.756
	Be	9		ppb		3.333	45.826
	B	11		ppb		2310.654	4.501
	Na	23		ppm		193885.766	2.876
	Mg	24		ppm		2384.341	2.177
	Al	27		ppb		7667.528	2.863
	K	39		ppm		341224.487	0.776
	Ca	44		ppm		22454.213	0.933
	Sc	45		ppb		1695360.715	1.670
	Ti	47		ppb		128.001	15.606
	V	51		ppb		1971.089	6.080
	Cr	52		ppb		13192.103	1.984
	Fe	54		ppm		53383.600	3.484
	Mn	55		ppb		3171.937	2.595
	Co	59		ppb		196.336	14.137
	Ni	60		ppb		1273.431	0.640
	Cu	65		ppb		2823.478	1.296
	Zn	66		ppb		567.686	2.366
>	Ge	72		ppb		449451.350	0.552
	As	75		ppb		45.585	58.990
	Se	82		ppb		91.667	6.008
	Y	89		ppb		5084916.654	1.812
	Cd	111		ppb		7.333	56.773
	Mo	98		ppb		445.505	2.169
>	Rh	103		ppb		4372957.776	0.478
	Ag	107		ppb		322.673	11.864
	Sn	118		ppb		3495.066	2.234
	In	115		ppb		7319845.944	1.352
	Sb	121		ppb		69.000	11.594
	Ba	137		ppb		164.668	12.887
>	Tb	159		ppb		8748032.043	2.420
	Ho	165		ppb		8864035.347	1.055
	Tl	205		ppb		3675.811	1.942
	Pb	208		ppb		1206.034	2.464
>	Bi	209		ppb		6040741.061	1.311
	Kr	83		ppb		73.334	7.873

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L2

Analyzed Date/Time: Friday, March 16, 2012 14:59:07
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L2.004
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		91633.415	20.121
	Be	9	0.500	ppb	17.172	339.007	3.684
	B	11	0.500	ppb	141.775	2779.464	2.738
	Na	23	0.005	ppm	7.772	221886.379	0.963
	Mg	24	0.005	ppm	0.747	25878.127	1.754
	Al	27	0.500	ppb	7.107	12442.284	1.781
	K	39	0.005	ppm	13.664	401630.950	1.233
	Ca	44	0.005	ppm	25.074	23983.466	1.100
	Sc	45		ppb		1702254.210	1.705
	Ti	47	0.500	ppb	5.740	574.353	3.863
	V	51	0.500	ppb	7.693	8679.132	5.443
	Cr	52	0.500	ppb	12.965	18233.611	3.678
	Fe	54	0.005	ppm	446.937	51626.669	2.193
	Mn	55	0.500	ppb	3.074	13074.917	1.270
	Co	59	0.500	ppb	3.104	8524.695	3.494
	Ni	60	0.500	ppb	2.675	3123.252	0.952
	Cu	65	0.500	ppb	9.015	4681.649	2.601
	Zn	66	0.500	ppb	6.747	1852.539	3.616
>	Ge	72		ppb		437689.444	1.139
	As	75	0.500	ppb	3.712	1336.495	2.575
	Se	82	0.500	ppb	14.552	231.003	8.840
	Y	89		ppb		5109421.905	0.650
	Cd	111	0.500	ppb	1.367	2390.009	1.193
	Mo	98	0.500	ppb	3.680	5047.204	1.957
>	Rh	103		ppb		4382598.049	1.437
	Ag	107	0.500	ppb	1.279	8049.219	0.684
	Sn	118	0.500	ppb	3.529	9959.949	1.443
	In	115		ppb		7198318.482	0.783
	Sb	121	0.500	ppb	1.194	8140.308	1.390
	Ba	137	0.500	ppb	2.896	3860.561	3.073
>	Tb	159		ppb		8611066.069	0.296
	Ho	165		ppb		8980039.854	2.244
	Tl	205	0.500	ppb	2.060	30499.061	2.207
	Pb	208	0.500	ppb	0.413	35452.815	0.218
>	Bi	209		ppb		6056414.285	0.467
	Kr	83		ppb		79.667	8.070

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message Analyte Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L3

Analyzed Date/Time: Friday, March 16, 2012 15:04:37
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L3.005
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		98032.953	13.643
	Be	9	50.000	ppb	14.521	33430.942	2.022
	B	11	50.001	ppb	16.153	46257.374	1.167
	Na	23	0.500	ppm	3.900	4188180.992	1.674
	Mg	24	0.500	ppm	2.279	2672071.514	2.987
	Al	27	49.998	ppb	4.367	360554.434	0.779
	K	39	0.500	ppm	5.641	6637630.796	3.994
	Ca	44	0.500	ppm	4.034	210088.760	1.697
	Sc	45		ppb		1650644.376	5.485
	Ti	47	50.000	ppb	2.317	46338.921	3.547
	V	51	50.000	ppb	6.051	662428.424	2.747
	Cr	52	50.001	ppb	4.805	597510.942	3.119
	Fe	54	0.500	ppm	3.762	534247.514	2.500
	Mn	55	50.000	ppb	3.874	960557.799	2.828
	Co	59	50.000	ppb	3.134	809981.202	4.519
	Ni	60	50.000	ppb	3.121	177855.695	1.900
	Cu	65	50.000	ppb	4.793	200856.896	0.845
	Zn	66	49.999	ppb	5.069	109166.895	1.906
>	Ge	72		ppb		423616.859	4.798
	As	75	50.000	ppb	1.954	130446.913	3.950
	Se	82	50.000	ppb	4.529	15117.369	1.569
	Y	89		ppb		4904216.501	2.668
	Cd	111	50.000	ppb	3.949	226572.328	1.017
	Mo	98	50.000	ppb	3.321	461208.891	1.019
>	Rh	103		ppb		4134874.587	2.412
	Ag	107	50.000	ppb	3.110	765852.438	0.817
	Sn	118	50.001	ppb	2.129	741693.075	0.651
	In	115		ppb		6967061.391	3.003
	Sb	121	50.000	ppb	0.153	790732.165	0.871
	Ba	137	50.000	ppb	1.631	349840.690	2.260
>	Tb	159		ppb		8529993.595	0.719
	Ho	165		ppb		8682320.648	0.754
	Tl	205	50.001	ppb	0.454	2892885.268	1.925
	Pb	208	50.000	ppb	1.151	3372916.328	1.078
>	Bi	209		ppb		5871443.468	2.225
	Kr	83		ppb		90.000	1.925

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L4

Analyzed Date/Time: Friday, March 16, 2012 15:10:08
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L4.006
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		88731.095	6.234
	Be	9	102.494	ppb	6.663	69604.149	0.592
	B	11	102.884	ppb	4.888	95353.504	1.401
	Na	23	0.999	ppm	2.392	8381026.501	1.095
	Mg	24	1.004	ppm	1.804	5594497.678	2.218
	Al	27	100.232	ppb	1.837	741846.685	0.701
	K	39	0.997	ppm	4.860	13084498.184	3.468
	Ca	44	1.002	ppm	1.713	413528.592	1.012
	Sc	45		ppb		1723330.296	1.606
	Ti	47	100.084	ppb	0.614	95411.129	1.074
	V	51	102.439	ppb	4.132	1542682.887	3.035
	Cr	52	102.059	ppb	2.222	1349422.604	1.395
	Fe	54	1.016	ppm	7.736	1131729.974	6.491
	Mn	55	101.974	ppb	2.638	2180326.317	2.008
	Co	59	101.662	ppb	2.283	1810370.375	1.838
	Ni	60	100.198	ppb	1.361	367686.601	1.463
	Cu	65	99.745	ppb	3.832	404765.370	2.564
	Zn	66	100.070	ppb	3.132	224523.536	1.979
>	Ge	72		ppb		434621.883	1.285
	As	75	100.012	ppb	2.364	267870.783	2.314
	Se	82	99.626	ppb	2.684	30398.350	1.456
	Y	89		ppb		5019297.254	2.368
	Cd	111	99.727	ppb	2.631	459124.431	1.517
	Mo	98	99.965	ppb	1.766	933777.154	1.261
>	Rh	103		ppb		4193180.147	0.988
	Ag	107	100.189	ppb	5.178	1568825.382	5.760
	Sn	118	99.890	ppb	0.393	1493218.085	0.597
	In	115		ppb		7025750.052	1.471
	Sb	121	99.458	ppb	0.671	1577385.277	0.390
	Ba	137	99.971	ppb	2.164	715581.293	1.223
>	Tb	159		ppb		8740475.959	1.060
	Ho	165		ppb		8881570.912	1.765
	Tl	205	99.945	ppb	1.753	5786058.639	0.640
	Pb	208	100.910	ppb	1.128	7088727.675	0.783
>	Bi	209		ppb		5892265.005	1.587
	Kr	83		ppb		99.334	0.581

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
[>	Li	6		
|	Be	9		
L	B	11		
[	Na	23		
|	Mg	24		
|	Al	27		
|	K	39		
|	Ca	44		
|	Sc	45		
|	Ti	47		
|	V	51		
|	Cr	52		
|	Fe	54		
|	Mn	55		
|	Co	59		
|	Ni	60		
|	Cu	65		
|	Zn	66		
|>	Ge	72		
|	As	75		
|	Se	82		
|	Y	89		
L	Cd	111		
[	Mo	98		
|>	Rh	103		
|	Ag	107		
|	Sn	118		
L	In	115		
[	Sb	121		
|	Ba	137		
|>	Tb	159		
L	Ho	165		
[	Tl	205		
|	Pb	208		
L>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: L5

Analyzed Date/Time: Friday, March 16, 2012 15:15:39
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\L5.007
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		88972.173	7.455
	Be	9	199.798	ppb	8.067	135449.485	1.801
	B	11	199.496	ppb	10.536	181098.977	3.223
	Na	23	1.990	ppm	2.990	15979651.235	1.957
	Mg	24	1.993	ppm	0.870	10794691.354	1.606
	Al	27	203.641	ppb	2.567	1565463.841	2.404
	K	39	1.979	ppm	3.899	24445862.892	2.430
	Ca	44	1.984	ppm	2.520	765588.625	2.234
	Sc	45		ppb		1722786.484	0.950
	Ti	47	198.852	ppb	2.111	182919.226	1.872
	V	51	200.803	ppb	2.823	3010616.436	1.306
	Cr	52	200.145	ppb	3.487	2595833.666	2.372
	Fe	54	2.004	ppm	3.227	2158802.266	2.311
	Mn	55	200.006	ppb	3.581	4202179.927	2.611
	Co	59	199.779	ppb	1.948	3485678.052	0.963
	Ni	60	197.407	ppb	2.153	682896.387	2.362
	Cu	65	197.736	ppb	3.897	758977.960	2.423
	Zn	66	199.599	ppb	3.483	437007.540	2.097
>	Ge	72		ppb		427391.448	1.566
	As	75	198.987	ppb	0.902	515684.233	0.670
	Se	82	200.444	ppb	2.935	60484.106	2.152
	Y	89		ppb		5008145.194	0.549
	Cd	111	198.838	ppb	2.115	883764.457	1.203
	Mo	98	204.122	ppb	2.715	1985421.570	2.547
>	Rh	103		ppb		4079123.986	0.311
	Ag	107	129.068	ppb	3.802	1965480.981	3.501
	Sn	118	203.690	ppb	0.486	3144185.372	0.743
	In	115		ppb		6958552.308	1.379
	Sb	121	202.579	ppb	2.506	3354410.435	1.061
	Ba	137	197.094	ppb	2.546	1349414.769	1.006
>	Tb	159		ppb		8750997.089	1.528
	Ho	165		ppb		8944294.279	2.254
	Tl	205	198.903	ppb	1.330	11176857.835	0.758
	Pb	208	200.520	ppb	0.788	14031745.312	0.762
>	Bi	209		ppb		5820750.702	0.823
	Kr	83		ppb		113.334	12.520

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		
	Kr	83		

QC Out of Limits

Out of Limits Message Analyte Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICV

Analyzed Date/Time: Friday, March 16, 2012 15:37:54
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICV.011
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85868.049	9.426
	Be	9	49.740	ppb	8.961	32493.229	0.927
	B	11	47.612	ppb	10.310	43443.970	1.691
	Na	23	0.496	ppm	1.897	3887465.273	2.047
	Mg	24	0.491	ppm	1.754	2508640.858	1.420
	Al	27	54.906	ppb	4.786	403014.108	3.663
	K	39	0.493	ppm	1.534	5973918.107	0.479
	Ca	44	0.468	ppm	1.683	185622.748	2.506
	Sc	45		ppb		1550215.090	1.917
	Ti	47	204.556	ppb	3.328	177446.680	2.354
	V	51	49.720	ppb	1.143	704538.698	0.109
	Cr	52	50.838	ppb	2.054	630880.626	2.216
	Fe	54	0.457	ppm	1.059	501820.807	0.366
	Mn	55	48.656	ppb	1.650	966600.948	2.070
	Co	59	49.189	ppb	0.642	809687.106	0.423
	Ni	60	48.170	ppb	3.823	157992.026	2.751
	Cu	65	48.359	ppb	1.134	177035.810	0.782
	Zn	66	50.655	ppb	0.732	105021.093	1.787
>	Ge	72		ppb		403094.233	1.068
	As	75	52.428	ppb	1.781	128172.128	0.855
	Se	82	48.878	ppb	0.819	13975.377	1.180
	Y	89		ppb		4639035.095	1.512
	Cd	111	50.049	ppb	0.810	209837.404	0.295
	Mo	98	45.948	ppb	5.574	413804.618	2.435
>	Rh	103		ppb		3778807.879	3.671
	Ag	107	10.782	ppb	1.835	152316.905	2.549
	Sn	118	46.617	ppb	2.101	668583.786	1.573
	In	115		ppb		6659221.916	2.114
	Sb	121	47.124	ppb	4.205	736900.105	1.510
	Ba	137	49.169	ppb	2.438	318120.522	0.740
>	Tb	159		ppb		8268561.466	3.099
	Ho	165		ppb		8438730.154	1.980
	Tl	205	45.959	ppb	1.996	2531335.554	1.736
	Pb	208	45.515	ppb	1.377	3119369.337	1.133
>	Bi	209		ppb		5699315.092	0.840
	Kr	83		ppb		87.000	9.195

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Integrated Analytical Laboratories, LLC.
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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.179
	Be	9	99.480	
	B	11	95.224	
	Na	23	99.191	
	Mg	24	98.152	
	Al	27	109.811	
	K	39	98.606	
	Ca	44	93.537	
	Sc	45		
	Ti	47	102.278	
	V	51	99.439	
	Cr	52	101.676	
	Fe	54	91.491	
	Mn	55	97.312	
	Co	59	98.378	
	Ni	60	96.340	
	Cu	65	96.718	
	Zn	66	101.310	
>	Ge	72		89.686
	As	75	104.856	
	Se	82	97.755	
	Y	89		
	Cd	111	100.099	
	Mo	98	91.897	
>	Rh	103		86.413
	Ag	107	107.819	
	Sn	118	93.233	
	In	115		
	Sb	121	94.248	
	Ba	137	98.338	
>	Tb	159		94.519
	Ho	165		
	Tl	205	91.917	
	Pb	208	91.030	
>	Bi	209		94.348
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICB

Analyzed Date/Time: Friday, March 16, 2012 15:43:26
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\ICB.012
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		100433.074	14.050
	Be	9	0.000	ppb	19914.647	4.000	66.144
	B	11	0.390	ppb	130.718	3083.571	3.167
	Na	23	0.000	ppm	439.933	176484.756	1.261
	Mg	24	-0.000	ppm	13.553	1621.158	5.375
	Al	27	-0.069	ppb	5.040	6437.820	1.723
	K	39	0.001	ppm	41.221	322066.012	0.429
	Ca	44	0.006	ppm	9.968	22429.481	1.204
	Sc	45		ppb		1562328.296	3.825
	Ti	47	0.154	ppb	8.429	250.337	4.995
	V	51	0.002	ppb	472.496	1812.403	8.389
	Cr	52	-0.020	ppb	142.349	11701.551	3.825
	Fe	54	-0.000	ppm	239.012	47921.684	1.233
	Mn	55	-0.004	ppb	133.705	2785.799	3.242
	Co	59	0.004	ppb	11.968	241.003	4.332
	Ni	60	-0.002	ppb	994.599	1146.746	4.995
	Cu	65	-0.037	ppb	62.714	2421.352	3.497
	Zn	66	-0.001	ppb	764.069	510.682	3.644
>	Ge	72		ppb		406795.824	1.330
	As	75	0.035	ppb	68.329	126.767	45.741
	Se	82	0.064	ppb	49.569	101.334	9.169
	Y	89		ppb		4695877.172	1.085
	Cd	111	0.001	ppb	41.544	11.333	18.368
	Mo	98	0.122	ppb	12.493	1539.929	10.875
>	Rh	103		ppb		3919922.068	1.801
	Ag	107	0.010	ppb	26.752	435.678	10.669
	Sn	118	0.491	ppb	9.552	10422.210	8.355
	In	115		ppb		6627705.841	2.448
	Sb	121	0.015	ppb	13.382	294.672	12.058
	Ba	137	-0.004	ppb	44.073	127.001	8.183
>	Tb	159		ppb		8024605.771	2.584
	Ho	165		ppb		8188774.587	1.086
	Tl	205	-0.006	ppb	15.572	3106.579	0.934
	Pb	208	0.000	ppb	223.923	1144.031	5.128
>	Bi	209		ppb		5613317.816	0.621
	Kr	83		ppb		81.334	2.559

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		118.341
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		90.509
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		89.640
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		91.730
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		92.924
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICSA

Analyzed Date/Time: Friday, March 16, 2012 15:48:59
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICSA.013
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 8

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		80347.058	2.142
	Be	9	0.005	ppb	76.686	6.333	39.736
	B	11	-0.400	ppb	18.554	1861.541	1.272
	Na	23	S	ppm	S	S	S
	Mg	24	S	ppm	S	S	S
	Al	27	S	ppb	S	S	S
	K	39	S	ppm	S	S	S
	Ca	44	106.801	ppm	2.023	36880548.758	3.254
	Sc	45		ppb		1559837.678	2.577
	Ti	47	2682.263	ppb	1.036	2268626.383	1.826
	V	51	-0.228	ppb	94.336	-1455.040	208.184
	Cr	52	1.344	ppb	2.331	27503.005	3.083
	Fe	54	92.754	ppm	1.738	89813942.941	0.776
	Mn	55	0.771	ppb	39.510	17578.174	31.768
	Co	59	0.412	ppb	14.197	6773.283	12.443
	Ni	60	-0.155	ppb	185.691	605.829	148.909
	Cu	65	1.004	ppb	22.328	5993.293	10.764
	Zn	66	-0.262	ppb	304.080	-56.539	2876.591
>	Ge	72		ppb		393216.878	2.477
	As	75	0.061	ppb	96.405	187.598	78.095
	Se	82	0.289	ppb	16.048	160.668	10.495
	Y	89		ppb		4216491.500	0.805
	Cd	111	0.018	ppb	2181.606	54.836	3018.884
	Mo	98	2149.714	ppb	1.843	18202551.209	1.394
>	Rh	103		ppb		3552250.509	2.027
	Ag	107	0.073	ppb	2.967	1233.091	2.669
	Sn	118	0.434	ppb	2.848	8661.166	0.953
	In	115		ppb		6004631.810	1.870
	Sb	121	0.135	ppb	1.297	1905.885	1.294
	Ba	137	0.461	ppb	2.440	2753.788	2.367
>	Tb	159		ppb		7256268.922	0.307
	Ho	165		ppb		7145887.212	0.106
	Tl	205	-0.040	ppb	2.329	1078.403	3.851
	Pb	208	0.361	ppb	2.685	22426.688	1.096
>	Bi	209		ppb		4945543.642	1.903
	Kr	83		ppb		227.003	5.359

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		94.673
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		87.488
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		81.232
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		82.947
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		81.870
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: ICSAB

Analyzed Date/Time: Friday, March 16, 2012 15:54:33
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\ICSAB.014
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85880.157	11.768
	Be	9	0.013	ppb	71.988	11.667	40.507
	B	11	-0.503	ppb	51.578	1883.546	0.412
	Na	23	S	ppm	S	S	S
	Mg	24	S	ppm	S	S	S
	Al	27	S	ppb	S	S	S
	K	39	S	ppm	S	S	S
	Ca	44	113.416	ppm	1.288	39411389.306	1.842
	Sc	45		ppb		1566736.745	2.955
	Ti	47	2800.310	ppb	2.195	2383389.853	1.267
	V	51	-0.435	ppb	39.668	-4330.917	56.426
	Cr	52	19.002	ppb	1.331	238750.698	1.590
	Fe	54	97.238	ppm	2.185	94758391.807	0.720
	Mn	55	18.221	ppb	2.029	357072.169	2.082
	Co	59	16.887	ppb	0.693	273006.894	1.416
	Ni	60	16.914	ppb	2.027	55196.781	1.628
	Cu	65	16.976	ppb	2.519	62616.798	1.678
	Zn	66	16.727	ppb	2.370	34383.743	3.510
>	Ge	72		ppb		395721.015	1.630
	As	75	19.068	ppb	1.450	45787.011	0.723
	Se	82	0.334	ppb	15.123	173.668	6.821
	Y	89		ppb		4186083.742	0.916
	Cd	111	20.795	ppb	2.001	85581.217	0.672
	Mo	98	2178.411	ppb	3.103	18407715.461	1.756
>	Rh	103		ppb		3545376.858	1.545
	Ag	107	18.880	ppb	0.522	250124.858	1.081
	Sn	118	0.533	ppb	2.624	9981.975	0.800
	In	115		ppb		5852312.031	0.941
	Sb	121	0.130	ppb	3.537	1910.219	3.147
	Ba	137	0.437	ppb	1.016	2702.105	1.436
>	Tb	159		ppb		7495414.832	0.697
	Ho	165		ppb		6924466.080	1.269
	Tl	205	-0.040	ppb	0.357	1077.736	0.862
	Pb	208	0.364	ppb	2.741	22274.598	1.315
>	Bi	209		ppb		4866735.155	1.374
	Kr	83		ppb		256.671	8.663

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.193
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52	95.008	
	Fe	54		
	Mn	55	91.105	
	Co	59	84.436	
	Ni	60	84.571	
	Cu	65	84.882	
	Zn	66	83.637	
>	Ge	72		88.045
	As	75	95.338	
	Se	82		
	Y	89		
	Cd	111	103.975	
	Mo	98		
>	Rh	103		81.075
	Ag	107	94.402	
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		85.681
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		80.565
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: BMT1

Analyzed Date/Time: Friday, March 16, 2012 16:10:33
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\BMT1.017
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 11
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
[>	Li	6		ppb		86205.268	6.787
|	Be	9	0.917	ppb	62.447	6.333	24.119
|	B	11	115.914	ppb	44.891	2843.152	2.907
[	Na	23	1186.413	ppm	3.621	52119051.812	1.184
|	Mg	24	0.003	ppm	341.958	2588.071	10.002
|	Al	27	237.550	ppb	4.403	18060.550	0.570
|	K	39	0.424	ppm	32.064	386267.111	1.394
|	Ca	44	1.607	ppm	16.826	26866.910	1.026
|	Sc	45		ppb		1897547.615	2.212
|	Ti	47	20.847	ppb	16.858	239.670	5.013
|	V	51	0.819	ppb	389.198	2133.399	11.438
|	Cr	52	15.361	ppb	41.989	14924.355	1.681
|	Fe	54	-0.027	ppm	759.083	55832.075	2.892
|	Mn	55	1.419	ppb	95.175	3488.730	2.136
|	Co	59	-0.178	ppb	77.649	188.669	5.862
|	Ni	60	0.414	ppb	145.184	1343.442	2.128
|	Cu	65	23.629	ppb	35.176	3457.384	2.982
|	Zn	66	37.374	ppb	3.335	1046.066	1.086
|>	Ge	72		ppb		471416.889	2.465
|	As	75	0.583	ppb	258.562	56.374	39.314
|	Se	82	2.731	ppb	54.479	100.667	2.500
|	Y	89		ppb		5397239.089	2.936
[	Cd	111	0.216	ppb	12.925	13.000	7.692
[	Mo	98	52.762	ppb	5.638	3279.624	6.303
|>	Rh	103		ppb		4485505.178	1.535
|	Ag	107	2.149	ppb	10.938	511.016	5.084
|	Sn	118	2.033	ppb	64.294	3758.182	4.181
[	In	115		ppb		7451750.167	1.293
[	Sb	121	0.180	ppb	6.731	84.667	1.804
|	Ba	137	4.338	ppb	26.718	315.673	11.441
|>	Tb	159		ppb		8828693.536	1.389
[	Ho	165		ppb		9039583.695	0.644
[	Tl	205	4.891	ppb	9.212	4999.499	0.791
|	Pb	208	0.946	ppb	16.291	1519.387	4.707
[>	Bi	209		ppb		5921859.139	1.883
	Kr	83		ppb		83.334	10.889

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.576
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		104.887
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		102.574
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		100.922
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.032
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005

Analyzed Date/Time: Friday, March 16, 2012 16:15:43
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005.018
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 13
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84708.329	8.362
	Be	9	-0.185	ppb	361.533	2.667	78.062
	B	11	224.183	ppb	20.838	3256.637	3.027
	Na	23	1307.665	ppm	3.958	56960252.654	3.156
	Mg	24	15.653	ppm	3.871	466119.610	4.638
	Al	27	465.181	ppb	17.368	27428.879	11.766
	K	39	6.133	ppm	24.658	763265.363	12.594
	Ca	44	649.308	ppm	2.122	1355240.219	1.960
	Sc	45		ppb		1881148.541	5.198
	Ti	47	19.522	ppb	41.051	231.003	16.519
	V	51	65.335	ppb	7.382	7403.282	4.832
	Cr	52	21.715	ppb	23.244	15251.614	1.976
	Fe	54	0.360	ppm	101.037	57577.470	2.756
	Mn	55	1522.094	ppb	2.340	178081.369	1.742
	Co	59	2.106	ppb	6.176	405.010	1.781
	Ni	60	52.825	ppb	6.991	2321.657	2.520
	Cu	65	163.266	ppb	10.179	6349.755	4.288
	Zn	66	1228.156	ppb	3.777	15277.330	2.472
>	Ge	72		ppb		467440.073	1.312
	As	75	1.423	ppb	178.983	67.363	52.812
	Se	82	-4.400	ppb	134.261	88.000	9.841
	Y	89		ppb		5523456.354	1.632
	Cd	111	14.766	ppb	10.510	366.341	9.367
	Mo	98	35.696	ppb	3.272	2368.944	3.054
>	Rh	103		ppb		4491507.561	0.421
	Ag	107	1.061	ppb	14.644	420.344	2.706
	Sn	118	2.273	ppb	55.968	3782.525	2.465
	In	115		ppb		7445937.387	1.246
	Sb	121	2.871	ppb	8.971	312.339	7.673
	Ba	137	1279.834	ppb	2.742	44757.249	2.386
>	Tb	159		ppb		8905848.982	0.996
	Ho	165		ppb		9103270.554	1.231
	Tl	205	3.687	ppb	4.042	4667.307	1.942
	Pb	208	17.102	ppb	2.176	7284.244	0.699
>	Bi	209		ppb		5934545.713	1.265
	Kr	83		ppb		94.001	9.456

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		99.812
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		104.002
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		102.711
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		101.804
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.242
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005R

Analyzed Date/Time: Friday, March 16, 2012 16:20:53
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\DataSet\pg117\02579-005R.019
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 14
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
[>	Li	6		ppb		85106.143	7.871
|	Be	9	0.914	ppb	32.157	6.333	18.232
|	B	11	240.367	ppb	28.431	3337.669	2.732
[	Na	23	1327.051	ppm	2.291	57301305.479	1.871
|	Mg	24	16.162	ppm	0.431	476864.988	0.443
|	Al	27	438.873	ppb	18.476	26124.891	13.701
|	K	39	6.739	ppm	17.028	796857.529	9.195
|	Ca	44	650.385	ppm	4.450	1345626.202	4.583
|	Sc	45		ppb		1863327.530	0.541
|	Ti	47	17.829	ppb	27.307	220.670	10.238
|	V	51	64.423	ppb	0.709	7265.385	0.704
|	Cr	52	18.402	ppb	11.105	14886.954	1.338
|	Fe	54	0.316	ppm	104.540	56823.832	2.680
|	Mn	55	1530.437	ppb	5.332	177462.993	4.943
|	Co	59	2.108	ppb	6.350	401.676	2.506
|	Ni	60	53.656	ppb	15.408	2316.323	6.006
|	Cu	65	166.529	ppb	9.093	6362.625	4.163
|	Zn	66	1232.617	ppb	3.932	15198.859	3.563
|>	Ge	72		ppb		463315.477	0.790
|	As	75	5.204	ppb	38.502	120.050	23.114
|	Se	82	7.671	ppb	94.892	107.001	10.778
|	Y	89		ppb		5420494.138	1.674
|	Cd	111	13.883	ppb	9.302	342.007	8.718
[	Mo	98	27.351	ppb	3.092	1897.782	3.268
|>	Rh	103		ppb		4436003.204	3.383
|	Ag	107	1.171	ppb	29.553	423.677	3.423
|	Sn	118	-0.416	ppb	152.252	3509.406	1.933
|	In	115		ppb		7439258.198	1.633
[	Sb	121	2.905	ppb	12.045	314.006	8.492
|	Ba	137	1436.468	ppb	3.464	50066.033	2.955
|>	Tb	159		ppb		8880215.685	1.395
|	Ho	165		ppb		9065501.645	0.615
[	Tl	205	2.843	ppb	11.268	4434.180	1.621
|	Pb	208	17.925	ppb	3.546	7592.692	1.826
[>	Bi	209		ppb		5946805.623	1.157
	Kr	83		ppb		83.000	8.688

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		100.281
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		103.085
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		101.442
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		101.511
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		98.445
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005SD

Analyzed Date/Time: Friday, March 16, 2012 16:26:03
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005SD.020
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 500
Autosampler Position: 15
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		84771.391	6.144
	Be	9	4.604	ppb	83.128	6.333	39.736
	B	11	706.449	ppb	23.712	2908.174	1.170
	Na	23	1300.666	ppm	6.332	11391003.262	3.007
	Mg	24	15.758	ppm	4.956	94978.304	1.828
	Al	27	1591.445	ppb	8.015	21106.033	1.847
	K	39	7.168	ppm	16.766	446628.437	1.265
	Ca	44	556.089	ppm	5.215	249298.244	1.530
	Sc	45		ppb		1822295.299	1.961
	Ti	47	36.826	ppb	38.616	168.668	7.318
	V	51	66.986	ppb	18.831	3119.487	3.706
	Cr	52	53.443	ppb	46.725	14355.021	1.117
	Fe	54	1.922	ppm	36.209	57271.807	2.516
	Mn	55	1698.255	ppb	4.414	41940.949	0.812
	Co	59	2.697	ppb	35.468	253.337	4.575
	Ni	60	40.270	ppb	15.574	1465.129	3.888
	Cu	65	275.692	ppb	23.401	4052.986	3.638
	Zn	66	1475.753	ppb	2.314	4087.336	1.393
>	Ge	72		ppb		463810.084	3.247
	As	75	-0.632	ppb	3956.763	46.074	156.284
	Se	82	5.865	ppb	637.365	96.667	14.860
	Y	89		ppb		5456138.493	3.551
	Cd	111	14.340	ppb	5.479	76.667	1.992
	Mo	98	97.124	ppb	10.088	1518.595	7.079
>	Rh	103		ppb		4554835.967	2.100
	Ag	107	1.899	ppb	85.397	368.008	5.549
	Sn	118	-1.886	ppb	190.308	3607.114	0.551
	In	115		ppb		7572531.789	2.974
	Sb	121	2.560	ppb	13.144	114.667	6.995
	Ba	137	1276.259	ppb	2.514	9153.691	0.249
>	Tb	159		ppb		8999965.266	2.358
	Ho	165		ppb		9161080.109	2.531
	Tl	205	14.635	ppb	9.022	4578.591	1.747
	Pb	208	22.073	ppb	2.372	2839.525	0.808
>	Bi	209		ppb		6106856.721	0.677
	Kr	83		ppb		91.334	4.937

E12-02579 0201

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		99.887
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		103.195
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		104.159
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		102.880
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		101.094
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: BST1

Analyzed Date/Time: Friday, March 16, 2012 16:31:13
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\BST1.021
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 12
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		82687.590	7.158
	Be	9	4363.870	ppb	7.916	13756.018	3.091
	B	11	146.428	ppb	46.059	2850.488	3.100
	Na	23	1354.138	ppm	4.429	58134804.751	3.164
	Mg	24	16.643	ppm	1.501	488331.798	1.638
	Al	27	18901.669	ppb	8.141	788341.359	9.727
	K	39	22.602	ppm	4.901	1834719.946	2.907
	Ca	44	19.859	ppm	4.330	63166.172	0.839
	Sc	45		ppb		1874744.254	2.984
	Ti	47	4063.835	ppb	3.006	20268.625	1.844
	V	51	3629.046	ppb	6.420	295042.192	4.613
	Cr	52	3724.050	ppb	4.936	272585.766	2.653
	Fe	54	18.687	ppm	3.620	160733.275	2.517
	Mn	55	3703.430	ppb	3.852	422413.951	2.531
	Co	59	3729.169	ppb	4.193	350887.018	2.829
	Ni	60	4036.017	ppb	2.850	76437.091	2.408
	Cu	65	4064.960	ppb	2.981	86719.231	0.822
	Zn	66	4046.996	ppb	2.384	48299.922	1.495
>	Ge	72		ppb		460880.830	2.289
	As	75	4020.798	ppb	2.271	56210.661	0.051
	Se	82	3945.388	ppb	5.479	6500.203	3.414
	Y	89		ppb		5439213.481	2.019
	Cd	111	4025.824	ppb	3.059	96462.513	1.584
	Mo	98	3649.822	ppb	1.465	197751.986	2.533
>	Rh	103		ppb		4534185.429	1.072
	Ag	107	4534.036	ppb	2.086	384003.782	1.459
	Sn	118	-2.993	ppb	81.398	3366.348	5.515
	In	115		ppb		7465892.723	1.464
	Sb	121	3856.835	ppb	2.408	329555.919	1.437
	Ba	137	4138.294	ppb	2.036	146340.587	1.427
>	Tb	159		ppb		9029233.134	1.347
	Ho	165		ppb		9251166.664	1.164
	Tl	205	3547.374	ppb	1.348	1043859.735	0.497
	Pb	208	3688.526	ppb	2.226	1348232.639	1.011
>	Bi	209		ppb		6076911.494	1.310
	Kr	83		ppb		97.667	8.946

E12-02579 0203

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		97.431
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		102.543
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		103.687
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		103.214
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		100.599
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005RS

Analyzed Date/Time: Friday, March 16, 2012 16:36:23
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005RS.022
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 16
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		83197.676	5.281
	Be	9	4461.468	ppb	4.540	14177.717	0.714
	B	11	255.540	ppb	18.443	3334.000	1.134
	Na	23	1343.785	ppm	1.605	59359303.508	1.870
	Mg	24	38.019	ppm	1.318	1144357.065	2.689
	Al	27	20050.102	ppb	11.135	858117.061	9.872
	K	39	28.215	ppm	5.766	2266009.468	3.335
	Ca	44	669.495	ppm	1.204	1416367.882	2.239
	Sc	45		ppb		1909673.079	3.717
	Ti	47	4097.745	ppb	3.252	21018.478	1.729
	V	51	3704.080	ppb	2.279	309950.003	3.181
	Cr	52	3753.411	ppb	2.953	282701.268	4.207
	Fe	54	19.010	ppm	6.325	167145.150	2.725
	Mn	55	5224.686	ppb	0.960	611740.403	1.154
	Co	59	3738.028	ppb	1.581	361957.224	3.036
	Ni	60	4085.092	ppb	3.418	79543.588	1.938
	Cu	65	4185.849	ppb	3.031	91762.196	1.532
	Zn	66	5270.694	ppb	0.842	64525.187	0.674
>	Ge	72		ppb		473983.703	1.483
	As	75	4073.610	ppb	1.371	58581.452	0.951
	Se	82	3964.638	ppb	0.150	6722.377	1.601
	Y	89		ppb		5609199.469	1.756
	Cd	111	4010.209	ppb	1.179	98849.153	0.415
	Mo	98	3778.818	ppb	2.572	205660.799	1.704
>	Rh	103		ppb		4556361.051	1.669
	Ag	107	4620.825	ppb	2.712	393189.170	1.148
	Sn	118	-2.732	ppb	83.030	3404.363	4.271
	In	115		ppb		7647554.347	0.718
	Sb	121	3827.011	ppb	1.044	334990.281	1.091
	Ba	137	5338.967	ppb	2.352	193344.983	2.305
>	Tb	159		ppb		9248168.270	0.925
	Ho	165		ppb		9431339.776	1.795
	Tl	205	3578.672	ppb	1.438	1065118.058	1.251
	Pb	208	3781.296	ppb	1.630	1397997.259	0.662
>	Bi	209		ppb		6147032.447	2.189
	Kr	83		ppb		99.334	12.095

E12-02579 0205

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		98.032
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		105.458
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		104.194
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		105.717
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		101.760
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCV

Analyzed Date/Time: Friday, March 16, 2012 16:41:35
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCV.023
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		82740.508	7.316
	Be	9	53.783	ppb	7.566	33923.927	1.929
	B	11	53.226	ppb	9.315	46627.817	2.748
	Na	23	0.495	ppm	4.354	4330017.206	1.739
	Mg	24	0.496	ppm	3.307	2828750.895	0.491
	Al	27	54.954	ppb	5.067	451287.393	7.657
	K	39	0.535	ppm	2.137	7217119.641	3.004
	Ca	44	0.489	ppm	3.584	215874.503	2.530
	Sc	45		ppb		1852101.363	2.594
	Ti	47	213.876	ppb	2.086	207276.610	0.873
	V	51	50.841	ppb	4.676	804333.154	1.771
	Cr	52	45.143	ppb	3.805	627042.793	1.045
	Fe	54	0.466	ppm	3.337	569755.449	3.214
	Mn	55	45.587	ppb	3.068	1011588.161	0.254
	Co	59	46.028	ppb	1.358	846454.547	1.627
	Ni	60	50.516	ppb	2.516	185126.550	3.715
	Cu	65	50.926	ppb	3.454	208078.499	2.094
	Zn	66	52.509	ppb	3.611	121540.279	0.829
>	Ge	72		ppb		450425.887	2.821
	As	75	53.995	ppb	1.722	147492.217	2.334
	Se	82	49.514	ppb	4.789	15804.643	1.871
	Y	89		ppb		5471869.012	3.154
	Cd	111	50.418	ppb	5.326	235990.806	2.760
	Mo	98	45.275	ppb	1.396	469178.469	1.920
>	Rh	103		ppb		4342468.121	1.036
	Ag	107	10.678	ppb	1.309	173423.655	2.179
	Sn	118	45.490	ppb	0.613	750178.778	0.446
	In	115		ppb		7556076.810	1.086
	Sb	121	46.465	ppb	2.243	812128.638	1.179
	Ba	137	49.144	ppb	2.821	355250.643	1.566
>	Tb	159		ppb		9235829.854	1.289
	Ho	165		ppb		9400411.664	1.108
	Tl	205	46.322	ppb	0.704	2798944.427	0.575
	Pb	208	45.042	ppb	1.224	3386394.806	0.279
>	Bi	209		ppb		6252494.120	1.251
	Kr	83		ppb		90.000	11.277

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		97.494
	Be	9	107.565	
	B	11	106.453	
	Na	23	98.934	
	Mg	24	99.101	
	Al	27	109.909	
	K	39	107.041	
	Ca	44	97.868	
	Sc	45		
	Ti	47	106.938	
	V	51	101.681	
	Cr	52	90.286	
	Fe	54	93.134	
	Mn	55	91.175	
	Co	59	92.055	
	Ni	60	101.033	
	Cu	65	101.851	
	Zn	66	105.019	
>	Ge	72		100.217
	As	75	107.990	
	Se	82	99.029	
	Y	89		
	Cd	111	100.835	
	Mo	98	90.551	
>	Rh	103		99.303
	Ag	107	106.780	
	Sn	118	90.980	
	In	115		
	Sb	121	92.929	
	Ba	137	98.289	
>	Tb	159		105.576
	Ho	165		
	Tl	205	92.644	
	Pb	208	90.084	
>	Bi	209		103.505
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCB

Analyzed Date/Time: Friday, March 16, 2012 16:47:07
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\Dataset\pg117\CCB.024
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		78387.831	7.985
	Be	9	0.007	ppb	16.042	7.000	14.286
	B	11	1.161	ppb	25.329	3042.889	1.081
	Na	23	-0.000	ppm	77.465	185295.521	1.819
	Mg	24	-0.000	ppm	4.683	1707.508	3.112
	Al	27	-0.078	ppb	51.726	6870.500	3.710
	K	39	0.002	ppm	31.989	357771.001	0.903
	Ca	44	-0.001	ppm	93.107	21418.491	0.688
	Sc	45		ppb		1756087.213	1.301
	Ti	47	0.139	ppb	10.825	256.004	7.042
	V	51	-0.004	ppb	167.754	1858.259	5.934
	Cr	52	0.012	ppb	45.056	13034.188	1.901
	Fe	54	-0.000	ppm	97.903	51868.990	1.240
	Mn	55	-0.001	ppb	182.764	3070.566	0.751
	Co	59	0.002	ppb	78.062	230.003	13.825
	Ni	60	0.001	ppb	2190.874	1245.426	4.151
	Cu	65	-0.004	ppb	630.338	2738.784	3.207
	Zn	66	0.004	ppb	179.944	563.019	3.318
>	Ge	72		ppb		438679.150	1.634
	As	75	0.008	ppb	175.820	65.139	54.823
	Se	82	0.047	ppb	73.271	104.001	9.470
	Y	89		ppb		5095449.442	1.198
	Cd	111	0.002	ppb	36.448	18.333	22.709
	Mo	98	0.158	ppb	9.091	2038.378	6.664
>	Rh	103		ppb		4260701.513	3.002
	Ag	107	0.012	ppb	10.341	500.348	2.401
	Sn	118	0.416	ppb	15.044	10102.157	9.654
	In	115		ppb		7211489.069	2.657
	Sb	121	0.016	ppb	13.843	333.007	11.727
	Ba	137	-0.003	ppb	39.371	144.001	5.424
>	Tb	159		ppb		8597482.753	0.785
	Ho	165		ppb		8783865.238	1.813
	Tl	205	0.014	ppb	9.966	4404.164	0.545
	Pb	208	0.000	ppb	669.585	1180.699	0.636
>	Bi	209		ppb		5903777.071	1.291
	Kr	83		ppb		97.001	6.186

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		92.365
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		97.603
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		97.433
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		98.279
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		97.733
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: 02579-005PS

Analyzed Date/Time: Friday, March 16, 2012 16:52:38
Sample Type: Sample
Batch ID: 117
Dataset File: C:\Elandata\Dataset\pg117\02579-005PS.025
ICP-MS S/N AH12420705
Initial Sample Quantity (mg): 25000
Sample Prep Volume (mL): 50
Aliquot Volume (mL): 1
Diluted To Volume (mL): 100
Autosampler Position: 17
Analyst: ROB

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85148.640	21.748
	Be	9	4286.918	ppb	19.215	13580.062	2.852
	B	11	260.733	ppb	66.744	3333.000	2.836
	Na	23	1369.626	ppm	2.207	56493297.418	0.293
	Mg	24	38.337	ppm	1.418	1077593.489	1.752
	Al	27	19575.704	ppb	7.230	783971.782	8.760
	K	39	29.193	ppm	2.250	2178755.455	0.066
	Ca	44	677.879	ppm	3.416	1338813.408	2.601
	Sc	45		ppb		1801358.509	1.677
	Ti	47	4233.407	ppb	2.315	20280.989	1.993
	V	51	3749.954	ppb	1.047	293017.152	1.524
	Cr	52	3773.961	ppb	2.227	265400.781	3.577
	Fe	54	19.352	ppm	4.398	157990.461	1.083
	Mn	55	5296.513	ppb	2.859	579078.799	1.844
	Co	59	3771.773	ppb	0.233	341085.828	2.015
	Ni	60	4180.154	ppb	4.261	76026.083	4.805
	Cu	65	4283.673	ppb	0.765	87674.272	2.189
	Zn	66	5362.867	ppb	3.210	61322.031	3.970
>	Ge	72		ppb		442721.866	1.923
	As	75	4104.919	ppb	2.505	55139.040	2.732
	Se	82	4019.301	ppb	2.029	6365.432	3.619
	Y	89		ppb		5323269.895	0.602
	Cd	111	4153.630	ppb	1.775	95649.462	3.037
	Mo	98	3846.987	ppb	5.231	197125.449	1.474
>	Rh	103		ppb		4294930.878	3.895
	Ag	107	4652.278	ppb	2.864	372988.998	1.239
	Sn	118	29.629	ppb	2.195	5837.379	3.604
	In	115		ppb		7194663.564	2.922
	Sb	121	3931.321	ppb	3.189	324773.424	0.377
	Ba	137	5641.188	ppb	2.118	192852.083	1.724
>	Tb	159		ppb		8733398.109	2.904
	Ho	165		ppb		8988711.287	0.639
	Tl	205	3651.205	ppb	1.144	1040226.654	1.562
	Pb	208	3835.538	ppb	1.708	1357449.302	1.294
>	Bi	209		ppb		5883314.500	0.429
	Kr	83		ppb		98.667	4.220

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Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		100.331
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		98.503
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		98.216
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		99.833
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		97.394
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCV

Analyzed Date/Time: Friday, March 16, 2012 17:44:31
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCV.035
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		85736.899	5.046
	Be	9	51.468	ppb	6.028	33690.638	1.033
	B	11	51.744	ppb	5.776	47148.385	2.367
	Na	23	0.527	ppm	1.765	4489349.856	2.984
	Mg	24	0.516	ppm	0.983	2868868.389	0.628
	Al	27	54.894	ppb	4.661	438551.635	3.093
	K	39	0.536	ppm	2.582	7040609.498	2.083
	Ca	44	0.474	ppm	3.078	204606.018	3.798
	Sc	45		ppb		1880191.297	0.388
	Ti	47	208.145	ppb	2.986	196532.880	1.595
	V	51	50.181	ppb	1.095	774090.146	1.935
	Cr	52	46.873	ppb	1.504	634286.901	2.957
	Fe	54	0.463	ppm	4.095	552124.203	2.950
	Mn	55	46.855	ppb	2.098	1013454.005	3.086
	Co	59	46.127	ppb	2.116	826382.388	0.620
	Ni	60	49.631	ppb	3.436	177144.790	1.904
	Cu	65	50.309	ppb	1.691	200348.789	0.337
	Zn	66	52.061	ppb	0.838	117480.569	2.211
>	Ge	72		ppb		438789.532	1.548
	As	75	53.659	ppb	3.002	142771.589	1.610
	Se	82	48.830	ppb	2.897	15202.539	4.358
	Y	89		ppb		5498585.759	1.687
	Cd	111	49.850	ppb	0.346	227522.373	1.663
	Mo	98	53.310	ppb	5.980	533538.333	4.899
>	Rh	103		ppb		4196936.309	2.210
	Ag	107	10.193	ppb	3.016	159952.680	2.210
	Sn	118	45.648	ppb	1.407	727433.934	0.883
	In	115		ppb		7648311.145	1.611
	Sb	121	46.689	ppb	1.441	794208.788	0.475
	Ba	137	49.319	ppb	0.934	347030.794	1.504
>	Tb	159		ppb		8987882.246	0.983
	Ho	165		ppb		9673272.762	1.191
	Tl	205	50.991	ppb	0.978	2856772.562	1.771
	Pb	208	48.025	ppb	1.150	3347927.311	0.125
>	Bi	209		ppb		5797546.186	1.033
	Kr	83		ppb		88.667	11.127

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		101.024
	Be	9	102.936	
	B	11	103.488	
	Na	23	105.499	
	Mg	24	103.122	
	Al	27	109.788	
	K	39	107.203	
	Ca	44	94.853	
	Sc	45		
	Ti	47	104.073	
	V	51	100.361	
	Cr	52	93.747	
	Fe	54	92.596	
	Mn	55	93.711	
	Co	59	92.253	
	Ni	60	99.261	
	Cu	65	100.617	
	Zn	66	104.122	
>	Ge	72		97.628
	As	75	107.318	
	Se	82	97.660	
	Y	89		
	Cd	111	99.699	
	Mo	98	106.620	
>	Rh	103		95.975
	Ag	107	101.929	
	Sn	118	91.297	
	In	115		
	Sb	121	93.378	
	Ba	137	98.639	
>	Tb	159		102.742
	Ho	165		
	Tl	205	101.981	
	Pb	208	96.050	
>	Bi	209		95.974
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Integrated Analytical Laboratories, LLC.
273 Franklin Road, Randolph, NJ 07869

Method 6020

Sample ID: CCB

Analyzed Date/Time: Friday, March 16, 2012 17:50:03
Sample Type: Sample
Batch ID:
Dataset File: C:\Elandata\DataSet\pg117\CCB.036
ICP-MS S/N AH12420705
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7

Concentration Results

	Analyte	Mass	Conc. Mean	Units	Conc. RSD	Meas. Intens. Mean	Meas. Intens. RSD
>	Li	6		ppb		81548.108	3.800
	Be	9	0.001	ppb	448.023	3.667	56.773
	B	11	1.384	ppb	14.503	3362.346	6.002
	Na	23	-0.000	ppm	536.172	195998.532	0.656
	Mg	24	-0.000	ppm	42.877	2101.266	6.514
	Al	27	-0.052	ppb	67.030	7353.913	3.846
	K	39	0.001	ppm	10.876	360240.177	0.643
	Ca	44	-0.008	ppm	0.869	19744.364	1.036
	Sc	45		ppb		1902207.912	2.048
	Ti	47	0.151	ppb	46.476	278.005	24.945
	V	51	-0.011	ppb	63.973	1821.542	5.132
	Cr	52	-0.018	ppb	181.704	13120.325	2.541
	Fe	54	-0.002	ppm	34.707	52367.402	2.224
	Mn	55	-0.005	ppb	21.783	3111.914	1.244
	Co	59	0.002	ppb	25.406	242.670	3.505
	Ni	60	-0.003	ppb	897.507	1281.432	6.091
	Cu	65	-0.048	ppb	26.043	2665.760	1.298
	Zn	66	0.043	ppb	27.482	677.028	4.941
>	Ge	72		ppb		455779.180	1.071
	As	75	0.008	ppb	201.202	66.898	62.424
	Se	82	-0.002	ppb	647.595	92.334	4.377
	Y	89		ppb		5496950.780	2.383
	Cd	111	0.012	ppb	29.413	62.334	26.132
	Mo	98	0.123	ppb	105.670	1856.953	79.039
>	Rh	103		ppb		4650758.455	1.842
	Ag	107	0.004	ppb	26.407	417.677	6.431
	Sn	118	0.388	ppb	15.472	10545.725	11.250
	In	115		ppb		7758071.078	0.951
	Sb	121	0.014	ppb	11.190	317.006	8.049
	Ba	137	-0.003	ppb	37.079	155.668	4.906
>	Tb	159		ppb		9474946.429	0.686
	Ho	165		ppb		9640899.411	1.193
	Tl	205	0.006	ppb	55.508	4194.056	2.895
	Pb	208	-0.000	ppb	2519.660	1261.704	4.421
>	Bi	209		ppb		6340558.593	1.931
	Kr	83		ppb		86.000	2.014

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery
>	Li	6		96.089
	Be	9		
	B	11		
	Na	23		
	Mg	24		
	Al	27		
	K	39		
	Ca	44		
	Sc	45		
	Ti	47		
	V	51		
	Cr	52		
	Fe	54		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		101.408
	As	75		
	Se	82		
	Y	89		
	Cd	111		
	Mo	98		
>	Rh	103		106.353
	Ag	107		
	Sn	118		
	In	115		
	Sb	121		
	Ba	137		
>	Tb	159		108.309
	Ho	165		
	Tl	205		
	Pb	208		
>	Bi	209		104.963
	Kr	83		

QC Out of Limits

Out of Limits Message	Analyte	Mass

Analytical Sequence

Method : 7470A TCLP

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		BMT1-117
10	10		BST1-117
11	11		02579-005
12	12		02579-005R
13	13		02579-005RS
14	14		02521-001
15	15		02521-002
16	16		02521-003
17	17		02541-001
18	18		02541-002
19	2	QC	CCV
20	1	QC	CCB
21	19		02541-003
22	20		02552-001
23	21		02552-002
24	22		02553-001
25	23		02553-002
26	24		02553-003
27	25		02556-001
28	26		02556-002
29	27		02580-001
30	28		02580-002
31	2	QC	CCV
32	1	QC	CCB
33	29		02580-003
34	30		02580-004
35	31		02580-005
36	32		02580-006
37	33		BMT2-117
38	34		BST2-117
39	35		02111-001
40	36		02111-001R
41	37		02111-001RS
42	38		02554-001
43	2	QC	CCV
44	1	QC	CCB
45	39		02599-001
46	40		02600-001
47	41		02600-002
48	42		02601-001
49	43		02602-001
50	2	QC	CCV
51	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\117.SIF
Batch ID: 117TCLP
Results Data Set: pg117ahg
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Method Loaded
Method Name: 7470A TCLP
Method Last Saved: 4/15/2011 1:57:25 PM
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 3/16/2012 1:15:10 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0014	0.0014	0.0003	13:16:03	Yes
2		[0.00]	0.0014	0.0014	0.0003	13:16:36	Yes
3		[0.00]	0.0010	0.0010	0.0003	13:17:09	Yes
Mean:		[0.00]	0.0013				
SD:		0.00	0.0002				
%RSD:		0.00	16.85				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 3/16/2012 1:17:28 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0207	0.0220	0.0043	13:18:22	Yes
2		[0.25]	0.0208	0.0221	0.0042	13:18:54	Yes
3		[0.25]	0.0211	0.0224	0.0043	13:19:27	Yes
Mean:		[0.25]	0.0209				
SD:		0.00	0.0002				
%RSD:		0.00	1.06				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.08353 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 3/16/2012 1:19:47 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.2153	0.2165	0.0406	13:20:42	Yes
2		[2.500]	0.2113	0.2126	0.0400	13:21:15	Yes
3		[2.500]	0.2112	0.2124	0.0400	13:21:48	Yes
Mean:		[2.500]	0.2126				
SD:		0.000	0.0023				
%RSD:		0.000	1.09				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999996 Slope: 0.08502 Intercept: 0.00000

Sequence No.: 4
Autosampler Location: 5

Sample ID: Calib Std 3 Date Collected: 3/16/2012 1:22:08 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.4238	0.4251	0.0796	13:23:02	Yes
2		[5.000]	0.4144	0.4157	0.0783	13:23:35	Yes
3		[5.000]	0.4130	0.4143	0.0783	13:24:07	Yes
Mean:		[5.000]	0.4171				
SD:		0.000	0.0059				
%RSD:		0.000	1.41				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999918 Slope: 0.08374 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 6
Sample ID: Calib Std 4 Date Collected: 3/16/2012 1:24:28 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.6248	0.6260	0.1172	13:25:23	Yes
2		[7.500]	0.6209	0.6222	0.1168	13:25:56	Yes
3		[7.500]	0.6153	0.6166	0.1162	13:26:29	Yes
Mean:		[7.500]	0.6203				
SD:		0.000	0.0048				
%RSD:		0.000	0.77				

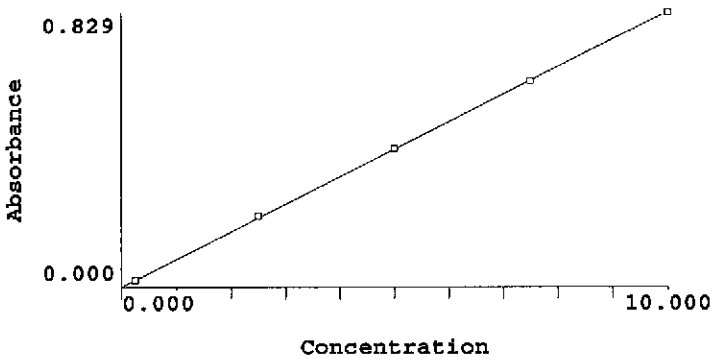
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999915 Slope: 0.08308 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 7
Sample ID: Calib Std 5 Date Collected: 3/16/2012 1:26:51 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.8392	0.8405	0.1559	13:27:46	Yes
2		[10.000]	0.8238	0.8251	0.1535	13:28:19	Yes
3		[10.000]	0.8232	0.8244	0.1542	13:28:52	Yes
Mean:		[10.000]	0.8287				
SD:		0.000	0.0091				
%RSD:		0.000	1.10				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999956 Slope: 0.08297 Intercept: 0.00000



Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

Calib Blank 1	0.0000	0	0.00000	0.00	16.9
Calib Std 1	0.0209	0.25	0.25169	0.00	1.1
Calib Std 2	0.2126	2.500	2.56202	0.00	1.1
Calib Std 3	0.4171	5.000	5.02676	0.01	1.4
Calib Std 4	0.6203	7.500	7.47626	0.00	0.8
Calib Std 5	0.8287	10.000	9.98835	0.01	1.1

Correlation Coef.: 0.999956 Slope: 0.08297 Intercept: 0.00000

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 3/16/2012 1:29:14 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00528	5.2828	0.4383	0.4396	0.0822	13:30:08	Yes
2	0.00522	5.2194	0.4331	0.4343	0.0818	13:30:41	Yes
3	0.00520	5.1987	0.4313	0.4326	0.0818	13:31:13	Yes
Mean:	0.00523	5.2336	0.4342				
SD:	0.00004	0.04379	0.0036				
%RSD:	0.83675	0.83675	0.84				

QC value within limits for Hg 253.7 Recovery = 104.67%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 3/16/2012 1:31:33 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00128	0.0001	0.0014	0.0003	13:32:26	Yes
2	0.00000	-0.00056	-0.0000	0.0012	0.0003	13:32:59	Yes
3	0.00000	-0.00071	-0.0001	0.0012	0.0003	13:33:32	Yes
Mean:	0.00000	0.00000	0.0000				
SD:	0.00000	0.00111	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BMT1-117 **Date Collected: 3/16/2012 1:33:51 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BMT1-117

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.00755	-0.0006	0.0007	0.0002	13:34:43	Yes
2	-0.00002	-0.00838	-0.0007	0.0006	0.0002	13:35:16	Yes
3	-0.00001	-0.00307	-0.0003	0.0010	0.0002	13:35:49	Yes
Mean:	-0.00001	-0.00633	-0.0005				
SD:	0.00001	0.00286	0.0002				
%RSD:	45.131	45.131	45.13				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: BST1-117 **Date Collected: 3/16/2012 1:36:08 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BST1-117

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01097	5.4844	0.4550	0.4563	0.0859	13:37:00	Yes
2	0.01083	5.4166	0.4494	0.4507	0.0852	13:37:33	Yes
3	0.01082	5.4103	0.4489	0.4502	0.0854	13:38:06	Yes

Mean:	0.01087	5.4371	0.4511
SD:	0.00008	0.04110	0.0034
%RSD:	0.75595	0.75595	0.76

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: 02579-005 **Date Collected: 3/16/2012 1:38:25 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00003	0.01684	0.0014	0.0027	0.0006	13:39:19	Yes
2	0.00003	0.01566	0.0013	0.0026	0.0005	13:39:51	Yes
3	0.00004	0.01864	0.0015	0.0028	0.0005	13:40:24	Yes
Mean:	0.00003	0.01705	0.0014				
SD:	0.00000	0.00150	0.0001				
%RSD:	8.8009	8.8009	8.80				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 02579-005R **Date Collected: 3/16/2012 1:40:43 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005R

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00003	0.01416	0.0012	0.0025	0.0005	13:41:36	Yes
2	0.00003	0.01473	0.0012	0.0025	0.0005	13:42:09	Yes
3	0.00003	0.01621	0.0013	0.0026	0.0005	13:42:42	Yes
Mean:	0.00003	0.01504	0.0012				
SD:	0.00000	0.00106	0.0001				
%RSD:	7.0562	7.0562	7.06				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 02579-005RS **Date Collected: 3/16/2012 1:43:01 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02579-005RS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01080	5.4015	0.4482	0.4495	0.0834	13:43:55	Yes
2	0.01065	5.3244	0.4418	0.4431	0.0825	13:44:28	Yes
3	0.01049	5.2449	0.4352	0.4365	0.0819	13:45:01	Yes
Mean:	0.01065	5.3236	0.4417				
SD:	0.00016	0.07831	0.0065				
%RSD:	1.4711	1.4711	1.47				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 02521-001 **Date Collected: 3/16/2012 1:45:21 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02521-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00001	0.00604	0.0005	0.0018	0.0003	13:46:14	Yes
2	0.00000	0.00137	0.0001	0.0014	0.0003	13:46:47	Yes
3	0.00000	-0.00060	-0.0000	0.0012	0.0003	13:47:20	Yes
Mean:	0.00000	0.00227	0.0002				
SD:	0.00001	0.00341	0.0003				
%RSD:	149.94	149.94	149.94				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 02521-002 **Date Collected: 3/16/2012 1:47:40 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02521-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00028	-0.0000	0.0013	0.0002	13:48:34	Yes
2	-0.00001	-0.00539	-0.0004	0.0008	0.0002	13:49:07	Yes
3	-0.00002	-0.00869	-0.0007	0.0006	0.0002	13:49:40	Yes
Mean:	-0.00001	-0.00478	-0.0004				
SD:	0.00001	0.00424	0.0004				
%RSD:	88.632	88.632	88.63				

Sequence No.: 16 Autosampler Location: 16
Sample ID: 02521-003 Date Collected: 3/16/2012 1:50:01 PM
Analyst: Rob Data Type: Original

Replicate Data: 02521-003

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00141	-0.0001	0.0012	0.0002	13:50:55	Yes
2	-0.00002	-0.00753	-0.0006	0.0007	0.0002	13:51:27	Yes
3	-0.00001	-0.00517	-0.0004	0.0009	0.0002	13:52:00	Yes
Mean:	-0.00001	-0.00470	-0.0004				
SD:	0.00001	0.00309	0.0003				
%RSD:	65.652	65.652	65.65				

Sequence No.: 17 Autosampler Location: 17
Sample ID: 02541-001 Date Collected: 3/16/2012 1:52:21 PM
Analyst: Rob Data Type: Original

Replicate Data: 02541-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00333	-0.0003	0.0010	0.0002	13:53:15	Yes
2	0.00000	-0.00212	-0.0002	0.0011	0.0002	13:53:48	Yes
3	-0.00001	-0.00356	-0.0003	0.0010	0.0002	13:54:21	Yes
Mean:	-0.00001	-0.00300	-0.0002				
SD:	0.00000	0.00078	0.0001				
%RSD:	25.838	25.838	25.84				

Sequence No.: 18 Autosampler Location: 18
Sample ID: 02541-002 Date Collected: 3/16/2012 1:54:41 PM
Analyst: Rob Data Type: Original

Replicate Data: 02541-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00497	-0.0004	0.0009	0.0002	13:55:36	Yes
2	-0.00001	-0.00376	-0.0003	0.0010	0.0002	13:56:09	Yes
3	-0.00001	-0.00539	-0.0004	0.0008	0.0002	13:56:42	Yes
Mean:	-0.00001	-0.00471	-0.0004				
SD:	0.00000	0.00084	0.0001				
%RSD:	17.941	17.941	17.94				

Sequence No.: 19 Autosampler Location: 2
Sample ID: CCV Date Collected: 3/16/2012 1:57:03 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00532	5.3238	0.4417	0.4430	0.0825	13:57:56	Yes
2	0.00525	5.2506	0.4356	0.4369	0.0818	13:58:29	Yes
3	0.00521	5.2112	0.4324	0.4337	0.0814	13:59:02	Yes

Mean:	0.00526	5.2619	0.4366
SD:	0.00006	0.05716	0.0047
%RSD:	1.0863	1.0863	1.09

QC value within limits for Hg 253.7 Recovery = 105.24%
All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 3/16/2012 1:59:21 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00122	-0.0001	0.0012	0.0003	14:00:14	Yes
2	0.00000	0.00301	0.0002	0.0015	0.0003	14:00:47	Yes
3	0.00000	0.00306	0.0003	0.0015	0.0003	14:01:20	Yes
Mean:	0.00000	0.00162	0.0001				
SD:	0.00000	0.00245	0.0002				
%RSD:	151.82	151.82	151.82				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 19**
Sample ID: 02541-003 **Date Collected: 3/16/2012 2:01:39 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02541-003

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00217	0.0002	0.0015	0.0003	14:02:34	Yes
2	0.00001	0.00278	0.0002	0.0015	0.0003	14:03:06	Yes
3	-0.00001	-0.00431	-0.0004	0.0009	0.0003	14:03:39	Yes
Mean:	0.00000	0.00022	0.0000				
SD:	0.00001	0.00393	0.0003				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: 02552-001 **Date Collected: 3/16/2012 2:04:01 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02552-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00119	-0.0001	0.0012	0.0003	14:04:56	Yes
2	0.00001	0.00381	0.0003	0.0016	0.0003	14:05:29	Yes
3	0.00000	0.00213	0.0002	0.0015	0.0003	14:06:02	Yes
Mean:	0.00000	0.00158	0.0001				
SD:	0.00001	0.00254	0.0002				
%RSD:	160.65	160.65	160.65				

Sequence No.: 23 **Autosampler Location: 21**
Sample ID: 02552-002 **Date Collected: 3/16/2012 2:06:23 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: 02552-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00117	0.0001	0.0014	0.0003	14:07:18	Yes
2	0.00001	0.00355	0.0003	0.0016	0.0003	14:07:52	Yes
3	0.00000	0.00081	0.0001	0.0014	0.0003	14:08:24	Yes
Mean:	0.00000	0.00184	0.0002				
SD:	0.00000	0.00149	0.0001				
%RSD:	80.837	80.837	80.84				

TCLP METALS
PREP LOGS
STANDARD PREP LOGS

2012 PG: 117 METALS'S DIGESTION LOG

Date: 03/16/12 08:00

MATRIX: LEACHATE | **PREP. SOLUTION** | **DATE** | **LOT #** | **ANALYSIS METHOD:** 6020 | **Hg DIG. DATE:** 3/16/12

DIGESTION METHOD: 3005A | NaCl: | 2/24/12 | 096144 | **Hg ANAL. METHOD:** 1311/7470A

SPIKES: 1.00ml M359 | Hydroxylamine: | 2/24/12 | 108224 | **LOT# HNO3:** 114927 | **ICPMS ICV:** M331

Hg DIGESTION METHOD: 7470A | KMnO4: | 3/13/12 | 104702 | **LOT# H2SO4:** 104256 | **ICPMS Cal. Stds.:** M327,M361

Hg SPIKE: 2.50 PPB M326-8 | K2S2O8: | 2/8/12 | 084163 | **LOT# HCL:** 115830

Hg ICV: 2.50 PPB M344-1

TEST REQUESTED	SAMPLE #	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M326-8		
Hg	STD2 2.50 PPB						25	50			M326-8		
Hg	STD3 5.00 PPB						25	50			M326-8		
Hg	STD4 7.50 PPB						25	50			M326-8		
Hg	STD5 10.0 PPB						25	50			M326-8		
Hg	ICV 5.00 PPB						25	50			M344-1		
	BMT1				25	50	25	50					
	BST1				25	50	25	50					
TCLP	02579-005	*	R		25	50	25	50	U1-LM	3/19	R-48(3/19 11:00)		
	02579-005R	*	R		25	50	25	50	U1-LM				
	02579-005RS	*	R		25	50	25	50	U1-LM				
TCLP + Cu Ni Zn	02521-001	*	N		25	50	25	50	VS1-LM	3/26	Solid, Cloudy	0.2	
TCLP + Cu Ni Zn	02521-002	*	N		25	50	25	50	VS1-LM		Solid, Cloudy	0.2	
TCLP + Cu Ni Zn	02521-003	*	N		25	50	25	50	VS1-LM		FILT OF 3 RECEIVED IN 2OZ, LIMITED SAMPLE.. TCLP VOA 6.25G, FULL TCLP 50G, ASTM 25G, PCB 5G, TOX 1G, TS/TVS 5G, O&G/SGTHEM 10G, REACTIVITY 10G---DO NOT USE UP THE REST OF SAMPLE.....PAIN T FILTER ND WITH 100G, IGNITABILITY NO 03/14/12; Solid,cloudy	0.2	
TCLP	02541-001	*	Y		25	50	25	50	U1-LM	3/20	R-1WK		
TCLP	02541-002	*	Y		25	50	25	50	U1-LM		R-1WK		
TCLP	02541-003	*	Y		25	50	25	50	U1-LM		R-1WK		
TCLP	02552-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous,light Yellow		
TCLP	02552-002	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	02553-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous,Light Yellow		
TCLP	02553-002	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	02553-003	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Yellow		
TCLP	02556-001	*	N		25	50	25	50	U1-LM	3/20	R-1WK; Aqueous		

E12-02579 0225

2012 PG: 117 METALS'S DIGESTION LOG

Date: 03/16/12 08:00

TCLP	**02556-002**	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Pink		
TCLP	**02580-001**	*	Y		25	50	25	50	U1-LM	**3/21**	R-1WK; Solid		
TCLP	**02580-002**	*	Y		25	50	25	50	U1-LM		R-1WK; Aqueous,Light Yellow		
TCLP	**02580-003**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-004**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-005**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
TCLP	**02580-006**	*	Y		25	50	25	50	U1-LM		R-1WK; Solid		
	BMT2				25	50	25	50					
	BST2				25	50	25	50					
TCLP As + Ba Cd Cr Pb Hg Se Ag Cu Ni Zn Be Sb Tl V	**02111-001**	*	Y		25	50	25	50	U1-LM	**3/19**	R-48(3/19 16:00); SEE ATTACH FOR METAL LIMIT		*
	02111-001R	*	Y		25	50	25	50	U1-LM				
	02111-001RS	*	Y		25	50	25	50	U1-LM				
TCLP	**02554-001**	*	N		10	20	10	50	U1-LM	**3/20**	R-1WK; IS CLEAR AND BRIGHT RED; Liquid,Red,Ashing		
TCLP	**02599-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02600-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02600-002**	*	N		25	50	25	50	U1-LM		R-1WK; Aqueous		
TCLP	**02601-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		
TCLP	**02602-001**	*	N		25	50	25	50	U1-LM	**3/21**	R-1WK; Aqueous		

Standard Preparation Worksheet for ICP-MS

ELAN DRC-e S/N AH12420705

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	Spex	CL-CAL-1	42-504S	M-424	05/30/2013	
Instrument Check Standard 3	Spex	CL-ICS-3	CL43-142AP	M-417	05/30/2013	
1000 ppm Ti	SCP	140-050-281	SH0720005	M-415	04/17/2013	
1000ppm B	SCP	140-050-051	SH0930007	M-414	04/17/2013	
1000 ppm Sn	I.V.	CGSnC1-1	D2-SN02031	M-373	03/1/2013	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP		511051200	M-396	05/2012	

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	Spex	CL-INT-A2	4-298BD	M-376	05/2012	
Interference Check Solution 2	Spex	CL-INT-B2	CL42-123AD	M-389	06/2012	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	IV	CGGE1-1	D2-GE01084	M-388	05/5/2013	
1000ppm Rh	IV	CGR41-1	D2-R401101	M-383	04/20/2013	
Multi-element Internal Standard 1	Spex	CLISS-1	CL5-152YP	M-419	03/15/2013	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Culligan					
Nitric Acid	Fisher	A200S-212	113723		11/08/2021	

Standard Preparation Worksheet for ICP-MS

ELAN DRC-e S/N AH12420705

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
(trace elem.) *	0	0.5 ppb	50 ppb	100 ppb	200 ppb
(major elem.) **	0	0.005 ppm	0.5 ppm	1 ppm	2 ppm
Calibration Stock	0	0.05ml	5ml	10ml	20ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 030512

Standard Name		030512-1	030512-2	030512-3	030512-4	030512-5
Prepared by:	Initial	RP	RP	RP	RP	RP
	Date	3/5/12	3/5/12	3/5/12	3/5/12	3/5/12
Standard Name		030512-6	030512-7	030512-8	030512-9	030512-10
Prepared by:	Initial	3/12/12 RP	RP	RP	RP	RP
	Date		3/12/12	3/12/12	3/12/12	3/12/12
Standard Name		030512-11	030512-12	030512-13	030512-14	030512-15
Prepared by:	Initial	RP	RP	RP	RP	RP
	Date	3/19/12	3/19/12	3/19/12	3/19/12	3/19/12
Standard Name						
Prepared by:	Initial					
	Date					
Standard Name						
Prepared by:	Initial					
	Date					

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.10 mL ICV custom standard

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05ml 1000ppm Rh

Prepared by:	Initial	RP	RP	RP		
	Date	3/5/12	3/12/12	3/19/12		

GENERAL CHEMISTRY

GENERAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
3/16/2012

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Unit: mg/Kg

Batch ID: AP091-0006

Blank

Parameter	Method Blank	MDL	Analysis Date
Sulfur as S	ND	825	03/16/12

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Sulfur as S	02579-002D	ND	ND	NC	NC

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Sulfur as S	NA	NA	NA	NA	NA	75 - 125

The above blank result applies to the follow samples:

E12-02579-002
E12-02579-002D
E12-02579-003
E12-02579-004
E12-02572-001
E12-02532-002

++ = No Flash - Sample boiled at 100C
NA = Not Applicable
ND = Not Detected
NC = Non calculable RPD due to value less than the detection limit
No = Does Not Ignite
Yes = Sample Ignites

IAL, LLC
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GENERAL CHEMISTRY RAW DATA
INSTRUMENT LOGS

2.1136	2.1136					
0.1147	0.1123					
0.1150	0.1259					
0.1107	0.1152					
0.1135	0.1172					
0.1110	0.7111					
0.1110	ND					
1736	0.0065					
1176	0.0065					
7111	0.1003	(8350)				
	73500					
0.1136	ND					
0.1864	0.0646					
0.1856	0.0647					
0.2111	0.1001					
0.1180	ND					
.1807	0.0631					
.1830	0.0637					
.2174	0.1000					

Hydrid						
7/6/12	10:00	SV	wt1	wt2	diff	
PBS		0.500g	0.1211	0.1211	ND	<825
2579-002		0.508g	0.1203	0.1212	0.0009	<812
-002P		0.510g	0.1198	0.1206	0.0008	<812
-003		0.503g	0.1204	0.1224	0.0020	<820
-004		0.513g	0.1181	0.1196	0.0015	<804
2572-001		0.1729	0.1141	0.1274	0.0133	6720
2532-002		0.1505g	0.1175	0.1200	0.0025	<816
Hulk 8bb		0.05g	0.1111	0.1211	0.1000	75000
Sulforaphane Acid		333000 RA 43-15				(83%)

GENERAL CHEMISTRY STANDARD
PREP LOGS

EMD™ LA-43-15

EMD Chemicals Inc.
480 S. Democrat Road
Gibbstown, NJ 08027
Phone 856-423-6300
Fax 856-423-4389

10/14/03

1cc.

Name: Sulfamic Acid
GR ACS
Meets ACS Specifications

Formula: NH_2SO_3H

Item Number: SX1140/1, SX1140/2, SX1140/3, SX1140/4, SX1140/902

Formula Wt: 97.09

Lot Number: 46250744

Data Order No: 000404701

CHARACTERISTIC	REQUIREMENT		RESULTS	UNITS
	Min.	Max.		
Assay (dried basis)	99.3	100.3	99.33	%
Insoluble matter		0.01	0.002	%
Color			White	
Form			Crystals	
Chloride (Cl)		0.001	< 0.0001	%
Sulfate (SO4)		0.05	0.047	%
Heavy metals (as Pb)		0.001	< 0.0001	%
Iron (Fe)		5	< 0.5	ppm
Residue after ignition		0.01	0.001	%

Charles M. Wilson,
Quality Assurance Manager

Release Date: 9/11/2006

EMD Chemicals Inc.
(Formerly EM Science, A Division of EM Industries, Inc.)
An Affiliate of Merck KGaA, Darmstadt, Germany

E12-02579 0235

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles Special List (Units)	***(mg/Kg-ppm)***		
Chloromethane	ND		0.060
Vinyl chloride	ND		0.064
Bromomethane	ND		0.065
Chloroethane	ND		0.063
Trichlorofluoromethane	ND		0.072
Acrolein	ND		0.243
1,1-Dichloroethene	ND		0.053
Acetone	ND		0.056
Methylene chloride	ND		0.212
Acrylonitrile	ND		0.241
trans-1,2-Dichloroethene	ND		0.056
1,1-Dichloroethane	ND		0.051
cis-1,2-Dichloroethene	ND		0.052
2-Butanone (MEK)	ND		0.088
Chloroform	ND		0.061
1,1,1-Trichloroethane	ND		0.052
Carbon tetrachloride	ND		0.061
1,2-Dichloroethane (EDC)	ND		0.045
Benzene	ND		0.029
Trichloroethene	ND		0.029
1,2-Dichloropropane	ND		0.063
Bromodichloromethane	ND		0.043
2-Chloroethyl vinyl ether	ND		0.058
cis-1,3-Dichloropropene	ND		0.046
4-Methyl-2-pentanone (MIBK)	ND		0.049
Toluene	0.038	J	0.028
trans-1,3-Dichloropropene	ND		0.037
1,1,2-Trichloroethane	ND		0.036
Tetrachloroethene	ND		0.030
Dibromochloromethane	ND		0.043
Chlorobenzene	ND		0.049
1,1,1,2-Tetrachloroethane	ND		0.045
Ethylbenzene	ND		0.054
Total Xylenes	ND		0.080
Styrene	ND		0.047
Bromoform	ND		0.051
1,1,2,2-Tetrachloroethane	ND		0.044
1,3-Dichlorobenzene	ND		0.046
1,4-Dichlorobenzene	ND		0.045
1,2-Dichlorobenzene	ND		0.054
1,2,4-Trichlorobenzene	ND		0.060
TOTAL VO's:	0.038	J	

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - PAH (Units)	***(mg/Kg-ppm)***		
Naphthalene	0.079		0.021
Acenaphthylene	0.223		0.025
Acenaphthene	0.052		0.028
Fluorene	0.075		0.021
Phenanthrene	0.987		0.023
Anthracene	0.274		0.035
Fluoranthene	2.10		0.021
Pyrene	1.75		0.026
Benzo[a]anthracene	1.08		0.034
Chrysene	1.12		0.024
Benzo[b]fluoranthene	1.31		0.022
Benzo[k]fluoranthene	1.15		0.033
Benzo[a]pyrene	1.37		0.021
Indeno[1,2,3-cd]pyrene	0.456		0.023
Dibenz[a,h]anthracene	0.203		0.026
Benzo[g,h,i]perylene	0.373		0.032
PCB's (Units)	***(mg/Kg-ppm)***		
Aroclor-1016	ND		0.016
Aroclor-1221	ND		0.016
Aroclor-1232	ND		0.016
Aroclor-1242	ND		0.016
Aroclor-1248	ND		0.016
Aroclor-1254	ND		0.016
Aroclor-1260	ND		0.016
PCBs	ND		
Hydrocarbons (Units)	***(mg/Kg-ppm)***		
TPH-DRO	ND		62.5

ND = Analyzed for but Not Detected at the MDL

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT
Lab Case No.: E13-10601

Lab ID:	**10601-001**		
Client ID:	**GPEC WC 102313**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**10/23/13**		
PARAMETER(Units)	Conc	Q	MDL
Metals (Units)	***(mg/Kg-ppm)***		
Antimony	ND		0.291
Arsenic	9.94		0.291
Beryllium	0.359	J	0.233
Cadmium	0.309	J	0.145
Chromium	19.2		0.582
Copper	61.9		0.582
Lead	127		0.582
Mercury	1.40		0.024
Nickel	67.8		0.582
Selenium	0.900		0.582
Silver	ND		0.145
Thallium	0.159	J	0.145
Zinc	120		0.582
TCLP Metals (Units)	***(mg/L-ppm)***		
TCLP Lead	0.100		0.050
General Analytical (Units)			
Sulfur as S(mg/Kg-ppm)	ND		881

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

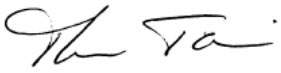
ANALYTICAL REPORT

Job Number: 460-32027-1

Job Description: Greenpoint

For:
GEI Consultants, Inc.
1 Greenwood Avenue, Suite 210
Montclair, NJ 07042

Attention: Mr. Michael Zukauskas



Approved for release.
Thomas Tanico
Department Manager II
10/18/2011 1:30 PM

Thomas Tanico
Department Manager II
thomas.tanico@testamericainc.com
10/18/2011

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

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TestAmerica Laboratories, Inc.
TestAmerica Edison 777 New Durham Road, Edison, NJ 08817
Tel (732) 549-3900 Fax (732) 549-3679 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

EXECUTIVE SUMMARY - Detections

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-32027-1	**GPEC-WC-100411**					
Methylene Chloride		3.9	B	1.1	ug/Kg	8260B
Acetone		5.4	J	11	ug/Kg	8260B
Naphthalene		81	J	380	ug/Kg	8270C
2-Methylnaphthalene		65	J	380	ug/Kg	8270C
Acenaphthylene		67	J	380	ug/Kg	8270C
Phenanthrene		550		380	ug/Kg	8270C
Anthracene		120	J	380	ug/Kg	8270C
Fluoranthene		1100		380	ug/Kg	8270C
Pyrene		980		380	ug/Kg	8270C
Benzo[a]anthracene		710		38	ug/Kg	8270C
Chrysene		760		380	ug/Kg	8270C
Benzo[b]fluoranthene		840		38	ug/Kg	8270C
Benzo[k]fluoranthene		310		38	ug/Kg	8270C
Benzo[a]pyrene		780		38	ug/Kg	8270C
Indeno[1,2,3-cd]pyrene		860		38	ug/Kg	8270C
Dibenz(a,h)anthracene		190		38	ug/Kg	8270C
Benzo[g,h,i]perylene		850		380	ug/Kg	8270C
4,4'-DDT		7.7		7.7	ug/Kg	8081A
Aroclor 1254		100		77	ug/Kg	8082
Aluminum		4390		41.1	mg/Kg	6010B
Antimony		5.0		2.1	mg/Kg	6010B
Arsenic		8.9		1.0	mg/Kg	6010B
Barium		85.9		41.1	mg/Kg	6010B
Beryllium		0.27	J	0.41	mg/Kg	6010B
Cadmium		0.73	J	1.0	mg/Kg	6010B
Calcium		18500		1030	mg/Kg	6010B
Chromium		17.6		2.1	mg/Kg	6010B
Cobalt		5.9	J	10.3	mg/Kg	6010B
Copper		185		5.1	mg/Kg	6010B
Iron		16900		30.8	mg/Kg	6010B
Lead		216		1.0	mg/Kg	6010B
Magnesium		11000		1030	mg/Kg	6010B
Manganese		255		3.1	mg/Kg	6010B
Nickel		19.6		8.2	mg/Kg	6010B
Potassium		533	J	1030	mg/Kg	6010B
Silver		0.42	J	2.1	mg/Kg	6010B
Sodium		97.9	J	1030	mg/Kg	6010B
Vanadium		19.7		10.3	mg/Kg	6010B
Zinc		255		6.2	mg/Kg	6010B
Mercury		0.79		0.038	mg/Kg	7471A
Cyanide, Total		0.52	J	0.57	mg/Kg	9012A
Percent Moisture		13.0		1.0	%	Moisture
Percent Solids		87.0		1.0	%	Moisture

METHOD SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL EDI	SW846 8260B	
Closed System Purge and Trap	TAL EDI		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL EDI	SW846 8270C	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Organochlorine Pesticides (GC)	TAL EDI	SW846 8081A	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL EDI	SW846 8082	
Automated Soxhlet Extraction	TAL EDI		SW846 3541
Metals (ICP)	TAL EDI	SW846 6010B	
Preparation, Metals	TAL EDI		SW846 3050B
Mercury (CVAA)	TAL EDI	SW846 7471A	
Preparation, Mercury	TAL EDI		SW846 7471A
Cyanide, Total and/or Amenable	TAL EDI	SW846 9012A	
Cyanide, Total and/or Amenable, Distillation	TAL EDI		SW846 9012A
Percent Moisture	TAL EDI	EPA Moisture	

Lab References:

TAL EDI = TestAmerica Edison

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method	Analyst	Analyst ID
SW846 8260B	Desai, Saurab	SD
SW846 8270C	Asfaw, Abebaye A.	AAA
SW846 8081A	Manlangit, Ferdie	FM
SW846 8082	Damarapu, Shanthi	SD
SW846 6010B	Dave, Virendra	VD
SW846 7471A	Sheikh, Razia B	RBS
SW846 9012A	Vu, Huan	HV
EPA Moisture	Armbruster, Chris	CHA

SAMPLE SUMMARY

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-32027-1	GPEC-WC-100411	Solid	10/04/2011 1150	10/05/2011 1345

SAMPLE RESULTS

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	460-89170	Instrument ID:	VOAMS12
Prep Method:	5035	Prep Batch:	460-88519	Lab File ID:	o52593.d
Dilution:	1.0			Initial Weight/Volume:	5.30 g
Analysis Date:	10/12/2011 1202			Final Weight/Volume:	5 mL
Prep Date:	10/06/2011 1129				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Chloromethane		1.1	U	0.69	1.1
Bromomethane		1.1	U	0.44	1.1
Vinyl chloride		1.1	U	0.25	1.1
Chloroethane		1.1	U	0.43	1.1
Methylene Chloride		3.9	B	0.51	1.1
Acetone		5.4	J	4.0	11
Carbon disulfide		1.1	U	0.50	1.1
1,1-Dichloroethene		1.1	U	0.40	1.1
1,1-Dichloroethane		1.1	U	0.27	1.1
trans-1,2-Dichloroethene		1.1	U	0.31	1.1
cis-1,2-Dichloroethene		1.1	U	0.26	1.1
Chloroform		1.1	U	0.26	1.1
1,2-Dichloroethane		1.1	U	0.42	1.1
2-Butanone		11	U	0.62	11
1,1,1-Trichloroethane		1.1	U	0.20	1.1
Carbon tetrachloride		1.1	U	0.11	1.1
Bromodichloromethane		1.1	U	0.33	1.1
1,2-Dichloropropane		1.1	U	0.34	1.1
cis-1,3-Dichloropropene		1.1	U	0.22	1.1
Trichloroethene		1.1	U	0.39	1.1
Dibromochloromethane		1.1	U	0.61	1.1
1,1,2-Trichloroethane		1.1	U	0.64	1.1
Benzene		1.1	U	0.80	1.1
trans-1,3-Dichloropropene		1.1	U	0.24	1.1
Bromoform		1.1	U	0.76	1.1
4-Methyl-2-pentanone		11	U	0.78	11
2-Hexanone		11	U	1.8	11
Tetrachloroethene		1.1	U	0.36	1.1
1,1,2,2-Tetrachloroethane		1.1	U	0.82	1.1
Toluene		1.1	U	0.32	1.1
Chlorobenzene		1.1	U	0.52	1.1
Ethylbenzene		1.1	U	0.21	1.1
Styrene		1.1	U	0.38	1.1
Xylenes, Total		3.3	U	0.85	3.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 138
Toluene-d8 (Surr)	108		66 - 126
Bromofluorobenzene	106		72 - 132

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-88484	Lab File ID:	z10565.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0628			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		380	U	47	380
2-Chlorophenol		380	U	51	380
2-Methylphenol		380	U	55	380
4-Methylphenol		380	U	62	380
2-Nitrophenol		380	U	63	380
2,4-Dimethylphenol		380	U	61	380
2,4-Dichlorophenol		380	U	61	380
4-Chloro-3-methylphenol		380	U	64	380
2,4,6-Trichlorophenol		380	U	68	380
2,4,5-Trichlorophenol		380	U	73	380
2,4-Dinitrophenol		1100	U	81	1100
4-Nitrophenol		1100	U	98	1100
4,6-Dinitro-2-methylphenol		1100	U	180	1100
Pentachlorophenol		1100	U	190	1100
Bis(2-chloroethyl)ether		38	U	7.9	38
1,3-Dichlorobenzene		380	U	52	380
1,4-Dichlorobenzene		380	U	57	380
1,2-Dichlorobenzene		380	U	61	380
N-Nitrosodi-n-propylamine		38	U	5.0	38
Hexachloroethane		38	U	6.4	38
Nitrobenzene		38	U	8.5	38
Isophorone		380	U	44	380
Bis(2-chloroethoxy)methane		380	U	54	380
1,2,4-Trichlorobenzene		38	U	6.2	38
Naphthalene		81	J	56	380
4-Chloroaniline		380	U	48	380
Hexachlorobutadiene		77	U	15	77
2-Methylnaphthalene		65	J	56	380
Hexachlorocyclopentadiene		380	U	110	380
2-Chloronaphthalene		380	U	54	380
2-Nitroaniline		770	U	100	770
Dimethyl phthalate		380	U	51	380
Acenaphthylene		67	J	54	380
2,6-Dinitrotoluene		77	U	9.7	77
3-Nitroaniline		770	U	86	770
Acenaphthene		380	U	54	380
Dibenzofuran		380	U	57	380
2,4-Dinitrotoluene		77	U	11	77
Diethyl phthalate		380	U	51	380
4-Chlorophenyl phenyl ether		380	U	65	380
Fluorene		380	U	64	380
4-Nitroaniline		770	U	79	770
N-Nitrosodiphenylamine		380	U	62	380
4-Bromophenyl phenyl ether		380	U	68	380
Hexachlorobenzene		38	U	5.3	38
Phenanthrene		550		66	380

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Prep Method:	3541	Prep Batch:	460-88484	Lab File ID:	z10565.d
Dilution:	1.0			Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0628			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Anthracene		120	J	67	380
Carbazole		380	U	60	380
Di-n-butyl phthalate		380	U	58	380
Fluoranthene		1100		63	380
Pyrene		980		66	380
Butyl benzyl phthalate		380	U	44	380
3,3'-Dichlorobenzidine		770	U	84	770
Benzo[a]anthracene		710		7.0	38
Chrysene		760		55	380
Bis(2-ethylhexyl) phthalate		380	U	50	380
Di-n-octyl phthalate		380	U	45	380
Benzo[b]fluoranthene		840		5.7	38
Benzo[k]fluoranthene		310		5.3	38
Benzo[a]pyrene		780		4.7	38
Indeno[1,2,3-cd]pyrene		860		6.1	38
Dibenz(a,h)anthracene		190		4.6	38
Benzo[g,h,i]perylene		850		40	380
bis (2-chloroisopropyl) ether		380	U	50	380

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	87		38 - 105
Phenol-d5	75		41 - 118
Terphenyl-d14	86		16 - 151
2,4,6-Tribromophenol	32		10 - 120
2-Fluorophenol	74		37 - 125
2-Fluorobiphenyl	93		40 - 109

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Prep Method:	3541	Prep Batch:	460-88637	Initial Weight/Volume:	15.00 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	10/11/2011 1356			Injection Volume:	1 uL
Prep Date:	10/07/2011 0303			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aldrin		7.7	U	1.7	7.7
alpha-BHC		7.7	U	1.4	7.7
beta-BHC		7.7	U	1.0	7.7
delta-BHC		7.7	U	1.2	7.7
gamma-BHC (Lindane)		7.7	U	0.90	7.7
Chlordane		77	U	17	77
4,4'-DDD		7.7	U	0.92	7.7
4,4'-DDE		7.7	U	1.5	7.7
4,4'-DDT		7.7		0.97	7.7
Dieldrin		7.7	U	1.5	7.7
Endosulfan I		7.7	U	1.6	7.7
Endosulfan II		7.7	U	1.2	7.7
Endosulfan sulfate		7.7	U	0.99	7.7
Endrin		7.7	U	1.1	7.7
Endrin aldehyde		7.7	U	1.9	7.7
Endrin ketone		7.7	U	1.1	7.7
Heptachlor		7.7	U	1.1	7.7
Heptachlor epoxide		7.7	U	1.6	7.7
Methoxychlor		7.7	U	0.86	7.7
Toxaphene		77	U	16	77

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	59		40 - 150
DCB Decachlorobiphenyl	112		53 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Prep Method:	3541	Prep Batch:	460-88637	Initial Weight/Volume:	15.00 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	10/11/2011 1356			Injection Volume:	1 uL
Prep Date:	10/07/2011 0303			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	55		40 - 150
DCB Decachlorobiphenyl	76		53 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	460-89048	Instrument ID:	PESTGC9
Prep Method:	3541	Prep Batch:	460-88635	Initial Weight/Volume:	15.00 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	10/10/2011 1112			Injection Volume:	
Prep Date:	10/07/2011 0300			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		77	U	15	77
Aroclor 1221		77	U	23	77
Aroclor 1232		77	U	44	77
Aroclor 1242		77	U	15	77
Aroclor 1248		77	U	20	77
Aroclor 1254		100		26	77
Aroclor 1260		77	U	8.6	77
Aroclor 1262		77	U	13	77
Aroclor 1268		77	U	13	77

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	102		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	460-89048	Instrument ID:	PESTGC9
Prep Method:	3541	Prep Batch:	460-88635	Initial Weight/Volume:	15.00 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	10/10/2011 1112			Injection Volume:	
Prep Date:	10/07/2011 0300			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	80		30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150
Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	460-88831	Instrument ID:	ICP4
Prep Method:	3050B	Prep Batch:	460-88818	Lab File ID:	duo10092011vd1.asc
Dilution:	4.0			Initial Weight/Volume:	1.12 g
Analysis Date:	10/09/2011 0334			Final Weight/Volume:	50 mL
Prep Date:	10/08/2011 1854				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4390		15.0	41.1
Antimony		5.0		0.90	2.1
Arsenic		8.9		0.71	1.0
Barium		85.9		1.2	41.1
Beryllium		0.27	J	0.18	0.41
Cadmium		0.73	J	0.16	1.0
Calcium		18500		27.0	1030
Chromium		17.6		1.2	2.1
Cobalt		5.9	J	1.3	10.3
Copper		185		0.84	5.1
Iron		16900		10.9	30.8
Lead		216		0.51	1.0
Magnesium		11000		10.9	1030
Manganese		255		1.2	3.1
Nickel		19.6		0.55	8.2
Potassium		533	J	46.3	1030
Selenium		2.1	U	0.96	2.1
Silver		0.42	J	0.16	2.1
Sodium		97.9	J	63.0	1030
Thallium		2.1	U	0.99	2.1
Vanadium		19.7		0.53	10.3
Zinc		255		1.0	6.2

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	460-88586	Instrument ID:	LEEMAN3
Prep Method:	7471A	Prep Batch:	460-88505	Lab File ID:	88505hg1.PRN
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	10/06/2011 1547			Final Weight/Volume:	100 mL
Prep Date:	10/06/2011 1048				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.79		0.025	0.038

General Chemistry

Client Sample ID: **GPEC-WC-100411**

Lab Sample ID: 460-32027-1 Date Sampled: 10/04/2011 1150

Client Matrix: Solid % Moisture: 13.0 Date Received: 10/05/2011 1345

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.52	J	mg/Kg	0.13	0.57	1.0	9012A
Analysis Batch: 460-89084	Analysis Date: 10/11/2011 1255						DryWt Corrected: Y
Prep Batch: 460-89025	Prep Date: 10/11/2011 0830						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	13.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-88549	Analysis Date: 10/06/2011 1518						DryWt Corrected: N
Percent Solids	87.0		%	1.0	1.0	1.0	Moisture
Analysis Batch: 460-88549	Analysis Date: 10/06/2011 1518						DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Metals		
	U	Indicates the analyte was analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	F	MS/MSD Recovery or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

DATA REPORTING QUALIFIERS

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: GEI Consultants, Inc. Job Number: 460-32027-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 460-88519					
LB3 460-88519/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	5035	
460-32027-1	GPEC-WC-100411	T	Solid	5035	
Analysis Batch:460-89170					
LCS 460-89170/3	Lab Control Sample	T	Solid	8260B	
LCSD 460-89170/4	Lab Control Sample Duplicate	T	Solid	8260B	
MB 460-89170/5	Method Blank	T	Solid	8260B	
LB3 460-88519/1-A	Neutral Leach or MeOH Extraction Blank	T	Solid	8260B	460-88519
460-32027-1	GPEC-WC-100411	T	Solid	8260B	460-88519

Report Basis
T = Total

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 460-88484					
LCS 460-88484/2-A	Lab Control Sample	T	Solid	3541	
MB 460-88484/1-A	Method Blank	T	Solid	3541	
460-31986-B-6-D MS	Matrix Spike	T	Solid	3541	
460-31986-B-6-E MSD	Matrix Spike Duplicate	T	Solid	3541	
460-32027-1	GPEC-WC-100411	T	Solid	3541	
Analysis Batch:460-88958					
MB 460-88484/1-A	Method Blank	T	Solid	8270C	460-88484
460-31986-B-6-D MS	Matrix Spike	T	Solid	8270C	460-88484
460-31986-B-6-E MSD	Matrix Spike Duplicate	T	Solid	8270C	460-88484
460-32027-1	GPEC-WC-100411	T	Solid	8270C	460-88484
Analysis Batch:460-88962					
LCS 460-88484/2-A	Lab Control Sample	T	Solid	8270C	460-88484

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-32027-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 460-88635					
LCS 460-88635/2-A	Lab Control Sample	T	Solid	3541	
MB 460-88635/1-A	Method Blank	T	Solid	3541	
460-31973-H-1-A MS	Matrix Spike	T	Solid	3541	
460-31973-H-1-B MSD	Matrix Spike Duplicate	T	Solid	3541	
460-32027-1	GPEC-WC-100411	T	Solid	3541	
Prep Batch: 460-88637					
LCS 460-88637/2-A	Lab Control Sample	T	Solid	3541	
MB 460-88637/1-A	Method Blank	T	Solid	3541	
460-32001-A-7-B DU	Duplicate	T	Solid	3541	
460-32001-D-7-D MS	Matrix Spike	T	Solid	3541	
460-32001-D-7-E MSD	Matrix Spike Duplicate	T	Solid	3541	
460-32027-1	GPEC-WC-100411	T	Solid	3541	
Analysis Batch:460-88969					
LCS 460-88635/2-A	Lab Control Sample	T	Solid	8082	460-88635
MB 460-88635/1-A	Method Blank	T	Solid	8082	460-88635
460-31973-H-1-A MS	Matrix Spike	T	Solid	8082	460-88635
460-31973-H-1-B MSD	Matrix Spike Duplicate	T	Solid	8082	460-88635
Analysis Batch:460-89048					
460-32027-1	GPEC-WC-100411	T	Solid	8082	460-88635
Analysis Batch:460-89072					
LCS 460-88637/2-A	Lab Control Sample	T	Solid	8081A	460-88637
MB 460-88637/1-A	Method Blank	T	Solid	8081A	460-88637
460-32001-A-7-B DU	Duplicate	T	Solid	8081A	460-88637
460-32001-D-7-D MS	Matrix Spike	T	Solid	8081A	460-88637
460-32001-D-7-E MSD	Matrix Spike Duplicate	T	Solid	8081A	460-88637
460-32027-1	GPEC-WC-100411	T	Solid	8081A	460-88637

Report Basis
T = Total

Client: GEI Consultants, Inc. Job Number: 460-32027-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 460-88505					
LCSSRM 460-88505/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	
MB 460-88505/1-A	Method Blank	T	Solid	7471A	
460-31796-E-11-J DU	Duplicate	T	Solid	7471A	
460-31796-E-11-K MS	Matrix Spike	T	Solid	7471A	
460-32027-1	GPEC-WC-100411	T	Solid	7471A	
Analysis Batch:460-88586					
LCSSRM 460-88505/2-A ^10	LCS-Certified Reference Material	T	Solid	7471A	460-88505
MB 460-88505/1-A	Method Blank	T	Solid	7471A	460-88505
460-31796-E-11-J DU	Duplicate	T	Solid	7471A	460-88505
460-31796-E-11-K MS	Matrix Spike	T	Solid	7471A	460-88505
460-32027-1	GPEC-WC-100411	T	Solid	7471A	460-88505
Prep Batch: 460-88818					
LCSSRM 460-88818/2-A	LCS-Certified Reference Material	T	Solid	3050B	
MB 460-88818/1-A ^2	Method Blank	T	Solid	3050B	
460-31736-C-16-F DU	Duplicate	T	Solid	3050B	
460-31736-C-16-G MS	Matrix Spike	T	Solid	3050B	
460-32027-1	GPEC-WC-100411	T	Solid	3050B	
Analysis Batch:460-88831					
LCSSRM 460-88818/2-A	LCS-Certified Reference Material	T	Solid	6010B	460-88818
MB 460-88818/1-A ^2	Method Blank	T	Solid	6010B	460-88818
460-31736-C-16-F DU	Duplicate	T	Solid	6010B	460-88818
460-31736-C-16-G MS	Matrix Spike	T	Solid	6010B	460-88818
460-32027-1	GPEC-WC-100411	T	Solid	6010B	460-88818

Report Basis

T = Total

Client: GEI Consultants, Inc. Job Number: 460-32027-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-88549					
460-31956-A-7 MS	Matrix Spike	T	Solid	Moisture	
460-31962-A-3 DU	Duplicate	T	Solid	Moisture	
460-32027-1	GPEC-WC-100411	T	Solid	Moisture	
Prep Batch: 460-89025					
HLCS 460-89025/3-A	High Level Control Sample	T	Solid	9012A	
LLCS 460-89025/2-A	Low Level Control Sample	T	Solid	9012A	
MB 460-89025/1-A	Method Blank	T	Solid	9012A	
460-31686-E-12-G MS	Matrix Spike	T	Solid	9012A	
460-31686-E-12-H MSD	Matrix Spike Duplicate	T	Solid	9012A	
460-32027-1	GPEC-WC-100411	T	Solid	9012A	
Analysis Batch:460-89084					
HLCS 460-89025/3-A	High Level Control Sample	T	Solid	9012A	460-89025
LLCS 460-89025/2-A	Low Level Control Sample	T	Solid	9012A	460-89025
MB 460-89025/1-A	Method Blank	T	Solid	9012A	460-89025
460-31686-E-12-G MS	Matrix Spike	T	Solid	9012A	460-89025
460-31686-E-12-H MSD	Matrix Spike Duplicate	T	Solid	9012A	460-89025
460-32027-1	GPEC-WC-100411	T	Solid	9012A	460-89025

Report Basis

T = Total

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	TOL %Rec	BFB %Rec
460-32027-1	GPEC-WC-100411	107	108	106
MB 460-89170/5		108	108	106
LB3 460-88519/1-A		107	108	105
LCS 460-89170/3		105	107	102
LCSD 460-89170/4		90	91	88

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	70-138
TOL = Toluene-d8 (Surr)	66-126
BFB = Bromofluorobenzene	72-132

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Surrogate Recovery Report

8270C Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	NBZ %Rec	PHL %Rec	TPH %Rec	TBP %Rec	2FP %Rec	FBP %Rec
460-32027-1	GPEC-WC-100411	87	75	86	32	74	93
MB 460-88484/1-A		80	76	89	51	76	81
LCS 460-88484/2-A		80	73	83	75	73	81
460-31986-B-6-D MS		81	70	80	71	67	94
460-31986-B-6-E MSD		84	70	80	74	69	100

Surrogate	Acceptance Limits
NBZ = Nitrobenzene-d5	38-105
PHL = Phenol-d5	41-118
TPH = Terphenyl-d14	16-151
TBP = 2,4,6-Tribromophenol	10-120
2FP = 2-Fluorophenol	37-125
FBP = 2-Fluorobiphenyl	40-109

Client: GEI Consultants, Inc.

Job Number: 460-32027-1

Surrogate Recovery Report

8081A Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TCX1 %Rec	TCX2 %Rec	DCB1 %Rec	DCB2 %Rec
460-32027-1	GPEC-WC-100411	55	59	76	112
MB 460-88637/1-A		86	84	104	137
LCS 460-88637/2-A		107	98	139	117
460-32001-D-7-D MS		62	58	58	120
460-32001-D-7-E MSD		62	57	64	84
460-32001-A-7-B DU		28X	28X	38p X	85

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	40-150
DCB = DCB Decachlorobiphenyl	53-150

Client: GEI Consultants, Inc.

Job Number: 460-32027-1

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	DCB2 %Rec
460-32027-1	GPEC-WC-100411	80	102
MB 460-88635/1-A		130	130
LCS 460-88635/2-A		134	134
460-31973-H-1-A MS		104	117
460-31973-H-1-B MSD		101	112

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	30-150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Neutral Leach or MeOH Extraction Blank - Batch: 460-88519

Method: 8260B
Preparation: 5035

Lab Sample ID:	LB3 460-88519/1-A	Analysis Batch:	460-89170	Instrument ID:	VOAMS12
Client Matrix:	Solid	Prep Batch:	460-88519	Lab File ID:	o52594.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	10/12/2011 1227	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	10/06/2011 1128				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chloromethane	1.0	U	0.63	1.0
Bromomethane	1.0	U	0.41	1.0
Vinyl chloride	1.0	U	0.23	1.0
Chloroethane	1.0	U	0.40	1.0
Methylene Chloride	0.912	J	0.47	1.0
Acetone	10	U	3.7	10
Carbon disulfide	1.0	U	0.47	1.0
1,1-Dichloroethene	1.0	U	0.37	1.0
1,1-Dichloroethane	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.28	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
Chloroform	1.0	U	0.24	1.0
1,2-Dichloroethane	1.0	U	0.39	1.0
2-Butanone	10	U	0.57	10
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.10	1.0
Bromodichloromethane	1.0	U	0.30	1.0
1,2-Dichloropropane	1.0	U	0.32	1.0
cis-1,3-Dichloropropene	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.36	1.0
Dibromochloromethane	1.0	U	0.56	1.0
1,1,2-Trichloroethane	1.0	U	0.59	1.0
Benzene	1.0	U	0.74	1.0
trans-1,3-Dichloropropene	1.0	U	0.22	1.0
Bromoform	1.0	U	0.70	1.0
4-Methyl-2-pentanone	10	U	0.72	10
2-Hexanone	10	U	1.7	10
Tetrachloroethene	1.0	U	0.33	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.76	1.0
Toluene	1.0	U	0.30	1.0
Chlorobenzene	1.0	U	0.48	1.0
Ethylbenzene	1.0	U	0.19	1.0
Styrene	1.0	U	0.35	1.0
Xylenes, Total	3.0	U	0.79	3.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	70 - 138
Toluene-d8 (Surr)	108	66 - 126
Bromofluorobenzene	105	72 - 132

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-89170 **Method: 8260B**
Preparation: N/A

Lab Sample ID:	MB 460-89170/5	Analysis Batch:	460-89170	Instrument ID:	VOAMS12
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	o52588.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	10/12/2011 0948	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chloromethane	1.0	U	0.63	1.0
Bromomethane	1.0	U	0.41	1.0
Vinyl chloride	1.0	U	0.23	1.0
Chloroethane	1.0	U	0.40	1.0
Methylene Chloride	1.0	U	0.47	1.0
Acetone	10	U	3.7	10
Carbon disulfide	1.0	U	0.47	1.0
1,1-Dichloroethene	1.0	U	0.37	1.0
1,1-Dichloroethane	1.0	U	0.25	1.0
trans-1,2-Dichloroethene	1.0	U	0.28	1.0
cis-1,2-Dichloroethene	1.0	U	0.24	1.0
Chloroform	1.0	U	0.24	1.0
1,2-Dichloroethane	1.0	U	0.39	1.0
2-Butanone	10	U	0.57	10
1,1,1-Trichloroethane	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.10	1.0
Bromodichloromethane	1.0	U	0.30	1.0
1,2-Dichloropropane	1.0	U	0.32	1.0
cis-1,3-Dichloropropene	1.0	U	0.20	1.0
Trichloroethene	1.0	U	0.36	1.0
Dibromochloromethane	1.0	U	0.56	1.0
1,1,2-Trichloroethane	1.0	U	0.59	1.0
Benzene	1.0	U	0.74	1.0
trans-1,3-Dichloropropene	1.0	U	0.22	1.0
Bromoform	1.0	U	0.70	1.0
4-Methyl-2-pentanone	10	U	0.72	10
2-Hexanone	10	U	1.7	10
Tetrachloroethene	1.0	U	0.33	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.76	1.0
Toluene	1.0	U	0.30	1.0
Chlorobenzene	1.0	U	0.48	1.0
Ethylbenzene	1.0	U	0.19	1.0
Styrene	1.0	U	0.35	1.0
Xylenes, Total	3.0	U	0.79	3.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	70 - 138
Toluene-d8 (Surr)	108	66 - 126
Bromofluorobenzene	106	72 - 132

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 460-89170

Method: 8260B
Preparation: N/A

LCS Lab Sample ID:	LCS 460-89170/3	Analysis Batch:	460-89170	Instrument ID:	VOAMS12
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	o52585.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	10/12/2011 0814	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 460-89170/4	Analysis Batch:	460-89170	Instrument ID:	VOAMS12
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	o52586.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	10/12/2011 0839	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chloromethane	82	86	50 - 151	5	30		
Bromomethane	84	89	54 - 142	5	30		
Vinyl chloride	83	89	67 - 133	6	30		
Chloroethane	93	100	56 - 146	8	30		
Methylene Chloride	98	99	74 - 137	1	30		
Acetone	97	122	27 - 164	23	30		
Carbon disulfide	79	78	72 - 128	1	30		
1,1-Dichloroethene	88	86	71 - 126	2	30		
1,1-Dichloroethane	96	97	76 - 125	1	30		
trans-1,2-Dichloroethene	90	89	75 - 122	1	30		
cis-1,2-Dichloroethene	96	94	80 - 120	1	30		
Chloroform	93	95	77 - 120	3	30		
1,2-Dichloroethane	97	98	76 - 118	1	30		
2-Butanone	100	104	77 - 117	4	30		
1,1,1-Trichloroethane	84	87	78 - 117	4	30		
Carbon tetrachloride	81	84	79 - 118	3	30		
Bromodichloromethane	86	88	79 - 119	2	30		
1,2-Dichloropropane	91	91	82 - 122	0	30		
cis-1,3-Dichloropropene	88	88	80 - 123	0	30		
Trichloroethene	91	92	79 - 119	1	30		
Dibromochloromethane	74	78	68 - 120	5	30		
1,1,2-Trichloroethane	92	96	73 - 118	4	30		
Benzene	92	93	77 - 117	1	30		
trans-1,3-Dichloropropene	85	86	67 - 121	2	30		
Bromoform	64	68	59 - 125	6	30		
4-Methyl-2-pentanone	86	97	68 - 120	12	30		
2-Hexanone	81	96	70 - 122	16	30		
Tetrachloroethene	91	95	80 - 120	4	30		
1,1,2,2-Tetrachloroethane	88	91	79 - 122	3	30		
Toluene	107	106	75 - 115	1	30		
Chlorobenzene	94	95	80 - 120	1	30		
Ethylbenzene	90	92	81 - 121	2	30		
Styrene	90	91	82 - 122	2	30		
Xylenes, Total	90	91	82 - 122	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	90	70 - 138
Toluene-d8 (Surr)	107	91	66 - 126
Bromofluorobenzene	102	88	72 - 132

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88484 **Method: 8270C**
Preparation: 3541

Lab Sample ID:	MB 460-88484/1-A	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10552.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0101	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phenol	330	U	41	330
2-Chlorophenol	330	U	44	330
2-Methylphenol	330	U	48	330
4-Methylphenol	330	U	54	330
2-Nitrophenol	330	U	54	330
2,4-Dimethylphenol	330	U	53	330
2,4-Dichlorophenol	330	U	53	330
4-Chloro-3-methylphenol	330	U	56	330
2,4,6-Trichlorophenol	330	U	59	330
2,4,5-Trichlorophenol	330	U	64	330
2,4-Dinitrophenol	1000	U	70	1000
4-Nitrophenol	1000	U	85	1000
4,6-Dinitro-2-methylphenol	1000	U	160	1000
Pentachlorophenol	1000	U	160	1000
Bis(2-chloroethyl)ether	33	U	6.9	33
1,3-Dichlorobenzene	330	U	45	330
1,4-Dichlorobenzene	330	U	49	330
1,2-Dichlorobenzene	330	U	53	330
N-Nitrosodi-n-propylamine	33	U	4.4	33
Hexachloroethane	33	U	5.6	33
Nitrobenzene	33	U	7.4	33
Isophorone	330	U	38	330
Bis(2-chloroethoxy)methane	330	U	47	330
1,2,4-Trichlorobenzene	33	U	5.4	33
Naphthalene	330	U	48	330
4-Chloroaniline	330	U	42	330
Hexachlorobutadiene	67	U	13	67
2-Methylnaphthalene	330	U	48	330
Hexachlorocyclopentadiene	330	U	97	330
2-Chloronaphthalene	330	U	47	330
2-Nitroaniline	670	U	91	670
Dimethyl phthalate	330	U	45	330
Acenaphthylene	330	U	47	330
2,6-Dinitrotoluene	67	U	8.4	67
3-Nitroaniline	670	U	75	670
Acenaphthene	330	U	47	330
Dibenzofuran	330	U	50	330
2,4-Dinitrotoluene	67	U	9.7	67
Diethyl phthalate	330	U	44	330
4-Chlorophenyl phenyl ether	330	U	57	330
Fluorene	330	U	56	330
4-Nitroaniline	670	U	68	670
N-Nitrosodiphenylamine	330	U	54	330
4-Bromophenyl phenyl ether	330	U	59	330
Hexachlorobenzene	33	U	4.6	33

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88484 **Method: 8270C**
Preparation: 3541

Lab Sample ID:	MB 460-88484/1-A	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10552.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0101	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phenanthrene	330	U	58	330
Anthracene	330	U	58	330
Carbazole	330	U	53	330
Di-n-butyl phthalate	330	U	51	330
Fluoranthene	330	U	55	330
Pyrene	330	U	57	330
Butyl benzyl phthalate	330	U	39	330
3,3'-Dichlorobenzidine	670	U	73	670
Benzo[a]anthracene	33	U	6.1	33
Chrysene	330	U	48	330
Bis(2-ethylhexyl) phthalate	330	U	44	330
Di-n-octyl phthalate	330	U	39	330
Benzo[b]fluoranthene	33	U	4.9	33
Benzo[k]fluoranthene	33	U	4.6	33
Benzo[a]pyrene	33	U	4.1	33
Indeno[1,2,3-cd]pyrene	33	U	5.3	33
Dibenz(a,h)anthracene	33	U	4.0	33
Benzo[g,h,i]perylene	330	U	35	330
bis (2-chloroisopropyl) ether	330	U	43	330

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5	80	38 - 105
Phenol-d5	76	41 - 118
Terphenyl-d14	89	16 - 151
2,4,6-Tribromophenol	51	10 - 120
2-Fluorophenol	76	37 - 125
2-Fluorobiphenyl	81	40 - 109

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Control Sample - Batch: 460-88484

Method: 8270C
Preparation: 3541

Lab Sample ID:	LCS 460-88484/2-A	Analysis Batch:	460-88962	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10619.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.01 g
Analysis Date:	10/09/2011 1822	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenol	6370	4870	77	54 - 115	
2-Chlorophenol	6400	5180	81	56 - 110	
2-Methylphenol	6420	5290	82	54 - 117	
4-Methylphenol	6420	4450	69	47 - 103	
2-Nitrophenol	6440	5120	80	55 - 101	
2,4-Dimethylphenol	6410	5230	82	56 - 112	
2,4-Dichlorophenol	6450	4970	77	58 - 115	
4-Chloro-3-methylphenol	6440	5110	79	55 - 117	
2,4,6-Trichlorophenol	6490	5180	80	53 - 118	
2,4,5-Trichlorophenol	6490	5260	81	50 - 115	
2,4-Dinitrophenol	6660	1230	18	10 - 129	
4-Nitrophenol	6660	4960	75	45 - 114	
4,6-Dinitro-2-methylphenol	6670	2820	42	10 - 110	
Pentachlorophenol	6670	4300	65	19 - 113	
Bis(2-chloroethyl)ether	3330	2610	78	44 - 101	
1,3-Dichlorobenzene	3330	2510	75	47 - 84	
1,4-Dichlorobenzene	3330	2530	76	47 - 85	
1,2-Dichlorobenzene	3330	2570	77	48 - 87	
N-Nitrosodi-n-propylamine	3330	2570	77	42 - 107	
Hexachloroethane	3330	2540	76	45 - 90	
Nitrobenzene	3330	2620	79	42 - 106	
Isophorone	3330	2590	78	48 - 97	
Bis(2-chloroethoxy)methane	3330	2690	81	51 - 100	
1,2,4-Trichlorobenzene	3330	2580	78	48 - 94	
Naphthalene	3330	2620	79	53 - 94	
4-Chloroaniline	3330	1230	37	10 - 96	
Hexachlorobutadiene	3330	2590	78	45 - 98	
2-Methylnaphthalene	3330	2630	79	51 - 98	
Hexachlorocyclopentadiene	3330	2450	74	24 - 98	
2-Chloronaphthalene	3330	2750	83	51 - 102	
2-Nitroaniline	3330	2440	73	51 - 109	
Dimethyl phthalate	3330	2590	78	52 - 112	
Acenaphthylene	3330	2630	79	51 - 103	
2,6-Dinitrotoluene	3330	2590	78	51 - 115	
3-Nitroaniline	3330	1470	44	32 - 104	
Acenaphthene	3330	2680	80	46 - 100	
Dibenzofuran	3330	2650	79	52 - 106	
2,4-Dinitrotoluene	3330	2430	73	53 - 110	
Diethyl phthalate	3330	2540	76	52 - 114	
4-Chlorophenyl phenyl ether	3330	2600	78	50 - 106	
Fluorene	3330	2630	79	51 - 108	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Control Sample - Batch: 460-88484

Method: 8270C
Preparation: 3541

Lab Sample ID:	LCS 460-88484/2-A	Analysis Batch:	460-88962	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10619.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.01 g
Analysis Date:	10/09/2011 1822	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4-Nitroaniline	3330	2050	62	45 - 106	
N-Nitrosodiphenylamine	3330	2960	89	49 - 106	
4-Bromophenyl phenyl ether	3330	2920	88	44 - 102	
Hexachlorobenzene	3330	2930	88	43 - 104	
Phenanthrene	3330	2830	85	48 - 108	
Anthracene	3330	2710	81	50 - 107	
Carbazole	3330	2570	77	49 - 104	
Di-n-butyl phthalate	3330	2630	79	50 - 108	
Fluoranthene	3330	2550	76	49 - 108	
Pyrene	3330	2820	85	49 - 116	
Butyl benzyl phthalate	3330	2720	82	49 - 117	
3,3'-Dichlorobenzidine	3330	1800	54	24 - 105	
Benzo[a]anthracene	3330	2630	79	46 - 112	
Chrysene	3330	2860	86	45 - 114	
Bis(2-ethylhexyl) phthalate	3330	2720	82	49 - 119	
Di-n-octyl phthalate	3330	2350	71	40 - 106	
Benzo[b]fluoranthene	3330	2800	84	33 - 96	
Benzo[k]fluoranthene	3330	2580	77	35 - 115	
Benzo[a]pyrene	3330	2770	83	36 - 89	
Indeno[1,2,3-cd]pyrene	3330	3340	100	43 - 109	
Dibenz(a,h)anthracene	3330	3220	97	43 - 107	
Benzo[g,h,i]perylene	3330	3310	99	43 - 106	
bis (2-chloroisopropyl) ether	3330	2580	78	45 - 102	

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5	80	38 - 105
Phenol-d5	73	41 - 118
Terphenyl-d14	83	16 - 151
2,4,6-Tribromophenol	75	10 - 120
2-Fluorophenol	73	37 - 125
2-Fluorobiphenyl	81	40 - 109

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88484

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-31986-B-6-D MS	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10562.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0514			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-31986-B-6-E MSD	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10563.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0539			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenol	71	72	54 - 115	1	30		
2-Chlorophenol	74	75	56 - 110	0	30		
2-Methylphenol	79	79	54 - 117	0	30		
4-Methylphenol	67	67	47 - 103	1	30		
2-Nitrophenol	79	83	55 - 101	5	30		
2,4-Dimethylphenol	91	93	56 - 112	2	30		
2,4-Dichlorophenol	81	84	58 - 115	3	30		
4-Chloro-3-methylphenol	86	89	55 - 117	4	30		
2,4,6-Trichlorophenol	88	92	53 - 118	4	30		
2,4,5-Trichlorophenol	84	87	50 - 115	4	30		
2,4-Dinitrophenol	38	37	10 - 129	1	30		
4-Nitrophenol	85	89	45 - 114	5	30		
4,6-Dinitro-2-methylphenol	71	69	10 - 110	2	30		
Pentachlorophenol	24	24	19 - 113	2	30		
Bis(2-chloroethyl)ether	69	73	44 - 101	5	30		
1,3-Dichlorobenzene	69	70	47 - 84	3	30		
1,4-Dichlorobenzene	70	70	47 - 85	1	30		
1,2-Dichlorobenzene	70	72	48 - 87	3	30		
N-Nitrosodi-n-propylamine	80	82	42 - 107	3	30		
Hexachloroethane	71	72	45 - 90	2	30		
Nitrobenzene	80	83	42 - 106	3	30		
Isophorone	85	89	48 - 97	4	30		
Bis(2-chloroethoxy)methane	85	87	51 - 100	3	30		
1,2,4-Trichlorobenzene	78	81	48 - 94	3	30		
Naphthalene	78	81	53 - 94	3	30		
4-Chloroaniline	40	40	10 - 96	2	30		
Hexachlorobutadiene	80	82	45 - 98	3	30		
2-Methylnaphthalene	80	83	51 - 98	3	30		
Hexachlorocyclopentadiene	37	35	24 - 98	5	30		
2-Chloronaphthalene	94	97	51 - 102	4	30		
2-Nitroaniline	108	117	51 - 109	7	30		F
Dimethyl phthalate	106	110	52 - 112	4	30		

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88484

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-31986-B-6-D MS	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10562.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0514			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-31986-B-6-E MSD	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10563.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0539			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthylene	88	91	51 - 103	3	30		
2,6-Dinitrotoluene	99	103	51 - 115	4	30		
3-Nitroaniline	67	71	32 - 104	5	30		
Acenaphthene	91	93	46 - 100	2	30		
Dibenzofuran	92	94	52 - 106	2	30		
2,4-Dinitrotoluene	92	96	53 - 110	4	30		
Diethyl phthalate	102	107	52 - 114	5	30		
4-Chlorophenyl phenyl ether	92	94	50 - 106	3	30		
Fluorene	89	90	51 - 108	2	30		
4-Nitroaniline	68	72	45 - 106	5	30		
N-Nitrosodiphenylamine	113	115	49 - 106	1	30	F	F
4-Bromophenyl phenyl ether	106	107	44 - 102	1	30	F	F
Hexachlorobenzene	99	99	43 - 104	0	30		
Phenanthrene	95	99	48 - 108	3	30		
Anthracene	90	93	50 - 107	3	30		
Carbazole	89	94	49 - 104	6	30		
Di-n-butyl phthalate	107	112	50 - 108	4	30		F
Fluoranthene	85	91	49 - 108	7	30		
Pyrene	80	79	49 - 116	1	30		
Butyl benzyl phthalate	92	92	49 - 117	0	30		
3,3'-Dichlorobenzidine	76	81	24 - 105	5	30		
Benzo[a]anthracene	91	94	46 - 112	4	30		
Chrysene	97	101	45 - 114	5	30		
Bis(2-ethylhexyl) phthalate	93	97	49 - 119	3	30		
Di-n-octyl phthalate	65	63	40 - 106	3	30		
Benzo[b]fluoranthene	87	87	33 - 96	0	30		
Benzo[k]fluoranthene	80	83	35 - 115	4	30		
Benzo[a]pyrene	91	93	36 - 89	2	30	F	F
Indeno[1,2,3-cd]pyrene	164	162	43 - 109	1	30	F	F
Dibenz(a,h)anthracene	150	152	43 - 107	1	30	F	F
Benzo[g,h,i]perylene	161	157	43 - 106	2	30	F	F
bis (2-chloroisopropyl) ether	75	76	45 - 102	2	30		

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88484

Method: 8270C
Preparation: 3541

MS Lab Sample ID:	460-31986-B-6-D MS	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10562.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0514			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	460-31986-B-6-E MSD	Analysis Batch:	460-88958	Instrument ID:	BNAMS11
Client Matrix:	Solid	Prep Batch:	460-88484	Lab File ID:	z10563.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/08/2011 0539			Final Weight/Volume:	1 mL
Prep Date:	10/06/2011 0800			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Nitrobenzene-d5	81	84	38 - 105
Phenol-d5	70	70	41 - 118
Terphenyl-d14	80	80	16 - 151
2,4,6-Tribromophenol	71	74	10 - 120
2-Fluorophenol	67	69	37 - 125
2-Fluorobiphenyl	94	100	40 - 109

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88637 **Method: 8081A**
Preparation: 3541

Lab Sample ID:	MB 460-88637/1-A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xr125291.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1600	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aldrin	6.7	U	1.5	6.7
alpha-BHC	6.7	U	1.2	6.7
beta-BHC	6.7	U	0.91	6.7
delta-BHC	6.7	U	1.0	6.7
gamma-BHC (Lindane)	6.7	U	0.78	6.7
Chlordane	67	U	15	67
4,4'-DDD	6.7	U	0.80	6.7
4,4'-DDE	6.7	U	1.3	6.7
4,4'-DDT	6.7	U	0.84	6.7
Dieldrin	6.7	U	1.3	6.7
Endosulfan I	6.7	U	1.4	6.7
Endosulfan II	6.7	U	1.0	6.7
Endosulfan sulfate	6.7	U	0.86	6.7
Endrin	6.7	U	0.94	6.7
Endrin aldehyde	6.7	U	1.7	6.7
Endrin ketone	6.7	U	0.99	6.7
Heptachlor	6.7	U	0.96	6.7
Heptachlor epoxide	6.7	U	1.4	6.7
Methoxychlor	6.7	U	0.75	6.7
Toxaphene	67	U	14	67

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	86	40 - 150
DCB Decachlorobiphenyl	137	53 - 150

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	84	40 - 150
DCB Decachlorobiphenyl	104	53 - 150

Lab Control Sample - Batch: 460-88637 **Method: 8081A**
Preparation: 3541

Lab Sample ID:	LCS 460-88637/2-A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xr125272.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1138	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aldrin	133	119	89	58 - 143	
alpha-BHC	133	120	90	58 - 138	
beta-BHC	133	130	98	60 - 139	
delta-BHC	133	122	91	60 - 141	
gamma-BHC (Lindane)	133	120	90	58 - 136	
4,4'-DDD	133	136	102	63 - 150	
4,4'-DDE	133	129	97	58 - 150	
4,4'-DDT	133	132	99	57 - 150	
Dieldrin	133	134	101	55 - 128	
Endosulfan I	133	131	99	60 - 138	
Endosulfan II	133	136	102	59 - 133	
Endosulfan sulfate	133	118	89	56 - 133	
Endrin	133	137	102	61 - 150	
Endrin aldehyde	133	117	88	55 - 122	
Endrin ketone	133	120	90	62 - 139	
Heptachlor	133	122	91	58 - 137	
Heptachlor epoxide	133	130	97	59 - 136	
Methoxychlor	133	118	89	42 - 150	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	98	40 - 150
Tetrachloro-m-xylene	107	40 - 150
DCB Decachlorobiphenyl	117	53 - 150
DCB Decachlorobiphenyl	139	53 - 150

Lab Control Sample - Batch: 460-88637 **Method: 8081A**
Preparation: 3541

Lab Sample ID:	LCS 460-88637/2-A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xf125272.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1138	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aldrin	133	133	100	58 - 143	
alpha-BHC	133	128	96	58 - 138	
beta-BHC	133	124	93	60 - 139	
delta-BHC	133	131	98	60 - 141	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Control Sample - Batch: 460-88637

Method: 8081A
Preparation: 3541

Lab Sample ID:	LCS 460-88637/2-A	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xf125272.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1138	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
gamma-BHC (Lindane)	133	130	98	58 - 136	
4,4'-DDD	133	128	96	63 - 150	
4,4'-DDE	133	130	98	58 - 150	
4,4'-DDT	133	130	98	57 - 150	
Dieldrin	133	133	100	55 - 128	
Endosulfan I	133	128	96	60 - 138	
Endosulfan II	133	131	99	59 - 133	
Endosulfan sulfate	133	129	97	56 - 133	
Endrin	133	133	100	61 - 150	
Endrin aldehyde	133	110	83	55 - 122	
Endrin ketone	133	140	105	62 - 139	
Heptachlor	133	126	94	58 - 137	
Heptachlor epoxide	133	126	94	59 - 136	
Methoxychlor	133	122	92	42 - 150	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88637

Method: 8081A
Preparation: 3541

MS Lab Sample ID:	460-32001-D-7-D MS	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xf125274.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1206			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-32001-D-7-E MSD	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xf125275.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.02 g
Analysis Date:	10/11/2011 1219			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aldrin	72	72	58 - 143	0	30		
alpha-BHC	67	69	58 - 138	3	30		
beta-BHC	66	68	60 - 139	2	30		
delta-BHC	69	71	60 - 141	3	30		
gamma-BHC (Lindane)	66	69	58 - 136	4	30		
4,4'-DDD	70	74	63 - 150	5	30		
4,4'-DDE	72	74	58 - 150	3	30		
4,4'-DDT	66	69	57 - 150	5	30		
Dieldrin	72	74	55 - 128	2	30		
Endosulfan I	70	70	60 - 138	1	30		
Endosulfan II	68	71	59 - 133	3	30		
Endosulfan sulfate	71	65	56 - 133	8	30		
Endrin	72	74	61 - 150	2	30		
Endrin aldehyde	53	55	55 - 122	4	30	F	
Endrin ketone	69	67	62 - 139	3	30		
Heptachlor	67	70	58 - 137	3	30		
Heptachlor epoxide	72	72	59 - 136	0	30		
Methoxychlor	69	63	42 - 150	9	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	62	62	40 - 150
DCB Decachlorobiphenyl	120	84	53 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88637

Method: 8081A
Preparation: 3541

MS Lab Sample ID:	460-32001-D-7-D MS	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xr125274.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/11/2011 1206			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-32001-D-7-E MSD	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xr125275.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.02 g
Analysis Date:	10/11/2011 1219			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aldrin	65	67	58 - 143	3	30		
alpha-BHC	66	67	58 - 138	2	30		
beta-BHC	62	66	60 - 139	6	30		
delta-BHC	66	68	60 - 141	3	30		
gamma-BHC (Lindane)	65	69	58 - 136	6	30		
4,4'-DDD	66	68	63 - 150	2	30		
4,4'-DDE	67	69	58 - 150	3	30		
4,4'-DDT	65	67	57 - 150	3	30		
Dieldrin	67	68	55 - 128	1	30		
Endosulfan I	66	66	60 - 138	0	30		
Endosulfan II	67	68	59 - 133	1	30		
Endosulfan sulfate	57	60	56 - 133	4	30		
Endrin	69	70	61 - 150	1	30		
Endrin aldehyde	49	55	55 - 122	10	30	F	
Endrin ketone	60	64	62 - 139	5	30	F	
Heptachlor	66	68	58 - 137	3	30		
Heptachlor epoxide	68	68	59 - 136	0	30		
Methoxychlor	58	63	42 - 150	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	58	57	40 - 150
DCB Decachlorobiphenyl	58	64	53 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Duplicate - Batch: 460-88637 **Method: 8081A**
Preparation: 3541

Lab Sample ID:	460-32001-A-7-B DU	Analysis Batch:	460-89072	Instrument ID:	PESTGC1
Client Matrix:	Solid	Prep Batch:	460-88637	Lab File ID:	xr125279.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.05 g
Analysis Date:	10/11/2011 1315	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0303			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aldrin	8.3	U	8.3	NC		U
alpha-BHC	8.3	U	8.3	NC		U
beta-BHC	8.3	U	8.3	NC		U
delta-BHC	8.3	U	8.3	NC		U
gamma-BHC (Lindane)	8.3	U	8.3	NC		U
Chlordane	83	U	83	NC		U
4,4'-DDD	8.3	U	8.3	NC		U
4,4'-DDE	8.3	U	8.3	NC		U
4,4'-DDT	8.3	U	8.3	NC		U
Dieldrin	8.3	U	8.3	NC		U
Endosulfan I	8.3	U	8.3	NC		U
Endosulfan II	8.3	U	8.3	NC		U
Endosulfan sulfate	8.3	U	8.3	NC		U
Endrin	8.3	U	8.3	NC		U
Endrin aldehyde	8.6		6.35	30.0		J
Endrin ketone	8.3	U	8.3	NC		U
Heptachlor	8.3	U	8.3	NC		U
Heptachlor epoxide	8.3	U	8.3	NC		U
Methoxychlor	8.3	U	8.3	NC		U
Toxaphene	83	U	83	NC		U

Surrogate	% Rec		Acceptance Limits
Tetrachloro-m-xylene	28	X	40 - 150
DCB Decachlorobiphenyl	38	p X	53 - 150

Surrogate	% Rec		Acceptance Limits
Tetrachloro-m-xylene	28	X	40 - 150
DCB Decachlorobiphenyl	85		53 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88635 **Method: 8082**
Preparation: 3541

Lab Sample ID:	MB 460-88635/1-A	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vf465340.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/10/2011 0435	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	67	U	13	67
Aroclor 1016	67	U	13	67
Aroclor 1221	67	U	20	67
Aroclor 1221	67	U	20	67
Aroclor 1232	67	U	38	67
Aroclor 1232	67	U	38	67
Aroclor 1242	67	U	13	67
Aroclor 1242	67	U	13	67
Aroclor 1248	67	U	18	67
Aroclor 1248	67	U	18	67
Aroclor 1254	67	U	23	67
Aroclor 1254	67	U	23	67
Aroclor 1260	67	U	7.5	67
Aroclor 1260	67	U	7.5	67
Aroclor 1262	67	U	12	67
Aroclor 1262	67	U	12	67
Aroclor 1268	67	U	12	67
Aroclor 1268	67	U	12	67

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	130	30 - 150
DCB Decachlorobiphenyl	130	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Lab Control Sample - Batch: 460-88635 **Method: 8082**
Preparation: 3541

Lab Sample ID:	LCS 460-88635/2-A	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vf465341.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/10/2011 0451	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	424	127	60 - 144	
Aroclor 1260	333	412	124	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	134	30 - 150

Lab Control Sample - Batch: 460-88635 **Method: 8082**
Preparation: 3541

Lab Sample ID:	LCS 460-88635/2-A	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vr465341.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.00 g
Analysis Date:	10/10/2011 0451	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	333	413	124	60 - 144	
Aroclor 1260	333	386	116	63 - 143	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	134	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88635

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-31973-H-1-A MS	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vf465342.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.05 g
Analysis Date:	10/10/2011 0507			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	460-31973-H-1-B MSD	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vf465343.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.02 g
Analysis Date:	10/10/2011 0523			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	107	105	60 - 144	2	30		
Aroclor 1260	118	113	63 - 143	4	30		
Aroclor 1260	118	117	63 - 143	1	30		
Aroclor 1260	119	113	63 - 143	4	30		
Aroclor 1260	119	117	63 - 143	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	117	112	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-88635

Method: 8082
Preparation: 3541

MS Lab Sample ID:	460-31973-H-1-A MS	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vr465342.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.05 g
Analysis Date:	10/10/2011 0507			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

MSD Lab Sample ID:	460-31973-H-1-B MSD	Analysis Batch:	460-88969	Instrument ID:	PESTGC9
Client Matrix:	Solid	Prep Batch:	460-88635	Lab File ID:	vr465343.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	15.02 g
Analysis Date:	10/10/2011 0523			Final Weight/Volume:	10 mL
Prep Date:	10/07/2011 0300			Injection Volume:	
Leach Date:	N/A			Column ID:	SECONDARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	99	97	60 - 144	2	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl	104	101	30 - 150

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88818

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 460-88818/1-A ^2	Analysis Batch:	460-88831	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-88818	Lab File ID:	duo10092011vd1.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	10/09/2011 0227	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	10/08/2011 1854				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	20.0	U	7.3	20.0
Antimony	1.0	U	0.44	1.0
Arsenic	0.50	U	0.35	0.50
Barium	20.0	U	0.60	20.0
Beryllium	0.20	U	0.088	0.20
Cadmium	0.50	U	0.078	0.50
Calcium	500	U	13.1	500
Chromium	1.0	U	0.59	1.0
Cobalt	5.0	U	0.61	5.0
Copper	2.5	U	0.41	2.5
Iron	15.0	U	5.3	15.0
Lead	0.50	U	0.25	0.50
Magnesium	500	U	5.3	500
Manganese	1.5	U	0.56	1.5
Nickel	4.0	U	0.27	4.0
Potassium	500	U	22.6	500
Selenium	1.0	U	0.47	1.0
Silver	1.0	U	0.076	1.0
Sodium	500	U	30.7	500
Thallium	1.0	U	0.48	1.0
Vanadium	5.0	U	0.26	5.0
Zinc	3.0	U	0.49	3.0

Client: GEI Consultants, Inc. Job Number: 460-32027-1

LCS-Certified Reference Material - Batch: 460-88818

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCSSRM 460-88818/2-A	Analysis Batch:	460-88831	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-88818	Lab File ID:	duo10092011vd1.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	10/09/2011 0231	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	10/08/2011 1854				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	10500	7926	75	46.1 - 154	
Antimony	67.4	187.9	279	32.0 - 353	
Arsenic	104	106.8	103	69.7 - 131	
Barium	198	198.0	100	73.2 - 126	
Beryllium	77.6	77.60	100	74.0 - 126	
Cadmium	60.7	60.82	100	73.3 - 127	
Calcium	9870	10640	108	75.4 - 125	
Chromium	236	236.2	100	70.8 - 129	
Cobalt	91.2	95.64	105	74.4 - 126	
Copper	174	173.8	100	75.3 - 124	
Iron	18000	17900	99	42.1 - 158	
Lead	86.0	90.42	105	69.8 - 130	
Magnesium	4000	3608	90	69.5 - 131	
Manganese	558	590.2	106	77.4 - 123	
Nickel	134	140.1	105	73.2 - 127	
Potassium	4300	3930	91	65.3 - 135	
Selenium	286	273.0	95	69.6 - 130	
Silver	30.1	28.88	96	65.1 - 135	
Sodium	1020	969.0	95	60.2 - 139	J
Thallium	121	135.2	112	67.8 - 133	
Vanadium	115	113.9	99	67.6 - 132	
Zinc	594	604.2	102	73.6 - 127	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike - Batch: 460-88818

Method: 6010B
Preparation: 3050B

Lab Sample ID:	460-31736-C-16-G MS	Analysis Batch:	460-88831	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-88818	Lab File ID:	duo10092011vd1.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	10/09/2011 0238	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	10/08/2011 1854				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	5280		214	8493	1502	75 - 125	4
Antimony	2.2	U	53.5	49.43	92	75 - 125	
Arsenic	1.3		214	196.5	91	75 - 125	
Barium	21.7	J	214	235.4	100	75 - 125	
Beryllium	0.37	J	5.35	5.92	104	75 - 125	
Cadmium	1.1	U	5.35	5.48	102	75 - 125	
Calcium	213	J	2140	2512	107	75 - 125	
Chromium	6.2		21.4	29.53	109	75 - 125	
Cobalt	3.2	J	53.5	56.15	99	75 - 125	
Copper	2.9	J	26.7	29.57	100	75 - 125	
Iron	7930		107	8354	397	75 - 125	4
Lead	3.7		53.5	58.01	101	75 - 125	
Magnesium	282	J	2140	2375	98	75 - 125	
Manganese	195		53.5	224.2	54	75 - 125	F
Nickel	3.7	J	53.5	58.48	102	75 - 125	
Potassium	126	J	2140	2150	95	75 - 125	
Selenium	2.2	U	214	192.7	90	75 - 125	
Silver	2.2	U	5.35	4.96	93	75 - 125	
Sodium	1080	U	2140	2085	97	75 - 125	
Thallium	2.2	U	214	221.0	103	75 - 125	
Vanadium	12.3		53.5	65.18	99	75 - 125	
Zinc	9.4		53.5	64.34	103	75 - 125	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Duplicate - Batch: 460-88818

Method: 6010B
Preparation: 3050B

Lab Sample ID:	460-31736-C-16-F DU	Analysis Batch:	460-88831	Instrument ID:	ICP4
Client Matrix:	Solid	Prep Batch:	460-88818	Lab File ID:	duo10092011vd1.asc
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	10/09/2011 0212	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	10/08/2011 1854				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	5280		5760	9	20	
Antimony	2.2	U	2.2	NC	20	U
Arsenic	1.3		1.31	1	20	
Barium	21.7	J	25.03	14	20	J
Beryllium	0.37	J	0.382	3	20	J
Cadmium	1.1	U	1.1	NC	20	U
Calcium	213	J	203.6	5	20	J
Chromium	6.2		6.33	2	20	
Cobalt	3.2	J	3.51	8	20	J
Copper	2.9	J	2.23	25	20	J
Iron	7930		7940	0.1	20	
Lead	3.7		4.37	16	20	
Magnesium	282	J	281.8	0.2	20	J
Manganese	195		218.2	11	20	
Nickel	3.7	J	4.29	15	20	J
Potassium	126	J	145.0	14	20	J
Selenium	2.2	U	2.2	NC	20	U
Silver	2.2	U	0.178	NC	20	J
Sodium	1080	U	1090	NC	20	U
Thallium	2.2	U	2.2	NC	20	U
Vanadium	12.3		12.64	3	20	
Zinc	9.4		10.20	8	20	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-88505

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 460-88505/1-A	Analysis Batch:	460-88586	Instrument ID:	LEEMAN3
Client Matrix:	Solid	Prep Batch:	460-88505	Lab File ID:	88505hg1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	10/06/2011 1500	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	10/06/2011 1048				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.033	U	0.022	0.033

LCS-Certified Reference Material - Batch: 460-88505

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCSSRM 460-88505/2-A	Analysis Batch:	460-88586	Instrument ID:	LEEMAN3
Client Matrix:	Solid	Prep Batch:	460-88505	Lab File ID:	88505hg1.PRN
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	10/06/2011 1502	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	10/06/2011 1048				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	8.46	10.13	120	51.3 - 149	

Matrix Spike - Batch: 460-88505

Method: 7471A
Preparation: 7471A

Lab Sample ID:	460-31796-E-11-K MS	Analysis Batch:	460-88586	Instrument ID:	LEEMAN3
Client Matrix:	Solid	Prep Batch:	460-88505	Lab File ID:	88505hg1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	10/06/2011 1507	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	10/06/2011 1048				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.057	0.186	0.238	97	75 - 125	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Duplicate - Batch: 460-88505

Method: 7471A
Preparation: 7471A

Lab Sample ID:	460-31796-E-11-J DU	Analysis Batch:	460-88586	Instrument ID:	LEEMAN3
Client Matrix:	Solid	Prep Batch:	460-88505	Lab File ID:	88505hg1.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	10/06/2011 1506	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	10/06/2011 1048				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.057	0.0672	16	20	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Method Blank - Batch: 460-89025

Method: 9012A
Preparation: 9012A

Lab Sample ID:	MB 460-89025/1-A	Analysis Batch:	460-89084	Instrument ID:	Lachat2
Client Matrix:	Solid	Prep Batch:	460-89025	Lab File ID:	C111011.FDT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	10/11/2011 1245	Units:	mg/Kg	Final Weight/Volume:	50.0 mL
Prep Date:	10/11/2011 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.50	U	0.11	0.50

Low Level Control Sample - Batch: 460-89025

Method: 9012A
Preparation: 9012A

Lab Sample ID:	LLCS 460-89025/2-A	Analysis Batch:	460-89084	Instrument ID:	Lachat2
Client Matrix:	Solid	Prep Batch:	460-89025	Lab File ID:	C111011.FDT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	10/11/2011 1248	Units:	mg/Kg	Final Weight/Volume:	50.0 mL
Prep Date:	10/11/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	1.25	1.35	108	90 - 110	

High Level Control Sample - Batch: 460-89025

Method: 9012A
Preparation: 9012A

Lab Sample ID:	HLCS 460-89025/3-A	Analysis Batch:	460-89084	Instrument ID:	Lachat2
Client Matrix:	Solid	Prep Batch:	460-89025	Lab File ID:	C111011.FDT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	10/11/2011 1250	Units:	mg/Kg	Final Weight/Volume:	50.0 mL
Prep Date:	10/11/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	10.0	9.92	99	90 - 110	

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 460-89025

Method: 9012A
Preparation: 9012A

MS Lab Sample ID:	460-31686-E-12-G MS	Analysis Batch:	460-89084	Instrument ID:	Lachat2
Client Matrix:	Solid	Prep Batch:	460-89025	Lab File ID:	C111011.FDT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	10/11/2011 1251			Final Weight/Volume:	50.0 mL
Prep Date:	10/11/2011 0830				
Leach Date:	N/A				

MSD Lab Sample ID:	460-31686-E-12-H MSD	Analysis Batch:	460-89084	Instrument ID:	Lachat2
Client Matrix:	Solid	Prep Batch:	460-89025	Lab File ID:	C111011.FDT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	10/11/2011 1252			Final Weight/Volume:	50.0 mL
Prep Date:	10/11/2011 0830				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	105	103	87 - 115	1	10		

Client: GEI Consultants, Inc. Job Number: 460-32027-1

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual

Duplicate - Batch: 460-88549

Method: Moisture
Preparation: N/A

Lab Sample ID:	460-31962-A-3 DU	Analysis Batch:	460-88549	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	10/06/2011 1518	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	13.7	13.7	0.3	20	
Percent Solids	86.3	86.3	0.05	20	

TestAmerica
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777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Mike Zakowskas	Samplers Name (Printed): Erin Regan	Site/Project Identification: Greenpoint
Company: GEI	P. O. #	State (Location of site): NJ: ☐ NY: ☒ Other:
		Regulatory Program: NYCRR Industrial SCC
Address: 1 Greenwood Ave Montclair NJ	Analysis Turnaround Time: Standard ☐	
City:	State: NJ	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☒ Other ☐ — see MSA
Phone: 973 873 7110	Fax:	

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC 8260	SVOC 8270	6020	TAL	90124	PCB 8082	Pest 8081A					LAB USE ONLY Sample Numbers
GPEC-WE-100411	10-4-11	11:50	Soil	2	X	X	X	X	X	X	X					32027-1

LAB USE ONLY: Project No: | Job No: 32027

Preservation Used: (1 = ICE) 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____

Soil: Water:

Special Instructions See MSA

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Erin Regan	GEI	10-5-11 | 13:45	1)	10/5/11 13:45
2)	T.A. Sc	|	2)	
3)		|	3) 5.3°	
4)		|	4)	

5 DAY RUSH

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-32027-1

Login Number: 32027

List Source: TestAmerica Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	NOT PRESENT
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.3 C. IR#50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	NO CITY LISTED ON COC
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT WC**
IAL Case Number: **E15-01273**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.

E15-01273

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 2/19/2015@11:52

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
01273-001	GPEC-WC1-021815	n/a	2/18/2015@13:35	Soil	3

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Integrated Analytical Laboratories, LLC. received one (1) sample from GEI Consultants Inc. - Montclair (IAL SDG# **E15-01273**, Project: GREENPOINT WC) on February 19, 2015 for the analysis of :

(1) TCL VO
(1) TCLP VO
(1) TPH-GRO
(1) TCL BNA
(1) TCLP BNA
(1) Herbicides
(1) TCL PCB
(1) TCL Pesticides
(1) TCLP Herbicides
(1) TCLP Pesticides
(1) TPH-DRO-48 HR
(1) TAL Metals
(1) TCLP Metals
(1) % Moisture
(1) Cr-VI (Hexavalent Chromium)
(1) Cyanide, Reactive
(1) Free Cyanide
(1) Ignitability
(1) pH/Corrosivity
(1) Sulfide, Reactive
(1) TOC
(1) TOX (Total Organic Halides)

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 1311/8260C	**Batch: L150220-01**	**Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- #001 run straight.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Volatiles By 8260C	Batch: F150220-01	Matrix: MEOH

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- 01273-001 was run straight due to matrix interference.

Volatiles By 8260C	Batch: L150219-01	Matrix: MEOH

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-01273
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- #001 run straight.

Semivolatiles By 1311/8270D	Batch: 150220-03	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Internal standard recovery me QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria. NJDEP DKQP criteria not met.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E15-01273
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Semivolatiles By 8270D	Batch: 150219-01	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Internal standard recovery me QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E15-01273
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.
- 01273-001: *double final volume.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

Herbicide By 1311/8151A	Batch: 150223-05	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to matrix interference.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 001.

Herbicide By 8151A	Batch: 150220-11	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 001.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

PCB By 8082A	Batch: 150219-06	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- Sample 001 was diluted 2x for potential matrix interference.

Pesticide By 1311/8081B	Batch: 150223-08	Matrix: TCLP Leachate

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- #001 run straight.

Pesticide By 8081B	Batch: 150219-06	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- #001 run straight.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

TPH-DRO By 8015D	Batch: 150219-08	Matrix: Soil

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E15-01273
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- The sample was run straight.

Metals By 1311/6020A/7470A	Batch: T150223-01	Matrix: TCLP Leachate

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E15-01273
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Metals By 6020A/7471B	Batch: S150220-01	Matrix: Soil

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E15-01273
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Cyanide, Reactive By 7.3.3.2	Batch: AP045-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Free Cyanide By 9016	Batch: AP150-0001	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-01273

Hexavalent Chromium By 3060A/7196A	Batch: AP011-0015	Matrix: Soil

QC
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- The NJ DEP requires rehomogenization, redigestion and reanalysis of the entire analytical batch when the associated QC fails. If the reanalyzed analytical batch QC fails a second time and the sample environment was a "reducing" environment, as defined by the NJ DEP, then the original sample results are valid.
- MS percent recovery did not meet QC criteria. NJDEP DKQP criteria not met.
- Samples were rehomogenized/redigested/reanalyzed.
- Laboratory characterization was performed to determine if reducing conditions exist in the sample (Eh, pH, Sulfide Odor, COD).
- Sample results were not qualified based on the Matrix Spike results.
- Duplicate Recoveries met QC criteria.

E15-01273
- All samples were received within holding time.
- All samples were analyzed within holding time.

Ignitability By 1030	Batch: AP068-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

pH/Corrosivity By 9045C	Batch: AP023-0041	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Sulfide, Reactive By 7.3.4.2	Batch: AP044-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Total Organic Carbon (TOC) By Lloyd Kahn	Batch: AP030-0008	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

Total Organic Halides (TOX) By 9023	Batch: AP067-0004	Matrix: Soil

QC - All QC passed criteria.

E15-01273 - Holding time met requirement for each sample.

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

2/24/2015
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

	Lab ID:	01273-001	
	Client ID:	GPEC-WC1-021815	
	Matrix:	Soil	
	Sampled Date	2/18/15	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Dichlorodifluoromethane	ND		0.077
Chloromethane	ND		0.055
Vinyl chloride	ND		0.052
Bromomethane	ND		0.076
Chloroethane	ND		0.093
Trichlorofluoromethane	ND		0.091
1,1-Dichloroethene	ND		0.055
Acetone	ND		0.160
Carbon disulfide	ND		0.056
Methylene chloride	ND		0.223
trans-1,2-Dichloroethene	ND		0.061
Methyl tert-butyl ether (MTBE)	ND		0.055
1,1-Dichloroethane	ND		0.040
cis-1,2-Dichloroethene	ND		0.054
2-Butanone (MEK)	ND		0.097
Bromochloromethane	ND		0.071
Chloroform	ND		0.057
1,1,1-Trichloroethane	ND		0.054
Carbon tetrachloride	ND		0.075
1,2-Dichloroethane (EDC)	ND		0.064
Benzene	ND		0.043
Trichloroethene	ND		0.040
1,2-Dichloropropane	ND		0.062
1,4-Dioxane	ND		9.25
Bromodichloromethane	ND		0.059
cis-1,3-Dichloropropene	ND		0.049
4-Methyl-2-pentanone (MIBK)	ND		0.097
Toluene	ND		0.041
trans-1,3-Dichloropropene	ND		0.047
1,1,2-Trichloroethane	ND		0.071
Tetrachloroethene	ND		0.055
2-Hexanone	ND		0.078
Dibromochloromethane	ND		0.058
1,2-Dibromoethane (EDB)	ND		0.076
Chlorobenzene	ND		0.044
Ethylbenzene	ND		0.047
Total Xylenes	ND		0.117
Styrene	ND		0.041
Bromoform	ND		0.074
Isopropylbenzene	ND		0.065
1,1,2,2-Tetrachloroethane	ND		0.077
1,3-Dichlorobenzene	ND		0.047
1,4-Dichlorobenzene	ND		0.046
1,2-Dichlorobenzene	ND		0.045

ND = Analyzed for but Not Detected at the MDL
Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	***(mg/Kg)***		
1,2-Dibromo-3-chloropropane	ND		0.104
1,2,4-Trichlorobenzene	ND		0.054
1,2,3-Trichlorobenzene	ND		0.050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.109
Methyl acetate	ND		0.100
Cyclohexane	ND		0.091
Methylcyclohexane	ND		0.086
1,3-Dichloropropene (cis- and trans-)	ND		0.049
TOTAL VO's:	ND		
TCLP Volatiles (Units)	***(mg/L)***		
Vinyl chloride	ND		0.023
1,1-Dichloroethene	ND		0.025
2-Butanone (MEK)	ND		0.044
Chloroform	ND		0.026
Carbon tetrachloride	ND		0.033
1,2-Dichloroethane (EDC)	ND		0.029
Benzene	ND		0.019
Trichloroethene	ND		0.018
Tetrachloroethene	ND		0.025
Chlorobenzene	ND		0.020
1,4-Dichlorobenzene	ND		0.021

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: GEI Consultants Inc. - Montclair

Project: GREENPOINT WC

Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
Benzaldehyde	ND		0.044
Phenol	ND		0.047
Bis(2-chloroethyl) ether	ND		0.044
2-Chlorophenol	ND		0.044
2-Methylphenol	ND		0.051
Bis(2-chloroisopropyl) ether	ND		0.044
4-Methylphenol **	ND		0.059
N-Nitrosodi-n-propylamine	ND		0.060
Acetophenone	ND		0.060
Hexachloroethane	ND		0.044
Nitrobenzene	ND		0.062
Isophorone	ND		0.067
2-Nitrophenol	ND		0.044
2,4-Dimethylphenol	ND		0.051
Bis(2-chloroethoxy) methane	ND		0.044
2,4-Dichlorophenol	ND		0.044
Naphthalene	0.297		0.044
4-Chloroaniline	ND		0.044
Hexachlorobutadiene	ND		0.044
Caprolactam	ND		0.047
4-Chloro-3-methylphenol	ND		0.044
2-Methylnaphthalene	0.163		0.044
Hexachlorocyclopentadiene	ND		0.044
2,4,6-Trichlorophenol	ND		0.044
2,4,5-Trichlorophenol	ND		0.044
1,1'-Biphenyl	0.064	J	0.044
2-Chloronaphthalene	ND		0.044
2-Nitroaniline	ND		0.044
Dimethyl phthalate	ND		0.056
2,6-Dinitrotoluene	ND		0.044
Acenaphthylene	0.178		0.051
3-Nitroaniline	ND		0.056
Acenaphthene	0.538		0.056
2,4-Dinitrophenol	ND		0.052
4-Nitrophenol	ND		0.059
2,4-Dinitrotoluene	ND		0.044
Dibenzofuran	0.431		0.044
Diethyl phthalate	ND		0.067
Fluorene	0.576		0.044
4-Chlorophenyl phenyl ether	ND		0.044
4-Nitroaniline	ND		0.044
1,2,4,5-Tetrachlorobenzene	ND		0.044

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
2,3,4,6-Tetrachlorophenol	ND		0.044
4,6-Dinitro-2-methylphenol	ND		0.044
N-Nitrosodiphenylamine	ND		0.044
4-Bromophenyl phenyl ether	ND		0.044
Hexachlorobenzene	ND		0.044
Atrazine	ND		0.044
Pentachlorophenol	ND		0.044
Phenanthrene	5.69		0.044
Anthracene	1.67		0.044
Carbazole	0.449		0.044
Di-n-butyl phthalate	ND		0.044
Fluoranthene	7.13		0.044
Pyrene	8.61		0.044
Butyl benzyl phthalate	ND		0.044
3,3'-Dichlorobenzidine	ND		0.051
Benzo[a]anthracene	4.06		0.044
Chrysene	4.54		0.044
Bis(2-ethylhexyl) phthalate	ND		0.044
Di-n-octyl phthalate	ND		0.054
Benzo[b]fluoranthene	4.24		0.044
Benzo[k]fluoranthene	4.57		0.044
Benzo[a]pyrene	4.93		0.044
Indeno[1,2,3-cd]pyrene	2.82		0.065
Dibenz[a,h]anthracene	0.882		0.044
Benzo[g,h,i]perylene	3.33		0.044
Dinitrotoluene (2,4- and 2,6-)	ND		0.044
TOTAL BNA'S:	55.2	J	
TCLP Semivolatiles (Units)	*(mg/L)*		
Pyridine	ND		0.00308
1,4-Dichlorobenzene	ND		0.00266
2-Methylphenol	ND		0.00588
4-Methylphenol	ND		0.00406
3-Methylphenol	ND		0.00406
Hexachloroethane	ND		0.003
Nitrobenzene	ND		0.00248
Hexachlorobutadiene	ND		0.00334
2,4,6-Trichlorophenol	ND		0.00236
2,4,5-Trichlorophenol	ND		0.00612
2,4-Dinitrotoluene	ND		0.00328
Hexachlorobenzene	ND		0.00376
Pentachlorophenol	ND		0.0032

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	***(mg/Kg)***		
Aroclor-1016	ND		0.034
Aroclor-1221	ND		0.034
Aroclor-1232	ND		0.034
Aroclor-1242	ND		0.034
Aroclor-1248	ND		0.034
Aroclor-1254	ND		0.034
Aroclor-1260	ND		0.034
Aroclor-1262	ND		0.034
Aroclor-1268	ND		0.034
PCBs	ND		0.034
Pesticides (Units)	***(mg/Kg)***		
alpha-BHC	ND		0.00421
beta-BHC	ND		0.00421
gamma-BHC (Lindane)	ND		0.00421
delta-BHC	ND		0.00421
Heptachlor	ND		0.00421
Aldrin	ND		0.00421
Heptachlor epoxide	ND		0.00421
Endosulfan I	ND		0.00421
4,4'-DDE	ND		0.00421
Dieldrin	ND		0.00421
Endrin	ND		0.00421
Endosulfan II	ND		0.00421
4,4'-DDD	ND		0.00421
Endrin aldehyde	ND		0.00421
Endosulfan sulfate	ND		0.00421
4,4'-DDT	ND		0.00421
Endrin ketone	ND		0.00421
Methoxychlor	ND		0.00421
alpha-Chlordane	ND		0.00421
gamma-Chlordane	ND		0.00421
Toxaphene	ND		0.051
Endosulfan (I and II)	ND		0.00421
Chlordane (alpha and gamma)	ND		0.00421
TCLP Pesticides (Units)	***(mg/L)***		
gamma-BHC (Lindane)	ND		0.000025
Heptachlor	ND		0.000025
Heptachlor epoxide	ND		0.000025
Endrin	ND		0.000025
Methoxychlor	ND		0.000025
Chlordane	ND		0.0003
Toxaphene	ND		0.0003

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
Herbicides (Units)	*(mg/Kg)*		
Dalapon	ND		0.00722
Dicamba	ND		0.00722
2,4-D	ND		0.00722
2,4,5-TP (Silvex)	ND		0.00722
2,4,5-T	ND		0.00722
2,4-DB	ND		0.00722
Dinoseb	ND		0.00722
TCLP Herbicides (Units)	*(mg/L)*		
2,4-D	ND		0.0005
2,4,5-TP (Silvex)	ND		0.0005
Hydrocarbons (Units)	*(mg/Kg)*		
TPH-DRO	359		62.7
TPH-GRO (Units)	*(mg/Kg)*		
TPH-GRO	ND		4.47
Metals (Units)	*(mg/Kg)*		
Aluminum	6350		0.591
Antimony	5.46		0.295
Arsenic	14.6		0.295
Barium	180		0.591
Beryllium	0.480	J	0.236
Cadmium	0.651		0.148
Calcium	7990		5.91
Chromium	18.8		0.591
Cobalt	6.49		0.591
Copper	176		0.591
Iron	17800		5.91
Lead	299		0.591
Magnesium	2230		5.91
Manganese	337		0.295
Mercury	1.24		0.003
Nickel	21.2		0.591
Potassium	812		5.91
Selenium	1.54		0.591
Silver	0.528	J	0.148
Sodium	794		5.91
Thallium	0.282	J	0.148
Vanadium	27.1		0.591
Zinc	315		0.591

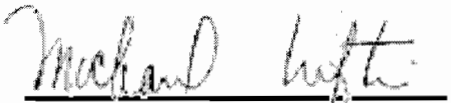
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E15-01273

Lab ID:	**01273-001**		
Client ID:	**GPEC-WC1-021815**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**2/18/15**		
PARAMETER(Units)	Conc	Q	MDL
TCLP Metals (Units)	*(mg/L)*		
TCLP Arsenic	ND		0.100
TCLP Barium	0.779		0.100
TCLP Cadmium	ND		0.025
TCLP Chromium	ND		0.100
TCLP Lead	0.303		0.050
TCLP Mercury	ND		0.0003
TCLP Selenium	ND		0.100
TCLP Silver	ND		0.025
General Analytical (Units)			
Hexavalent Chromium(mg/Kg)	ND		0.187
pH/Corrosivity(SU)	7.73		NA
Total Organic Carbon (TOC)(mg/Kg)	91800		588
Sulfide, Reactive(mg/Kg)	ND		17.9
Cyanide, Reactive(mg/Kg)	ND		11.2
Total Organic Halides (TOX)(mg/Kg)	ND		11.2
Ignitability(Yes/No)	NO		NA
Free Cyanide(mg/Kg)	ND		1.70
Percent Moisture(%)	10.60		NA

ND = Analyzed for but Not Detected at the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:



Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/19/2015
Data file: L6688.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.112	0.077
Chloromethane	ND		0.112	0.055
Vinyl chloride	ND		0.112	0.052
Bromomethane	ND		0.112	0.076
Chloroethane	ND		0.112	0.093
Trichlorofluoromethane	ND		0.112	0.091
1,1-Dichloroethene	ND		0.112	0.055
Acetone	ND		0.224	0.160
Carbon disulfide	ND		0.112	0.056
Methylene chloride	ND		0.224	0.223
trans-1,2-Dichloroethene	ND		0.112	0.061
Methyl tert-butyl ether (MTBE)	ND		0.112	0.055
1,1-Dichloroethane	ND		0.112	0.040
cis-1,2-Dichloroethene	ND		0.112	0.054
2-Butanone (MEK)	ND		0.112	0.097
Bromochloromethane	ND		0.112	0.071
Chloroform	ND		0.112	0.057
1,1,1-Trichloroethane	ND		0.112	0.054
Carbon tetrachloride	ND		0.112	0.075
1,2-Dichloroethane (EDC)	ND		0.112	0.064
Benzene	ND		0.112	0.043
Trichloroethene	ND		0.112	0.040
1,2-Dichloropropane	ND		0.112	0.062
1,4-Dioxane	ND		22.4	9.25
Bromodichloromethane	ND		0.112	0.059
cis-1,3-Dichloropropene	ND		0.112	0.049
4-Methyl-2-pentanone (MIBK)	ND		0.112	0.097

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/19/2015
Data file: L6688.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.112	0.041
trans-1,3-Dichloropropene	ND		0.112	0.047
1,1,2-Trichloroethane	ND		0.112	0.071
Tetrachloroethene	ND		0.112	0.055
2-Hexanone	ND		0.112	0.078
Dibromochloromethane	ND		0.112	0.058
1,2-Dibromoethane (EDB)	ND		0.112	0.076
Chlorobenzene	ND		0.112	0.044
Ethylbenzene	ND		0.112	0.047
Total Xylenes	ND		0.224	0.117
Styrene	ND		0.112	0.041
Bromoform	ND		0.112	0.074
Isopropylbenzene	ND		0.112	0.065
1,1,2,2-Tetrachloroethane	ND		0.112	0.077
1,3-Dichlorobenzene	ND		0.112	0.047
1,4-Dichlorobenzene	ND		0.112	0.046
1,2-Dichlorobenzene	ND		0.112	0.045
1,2-Dibromo-3-chloropropane	ND		0.224	0.104
1,2,4-Trichlorobenzene	ND		0.112	0.054
1,2,3-Trichlorobenzene	ND		0.112	0.050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.112	0.109
Methyl acetate	ND		0.112	0.100
Cyclohexane	ND		0.112	0.091
Methylcyclohexane	ND		0.112	0.086
1,3-Dichloropropene (cis- and trans-)	ND		0.112	0.049

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: 01273-001
Client ID: GPEC-WC1-021815
Date Received: 02/18/2015
Date Analyzed: 02/20/2015
Data file: F9272.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		5.59	4.47

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received: 02/19/2015
Date Analyzed: 02/20/2015
Data file: L6706.D

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.023
1,1-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.050	0.044
Chloroform	ND		0.050	0.026
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
Tetrachloroethene	ND		0.050	0.025
Chlorobenzene	ND		0.050	0.020
1,4-Dichlorobenzene	ND		0.050	0.021

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3749.D

GC/MS Column: DB-5
Sample wt/vol: 15.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.073	0.044
Phenol	ND		0.073	0.047
Bis(2-chloroethyl) ether	ND		0.073	0.044
2-Chlorophenol	ND		0.073	0.044
2-Methylphenol	ND		0.073	0.051
Bis(2-chloroisopropyl) ether	ND		0.073	0.044
4-Methylphenol **	ND		0.073	0.059
N-Nitrosodi-n-propylamine	ND		0.073	0.060
Acetophenone	ND		0.073	0.060
Hexachloroethane	ND		0.073	0.044
Nitrobenzene	ND		0.073	0.062
Isophorone	ND		0.073	0.067
2-Nitrophenol	ND		0.073	0.044
2,4-Dimethylphenol	ND		0.073	0.051
Bis(2-chloroethoxy) methane	ND		0.073	0.044
2,4-Dichlorophenol	ND		0.073	0.044
Naphthalene	0.297		0.073	0.044
4-Chloroaniline	ND		0.073	0.044
Hexachlorobutadiene	ND		0.073	0.044
Caprolactam	ND		0.073	0.047
4-Chloro-3-methylphenol	ND		0.073	0.044
2-Methylnaphthalene	0.163		0.073	0.044
Hexachlorocyclopentadiene	ND		0.073	0.044
2,4,6-Trichlorophenol	ND		0.073	0.044
2,4,5-Trichlorophenol	ND		0.073	0.044
1,1'-Biphenyl	0.064	J	0.073	0.044
2-Chloronaphthalene	ND		0.073	0.044
2-Nitroaniline	ND		0.073	0.044
Dimethyl phthalate	ND		0.073	0.056

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3749.D

GC/MS Column: DB-5
Sample wt/vol: 15.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.073	0.044
Acenaphthylene	0.178		0.073	0.051
3-Nitroaniline	ND		0.073	0.056
Acenaphthene	0.538		0.073	0.056
2,4-Dinitrophenol	ND		0.073	0.052
4-Nitrophenol	ND		0.073	0.059
2,4-Dinitrotoluene	ND		0.073	0.044
Dibenzofuran	0.431		0.073	0.044
Diethyl phthalate	ND		0.073	0.067
Fluorene	0.576		0.073	0.044
4-Chlorophenyl phenyl ether	ND		0.073	0.044
4-Nitroaniline	ND		0.073	0.044
1,2,4,5-Tetrachlorobenzene	ND		0.073	0.044
2,3,4,6-Tetrachlorophenol	ND		0.073	0.044
4,6-Dinitro-2-methylphenol	ND		0.073	0.044
N-Nitrosodiphenylamine	ND		0.073	0.044
4-Bromophenyl phenyl ether	ND		0.073	0.044
Hexachlorobenzene	ND		0.073	0.044
Atrazine	ND		0.073	0.044
Pentachlorophenol	ND		0.073	0.044
Phenanthrene	5.69		0.073	0.044
Anthracene	1.67		0.073	0.044
Carbazole	0.449		0.073	0.044
Di-n-butyl phthalate	ND		0.073	0.044
Fluoranthene	7.13		0.073	0.044
Pyrene	8.61		0.073	0.044
Butyl benzyl phthalate	ND		0.073	0.044
3,3'-Dichlorobenzidine	ND		0.073	0.051
Benzo[a]anthracene	4.06		0.073	0.044
Chrysene	4.54		0.073	0.044
Bis(2-ethylhexyl) phthalate	ND		0.073	0.044
Di-n-octyl phthalate	ND		0.073	0.054
Benzo[b]fluoranthene	4.24		0.073	0.044
Benzo[k]fluoranthene	4.57		0.073	0.044
Benzo[a]pyrene	4.93		0.073	0.044
Indeno[1,2,3-cd]pyrene	2.82		0.073	0.065
Dibenz[a,h]anthracene	0.882		0.073	0.044
Benzo[g,h,i]perylene	3.33		0.073	0.044
Dinitrotoluene (2,4- and 2,6-)	ND		0.073	0.044
Total Target Compounds (68):	55.2	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7679.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00308
1,4-Dichlorobenzene	ND		0.020	0.00266
2-Methylphenol	ND		0.020	0.00588
4-Methylphenol	ND		0.020	0.00406
3-Methylphenol	ND		0.020	0.00406
Hexachloroethane	ND		0.020	0.003
Nitrobenzene	ND		0.020	0.00248
Hexachlorobutadiene	ND		0.020	0.00334
2,4,6-Trichlorophenol	ND		0.020	0.00236
2,4,5-Trichlorophenol	ND		0.020	0.00612
2,4-Dinitrotoluene	ND		0.020	0.00328
Hexachlorobenzene	ND		0.020	0.00376
Pentachlorophenol	ND		0.020	0.0032

Total Target Compounds (13): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015
Data file: R3404.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.084	0.034
Aroclor-1221	ND		0.084	0.034
Aroclor-1232	ND		0.084	0.034
Aroclor-1242	ND		0.084	0.034
Aroclor-1248	ND		0.084	0.034
Aroclor-1254	ND		0.084	0.034
Aroclor-1260	ND		0.084	0.034
Aroclor-1262	ND		0.084	0.034
Aroclor-1268	ND		0.084	0.034
PCBs	ND		0.084	0.034

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8325.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00843	0.00421
beta-BHC	ND		0.00843	0.00421
gamma-BHC (Lindane)	ND		0.00843	0.00421
delta-BHC	ND		0.00843	0.00421
Heptachlor	ND		0.00843	0.00421
Aldrin	ND		0.00843	0.00421
Heptachlor epoxide	ND		0.00843	0.00421
Endosulfan I	ND		0.00843	0.00421
4,4'-DDE	ND		0.00843	0.00421
Dieldrin	ND		0.00843	0.00421
Endrin	ND		0.00843	0.00421
Endosulfan II	ND		0.00843	0.00421
4,4'-DDD	ND		0.00843	0.00421
Endrin aldehyde	ND		0.00843	0.00421
Endosulfan sulfate	ND		0.00843	0.00421
4,4'-DDT	ND		0.00843	0.00421
Endrin ketone	ND		0.00843	0.00421
Methoxychlor	ND		0.00843	0.00421
alpha-Chlordane	ND		0.00843	0.00421
gamma-Chlordane	ND		0.00843	0.00421
Toxaphene	ND		0.105	0.051
Endosulfan (I and II)	ND		0.00843	0.00421
Chlordane (alpha and gamma)	ND		0.00843	0.00421

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0149.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2563.D

GC Column: DB-5/DB1701P
Sample wt/vol: 15.50g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.018	0.00722
Dicamba	ND		0.018	0.00722
2,4-D	ND		0.018	0.00722
2,4,5-TP (Silvex)	ND		0.018	0.00722
2,4,5-T	ND		0.018	0.00722
2,4-DB	ND		0.018	0.00722
Dinoseb	ND		0.018	0.00722

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: E15-01273-001
Client ID: GPEC-WC1
Date Received: 02/19/2015
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2571.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID:	01273-001	GC Column:	RTX-5
Client ID:	GPEC-WC1-021815	Sample wt/vol:	10.71g
Date Received:	02/19/2015	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/19/2015	Dilution Factor:	1
Date Analyzed:	02/20/2015	%Moisture:	10.6
Data File:	QB0772.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	359		78.3	62.7

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID: E15-01273-001
Client ID: GPEC-WC1-021815
Date Collected: 02/18/15 13:35
Date Received: 02/19/15 11:52
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 10.6
Batch #: 079

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	6350		1	0.591	0.591	02/23/15 10:40	6020A
Antimony	5.46		1	0.591	0.295	02/23/15 10:40	6020A
Arsenic	14.6		1	0.591	0.295	02/23/15 10:40	6020A
Barium	180		1	0.591	0.591	02/23/15 10:40	6020A
Beryllium	0.480	J	1	0.591	0.236	02/23/15 10:40	6020A
Cadmium	0.651		1	0.591	0.148	02/23/15 10:40	6020A
Calcium	7990		1	5.91	5.91	02/23/15 10:40	6020A
Chromium	18.8		1	0.591	0.591	02/23/15 10:40	6020A
Cobalt	6.49		1	0.591	0.591	02/23/15 10:40	6020A
Copper	176		1	0.591	0.591	02/23/15 10:40	6020A
Iron	17800		1	5.91	5.91	02/23/15 10:40	6020A
Lead	299		1	0.591	0.591	02/23/15 10:40	6020A
Magnesium	2230		1	5.91	5.91	02/23/15 10:40	6020A
Manganese	337		1	0.591	0.295	02/23/15 10:40	6020A
Mercury	1.24		1	0.0063	0.0030	02/20/15 16:23	7471B
Nickel	21.2		1	0.591	0.591	02/23/15 10:40	6020A
Potassium	812		1	5.91	5.91	02/23/15 10:40	6020A
Selenium	1.54		1	0.591	0.591	02/23/15 10:40	6020A
Silver	0.528	J	1	0.591	0.148	02/23/15 10:40	6020A
Sodium	794		1	5.91	5.91	02/23/15 10:40	6020A
Thallium	0.282	J	1	0.591	0.148	02/23/15 10:40	6020A
Vanadium	27.1		1	0.591	0.591	02/23/15 10:40	6020A
Zinc	315		1	0.591	0.591	02/23/15 10:40	6020A

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP METALS

Client/Project: GEI-MTCLR/GREENPOINT WC

Lab ID: E15-01273-001
Client ID: GPEC-WC1-021815
Date Collected: 02/18/15 13:35
Date Received: 02/19/15 11:52
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 083

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Arsenic	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Barium	0.779		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Cadmium	ND		1	0.100	0.025	02/23/15 17:41	1311/6020A
TCLP Chromium	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Lead	0.303		1	0.100	0.050	02/23/15 17:41	1311/6020A
TCLP Mercury	ND		1	0.0005	0.0003	02/23/15 13:01	1311/7470A
TCLP Selenium	ND		1	0.100	0.100	02/23/15 17:41	1311/6020A
TCLP Silver	ND		1	0.100	0.025	02/23/15 17:41	1311/6020A

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 3060A/7196A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	0.187	1.12	89.4	02/18/15 13:35	02/20/15 14:32

Cyanide, Reactive

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 7.3.3.2

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	11.2	11.2	89.4	02/18/15 13:35	02/20/15 16:00

Free Cyanide

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9016

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	1.70	2.80	89.4	02/18/15 13:35	02/20/15 17:30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Ignitability

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 1030

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	NO		1	Soil-Yes/No	NA	NA	89.4	02/18/15 13:35	02/20/15 15:30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: D2216-71

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	10.6		1	Soil-%	NA	NA	02/18/15 13:35	02/19/15 14:03

INTEGRATED ANALYTICAL LABORATORIES, LLC.

pH/Corrosivity

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9045C

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	7.73		1	Soil-SU	NA	NA	89.4	02/18/15 13:35	02/20/15 08:26

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfide, Reactive

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 7.3.4.2

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	17.9	17.9	89.4	02/18/15 13:35	02/20/15 16:45

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Organic Carbon (TOC)

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: Lloyd Kahn

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	91800		1	Soil-mg/Kg	588	1000	89.4	02/18/15 13:35	02/23/15 09:15

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Organic Halides (TOX)

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 02/19/15 11:52
Method: 9023

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-01273-001	GPEC-WC1-021815	ND		1	Soil-mg/Kg	11.2	33.6	89.4	02/18/15 13:35	02/20/15 11:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/19/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKM150218-01	MEOH	L6676.D	101	98	90
01168-001	MEOH	L6677.D	101	99	100
01168-002	MEOH	L6678.D	101	98	92
01062-005	MEOH	L6680.D	98	98	94
01229-001	MEOH	L6682.D	103	97	101
LCSM150219-01	MEOH	L6683.D	98	101	102
01062-005MS	MEOH	L6684.D	95	101	98
01062-005MSD	MEOH	L6685.D	95	101	99
01273-001	MEOH	L6688.D	95	98	99
01167-002	MEOH	L6689.D	96	99	101
01167-001	MEOH	L6690.D	98	98	96
01158-001	MEOH	L6691.D	96	100	101
01158-007	MEOH	L6692.D	96	98	98
01158-014	MEOH	L6693.D	96	98	100
01158-002	MEOH	L6694.D	102	100	100
01158-006	MEOH	L6695.D	98	100	98
01158-012	MEOH	L6696.D	96	100	99
01158-013	MEOH	L6697.D	95	99	100
01177-001	MEOH	L6698.D	94	98	99
01224-001	MEOH	L6699.D	98	101	98

	Concentration	DKQPs Leachate Aqueous/Meoh		Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	45-154	45-153
SMC2 = Toluene-d8	50 ppb	70-130	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	48-149	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	63.9	128	
Chloromethane	50.0	0.0	53.2	106	
Vinyl chloride	50.0	0.0	57.1	114	
Bromomethane	50.0	0.0	46.9	94	
Chloroethane	50.0	0.0	52.4	105	
Trichlorofluoromethane	50.0	0.0	43.0	86	
Acrolein	150	0.0	181.9	121	
1,1-Dichloroethene	50.0	0.0	52.9	106	
Acetone	50.0	0.0	58.0	116	
Carbon disulfide	50.0	0.0	53.7	107	
Vinyl acetate	50.0	0.0	51.0	102	
Methylene chloride	50.0	0.0	48.0	96	
Acrylonitrile	150.0	0.0	172.5	115	
tert-Butyl alcohol (TBA)	100.0	0.0	106.5	107	
trans-1,2-Dichloroethene	50.0	0.0	48.6	97	
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.3	99	
1,1-Dichloroethane	50.0	0.0	47.7	95	
Diisopropyl ether (DIPE)	50.0	0.0	52.4	105	
cis-1,2-Dichloroethene	50.0	0.0	47.9	96	
2,2-Dichloropropane	50.0	0.0	53.0	106	
2-Butanone (MEK)	50.0	0.0	56.4	113	
Bromochloromethane	50.0	0.0	45.1	90	
Chloroform	50.0	0.0	44.3	89	
1,1,1-Trichloroethane	50.0	0.0	49.5	99	
Carbon tetrachloride	50.0	0.0	50.3	101	
1,1-Dichloropropene	50.0	0.0	51.4	103	
1,2-Dichloroethane (EDC)	50.0	0.0	44.5	89	
Benzene	50.0	0.0	46.5	93	
Trichloroethene	50.0	0.0	45.7	91	
1,2-Dichloropropane	50.0	0.0	48.4	97	
Dibromomethane	50.0	0.0	44.0	88	
1,4-Dioxane	1500	0.0	1684	112	
Bromodichloromethane	50.0	0.0	45.4	91	
2-Chloroethyl vinyl ether	50.0	0.0	48.3	97	
cis-1,3-Dichloropropene	50.0	0.0	50.5	101	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	56.7	113	
Toluene	50.0	0.0	45.9	92	
trans-1,3-Dichloropropene	50.0	0.0	49.9	100	
1,1,2-Trichloroethane	50.0	0.0	45.5	91	
Tetrachloroethene	50.0	0.0	47.5	95	
1,3-Dichloropropane	50.0	0.0	47.9	96	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	62.9	126	
Dibromochloromethane	50.0	0.0	45.9	92	
1,2-Dibromoethane (EDB)	50.0	0.0	47.0	94	
Chlorobenzene	50.0	0.0	42.7	85	
1,1,1,2-Tetrachloroethane	50.0	0.0	44.7	89	
Ethylbenzene	50.0	0.0	47.5	95	
m,p-Xylene	100.0	0.0	95.5	96	
o-Xylene	50.0	0.0	50.0	100	
Styrene	50.0	0.0	49.2	98	
Bromoform	50.0	0.0	47.0	94	
Isopropylbenzene	50.0	0.0	50.8	102	
1,1,2,2-Tetrachloroethane	50.0	0.0	43.6	87	
Bromobenzene	50.0	0.0	44.4	89	
1,2,3-Trichloropropane	50.0	0.0	44.1	88	
n-Propylbenzene	50.0	0.0	47.8	96	
2-Chlorotoluene	50.0	0.0	44.8	90	
1,3,5-Trimethylbenzene	50.0	0.0	47.1	94	
4-Chlorotoluene	50.0	0.0	44.1	88	
tert-Butylbenzene	50.0	0.0	48.4	97	
1,2,4-Trimethylbenzene	50.0	0.0	45.1	90	
sec-Butylbenzene	50.0	0.0	47.1	94	
1,3-Dichlorobenzene	50.0	0.0	42.5	85	
4-Isopropyltoluene	50.0	0.0	46.1	92	
1,4-Dichlorobenzene	50.0	0.0	41.6	83	
n-Butylbenzene	50.0	0.0	47.7	95	
1,2-Dichlorobenzene	50.0	0.0	42.9	86	
1,2-Dibromo-3-chloropropane	50.0	0.0	45.8	92	
1,2,4-Trichlorobenzene	50.0	0.0	48.3	97	
Hexachlorobutadiene	50.0	0.0	47.2	94	
Naphthalene	50.0	0.0	51.7	103	
1,2,3-Trichlorobenzene	50.0	0.0	46.8	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	51.7	103	
Methyl acetate	50.0	0.0	55.3	111	
Cyclohexane	50.0	0.0	55.6	111	
Methylcyclohexane	50.0	0.0	54.7	109	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSM150219-01
Date Received:
Date Analyzed: 02/19/2015
LCS Data file: L6683.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	62.8	126		61.3	123		2	
Chloromethane	50.0	0.0	56.8	114		53.5	107		6	
Vinyl chloride	50.0	0.0	56.2	112		53.8	108		4	
Bromomethane	50.0	0.0	46.0	92		45.9	92		0	
Chloroethane	50.0	0.0	49.7	99		49.8	100		0	
Trichlorofluoromethane	50.0	0.0	40.9	82		38.8	78		5	
Acrolein	150	0.0	178	119		169	113		5	
1,1-Dichloroethene	50.0	0.0	51.8	104		48.5	97		7	
Acetone	50.0	0.0	57.3	115		53.6	107		7	
Carbon disulfide	50.0	0.0	51.8	104		50.7	101		2	
Vinyl acetate	50.0	0.0	50.0	100		50.1	100		0	
Methylene chloride	50.0	0.0	46.5	93		46.7	93		0	
Acrylonitrile	150	0.0	182	121		192	128		5	
tert-Butyl alcohol (TBA)	100	0.0	103.7	104		104.5	105		1	
trans-1,2-Dichloroethene	50.0	0.0	47.6	95		47.1	94		1	
Methyl tert-butyl ether (MTBE)	50.0	0.0	48.8	98		48.9	98		0	
1,1-Dichloroethane	50.0	0.0	47.2	94		47.5	95		1	
Diisopropyl ether (DIPE)	50.0	0.0	52.1	104		53.1	106		2	
cis-1,2-Dichloroethene	50.0	0.0	48.0	96		48.7	97		1	
2,2-Dichloropropane	50.0	0.0	49.6	99		50.4	101		2	
2-Butanone (MEK)	50.0	0.0	56.5	113		55.3	111		2	
Bromochloromethane	50.0	0.0	45.0	90		46.0	92		2	
Chloroform	50.0	0.0	44.2	88		44.6	89		1	
1,1,1-Trichloroethane	50.0	0.0	48.0	96		47.7	95		1	
Carbon tetrachloride	50.0	0.0	50.1	100		48.7	97		3	
1,1-Dichloropropene	50.0	0.0	50.8	102		50.0	100		2	
1,2-Dichloroethane (EDC)	50.0	0.0	44.0	88		44.8	90		2	
Benzene	50.0	0.0	47.1	94		47.9	96		2	
Trichloroethene	50.0	0.0	46.6	93		47.8	96		3	
1,2-Dichloropropane	50.0	0.0	48.8	98		50.7	101		4	
Dibromomethane	50.0	0.0	44.4	89		45.4	91		2	
1,4-Dioxane	1,500	0.0	1625	108		1592	106		2	
Bromodichloromethane	50.0	0.0	46.3	93		47.4	95		2	
2-Chloroethyl vinyl ether	50.0	0.0	50.0	100		52.4	105		5	
cis-1,3-Dichloropropene	50.0	0.0	51.3	103		53.0	106		3	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	57.2	114		58.3	117		2	
Toluene	50.0	0.0	45.9	92		46.9	94		2	
trans-1,3-Dichloropropene	50.0	0.0	51.1	102		52.6	105		3	
1,1,2-Trichloroethane	50.0	0.0	47.1	94		48.2	96		2	
Tetrachloroethene	50.0	0.0	47.0	94		47.2	94		0	
1,3-Dichloropropane	50.0	0.0	48.5	97		49.9	100		3	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	64.4	129		64.4	129		0	
Dibromochloromethane	50.0	0.0	47.3	95		48.8	98		3	
1,2-Dibromoethane (EDB)	50.0	0.0	48.3	97		49.3	99		2	
Chlorobenzene	50.0	0.0	44.0	88		44.4	89		1	
1,1,1,2-Tetrachloroethane	50.0	0.0	46.5	93		46.6	93		0	
Ethylbenzene	50.0	0.0	49.0	98		48.2	96		2	
m,p-Xylene	100	0.0	97.4	97		96.7	97		1	
o-Xylene	50.0	0.0	50.4	101		51.1	102		1	
Styrene	50.0	0.0	50.6	101		51.2	102		1	
Bromoform	50.0	0.0	50.3	101		48.1	96		4	
Isopropylbenzene	50.0	0.0	52.1	104		50.3	101		4	
1,1,2,2-Tetrachloroethane	50.0	0.0	44.7	89		43.3	87		3	
Bromobenzene	50.0	0.0	45.9	92		45.2	90		2	
1,2,3-Trichloropropane	50.0	0.0	45.4	91		44.7	89		2	
n-Propylbenzene	50.0	0.0	49.4	99		47.7	95		4	
2-Chlorotoluene	50.0	0.0	46.3	93		45.8	92		1	
1,3,5-Trimethylbenzene	50.0	0.0	49.0	98		47.2	94		4	
4-Chlorotoluene	50.0	0.0	45.6	91		44.8	90		2	
tert-Butylbenzene	50.0	0.0	49.2	98		47.0	94		5	
1,2,4-Trimethylbenzene	50.0	0.0	46.4	93		45.6	91		2	
sec-Butylbenzene	50.0	0.0	49.4	99		47.2	94		5	
1,3-Dichlorobenzene	50.0	0.0	43.7	87		43.2	86		1	
4-Isopropyltoluene	50.0	0.0	48.8	98		47.1	94		4	
1,4-Dichlorobenzene	50.0	0.0	43.1	86		42.1	84		2	
n-Butylbenzene	50.0	0.0	51.0	102		49.1	98		4	
1,2-Dichlorobenzene	50.0	0.0	44.1	88		43.3	87		2	
1,2-Dibromo-3-chloropropane	50.0	0.0	47.3	95		47.4	95		0	
1,2,4-Trichlorobenzene	50.0	0.0	53.8	108		53.2	106		1	
Hexachlorobutadiene	50.0	0.0	48.6	97		47.4	95		3	
Naphthalene	50.0	0.0	56.1	112		54.0	108		4	
1,2,3-Trichlorobenzene	50.0	0.0	52.3	105		50.9	102		3	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	51.7	103		45.1	90		14	
Methyl acetate	50.0	0.0	55.1	110		52.9	106		4	
Cyclohexane	50.0	0.0	55.7	111		50.3	101		10	
Methylcyclohexane	50.0	0.0	57.1	114		51.1	102		11	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01062-005
Client ID: SB-106_(9-9.5)
Date Received: 02/11/2015
Date Analyzed: 02/19/2015
MS Data file: L6684.D
MSD Data file: L6685.D

GC/MS Column: DB-624
Sample wt/vol: 0.09g
Matrix-Units: Soil-µg/Kg
% Moisture: 18.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L6676.D Instrument ID: MSD_L

Date Analyzed: 02/19/2015 Time Analyzed: 12:13

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AA-F5_(6.5-7)/	01168-001	02/19/2015	12:40
AA-E5_(6.5-7)/	01168-002	02/19/2015	13:07
SB-106_(9-9.5)	01062-005	02/19/2015	14:01
WC-1/GB-12/12-	01229-001	02/19/2015	14:55
LCS-50PPB	LCSM150219-01	02/19/2015	15:22
MS	01062-005MS	02/19/2015	15:49
MSD	01062-005MSD	02/19/2015	16:16
GPEC-WC1-02181	01273-001	02/19/2015	17:37
ES-WC-92_(4-8)	01167-002	02/19/2015	18:05
ES-WC-92_(0-4)	01167-001	02/19/2015	18:32
SB-1_/8-9	01158-001	02/19/2015	18:59
SB-5	01158-007	02/19/2015	19:25
SB-12	01158-014	02/19/2015	19:52
SB-2_(3-4)/3-4	01158-002	02/19/2015	20:20
SB-4	01158-006	02/19/2015	20:47
SB-10	01158-012	02/19/2015	21:13
SB-11	01158-013	02/19/2015	21:40
STOCKPILE	01177-001	02/19/2015	22:06
WC1/7-7.5	01224-001	02/19/2015	22:33

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6604.D BFB Injection Date: 02/13/2015

Inst ID: MSD_L BFB Injection Time: 10:29

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.8			
75	30.0 - 60.0% of mass 95	48.1			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	99.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	96.5	(	97.4	)1
177	5.0 - 9.0% of mass 176	6.1	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC1	ICC1	L6605.D	02/13/2015	10:56
ICC5	ICC5	L6607.D	02/13/2015	11:53
ICC2	ICC2	L6608.D	02/13/2015	12:21
ICC20	ICC20	L6609.D	02/13/2015	12:48
ICC100	ICC100	L6610.D	02/13/2015	13:15
ICC150	ICC150	L6611.D	02/13/2015	13:42
ICC200	ICC200	L6612.D	02/13/2015	14:09
ICV100	ICV100	L6615.D	02/13/2015	15:30
BLKM150213-01	BLKM150213-01	L6618.D	02/13/2015	16:50
LCS-50PPB	LCSM150213-01	L6619.D	02/13/2015	17:17
MS	01069-001MS	L6620.D	02/13/2015	17:44
MSD	01069-001MSD	L6621.D	02/13/2015	18:12
ES-WC-91_(0-4)	01069-001	L6624.D	02/13/2015	19:32
T-2/5.0-5.5	01089-001	L6625.D	02/13/2015	19:59
SB-6/10.5	01049-007	L6626.D	02/13/2015	20:26
SB-7/7.5	01049-006	L6627.D	02/13/2015	20:52
SB-5/7.5	01049-005	L6628.D	02/13/2015	21:19
ES-WC-91_(4-8)	01069-002	L6629.D	02/13/2015	21:46
WC-1/GB6/12-12	01060-001	L6630.D	02/13/2015	22:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6673.D BFB Injection Date: 02/19/2015

Inst ID: MSD_L BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.4			
75	30.0 - 60.0% of mass 95	48.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.7	(	0.7	)1
174	Great than 50.0% of mass 95	98.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	95.6	(	97.5	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L6674.D	02/19/2015	11:18
BLKM150218-01	BLKM150218-01	L6676.D	02/19/2015	12:13
AA-F5_(6.5-7)/	01168-001	L6677.D	02/19/2015	12:40
AA-E5_(6.5-7)/	01168-002	L6678.D	02/19/2015	13:07
SB-106_(9-9.5)	01062-005	L6680.D	02/19/2015	14:01
WC-1/GB-12/12-	01229-001	L6682.D	02/19/2015	14:55
LCS-50PPB	LCSM150219-01	L6683.D	02/19/2015	15:22
MS	01062-005MS	L6684.D	02/19/2015	15:49
MSD	01062-005MSD	L6685.D	02/19/2015	16:16
GPEC-WC1-02181	01273-001	L6688.D	02/19/2015	17:37
ES-WC-92_(4-8)	01167-002	L6689.D	02/19/2015	18:05
ES-WC-92_(0-4)	01167-001	L6690.D	02/19/2015	18:32
SB-1_/8-9	01158-001	L6691.D	02/19/2015	18:59
SB-5	01158-007	L6692.D	02/19/2015	19:25
SB-12	01158-014	L6693.D	02/19/2015	19:52
SB-2_(3-4)/3-4	01158-002	L6694.D	02/19/2015	20:20
SB-4	01158-006	L6695.D	02/19/2015	20:47
SB-10	01158-012	L6696.D	02/19/2015	21:13
SB-11	01158-013	L6697.D	02/19/2015	21:40
STOCKPILE	01177-001	L6698.D	02/19/2015	22:06

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6673.D BFB Injection Date : 02/19/201

Inst ID: MSD_L BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.4			
75	30.0 - 60.0% of mass 95	48.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.7	(	0.7	)1
174	Great than 50.0% of mass 95	98.1			
175	5.0 - 9.0% of mass 174	7.0	(	7.1	)1
176	95.0 - 101.0% of mass 174	95.6	(	97.5	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
WC1/7-7.5	01224-001	L6699.D	02/19/2015	22:33

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6610.D Date Analyzed: 02/13/2015

Instrument ID: MSD_L Time Analyzed: 13:15

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	334357		6.13		464375		6.95		434421		10.29	
	UPPER LIMIT	668714		6.63		928750		7.45		868842		10.79	
	LOWER LIMIT	167178.5		5.63		232187.5		6.45		217210.5		9.79	
	LAB SAMPLE ID												
01	ICC1	286657		6.13		409962		6.95		361365		10.29	
02	ICC5	304709		6.13		431865		6.95		390295		10.29	
03	ICC2	298969		6.13		429322		6.95		378604		10.29	
04	ICC20	315672		6.13		444551		6.95		400966		10.29	
05	ICC150	335884		6.13		470961		6.95		440697		10.29	
06	ICC200	347689		6.13		492059		6.94		454144		10.29	
07	ICV100	324200		6.13		455058		6.95		426508		10.29	
08	BLKM150213-01	296616		6.13		423991		6.95		386239		10.29	
09	LCSM150213-01	300487		6.13		426483		6.95		386354		10.29	
10	01069-001MS	311799		6.13		436541		6.95		404194		10.29	
11	01069-001MSD	317198		6.13		447453		6.95		416649		10.29	
12	01069-001	323490		6.12		447114		6.94		395768		10.29	
13	01089-001	322349		6.13		456099		6.95		417971		10.29	
14	01049-007	342364		6.12		482740		6.94		435833		10.29	
15	01049-006	353810		6.13		500879		6.94		455250		10.29	
16	01049-005	373112		6.13		521120		6.94		477388		10.29	
17	01069-002	369786		6.13		524497		6.95		472500		10.29	
18	01060-001	370007		6.13		524324		6.95		463729		10.29	
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6674.D Date Analyzed: 02/19/2015

Instrument ID: MSD_L Time Analyzed: 11:18

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	339787		6.13		473189		6.95		445652		10.29	
	UPPER LIMIT	679574		6.63		946378		7.45		891304		10.79	
	LOWER LIMIT	169893.5		5.63		236594.5		6.45		222826		9.79	
	LAB SAMPLE ID												
01	BLKM150218-01	311809		6.13		437922		6.95		394523		10.29	
02	01168-001	306561		6.13		425649		6.95		391762		10.29	
03	01168-002	301105		6.13		425401		6.94		387119		10.29	
04	01062-005	323191		6.12		448172		6.94		409891		10.29	
05	01229-001	314071		6.13		443845		6.95		410339		10.29	
06	LCSM150219-01	358338		6.13		507183		6.95		474079		10.29	
07	01062-005MS	375414		6.13		525180		6.95		480260		10.29	
08	01062-005MSD	381693		6.13		535479		6.95		502867		10.29	
09	01273-001	356850		6.12		504496		6.94		463108		10.29	
10	01167-002	358254		6.13		508494		6.94		464376		10.29	
11	01167-001	364492		6.13		517785		6.95		464328		10.29	
12	01158-001	360853		6.12		510264		6.94		479575		10.29	
13	01158-007	366306		6.12		525283		6.94		482277		10.29	
14	01158-014	365188		6.12		520976		6.94		480893		10.29	
15	01158-002	361914		6.13		524452		6.95		493747		10.29	
16	01158-006	378832		6.13		549501		6.95		517071		10.29	
17	01158-012	385608		6.13		550656		6.94		508637		10.29	
18	01158-013	387841		6.12		556395		6.94		508077		10.29	
19	01177-001	389075		6.13		555987		6.94		510865		10.29	
20	01224-001	389248		6.13		563480		6.95		517666		10.29	
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6688.D
Acq On : 19 Feb 2015 17:37
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 20 09:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.12	168	356850	50.00	UG	-0.01
31) 1,4-Difluorobenzene	6.94	114	504496	50.00	UG	-0.01
50) Chlorobenzene-d5	10.29	117	463108	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	145477	47.58	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.16%			
41) Toluene-d8	8.62	98	439298	49.17	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.34%			
59) Bromofluorobenzene	11.69	95	199682	49.33	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.66%			

Target Compounds	Qvalue

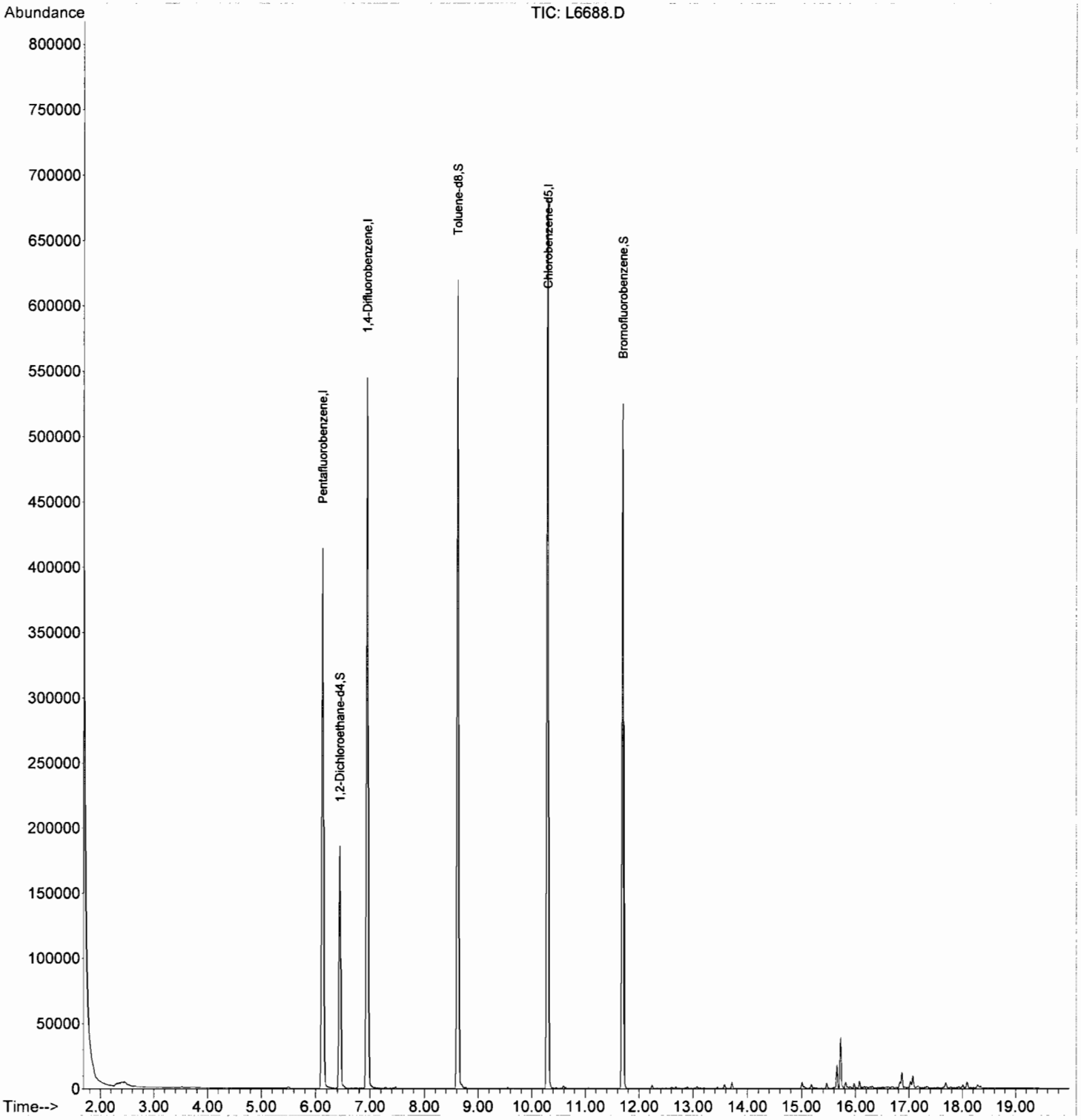
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/20/15

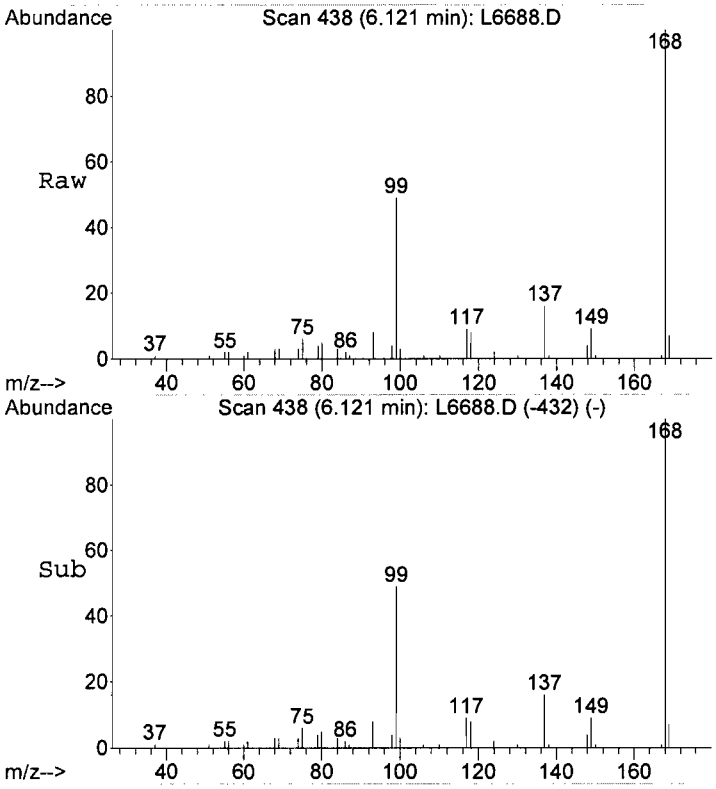
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6688.D
Acq On : 19 Feb 2015 17:37
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 20 09:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



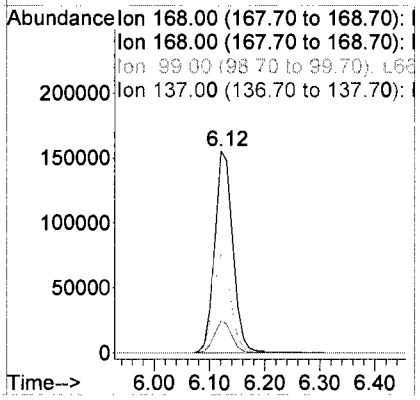
2/20/15

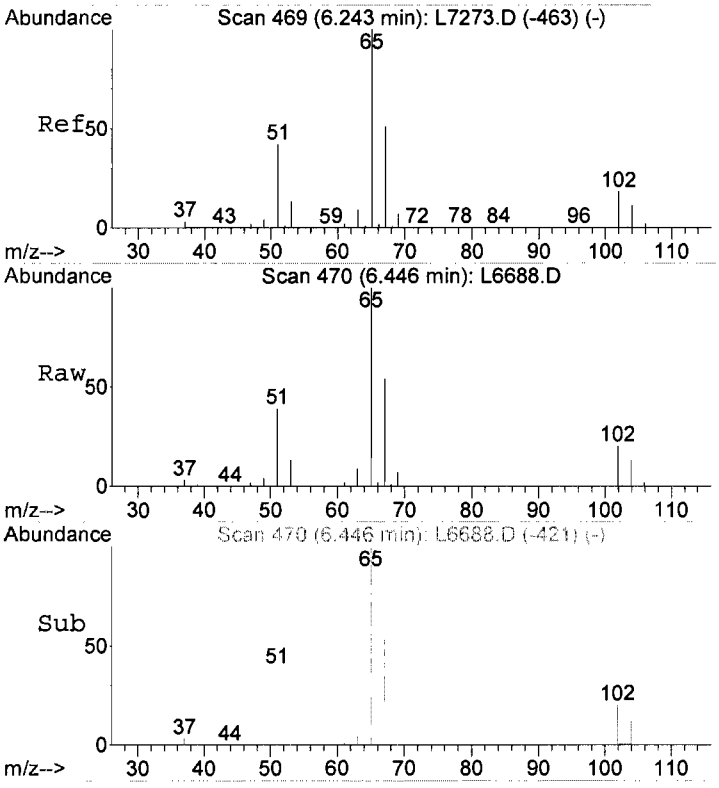


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.12 min Scan# 438
Delta R.T. -0.01 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:168 Resp: 356850

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

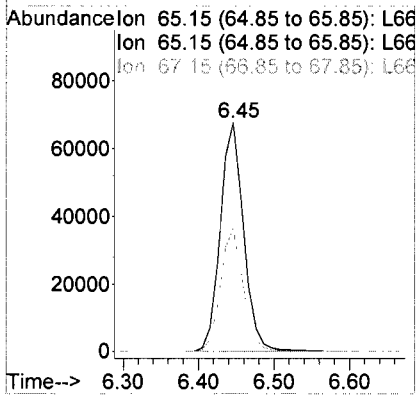


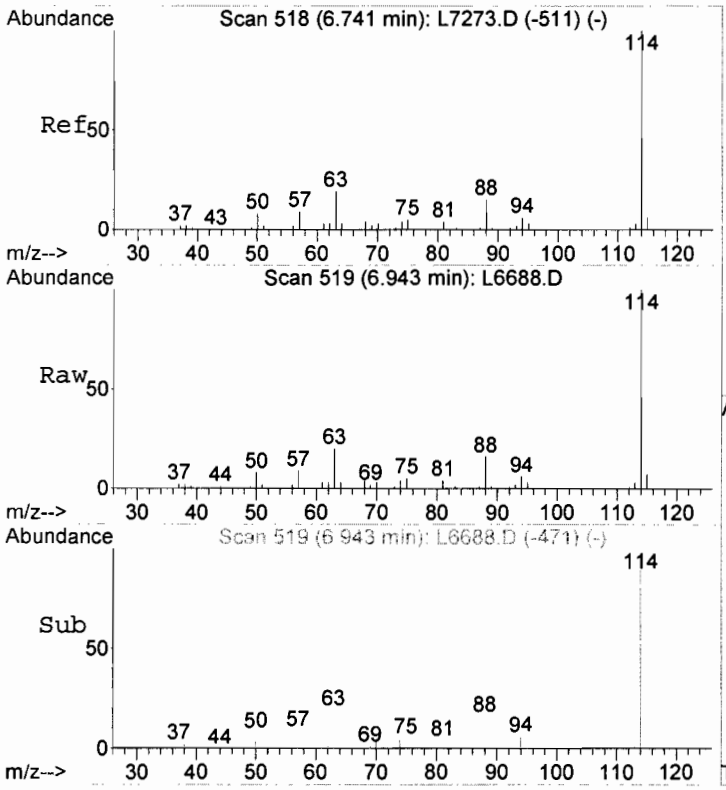


#30
1,2-Dichloroethane-d4
Concen: 47.58 UG
RT: 6.45 min Scan# 470
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 65 Resp: 145477

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	53.0	35.1	65.1

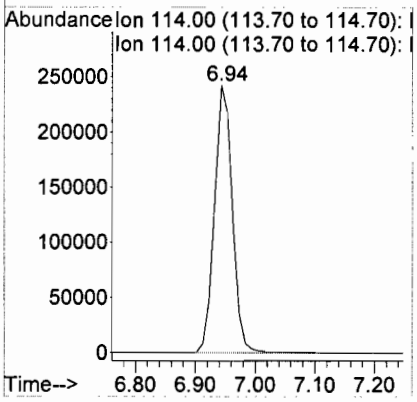


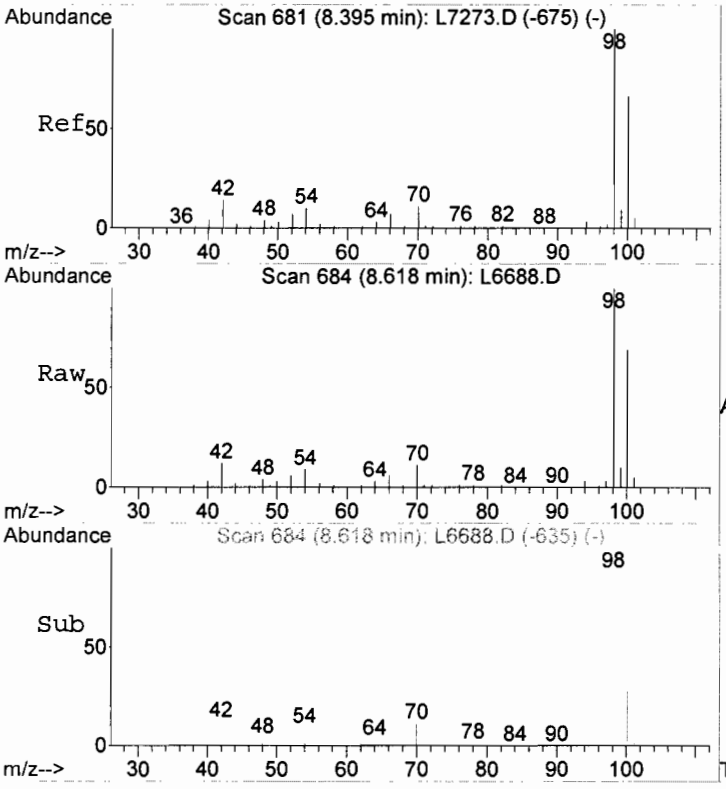


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.94 min Scan# 519
Delta R.T. -0.01 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:114 Resp: 504496

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

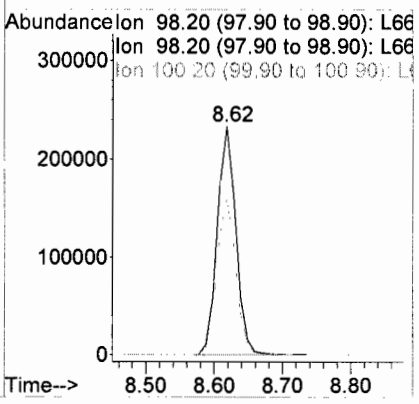


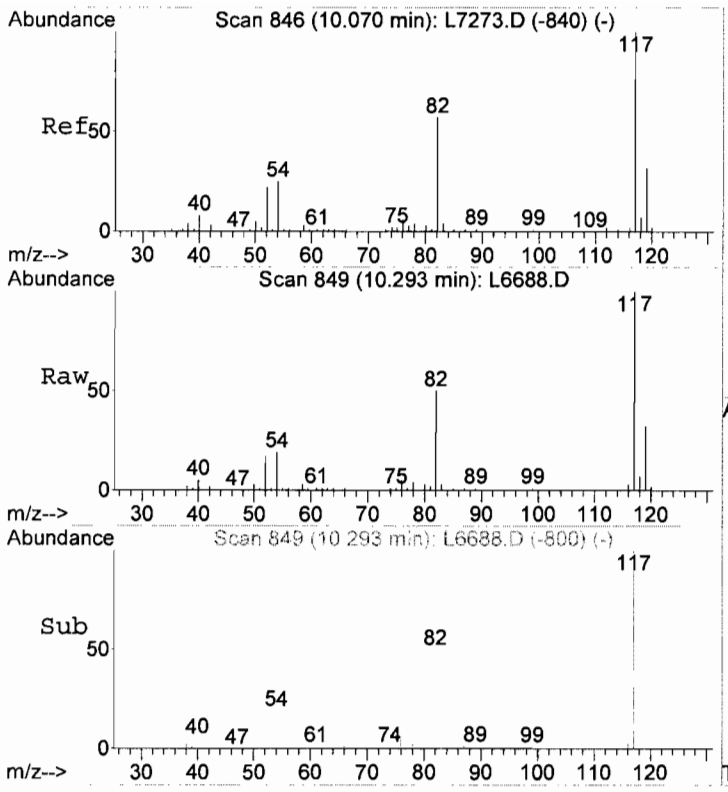


#41
Toluene-d8
Concen: 49.17 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 98 Resp: 439298

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.4	44.8	83.2

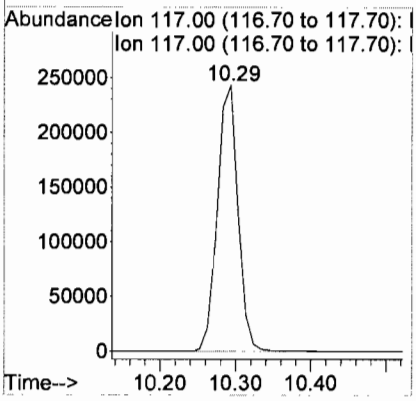


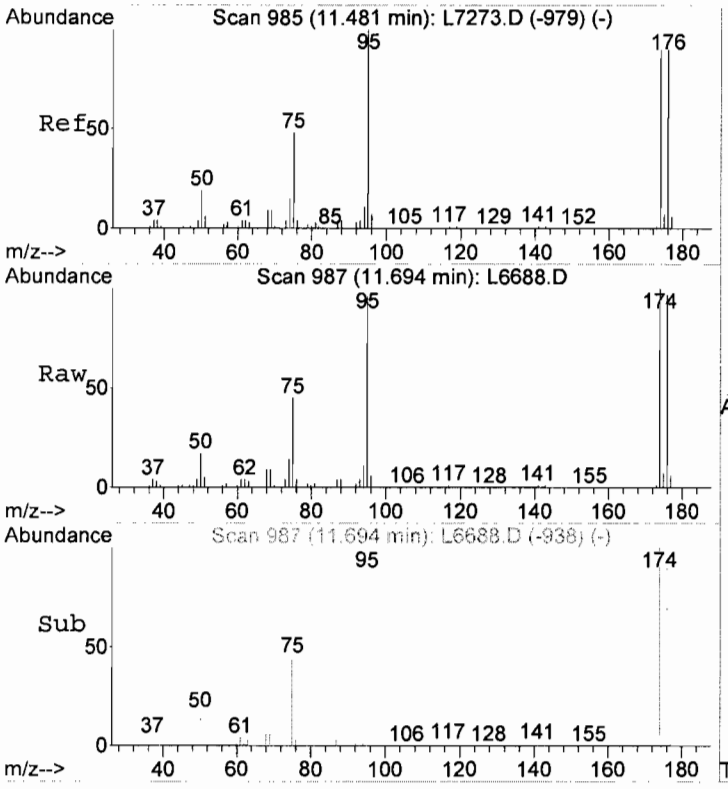


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion:117 Resp: 463108

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

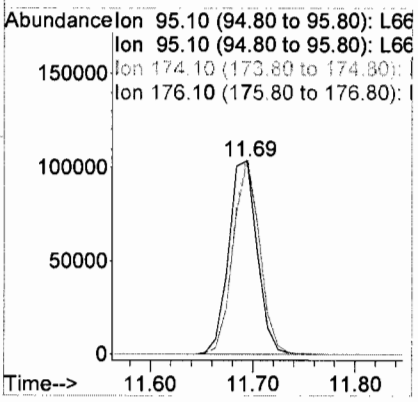




#59
Bromofluorobenzene
Concen: 49.33 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6688.D
Acq: 19 Feb 2015 17:37

Tgt Ion: 95 Resp: 199682

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.8	0.0	0.0#
176	93.2	0.0	0.0#



VOLATILE ORGANICS STANDARDS

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015
Response Via : Initial Calibration

MXF 2/17/15
CT 2/17/15

Calibration Files
1 =L6605.D 2 =L6608.D 5 =L6607.D
20 =L6609.D 100 =L6610.D 150 =L6611.D 200 =L6612.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.168	0.124	0.239	0.213	0.203	0.222	0.219	0.198	19.88
3)	TP	Chloromethane	0.437	0.316	0.348	0.387	0.388	0.407	0.411	0.385	10.59
4)	C	Vinyl chloride	0.297	0.263	0.368	0.328	0.358	0.364	0.343	0.332	11.73
5)	T	Bromomethane	0.225	0.259	0.225	0.213	0.191	0.173	0.157	0.206	16.92
6)	T	Chloroethane	0.229	0.132	0.177	0.170	0.164	0.159	0.152	0.169	17.94
7)	T	Trichlorofluorome	0.384	0.319	0.471	0.393	0.352	0.397	0.298	0.374	15.31
8)	T	Acrolein	0.027	0.024	0.028	0.023	0.022	0.024	0.023	0.024	9.52
9)	MC	1,1-Dichloroethen	0.323	0.218	0.265	0.273	0.292	0.287	0.271	0.275	11.55
10)	T	Acetone		0.083	0.095	0.083	0.075	0.076	0.076	0.081	9.38
11)	T	Carbon disulfide	0.898	0.791	0.743	0.816	0.924	0.923	0.908	0.858	8.55
12)	T	Vinyl acetate	1.373	1.226	1.364	1.154	1.002	0.950	0.923	1.142	16.54
13)	T	Methylene chlorid		0.432	0.420	0.356	0.333	0.334	0.335	0.368	12.41
14)	T	Acrylonitrile	0.124	0.144	0.145	0.111	0.128	0.138	0.131	0.132	9.21
15)	T	tert-Butyl alcoho	0.026	0.033	0.031	0.029	0.028	0.029	0.030	0.029	7.67
16)	T	trans-1,2-Dichlor	0.563	0.456	0.518	0.475	0.471	0.453	0.446	0.483	8.80
17)	T	Methyl tert-butyl	1.550	1.315	1.384	1.291	1.236	1.246	1.278	1.329	8.23
18)	TP	1,1-Dichloroethan	1.063	0.877	0.971	0.861	0.860	0.856	0.866	0.908	8.76
19)	T	Diisopropyl ether	1.817	1.587	1.847	1.666	1.599	1.571	1.573	1.666	7.10
20)	T	cis-1,2-Dichloroe	0.592	0.519	0.578	0.540	0.534	0.527	0.529	0.546	5.11
21)	T	2,2-Dichloropropa	0.506	0.331	0.431	0.422	0.441	0.443	0.427	0.429	12.03
22)	T	2-Butanone (MEK)	0.205	0.161	0.210	0.196	0.186	0.181	0.183	0.189	8.72
23)	T	Bromochloromethan	0.313	0.301	0.303	0.278	0.265	0.264	0.268	0.285	7.31
25)	C	Chloroform	1.125	0.954	0.998	0.898	0.876	0.871	0.878	0.943	9.90
26)	T	1,1,1-Trichloroet	0.681	0.464	0.575	0.568	0.619	0.608	0.608	0.589	11.28
27)	T	Carbon tetrachlor	0.456	0.404	0.420	0.426	0.490	0.481	0.462	0.448	7.24
28)	T	1,1-Dichloroprope	0.556	0.405	0.490	0.492	0.547	0.529	0.512	0.504	10.04
29)	T	1,2-Dichloroethan	0.918	0.775	0.803	0.720	0.688	0.675	0.685	0.752	11.66
30)	S	1,2-Dichloroethan	0.454	0.445	0.440	0.426	0.414	0.412	0.409	0.428	4.20
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.596	1.326	1.484	1.334	1.316	1.274	1.256	1.370	9.06
33)	M	Trichloroethene	0.347	0.283	0.329	0.307	0.348	0.341	0.345	0.329	7.55
34)	C	1,2-Dichloropropa	0.374	0.324	0.358	0.341	0.345	0.335	0.342	0.346	4.67
35)	T	Dibromomethane	0.249	0.214	0.236	0.213	0.211	0.207	0.210	0.220	7.23
36)	T	1,4-Dioxane	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	15.84
37)	T	Bromodichlorometh	0.475	0.413	0.459	0.452	0.476	0.471	0.483	0.461	5.16
38)	T	2-Chloroethyl vin	0.195	0.203	0.195	0.191	0.213	0.207	0.215	0.203	4.67
39)	T	cis-1,3-Dichlorop	0.406	0.396	0.468	0.500	0.545	0.534	0.553	0.486	13.37
40)	T	4-Methyl-2-pentan	0.246	0.223	0.278	0.288	0.306	0.298	0.306	0.278	11.43
41)	S	Toluene-d8	0.857	0.866	0.886	0.882	0.906	0.899	0.902	0.885	2.12
42)	MC	Toluene	0.914	0.719	0.796	0.731	0.763	0.733	0.726	0.769	9.06
43)	T	trans-1,3-Dichlor	0.361	0.329	0.409	0.441	0.496	0.490	0.499	0.432	15.82
44)	T	1,1,2-Trichloroet	0.279	0.232	0.271	0.245	0.249	0.243	0.247	0.252	6.55
45)	T	Tetrachloroethene	0.303	0.218	0.258	0.243	0.270	0.256	0.252	0.257	10.06
46)	T	1,3-Dichloropropa	0.499	0.456	0.524	0.487	0.496	0.483	0.490	0.491	4.18
47)	T	2-Hexanone	0.121	0.138	0.149	0.176	0.196	0.194	0.200	0.168	19.00
48)	T	Dibromochlorometh	0.293	0.266	0.318	0.326	0.368	0.362	0.370	0.329	12.22
49)	T	1,2-Dibromoethane	0.303	0.266	0.317	0.304	0.317	0.310	0.317	0.305	5.97
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.192	1.005	1.069	0.931	0.917	0.896	0.916	0.989	10.96
52)	T	1,1,1,2-Tetrachlo	0.374	0.330	0.371	0.365	0.376	0.374	0.379	0.367	4.57

53)	C	Ethylbenzene	1.319	1.061	1.291	1.239	1.303	1.258	1.271	1.249	6.97
54)	T	m,p-Xylene	0.509	0.423	0.526	0.499	0.502	0.476	0.471	0.486	6.92
55)	T	o-Xylene	0.447	0.410	0.514	0.519	0.518	0.490	0.487	0.483	8.53
56)	T	Styrene	0.806	0.785	0.969	0.978	0.972	0.915	0.913	0.905	8.83
57)	TP	Bromoform	0.408	0.303	0.283	0.232	0.263	0.267	0.278	0.291	19.31
58)	T	Isopropylbenzene	0.887	0.685	0.921	0.966	1.054	1.015	1.034	0.937	13.51
59)	S	Bromofluorobenzen	0.432	0.436	0.439	0.427	0.439	0.446	0.439	0.437	1.36
60)	TP	1,1,2,2-Tetrachlo	0.567	0.441	0.472	0.417	0.376	0.363	0.361	0.428	17.33
61)	T	Bromobenzene	0.507	0.412	0.459	0.419	0.421	0.410	0.415	0.435	8.25
62)	T	1,2,3-Trichloropr	0.431	0.385	0.404	0.363	0.352	0.342	0.348	0.375	8.79
63)	T	n-Propylbenzene	1.174	0.894	1.078	1.071	1.124	1.100	1.107	1.078	8.17
64)	T	2-Chlorotoluene	0.917	0.731	0.864	0.794	0.798	0.779	0.798	0.812	7.47
65)	T	1,3,5-Trimethylbe	0.898	0.731	0.879	0.872	0.886	0.872	0.875	0.859	6.65
66)	T	4-Chlorotoluene	1.187	0.926	1.062	0.964	0.956	0.931	0.943	0.996	9.64
67)	T	tert-Butylbenzene	0.765	0.499	0.611	0.627	0.671	0.682	0.685	0.649	12.73
68)	T	1,2,4-Trimethylbe	1.177	0.809	0.971	0.929	0.926	0.922	0.935	0.953	11.65
69)	T	sec-Butylbenzene	1.065	0.731	0.847	0.870	0.918	0.909	0.920	0.894	11.19
70)	T	1,3-Dichlorobenze	0.869	0.659	0.687	0.638	0.613	0.609	0.629	0.672	13.54
71)	T	4-Isopropyltoluen	0.938	0.693	0.806	0.806	0.830	0.831	0.841	0.821	8.77
72)	T	1,4-Dichlorobenze	0.905	0.713	0.747	0.668	0.644	0.637	0.645	0.709	13.55
73)	T	n-Butylbenzene	0.409	0.307	0.324	0.357	0.375	0.379	0.378	0.361	9.75
74)	T	1,2-Dichlorobenze	0.858	0.684	0.734	0.667	0.618	0.614	0.614	0.684	12.96
75)	T	1,2-Dibromo-3-chl		0.042	0.056	0.059	0.065	0.068	0.069	0.060	17.10
76)	T	1,2,4-Trichlorobe	0.285	0.306	0.351	0.331	0.360	0.383	0.398	0.345	11.77
77)	T	Hexachlorobutadie		0.164	0.146	0.168	0.169	0.170	0.171	0.165	5.62
78)	T	Naphthalene	0.583	0.673	0.784	0.947	0.945	0.992	1.009	0.847	19.90
79)	T	1,2,3-Trichlorobe	0.295	0.309	0.317	0.325	0.340	0.359	0.377	0.332	8.65
80)	T	1,1,2-Trichloro-1	0.148	0.092	0.165	0.146	0.142	0.134	0.147	0.139	16.44
81)	T	Methyl acetate	0.187	0.235	0.234	0.204	0.189	0.190	0.193	0.204	10.33
82)	T	Cyclohexane	0.325	0.156	0.258	0.268	0.265	0.261	0.261	0.256	19.57
83)	T	Methylcyclohexane	0.183	0.175	0.152	0.158	0.175	0.162	0.138	0.163	9.63

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM021315.M Tue Feb 17 14:02:32 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	286657	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	409962	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	361365	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	130193	47.48	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.96%				
41) Toluene-d8	8.62	98	351417	45.22	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 90.44%				
59) Bromofluorobenzene	11.69	95	156247	47.84	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.68%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	965m	0.46	UG		
3) Chloromethane	1.93	50	2505	0.74	UG		96
4) Vinyl chloride	2.06	62	1701	0.59	UG		99
5) Bromomethane	2.42	94	1292m	0.92	UG		
6) Chloroethane	2.54	64	1315	0.90	UG	#	86
7) Trichlorofluoromethane	2.84	101	2201	0.75	UG		97
8) Acrolein	3.33	56	3085	8.81	UG	#	65
9) 1,1-Dichloroethene	3.45	96	1850	0.85	UG		96
11) Carbon disulfide	3.71	76	5151	0.72	UG		100
12) Vinyl acetate	4.96	43	7869	0.81	UG	#	99
14) Acrylonitrile	4.32	53	14269	14.12	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	297m	1.27	UG		
16) trans-1,2-Dichloroethene	4.36	96	3228	1.00	UG		97
17) Methyl tert-butyl ether (M	4.38	73	8886	1.01	UG		100
18) 1,1-Dichloroethane	4.86	63	6096	1.01	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	10416	0.93	UG		99
20) cis-1,2-Dichloroethene	5.53	96	3396	0.96	UG		98
21) 2,2-Dichloropropane	5.53	77	2901	0.95	UG		92
22) 2-Butanone (MEK)	5.55	43	1176	1.11	UG	#	89
23) Bromochloromethane	5.80	128	1796	1.07	UG		99
25) Chloroform	5.89	83	6452	1.11	UG		99
26) 1,1,1-Trichloroethane	6.10	97	3906	0.98	UG	#	80
27) Carbon tetrachloride	6.29	117	2612	0.84	UG		99
28) 1,1-Dichloropropene	6.29	75	3187	0.86	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	5262	1.16	UG		99
32) Benzene	6.53	78	13086	1.07	UG		100
33) Trichloroethene	7.25	95	2848	1.00	UG		92
34) 1,2-Dichloropropane	7.49	63	3066	0.99	UG	#	100
35) Dibromomethane	7.61	93	2039	1.10	UG		92
36) 1,4-Dioxane	7.64	88	3071	121.30	UG		98
37) Bromodichloromethane	7.80	83	3891	1.02	UG	#	97
38) 2-Chloroethyl vinyl ether	8.14	63	1597	0.96	UG	#	91
39) cis-1,3-Dichloropropene	8.30	75	3330	0.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.48	43	2021	0.81	UG		95
42) Toluene	8.70	92	7498	1.12	UG		98
43) trans-1,3-Dichloropropene	8.93	75	2964	0.81	UG	#	97
44) 1,1,2-Trichloroethane	9.15	83	2285	1.09	UG		98
45) Tetrachloroethene	9.33	166	2485	1.09	UG		100
46) 1,3-Dichloropropane	9.34	76	4094	0.99	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

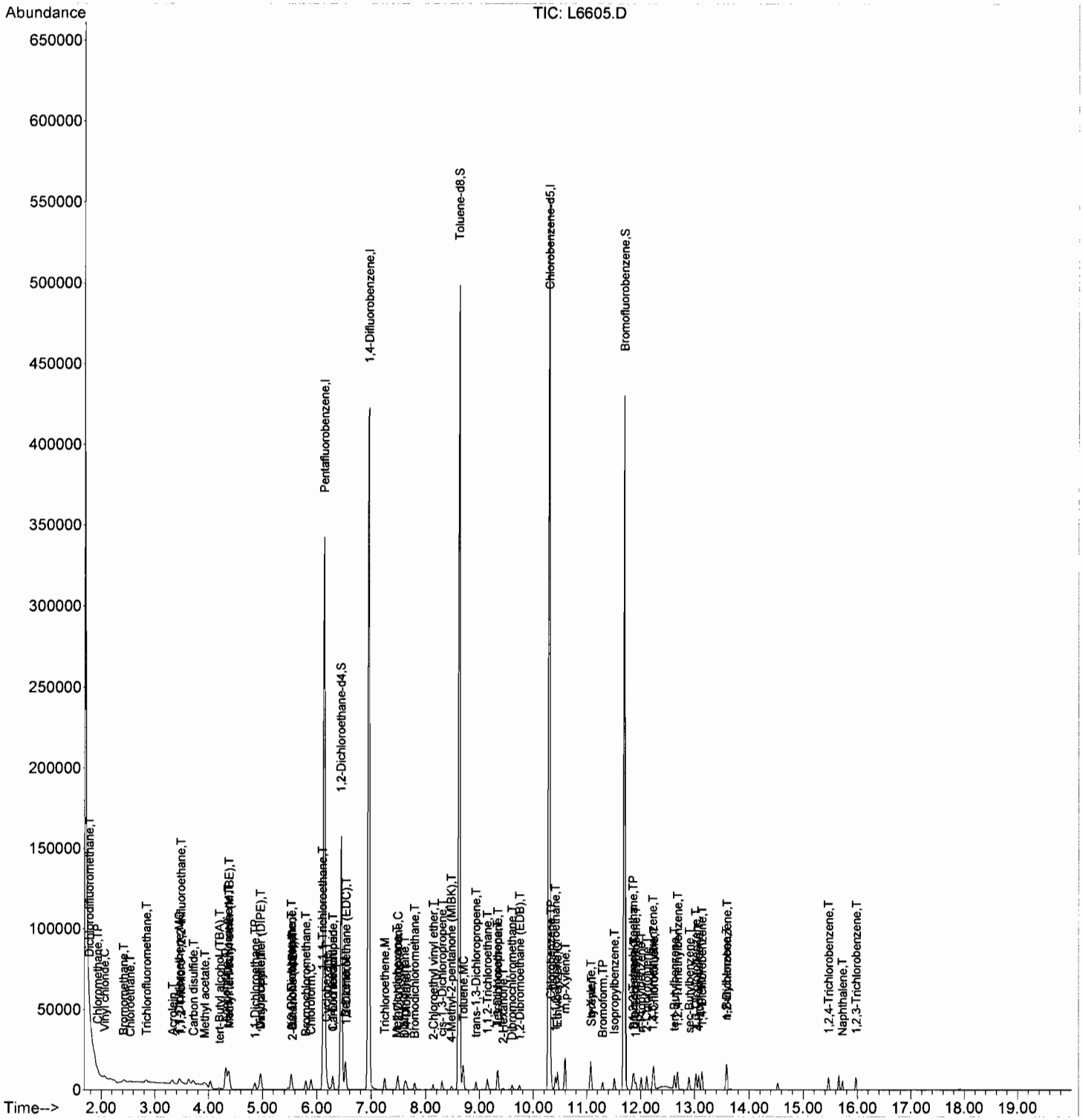
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.44	43	989	0.82	UG	#	88
48) Dibromochloromethane	9.60	129	2403	0.94	UG		97
49) 1,2-Dibromoethane (EDB)	9.75	107	2481	1.00	UG		98
51) Chlorobenzene	10.32	112	8615	1.19	UG		100
52) 1,1,1,2-Tetrachloroethane	10.42	131	2703	1.01	UG		97
53) Ethylbenzene	10.46	91	9531	0.93	UG		100
54) m,p-Xylene	10.60	106	7354	1.85	UG		94
55) o-Xylene	11.07	106	3231	0.80	UG		99
56) Styrene	11.09	104	5826	0.80	UG		98
57) Bromoform	11.30	173	2950	1.63	UG		99
58) Isopropylbenzene	11.51	105	6412	0.78	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	4100	1.25	UG	#	98
61) Bromobenzene	11.88	156	3661	1.16	UG		100
62) 1,2,3-Trichloropropane	11.91	75	3114	1.09	UG		98
63) n-Propylbenzene	12.01	91	8484	0.94	UG		100
64) 2-Chlorotoluene	12.11	91	6627	1.00	UG		100
65) 1,3,5-Trimethylbenzene	12.22	105	6488	0.94	UG		99
66) 4-Chlorotoluene	12.24	91	8576	1.11	UG		100
67) tert-Butylbenzene	12.63	119	5531	1.05	UG		100
68) 1,2,4-Trimethylbenzene	12.69	105	8507	1.15	UG		100
69) sec-Butylbenzene	12.90	105	7696	1.02	UG		99
70) 1,3-Dichlorobenzene	13.02	146	6279	1.26	UG		100
71) 4-Isopropyltoluene	13.07	119	6781	1.01	UG		99
72) 1,4-Dichlorobenzene	13.14	146	6544	1.26	UG		99
73) n-Butylbenzene	13.58	92	2956	0.95	UG		97
74) 1,2-Dichlorobenzene	13.59	146	6199	1.23	UG		99
76) 1,2,4-Trichlorobenzene	15.47	180	2057m	0.72	UG		
78) Naphthalene	15.72	128	4215m	0.62	UG		
79) 1,2,3-Trichlorobenzene	15.98	180	2135m	0.82	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1068m	0.78	UG		
81) Methyl acetate	3.93	43	1350m	0.74	UG		
82) Cyclohexane	6.17	56	2351m	0.92	UG		
83) Methylcyclohexane	7.47	55	1326	0.77	UG		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	304709	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	431865	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	390295	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134041	47.30	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.60%				
41) Toluene-d8	8.62	98	382579	47.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 95.90%				
59) Bromofluorobenzene	11.69	95	171478	49.40	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	7279m	4.25	UG		
3) Chloromethane	1.93	50	10597	3.53	UG		100
4) Vinyl chloride	2.06	62	11205m	4.69	UG		
5) Bromomethane	2.42	94	6870	4.34	UG		95
6) Chloroethane	2.55	64	5395	3.88	UG		98
7) Trichlorofluoromethane	2.83	101	14342m	5.42	UG		
8) Acrolein	3.32	56	17065	56.05	UG		100
9) 1,1-Dichloroethene	3.45	96	8067	3.78	UG		98
10) Acetone	3.51	43	2891m	3.47	UG		
11) Carbon disulfide	3.70	76	22627	3.50	UG		100
12) Vinyl acetate	4.96	43	41571	4.51	UG	#	99
13) Methylene chloride	4.03	84	12794	4.66	UG		100
14) Acrylonitrile	4.32	53	88651	88.83	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	1860m	6.38	UG		
16) trans-1,2-Dichloroethene	4.36	96	15791	4.97	UG		91
17) Methyl tert-butyl ether (M	4.38	73	42173	4.74	UG		100
18) 1,1-Dichloroethane	4.85	63	29585	4.90	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	56284	5.00	UG		99
20) cis-1,2-Dichloroethene	5.53	96	17597	4.97	UG		98
21) 2,2-Dichloropropane	5.53	77	13118	4.46	UG	#	84
22) 2-Butanone (MEK)	5.55	43	6407	5.64	UG		98
23) Bromochloromethane	5.80	128	9242	5.29	UG		100
25) Chloroform	5.89	83	30413	5.07	UG		100
26) 1,1,1-Trichloroethane	6.11	97	17535	4.54	UG	#	80
27) Carbon tetrachloride	6.29	117	12811m	4.40	UG		
28) 1,1-Dichloropropene	6.29	75	14930	4.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	24467	5.17	UG		100
32) Benzene	6.53	78	64099	5.21	UG		100
33) Trichloroethene	7.25	95	14208	5.01	UG		95
34) 1,2-Dichloropropane	7.49	63	15474	4.95	UG		100
35) Dibromomethane	7.62	93	10182	5.32	UG		93
36) 1,4-Dioxane	7.64	88	28203	1115.25	UG		99
37) Bromodichloromethane	7.80	83	19841	5.00	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	8426	4.71	UG		99
39) cis-1,3-Dichloropropene	8.30	75	20204	4.75	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	11993	4.75	UG		99
42) Toluene	8.70	92	34397	5.09	UG		98
43) trans-1,3-Dichloropropene	8.93	75	17670	4.72	UG		99
44) 1,1,2-Trichloroethane	9.15	83	11697	5.42	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

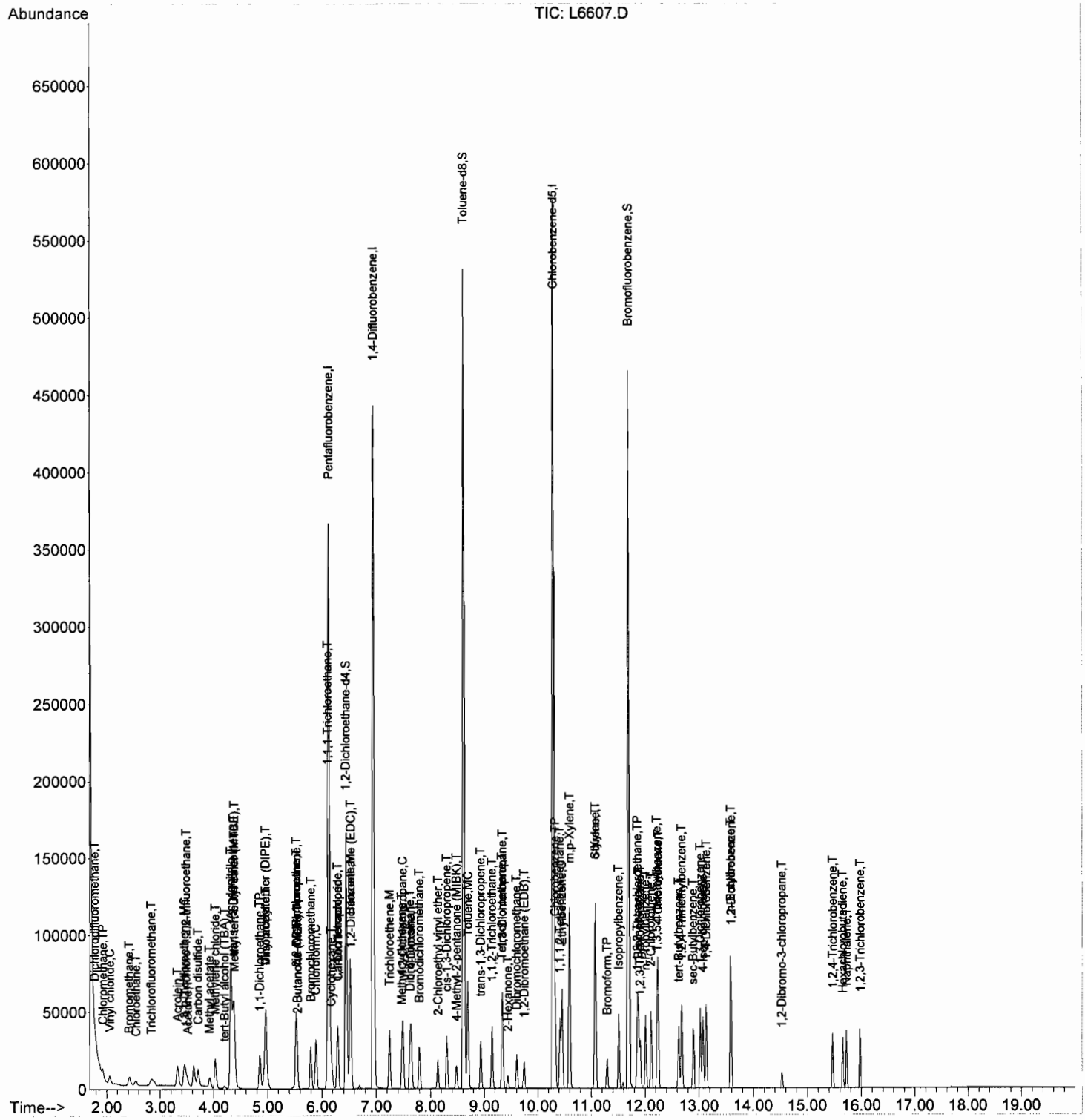
Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	11135	4.95 UG	98
46) 1,3-Dichloropropane	9.34	76	22634	5.36 UG	100
47) 2-Hexanone	9.44	43	6432	5.13 UG	98
48) Dibromochloromethane	9.60	129	13736	5.02 UG	99
49) 1,2-Dibromoethane (EDB)	9.75	107	13704	5.29 UG	99
51) Chlorobenzene	10.32	112	41728	5.37 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	14472	5.03 UG	99
53) Ethylbenzene	10.46	91	50374	4.91 UG	99
54) m,p-Xylene	10.60	106	41025	10.24 UG	96
55) o-Xylene	11.07	106	20059	4.97 UG	96
56) Styrene	11.07	104	37839	5.14 UG	98
57) Bromoform	11.30	173	11042	5.08 UG	99
58) Isopropylbenzene	11.51	105	35950	4.50 UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	18409	5.24 UG	99
61) Bromobenzene	11.88	156	17923	5.31 UG	99
62) 1,2,3-Trichloropropane	11.91	75	15766	5.22 UG	98
63) n-Propylbenzene	12.01	91	42062	4.66 UG	100
64) 2-Chlorotoluene	12.11	91	33726	5.00 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	34294	4.84 UG	99
66) 4-Chlorotoluene	12.24	91	41464	5.10 UG	99
67) tert-Butylbenzene	12.63	119	23855	4.38 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	37915	4.81 UG	99
69) sec-Butylbenzene	12.89	105	33061	4.35 UG	99
70) 1,3-Dichlorobenzene	13.02	146	26820	4.98 UG	100
71) 4-Isopropyltoluene	13.07	119	31463	4.61 UG	100
72) 1,4-Dichlorobenzene	13.14	146	29159	5.21 UG	100
73) n-Butylbenzene	13.58	92	12665	4.06 UG	96
74) 1,2-Dichlorobenzene	13.59	146	28663	5.27 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	2171m	3.08 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	13712	4.45 UG	100
77) Hexachlorobutadiene	15.65	225	5715m	3.58 UG	
78) Naphthalene	15.72	128	30590	4.35 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	12389m	4.30 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	6449m	5.34 UG	
81) Methyl acetate	3.92	43	9123	4.64 UG	98
82) Cyclohexane	6.17	56	10061m	4.33 UG	
83) Methylcyclohexane	7.47	55	5920m	3.79 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	298969	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	429322	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	378604	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	132953	48.68	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.36%				
41) Toluene-d8	8.62	98	371625	47.34	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 94.68%				
59) Bromofluorobenzene	11.69	95	165072	49.37	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.74%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	1480m	1.03	UG		
3) Chloromethane	1.93	50	3782	1.42	UG		98
4) Vinyl chloride	2.05	62	3150m	1.50	UG		
5) Bromomethane	2.42	94	3092	2.03	UG		87
6) Chloroethane	2.54	64	1573	1.26	UG	#	86
7) Trichlorofluoromethane	2.83	101	3811m	1.67	UG		
8) Acrolein	3.33	56	7161m	27.08	UG		
9) 1,1-Dichloroethene	3.45	96	2607	1.34	UG		91
10) Acetone	3.52	43	998m	1.21	UG		
11) Carbon disulfide	3.70	76	9465m	1.61	UG		
12) Vinyl acetate	4.96	43	14667	1.72	UG	#	99
13) Methylene chloride	4.03	84	5161	2.03	UG		98
14) Acrylonitrile	4.32	53	43144	46.09	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	794m	2.72	UG		
16) trans-1,2-Dichloroethene	4.36	96	5455	1.79	UG		92
17) Methyl tert-butyl ether (M	4.39	73	15726	1.85	UG		100
18) 1,1-Dichloroethane	4.85	63	10492	1.81	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	18977	1.75	UG		99
20) cis-1,2-Dichloroethene	5.52	96	6211	1.83	UG		97
21) 2,2-Dichloropropane	5.53	77	3958	1.43	UG	#	49
22) 2-Butanone (MEK)	5.55	43	1931	1.71	UG	#	89
23) Bromochloromethane	5.80	128	3600	2.11	UG		96
25) Chloroform	5.89	83	11404	1.97	UG		100
26) 1,1,1-Trichloroethane	6.11	97	5543	1.52	UG	#	80
27) Carbon tetrachloride	6.29	117	4827m	1.78	UG		
28) 1,1-Dichloropropene	6.29	75	4843	1.51	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	9263	2.01	UG		100
32) Benzene	6.53	78	22775	1.88	UG		99
33) Trichloroethene	7.25	95	4861	1.74	UG		91
34) 1,2-Dichloropropane	7.49	63	5570	1.82	UG	#	100
35) Dibromomethane	7.62	93	3667	1.92	UG		94
36) 1,4-Dioxane	7.65	88	12759	504.88	UG		100
37) Bromodichloromethane	7.80	83	7087	1.80	UG	#	68
38) 2-Chloroethyl vinyl ether	8.14	63	3480	1.96	UG		98
39) cis-1,3-Dichloropropene	8.30	75	6796	1.62	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	3831	1.55	UG		97
42) Toluene	8.70	92	12346	1.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	5651	1.52	UG		100
44) 1,1,2-Trichloroethane	9.15	83	3978	1.85	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

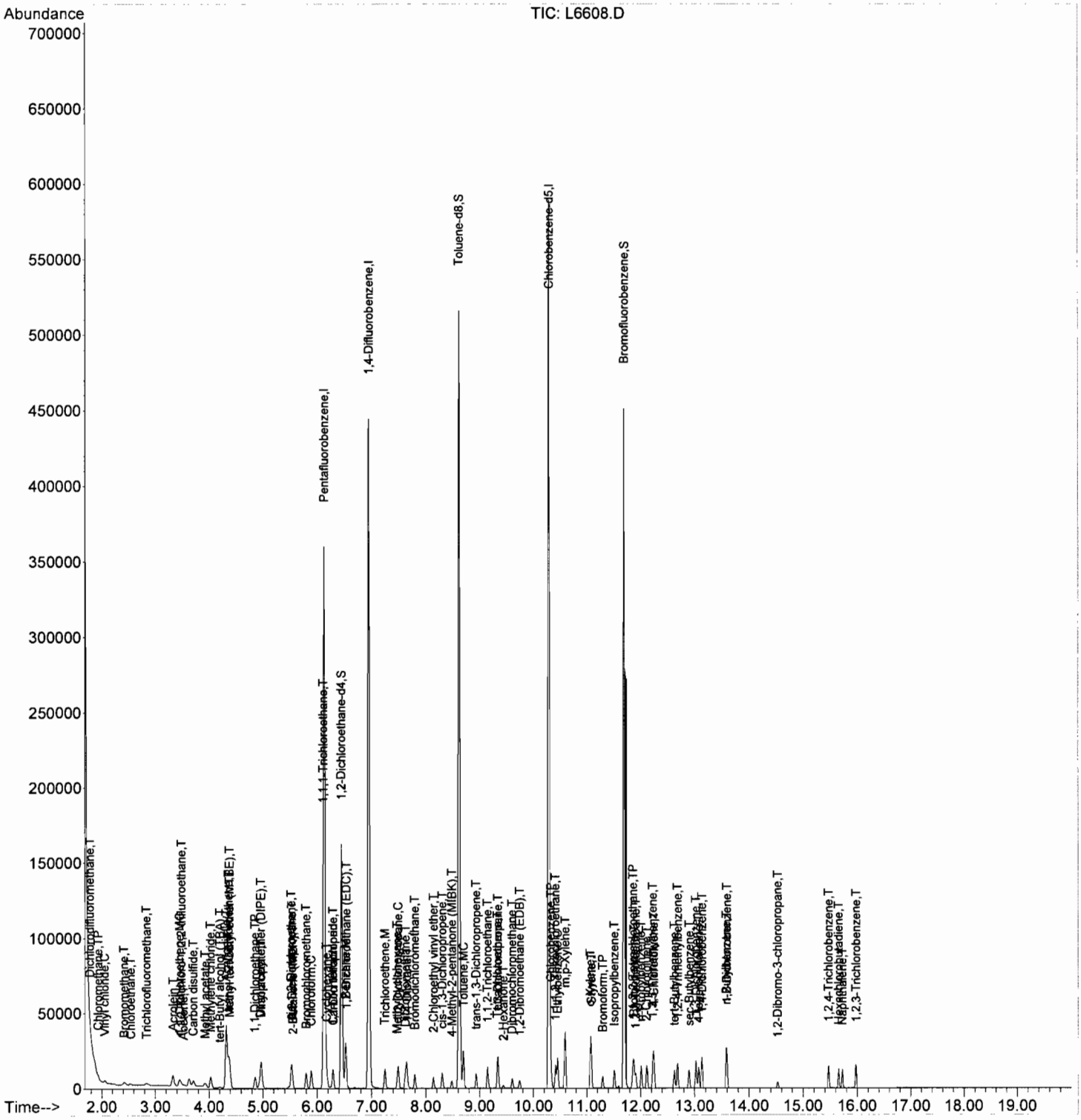
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	3747	1.70 UG	97
46) 1,3-Dichloropropane	9.34	76	7826	1.86 UG	100
47) 2-Hexanone	9.44	43	2371m	1.86 UG	
48) Dibromochloromethane	9.60	129	4571	1.66 UG	98
49) 1,2-Dibromoethane (EDB)	9.75	107	4565	1.76 UG	96
51) Chlorobenzene	10.32	112	15224	2.02 UG	99
52) 1,1,1,2-Tetrachloroethane	10.42	131	5002	1.80 UG	98
53) Ethylbenzene	10.46	91	16070	1.65 UG	99
54) m,p-Xylene	10.60	106	12806	3.36 UG	98
55) o-Xylene	11.06	106	6203	1.62 UG	95
56) Styrene	11.09	104	11886	1.69 UG	97
57) Bromoform	11.30	173	4587	2.11 UG	100
58) Isopropylbenzene	11.51	105	10374	1.39 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	6680	1.97 UG	100
61) Bromobenzene	11.88	156	6234	1.90 UG	99
62) 1,2,3-Trichloropropane	11.91	75	5833	2.01 UG	99
63) n-Propylbenzene	12.01	91	13538	1.60 UG	100
64) 2-Chlorotoluene	12.11	91	11075	1.73 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	11071	1.65 UG	100
66) 4-Chlorotoluene	12.24	91	14031	1.80 UG	99
67) tert-Butylbenzene	12.63	119	7554	1.48 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	12246	1.64 UG	99
69) sec-Butylbenzene	12.90	105	11065	1.57 UG	100
70) 1,3-Dichlorobenzene	13.02	146	9987	1.94 UG	100
71) 4-Isopropyltoluene	13.07	119	10499	1.64 UG	99
72) 1,4-Dichlorobenzene	13.14	146	10805	2.01 UG	99
73) n-Butylbenzene	13.58	92	4642	1.62 UG	96
74) 1,2-Dichlorobenzene	13.59	146	10366	1.99 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	633m	0.92 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	4633m	1.58 UG	
77) Hexachlorobutadiene	15.65	225	2480m	1.61 UG	
78) Naphthalene	15.72	128	10185	1.54 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	4673m	1.67 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1389m	1.29 UG	
81) Methyl acetate	3.93	43	3555	1.93 UG	98
82) Cyclohexane	6.17	56	2362m	1.17 UG	
83) Methylcyclohexane	7.47	55	2656m	2.00 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	315672	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	444551	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	400966	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134467	46.70	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.40%				
41) Toluene-d8	8.62	98	392017	48.23	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.46%				
59) Bromofluorobenzene	11.69	95	171258	48.23	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	26845m	18.12	UG		
3) Chloromethane	1.93	50	48903	17.53	UG		100
4) Vinyl chloride	2.06	62	41440	18.88	UG		100
5) Bromomethane	2.43	94	26908	16.65	UG		97
6) Chloroethane	2.54	64	21465	16.56	UG		100
7) Trichlorofluoromethane	2.83	101	49675m	20.82	UG		
8) Acrolein	3.33	56	28455	102.56	UG		100
9) 1,1-Dichloroethene	3.45	96	34458	16.94	UG		94
10) Acetone	3.52	43	10477	12.35	UG		100
11) Carbon disulfide	3.70	76	102974	16.66	UG		100
12) Vinyl acetate	4.96	43	145748	15.99	UG	#	99
13) Methylene chloride	4.03	84	44924	16.50	UG		100
14) Acrylonitrile	4.32	53	140306	140.34	UG		100
15) tert-Butyl alcohol (TBA)	4.21	59	7230	24.08	UG		99
16) trans-1,2-Dichloroethene	4.36	96	60027	18.57	UG		90
17) Methyl tert-butyl ether (M	4.39	73	163000	17.98	UG		100
18) 1,1-Dichloroethane	4.86	63	108728	17.71	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	210308	18.20	UG		100
20) cis-1,2-Dichloroethene	5.53	96	68143	18.82	UG		98
21) 2,2-Dichloropropane	5.53	77	53247	18.24	UG		87
22) 2-Butanone (MEK)	5.55	43	24758	21.18	UG		98
23) Bromochloromethane	5.80	128	35072	19.07	UG		99
25) Chloroform	5.89	83	113343	18.30	UG		100
26) 1,1,1-Trichloroethane	6.11	97	71744	18.61	UG		95
27) Carbon tetrachloride	6.29	117	53834	18.85	UG		100
28) 1,1-Dichloropropene	6.29	75	62146	18.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	90868	18.46	UG		100
32) Benzene	6.53	78	237299	18.83	UG		100
33) Trichloroethene	7.25	95	54620	18.78	UG		94
34) 1,2-Dichloropropane	7.49	63	60716	19.05	UG	#	100
35) Dibromomethane	7.62	93	37886	19.06	UG		93
36) 1,4-Dioxane	7.64	88	51893	1964.11	UG		98
37) Bromodichloromethane	7.80	83	80405	19.48	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	33979	18.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	88824	20.22	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	51207	19.98	UG		100
42) Toluene	8.70	92	129930	18.67	UG		98
43) trans-1,3-Dichloropropene	8.93	75	78392	20.27	UG		99
44) 1,1,2-Trichloroethane	9.15	83	43644	19.39	UG		99

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

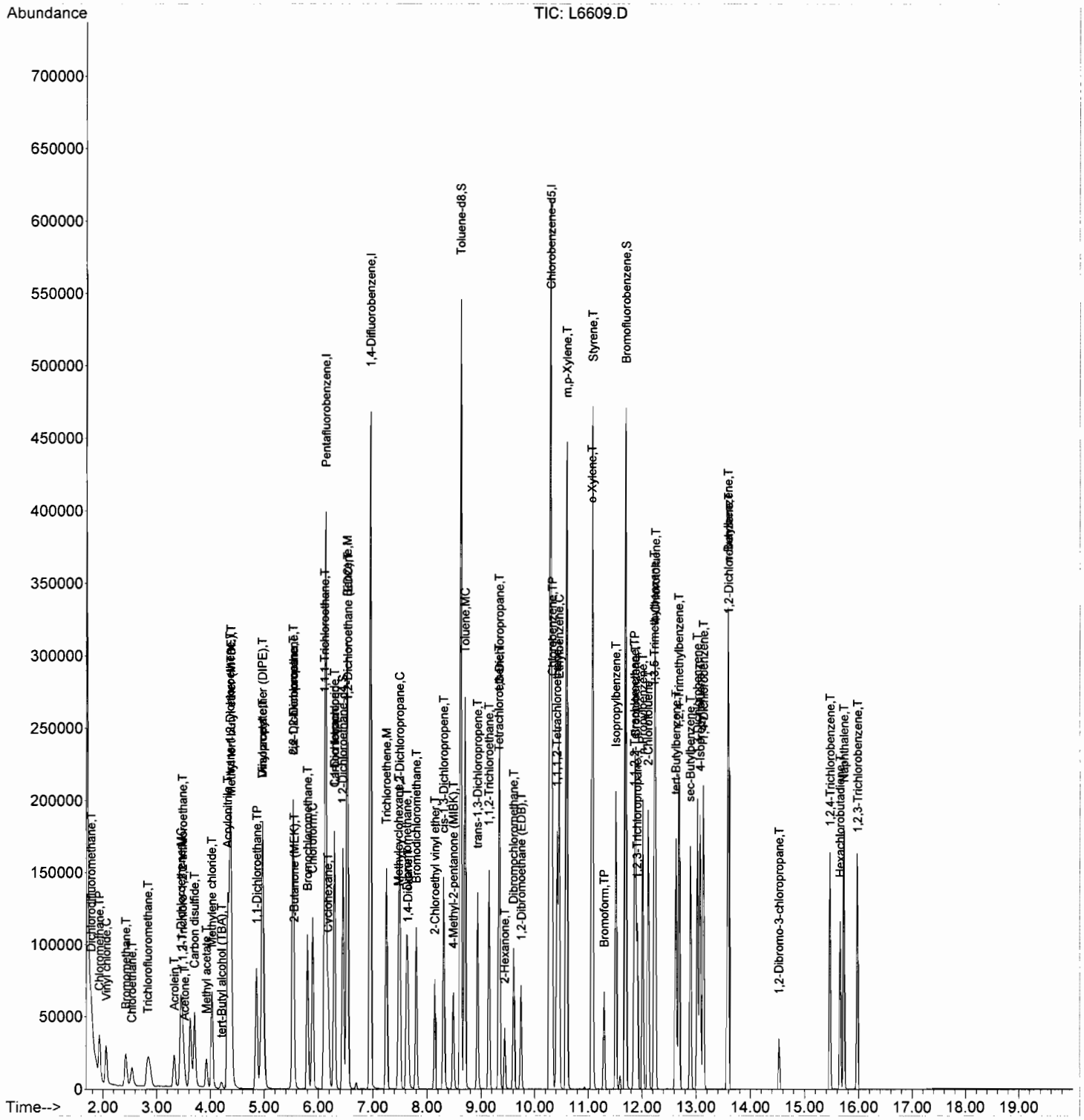
Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	43208	18.97	UG	99
46) 1,3-Dichloropropane	9.34	76	86541	19.66	UG	100
47) 2-Hexanone	9.44	43	31281	24.01	UG	100
48) Dibromochloromethane	9.60	129	57934	20.18	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	54040	20.15	UG	100
51) Chlorobenzene	10.32	112	149360	18.50	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	58497	19.73	UG	99
53) Ethylbenzene	10.46	91	198727	19.19	UG	99
54) m,p-Xylene	10.60	106	159960	39.48	UG	95
55) o-Xylene	11.06	106	83253	20.49	UG	95
56) Styrene	11.08	104	156885	20.81	UG	98
57) Bromoform	11.30	173	37262	16.11	UG	99
58) Isopropylbenzene	11.51	105	154866	19.60	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	66874	18.49	UG	99
61) Bromobenzene	11.88	156	67147	19.10	UG	99
62) 1,2,3-Trichloropropane	11.91	75	58228	18.75	UG	98
63) n-Propylbenzene	12.01	91	171807	19.07	UG	100
64) 2-Chlorotoluene	12.11	91	127352	18.67	UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	139845	19.55	UG	99
66) 4-Chlorotoluene	12.24	91	154605	18.62	UG	99
67) tert-Butylbenzene	12.63	119	100558	18.56	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	149051	18.77	UG	99
69) sec-Butylbenzene	12.89	105	139551	18.58	UG	99
70) 1,3-Dichlorobenzene	13.02	146	102366	18.64	UG	100
71) 4-Isopropyltoluene	13.07	119	129232	18.82	UG	100
72) 1,4-Dichlorobenzene	13.14	146	107179	18.55	UG	100
73) n-Butylbenzene	13.58	92	57239	18.58	UG	96
74) 1,2-Dichlorobenzene	13.59	146	106966	19.10	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	9541	12.98	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	53045m	16.46	UG	
77) Hexachlorobutadiene	15.65	225	26983	16.36	UG	100
78) Naphthalene	15.72	128	151829	21.31	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	52117m	17.01	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	23392m	21.30	UG	
81) Methyl acetate	3.93	43	32643	16.77	UG	98
82) Cyclohexane	6.17	56	42957	20.28	UG	96
83) Methylcyclohexane	7.47	55	25359	17.99	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	334357	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	464375	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	434421	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138317	46.32	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.64%				
41) Toluene-d8	8.62	98	420891	50.14	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.28%				
59) Bromofluorobenzene	11.69	95	190880	50.07	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	135581m	83.59	UG		
3) Chloromethane	1.93	50	259406	91.14	UG		100
4) Vinyl chloride	2.06	62	239662	105.33	UG		100
5) Bromomethane	2.43	94	127834	76.26	UG		99
6) Chloroethane	2.54	64	109841	83.99	UG		99
7) Trichlorofluoromethane	2.84	101	235684	101.84	UG		100
8) Acrolein	3.33	56	43868	174.73	UG		99
9) 1,1-Dichloroethene	3.45	96	195067	96.51	UG		94
10) Acetone	3.52	43	49860	55.96	UG		100
11) Carbon disulfide	3.70	76	617607	97.32	UG		100
12) Vinyl acetate	4.96	43	670300	73.09	UG	#	99
13) Methylene chloride	4.03	84	222369	80.84	UG		100
14) Acrylonitrile	4.32	53	256600	256.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	37595	121.71	UG		100
16) trans-1,2-Dichloroethene	4.36	96	314778	92.13	UG		91
17) Methyl tert-butyl ether (M	4.38	73	826446	87.14	UG		100
18) 1,1-Dichloroethane	4.86	63	575077	89.41	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1069535	90.27	UG		100
20) cis-1,2-Dichloroethene	5.53	96	357105	93.56	UG		99
21) 2,2-Dichloropropane	5.53	77	294954	96.02	UG		90
22) 2-Butanone (MEK)	5.55	43	124143	97.90	UG		99
23) Bromochloromethane	5.80	128	176982	90.48	UG		100
25) Chloroform	5.90	83	586073	89.53	UG		100
26) 1,1,1-Trichloroethane	6.11	97	413973	100.84	UG		99
27) Carbon tetrachloride	6.29	117	327970	107.13	UG		100
28) 1,1-Dichloropropene	6.29	75	365985	101.72	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	460053	88.27	UG		100
32) Benzene	6.53	78	1222361	92.49	UG		100
33) Trichloroethene	7.25	95	322888	105.03	UG		94
34) 1,2-Dichloropropane	7.49	63	320218	95.98	UG	#	100
35) Dibromomethane	7.62	93	195778	93.59	UG		93
36) 1,4-Dioxane	7.64	88	82510	3090.17	UG		99
37) Bromodichloromethane	7.80	83	442279	101.50	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	197694	102.09	UG		99
39) cis-1,3-Dichloropropene	8.30	75	506286	109.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	283828	105.94	UG		99
42) Toluene	8.70	92	708587	96.69	UG		99
43) trans-1,3-Dichloropropene	8.93	75	460271	112.42	UG		99
44) 1,1,2-Trichloroethane	9.15	83	231701	97.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

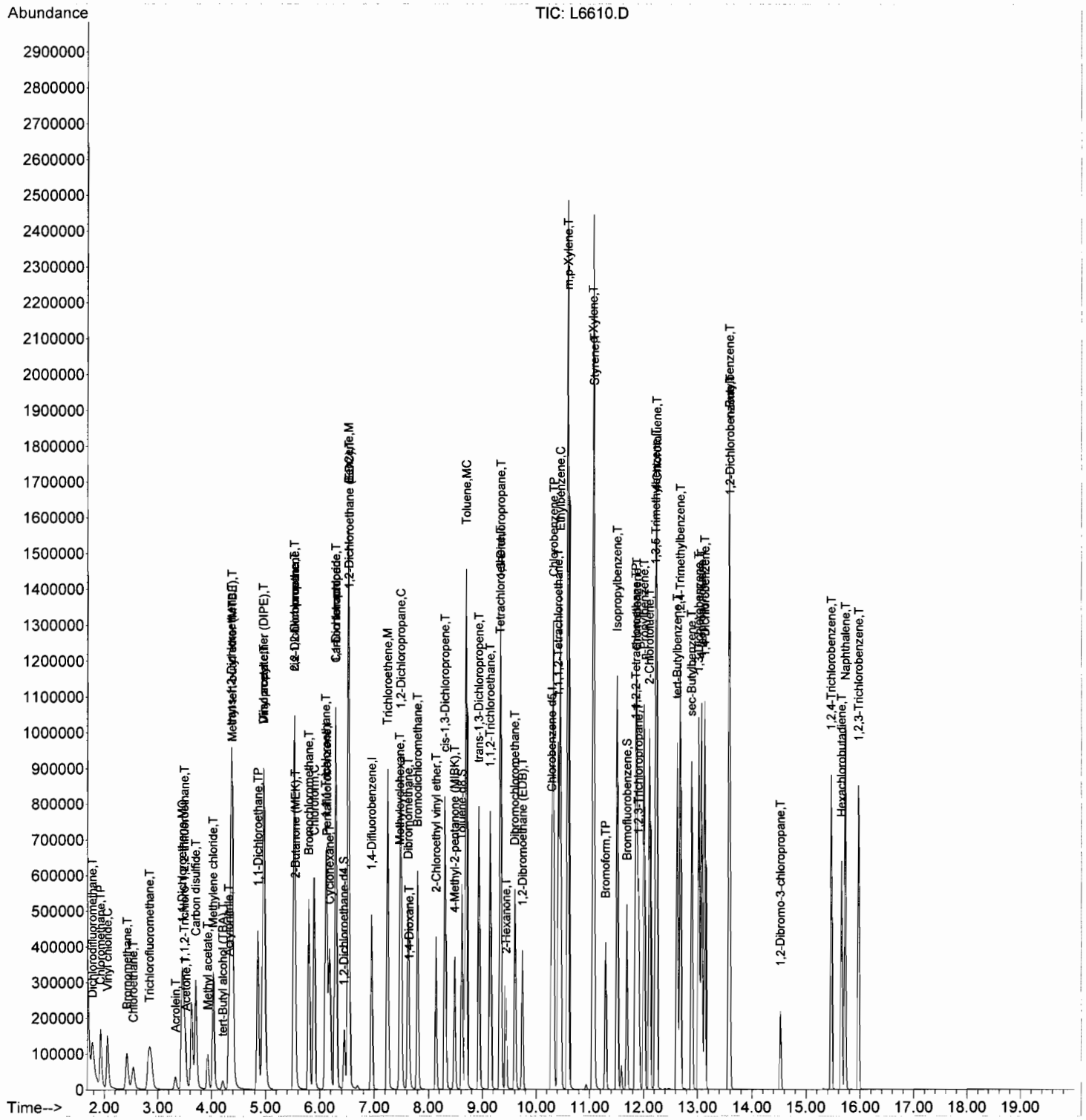
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	250451	103.35	UG	98
46) 1,3-Dichloropropane	9.34	76	460435	98.98	UG	100
47) 2-Hexanone	9.44	43	182449	127.87	UG	99
48) Dibromochloromethane	9.60	129	342079	111.87	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293964	103.36	UG	100
51) Chlorobenzene	10.32	112	796513	90.52	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	326878	100.78	UG	99
53) Ethylbenzene	10.46	91	1132069	100.80	UG	99
54) m,p-Xylene	10.60	106	871540	197.85	UG	96
55) o-Xylene	11.06	106	449662	102.13	UG	96
56) Styrene	11.09	104	844414	102.91	UG	98
57) Bromoform	11.30	173	228773	89.97	UG	100
58) Isopropylbenzene	11.51	105	916004	107.16	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	327056	83.51	UG	100
61) Bromobenzene	11.88	156	365821	95.41	UG	100
62) 1,2,3-Trichloropropane	11.91	75	305643	90.83	UG	99
63) n-Propylbenzene	12.01	91	976974	100.01	UG	100
64) 2-Chlorotoluene	12.11	91	692915	94.24	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770103	99.18	UG	100
66) 4-Chlorotoluene	12.24	91	830453	92.46	UG	99
67) tert-Butylbenzene	12.63	119	582579	99.00	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	804432	93.52	UG	100
69) sec-Butylbenzene	12.89	105	798018	97.80	UG	99
70) 1,3-Dichlorobenzene	13.02	146	532476	89.12	UG	100
71) 4-Isopropyltoluene	13.07	119	721165	96.79	UG	100
72) 1,4-Dichlorobenzene	13.14	146	559666	89.03	UG	100
73) n-Butylbenzene	13.58	92	326018	97.98	UG	96
74) 1,2-Dichlorobenzene	13.59	146	536897	88.02	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	56643	71.09	UG	86
76) 1,2,4-Trichlorobenzene	15.46	180	313022	89.18	UG	99
77) Hexachlorobutadiene	15.65	225	146999	81.48	UG	100
78) Naphthalene	15.72	128	820624	105.88	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	295261	87.53	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	123012	109.20	UG	93
81) Methyl acetate	3.93	43	164496	79.93	UG	98
82) Cyclohexane	6.18	56	230208	106.54	UG	99
83) Methylcyclohexane	7.47	55	152195	105.15	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	335884	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	470961	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	440697	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	138287	47.08	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.16%			
41) Toluene-d8	8.62	98	423609	50.20	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.40%			
59) Bromofluorobenzene	11.69	95	196398	50.95	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.78	85	223936m	140.38	UG	
3) Chloromethane	1.93	50	409652	151.59	UG	100
4) Vinyl chloride	2.06	62	366638	169.03	UG	100
5) Bromomethane	2.42	94	174399	110.10	UG	99
6) Chloroethane	2.54	64	159988	128.10	UG	100
7) Trichlorofluoromethane	2.83	101	400272m	183.63	UG	
8) Acrolein	3.32	56	64810	312.72	UG	99
9) 1,1-Dichloroethene	3.44	96	289405	149.20	UG	93
10) Acetone	3.51	43	76410	86.78	UG	100
11) Carbon disulfide	3.70	76	930236	155.90	UG	100
12) Vinyl acetate	4.96	43	957178	113.10	UG #	99
13) Methylene chloride	4.03	84	336075	128.68	UG	100
14) Acrylonitrile	4.32	53	371555	394.86	UG	99
15) tert-Butyl alcohol (TBA)	4.21	59	58432	196.44	UG	100
16) trans-1,2-Dichloroethene	4.36	96	456619	136.31	UG	92
17) Methyl tert-butyl ether (M	4.38	73	1255210	135.95	UG	100
18) 1,1-Dichloroethane	4.85	63	862969	137.24	UG	99
19) Diisopropyl ether (DIPE)	4.96	45	1583322	136.88	UG	100
20) cis-1,2-Dichloroethene	5.52	96	531219	141.44	UG	99
21) 2,2-Dichloropropane	5.53	77	446456	150.03	UG	91
22) 2-Butanone (MEK)	5.55	43	182607	142.88	UG	100
23) Bromochloromethane	5.80	128	265722	136.95	UG	99
25) Chloroform	5.89	83	877495	135.77	UG	100
26) 1,1,1-Trichloroethane	6.10	97	612568	151.61	UG	100
27) Carbon tetrachloride	6.29	117	484380	161.86	UG	100
28) 1,1-Dichloropropene	6.29	75	532589	151.63	UG	95
29) 1,2-Dichloroethane (EDC)	6.54	62	680297	132.05	UG	100
32) Benzene	6.52	78	1799829	136.43	UG	100
33) Trichloroethene	7.25	95	482468	154.71	UG	93
34) 1,2-Dichloropropane	7.49	63	473341	141.91	UG	100
35) Dibromomethane	7.62	93	292387	139.09	UG	93
36) 1,4-Dioxane	7.64	88	116905	4351.50	UG	98
37) Bromodichloromethane	7.80	83	665537	151.31	UG	100
38) 2-Chloroethyl vinyl ether	8.14	63	292781	150.08	UG	99
39) cis-1,3-Dichloropropene	8.30	75	755147	161.79	UG	99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	421459	157.42	UG	99
42) Toluene	8.70	92	1035827	140.37	UG	99
43) trans-1,3-Dichloropropene	8.93	75	692064	167.19	UG	99
44) 1,1,2-Trichloroethane	9.15	83	343381	142.81	UG	98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

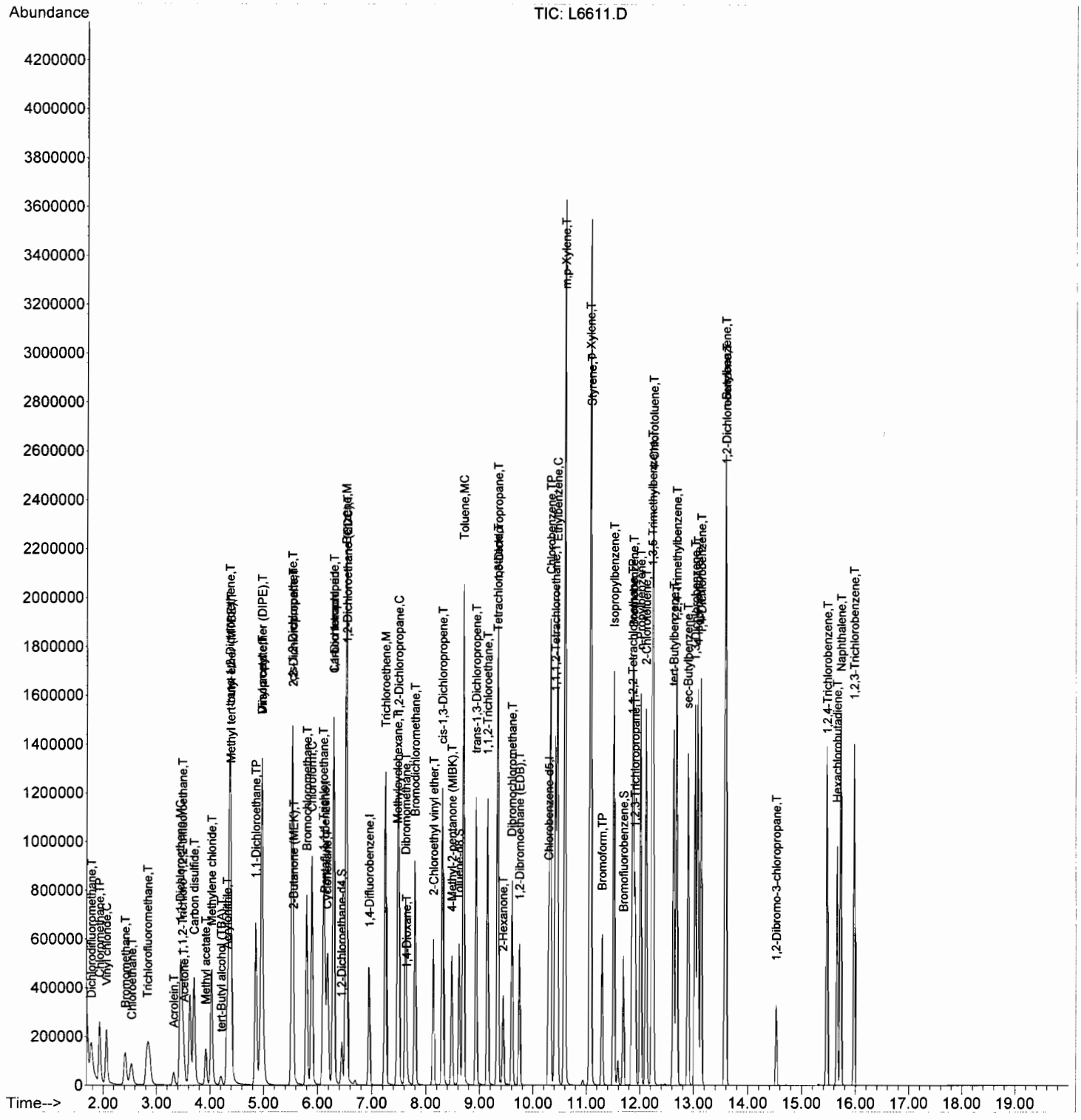
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	362196	147.56	UG	99
46) 1,3-Dichloropropane	9.34	76	681753	145.23	UG	100
47) 2-Hexanone	9.44	43	274380	182.08	UG	99
48) Dibromochloromethane	9.60	129	512049	164.28	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	437940	151.50	UG	100
51) Chlorobenzene	10.32	112	1184090	133.72	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	493957	151.08	UG	100
53) Ethylbenzene	10.46	91	1663227	147.80	UG	99
54) m,p-Xylene	10.60	106	1258493	286.06	UG	97
55) o-Xylene	11.06	106	647981	147.97	UG	97
56) Styrene	11.09	104	1209945	147.62	UG	99
57) Bromoform	11.30	173	352770	136.89	UG	100
58) Isopropylbenzene	11.51	105	1341408	157.73	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	479322	123.48	UG	100
61) Bromobenzene	11.88	156	542711	140.14	UG	100
62) 1,2,3-Trichloropropane	11.91	75	452571	134.43	UG	99
63) n-Propylbenzene	12.01	91	1454585	149.52	UG	100
64) 2-Chlorotoluene	12.11	91	1030447	140.76	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1152367	148.99	UG	100
66) 4-Chlorotoluene	12.24	91	1230325	137.19	UG	99
67) tert-Butylbenzene	12.63	119	902124	154.45	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	1219464	142.26	UG	100
69) sec-Butylbenzene	12.89	105	1201323	148.26	UG	99
70) 1,3-Dichlorobenzene	13.02	146	804657	134.15	UG	100
71) 4-Isopropyltoluene	13.07	119	1098378	148.34	UG	100
72) 1,4-Dichlorobenzene	13.14	146	841712	133.28	UG	100
73) n-Butylbenzene	13.58	92	501569	152.74	UG	96
74) 1,2-Dichlorobenzene	13.59	146	811639	132.91	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	89357	112.05	UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	506729	143.19	UG	99
77) Hexachlorobutadiene	15.65	225	224502	123.11	UG	100
78) Naphthalene	15.72	128	1311025	168.82	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	474490	138.81	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	177505	163.69	UG	93
81) Methyl acetate	3.92	43	250959	123.82	UG	98
82) Cyclohexane	6.17	56	344691m	165.44	UG	
83) Methylcyclohexane	7.47	55	214336	153.67	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	347689	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.94	114	492059	50.00	UG		-0.01
50) Chlorobenzene-d5	10.29	117	454144	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	142190	47.73	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.46%				
41) Toluene-d8	8.62	98	443856	50.93	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.86%				
59) Bromofluorobenzene	11.69	95	199429	50.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.77	85	304089m	189.29	UG		
3) Chloromethane	1.93	50	571412	213.55	UG		100
4) Vinyl chloride	2.06	62	477108	221.79	UG		100
5) Bromomethane	2.41	94	217863	137.79	UG		99
6) Chloroethane	2.53	64	211835	180.21	UG		100
7) Trichlorofluoromethane	2.83	101	414904	193.74	UG		100
8) Acrolein	3.32	56	79093	454.85	UG		99
9) 1,1-Dichloroethene	3.44	96	377014	196.81	UG		92
10) Acetone	3.51	43	106234	119.12	UG		100
11) Carbon disulfide	3.69	76	1262944	219.20	UG		100
12) Vinyl acetate	4.96	43	1284213	161.75	UG	#	99
13) Methylene chloride	4.02	84	465619	181.95	UG		100
14) Acrylonitrile	4.31	53	454543	496.14	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	82352	278.77	UG		100
16) trans-1,2-Dichloroethene	4.35	96	619869	184.48	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1777624	192.42	UG		100
18) 1,1-Dichloroethane	4.85	63	1204538	190.80	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	2187286	188.84	UG		100
20) cis-1,2-Dichloroethene	5.52	96	736184	194.03	UG		98
21) 2,2-Dichloropropane	5.53	77	593526	199.15	UG		89
22) 2-Butanone (MEK)	5.55	43	254445	193.64	UG		100
23) Bromochloromethane	5.80	128	372741	188.39	UG		99
25) Chloroform	5.89	83	1221177	186.26	UG		100
26) 1,1,1-Trichloroethane	6.10	97	845222	206.36	UG		100
27) Carbon tetrachloride	6.29	117	642375	213.82	UG		100
28) 1,1-Dichloropropene	6.29	75	712425	203.10	UG		94
29) 1,2-Dichloroethane (EDC)	6.53	62	952707	182.22	UG		100
32) Benzene	6.52	78	2472273	183.43	UG		100
33) Trichloroethene	7.25	95	679672	210.10	UG		94
34) 1,2-Dichloropropane	7.49	63	672214	197.63	UG		100
35) Dibromomethane	7.62	93	413198	191.01	UG		93
36) 1,4-Dioxane	7.64	88	140956	5023.89	UG		99
37) Bromodichloromethane	7.80	83	949898	209.27	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	423767	212.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	1088003	227.51	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	601609	220.03	UG		99
42) Toluene	8.70	92	1428367	188.76	UG		99
43) trans-1,3-Dichloropropene	8.93	75	981927	230.90	UG		99
44) 1,1,2-Trichloroethane	9.15	83	485818	195.68	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

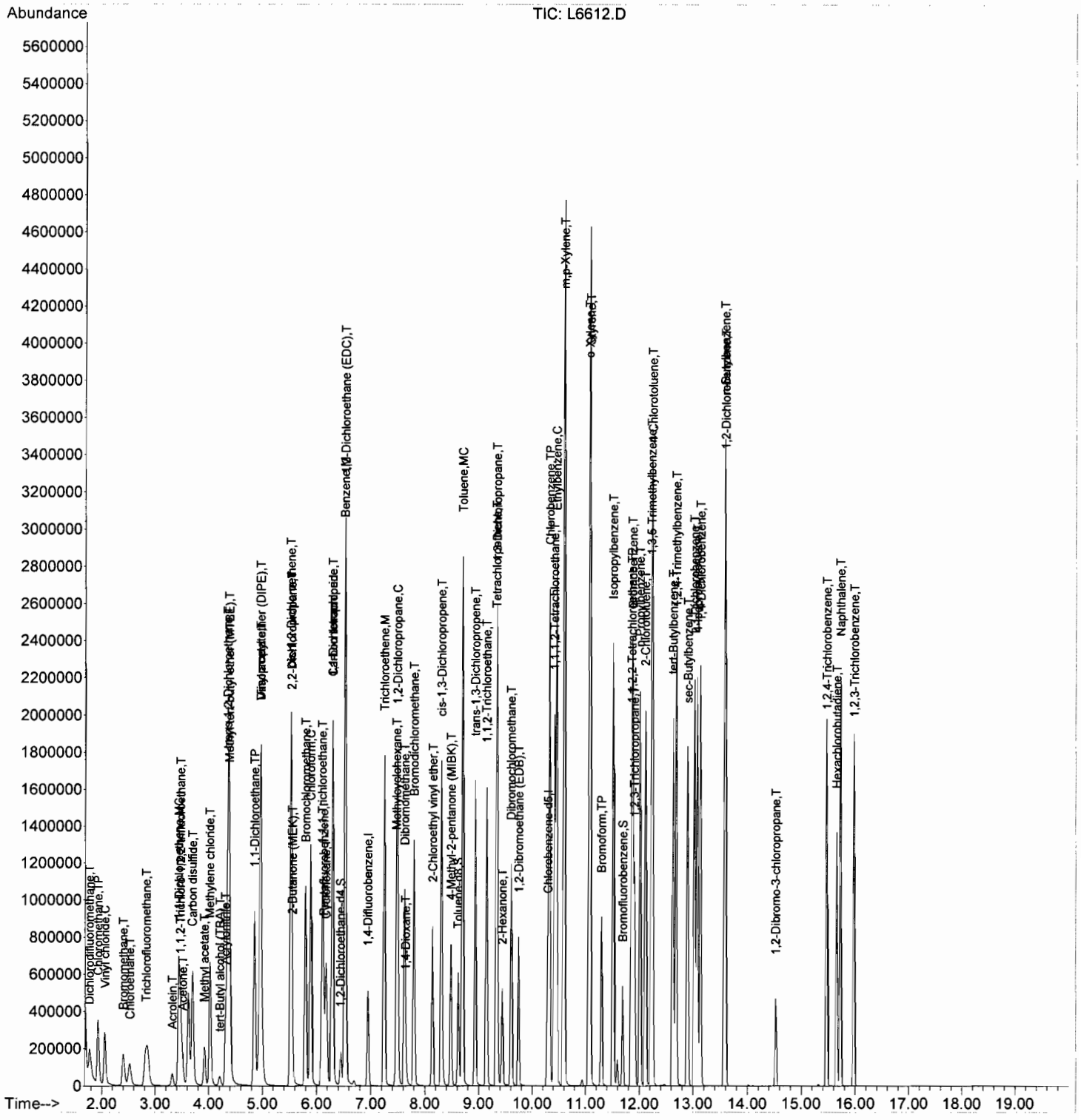
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	495262	195.74	UG	99
46) 1,3-Dichloropropane	9.34	76	963914	199.67	UG	100
47) 2-Hexanone	9.44	43	393991	245.05	UG	99
48) Dibromochloromethane	9.60	129	728089	224.80	UG	100
49) 1,2-Dibromoethane (EDB)	9.74	107	623310	207.88	UG	100
51) Chlorobenzene	10.32	112	1663788	185.14	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	688253	206.51	UG	99
53) Ethylbenzene	10.46	91	2309390	203.59	UG	99
54) m,p-Xylene	10.60	106	1711584	387.46	UG	98
55) o-Xylene	11.06	106	884103	201.35	UG	98
56) Styrene	11.09	104	1657866	201.58	UG	99
57) Bromoform	11.30	173	505262	191.39	UG	100
58) Isopropylbenzene	11.51	105	1877638	220.54	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	655689	168.61	UG	100
61) Bromobenzene	11.88	156	753587	190.89	UG	100
62) 1,2,3-Trichloropropane	11.91	75	632624	185.71	UG	99
63) n-Propylbenzene	12.01	91	2011676	205.38	UG	100
64) 2-Chlorotoluene	12.11	91	1449521	196.63	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1589689	203.77	UG	100
66) 4-Chlorotoluene	12.24	91	1713614	189.50	UG	99
67) tert-Butylbenzene	12.63	119	1245051	211.33	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	1699174	196.33	UG	100
69) sec-Butylbenzene	12.90	105	1670826	205.71	UG	99
70) 1,3-Dichlorobenzene	13.02	146	1141984	187.11	UG	100
71) 4-Isopropyltoluene	13.07	119	1527548	204.91	UG	100
72) 1,4-Dichlorobenzene	13.14	146	1171330	182.00	UG	100
73) n-Butylbenzene	13.58	92	686586	209.19	UG	96
74) 1,2-Dichlorobenzene	13.59	146	1115093	179.44	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	126115	155.00	UG	83
76) 1,2,4-Trichlorobenzene	15.47	180	722451	199.52	UG	99
77) Hexachlorobutadiene	15.65	225	309785	165.83	UG	100
78) Naphthalene	15.72	128	1833303	231.30	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	684454	194.55	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	266234m	256.23	UG	
81) Methyl acetate	3.92	43	349724	171.75	UG	98
82) Cyclohexane	6.17	56	473454m	244.90	UG	
83) Methylcyclohexane	7.47	55	251092	185.40	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.198	0.236	-19.2	113	0.00
3	TP	Chloromethane	0.385	0.431	-11.9	108	0.00
4	C	Vinyl chloride	0.332	0.383	-15.4	104	0.00
5	T	Bromomethane	0.206	0.224	-8.7	114	-0.01
6	T	Chloroethane	0.169	0.181	-7.1	107	0.00
7	T	Trichlorofluoromethane	0.374	0.435	-16.3	120	-0.01
8	T	Acrolein	0.024	0.022	8.3	99	0.00
9	MC	1,1-Dichloroethene	0.275	0.306	-11.3	102	0.00
10	T	Acetone	0.081	0.079	2.5	103	0.00
11	T	Carbon disulfide	0.858	1.000	-16.6	105	0.00
12	T	Vinyl acetate	1.142	1.151	-0.8	111	0.00
13	T	Methylene chloride	0.368	0.354	3.8	103	0.00
14	T	Acrylonitrile	0.132	0.111	15.9	84	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.030	-3.4	102	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	99	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.291	2.9	101	0.00
18	TP	1,1-Dichloroethane	0.908	0.885	2.5	100	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.651	0.9	100	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.546	0.0	99	0.00
21	T	2,2-Dichloropropane	0.429	0.501	-16.8	110	0.00
22	T	2-Butanone (MEK)	0.189	0.191	-1.1	100	0.00
23	T	Bromochloromethane	0.285	0.273	4.2	100	0.00
25	C	Chloroform	0.943	0.896	5.0	99	0.00
26	T	1,1,1-Trichloroethane	0.589	0.668	-13.4	105	0.00
27	T	Carbon tetrachloride	0.448	0.526	-17.4	104	0.01
28	T	1,1-Dichloropropene	0.504	0.562	-11.5	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.705	6.3	99	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.417	2.6	98	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
32	M	Benzene	1.370	1.325	3.3	99	0.00
33	M	Trichloroethene	0.329	0.330	-0.3	93	0.00
34	C	1,2-Dichloropropane	0.346	0.348	-0.6	99	0.00
35	T	Dibromomethane	0.220	0.213	3.2	99	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	95	0.01
37	T	Bromodichloromethane	0.461	0.483	-4.8	99	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.215	-5.9	99	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.551	-13.4	99	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.310	-11.5	99	0.00
41	S	Toluene-d8	0.885	0.902	-1.9	98	0.00
42	MC	Toluene	0.769	0.760	1.2	98	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.503	-16.4	99	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	100	0.00
45	T	Tetrachloroethene	0.257	0.271	-5.4	98	0.00
46	T	1,3-Dichloropropane	0.491	0.504	-2.6	100	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	99	0.00
48	T	Dibromochloromethane	0.329	0.369	-12.2	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.319	-4.6	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
51	TP	Chlorobenzene	0.989	0.921	6.9	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.379	-3.3	99	0.00
53	C	Ethylbenzene	1.249	1.305	-4.5	98	0.00
54	T	m,p-Xylene	0.486	0.504	-3.7	99	0.00
55	T	o-Xylene	0.483	0.523	-8.3	99	0.00
56	T	Styrene	0.905	0.964	-6.5	97	0.00
57	TP	Bromoform	0.291	0.270	7.2	101	0.00
58	T	Isopropylbenzene	0.937	1.069	-14.1	100	0.00
59	S	Bromofluorobenzene	0.437	0.448	-2.5	100	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.410	4.2	107	0.00
61	T	Bromobenzene	0.435	0.425	2.3	99	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	101	0.00
63	T	n-Propylbenzene	1.078	1.158	-7.4	101	0.00
64	T	2-Chlorotoluene	0.812	0.817	-0.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.903	-5.1	100	0.00
66	T	4-Chlorotoluene	0.996	0.968	2.8	99	0.00
67	T	tert-Butylbenzene	0.649	0.709	-9.2	104	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.951	0.2	101	0.00
69	T	sec-Butylbenzene	0.894	0.952	-6.5	102	0.00
70	T	1,3-Dichlorobenzene	0.672	0.632	6.0	101	0.00
71	T	4-Isopropyltoluene	0.821	0.862	-5.0	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.656	7.5	100	0.00
73	T	n-Butylbenzene	0.361	0.394	-9.1	103	0.00
74	T	1,2-Dichlorobenzene	0.684	0.638	6.7	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.067	-11.7	101	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.375	-8.7	102	0.00
77	T	Hexachlorobutadiene	0.165	0.187	-13.3	109	0.00
78	T	Naphthalene	0.847	0.979	-15.6	102	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.347	-4.5	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.164	-18.0	114	-0.01
81	T	Methyl acetate	0.204	0.203	0.5	105	0.00
82	T	Cyclohexane	0.256	0.292	-14.1	108	0.00
83	T	Methylcyclohexane	0.163	0.193	-18.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Tue Feb 17 14:03:27 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	324200	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	455058	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	426508	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	135106	48.63	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.26%				
41) Toluene-d8	8.62	98	410628	50.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.90%				
59) Bromofluorobenzene	11.69	95	191250	51.30	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	153154m	119.19	UG		
3) Chloromethane	1.93	50	279647	112.08	UG		100
4) Vinyl chloride	2.06	62	248132	115.40	UG		100
5) Bromomethane	2.42	94	145361	108.72	UG		99
6) Chloroethane	2.54	64	117664	107.35	UG		99
7) Trichlorofluoromethane	2.83	101	281762	116.34	UG		100
8) Acrolein	3.33	56	43324	274.92	UG		99
9) 1,1-Dichloroethene	3.45	96	198435	111.09	UG		94
10) Acetone	3.52	43	51407	97.46	UG		100
11) Carbon disulfide	3.70	76	648362	116.60	UG		100
12) Vinyl acetate	4.96	43	746390	100.81	UG	#	99
13) Methylene chloride	4.03	84	229842	96.32	UG		100
14) Acrylonitrile	4.32	53	216498	253.43	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	38272	201.59	UG		100
16) trans-1,2-Dichloroethene	4.36	96	310892	99.23	UG		92
17) Methyl tert-butyl ether (M	4.38	73	836791	97.14	UG		100
18) 1,1-Dichloroethane	4.86	63	573848	97.48	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1070219	99.09	UG		100
20) cis-1,2-Dichloroethene	5.53	96	354243	100.13	UG		99
21) 2,2-Dichloropropane	5.53	77	324539	116.79	UG		96
22) 2-Butanone (MEK)	5.55	43	123684	100.95	UG		99
23) Bromochloromethane	5.80	128	176968	95.92	UG		99
25) Chloroform	5.90	83	580962	95.03	UG		100
26) 1,1,1-Trichloroethane	6.11	97	433067	113.39	UG		100
27) Carbon tetrachloride	6.30	117	341234	117.36	UG		100
28) 1,1-Dichloropropene	6.29	75	364272	111.37	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	456834	93.71	UG		100
32) Benzene	6.53	78	1205529	96.72	UG		100
33) Trichloroethene	7.25	95	300022	100.28	UG		93
34) 1,2-Dichloropropane	7.49	63	316367	100.58	UG		100
35) Dibromomethane	7.62	93	194003	96.97	UG		93
36) 1,4-Dioxane	7.65	88	78353	3019.69	UG		99
37) Bromodichloromethane	7.80	83	439343	104.66	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	195483	105.96	UG		99
39) cis-1,3-Dichloropropene	8.30	75	501441	113.38	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	282039	111.54	UG		100
42) Toluene	8.70	92	691395	98.80	UG		99
43) trans-1,3-Dichloropropene	8.93	75	457480	116.32	UG		99
44) 1,1,2-Trichloroethane	9.15	83	230613	100.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

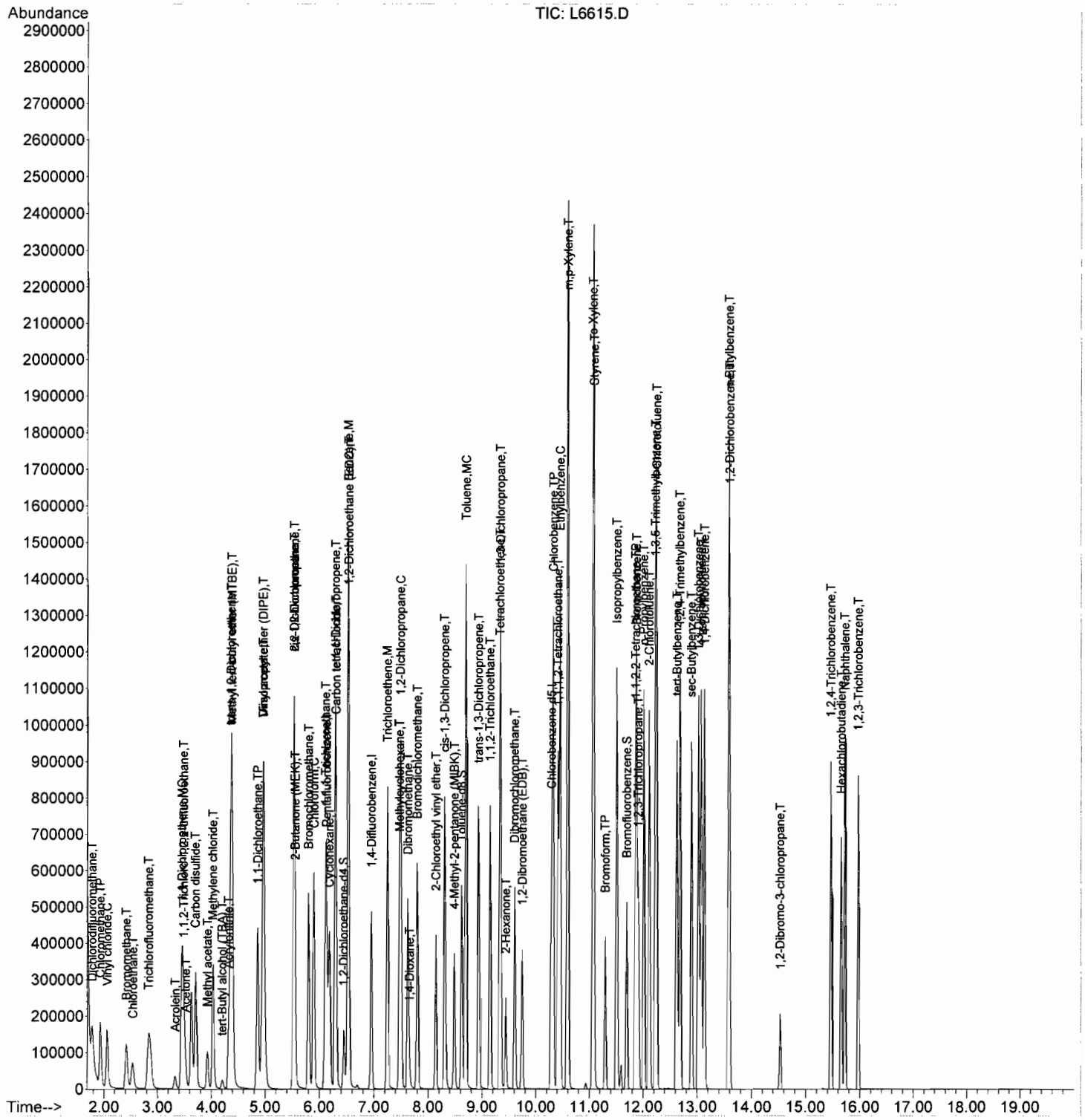
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	246473	105.33 UG	98
46) 1,3-Dichloropropane	9.34	76	459129	102.84 UG	100
47) 2-Hexanone	9.44	43	180312	118.09 UG	99
48) Dibromochloromethane	9.60	129	335763	112.10 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	290638	104.81 UG	100
51) Chlorobenzene	10.32	112	785293	93.05 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	323215	103.26 UG	99
53) Ethylbenzene	10.46	91	1113113	104.49 UG	99
54) m,p-Xylene	10.60	106	860185	207.34 UG	96
55) o-Xylene	11.06	106	446318	108.23 UG	96
56) Styrene	11.09	104	822727	106.52 UG	99
57) Bromoform	11.30	173	230374	92.92 UG	100
58) Isopropylbenzene	11.51	105	912035	114.07 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349552	95.71 UG	100
61) Bromobenzene	11.88	156	362773	97.85 UG	100
62) 1,2,3-Trichloropropane	11.91	75	307882	96.24 UG	99
63) n-Propylbenzene	12.01	91	988101	107.41 UG	100
64) 2-Chlorotoluene	12.11	91	696626	100.62 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770246	105.13 UG	100
66) 4-Chlorotoluene	12.24	91	825829	97.24 UG	99
67) tert-Butylbenzene	12.63	119	604701	109.29 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	810795	99.75 UG	100
69) sec-Butylbenzene	12.89	105	811907	106.44 UG	99
70) 1,3-Dichlorobenzene	13.02	146	539274	94.08 UG	100
71) 4-Isopropyltoluene	13.07	119	735159	105.01 UG	100
72) 1,4-Dichlorobenzene	13.14	146	559709	92.60 UG	100
73) n-Butylbenzene	13.58	92	335894	108.97 UG	96
74) 1,2-Dichlorobenzene	13.59	146	544194	93.25 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	56934	111.51 UG	85
76) 1,2,4-Trichlorobenzene	15.46	180	319645	108.67 UG	99
77) Hexachlorobutadiene	15.65	225	159520	113.57 UG	100
78) Naphthalene	15.72	128	835014	115.52 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	296326	104.73 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	139981	118.06 UG	92
81) Methyl acetate	3.93	43	173324	99.43 UG	98
82) Cyclohexane	6.18	56	249268	114.07 UG	100
83) Methylcyclohexane	7.47	55	165056	118.38 UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.198	0.235	-18.7	118	0.00
3	TP	Chloromethane	0.385	0.436	-13.2	114	0.00
4	C	Vinyl chloride	0.332	0.393	-18.4	111	0.00
5	T	Bromomethane	0.206	0.205	0.5	109	-0.01
6	T	Chloroethane	0.169	0.189	-11.8	117	0.00
7	T	Trichlorofluoromethane	0.374	0.360	3.7	104	0.00
8	T	Acrolein	0.024	0.028	-16.7	131	0.00
9	MC	1,1-Dichloroethene	0.275	0.317	-15.3	110	0.00
10	T	Acetone	0.081	0.090	-11.1	123	0.00
11	T	Carbon disulfide	0.858	1.026	-19.6	113	0.00
12	T	Vinyl acetate	1.142	1.201	-5.2	122	0.00
13	T	Methylene chloride	0.368	0.358	2.7	109	0.00
14	T	Acrylonitrile	0.132	0.157	-18.9	125	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.033	-13.8	118	0.00
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	103	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.327	0.2	109	0.01
18	TP	1,1-Dichloroethane	0.908	0.911	-0.3	108	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.769	-6.2	112	0.01
20	T	cis-1,2-Dichloroethene	0.546	0.540	1.1	103	0.00
21	T	2,2-Dichloropropane	0.429	0.475	-10.7	109	0.00
22	T	2-Butanone (MEK)	0.189	0.204	-7.9	112	0.00
23	T	Bromochloromethane	0.285	0.266	6.7	102	0.00
25	C	Chloroform	0.943	0.891	5.5	103	0.00
26	T	1,1,1-Trichloroethane	0.589	0.642	-9.0	105	0.00
27	T	Carbon tetrachloride	0.448	0.509	-13.6	105	0.01
28	T	1,1-Dichloropropene	0.504	0.572	-13.5	106	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.700	6.9	103	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.418	2.3	103	0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
32	M	Benzene	1.370	1.333	2.7	103	0.00
33	M	Trichloroethene	0.329	0.334	-1.5	98	0.00
34	C	1,2-Dichloropropane	0.346	0.353	-2.0	104	0.00
35	T	Dibromomethane	0.220	0.208	5.5	101	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	106	0.00
37	T	Bromodichloromethane	0.461	0.475	-3.0	102	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.211	-3.9	101	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.545	-12.1	102	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.315	-13.3	105	0.00
41	S	Toluene-d8	0.885	0.898	-1.5	101	0.00
42	MC	Toluene	0.769	0.753	2.1	101	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.490	-13.4	101	0.00
44	T	1,1,2-Trichloroethane	0.252	0.246	2.4	101	0.00
45	T	Tetrachloroethene	0.257	0.269	-4.7	102	0.00
46	T	1,3-Dichloropropane	0.491	0.495	-0.8	102	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	102	0.00
48	T	Dibromochloromethane	0.329	0.355	-7.9	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.310	-1.6	100	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
51	TP	Chlorobenzene	0.989	0.899	9.1	101	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.373	-1.6	102	0.00
53	C	Ethylbenzene	1.249	1.291	-3.4	102	0.00
54	T	m,p-Xylene	0.486	0.491	-1.0	100	0.00
55	T	o-Xylene	0.483	0.501	-3.7	99	0.00
56	T	Styrene	0.905	0.940	-3.9	99	0.00
57	TP	Bromoform	0.291	0.311	-6.9	121	0.00
58	T	Isopropylbenzene	0.937	1.036	-10.6	101	0.00
59	S	Bromofluorobenzene	0.437	0.445	-1.8	104	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.392	8.4	107	0.00
61	T	Bromobenzene	0.435	0.413	5.1	101	0.00
62	T	1,2,3-Trichloropropane	0.375	0.351	6.4	102	0.00
63	T	n-Propylbenzene	1.078	1.108	-2.8	101	0.00
64	T	2-Chlorotoluene	0.812	0.783	3.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.862	-0.3	100	0.00
66	T	4-Chlorotoluene	0.996	0.932	6.4	100	0.00
67	T	tert-Butylbenzene	0.649	0.675	-4.0	103	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.913	4.2	101	0.01
69	T	sec-Butylbenzene	0.894	0.910	-1.8	102	0.01
70	T	1,3-Dichlorobenzene	0.672	0.600	10.7	100	0.00
71	T	4-Isopropyltoluene	0.821	0.823	-0.2	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.623	12.1	99	0.00
73	T	n-Butylbenzene	0.361	0.370	-2.5	101	0.00
74	T	1,2-Dichlorobenzene	0.684	0.608	11.1	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.066	-10.0	103	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.353	-2.3	100	0.01
77	T	Hexachlorobutadiene	0.165	0.171	-3.6	104	0.00
78	T	Naphthalene	0.847	0.922	-8.9	100	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.324	2.4	98	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.150	-7.9	109	0.00
81	T	Methyl acetate	0.204	0.224	-9.8	121	0.00
82	T	Cyclohexane	0.256	0.285	-11.3	110	0.00
83	T	Methylcyclohexane	0.163	0.186	-14.1	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Thu Feb 19 16:11:28 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	339787	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	473189	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	445652	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.46	65	142049	48.79	UG		0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.58%				
41) Toluene-d8	8.62	98	424731	50.68	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.36%				
59) Bromofluorobenzene	11.69	95	198520	50.97	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.94%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	159918m	118.75	UG		
3) Chloromethane	1.93	50	296192m	113.27	UG		
4) Vinyl chloride	2.06	62	267127m	118.53	UG		
5) Bromomethane	2.42	94	139145	99.30	UG		98
6) Chloroethane	2.54	64	128710	112.04	UG		100
7) Trichlorofluoromethane	2.84	101	244544	96.34	UG		100
8) Acrolein	3.33	56	57395m	347.50	UG		
9) 1,1-Dichloroethene	3.45	96	215543	115.14	UG		96
10) Acetone	3.52	43	61420m	111.10	UG		
11) Carbon disulfide	3.70	76	697303	119.65	UG		100
12) Vinyl acetate	4.96	43	816083	105.17	UG	#	99
13) Methylene chloride	4.03	84	243413	97.33	UG		100
14) Acrylonitrile	4.32	53	319797	357.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	44519	223.74	UG		100
16) trans-1,2-Dichloroethene	4.36	96	325415	99.10	UG		94
17) Methyl tert-butyl ether (M	4.40	73	901735	99.88	UG		100
18) 1,1-Dichloroethane	4.86	63	618948	100.32	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	1201980	106.19	UG		100
20) cis-1,2-Dichloroethene	5.53	96	367200	99.03	UG		99
21) 2,2-Dichloropropane	5.53	77	322828	110.84	UG		94
22) 2-Butanone (MEK)	5.55	43	138601m	107.93	UG		
23) Bromochloromethane	5.80	128	180716	93.46	UG		100
25) Chloroform	5.90	83	605265	94.46	UG		100
26) 1,1,1-Trichloroethane	6.11	97	436238	108.98	UG		99
27) Carbon tetrachloride	6.30	117	345702	113.44	UG		100
28) 1,1-Dichloropropene	6.29	75	388398	113.30	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	475712	93.10	UG		100
32) Benzene	6.53	78	1261297	97.31	UG		100
33) Trichloroethene	7.25	95	316420	101.71	UG		93
34) 1,2-Dichloropropane	7.49	63	333891	102.08	UG		100
35) Dibromomethane	7.62	93	197064	94.73	UG		93
36) 1,4-Dioxane	7.64	88	87541m	3244.52	UG		
37) Bromodichloromethane	7.80	83	449543	102.99	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	199611	104.05	UG		99
39) cis-1,3-Dichloropropene	8.30	75	515996	112.20	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	297944m	113.32	UG		
42) Toluene	8.70	92	712862	97.96	UG		99
43) trans-1,3-Dichloropropene	8.93	75	463395	113.31	UG		99
44) 1,1,2-Trichloroethane	9.15	83	233061	97.62	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

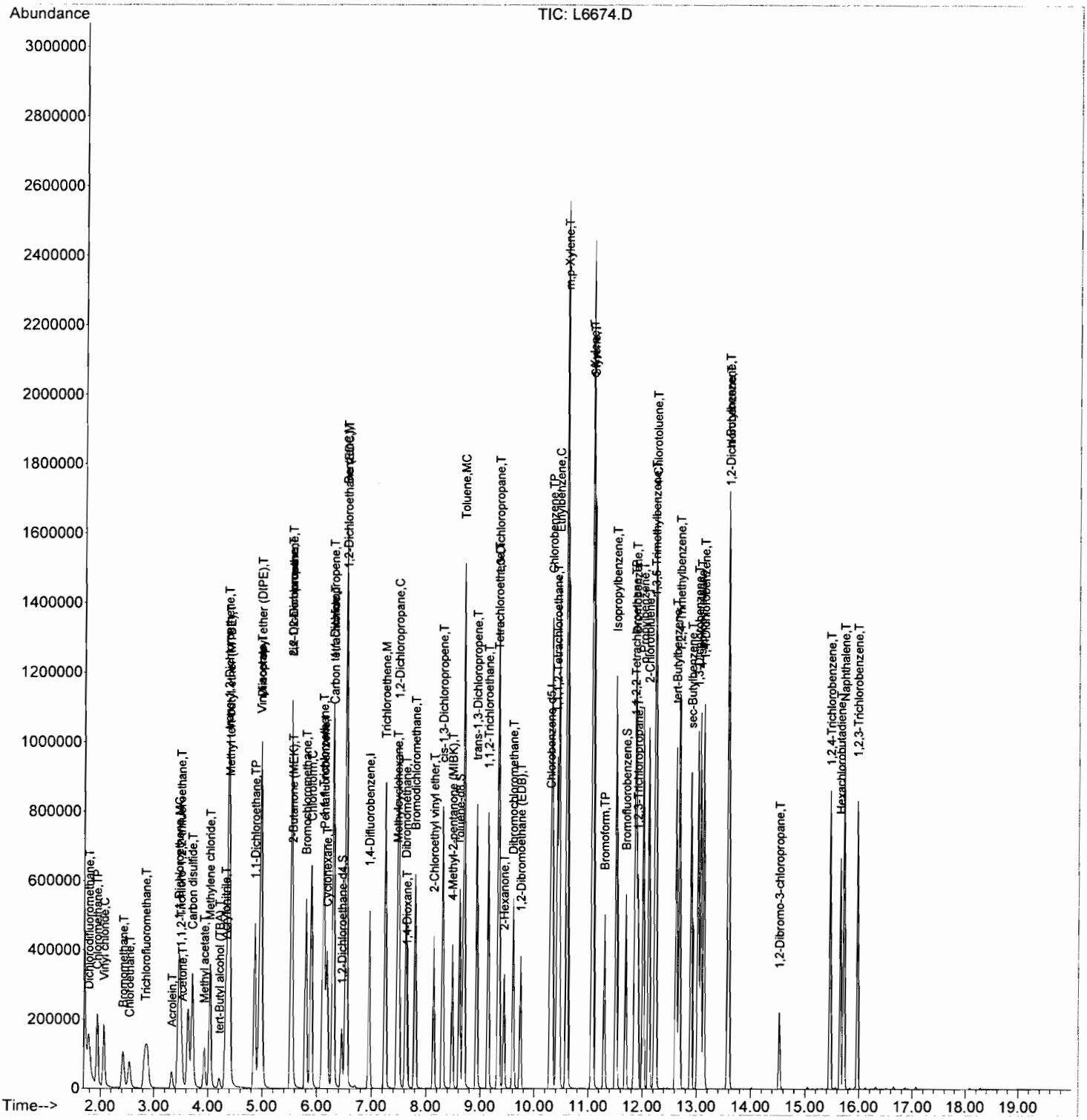
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	254284	104.51	UG	98
46) 1,3-Dichloropropane	9.34	76	468572	100.93	UG	100
47) 2-Hexanone	9.44	43	186986m	117.77	UG	
48) Dibromochloromethane	9.60	129	335786	107.81	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293590	101.82	UG	100
51) Chlorobenzene	10.32	112	801563	90.89	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	332873	101.78	UG	99
53) Ethylbenzene	10.46	91	1150555	103.37	UG	99
54) m,p-Xylene	10.60	106	874440	201.73	UG	97
55) o-Xylene	11.06	106	446825	103.70	UG	97
56) Styrene	11.09	104	837983	103.83	UG	99
57) Bromoform	11.30	173	277474	107.11	UG	100
58) Isopropylbenzene	11.51	105	923413	110.53	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349318	91.54	UG	100
61) Bromobenzene	11.88	156	368251	95.06	UG	100
62) 1,2,3-Trichloropropane	11.91	75	312635	93.52	UG	99
63) n-Propylbenzene	12.01	91	987623	102.75	UG	100
64) 2-Chlorotoluene	12.11	91	697537	96.43	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	768006	100.32	UG	100
66) 4-Chlorotoluene	12.24	91	830914	93.64	UG	99
67) tert-Butylbenzene	12.63	119	601434	104.03	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	813581	95.79	UG	100
69) sec-Butylbenzene	12.90	105	810826	101.73	UG	99
70) 1,3-Dichlorobenzene	13.02	146	534814	89.29	UG	100
71) 4-Isopropyltoluene	13.07	119	733878	100.32	UG	100
72) 1,4-Dichlorobenzene	13.14	146	555617	87.98	UG	100
73) n-Butylbenzene	13.58	92	330036	102.47	UG	96
74) 1,2-Dichlorobenzene	13.59	146	542074	88.89	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	58398	109.47	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	314189	102.22	UG	100
77) Hexachlorobutadiene	15.65	225	152322	103.79	UG	100
78) Naphthalene	15.72	128	822222	108.87	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	288938	97.73	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	133714	107.93	UG	94
81) Methyl acetate	3.93	43	199684	109.63	UG	99
82) Cyclohexane	6.18	56	253603	111.07	UG	99
83) Methylcyclohexane	7.47	55	166176	114.07	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6674.D
Acq On : 19 Feb 2015 11:18
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 19 16:11:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



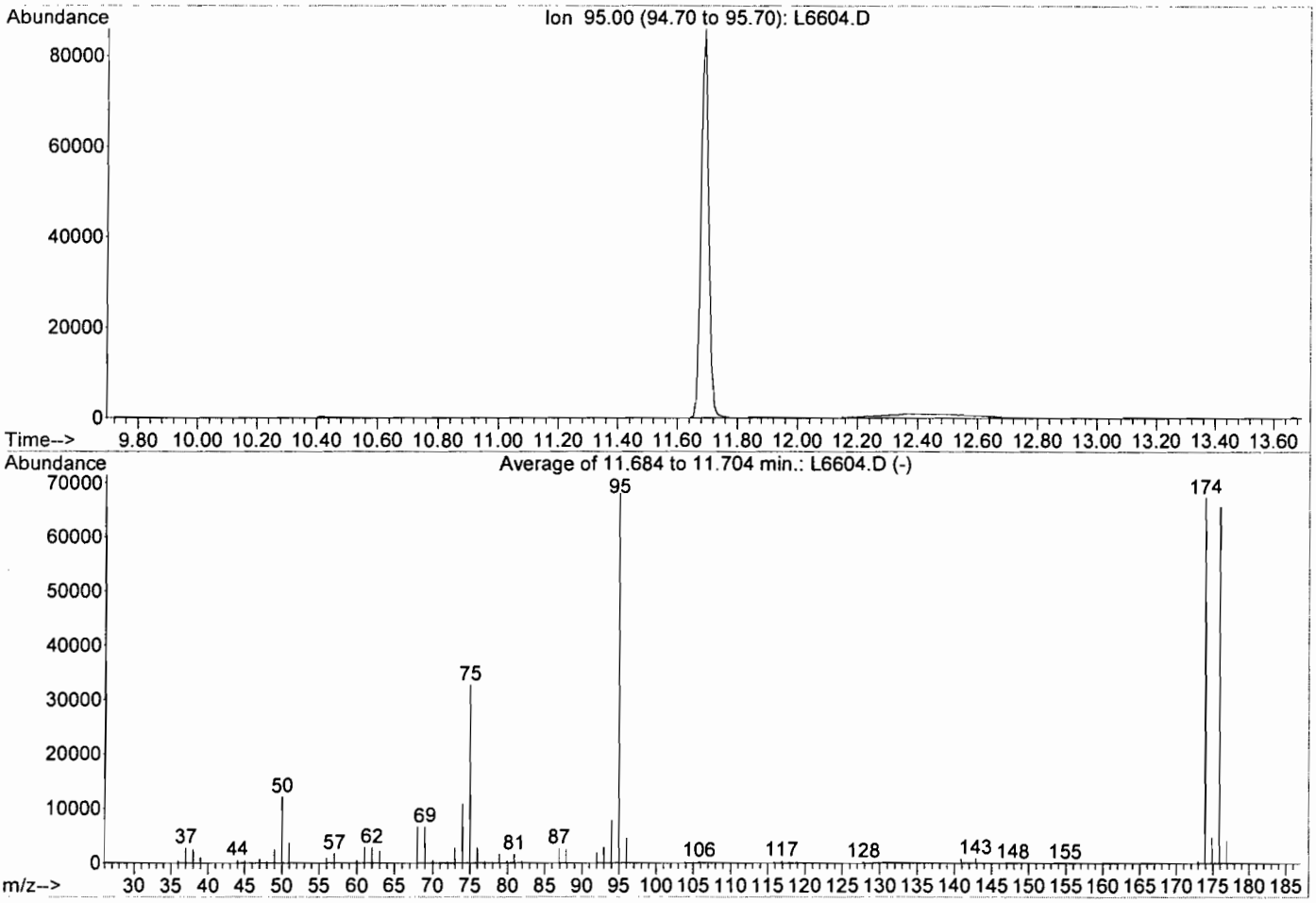
VOLATILE ORGANICS RAW QC DATA

BFB

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6604.D
Acq On : 13 Feb 2015 10:29
Operator : MEI
Sample : BFB150213
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12137	PASS
75	95	30	60	48.1	32720	PASS
95	95	100	100	100.0	68045	PASS
96	95	5	9	6.7	4577	PASS
173	174	0.00	2	0.6	434	PASS
174	95	50	100	99.1	67400	PASS
175	174	5	9	7.1	4785	PASS
176	174	95	101	97.4	65629	PASS
177	176	5	9	6.3	4113	PASS

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	470	51.00	3639	70.00	510	81.90	341
37.00	2748	52.00	151	71.95	221	86.90	2722
38.00	2473	56.00	947	73.00	2746	87.90	2497
39.00	993	57.00	1767	74.00	10841	90.90	180
40.00	71	60.00	537	75.00	32720	92.00	1898
44.00	515	61.00	2808	76.00	2838	93.00	2852
45.00	487	62.00	2810	76.95	351	94.00	7830
47.00	799	63.00	2199	77.95	188	95.00	68045
48.00	298	64.05	174	78.90	1658	96.00	4577
49.00	2523	68.00	6523	79.90	458	103.90	220
50.00	12137	69.00	6609	80.90	1660	105.85	298

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

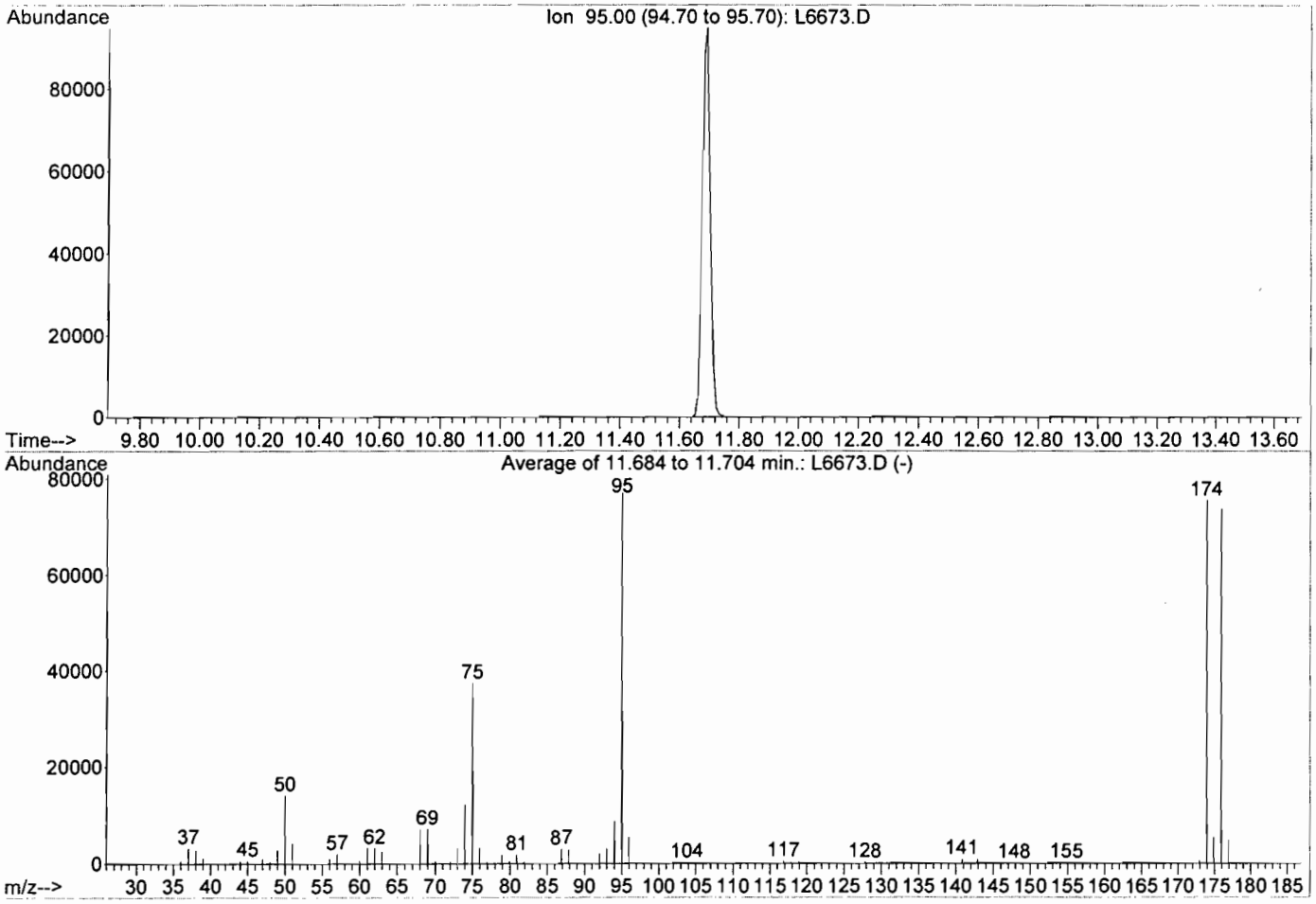
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.85	234	173.90	67400				
116.90	441	174.90	4785				
117.90	205	175.90	65629				
118.90	362	176.90	4113				
127.85	262						
129.85	212						
140.90	793						
142.90	876						
147.90	85						
154.90	80						
172.95	434						

BFB

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6673.D
Acq On : 19 Feb 2015 10:51
Operator : MEI
Sample : BFB150219
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	14138	PASS
75	95	30	60	48.7	37506	PASS
95	95	100	100	100.0	77018	PASS
96	95	5	9	7.0	5424	PASS
173	174	0.00	2	0.7	548	PASS
174	95	50	100	98.1	75554	PASS
175	174	5	9	7.1	5396	PASS
176	174	95	101	97.5	73637	PASS
177	176	5	9	6.6	4841	PASS

Average of 11.684 to 11.704 min.: L6673.D
BFB150219
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	556	51.00	4235	68.00	7183	79.90	490
37.00	3229	51.95	168	69.00	7210	80.90	1823
38.00	2852	55.00	76	70.00	544	81.90	362
39.00	1167	56.00	978	72.00	377	86.90	3029
39.95	142	57.00	1958	73.00	3119	87.90	2915
44.00	564	60.00	620	74.00	12240	90.90	175
45.00	638	61.00	3251	75.00	37506	92.00	2091
47.00	989	62.00	3263	76.00	3197	93.00	3044
48.00	399	63.00	2500	76.95	309	94.00	8737
49.00	2886	64.00	202	77.90	254	95.00	77018
50.00	14138	66.95	142	78.90	1735	96.00	5424

Average of 11.684 to 11.704 min.: L6673.D
BFB150219
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.85	244	154.85	229				
105.90	236	171.90	91				
115.80	208	172.95	548				
116.85	474	173.90	75554				
117.85	274	174.90	5396				
118.90	401	175.90	73637				
127.85	302	176.90	4841				
129.85	208						
140.85	895						
142.90	873						
147.85	173						

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.050	0.034
Chloromethane	ND		0.050	0.025
Vinyl chloride	ND		0.050	0.023
Bromomethane	ND		0.050	0.034
Chloroethane	ND		0.050	0.041
Trichlorofluoromethane	ND		0.050	0.041
1,1-Dichloroethene	ND		0.050	0.025
Acetone	ND		0.100	0.072
Carbon disulfide	ND		0.050	0.025
Methylene chloride	ND		0.100	0.100
trans-1,2-Dichloroethene	ND		0.050	0.027
Methyl tert-butyl ether (MTBE)	ND		0.050	0.025
1,1-Dichloroethane	ND		0.050	0.018
cis-1,2-Dichloroethene	ND		0.050	0.024
2-Butanone (MEK)	ND		0.050	0.044
Bromochloromethane	ND		0.050	0.032
Chloroform	ND		0.050	0.026
1,1,1-Trichloroethane	ND		0.050	0.024
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
1,2-Dichloropropane	ND		0.050	0.028
1,4-Dioxane	ND		10.0	4.14
Bromodichloromethane	ND		0.050	0.026
cis-1,3-Dichloropropene	ND		0.050	0.022
4-Methyl-2-pentanone (MIBK)	ND		0.050	0.043

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.019
trans-1,3-Dichloropropene	ND		0.050	0.021
1,1,2-Trichloroethane	ND		0.050	0.032
Tetrachloroethene	ND		0.050	0.025
2-Hexanone	ND		0.050	0.035
Dibromochloromethane	ND		0.050	0.026
1,2-Dibromoethane (EDB)	ND		0.050	0.034
Chlorobenzene	ND		0.050	0.020
Ethylbenzene	ND		0.050	0.021
Total Xylenes	ND		0.100	0.052
Styrene	ND		0.050	0.019
Bromoform	ND		0.050	0.033
Isopropylbenzene	ND		0.050	0.029
1,1,2,2-Tetrachloroethane	ND		0.050	0.035
1,3-Dichlorobenzene	ND		0.050	0.021
1,4-Dichlorobenzene	ND		0.050	0.021
1,2-Dichlorobenzene	ND		0.050	0.020
1,2-Dibromo-3-chloropropane	ND		0.100	0.047
1,2,4-Trichlorobenzene	ND		0.050	0.024
1,2,3-Trichlorobenzene	ND		0.050	0.023
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.049
Methyl acetate	ND		0.050	0.045
Cyclohexane	ND		0.050	0.041
Methylcyclohexane	ND		0.050	0.039
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.022

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM150218-01
Client ID: BLKM150218-01
Date Received:
Date Analyzed: 02/19/2015
Data file: L6676.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 19 16:11:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	311809	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	437922	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	394523	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	135416	50.68	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 101.36%			
41) Toluene-d8	8.62	98	380624	49.08	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.16%			
59) Bromofluorobenzene	11.69	95	154848	44.91	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 89.82%			

Target Compounds	Qvalue

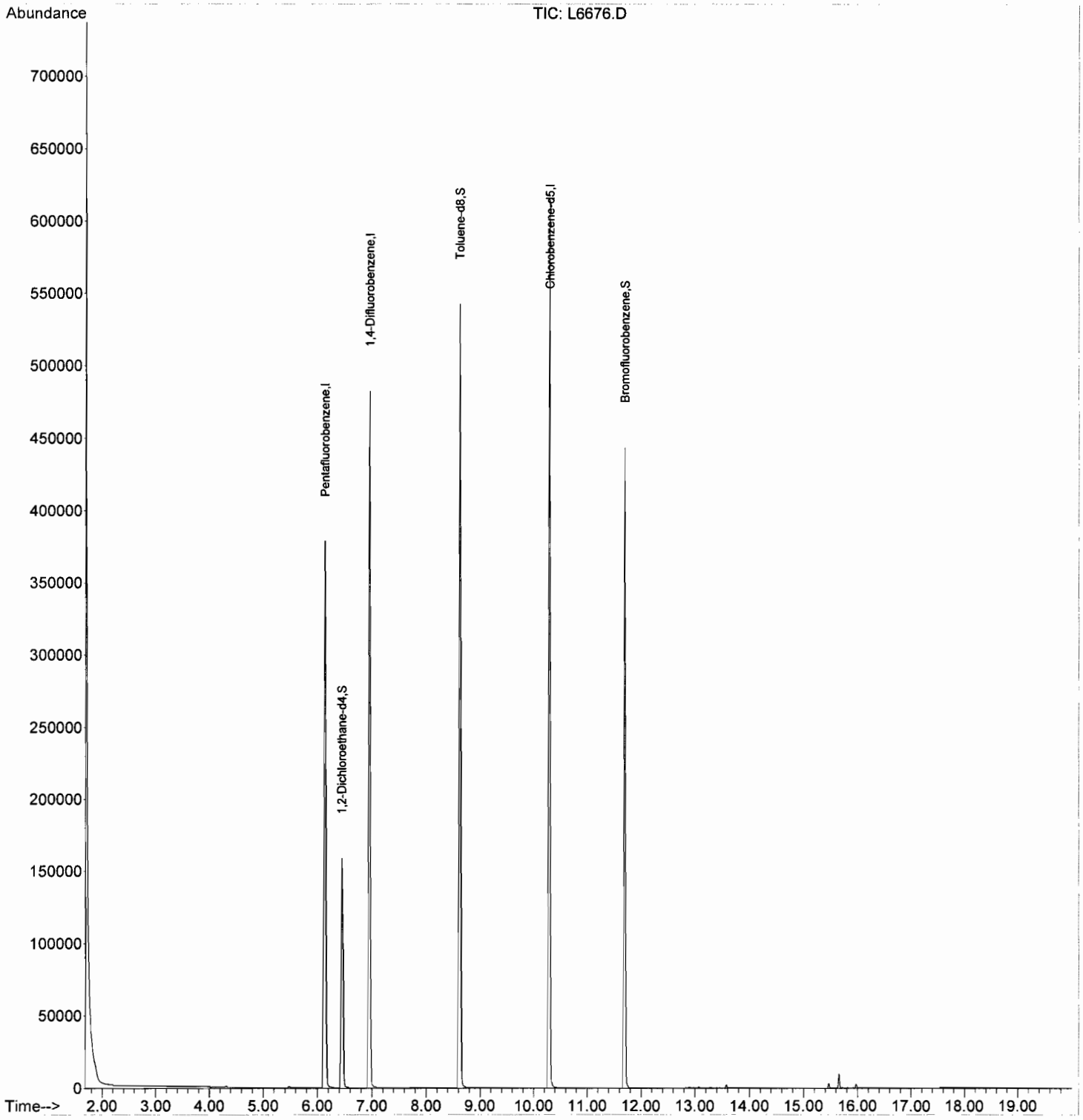
(#) = qualifier out of range (m) = manual integration (+) = signals summed

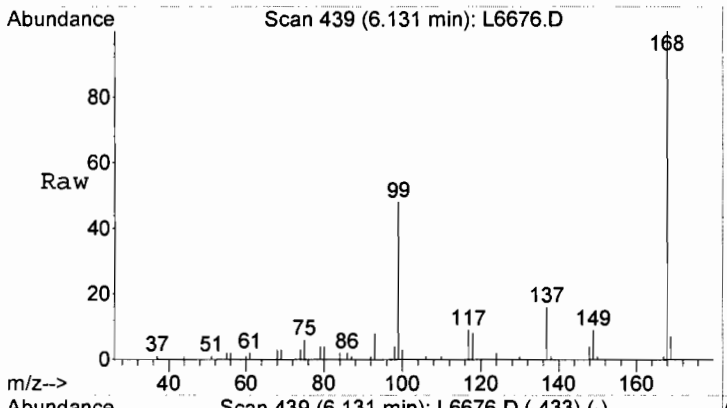
2/20/15

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 19 16:11:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

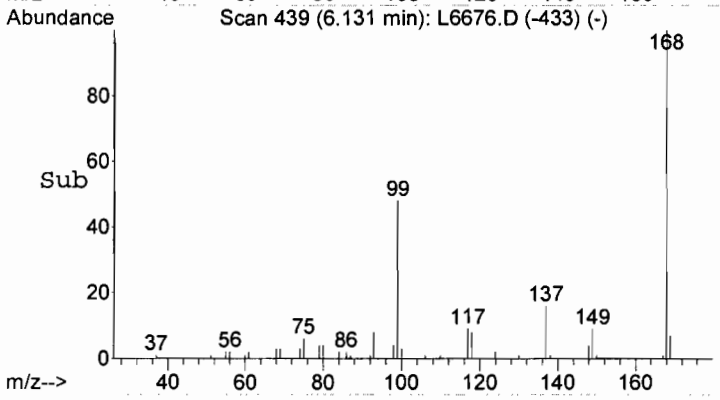


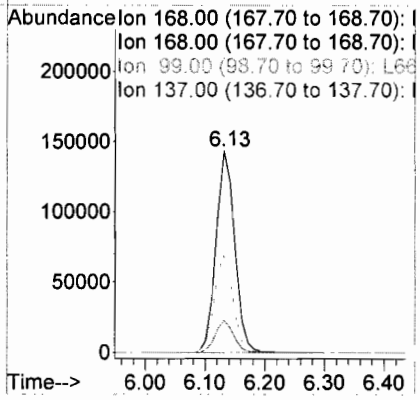


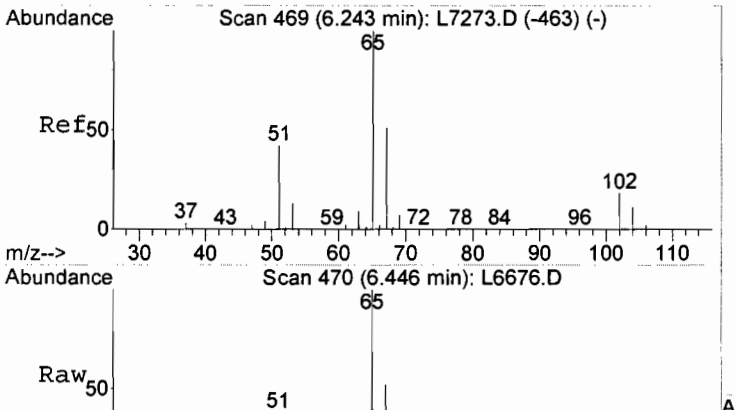
#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:168 Resp: 311809

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#



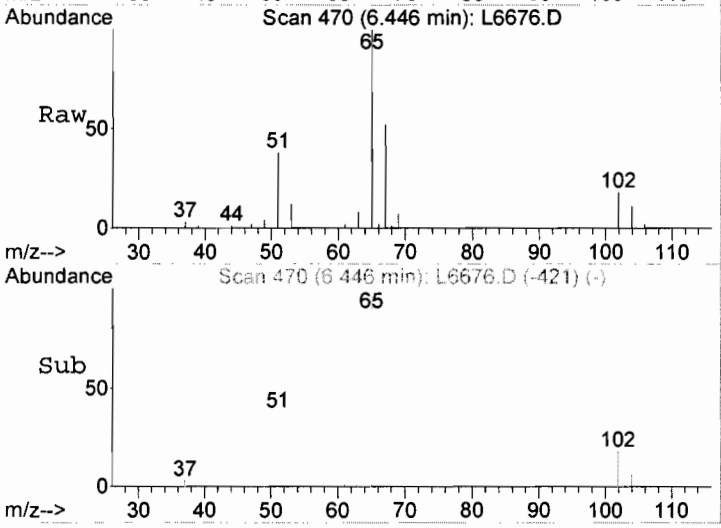


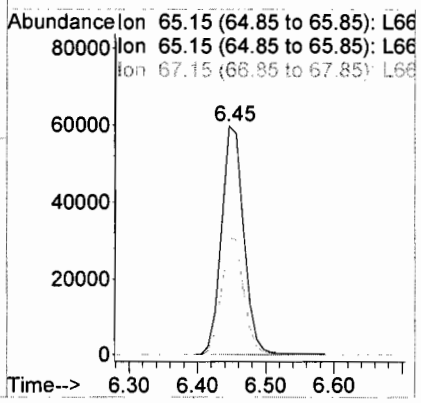


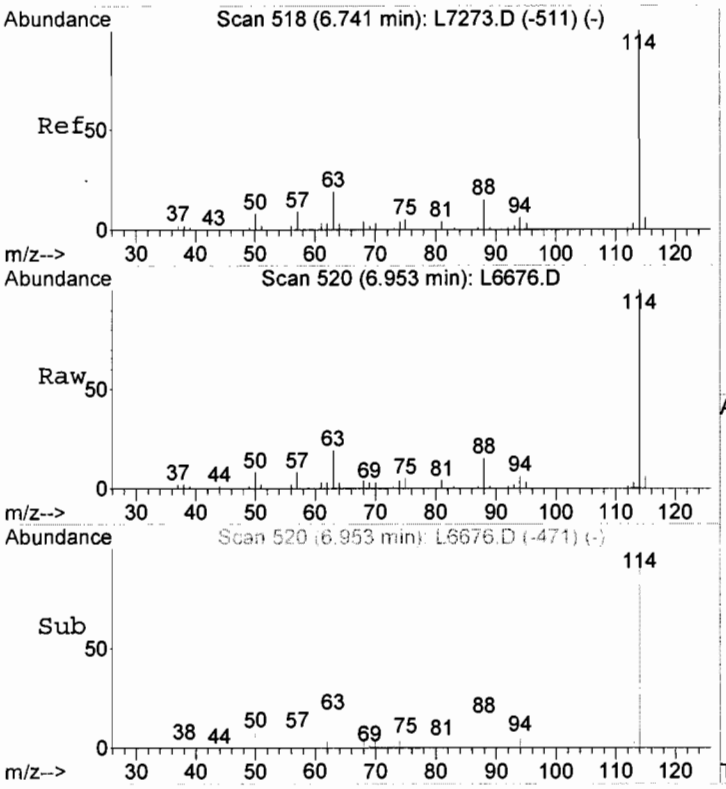
#30
1,2-Dichloroethane-d4
Concen: 50.68 UG
RT: 6.45 min Scan# 470
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 65 Resp: 135416

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	51.5	35.1	65.1



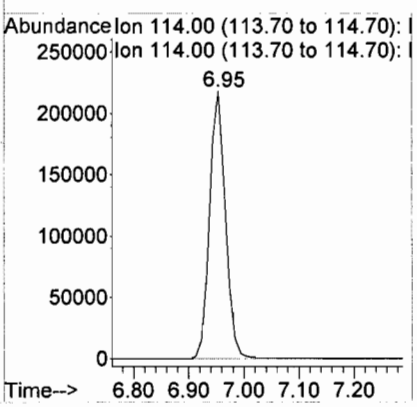


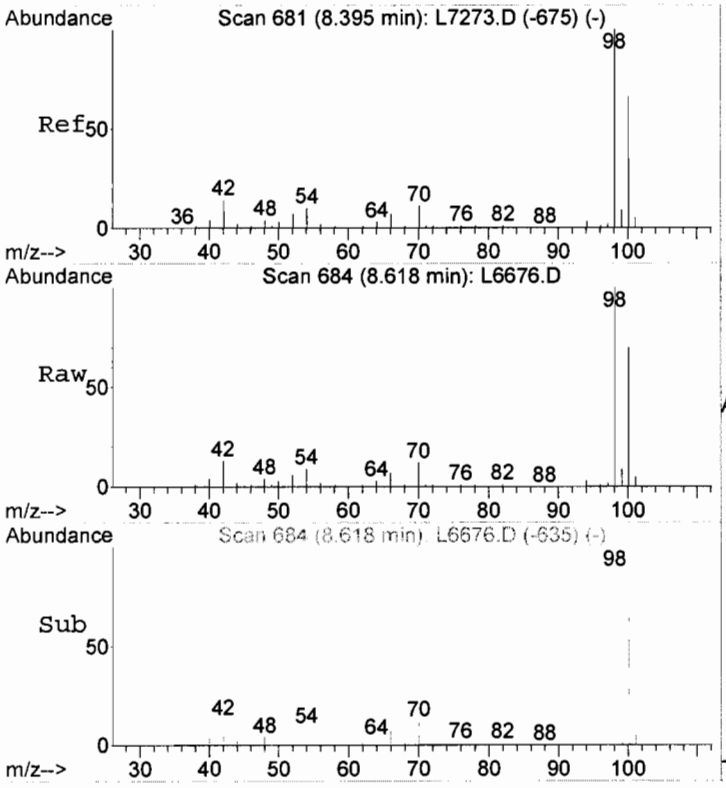


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:114 Resp: 437922

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

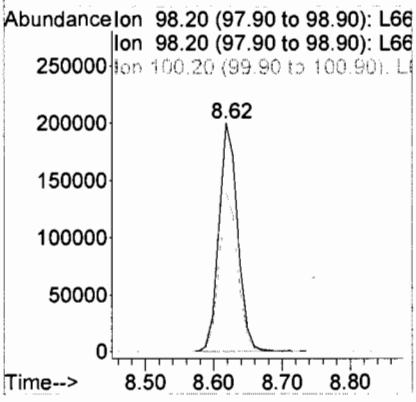


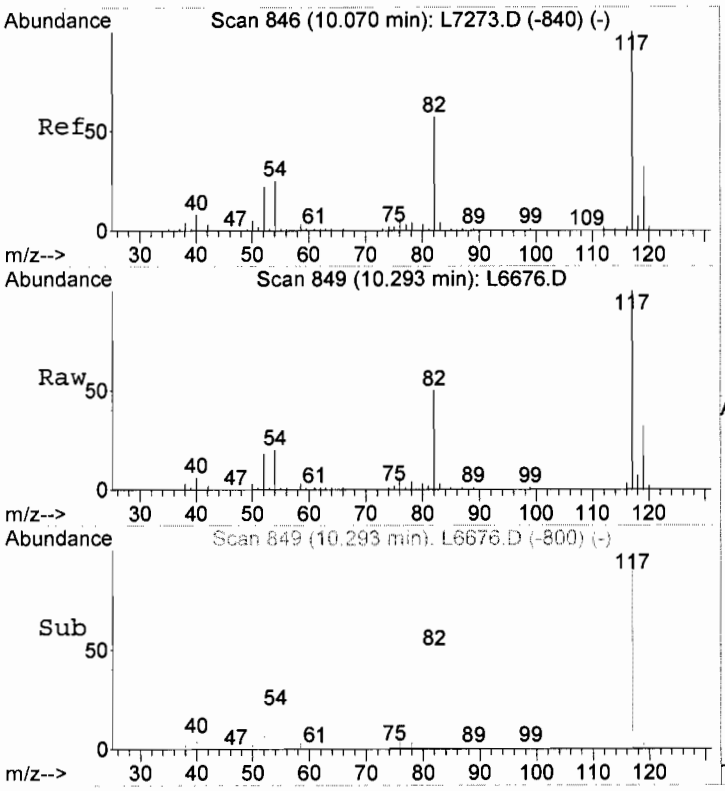


#41
Toluene-d8
Concen: 49.08 UG
RT: 8.62 min Scan# 684
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 98 Resp: 380624

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.2	44.8	83.2

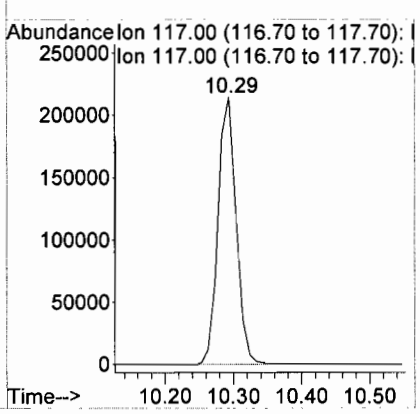


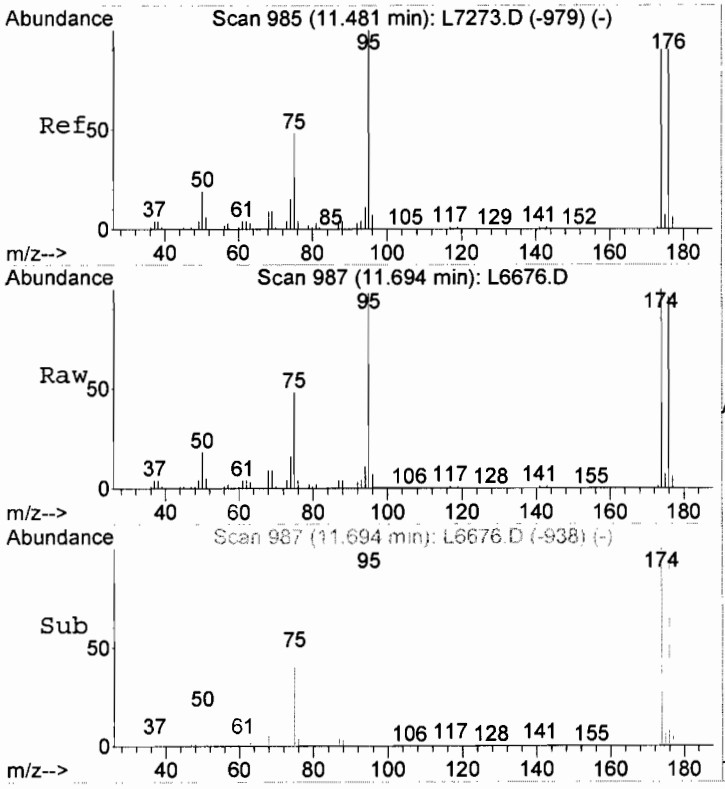


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion:117 Resp: 394523

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

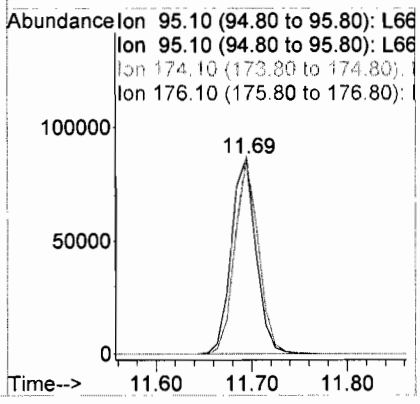




#59
Bromofluorobenzene
Concen: 44.91 UG
RT: 11.69 min Scan# 987
Delta R.T. 0.00 min
Lab File: L6676.D
Acq: 19 Feb 2015 12:13

Tgt Ion: 95 Resp: 154848

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	97.8	0.0	0.0#
176	94.7	0.0	0.0#



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	433	439	457	rVB	378834	817620	70.51%	15.922%
2	6.446	465	470	481	rBV	158648	356749	30.76%	6.947%
3	6.953	513	520	535	rBV	482002	972704	83.88%	18.943%
4	8.618	678	684	698	rBV	542665	1031169	88.92%	20.081%
5	10.293	841	849	860	rBV	614330	1159657	100.00%	22.583%
6	11.694	977	987	996	rVB	443665	782197	67.45%	15.233%
7	15.654	1371	1377	1382	rBV	9919	14902	1.29%	0.290%

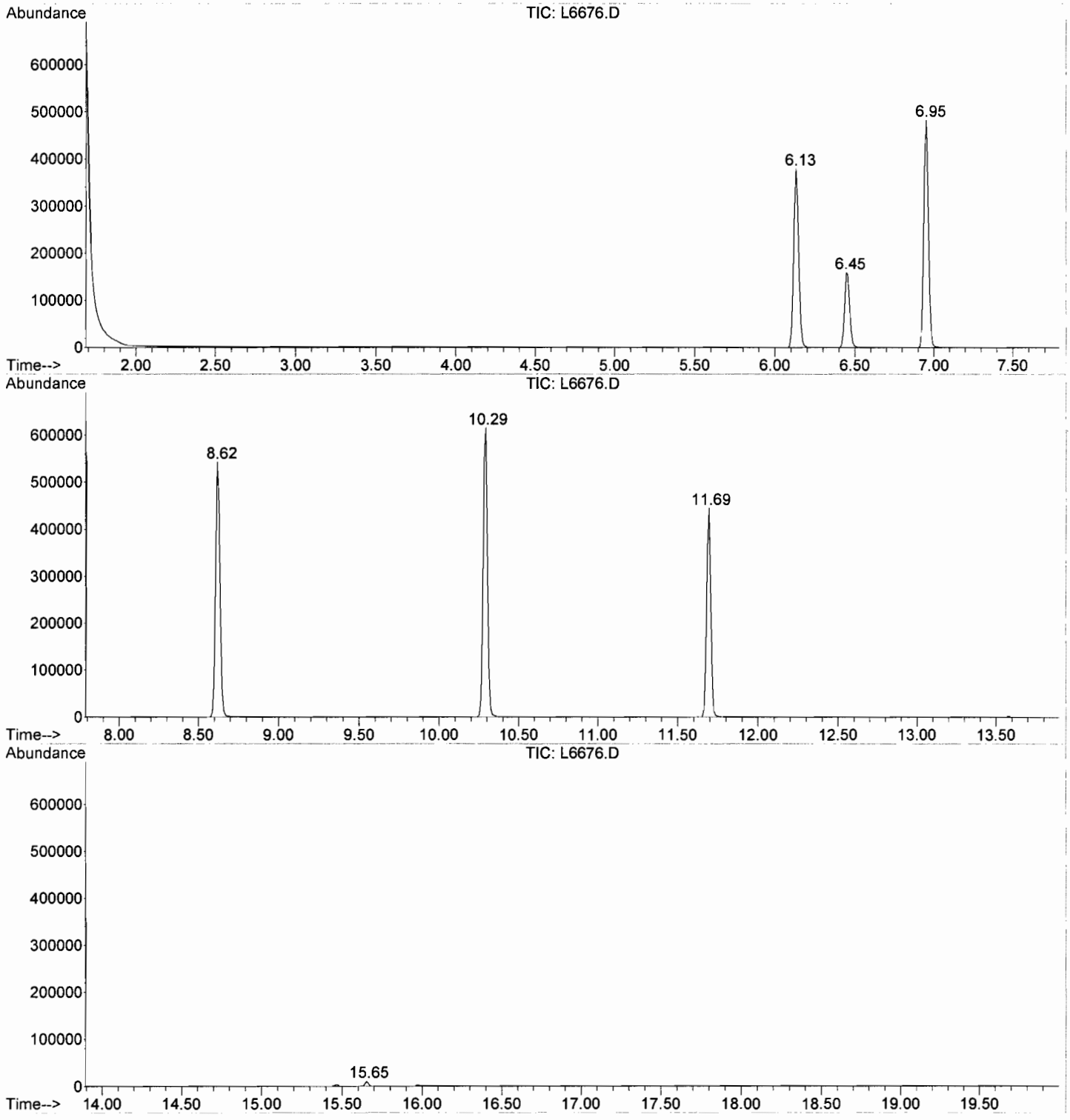
Sum of corrected areas: 5134998

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6676.D
Acq On : 19 Feb 2015 12:13
Operator : MEI
Sample : BLKM150218-01,BLKM150218-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	358338	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	507183	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	474079	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	150819	49.12	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.24%				
41) Toluene-d8	8.62	98	454597	50.61	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.22%				
59) Bromofluorobenzene	11.69	95	212087	51.19	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	90711m	63.87	UG		
3) Chloromethane	1.93	50	146568	53.15	UG		100
4) Vinyl chloride	2.06	62	135574	57.04	UG		100
5) Bromomethane	2.43	94	69304	46.90	UG		97
6) Chloroethane	2.55	64	63474	52.39	UG		99
7) Trichlorofluoromethane	2.83	101	114992	42.96	UG		100
8) Acrolein	3.33	56	31691	181.94	UG		99
9) 1,1-Dichloroethene	3.45	96	104390	52.88	UG		96
10) Acetone	3.51	43	33794	57.97	UG		100
11) Carbon disulfide	3.70	76	329997	53.69	UG		100
12) Vinyl acetate	4.96	43	417645	51.03	UG	#	99
13) Methylene chloride	4.03	84	126616	48.01	UG		100
14) Acrylonitrile	4.32	53	162868m	172.49	UG		
15) tert-Butyl alcohol (TBA)	4.20	59	22357	106.54	UG		99
16) trans-1,2-Dichloroethene	4.36	96	168160	48.56	UG		93
17) Methyl tert-butyl ether (M	4.38	73	469132	49.27	UG		100
18) 1,1-Dichloroethane	4.85	63	310005	47.65	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	625421	52.39	UG		99
20) cis-1,2-Dichloroethene	5.53	96	187347	47.91	UG		99
21) 2,2-Dichloropropane	5.53	77	162646	52.95	UG		93
22) 2-Butanone (MEK)	5.55	43	76334	56.37	UG		99
23) Bromochloromethane	5.80	128	91983	45.11	UG		99
25) Chloroform	5.89	83	299209	44.28	UG		100
26) 1,1,1-Trichloroethane	6.11	97	208855	49.48	UG		98
27) Carbon tetrachloride	6.29	117	161607	50.28	UG		100
28) 1,1-Dichloropropene	6.29	75	185829	51.40	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	239856	44.51	UG		100
32) Benzene	6.53	78	645332	46.45	UG		100
33) Trichloroethene	7.25	95	152202	45.65	UG		93
34) 1,2-Dichloropropane	7.49	63	169774	48.43	UG		100
35) Dibromomethane	7.62	93	98032	43.97	UG		93
36) 1,4-Dioxane	7.64	88	48714	1684.47	UG		100
37) Bromodichloromethane	7.80	83	212533	45.43	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	99281	48.28	UG		99
39) cis-1,3-Dichloropropene	8.30	75	248789	50.47	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	159707	56.67	UG		100
42) Toluene	8.70	92	357574	45.85	UG		100
43) trans-1,3-Dichloropropene	8.93	75	218898	49.94	UG		99
44) 1,1,2-Trichloroethane	9.15	83	116430	45.50	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

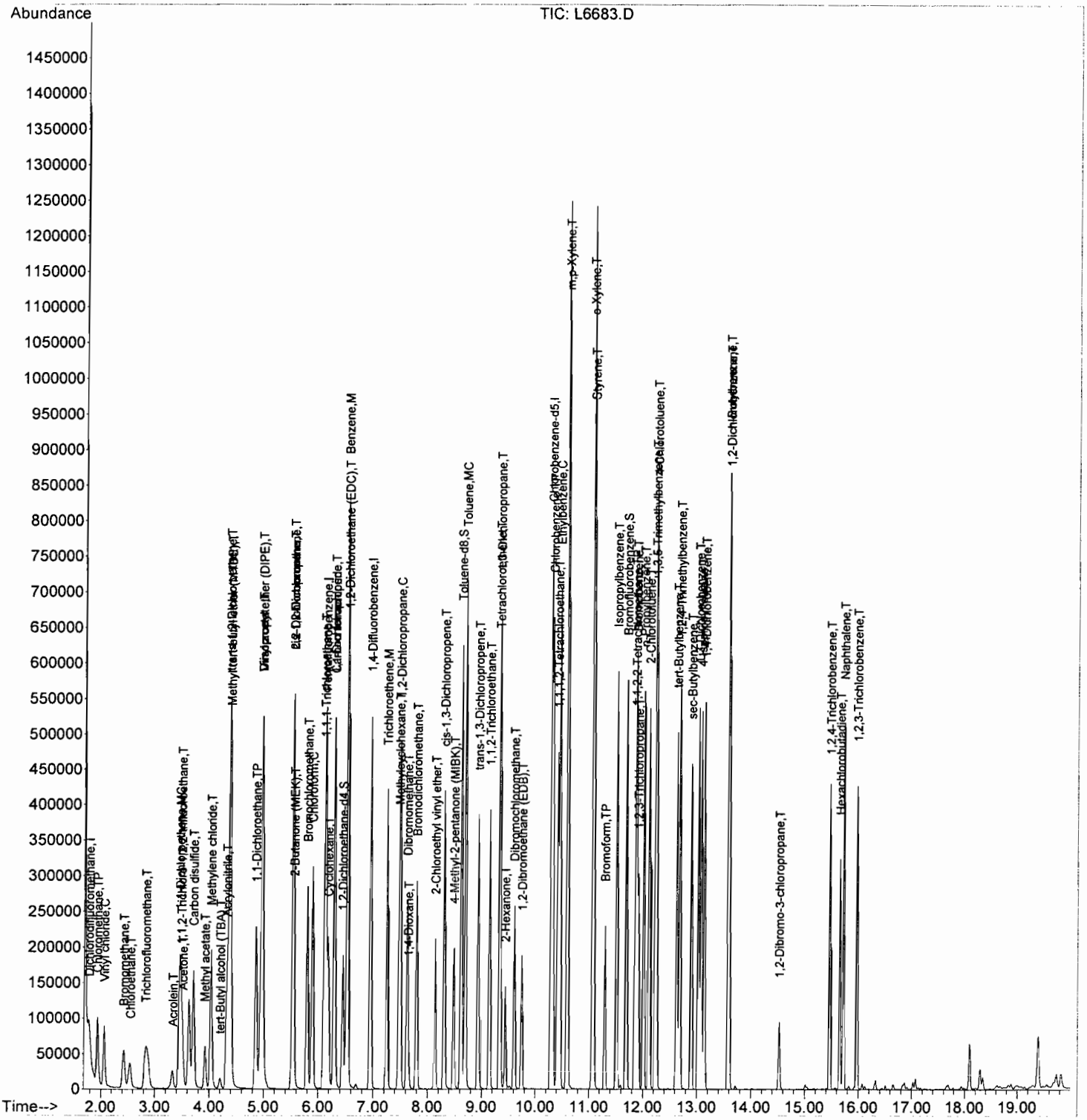
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	123975	47.54	UG	98
46) 1,3-Dichloropropane	9.34	76	238270	47.88	UG	100
47) 2-Hexanone	9.44	43	107014	62.88	UG	100
48) Dibromochloromethane	9.60	129	153228	45.90	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	145163	46.97	UG	100
51) Chlorobenzene	10.32	112	400190	42.66	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	155498	44.69	UG	99
53) Ethylbenzene	10.46	91	562303	47.49	UG	99
54) m,p-Xylene	10.60	106	440230	95.47	UG	96
55) o-Xylene	11.06	106	229103	49.98	UG	95
56) Styrene	11.09	104	422221	49.18	UG	98
57) Bromoform	11.30	173	129594	47.02	UG	100
58) Isopropylbenzene	11.51	105	451564	50.81	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	177165	43.64	UG	100
61) Bromobenzene	11.88	156	182906	44.38	UG	100
62) 1,2,3-Trichloropropane	11.91	75	156729	44.07	UG	99
63) n-Propylbenzene	12.01	91	489174	47.84	UG	100
64) 2-Chlorotoluene	12.11	91	344957	44.83	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	383468	47.09	UG	100
66) 4-Chlorotoluene	12.24	91	416073	44.08	UG	99
67) tert-Butylbenzene	12.63	119	297792	48.42	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	407228	45.07	UG	100
69) sec-Butylbenzene	12.89	105	399084	47.07	UG	99
70) 1,3-Dichlorobenzene	13.02	146	270727	42.49	UG	100
71) 4-Isopropyltoluene	13.07	119	358560	46.08	UG	100
72) 1,4-Dichlorobenzene	13.14	146	279572	41.61	UG	100
73) n-Butylbenzene	13.58	92	163287	47.66	UG	96
74) 1,2-Dichlorobenzene	13.59	146	278095	42.87	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	25979	45.78	UG	87
76) 1,2,4-Trichlorobenzene	15.47	180	157799	48.26	UG	100
77) Hexachlorobutadiene	15.65	225	73706	47.21	UG	100
78) Naphthalene	15.72	128	415382	51.70	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	147247	46.82	UG	100
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	68098	51.67	UG	95
81) Methyl acetate	3.92	43	107104	55.28	UG	99
82) Cyclohexane	6.18	56	134953	55.56	UG	99
83) Methylcyclohexane	7.47	55	84736	54.68	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6683.D
Acq On : 19 Feb 2015 15:22
Operator : MEI
Sample : LCS-50PPB,LCSM150219-01,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 19 16:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	375414	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	525180	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	480260	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.46	65	153361	47.67	UG		0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.34%				
41) Toluene-d8	8.62	98	470007	50.53	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.06%				
59) Bromofluorobenzene	11.69	95	206322	49.15	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	93428m	62.79	UG		
3) Chloromethane	1.93	50	164120	56.81	UG		100
4) Vinyl chloride	2.06	62	140009	56.23	UG		100
5) Bromomethane	2.43	94	71275	46.04	UG		98
6) Chloroethane	2.55	64	63063	49.69	UG		100
7) Trichlorofluoromethane	2.84	101	114625	40.87	UG		100
8) Acrolein	3.33	56	32541	178.32	UG		99
9) 1,1-Dichloroethene	3.46	96	107205	51.83	UG		96
10) Acetone	3.52	43	35020	57.34	UG		100
11) Carbon disulfide	3.72	76	333535	51.80	UG		100
12) Vinyl acetate	4.96	43	428621	49.99	UG	#	99
13) Methylene chloride	4.03	84	128366	46.46	UG		100
14) Acrylonitrile	4.32	53	179747m	181.71	UG		
15) tert-Butyl alcohol (TBA)	4.21	59	22803	103.72	UG		99
16) trans-1,2-Dichloroethene	4.36	96	172759	47.62	UG		93
17) Methyl tert-butyl ether (M	4.40	73	486340	48.76	UG		100
18) 1,1-Dichloroethane	4.86	63	321956	47.23	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	651785	52.12	UG		99
20) cis-1,2-Dichloroethene	5.53	96	196779	48.03	UG		100
21) 2,2-Dichloropropane	5.53	77	159723	49.64	UG		89
22) 2-Butanone (MEK)	5.55	43	80207	56.53	UG		99
23) Bromochloromethane	5.80	128	96151	45.01	UG		99
25) Chloroform	5.90	83	312870	44.20	UG		100
26) 1,1,1-Trichloroethane	6.11	97	212340	48.01	UG		98
27) Carbon tetrachloride	6.30	117	168510	50.05	UG		100
28) 1,1-Dichloropropene	6.29	75	192389	50.80	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	248332	43.99	UG		100
32) Benzene	6.53	78	676917	47.06	UG		100
33) Trichloroethene	7.25	95	160709	46.55	UG		93
34) 1,2-Dichloropropane	7.49	63	177088	48.78	UG		100
35) Dibromomethane	7.62	93	102530	44.41	UG		92
36) 1,4-Dioxane	7.64	88	48660	1624.94	UG		100
37) Bromodichloromethane	7.80	83	224321	46.30	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	106492	50.01	UG		99
39) cis-1,3-Dichloropropene	8.30	75	261734	51.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	166938	57.21	UG		100
42) Toluene	8.70	92	370326	45.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	231980	51.11	UG		99
44) 1,1,2-Trichloroethane	9.15	83	124749	47.08	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

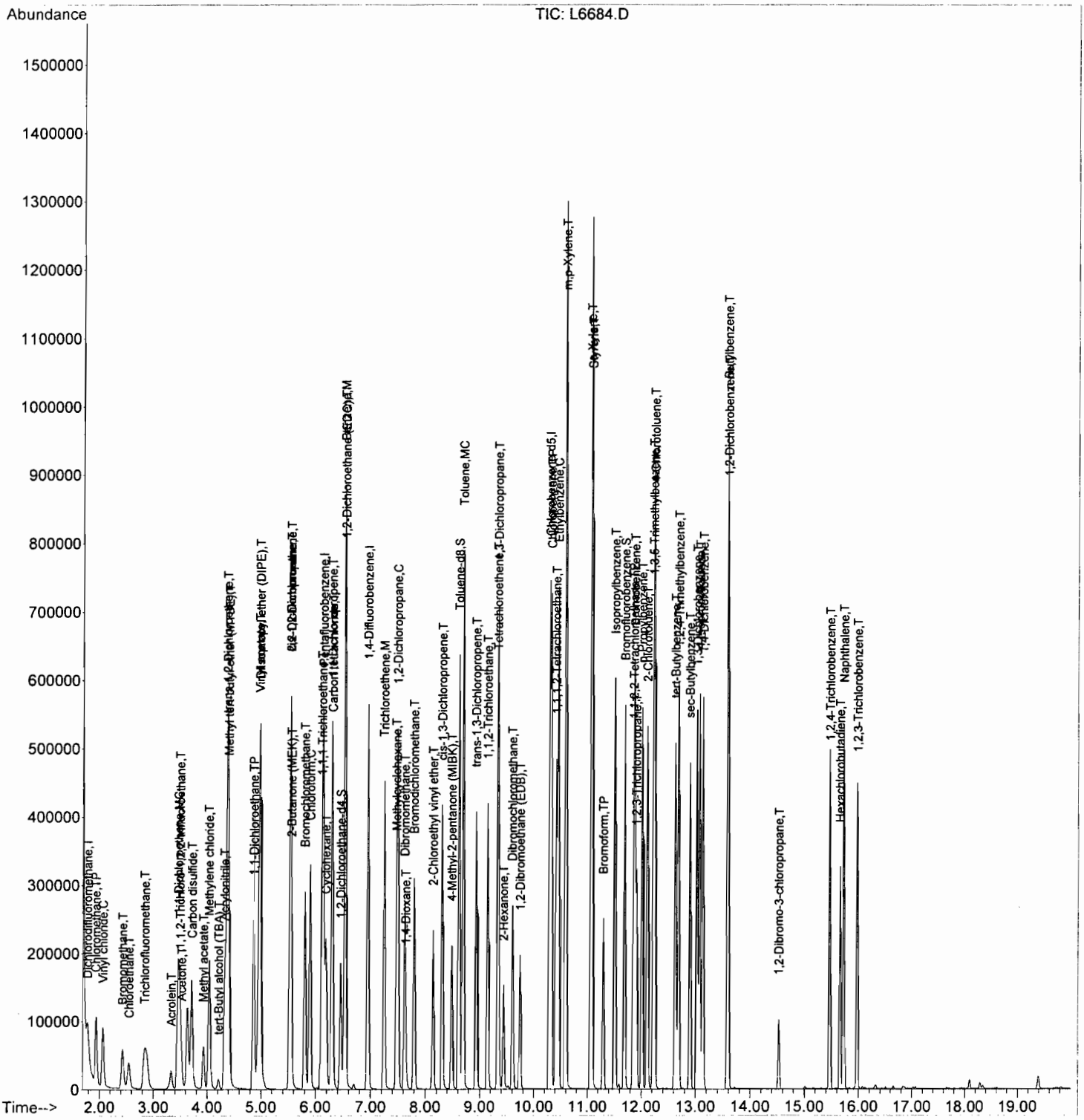
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	127034	47.04 UG	98
46) 1,3-Dichloropropane	9.34	76	249993	48.52 UG	100
47) 2-Hexanone	9.44	43	113473	64.40 UG	100
48) Dibromochloromethane	9.60	129	163320	47.25 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	154648	48.32 UG	100
51) Chlorobenzene	10.32	112	417927	43.98 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	163834	46.48 UG	99
53) Ethylbenzene	10.46	91	587941	49.01 UG	99
54) m,p-Xylene	10.60	106	455180	97.44 UG	96
55) o-Xylene	11.06	106	233809	50.35 UG	96
56) Styrene	11.09	104	440353	50.63 UG	98
57) Bromoform	11.30	173	140426	50.30 UG	100
58) Isopropylbenzene	11.51	105	469473	52.14 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	183744	44.68 UG	100
61) Bromobenzene	11.88	156	191582	45.89 UG	100
62) 1,2,3-Trichloropropane	11.91	75	163680	45.44 UG	99
63) n-Propylbenzene	12.01	91	511748	49.40 UG	100
64) 2-Chlorotoluene	12.11	91	361233	46.34 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	404163	48.99 UG	100
66) 4-Chlorotoluene	12.24	91	436134	45.61 UG	99
67) tert-Butylbenzene	12.63	119	306243	49.15 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	425076	46.44 UG	99
69) sec-Butylbenzene	12.89	105	423884	49.35 UG	99
70) 1,3-Dichlorobenzene	13.02	146	281724	43.65 UG	100
71) 4-Isopropyltoluene	13.08	119	384377	48.76 UG	100
72) 1,4-Dichlorobenzene	13.14	146	293306	43.10 UG	100
73) n-Butylbenzene	13.58	92	176855	50.95 UG	96
74) 1,2-Dichlorobenzene	13.59	146	289697	44.08 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	27168	47.26 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	178297	53.83 UG	100
77) Hexachlorobutadiene	15.65	225	76817	48.57 UG	100
78) Naphthalene	15.72	128	456585	56.10 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	166541	52.27 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	69030	51.70 UG	95
81) Methyl acetate	3.93	43	108138	55.09 UG	99
82) Cyclohexane	6.18	56	137153	55.74 UG	100
83) Methylcyclohexane	7.47	55	89697	57.13 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : L6684.D
Acq On : 19 Feb 2015 15:49
Operator : MEI
Sample : MS,01062-005MS,M,0.05g,0
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 09:26:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	381693	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	535479	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	502867	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	155571	47.57	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.14%				
41) Toluene-d8	8.62	98	480939	50.72	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.44%				
59) Bromofluorobenzene	11.69	95	217615	49.51	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 99.02%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	92777m	61.33	UG		
3) Chloromethane	1.93	50	157263	53.54	UG		100
4) Vinyl chloride	2.06	62	136278	53.83	UG		100
5) Bromomethane	2.43	94	72266	45.91	UG		97
6) Chloroethane	2.55	64	64312	49.84	UG		100
7) Trichlorofluoromethane	2.84	101	110609	38.79	UG		99
8) Acrolein	3.33	56	31299	168.70	UG		100
9) 1,1-Dichloroethene	3.45	96	102032	48.52	UG		96
10) Acetone	3.52	43	33265	53.57	UG		100
11) Carbon disulfide	3.70	76	331926	50.70	UG		100
12) Vinyl acetate	4.96	43	436382	50.06	UG	#	99
13) Methylene chloride	4.03	84	131228	46.71	UG		100
14) Acrylonitrile	4.32	53	193578	192.47	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	23364	104.53	UG		99
16) trans-1,2-Dichloroethene	4.36	96	173880	47.14	UG		93
17) Methyl tert-butyl ether (M	4.39	73	496117	48.92	UG		100
18) 1,1-Dichloroethane	4.86	63	329194	47.50	UG		99
19) Diisopropyl ether (DIPE)	4.97	45	675548	53.13	UG		99
20) cis-1,2-Dichloroethene	5.53	96	202686	48.66	UG		100
21) 2,2-Dichloropropane	5.53	77	164845	50.38	UG		89
22) 2-Butanone (MEK)	5.55	43	79754	55.29	UG		99
23) Bromochloromethane	5.80	128	99800	45.95	UG		99
25) Chloroform	5.90	83	320977	44.59	UG		100
26) 1,1,1-Trichloroethane	6.11	97	214440	47.69	UG		98
27) Carbon tetrachloride	6.30	117	166580	48.66	UG		100
28) 1,1-Dichloropropene	6.29	75	192427	49.97	UG		97
29) 1,2-Dichloroethane (EDC)	6.54	62	256843	44.75	UG		100
32) Benzene	6.53	78	703172	47.94	UG		100
33) Trichloroethene	7.25	95	168430	47.84	UG		93
34) 1,2-Dichloropropane	7.49	63	187615	50.69	UG		100
35) Dibromomethane	7.62	93	106810	45.37	UG		93
36) 1,4-Dioxane	7.65	88	48602	1591.79	UG		99
37) Bromodichloromethane	7.80	83	234153	47.40	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	113732	52.39	UG		99
39) cis-1,3-Dichloropropene	8.30	75	275977	53.03	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	173584	58.34	UG		100
42) Toluene	8.70	92	386239	46.90	UG		99
43) trans-1,3-Dichloropropene	8.93	75	243549	52.63	UG		99
44) 1,1,2-Trichloroethane	9.15	83	130269	48.22	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

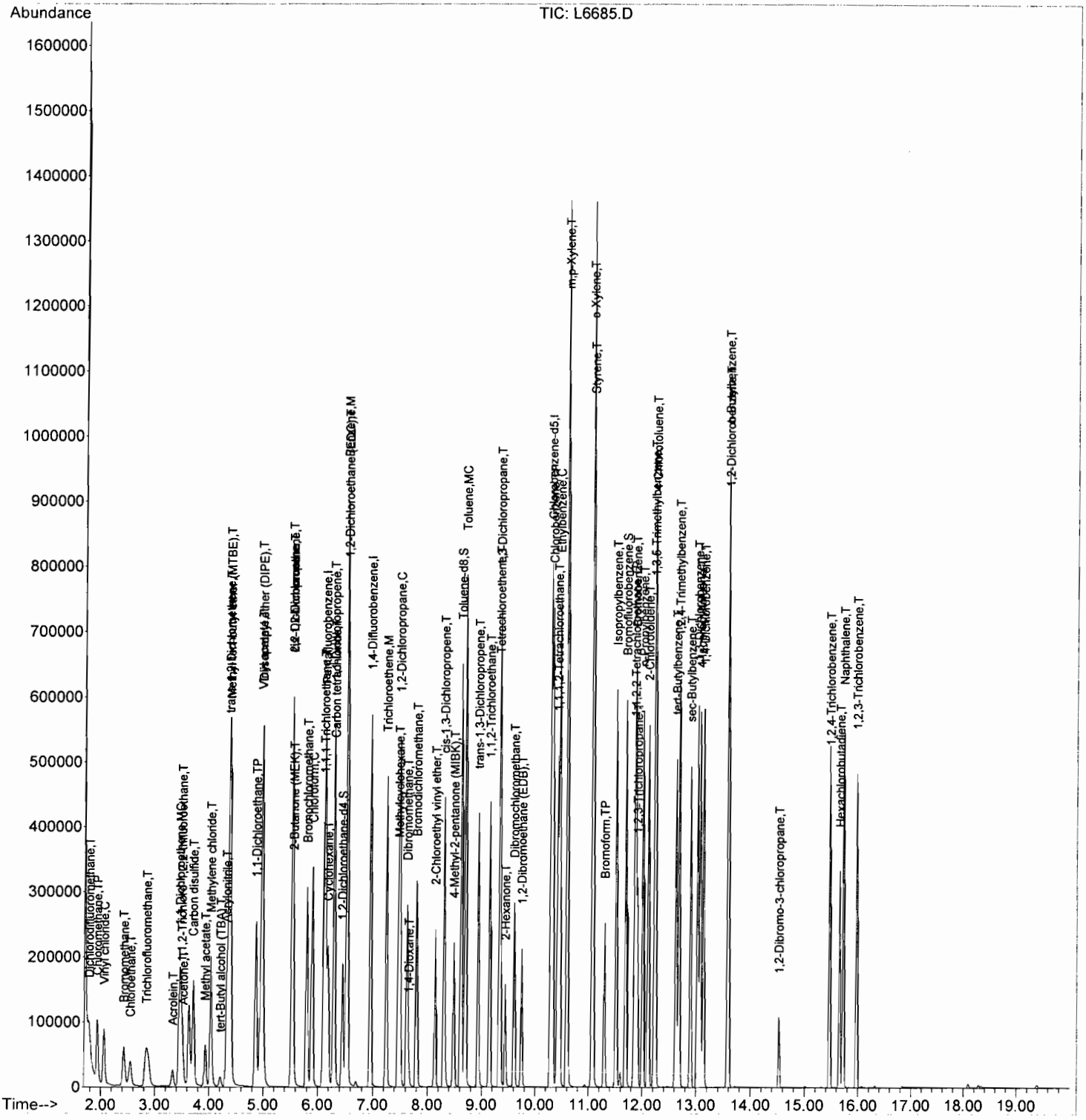
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	129849	47.16 UG	98
46) 1,3-Dichloropropane	9.34	76	262384	49.94 UG	100
47) 2-Hexanone	9.44	43	115623	64.35 UG	100
48) Dibromochloromethane	9.60	129	171915	48.78 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	160830	49.29 UG	100
51) Chlorobenzene	10.32	112	441448	44.36 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	172069	46.63 UG	99
53) Ethylbenzene	10.46	91	605194	48.18 UG	99
54) m,p-Xylene	10.60	106	473101	96.72 UG	96
55) o-Xylene	11.06	106	248636	51.14 UG	95
56) Styrene	11.09	104	466147	51.19 UG	98
57) Bromoform	11.30	173	140501	48.06 UG	100
58) Isopropylbenzene	11.51	105	473973	50.28 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	186478	43.31 UG	100
61) Bromobenzene	11.88	156	197466	45.17 UG	100
62) 1,2,3-Trichloropropane	11.91	75	168622	44.70 UG	99
63) n-Propylbenzene	12.01	91	517255	47.69 UG	100
64) 2-Chlorotoluene	12.11	91	373397	45.74 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	407913	47.22 UG	99
66) 4-Chlorotoluene	12.24	91	448329	44.77 UG	99
67) tert-Butylbenzene	12.63	119	306863	47.04 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	437014	45.60 UG	100
69) sec-Butylbenzene	12.89	105	424029	47.15 UG	99
70) 1,3-Dichlorobenzene	13.02	146	291826	43.18 UG	100
71) 4-Isopropyltoluene	13.08	119	389129	47.14 UG	100
72) 1,4-Dichlorobenzene	13.14	146	300009	42.10 UG	100
73) n-Butylbenzene	13.58	92	178243	49.05 UG	96
74) 1,2-Dichlorobenzene	13.59	146	298198	43.34 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	28526	47.39 UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	184564	53.22 UG	99
77) Hexachlorobutadiene	15.65	225	78474	47.39 UG	100
78) Naphthalene	15.72	128	459864	53.96 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	169642	50.85 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	63062	45.11 UG	94
81) Methyl acetate	3.93	43	108732	52.90 UG	99
82) Cyclohexane	6.18	56	129673	50.33 UG	100
83) Methylcyclohexane	7.47	55	83961	51.07 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-19-15\
Data File : L6685.D
Acq On : 19 Feb 2015 16:16
Operator : MEI
Sample : MSD,01062-005MSD,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 09:47:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/13/2015 17:16

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-13-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6604	BFB150213										ok
2	2	L6605	ICC1	ICC1		5		W				100	ok
3	3	L6606	ICC2	ICC2		5		W				100	—
4	4	L6607	ICC5	ICC5		5		W				100	ok
5	5	L6608	ICC2	ICC2		5		W				100	ok
6	6	L6609	ICC20	ICC20		5		W				100	ok
7	7	L6610	ICC100	ICC100		5		W				100	ok
8	8	L6611	ICC150	ICC150		5		W				100	ok
9	9	L6612	ICC200	ICC200		5		W				100	ok
10	10	L6613	RB										—
11	11	L6614	RB										—
12	12	L6615	ICV100	ICV100		5		W				100	ok
13	13	L6616	RB										—
14	14	L6617	RB										—
15	15	L6618	BLKM150213-01	LKM150213-01		0.1		M				0	ok
16	16	L6619	LCS-50PPB	CSM150213-01		0.05		M				0	ok
17	17	L6620	MS	01069-001MS		0.05		M				0	ok
18	18	L6621	MSD	1069-001MSD		0.05		M				0	ok
19	19	L6622	RB										—
20	20	L6623	RB										—
21	21	L6624	1069	1	1	0.088		M	ES-WC-91_(0-4)	02/10/15	02/11/15	7.30	Re-Soil
22	22	L6625	1089	1	20	0.0031		M	T-2/5.0-5.5	02/10/15	02/11/15	32.2	ok
23	23	L6626	1049	7	1	0.027		M	SB-6/10.5	02/10/15	02/11/15	16.7	ok
24	24	L6627		6	1	0.048		M	SB-7/7.5	02/10/15	02/11/15	13.5	ok
25	25	L6628		5	1	0.022		M	SB-5/7.5	02/10/15	02/11/15	14.4	ok
26	26	L6629	1069	2	5	0.006		M	ES-WC-91_(4-8)	02/10/15	02/11/15	42.9	ok
27	27	L6630	1060	1	5	0.01		M	WC-1/GB6/12-12	11/14/14	02/11/15	10.7	ok
28	28	L6631	RB										—

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/19/2015 15:58

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-19-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6673	BFB150219										ok
2	2	L6674	CCV100	CCV100		5		W				100	ok
3	3	L6675	RB										ok
4	4	L6676	BLKM150219-01	LKM150219-01		0.1		M				0	ok
5	5	L6677	1168	1	1	0.062		M	AA-F5_(6.5-7)/	02/13/15	02/13/15	14.4	ok
6	6	L6678		2	1	0.05		M	AA-E5_(6.5-7)/	02/13/15	02/13/15	15.3	ok
7	7	L6679	1062	4	1	0.062		M	SB-105_(11.5-1	02/10/15	02/11/15	17.3	Re-5g soil
8	8	L6680		5	1	0.09		M	SB-106_(9-9.5)	02/10/15	02/11/15	18.5	↓
9	9	L6681		2	1	0.067		M	SB-102_(5.5-6)	02/10/15	02/11/15	15.0	ok
10	10	L6682	1229	1	2	0.025		M	WC-1/GB-12/12-	05/05/14	02/17/15	7.50	ok
11	11	L6683	LCS-50PPB	CSM150219-01		0.05		M				0	ok
12	12	L6684	MS	01062-005MS		0.05		M				0	ok
13	13	L6685	MSD	1062-005MSD		0.05		M				0	ok
14	14	L6686	RB										ok
15	15	L6687	1062	2	1	0.067		M	SB-102_(5.5-6)	02/10/15	02/11/15	15.0	Re-5g soil, confirmation run
16	16	L6688	1273	1	1	0.05		M	GPEC-WC1-02181	02/18/15	02/19/15		ok
17	17	L6689	1167	2	1	0.063		M	ES-WC-92_(4-8)	02/13/15	02/13/15	17.0	ok
18	18	L6690		1	5	0.007		M	ES-WC-92_(0-4)	02/13/15	02/13/15	15.4	ok
19	19	L6691	1158	1	1	0.05		M	SB-1_/8-9	02/13/15	02/13/15	11.1	ok
20	20	L6692		7	1	0.027		M	SB-5	02/13/15	02/13/15	26.3	ok
21	21	L6693		14	1	0.031		M	SB-12	02/13/15	02/13/15	12.0	ok
22	22	L6694		2	5	0.006		M	SB-2_(3-4)/3-4	02/13/15	02/13/15	31.6	ok
23	23	L6695		6	5	0.006		M	SB-4	02/13/15	02/13/15	13.3	ok
24	24	L6696		12	2	0.02		M	SB-10	02/13/15	02/13/15	14.7	ok
25	25	L6697		13	1	0.042		M	SB-11	02/13/15	02/13/15	14.6	ok
26	26	L6698	1177	1	1	0.05		M	STOCKPILE	02/12/15	02/13/15	6.00	ok
27	27	L6699	1224	1	5	0.01		M	WC1/7-7.5	02/16/15	02/17/15	23.7	ok
28	28	L6700	RB										✓

LS1030 TPH-GRO Working Std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertiPrep GAS-20 (Lot# C113091108.) @ 20mg/ml
Exp: 1/11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/6/14, exp: 2/28/17)
Exp: 3/9/15 1ml ECS-A46 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/7/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIFE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 10/11/2015)
1ml of ECS-A44 8260 Addition @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
~~1ml of VOA-ZALAST-1 @ 2,000ppm Lot# C112121913~~ (Rec: 5/1/14 exp: 4/28/2015)
diluted into 50ml MeOH

LS1032 Secondary Acrolein/Acrylonitrile @ 1000 ppm working soln
CXZ 12/15/14 ~~1ml of ECS-A4038 (Lot# 120814, exp. 3/8/15)~~ into 10ml
exp. 3/8/15 MeOH, final volume is 10ml

LS1033 ~~TPH working std @ 500 mg/ml~~
prep: 1/5/15 ~~1ml of Spex CertiPrep GAS-20 (Lot# C113091108) @ 20mg/ml~~
Exp: 4/3/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working Std @ 1,000 mg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/8/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (< -10° C)

LS1035 BFB @ 25 µg/ml for tuning
pre: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 82# MM2/ (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) Dilute with MeOH, Final volume: 2 ml
CXM

LS1036 1,4-Dioxane working Std @ 10,000 ppm
pre: 1/20/15 Transfer 1,4-Dioxane @ 10,000 ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CXM

LS1037 DIPE stock std soln @ 5,000 µg/ml
MXF 2/3/15 34.48 µl of DIPE neat (Recd 6/19/13, Lot# SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
MXF 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
exp. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
pre: 4/5/15 1 ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MEOH
CXM

x528

x528 — x50 ppm screening work solution.

Exp 11/11/14

50 µl (cat# V0-2BL-12) (Lot# C.113060408)

exp 2/11/15 — at 50 ng/µl dilut with 1ml MeoH.

L2529 — ~~Secondary Mix of 100 ppm~~

12/10/14 — 98 ml of L2478 NITRO/TRIA/DIPE @ 5000 PPM/

3/10/15 — 1000 PPM / 5000 ppm

MeoH — 2ml of ECS-A-049 Add-ons Mix #3 2000 PPM

Lot: AO309 received 7/17/14 exp 11/16/2015

2ml of ECS-524.2/8260 Main Mix 2000 ppm

ECS-A-033 Lot. 524MM20, received 7/17/14

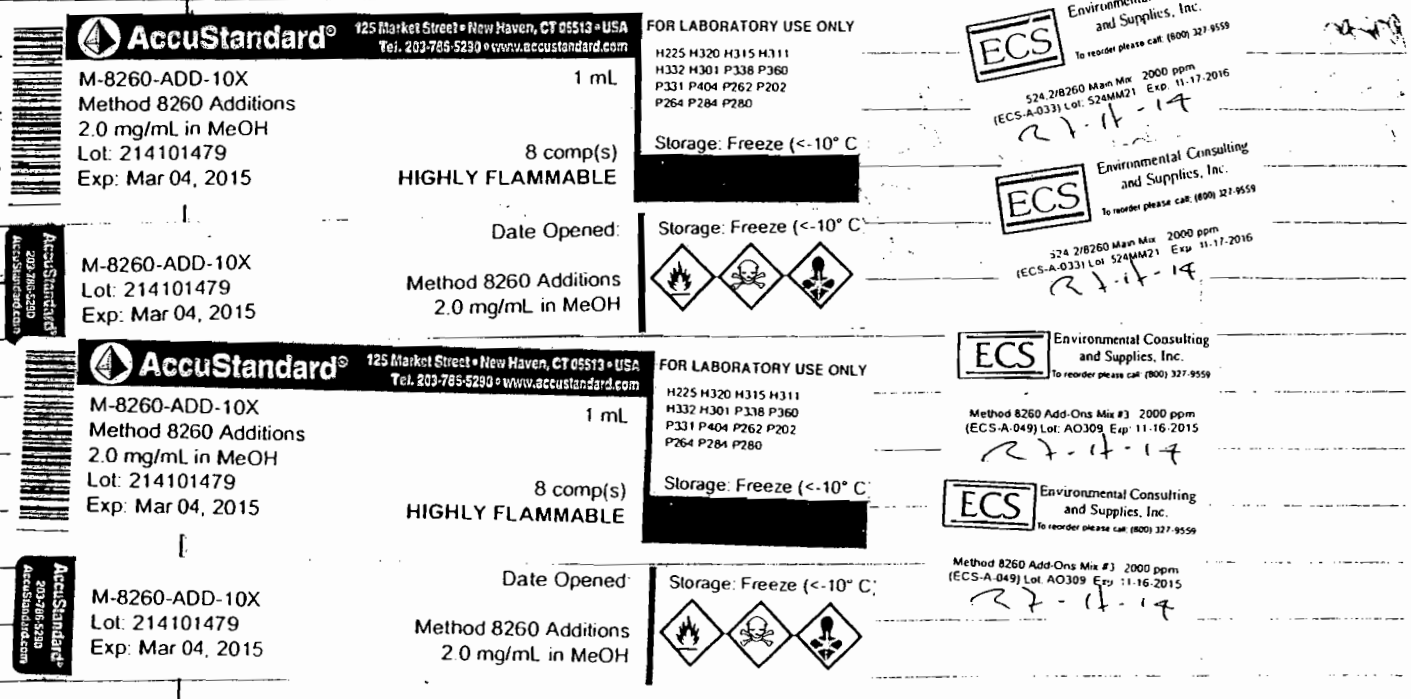
Exp 11/17/16

MeOH — 1ml/s of Volatiles gases Mix 1000 ppm ECS-A-0

Lot: VGM022, received 12/24/14 exp. 11/6/15

2ml of M-8260-ADD-10x, received 6/13/14 exp.

03/04/15 ~~12/23/14~~ into 100 ml of MeOH



VOLATILE ORGANICS/TPH-GRO

VOLATILE ORGANICS/TPH-GRO QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKT150220-01	MEOH	F9271.D	122	85	89
01273-001	MEOH	F9272.D	112	91	90
LCST150220-01	MEOH	F9273.D	98	99	92
01273-001MS	MEOH	F9274.D	96	92	94
01273-001MSD	MEOH	F9275.D	97	99	93

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

D Surrogate diluted out

M Matrix interference

FORM **2**

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCST150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: F9273.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
TPH-GRO	500	0.0	475	95	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-021815
Date Received:
Date Analyzed: 02/20/2015
MS Data file: F9274.D
MSD Data file: F9275.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
TPH-GRO	500	0.0	545	109		471	94		15	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F9271.D Instrument ID: MSD_F

Date Analyzed: 02/20/2015 Time Analyzed: 15:06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1-021815	01273-001	02/20/2015	15:34
TPH-500PPB	LCST150220-01	02/20/2015	16:02
MS	01273-001MS	02/20/2015	16:29
MSD	01273-001MSD	02/20/2015	16:57

FORM **4**

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F9261.D BFB Injection Date: 02/20/2015

Inst ID: MSD_F BFB Injection Time: 9:33

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.5			
75	30.0 - 60.0% of mass 95	46.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.8	(	1.1	)1
174	Great than 50.0% of mass 95	75.5			
175	5.0 - 9.0% of mass 174	5.5	(	7.3	)1
176	95.0 - 101.0% of mass 174	71.9	(	95.2	)1
177	5.0 - 9.0% of mass 176	4.8	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC50	ICC50	F9262.D	02/20/2015	10:38
ICC100	ICC100	F9263.D	02/20/2015	11:06
ICC200	ICC200	F9264.D	02/20/2015	11:37
ICC1000	ICC1000	F9265.D	02/20/2015	12:07
ICC2000	ICC2000	F9266.D	02/20/2015	12:47
ICC5000	ICC5000	F9267.D	02/20/2015	13:14
ICV1000	ICV1000	F9269.D	02/20/2015	14:10
BLKT150220-01	BLKT150220-01	F9271.D	02/20/2015	15:06
GPEC-WC1-02181	01273-001	F9272.D	02/20/2015	15:34
TPH-500PPB	LCST150220-01	F9273.D	02/20/2015	16:02
MS	01273-001MS	F9274.D	02/20/2015	16:29
MSD	01273-001MSD	F9275.D	02/20/2015	16:57

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F9265.D

Date Analyzed: 02/20/2015

Instrument ID: MSD_F

Time Analyzed: 12:07

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	256360		6.05		388560		6.88		360050		10.22	
	UPPER LIMIT	512720		6.55		777120		7.38		720100		10.72	
	LOWER LIMIT	128180		5.55		194280		6.38		180025		9.72	
	LAB SAMPLE ID												
01	ICC50	198139		6.05		354684		6.87		321567		10.21	
02	ICC100	203461		6.05		361351		6.87		324737		10.21	
03	ICC200	222399		6.05		379228		6.87		342360		10.21	
04	ICC2000	274954		6.05		412103		6.88		376513		10.22	
05	ICC5000	299488		6.05		447367		6.86		427354		10.22	
06	ICV1000	284376		6.05		442387		6.88		405946		10.22	
07	BLKT150220-01	189146		6.05		336251		6.88		279757		10.21	
08	01273-001	200011		6.05		341713		6.87		294225		10.22	
09	LCST150220-01	243648		6.05		388262		6.88		349700		10.22	
10	01273-001MS	236255		6.05		358884		6.88		291005		10.21	
11	01273-001MSD	257710		6.05		412275		6.87		376144		10.21	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9272.D
Acq On : 20 Feb 2015 15:34
Operator : XING
Sample : GPEC-WC1-021815,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPO,02/18/15,02/18/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 16:29:09 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	200011	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.865	114	341713	50.00	UG	-0.01
5) Chlorobenzene-d5	10.215	117	294225	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	107578	56.23	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 112.46%			
4) Toluene-d8	8.540	98	280341	45.38	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 90.76%			
6) Bromofluorobenzene	11.616	95	136906	45.13	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 90.26%			

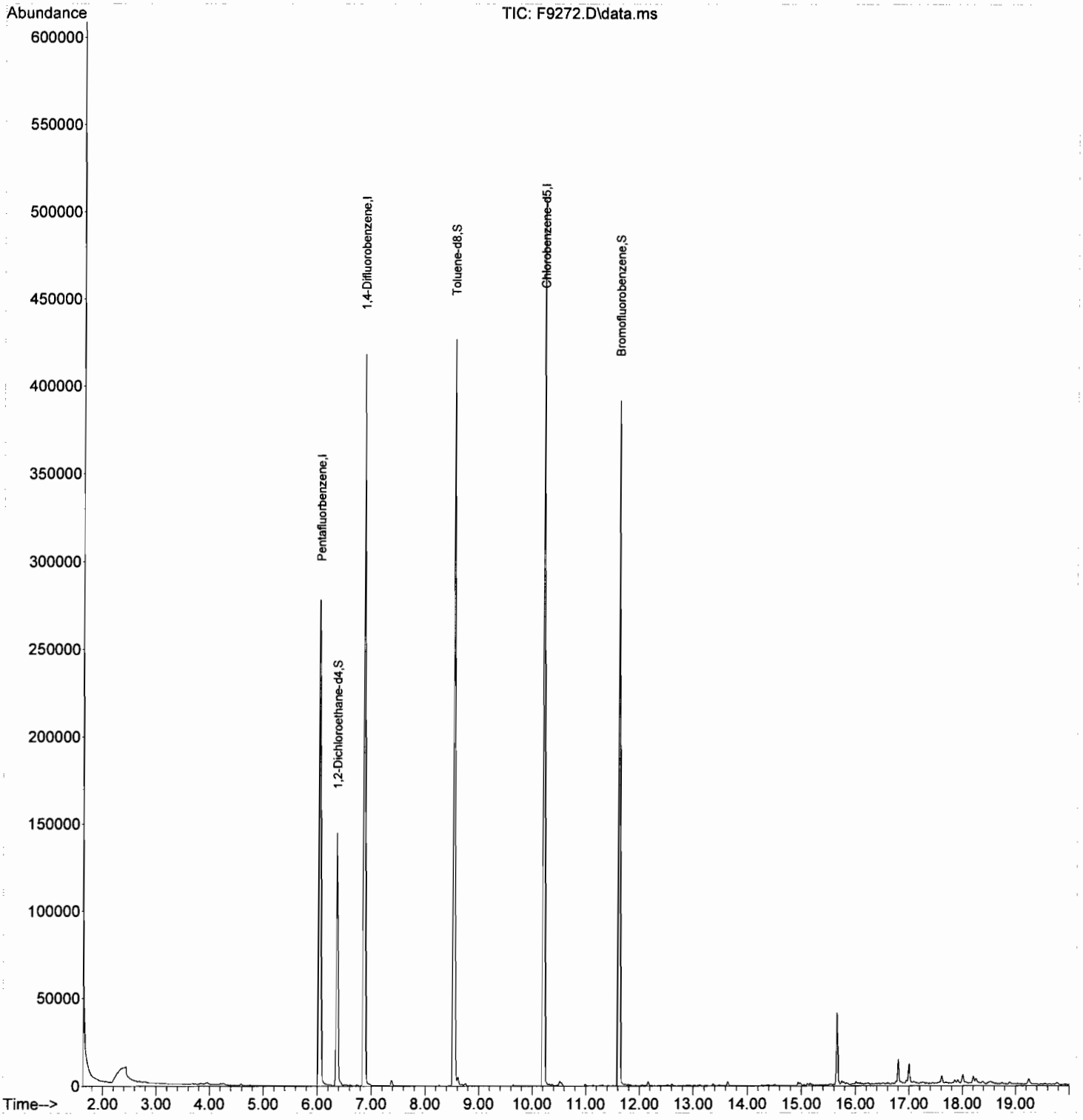
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9272.D
Acq On : 20 Feb 2015 15:34
Operator : XING
Sample : GPEC-WC1-021815,01273-001,M,0.05g,10.6
Misc : GEI-MTCLR/GREENPO,02/18/15,02/18/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 20 16:29:09 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



GRO
VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_F

Method Path : C:\msdchem\1\METHODS\
Method File : FTPM0220.M
Title : VOLATILE ORGANICS BY EPA 8260C
Last Update : Fri Feb 20 15:28:02 2015
Response Via : Initial Calibration

Calibration Files
50 =F9262.D 100 =F9263.D 200 =F9264.D
1000=F9265.D 2000=F9266.D 5000=F9267.D =

		Compound	50	100	200	1000	2000	5000	Avg	%RSD
1)	I	Pentafluorbenzene	----------ISTD----------							
2)	S	1,2-Dichloroethan	0.538	0.533	0.500	0.443	0.432	0.424	0.478	10.78
3)	I	1,4-Difluorobenzene	----------ISTD----------							
4)	S	Toluene-d8	0.877	0.870	0.906	0.905	0.915	0.951	0.904	3.22
5)	I	Chlorobenzene-d5	----------ISTD----------							
6)	S	Bromofluorobenzen	0.539	0.570	0.510	0.486	0.495	0.494	0.516	6.26
7)	H	TPH-GRO	1.345	1.260	1.408	1.509	1.606	1.633	1.460	10.14

(#) = Out of Range

FTPM0220.M Fri Feb 20 15:28:09 2015 RP1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9262.D
Acq On : 20 Feb 2015 10:38
Operator : XING
Sample : ICC50,ICC50,A,5mL,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 15:25:05 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 13:35:38 2015
Response via : Initial Calibration

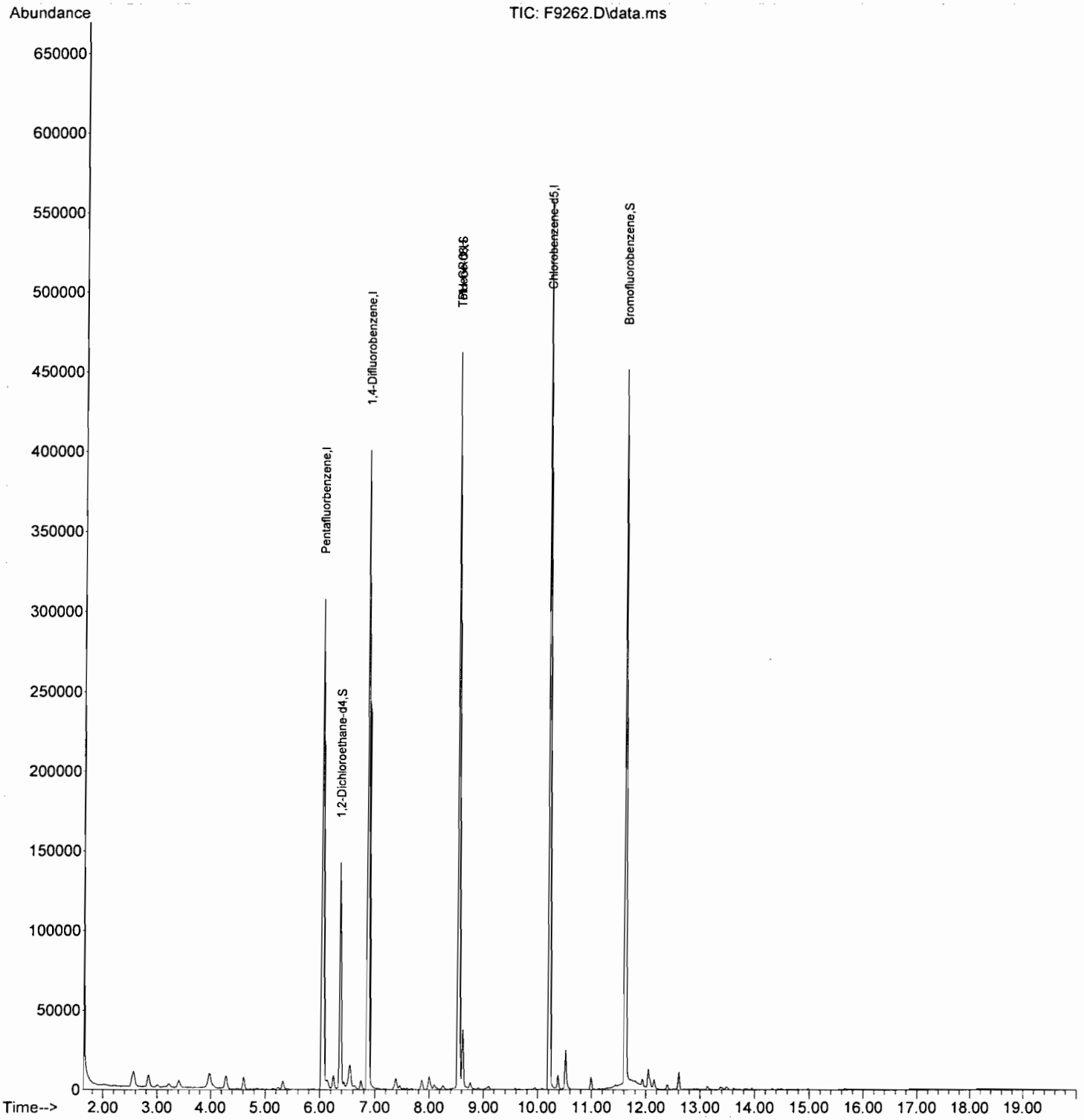
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	198139	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	354684	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	321567	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	106589	56.24	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 112.48%			
4) Toluene-d8	8.540	98	310901	48.49	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 96.98%			
6) Bromofluorobenzene	11.616	95	173173	52.23	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 104.46%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	432376m	46.05	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9262.D
Acq On : 20 Feb 2015 10:38
Operator : XING
Sample : ICC50,ICC50,A,5mL,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 15:25:05 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 13:35:38 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9263.D
Acq On : 20 Feb 2015 11:06
Operator : XING
Sample : ICC100,ICC100,A,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:25:30 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:15 2015
Response via : Initial Calibration

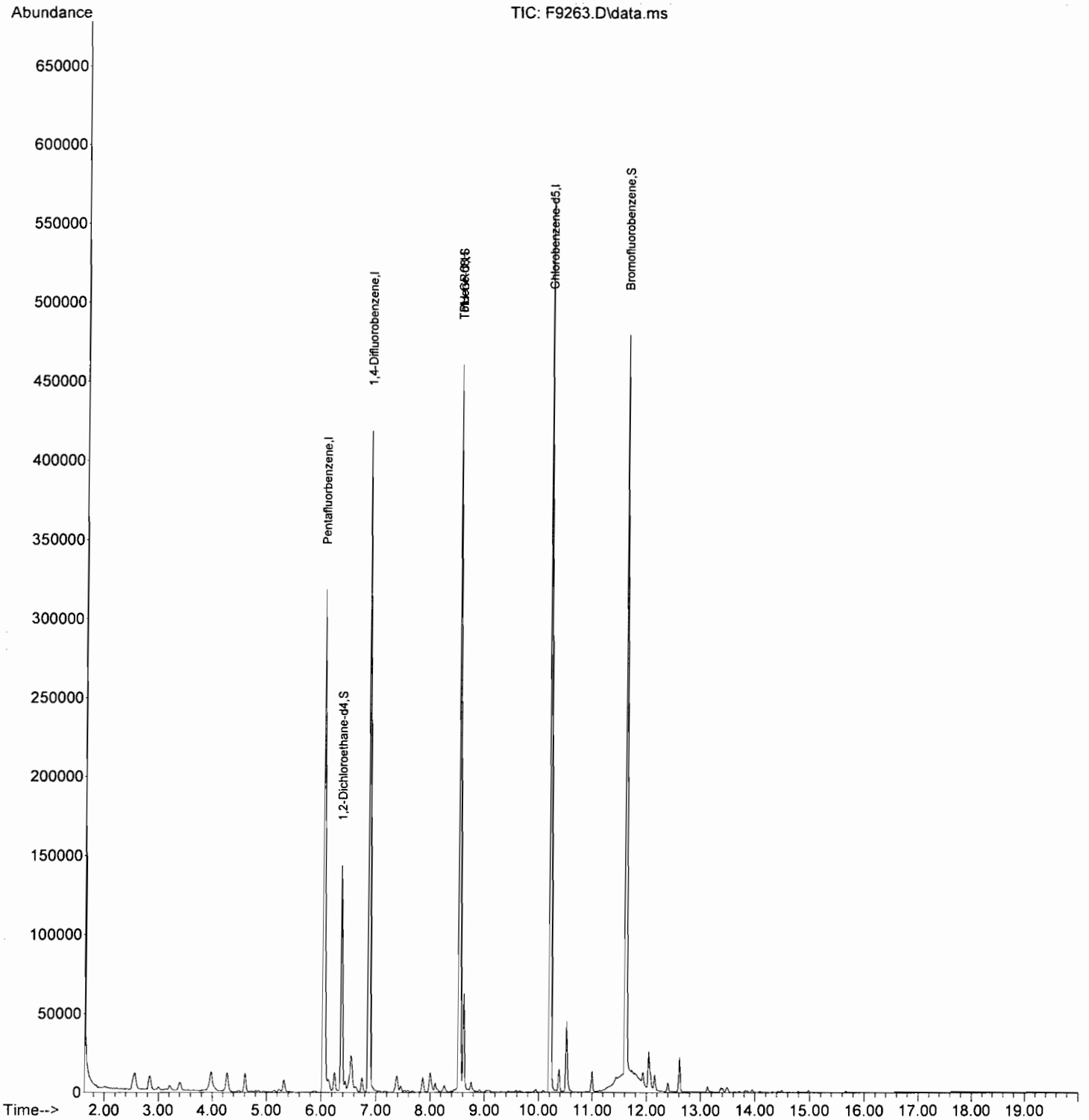
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	203461	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	361351	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	324737	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	108362	55.68	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 111.36%			
4) Toluene-d8	8.540	98	314385	48.13	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 96.26%			
6) Bromofluorobenzene	11.616	95	184962	55.24	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 110.48%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	818465m	86.31	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9263.D
Acq On : 20 Feb 2015 11:06
Operator : XING
Sample : ICC100,ICC100,A,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:25:30 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:15 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9264.D
Acq On : 20 Feb 2015 11:37
Operator : XING
Sample : ICC200,ICC200,A,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:26:03 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:39 2015
Response via : Initial Calibration

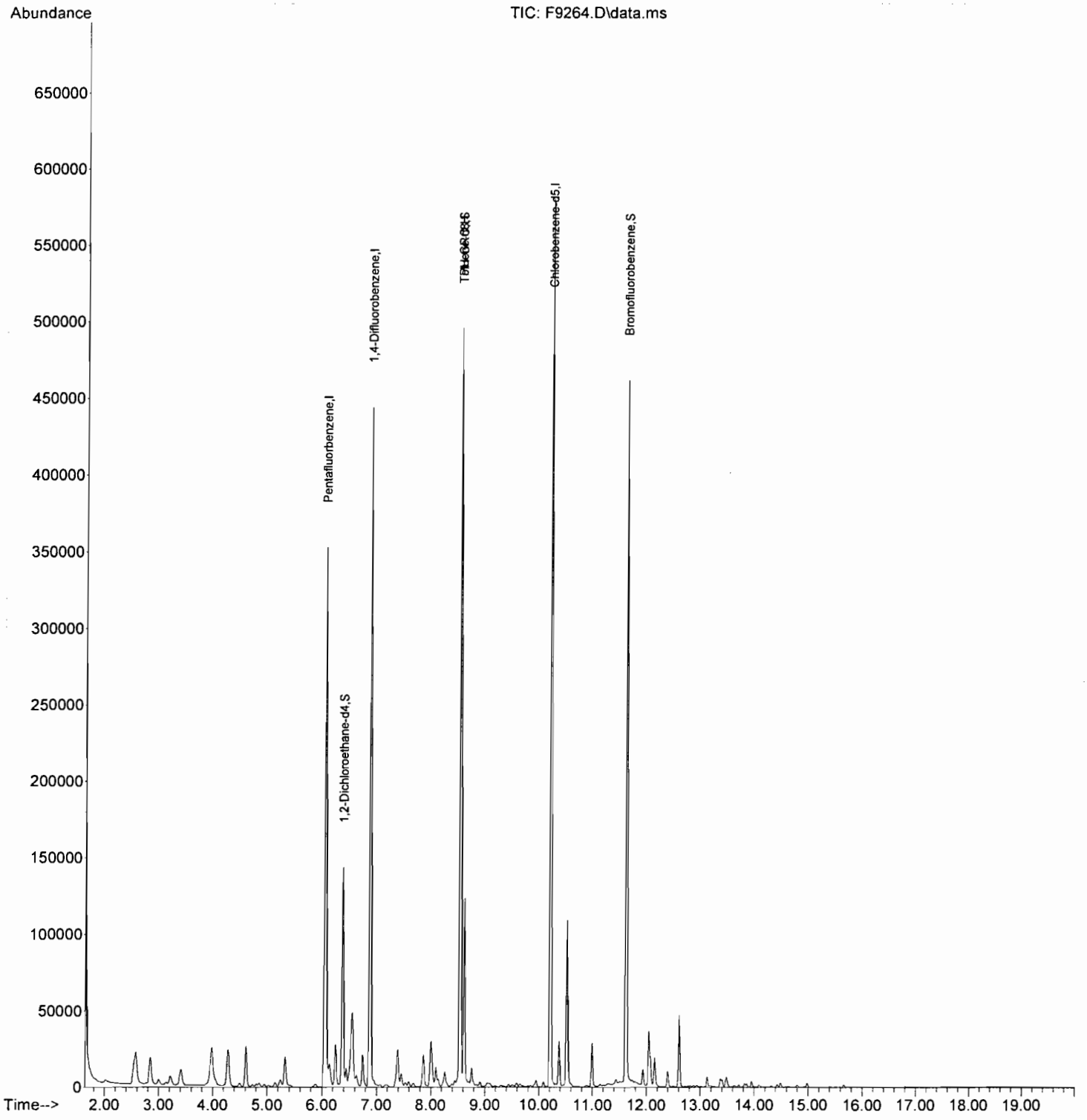
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	222399	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	379228	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	342360	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.378	65	111163	52.25	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 104.50%			
4) Toluene-d8	8.540	98	343404	50.09	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.18%			
6) Bromofluorobenzene	11.616	95	174519	49.44	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.88%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	1927580m	192.81	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9264.D
Acq On : 20 Feb 2015 11:37
Operator : XING
Sample : ICC200,ICC200,A,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:26:03 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:25:39 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9265.D
Acq On : 20 Feb 2015 12:07
Operator : XING
Sample : ICC1000,ICC1000,A,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:26:40 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:13 2015
Response via : Initial Calibration

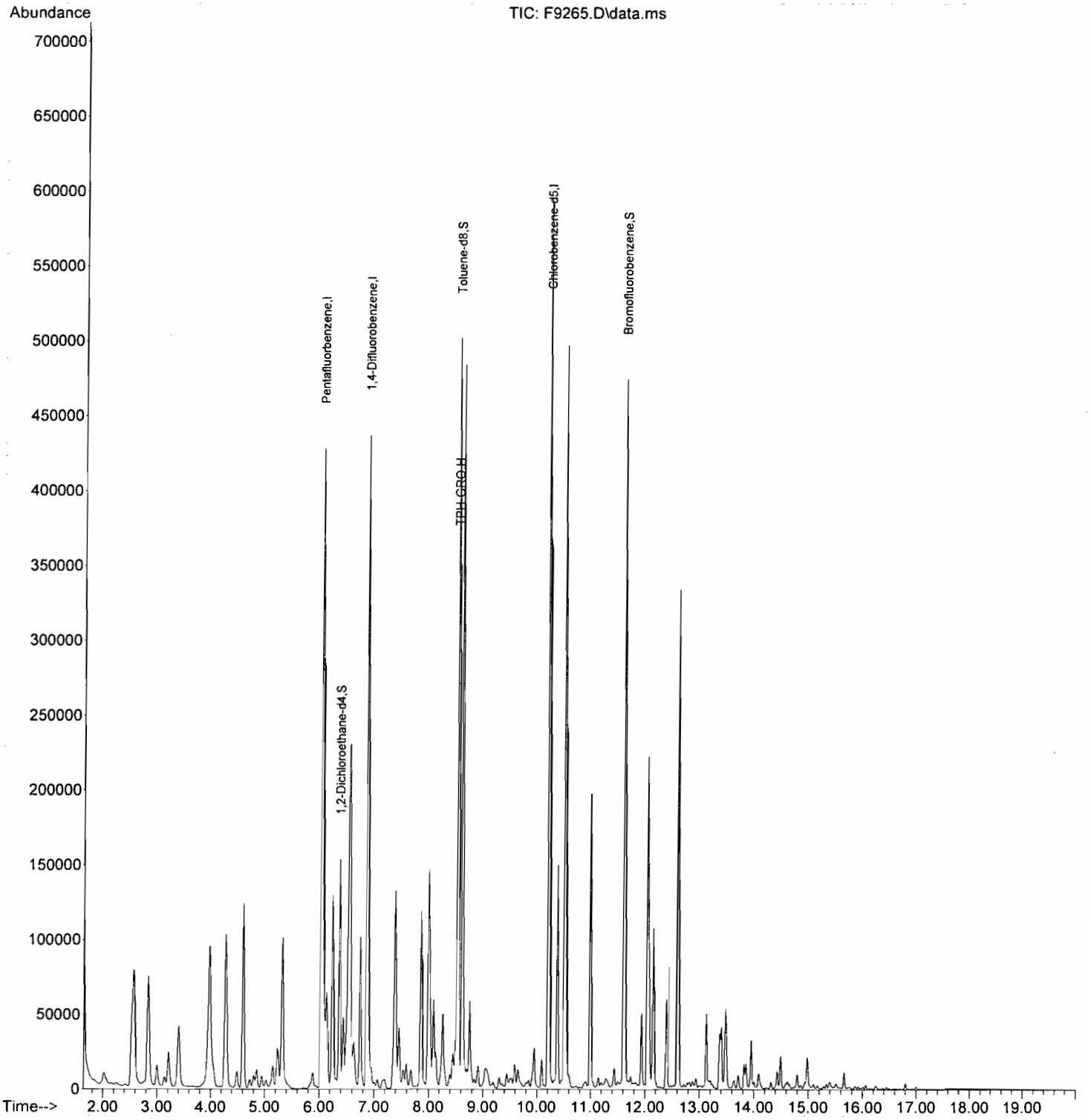
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	256360	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	388560	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	360050	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	113663	46.35	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 92.70%			
4) Toluene-d8	8.540	98	351764	50.08	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.16%			
6) Bromofluorobenzene	11.616	95	175075	47.16	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 94.32%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	10868882m	1033.76	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9265.D
Acq On : 20 Feb 2015 12:07
Operator : XING
Sample : ICC1000,ICC1000,A,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:26:40 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:13 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9266.D
Acq On : 20 Feb 2015 12:47
Operator : XING
Sample : ICC2000,ICC2000,A,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 15:27:11 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:50 2015
Response via : Initial Calibration

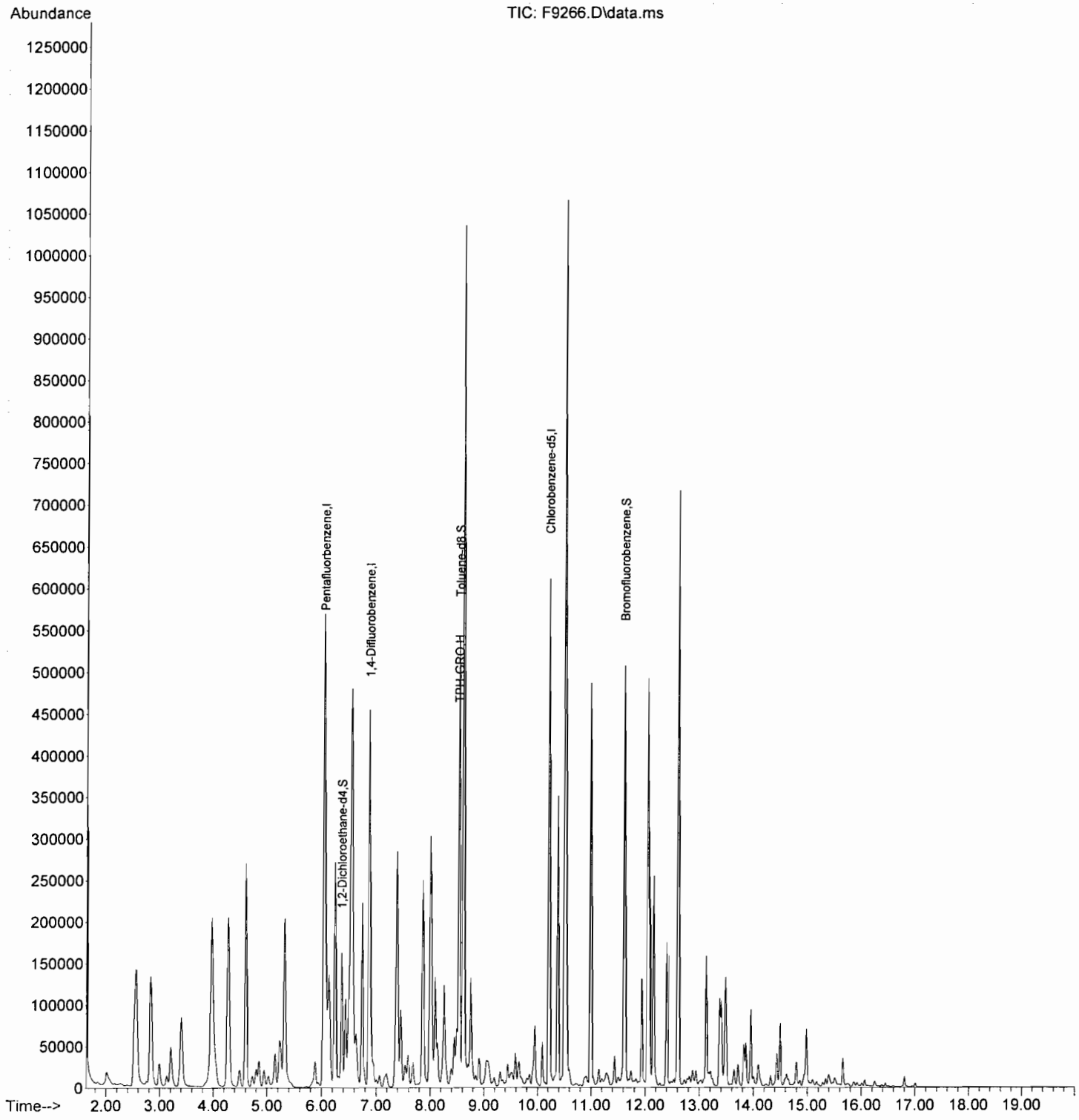
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	274954	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	412103	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	376513	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	118894	45.20	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 90.40%			
4) Toluene-d8	8.540	98	376931	50.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.20%			
6) Bromofluorobenzene	11.616	95	186373	48.00	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 96.00%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	24180365m	2199.29	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9266.D
Acq On : 20 Feb 2015 12:47
Operator : XING
Sample : ICC2000,ICC2000,A,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 15:27:11 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:26:50 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9267.D
Acq On : 20 Feb 2015 13:14
Operator : XING
Sample : ICC5000,ICC5000,A,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 15:27:37 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:27:23 2015
Response via : Initial Calibration

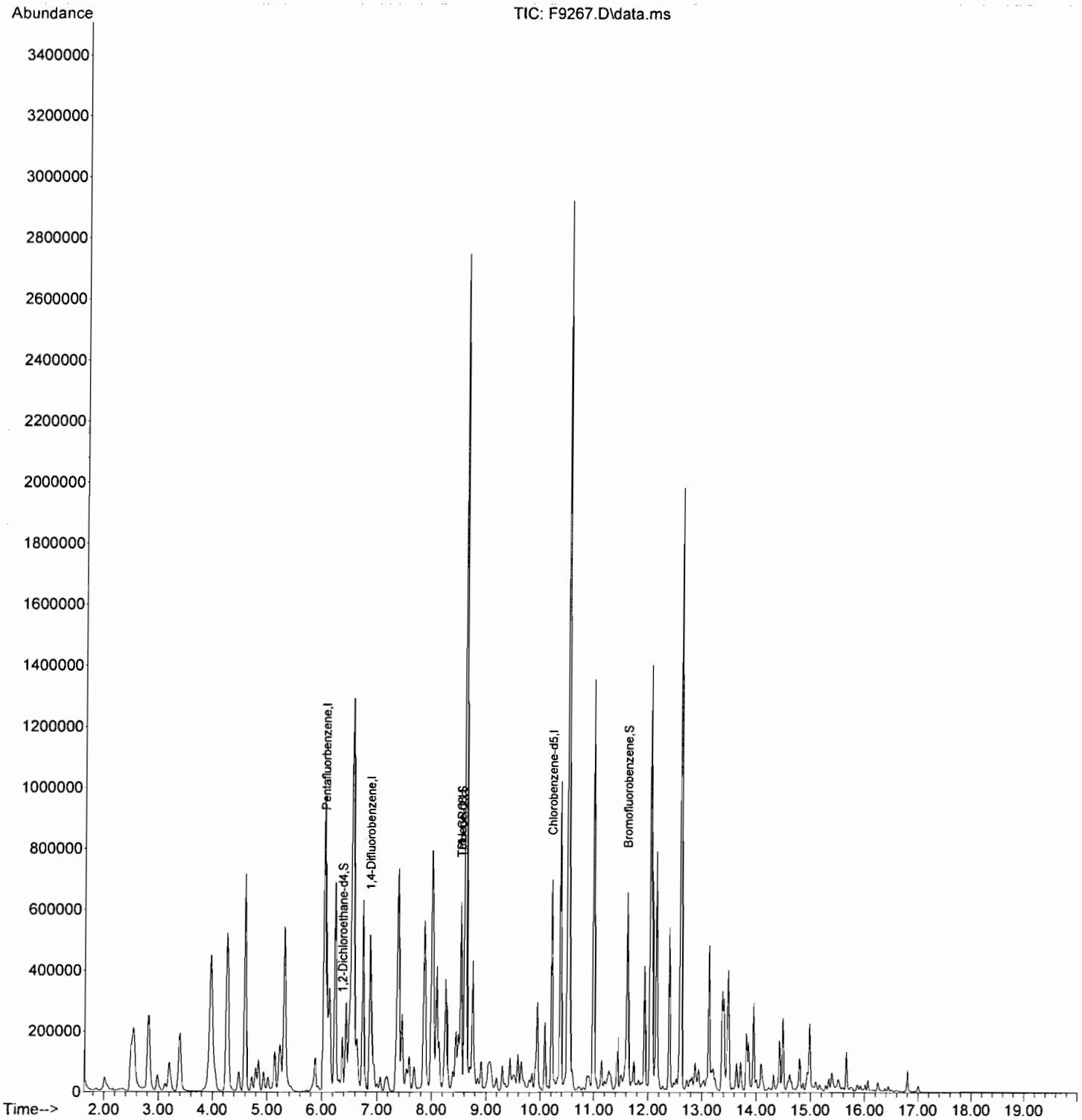
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	299488	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.865	114	447367	50.00	UG	-0.01
5) Chlorobenzene-d5	10.215	117	427354	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	126873	44.29	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 88.58%			
4) Toluene-d8	8.540	98	425401	52.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 105.20%			
6) Bromofluorobenzene	11.616	95	211260	47.94	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 95.88%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	69791478m	5592.60	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9267.D
Acq On : 20 Feb 2015 13:14
Operator : XING
Sample : ICC5000,ICC5000,A,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 15:27:37 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:27:23 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Min. RRF : 0.300 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorbenzene	1.000	1.000	0.0	111	0.00
2	S	1,2-Dichloroethane-d4	0.478	0.441	7.7	110	0.00
3	I	1,4-Difluorobenzene	1.000	1.000	0.0	114	0.00
4	S	Toluene-d8	0.904	0.906	-0.2	114	0.00
5	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00
6	S	Bromofluorobenzene	0.516	0.482	6.6	112	0.00
7	H	TPH-GRO	1.460	1.404	3.8	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FTPM0220.M Fri Feb 20 15:29:00 2015 RP1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

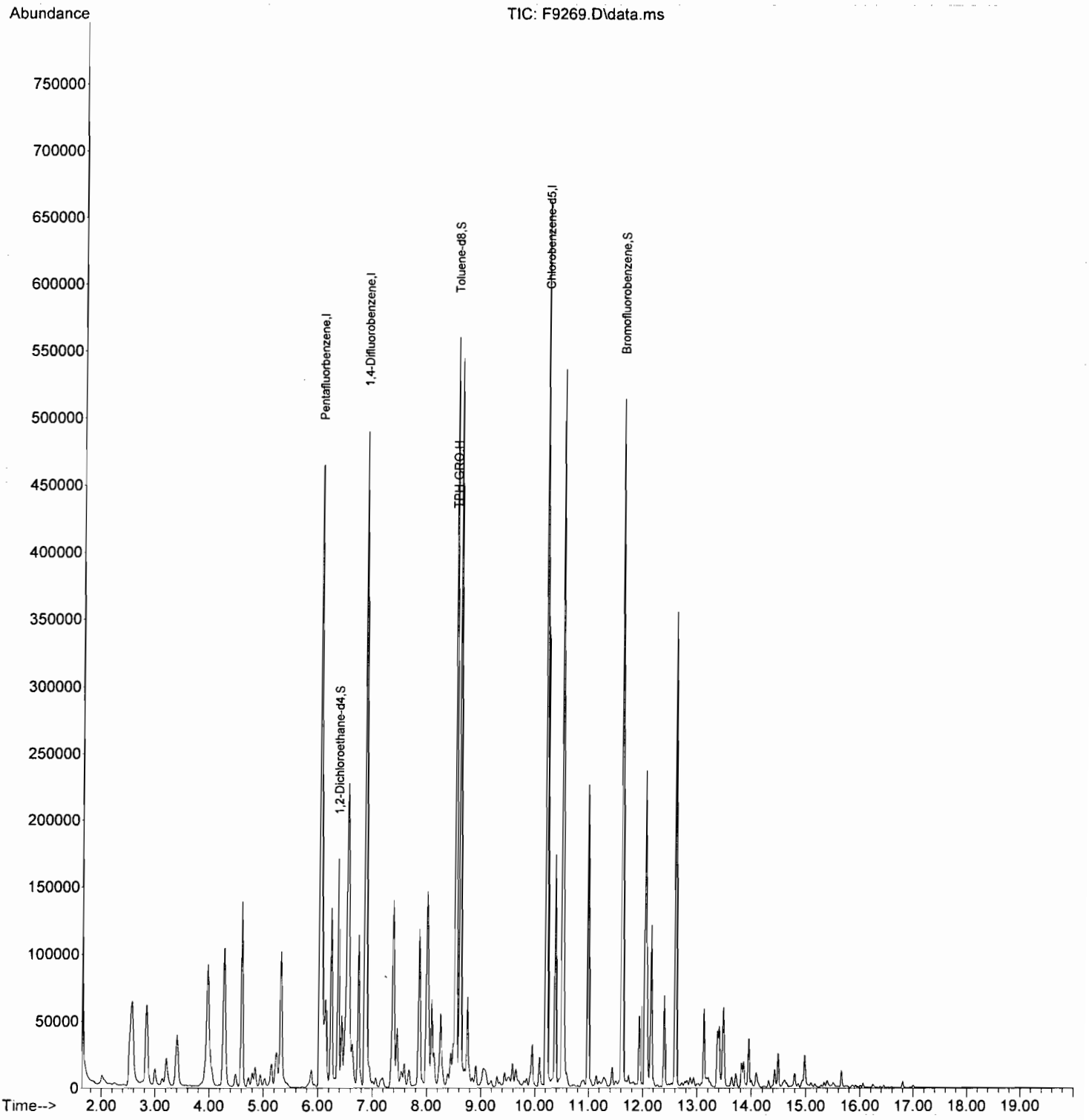
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	284376	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	442387	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	405946	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	125341	46.08	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 92.16%			
4) Toluene-d8	8.540	98	400915	50.13	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.26%			
6) Bromofluorobenzene	11.616	95	195564	46.72	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.44%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	11397407m	961.47	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9269.D
Acq On : 20 Feb 2015 14:10
Operator : XING
Sample : ICV1000,ICV1000,A,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 20 15:28:48 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

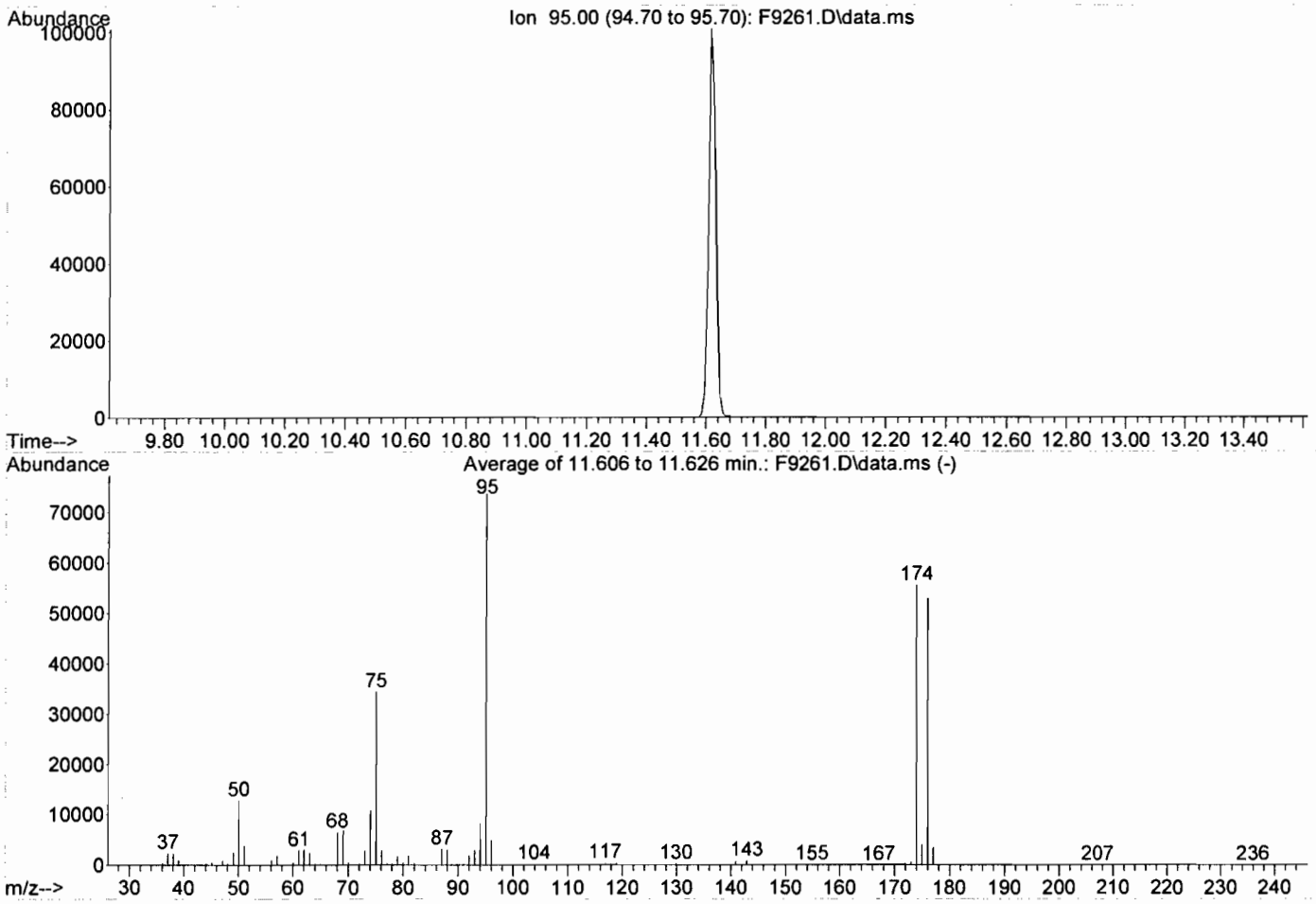


GRO
VOLATILE ORGANICS RAW QC DATA

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9261.D
Acq On : 20 Feb 2015 9:33
Operator : XING
Sample : BFB150220
Misc : 50NG
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\FA010715.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Thu Jan 08 09:56:44 2015



AutoFind: Scans 983, 984, 985; Background Corrected with Scan 977

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	12886	PASS
75	95	30	60	46.9	34504	PASS
95	95	100	100	100.0	73640	PASS
96	95	5	9	6.7	4905	PASS
173	174	0.00	2	1.1	616	PASS
174	95	50	100	75.5	55562	PASS
175	174	5	9	7.3	4064	PASS
176	174	95	101	95.2	52883	PASS
177	176	5	9	6.7	3554	PASS

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	443	47.10	884	56.05	976	68.05	6566
37.10	2421	48.05	324	57.10	1906	69.10	6872
38.10	2282	49.10	2552	58.10	77	70.05	518
39.10	987	50.10	12886	60.05	542	71.00	27
40.05	40	51.10	3930	61.10	2975	71.20	20
41.15	62	52.10	149	62.05	3106	72.00	325
42.20	21	52.70	6	63.10	2479	73.05	2945
43.15	96	53.00	18	64.05	276	74.05	10886
44.10	348	53.20	21	65.05	254	75.10	34504
45.10	547	54.05	18	66.00	24	76.10	3001
46.15	65	55.05	152	67.05	190	77.10	434

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.00	295	91.00	246	104.95	106	116.90	434
79.00	1772	92.00	2002	105.90	259	117.90	265
80.00	544	93.00	3078	106.95	59	118.90	365
80.95	1908	94.00	8251	108.05	27	119.90	13
82.00	393	95.10	73640	109.90	57	120.50	6
83.00	73	96.05	4905	110.95	46	122.00	6
84.10	12	97.05	157	111.90	35	123.00	22
85.05	22	98.15	27	112.10	21	123.90	40
85.95	94	99.15	29	112.95	60	124.80	8
87.00	3218	102.85	24	114.90	61	125.40	7
88.00	3085	103.90	286	115.90	267	125.95	25

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
126.85	19	138.80	12	148.95	52	160.95	68
128.00	235	139.20	7	149.95	65	167.10	7
128.95	122	139.90	48	151.80	15	168.50	11
129.90	280	140.90	726	152.05	27	169.80	14
130.95	88	141.95	94	152.90	39	170.10	13
131.90	16	142.95	885	153.95	52	170.95	89
133.80	7	143.95	61	154.95	175	171.95	373
134.80	19	144.90	190	155.95	69	173.00	616
134.95	143	145.95	112	156.95	160	174.00	55562
135.90	13	146.90	51	158.00	53	175.00	4064
136.90	122	147.95	172	158.90	97	176.00	52883

Average of 11.606 to 11.626 min.: F9261.D\data.ms
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	3554						
177.95	92						
207.10	7						
236.00	8						

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: BLKT150220-01
Client ID: BLKT150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: F9271.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		2.50	2.00

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9271.D
Acq On : 20 Feb 2015 15:06
Operator : XING
Sample : BLKT150220-01,BLKT150220-01,M,0.1g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 15:30:17 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	189146	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	336251	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	279757	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.378	65	110457	61.05	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 122.10%#			
4) Toluene-d8	8.540	98	258922	42.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 85.20%#			
6) Bromofluorobenzene	11.616	95	128872	44.67	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 89.34%			

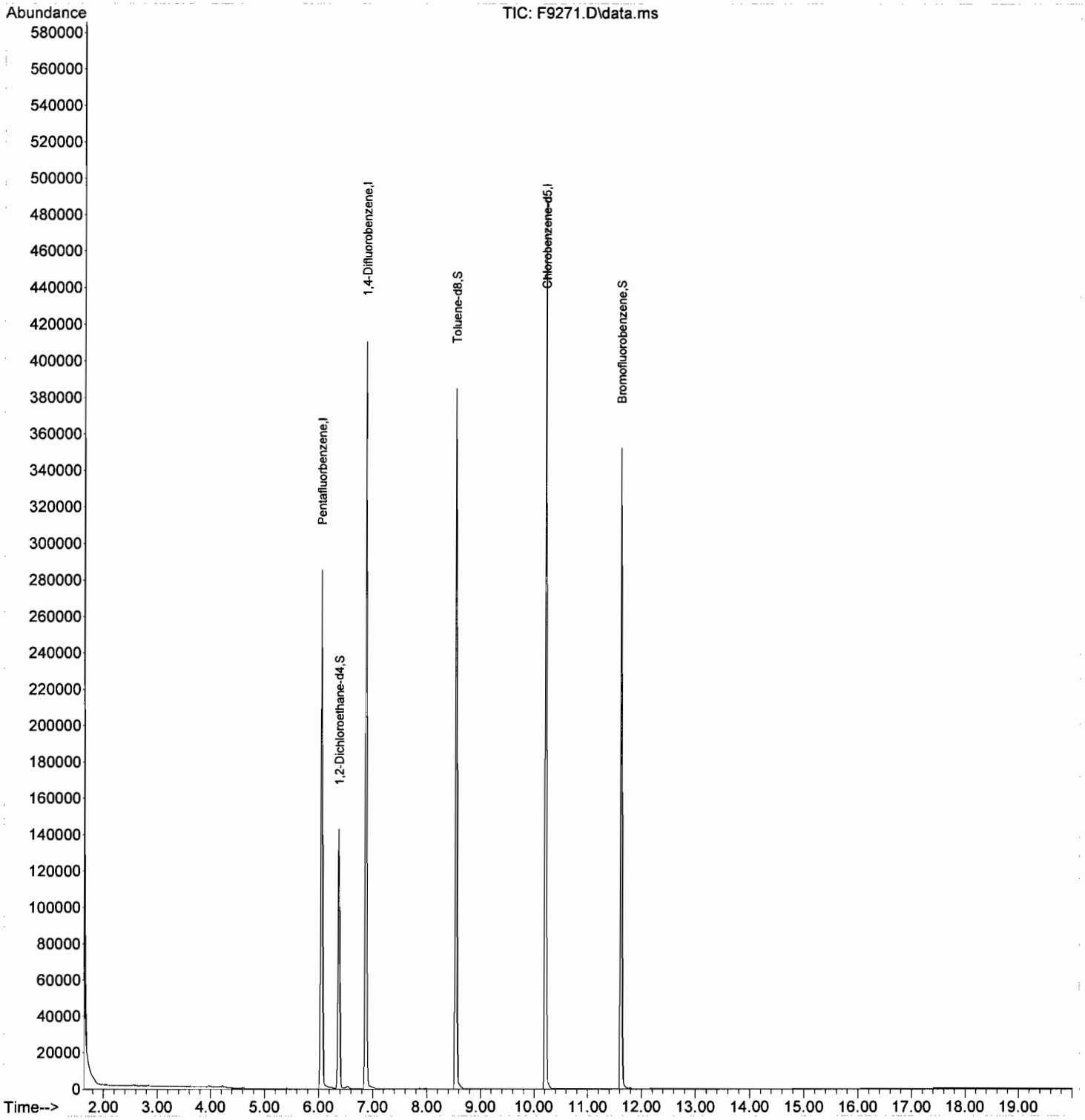
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9271.D
Acq On : 20 Feb 2015 15:06
Operator : XING
Sample : BLKT150220-01,BLKT150220-01,M,0.1g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 20 15:30:17 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9273.D
Acq On : 20 Feb 2015 16:02
Operator : XING
Sample : TPH-500PPB,LCST150220-01,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 16:22:33 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

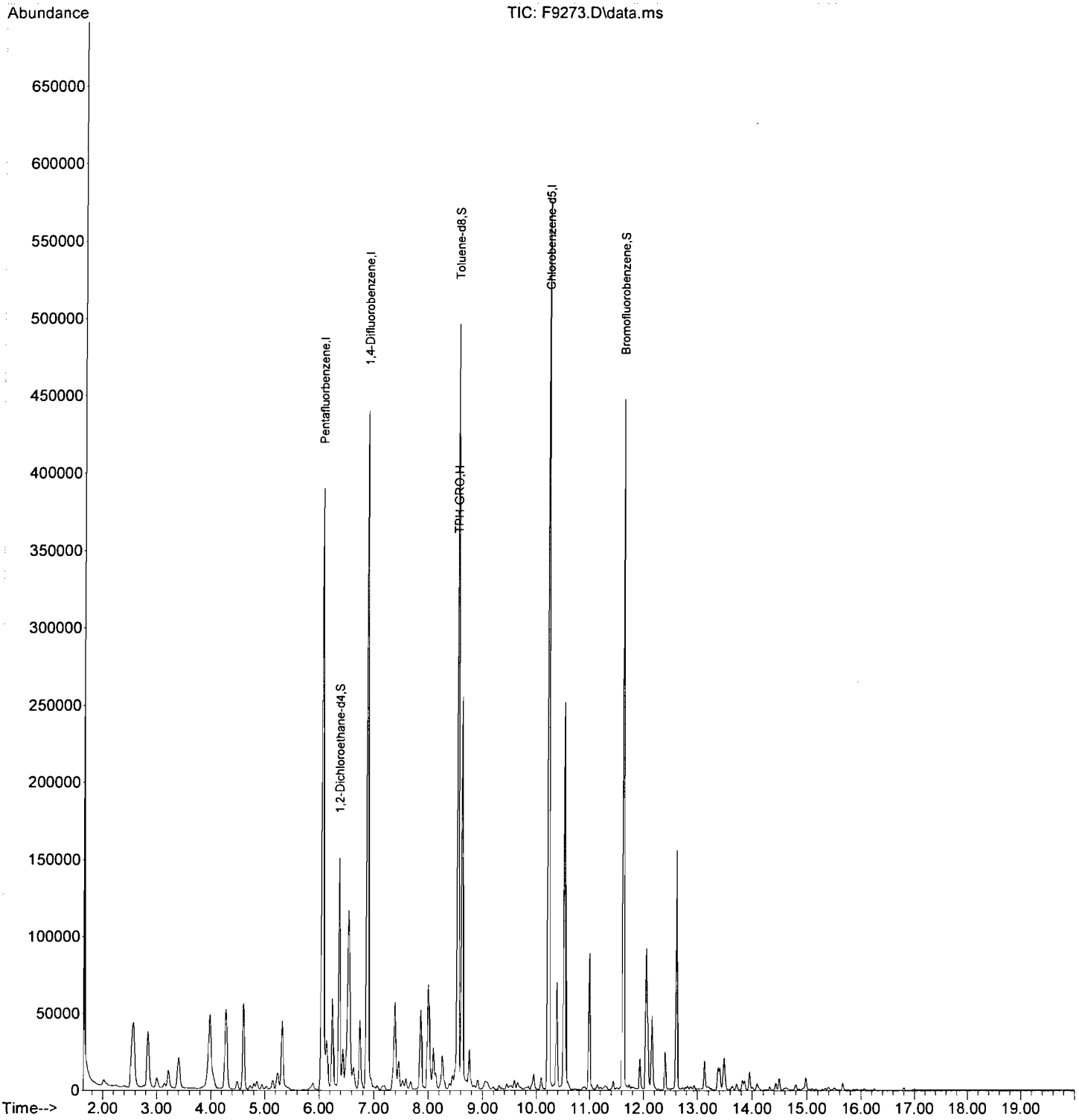
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	243648	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	388262	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	349700	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.368	65	113808	48.83	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.66%			
4) Toluene-d8	8.540	98	346583	49.38	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 98.76%			
6) Bromofluorobenzene	11.616	95	166330	46.13	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 92.26%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	4847922m	474.74	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9273.D
Acq On : 20 Feb 2015 16:02
Operator : XING
Sample : TPH-500PPB,LCST150220-01,M,0.05g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 16:22:33 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9274.D
Acq On : 20 Feb 2015 16:29
Operator : XING
Sample : MS,01273-001MS,M,0.05g,0
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 16:55:38 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

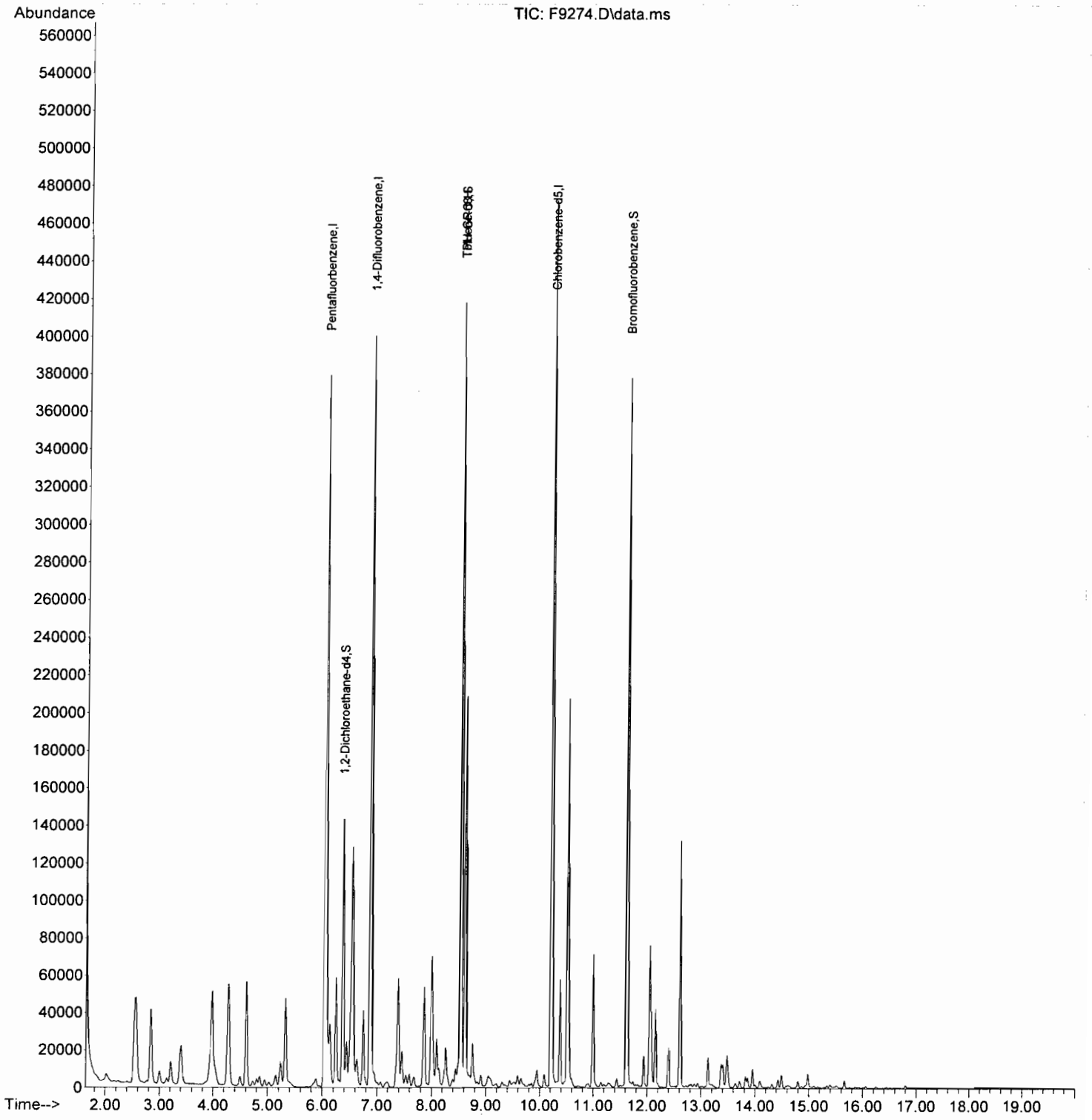
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	236255	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	358884	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	291005	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	108457	47.99	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 95.98%			
4) Toluene-d8	8.540	98	297179	45.81	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 91.62%			
6) Bromofluorobenzene	11.616	95	140721	46.90	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.80%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	4627358m	544.54	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9274.D
Acq On : 20 Feb 2015 16:29
Operator : XING
Sample : MS,01273-001MS,M,0.05g,0
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 20 16:55:38 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9275.D
Acq On : 20 Feb 2015 16:57
Operator : XING
Sample : MSD,01273-001MSD,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:20:19 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration

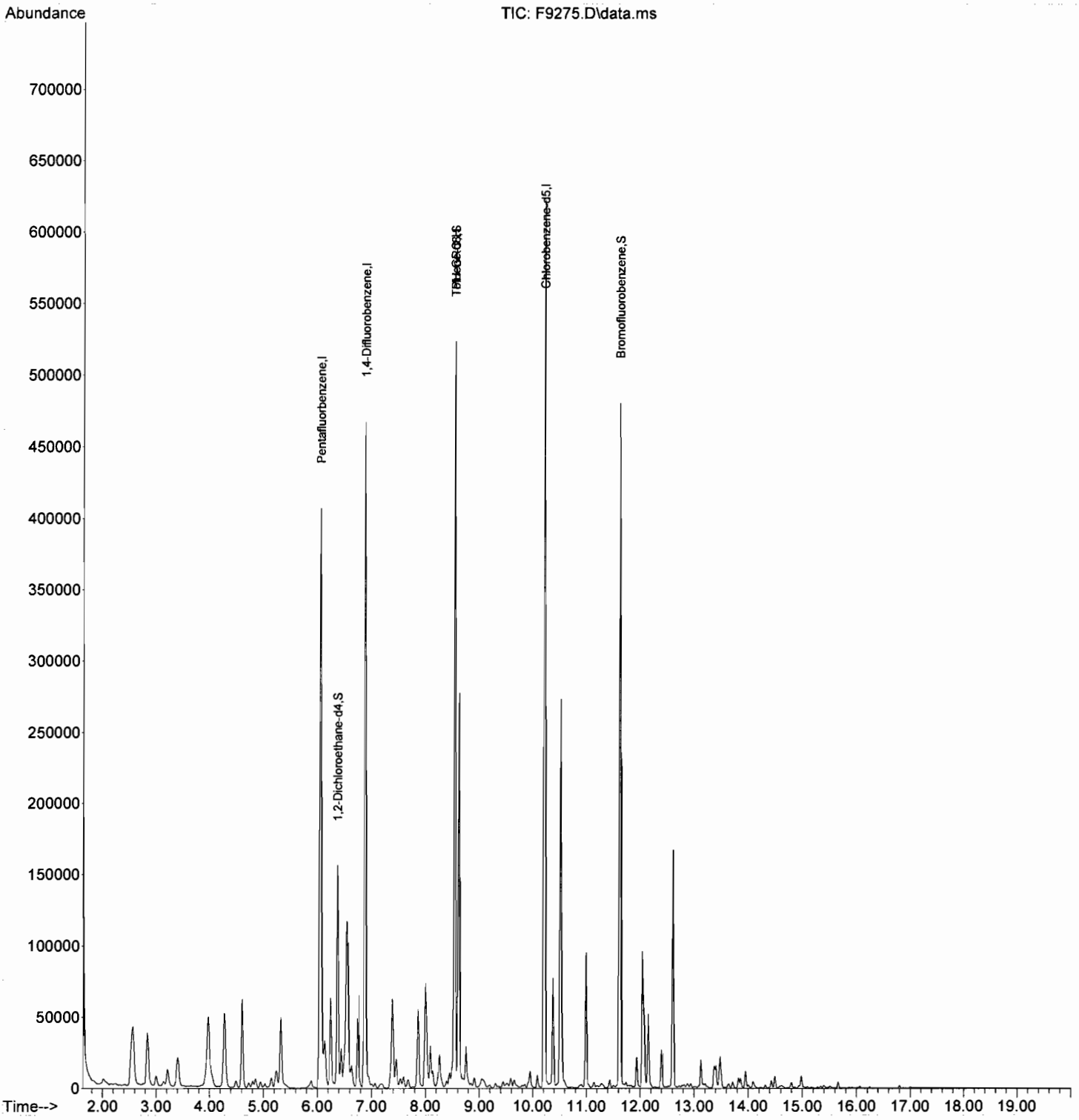
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.053	168	257710	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.875	114	412275	50.00	UG	0.00
5) Chlorobenzene-d5	10.215	117	376144	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.367	65	119066	48.30	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 96.60%			
4) Toluene-d8	8.540	98	370530	49.72	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.44%			
6) Bromofluorobenzene	11.616	95	180493	46.54	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 93.08%			
Target Compounds						Qvalue
7) TPH-GRO	8.530	TIC	5171566m	470.83	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\02-20-15\
Data File : F9275.D
Acq On : 20 Feb 2015 16:57
Operator : XING
Sample : MSD,01273-001MSD,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:20:19 2015
Quant Method : C:\msdchem\1\METHODS\FTPM0220.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Fri Feb 20 15:28:02 2015
Response via : Initial Calibration



GRO
VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/20/2015 16:56

INSTRUMENT: MSD-F

TUNE FILE: TUNE F

SEQUENCE FILE: 2/20/2015

METHOD: FTPM0220

ANALYST: Xingfang Wang

WXF Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX	Client ID	Samp Date	Recd Date	% Moist	Comments
1	1	F9261	BFB150220	BFB150220									ok
2	2	F9262	ICC50	ICC50		5		A				100	ok
3	3	F9263	ICC100	ICC100		5		A				100	ok
4	4	F9264	ICC200	ICC200		5		A				100	ok
5	5	F9265	ICC1000	ICC1000		5		A				100	ok
6	6	F9266	ICC2000	ICC2000		5		A				100	ok
7	7	F9267	ICC5000	ICC5000		5		A				100	ok
8	8	F9268	RB			5		A				100	/
9	9	F9269	ICV1000	ICV1000		5		A				100	ok
10	10	F9270	RB			5		A				100	/
11	11	F9271	BLKT150220-01	LKT150220-01		0.1		M				0	ok
12	12	F9272	1273	1	1	0.05		M	GPEC-WC1-02181	02/18/15	02/19/15	10.6	ok
13	13	F9273	TPH-500PPB	CST150220-	1	0.05		M				0	ok
14	14	F9274	MS	01273-001MS	1	0.05		M				0	ok
15	15	F9275	MSD	1273-001MS	1	0.05		M				0	ok
16	16	F9276	RB		1	0.05		M				0	/

LS1030 TPH-GRO Working std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertPrep GAS-20 (Lot# C113091108) @ 20mg/ml
Exp: 3/11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/3/14, exp. 2/28/17)
Exp: 3/9/15 1ml ECS-A40 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/7/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIPE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 12/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
1ml of VO-IALAS-1 @ 2,000ppm Lot# C112121913 (Rec: 5/1/14, exp: 4/29/2017)
diluted into 50ml MeOH.

LS1032 Secondary Acrolein/Acrylonitrile @ 1000ppm working soln
prep 12/15/14 1ml of ECS-A-038 (Lot # 120814, exp. 3/8/15) into 10ml
exp. 3/8/15 MeOH, final volume is 10ml

LS1033 TPH-GRO working std @ 500 mg/ml
prep: 1/7/15 125 µl of Spex CertPrep GAS-20 (Lot# C113091108) @ 20mg/ml
Exp: 4/7/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working std @ 1,000µg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/13/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280
Storage: Freeze (<-10° C)
Danger

LS1035 BFB @ 25 µg/ml for tuning
prep: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 524 MM21 (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) into 1ml MeOH. Final Volume 2ml
CXM

LS1036: 1,4-Dioxane working Std @ 10,000 ppm
prep: 1/20/15 Transfer 1,4-Dioxane @ 10,000ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CXM

LS1037 DIPE stock std soln @ 5,000 µg/ml
XF 2/3/15 34.48 µl of DIPE neat (Recd 6/9/13, Lot # SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
F 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
p. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
prep: 4/5/15 1ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MeOH
CXM

TCLP
VOLATILE ORGANICS

TCLP
VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA150220-01	AQUEOUS	L6704.D	96	99	99
TCLP150220	LEACHATE	L6705.D	96	99	94
01273-001	LEACHATE	L6706.D	96	99	95
SPLP150207	LEACHATE	L6707.D	96	99	97
00995-002	LEACHATE	L6708.D	99	98	97
01137-002	AQUEOUS	L6709.D	96	96	98
01137-007	AQUEOUS	L6710.D	97	97	92
01137-008	AQUEOUS	L6711.D	95	97	93
01137-003	AQUEOUS	L6712.D	94	98	99
01213-001	AQUEOUS	L6714.D	98	97	88
LCSA150220-01	AQUEOUS	L6715.D	96	100	92
01273-001MS	AQUEOUS	L6716.D	96	101	92
01273-001MSD	AQUEOUS	L6717.D	95	101	94
01137-005	AQUEOUS	L6720.D	99	97	96
01137-006	AQUEOUS	L6721.D	99	96	99
01137-001	AQUEOUS	L6722.D	100	97	95
01137-004	AQUEOUS	L6723.D	101	98	99
01214-001	AQUEOUS	L6724.D	101	97	95
01244-001	AQUEOUS	L6725.D	100	96	91
01244-002	AQUEOUS	L6726.D	101	98	92
01244-003	AQUEOUS	L6727.D	101	99	91

			Leachate	
	Concentration	DKQPs	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	45-154	45-153
SMC2 = Toluene-d8	50 ppb	70-130	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	48-149	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	62.0	124	
Chloromethane	50.0	0.0	55.4	111	
Vinyl chloride	50.0	0.0	58.0	116	
Bromomethane	50.0	0.0	53.2	106	
Chloroethane	50.0	0.0	56.8	114	
Trichlorofluoromethane	50.0	0.0	43.6	87	
Acrolein	150	0.0	154.4	103	
1,1-Dichloroethene	50.0	0.0	53.3	107	
Acetone	50.0	0.0	63.1	126	
Carbon disulfide	50.0	0.0	55.6	111	
Vinyl acetate	50.0	0.0	50.1	100	
Methylene chloride	50.0	0.0	49.3	99	
Acrylonitrile	150.0	0.0	154.9	103	
tert-Butyl alcohol (TBA)	100.0	0.0	89.0	89	
trans-1,2-Dichloroethene	50.0	0.0	48.6	97	
Methyl tert-butyl ether (MTBE)	50.0	0.0	48.4	97	
1,1-Dichloroethane	50.0	0.0	49.0	98	
Diisopropyl ether (DIPE)	50.0	0.0	52.3	105	
cis-1,2-Dichloroethene	50.0	0.0	50.1	100	
2,2-Dichloropropane	50.0	0.0	53.3	107	
2-Butanone (MEK)	50.0	0.0	61.7	123	
Bromochloromethane	50.0	0.0	46.3	93	
Chloroform	50.0	0.0	46.1	92	
1,1,1-Trichloroethane	50.0	0.0	51.6	103	
Carbon tetrachloride	50.0	0.0	52.2	104	
1,1-Dichloropropene	50.0	0.0	53.3	107	
1,2-Dichloroethane (EDC)	50.0	0.0	45.5	91	
Benzene	50.0	0.0	48.6	97	
Trichloroethene	50.0	0.0	48.6	97	
1,2-Dichloropropane	50.0	0.0	50.7	101	
Dibromomethane	50.0	0.0	45.5	91	
1,4-Dioxane	1500	0.0	1162	77	
Bromodichloromethane	50.0	0.0	48.7	97	
2-Chloroethyl vinyl ether	50.0	0.0	49.6	99	
cis-1,3-Dichloropropene	50.0	0.0	53.3	107	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	57.1	114	
Toluene	50.0	0.0	48.2	96	
trans-1,3-Dichloropropene	50.0	0.0	52.1	104	
1,1,2-Trichloroethane	50.0	0.0	47.3	95	
Tetrachloroethene	50.0	0.0	47.7	95	
1,3-Dichloropropane	50.0	0.0	49.4	99	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	63.9	128	
Dibromochloromethane	50.0	0.0	49.1	98	
1,2-Dibromoethane (EDB)	50.0	0.0	48.6	97	
Chlorobenzene	50.0	0.0	45.5	91	
1,1,1,2-Tetrachloroethane	50.0	0.0	48.4	97	
Ethylbenzene	50.0	0.0	49.0	98	
m,p-Xylene	100.0	0.0	98.2	98	
o-Xylene	50.0	0.0	50.7	101	
Styrene	50.0	0.0	50.7	101	
Bromoform	50.0	0.0	47.2	94	
Isopropylbenzene	50.0	0.0	50.9	102	
1,1,2,2-Tetrachloroethane	50.0	0.0	42.4	85	
Bromobenzene	50.0	0.0	45.2	90	
1,2,3-Trichloropropane	50.0	0.0	43.5	87	
n-Propylbenzene	50.0	0.0	47.1	94	
2-Chlorotoluene	50.0	0.0	45.5	91	
1,3,5-Trimethylbenzene	50.0	0.0	46.9	94	
4-Chlorotoluene	50.0	0.0	44.1	88	
tert-Butylbenzene	50.0	0.0	46.4	93	
1,2,4-Trimethylbenzene	50.0	0.0	44.8	90	
sec-Butylbenzene	50.0	0.0	45.3	91	
1,3-Dichlorobenzene	50.0	0.0	41.8	84	
4-Isopropyltoluene	50.0	0.0	44.8	90	
1,4-Dichlorobenzene	50.0	0.0	40.8	82	
n-Butylbenzene	50.0	0.0	45.2	90	
1,2-Dichlorobenzene	50.0	0.0	41.2	82	
1,2-Dibromo-3-chloropropane	50.0	0.0	38.7	77	
1,2,4-Trichlorobenzene	50.0	0.0	38.8	78	
Hexachlorobutadiene	50.0	0.0	40.3	81	
Naphthalene	50.0	0.0	37.1	74	
1,2,3-Trichlorobenzene	50.0	0.0	36.2	72	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	54.3	109	
Methyl acetate	50.0	0.0	54.1	108	
Cyclohexane	50.0	0.0	55.7	111	
Methylcyclohexane	50.0	0.0	55.6	111	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-01
Date Received:
Date Analyzed: 02/20/2015
LCS Data file: L6715.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260 **MS/MSD SPIKE REPORT**

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	62.8	126		58.7	117		7	
Chloromethane	50.0	0.0	59.1	118		54.4	109		8	
Vinyl chloride	50.0	0.0	64.4	129		54.5	109		17	
Bromomethane	50.0	0.0	55.3	111		49.8	100		10	
Chloroethane	50.0	0.0	60.3	121		51.9	104		15	
Trichlorofluoromethane	50.0	0.0	47.0	94		39.7	79		17	
Acrolein	150	0.0	162	108		162	108		0	
1,1-Dichloroethene	50.0	0.0	58.9	118		51.4	103		14	
Acetone	50.0	0.0	61.9	124		58.8	118		5	
Carbon disulfide	50.0	0.0	61.8	124		52.9	106		16	
Vinyl acetate	50.0	0.0	53.7	107		50.6	101		6	
Methylene chloride	50.0	0.0	50.8	102		48.0	96		6	
Acrylonitrile	150	0.0	181	121		187	125		3	
tert-Butyl alcohol (TBA)	100	0.0	97.7	98		96.6	97		1	
trans-1,2-Dichloroethene	50.0	0.0	53.0	106		48.7	97		8	
Methyl tert-butyl ether (MTBE)	50.0	0.0	51.3	103		48.7	97		5	
1,1-Dichloroethane	50.0	0.0	51.4	103		48.7	97		5	
Diisopropyl ether (DIPE)	50.0	0.0	54.3	109		52.3	105		4	
cis-1,2-Dichloroethene	50.0	0.0	52.4	105		50.0	100		5	
2,2-Dichloropropane	50.0	0.0	61.7	123		51.7	103		18	
2-Butanone (MEK)	50.0	0.0	61.5	123		63.7	127		4	
Bromochloromethane	50.0	0.0	48.7	97		46.6	93		4	
Chloroform	50.0	0.0	48.2	96		46.3	93		4	
1,1,1-Trichloroethane	50.0	0.0	57.6	115		50.0	100		14	
Carbon tetrachloride	50.0	0.0	60.5	121		50.8	102		17	
1,1-Dichloropropene	50.0	0.0	58.9	118		51.9	104		13	
1,2-Dichloroethane (EDC)	50.0	0.0	46.6	93		45.3	91		3	
Benzene	50.0	0.0	50.5	101		48.2	96		5	
Trichloroethene	50.0	0.0	50.8	102		47.8	96		6	
1,2-Dichloropropane	50.0	0.0	51.9	104		50.3	101		3	
Dibromomethane	50.0	0.0	46.6	93		45.1	90		3	
1,4-Dioxane	1,500	0.0	1738	116		1717	114		1	
Bromodichloromethane	50.0	0.0	49.9	100		48.5	97		3	
2-Chloroethyl vinyl ether	50.0	0.0	50.9	102		49.6	99		3	
cis-1,3-Dichloropropene	50.0	0.0	55.4	111		53.6	107		3	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	59.2	118		57.5	115		3	
Toluene	50.0	0.0	50.2	100		47.9	96		5	
trans-1,3-Dichloropropene	50.0	0.0	54.4	109		53.7	107		1	
1,1,2-Trichloroethane	50.0	0.0	48.6	97		47.4	95		3	
Tetrachloroethene	50.0	0.0	52.4	105		48.4	97		8	
1,3-Dichloropropane	50.0	0.0	50.1	100		49.1	98		2	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	59.5	119		58.7	117		1	
Dibromochloromethane	50.0	0.0	51.3	103		50.0	100		3	
1,2-Dibromoethane (EDB)	50.0	0.0	49.9	100		48.8	98		2	
Chlorobenzene	50.0	0.0	47.3	95		46.5	93		2	
1,1,1,2-Tetrachloroethane	50.0	0.0	50.4	101		49.1	98		3	
Ethylbenzene	50.0	0.0	53.1	106		50.6	101		5	
m,p-Xylene	100	0.0	105.2	105		101.5	102		4	
o-Xylene	50.0	0.0	54.8	110		52.8	106		4	
Styrene	50.0	0.0	54.0	108		53.1	106		2	
Bromoform	50.0	0.0	52.2	104		51.0	102		2	
Isopropylbenzene	50.0	0.0	57.2	114		53.6	107		6	
1,1,2,2-Tetrachloroethane	50.0	0.0	44.8	90		43.7	87		2	
Bromobenzene	50.0	0.0	48.3	97		47.5	95		2	
1,2,3-Trichloropropane	50.0	0.0	45.6	91		44.6	89		2	
n-Propylbenzene	50.0	0.0	54.2	108		50.5	101		7	
2-Chlorotoluene	50.0	0.0	49.7	99		48.4	97		3	
1,3,5-Trimethylbenzene	50.0	0.0	53.8	108		51.0	102		5	
4-Chlorotoluene	50.0	0.0	48.5	97		47.1	94		3	
tert-Butylbenzene	50.0	0.0	54.5	109		50.9	102		7	
1,2,4-Trimethylbenzene	50.0	0.0	50.6	101		48.3	97		5	
sec-Butylbenzene	50.0	0.0	55.2	110		51.2	102		8	
1,3-Dichlorobenzene	50.0	0.0	45.8	92		45.3	91		1	
4-Isopropyltoluene	50.0	0.0	53.8	108		51.2	102		5	
1,4-Dichlorobenzene	50.0	0.0	45.1	90		44.3	89		2	
n-Butylbenzene	50.0	0.0	55.6	111		52.5	105		6	
1,2-Dichlorobenzene	50.0	0.0	45.3	91		44.9	90		1	
1,2-Dibromo-3-chloropropane	50.0	0.0	40.6	81		39.5	79		3	
1,2,4-Trichlorobenzene	50.0	0.0	49.2	98		48.3	97		2	
Hexachlorobutadiene	50.0	0.0	51.2	102		47.2	94		8	
Naphthalene	50.0	0.0	37.3	75		36.7	73		2	
1,2,3-Trichlorobenzene	50.0	0.0	47.3	95		52.4	105		10	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	54.3	109		49.5	99		9	
Methyl acetate	50.0	0.0	55.0	110		51.9	104		6	
Cyclohexane	50.0	0.0	60.8	122		53.9	108		12	
Methylcyclohexane	50.0	0.0	60.9	122		56.8	114		7	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 01273-001
Client ID: GPEC-WC1-02181
Date Received:
Date Analyzed: 02/20/2015
MS Data file: L6716.D
MSD Data file: L6717.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L6704.D Instrument ID: MSD_L

Date Analyzed: 02/20/2015 Time Analyzed: 10:03

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TCLP150220	TCLP150220	02/20/2015	10:30
GPEC-WC1-02181	01273-001	02/20/2015	10:56
SPLP150207	SPLP150207	02/20/2015	11:23
SS-14A-01C/2.0	00995-002	02/20/2015	11:50
MW-3	01137-002	02/20/2015	12:17
MW-2	01137-007	02/20/2015	12:44
MW-6	01137-008	02/20/2015	13:11
MW-4	01137-003	02/20/2015	13:38
MW-1/5	01213-001	02/20/2015	14:32
LCS-50PPB	LCSA150220-01	02/20/2015	14:59
MS	01273-001MS	02/20/2015	15:25
MSD	01273-001MSD	02/20/2015	15:52
FIELD_BLANK	01137-005	02/20/2015	17:13
TRIP_BLANK	01137-006	02/20/2015	17:40
MW-1R	01137-001	02/20/2015	18:07
MW-5	01137-004	02/20/2015	18:33
MW-1/10	01214-001	02/20/2015	19:00
MW-1	01244-001	02/20/2015	19:27
MW-2	01244-002	02/20/2015	19:53
MW-3	01244-003	02/20/2015	20:20

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6604.D BFB Injection Date: 02/13/2015

Inst ID: MSD_L BFB Injection Time: 10:29

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	17.8	
75	30.0 - 60.0% of mass 95	48.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.6 (0.6)1	
174	Great than 50.0% of mass 95	99.1	
175	5.0 - 9.0% of mass 174	7.0 (7.1)1	
176	95.0 - 101.0% of mass 174	96.5 (97.4)1	
177	5.0 - 9.0% of mass 176	6.1 (6.3)2	
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC1	ICC1	L6605.D	02/13/2015	10:56
ICC5	ICC5	L6607.D	02/13/2015	11:53
ICC2	ICC2	L6608.D	02/13/2015	12:21
ICC20	ICC20	L6609.D	02/13/2015	12:48
ICC100	ICC100	L6610.D	02/13/2015	13:15
ICC150	ICC150	L6611.D	02/13/2015	13:42
ICC200	ICC200	L6612.D	02/13/2015	14:09
ICV100	ICV100	L6615.D	02/13/2015	15:30
BLKM150213-01	BLKM150213-01	L6618.D	02/13/2015	16:50
LCS-50PPB	LCSM150213-01	L6619.D	02/13/2015	17:17
MS	01069-001MS	L6620.D	02/13/2015	17:44
MSD	01069-001MSD	L6621.D	02/13/2015	18:12
ES-WC-91_(0-4)	01069-001	L6624.D	02/13/2015	19:32
T-2/5.0-5.5	01089-001	L6625.D	02/13/2015	19:59
SB-6/10.5	01049-007	L6626.D	02/13/2015	20:26
SB-7/7.5	01049-006	L6627.D	02/13/2015	20:52
SB-5/7.5	01049-005	L6628.D	02/13/2015	21:19
ES-WC-91_(4-8)	01069-002	L6629.D	02/13/2015	21:46
WC-1/GB6/12-12	01060-001	L6630.D	02/13/2015	22:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6701.D

BFB Injection Date: 02/20/2015

Inst ID: MSD_L

BFB Injection Time: 8:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.7			
75	30.0 - 60.0% of mass 95	46.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	98.8			
175	5.0 - 9.0% of mass 174	7.1	(	7.2	)1
176	95.0 - 101.0% of mass 174	96.1	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L6702.D	02/20/2015	9:08
BLKA150220-01	BLKA150220-01	L6704.D	02/20/2015	10:03
TCLP150220	TCLP150220	L6705.D	02/20/2015	10:30
GPEC-WC1-02181	01273-001	L6706.D	02/20/2015	10:56
SPLP150207	SPLP150207	L6707.D	02/20/2015	11:23
SS-14A-01C/2.0	00995-002	L6708.D	02/20/2015	11:50
MW-3	01137-002	L6709.D	02/20/2015	12:17
MW-2	01137-007	L6710.D	02/20/2015	12:44
MW-6	01137-008	L6711.D	02/20/2015	13:11
MW-4	01137-003	L6712.D	02/20/2015	13:38
MW-1/5	01213-001	L6714.D	02/20/2015	14:32
LCS-50PPB	LCSA150220-01	L6715.D	02/20/2015	14:59
MS	01273-001MS	L6716.D	02/20/2015	15:25
MSD	01273-001MSD	L6717.D	02/20/2015	15:52
FIELD_BLANK	01137-005	L6720.D	02/20/2015	17:13
TRIP_BLANK	01137-006	L6721.D	02/20/2015	17:40
MW-1R	01137-001	L6722.D	02/20/2015	18:07
MW-5	01137-004	L6723.D	02/20/2015	18:33
MW-1/10	01214-001	L6724.D	02/20/2015	19:00
MW-1	01244-001	L6725.D	02/20/2015	19:27

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L6701.D BFB Injection Date : 02/20/201

Inst ID: MSD_L BFB Injection Time: 8:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.7			
75	30.0 - 60.0% of mass 95	46.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.6	)1
174	Great than 50.0% of mass 95	98.8			
175	5.0 - 9.0% of mass 174	7.1	(	7.2	)1
176	95.0 - 101.0% of mass 174	96.1	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MW-2	01244-002	L6726.D	02/20/2015	19:53
MW-3	01244-003	L6727.D	02/20/2015	20:20

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6610.D Date Analyzed: 02/13/2015

Instrument ID: MSD_L Time Analyzed: 13:15

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	334357	6.13	464375	6.95	434421	10.29
	UPPER LIMIT	668714	6.63	928750	7.45	868842	10.79
	LOWER LIMIT	167178.5	5.63	232187.5	6.45	217210.5	9.79
	LAB SAMPLE ID						
01	ICC1	286657	6.13	409962	6.95	361365	10.29
02	ICC5	304709	6.13	431865	6.95	390295	10.29
03	ICC2	298969	6.13	429322	6.95	378604	10.29
04	ICC20	315672	6.13	444551	6.95	400966	10.29
05	ICC150	335884	6.13	470961	6.95	440697	10.29
06	ICC200	347689	6.13	492059	6.94	454144	10.29
07	ICV100	324200	6.13	455058	6.95	426508	10.29
08	BLKM150213-01	296616	6.13	423991	6.95	386239	10.29
09	LCSM150213-01	300487	6.13	426483	6.95	386354	10.29
10	01069-001MS	311799	6.13	436541	6.95	404194	10.29
11	01069-001MSD	317198	6.13	447453	6.95	416649	10.29
12	01069-001	323490	6.12	447114	6.94	395768	10.29
13	01089-001	322349	6.13	456099	6.95	417971	10.29
14	01049-007	342364	6.12	482740	6.94	435833	10.29
15	01049-006	353810	6.13	500879	6.94	455250	10.29
16	01049-005	373112	6.13	521120	6.94	477388	10.29
17	01069-002	369786	6.13	524497	6.95	472500	10.29
18	01060-001	370007	6.13	524324	6.95	463729	10.29
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L6702.D Date Analyzed: 02/20/2015

Instrument ID: MSD_L Time Analyzed: 9:08

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	396182	6.13	567004	6.95	525446	10.29
	UPPER LIMIT	792364	6.63	1134008	7.45	1050892	10.79
	LOWER LIMIT	198091	5.63	283502	6.45	262723	9.79
	LAB SAMPLE ID						
01	BLKA150220-01	395270	6.13	561728	6.95	517534	10.29
02	TCLP150220	388456	6.13	555838	6.95	505670	10.29
03	01273-001	383297	6.13	547554	6.95	504535	10.29
04	SPLP150207	382177	6.13	543077	6.95	500403	10.29
05	00995-002	368268	6.13	530332	6.95	491932	10.29
06	01137-002	358906	6.13	504406	6.95	441781	10.29
07	01137-007	366400	6.13	518865	6.95	455972	10.29
08	01137-008	359499	6.13	499821	6.95	436848	10.29
09	01137-003	355099	6.13	502966	6.95	460139	10.29
10	01213-001	348964	6.13	498361	6.95	440328	10.29
11	LCSA150220-01	358207	6.13	505677	6.95	465279	10.29
12	01273-001MS	350927	6.13	499982	6.95	457693	10.29
13	01273-001MSD	362029	6.13	510735	6.95	466211	10.29
14	01137-005	332042	6.13	472562	6.95	432911	10.29
15	01137-006	334498	6.13	481200	6.95	427831	10.29
16	01137-001	324840	6.13	461642	6.95	427180	10.29
17	01137-004	309013	6.13	439981	6.95	415435	10.29
18	01214-001	311805	6.13	448291	6.95	405623	10.29
19	01244-001	302713	6.13	427750	6.95	381285	10.29
20	01244-002	301531	6.13	436343	6.95	395069	10.29
21	01244-003	296768	6.13	422672	6.95	387127	10.29
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

TCLP
VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6706.D
Acq On : 20 Feb 2015 10:56
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,T,0.1ml,100
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 16:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	383297	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	547554	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	504535	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	156919	47.78	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.56%			
41) Toluene-d8	8.62	98	480459	49.55	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.10%			
59) Bromofluorobenzene	11.69	95	209857	47.59	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.18%			
Target Compounds						Qvalue

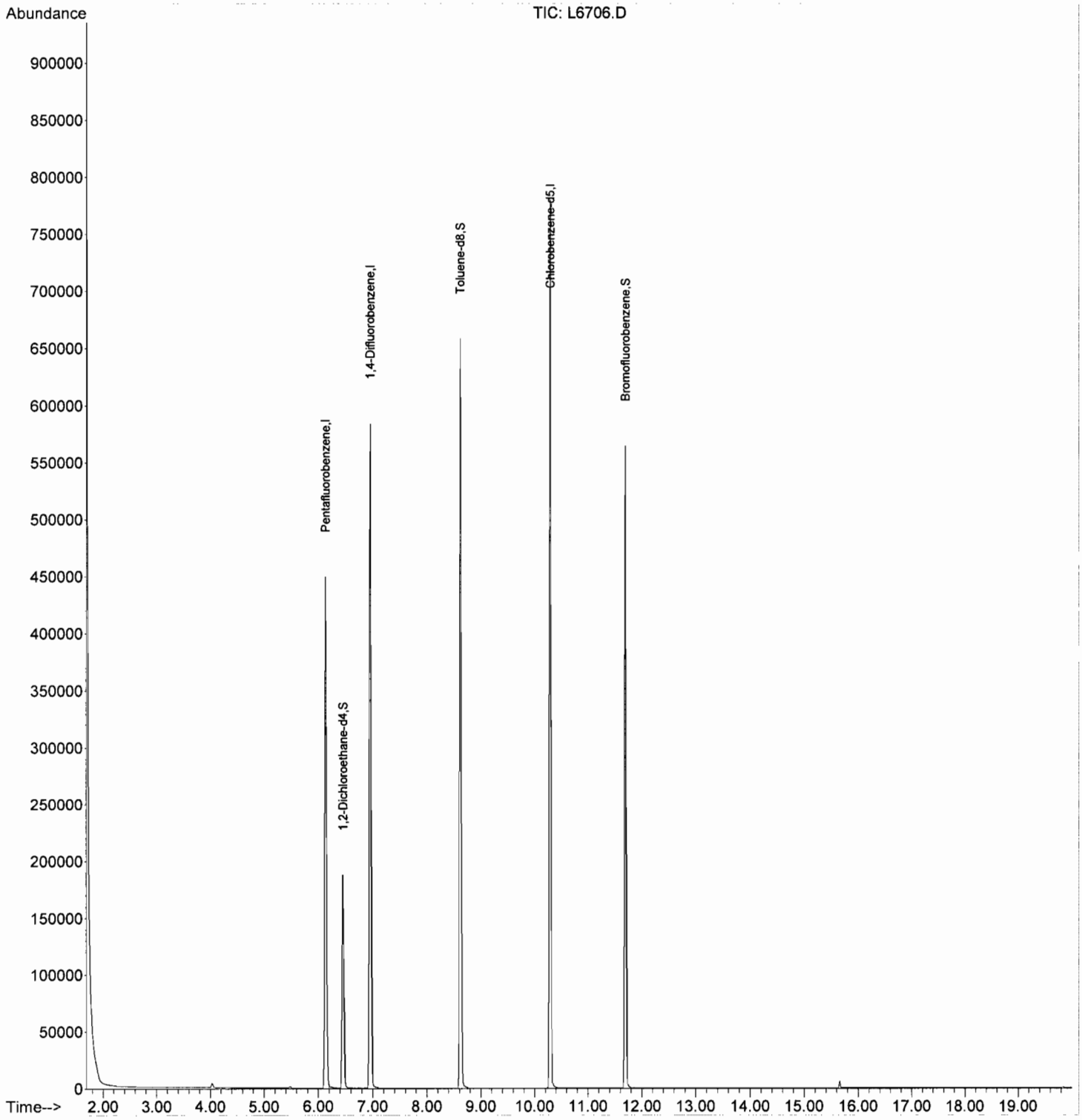
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

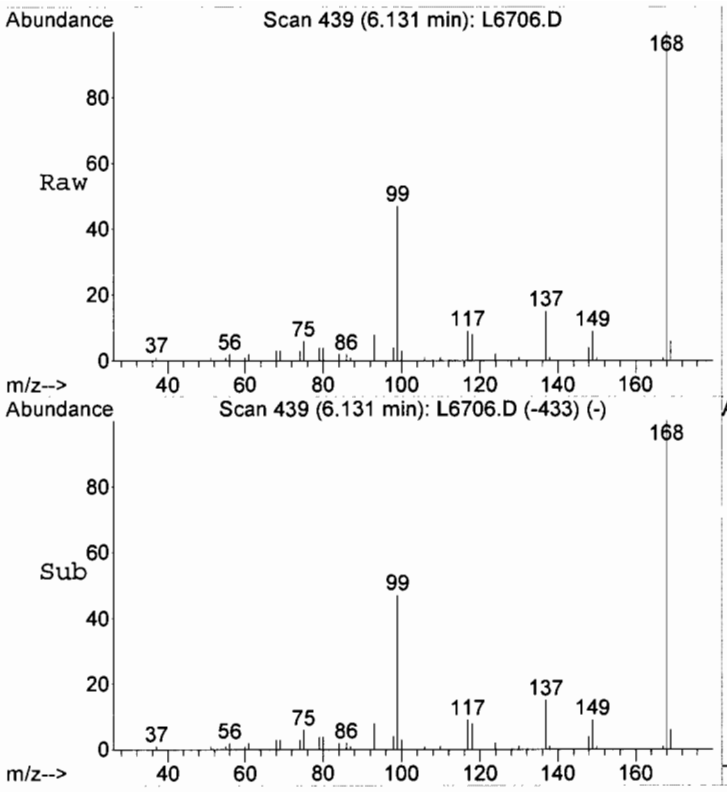
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6706.D
Acq On : 20 Feb 2015 10:56
Operator : MEI
Sample : GPEC-WC1-02181,01273-001,T,0.1ml,100
Misc : GEI-MTCLR/GREENPOI,02/18/15,02/19/15,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 20 16:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



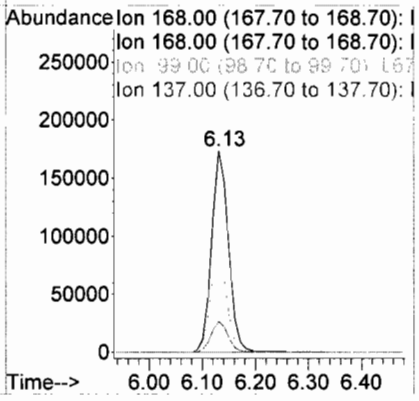
2/23/15

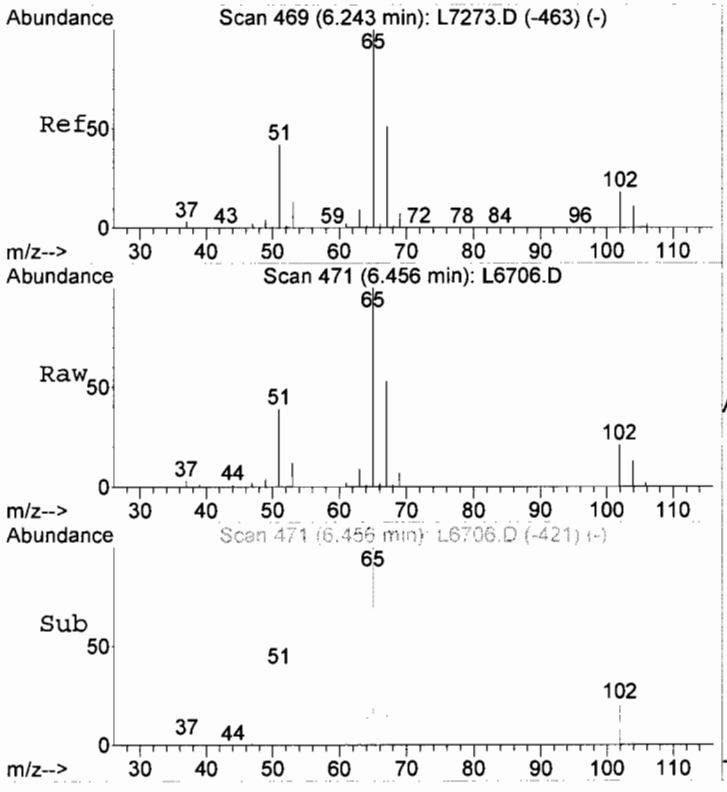


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:168 Resp: 383297

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

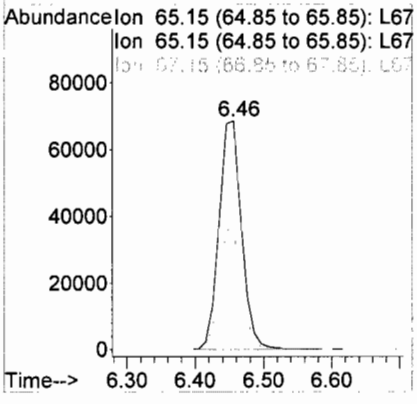


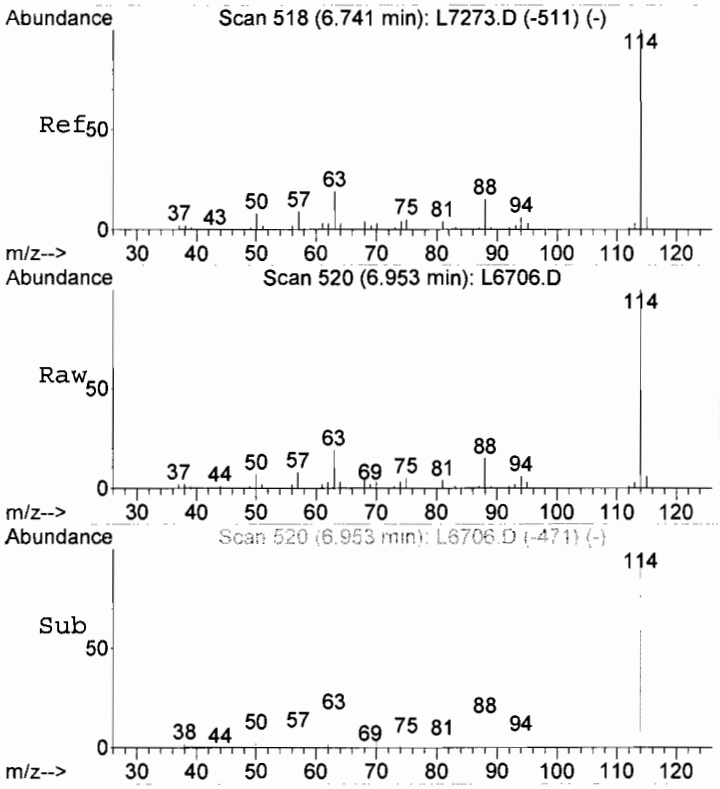


#30
1,2-Dichloroethane-d4
Concen: 47.78 UG
RT: 6.46 min Scan# 471
Delta R.T. 0.01 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 65 Resp: 156919

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	52.8	35.1	65.1

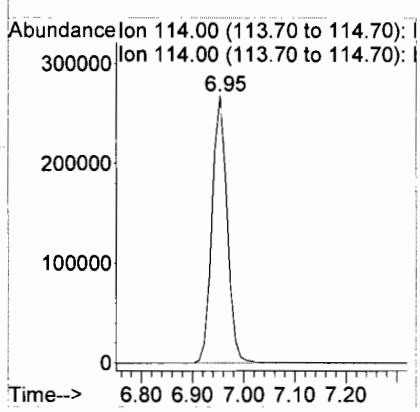


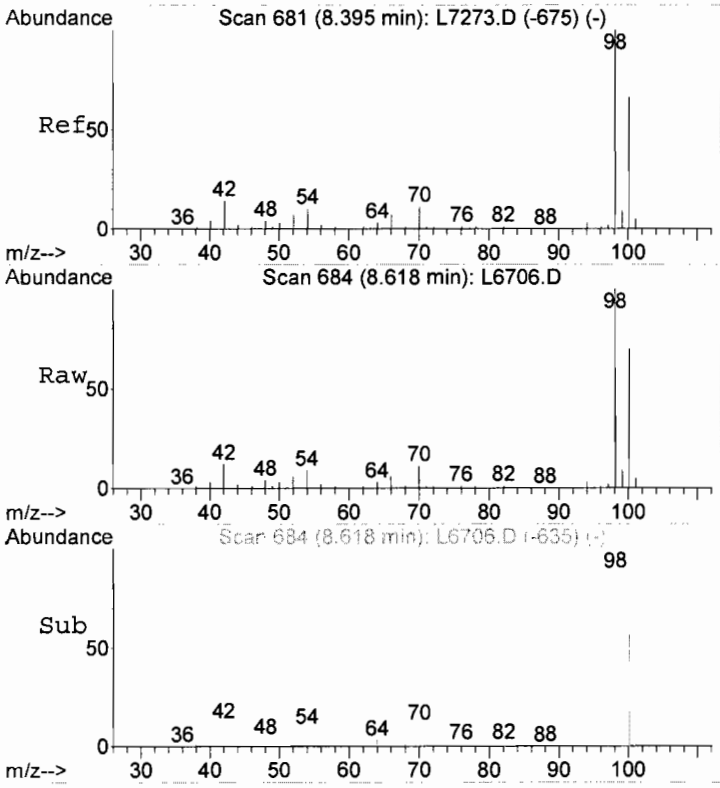


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:114 Resp: 547554

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

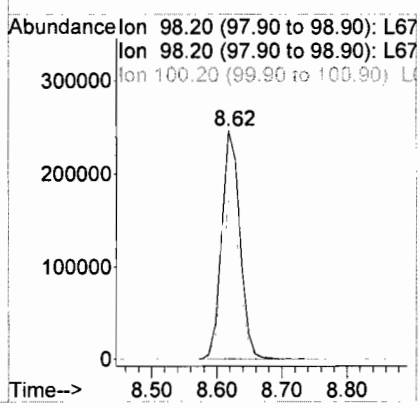


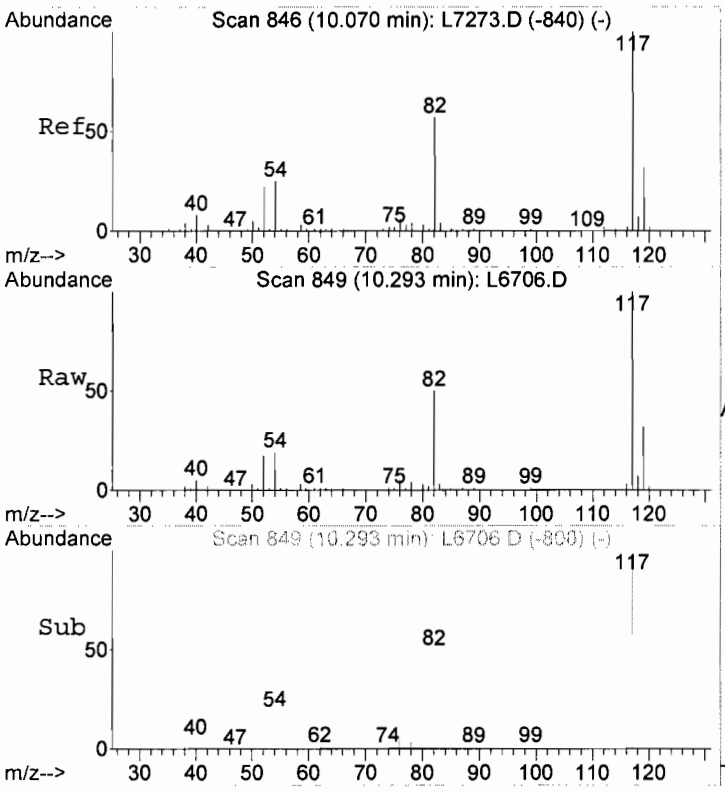


#41
Toluene-d8
Concen: 49.55 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 98 Resp: 480459

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.5	44.8	83.2

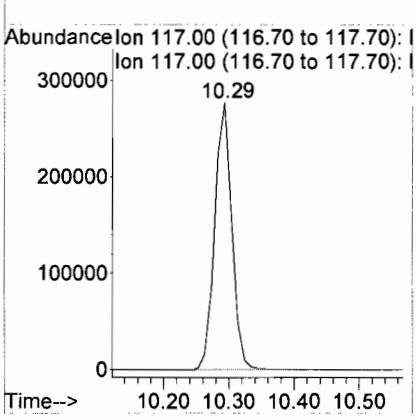


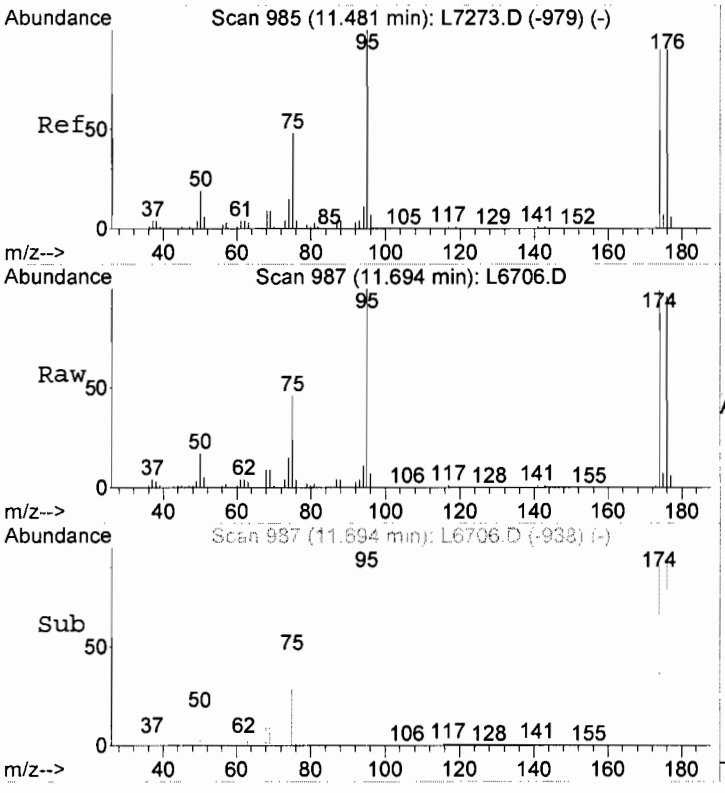


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion:117 Resp: 504535

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

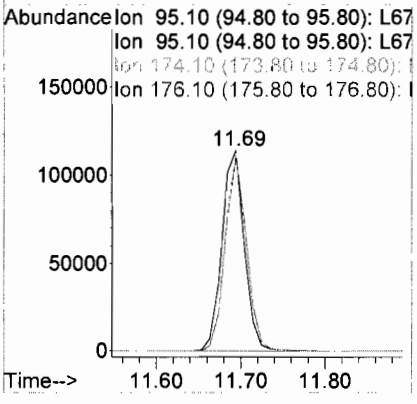




#59
Bromofluorobenzene
Concen: 47.59 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6706.D
Acq: 20 Feb 2015 10:56

Tgt Ion: 95 Resp: 209857

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.0	0.0	0.0#
176	91.6	0.0	0.0#



TCLP
VOLATILE ORGANICS STANDARDS

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015
Response Via : Initial Calibration

MXF 2/17/15
CT 2/17/15

Calibration Files
1 =L6605.D 2 =L6608.D 5 =L6607.D
20 =L6609.D 100 =L6610.D 150 =L6611.D 200 =L6612.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.168	0.124	0.239	0.213	0.203	0.222	0.219	0.198	19.88
3)	TP	Chloromethane	0.437	0.316	0.348	0.387	0.388	0.407	0.411	0.385	10.59
4)	C	Vinyl chloride	0.297	0.263	0.368	0.328	0.358	0.364	0.343	0.332	11.73
5)	T	Bromomethane	0.225	0.259	0.225	0.213	0.191	0.173	0.157	0.206	16.92
6)	T	Chloroethane	0.229	0.132	0.177	0.170	0.164	0.159	0.152	0.169	17.94
7)	T	Trichlorofluorome	0.384	0.319	0.471	0.393	0.352	0.397	0.298	0.374	15.31
8)	T	Acrolein	0.027	0.024	0.028	0.023	0.022	0.024	0.023	0.024	9.52
9)	MC	1,1-Dichloroethen	0.323	0.218	0.265	0.273	0.292	0.287	0.271	0.275	11.55
10)	T	Acetone		0.083	0.095	0.083	0.075	0.076	0.076	0.081	9.38
11)	T	Carbon disulfide	0.898	0.791	0.743	0.816	0.924	0.923	0.908	0.858	8.55
12)	T	Vinyl acetate	1.373	1.226	1.364	1.154	1.002	0.950	0.923	1.142	16.54
13)	T	Methylene chlorid		0.432	0.420	0.356	0.333	0.334	0.335	0.368	12.41
14)	T	Acrylonitrile	0.124	0.144	0.145	0.111	0.128	0.138	0.131	0.132	9.21
15)	T	tert-Butyl alcoho	0.026	0.033	0.031	0.029	0.028	0.029	0.030	0.029	7.67
16)	T	trans-1,2-Dichlor	0.563	0.456	0.518	0.475	0.471	0.453	0.446	0.483	8.80
17)	T	Methyl tert-butyl	1.550	1.315	1.384	1.291	1.236	1.246	1.278	1.329	8.23
18)	TP	1,1-Dichloroethan	1.063	0.877	0.971	0.861	0.860	0.856	0.866	0.908	8.76
19)	T	Diisopropyl ether	1.817	1.587	1.847	1.666	1.599	1.571	1.573	1.666	7.10
20)	T	cis-1,2-Dichloroe	0.592	0.519	0.578	0.540	0.534	0.527	0.529	0.546	5.11
21)	T	2,2-Dichloropropa	0.506	0.331	0.431	0.422	0.441	0.443	0.427	0.429	12.03
22)	T	2-Butanone (MEK)	0.205	0.161	0.210	0.196	0.186	0.181	0.183	0.189	8.72
23)	T	Bromochloromethan	0.313	0.301	0.303	0.278	0.265	0.264	0.268	0.285	7.31
25)	C	Chloroform	1.125	0.954	0.998	0.898	0.876	0.871	0.878	0.943	9.90
26)	T	1,1,1-Trichloroet	0.681	0.464	0.575	0.568	0.619	0.608	0.608	0.589	11.28
27)	T	Carbon tetrachlor	0.456	0.404	0.420	0.426	0.490	0.481	0.462	0.448	7.24
28)	T	1,1-Dichloroprope	0.556	0.405	0.490	0.492	0.547	0.529	0.512	0.504	10.04
29)	T	1,2-Dichloroethan	0.918	0.775	0.803	0.720	0.688	0.675	0.685	0.752	11.66
30)	S	1,2-Dichloroethan	0.454	0.445	0.440	0.426	0.414	0.412	0.409	0.428	4.20
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.596	1.326	1.484	1.334	1.316	1.274	1.256	1.370	9.06
33)	M	Trichloroethene	0.347	0.283	0.329	0.307	0.348	0.341	0.345	0.329	7.55
34)	C	1,2-Dichloropropa	0.374	0.324	0.358	0.341	0.345	0.335	0.342	0.346	4.67
35)	T	Dibromomethane	0.249	0.214	0.236	0.213	0.211	0.207	0.210	0.220	7.23
36)	T	1,4-Dioxane	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	15.84
37)	T	Bromodichlorometh	0.475	0.413	0.459	0.452	0.476	0.471	0.483	0.461	5.16
38)	T	2-Chloroethyl vin	0.195	0.203	0.195	0.191	0.213	0.207	0.215	0.203	4.67
39)	T	cis-1,3-Dichlorop	0.406	0.396	0.468	0.500	0.545	0.534	0.553	0.486	13.37
40)	T	4-Methyl-2-pentan	0.246	0.223	0.278	0.288	0.306	0.298	0.306	0.278	11.43
41)	S	Toluene-d8	0.857	0.866	0.886	0.882	0.906	0.899	0.902	0.885	2.12
42)	MC	Toluene	0.914	0.719	0.796	0.731	0.763	0.733	0.726	0.769	9.06
43)	T	trans-1,3-Dichlor	0.361	0.329	0.409	0.441	0.496	0.490	0.499	0.432	15.82
44)	T	1,1,2-Trichloroet	0.279	0.232	0.271	0.245	0.249	0.243	0.247	0.252	6.55
45)	T	Tetrachloroethene	0.303	0.218	0.258	0.243	0.270	0.256	0.252	0.257	10.06
46)	T	1,3-Dichloropropa	0.499	0.456	0.524	0.487	0.496	0.483	0.490	0.491	4.18
47)	T	2-Hexanone	0.121	0.138	0.149	0.176	0.196	0.194	0.200	0.168	19.00
48)	T	Dibromochlorometh	0.293	0.266	0.318	0.326	0.368	0.362	0.370	0.329	12.22
49)	T	1,2-Dibromoethane	0.303	0.266	0.317	0.304	0.317	0.310	0.317	0.305	5.97
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.192	1.005	1.069	0.931	0.917	0.896	0.916	0.989	10.96
52)	T	1,1,1,2-Tetrachlo	0.374	0.330	0.371	0.365	0.376	0.374	0.379	0.367	4.57

53)	C	Ethylbenzene	1.319	1.061	1.291	1.239	1.303	1.258	1.271	1.249	6.97
54)	T	m,p-Xylene	0.509	0.423	0.526	0.499	0.502	0.476	0.471	0.486	6.92
55)	T	o-Xylene	0.447	0.410	0.514	0.519	0.518	0.490	0.487	0.483	8.53
56)	T	Styrene	0.806	0.785	0.969	0.978	0.972	0.915	0.913	0.905	8.83
57)	TP	Bromoform	0.408	0.303	0.283	0.232	0.263	0.267	0.278	0.291	19.31
58)	T	Isopropylbenzene	0.887	0.685	0.921	0.966	1.054	1.015	1.034	0.937	13.51
59)	S	Bromofluorobenzen	0.432	0.436	0.439	0.427	0.439	0.446	0.439	0.437	1.36
60)	TP	1,1,2,2-Tetrachlo	0.567	0.441	0.472	0.417	0.376	0.363	0.361	0.428	17.33
61)	T	Bromobenzene	0.507	0.412	0.459	0.419	0.421	0.410	0.415	0.435	8.25
62)	T	1,2,3-Trichloropr	0.431	0.385	0.404	0.363	0.352	0.342	0.348	0.375	8.79
63)	T	n-Propylbenzene	1.174	0.894	1.078	1.071	1.124	1.100	1.107	1.078	8.17
64)	T	2-Chlorotoluene	0.917	0.731	0.864	0.794	0.798	0.779	0.798	0.812	7.47
65)	T	1,3,5-Trimethylbe	0.898	0.731	0.879	0.872	0.886	0.872	0.875	0.859	6.65
66)	T	4-Chlorotoluene	1.187	0.926	1.062	0.964	0.956	0.931	0.943	0.996	9.64
67)	T	tert-Butylbenzene	0.765	0.499	0.611	0.627	0.671	0.682	0.685	0.649	12.73
68)	T	1,2,4-Trimethylbe	1.177	0.809	0.971	0.929	0.926	0.922	0.935	0.953	11.65
69)	T	sec-Butylbenzene	1.065	0.731	0.847	0.870	0.918	0.909	0.920	0.894	11.19
70)	T	1,3-Dichlorobenze	0.869	0.659	0.687	0.638	0.613	0.609	0.629	0.672	13.54
71)	T	4-Isopropyltoluen	0.938	0.693	0.806	0.806	0.830	0.831	0.841	0.821	8.77
72)	T	1,4-Dichlorobenze	0.905	0.713	0.747	0.668	0.644	0.637	0.645	0.709	13.55
73)	T	n-Butylbenzene	0.409	0.307	0.324	0.357	0.375	0.379	0.378	0.361	9.75
74)	T	1,2-Dichlorobenze	0.858	0.684	0.734	0.667	0.618	0.614	0.614	0.684	12.96
75)	T	1,2-Dibromo-3-chl		0.042	0.056	0.059	0.065	0.068	0.069	0.060	17.10
76)	T	1,2,4-Trichlorobe	0.285	0.306	0.351	0.331	0.360	0.383	0.398	0.345	11.77
77)	T	Hexachlorobutadie		0.164	0.146	0.168	0.169	0.170	0.171	0.165	5.62
78)	T	Naphthalene	0.583	0.673	0.784	0.947	0.945	0.992	1.009	0.847	19.90
79)	T	1,2,3-Trichlorobe	0.295	0.309	0.317	0.325	0.340	0.359	0.377	0.332	8.65
80)	T	1,1,2-Trichloro-1	0.148	0.092	0.165	0.146	0.142	0.134	0.147	0.139	16.44
81)	T	Methyl acetate	0.187	0.235	0.234	0.204	0.189	0.190	0.193	0.204	10.33
82)	T	Cyclohexane	0.325	0.156	0.258	0.268	0.265	0.261	0.261	0.256	19.57
83)	T	Methylcyclohexane	0.183	0.175	0.152	0.158	0.175	0.162	0.138	0.163	9.63

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM021315.M Tue Feb 17 14:02:32 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	286657	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	409962	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	361365	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	130193	47.48	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.96%				
41) Toluene-d8	8.62	98	351417	45.22	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 90.44%				
59) Bromofluorobenzene	11.69	95	156247	47.84	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.68%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	965m	0.46	UG		
3) Chloromethane	1.93	50	2505	0.74	UG		96
4) Vinyl chloride	2.06	62	1701	0.59	UG		99
5) Bromomethane	2.42	94	1292m	0.92	UG		
6) Chloroethane	2.54	64	1315	0.90	UG	#	86
7) Trichlorofluoromethane	2.84	101	2201	0.75	UG		97
8) Acrolein	3.33	56	3085	8.81	UG	#	65
9) 1,1-Dichloroethene	3.45	96	1850	0.85	UG		96
11) Carbon disulfide	3.71	76	5151	0.72	UG		100
12) Vinyl acetate	4.96	43	7869	0.81	UG	#	99
14) Acrylonitrile	4.32	53	14269	14.12	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	297m	1.27	UG		
16) trans-1,2-Dichloroethene	4.36	96	3228	1.00	UG		97
17) Methyl tert-butyl ether (M	4.38	73	8886	1.01	UG		100
18) 1,1-Dichloroethane	4.86	63	6096	1.01	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	10416	0.93	UG		99
20) cis-1,2-Dichloroethene	5.53	96	3396	0.96	UG		98
21) 2,2-Dichloropropane	5.53	77	2901	0.95	UG		92
22) 2-Butanone (MEK)	5.55	43	1176	1.11	UG	#	89
23) Bromochloromethane	5.80	128	1796	1.07	UG		99
25) Chloroform	5.89	83	6452	1.11	UG		99
26) 1,1,1-Trichloroethane	6.10	97	3906	0.98	UG	#	80
27) Carbon tetrachloride	6.29	117	2612	0.84	UG		99
28) 1,1-Dichloropropene	6.29	75	3187	0.86	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	5262	1.16	UG		99
32) Benzene	6.53	78	13086	1.07	UG		100
33) Trichloroethene	7.25	95	2848	1.00	UG		92
34) 1,2-Dichloropropane	7.49	63	3066	0.99	UG	#	100
35) Dibromomethane	7.61	93	2039	1.10	UG		92
36) 1,4-Dioxane	7.64	88	3071	121.30	UG		98
37) Bromodichloromethane	7.80	83	3891	1.02	UG	#	97
38) 2-Chloroethyl vinyl ether	8.14	63	1597	0.96	UG	#	91
39) cis-1,3-Dichloropropene	8.30	75	3330	0.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.48	43	2021	0.81	UG		95
42) Toluene	8.70	92	7498	1.12	UG		98
43) trans-1,3-Dichloropropene	8.93	75	2964	0.81	UG	#	97
44) 1,1,2-Trichloroethane	9.15	83	2285	1.09	UG		98
45) Tetrachloroethene	9.33	166	2485	1.09	UG		100
46) 1,3-Dichloropropane	9.34	76	4094	0.99	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration

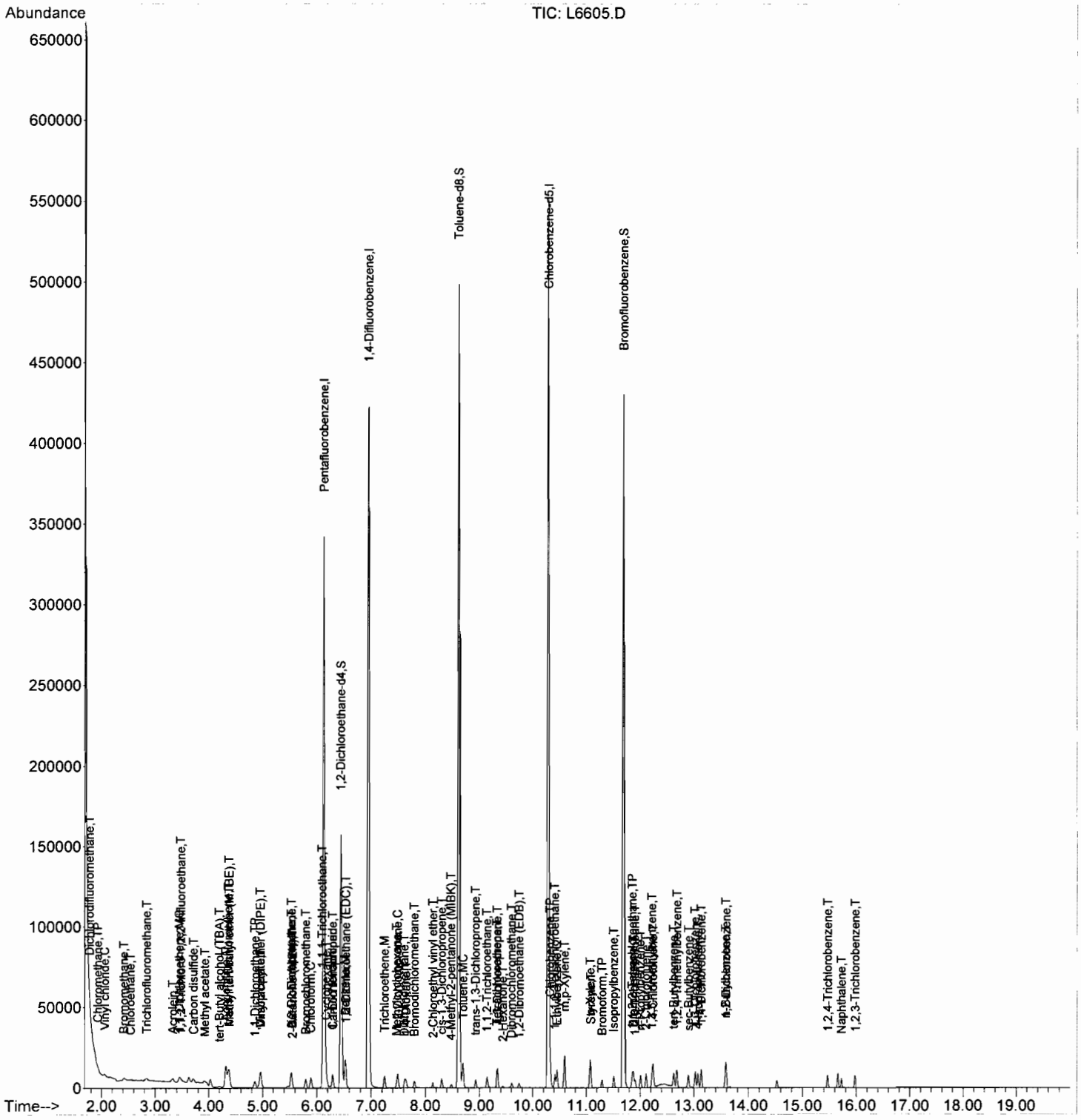
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.44	43	989	0.82	UG	#	88
48) Dibromochloromethane	9.60	129	2403	0.94	UG		97
49) 1,2-Dibromoethane (EDB)	9.75	107	2481	1.00	UG		98
51) Chlorobenzene	10.32	112	8615	1.19	UG		100
52) 1,1,1,2-Tetrachloroethane	10.42	131	2703	1.01	UG		97
53) Ethylbenzene	10.46	91	9531	0.93	UG		100
54) m,p-Xylene	10.60	106	7354	1.85	UG		94
55) o-Xylene	11.07	106	3231	0.80	UG		99
56) Styrene	11.09	104	5826	0.80	UG		98
57) Bromoform	11.30	173	2950	1.63	UG		99
58) Isopropylbenzene	11.51	105	6412	0.78	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	4100	1.25	UG	#	98
61) Bromobenzene	11.88	156	3661	1.16	UG		100
62) 1,2,3-Trichloropropane	11.91	75	3114	1.09	UG		98
63) n-Propylbenzene	12.01	91	8484	0.94	UG		100
64) 2-Chlorotoluene	12.11	91	6627	1.00	UG		100
65) 1,3,5-Trimethylbenzene	12.22	105	6488	0.94	UG		99
66) 4-Chlorotoluene	12.24	91	8576	1.11	UG		100
67) tert-Butylbenzene	12.63	119	5531	1.05	UG		100
68) 1,2,4-Trimethylbenzene	12.69	105	8507	1.15	UG		100
69) sec-Butylbenzene	12.90	105	7696	1.02	UG		99
70) 1,3-Dichlorobenzene	13.02	146	6279	1.26	UG		100
71) 4-Isopropyltoluene	13.07	119	6781	1.01	UG		99
72) 1,4-Dichlorobenzene	13.14	146	6544	1.26	UG		99
73) n-Butylbenzene	13.58	92	2956	0.95	UG		97
74) 1,2-Dichlorobenzene	13.59	146	6199	1.23	UG		99
76) 1,2,4-Trichlorobenzene	15.47	180	2057m	0.72	UG		
78) Naphthalene	15.72	128	4215m	0.62	UG		
79) 1,2,3-Trichlorobenzene	15.98	180	2135m	0.82	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1068m	0.78	UG		
81) Methyl acetate	3.93	43	1350m	0.74	UG		
82) Cyclohexane	6.17	56	2351m	0.92	UG		
83) Methylcyclohexane	7.47	55	1326	0.77	UG		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6605.D
Acq On : 13 Feb 2015 10:56
Operator : MEI
Sample : ICC1,ICC1,W,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 13:57:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:07:17 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	304709	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	431865	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	390295	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134041	47.30	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.60%				
41) Toluene-d8	8.62	98	382579	47.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 95.90%				
59) Bromofluorobenzene	11.69	95	171478	49.40	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	7279m	4.25	UG		
3) Chloromethane	1.93	50	10597	3.53	UG		100
4) Vinyl chloride	2.06	62	11205m	4.69	UG		
5) Bromomethane	2.42	94	6870	4.34	UG		95
6) Chloroethane	2.55	64	5395	3.88	UG		98
7) Trichlorofluoromethane	2.83	101	14342m	5.42	UG		
8) Acrolein	3.32	56	17065	56.05	UG		100
9) 1,1-Dichloroethene	3.45	96	8067	3.78	UG		98
10) Acetone	3.51	43	2891m	3.47	UG		
11) Carbon disulfide	3.70	76	22627	3.50	UG		100
12) Vinyl acetate	4.96	43	41571	4.51	UG	#	99
13) Methylene chloride	4.03	84	12794	4.66	UG		100
14) Acrylonitrile	4.32	53	88651	88.83	UG		100
15) tert-Butyl alcohol (TBA)	4.20	59	1860m	6.38	UG		
16) trans-1,2-Dichloroethene	4.36	96	15791	4.97	UG		91
17) Methyl tert-butyl ether (M	4.38	73	42173	4.74	UG		100
18) 1,1-Dichloroethane	4.85	63	29585	4.90	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	56284	5.00	UG		99
20) cis-1,2-Dichloroethene	5.53	96	17597	4.97	UG		98
21) 2,2-Dichloropropane	5.53	77	13118	4.46	UG	#	84
22) 2-Butanone (MEK)	5.55	43	6407	5.64	UG		98
23) Bromochloromethane	5.80	128	9242	5.29	UG		100
25) Chloroform	5.89	83	30413	5.07	UG		100
26) 1,1,1-Trichloroethane	6.11	97	17535	4.54	UG	#	80
27) Carbon tetrachloride	6.29	117	12811m	4.40	UG		
28) 1,1-Dichloropropene	6.29	75	14930	4.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	24467	5.17	UG		100
32) Benzene	6.53	78	64099	5.21	UG		100
33) Trichloroethene	7.25	95	14208	5.01	UG		95
34) 1,2-Dichloropropane	7.49	63	15474	4.95	UG		100
35) Dibromomethane	7.62	93	10182	5.32	UG		93
36) 1,4-Dioxane	7.64	88	28203	1115.25	UG		99
37) Bromodichloromethane	7.80	83	19841	5.00	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	8426	4.71	UG		99
39) cis-1,3-Dichloropropene	8.30	75	20204	4.75	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	11993	4.75	UG		99
42) Toluene	8.70	92	34397	5.09	UG		98
43) trans-1,3-Dichloropropene	8.93	75	17670	4.72	UG		99
44) 1,1,2-Trichloroethane	9.15	83	11697	5.42	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration

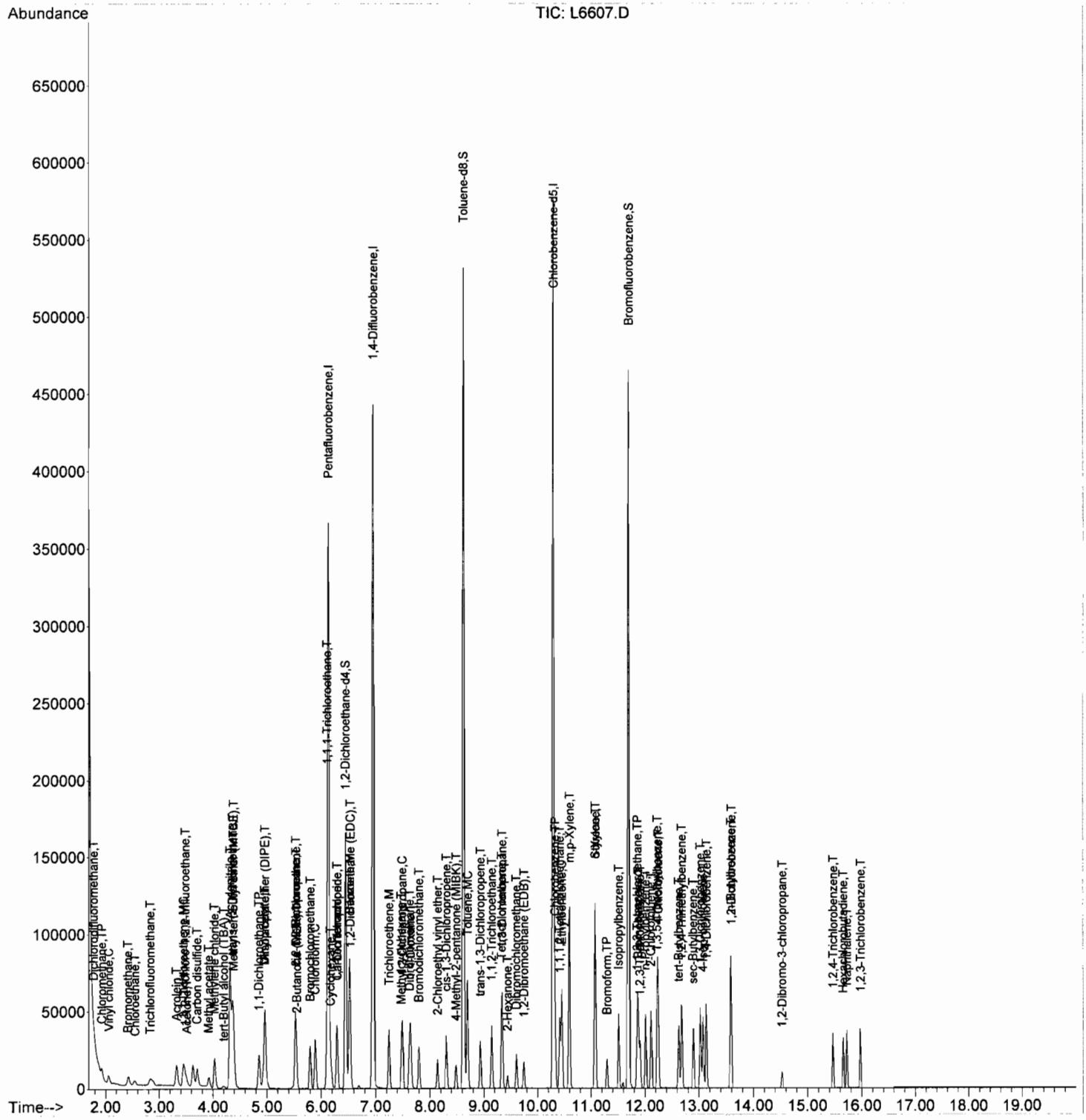
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	11135	4.95	UG	98
46) 1,3-Dichloropropane	9.34	76	22634	5.36	UG	100
47) 2-Hexanone	9.44	43	6432	5.13	UG	98
48) Dibromochloromethane	9.60	129	13736	5.02	UG	99
49) 1,2-Dibromoethane (EDB)	9.75	107	13704	5.29	UG	99
51) Chlorobenzene	10.32	112	41728	5.37	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	14472	5.03	UG	99
53) Ethylbenzene	10.46	91	50374	4.91	UG	99
54) m,p-Xylene	10.60	106	41025	10.24	UG	96
55) o-Xylene	11.07	106	20059	4.97	UG	96
56) Styrene	11.07	104	37839	5.14	UG	98
57) Bromoform	11.30	173	11042	5.08	UG	99
58) Isopropylbenzene	11.51	105	35950	4.50	UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	18409	5.24	UG	99
61) Bromobenzene	11.88	156	17923	5.31	UG	99
62) 1,2,3-Trichloropropane	11.91	75	15766	5.22	UG	98
63) n-Propylbenzene	12.01	91	42062	4.66	UG	100
64) 2-Chlorotoluene	12.11	91	33726	5.00	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	34294	4.84	UG	99
66) 4-Chlorotoluene	12.24	91	41464	5.10	UG	99
67) tert-Butylbenzene	12.63	119	23855	4.38	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	37915	4.81	UG	99
69) sec-Butylbenzene	12.89	105	33061	4.35	UG	99
70) 1,3-Dichlorobenzene	13.02	146	26820	4.98	UG	100
71) 4-Isopropyltoluene	13.07	119	31463	4.61	UG	100
72) 1,4-Dichlorobenzene	13.14	146	29159	5.21	UG	100
73) n-Butylbenzene	13.58	92	12665	4.06	UG	96
74) 1,2-Dichlorobenzene	13.59	146	28663	5.27	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	2171m	3.08	UG	
76) 1,2,4-Trichlorobenzene	15.47	180	13712	4.45	UG	100
77) Hexachlorobutadiene	15.65	225	5715m	3.58	UG	
78) Naphthalene	15.72	128	30590	4.35	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	12389m	4.30	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	6449m	5.34	UG	
81) Methyl acetate	3.92	43	9123	4.64	UG	98
82) Cyclohexane	6.17	56	10061m	4.33	UG	
83) Methylcyclohexane	7.47	55	5920m	3.79	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6607.D
Acq On : 13 Feb 2015 11:53
Operator : MEI
Sample : ICC5,ICC5,W,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 13:56:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:10:56 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	298969	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	429322	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	378604	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	132953	48.68	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.36%				
41) Toluene-d8	8.62	98	371625	47.34	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 94.68%				
59) Bromofluorobenzene	11.69	95	165072	49.37	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.74%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	1480m	1.03	UG		
3) Chloromethane	1.93	50	3782	1.42	UG		98
4) Vinyl chloride	2.05	62	3150m	1.50	UG		
5) Bromomethane	2.42	94	3092	2.03	UG		87
6) Chloroethane	2.54	64	1573	1.26	UG	#	86
7) Trichlorofluoromethane	2.83	101	3811m	1.67	UG		
8) Acrolein	3.33	56	7161m	27.08	UG		
9) 1,1-Dichloroethene	3.45	96	2607	1.34	UG		91
10) Acetone	3.52	43	998m	1.21	UG		
11) Carbon disulfide	3.70	76	9465m	1.61	UG		
12) Vinyl acetate	4.96	43	14667	1.72	UG	#	99
13) Methylene chloride	4.03	84	5161	2.03	UG		98
14) Acrylonitrile	4.32	53	43144	46.09	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	794m	2.72	UG		
16) trans-1,2-Dichloroethene	4.36	96	5455	1.79	UG		92
17) Methyl tert-butyl ether (M	4.39	73	15726	1.85	UG		100
18) 1,1-Dichloroethane	4.85	63	10492	1.81	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	18977	1.75	UG		99
20) cis-1,2-Dichloroethene	5.52	96	6211	1.83	UG		97
21) 2,2-Dichloropropane	5.53	77	3958	1.43	UG	#	49
22) 2-Butanone (MEK)	5.55	43	1931	1.71	UG	#	89
23) Bromochloromethane	5.80	128	3600	2.11	UG		96
25) Chloroform	5.89	83	11404	1.97	UG		100
26) 1,1,1-Trichloroethane	6.11	97	5543	1.52	UG	#	80
27) Carbon tetrachloride	6.29	117	4827m	1.78	UG		
28) 1,1-Dichloropropene	6.29	75	4843	1.51	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	9263	2.01	UG		100
32) Benzene	6.53	78	22775	1.88	UG		99
33) Trichloroethene	7.25	95	4861	1.74	UG		91
34) 1,2-Dichloropropane	7.49	63	5570	1.82	UG	#	100
35) Dibromomethane	7.62	93	3667	1.92	UG		94
36) 1,4-Dioxane	7.65	88	12759	504.88	UG		100
37) Bromodichloromethane	7.80	83	7087	1.80	UG	#	68
38) 2-Chloroethyl vinyl ether	8.14	63	3480	1.96	UG		98
39) cis-1,3-Dichloropropene	8.30	75	6796	1.62	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	3831	1.55	UG		97
42) Toluene	8.70	92	12346	1.85	UG		99
43) trans-1,3-Dichloropropene	8.93	75	5651	1.52	UG		100
44) 1,1,2-Trichloroethane	9.15	83	3978	1.85	UG		100

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration

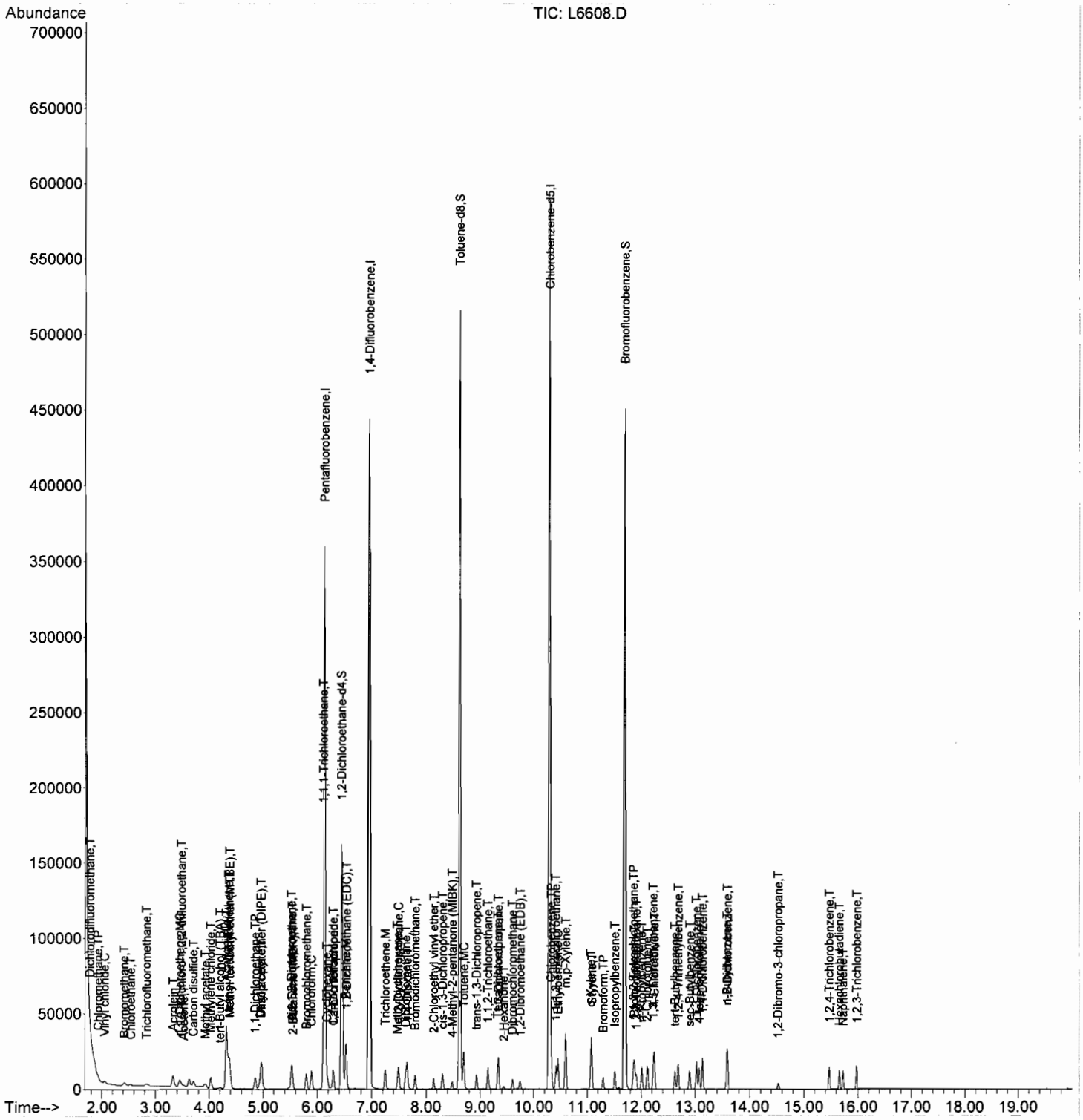
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	3747	1.70 UG	97
46) 1,3-Dichloropropane	9.34	76	7826	1.86 UG	100
47) 2-Hexanone	9.44	43	2371m	1.86 UG	
48) Dibromochloromethane	9.60	129	4571	1.66 UG	98
49) 1,2-Dibromoethane (EDB)	9.75	107	4565	1.76 UG	96
51) Chlorobenzene	10.32	112	15224	2.02 UG	99
52) 1,1,1,2-Tetrachloroethane	10.42	131	5002	1.80 UG	98
53) Ethylbenzene	10.46	91	16070	1.65 UG	99
54) m,p-Xylene	10.60	106	12806	3.36 UG	98
55) o-Xylene	11.06	106	6203	1.62 UG	95
56) Styrene	11.09	104	11886	1.69 UG	97
57) Bromoform	11.30	173	4587	2.11 UG	100
58) Isopropylbenzene	11.51	105	10374	1.39 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	6680	1.97 UG	100
61) Bromobenzene	11.88	156	6234	1.90 UG	99
62) 1,2,3-Trichloropropane	11.91	75	5833	2.01 UG	99
63) n-Propylbenzene	12.01	91	13538	1.60 UG	100
64) 2-Chlorotoluene	12.11	91	11075	1.73 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	11071	1.65 UG	100
66) 4-Chlorotoluene	12.24	91	14031	1.80 UG	99
67) tert-Butylbenzene	12.63	119	7554	1.48 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	12246	1.64 UG	99
69) sec-Butylbenzene	12.90	105	11065	1.57 UG	100
70) 1,3-Dichlorobenzene	13.02	146	9987	1.94 UG	100
71) 4-Isopropyltoluene	13.07	119	10499	1.64 UG	99
72) 1,4-Dichlorobenzene	13.14	146	10805	2.01 UG	99
73) n-Butylbenzene	13.58	92	4642	1.62 UG	96
74) 1,2-Dichlorobenzene	13.59	146	10366	1.99 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	633m	0.92 UG	
76) 1,2,4-Trichlorobenzene	15.47	180	4633m	1.58 UG	
77) Hexachlorobutadiene	15.65	225	2480m	1.61 UG	
78) Naphthalene	15.72	128	10185	1.54 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	4673m	1.67 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	1389m	1.29 UG	
81) Methyl acetate	3.93	43	3555	1.93 UG	98
82) Cyclohexane	6.17	56	2362m	1.17 UG	
83) Methylcyclohexane	7.47	55	2656m	2.00 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6608.D
Acq On : 13 Feb 2015 12:21
Operator : MEI
Sample : ICC2,ICC2,W,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 13:56:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:20 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	315672	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	444551	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	400966	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	134467	46.70	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.40%				
41) Toluene-d8	8.62	98	392017	48.23	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.46%				
59) Bromofluorobenzene	11.69	95	171258	48.23	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	26845m	18.12	UG		
3) Chloromethane	1.93	50	48903	17.53	UG		100
4) Vinyl chloride	2.06	62	41440	18.88	UG		100
5) Bromomethane	2.43	94	26908	16.65	UG		97
6) Chloroethane	2.54	64	21465	16.56	UG		100
7) Trichlorofluoromethane	2.83	101	49675m	20.82	UG		
8) Acrolein	3.33	56	28455	102.56	UG		100
9) 1,1-Dichloroethene	3.45	96	34458	16.94	UG		94
10) Acetone	3.52	43	10477	12.35	UG		100
11) Carbon disulfide	3.70	76	102974	16.66	UG		100
12) Vinyl acetate	4.96	43	145748	15.99	UG	#	99
13) Methylene chloride	4.03	84	44924	16.50	UG		100
14) Acrylonitrile	4.32	53	140306	140.34	UG		100
15) tert-Butyl alcohol (TBA)	4.21	59	7230	24.08	UG		99
16) trans-1,2-Dichloroethene	4.36	96	60027	18.57	UG		90
17) Methyl tert-butyl ether (M	4.39	73	163000	17.98	UG		100
18) 1,1-Dichloroethane	4.86	63	108728	17.71	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	210308	18.20	UG		100
20) cis-1,2-Dichloroethene	5.53	96	68143	18.82	UG		98
21) 2,2-Dichloropropane	5.53	77	53247	18.24	UG		87
22) 2-Butanone (MEK)	5.55	43	24758	21.18	UG		98
23) Bromochloromethane	5.80	128	35072	19.07	UG		99
25) Chloroform	5.89	83	113343	18.30	UG		100
26) 1,1,1-Trichloroethane	6.11	97	71744	18.61	UG		95
27) Carbon tetrachloride	6.29	117	53834	18.85	UG		100
28) 1,1-Dichloropropene	6.29	75	62146	18.34	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	90868	18.46	UG		100
32) Benzene	6.53	78	237299	18.83	UG		100
33) Trichloroethene	7.25	95	54620	18.78	UG		94
34) 1,2-Dichloropropane	7.49	63	60716	19.05	UG	#	100
35) Dibromomethane	7.62	93	37886	19.06	UG		93
36) 1,4-Dioxane	7.64	88	51893	1964.11	UG		98
37) Bromodichloromethane	7.80	83	80405	19.48	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	33979	18.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	88824	20.22	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	51207	19.98	UG		100
42) Toluene	8.70	92	129930	18.67	UG		98
43) trans-1,3-Dichloropropene	8.93	75	78392	20.27	UG		99
44) 1,1,2-Trichloroethane	9.15	83	43644	19.39	UG		99

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration

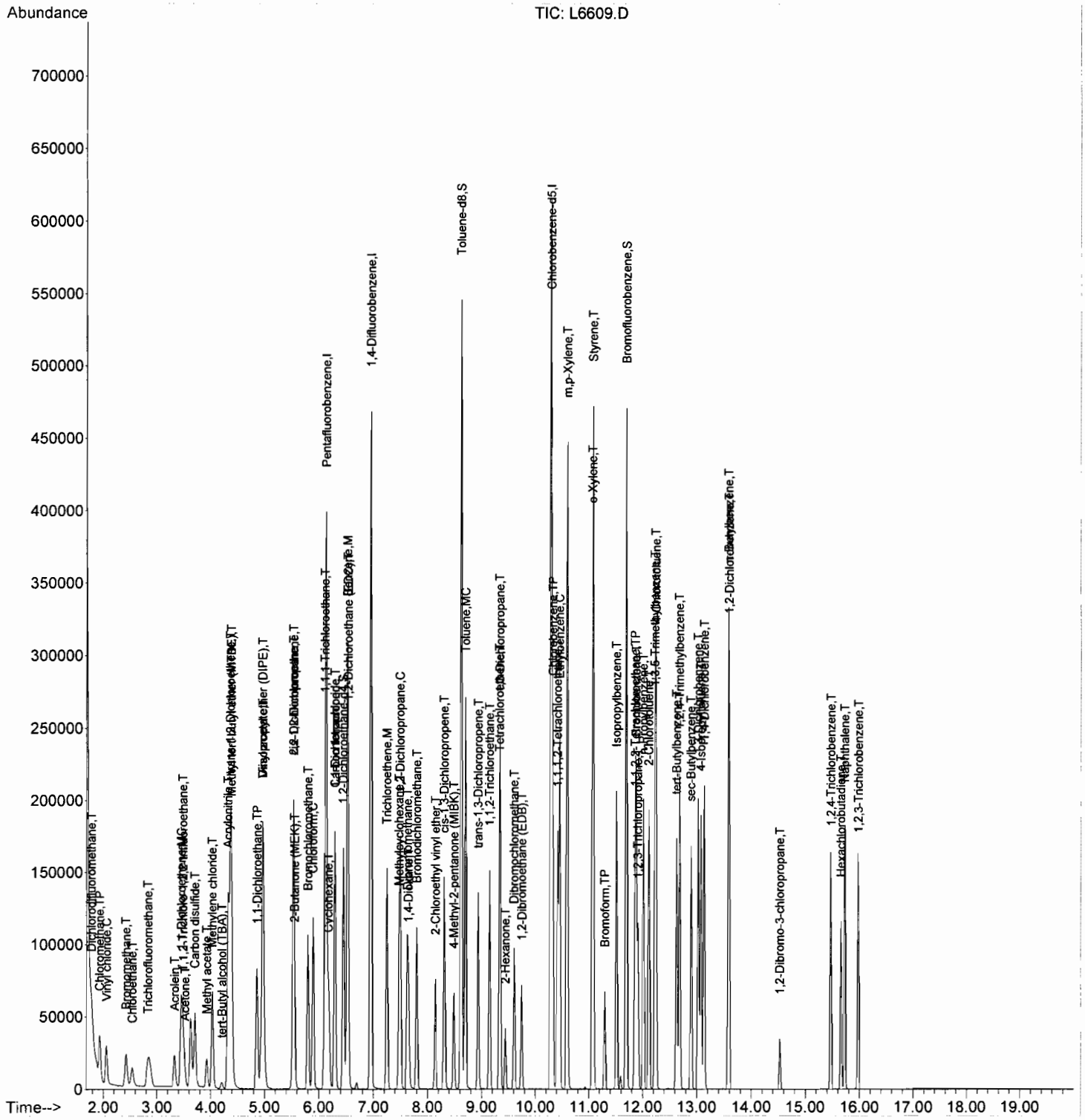
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	43208	18.97	UG	99
46) 1,3-Dichloropropane	9.34	76	86541	19.66	UG	100
47) 2-Hexanone	9.44	43	31281	24.01	UG	100
48) Dibromochloromethane	9.60	129	57934	20.18	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	54040	20.15	UG	100
51) Chlorobenzene	10.32	112	149360	18.50	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	58497	19.73	UG	99
53) Ethylbenzene	10.46	91	198727	19.19	UG	99
54) m,p-Xylene	10.60	106	159960	39.48	UG	95
55) o-Xylene	11.06	106	83253	20.49	UG	95
56) Styrene	11.08	104	156885	20.81	UG	98
57) Bromoform	11.30	173	37262	16.11	UG	99
58) Isopropylbenzene	11.51	105	154866	19.60	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	66874	18.49	UG	99
61) Bromobenzene	11.88	156	67147	19.10	UG	99
62) 1,2,3-Trichloropropane	11.91	75	58228	18.75	UG	98
63) n-Propylbenzene	12.01	91	171807	19.07	UG	100
64) 2-Chlorotoluene	12.11	91	127352	18.67	UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	139845	19.55	UG	99
66) 4-Chlorotoluene	12.24	91	154605	18.62	UG	99
67) tert-Butylbenzene	12.63	119	100558	18.56	UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	149051	18.77	UG	99
69) sec-Butylbenzene	12.89	105	139551	18.58	UG	99
70) 1,3-Dichlorobenzene	13.02	146	102366	18.64	UG	100
71) 4-Isopropyltoluene	13.07	119	129232	18.82	UG	100
72) 1,4-Dichlorobenzene	13.14	146	107179	18.55	UG	100
73) n-Butylbenzene	13.58	92	57239	18.58	UG	96
74) 1,2-Dichlorobenzene	13.59	146	106966	19.10	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	9541	12.98	UG	86
76) 1,2,4-Trichlorobenzene	15.47	180	53045m	16.46	UG	
77) Hexachlorobutadiene	15.65	225	26983	16.36	UG	100
78) Naphthalene	15.72	128	151829	21.31	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	52117m	17.01	UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	23392m	21.30	UG	
81) Methyl acetate	3.93	43	32643	16.77	UG	98
82) Cyclohexane	6.17	56	42957	20.28	UG	96
83) Methylcyclohexane	7.47	55	25359	17.99	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6609.D
Acq On : 13 Feb 2015 12:48
Operator : MEI
Sample : ICC20,ICC20,W,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 13:32:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:11:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	334357	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	464375	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	434421	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138317	46.32	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.64%				
41) Toluene-d8	8.62	98	420891	50.14	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.28%				
59) Bromofluorobenzene	11.69	95	190880	50.07	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	135581m	83.59	UG		
3) Chloromethane	1.93	50	259406	91.14	UG		100
4) Vinyl chloride	2.06	62	239662	105.33	UG		100
5) Bromomethane	2.43	94	127834	76.26	UG		99
6) Chloroethane	2.54	64	109841	83.99	UG		99
7) Trichlorofluoromethane	2.84	101	235684	101.84	UG		100
8) Acrolein	3.33	56	43868	174.73	UG		99
9) 1,1-Dichloroethene	3.45	96	195067	96.51	UG		94
10) Acetone	3.52	43	49860	55.96	UG		100
11) Carbon disulfide	3.70	76	617607	97.32	UG		100
12) Vinyl acetate	4.96	43	670300	73.09	UG	#	99
13) Methylene chloride	4.03	84	222369	80.84	UG		100
14) Acrylonitrile	4.32	53	256600	256.18	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	37595	121.71	UG		100
16) trans-1,2-Dichloroethene	4.36	96	314778	92.13	UG		91
17) Methyl tert-butyl ether (M	4.38	73	826446	87.14	UG		100
18) 1,1-Dichloroethane	4.86	63	575077	89.41	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1069535	90.27	UG		100
20) cis-1,2-Dichloroethene	5.53	96	357105	93.56	UG		99
21) 2,2-Dichloropropane	5.53	77	294954	96.02	UG		90
22) 2-Butanone (MEK)	5.55	43	124143	97.90	UG		99
23) Bromochloromethane	5.80	128	176982	90.48	UG		100
25) Chloroform	5.90	83	586073	89.53	UG		100
26) 1,1,1-Trichloroethane	6.11	97	413973	100.84	UG		99
27) Carbon tetrachloride	6.29	117	327970	107.13	UG		100
28) 1,1-Dichloropropene	6.29	75	365985	101.72	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	460053	88.27	UG		100
32) Benzene	6.53	78	1222361	92.49	UG		100
33) Trichloroethene	7.25	95	322888	105.03	UG		94
34) 1,2-Dichloropropane	7.49	63	320218	95.98	UG	#	100
35) Dibromomethane	7.62	93	195778	93.59	UG		93
36) 1,4-Dioxane	7.64	88	82510	3090.17	UG		99
37) Bromodichloromethane	7.80	83	442279	101.50	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	197694	102.09	UG		99
39) cis-1,3-Dichloropropene	8.30	75	506286	109.28	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	283828	105.94	UG		99
42) Toluene	8.70	92	708587	96.69	UG		99
43) trans-1,3-Dichloropropene	8.93	75	460271	112.42	UG		99
44) 1,1,2-Trichloroethane	9.15	83	231701	97.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration

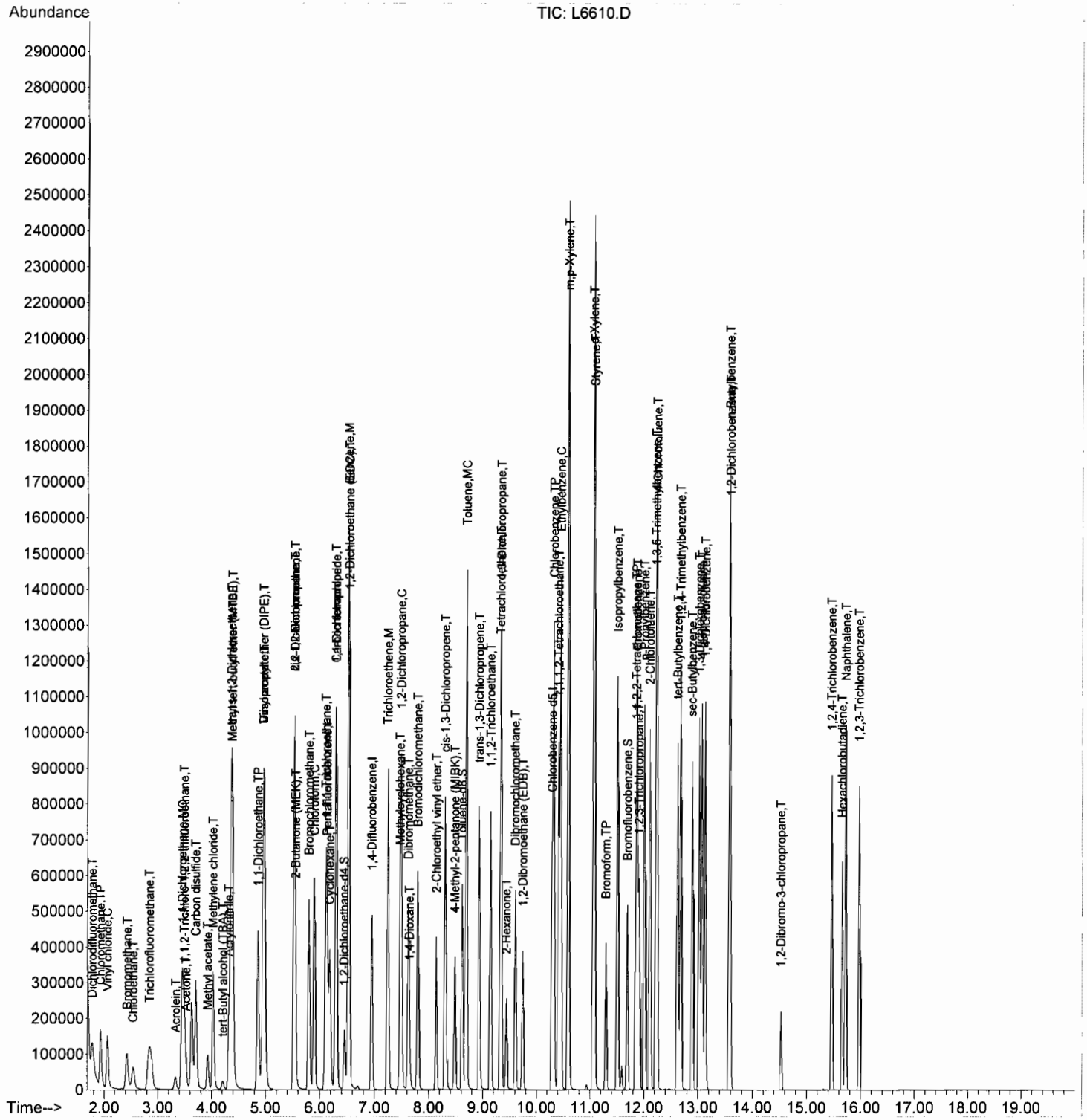
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	250451	103.35 UG	98
46) 1,3-Dichloropropane	9.34	76	460435	98.98 UG	100
47) 2-Hexanone	9.44	43	182449	127.87 UG	99
48) Dibromochloromethane	9.60	129	342079	111.87 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	293964	103.36 UG	100
51) Chlorobenzene	10.32	112	796513	90.52 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	326878	100.78 UG	99
53) Ethylbenzene	10.46	91	1132069	100.80 UG	99
54) m,p-Xylene	10.60	106	871540	197.85 UG	96
55) o-Xylene	11.06	106	449662	102.13 UG	96
56) Styrene	11.09	104	844414	102.91 UG	98
57) Bromoform	11.30	173	228773	89.97 UG	100
58) Isopropylbenzene	11.51	105	916004	107.16 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	327056	83.51 UG	100
61) Bromobenzene	11.88	156	365821	95.41 UG	100
62) 1,2,3-Trichloropropane	11.91	75	305643	90.83 UG	99
63) n-Propylbenzene	12.01	91	976974	100.01 UG	100
64) 2-Chlorotoluene	12.11	91	692915	94.24 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770103	99.18 UG	100
66) 4-Chlorotoluene	12.24	91	830453	92.46 UG	99
67) tert-Butylbenzene	12.63	119	582579	99.00 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	804432	93.52 UG	100
69) sec-Butylbenzene	12.89	105	798018	97.80 UG	99
70) 1,3-Dichlorobenzene	13.02	146	532476	89.12 UG	100
71) 4-Isopropyltoluene	13.07	119	721165	96.79 UG	100
72) 1,4-Dichlorobenzene	13.14	146	559666	89.03 UG	100
73) n-Butylbenzene	13.58	92	326018	97.98 UG	96
74) 1,2-Dichlorobenzene	13.59	146	536897	88.02 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	56643	71.09 UG	86
76) 1,2,4-Trichlorobenzene	15.46	180	313022	89.18 UG	99
77) Hexachlorobutadiene	15.65	225	146999	81.48 UG	100
78) Naphthalene	15.72	128	820624	105.88 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	295261	87.53 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	123012	109.20 UG	93
81) Methyl acetate	3.93	43	164496	79.93 UG	98
82) Cyclohexane	6.18	56	230208	106.54 UG	99
83) Methylcyclohexane	7.47	55	152195	105.15 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6610.D
Acq On : 13 Feb 2015 13:15
Operator : MEI
Sample : ICC100,ICC100,W,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 13 17:20:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:12:22 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	335884	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	470961	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	440697	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	138287	47.08	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.16%				
41) Toluene-d8	8.62	98	423609	50.20	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.40%				
59) Bromofluorobenzene	11.69	95	196398	50.95	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.90%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	223936m	140.38	UG		
3) Chloromethane	1.93	50	409652	151.59	UG		100
4) Vinyl chloride	2.06	62	366638	169.03	UG		100
5) Bromomethane	2.42	94	174399	110.10	UG		99
6) Chloroethane	2.54	64	159988	128.10	UG		100
7) Trichlorofluoromethane	2.83	101	400272m	183.63	UG		
8) Acrolein	3.32	56	64810	312.72	UG		99
9) 1,1-Dichloroethene	3.44	96	289405	149.20	UG		93
10) Acetone	3.51	43	76410	86.78	UG		100
11) Carbon disulfide	3.70	76	930236	155.90	UG		100
12) Vinyl acetate	4.96	43	957178	113.10	UG	#	99
13) Methylene chloride	4.03	84	336075	128.68	UG		100
14) Acrylonitrile	4.32	53	371555	394.86	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	58432	196.44	UG		100
16) trans-1,2-Dichloroethene	4.36	96	456619	136.31	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1255210	135.95	UG		100
18) 1,1-Dichloroethane	4.85	63	862969	137.24	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1583322	136.88	UG		100
20) cis-1,2-Dichloroethene	5.52	96	531219	141.44	UG		99
21) 2,2-Dichloropropane	5.53	77	446456	150.03	UG		91
22) 2-Butanone (MEK)	5.55	43	182607	142.88	UG		100
23) Bromochloromethane	5.80	128	265722	136.95	UG		99
25) Chloroform	5.89	83	877495	135.77	UG		100
26) 1,1,1-Trichloroethane	6.10	97	612568	151.61	UG		100
27) Carbon tetrachloride	6.29	117	484380	161.86	UG		100
28) 1,1-Dichloropropene	6.29	75	532589	151.63	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	680297	132.05	UG		100
32) Benzene	6.52	78	1799829	136.43	UG		100
33) Trichloroethene	7.25	95	482468	154.71	UG		93
34) 1,2-Dichloropropane	7.49	63	473341	141.91	UG		100
35) Dibromomethane	7.62	93	292387	139.09	UG		93
36) 1,4-Dioxane	7.64	88	116905	4351.50	UG		98
37) Bromodichloromethane	7.80	83	665537	151.31	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	292781	150.08	UG		99
39) cis-1,3-Dichloropropene	8.30	75	755147	161.79	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	421459	157.42	UG		99
42) Toluene	8.70	92	1035827	140.37	UG		99
43) trans-1,3-Dichloropropene	8.93	75	692064	167.19	UG		99
44) 1,1,2-Trichloroethane	9.15	83	343381	142.81	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

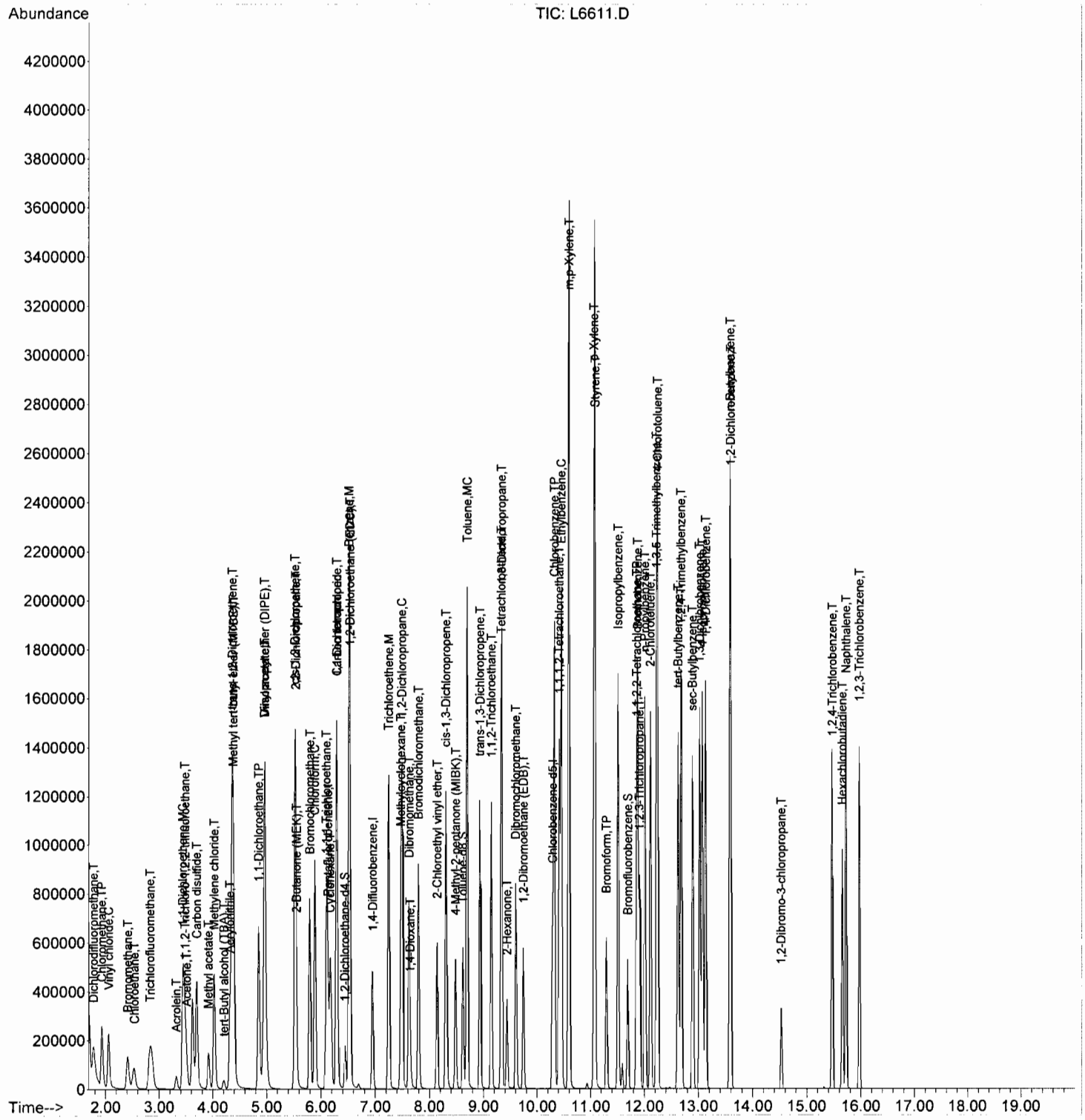
Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	362196	147.56 UG	99
46) 1,3-Dichloropropane	9.34	76	681753	145.23 UG	100
47) 2-Hexanone	9.44	43	274380	182.08 UG	99
48) Dibromochloromethane	9.60	129	512049	164.28 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	437940	151.50 UG	100
51) Chlorobenzene	10.32	112	1184090	133.72 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	493957	151.08 UG	100
53) Ethylbenzene	10.46	91	1663227	147.80 UG	99
54) m,p-Xylene	10.60	106	1258493	286.06 UG	97
55) o-Xylene	11.06	106	647981	147.97 UG	97
56) Styrene	11.09	104	1209945	147.62 UG	99
57) Bromoform	11.30	173	352770	136.89 UG	100
58) Isopropylbenzene	11.51	105	1341408	157.73 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	479322	123.48 UG	100
61) Bromobenzene	11.88	156	542711	140.14 UG	100
62) 1,2,3-Trichloropropane	11.91	75	452571	134.43 UG	99
63) n-Propylbenzene	12.01	91	1454585	149.52 UG	100
64) 2-Chlorotoluene	12.11	91	1030447	140.76 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1152367	148.99 UG	100
66) 4-Chlorotoluene	12.24	91	1230325	137.19 UG	99
67) tert-Butylbenzene	12.63	119	902124	154.45 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	1219464	142.26 UG	100
69) sec-Butylbenzene	12.89	105	1201323	148.26 UG	99
70) 1,3-Dichlorobenzene	13.02	146	804657	134.15 UG	100
71) 4-Isopropyltoluene	13.07	119	1098378	148.34 UG	100
72) 1,4-Dichlorobenzene	13.14	146	841712	133.28 UG	100
73) n-Butylbenzene	13.58	92	501569	152.74 UG	96
74) 1,2-Dichlorobenzene	13.59	146	811639	132.91 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	89357	112.05 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	506729	143.19 UG	99
77) Hexachlorobutadiene	15.65	225	224502	123.11 UG	100
78) Naphthalene	15.72	128	1311025	168.82 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	474490	138.81 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	177505	163.69 UG	93
81) Methyl acetate	3.92	43	250959	123.82 UG	98
82) Cyclohexane	6.17	56	344691m	165.44 UG	
83) Methylcyclohexane	7.47	55	214336	153.67 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6611.D
Acq On : 13 Feb 2015 13:42
Operator : MEI
Sample : ICC150,ICC150,W,5ml,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 14:01:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:01 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	347689	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.94	114	492059	50.00	UG		-0.01
50) Chlorobenzene-d5	10.29	117	454144	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	142190	47.73	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.46%				
41) Toluene-d8	8.62	98	443856	50.93	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.86%				
59) Bromofluorobenzene	11.69	95	199429	50.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.77	85	304089m	189.29	UG		
3) Chloromethane	1.93	50	571412	213.55	UG		100
4) Vinyl chloride	2.06	62	477108	221.79	UG		100
5) Bromomethane	2.41	94	217863	137.79	UG		99
6) Chloroethane	2.53	64	211835	180.21	UG		100
7) Trichlorofluoromethane	2.83	101	414904	193.74	UG		100
8) Acrolein	3.32	56	79093	454.85	UG		99
9) 1,1-Dichloroethene	3.44	96	377014	196.81	UG		92
10) Acetone	3.51	43	106234	119.12	UG		100
11) Carbon disulfide	3.69	76	1262944	219.20	UG		100
12) Vinyl acetate	4.96	43	1284213	161.75	UG	#	99
13) Methylene chloride	4.02	84	465619	181.95	UG		100
14) Acrylonitrile	4.31	53	454543	496.14	UG		99
15) tert-Butyl alcohol (TBA)	4.21	59	82352	278.77	UG		100
16) trans-1,2-Dichloroethene	4.35	96	619869	184.48	UG		92
17) Methyl tert-butyl ether (M	4.38	73	1777624	192.42	UG		100
18) 1,1-Dichloroethane	4.85	63	1204538	190.80	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	2187286	188.84	UG		100
20) cis-1,2-Dichloroethene	5.52	96	736184	194.03	UG		98
21) 2,2-Dichloropropane	5.53	77	593526	199.15	UG		89
22) 2-Butanone (MEK)	5.55	43	254445	193.64	UG		100
23) Bromochloromethane	5.80	128	372741	188.39	UG		99
25) Chloroform	5.89	83	1221177	186.26	UG		100
26) 1,1,1-Trichloroethane	6.10	97	845222	206.36	UG		100
27) Carbon tetrachloride	6.29	117	642375	213.82	UG		100
28) 1,1-Dichloropropene	6.29	75	712425	203.10	UG		94
29) 1,2-Dichloroethane (EDC)	6.53	62	952707	182.22	UG		100
32) Benzene	6.52	78	2472273	183.43	UG		100
33) Trichloroethene	7.25	95	679672	210.10	UG		94
34) 1,2-Dichloropropane	7.49	63	672214	197.63	UG		100
35) Dibromomethane	7.62	93	413198	191.01	UG		93
36) 1,4-Dioxane	7.64	88	140956	5023.89	UG		99
37) Bromodichloromethane	7.80	83	949898	209.27	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	423767	212.42	UG		99
39) cis-1,3-Dichloropropene	8.30	75	1088003	227.51	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	601609	220.03	UG		99
42) Toluene	8.70	92	1428367	188.76	UG		99
43) trans-1,3-Dichloropropene	8.93	75	981927	230.90	UG		99
44) 1,1,2-Trichloroethane	9.15	83	485818	195.68	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration

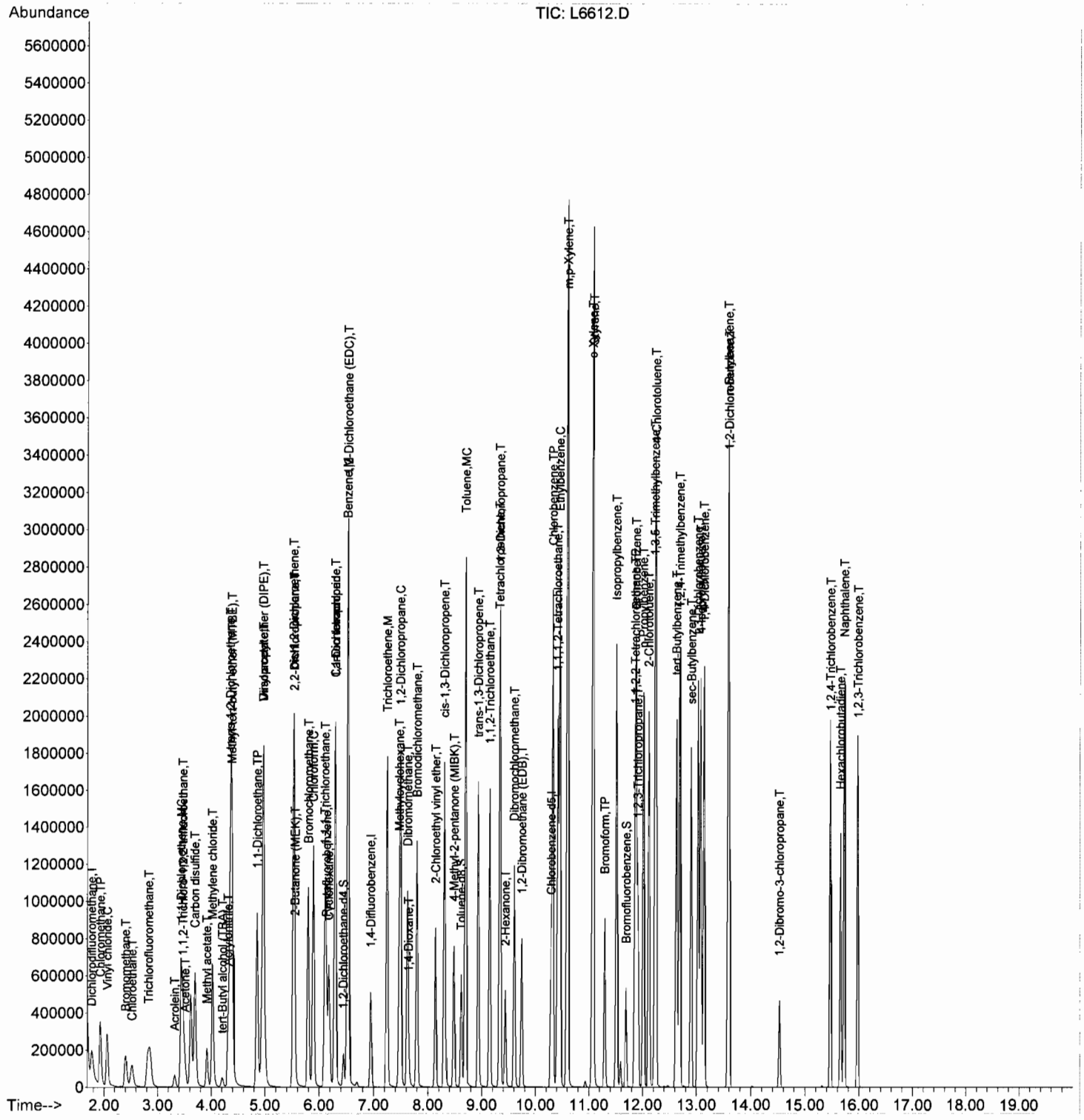
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	495262	195.74	UG	99
46) 1,3-Dichloropropane	9.34	76	963914	199.67	UG	100
47) 2-Hexanone	9.44	43	393991	245.05	UG	99
48) Dibromochloromethane	9.60	129	728089	224.80	UG	100
49) 1,2-Dibromoethane (EDB)	9.74	107	623310	207.88	UG	100
51) Chlorobenzene	10.32	112	1663788	185.14	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	688253	206.51	UG	99
53) Ethylbenzene	10.46	91	2309390	203.59	UG	99
54) m,p-Xylene	10.60	106	1711584	387.46	UG	98
55) o-Xylene	11.06	106	884103	201.35	UG	98
56) Styrene	11.09	104	1657866	201.58	UG	99
57) Bromoform	11.30	173	505262	191.39	UG	100
58) Isopropylbenzene	11.51	105	1877638	220.54	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	655689	168.61	UG	100
61) Bromobenzene	11.88	156	753587	190.89	UG	100
62) 1,2,3-Trichloropropane	11.91	75	632624	185.71	UG	99
63) n-Propylbenzene	12.01	91	2011676	205.38	UG	100
64) 2-Chlorotoluene	12.11	91	1449521	196.63	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	1589689	203.77	UG	100
66) 4-Chlorotoluene	12.24	91	1713614	189.50	UG	99
67) tert-Butylbenzene	12.63	119	1245051	211.33	UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	1699174	196.33	UG	100
69) sec-Butylbenzene	12.90	105	1670826	205.71	UG	99
70) 1,3-Dichlorobenzene	13.02	146	1141984	187.11	UG	100
71) 4-Isopropyltoluene	13.07	119	1527548	204.91	UG	100
72) 1,4-Dichlorobenzene	13.14	146	1171330	182.00	UG	100
73) n-Butylbenzene	13.58	92	686586	209.19	UG	96
74) 1,2-Dichlorobenzene	13.59	146	1115093	179.44	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	126115	155.00	UG	83
76) 1,2,4-Trichlorobenzene	15.47	180	722451	199.52	UG	99
77) Hexachlorobutadiene	15.65	225	309785	165.83	UG	100
78) Naphthalene	15.72	128	1833303	231.30	UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	684454	194.55	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	266234m	256.23	UG	
81) Methyl acetate	3.92	43	349724	171.75	UG	98
82) Cyclohexane	6.17	56	473454m	244.90	UG	
83) Methylcyclohexane	7.47	55	251092	185.40	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6612.D
Acq On : 13 Feb 2015 14:09
Operator : MEI
Sample : ICC200,ICC200,W,5ml,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 14:01:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Feb 13 16:13:38 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.198	0.236	-19.2	113	0.00
3	TP	Chloromethane	0.385	0.431	-11.9	108	0.00
4	C	Vinyl chloride	0.332	0.383	-15.4	104	0.00
5	T	Bromomethane	0.206	0.224	-8.7	114	-0.01
6	T	Chloroethane	0.169	0.181	-7.1	107	0.00
7	T	Trichlorofluoromethane	0.374	0.435	-16.3	120	-0.01
8	T	Acrolein	0.024	0.022	8.3	99	0.00
9	MC	1,1-Dichloroethene	0.275	0.306	-11.3	102	0.00
10	T	Acetone	0.081	0.079	2.5	103	0.00
11	T	Carbon disulfide	0.858	1.000	-16.6	105	0.00
12	T	Vinyl acetate	1.142	1.151	-0.8	111	0.00
13	T	Methylene chloride	0.368	0.354	3.8	103	0.00
14	T	Acrylonitrile	0.132	0.111	15.9	84	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.030	-3.4	102	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.479	0.8	99	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.291	2.9	101	0.00
18	TP	1,1-Dichloroethane	0.908	0.885	2.5	100	0.00
19	T	Diisopropyl ether (DIPE)	1.666	1.651	0.9	100	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.546	0.0	99	0.00
21	T	2,2-Dichloropropane	0.429	0.501	-16.8	110	0.00
22	T	2-Butanone (MEK)	0.189	0.191	-1.1	100	0.00
23	T	Bromochloromethane	0.285	0.273	4.2	100	0.00
25	C	Chloroform	0.943	0.896	5.0	99	0.00
26	T	1,1,1-Trichloroethane	0.589	0.668	-13.4	105	0.00
27	T	Carbon tetrachloride	0.448	0.526	-17.4	104	0.01
28	T	1,1-Dichloropropene	0.504	0.562	-11.5	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.705	6.3	99	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.417	2.6	98	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
32	M	Benzene	1.370	1.325	3.3	99	0.00
33	M	Trichloroethene	0.329	0.330	-0.3	93	0.00
34	C	1,2-Dichloropropane	0.346	0.348	-0.6	99	0.00
35	T	Dibromomethane	0.220	0.213	3.2	99	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	95	0.01
37	T	Bromodichloromethane	0.461	0.483	-4.8	99	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.215	-5.9	99	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.551	-13.4	99	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.310	-11.5	99	0.00
41	S	Toluene-d8	0.885	0.902	-1.9	98	0.00
42	MC	Toluene	0.769	0.760	1.2	98	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.503	-16.4	99	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	100	0.00
45	T	Tetrachloroethene	0.257	0.271	-5.4	98	0.00
46	T	1,3-Dichloropropane	0.491	0.504	-2.6	100	0.00

47	T	2-Hexanone	0.168	0.198	-17.9	99	0.00
48	T	Dibromochloromethane	0.329	0.369	-12.2	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.319	-4.6	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
51	TP	Chlorobenzene	0.989	0.921	6.9	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.379	-3.3	99	0.00
53	C	Ethylbenzene	1.249	1.305	-4.5	98	0.00
54	T	m,p-Xylene	0.486	0.504	-3.7	99	0.00
55	T	o-Xylene	0.483	0.523	-8.3	99	0.00
56	T	Styrene	0.905	0.964	-6.5	97	0.00
57	TP	Bromoform	0.291	0.270	7.2	101	0.00
58	T	Isopropylbenzene	0.937	1.069	-14.1	100	0.00
59	S	Bromofluorobenzene	0.437	0.448	-2.5	100	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.410	4.2	107	0.00
61	T	Bromobenzene	0.435	0.425	2.3	99	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	101	0.00
63	T	n-Propylbenzene	1.078	1.158	-7.4	101	0.00
64	T	2-Chlorotoluene	0.812	0.817	-0.6	101	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.903	-5.1	100	0.00
66	T	4-Chlorotoluene	0.996	0.968	2.8	99	0.00
67	T	tert-Butylbenzene	0.649	0.709	-9.2	104	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.951	0.2	101	0.00
69	T	sec-Butylbenzene	0.894	0.952	-6.5	102	0.00
70	T	1,3-Dichlorobenzene	0.672	0.632	6.0	101	0.00
71	T	4-Isopropyltoluene	0.821	0.862	-5.0	102	0.00
72	T	1,4-Dichlorobenzene	0.709	0.656	7.5	100	0.00
73	T	n-Butylbenzene	0.361	0.394	-9.1	103	0.00
74	T	1,2-Dichlorobenzene	0.684	0.638	6.7	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.067	-11.7	101	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.375	-8.7	102	0.00
77	T	Hexachlorobutadiene	0.165	0.187	-13.3	109	0.00
78	T	Naphthalene	0.847	0.979	-15.6	102	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.347	-4.5	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.164	-18.0	114	-0.01
81	T	Methyl acetate	0.204	0.203	0.5	105	0.00
82	T	Cyclohexane	0.256	0.292	-14.1	108	0.00
83	T	Methylcyclohexane	0.163	0.193	-18.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Tue Feb 17 14:03:27 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	324200	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	455058	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	426508	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	135106	48.63	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.26%				
41) Toluene-d8	8.62	98	410628	50.95	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.90%				
59) Bromofluorobenzene	11.69	95	191250	51.30	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	153154m	119.19	UG		
3) Chloromethane	1.93	50	279647	112.08	UG		100
4) Vinyl chloride	2.06	62	248132	115.40	UG		100
5) Bromomethane	2.42	94	145361	108.72	UG		99
6) Chloroethane	2.54	64	117664	107.35	UG		99
7) Trichlorofluoromethane	2.83	101	281762	116.34	UG		100
8) Acrolein	3.33	56	43324	274.92	UG		99
9) 1,1-Dichloroethene	3.45	96	198435	111.09	UG		94
10) Acetone	3.52	43	51407	97.46	UG		100
11) Carbon disulfide	3.70	76	648362	116.60	UG		100
12) Vinyl acetate	4.96	43	746390	100.81	UG	#	99
13) Methylene chloride	4.03	84	229842	96.32	UG		100
14) Acrylonitrile	4.32	53	216498	253.43	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	38272	201.59	UG		100
16) trans-1,2-Dichloroethene	4.36	96	310892	99.23	UG		92
17) Methyl tert-butyl ether (M	4.38	73	836791	97.14	UG		100
18) 1,1-Dichloroethane	4.86	63	573848	97.48	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	1070219	99.09	UG		100
20) cis-1,2-Dichloroethene	5.53	96	354243	100.13	UG		99
21) 2,2-Dichloropropane	5.53	77	324539	116.79	UG		96
22) 2-Butanone (MEK)	5.55	43	123684	100.95	UG		99
23) Bromochloromethane	5.80	128	176968	95.92	UG		99
25) Chloroform	5.90	83	580962	95.03	UG		100
26) 1,1,1-Trichloroethane	6.11	97	433067	113.39	UG		100
27) Carbon tetrachloride	6.30	117	341234	117.36	UG		100
28) 1,1-Dichloropropene	6.29	75	364272	111.37	UG		95
29) 1,2-Dichloroethane (EDC)	6.54	62	456834	93.71	UG		100
32) Benzene	6.53	78	1205529	96.72	UG		100
33) Trichloroethene	7.25	95	300022	100.28	UG		93
34) 1,2-Dichloropropane	7.49	63	316367	100.58	UG		100
35) Dibromomethane	7.62	93	194003	96.97	UG		93
36) 1,4-Dioxane	7.65	88	78353	3019.69	UG		99
37) Bromodichloromethane	7.80	83	439343	104.66	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	195483	105.96	UG		99
39) cis-1,3-Dichloropropene	8.30	75	501441	113.38	UG		99
40) 4-Methyl-2-pentanone (MIBK	8.49	43	282039	111.54	UG		100
42) Toluene	8.70	92	691395	98.80	UG		99
43) trans-1,3-Dichloropropene	8.93	75	457480	116.32	UG		99
44) 1,1,2-Trichloroethane	9.15	83	230613	100.44	UG		98

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

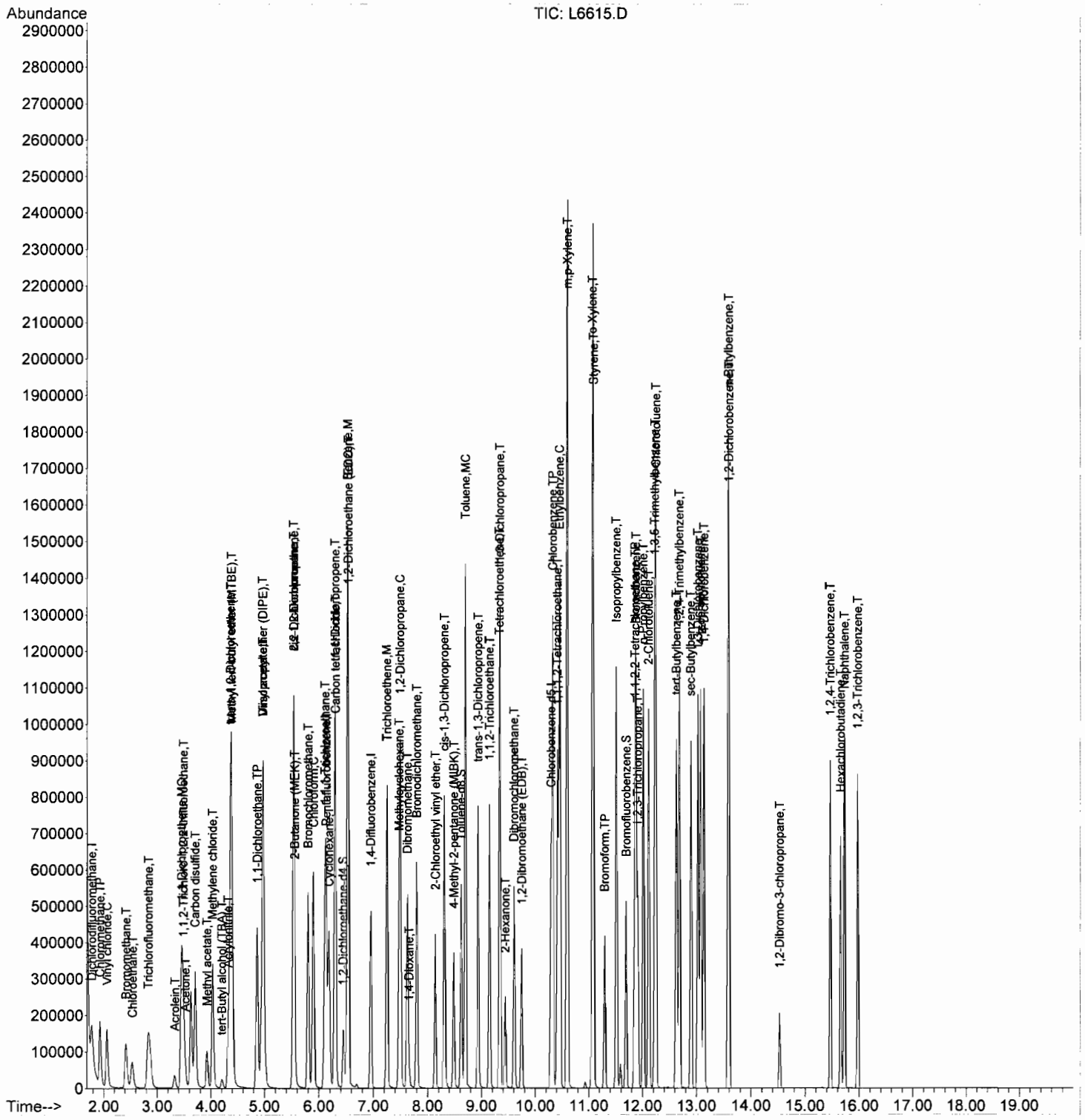
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	246473	105.33	UG	98
46) 1,3-Dichloropropane	9.34	76	459129	102.84	UG	100
47) 2-Hexanone	9.44	43	180312	118.09	UG	99
48) Dibromochloromethane	9.60	129	335763	112.10	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	290638	104.81	UG	100
51) Chlorobenzene	10.32	112	785293	93.05	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	323215	103.26	UG	99
53) Ethylbenzene	10.46	91	1113113	104.49	UG	99
54) m,p-Xylene	10.60	106	860185	207.34	UG	96
55) o-Xylene	11.06	106	446318	108.23	UG	96
56) Styrene	11.09	104	822727	106.52	UG	99
57) Bromoform	11.30	173	230374	92.92	UG	100
58) Isopropylbenzene	11.51	105	912035	114.07	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	349552	95.71	UG	100
61) Bromobenzene	11.88	156	362773	97.85	UG	100
62) 1,2,3-Trichloropropane	11.91	75	307882	96.24	UG	99
63) n-Propylbenzene	12.01	91	988101	107.41	UG	100
64) 2-Chlorotoluene	12.11	91	696626	100.62	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	770246	105.13	UG	100
66) 4-Chlorotoluene	12.24	91	825829	97.24	UG	99
67) tert-Butylbenzene	12.63	119	604701	109.29	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	810795	99.75	UG	100
69) sec-Butylbenzene	12.89	105	811907	106.44	UG	99
70) 1,3-Dichlorobenzene	13.02	146	539274	94.08	UG	100
71) 4-Isopropyltoluene	13.07	119	735159	105.01	UG	100
72) 1,4-Dichlorobenzene	13.14	146	559709	92.60	UG	100
73) n-Butylbenzene	13.58	92	335894	108.97	UG	96
74) 1,2-Dichlorobenzene	13.59	146	544194	93.25	UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	56934	111.51	UG	85
76) 1,2,4-Trichlorobenzene	15.46	180	319645	108.67	UG	99
77) Hexachlorobutadiene	15.65	225	159520	113.57	UG	100
78) Naphthalene	15.72	128	835014	115.52	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	296326	104.73	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	139981	118.06	UG	92
81) Methyl acetate	3.93	43	173324	99.43	UG	98
82) Cyclohexane	6.18	56	249268	114.07	UG	100
83) Methylcyclohexane	7.47	55	165056	118.38	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6615.D
Acq On : 13 Feb 2015 15:30
Operator : MEI
Sample : ICV100,ICV100,W,5ml,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 14:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	118	0.00
2	T	Dichlorodifluoromethane	0.198	0.237	-19.7	138	0.00
3	TP	Chloromethane	0.385	0.451	-17.1	138	0.00
4	C	Vinyl chloride	0.332	0.395	-19.0	131	0.00
5	T	Bromomethane	0.206	0.205	0.5	127	-0.01
6	T	Chloroethane	0.169	0.193	-14.2	139	0.00
7	T	Trichlorofluoromethane	0.374	0.338	9.6	114	0.00
8	T	Acrolein	0.024	0.028	-16.7	151	-0.01
9	MC	1,1-Dichloroethene	0.275	0.311	-13.1	126	0.00
10	T	Acetone	0.081	0.094	-16.0	149	-0.01
11	T	Carbon disulfide	0.858	1.007	-17.4	129	0.00
12	T	Vinyl acetate	1.142	1.184	-3.7	140	0.00
13	T	Methylene chloride	0.368	0.381	-3.5	136	0.00
14	T	Acrylonitrile	0.132	0.149	-12.9	138	0.00
15	T	tert-Butyl alcohol (TBA)	0.029	0.033	-13.8	140	-0.01
16	T	trans-1,2-Dichloroethene	0.483	0.489	-1.2	123	0.00
17	T	Methyl tert-butyl ether (MT	1.329	1.375	-3.5	132	0.00
18	TP	1,1-Dichloroethane	0.908	0.928	-2.2	128	-0.01
19	T	Diisopropyl ether (DIPE)	1.666	1.817	-9.1	135	0.00
20	T	cis-1,2-Dichloroethene	0.546	0.559	-2.4	124	0.00
21	T	2,2-Dichloropropane	0.429	0.492	-14.7	132	0.00
22	T	2-Butanone (MEK)	0.189	0.218	-15.3	139	-0.01
23	T	Bromochloromethane	0.285	0.274	3.9	123	0.00
25	C	Chloroform	0.943	0.885	6.2	120	-0.01
26	T	1,1,1-Trichloroethane	0.589	0.634	-7.6	121	0.00
27	T	Carbon tetrachloride	0.448	0.510	-13.8	123	0.00
28	T	1,1-Dichloropropene	0.504	0.561	-11.3	122	0.00
29	T	1,2-Dichloroethane (EDC)	0.752	0.691	8.1	119	0.00
30	S	1,2-Dichloroethane-d4	0.428	0.408	4.7	117	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	122	0.00
32	M	Benzene	1.370	1.345	1.8	125	0.00
33	M	Trichloroethene	0.329	0.328	0.3	115	0.00
34	C	1,2-Dichloropropane	0.346	0.358	-3.5	127	0.00
35	T	Dibromomethane	0.220	0.208	5.5	120	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	144	0.00
37	T	Bromodichloromethane	0.461	0.464	-0.7	119	0.00
38	T	2-Chloroethyl vinyl ether	0.203	0.228	-12.3	131	0.00
39	T	cis-1,3-Dichloropropene	0.486	0.557	-14.6	125	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.278	0.327	-17.6	131	-0.01
41	S	Toluene-d8	0.885	0.898	-1.5	121	0.00
42	MC	Toluene	0.769	0.733	4.7	117	0.00
43	T	trans-1,3-Dichloropropene	0.432	0.495	-14.6	122	0.00
44	T	1,1,2-Trichloroethane	0.252	0.253	-0.4	124	0.00
45	T	Tetrachloroethene	0.257	0.263	-2.3	119	0.00
46	T	1,3-Dichloropropane	0.491	0.506	-3.1	125	0.00

47	T	2-Hexanone	0.168	0.192	-14.3	120	0.00
48	T	Dibromochloromethane	0.329	0.347	-5.5	115	0.00
49	T	1,2-Dibromoethane (EDB)	0.305	0.316	-3.6	122	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00
51	TP	Chlorobenzene	0.989	0.896	9.4	118	0.00
52	T	1,1,1,2-Tetrachloroethane	0.367	0.363	1.1	117	0.00
53	C	Ethylbenzene	1.249	1.295	-3.7	120	0.00
54	T	m,p-Xylene	0.486	0.489	-0.6	118	0.00
55	T	o-Xylene	0.483	0.501	-3.7	117	0.00
56	T	Styrene	0.905	0.929	-2.7	116	0.00
57	TP	Bromoform	0.291	0.324	-11.3	149	0.00
58	T	Isopropylbenzene	0.937	1.063	-13.4	122	0.00
59	S	Bromofluorobenzene	0.437	0.431	1.4	119	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.428	0.403	5.8	130	0.00
61	T	Bromobenzene	0.435	0.404	7.1	116	0.00
62	T	1,2,3-Trichloropropane	0.375	0.361	3.7	124	0.00
63	T	n-Propylbenzene	1.078	1.146	-6.3	123	0.00
64	T	2-Chlorotoluene	0.812	0.791	2.6	120	0.00
65	T	1,3,5-Trimethylbenzene	0.859	0.898	-4.5	122	0.00
66	T	4-Chlorotoluene	0.996	0.941	5.5	119	0.00
67	T	tert-Butylbenzene	0.649	0.707	-8.9	128	0.00
68	T	1,2,4-Trimethylbenzene	0.953	0.936	1.8	122	0.01
69	T	sec-Butylbenzene	0.894	0.961	-7.5	127	0.00
70	T	1,3-Dichlorobenzene	0.672	0.610	9.2	120	0.00
71	T	4-Isopropyltoluene	0.821	0.860	-4.8	125	0.00
72	T	1,4-Dichlorobenzene	0.709	0.627	11.6	118	0.00
73	T	n-Butylbenzene	0.361	0.395	-9.4	127	0.00
74	T	1,2-Dichlorobenzene	0.684	0.600	12.3	117	0.00
75	T	1,2-Dibromo-3-chloropropane	0.060	0.063	-5.0	116	0.00
76	T	1,2,4-Trichlorobenzene	0.345	0.357	-3.5	120	0.01
77	T	Hexachlorobutadiene	0.165	0.173	-4.8	124	0.00
78	T	Naphthalene	0.847	0.873	-3.1	112	0.00
79	T	1,2,3-Trichlorobenzene	0.332	0.360	-8.4	128	0.01
80	T	1,1,2-Trichloro-1,2,2-trifl	0.139	0.140	-0.7	120	-0.01
81	T	Methyl acetate	0.204	0.225	-10.3	143	-0.01
82	T	Cyclohexane	0.256	0.286	-11.7	130	0.00
83	T	Methylcyclohexane	0.163	0.186	-14.1	128	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM021315.M Fri Feb 20 16:56:36 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	396182	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	567004	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	525446	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	161449	47.56	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.12%			
41) Toluene-d8	8.62	98	509043	50.69	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.38%			
59) Bromofluorobenzene	11.69	95	226451	49.31	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.62%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.78	85	187500m	119.41	UG	
3) Chloromethane	1.93	50	357270m	117.18	UG	
4) Vinyl chloride	2.06	62	313331m	119.25	UG	
5) Bromomethane	2.42	94	162346	99.37	UG	99
6) Chloroethane	2.54	64	152691	114.00	UG	99
7) Trichlorofluoromethane	2.84	101	267721	90.46	UG	100
8) Acrolein	3.32	56	66152m	343.51	UG	
9) 1,1-Dichloroethene	3.45	96	246270	112.83	UG	96
10) Acetone	3.51	43	74434	115.48	UG	99
11) Carbon disulfide	3.70	76	797744m	117.40	UG	
12) Vinyl acetate	4.96	43	938113	103.68	UG	# 99
13) Methylene chloride	4.03	84	301689	103.46	UG	100
14) Acrylonitrile	4.32	53	353497m	338.62	UG	
15) tert-Butyl alcohol (TBA)	4.20	59	52537m	226.45	UG	
16) trans-1,2-Dichloroethene	4.36	96	387656	101.25	UG	93
17) Methyl tert-butyl ether (M	4.38	73	1089838	103.53	UG	100
18) 1,1-Dichloroethane	4.85	63	734932	102.16	UG	99
19) Diisopropyl ether (DIPE)	4.96	45	1439626	109.08	UG	100
20) cis-1,2-Dichloroethene	5.53	96	442774	102.41	UG	99
21) 2,2-Dichloropropane	5.53	77	389623	114.73	UG	94
22) 2-Butanone (MEK)	5.54	43	172758	115.38	UG	99
23) Bromochloromethane	5.80	128	216946	96.23	UG	99
25) Chloroform	5.89	83	700894	93.82	UG	100
26) 1,1,1-Trichloroethane	6.11	97	502690	107.71	UG	99
27) Carbon tetrachloride	6.29	117	403966	113.69	UG	100
28) 1,1-Dichloropropene	6.29	75	444788	111.28	UG	95
29) 1,2-Dichloroethane (EDC)	6.54	62	547628	91.92	UG	100
32) Benzene	6.53	78	1524690	98.17	UG	100
33) Trichloroethene	7.25	95	371683	99.71	UG	94
34) 1,2-Dichloropropane	7.49	63	406203	103.64	UG	100
35) Dibromomethane	7.62	93	235705	94.56	UG	93
36) 1,4-Dioxane	7.64	88	118574	3667.56	UG	99
37) Bromodichloromethane	7.80	83	526253	100.61	UG	100
38) 2-Chloroethyl vinyl ether	8.14	63	258319	112.37	UG	99
39) cis-1,3-Dichloropropene	8.30	75	631463	114.59	UG	100
40) 4-Methyl-2-pentanone (MIBK	8.48	43	370591m	117.63	UG	
42) Toluene	8.70	92	830700	95.27	UG	100
43) trans-1,3-Dichloropropene	8.93	75	560931	114.47	UG	99
44) 1,1,2-Trichloroethane	9.15	83	286506	100.15	UG	98

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

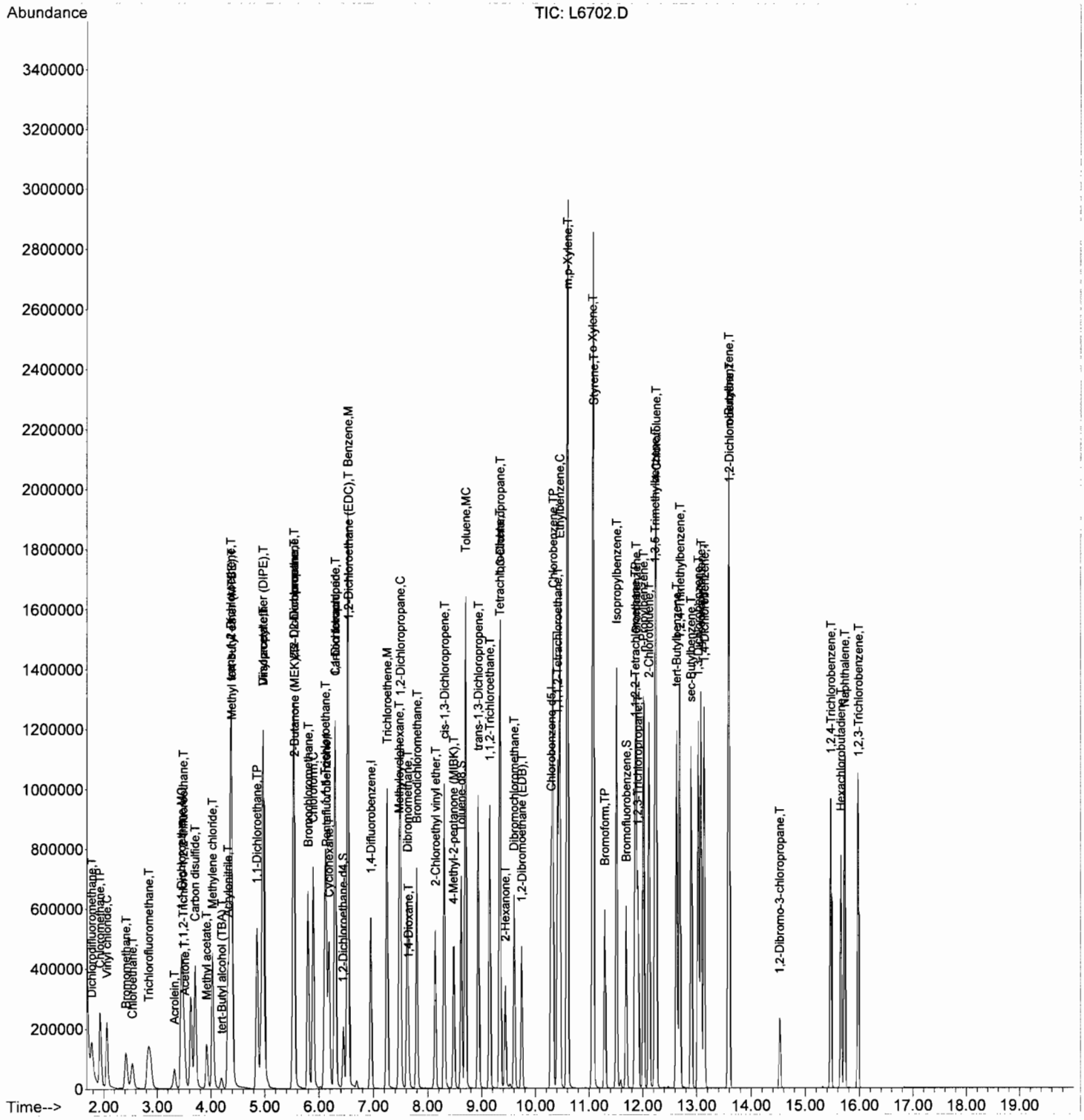
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	297781	102.13 UG	99
46) 1,3-Dichloropropane	9.34	76	573660	103.12 UG	100
47) 2-Hexanone	9.44	43	218133m	114.66 UG	
48) Dibromochloromethane	9.60	129	393581	105.46 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	358270	103.69 UG	100
51) Chlorobenzene	10.32	112	942013	90.60 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	381170	98.85 UG	99
53) Ethylbenzene	10.46	91	1360872	103.69 UG	99
54) m,p-Xylene	10.60	106	1028410	201.22 UG	97
55) o-Xylene	11.06	106	526798	103.69 UG	96
56) Styrene	11.09	104	976519	102.62 UG	98
57) Bromoform	11.30	173	340370	111.43 UG	100
58) Isopropylbenzene	11.51	105	1116729	113.37 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	423681	94.17 UG	100
61) Bromobenzene	11.88	156	424242	92.88 UG	100
62) 1,2,3-Trichloropropane	11.91	75	379509	96.29 UG	99
63) n-Propylbenzene	12.01	91	1204136	106.25 UG	100
64) 2-Chlorotoluene	12.11	91	831029	97.43 UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	943343	104.51 UG	100
66) 4-Chlorotoluene	12.24	91	988952	94.52 UG	99
67) tert-Butylbenzene	12.63	119	742847	108.98 UG	98
68) 1,2,4-Trimethylbenzene	12.69	105	983185	98.18 UG	100
69) sec-Butylbenzene	12.89	105	1010064	107.48 UG	99
70) 1,3-Dichlorobenzene	13.02	146	641181	90.80 UG	100
71) 4-Isopropyltoluene	13.07	119	903591	104.76 UG	100
72) 1,4-Dichlorobenzene	13.14	146	658776	88.47 UG	100
73) n-Butylbenzene	13.58	92	414842	109.24 UG	96
74) 1,2-Dichlorobenzene	13.59	146	630677	87.72 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	65715	104.48 UG	84
76) 1,2,4-Trichlorobenzene	15.47	180	375145	103.52 UG	99
77) Hexachlorobutadiene	15.65	225	182018	105.19 UG	100
78) Naphthalene	15.72	128	917914	103.08 UG	100
79) 1,2,3-Trichlorobenzene	15.98	180	378494	108.58 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	147574	101.03 UG	94
81) Methyl acetate	3.92	43	235937m	109.86 UG	
82) Cyclohexane	6.18	56	300390	111.58 UG	99
83) Methylcyclohexane	7.47	55	194944	113.49 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6702.D
Acq On : 20 Feb 2015 9:08
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 16:56:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

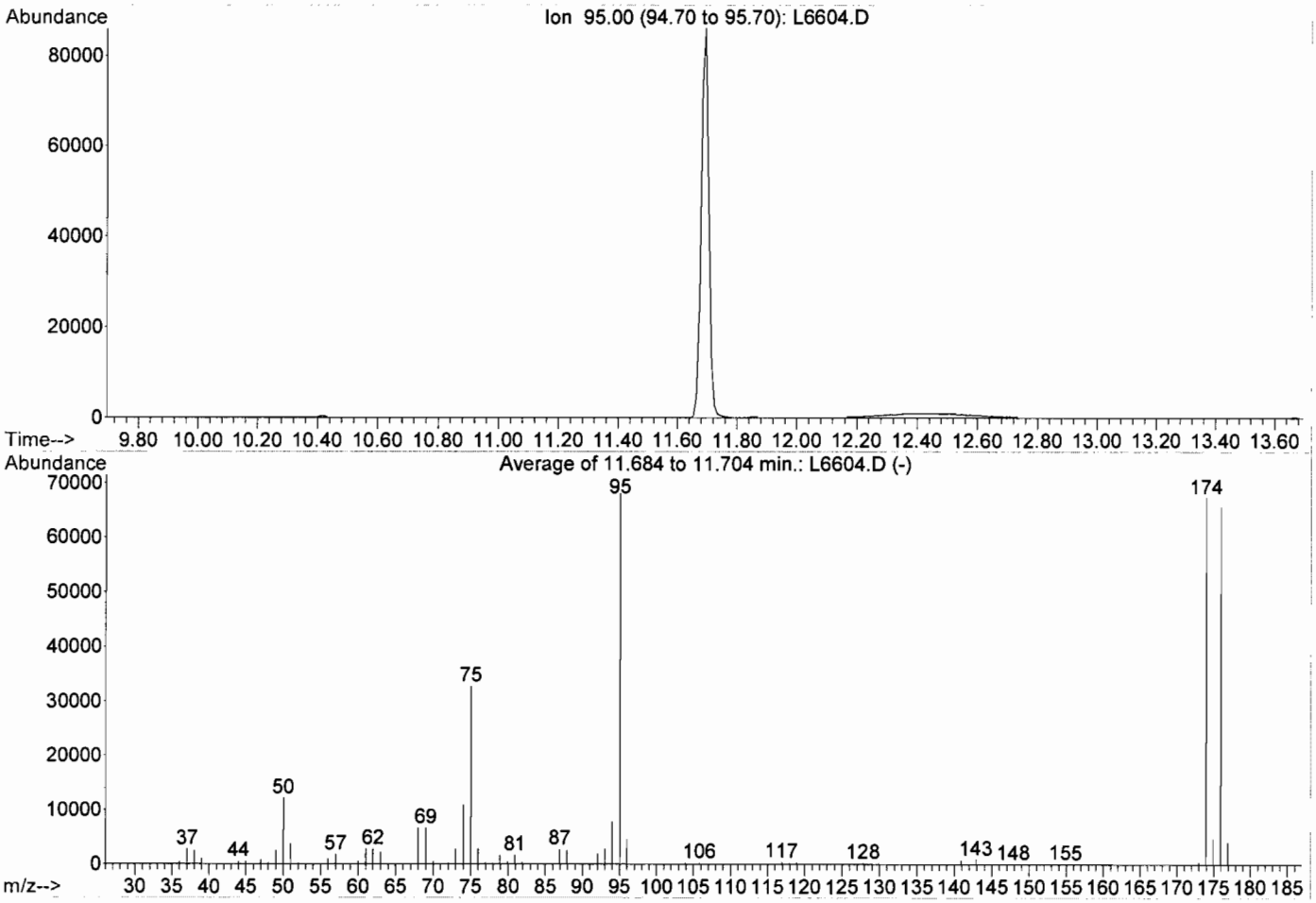


TCLP
VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\02-13-15\
Data File : L6604.D
Acq On : 13 Feb 2015 10:29
Operator : MEI
Sample : BFB150213
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12137	PASS
75	95	30	60	48.1	32720	PASS
95	95	100	100	100.0	68045	PASS
96	95	5	9	6.7	4577	PASS
173	174	0.00	2	0.6	434	PASS
174	95	50	100	99.1	67400	PASS
175	174	5	9	7.1	4785	PASS
176	174	95	101	97.4	65629	PASS
177	176	5	9	6.3	4113	PASS

Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	470	51.00	3639	70.00	510	81.90	341
37.00	2748	52.00	151	71.95	221	86.90	2722
38.00	2473	56.00	947	73.00	2746	87.90	2497
39.00	993	57.00	1767	74.00	10841	90.90	180
40.00	71	60.00	537	75.00	32720	92.00	1898
44.00	515	61.00	2808	76.00	2838	93.00	2852
45.00	487	62.00	2810	76.95	351	94.00	7830
47.00	799	63.00	2199	77.95	188	95.00	68045
48.00	298	64.05	174	78.90	1658	96.00	4577
49.00	2523	68.00	6523	79.90	458	103.90	220
50.00	12137	69.00	6609	80.90	1660	105.85	298

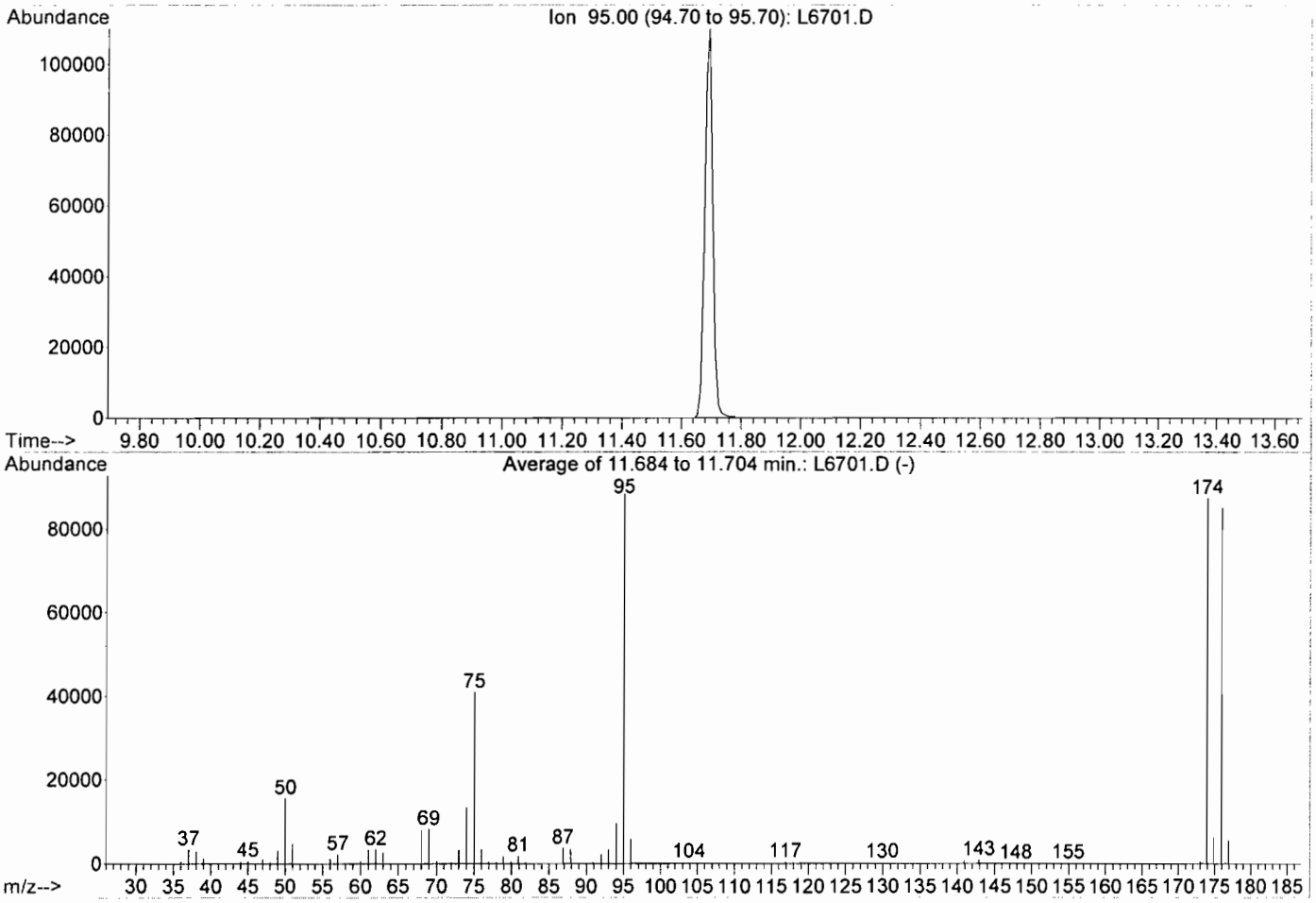
Average of 11.684 to 11.704 min.: L6604.D
BFB150213
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.85	234	173.90	67400				
116.90	441	174.90	4785				
117.90	205	175.90	65629				
118.90	362	176.90	4113				
127.85	262						
129.85	212						
140.90	793						
142.90	876						
147.90	85						
154.90	80						
172.95	434						

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6701.D
Acq On : 20 Feb 2015 8:41
Operator : MEI
Sample : BFB150220
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Feb 17 14:02:09 2015



AutoFind: Scans 986, 987, 988; Background Corrected with Scan 980

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	15622	PASS
75	95	30	60	46.3	40965	PASS
95	95	100	100	100.0	88450	PASS
96	95	5	9	6.7	5921	PASS
173	174	0.00	2	0.6	567	PASS
174	95	50	100	98.8	87373	PASS
175	174	5	9	7.2	6268	PASS
176	174	95	101	97.3	85013	PASS
177	176	5	9	6.6	5585	PASS

Average of 11.684 to 11.704 min.: L6701.D
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	609	49.00	3192	64.00	190	77.95	348
37.00	3448	50.00	15622	66.95	161	78.90	1821
38.00	3062	51.00	4795	68.00	8022	79.90	501
39.00	1304	52.00	158	69.00	8257	80.90	1846
40.00	233	55.00	214	70.00	677	81.90	377
41.00	68	56.00	1168	71.95	354	86.90	3712
43.05	157	57.00	2269	73.00	3305	87.90	3503
44.00	416	60.00	645	74.00	13454	90.90	298
45.00	668	61.00	3413	75.00	40965	92.00	2336
47.00	1180	62.00	3428	76.00	3488	93.00	3467
48.00	444	63.00	2651	76.95	465	94.00	9739

Average of 11.684 to 11.704 min.: L6701.D
BFB150220
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	88450	129.90	313				
96.00	5921	140.90	885				
97.00	74	142.90	933				
103.90	321	147.90	86				
105.90	312	154.95	181				
115.85	266	156.90	82				
116.90	488	173.00	567				
117.90	306	173.90	87373				
118.85	449	174.90	6268				
127.85	308	175.90	85013				
128.90	69	176.90	5585				

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150220-01
Client ID: BLKA150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: L6704.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		1.00	0.493
Vinyl chloride	ND		1.00	0.463
Bromomethane	ND		1.00	0.684
Chloroethane	ND		1.00	0.829
Trichlorofluoromethane	ND		1.00	0.813
Acrolein	ND		20.0	8.50
1,1-Dichloroethene	ND		1.00	0.491
Methylene chloride	ND		2.00	1.99
Acrylonitrile	ND		20.0	12.3
trans-1,2-Dichloroethene	ND		1.00	0.544
1,1-Dichloroethane	ND		1.00	0.358
Chloroform	ND		1.00	0.511
1,1,1-Trichloroethane	ND		1.00	0.485
Carbon tetrachloride	ND		1.00	0.668
1,2-Dichloroethane (EDC)	ND		1.00	0.573
Benzene	ND		1.00	0.388
Trichloroethene	ND		1.00	0.357
1,2-Dichloropropane	ND		1.00	0.556
Bromodichloromethane	ND		1.00	0.526
2-Chloroethyl vinyl ether	ND		1.00	0.990
cis-1,3-Dichloropropene	ND		1.00	0.441
Toluene	ND		1.00	0.370
trans-1,3-Dichloropropene	ND		1.00	0.416
1,1,2-Trichloroethane	ND		1.00	0.633
Tetrachloroethene	ND		1.00	0.495
Dibromochloromethane	ND		1.00	0.516
Chlorobenzene	ND		1.00	0.395
Ethylbenzene	ND		1.00	0.420
Total Xylenes	ND		2.00	1.04
Bromoform	ND		1.00	0.663
1,1,2,2-Tetrachloroethane	ND		1.00	0.691
1,3-Dichlorobenzene	ND		1.00	0.416
1,4-Dichlorobenzene	ND		1.00	0.409
1,2-Dichlorobenzene	ND		1.00	0.401

Total Target Compounds (34): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA150220-01
Client ID: BLKA150220-01
Date Received:
Date Analyzed: 02/20/2015
Data file: L6704.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: TCLP150220
Client ID: TCLP150220
Date Received:
Date Analyzed: 02/20/2015
Data file: L6705.D

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.023
1,1-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.050	0.044
Chloroform	ND		0.050	0.026
Carbon tetrachloride	ND		0.050	0.033
1,2-Dichloroethane (EDC)	ND		0.050	0.029
Benzene	ND		0.050	0.019
Trichloroethene	ND		0.050	0.018
Tetrachloroethene	ND		0.050	0.025
Chlorobenzene	ND		0.050	0.020
1,4-Dichlorobenzene	ND		0.050	0.021

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 16:57:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	395270	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	561728	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	517534	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	162200	47.89	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.78%			
41) Toluene-d8	8.62	98	493549	49.61	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.22%			
59) Bromofluorobenzene	11.69	95	223067	49.32	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.64%			

Target Compounds	Qvalue

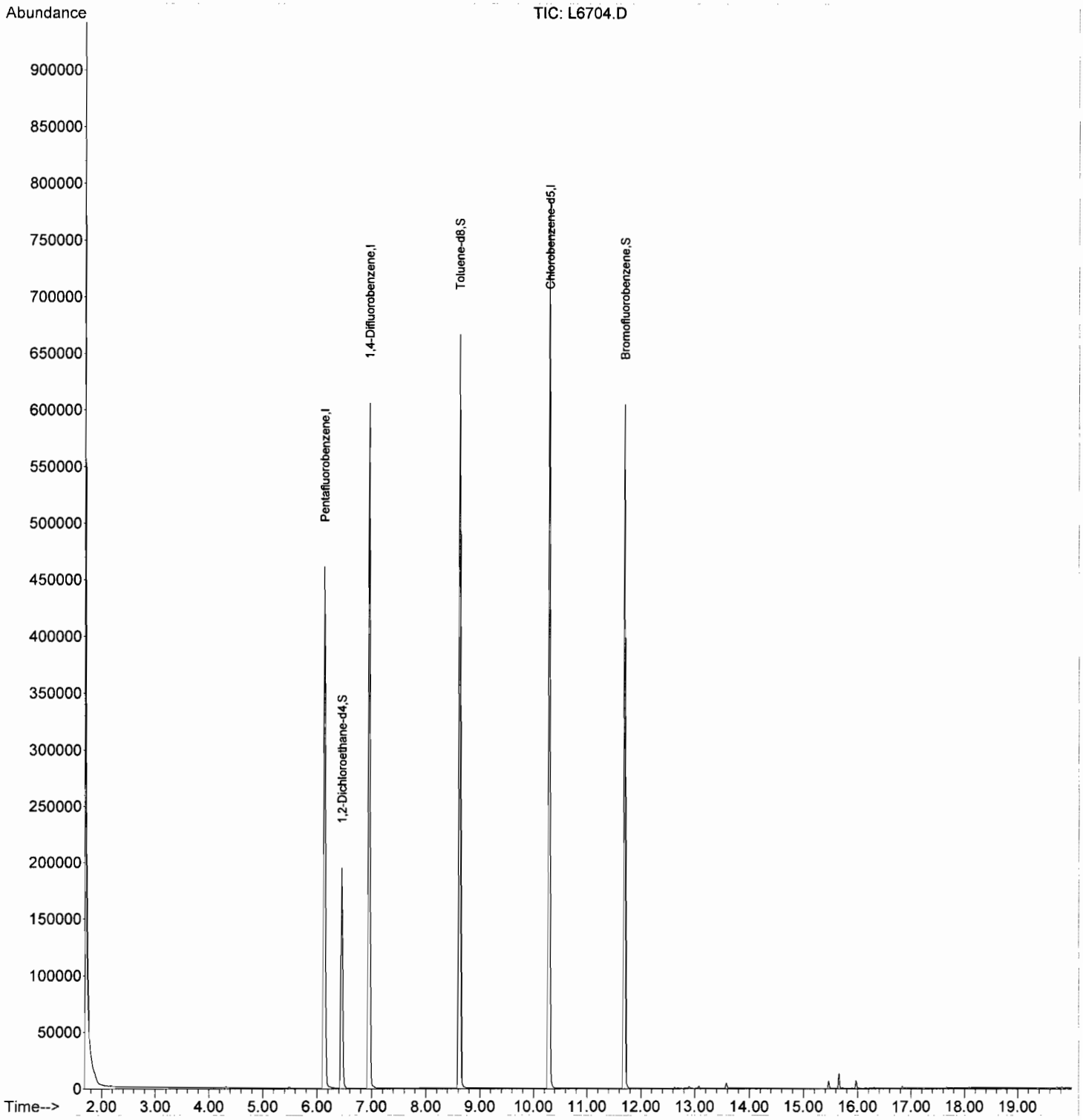
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

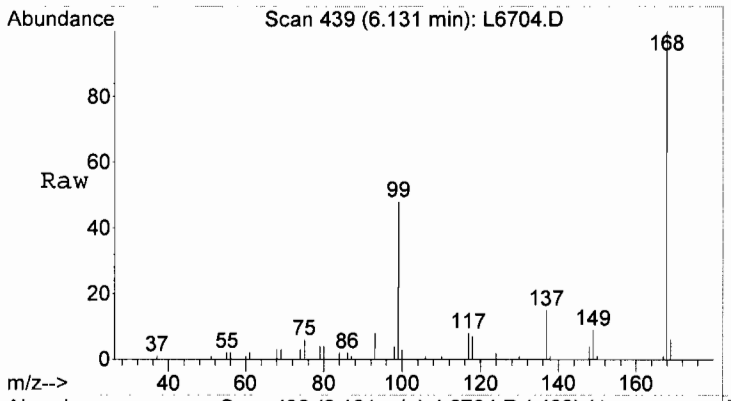
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 16:57:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



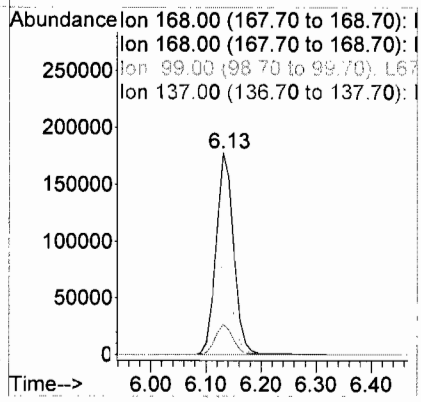
CT 2/23/15

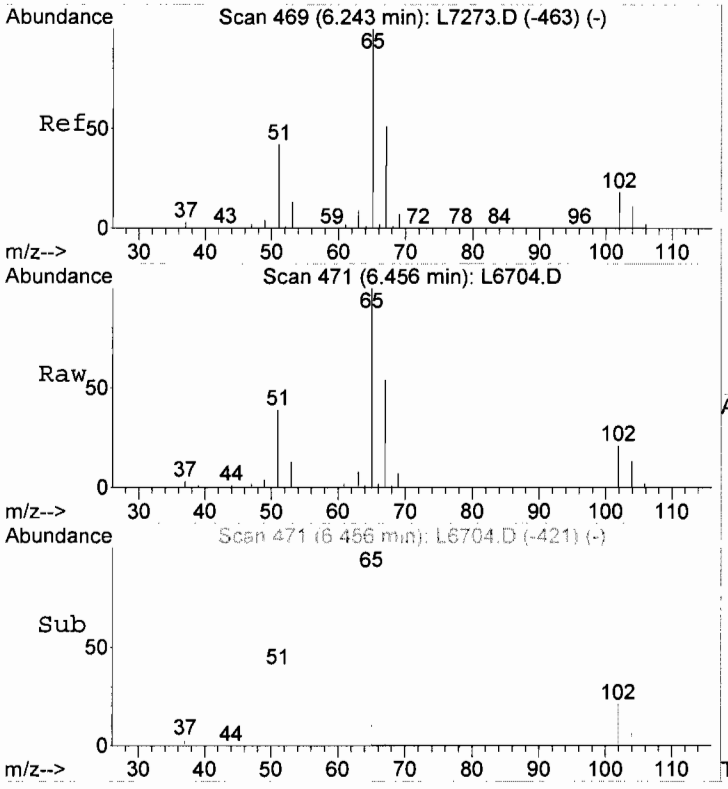


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:168 Resp: 395270

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

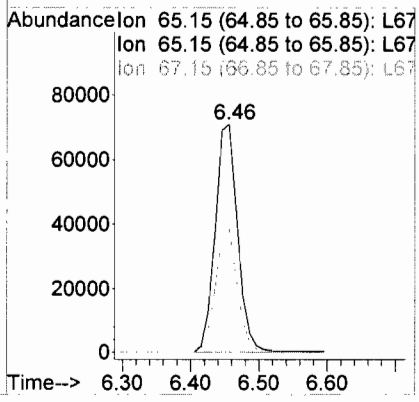


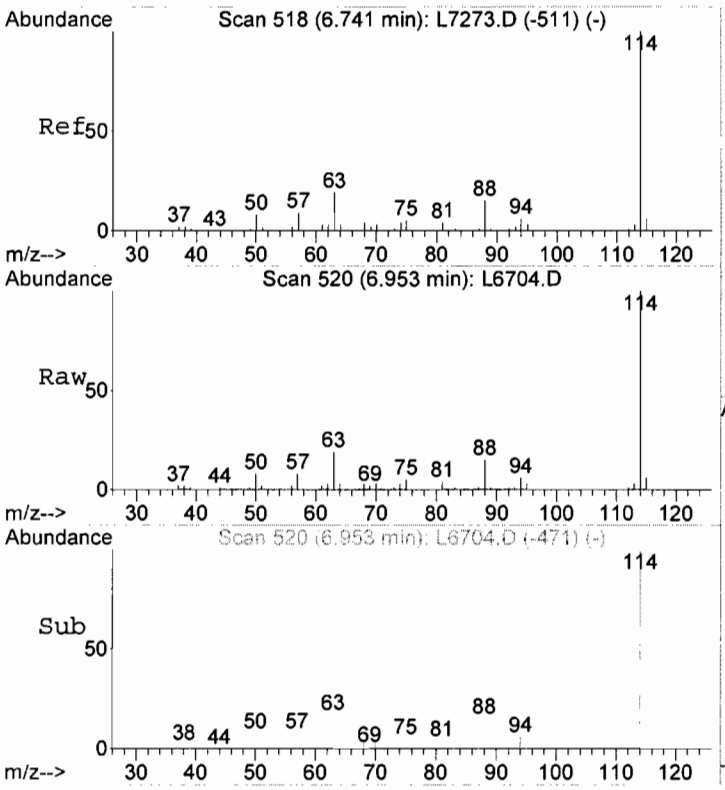


#30
1,2-Dichloroethane-d4
Concen: 47.89 UG
RT: 6.46 min Scan# 471
Delta R.T. 0.01 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 65 Resp: 162200

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	52.9	35.1	65.1

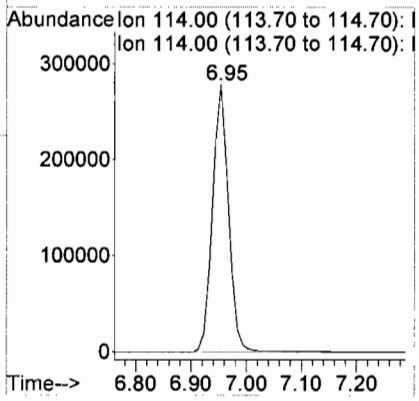


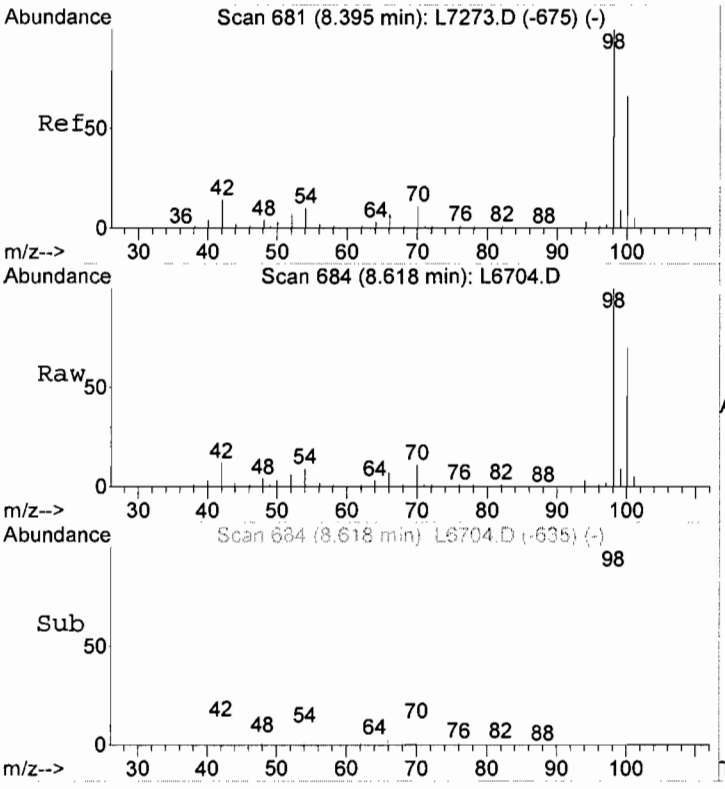


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:114 Resp: 561728

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

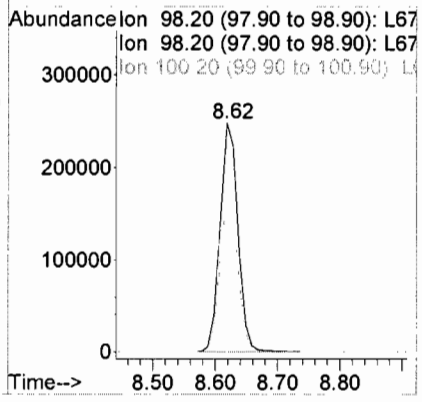


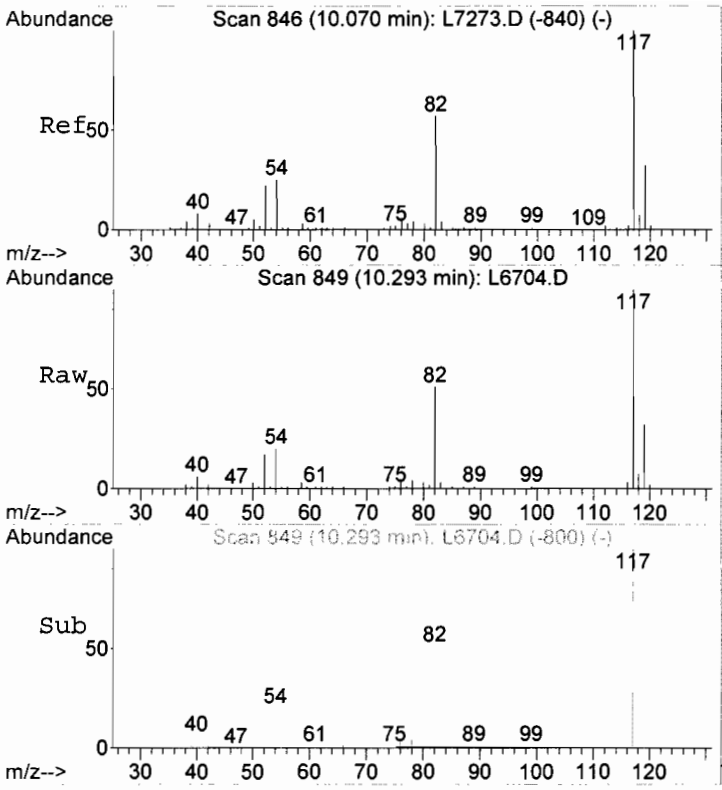


#41
Toluene-d8
Concen: 49.61 UG
RT: 8.62 min Scan# 684
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 98 Resp: 493549

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.7	44.8	83.2

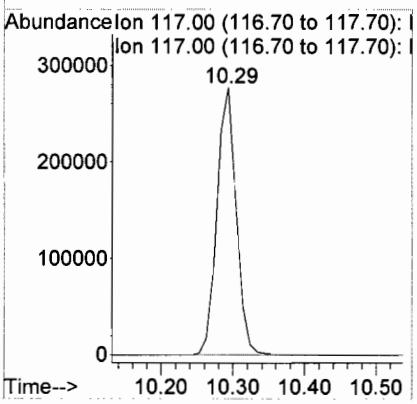


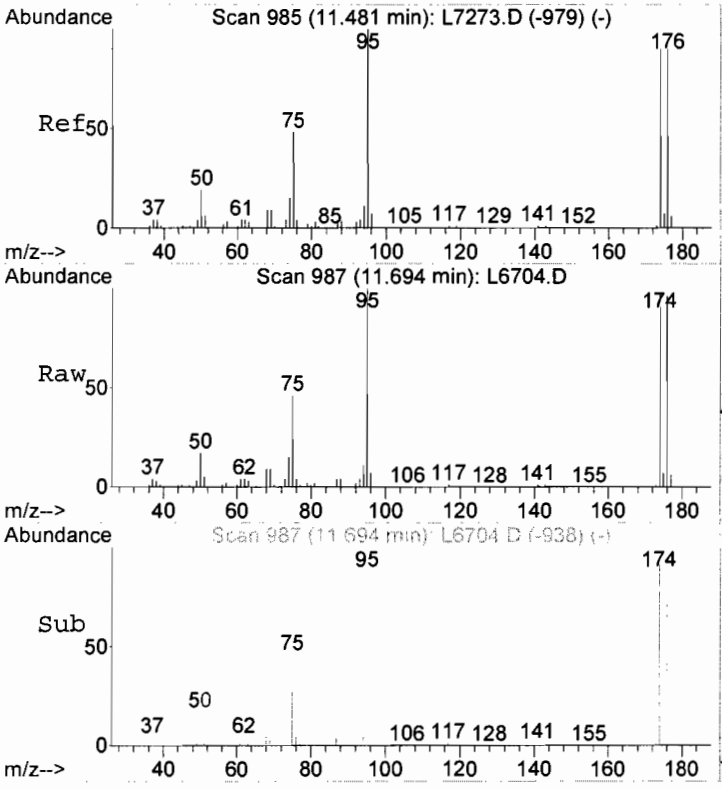


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion:117 Resp: 517534

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

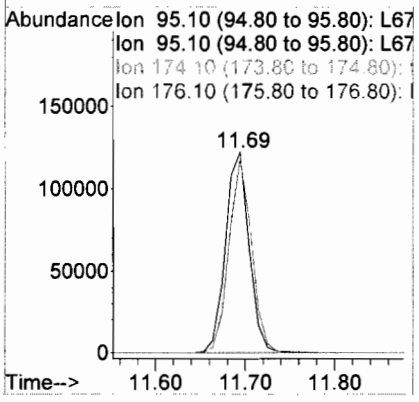




#59
Bromofluorobenzene
Concen: 49.32 UG
RT: 11.69 min Scan# 987
Delta R.T. 0.00 min
Lab File: L6704.D
Acq: 20 Feb 2015 10:03

Tgt Ion: 95 Resp: 223067

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	94.8	0.0	0.0#
176	92.4	0.0	0.0#



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LM021315.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	433	439	462	rVB	461111	1011026	67.46%	15.288%
2	6.456	465	471	488	rVB	194719	441154	29.44%	6.671%
3	6.953	514	520	543	rVB	605579	1226164	81.81%	18.541%
4	8.618	678	684	703	rVB	666374	1323130	88.28%	20.007%
5	10.293	843	849	866	rBV	784868	1498721	100.00%	22.663%
6	11.694	981	987	998	rVB	604969	1094767	73.05%	16.554%
7	15.653	1372	1377	1381	rBV	12870	18235	1.22%	0.276%

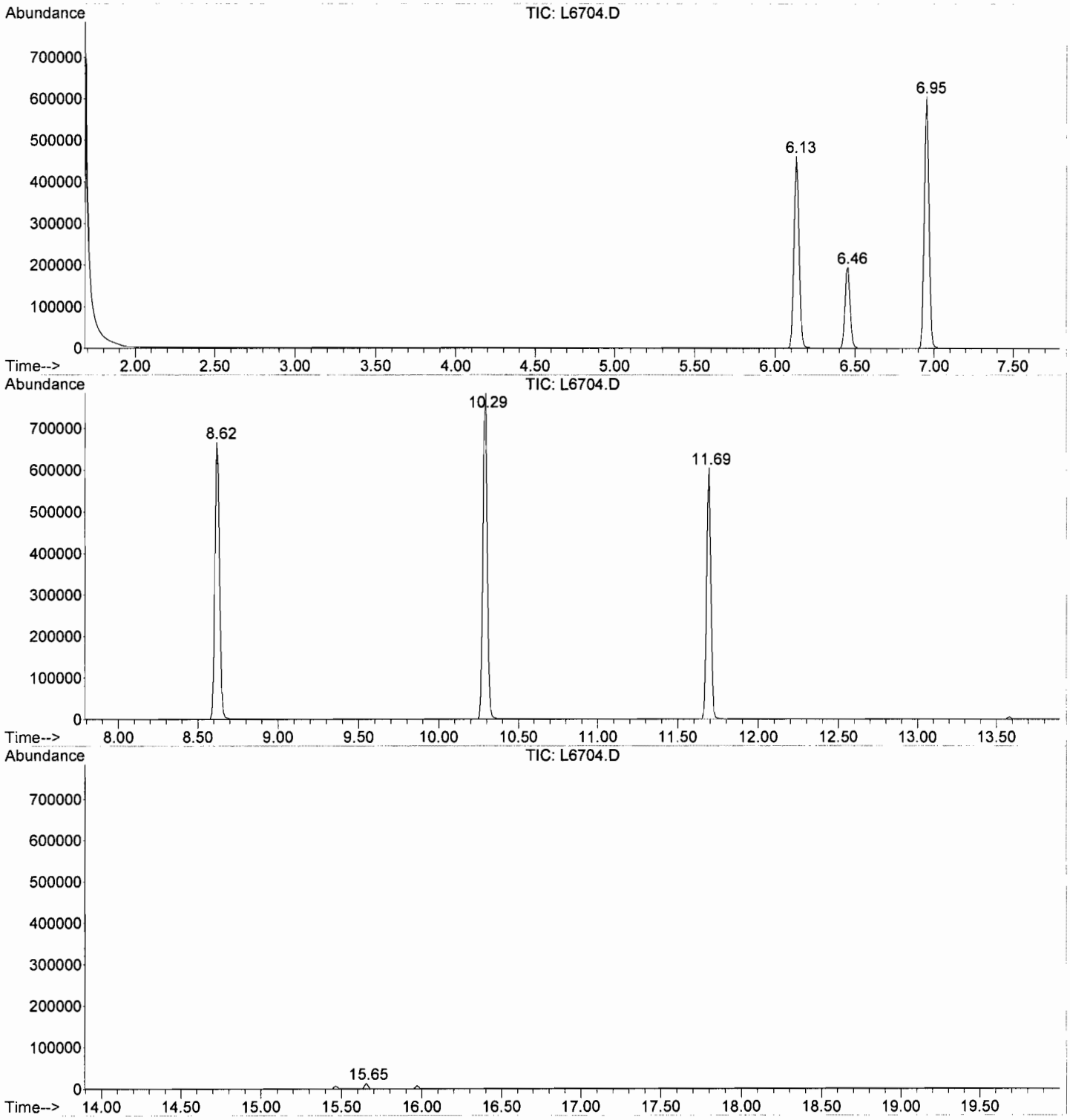
Sum of corrected areas: 6613197

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6704.D
Acq On : 20 Feb 2015 10:03
Operator : MEI
Sample : BLKA150220-01,BLKA150220-01,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6705.D
Acq On : 20 Feb 2015 10:30
Operator : MEI
Sample : TCLP150220,TCLP150220,T,0.1ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 16:58:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	388456	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	555838	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	505670	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	159249	47.84	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.68%			
41) Toluene-d8	8.62	98	488900	49.67	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.34%			
59) Bromofluorobenzene	11.69	95	208284	47.13	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.26%			

Target Compounds	Qvalue

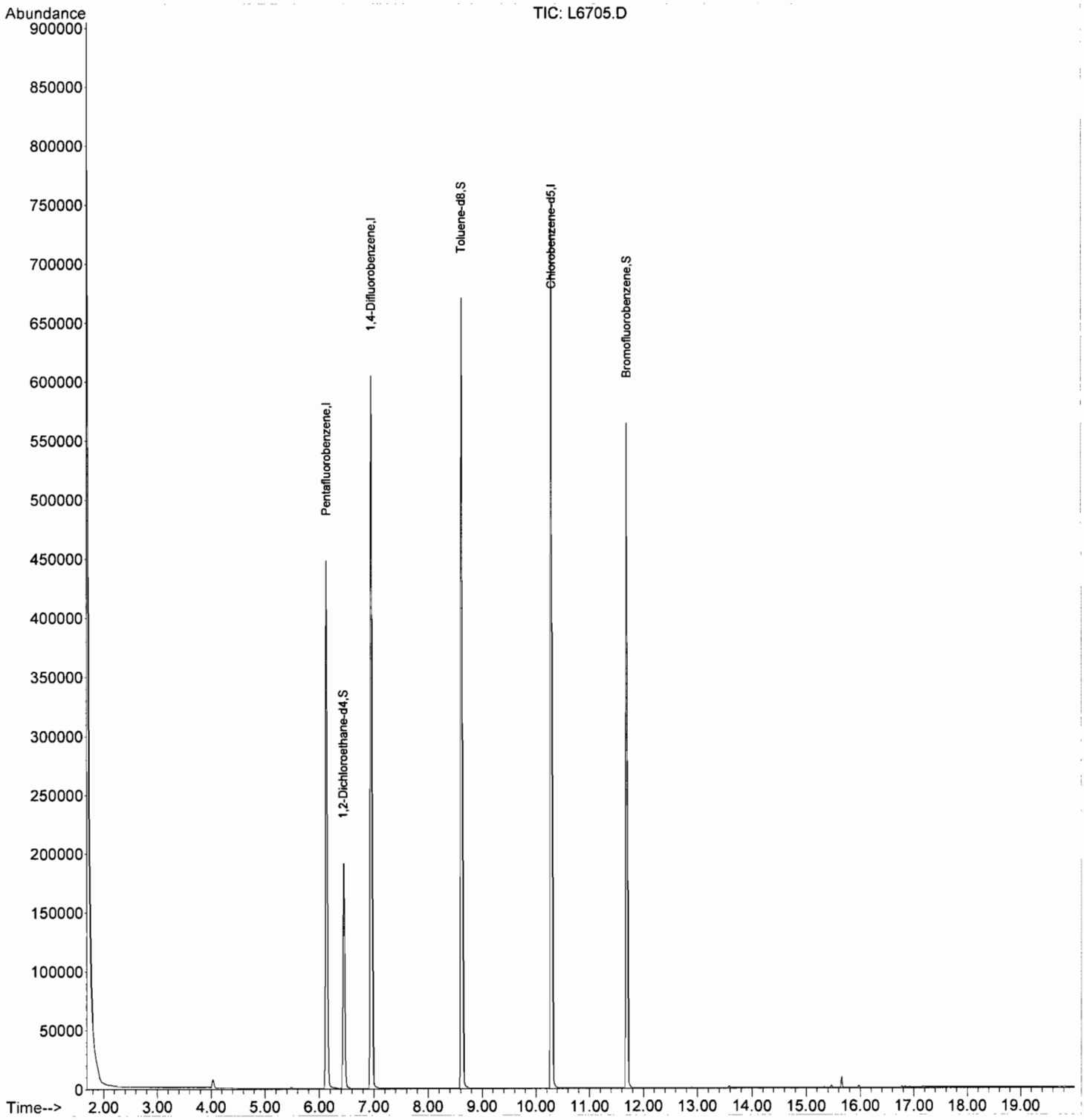
(#) = qualifier out of range (m) = manual integration (+) = signals summed

2/23/15

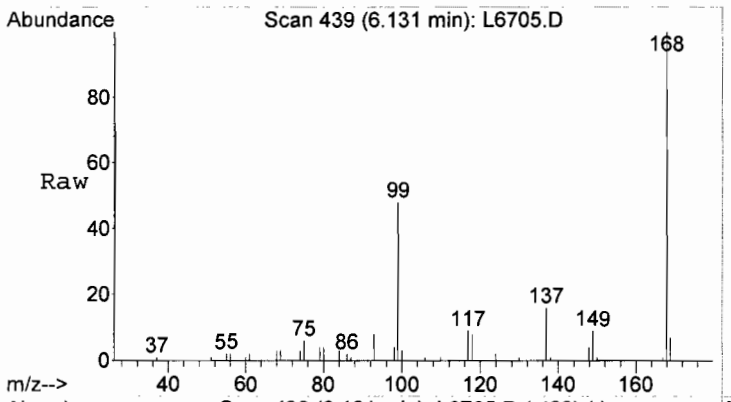
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6705.D
Acq On : 20 Feb 2015 10:30
Operator : MEI
Sample : TCLP150220,TCLP150220,T,0.1ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 16:58:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



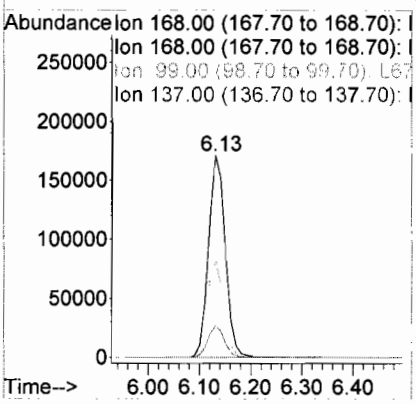
2/23/15

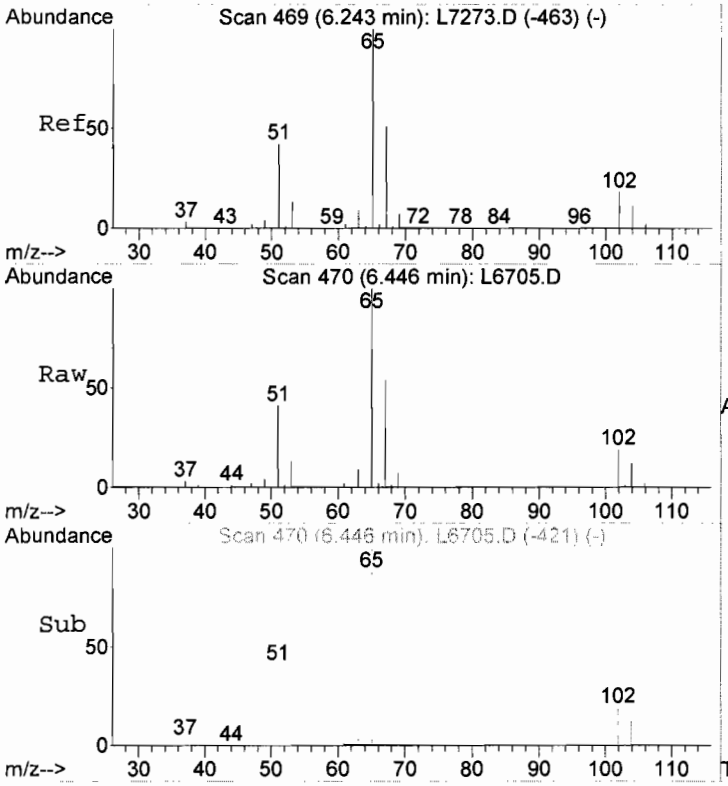


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.13 min Scan# 439
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:168 Resp: 388456

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.9	20.2#

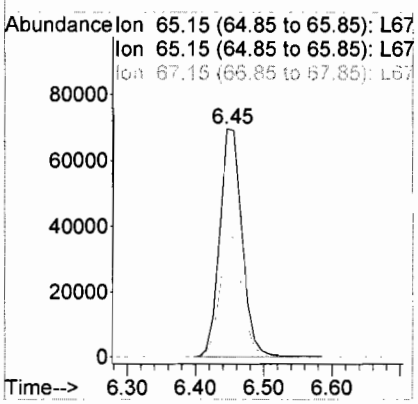


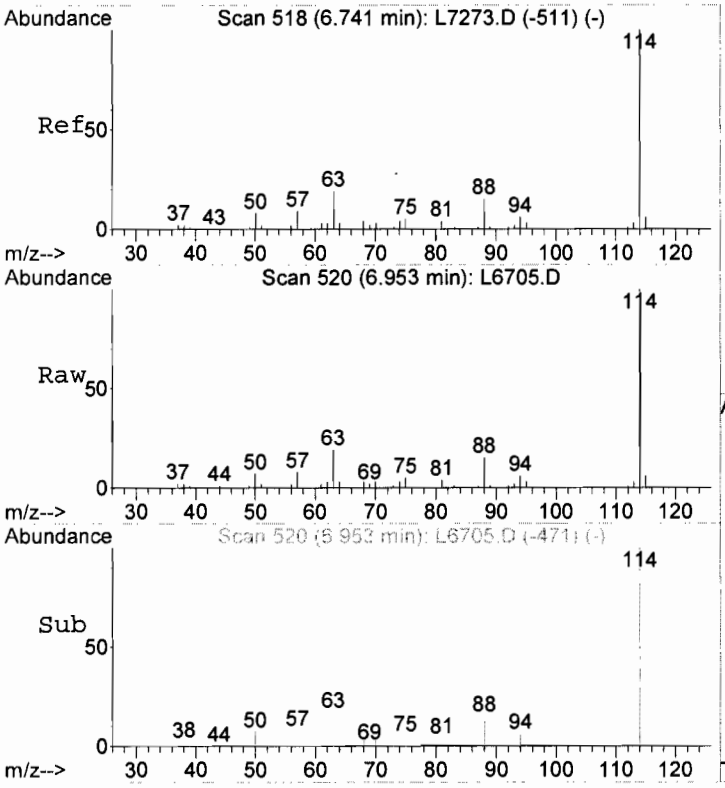


#30
1,2-Dichloroethane-d4
Concen: 47.84 UG
RT: 6.45 min Scan# 470
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 65 Resp: 159249

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	53.2	35.1	65.1

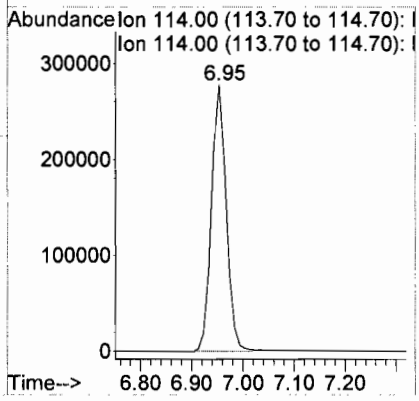


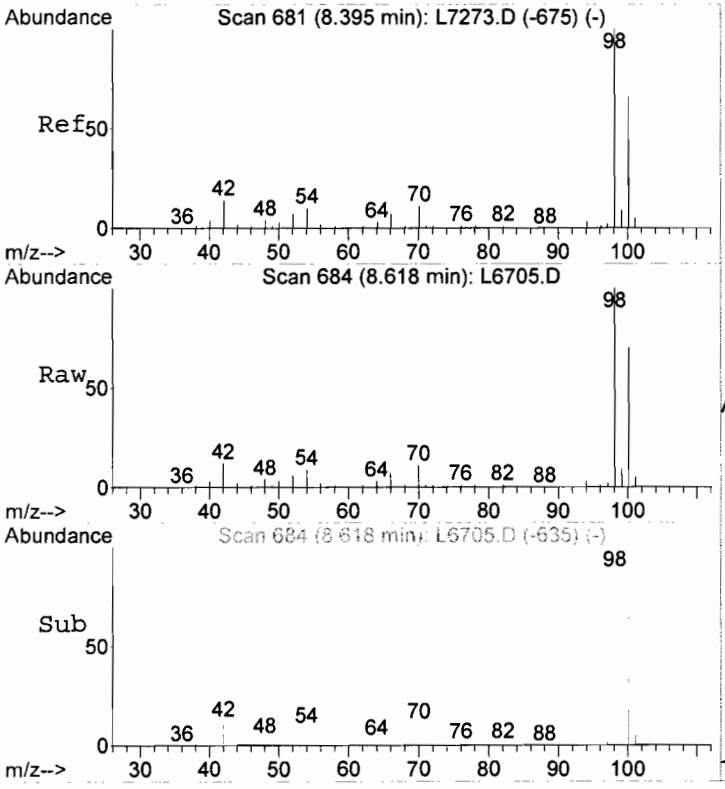


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.95 min Scan# 520
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:114 Resp: 555838

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

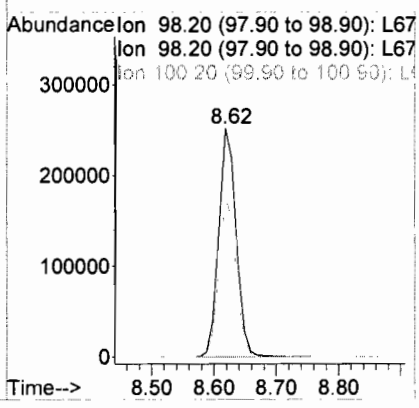


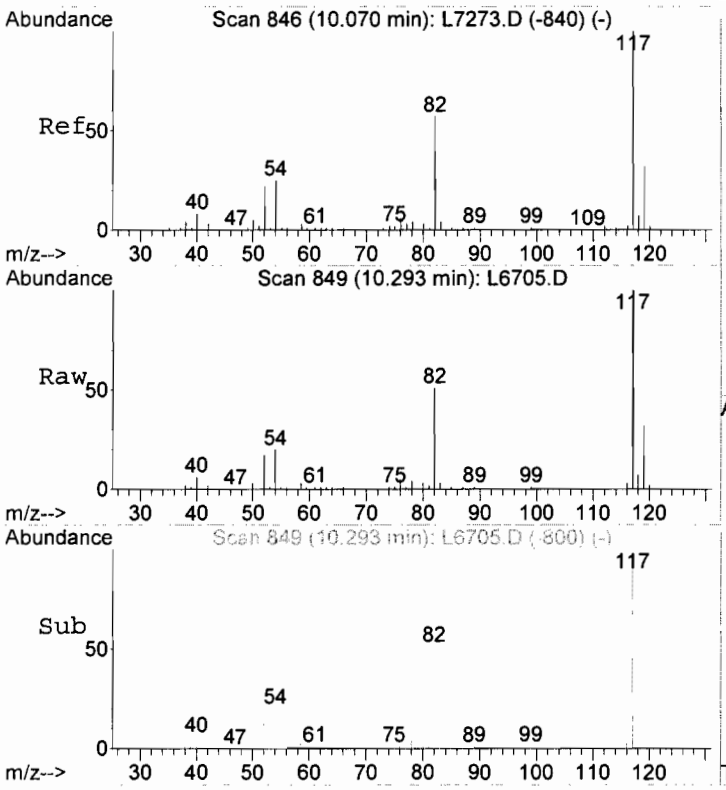


#41
Toluene-d8
Concen: 49.67 UG
RT: 8.62 min Scan# 684
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 98 Resp: 488900

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	69.3	44.8	83.2

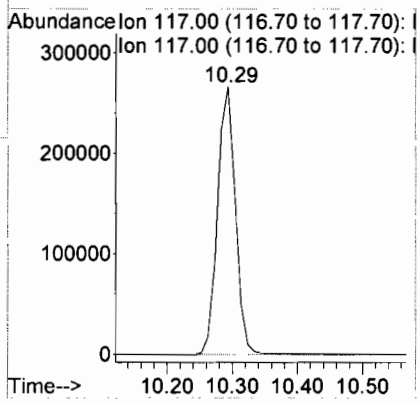


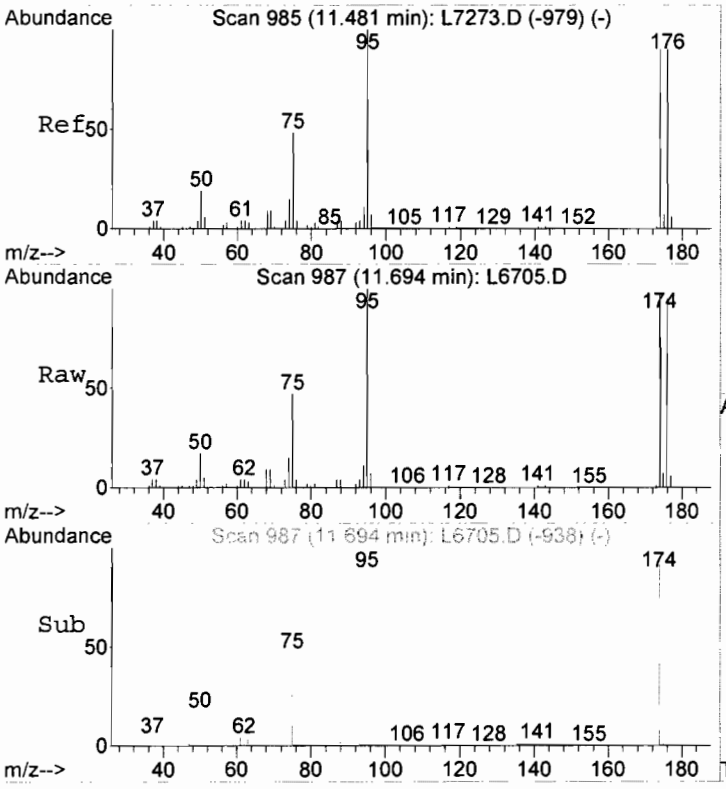


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.29 min Scan# 849
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion:117 Resp: 505670

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

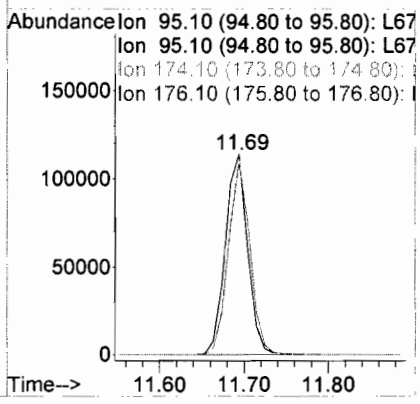




#59
Bromofluorobenzene
Concen: 47.13 UG
RT: 11.69 min Scan# 987
Delta R.T. -0.00 min
Lab File: L6705.D
Acq: 20 Feb 2015 10:30

Tgt Ion: 95 Resp: 208284

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	95.4	0.0	0.0#
176	92.5	0.0	0.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	358207	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	505677	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	465279	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	147238	47.97	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.94%				
41) Toluene-d8	8.62	98	448436	50.07	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.14%				
59) Bromofluorobenzene	11.69	95	187455	46.10	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	87981m	61.97	UG		
3) Chloromethane	1.93	50	152772	55.42	UG		100
4) Vinyl chloride	2.06	62	137745	57.98	UG		100
5) Bromomethane	2.43	94	78619	53.22	UG		98
6) Chloroethane	2.54	64	68735	56.76	UG		100
7) Trichlorofluoromethane	2.83	101	116655	43.59	UG		100
8) Acrolein	3.32	56	26885	154.41	UG		99
9) 1,1-Dichloroethene	3.45	96	105098	53.25	UG		95
10) Acetone	3.51	43	36790m	63.13	UG		
11) Carbon disulfide	3.70	76	341569	55.60	UG		100
12) Vinyl acetate	4.96	43	409662	50.08	UG	#	99
13) Methylene chloride	4.03	84	129980	49.30	UG		100
14) Acrylonitrile	4.32	53	146170	154.86	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	18661	88.96	UG		99
16) trans-1,2-Dichloroethene	4.36	96	168049	48.55	UG		93
17) Methyl tert-butyl ether (M	4.39	73	460653	48.40	UG		100
18) 1,1-Dichloroethane	4.85	63	318361	48.95	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	624433	52.33	UG		100
20) cis-1,2-Dichloroethene	5.53	96	195640	50.05	UG		100
21) 2,2-Dichloropropane	5.53	77	163566	53.27	UG		91
22) 2-Butanone (MEK)	5.55	43	83477	61.66	UG		99
23) Bromochloromethane	5.80	128	94334	46.28	UG		100
25) Chloroform	5.89	83	311346	46.09	UG		100
26) 1,1,1-Trichloroethane	6.11	97	217915	51.64	UG		98
27) Carbon tetrachloride	6.29	117	167664	52.19	UG		100
28) 1,1-Dichloropropene	6.29	75	192532	53.28	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	245271	45.53	UG		100
32) Benzene	6.53	78	673183	48.60	UG		100
33) Trichloroethene	7.25	95	161401	48.55	UG		94
34) 1,2-Dichloropropane	7.49	63	177368	50.74	UG		100
35) Dibromomethane	7.62	93	101072	45.46	UG		92
36) 1,4-Dioxane	7.64	88	33515	1162.36	UG		100
37) Bromodichloromethane	7.80	83	227065	48.68	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	101653	49.58	UG		99
39) cis-1,3-Dichloropropene	8.30	75	262095	53.33	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	160563	57.14	UG		100
42) Toluene	8.70	92	374832	48.20	UG		99
43) trans-1,3-Dichloropropene	8.93	75	227537	52.06	UG		99
44) 1,1,2-Trichloroethane	9.15	83	120655	47.29	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

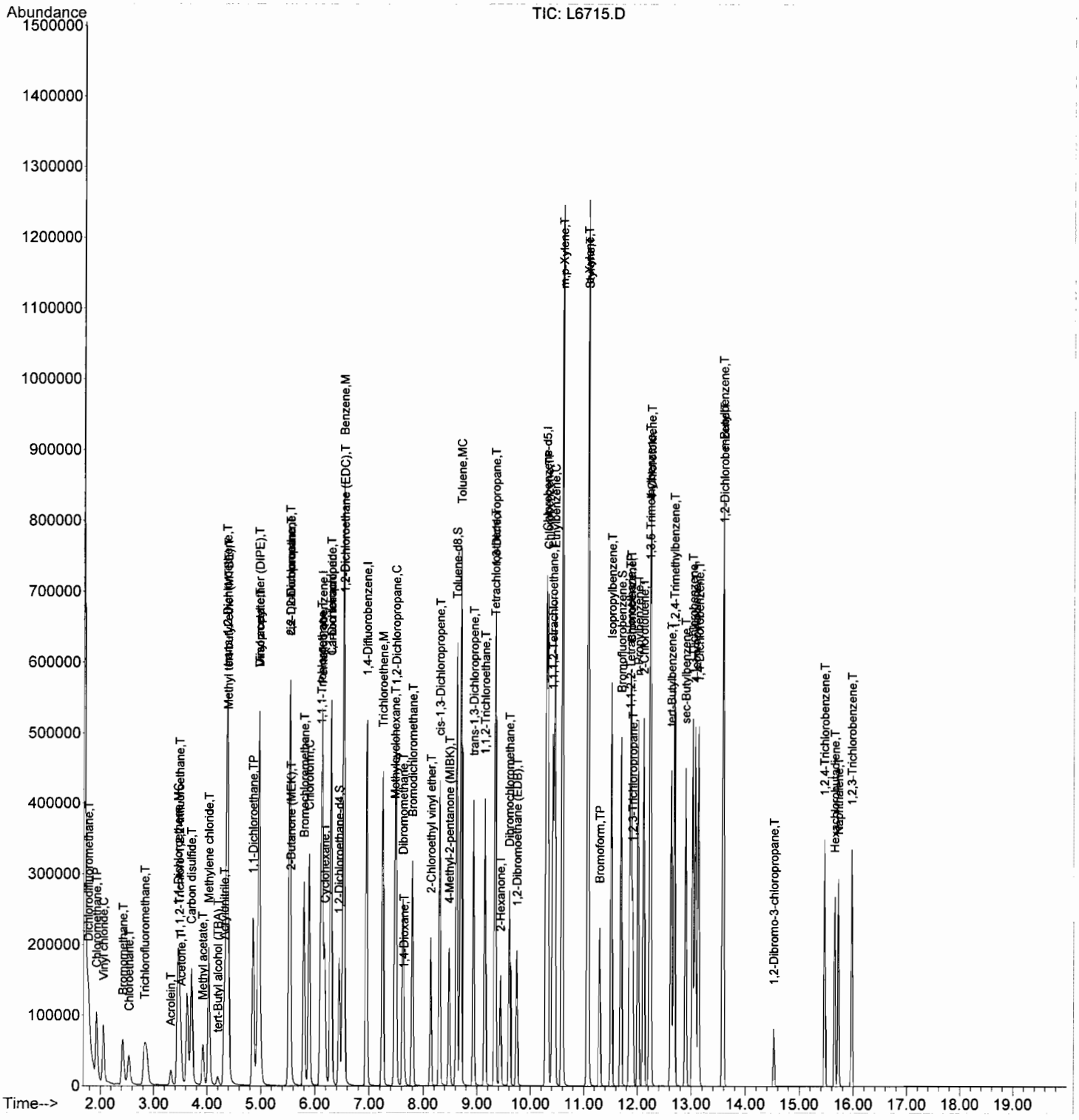
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	124008	47.69 UG	98
46) 1,3-Dichloropropane	9.34	76	244840	49.35 UG	100
47) 2-Hexanone	9.44	43	108441m	63.91 UG	
48) Dibromochloromethane	9.60	129	163494	49.12 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	149717	48.59 UG	100
51) Chlorobenzene	10.32	112	418821	45.49 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	165370	48.43 UG	99
53) Ethylbenzene	10.46	91	569287	48.99 UG	99
54) m,p-Xylene	10.60	106	444186	98.15 UG	96
55) o-Xylene	11.06	106	228091	50.70 UG	96
56) Styrene	11.08	104	427268	50.71 UG	98
57) Bromoform	11.30	173	127633	47.19 UG	100
58) Isopropylbenzene	11.51	105	444047	50.91 UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	168822	42.37 UG	100
61) Bromobenzene	11.88	156	182805	45.20 UG	100
62) 1,2,3-Trichloropropane	11.91	75	151667	43.46 UG	99
63) n-Propylbenzene	12.01	91	472916	47.13 UG	100
64) 2-Chlorotoluene	12.11	91	343312	45.46 UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	375173	46.94 UG	100
66) 4-Chlorotoluene	12.24	91	408112	44.05 UG	99
67) tert-Butylbenzene	12.63	119	279810	46.36 UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	396780	44.75 UG	100
69) sec-Butylbenzene	12.89	105	377152	45.32 UG	99
70) 1,3-Dichlorobenzene	13.02	146	261086	41.75 UG	100
71) 4-Isopropyltoluene	13.08	119	342208	44.81 UG	100
72) 1,4-Dichlorobenzene	13.14	146	269284	40.84 UG	100
73) n-Butylbenzene	13.58	92	151876	45.17 UG	96
74) 1,2-Dichlorobenzene	13.59	146	262521	41.23 UG	100
75) 1,2-Dibromo-3-chloropropan	14.53	75	21555	38.70 UG	89
76) 1,2,4-Trichlorobenzene	15.46	180	124501	38.80 UG	99
77) Hexachlorobutadiene	15.65	225	61789	40.33 UG	100
78) Naphthalene	15.72	128	292346m	37.08 UG	
79) 1,2,3-Trichlorobenzene	15.97	180	111838	36.23 UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	70200	54.27 UG	94
81) Methyl acetate	3.92	43	102785	54.05 UG	99
82) Cyclohexane	6.18	56	132788	55.70 UG	100
83) Methylcyclohexane	7.47	55	84497	55.55 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6715.D
Acq On : 20 Feb 2015 14:59
Operator : MEI
Sample : LCS-50PPB,LCSA150220-01,A,5ml,100
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 20 17:12:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	350927	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	499982	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	457693	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	143925	47.86	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.72%				
41) Toluene-d8	8.62	98	446619	50.44	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.88%				
59) Bromofluorobenzene	11.69	95	184172	46.04	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.08%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	87399m	62.84	UG		
3) Chloromethane	1.93	50	159660	59.12	UG		100
4) Vinyl chloride	2.06	62	149787	64.36	UG		100
5) Bromomethane	2.43	94	80053	55.32	UG		98
6) Chloroethane	2.54	64	71555	60.31	UG		100
7) Trichlorofluoromethane	2.83	101	123307m	47.03	UG		
8) Acrolein	3.32	56	27693	162.35	UG		99
9) 1,1-Dichloroethene	3.45	96	113931	58.93	UG		96
10) Acetone	3.51	43	35360m	61.93	UG		
11) Carbon disulfide	3.70	76	372150	61.83	UG		100
12) Vinyl acetate	4.96	43	429929	53.64	UG	#	99
13) Methylene chloride	4.03	84	131126	50.77	UG		100
14) Acrylonitrile	4.32	53	167583	181.23	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	20080	97.71	UG		99
16) trans-1,2-Dichloroethene	4.36	96	179683	52.98	UG		92
17) Methyl tert-butyl ether (M	4.39	73	478054	51.27	UG		100
18) 1,1-Dichloroethane	4.85	63	327685	51.43	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	634579	54.28	UG		100
20) cis-1,2-Dichloroethene	5.53	96	200493	52.35	UG		100
21) 2,2-Dichloropropane	5.53	77	185688	61.73	UG		97
22) 2-Butanone (MEK)	5.55	43	81546m	61.49	UG		
23) Bromochloromethane	5.80	128	97170	48.66	UG		100
25) Chloroform	5.89	83	318670	48.16	UG		100
26) 1,1,1-Trichloroethane	6.11	97	238264	57.63	UG		98
27) Carbon tetrachloride	6.29	117	190386	60.49	UG		100
28) 1,1-Dichloropropene	6.29	75	208662	58.94	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	246049	46.63	UG		100
32) Benzene	6.53	78	691829	50.52	UG		100
33) Trichloroethene	7.25	95	166856	50.76	UG		93
34) 1,2-Dichloropropane	7.49	63	179461	51.93	UG		100
35) Dibromomethane	7.62	93	102451	46.61	UG		92
36) 1,4-Dioxane	7.64	88	49545	1737.88	UG		99
37) Bromodichloromethane	7.80	83	230240	49.92	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	103222	50.92	UG		99
39) cis-1,3-Dichloropropene	8.30	75	269246	55.41	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.48	43	164566	59.24	UG		100
42) Toluene	8.70	92	386047	50.21	UG		99
43) trans-1,3-Dichloropropene	8.93	75	234959	54.38	UG		99
44) 1,1,2-Trichloroethane	9.15	83	122511	48.56	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

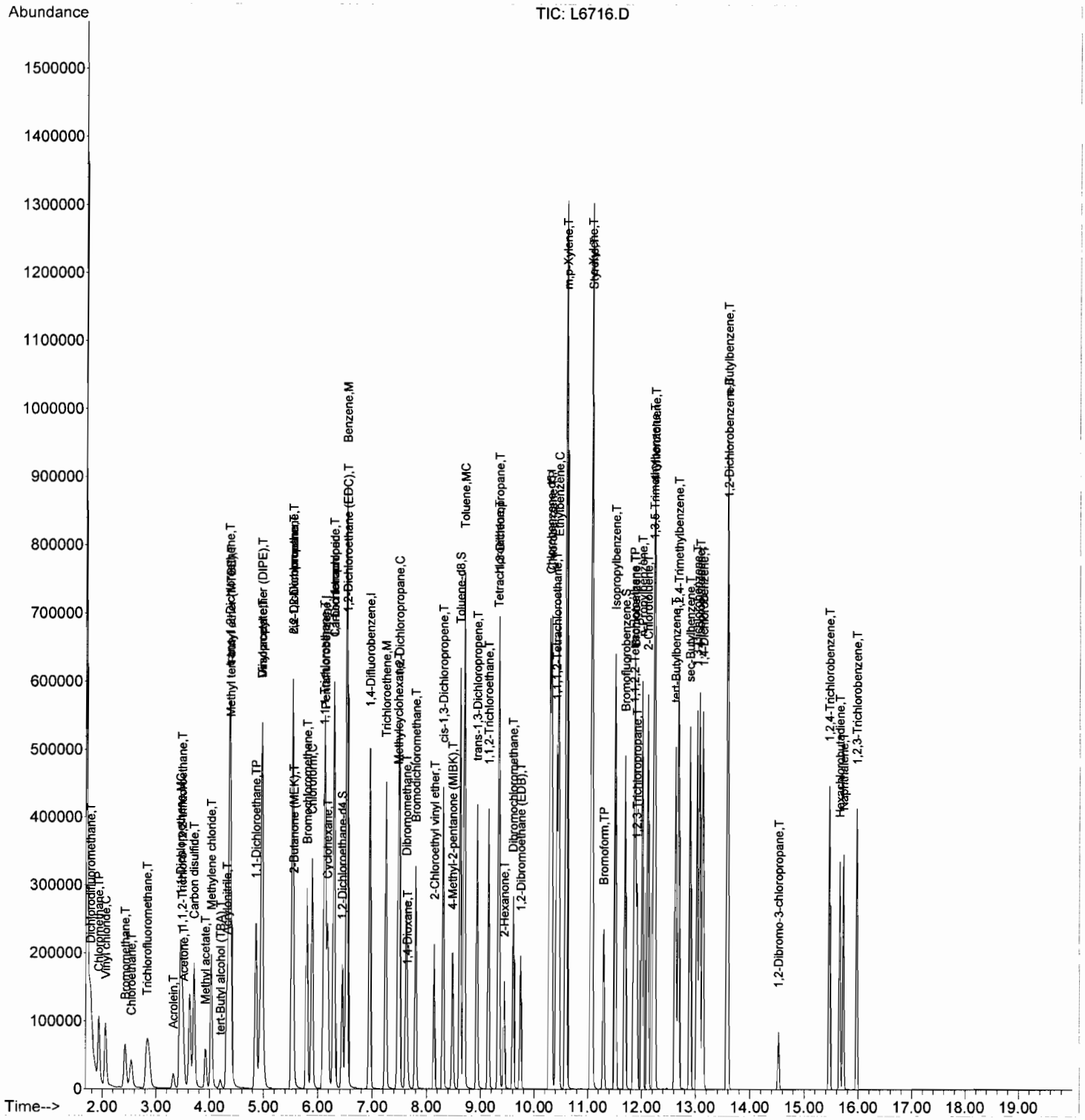
Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Tetrachloroethene	9.33	166	134674	52.38	UG	98
46) 1,3-Dichloropropane	9.34	76	245600	50.07	UG	100
47) 2-Hexanone	9.44	43	99844m	59.52	UG	
48) Dibromochloromethane	9.60	129	168865	51.31	UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	151941	49.87	UG	100
51) Chlorobenzene	10.32	112	428666	47.33	UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	169386	50.43	UG	99
53) Ethylbenzene	10.46	91	606602	53.06	UG	99
54) m,p-Xylene	10.60	106	468238	105.18	UG	96
55) o-Xylene	11.06	106	242361	54.77	UG	96
56) Styrene	11.08	104	447331	53.97	UG	98
57) Bromoform	11.30	173	138769	52.16	UG	100
58) Isopropylbenzene	11.51	105	490854	57.21	UG	100
60) 1,1,2,2-Tetrachloroethane	11.86	83	175516	44.79	UG	100
61) Bromobenzene	11.88	156	192171	48.30	UG	100
62) 1,2,3-Trichloropropane	11.91	75	156433	45.56	UG	99
63) n-Propylbenzene	12.01	91	534862	54.18	UG	100
64) 2-Chlorotoluene	12.11	91	369231	49.70	UG	98
65) 1,3,5-Trimethylbenzene	12.22	105	422864	53.78	UG	100
66) 4-Chlorotoluene	12.24	91	442136	48.51	UG	99
67) tert-Butylbenzene	12.63	119	323577	54.50	UG	98
68) 1,2,4-Trimethylbenzene	12.68	105	440901	50.55	UG	100
69) sec-Butylbenzene	12.89	105	451545	55.16	UG	99
70) 1,3-Dichlorobenzene	13.02	146	281708	45.80	UG	100
71) 4-Isopropyltoluene	13.07	119	404056	53.78	UG	100
72) 1,4-Dichlorobenzene	13.14	146	292184	45.05	UG	100
73) n-Butylbenzene	13.58	92	183748	55.55	UG	96
74) 1,2-Dichlorobenzene	13.59	146	283395	45.25	UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	22240	40.59	UG	87
76) 1,2,4-Trichlorobenzene	15.46	180	155138	49.15	UG	99
77) Hexachlorobutadiene	15.65	225	77233	51.24	UG	100
78) Naphthalene	15.72	128	289381	37.31	UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	143525	47.27	UG	99
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	69143m	54.34	UG	
81) Methyl acetate	3.92	43	102920	55.02	UG	99
82) Cyclohexane	6.17	56	142644m	60.83	UG	
83) Methylcyclohexane	7.47	55	91065m	60.86	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6716.D
Acq On : 20 Feb 2015 15:25
Operator : MEI
Sample : MS,01273-001MS,A,5ml,100
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:29:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.13	168	362029	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.95	114	510735	50.00	UG		0.00
50) Chlorobenzene-d5	10.29	117	466211	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	147644	47.59	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.18%				
41) Toluene-d8	8.62	98	454679	50.27	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.54%				
59) Bromofluorobenzene	11.69	95	191719	47.05	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	84290m	58.74	UG		
3) Chloromethane	1.93	50	151525	54.39	UG		100
4) Vinyl chloride	2.06	62	130830	54.49	UG		100
5) Bromomethane	2.43	94	74297	49.76	UG		98
6) Chloroethane	2.55	64	63480	51.86	UG		100
7) Trichlorofluoromethane	2.84	101	107394	39.71	UG		100
8) Acrolein	3.33	56	28523	162.08	UG		99
9) 1,1-Dichloroethene	3.45	96	102482	51.38	UG		95
10) Acetone	3.51	43	34613m	58.77	UG		
11) Carbon disulfide	3.70	76	328291	52.87	UG		100
12) Vinyl acetate	4.96	43	418572	50.63	UG	#	99
13) Methylene chloride	4.03	84	127835	47.97	UG		100
14) Acrylonitrile	4.32	53	178131	186.73	UG		99
15) tert-Butyl alcohol (TBA)	4.20	59	20489	96.64	UG		100
16) trans-1,2-Dichloroethene	4.36	96	170292	48.67	UG		93
17) Methyl tert-butyl ether (M	4.39	73	468106	48.66	UG		100
18) 1,1-Dichloroethane	4.86	63	319798	48.65	UG		99
19) Diisopropyl ether (DIPE)	4.96	45	630678	52.29	UG		100
20) cis-1,2-Dichloroethene	5.53	96	197474	49.98	UG		99
21) 2,2-Dichloropropane	5.53	77	160327	51.67	UG		89
22) 2-Butanone (MEK)	5.55	43	87142	63.69	UG		99
23) Bromochloromethane	5.80	128	96069	46.63	UG		100
25) Chloroform	5.89	83	315902	46.27	UG		100
26) 1,1,1-Trichloroethane	6.11	97	213206	49.99	UG		98
27) Carbon tetrachloride	6.30	117	164864	50.78	UG		100
28) 1,1-Dichloropropene	6.29	75	189589	51.91	UG		96
29) 1,2-Dichloroethane (EDC)	6.54	62	246578	45.29	UG		100
32) Benzene	6.53	78	674540	48.22	UG		100
33) Trichloroethene	7.25	95	160382	47.76	UG		93
34) 1,2-Dichloropropane	7.49	63	177669	50.32	UG		100
35) Dibromomethane	7.62	93	101364	45.14	UG		92
36) 1,4-Dioxane	7.64	88	50002	1716.98	UG		100
37) Bromodichloromethane	7.80	83	228444	48.49	UG		100
38) 2-Chloroethyl vinyl ether	8.14	63	102668	49.58	UG		99
39) cis-1,3-Dichloropropene	8.30	75	266063	53.60	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.49	43	163193	57.50	UG		100
42) Toluene	8.70	92	375965	47.87	UG		100
43) trans-1,3-Dichloropropene	8.93	75	236793	53.65	UG		99
44) 1,1,2-Trichloroethane	9.15	83	122017	47.35	UG		98

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration

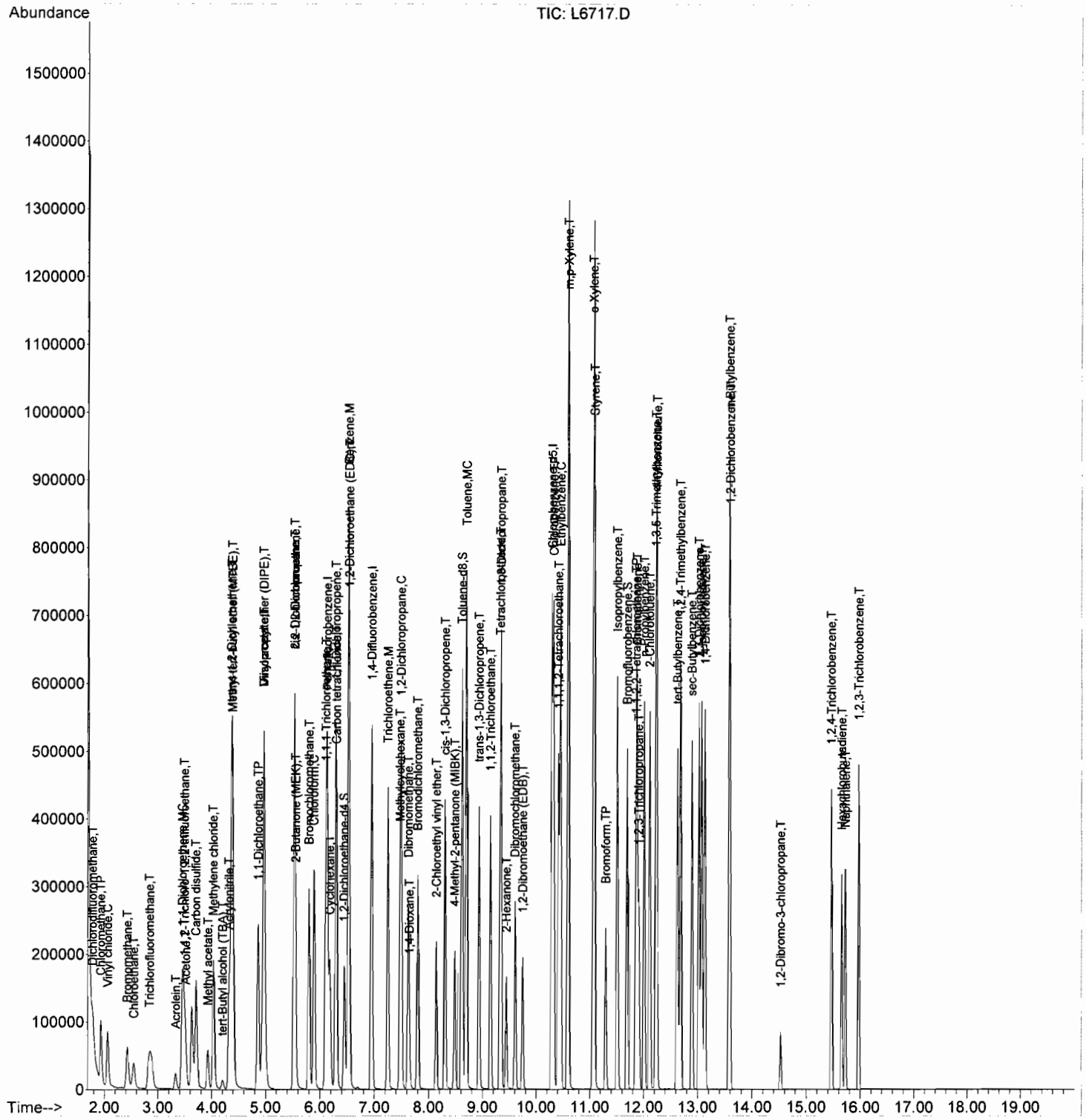
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.33	166	127024	48.37 UG	98
46) 1,3-Dichloropropane	9.34	76	246252	49.14 UG	100
47) 2-Hexanone	9.44	43	100597m	58.70 UG	
48) Dibromochloromethane	9.60	129	168102	50.00 UG	100
49) 1,2-Dibromoethane (EDB)	9.75	107	151774	48.77 UG	100
51) Chlorobenzene	10.32	112	428521	46.45 UG	100
52) 1,1,1,2-Tetrachloroethane	10.42	131	168065	49.12 UG	99
53) Ethylbenzene	10.46	91	589666	50.64 UG	99
54) m,p-Xylene	10.60	106	460257	101.49 UG	96
55) o-Xylene	11.06	106	237917	52.78 UG	95
56) Styrene	11.09	104	448186	53.08 UG	98
57) Bromoform	11.30	173	138308	51.03 UG	100
58) Isopropylbenzene	11.51	105	468391	53.59 UG	99
60) 1,1,2,2-Tetrachloroethane	11.86	83	174564	43.73 UG	100
61) Bromobenzene	11.88	156	192500	47.50 UG	100
62) 1,2,3-Trichloropropane	11.91	75	155852	44.57 UG	99
63) n-Propylbenzene	12.01	91	507377	50.46 UG	100
64) 2-Chlorotoluene	12.11	91	366033	48.37 UG	99
65) 1,3,5-Trimethylbenzene	12.22	105	408115	50.96 UG	100
66) 4-Chlorotoluene	12.24	91	436746	47.05 UG	99
67) tert-Butylbenzene	12.63	119	307618	50.86 UG	99
68) 1,2,4-Trimethylbenzene	12.68	105	429107	48.30 UG	100
69) sec-Butylbenzene	12.89	105	427221	51.24 UG	99
70) 1,3-Dichlorobenzene	13.02	146	283982	45.32 UG	100
71) 4-Isopropyltoluene	13.07	119	392137	51.24 UG	100
72) 1,4-Dichlorobenzene	13.14	146	292478	44.27 UG	100
73) n-Butylbenzene	13.58	92	176913	52.51 UG	96
74) 1,2-Dichlorobenzene	13.59	146	286555	44.92 UG	99
75) 1,2-Dibromo-3-chloropropan	14.53	75	22045	39.50 UG	87
76) 1,2,4-Trichlorobenzene	15.46	180	155334	48.31 UG	99
77) Hexachlorobutadiene	15.65	225	72406	47.16 UG	100
78) Naphthalene	15.72	128	289839	36.68 UG	100
79) 1,2,3-Trichlorobenzene	15.97	180	161938	52.36 UG	100
80) 1,1,2-Trichloro-1,2,2-trif	3.49	101	64156	49.50 UG	94
81) Methyl acetate	3.93	43	98839	51.87 UG	99
82) Cyclohexane	6.18	56	128669	53.87 UG	100
83) Methylcyclohexane	7.47	55	86548	56.79 UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : L6717.D
Acq On : 20 Feb 2015 15:52
Operator : MEI
Sample : MSD,01273-001MSD,A,5ml,100
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:27:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LM021315.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Feb 17 14:02:09 2015
Response via : Initial Calibration



TCLP
VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/13/2015 17:16

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-13-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	L6604	BFB150213										ok
2	2	L6605	ICC1	ICC1		5		W				100	ok
3	3	L6606	ICC2	ICC2		5		W				100	—
4	4	L6607	ICC5	ICC5		5		W				100	ok
5	5	L6608	ICC2	ICC2		5		W				100	ok
6	6	L6609	ICC20	ICC20		5		W				100	ok
7	7	L6610	ICC100	ICC100		5		W				100	ok
8	8	L6611	ICC150	ICC150		5		W				100	ok
9	9	L6612	ICC200	ICC200		5		W				100	ok
10	10	L6613	RB										—
11	11	L6614	RB										—
12	12	L6615	ICV100	ICV100		5		W				100	ok
13	13	L6616	RB										—
14	14	L6617	RB										—
15	15	L6618	BLKM150213-01	LKM150213-01		0.1		M				0	ok
16	16	L6619	LCS-50PPB	CSM150213-01		0.05		M				0	ok
17	17	L6620	MS	01069-001MS		0.05		M				0	ok
18	18	L6621	MSD	1069-001MSD		0.05		M				0	ok
19	19	L6622	RB										—
20	20	L6623	RB										—
21	21	L6624	1069	1	1	0.088		M	ES-WC-91_(0-4)	02/10/15	02/11/15	7.30	Re-Soil
22	22	L6625	1089	1	20	0.0031		M	T-2/5.0-5.5	02/10/15	02/11/15	32.2	ok
23	23	L6626	1049	7	1	0.027		M	SB-6/10.5	02/10/15	02/11/15	16.7	ok
24	24	L6627		6	1	0.048		M	SB-7/7.5	02/10/15	02/11/15	13.5	ok
25	25	L6628		5	1	0.022		M	SB-5/7.5	02/10/15	02/11/15	14.4	ok
26	26	L6629	1069	2	5	0.006		M	ES-WC-91_(4-8)	02/10/15	02/11/15	42.9	ok
27	27	L6630	1060	1	5	0.01		M	WC-1/GB6/12-12	11/14/14	02/11/15	10.7	ok
28	28	L6631	RB										—

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 2/20/15 9:23

INSTRUMENT: MSD-L

TUNE FILE: TUNE L

SEQUENCE FILE: 02-20-15

METHOD: LM021315

ANALYST: Mei Chen

CXM Initial

STANDARD	#	#	(ul)	CONC.
BFB	LS1035	1	1	50 ng
ISTD/SURR	LS1039	1	1	250 ug/mL
PRIMARY 8260 STD	LS1031	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1034	1.5	12	1000 ug/mL
1,4-Dioxane	LS1036	1.5	12	10000ug/mL
TPH-GRO	LS1033	10	80	500ug/mL
SECONDARY 8260 STD	L2529	6.25	50	40 ug/mL
SECONDARY AC/AC	LS1032	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX	Client ID	Samp Date	Recd Date	% Moist	Comments
1	1	L6701	BFB150220										ok
2	2	L6702	CCV100	CCV100		5		A				100	ok
3	3	L6703	RB										/
4	4	L6704	BLKA150220-0	LKA150220-01		5		A				100	ok
5	5	L6705	TCLP150220	TCLP150220		0.1		T				100	ok
6	6	L6706	1273	1		0.1		T	GPEC-WC1-02181	02/18/15	02/19/15	100	ok
7	7	L6707	SPLP150207	SPLP150207		5		P				100	ok
8	8	L6708	995	2		5		P	SS-14A-01C/2.0	02/06/15	02/06/15	100	ok
9	9	L6709	1137	2		5		A	MW-3	02/12/15	02/12/15	100	ok
10	10	L6710		7		5		A	MW-2	02/12/15	02/12/15	100	ok
11	11	L6711		8		5		A	MW-6	02/12/15	02/12/15	100	ok
12	12	L6712		3		5		A	MW-4	02/12/15	02/12/15	100	ok
13	13	L6713	1213	1		5		A	MW-1/5	02/17/15	02/17/15	100	sample foaming, MeOH contamination
14	14	L6714		1		2.5		A	MW-1/5	02/17/15	02/17/15	100	ok
15	15	L6715	LCS-50PPB	CSA150220-01		5		A				100	ok
16	16	L6716	MS	1273-001MS		5		A				100	ok
17	17	L6717	MSD	273-001MSD		5		A				100	ok
18	18	L6718	RB									100	ok
19	19	L6719	RB										/
20	20	L6720	1137	5		5		A	FIELD_BLANK	02/12/15	02/12/15	100	ok
21	21	L6721		6		5		A	TRIP_BLANK	02/12/15	02/12/15	100	ok
22	22	L6722		1		5		A	MW-1R	02/12/15	02/12/15	100	ok
23	23	L6723		4		5		A	MW-5	02/12/15	02/12/15	100	ok
24	24	L6724	1214	1		5		A	MW-1/10	02/16/15	02/17/15	100	ok
25	25	L6725	1244	1		5		A	MW-1	02/17/15	02/18/15	100	ok
26	26	L6726		2		5		A	MW-2	02/17/15	02/18/15	100	ok
27	27	L6727		3		5		A	MW-3	02/17/15	02/18/15	100	ok
28	28	L6728	1137	7		5		A	MW-2	02/12/15	02/12/15	100	confirmation run for EDC
29	29	L6729	RB										/

LS1030 TPH-GRO Working Std @ 500 mg/ml
prep: 11/11/14 125 µl of Spex CertiPrep GAS-20 (Lot# C113091008) @ 20mg/ml
Exp: 11/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1031 8260 Primary std solution @ 40ppm
prep: 12/9/14 1ml DWM-588 @ 2,000ppm Lot# CL-0102 (Rec 3/6/14, exp: 2/28/17)
Exp: 3/8/15 1ml ECS-A40 2-Chloroethyl Vinyl ether Lot# CVE02 (Rec 6/7/13, exp: 11/19/15)
CXM 0.4ml of TBA @ 10,000ppm (LS1004, exp: 4/24/15)
0.4 ml of DIPE @ 5,000ppm (LS1016, exp: 7/24/15)
1ml of ECS-A43 Ketones @ 2,000ppm (Recd 12/27/13, exp: 10/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000ppm (Rec: 12/27/13, exp: 8/31/2016)
1ml of VOA-TRAIN-1 @ 2,000ppm Lot# C112121913 (Rec: 5/1/14, exp: 4/29/2015)
diluted into 50ml MeOH.

LS1032 Secondary Acrolein/Acrylonitrile @ 1000 ppm working soln
exp 12/15/14 1ml of ECS-A2038 (Lot# 120814, exp. 3/8/15) into 10ml
exp. 3/8/15 MeOH, final volume 10ml

LS1033 TPH-GRO working std @ 500 mg/ml
prep: 1/7/15 125µl of Spex CertiPrep GAS-20 (Lot# C113091008) @ 20mg/ml
Exp: 4/3/15 (exp: 1/13/17) diluted into 5ml MeOH
CXM

LS1034 Primary Acrolein/Acrylonitrile working std @ 1,000 mg/ml
prep: 1/13/15 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp: 4/8/15

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X R 1-13-15
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214121278
Exp: Apr 22, 2015
1 mL
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (< -10° C)

LS1035 BFB @ 25 µg/ml for tuning
pre: 1/20/15 1 ml of ECS-A-033 @ 50ppm Lot# 524 MM2 (Recd 10/15/14,
Exp: 4/20/15 exp 11/17/2016) into 1ml MeOH, Final Volume: 2 ml
CKM

LS1036 1,4-Dioxane working Std @ 10,000 ppm
pre: 1/20/15 Transfer 1,4-Dioxane @10,000 ppm (ECS-A-Diox) Lot# 111712
Exp: 4/20/15 (exp: 11/17/2015) into 1ml vial
CKM

LS1037 DIPE stock std soln @ 5,000 µg/ml
MXF 2/3/15 34.48 µl of DIPE neat (Recd 6/19/13, Lot# SHBB 6268V)
exp. 2/3/16 into 5ml MEOH

LS1038 Tert-butyl alcohol stock std @ 10,000 µg/ml
MXF 2/4/15 129 µl of Sigma-Aldrich Tert-butyl alcohol neat
exp. 2/4/16 (Recd 11/20/12) into 10ml MEOH

LS1039 IS/SURR working solution @ 250 µg/ml
pre: 4/5/15 1 ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of
Exp: 5/5/15 LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MEOH
CKM

trans 2528

2528 250 ppm screening work solution.

are 11/11/14 50 ml (cat# V0-2BL-12) (Lot# C113060408)

exp 2/11/15 at 5000 ug/ml dilut with 1ml MeOH.

200 ppm

L2529 ~~Secondary Mix of 200 ppm~~

P. 12/10/14 98 ml of L2478 MTBE/TAME/DIPE @ 5000 ppm/

3/10/15 1000 ppm/5000 ppm

2ml of ECS-A-049 Add-ons Mix #3 2000 ppm

MeOH Lot: AO309 received 7/17/14 exp 11/16/2015

2ml of ECS-524.2/8260 Main Mix 2000 ppm

ECS-A-033 Lot: 524MM20, received 7/17/14

exp. 11/17/16

MeOH 10ml's of Restek gases Mix 1000 ppm ECS-A-0

Lot: VGM022, received 12/24/14 exp. 11/6/15

2ml of M-8260-ADD-10x, received 6/13/14 exp.

03/04/15 12/23/14 into 100 ml of MeOH

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M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214101479
Exp: Mar 04, 2015

1 mL
8 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280

Storage: Freeze (<-10° C

[redacted]

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

524.2/8260 Main Mix 2000 ppm
(ECS-A-033) Lot: 524MM21 Exp. 11-17-2016
7-17-14

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

524.2/8260 Main Mix 2000 ppm
(ECS-A-033) Lot: 524MM21 Exp. 11-17-2016
7-17-14

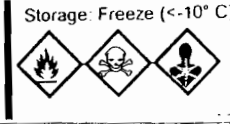
AccuStandard 203-786-5290 AccuStandard.com

M-8260-ADD-10X
Lot: 214101479
Exp: Mar 04, 2015

Date Opened:

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C



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M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214101479
Exp: Mar 04, 2015

1 mL
8 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280

Storage: Freeze (<-10° C

[redacted]

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

Method 8260 Add-Ons Mix #3 2000 ppm
(ECS-A-049) Lot: AO309 Exp: 11-16-2015
7-17-14

ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559

Method 8260 Add-Ons Mix #3 2000 ppm
(ECS-A-049) Lot: AO309 Exp: 11-16-2015
7-17-14

AccuStandard 203-786-5290 AccuStandard.com

M-8260-ADD-10X
Lot: 214101479
Exp: Mar 04, 2015

Date Opened

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C

SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	S1	#	S2	#	S3	#	S4	#	S5	#	S6	#
CCV040BNA2		C3744.D	N/A		N/A		N/A		N/A		N/A		N/A	
BLKS150219-01	SOIL	C3745.D	55		57		53		59		67		76	
LCSS150219-01	SOIL	C3746.D	54		63		59		65		73		78	
E15-01158-021MS	SOIL	C3747.D	50		55		52		57		61		63	
E15-01158-021MSD	SOIL	C3748.D	49		56		53		54		63		73	
E15-01273-001	SOIL	C3749.D	38		44		40		52		58		66	
E15-00920-002	SOIL	C3750.D	N/A		N/A		80		76		N/A		76	
E15-01248-002	SOIL	C3751.D	39		46		46		57		54		61	
E15-01248-004	SOIL	C3752.D	28	$	37		33		48		51		56	
E15-01248-006	SOIL	C3753.D	26	$	38		41		58		54		63	
E15-01158-021	SOIL	C3754.D	N/A		N/A		59		66		N/A		61	
E15-01158-022	SOIL	C3755.D	N/A		N/A		41		52		N/A		60	
E15-01246-001	SOIL	C3756.D	N/A		N/A		43		51		N/A		58	
E15-01246-002	SOIL	C3757.D	N/A		N/A		26	$	40		N/A		57	

	DKQPs		IAL	
	Aqueous	Soil	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	15-110	30-130	45-104	24-101
S2 (PHL) = Phenol-d5	15-110	30-130	52-106	23-108
S3 (NBZ) = Nitrobenzene-d5	30-130	30-130	57-107	26-98
S4 (FBP) = 2-Fluorobiphenyl	30-130	30-130	57-126	34-96
S5 (TBP) = 2,4,6-Tribromophenol	15-110	30-130	30-147	32-112
S6 (TPH) = Terphenyl-d14	30-130	30-130	68-133	19-118

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference
N/A Not applicable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-01
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3746.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	DKQP
N-Nitrosodimethylamine	50.0	26.8	54	$	40-140	70-130
Pyridine	50.0	23.9	48		20-120	20-160
Benzaldehyde	50.0	5.3	11	$	10-110	20-160
Phenol	50.0	28.3	57		30-140	20-160
Aniline	50.0	31.2	62	$	40-140	70-130
Bis(2-chloroethyl) ether	50.0	28.8	58	$	40-140	70-130
2-Chlorophenol	50.0	27.4	55		30-140	20-160
1,3-Dichlorobenzene	50.0	28.1	56	$	40-140	70-130
1,4-Dichlorobenzene	50.0	25.2	50	$	40-140	70-130
Benzyl alcohol	50.0	30.1	60	$	40-140	70-130
1,2-Dichlorobenzene	50.0	26.8	54	$	40-140	70-130
2-Methylphenol	50.0	38.1	76		30-140	20-160
Bis(2-chloroisopropyl) ether	50.0	30.7	61	$	40-140	70-130
4-Methylphenol	50.0	33.2	66	$	30-140	70-130
N-Nitrosodi-n-propylamine	50.0	31.0	62	$	40-140	70-130
Acetophenone	50.0	31.4	63	$	40-140	70-130
3-Methylphenol	50.0	33.2	66		30-140	20-160
Hexachloroethane	50.0	26.9	54	$	40-140	70-130
Nitrobenzene	50.0	29.6	59	$	40-140	70-130
Isophorone	50.0	31.6	63	$	40-140	70-130
2-Nitrophenol	50.0	29.7	59		30-140	20-160
2,4-Dimethylphenol	50.0	30.0	60		30-140	20-160
Bis(2-chloroethoxy) methane	50.0	29.3	59	$	40-140	70-130
Benzoic acid	50.0	33.0	66		30-140	20-160
2,4-Dimethylaniline	50.0	36.2	72		40-140	70-130
2,4-Dichlorophenol	50.0	29.2	58		30-140	20-160
1,2,4-Trichlorobenzene	50.0	28.7	57	$	40-140	70-130
Naphthalene	50.0	29.0	58	$	40-140	70-130
4-Chloroaniline	50.0	33.0	66	$	40-140	70-130
Hexachlorobutadiene	50.0	29.8	60	$	40-140	70-130
Caprolactam	50.0	34.4	69	$	40-140	70-130
4-Chloro-3-methylphenol	50.0	29.9	60		30-140	20-160
2-Methylnaphthalene	50.0	33.3	67	$	40-140	70-130
Hexachlorocyclopentadiene	50.0	9.8	20		5-105	20-160
2,4,6-Trichlorophenol	50.0	30.3	61		30-140	20-160
2,4,5-Trichlorophenol	50.0	34.8	70		30-140	20-160
1,1'-Biphenyl	50.0	34.9	70		40-140	70-130
2-Chloronaphthalene	50.0	32.1	64	$	40-140	70-130
2-Nitroaniline	50.0	35.5	71		40-140	70-130
Dimethyl phthalate	50.0	32.7	65	$	40-140	70-130
2,6-Dinitrotoluene	50.0	34.9	70		40-140	70-130
Acenaphthylene	50.0	32.6	65	$	40-140	70-130
3-Nitroaniline	50.0	36.4	73		40-140	70-130
Acenaphthene	50.0	32.5	65		40-140	20-160
2,4-Dinitrophenol	50.0	20.5	41		5-105	20-160

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-01
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3746.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	Rec Limits DKQP
4-Nitrophenol	50.0	26.4	53		30-140	20-160
2,4-Dinitrotoluene	50.0	36.3	73		40-140	70-130
Dibenzofuran	50.0	34.1	68	$	40-140	70-130
Diethyl phthalate	50.0	31.4	63	$	40-140	70-130
Fluorene	50.0	32.2	64	$	40-140	70-130
4-Chlorophenyl phenyl ether	50.0	33.6	67	$	40-140	70-130
4-Nitroaniline	50.0	32.3	65	$	40-140	70-130
1,2,4,5-Tetrachlorobenzene	50.0	33.5	67	$	40-140	70-130
2,3,4,6-Tetrachlorophenol	50.0	35.9	72		40-140	70-130
4,6-Dinitro-2-methylphenol	50.0	35.3	71		10-110	20-160
N-Nitrosodiphenylamine	50.0	35.1	70		40-140	70-130
1,2-Diphenylhydrazine	50.0	29.7	59	$	40-140	70-130
4-Bromophenyl phenyl ether	50.0	34.1	68	$	40-140	70-130
Hexachlorobenzene	50.0	33.6	67	$	40-140	70-130
Atrazine	50.0	37.8	76		20-120	20-160
Pentachlorophenol	50.0	28.4	57		30-140	20-160
Phenanthrene	50.0	32.9	66	$	40-140	70-130
Anthracene	50.0	34.3	69	$	40-140	70-130
Carbazole	50.0	33.9	68	$	40-140	70-130
Di-n-butyl phthalate	50.0	33.8	68	$	40-140	70-130
Fluoranthene	50.0	32.2	64	$	40-140	70-130
Benzidine	50.0	8.1	16	$	5-105	20-160
Pyrene	50.0	39.1	78		40-140	70-130
3,3'-Dimethylbenzidine	50.0	14.5	29		5-105	20-160
Butyl benzyl phthalate	50.0	36.5	73		40-140	70-130
3,3'-Dichlorobenzidine	50.0	34.3	69	$	40-140	70-130
Benzo[a]anthracene	50.0	35.6	71		40-140	70-130
Chrysene	50.0	37.2	74		40-140	70-130
Bis(2-ethylhexyl) phthalate	50.0	37.4	75		40-140	70-130
Di-n-octyl phthalate	50.0	58.4	117		40-140	70-130
Benzo[b]fluoranthene	50.0	48.5	97		40-140	70-130
Benzo[k]fluoranthene	50.0	57.1	114		40-140	70-130
Benzo[a]pyrene	50.0	49.7	99		40-140	70-130
Indeno[1,2,3-cd]pyrene	50.0	43.6	87		40-140	70-130
Dibenz[a,h]anthracene	50.0	44.5	89		40-140	70-130
Benzo[g,h,i]perylene	50.0	42.7	85		40-140	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01158-021
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: C3747.D
MSD Data file: C3748.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD limits IAL	DKQP
N-Nitrosodimethylamine	50.0	0.0	30.5	61	$	29.5	59	$	3		40-140/30	70-130/30
Pyridine	50.0	0.0	17.3	35		16.6	33		4		20-120/30	20-160/30
Benzaldehyde	50.0	0.0	22.6	45		22.5	45		0		10-110/30	20-160/30
Phenol	50.0	0.0	31.1	62		30.8	62		1		30-140/30	20-160/30
Aniline	50.0	0.0	27.6	55	$	32.5	65	$	16		40-140/30	70-130/30
Bis(2-chloroethyl) ether	50.0	0.0	30.8	62	$	33.0	66	$	7		40-140/30	70-130/30
2-Chlorophenol	50.0	0.0	30.3	61		30.0	60		1		30-140/30	20-160/30
1,3-Dichlorobenzene	50.0	0.0	31.5	63	$	30.9	62	$	2		40-140/30	70-130/30
1,4-Dichlorobenzene	50.0	0.0	29.8	60	$	29.5	59	$	1		40-140/30	70-130/30
Benzyl alcohol	50.0	0.0	32.2	64	$	32.0	64	$	1		40-140/30	70-130/30
1,2-Dichlorobenzene	50.0	0.0	29.9	60	$	29.9	60	$	0		40-140/30	70-130/30
2-Methylphenol	50.0	0.0	41.3	83		41.5	83		0		30-140/30	20-160/30
Bis(2-chloroisopropyl) ether	50.0	0.0	33.0	66	$	33.1	66	$	0		40-140/30	70-130/30
4-Methylphenol	50.0	0.0	34.0	68	$	34.2	68	$	1		30-140/30	70-130/30
N-Nitrosodi-n-propylamine	50.0	0.0	37.3	75		34.6	69	$	8		40-140/30	70-130/30
Acetophenone	50.0	0.0	32.8	66	$	33.2	66	$	1		40-140/30	70-130/30
3-Methylphenol	50.0	0.0	34.0	68		34.2	68		1		30-140/30	20-160/30
Hexachloroethane	50.0	0.0	31.2	62	$	31.7	63	$	2		40-140/30	70-130/30
Nitrobenzene	50.0	0.0	30.2	60	$	32.1	64	$	6		40-140/30	70-130/30
Isophorone	50.0	0.0	32.0	64	$	32.9	66	$	3		40-140/30	70-130/30
2-Nitrophenol	50.0	0.0	31.3	63		31.2	62		0		30-140/30	20-160/30
2,4-Dimethylphenol	50.0	0.0	30.3	61		32.3	65		6		30-140/30	20-160/30
Bis(2-chloroethoxy) methane	50.0	0.0	30.3	61	$	31.5	63	$	4		40-140/30	70-130/30
Benzoic acid	50.0	0.0	17.2	34		17.9	36		4		30-140/30	20-160/30
2,4-Dimethylaniline	50.0	0.0	30.4	61	$	35.0	70		14		40-140/30	70-130/30
2,4-Dichlorophenol	50.0	0.0	30.4	61		30.8	62		1		30-140/30	20-160/30
1,2,4-Trichlorobenzene	50.0	0.0	30.7	61	$	31.3	63	$	2		40-140/30	70-130/30
Naphthalene	50.0	0.0	29.4	59	$	30.0	60	$	2		40-140/30	70-130/30
4-Chloroaniline	50.0	0.0	25.4	51	$	33.2	66	$	27		40-140/30	70-130/30
Hexachlorobutadiene	50.0	0.0	30.8	62	$	31.5	63	$	2		40-140/30	70-130/30
Caprolactam	50.0	0.0	32.2	64	$	32.9	66	$	2		40-140/30	70-130/30
4-Chloro-3-methylphenol	50.0	0.0	29.9	60		30.0	60		0		30-140/30	20-160/30
2-Methylnaphthalene	50.0	0.0	34.2	68	$	35.0	70		2		40-140/30	70-130/30
Hexachlorocyclopentadiene	50.0	0.0	15.8	32		11.8	24		29		5-105/30	20-160/30
2,4,6-Trichlorophenol	50.0	0.0	31.5	63		30.8	62		2		30-140/30	20-160/30
2,4,5-Trichlorophenol	50.0	0.0	35.9	72		35.4	71		1		30-140/30	20-160/30
1,1'-Biphenyl	50.0	0.0	35.1	70		35.1	70		0		40-140/30	70-130/30
2-Chloronaphthalene	50.0	0.0	32.6	65	$	32.5	65	$	0		40-140/30	70-130/30
2-Nitroaniline	50.0	0.0	35.9	72		37.6	75		5		40-140/30	70-130/30
Dimethyl phthalate	50.0	0.0	33.4	67	$	32.3	65	$	3		40-140/30	70-130/30
2,6-Dinitrotoluene	50.0	0.0	37.8	76		35.8	72		5		40-140/30	70-130/30
Acenaphthylene	50.0	0.0	33.5	67	$	31.9	64	$	5		40-140/30	70-130/30
3-Nitroaniline	50.0	0.0	29.7	59	$	35.0	70		16		40-140/30	70-130/30
Acenaphthene	50.0	0.0	33.4	67		32.7	65		2		40-140/30	20-160/30
2,4-Dinitrophenol	50.0	0.0	2.9	6	$	3.7	7	$	24		5-105/30	20-160/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01158-021
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: C3747.D
MSD Data file: C3748.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD IAL Limits	Rec/RPD DKQP Limits
4-Nitrophenol	50.0	0.0	25.4	51		24.2	48		5		30-140/30	20-160/30
2,4-Dinitrotoluene	50.0	0.0	37.8	76		35.8	72		5		40-140/30	70-130/30
Dibenzofuran	50.0	0.0	34.5	69	$	34.9	70		1		40-140/30	70-130/30
Diethyl phthalate	50.0	0.0	32.1	64	$	32.1	64	$	0		40-140/30	70-130/30
Fluorene	50.0	0.0	32.9	66	$	32.8	66	$	0		40-140/30	70-130/30
4-Chlorophenyl phenyl ether	50.0	0.0	34.5	69	$	34.0	68	$	1		40-140/30	70-130/30
4-Nitroaniline	50.0	0.0	24.9	50	$	29.0	58	$	15		40-140/30	70-130/30
1,2,4,5-Tetrachlorobenzene	50.0	0.0	35.5	71		34.0	68	$	4		40-140/30	70-130/30
2,3,4,6-Tetrachlorophenol	50.0	0.0	33.8	68	$	32.0	64	$	5		40-140/30	70-130/30
4,6-Dinitro-2-methylphenol	50.0	0.0	15.6	31		15.8	32		1		10-110/30	20-160/30
N-Nitrosodiphenylamine	50.0	0.0	35.1	70		36.4	73		4		40-140/30	70-130/30
1,2-Diphenylhydrazine	50.0	0.0	30.1	60	$	32.6	65	$	8		40-140/30	70-130/30
4-Bromophenyl phenyl ether	50.0	0.0	33.7	67	$	34.7	69	$	3		40-140/30	70-130/30
Hexachlorobenzene	50.0	0.0	33.2	66	$	34.3	69	$	3		40-140/30	70-130/30
Atrazine	50.0	0.0	37.8	76		38.3	77		1		20-120/30	20-160/30
Pentachlorophenol	50.0	0.0	22.2	44		21.9	44		1		30-140/30	20-160/30
Phenanthrene	50.0	0.0	33.5	67	$	33.9	68	$	1		40-140/30	70-130/30
Anthracene	50.0	0.0	33.8	68	$	34.9	70		3		40-140/30	70-130/30
Carbazole	50.0	0.0	32.5	65	$	34.5	69	$	6		40-140/30	70-130/30
Di-n-butyl phthalate	50.0	0.0	34.1	68	$	35.6	71		4		40-140/30	70-130/30
Fluoranthene	50.0	0.0	32.1	64	$	33.0	66	$	3		40-140/30	70-130/30
Benzidine	50.0	0.0	3.2	6	$	3.7	7	$	14		5-105/30	20-160/30
Pyrene	50.0	0.0	35.5	71		40.8	82		14		40-140/30	70-130/30
3,3'-Dimethylbenzidine	50.0	0.0	9.1	18	$	10.0	20		9		5-105/30	20-160/30
Butyl benzyl phthalate	50.0	0.0	32.8	66	$	39.7	79		19		40-140/30	70-130/30
3,3'-Dichlorobenzidine	50.0	0.0	26.2	52	$	31.9	64	$	20		40-140/30	70-130/30
Benzo[a]anthracene	50.0	0.0	29.2	58	$	35.1	70		18		40-140/30	70-130/30
Chrysene	50.0	0.0	30.7	61	$	34.8	70		13		40-140/30	70-130/30
Bis(2-ethylhexyl) phthalate	50.0	0.0	40.1	80		39.8	80		1		40-140/30	70-130/30
Di-n-octyl phthalate	50.0	0.0	54.4	109		62.5	125		14		40-140/30	70-130/30
Benzo[b]fluoranthene	50.0	0.0	49.6	99		49.7	99		0		40-140/30	70-130/30
Benzo[k]fluoranthene	50.0	0.0	43.9	88		46.1	92		5		40-140/30	70-130/30
Benzo[a]pyrene	50.0	0.0	46.1	92		51.4	103		11		40-140/30	70-130/30
Indeno[1,2,3-cd]pyrene	50.0	0.0	41.4	83		46.7	93		12		40-140/30	70-130/30
Dibenz[a,h]anthracene	50.0	0.0	43.1	86		45.7	91		6		40-140/30	70-130/30
Benzo[g,h,i]perylene	50.0	0.0	43.6	87		46.7	93		7		40-140/30	70-130/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C3745.D Instrument ID: MSDC

Date Extracted: 02/19/15 Matrix: SOIL

Date Analyzed: 02/20/2015 Time Analyzed: 12:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS150219-01	02/20/2015	12:36
.	E15-01158-021MS	02/20/2015	12:51
.	E15-01158-021MSD	02/20/2015	13:07
GPEC-WC1	E15-01273-001	02/20/2015	13:22
S-2	E15-00920-002	02/20/2015	13:37
WC-1/0-4	E15-01248-002	02/20/2015	13:53
WC-2/0-4	E15-01248-004	02/20/2015	14:08
WC-3/0-4	E15-01248-006	02/20/2015	14:24
SB-13	E15-01158-021	02/20/2015	14:39
SB-14	E15-01158-022	02/20/2015	14:55
SB-N	E15-01246-001	02/20/2015	15:10
SB-S	E15-01246-002	02/20/2015	15:26

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C3568.D DFTPP Injection Date : 02/10/2015

Inst ID: MSDC DFTPP Injection Time: 11:24

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	38.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	43.7	
70	Less than 2.0% of mass 69	0.7	(1.7)1
127	40.0 - 60.0% of mass 198	52.5	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.3	
275	10.0 - 30.0% of mass 198	21.0	
365	Greater than 1.0% of mass 198	1.3	
441	Present, but less than mass 443	8.16	(74.8)3
442	40.0 - 100.0% of mass 198	51.2	
443	17.0 - 23.0% of mass 442	10.9	(21.3)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN011-15	ICC040BNA1	C3569.D	02/10/2015	11:34
ABN008-15	ICC001BNA1	C3570.D	02/10/2015	11:50
ABN009-15	ICC010BNA1	C3571.D	02/10/2015	12:05
ABN010-15	ICC020BNA1	C3572.D	02/10/2015	12:19
ABN012-15	ICC080BNA1	C3573.D	02/10/2015	12:35
ABN013-15	ICC160BNA1	C3574.D	02/10/2015	12:50
ABN004-15	ICV040BNA1	C3575.D	02/10/2015	13:06
ABN019-15	ICC160BNA2	C3576.D	02/10/2015	13:22
ABN018-15	ICC080BNA2	C3577.D	02/10/2015	13:37
ABN017-15	ICC040BNA2	C3578.D	02/10/2015	13:53
ABN016-15	ICC020BNA2	C3579.D	02/10/2015	14:08
ABN015-15	ICC010BNA2	C3580.D	02/10/2015	14:24
ABN014-15	ICC001BNA2	C3581.D	02/10/2015	14:39
ABN031-15	ICV040BNA2	C3582.D	02/10/2015	14:55

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C3742.D

DFTPP Injection Date : 02/20/2015

Inst ID: MSDC

DFTPP Injection Time: 11:39

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	46.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	54.1	
70	Less than 2.0% of mass 69	0.8	(1.4)1
127	40.0 - 60.0% of mass 198	57.5	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	8.0	
275	10.0 - 30.0% of mass 198	19.5	
365	Greater than 1.0% of mass 198	1.4	
441	Present, but less than mass 443	7.24	(71.1)3
442	40.0 - 100.0% of mass 198	48.5	
443	17.0 - 23.0% of mass 442	10.2	(21.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN004-15	CCV040BNA1	C3743.D	02/20/2015	11:50
ABN031-15	CCV040BNA2	C3744.D	02/20/2015	12:05
.	BLKS150219-01	C3745.D	02/20/2015	12:21
.	LCSS150219-01	C3746.D	02/20/2015	12:36
.	E15-01158-021MS	C3747.D	02/20/2015	12:51
.	E15-01158-021MSD	C3748.D	02/20/2015	13:07
GPEC-WC1	E15-01273-001	C3749.D	02/20/2015	13:22
S-2	E15-00920-002	C3750.D	02/20/2015	13:37
WC-1/0-4	E15-01248-002	C3751.D	02/20/2015	13:53
WC-2/0-4	E15-01248-004	C3752.D	02/20/2015	14:08
WC-3/0-4	E15-01248-006	C3753.D	02/20/2015	14:24
SB-13	E15-01158-021	C3754.D	02/20/2015	14:39
SB-14	E15-01158-022	C3755.D	02/20/2015	14:55
SB-N	E15-01246-001	C3756.D	02/20/2015	15:10
SB-S	E15-01246-002	C3757.D	02/20/2015	15:26

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3569.D

Date Analyzed: 02/10/2015

Instrument ID: MSDC

Time Analyzed: 11:34

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	128878		2.48		491089		3.03		306133		3.86	
	UPPER LIMIT	257756		2.98		982178		3.53		612266		4.36	
	LOWER LIMIT	64439		1.98		245545		2.53		153067		3.36	
	LAB SAMPLE ID												
01	ICC001BNA1	120599		2.47		481938		3.02		308833		3.85	
02	ICC010BNA1	121980		2.47		482893		3.02		310857		3.84	
03	ICC020BNA1	124974		2.47		495357		3.02		318422		3.83	
04	ICC080BNA1	117890		2.48		452565		3.02		283380		3.83	
05	ICC160BNA1	116160		2.48		433200		3.02		285658		3.83	
06	ICV040BNA1	140335		2.47		547618		3.02		342721		3.84	
07	ICC160BNA2	112064		2.47		438405		3.02		282014		3.83	
08	ICC080BNA2	118843		2.47		459361		3.02		307746		3.83	
09	ICC040BNA2	122613		2.47		473594		3.02		311728		3.83	
10	ICC020BNA2	130773		2.47		493240		3.02		325159		3.83	
11	ICC010BNA2	118679		2.47		459942		3.02		300684		3.83	
12	ICC001BNA2	113727		2.47		424579		3.02		279832		3.83	
13	ICV040BNA2	117923		2.47		451084		3.02		293610		3.83	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3569.D

Date Analyzed: 02/10/2015

Instrument ID: MSDC

Time Analyzed: 11:34

	40 ppm	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	510793		4.64		443021		6.42		309002		7.78	
	UPPER LIMIT	1021586		5.14		886042		6.92		618004		8.28	
	LOWER LIMIT	255397		4.14		221511		5.92		154501		7.28	
	LAB SAMPLE ID												
01	ICC001BNA1	525203		4.62		530919		6.40		366392		7.78	
02	ICC010BNA1	529904		4.61		511752		6.38		339678		7.74	
03	ICC020BNA1	527797		4.60		481370		6.37		324066		7.73	
04	ICC080BNA1	464948		4.60		406279		6.36		330161		7.72	
05	ICC160BNA1	452920		4.60		432931		6.37		364958		7.73	
06	ICV040BNA1	556309		4.60		452138		6.37		293263		7.74	
07	ICC160BNA2	482111		4.60		446203		6.37		368020		7.73	
08	ICC080BNA2	506712		4.59		476955		6.35		354984		7.72	
09	ICC040BNA2	531401		4.59		512173		6.36		368255		7.72	
10	ICC020BNA2	557105		4.59		513638		6.36		367657		7.71	
11	ICC010BNA2	506182		4.59		513614		6.36		377287		7.73	
12	ICC001BNA2	487355		4.60		487361		6.36		367497		7.73	
13	ICV040BNA2	505182		4.59		494765		6.34		354952		7.71	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3743.D

Date Analyzed: 02/20/2015

Instrument ID: MSDC

Time Analyzed: 11:50

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	126309		2.47		488911		3.02		306165		3.85	
	UPPER LIMIT	252618		2.97		977822		3.52		612330		4.35	
	LOWER LIMIT	63155		1.97		244456		2.52		153083		3.35	
	LAB SAMPLE ID												
01	CCV040BNA2	115264		2.47		473345		3.02		295665		3.85	
02	BLKS150219-01	207374		2.47		787539		3.02		507870		3.86	
03	LCSS150219-01	196449		2.47		769799		3.02		482907		3.84	
04	E15-01158-021MS	226612		2.47		921329		3.02		565711		3.84	
05	E15-01158-021MSD	198493		2.47		783720		3.02		503473		3.84	
06	E15-01273-001	232545		2.47		843807		3.02		499791		3.83	
07	E15-00920-002	206753		2.47		787215		3.02		415988		3.84	
08	E15-01248-002	224253		2.47		830558		3.02		459897		3.83	
09	E15-01248-004	219591		2.47		790921		3.02		435582		3.84	
10	E15-01248-006	227638		2.47		840664		3.02		457148		3.84	
11	E15-01158-021	148429		2.47		573169		3.02		336535		3.84	
12	E15-01158-022	202861		2.47		779927		3.02		456718		3.84	
13	E15-01246-001	218577		2.47		814014		3.02		460180		3.83	
14	E15-01246-002	192149		2.47		732890		3.02		421426		3.83	
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C3743.D

Date Analyzed: 02/20/2015

Instrument ID: MSDC

Time Analyzed: 11:50

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	514072	4.64	487175	6.42	339778	7.78
	UPPER LIMIT	1028144	5.14	974350	6.92	679556	8.28
	LOWER LIMIT	257036	4.14	243588	5.92	169889	7.28
	LAB SAMPLE ID						
01	CCV040BNA2	497118	4.62	519865	6.40	424296	7.77
02	BLKS150219-01	872040	4.64	776719	6.42	345367	7.78
03	LCSS150219-01	783779	4.61	604354	6.38	258590	7.74
04	E15-01158-021MS	922302	4.61	777322	6.38	303669	7.74
05	E15-01158-021MSD	789669	4.60	585903	6.38	247743	7.73
06	E15-01273-001	697019	4.59	475946	6.36	306634	7.72
07	E15-00920-002	574757	4.61	558060	6.39	344898	7.77
08	E15-01248-002	613073	4.59	496990	6.37	333728	7.72
09	E15-01248-004	578188	4.60	497495	6.38	317234	7.74
10	E15-01248-006	615863	4.60	494496	6.37	308217	7.74
11	E15-01158-021	474921	4.61	401415	6.38	250946	7.74
12	E15-01158-022	633416	4.60	506712	6.37	309039	7.72
13	E15-01246-001	627872	4.59	498385	6.36	316589	7.73
14	E15-01246-002	585123	4.60	495876	6.37	313689	7.73
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3749.D
Acq On : 20 Feb 2015 13:22
Operator : EDM
Sample : GPEC-WC1,E15-01273-001,S,15.24g,10.6,1
Misc : 150219-01,02/19/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 14:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

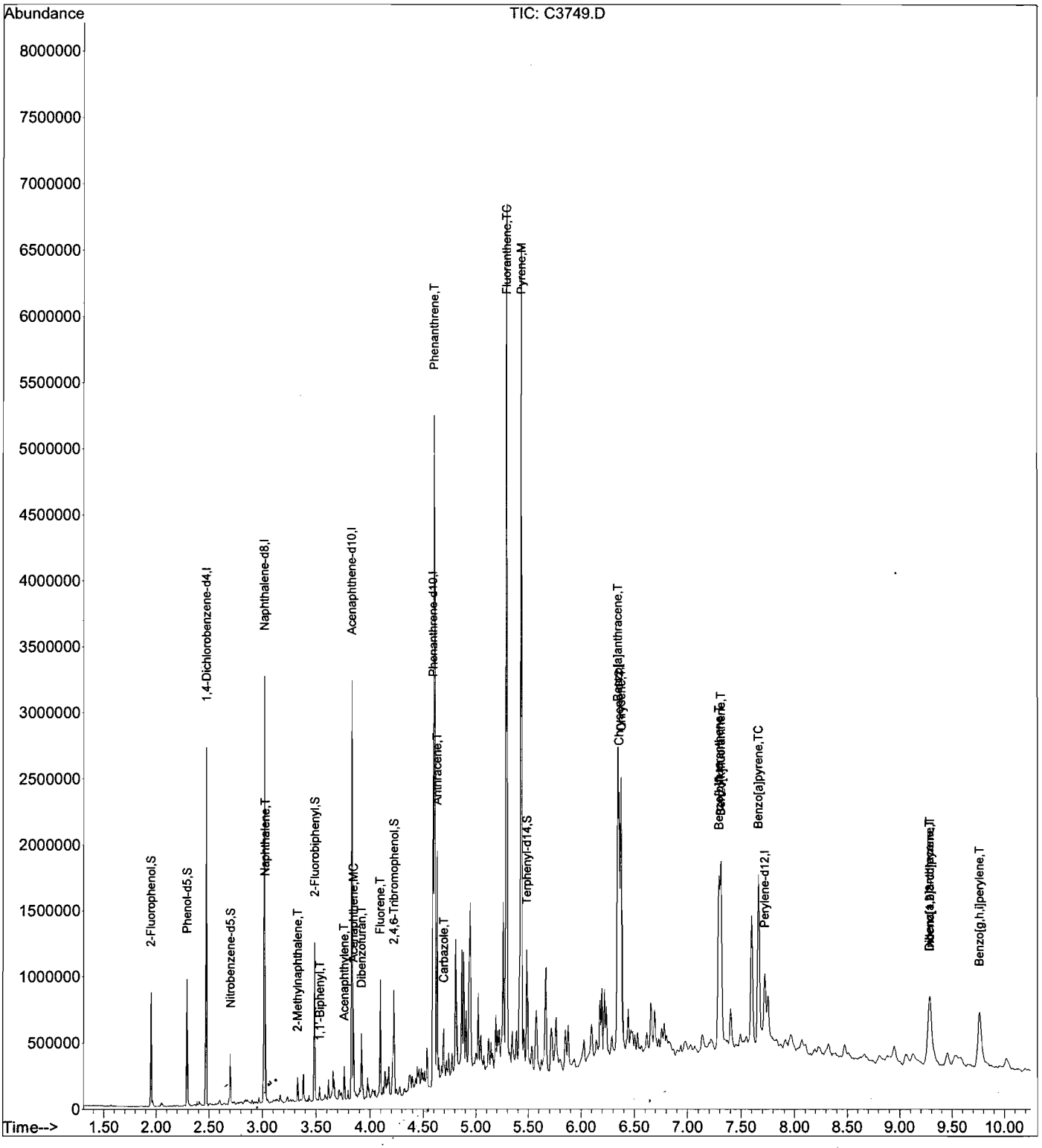
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	232545	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	843807	40.00	UG		-0.01
43) Acenaphthene-d10	3.83	164	499791	40.00	UG		-0.03
66) Phenanthrene-d10	4.59	188	697019	40.00	UG		-0.05
82) Chrysene-d12	6.36	240	475946	40.00	UG		-0.07
92) Perylene-d12	7.72	264	306634	40.00	UG		-0.06
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	132964	18.65	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	18.65%#			
6) Phenol-d5	2.29	99	193120	22.24	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	22.24%#			
24) Nitrobenzene-d5	2.70	82	68693	10.19	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery =	20.38%#			
47) 2-Fluorobiphenyl	3.49	172	223235	12.87	UG		-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	25.74%#			
70) 2,4,6-Tribromophenol	4.22	330	79615	28.68	UG		-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	28.68%#			
84) Terphenyl-d14	5.48	244	220522m	16.70	UG		-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	33.40%			
Target Compounds							Qvalue
34) Naphthalene	3.03	128	95317	4.04	UG	#	57
41) 2-Methylnaphthalene	3.33	142	35887	2.22	UG		94
48) 1,1'-Biphenyl	3.53	154	16435	0.88	UG		94
53) Acenaphthylene	3.76	152	55050	2.43	UG		100
55) Acenaphthene	3.84	153	106522	7.33	UG		88
59) Dibenzofuran	3.92	168	121435	5.88	UG	#	81
61) Fluorene	4.10	166	130333	7.84	UG		99
75) Phenanthrene	4.61	178	1561119	77.57	UG		98
76) Anthracene	4.63	178	456404	22.80	UG		98
77) Carbazole	4.69	167	107388	6.12	UG		99
79) Fluoranthene	5.29	202	2025519	97.11	UG	#	93
83) Pyrene	5.43	202	1813693	117.35	UG	#	86
88) Benzo[a]anthracene	6.34	228	745377	55.25	UG	#	93
89) Chrysene	6.38	228	776464	61.89	UG		98
94) Benzo[b]fluoranthene	7.30	252	645539m	57.72	UG		
95) Benzo[k]fluoranthene	7.31	252	658839	62.26	UG	#	84
96) Benzo[a]pyrene	7.66	252	699481	67.17	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.29	276	502144	38.47	UG	#	51
98) Dibenz[a,h]anthracene	9.28	278	128626	12.02	UG	#	64
99) Benzo[g,h,i]perylene	9.76	276	491013	45.35	UG	#	53

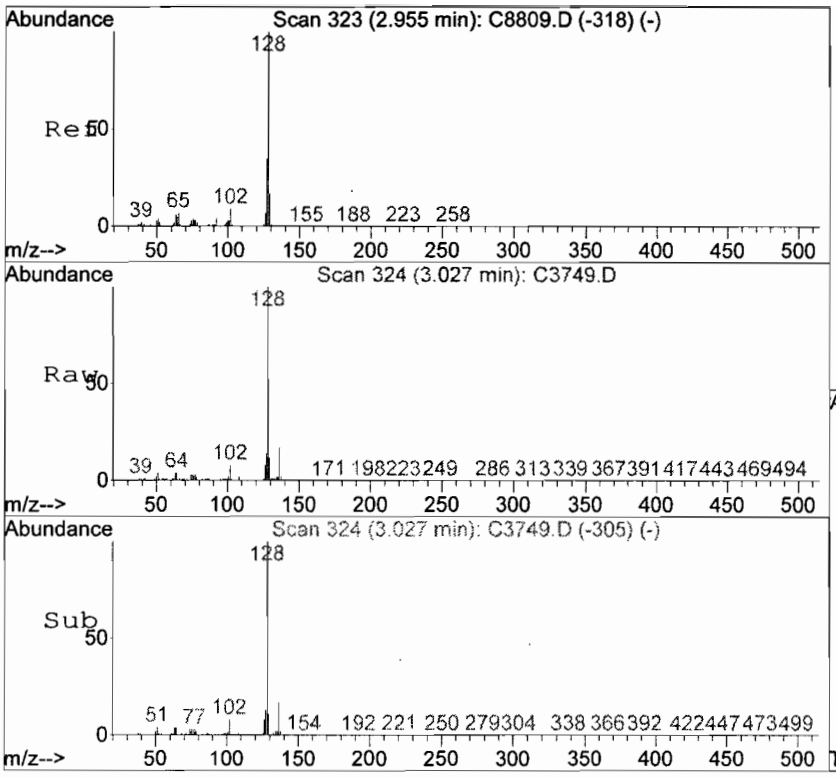
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3749.D
Acq On : 20 Feb 2015 13:22
Operator : EDM
Sample : GPEC-WC1,E15-01273-001,S,15.24g,10.6,1
Misc : 150219-01,02/19/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 20 14:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

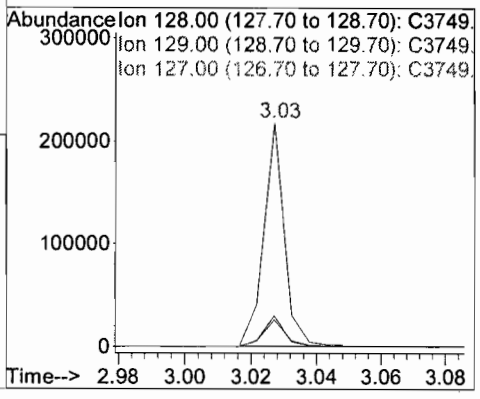


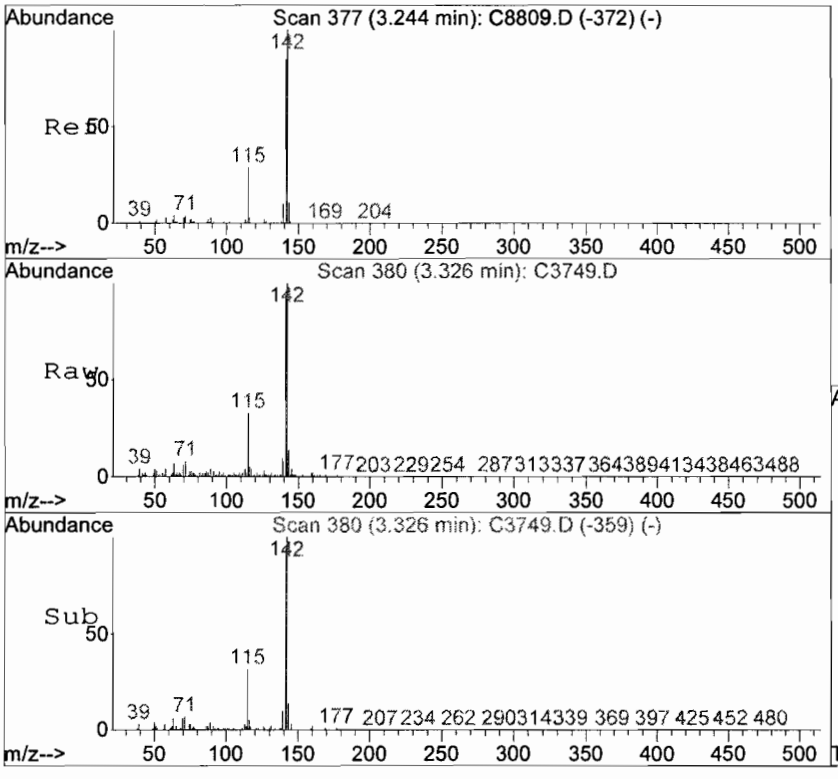


#34
Naphthalene
Concen: 4.04 UG
RT: 3.03 min Scan# 324
Delta R.T. -0.01 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:128 Resp: 95317

Ion	Ratio	Lower	Upper
128	100		
129	14.1	19.6	29.4#
127	14.3	41.3	61.9#

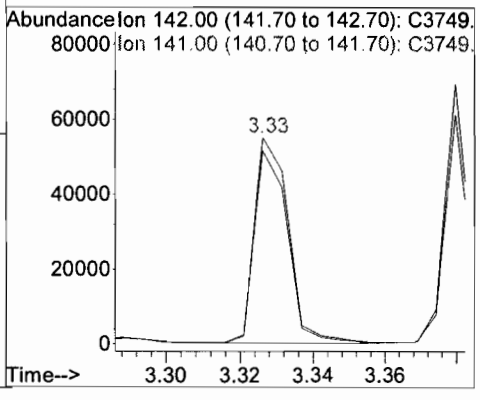


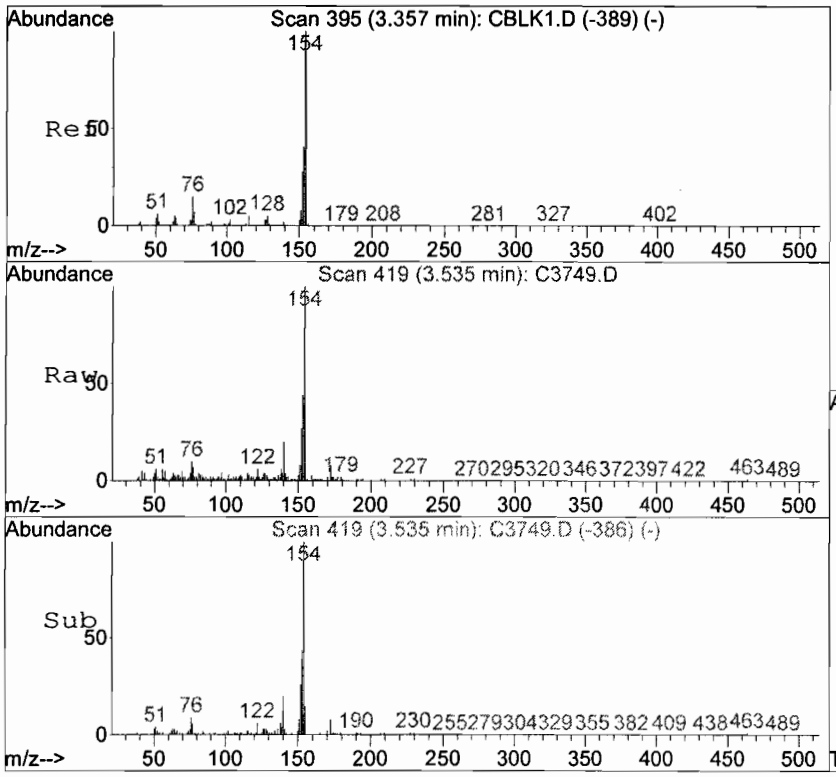


#41
2-Methylnaphthalene
Concen: 2.22 UG
RT: 3.33 min Scan# 380
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:142 Resp: 35887

Ion	Ratio	Lower	Upper
142	100		
141	90.8	68.6	102.8

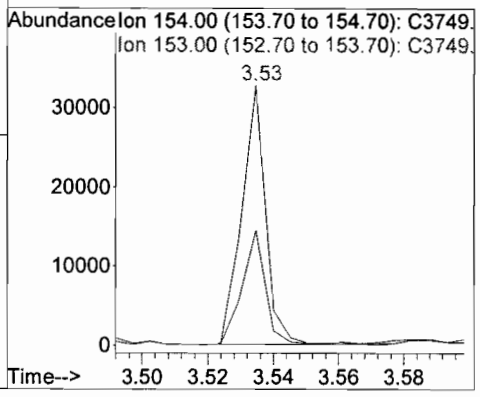


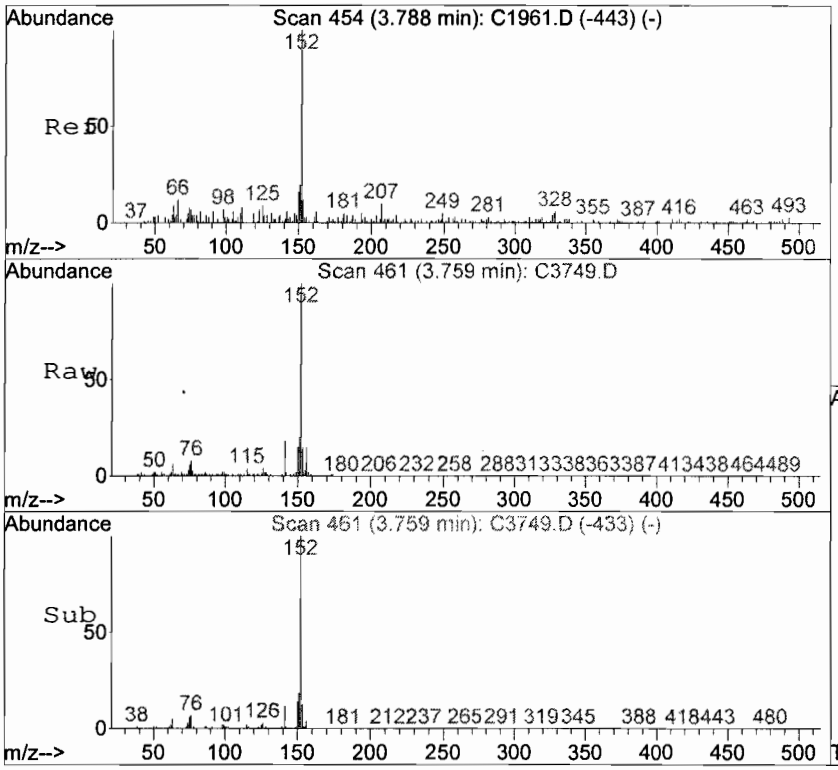


#48
1,1'-Bipheny1
Concen: 0.88 UG
RT: 3.53 min Scan# 419
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:154 Resp: 16435

Ion	Ratio	Lower	Upper
154	100		
153	43.9	32.3	48.5

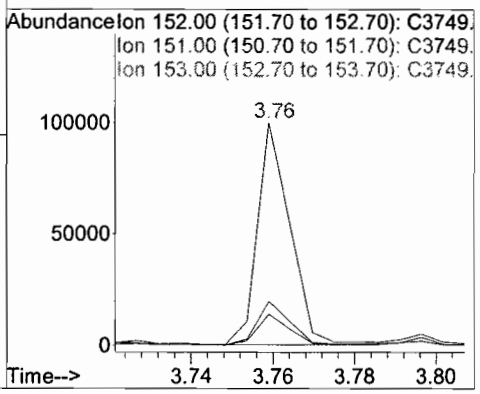


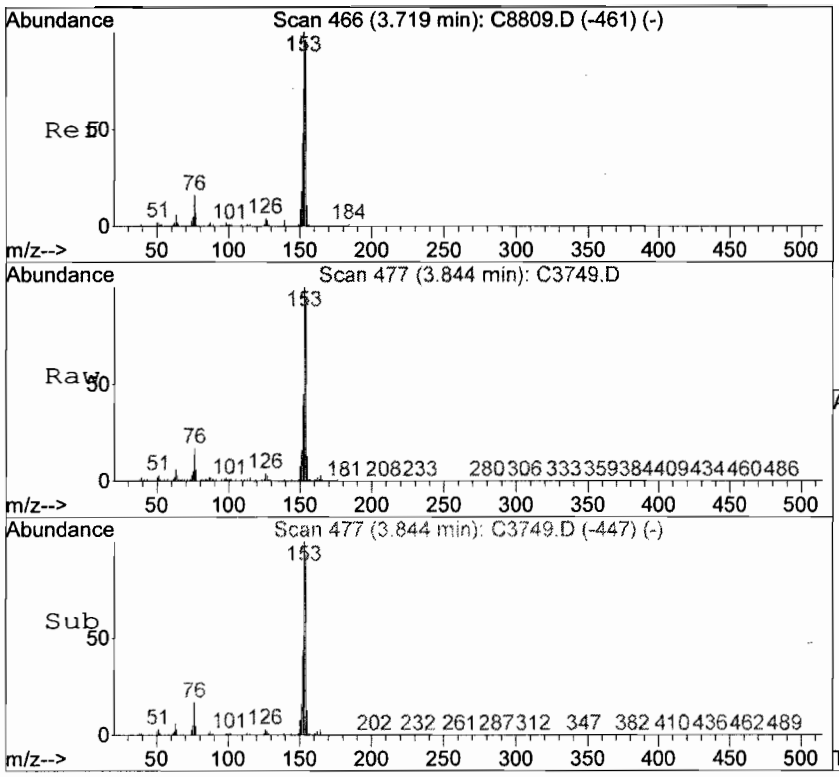


#53
Acenaphthy1ene
Concen: 2.43 UG
RT: 3.76 min Scan# 461
Delta R.T. -0.02 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:152 Resp: 55050

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.8	23.6
153	13.8	11.2	16.8

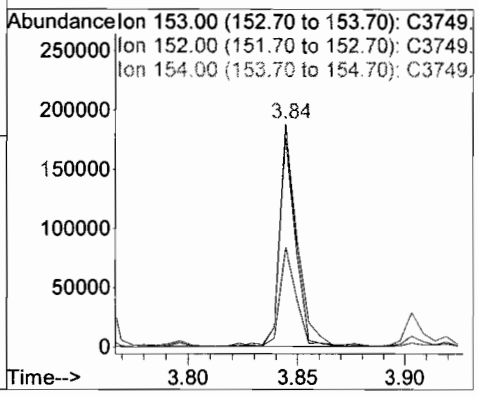


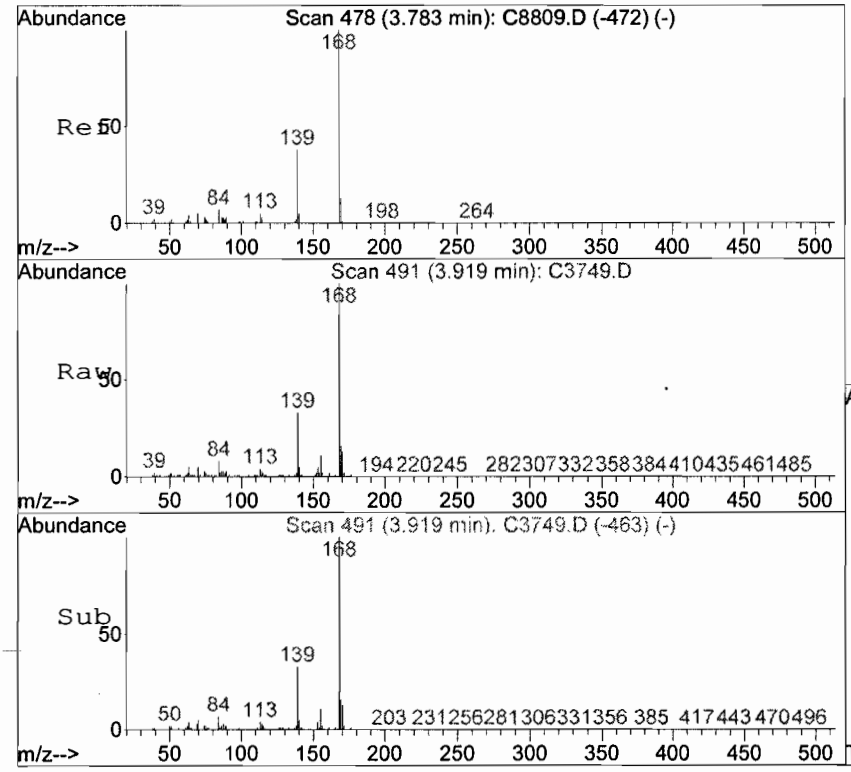


#55
Acenaphthene
Concen: 7.33 UG
RT: 3.84 min Scan# 477
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:153 Resp: 106522

Ion	Ratio	Lower	Upper
153	100		
152	43.7	37.7	56.5
154	87.2	82.6	124.0

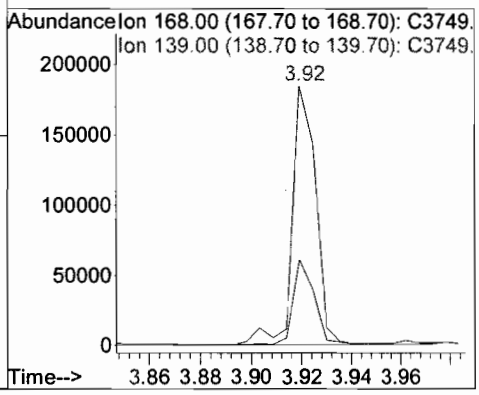


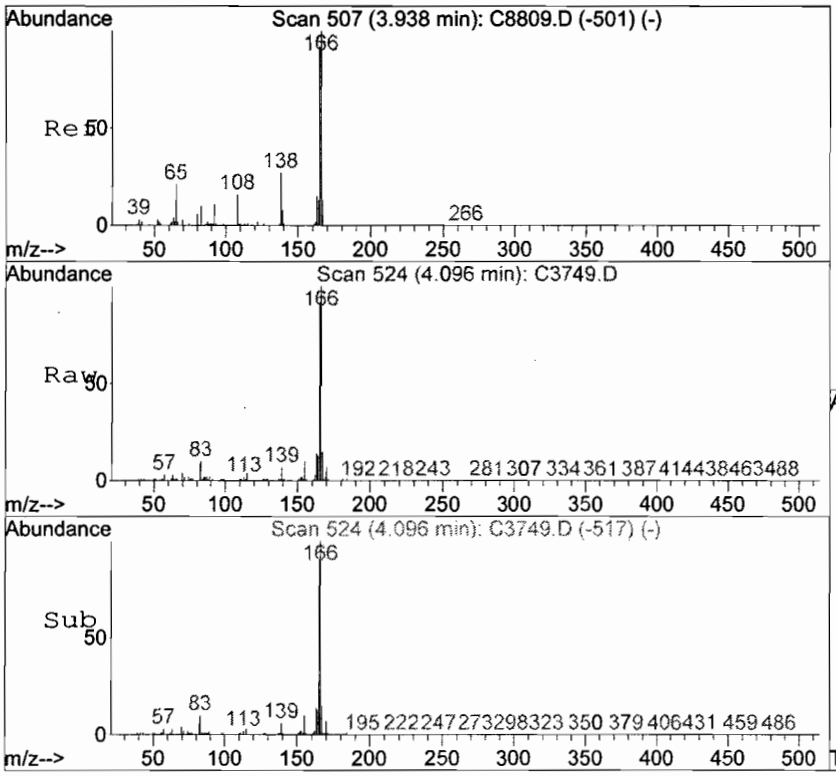


#59
Dibenzofuran
Concen: 5.88 UG
RT: 3.92 min Scan# 491
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:168 Resp: 121435

Ion	Ratio	Lower	Upper
168	100		
139	29.6	33.3	49.9#

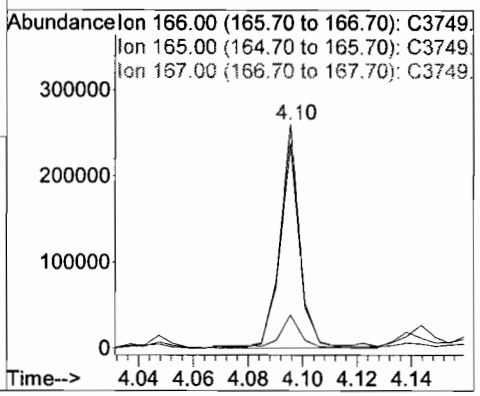


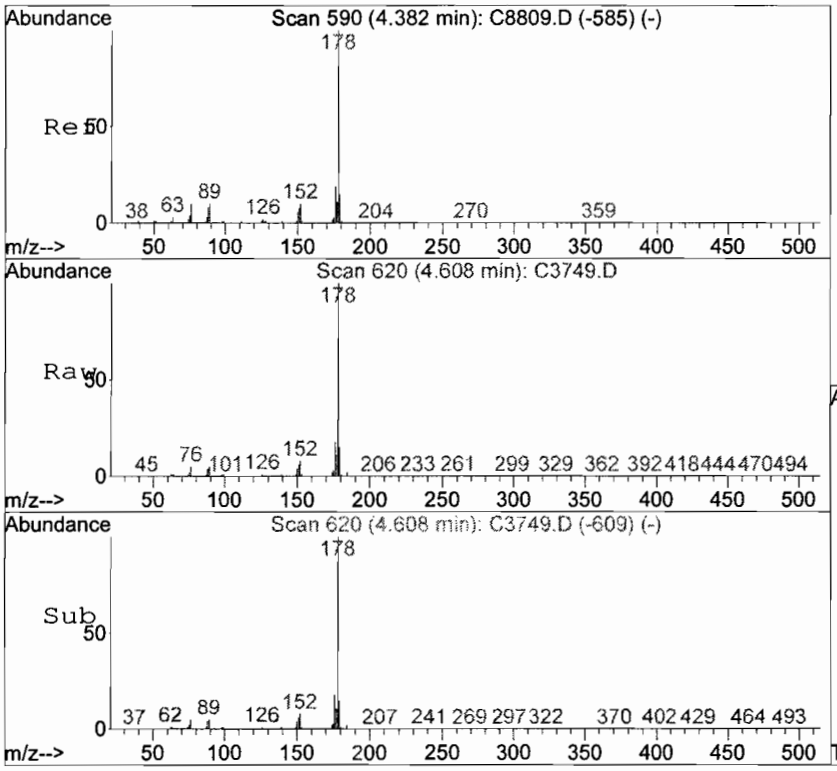


#61
Fluorene
Concen: 7.84 UG
RT: 4.10 min Scan# 524
Delta R.T. -0.03 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:166 Resp: 130333

Ion	Ratio	Lower	Upper
166	100		
165	92.7	74.6	112.0
167	17.6	11.8	17.8

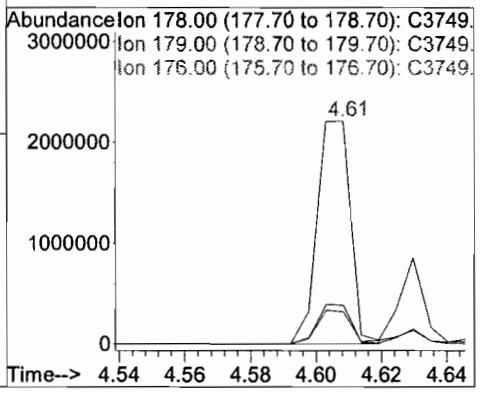


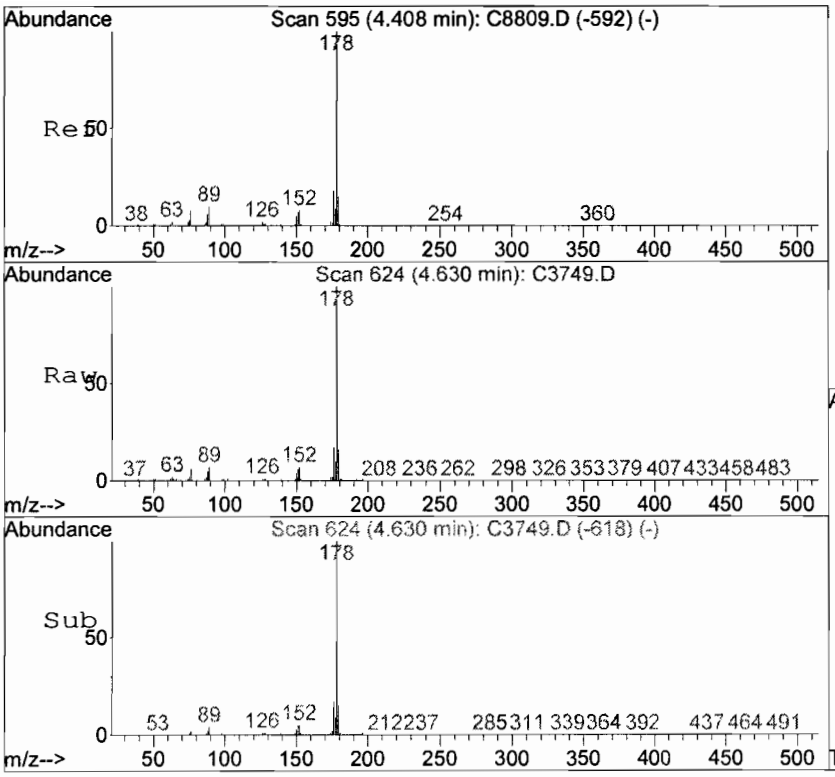


#75
Phenanthrene
Concen: 77.57 UG
RT: 4.61 min Scan# 620
Delta R.T. -0.04 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:178 Resp: 1561119

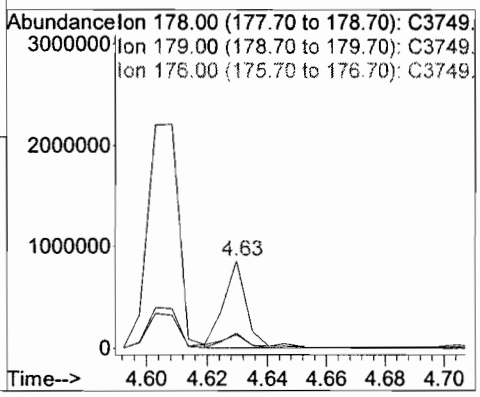
Ion	Ratio	Lower	Upper
178	100		
179	16.0	12.6	18.8
176	17.9	15.5	23.3

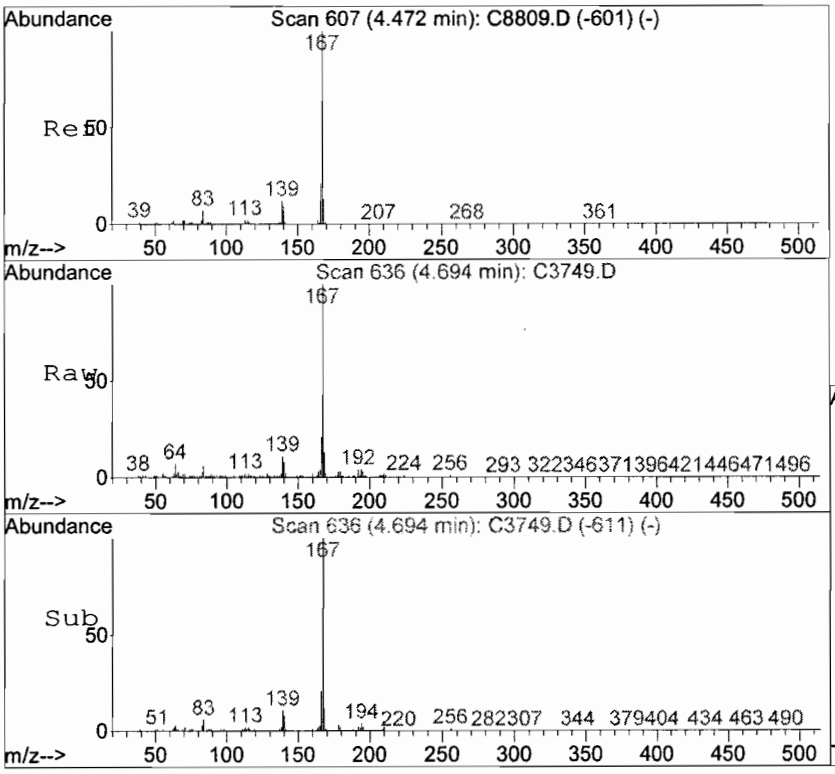




#76
Anthracene
Concen: 22.80 UG
RT: 4.63 min Scan# 624
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

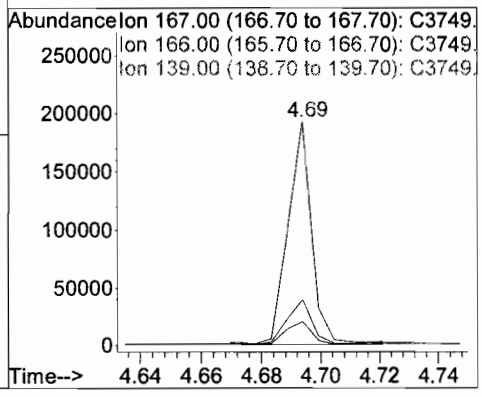
Tgt Ion:178	Resp:	456404	
Ion	Ratio	Lower	Upper
178	100		
179	16.5	12.5	18.7
176	17.2	14.5	21.7

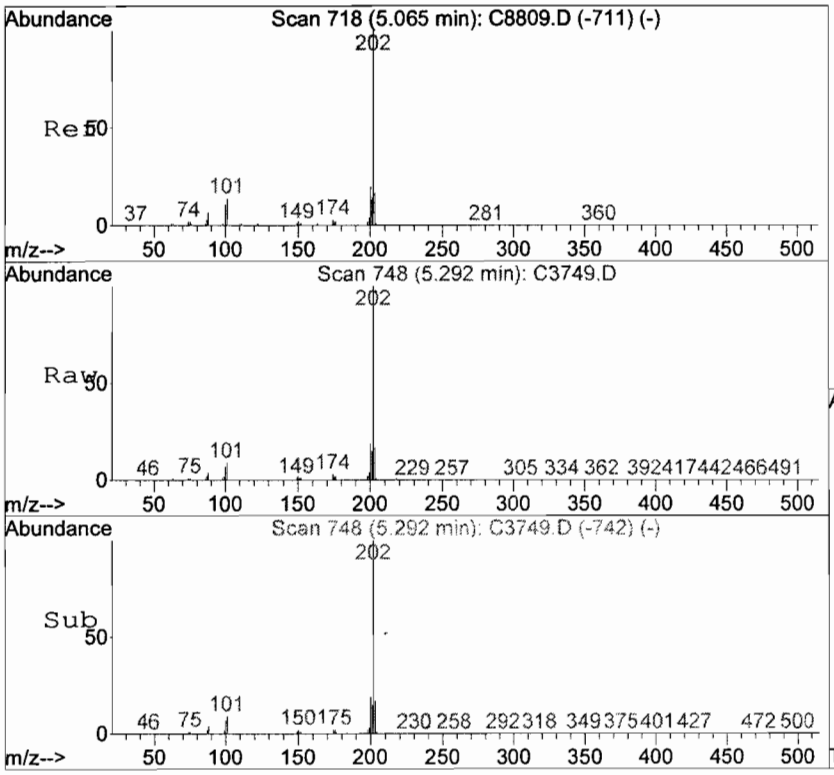




#77
Carbazole
Concen: 6.12 UG
RT: 4.69 min Scan# 636
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:167	Resp:	107388	
Ion	Ratio	Lower	Upper
167	100		
166	22.2	16.9	25.3
139	12.9	10.2	15.4

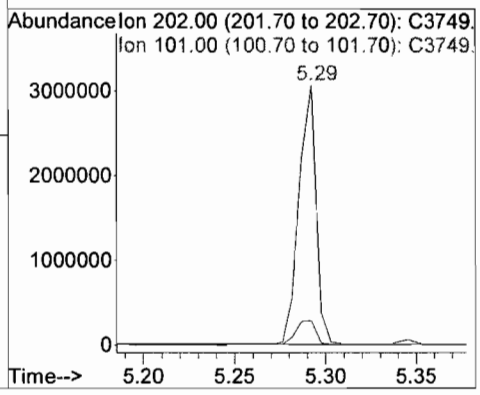


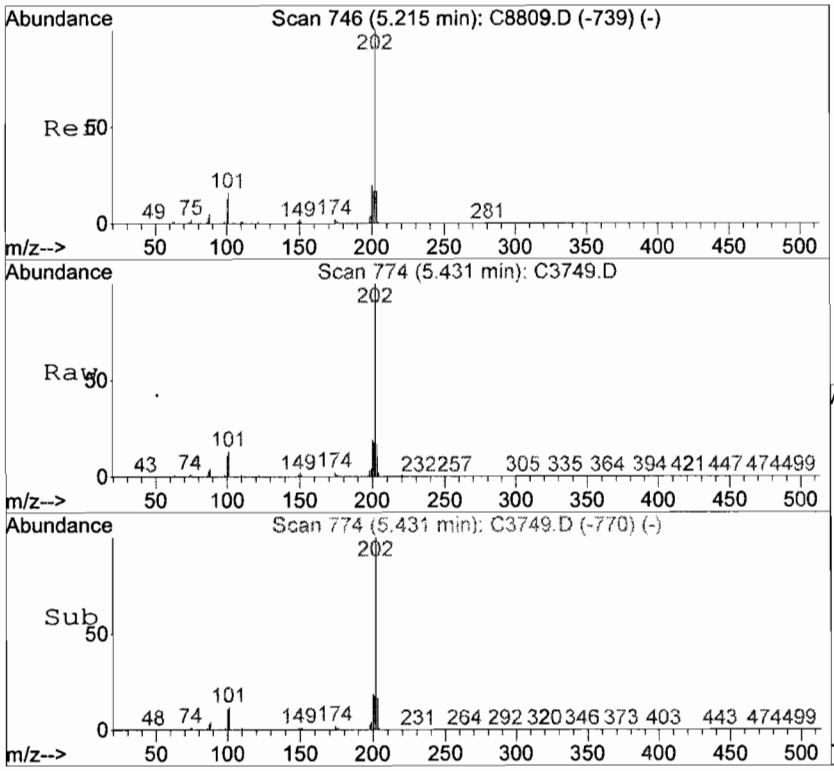


#79
Fluoranthene
Concen: 97.11 UG
RT: 5.29 min Scan# 748
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:202 Resp: 2025519

Ion	Ratio	Lower	Upper
202	100		
101	10.7	6.5	9.7#

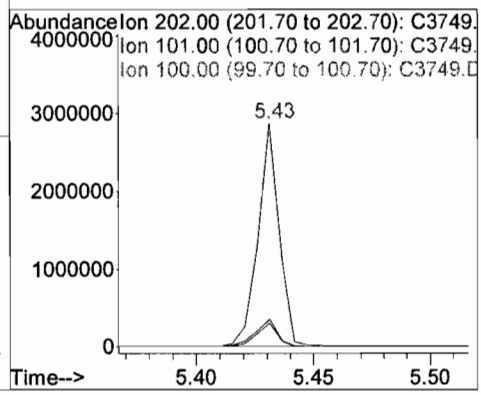


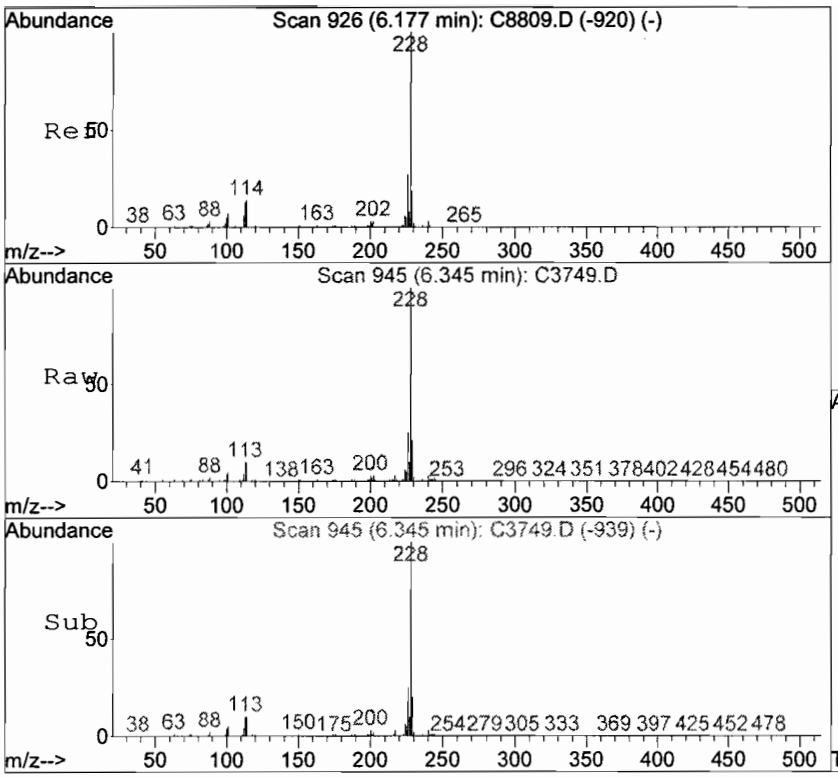


#83
Pyrene
Concen: 117.35 UG
RT: 5.43 min Scan# 774
Delta R.T. -0.08 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:202 Resp: 1813693

Ion	Ratio	Lower	Upper
202	100		
101	13.4	6.2	9.4#
100	10.8	5.2	7.8#

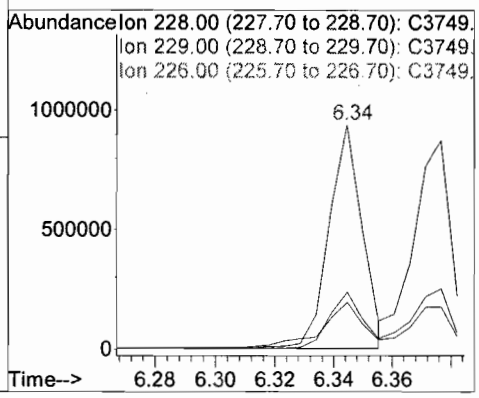


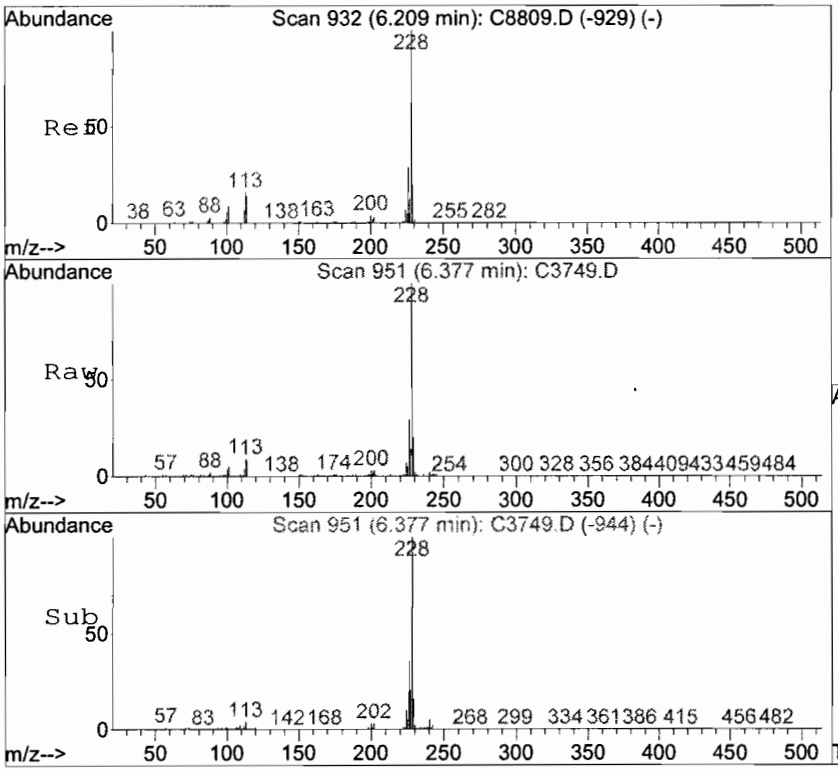


#88
Benzo[a]anthracene
Concen: 55.25 UG
RT: 6.34 min Scan# 945
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:228 Resp: 745377

Ion	Ratio	Lower	Upper
228	100		
229	25.6	15.7	23.5#
226	25.9	20.0	30.0

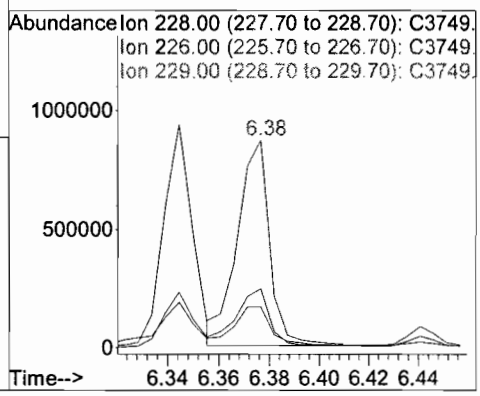


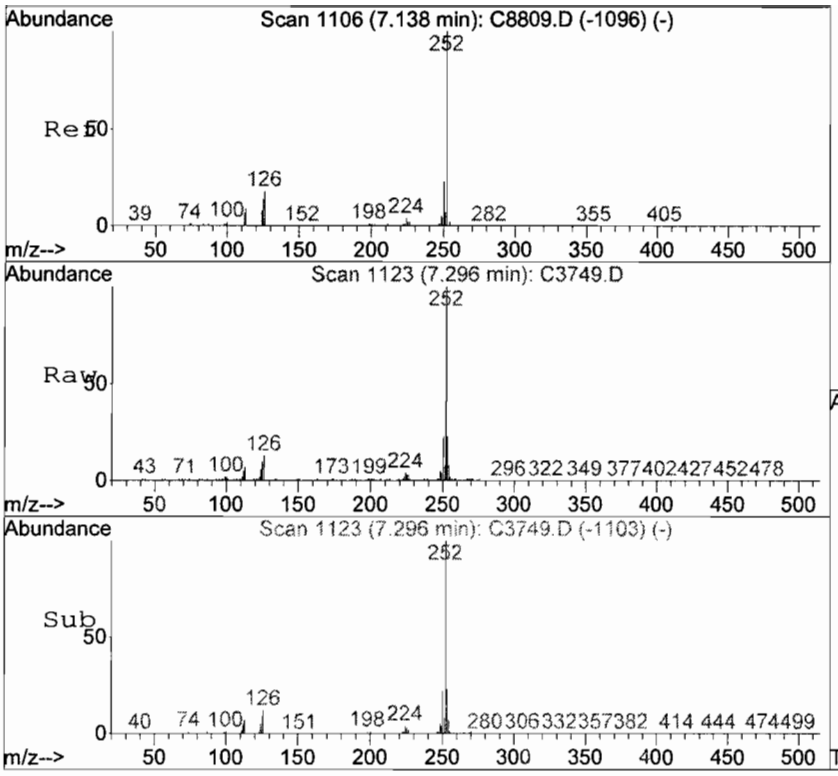


#89
Chrysene
Concen: 61.89 UG
RT: 6.38 min Scan# 951
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:228 Resp: 776464

Ion	Ratio	Lower	Upper
228	100		
226	30.1	23.7	35.5
229	22.4	16.9	25.3

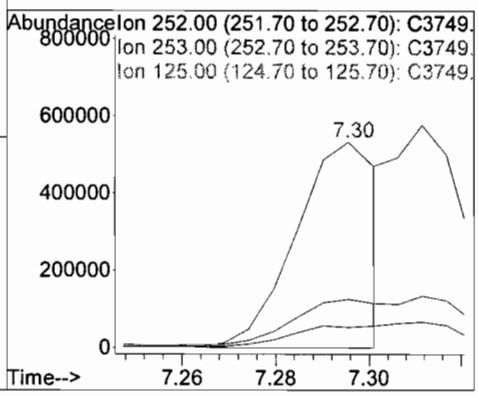


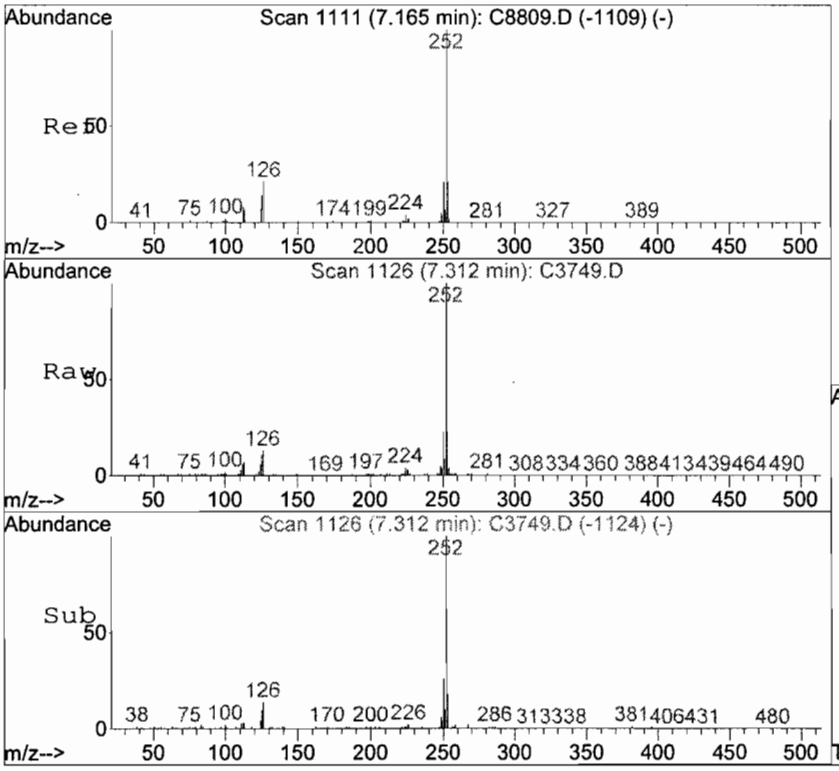


#94
Benzo[b]fluoranthene
Concen: 57.72 UG m
RT: 7.30 min Scan# 1123
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 645539

Ion	Ratio	Lower	Upper
252	100		
253	17.4	17.4	26.0
125	22.0	7.1	10.7#

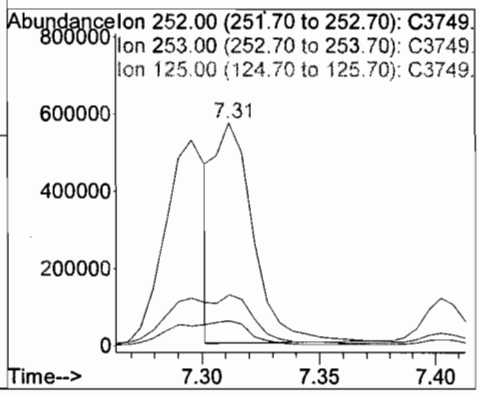


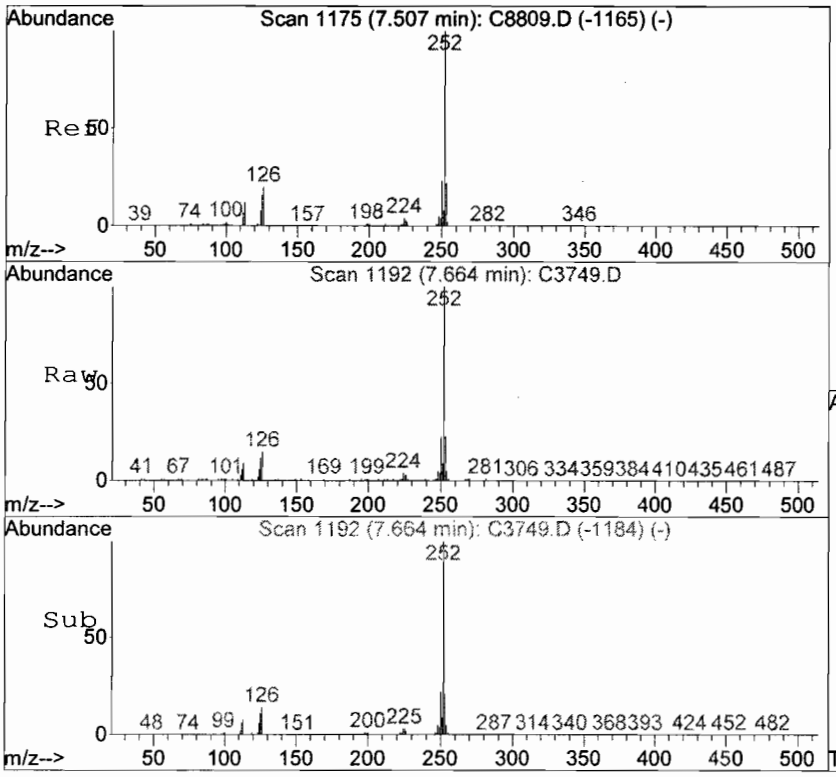


#95
Benzo[k]fluoranthene
Concen: 62.26 UG
RT: 7.31 min Scan# 1126
Delta R.T. -0.07 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 658839

Ion	Ratio	Lower	Upper
252	100		
253	17.5	16.7	25.1
125	21.4	6.5	9.7#

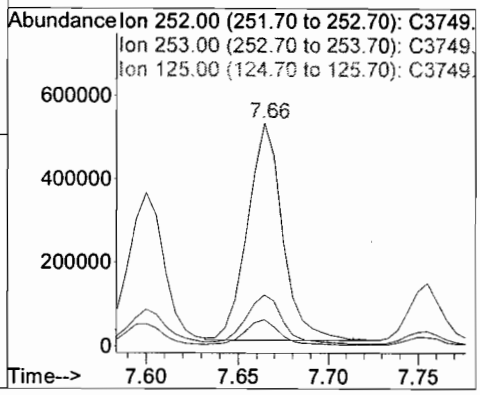


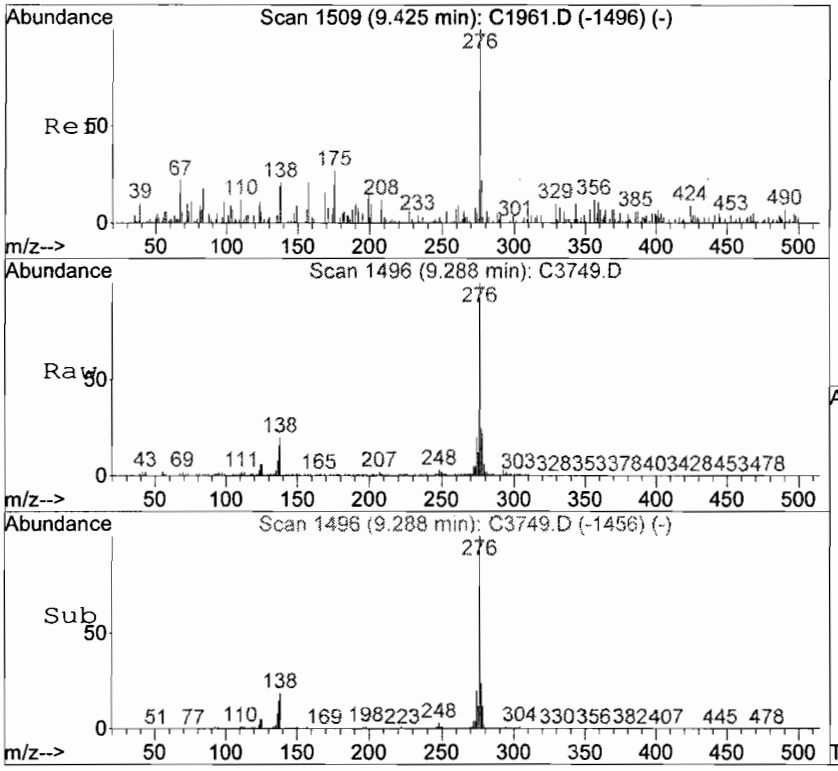


#96
Benzo[a]pyrene
Concen: 67.17 UG
RT: 7.66 min Scan# 1192
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:252 Resp: 699481

Ion	Ratio	Lower	Upper
252	100		
253	23.4	18.0	27.0
125	11.4	7.5	11.3#

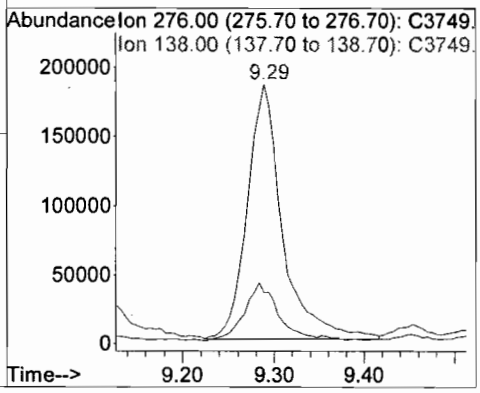


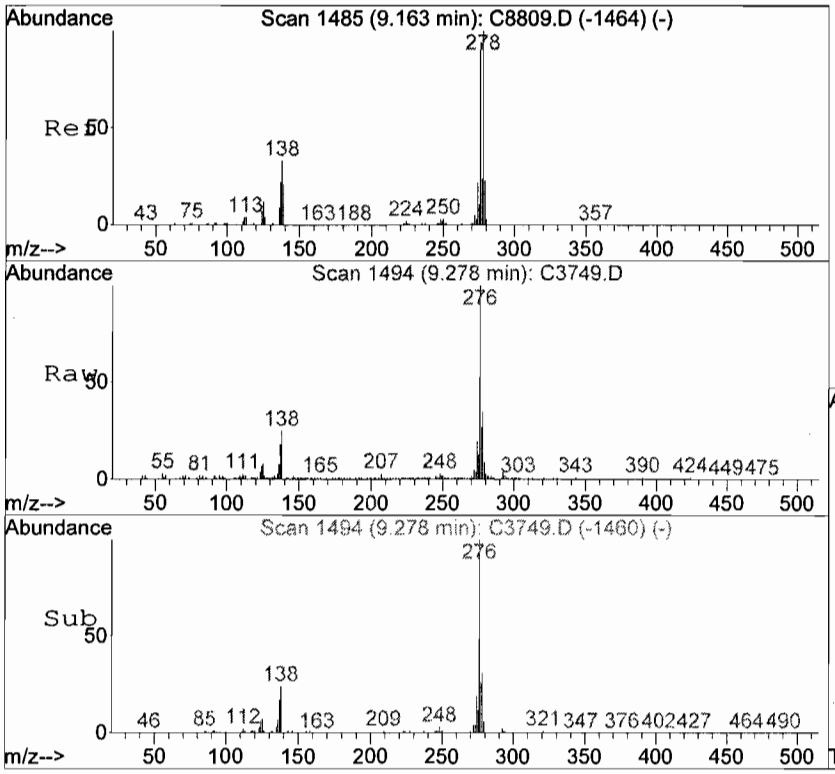


#97
Indeno[1,2,3-cd]pyrene
Concen: 38.47 UG
RT: 9.29 min Scan# 1496
Delta R.T. -0.05 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:276 Resp: 502144

Ion	Ratio	Lower	Upper
276	100		
138	22.6	0.8	1.2#

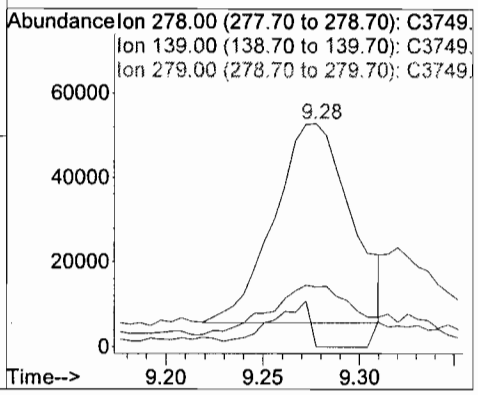


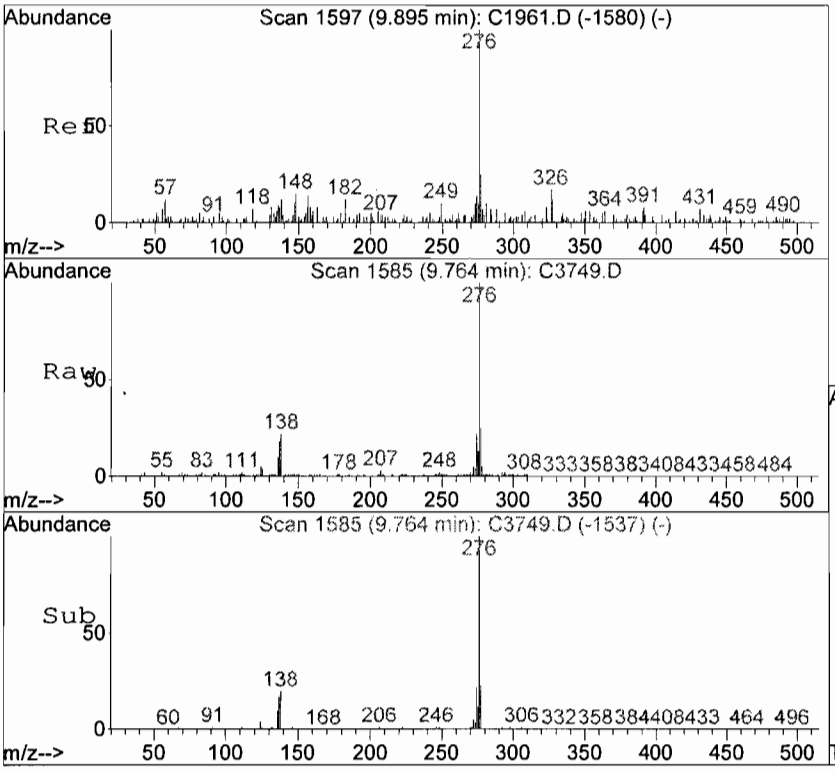


#98
Dibenz[a,h]anthracene
Concen: 12.02 UG
RT: 9.28 min Scan# 1494
Delta R.T. -0.06 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:278 Resp: 128626

Ion	Ratio	Lower	Upper
278	100		
139	11.6	0.6	0.8#
279	28.4	0.6	0.8#

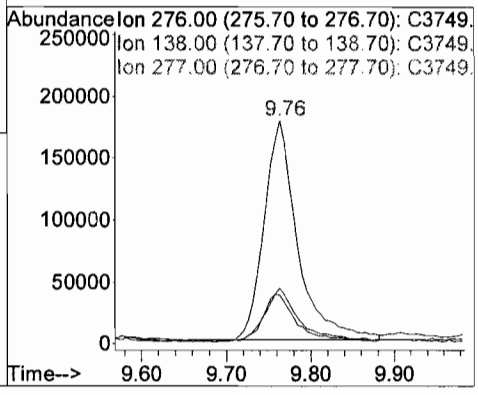




#99
Benzo[g,h,i]perylene
Concen: 45.35 UG
RT: 9.76 min Scan# 1585
Delta R.T. -0.04 min
Lab File: C3749.D
Acq: 20 Feb 2015 13:22

Tgt Ion:276 Resp: 491013

Ion	Ratio	Lower	Upper
276	100		
138	22.7	0.7	1.1#
277	25.4	0.0	0.0#



SEMI-VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS0415.M
Title : BNA CALIBRATION METHOD
Last Update : Wed Feb 11 11:39:18 2015
Response Via : Initial Calibration

Calibration Files
1 =C3570.D 10 =C3571.D 20 =C3572.D
40 =C3569.D 80 =C3573.D 160 =C3574.D

		Compound	1	10	20	40	80	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	0.655	0.617	0.657	0.622	0.698	0.630	0.647	4.69
3)	T	Pyridine	0.786	0.769	0.741	0.635	0.762	0.731	0.737	7.28
4)	S	2-Fluorophenol	1.237	1.222	1.275	1.189	1.219	1.214	1.226	2.33
5)	T	Benzaldehyde	0.686	0.621	0.603	0.764	0.625	0.643	0.657	9.05
6)	S	Phenol-d5	1.506	1.543	1.578	1.390	1.483	1.463	1.494	4.39
7)	MC	Phenol	1.612	1.584	1.711	1.478	1.462	1.584	1.572	5.84
8)	T	Aniline	0.742	0.640	0.650	0.619	0.616	0.609	0.646	7.66
9)	T	Bis(2-chloroethyl	0.827	0.712	0.731	0.678	0.678	0.693	0.720	7.84
10)	M	2-Chlorophenol	1.327	1.491	1.477	1.336	1.436	1.483	1.425	5.26
11)	T	1,3-Dichlorobenze	1.827	1.565	1.627	1.560	1.520	1.588	1.615	6.80
12)	MC	1,4-Dichlorobenze	1.628	1.656	1.671	1.550	1.629	1.510	1.607	3.94
13)	T	Benzyl alcohol	1.046	0.815	0.866	0.883	0.885	0.852	0.891	9.00
14)	T	1,2-Dichlorobenze	1.804	1.469	1.551	1.473	1.486	1.473	1.542	8.53
15)	T	2-Methylphenol	1.115	0.817	0.865	1.169	0.885	0.853	0.951	15.86
16)	T	Bis(2-chloroisopr	1.290	0.991	1.040	1.039	0.967	1.035	1.060	10.99
17)	T	4-Methylphenol	1.428	1.192	1.284	1.259	1.212	1.195	1.262	7.09
18)	MP	N-Nitrosodi-n-pro	0.885	0.776	0.800	0.767	0.751	0.758	0.790	6.31
19)	T	Acetophenone	2.095	1.643	1.751	1.700	1.654	1.635	1.746	10.09
20)	T	3-Methylphenol	1.428	1.206	1.280	1.258	1.211	1.194	1.263	6.93
21)	T	Hexachloroethane	0.367	0.490	0.491	0.468	0.488	0.489	0.466	10.49
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.314	0.301	0.311	0.292	0.327	0.372	0.320	8.88
25)	T	Nitrobenzene	0.380	0.282	0.299	0.280	0.276	0.302	0.303	12.90
26)	T	Isophorone	0.643	0.534	0.563	0.557	0.553	0.573	0.570	6.60
27)	TC	2-Nitrophenol	0.218	0.196	0.214	0.192	0.214	0.207	0.207	5.09
28)	T	2,4-Dimethylpheno	0.378	0.333	0.357	0.332	0.343	0.363	0.351	5.14
29)	T	Bis(2-chloroethox	0.417	0.333	0.339	0.351	0.340	0.350	0.355	8.76
30)	T	Benzoic acid	0.142	0.149	0.159	0.145	0.164	0.145	0.151	5.90
31)	T	2,4-Dimethylanili	0.425	0.375	0.397	0.385	0.404	0.406	0.399	4.46
32)	TC	2,4-Dichloropheno	0.336	0.316	0.321	0.306	0.332	0.317	0.321	3.43
33)	M	1,2,4-Trichlorobe	0.420	0.345	0.355	0.347	0.342	0.357	0.361	8.18
34)	T	Naphthalene	1.288	1.049	1.100	1.033	1.113	1.124	1.118	8.14
35)	T	4-Chloroaniline	0.623	0.526	0.568	0.584	0.562	0.583	0.574	5.57
36)	T	4-Aminotoluene	0.640	0.545	0.584	0.555	0.564	0.611	0.583	6.27
37)	TC	Hexachlorobutadie	0.225	0.178	0.193	0.191	0.193	0.188	0.195	8.01
38)	T	Caprolactam	0.080	0.096	0.099	0.097	0.093	0.097	0.094	7.63
39)	T	2-Aminotoluene	0.640	0.545	0.584	0.555	0.564	0.611	0.583	6.27
40)	MC	4-Chloro-3-methyl	0.385	0.305	0.314	0.296	0.296	0.307	0.317	10.69
41)	T	2-Methylnaphthale	0.854	0.721	0.757	0.792	0.736	0.740	0.767	6.41
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.134	0.130	0.138	0.138	0.123	0.155	0.136	7.91
45)	TC	2,4,6-Trichloroph	0.471	0.379	0.386	0.373	0.382	0.364	0.392	9.95
46)	T	2,4,5-Trichloroph	0.397	0.379	0.377	0.434	0.395	0.374	0.393	5.70
47)	S	2-Fluorobiphenyl	1.446	1.397	1.409	1.332	1.392	1.355	1.388	2.90
48)	T	1,1'-Biphenyl	1.710	1.436	1.445	1.570	1.493	1.357	1.502	8.25
49)	T	2-Chloronaphthale	1.209	1.079	1.105	1.108	1.133	1.043	1.113	5.05
50)	T	2-Nitroaniline	0.232	0.206	0.214	0.235	0.228	0.213	0.221	5.33
51)	T	Dimethyl phthalat	1.506	1.207	1.247	1.258	1.292	1.206	1.286	8.78

52)	T	2,6-Dinitrotoluen	0.262	0.238	0.258	0.261	0.263	0.281	0.261	5.25
53)	T	Acenaphthylene	1.983	1.739	1.796	1.775	1.821	1.768	1.814	4.82
54)	T	3-Nitroaniline	0.313	0.278	0.285	0.311	0.287	0.278	0.292	5.39
55)	MC	Acenaphthene	1.332	1.124	1.159	1.110	1.161	1.093	1.163	7.48
56)	TP	2,4-Dinitrophenol	0.119	0.091	0.087	0.107	0.111	0.115	0.105	12.53
57)	MP	4-Nitrophenol	0.196	0.171	0.162	0.171	0.165	0.158	0.170	8.05
58)	M	2,4-Dinitrotoluen	0.327	0.302	0.333	0.353	0.354	0.350	0.336	6.00
59)	T	Dibenzofuran	1.844	1.575	1.599	1.747	1.635	1.524	1.654	7.21
60)	T	Diethyl phthalate	1.418	1.143	1.176	1.191	1.148	1.134	1.202	9.01
61)	T	Fluorene	1.486	1.291	1.310	1.303	1.304	1.285	1.330	5.81
62)	T	4-Chlorophenyl ph	0.760	0.668	0.639	0.699	0.638	0.628	0.672	7.49
63)	T	4-Nitroaniline	0.297	0.287	0.287	0.331	0.301	0.298	0.300	5.42
64)		1,2,4,5-Tetrachlo	0.642	0.567	0.592	0.627	0.582	0.540	0.592	6.40
65)	T	2,3,4,6-Tetrachlo	0.376	0.352	0.266	0.330	0.321	0.304	0.325	11.82
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.084	0.092	0.108	0.123	0.127	0.136	0.111	18.48
68)	TC	N-Nitrosodiphenyl	0.618	0.547	0.569	0.615	0.593	0.581	0.587	4.63
69)	T	1,2-Diphenylhydra	0.661	0.554	0.620	0.584	0.624	0.608	0.609	5.99
70)	S	2,4,6-Tribromophe	0.151	0.159	0.165	0.158	0.162	0.162	0.159	2.90
71)	T	4-Bromophenyl phe	0.307	0.235	0.255	0.273	0.256	0.245	0.262	9.75
72)	T	Hexachlorobenzene	0.330	0.283	0.299	0.293	0.289	0.274	0.295	6.56
73)	T	Atrazine	0.210	0.208	0.223	0.183	0.228	0.214	0.211	7.50
74)	MC	Pentachlorophenol	0.137	0.146	0.165	0.168	0.173	0.174	0.160	9.59
75)	T	Phenanthrene	1.352	1.117	1.135	1.122	1.133	1.070	1.155	8.61
76)	T	Anthracene	1.329	1.087	1.132	1.148	1.125	1.071	1.149	8.08
77)	T	Carbazole	1.134	0.980	0.987	1.029	0.984	0.930	1.007	6.91
78)	T	Di-n-butyl phthal	1.285	1.114	1.165	1.199	1.168	1.148	1.180	4.99
79)	TC	Fluoranthene	1.406	1.172	1.179	1.161	1.155	1.108	1.197	8.80
80)	T	Benzidine	0.490	0.499	0.578	0.589	0.453	0.455	0.511	11.60
81)		4-Aminoaniline							0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.398	1.243	1.305	1.375	1.308	1.164	1.299	6.64
84)	S	Terphenyl-d14	1.131	1.117	1.140	1.146	1.131	0.991	1.109	5.28
85)	T	3,3'-Dimethylbenz	0.579	0.648	0.616	0.496	0.582	0.492	0.569	11.10
86)	T	Butyl benzyl phth	0.576	0.490	0.496	0.538	0.498	0.449	0.508	8.63
87)	T	3,3'-Dichlorobenz	0.397	0.380	0.395	0.425	0.388	0.319	0.384	9.20
88)	T	Benzo[a]anthracen	1.311	1.066	1.109	1.184	1.104	1.030	1.134	8.89
89)	T	Chrysene	1.133	1.044	1.045	1.093	1.049	0.962	1.054	5.42
90)	T	Bis(2-ethylhexyl)	0.736	0.642	0.684	0.750	0.697	0.638	0.691	6.72
91)	T	3,3'-Dimethoxyben							0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	1.649	1.377	1.460	1.669	1.307	1.231	1.449	12.41
94)	T	Benzo[b]fluoranth	1.448	1.289	1.490	1.727	1.327	1.472	1.459	10.59
95)	T	Benzo[k]fluoranth	1.498	1.495	1.293	1.490	1.403	1.103	1.380	11.41
96)	TC	Benzo[a]pyrene	1.458	1.257	1.309	1.561	1.322	1.242	1.358	9.23
97)	T	Indeno[1,2,3-cd]p	1.689	1.508	1.685	1.967	1.732	1.635	1.703	8.85
98)	T	Dibenz[a,h]anthra	1.375	1.262	1.321	1.661	1.427	1.331	1.396	10.09
99)	T	Benzo[g,h,i]peryl	1.347	1.265	1.399	1.664	1.446	1.353	1.412	9.71

(#) = Out of Range

CS0415.M Wed Feb 11 11:39:35 2015 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00
2	T	N-Nitrosodimethylamine	0.647	0.640	1.1	112	0.00
3	T	Pyridine	0.737	0.652	11.5	112	0.00
4	S	2-Fluorophenol	1.226	1.177	4.0	108	0.00
5	T	Benzaldehyde	0.657	0.765	-16.4	92	0.00
6	S	Phenol-d5	1.494	1.417	5.2	111	0.00
7	MC	Phenol	1.572	1.567	0.3	115	0.00
8	T	Aniline	0.646	0.646	0.0	114	0.00
9	T	Bis(2-chloroethyl) ether	0.720	0.703	2.4	113	0.00
10	M	2-Chlorophenol	1.425	1.337	6.2	109	0.00
11	T	1,3-Dichlorobenzene	1.615	1.574	2.5	110	0.00
12	MC	1,4-Dichlorobenzene	1.607	1.543	4.0	108	0.00
13	T	Benzyl alcohol	0.891	0.880	1.2	109	0.00
14	T	1,2-Dichlorobenzene	1.542	1.483	3.8	110	0.00
15	T	2-Methylphenol	0.951	0.881	7.4	82	-0.04
16	T	Bis(2-chloroisopropyl) ethe	1.060	1.099	-3.7	115	0.00
17	T	4-Methylphenol	1.262	1.268	-0.5	110	0.00
18	MP	N-Nitrosodi-n-propylamine	0.790	0.820	-3.8	116	0.00
19	T	Acetophenone	1.746	1.730	0.9	111	0.00
20	T	3-Methylphenol	1.263	1.268	-0.4	110	0.00
21	T	Hexachloroethane	0.466	0.473	-1.5	110	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	112	0.00
24	S	Nitrobenzene-d5	0.320	0.297	7.2	113	0.00
25	T	Nitrobenzene	0.303	0.296	2.3	118	0.00
26	T	Isophorone	0.570	0.545	4.4	109	0.00
27	TC	2-Nitrophenol	0.207	0.199	3.9	115	0.00
28	T	2,4-Dimethylphenol	0.351	0.344	2.0	115	0.00
29	T	Bis(2-chloroethoxy) methane	0.355	0.332	6.5	106	0.00
30	T	Benzoic acid	0.151	0.171	-13.2	131	0.00
31	T	2,4-Dimethylaniline	0.399	0.381	4.5	110	0.00
32	TC	2,4-Dichlorophenol	0.321	0.301	6.2	110	0.00
33	M	1,2,4-Trichlorobenzene	0.361	0.340	5.8	109	0.00
34	T	Naphthalene	1.118	1.040	7.0	112	0.00
35	T	4-Chloroaniline	0.574	0.567	1.2	108	0.00
36	T	4-Aminotoluene	0.583	0.549	5.8	110	0.00
37	TC	Hexachlorobutadiene	0.195	0.191	2.1	111	0.00
38	T	Caprolactam	0.094	0.099	-5.3	113	0.00
39	T	2-Aminotoluene	0.583	0.549	5.8	110	0.00
40	MC	4-Chloro-3-methylphenol	0.317	0.294	7.3	111	0.00
41	T	2-Methylnaphthalene	0.767	0.771	-0.5	109	-0.01
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	112	-0.02
44	TP	Hexachlorocyclopentadiene	0.136	0.164	-20.6	133	-0.01
45	TC	2,4,6-Trichlorophenol	0.392	0.363	7.4	109	-0.01
46	T	2,4,5-Trichlorophenol	0.393	0.421	-7.1	108	-0.01

47	S	2-Fluorobiphenyl	1.388	1.315	5.3	111	-0.01
48	T	1,1'-Biphenyl	1.502	1.574	-4.8	112	-0.01
49	T	2-Chloronaphthalene	1.113	1.077	3.2	109	-0.01
50	T	2-Nitroaniline	0.221	0.246	-11.3	117	-0.01
51	T	Dimethyl phthalate	1.286	1.246	3.1	111	-0.01
52	T	2,6-Dinitrotoluene	0.261	0.272	-4.2	117	-0.02
53	T	Acenaphthylene	1.814	1.745	3.8	110	-0.01
54	T	3-Nitroaniline	0.292	0.299	-2.4	107	-0.02
55	MC	Acenaphthene	1.163	1.116	4.0	113	-0.02
56	TP	2,4-Dinitrophenol	0.105	0.109	-3.8	114	-0.02
57	MP	4-Nitrophenol	0.170	0.159	6.5	104	-0.02
58	M	2,4-Dinitrotoluene	0.336	0.355	-5.7	113	-0.02
59	T	Dibenzofuran	1.654	1.672	-1.1	107	-0.02
60	T	Diethyl phthalate	1.202	1.146	4.7	108	-0.02
61	T	Fluorene	1.330	1.303	2.0	112	-0.02
62	T	4-Chlorophenyl phenyl ether	0.672	0.681	-1.3	109	-0.02
63	T	4-Nitroaniline	0.300	0.323	-7.7	109	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.592	0.612	-3.4	109	-0.01
65	T	2,3,4,6-Tetrachlorophenol	0.325	0.331	-1.8	112	-0.02
66	I	Phenanthrene-d10	1.000	1.000	0.0	109	-0.04
67	T	4,6-Dinitro-2-methylphenol	0.111	0.130	-17.1	115	-0.03
68	TC	N-Nitrosodiphenylamine	0.587	0.618	-5.3	110	-0.03
69	T	1,2-Diphenylhydrazine	0.609	0.573	5.9	107	-0.03
70	S	2,4,6-Tribromophenol	0.159	0.155	2.5	107	-0.03
71	T	4-Bromophenyl phenyl ether	0.262	0.266	-1.5	106	-0.03
72	T	Hexachlorobenzene	0.295	0.292	1.0	109	-0.03
73	T	Atrazine	0.211	0.175	17.1	104	-0.03
74	MC	Pentachlorophenol	0.160	0.162	-1.3	105	-0.04
75	T	Phenanthrene	1.155	1.103	4.5	107	-0.04
76	T	Anthracene	1.149	1.139	0.9	108	-0.04
77	T	Carbazole	1.007	0.992	1.5	105	-0.04
78	T	Di-n-butyl phthalate	1.180	1.182	-0.2	107	-0.05
79	TC	Fluoranthene	1.197	1.116	6.8	105	-0.06
80	T	Benzidine	0.511	0.505	1.2	85	0.04
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	102	-0.05
83	M	Pyrene	1.299	1.414	-8.9	105	-0.06
84	S	Terphenyl-d14	1.109	1.172	-5.7	104	-0.07
85	T	3,3'-Dimethylbenzidine	0.569	0.630	-10.7	142	-0.03
86	T	Butyl benzyl phthalate	0.508	0.530	-4.3	100	-0.07
87	T	3,3'-Dichlorobenzidine	0.384	0.414	-7.8	99	-0.06
88	T	Benzo[a]anthracene	1.134	1.149	-1.3	99	-0.06
89	T	Chrysene	1.054	1.124	-6.6	105	-0.05
90	T	Bis(2-ethylhexyl) phthalate	0.691	0.752	-8.8	102	-0.05
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	95	-0.04
93	TC	Di-n-octyl phthalate	1.449	1.708	-17.9	97	-0.05
94	T	Benzo[b]fluoranthene	1.459	1.576	-8.0	87	-0.05
95	T	Benzo[k]fluoranthene	1.380	1.645	-19.2	105	-0.05
96	TC	Benzo[a]pyrene	1.358	1.585	-16.7	96	-0.05
97	T	Indeno[1,2,3-cd]pyrene	1.703	1.974	-15.9	95	-0.04
98	T	Dibenz[a,h]anthracene	1.396	1.599	-14.5	91	-0.04
99	T	Benzo[g,h,i]perylene	1.412	1.651	-16.9	94	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0415.M Wed Feb 11 11:41:03 2015 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	0.647	0.661	-2.2	104	0.00
3	T	Pyridine	0.737	0.683	7.3	105	0.00
4	S	2-Fluorophenol	1.226	1.178	3.9	97	0.00
5	T	Benzaldehyde	0.657	0.799	-21.6	94	0.00
6	S	Phenol-d5	1.494	1.432	4.1	101	0.00
7	MC	Phenol	1.572	1.583	-0.7	105	0.00
8	T	Aniline	0.646	0.634	1.9	100	0.00
9	T	Bis(2-chloroethyl) ether	0.720	0.712	1.1	103	0.00
10	M	2-Chlorophenol	1.425	1.352	5.1	99	0.00
11	T	1,3-Dichlorobenzene	1.615	1.606	0.6	101	0.00
12	MC	1,4-Dichlorobenzene	1.607	1.559	3.0	99	0.00
13	T	Benzyl alcohol	0.891	0.878	1.5	97	0.00
14	T	1,2-Dichlorobenzene	1.542	1.499	2.8	100	0.00
15	T	2-Methylphenol	0.951	1.230	-29.3	103	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.060	1.074	-1.3	101	0.00
17	T	4-Methylphenol	1.262	1.308	-3.6	102	0.00
18	MP	N-Nitrosodi-n-propylamine	0.790	0.805	-1.9	103	0.00
19	T	Acetophenone	1.746	1.765	-1.1	102	0.00
20	T	3-Methylphenol	1.263	1.308	-3.6	102	0.00
21	T	Hexachloroethane	0.466	0.472	-1.3	99	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
24	S	Nitrobenzene-d5	0.320	0.298	6.9	102	0.00
25	T	Nitrobenzene	0.303	0.287	5.3	102	0.00
26	T	Isophorone	0.570	0.570	0.0	102	0.00
27	TC	2-Nitrophenol	0.207	0.201	2.9	104	0.00
28	T	2,4-Dimethylphenol	0.351	0.339	3.4	101	0.00
29	T	Bis(2-chloroethoxy) methane	0.355	0.338	4.8	96	0.00
30	T	Benzoic acid	0.151	0.134	11.3	92	0.00
31	T	2,4-Dimethylaniline	0.399	0.386	3.3	100	0.00
32	TC	2,4-Dichlorophenol	0.321	0.312	2.8	102	0.00
33	M	1,2,4-Trichlorobenzene	0.361	0.348	3.6	100	0.00
34	T	Naphthalene	1.118	1.069	4.4	103	0.00
35	T	4-Chloroaniline	0.574	0.579	-0.9	99	0.00
36	T	4-Aminotoluene	0.583	0.544	6.7	98	0.00
37	TC	Hexachlorobutadiene	0.195	0.186	4.6	97	0.00
38	T	Caprolactam	0.094	0.100	-6.4	102	0.00
39	T	2-Aminotoluene	0.583	0.544	6.7	98	0.00
40	MC	4-Chloro-3-methylphenol	0.317	0.297	6.3	100	0.00
41	T	2-Methylnaphthalene	0.767	0.794	-3.5	100	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
44	TP	Hexachlorocyclopentadiene	0.136	0.121	11.0	88	0.00
45	TC	2,4,6-Trichlorophenol	0.392	0.372	5.1	100	0.00

46	T	2,4,5-Trichlorophenol	0.393	0.427	-8.7	98	0.00
47	S	2-Fluorobiphenyl	1.388	1.296	6.6	97	0.00
48	T	1,1'-Biphenyl	1.502	1.559	-3.8	99	0.00
49	T	2-Chloronaphthalene	1.113	1.125	-1.1	102	0.00
50	T	2-Nitroaniline	0.221	0.249	-12.7	106	0.00
51	T	Dimethyl phthalate	1.286	1.266	1.6	101	0.00
52	T	2,6-Dinitrotoluene	0.261	0.278	-6.5	106	0.00
53	T	Acenaphthylene	1.814	1.800	0.8	101	0.00
54	T	3-Nitroaniline	0.292	0.319	-9.2	102	0.00
55	MC	Acenaphthene	1.163	1.101	5.3	99	0.00
56	TP	2,4-Dinitrophenol	0.105	0.106	-1.0	99	0.00
57	MP	4-Nitrophenol	0.170	0.158	7.1	93	0.00
58	M	2,4-Dinitrotoluene	0.336	0.359	-6.8	102	0.00
59	T	Dibenzofuran	1.654	1.755	-6.1	100	0.00
60	T	Diethyl phthalate	1.202	1.172	2.5	98	0.00
61	T	Fluorene	1.330	1.320	0.8	101	0.00
62	T	4-Chlorophenyl phenyl ether	0.672	0.698	-3.9	100	0.00
63	T	4-Nitroaniline	0.300	0.346	-15.3	104	0.00
64		1,2,4,5-Tetrachlorobenzene	0.592	0.617	-4.2	98	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.325	0.339	-4.3	103	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.00
67	T	4,6-Dinitro-2-methylphenol	0.111	0.123	-10.8	101	0.00
68	TC	N-Nitrosodiphenylamine	0.587	0.621	-5.8	102	0.00
69	T	1,2-Diphenylhydrazine	0.609	0.571	6.2	98	0.00
70	S	2,4,6-Tribromophenol	0.159	0.155	2.5	99	0.00
71	T	4-Bromophenyl phenyl ether	0.262	0.262	0.0	97	0.00
72	T	Hexachlorobenzene	0.295	0.293	0.7	101	0.00
73	T	Atrazine	0.211	0.159	24.6	88	0.00
74	MC	Pentachlorophenol	0.160	0.162	-1.3	97	0.00
75	T	Phenanthrene	1.155	1.131	2.1	101	0.00
76	T	Anthracene	1.149	1.160	-1.0	102	0.00
77	T	Carbazole	1.007	1.067	-6.0	104	-0.01
78	T	Di-n-butyl phthalate	1.180	1.187	-0.6	100	-0.01
79	TC	Fluoranthene	1.197	1.219	-1.8	106	-0.01
80	T	Benzidine	0.511	0.566	-10.8	94	0.11
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	110	0.00
83	M	Pyrene	1.299	1.308	-0.7	105	-0.01
84	S	Terphenyl-d14	1.109	1.088	1.9	104	-0.01
85	T	3,3'-Dimethylbenzidine	0.569	0.655	-15.1	155	0.06
86	T	Butyl benzyl phthalate	0.508	0.512	-0.8	105	-0.01
87	T	3,3'-Dichlorobenzidine	0.384	0.408	-6.2	105	0.00
88	T	Benzo[a]anthracene	1.134	1.128	0.5	105	-0.01
89	T	Chrysene	1.054	1.114	-5.7	112	0.00
90	T	Bis(2-ethylhexyl) phthalate	0.691	0.725	-4.9	106	0.00
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	110	0.00
93	TC	Di-n-octyl phthalate	1.449	1.661	-14.6	109	0.00
94	T	Benzo[b]fluoranthene	1.459	1.642	-12.5	105	0.00
95	T	Benzo[k]fluoranthene	1.380	1.554	-12.6	115	0.00
96	TC	Benzo[a]pyrene	1.358	1.544	-13.7	109	0.00
97	T	Indeno[1,2,3-cd]pyrene	1.703	1.888	-10.9	106	0.00
98	T	Dibenz[a,h]anthracene	1.396	1.580	-13.2	105	0.00
99	T	Benzo[g,h,i]perylene	1.412	1.628	-15.3	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0415.M Fri Feb 20 12:53:13 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	128878	40.00	UG		0.00
23) Naphthalene-d8	3.03	136	491089	40.00	UG		0.01
43) Acenaphthene-d10	3.86	164	306133	40.00	UG		0.03
66) Phenanthrene-d10	4.64	188	510793	40.00	UG		0.05
82) Chrysene-d12	6.42	240	443021	40.00	UG		0.07
92) Perylene-d12	7.78	264	309002	40.00	UG		0.09
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	383205	99.84	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 99.84%				
6) Phenol-d5	2.30	99	447903	97.36	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 97.36%				
24) Nitrobenzene-d5	2.71	82	179263	45.14	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 90.28%				
47) 2-Fluorobiphenyl	3.50	172	509736	47.08	UG		0.02
Spiked Amount 50.000	Range 34 - 96		Recovery = 94.16%				
70) 2,4,6-Tribromophenol	4.26	330	201288	92.73	UG		0.04
Spiked Amount 100.000	Range 32 - 112		Recovery = 92.73%				
84) Terphenyl-d14	5.58	244	634491	48.54	UG		0.10
Spiked Amount 50.000	Range 19 - 118		Recovery = 97.08%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	80175	37.17	UG	#	37
3) Pyridine	1.46	52	81884	32.79	UG	#	81
7) Phenol	2.30	94	190432	37.84	UG	#	27
8) Aniline	2.34	66	79821	41.80	UG		89
9) Bis(2-chloroethyl) ether	2.34	63	87363	38.08	UG	#	69
10) 2-Chlorophenol	2.40	128	172154	35.79	UG		91
11) 1,3-Dichlorobenzene	2.46	146	201044	37.59	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	199717	38.73	UG	#	80
13) Benzyl alcohol	2.51	108	113838	40.31	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	189890	38.35	UG		93
15) 2-Methylphenol	2.55	108	150594	46.37	UG		83
16) Bis(2-chloroisopropyl) eth	2.57	45	133922	41.59	UG	#	93
17) 4-Methylphenol	2.61	108	162273	39.90	UG		96
18) N-Nitrosodi-n-propylamine	2.63	70	98825	40.05	UG	#	88
19) Acetophenone	2.64	105	219078	40.12	UG	#	1
20) 3-Methylphenol	2.61	108	162171	39.94	UG		95
21) Hexachloroethane	2.70	117	60257	35.86	UG		90
25) Nitrobenzene	2.71	77	137560	38.75	UG	#	85
26) Isophorone	2.81	82	273322	38.54	UG		92
27) 2-Nitrophenol	2.85	139	94514	34.22	UG	#	71
28) 2,4-Dimethylphenol	2.84	107	163260	36.11	UG		88
29) Bis(2-chloroethoxy) methan	2.88	93	172384	40.35	UG		97
30) Benzoic acid	2.87	122	71439m	39.68	UG		
31) 2,4-Dimethylaniline	2.93	121	188884	36.87	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	150431	35.61	UG		98
33) 1,2,4-Trichlorobenzene	3.00	180	170351	36.80	UG		99
34) Naphthalene	3.03	128	507301	34.50	UG		95
35) 4-Chloroaniline	3.04	127	286924	40.07	UG		96
36) 4-Aminotoluene	2.65	106	272335	37.03	UG		97
37) Hexachlorobutadiene	3.10	225	93987	36.09	UG		97
38) Caprolactam	3.18	55	47819	46.50	UG	#	74
39) 2-Aminotoluene	2.65	106	272335	37.03	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration

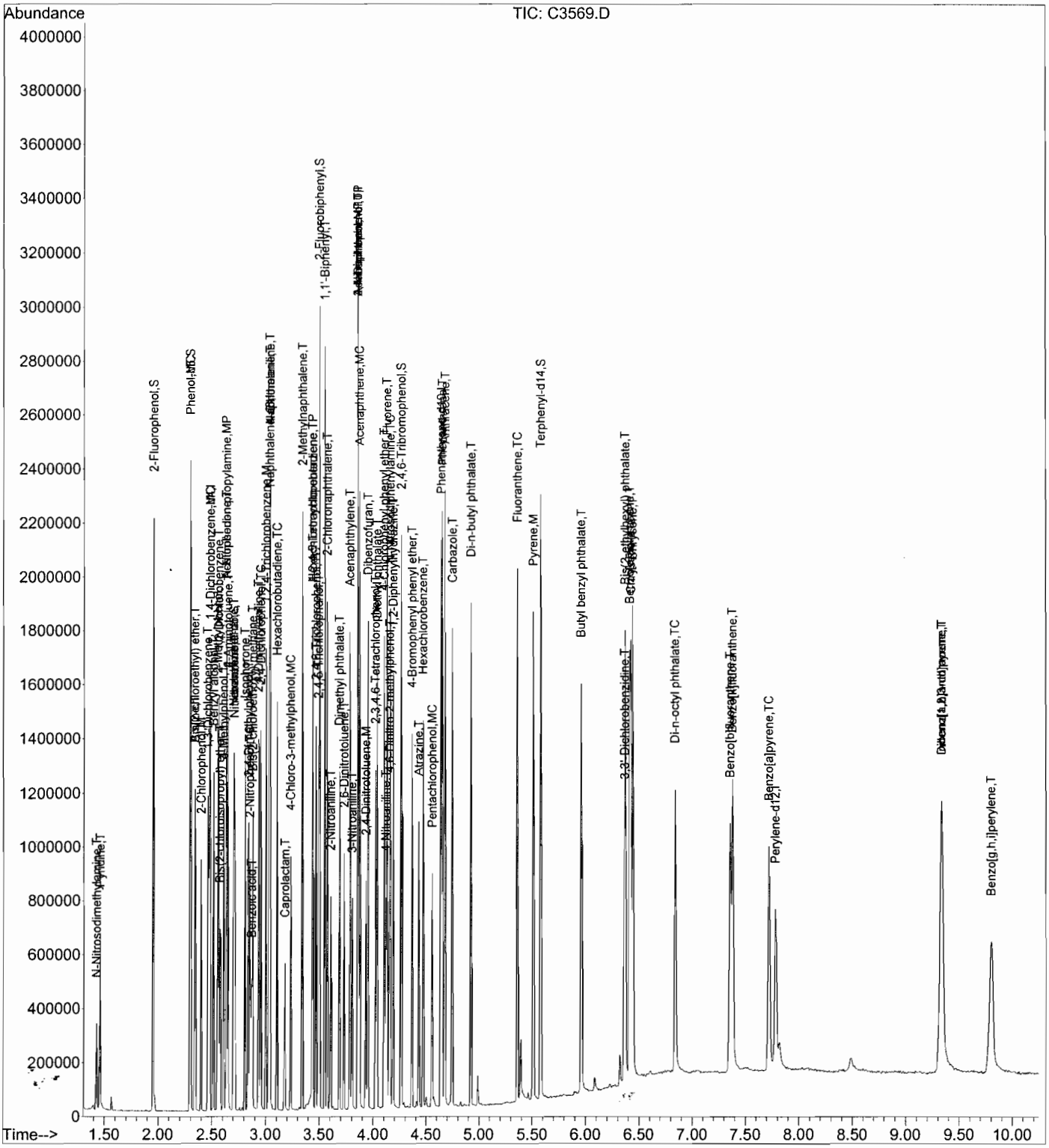
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	145384	38.34	UG		96
41) 2-Methylnaphthalene	3.34	142	389077	38.65	UG		99
44) Hexachlorocyclopentadiene	3.44	237	42148	16.08	UG	#	95
45) 2,4,6-Trichlorophenol	3.47	196	114315	35.39	UG		97
46) 2,4,5-Trichlorophenol	3.49	196	132934	42.56	UG		99
48) 1,1'-Biphenyl	3.55	154	480779	41.40	UG		98
49) 2-Chloronaphthalene	3.57	162	339332	38.61	UG		97
50) 2-Nitroaniline	3.60	65	71999	43.98	UG	#	74
51) Dimethyl phthalate	3.68	163	385090	37.58	UG		97
52) 2,6-Dinitrotoluene	3.73	165	80050	38.06	UG	#	86
53) Acenaphthylene	3.78	152	543356	38.87	UG		98
54) 3-Nitroaniline	3.80	138	95242	43.43	UG	#	96
55) Acenaphthene	3.87	153	339898	37.95	UG		96
56) 2,4-Dinitrophenol	3.86	184	32852	36.69	UG	#	1
57) 4-Nitrophenol	3.86	65	52241	43.25	UG	#	66
58) 2,4-Dinitrotoluene	3.93	165	107936	42.20	UG	#	77
59) Dibenzofuran	3.95	168	534928	42.12	UG	#	82
60) Diethyl phthalate	4.04	149	364713	39.58	UG		96
61) Fluorene	4.13	166	398830	38.29	UG		99
62) 4-Chlorophenyl phenyl ethe	4.10	204	213943	40.71	UG	#	88
63) 4-Nitroaniline	4.12	138	101386	50.56	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.44	216	191865	39.93	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.02	232	101010	33.40	UG		96
67) 4,6-Dinitro-2-methylphenol	4.15	198	62692	42.03	UG	#	74
68) N-Nitrosodiphenylamine	4.16	169	313965	41.75	UG		97
69) 1,2-Diphenylhydrazine	4.19	77	298173	39.10	UG	#	86
71) 4-Bromophenyl phenyl ether	4.36	248	139371m	39.78	UG		
72) Hexachlorobenzene	4.47	284	149690	36.26	UG	#	94
73) Atrazine	4.43	200	93252	32.37	UG		99
74) Pentachlorophenol	4.56	266	85942	35.55	UG		92
75) Phenanthrene	4.65	178	573172m	39.62	UG		
76) Anthracene	4.68	178	586339	40.54	UG		99
77) Carbazole	4.75	167	525536	43.61	UG		98
78) Di-n-butyl phthalate	4.92	149	612571	42.03	UG	#	97
79) Fluoranthene	5.36	202	593263	40.43	UG	#	91
83) Pyrene	5.51	202	609167m	40.31	UG		
86) Butyl benzyl phthalate	5.96	149	238408m	46.94	UG		
87) 3,3'-Dichlorobenzidine	6.36	252	188315	46.43	UG		98
88) Benzo[a]anthracene	6.41	228	524512	42.53	UG		100
89) Chrysene	6.44	228	484241	41.47	UG		96
90) Bis(2-ethylhexyl) phthalat	6.37	149	332352	47.62	UG		94
93) Di-n-octyl phthalate	6.84	149	515689	53.27	UG		100
94) Benzo[b]fluoranthene	7.36	252	533596	49.80	UG		99
95) Benzo[k]fluoranthene	7.38	252	460341m	45.03	UG		
96) Benzo[a]pyrene	7.72	252	482458	48.70	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.34	276	607704	47.66	UG	#	47
98) Dibenz[a,h]anthracene	9.34	278	513125	51.16	UG	#	64
99) Benzo[g,h,i]perylene	9.80	276	514236	47.68	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3569.D
Acq On : 10 Feb 2015 11:34
Operator : EDM
Sample : ABN011-15,ICC040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:48:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Feb 05 16:27:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	120599	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	481938	40.00	UG	0.00
43) Acenaphthene-d10	3.85	164	308833	40.00	UG	0.00
66) Phenanthrene-d10	4.62	188	525203m	40.00	UG	-0.02
82) Chrysene-d12	6.40	240	530919	40.00	UG	-0.02
92) Perylene-d12	7.78	264	366392	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	373050	104.03	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 104.03%#			
6) Phenol-d5	2.30	99	454117	108.35	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 108.35%#			
24) Nitrobenzene-d5	2.71	82	189074	53.74	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 107.48%#			
47) 2-Fluorobiphenyl	3.50	172	558147	54.27	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 108.54%#			
70) 2,4,6-Tribromophenol	4.25	330	198890	96.10	UG	-0.01
Spiked Amount 100.000	Range 32 - 112		Recovery = 96.10%			
84) Terphenyl-d14	5.56	244	750898	49.38	UG	-0.02
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.76%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.43	74	1976m	1.05	UG	
3) Pyridine	1.47	52	2371m	1.24	UG	
7) Phenol	2.30	94	4861	1.09	UG	# 1
8) Aniline	2.34	66	2237	1.20	UG	96
9) Bis(2-chloroethyl) ether	2.34	63	2494	1.22	UG	# 80
10) 2-Chlorophenol	2.40	128	4000m	0.99	UG	
11) 1,3-Dichlorobenzene	2.46	146	5508	1.17	UG	# 100
12) 1,4-Dichlorobenzene	2.48	146	4907	1.05	UG	# 52
13) Benzyl alcohol	2.51	108	3155	1.18	UG	# 75
14) 1,2-Dichlorobenzene	2.56	146	5438	1.22	UG	94
15) 2-Methylphenol	2.55	108	3362m	0.95	UG	
16) Bis(2-chloroisopropyl) eth	2.57	45	3889	1.24	UG	99
17) 4-Methylphenol	2.61	108	4305	1.13	UG	98
18) N-Nitrosodi-n-propylamine	2.63	70	2669	1.15	UG	90
19) Acetophenone	2.63	105	6316	1.23	UG	# 6
20) 3-Methylphenol	2.61	108	4305	1.13	UG	96
21) Hexachloroethane	2.70	117	1108m	0.79	UG	
25) Nitrobenzene	2.71	77	4578	1.36	UG	# 89
26) Isophorone	2.81	82	7744	1.15	UG	# 89
27) 2-Nitrophenol	2.85	139	2629	1.13	UG	# 74
28) 2,4-Dimethylphenol	2.83	107	4556	1.14	UG	# 67
29) Bis(2-chloroethoxy) methan	2.87	93	5028	1.19	UG	96
30) Benzoic acid	2.85	122	1711m	0.71	UG	
31) 2,4-Dimethylaniline	2.93	121	5126	1.11	UG	# 100
32) 2,4-Dichlorophenol	2.95	162	4051	1.10	UG	# 84
33) 1,2,4-Trichlorobenzene	3.00	180	5064	1.21	UG	88
34) Naphthalene	3.03	128	15524	1.25	UG	# 82
35) 4-Chloroaniline	3.03	127	7512	1.07	UG	# 25
36) 4-Aminotoluene	2.65	106	7712	1.15	UG	97
37) Hexachlorobutadiene	3.10	225	2706	1.17	UG	94
38) Caprolactam	3.16	55	960m	0.82	UG	
39) 2-Aminotoluene	2.65	106	7712	1.15	UG	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration

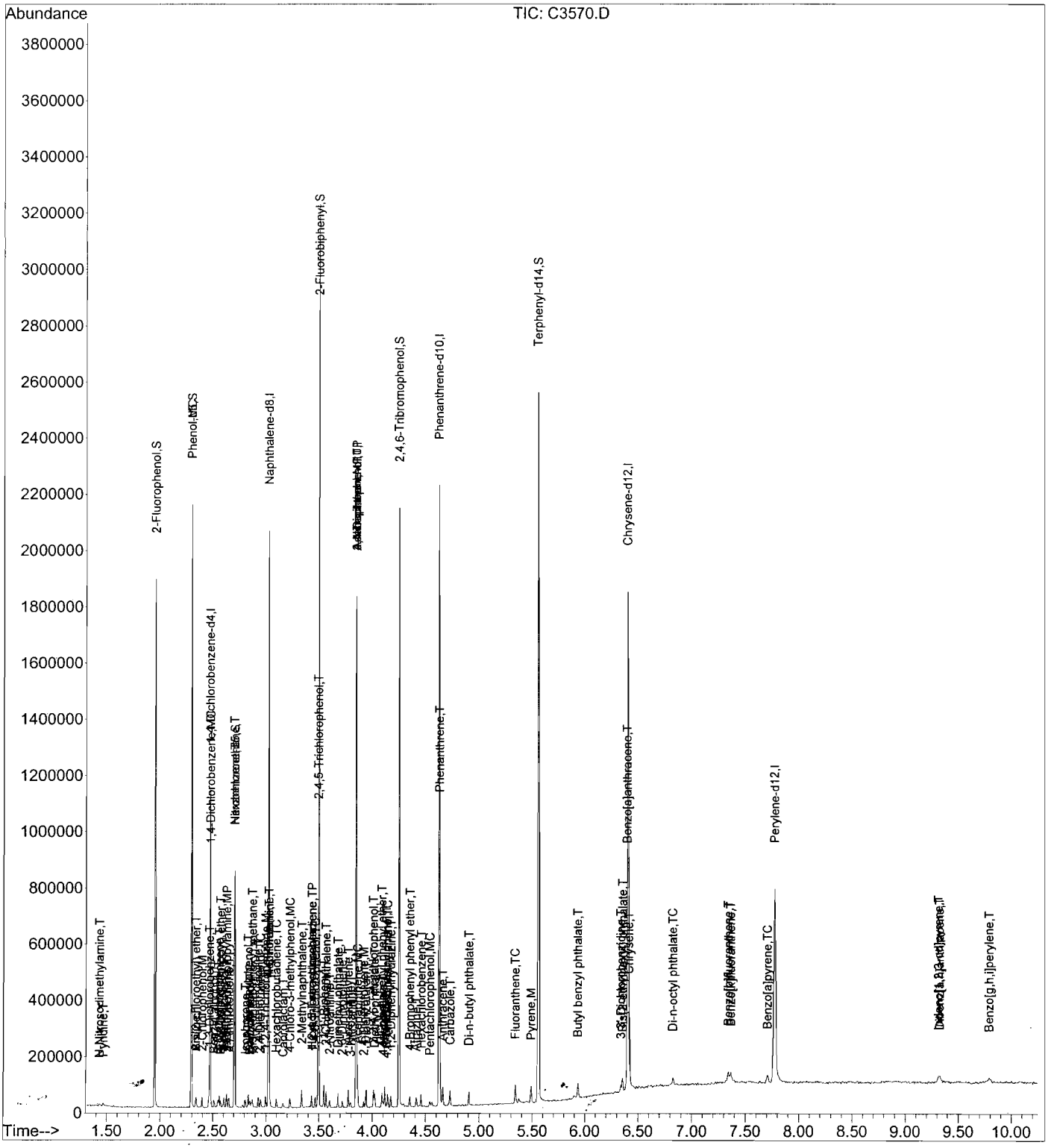
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	4637	1.30	UG	#	91
41) 2-Methylnaphthalene	3.34	142	10287	1.08	UG		100
44) Hexachlorocyclopentadiene	3.44	237	1037m	0.98	UG		
45) 2,4,6-Trichlorophenol	3.47	196	3634	1.26	UG		92
46) 2,4,5-Trichlorophenol	3.49	196	3062	0.91	UG		89
48) 1,1'-Biphenyl	3.55	154	13206	1.09	UG		96
49) 2-Chloronaphthalene	3.57	162	9338	1.09	UG		95
50) 2-Nitroaniline	3.60	65	1790	0.99	UG	#	80
51) Dimethyl phthalate	3.68	163	11631	1.20	UG	#	93
52) 2,6-Dinitrotoluene	3.72	165	2025	1.00	UG		89
53) Acenaphthylene	3.78	152	15312	1.12	UG		96
54) 3-Nitroaniline	3.80	138	2414	1.00	UG	#	87
55) Acenaphthene	3.87	153	10285	1.20	UG		95
56) 2,4-Dinitrophenol	3.85	184	922	1.11	UG	#	1
57) 4-Nitrophenol	3.84	65	1516m	1.15	UG		
58) 2,4-Dinitrotoluene	3.92	165	2528	0.93	UG	#	74
59) Dibenzofuran	3.94	168	14237	1.06	UG		88
60) Diethyl phthalate	4.02	149	10951	1.19	UG	#	89
61) Fluorene	4.12	166	11477	1.14	UG		98
62) 4-Chlorophenyl phenyl ethe	4.09	204	5870	1.09	UG		89
63) 4-Nitroaniline	4.10	138	2293	0.90	UG	#	59
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	4960	1.03	UG		95
65) 2,3,4,6-Tetrachlorophenol	4.01	232	2905m	1.14	UG		
67) 4,6-Dinitro-2-methylphenol	4.13	198	1100	0.68	UG	#	90
68) N-Nitrosodiphenylamine	4.14	169	8108	1.00	UG		96
69) 1,2-Diphenylhydrazine	4.18	77	8675m	1.13	UG		
71) 4-Bromophenyl phenyl ether	4.35	248	4035	1.13	UG	#	76
72) Hexachlorobenzene	4.46	284	4334	1.13	UG	#	89
73) Atrazine	4.42	200	2759m	1.15	UG		
74) Pentachlorophenol	4.54	266	1794	0.81	UG		93
75) Phenanthrene	4.64	178	17751m	1.20	UG		
76) Anthracene	4.66	178	17447	1.16	UG		99
77) Carbazole	4.73	167	14890	1.10	UG	#	95
78) Di-n-butyl phthalate	4.91	149	16878	1.07	UG		96
79) Fluoranthene	5.34	202	18457	1.21	UG	#	94
83) Pyrene	5.49	202	18560	1.02	UG	#	86
86) Butyl benzyl phthalate	5.93	149	7651	1.07	UG	#	88
87) 3,3'-Dichlorobenzidine	6.34	252	5268	0.93	UG	#	94
88) Benzo[a]anthracene	6.39	228	17398	1.11	UG		96
89) Chrysene	6.42	228	15033	1.04	UG		97
90) Bis(2-ethylhexyl) phthalat	6.36	149	9769	0.98	UG	#	84
93) Di-n-octyl phthalate	6.83	149	15108	0.99	UG		100
94) Benzo[b]fluoranthene	7.34	252	13266m	0.84	UG		
95) Benzo[k]fluoranthene	7.37	252	13722	1.01	UG	#	84
96) Benzo[a]pyrene	7.71	252	13356	0.93	UG	#	90
97) Indeno[1,2,3-cd]pyrene	9.32	276	15470	0.86	UG	#	37
98) Dibenz[a,h]anthracene	9.33	278	12594	0.83	UG	#	66
99) Benzo[g,h,i]perylene	9.79	276	12337	0.81	UG	#	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3570.D
Acq On : 10 Feb 2015 11:50
Operator : EDM
Sample : ABN008-15,ICC001BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 10 13:54:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 11:53:57 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	121980	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	482893	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	310857	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	529904	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	511752	40.00	UG		-0.05
92) Perylene-d12	7.74	264	339678	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	372698	100.73	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 100.73%				
6) Phenol-d5	2.30	99	470486	106.54	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 106.54%				
24) Nitrobenzene-d5	2.71	82	181929	49.75	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 99.50%#				
47) 2-Fluorobiphenyl	3.49	172	542780	50.29	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 100.58%#				
70) 2,4,6-Tribromophenol	4.24	330	210222	102.68	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.68%				
84) Terphenyl-d14	5.52	244	714780	49.07	UG		-0.06
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.14%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	18802	8.54	UG	#	38
3) Pyridine	1.46	52	23440	10.81	UG	#	84
7) Phenol	2.30	94	48289	10.25	UG	#	43
8) Aniline	2.34	66	19510	9.40	UG		87
9) Bis(2-chloroethyl) ether	2.34	63	21702	9.46	UG	#	68
10) 2-Chlorophenol	2.40	128	45464	9.51	UG		91
11) 1,3-Dichlorobenzene	2.46	146	47724	9.24	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	50491	10.42	UG	#	87
13) Benzyl alcohol	2.51	108	24853	8.45	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	44788	8.96	UG		96
15) 2-Methylphenol	2.51	108	24907	7.37	UG		96
16) Bis(2-chloroisopropyl) eth	2.57	45	30209	8.51	UG		98
17) 4-Methylphenol	2.61	108	36342	8.87	UG		94
18) N-Nitrosodi-n-propylamine	2.63	70	23654	9.39	UG	#	87
19) Acetophenone	2.63	105	50097	8.66	UG	#	1
20) 3-Methylphenol	2.61	108	36764	8.98	UG		94
21) Hexachloroethane	2.70	117	14949	8.51	UG		98
25) Nitrobenzene	2.71	77	33985	8.53	UG	#	84
26) Isophorone	2.80	82	64502	8.91	UG		91
27) 2-Nitrophenol	2.85	139	23709	9.56	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	40223	9.38	UG		84
29) Bis(2-chloroethoxy) methan	2.87	93	40247	8.68	UG		97
30) Benzoic acid	2.85	122	17934m	8.72	UG		
31) 2,4-Dimethylaniline	2.93	121	45225	9.25	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	38190	9.85	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	41685	9.00	UG		97
34) Naphthalene	3.03	128	126629	9.04	UG		98
35) 4-Chloroaniline	3.03	127	63481	8.71	UG		94
36) 4-Aminotoluene	2.65	106	65765	9.12	UG		98
37) Hexachlorobutadiene	3.10	225	21540	8.58	UG		92
38) Caprolactam	3.16	55	11614m	7.99	UG		
39) 2-Aminotoluene	2.65	106	65765	9.12	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration

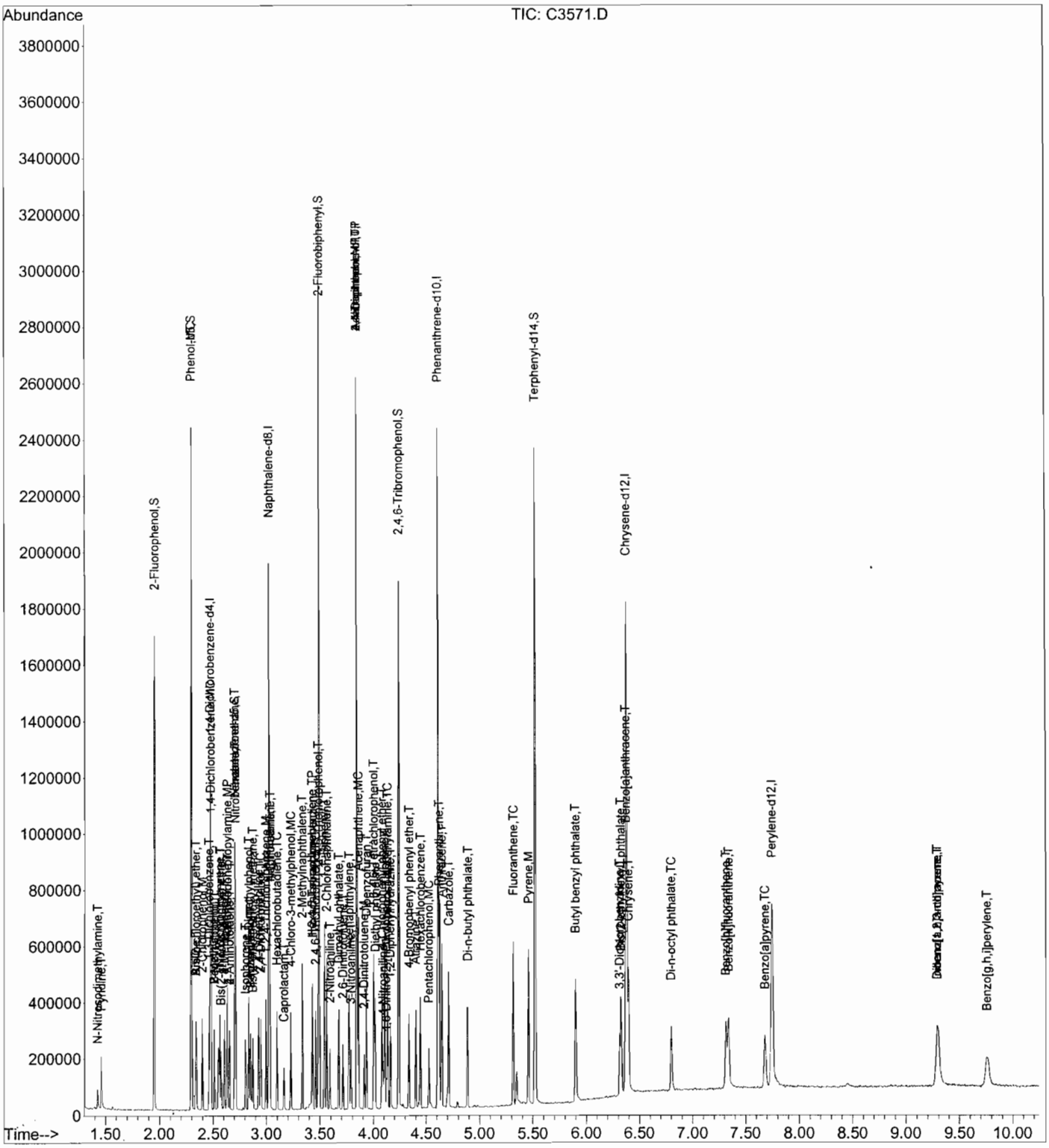
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	36790	8.95	UG		95
41) 2-Methylnaphthalene	3.33	142	87021	8.76	UG		99
44) Hexachlorocyclopentadiene	3.43	237	10117m	11.94	UG		
45) 2,4,6-Trichlorophenol	3.46	196	29429	8.97	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	29440	9.12	UG		99
48) 1,1'-Biphenyl	3.54	154	111583	8.75	UG		98
49) 2-Chloronaphthalene	3.56	162	83884	9.31	UG		98
50) 2-Nitroaniline	3.59	65	16039	8.84	UG	#	73
51) Dimethyl phthalate	3.67	163	93777	8.73	UG		98
52) 2,6-Dinitrotoluene	3.71	165	18496	9.09	UG	#	88
53) Acenaphthylene	3.77	152	135167	9.26	UG		99
54) 3-Nitroaniline	3.79	138	21643	8.93	UG	#	91
55) Acenaphthene	3.86	153	87348	9.20	UG		95
56) 2,4-Dinitrophenol	3.84	184	7052	8.00	UG	#	1
57) 4-Nitrophenol	3.83	65	13259	6.75	UG	#	75
58) 2,4-Dinitrotoluene	3.91	165	23471	8.88	UG	#	76
59) Dibenzofuran	3.93	168	122403	8.77	UG	#	83
60) Diethyl phthalate	4.02	149	88816	8.76	UG		95
61) Fluorene	4.11	166	100331	9.26	UG		98
62) 4-Chlorophenyl phenyl ethe	4.08	204	51938	9.16	UG	#	86
63) 4-Nitroaniline	4.09	138	22275	9.13	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	44083	8.94	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	27368m	6.38	UG		
67) 4,6-Dinitro-2-methylphenol	4.12	198	12180	8.90	UG	#	82
68) N-Nitrosodiphenylamine	4.13	169	72458	8.88	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	73448	8.91	UG	#	84
71) 4-Bromophenyl phenyl ether	4.34	248	31130	8.10	UG	#	84
72) Hexachlorobenzene	4.44	284	37530	9.09	UG	#	93
73) Atrazine	4.40	200	27600	9.21	UG		88
74) Pentachlorophenol	4.52	266	19356	9.58	UG		92
75) Phenanthrene	4.62	178	147996	9.03	UG		97
76) Anthracene	4.65	178	144042	8.78	UG		97
77) Carbazole	4.71	167	129818	9.06	UG		97
78) Di-n-butyl phthalate	4.89	149	147531	8.96	UG	#	97
79) Fluoranthene	5.31	202	155327	9.13	UG	#	95
83) Pyrene	5.46	202	159076	8.97	UG	#	88
86) Butyl benzyl phthalate	5.90	149	62717m	8.80	UG		
87) 3,3'-Dichlorobenzidine	6.31	252	48618	9.25	UG		98
88) Benzo[a]anthracene	6.37	228	136402	8.55	UG		98
89) Chrysene	6.40	228	133596	9.38	UG		95
90) Bis(2-ethylhexyl) phthalat	6.33	149	82186	8.64	UG		93
93) Di-n-octyl phthalate	6.80	149	116919	8.30	UG		99
94) Benzo[b]fluoranthene	7.31	252	109489m	8.12	UG		
95) Benzo[k]fluoranthene	7.34	252	126986	10.01	UG		98
96) Benzo[a]pyrene	7.68	252	106702	8.32	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.29	276	128040	8.25	UG	#	46
98) Dibenz[a,h]anthracene	9.29	278	107171	8.32	UG	#	64
99) Benzo[g,h,i]perylene	9.76	276	107453	8.40	UG	#	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3571.D
Acq On : 10 Feb 2015 12:05
Operator : EDM
Sample : ABN009-15,ICC010BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 10 13:42:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:04:43 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	124974	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	495357	40.00	UG		0.00
43) Acenaphthene-d10	3.83	164	318422	40.00	UG		-0.02
66) Phenanthrene-d10	4.60	188	527797	40.00	UG		-0.03
82) Chrysene-d12	6.37	240	481370	40.00	UG		-0.03
92) Perylene-d12	7.73	264	324066	40.00	UG		-0.05
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	398336	104.82	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 104.82%#				
6) Phenol-d5	2.30	99	493078	106.65	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 106.65%				
24) Nitrobenzene-d5	2.71	82	192806	51.48	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 102.96%#				
47) 2-Fluorobiphenyl	3.49	172	560721	50.62	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 101.24%#				
70) 2,4,6-Tribromophenol	4.23	330	217673	105.80	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 105.80%				
84) Terphenyl-d14	5.51	244	685912	50.37	UG		-0.05
Spiked Amount 50.000	Range 19 - 118		Recovery = 100.74%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	41027	19.11	UG	#	38
3) Pyridine	1.46	52	46293m	20.29	UG		
7) Phenol	2.30	94	106912	21.97	UG	#	32
8) Aniline	2.34	66	40643	19.50	UG		86
9) Bis(2-chloroethyl) ether	2.34	63	45701	19.80	UG	#	71
10) 2-Chlorophenol	2.40	128	92286	19.15	UG		91
11) 1,3-Dichlorobenzene	2.46	146	101693	19.72	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	104441	20.75	UG	#	82
13) Benzyl alcohol	2.51	108	54117	18.93	UG	#	80
14) 1,2-Dichlorobenzene	2.56	146	96895	19.60	UG		94
15) 2-Methylphenol	2.51	108	54078	17.13	UG		99
16) Bis(2-chloroisopropyl) eth	2.57	45	64986	18.80	UG		96
17) 4-Methylphenol	2.61	108	80222	19.86	UG		93
18) N-Nitrosodi-n-propylamine	2.63	70	49984	19.77	UG	#	85
19) Acetophenone	2.63	105	109386	19.32	UG	#	1
20) 3-Methylphenol	2.61	108	79981	19.73	UG		93
21) Hexachloroethane	2.70	117	30682	17.94	UG	#	86
25) Nitrobenzene	2.71	77	74062	19.05	UG	#	85
26) Isophorone	2.81	82	139370m	19.48	UG		
27) 2-Nitrophenol	2.85	139	53115	21.20	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	88320	20.50	UG		88
29) Bis(2-chloroethoxy) methan	2.87	93	84063	18.48	UG		97
30) Benzoic acid	2.86	122	39465	19.54	UG		88
31) 2,4-Dimethylaniline	2.93	121	98338	20.11	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	79408	20.06	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	87994	19.16	UG		97
34) Naphthalene	3.03	128	272418	19.58	UG		100
35) 4-Chloroaniline	3.03	127	140705	19.66	UG		99
36) 4-Aminotoluene	2.65	106	144711	20.15	UG		98
37) Hexachlorobutadiene	3.10	225	47828	19.49	UG		97
38) Caprolactam	3.17	55	24455	21.68	UG		82
39) 2-Aminotoluene	2.65	106	144711	20.15	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration

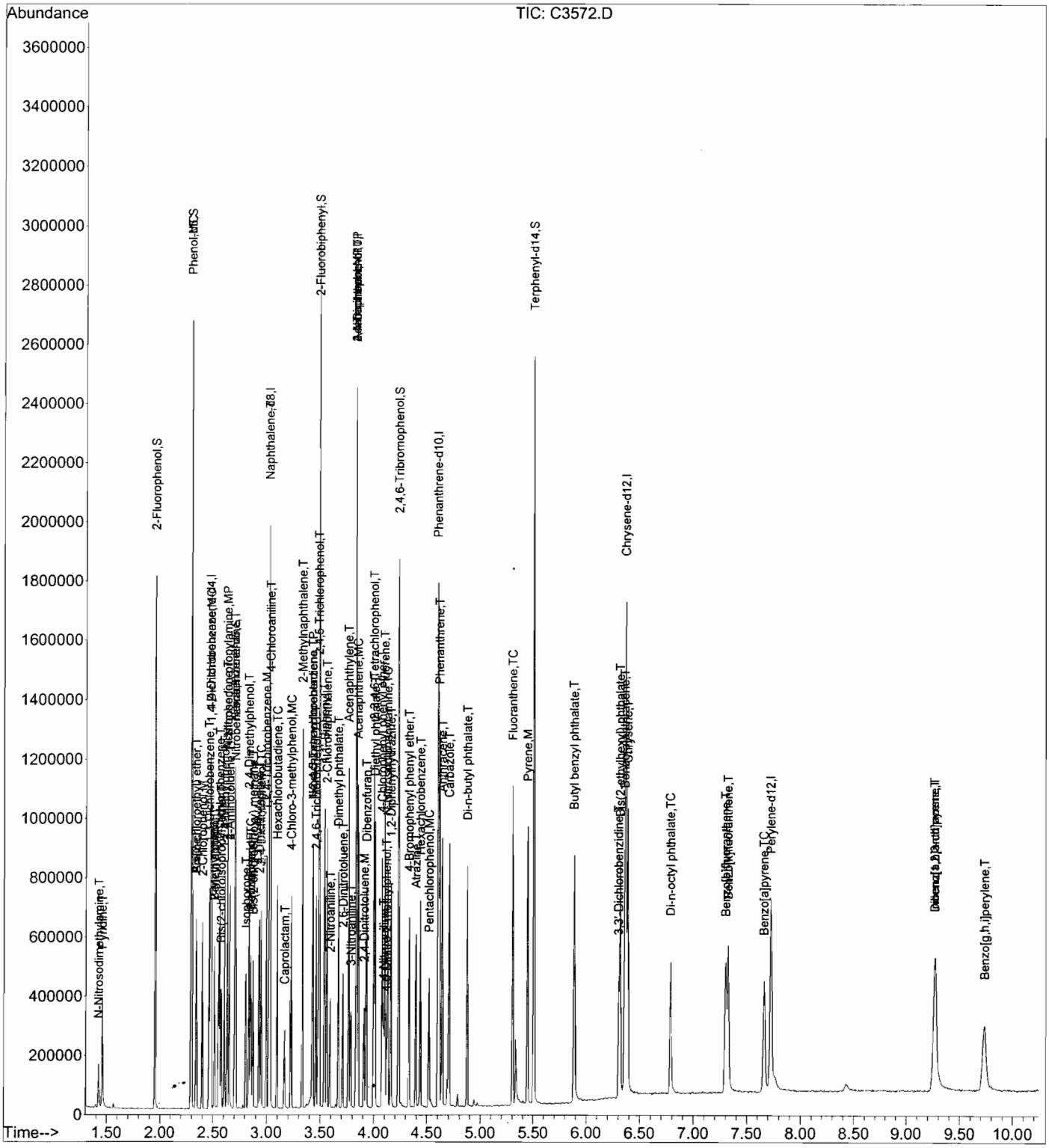
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	77816	19.13	UG		96
41) 2-Methylnaphthalene	3.33	142	187589	19.20	UG		99
44) Hexachlorocyclopentadiene	3.43	237	21981m	29.69	UG		
45) 2,4,6-Trichlorophenol	3.46	196	61397	18.92	UG		98
46) 2,4,5-Trichlorophenol	3.48	196	60079	18.72	UG		99
48) 1,1'-Biphenyl	3.54	154	230121	18.39	UG		99
49) 2-Chloronaphthalene	3.56	162	175856	19.51	UG		98
50) 2-Nitroaniline	3.59	65	34063	19.06	UG	#	73
51) Dimethyl phthalate	3.67	163	198560	18.84	UG	#	97
52) 2,6-Dinitrotoluene	3.71	165	41010	20.29	UG	#	84
53) Acenaphthylene	3.76	152	286004	19.61	UG		98
54) 3-Nitroaniline	3.79	138	45440	18.98	UG	#	94
55) Acenaphthene	3.85	153	184519	19.50	UG		94
56) 2,4-Dinitrophenol	3.83	184	13880	16.48	UG	#	1
57) 4-Nitrophenol	3.83	65	25740	18.04	UG	#	66
58) 2,4-Dinitrotoluene	3.91	165	52952	20.32	UG	#	75
59) Dibenzofuran	3.93	168	254622	18.57	UG	#	83
60) Diethyl phthalate	4.01	149	187278	18.81	UG		94
61) Fluorene	4.10	166	208551	19.26	UG		98
62) 4-Chlorophenyl phenyl ethe	4.07	204	101763	18.03	UG		89
63) 4-Nitroaniline	4.09	138	45765	18.85	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	94305	19.35	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	42297m	15.06	UG		
67) 4,6-Dinitro-2-methylphenol	4.12	198	28417	21.65	UG	#	81
68) N-Nitrosodiphenylamine	4.13	169	150154	19.19	UG		99
69) 1,2-Diphenylhydrazine	4.16	77	163729	20.69	UG	#	85
71) 4-Bromophenyl phenyl ether	4.33	248	67322	18.78	UG	#	86
72) Hexachlorobenzene	4.44	284	78864	19.78	UG	#	93
73) Atrazine	4.39	200	58722	20.21	UG		95
74) Pentachlorophenol	4.52	266	43420	21.89	UG		91
75) Phenanthrene	4.61	178	299576	18.97	UG		98
76) Anthracene	4.64	178	298749	19.06	UG		100
77) Carbazole	4.70	167	260451	18.84	UG		98
78) Di-n-butyl phthalate	4.88	149	307472	19.43	UG	#	97
79) Fluoranthene	5.30	202	311142	18.92	UG	#	94
83) Pyrene	5.45	202	314098	19.49	UG	#	88
86) Butyl benzyl phthalate	5.89	149	119374	18.54	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	94960	19.69	UG		93
88) Benzo[a]anthracene	6.36	228	266820	18.68	UG		99
89) Chrysene	6.39	228	251566	19.18	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	164588	19.28	UG		94
93) Di-n-octyl phthalate	6.79	149	236643	18.66	UG		100
94) Benzo[b]fluoranthene	7.30	252	241498m	20.03	UG		
95) Benzo[k]fluoranthene	7.32	252	209476	17.30	UG	#	96
96) Benzo[a]pyrene	7.66	252	212142	18.37	UG		98
97) Indeno[1,2,3-cd]pyrene	9.27	276	273024	19.58	UG	#	45
98) Dibenz[a,h]anthracene	9.27	278	214072	18.45	UG	#	63
99) Benzo[g,h,i]perylene	9.73	276	226747	19.63	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3572.D
Acq On : 10 Feb 2015 12:19
Operator : EDM
Sample : ABN010-15,ICC020BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 10 13:42:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:22:43 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	117890	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	452565	40.00	UG		0.00
43) Acenaphthene-d10	3.83	164	283380	40.00	UG		0.00
66) Phenanthrene-d10	4.60	188	464948	40.00	UG		0.00
82) Chrysene-d12	6.36	240	406279	40.00	UG		-0.01
92) Perylene-d12	7.72	264	330161	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	359250	99.02	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 99.02%				
6) Phenol-d5	2.30	99	437036	98.57	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 98.57%				
24) Nitrobenzene-d5	2.71	82	184869	53.63	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 107.26%#				
47) 2-Fluorobiphenyl	3.49	172	493079	49.86	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 99.72%#				
70) 2,4,6-Tribromophenol	4.23	330	187726	102.09	UG		0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.09%				
84) Terphenyl-d14	5.50	244	574312	49.88	UG		-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 99.76%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	164601	82.20	UG	#	38
3) Pyridine	1.45	52	179565	83.14	UG	#	84
7) Phenol	2.30	94	344819	73.30	UG	#	25
8) Aniline	2.34	66	145133	74.29	UG		87
9) Bis(2-chloroethyl) ether	2.34	63	159891	73.61	UG	#	69
10) 2-Chlorophenol	2.40	128	338537	75.28	UG	#	89
11) 1,3-Dichlorobenzene	2.46	146	358464	73.95	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	384074	80.14	UG	#	81
13) Benzyl alcohol	2.51	108	208573	78.40	UG	#	75
14) 1,2-Dichlorobenzene	2.56	146	350312	75.51	UG		96
15) 2-Methylphenol	2.51	108	208573	72.64	UG		97
16) Bis(2-chloroisopropyl) eth	2.57	45	227889	70.94	UG	#	94
17) 4-Methylphenol	2.61	108	285779	75.13	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	177111	74.47	UG	#	86
19) Acetophenone	2.64	105	389973	73.63	UG	#	1
20) 3-Methylphenol	2.61	108	285430	74.90	UG		94
21) Hexachloroethane	2.70	117	115161	73.27	UG		90
25) Nitrobenzene	2.71	77	250057	71.26	UG	#	85
26) Isophorone	2.81	82	500905m	77.12	UG		
27) 2-Nitrophenol	2.85	139	193764	83.39	UG	#	69
28) 2,4-Dimethylphenol	2.83	107	310500	78.39	UG		85
29) Bis(2-chloroethoxy) methan	2.88	93	308194	75.61	UG		98
30) Benzoic acid	2.87	122	148771	81.09	UG	#	76
31) 2,4-Dimethylaniline	2.93	121	365951	81.80	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	300550	83.05	UG		97
33) 1,2,4-Trichlorobenzene	3.00	180	309824	74.63	UG		97
34) Naphthalene	3.03	128	1007636	79.69	UG		98
35) 4-Chloroaniline	3.03	127	509117	78.20	UG		96
36) 4-Aminotoluene	2.65	106	510066	77.61	UG		100
37) Hexachlorobutadiene	3.10	225	174583	78.38	UG		98
38) Caprolactam	3.18	55	84246	80.07	UG	#	74
39) 2-Aminotoluene	2.65	106	510066	77.61	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

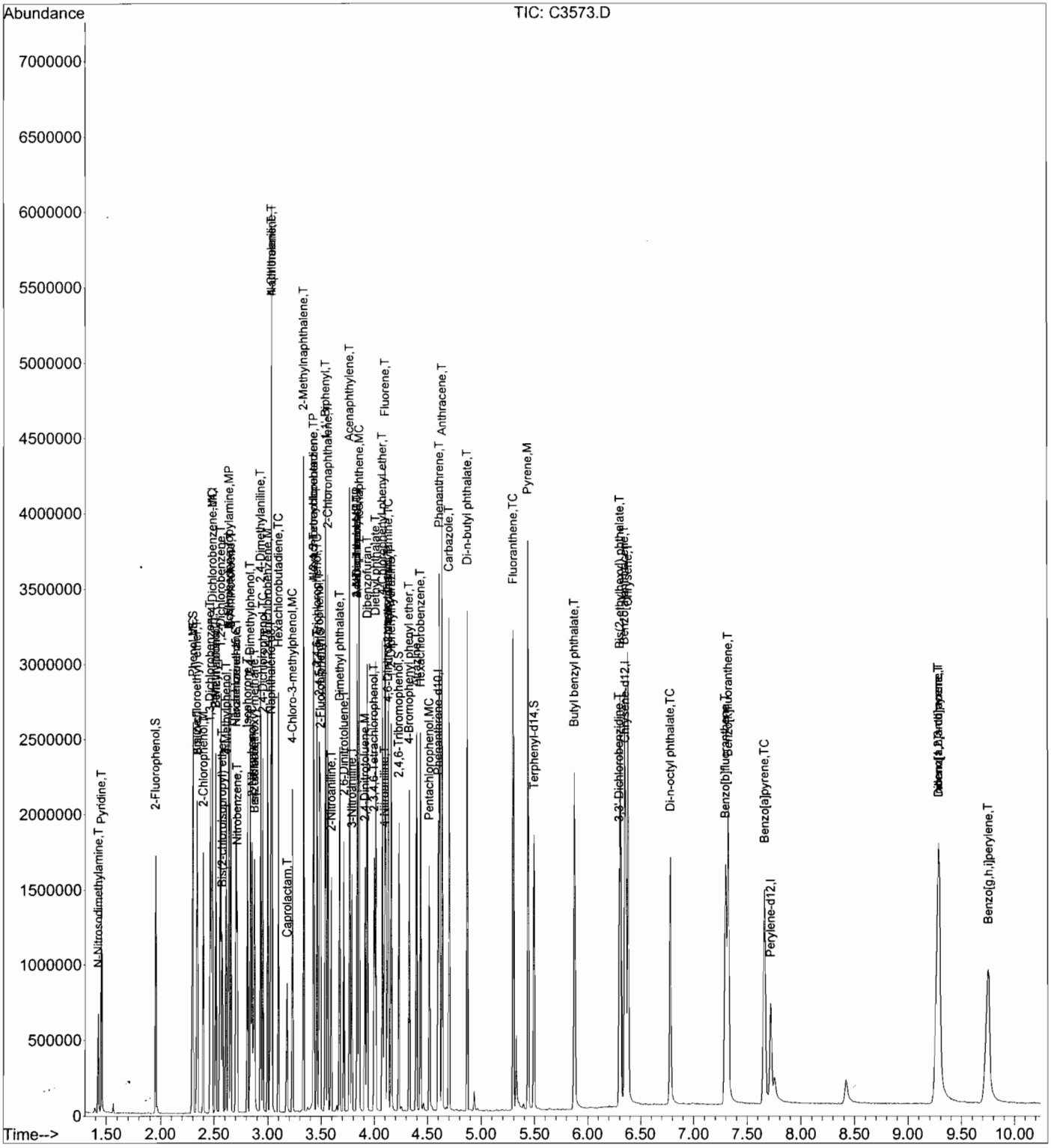
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	267840	72.85	UG		93
41) 2-Methylnaphthalene	3.33	142	666562	75.43	UG		100
44) Hexachlorocyclopentadiene	3.43	237	69451m	105.99	UG		
45) 2,4,6-Trichlorophenol	3.46	196	216736	76.08	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	223816	79.63	UG		98
48) 1,1'-Biphenyl	3.54	154	845960	77.51	UG		99
49) 2-Chloronaphthalene	3.56	162	642395	80.57	UG		99
50) 2-Nitroaniline	3.59	65	129351	82.30	UG	#	76
51) Dimethyl phthalate	3.67	163	732365	79.24	UG		97
52) 2,6-Dinitrotoluene	3.71	165	149059	82.56	UG	#	85
53) Acenaphthylene	3.76	152	1032202	79.90	UG		98
54) 3-Nitroaniline	3.79	138	162562	77.28	UG	#	96
55) Acenaphthene	3.86	153	658221	78.65	UG		95
56) 2,4-Dinitrophenol	3.84	184	62777	87.59	UG	#	1
57) 4-Nitrophenol	3.83	65	93440	75.44	UG	#	61
58) 2,4-Dinitrotoluene	3.91	165	200505	86.11	UG	#	77
59) Dibenzofuran	3.93	168	926682	77.33	UG	#	83
60) Diethyl phthalate	4.01	149	650855	74.56	UG		95
61) Fluorene	4.10	166	739131	77.42	UG		100
62) 4-Chlorophenyl phenyl ethe	4.07	204	361773	73.83	UG		90
63) 4-Nitroaniline	4.09	138	170702	80.17	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	329710	76.65	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	182137	77.67	UG		94
67) 4,6-Dinitro-2-methylphenol	4.12	198	118067	100.04	UG	#	72
68) N-Nitrosodiphenylamine	4.13	169	551199	80.78	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	580288	82.54	UG	#	84
71) 4-Bromophenyl phenyl ether	4.33	248	237933	76.50	UG	#	87
72) Hexachlorobenzene	4.43	284	268546	76.67	UG		94
73) Atrazine	4.39	200	212176	82.67	UG		99
74) Pentachlorophenol	4.51	266	160873	89.94	UG		93
75) Phenanthrene	4.61	178	1053673	76.72	UG		97
76) Anthracene	4.64	178	1046473	76.69	UG		98
77) Carbazole	4.70	167	914710	76.22	UG		98
78) Di-n-butyl phthalate	4.87	149	1085852	78.44	UG	#	97
79) Fluoranthene	5.30	202	1074356	75.17	UG	#	92
83) Pyrene	5.44	202	1062818	78.65	UG	#	86
86) Butyl benzyl phthalate	5.87	149	404690	75.86	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	315347	77.79	UG		99
88) Benzo[a]anthracene	6.35	228	897005	75.65	UG		99
89) Chrysene	6.38	228	852097	77.77	UG		97
90) Bis(2-ethylhexyl) phthalat	6.31	149	566479	79.32	UG		93
93) Di-n-octyl phthalate	6.78	149	862952	67.94	UG		100
94) Benzo[b]fluoranthene	7.30	252	875976	71.29	UG		99
95) Benzo[k]fluoranthene	7.32	252	926466	77.73	UG	#	97
96) Benzo[a]pyrene	7.66	252	873228	75.77	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.28	276	1143533	80.92	UG	#	45
98) Dibenz[a,h]anthracene	9.28	278	941988	81.25	UG	#	65
99) Benzo[g,h,i]perylene	9.75	276	954551	81.50	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3573.D
Acq On : 10 Feb 2015 12:35
Operator : EDM
Sample : ABN012-15,ICC080BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 10 13:43:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.48	152	116160	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	433200	40.00	UG	0.00
43) Acenaphthene-d10	3.83	164	285658	40.00	UG	0.00
66) Phenanthrene-d10	4.60	188	452920	40.00	UG	0.00
82) Chrysene-d12	6.37	240	432931	40.00	UG	0.00
92) Perylene-d12	7.73	264	364958	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	352408	98.58	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 98.58%			
6) Phenol-d5	2.30	99	424909	97.26	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 97.26%			
24) Nitrobenzene-d5	2.71	82	201615	61.10	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 122.20%#			
47) 2-Fluorobiphenyl	3.49	172	483734	48.53	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 97.06%#			
70) 2,4,6-Tribromophenol	4.23	330	183093	102.22	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 102.22%			
84) Terphenyl-d14	5.50	244	536518	43.73	UG	-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 87.46%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.43	74	292941	148.47	UG	# 38
3) Pyridine	1.46	52	339860	159.70	UG	# 84
7) Phenol	2.31	94	736179	158.83	UG	# 24
8) Aniline	2.34	66	283081	147.05	UG	85
9) Bis(2-chloroethyl) ether	2.35	63	322098	150.49	UG	# 71
10) 2-Chlorophenol	2.40	128	689089	155.51	UG	91
11) 1,3-Dichlorobenzene	2.47	146	737842	154.47	UG	# 94
12) 1,4-Dichlorobenzene	2.48	146	701745	148.61	UG	# 81
13) Benzyl alcohol	2.51	108	395829	151.00	UG	# 76
14) 1,2-Dichlorobenzene	2.56	146	684239	149.68	UG	94
15) 2-Methylphenol	2.51	108	396276	140.06	UG	98
16) Bis(2-chloroisopropyl) eth	2.58	45	480902	151.94	UG	94
17) 4-Methylphenol	2.62	108	555098	148.10	UG	96
18) N-Nitrosodi-n-propylamine	2.64	70	352307	150.35	UG	# 88
19) Acetophenone	2.64	105	759855	145.61	UG	# 1
20) 3-Methylphenol	2.62	108	554869	147.78	UG	95
21) Hexachloroethane	2.70	117	227046	146.62	UG	93
25) Nitrobenzene	2.72	77	523168	155.75	UG	# 87
26) Isophorone	2.81	82	992815	159.69	UG	92
27) 2-Nitrophenol	2.85	139	358567	161.21	UG	# 70
28) 2,4-Dimethylphenol	2.84	107	628192	165.69	UG	90
29) Bis(2-chloroethoxy) methan	2.88	93	607152	155.61	UG	97
30) Benzoic acid	2.88	122	251974m	143.47	UG	
31) 2,4-Dimethylaniline	2.94	121	703901	164.37	UG	# 100
32) 2,4-Dichlorophenol	2.95	162	548846	158.43	UG	97
33) 1,2,4-Trichlorobenzene	3.00	180	618557	155.65	UG	97
34) Naphthalene	3.03	128	1946890	160.86	UG	99
35) 4-Chloroaniline	3.03	127	1009877	162.05	UG	97
36) 4-Aminotoluene	2.66	106	1058317	168.22	UG	100
37) Hexachlorobutadiene	3.10	225	326059	152.92	UG	98
38) Caprolactam	3.19	55	168837	167.64	UG	# 75
39) 2-Aminotoluene	2.66	106	1058317	168.22	UG	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration

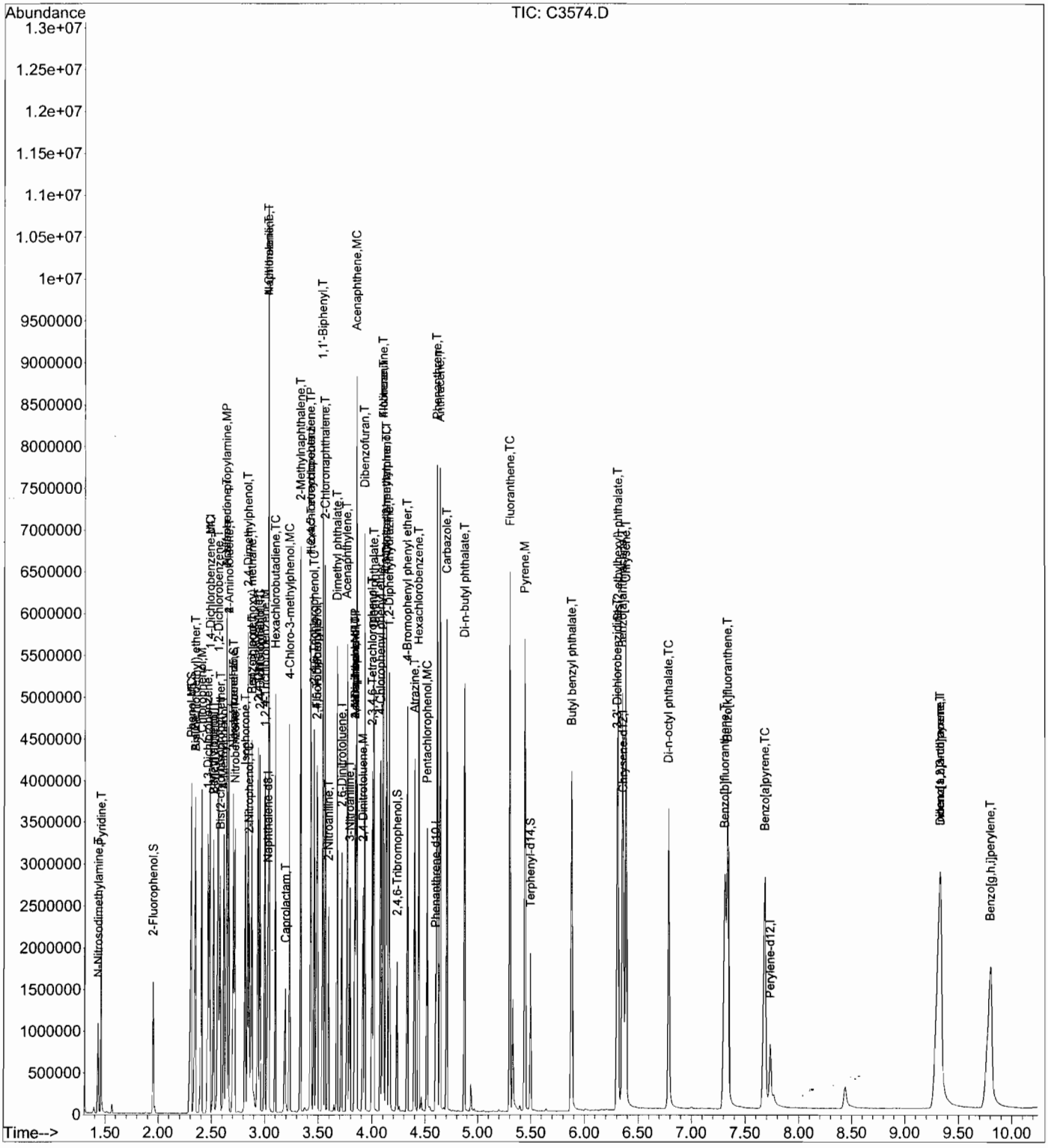
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	532304	151.25	UG		93
41) 2-Methylnaphthalene	3.33	142	1281659	151.51	UG		100
44) Hexachlorocyclopentadiene	3.43	237	176975m	267.92	UG		
45) 2,4,6-Trichlorophenol	3.46	196	415838	144.81	UG		98
46) 2,4,5-Trichlorophenol	3.49	196	427885	151.02	UG		99
48) 1,1'-Biphenyl	3.54	154	1550952	140.97	UG		99
49) 2-Chloronaphthalene	3.56	162	1192303	148.34	UG		97
50) 2-Nitroaniline	3.59	65	243383	153.63	UG	#	72
51) Dimethyl phthalate	3.67	163	1377474	147.86	UG		98
52) 2,6-Dinitrotoluene	3.72	165	320781	176.26	UG	#	82
53) Acenaphthylene	3.77	152	2019614	155.09	UG		98
54) 3-Nitroaniline	3.79	138	317754	149.85	UG		96
55) Acenaphthene	3.86	153	1248374	147.97	UG		95
56) 2,4-Dinitrophenol	3.84	184	131380	181.85	UG		59
57) 4-Nitrophenol	3.84	65	180298	144.41	UG	#	58
58) 2,4-Dinitrotoluene	3.91	165	400317	170.56	UG	#	82
59) Dibenzofuran	3.93	168	1741718	144.19	UG	#	83
60) Diethyl phthalate	4.02	149	1295327	147.20	UG		95
61) Fluorene	4.11	166	1468731	152.62	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	717797	145.32	UG	#	88
63) 4-Nitroaniline	4.10	138	340697	158.73	UG	#	63
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	616962	142.28	UG		96
65) 2,3,4,6-Tetrachlorophenol	4.00	232	347097	146.83	UG		94
67) 4,6-Dinitro-2-methylphenol	4.13	198	246037	214.01	UG	#	65
68) N-Nitrosodiphenylamine	4.13	169	1052697	158.37	UG		98
69) 1,2-Diphenylhydrazine	4.16	77	1101316	160.81	UG	#	84
71) 4-Bromophenyl phenyl ether	4.33	248	444567	146.74	UG	#	88
72) Hexachlorobenzene	4.44	284	496251	145.45	UG		95
73) Atrazine	4.40	200	386938	154.77	UG		99
74) Pentachlorophenol	4.52	266	314699	180.61	UG		92
75) Phenanthrene	4.61	178	1938115	144.86	UG		97
76) Anthracene	4.64	178	1940388	145.97	UG		99
77) Carbazole	4.70	167	1684819	144.12	UG		98
78) Di-n-butyl phthalate	4.88	149	2079147	154.19	UG	#	97
79) Fluoranthene	5.30	202	2006679	144.12	UG	#	92
83) Pyrene	5.44	202	2014935	139.93	UG	#	87
86) Butyl benzyl phthalate	5.88	149	777809	136.83	UG	#	90
87) 3,3'-Dichlorobenzidine	6.30	252	552255	127.84	UG		100
88) Benzo[a]anthracene	6.36	228	1782914	141.11	UG		100
89) Chrysene	6.39	228	1666391	142.72	UG		96
90) Bis(2-ethylhexyl) phthalat	6.31	149	1104791	145.18	UG		94
93) Di-n-octyl phthalate	6.79	149	1796941	127.98	UG		100
94) Benzo[b]fluoranthene	7.32	252	2149222	158.23	UG		95
95) Benzo[k]fluoranthene	7.34	252	1610602m	122.25	UG		
96) Benzo[a]pyrene	7.69	252	1813827	142.37	UG	#	97
97) Indeno[1,2,3-cd]pyrene	9.34	276	2387402	152.83	UG	#	45
98) Dibenz[a,h]anthracene	9.33	278	1943131	151.62	UG	#	63
99) Benzo[g,h,i]perylene	9.80	276	1974995	152.55	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3574.D
Acq On : 10 Feb 2015 12:50
Operator : EDM
Sample : ABN013-15,ICC160BNA1
Misc : NA,02/10/15,NA,1 ,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Feb 10 13:44:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 12:33:05 2015
Response via : Initial Calibration



Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	140335	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	547618	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	342721	40.00	UG		-0.01
66) Phenanthrene-d10	4.60	188	556309	40.00	UG		-0.02
82) Chrysene-d12	6.37	240	452138	40.00	UG		-0.03
92) Perylene-d12	7.74	264	293263	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	412861	95.98	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 95.98%				
6) Phenol-d5	2.30	99	497196	94.86	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 94.86%				
24) Nitrobenzene-d5	2.71	82	203244	46.45	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 92.90%				
47) 2-Fluorobiphenyl	3.49	172	563343	47.36	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 94.72%				
70) 2,4,6-Tribromophenol	4.23	330	216157	97.55	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 97.55%				
84) Terphenyl-d14	5.51	244	662387	52.82	UG		-0.05
Spiked Amount 50.000	Range 19 - 118		Recovery = 105.64%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	89854	39.61	UG	#	39
3) Pyridine	1.46	52	91468	35.36	UG	#	82
7) Phenol	2.30	94	219911	39.88	UG	#	27
8) Aniline	2.34	66	90622	39.98	UG		94
9) Bis(2-chloroethyl) ether	2.34	63	98705	39.08	UG	#	75
10) 2-Chlorophenol	2.40	128	187616	35.56	UG		92
11) 1,3-Dichlorobenzene	2.46	146	220954	39.01	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	216575	38.41	UG	#	81
13) Benzyl alcohol	2.51	108	123527	39.51	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	208111	38.46	UG		97
15) 2-Methylphenol	2.51	108	123672	37.54	UG		100
16) Bis(2-chloroisopropyl) eth	2.57	45	154188	41.45	UG	#	93
17) 4-Methylphenol	2.61	108	177979	40.21	UG		94
18) N-Nitrosodi-n-propylamine	2.63	70	115103	41.56	UG	#	87
19) Acetophenone	2.63	105	242712	39.62	UG	#	1
20) 3-Methylphenol	2.61	108	178002	40.18	UG		94
21) Hexachloroethane	2.70	117	66375	36.50	UG		90
25) Nitrobenzene	2.71	77	161870	39.00	UG		89
26) Isophorone	2.81	82	298272	38.19	UG		92
27) 2-Nitrophenol	2.85	139	109100	38.48	UG	#	72
28) 2,4-Dimethylphenol	2.83	107	188384	39.20	UG		91
29) Bis(2-chloroethoxy) methan	2.87	93	182062	37.43	UG		96
30) Benzoic acid	2.87	122	93445m	42.73	UG		
31) 2,4-Dimethylaniline	2.93	121	208574	38.21	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	165105	37.53	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	186362	37.69	UG		97
34) Naphthalene	3.03	128	569386	37.21	UG		97
35) 4-Chloroaniline	3.03	127	310764	39.51	UG		97
36) 4-Aminotoluene	2.65	106	300831	37.69	UG		96
37) Hexachlorobutadiene	3.10	225	104400	39.15	UG		98
38) Caprolactam	3.17	55	54206	42.23	UG	#	74
39) 2-Aminotoluene	2.65	106	300831	37.69	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration

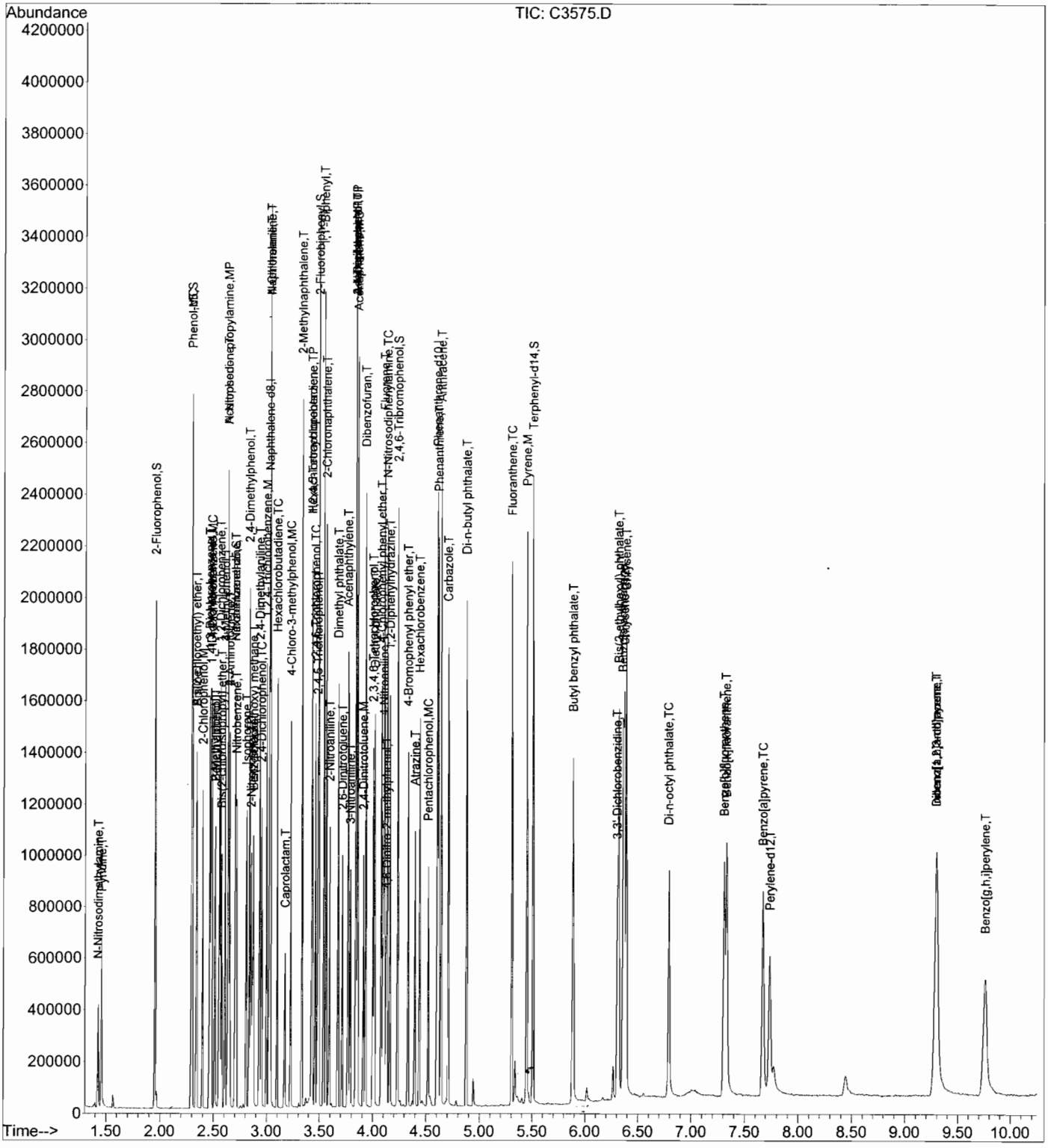
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.22	107	160998	37.08	UG		96
41) 2-Methylnaphthalene	3.33	142	422341	40.24	UG		100
44) Hexachlorocyclopentadiene	3.43	237	56059	48.01	UG		96
45) 2,4,6-Trichlorophenol	3.46	196	124561	37.04	UG		97
46) 2,4,5-Trichlorophenol	3.48	196	144121	42.83	UG		99
48) 1,1'-Biphenyl	3.54	154	539363	41.91	UG		98
49) 2-Chloronaphthalene	3.56	162	369012	38.69	UG		97
50) 2-Nitroaniline	3.59	65	84153	44.36	UG	#	80
51) Dimethyl phthalate	3.67	163	426874	38.74	UG		98
52) 2,6-Dinitrotoluene	3.71	165	93305	41.80	UG	#	84
53) Acenaphthylene	3.77	152	598096	38.49	UG		98
54) 3-Nitroaniline	3.79	138	102353	40.90	UG		98
55) Acenaphthene	3.86	153	382482	38.38	UG		95
56) 2,4-Dinitrophenol	3.84	184	37331	41.47	UG	#	1
57) 4-Nitrophenol	3.84	65	54431	37.30	UG	#	61
58) 2,4-Dinitrotoluene	3.91	165	121660	42.20	UG	#	76
59) Dibenzofuran	3.93	168	573132	40.44	UG	#	83
60) Diethyl phthalate	4.02	149	392889	38.16	UG		94
61) Fluorene	4.11	166	446466	39.18	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	233236	40.50	UG	#	89
63) 4-Nitroaniline	4.10	138	110699	43.03	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	209866	41.39	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.00	232	113399	40.74	UG		95
67) 4,6-Dinitro-2-methylphenol	4.12	198	72092	46.50	UG	#	73
68) N-Nitrosodiphenylamine	4.13	169	343981	42.14	UG		97
69) 1,2-Diphenylhydrazine	4.16	77	318623	37.65	UG	#	86
71) 4-Bromophenyl phenyl ether	4.33	248	147768	40.57	UG	#	88
72) Hexachlorobenzene	4.44	284	162573	39.67	UG		94
73) Atrazine	4.39	200	97386	31.71	UG		100
74) Pentachlorophenol	4.52	266	90313	40.49	UG		93
75) Phenanthrene	4.61	178	613397	38.19	UG		98
76) Anthracene	4.64	178	633520	39.65	UG		98
77) Carbazole	4.70	167	551675	39.38	UG		97
78) Di-n-butyl phthalate	4.88	149	657549	40.07	UG	#	97
79) Fluoranthene	5.30	202	621012	37.31	UG	#	92
83) Pyrene	5.45	202	639408	43.55	UG	#	87
86) Butyl benzyl phthalate	5.89	149	239545	41.72	UG	#	87
87) 3,3'-Dichlorobenzidine	6.30	252	187334	43.17	UG		95
88) Benzo[a]anthracene	6.36	228	519636	40.55	UG		99
89) Chrysene	6.39	228	508094	42.63	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	340186	43.54	UG		94
93) Di-n-octyl phthalate	6.79	149	501028	47.17	UG		100
94) Benzo[b]fluoranthene	7.31	252	462305m	43.22	UG		
95) Benzo[k]fluoranthene	7.33	252	482418	47.67	UG	#	97
96) Benzo[a]pyrene	7.67	252	464959	46.69	UG		97
97) Indeno[1,2,3-cd]pyrene	9.30	276	578999	46.38	UG	#	44
98) Dibenz[a,h]anthracene	9.29	278	469061	45.83	UG	#	62
99) Benzo[g,h,i]perylene	9.76	276	484213	46.76	UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3575.D
Acq On : 10 Feb 2015 13:06
Operator : EDM
Sample : ABN004-15,ICV040BNA1
Misc : NA,02/10/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 10 13:46:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:44:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3576.D
Acq On : 10 Feb 2015 13:22
Operator : EDM
Sample : ABN019-15,ICC160BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 11 11:38:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration

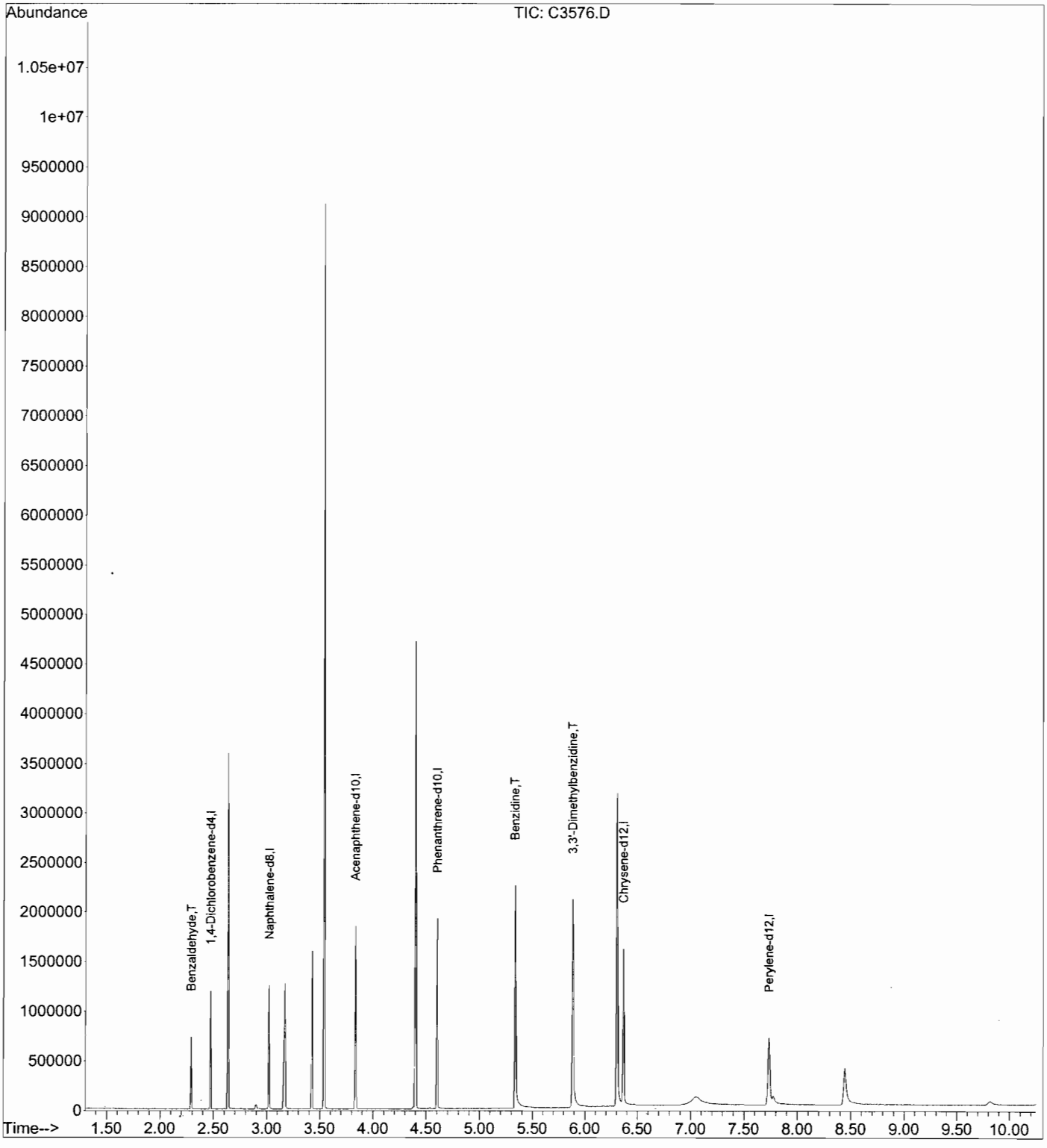
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	112070	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	438405	40.00	UG	0.00
43) Acenaphthene-d10	3.83	164	282039	40.00	UG	-0.02
66) Phenanthrene-d10	4.60	188	482455	40.00	UG	-0.04
82) Chrysene-d12	6.37	240	446203	40.00	UG	-0.06
92) Perylene-d12	7.73	264	368020	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	398	0.12	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 0.12%#			
6) Phenol-d5	2.30	99	538	0.13	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 0.13%#			
24) Nitrobenzene-d5	2.70	82	358	0.10	UG	-0.01
Spiked Amount 50.000	Range 26 - 98		Recovery = 0.20%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	4.23	330	185	0.10	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery = 0.10%#			
84) Terphenyl-d14	5.51	244	278	0.02	UG	-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 0.04%#			
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	298953m	162.57	UG	
80) Benzidine	5.34	184	824894m	134.12	UG	
85) 3,3'-Dimethylbenzidine	5.89	212	851545m	133.79	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3576.D
Acq On : 10 Feb 2015 13:22
Operator : EDM
Sample : ABN019-15,ICC160BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Feb 11 11:38:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3577.D
Acq On : 10 Feb 2015 13:37
Operator : EDM
Sample : ABN018-15,ICC080BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 10 14:03:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:58:41 2015
Response via : Initial Calibration

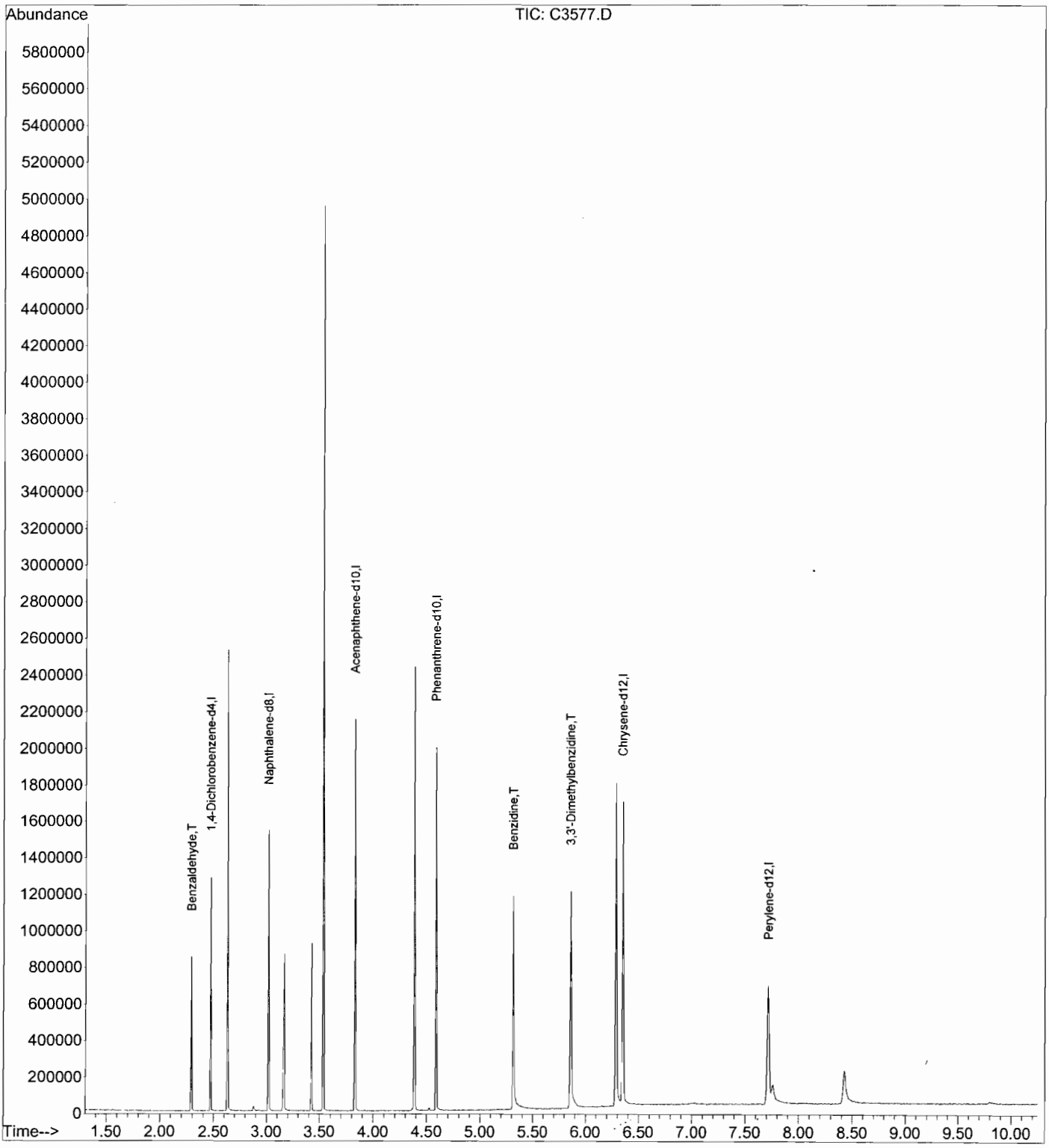
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	118843	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	459361	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	307746	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	506712	40.00	UG	-0.05
82) Chrysene-d12	6.35	240	476955	40.00	UG	-0.07
92) Perylene-d12	7.72	264	354984	40.00	UG	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	184	0.05	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.05%#		
6) Phenol-d5	2.29	99	144	0.03	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.66	82	148	0.04	UG	-0.04
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.08%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.00%#		
84) Terphenyl-d14	5.48	244	252	0.02	UG	-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	147431m	77.56	UG	
80) Benzidine	5.31	184	421293m	73.83	UG	
85) 3,3'-Dimethylbenzidine	5.86	212	473247m	79.00	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3577.D
Acq On : 10 Feb 2015 13:37
Operator : EDM
Sample : ABN018-15,ICC080BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Feb 10 14:03:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 13:58:41 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3578.D
Acq On : 10 Feb 2015 13:53
Operator : EDM
Sample : ABN017-15,ICC040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 10 14:12:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:03:58 2015
Response via : Initial Calibration

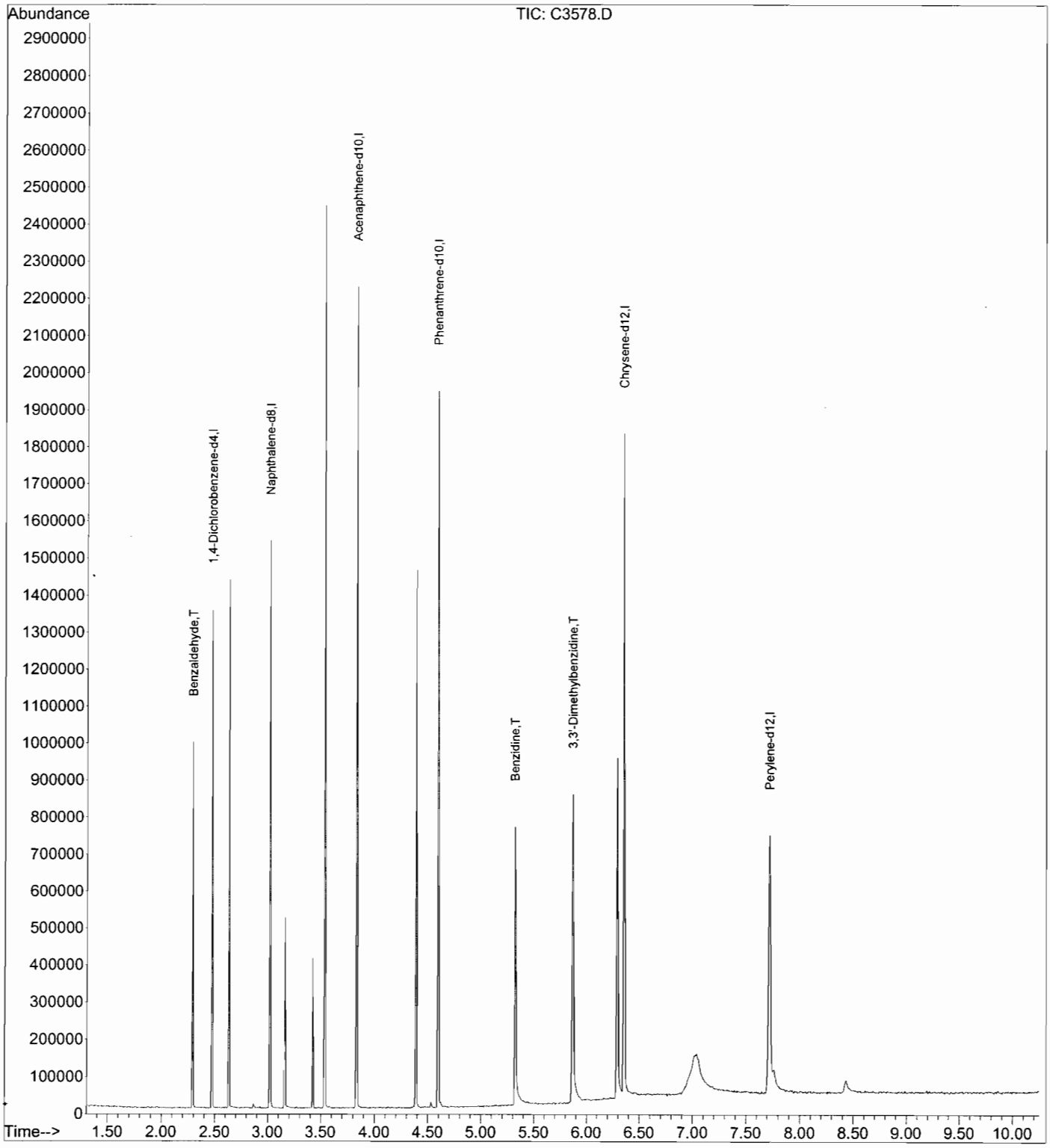
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	122613	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	473594	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	311728	40.00	UG	-0.02
66) Phenanthrene-d10	4.59	188	531401	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	512173	40.00	UG	-0.07
92) Perylene-d12	7.72	264	368255	40.00	UG	-0.06
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	522	0.14	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.14%#		
6) Phenol-d5	2.30	99	734	0.16	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.16%#		
24) Nitrobenzene-d5	2.71	82	223	0.06	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.23	330	182	0.09	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.09%#		
84) Terphenyl-d14	5.54	244	106	0.01	UG	-0.04
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.02%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	98409	50.75	UG	95
80) Benzidine	5.32	184	300729m	50.11	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	219758m	31.64	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3578.D
Acq On : 10 Feb 2015 13:53
Operator : EDM
Sample : ABN017-15,ICC040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Feb 10 14:12:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:03:58 2015
Response via : Initial Calibration



Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3579.D
Acq On : 10 Feb 2015 14:08
Operator : EDM
Sample : ABN016-15,ICC020BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 10 14:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration

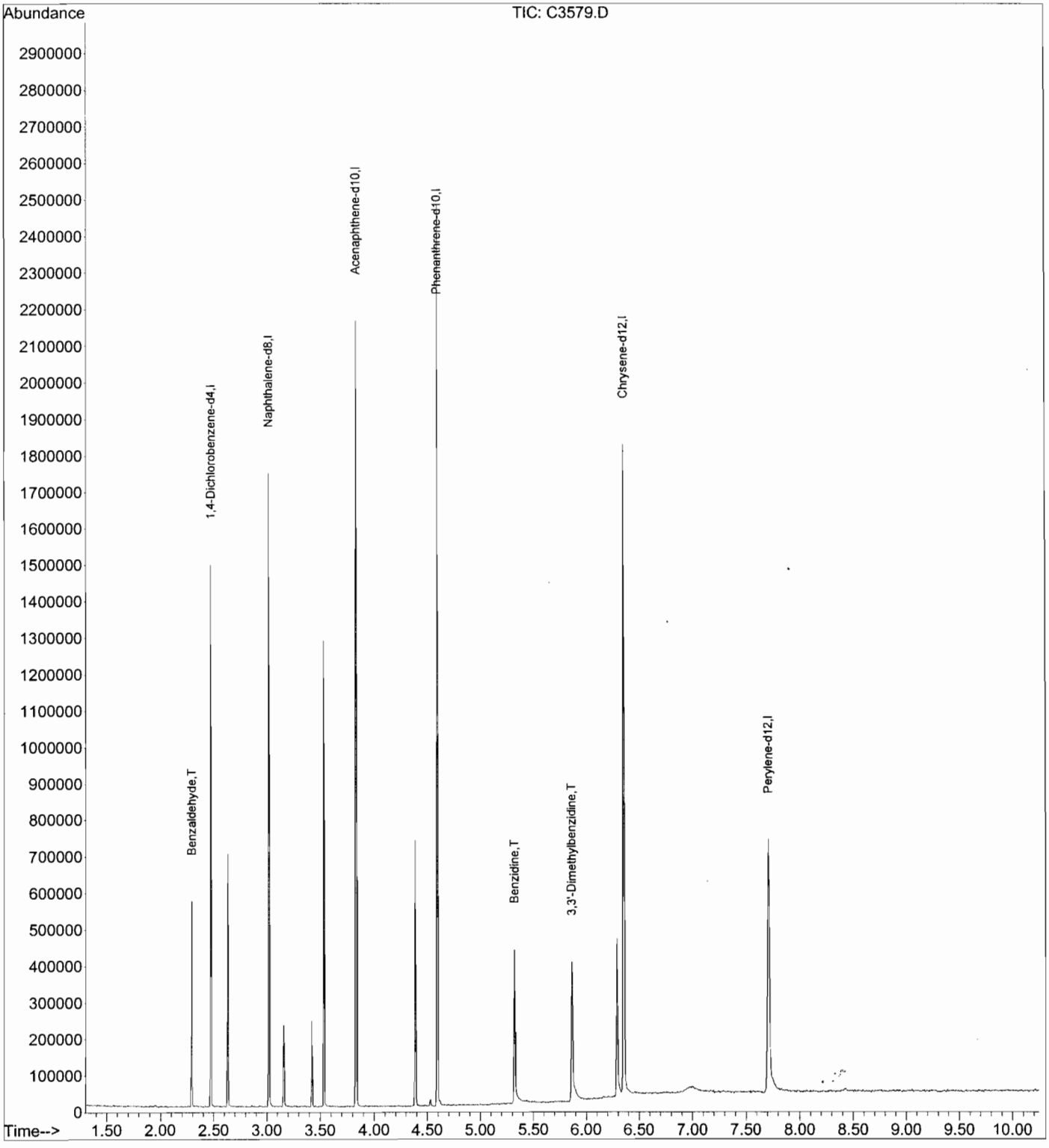
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	130773	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	493240	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	325159	40.00	UG	-0.02
66) Phenanthrene-d10	4.59	188	557105	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	513638	40.00	UG	-0.07
92) Perylene-d12	7.71	264	367657	40.00	UG	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	849	0.21	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.21%#		
6) Phenol-d5	2.29	99	1293	0.26	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.26%#		
24) Nitrobenzene-d5	2.75	82	303	0.08	UG	0.04
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.16%#		
47) 2-Fluorobiphenyl	3.49	172	148	0.01	UG	-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.02%#		
70) 2,4,6-Tribromophenol	4.23	330	347	0.16	UG	-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.16%#		
84) Terphenyl-d14	5.48	244	197	0.01	UG	-0.10
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.02%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	37650m	17.03	UG	
80) Benzidine	5.32	184	152522m	22.02	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	148148m	21.89	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3579.D
Acq On : 10 Feb 2015 14:08
Operator : EDM
Sample : ABN016-15,ICC020BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Feb 10 14:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3580.D
Acq On : 10 Feb 2015 14:24
Operator : EDM
Sample : ABN015-15,ICC010BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 10 14:50:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration

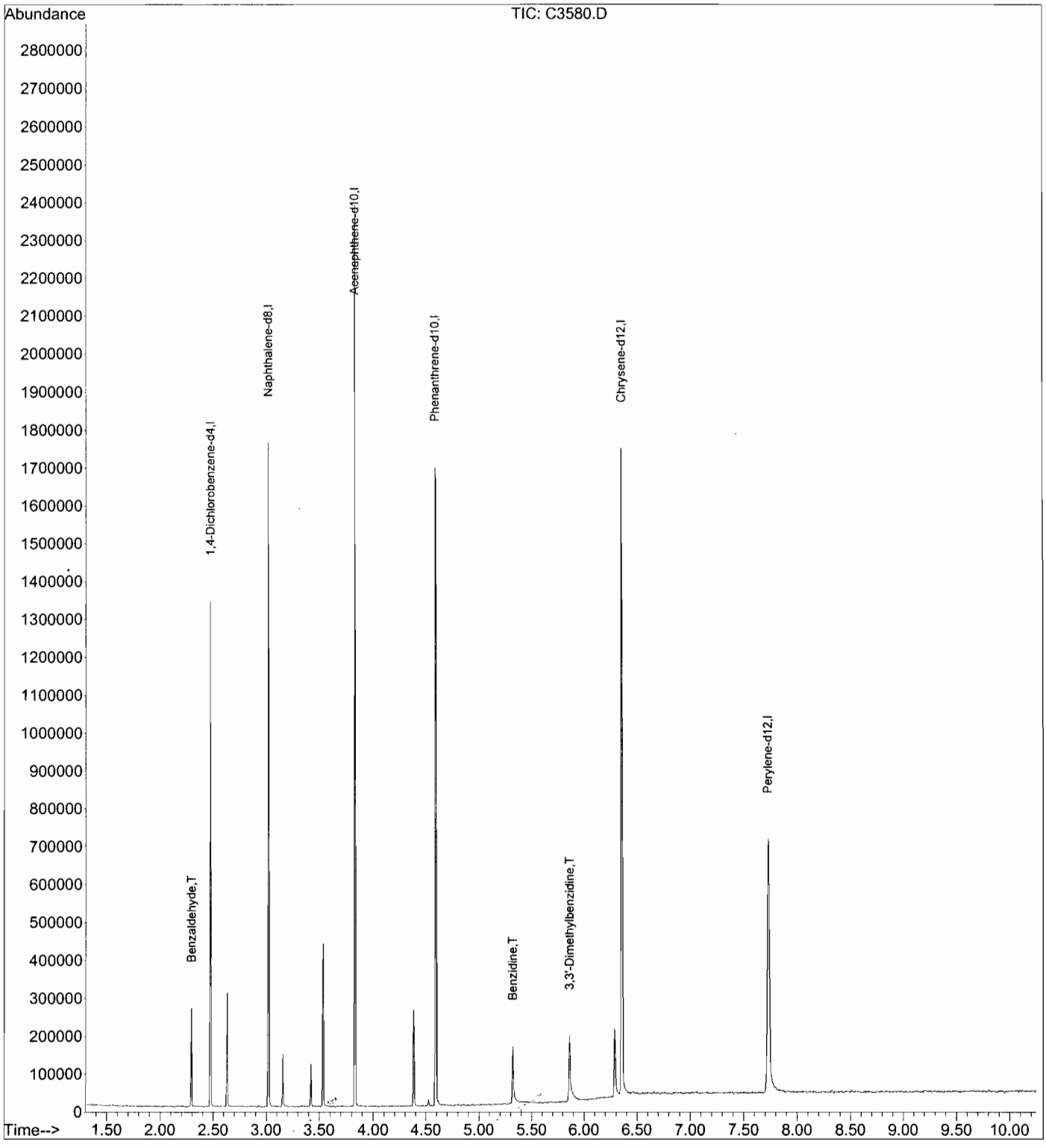
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	118679	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	459942	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	300684	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	506182	40.00	UG	-0.05
82) Chrysene-d12	6.36	240	513614	40.00	UG	-0.07
92) Perylene-d12	7.73	264	377287	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	275	0.08	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.08%#		
6) Phenol-d5	2.30	99	502	0.11	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.11%#		
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.22	330	232	0.12	UG	-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.12%#		
84) Terphenyl-d14	5.49	244	255	0.02	UG	-0.09
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	18929m	9.43	UG	
80) Benzidine	5.32	184	66136m	10.51	UG	
85) 3,3'-Dimethylbenzidine	5.86	212	82875m	12.25	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3580.D
Acq On : 10 Feb 2015 14:24
Operator : EDM
Sample : ABN015-15,ICC010BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Feb 10 14:50:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:13:40 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3581.D
Acq On : 10 Feb 2015 14:39
Operator : EDM
Sample : ABN014-15,ICC001BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 10 14:55:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:51:03 2015
Response via : Initial Calibration

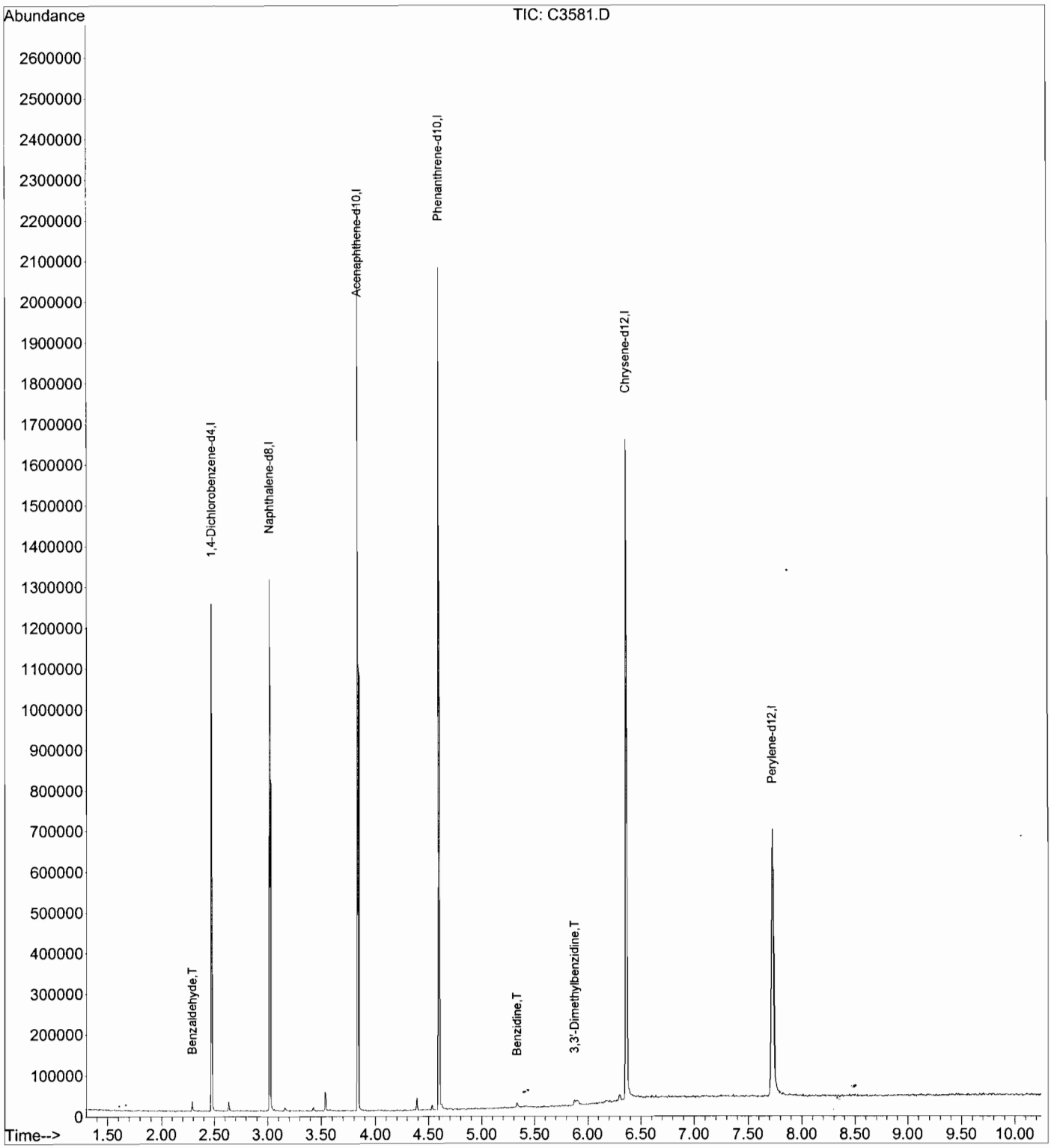
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	113727	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	424579	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	279832	40.00	UG	-0.02
66) Phenanthrene-d10	4.60	188	487355	40.00	UG	-0.04
82) Chrysene-d12	6.36	240	487361	40.00	UG	-0.06
92) Perylene-d12	7.73	264	367497	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	1.81	112	171	0.05	UG	-0.14
Spiked Amount 100.000	Range 24 - 101		Recovery = 0.05%#			
6) Phenol-d5	2.47	99	832	0.20	UG	0.18
Spiked Amount 100.000	Range 23 - 108		Recovery = 0.20%#			
24) Nitrobenzene-d5	2.74	82	133	0.04	UG	0.04
Spiked Amount 50.000	Range 26 - 98		Recovery = 0.08%#			
47) 2-Fluorobiphenyl	3.54	172	449	0.05	UG	0.04
Spiked Amount 50.000	Range 34 - 96		Recovery = 0.10%#			
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 32 - 112		Recovery = 0.00%#			
84) Terphenyl-d14	5.51	244	235	0.02	UG	-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 0.04%#			
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	2069m	1.12	UG	
80) Benzidine	5.33	184	6435m	1.03	UG	
85) 3,3'-Dimethylbenzidine	5.87	212	7688m	1.06	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3581.D
Acq On : 10 Feb 2015 14:39
Operator : EDM
Sample : ABN014-15,ICC001BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Feb 10 14:55:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:51:03 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3582.D
Acq On : 10 Feb 2015 14:55
Operator : EDM
Sample : ABN031-15,ICV040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

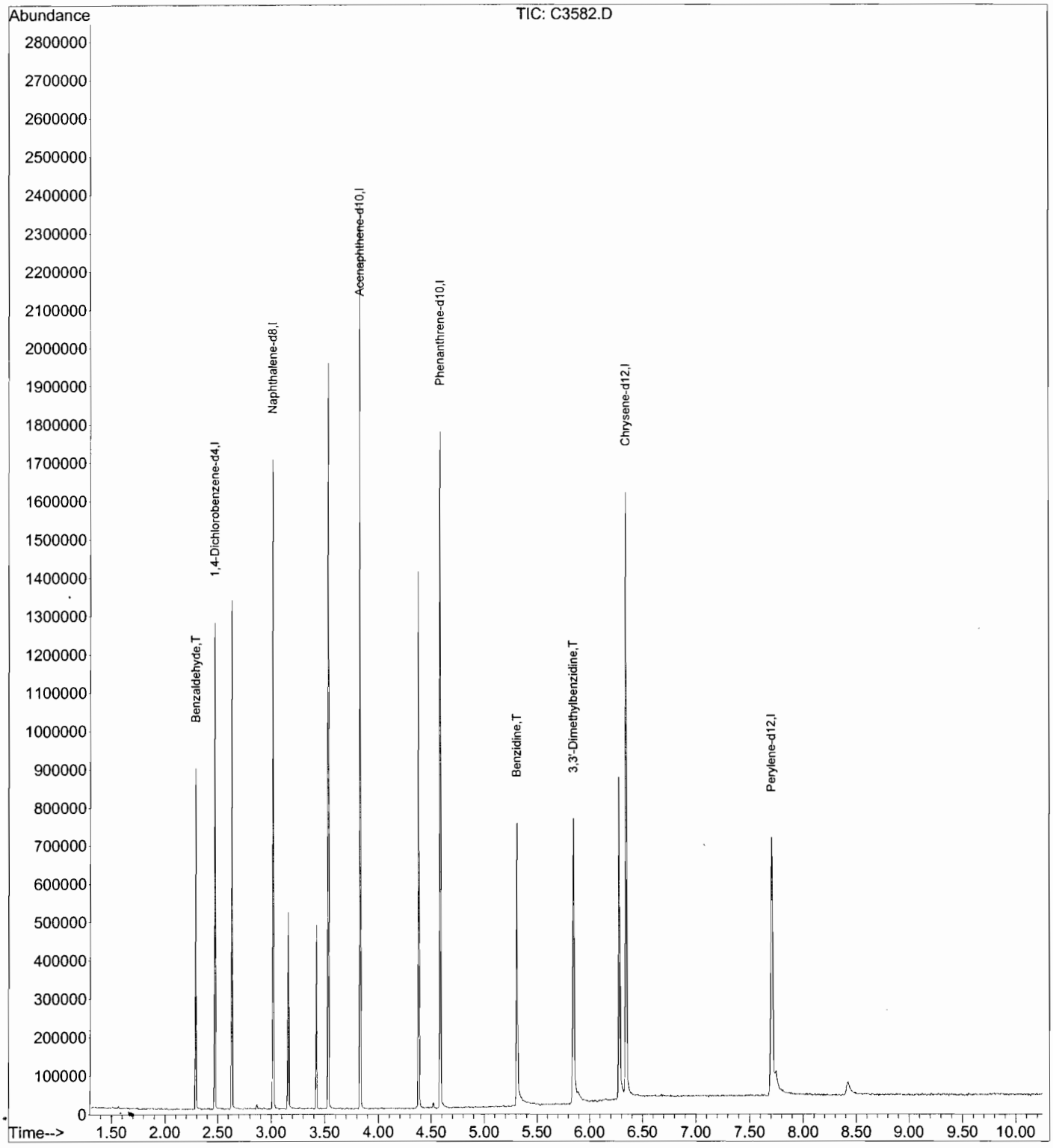
Quant Time: Feb 10 15:27:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	117923	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	451084	40.00	UG	-0.01
43) Acenaphthene-d10	3.83	164	293610	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	505182	40.00	UG	-0.05
82) Chrysene-d12	6.34	240	494765	40.00	UG	-0.08
92) Perylene-d12	7.71	264	354952	40.00	UG	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	266	0.07	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.07%#		
6) Phenol-d5	2.29	99	138	0.03	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.64	82	201	0.06	UG	-0.07
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	3.49	172	128	0.01	UG	-0.02
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.02%#		
70) 2,4,6-Tribromophenol	4.22	330	127	0.06	UG	-0.04
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.06%#		
84) Terphenyl-d14	5.47	244	211	0.02	UG	-0.11
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	90214	46.62	UG	96
80) Benzidine	5.31	184	254865m	39.57	UG	
85) 3,3'-Dimethylbenzidine	5.85	212	311576	44.15	UG	# 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3582.D
Acq On : 10 Feb 2015 14:55
Operator : EDM
Sample : ABN031-15,ICV040BNA2
Misc : NA,02/10/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 10 15:27:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 10 14:57:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	126309	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	488911	40.00	UG		0.00
43) Acenaphthene-d10	3.85	164	306165	40.00	UG		0.00
66) Phenanthrene-d10	4.64	188	514072	40.00	UG		0.00
82) Chrysene-d12	6.42	240	487175	40.00	UG		0.00
92) Perylene-d12	7.78	264	339778	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	372077	96.11	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 96.11%				
6) Phenol-d5	2.30	99	452049	95.83	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 95.83%				
24) Nitrobenzene-d5	2.71	82	182018	46.59	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 93.18%				
47) 2-Fluorobiphenyl	3.50	172	495974	46.67	UG		0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 93.34%				
70) 2,4,6-Tribromophenol	4.26	330	199423	97.39	UG		0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 97.39%				
84) Terphenyl-d14	5.57	244	662334	49.02	UG		-0.01
Spiked Amount 50.000	Range 19 - 118		Recovery = 98.04%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	83431	40.87	UG	#	36
3) Pyridine	1.45	52	86281	37.06	UG	#	82
7) Phenol	2.30	94	199983	40.29	UG	#	27
8) Aniline	2.34	66	80055	39.24	UG		89
9) Bis(2-chloroethyl) ether	2.34	63	89915	39.55	UG	#	73
10) 2-Chlorophenol	2.40	128	170777	37.96	UG		92
11) 1,3-Dichlorobenzene	2.46	146	202833	39.78	UG	#	96
12) 1,4-Dichlorobenzene	2.48	146	196930	38.80	UG	#	83
13) Benzyl alcohol	2.51	108	110873	39.40	UG	#	75
14) 1,2-Dichlorobenzene	2.56	146	189287	38.86	UG		95
15) 2-Methylphenol	2.55	108	155331	51.75	UG		87
16) Bis(2-chloroisopropyl) eth	2.57	45	135651	40.52	UG	#	93
17) 4-Methylphenol	2.61	108	165174	41.46	UG		96
18) N-Nitrosodi-n-propylamine	2.63	70	101644	40.77	UG	#	88
19) Acetophenone	2.63	105	222960	40.43	UG	#	1
20) 3-Methylphenol	2.61	108	165206	41.43	UG		96
21) Hexachloroethane	2.70	117	59629	40.56	UG		88
25) Nitrobenzene	2.71	77	140443	37.90	UG	#	86
26) Isophorone	2.81	82	278724	39.98	UG		91
27) 2-Nitrophenol	2.85	139	98370	38.86	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	165498	38.58	UG		94
29) Bis(2-chloroethoxy) methan	2.87	93	165375	38.08	UG		96
30) Benzoic acid	2.87	122	65538m	35.54	UG		
31) 2,4-Dimethylaniline	2.93	121	188613	38.70	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	152757	38.89	UG		99
33) 1,2,4-Trichlorobenzene	3.00	180	169980	38.50	UG		96
34) Naphthalene	3.03	128	522724	38.26	UG		97
35) 4-Chloroaniline	3.03	127	283040	40.31	UG		98
36) 4-Aminotoluene	2.65	106	266034	37.33	UG		96
37) Hexachlorobutadiene	3.10	225	90926	38.20	UG		97
38) Caprolactam	3.17	55	48832	42.61	UG	#	69
39) 2-Aminotoluene	2.65	106	266034	37.33	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

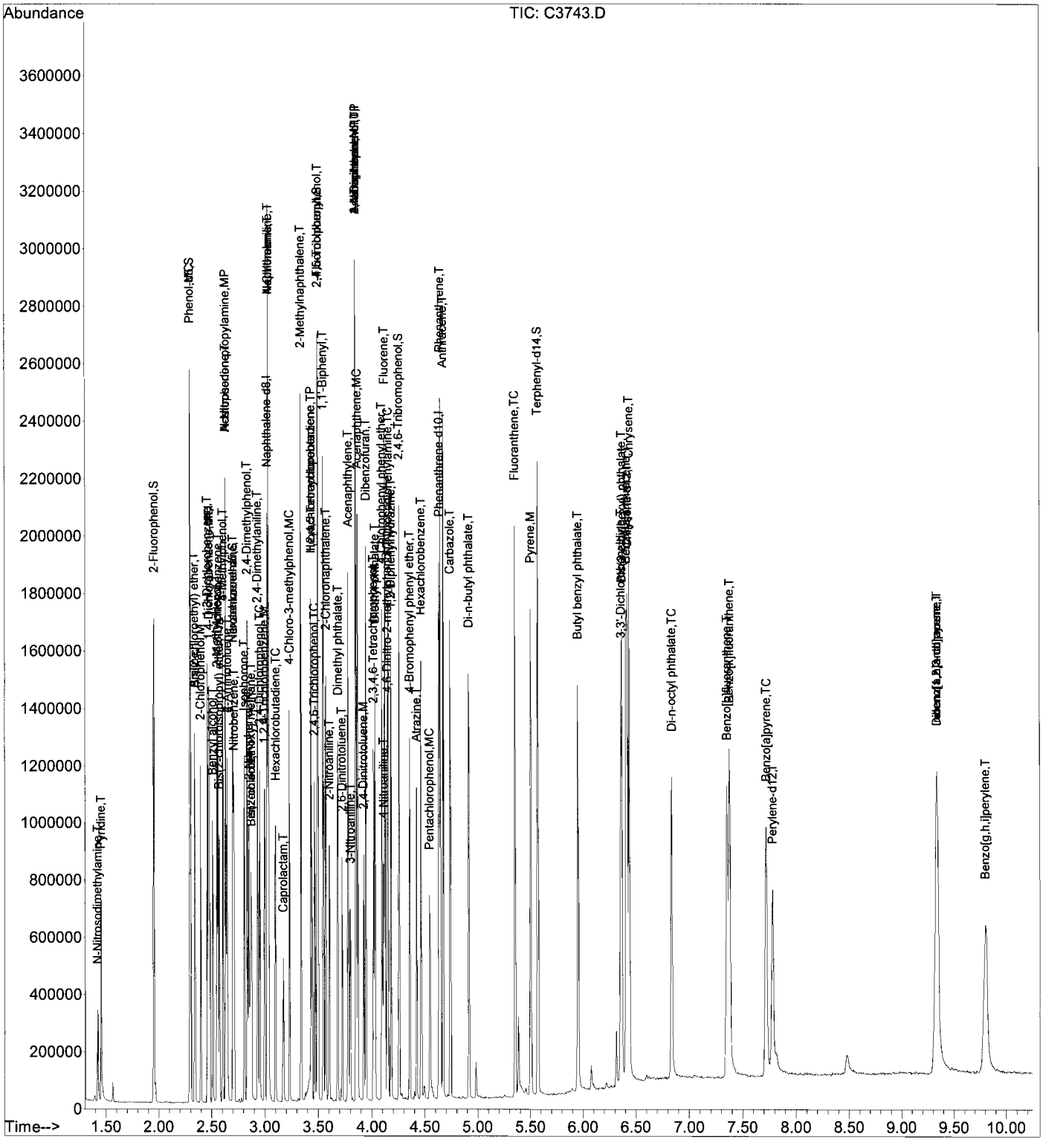
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.23	107	145231	37.46	UG		94
41) 2-Methylnaphthalene	3.34	142	388030	41.41	UG		99
44) Hexachlorocyclopentadiene	3.44	237	37176m	35.64	UG		
45) 2,4,6-Trichlorophenol	3.47	196	113986	37.95	UG		99
46) 2,4,5-Trichlorophenol	3.49	196	130585	43.44	UG		97
48) 1,1'-Biphenyl	3.55	154	477417	41.53	UG		98
49) 2-Chloronaphthalene	3.57	162	344476	40.43	UG		95
50) 2-Nitroaniline	3.60	65	76379	45.06	UG	#	78
51) Dimethyl phthalate	3.68	163	387591	39.38	UG		98
52) 2,6-Dinitrotoluene	3.72	165	85090	42.67	UG	#	83
53) Acenaphthylene	3.78	152	551081	39.70	UG		98
54) 3-Nitroaniline	3.80	138	97582	43.65	UG	#	94
55) Acenaphthene	3.87	153	337097	37.86	UG		96
56) 2,4-Dinitrophenol	3.86	184	32420	40.31	UG	#	1
57) 4-Nitrophenol	3.85	65	48410	37.13	UG	#	58
58) 2,4-Dinitrotoluene	3.92	165	110000	42.71	UG	#	75
59) Dibenzofuran	3.95	168	537335	42.44	UG	#	82
60) Diethyl phthalate	4.03	149	358807	39.01	UG		95
61) Fluorene	4.12	166	404081	39.69	UG		99
62) 4-Chlorophenyl phenyl ethe	4.10	204	213763	41.55	UG	#	88
63) 4-Nitroaniline	4.11	138	105943	46.10	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	188847	41.70	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.02	232	103759	41.73	UG		94
67) 4,6-Dinitro-2-methylphenol	4.14	198	63011	43.98	UG	#	71
68) N-Nitrosodiphenylamine	4.15	169	319315	42.33	UG		98
69) 1,2-Diphenylhydrazine	4.18	77	293512	37.53	UG	#	86
71) 4-Bromophenyl phenyl ether	4.36	248	134870	40.07	UG	#	86
72) Hexachlorobenzene	4.46	284	150543	39.75	UG	#	92
73) Atrazine	4.42	200	81853	30.20	UG		98
74) Pentachlorophenol	4.55	266	83479	40.50	UG		92
75) Phenanthrene	4.65	178	581516	39.18	UG		97
76) Anthracene	4.67	178	596563	40.41	UG		99
77) Carbazole	4.74	167	548506	42.37	UG		98
78) Di-n-butyl phthalate	4.91	149	610132	40.24	UG	#	97
79) Fluoranthene	5.35	202	626498	40.73	UG	#	94
83) Pyrene	5.50	202	637263	40.28	UG	#	88
86) Butyl benzyl phthalate	5.95	149	249598	40.34	UG	#	90
87) 3,3'-Dichlorobenzidine	6.36	252	198538	42.46	UG		99
88) Benzo[a]anthracene	6.40	228	549610	39.80	UG		99
89) Chrysene	6.44	228	542625	42.26	UG		97
90) Bis(2-ethylhexyl) phthalat	6.37	149	353347	41.97	UG		93
93) Di-n-octyl phthalate	6.84	149	564521	45.87	UG		100
94) Benzo[b]fluoranthene	7.35	252	558052m	45.03	UG		
95) Benzo[k]fluoranthene	7.38	252	527963	45.03	UG	#	98
96) Benzo[a]pyrene	7.72	252	524650	45.47	UG	#	96
97) Indeno[1,2,3-cd]pyrene	9.34	276	641556	44.36	UG	#	45
98) Dibenz[a,h]anthracene	9.34	278	536830	45.27	UG	#	64
99) Benzo[g,h,i]perylene	9.80	276	553175	46.11	UG	#	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3743.D
Acq On : 20 Feb 2015 11:50
Operator : EDM
Sample : ABN004-15,CCV040BNA1
Misc : NA,02/20/15,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Feb 20 12:04:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3744.D
Acq On : 20 Feb 2015 12:05
Operator : EDM
Sample : ABN031-15,CCV040BNA2
Misc : NA,02/20/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 20 12:54:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

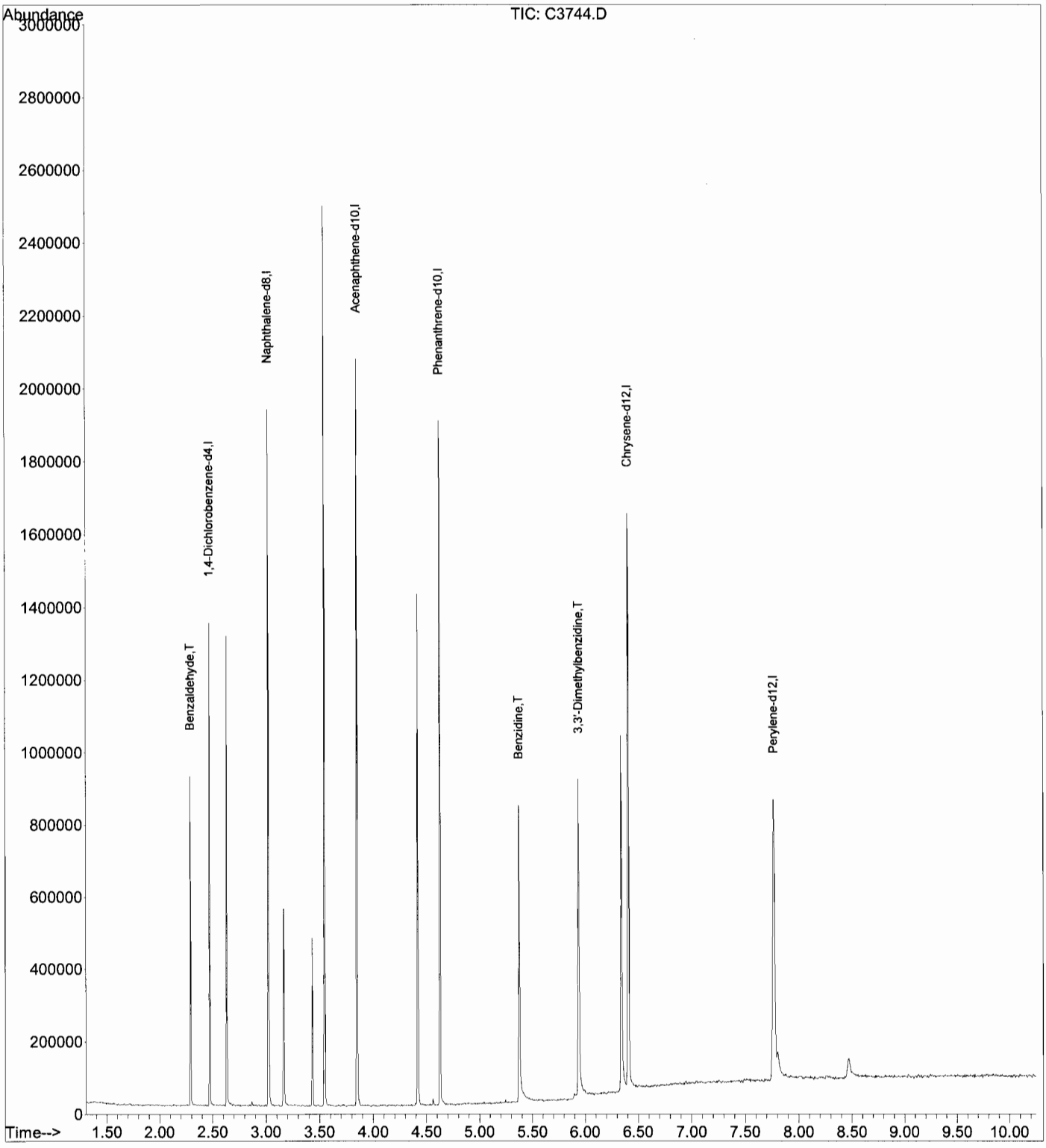
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	115264	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	473345	40.00	UG	0.00
43) Acenaphthene-d10	3.85	164	295665	40.00	UG	0.00
66) Phenanthrene-d10	4.62	188	497118	40.00	UG	-0.02
82) Chrysene-d12	6.40	240	519865	40.00	UG	-0.02
92) Perylene-d12	7.77	264	424296	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	147	0.04	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery =	0.04%#		
6) Phenol-d5	2.30	99	175	0.04	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery =	0.04%#		
24) Nitrobenzene-d5	2.69	82	395	0.10	UG	-0.02
Spiked Amount 50.000	Range 26 - 98		Recovery =	0.20%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 34 - 96		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.26	330	191	0.10	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery =	0.10%#		
84) Terphenyl-d14	5.55	244	417	0.03	UG	-0.03
Spiked Amount 50.000	Range 19 - 118		Recovery =	0.06%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.29	106	92055	48.63	UG	94
80) Benzidine	5.37	184	281185m	44.30	UG	
85) 3,3'-Dimethylbenzidine	5.94	212	340621m	46.08	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3744.D
Acq On : 20 Feb 2015 12:05
Operator : EDM
Sample : ABN031-15,CCV040BNA2
Misc : NA,02/20/15,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Feb 20 12:54:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

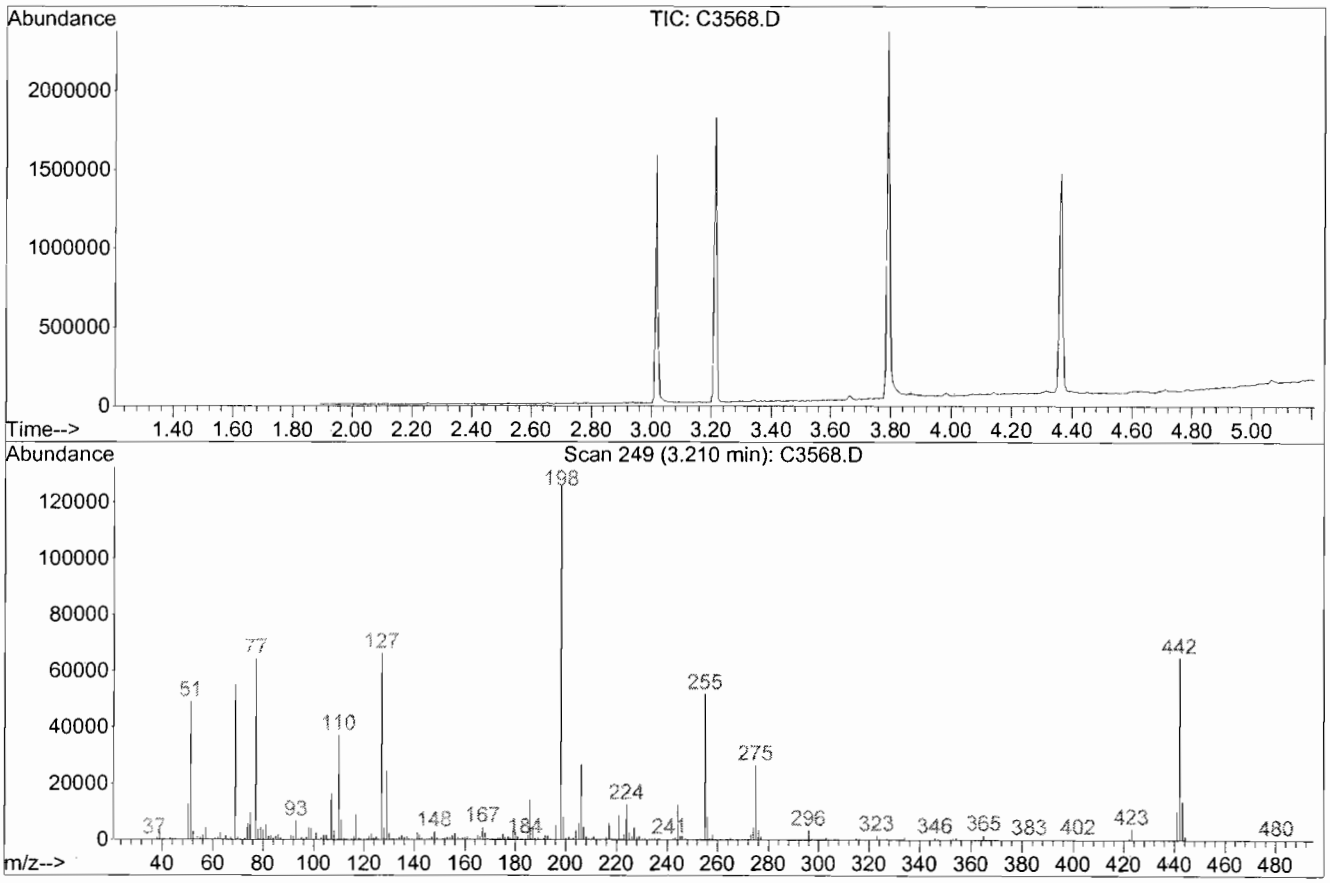


SEMI-VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\C_Feb-15\02-10-15\
Data File : C3568.D
Acq On : 10 Feb 2015 11:24
Operator : EDM
Sample : ABN005-15,DFTPP150210
Misc : NA,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2.M
Title :
Last Update : Mon Jul 25 11:08:53 2011



Spectrum Information: Scan 249

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.8	49008	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.7	55184	PASS
70	69	0.00	2	1.7	950	PASS
127	198	40	60	52.5	66272	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	126320	PASS
199	198	5	9	6.3	7976	PASS
275	198	10	30	21.0	26472	PASS
365	198	1	100	1.3	1660	PASS
441	443	0.01	100	74.8	10319	PASS
442	198	40	100	51.2	64720	PASS
443	442	17	23	21.3	13798	PASS

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	145	51.10	49008	64.10	330	78.00	3764
37.00	241	52.10	2878	65.10	1351	79.00	4354
37.40	164	53.00	256	66.30	154	80.00	3406
38.10	1004	55.00	869	67.10	873	81.00	5347
39.10	4366	56.10	1578	69.00	55184	82.10	1296
40.00	360	57.10	4317	70.00	950	83.00	1378
41.00	373	57.80	394	71.10	431	83.90	570
43.10	723	59.80	155	73.00	710	85.10	1219
44.10	509	61.00	730	74.00	5685	86.00	1752
45.10	224	62.00	910	75.00	9633	87.00	821
50.10	12759	63.00	2467	77.10	64184	91.00	1527

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1178	104.00	1769	117.90	520	129.00	24432
93.00	6671	105.00	1642	118.20	549	130.00	2288
94.00	441	107.00	16464	118.80	206	131.10	278
95.10	782	108.10	3043	120.00	228	131.80	442
96.00	435	110.00	37112	121.30	234	133.10	389
97.10	843	111.00	7043	122.00	1256	134.00	836
98.00	4301	112.00	521	123.00	2067	135.00	1535
99.00	4003	113.10	389	123.90	718	136.10	803
100.00	454	115.00	386	124.90	909	137.10	1067
101.00	2560	116.20	1198	127.00	66272	137.90	395
103.00	862	117.00	9008	128.00	4201	138.90	277

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.10	2469	152.00	637	163.80	302	175.10	1977
142.00	1565	153.00	956	165.00	1477	175.90	931
143.00	759	154.10	808	166.00	1170	177.10	1218
144.10	309	155.00	1459	167.00	4323	178.00	668
145.00	291	156.00	2144	168.00	2365	179.00	3205
146.00	439	157.10	761	168.90	364	180.00	2703
147.00	1063	157.90	517	169.20	362	180.90	1198
148.00	2888	159.10	615	170.90	437	182.20	213
149.00	631	159.90	833	172.10	283	182.90	179
149.80	301	160.90	1116	173.20	770	184.10	376
151.20	599	161.90	343	173.90	675	185.10	1543

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.00	14171	199.00	7976	210.30	613	227.00	4177
187.00	4192	200.00	746	211.00	1217	228.10	872
187.90	591	201.30	910	215.00	268	229.00	1200
189.00	819	202.20	413	216.00	819	230.20	171
190.00	161	203.00	641	217.00	5875	231.10	515
191.40	599	204.10	3350	217.90	493	231.70	140
192.00	1526	205.10	5890	221.00	8654	232.90	240
193.00	1446	206.00	26736	223.10	1836	234.00	245
194.10	387	207.00	4531	224.00	12558	235.00	666
196.10	5174	208.00	1131	225.10	2468	236.00	227
198.00	126320	209.00	532	226.10	987	237.00	420

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.00	167	249.80	213	265.00	830	281.00	383
240.20	180	252.10	155	265.90	407	281.90	302
241.00	275	253.20	373	267.90	204	282.90	175
242.20	424	255.00	51792	271.20	150	283.20	165
243.10	836	256.00	8246	272.10	353	284.10	324
244.10	12409	256.90	649	273.00	1813	285.00	422
245.10	1425	258.00	1701	274.00	4491	292.00	172
246.00	1362	259.20	393	275.00	26472	292.90	293

247.10	430	261.00	248	276.00	3500	296.00	3401
248.00	183	263.80	250	277.00	1296	297.20	504
249.20	278	264.20	151	278.00	336	302.10	226

Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
303.00	807	326.20	160	352.00	343	390.20	208
304.10	165	327.10	449	352.90	450	402.00	417
308.10	195	328.00	261	354.00	782	403.10	286
314.00	153	332.00	147	359.10	156	403.90	191
315.00	586	333.10	271	360.10	249	420.60	179
316.20	314	334.00	983	365.00	1660	421.00	293
317.20	218	335.20	261	365.80	231	422.10	646
318.90	150	337.10	201	370.90	255	423.00	3954
322.00	184	341.00	225	372.00	445	423.90	533
323.10	1569	346.00	735	373.10	275	441.10	10319
324.10	448	347.10	298	383.00	318	442.00	64720

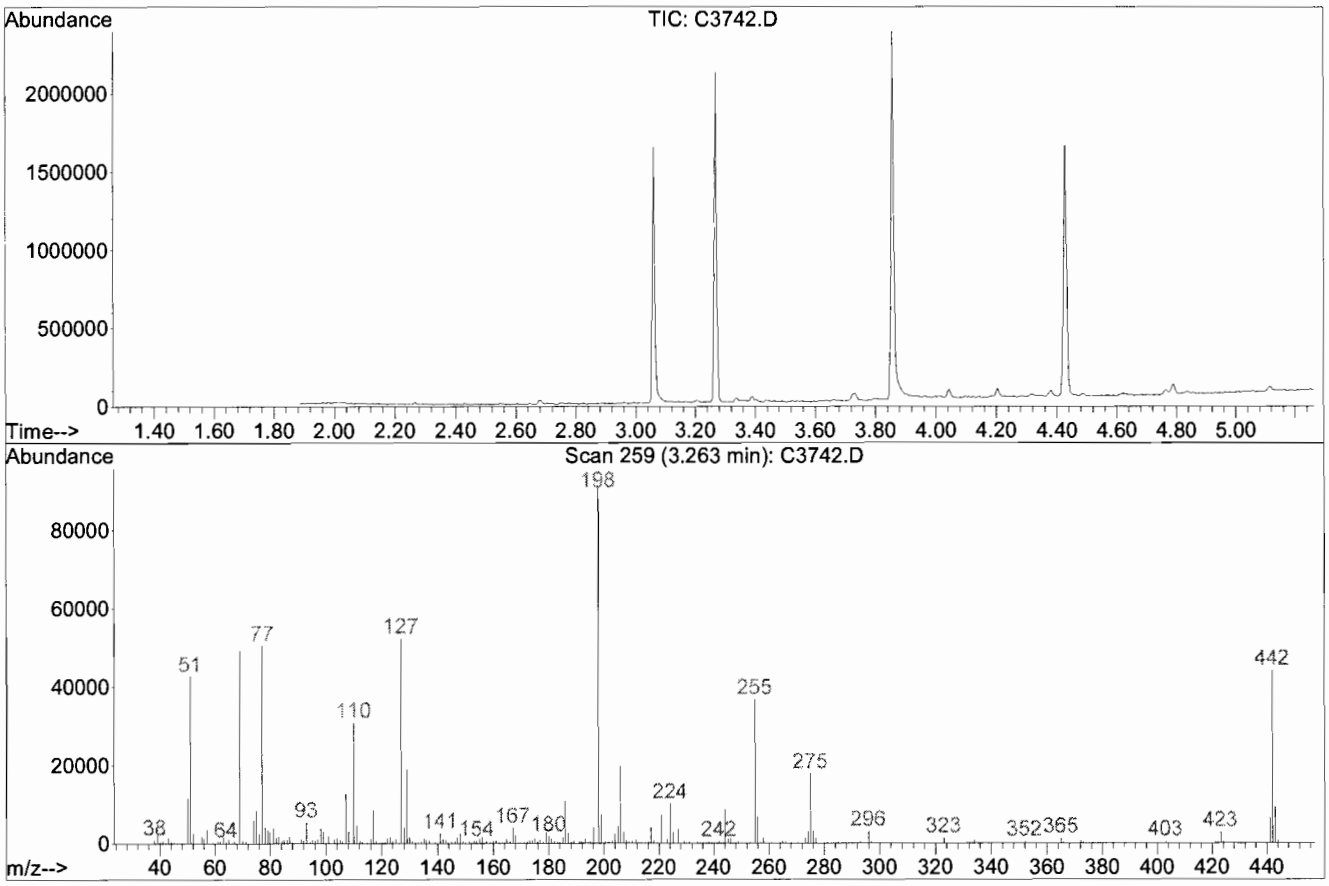
Scan 249 (3.210 min): C3568.D
ABN005-15,DFTPP150210

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.10	13798						
444.10	1406						
445.20	145						
480.40	160						

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3742.D
Acq On : 20 Feb 2015 11:39
Operator : EDM
Sample : ABN005-15,DFTPP150220
Misc : NA,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\CS0415.M
Title : BNA CALIBRATION METHOD
Last Update : Wed Feb 11 11:39:18 2015



Spectrum Information: Scan 259

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.8	42728	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	54.1	49368	PASS
70	69	0.00	2	1.4	710	PASS
127	198	40	60	57.5	52424	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91240	PASS
199	198	5	9	8.0	7255	PASS
275	198	10	30	19.5	17792	PASS
365	198	1	100	1.4	1257	PASS
441	443	0.01	100	71.1	6591	PASS
442	198	40	100	48.5	44240	PASS
443	442	17	23	21.0	9273	PASS

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	190	52.10	2497	65.10	1115	79.10	3468
38.10	904	53.10	212	66.30	167	79.90	2994
39.10	3997	55.10	1806	67.20	599	81.10	3983
40.00	316	56.00	1369	69.00	49368	82.20	1599
41.10	747	57.00	3554	70.00	710	83.00	1883
42.10	261	59.10	223	71.20	560	84.10	656
43.00	1529	61.00	655	74.10	5788	85.00	1104
44.10	453	61.80	512	75.00	8422	86.00	959
45.20	321	62.00	524	76.10	2453	87.00	1744
50.10	11572	63.00	1655	77.10	50584	88.00	328
51.10	42728	64.00	373	78.10	4023	89.10	149

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.10	1128	103.10	1079	116.10	1163	128.10	4139
91.90	964	104.00	1468	117.00	8463	129.00	19000
93.00	5463	105.00	963	118.00	690	130.00	1726
94.20	468	105.90	586	119.00	220	131.00	530
95.20	973	107.10	12726	120.10	274	132.00	313
96.10	843	108.10	3108	121.20	280	133.10	328
97.10	1206	110.00	30952	122.10	1309	134.10	486
98.10	3745	111.00	4567	123.10	1693	135.00	1303
99.00	3088	112.10	759	124.00	689	135.90	910
100.00	390	113.00	418	125.00	1071	137.00	845
101.00	1904	114.80	161	127.00	52424	139.10	240

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	2552	152.10	168	163.10	186	174.00	685
141.90	1121	153.10	714	164.10	368	175.00	1212
142.90	809	154.00	633	164.90	1090	175.80	393
143.70	268	155.00	1155	166.00	523	176.20	392
145.00	329	156.00	1669	167.00	3938	176.90	879
146.30	546	157.40	514	168.00	2203	178.00	358
147.10	1528	157.70	525	169.10	328	179.00	2898
148.10	2444	158.90	322	169.80	229	180.00	1793
149.00	562	159.90	587	171.10	333	181.00	1201
149.90	232	160.90	785	172.20	535	182.00	509
151.40	501	162.00	298	173.10	667	183.00	325

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.50	245	194.00	401	205.00	4278	216.10	527
184.00	175	195.00	438	206.00	19760	217.00	4030
185.00	1509	196.10	4028	207.10	2825	217.90	750
186.00	10949	198.00	91240	208.10	835	219.20	152
187.00	2524	199.00	7255	208.90	495	221.00	7264
188.10	395	200.30	437	210.10	564	222.90	1090
189.00	634	200.90	230	211.50	957	224.10	10144
191.00	507	201.50	407	212.20	276	225.10	2801
191.80	651	201.90	434	213.00	154	225.90	169
192.30	352	202.90	573	213.70	145	227.00	3596
193.10	1122	204.00	2504	215.10	189	229.10	609

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
230.00	217	245.10	1154	258.90	162	277.00	1257
231.00	335	246.10	1317	261.00	166	280.00	146
234.00	366	247.10	198	263.90	224	281.10	190
235.10	325	248.90	399	265.00	654	283.20	191
236.20	191	249.90	159	266.00	381	285.00	247
237.00	268	251.10	222	268.20	196	293.10	470
238.20	261	253.30	299	270.50	257	293.90	225
239.30	205	255.00	36776	273.10	1343	296.00	3037

240.10	202	256.00	6784	274.10	2950	297.00	343
241.90	470	257.00	371	275.00	17792	303.00	273
244.10	8694	258.00	1349	276.00	3173	304.30	156

Scan 259 (3.263 min): C3742.D
ABN005-15,DFTPP150220

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
310.30	202	334.00	783	372.10	645	444.10	684
312.40	143	335.00	163	373.00	434		
314.50	185	340.90	277	403.00	509		
315.00	283	346.00	267	421.20	295		
316.20	269	348.90	140	422.10	312		
321.00	228	352.00	528	423.10	2861		
323.00	1337	353.20	259	424.10	417		
323.90	206	354.10	356	439.00	202		
325.90	174	362.90	205	441.10	6591		
326.90	278	365.00	1257	442.10	44240		
328.00	162	365.90	368	443.10	9273		

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.028
Pyridine	ND		0.033	0.031
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.021
Aniline	ND		0.033	0.020
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.020
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.027
Benzyl alcohol	ND		0.033	0.020
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.023
Bis(2-chloroisopropyl) ether	ND		0.033	0.020
4-Methylphenol **	ND		0.033	0.027
N-Nitrosodi-n-propylamine	ND		0.033	0.027
Acetophenone	ND		0.033	0.027
3-Methylphenol	ND		0.033	0.029
Hexachloroethane	ND		0.033	0.020
Nitrobenzene	ND		0.033	0.028
Isophorone	ND		0.033	0.030
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.023
Bis(2-chloroethoxy) methane	ND		0.033	0.020
Benzoic acid	ND		0.033	0.020
2,4-Dimethylaniline	ND		0.033	0.020
2,4-Dichlorophenol	ND		0.033	0.020
1,2,4-Trichlorobenzene	ND		0.033	0.021
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
4-Aminotoluene	ND		0.033	0.032
Hexachlorobutadiene	ND		0.033	0.020
Caprolactam	ND		0.033	0.021
2-Aminotoluene	ND		0.033	0.029
4-Chloro-3-methylphenol	ND		0.033	0.020
2-Methylnaphthalene	ND		0.033	0.020
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.025

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.025
2,4-Dinitrophenol	ND		0.033	0.024
4-Nitrophenol	ND		0.033	0.027
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.020
Diethyl phthalate	ND		0.033	0.031
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.020
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.020
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.024
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.020
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.029
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.020

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150219-01
Client ID: .
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: C3745.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:54:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	207374	40.00	UG	0.00
23) Naphthalene-d8	3.02	136	787539	40.00	UG	0.00
43) Acenaphthene-d10	3.86	164	507870	40.00	UG	0.00
66) Phenanthrene-d10	4.64	188	872040	40.00	UG	0.00
82) Chrysene-d12	6.42	240	776719	40.00	UG	0.00
92) Perylene-d12	7.78	264	345367	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.95	112	350459	55.14	UG	0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 55.14%			
6) Phenol-d5	2.29	99	443788	57.30	UG	0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 57.30%			
24) Nitrobenzene-d5	2.70	82	168201	26.73	UG	0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 53.46%			
47) 2-Fluorobiphenyl	3.50	172	516431	29.30	UG	0.00
Spiked Amount 50.000	Range 34 - 96		Recovery = 58.60%			
70) 2,4,6-Tribromophenol	4.26	330	231731	66.71	UG	0.00
Spiked Amount 100.000	Range 32 - 112		Recovery = 66.71%			
84) Terphenyl-d14	5.58	244	818726	38.00	UG	0.00
Spiked Amount 50.000	Range 19 - 118		Recovery = 76.00%			

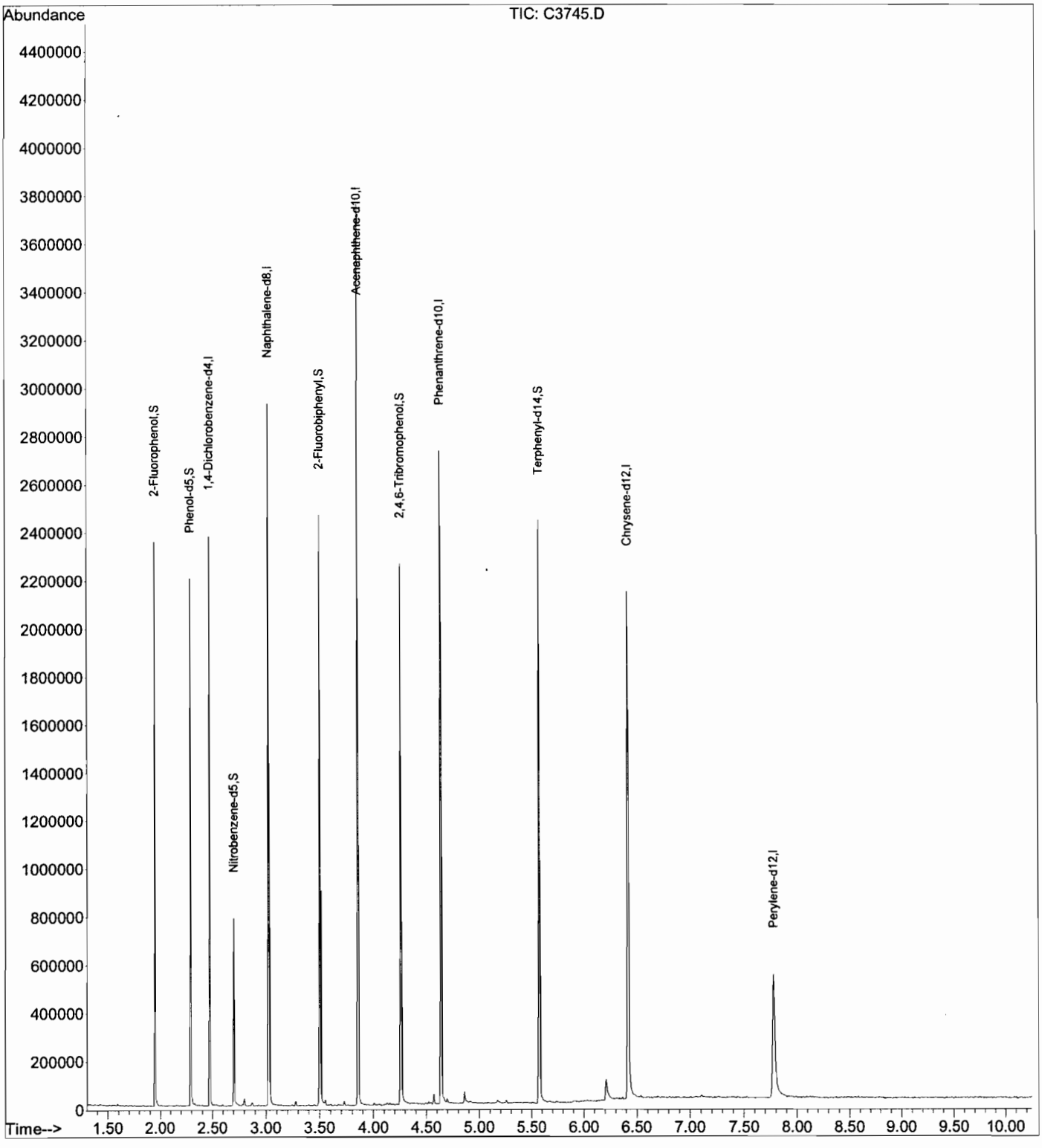
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 20 12:54:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3745.D
Acq On : 20 Feb 2015 12:21
Operator : EDM
Sample : .,BLKS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS0415.M Fri Feb 20 12:54:35 2015 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	196449	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	769799	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	482907	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	783779	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	604354	40.00	UG		-0.04
92) Perylene-d12	7.74	264	258590	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	323011	53.64	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 53.64%				
6) Phenol-d5	2.30	99	463460	63.17	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 63.17%				
24) Nitrobenzene-d5	2.70	82	180375	29.32	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 58.64%				
47) 2-Fluorobiphenyl	3.49	172	541716	32.32	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 64.64%				
70) 2,4,6-Tribromophenol	4.24	330	227718	72.94	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 72.94%				
84) Terphenyl-d14	5.52	244	657810	39.24	UG		-0.06
Spiked Amount 50.000	Range 19 - 118		Recovery = 78.48%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.43	74	85128	26.81	UG	#	37
3) Pyridine	1.46	52	86679	23.93	UG	#	81
5) Benzaldehyde	2.29	106	16960m	5.26	UG		
7) Phenol	2.30	94	218269	28.27	UG	#	25
8) Aniline	2.34	66	98836	31.15	UG		91
9) Bis(2-chloroethyl) ether	2.34	63	101740	28.78	UG	#	62
10) 2-Chlorophenol	2.40	128	191400	27.35	UG		90
11) 1,3-Dichlorobenzene	2.46	146	222852	28.10	UG	#	95
12) 1,4-Dichlorobenzene	2.48	146	199094	25.22	UG	#	81
13) Benzyl alcohol	2.51	108	131584	30.06	UG	#	77
14) 1,2-Dichlorobenzene	2.56	146	203391	26.85	UG		96
15) 2-Methylphenol	2.55	108	177670	38.06	UG		83
16) Bis(2-chloroisopropyl) eth	2.57	45	159651	30.66	UG	#	94
17) 4-Methylphenol	2.61	108	205712	33.20	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	120104	30.98	UG	#	87
19) Acetophenone	2.63	105	269228	31.39	UG	#	1
20) 3-Methylphenol	2.61	108	205632	33.16	UG		94
21) Hexachloroethane	2.70	117	61496	26.90	UG		87
25) Nitrobenzene	2.71	77	172677	29.60	UG	#	87
26) Isophorone	2.81	82	347214	31.63	UG		92
27) 2-Nitrophenol	2.85	139	118262	29.67	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	202638	30.00	UG		95
29) Bis(2-chloroethoxy) methan	2.87	93	200645	29.34	UG		97
30) Benzoic acid	2.87	122	95815	33.00	UG		93
31) 2,4-Dimethylaniline	2.93	121	278132	36.25	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	180454	29.18	UG		97
33) 1,2,4-Trichlorobenzene	3.00	180	199259	28.67	UG		98
34) Naphthalene	3.03	128	623415	28.98	UG		93
35) 4-Chloroaniline	3.03	127	364807	33.00	UG		94
36) 4-Aminotoluene	2.65	106	416123	37.09	UG		96
37) Hexachlorobutadiene	3.10	225	111533	29.76	UG		97
38) Caprolactam	3.17	55	62081	34.41	UG	#	72

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSS150219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

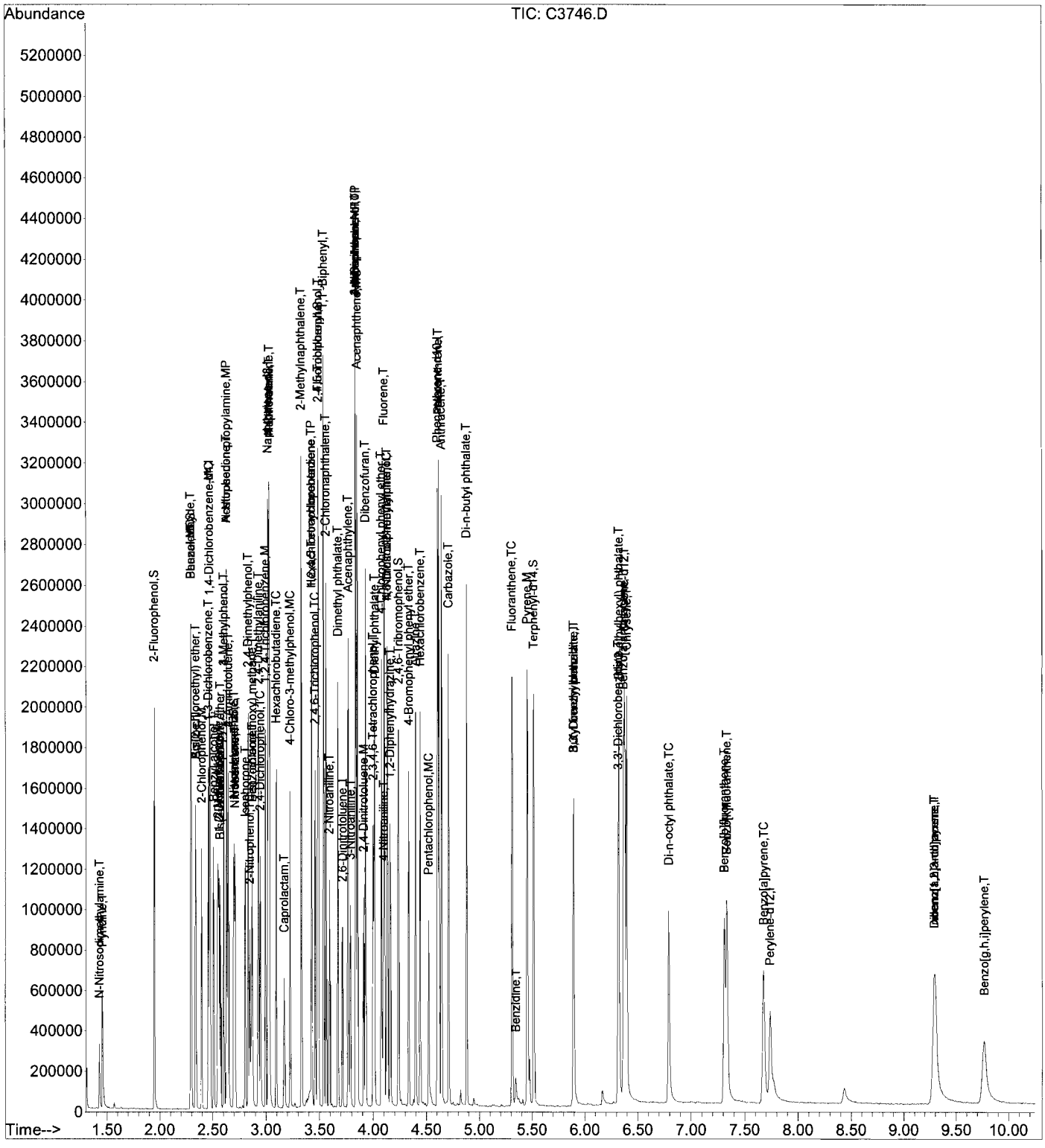
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	416123	37.09 UG		96
40) 4-Chloro-3-methylphenol	3.22	107	182213	29.85 UG		95
41) 2-Methylnaphthalene	3.33	142	490774	33.26 UG		99
44) Hexachlorocyclopentadiene	3.43	237	16205	9.85 UG		92
45) 2,4,6-Trichlorophenol	3.46	196	143548	30.30 UG		99
46) 2,4,5-Trichlorophenol	3.49	196	164848	34.77 UG		98
48) 1,1'-Biphenyl	3.54	154	632607	34.89 UG		98
49) 2-Chloronaphthalene	3.56	162	431589	32.12 UG		97
50) 2-Nitroaniline	3.59	65	94807	35.46 UG	#	73
51) Dimethyl phthalate	3.67	163	507742	32.70 UG		97
52) 2,6-Dinitrotoluene	3.72	165	109616	34.85 UG	#	83
53) Acenaphthylene	3.77	152	713524	32.59 UG		98
54) 3-Nitroaniline	3.79	138	128493	36.44 UG	#	92
55) Acenaphthene	3.86	153	456881	32.53 UG		93
56) 2,4-Dinitrophenol	3.84	184	26031	20.52 UG	#	1
57) 4-Nitrophenol	3.84	65	54247	26.38 UG	#	59
58) 2,4-Dinitrotoluene	3.91	165	147402	36.29 UG	#	76
59) Dibenzofuran	3.93	168	681581	34.13 UG	#	82
60) Diethyl phthalate	4.02	149	455636	31.40 UG		94
61) Fluorene	4.11	166	517108	32.21 UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	272467	33.58 UG	#	88
63) 4-Nitroaniline	4.10	138	117175	32.32 UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	239298	33.50 UG		96
65) 2,3,4,6-Tetrachlorophenol	4.00	232	140952	35.94 UG		93
67) 4,6-Dinitro-2-methylphenol	4.13	198	77112	35.30 UG	#	71
68) N-Nitrosodiphenylamine	4.13	169	403966	35.12 UG		99
69) 1,2-Diphenylhydrazine	4.16	77	353809	29.67 UG	#	83
71) 4-Bromophenyl phenyl ether	4.34	248	175095	34.12 UG	#	89
72) Hexachlorobenzene	4.44	284	193786	33.56 UG		94
73) Atrazine	4.40	200	156216	37.81 UG		97
74) Pentachlorophenol	4.52	266	89155	28.37 UG		90
75) Phenanthrene	4.62	178	743657	32.86 UG		98
76) Anthracene	4.65	178	771582	34.28 UG		99
77) Carbazole	4.71	167	669486	33.92 UG		98
78) Di-n-butyl phthalate	4.88	149	780252	33.75 UG	#	97
79) Fluoranthene	5.31	202	754402	32.17 UG	#	94
80) Benzidine	5.35	184	80864m	8.08 UG		
83) Pyrene	5.46	202	766532	39.06 UG	#	88
85) 3,3'-Dimethylbenzidine	5.90	212	124840m	14.53 UG		
86) Butyl benzyl phthalate	5.90	149	279878	36.47 UG	#	86
87) 3,3'-Dichlorobenzidine	6.31	252	199224	34.35 UG		99
88) Benzo[a]anthracene	6.37	228	609403	35.57 UG		100
89) Chrysene	6.40	228	592548	37.20 UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	390350	37.38 UG		92
93) Di-n-octyl phthalate	6.79	149	546861	58.38 UG		99
94) Benzo[b]fluoranthene	7.31	252	457769m	48.53 UG		
95) Benzo[k]fluoranthene	7.34	252	509660	57.11 UG	#	98
96) Benzo[a]pyrene	7.68	252	436737	49.73 UG	#	98
97) Indeno[1,2,3-cd]pyrene	9.30	276	479602	43.57 UG	#	48
98) Dibenz[a,h]anthracene	9.29	278	401406	44.48 UG	#	66
99) Benzo[g,h,i]perylene	9.77	276	389423	42.65 UG	#	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3746.D
Acq On : 20 Feb 2015 12:36
Operator : EDM
Sample : .,LCSSl50219-01,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 12:55:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	226612	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	921329	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	565711	40.00	UG		-0.02
66) Phenanthrene-d10	4.61	188	922302	40.00	UG		-0.03
82) Chrysene-d12	6.38	240	777322	40.00	UG		-0.05
92) Perylene-d12	7.74	264	303669	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	344267	49.56	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 49.56%				
6) Phenol-d5	2.30	99	467172	55.20	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 55.20%				
24) Nitrobenzene-d5	2.70	82	191533	26.02	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 52.04%				
47) 2-Fluorobiphenyl	3.49	172	560087	28.52	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 57.04%				
70) 2,4,6-Tribromophenol	4.24	330	224653	61.15	UG		-0.02
Spiked Amount 100.000	Range 32 - 112		Recovery = 61.15%				
84) Terphenyl-d14	5.51	244	676967	31.40	UG		-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 62.80%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.43	74	111597	30.47	UG	#	38
3) Pyridine	1.46	52	72134	17.27	UG	#	79
5) Benzaldehyde	2.29	106	84039	22.58	UG		92
7) Phenol	2.30	94	276847	31.09	UG	#	26
8) Aniline	2.34	66	101142	27.63	UG		77
9) Bis(2-chloroethyl) ether	2.34	63	125628	30.80	UG	#	76
10) 2-Chlorophenol	2.40	128	244918	30.34	UG	#	90
11) 1,3-Dichlorobenzene	2.46	146	287934	31.48	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	271510	29.82	UG	#	83
13) Benzyl alcohol	2.51	108	162522	32.19	UG	#	76
14) 1,2-Dichlorobenzene	2.56	146	260987	29.87	UG		94
15) 2-Methylphenol	2.55	108	222313	41.28	UG		84
16) Bis(2-chloroisopropyl) eth	2.57	45	198383	33.03	UG	#	94
17) 4-Methylphenol	2.61	108	242690	33.96	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	166964	37.33	UG	#	84
19) Acetophenone	2.63	105	324329	32.78	UG	#	1
20) 3-Methylphenol	2.61	108	242690	33.92	UG		95
21) Hexachloroethane	2.70	117	82335	31.22	UG		90
25) Nitrobenzene	2.71	77	211181	30.25	UG	#	87
26) Isophorone	2.81	82	419818	31.95	UG		92
27) 2-Nitrophenol	2.85	139	149303	31.30	UG	#	69
28) 2,4-Dimethylphenol	2.83	107	244582	30.25	UG		87
29) Bis(2-chloroethoxy) methan	2.87	93	247607	30.25	UG		97
30) Benzoic acid	2.84	122	59731m	17.19	UG		
31) 2,4-Dimethylaniline	2.93	121	279540	30.44	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	225163	30.42	UG		96
33) 1,2,4-Trichlorobenzene	3.00	180	255121	30.67	UG		97
34) Naphthalene	3.03	128	756653	29.39	UG		91
35) 4-Chloroaniline	3.03	127	335564	25.36	UG		99
36) 4-Aminotoluene	2.65	106	375050	27.93	UG		95
37) Hexachlorobutadiene	3.10	225	138082	30.78	UG		98
38) Caprolactam	3.18	55	69619	32.24	UG	#	77

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

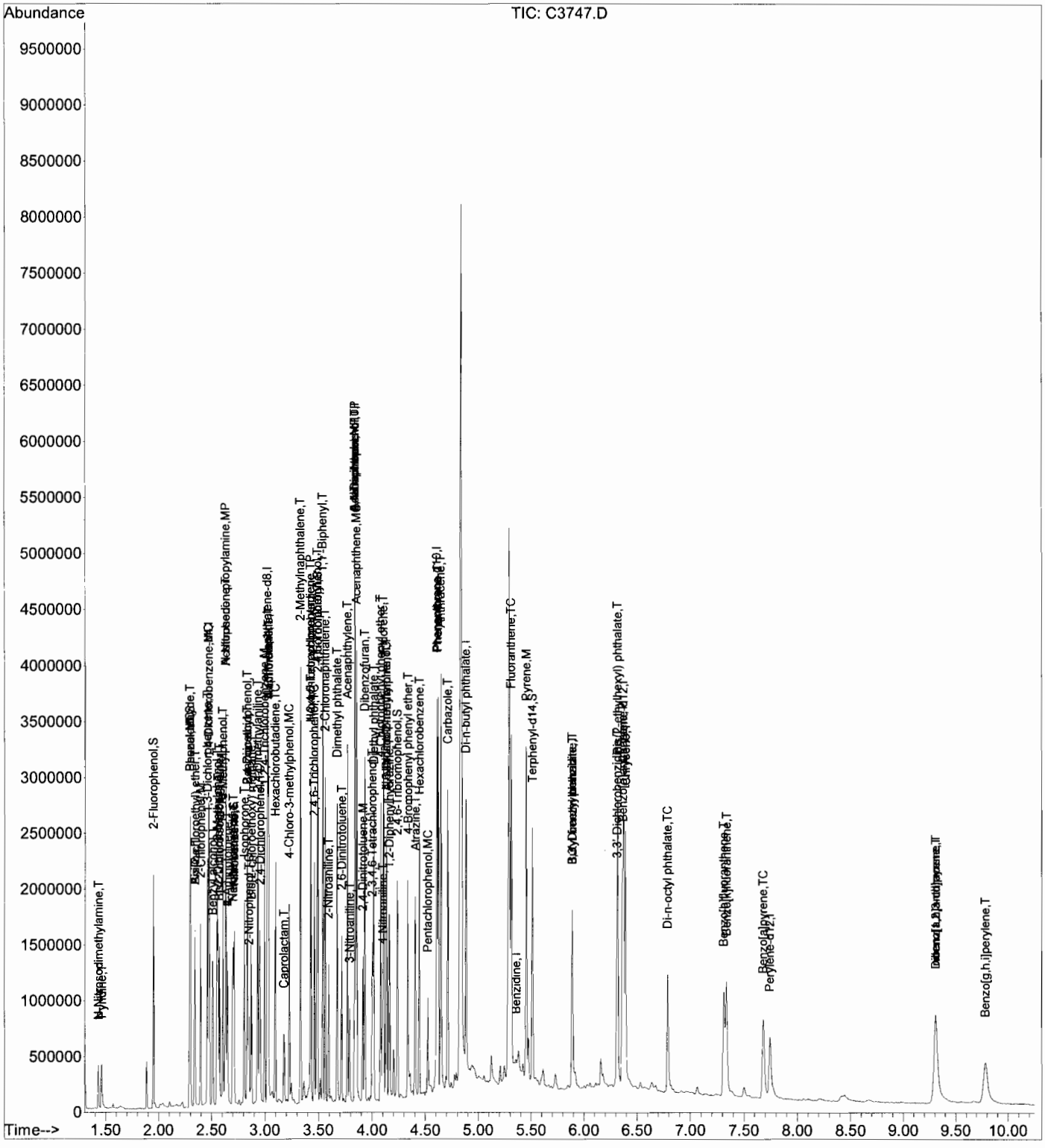
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	375050	27.93	UG		95
40) 4-Chloro-3-methylphenol	3.22	107	218072	29.85	UG		96
41) 2-Methylnaphthalene	3.33	142	603356	34.16	UG		100
44) Hexachlorocyclopentadiene	3.43	237	30541	15.85	UG	#	94
45) 2,4,6-Trichlorophenol	3.46	196	174638	31.46	UG		99
46) 2,4,5-Trichlorophenol	3.49	196	199590	35.93	UG		99
48) 1,1'-Biphenyl	3.54	154	745546	35.10	UG		97
49) 2-Chloronaphthalene	3.56	162	513726	32.63	UG		97
50) 2-Nitroaniline	3.59	65	112275	35.85	UG	#	72
51) Dimethyl phthalate	3.67	163	607435	33.40	UG		97
52) 2,6-Dinitrotoluene	3.72	165	139214	37.78	UG	#	85
53) Acenaphthylene	3.77	152	858060	33.45	UG		98
54) 3-Nitroaniline	3.79	138	122722	29.71	UG		95
55) Acenaphthene	3.86	153	548848	33.36	UG		92
56) 2,4-Dinitrophenol	3.84	184	4252	2.86	UG	#	1
57) 4-Nitrophenol	3.84	65	61304m	25.45	UG		
58) 2,4-Dinitrotoluene	3.91	165	179646	37.75	UG	#	76
59) Dibenzofuran	3.93	168	806438	34.47	UG	#	83
60) Diethyl phthalate	4.02	149	546058	32.13	UG		94
61) Fluorene	4.11	166	617965	32.85	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	327956	34.50	UG	#	88
63) 4-Nitroaniline	4.10	138	105861	24.93	UG	#	64
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	296726	35.46	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.00	232	155304	33.80	UG		94
67) 4,6-Dinitro-2-methylphenol	4.13	198	39991	15.56	UG	#	83
68) N-Nitrosodiphenylamine	4.13	169	474988	35.09	UG		100
69) 1,2-Diphenylhydrazine	4.16	77	422163	30.09	UG	#	82
71) 4-Bromophenyl phenyl ether	4.34	248	203497	33.70	UG	#	87
72) Hexachlorobenzene	4.44	284	225599	33.20	UG	#	94
73) Atrazine	4.41	200	183598	37.76	UG		96
74) Pentachlorophenol	4.52	266	82087	22.20	UG		92
75) Phenanthrene	4.62	178	890773	33.45	UG		98
76) Anthracene	4.65	178	894805	33.78	UG		98
77) Carbazole	4.71	167	754071	32.47	UG		98
78) Di-n-butyl phthalate	4.88	149	928522	34.13	UG	#	97
79) Fluoranthene	5.31	202	885257	32.08	UG	#	81
80) Benzidine	5.36	184	37962m	3.22	UG		
83) Pyrene	5.45	202	895182	35.47	UG	#	88
85) 3,3'-Dimethylbenzidine	5.89	212	100956m	9.13	UG		
86) Butyl benzyl phthalate	5.89	149	324248	32.85	UG	#	90
87) 3,3'-Dichlorobenzidine	6.31	252	195122	26.15	UG		98
88) Benzo[a]anthracene	6.36	228	643915	29.22	UG		100
89) Chrysene	6.39	228	629772	30.74	UG		97
90) Bis(2-ethylhexyl) phthalat	6.32	149	538650	40.10	UG		93
93) Di-n-octyl phthalate	6.79	149	597836	54.35	UG		100
94) Benzo[b]fluoranthene	7.31	252	549030	49.57	UG		99
95) Benzo[k]fluoranthene	7.34	252	460120m	43.91	UG		
96) Benzo[a]pyrene	7.69	252	474895	46.05	UG		98
97) Indeno[1,2,3-cd]pyrene	9.32	276	535549	41.43	UG	#	45
98) Dibenz[a,h]anthracene	9.31	278	456361	43.06	UG	#	65
99) Benzo[g,h,i]perylene	9.79	276	467307	43.58	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3747.D
Acq On : 20 Feb 2015 12:51
Operator : EDM
Sample : .,E15-01158-021MS,S,15.01g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 15:47:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.47	152	198493	40.00	UG		0.00
23) Naphthalene-d8	3.02	136	783720	40.00	UG		0.00
43) Acenaphthene-d10	3.84	164	503473	40.00	UG		-0.02
66) Phenanthrene-d10	4.60	188	789669	40.00	UG		-0.04
82) Chrysene-d12	6.38	240	585903	40.00	UG		-0.05
92) Perylene-d12	7.73	264	247743	40.00	UG		-0.05
System Monitoring Compounds							
4) 2-Fluorophenol	1.95	112	299552	49.24	UG		0.00
Spiked Amount 100.000	Range 24 - 101		Recovery = 49.24%				
6) Phenol-d5	2.30	99	414700	55.94	UG		0.00
Spiked Amount 100.000	Range 23 - 108		Recovery = 55.94%				
24) Nitrobenzene-d5	2.70	82	167234	26.70	UG		0.00
Spiked Amount 50.000	Range 26 - 98		Recovery = 53.40%				
47) 2-Fluorobiphenyl	3.49	172	475588	27.22	UG		-0.01
Spiked Amount 50.000	Range 34 - 96		Recovery = 54.44%				
70) 2,4,6-Tribromophenol	4.23	330	198953	63.25	UG		-0.03
Spiked Amount 100.000	Range 32 - 112		Recovery = 63.25%				
84) Terphenyl-d14	5.51	244	593012m	36.49	UG		-0.07
Spiked Amount 50.000	Range 19 - 118		Recovery = 72.98%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.42	74	94625	29.49	UG	#	38
3) Pyridine	1.46	52	60742	16.60	UG	#	82
5) Benzaldehyde	2.29	106	73192	22.45	UG		92
7) Phenol	2.30	94	240456	30.83	UG	#	26
8) Aniline	2.34	66	104125	32.48	UG		88
9) Bis(2-chloroethyl) ether	2.34	63	117764	32.96	UG	#	74
10) 2-Chlorophenol	2.40	128	211980	29.98	UG		91
11) 1,3-Dichlorobenzene	2.46	146	247333	30.87	UG	#	94
12) 1,4-Dichlorobenzene	2.48	146	235386	29.51	UG	#	84
13) Benzyl alcohol	2.51	108	141427	31.98	UG	#	76
14) 1,2-Dichlorobenzene	2.56	146	228967	29.91	UG		94
15) 2-Methylphenol	2.55	108	195898	41.53	UG		87
16) Bis(2-chloroisopropyl) eth	2.57	45	174375	33.14	UG	#	93
17) 4-Methylphenol	2.61	108	214294	34.23	UG		95
18) N-Nitrosodi-n-propylamine	2.63	70	135437	34.57	UG	#	87
19) Acetophenone	2.63	105	288088	33.25	UG	#	1
20) 3-Methylphenol	2.61	108	214294	34.20	UG		94
21) Hexachloroethane	2.70	117	73239	31.70	UG		93
25) Nitrobenzene	2.71	77	190606	32.09	UG		89
26) Isophorone	2.80	82	367332	32.87	UG		92
27) 2-Nitrophenol	2.85	139	126704	31.23	UG	#	71
28) 2,4-Dimethylphenol	2.83	107	221811	32.25	UG		93
29) Bis(2-chloroethoxy) methan	2.87	93	219285	31.50	UG		97
30) Benzoic acid	2.84	122	53013m	17.94	UG		
31) 2,4-Dimethylaniline	2.93	121	273148	34.97	UG	#	100
32) 2,4-Dichlorophenol	2.95	162	194249	30.85	UG		98
33) 1,2,4-Trichlorobenzene	3.00	180	221519	31.30	UG		98
34) Naphthalene	3.03	128	656120	29.96	UG		94
35) 4-Chloroaniline	3.03	127	373831	33.21	UG		95
36) 4-Aminotoluene	2.65	106	396677	34.73	UG		96
37) Hexachlorobutadiene	3.10	225	120052	31.46	UG		97
38) Caprolactam	3.17	55	60379	32.87	UG	#	75

gdm

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration

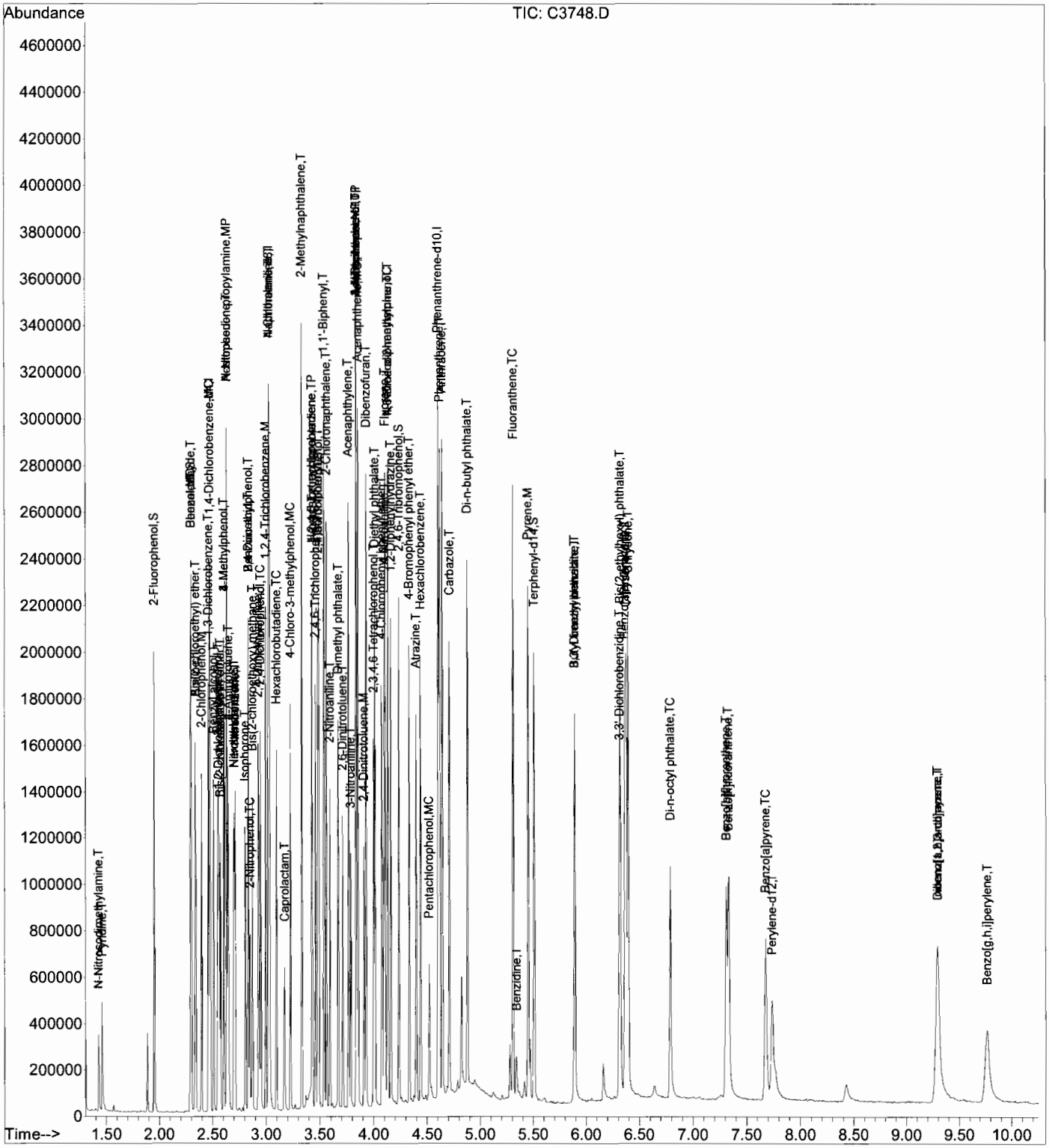
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.65	106	396677	34.73	UG		96
40) 4-Chloro-3-methylphenol	3.22	107	186122	29.95	UG		93
41) 2-Methylnaphthalene	3.33	142	525742	35.00	UG		99
44) Hexachlorocyclopentadiene	3.43	237	20210	11.78	UG		89
45) 2,4,6-Trichlorophenol	3.46	196	152259	30.82	UG		98
46) 2,4,5-Trichlorophenol	3.48	196	174833	35.37	UG		99
48) 1,1'-Biphenyl	3.54	154	664083	35.13	UG		98
49) 2-Chloronaphthalene	3.56	162	454677	32.45	UG		97
50) 2-Nitroaniline	3.59	65	104929	37.65	UG	#	76
51) Dimethyl phthalate	3.67	163	522553	32.28	UG		97
52) 2,6-Dinitrotoluene	3.71	165	117317	35.78	UG	#	82
53) Acenaphthylene	3.76	152	728047	31.89	UG		98
54) 3-Nitroaniline	3.79	138	128699	35.00	UG	#	93
55) Acenaphthene	3.86	153	478236	32.66	UG		92
56) 2,4-Dinitrophenol	3.84	184	4901	3.71	UG	#	1
57) 4-Nitrophenol	3.84	65	51907	24.21	UG	#	62
58) 2,4-Dinitrotoluene	3.91	165	151723	35.83	UG	#	76
59) Dibenzofuran	3.93	168	726234	34.88	UG	#	83
60) Diethyl phthalate	4.01	149	486330	32.15	UG		95
61) Fluorene	4.11	166	548297	32.75	UG		99
62) 4-Chlorophenyl phenyl ethe	4.08	204	287945	34.03	UG	#	88
63) 4-Nitroaniline	4.10	138	109483m	28.97	UG		
64) 1,2,4,5-Tetrachlorobenzene	3.43	216	253157	33.99	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.00	232	130882	32.01	UG		96
67) 4,6-Dinitro-2-methylphenol	4.13	198	34871m	15.84	UG		
68) N-Nitrosodiphenylamine	4.13	169	422011	36.42	UG		100
69) 1,2-Diphenylhydrazine	4.16	77	391130	32.56	UG	#	86
71) 4-Bromophenyl phenyl ether	4.33	248	179224m	34.66	UG		
72) Hexachlorobenzene	4.44	284	199720	34.33	UG	#	93
73) Atrazine	4.39	200	159436	38.30	UG		96
74) Pentachlorophenol	4.52	266	69465	21.94	UG		95
75) Phenanthrene	4.62	178	772993	33.90	UG		98
76) Anthracene	4.64	178	792217	34.93	UG		99
77) Carbazole	4.71	167	685877	34.49	UG		98
78) Di-n-butyl phthalate	4.88	149	830023	35.64	UG	#	97
79) Fluoranthene	5.31	202	780853	33.05	UG	#	94
80) Benzidine	5.34	184	37688m	3.74	UG		
83) Pyrene	5.45	202	776843	40.83	UG	#	88
85) 3,3'-Dimethylbenzidine	5.89	212	82907m	9.95	UG		
86) Butyl benzyl phthalate	5.89	149	295711	39.74	UG	#	88
87) 3,3'-Dichlorobenzidine	6.31	252	179636m	31.94	UG		
88) Benzo[a]anthracene	6.36	228	583710m	35.15	UG		
89) Chrysene	6.39	228	537930m	34.83	UG		
90) Bis(2-ethylhexyl) phthalat	6.32	149	403112	39.81	UG		94
93) Di-n-octyl phthalate	6.79	149	560453	62.45	UG		100
94) Benzo[b]fluoranthene	7.31	252	449105	49.70	UG		98
95) Benzo[k]fluoranthene	7.33	252	394420m	46.13	UG		
96) Benzo[a]pyrene	7.67	252	432630	51.42	UG		98
97) Indeno[1,2,3-cd]pyrene	9.29	276	492755	46.73	UG	#	48
98) Dibenz[a,h]anthracene	9.29	278	394831	45.66	UG	#	65
99) Benzo[g,h,i]perylene	9.76	276	408885	46.74	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : C3748.D
Acq On : 20 Feb 2015 13:07
Operator : EDM
Sample : .,E15-01158-021MSD,S,15.00g,0,0.5
Misc : 150219-01,02/19/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 15:51:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\CS0415.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Feb 11 11:39:18 2015
Response via : Initial Calibration



SEMI-VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC

EXTRACTION LOG - SEMIVOLATILES
(BN/AE/BNA)

Extraction Date/Time: 2/19/2015 8:59:00 AM **Tray ID:** **Batch ID: 150219-01**

Technician: Kimberly **Matrix: Soil**

Sample	*V			%	Initial	Final	Surrogate (# : ul)		Spike (# : ul)		%		
ID #	/C	*F	Test	Moist	(g)	(ml)	BN	Acid	BNA	Color	SED	Comments	Due
BLKS150219-01	BLK		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25		1			
LCSS150219-01	LCS		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
01158-021MS	MS		BNA	-	15.01	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
01158-021MSD	MSD		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
00920-002	1	1	PAH	18.2	15.27	1.00	BNS025 : 25			5			
01248-002	2	2	BNA	15.8	15.43	0.500	BNS025 : 25	AES026 : 25		5			
01248-004	3	3	BNA	17.9	15.36	0.500	BNS025 : 25	AES026 : 25		5			
01248-006	4	4	BNA	14.4	15.24	0.500	BNS025 : 25	AES026 : 25		4			
01158-021	5	5	BN	17.4	15.03	0.500	BNS025 : 25			2			
01158-022	6	6	BN	11.9	15.10	0.500	BNS025 : 25			4			
01246-001	7	1	PAH	9.10	15.60	0.500	BNS025 : 25			4			
01246-002	8	2	PAH	10.8	15.18	0.500	BNS025 : 25			5			
01273-001	9	3	BNA	10.6	15.24	1.00	BNS025 : 25	AES026 : 25		5		R-48	

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

*V/C=Vap/Cell
*F=Funnel

Color: 1 = Clear; 2 = Light Yellow
3 = Yellow-Gold; 4 = Brown; 5 = Black

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 2/10/2015 **BATCH ID:**

INSTRUMENT: C

TUNE FILE: DFTPP.U

METHOD 1 CS0415

METHOD 2

METHOD 3

ANALYST: Eleanor

John Initial

ISTD.Lot ECS SVI028

P (limit:2) = 0.90

B (limit:2) = 0.99

D(limit=20%)=

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
96	C3568	ABN005-15	DFTPP150210									11:24		
97	C3569	ABN011-15	ICC040BNA1											
26	C3570	ABN008-15	ICC001BNA1											
27	C3571	ABN009-15	ICC010BNA1											
28	C3572	ABN010-15	ICC020BNA1											
30	C3573	ABN012-15	ICC080BNA1											
31	C3574	ABN013-15	ICC160BNA1											
97	C3575	ABN004-15	ICV040BNA1											
32	C3576	ABN019-15	ICC160BNA2											
33	C3577	ABN018-15	ICC080BNA2											
34	C3578	ABN017-15	ICC040BNA2											
35	C3579	ABN016-15	ICC020BNA2											
36	C3580	ABN015-15	ICC010BNA2											
37	C3581	ABN014-15	ICC001BNA2											
98	C3582	ABN031-15	ICV040BNA2											

DATE: 2/20/2015 **BATCH ID:** 150219-01

INSTRUMENT: C 150219-03

TUNE FILE: DFTPP.U

METHOD 1 CS0415 ISTD.Lot ECS SVI028

METHOD 2 P(limit:2) = 0.98

METHOD 3 B(limit:2) = 1.30

ANALYST: Eleanor D(limit=20%) =

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
96	C3742	ABN005-15	DFTPP150220									11:39		.
97	C3743	ABN004-15	CCV040BNA1											.
98	C3744	ABN031-15	CCV040BNA2											.
1	C3745	BLKS150219-01		1	15.00	0.5	S			2/19/15	0			.
2	C3746	LCSS150219-01		1	15.00	0.5	S			2/19/15	0			.
3	C3747	15-01158-021MS		1	15.01	0.5	S			2/19/15	0			.
4	C3748	15-01158-021MSD		1	15.00	0.5	S			2/19/15	0			.
13	C3749	01273	1	1	15.24	1	S	2/18/15	2/19/15	2/19/15	10.6			GPEC-WC1
5	C3750	00920	2	2	15.27	1	S	2/5/15	2/5/15	2/19/15	18.2			S-2
6	C3751	01248	2	1	15.43	0.5	S	2/18/15	2/18/15	2/19/15	15.8			WC-1/0-4
7	C3752	01248	4	1	15.36	0.5	S	2/18/15	2/18/15	2/19/15	17.9			WC-2/0-4
8	C3753	01248	6	1	15.24	0.5	S	2/18/15	2/18/15	2/19/15	14.4			WC-3/0-4
9	C3754	01158	21	1	15.03	0.5	S	2/13/15	2/13/15	2/19/15				SB-13
10	C3755	01158	22	1	15.10	0.5	S	2/13/15	2/13/15	2/19/15				SB-14
11	C3756	01246	1	1	15.60	0.5	S	2/18/15	2/18/15	2/19/15				SB-N
12	C3757	01246	2	1	15.18	0.5	S	2/18/15	2/18/15	2/19/15				SB-S
26	C3758	BLKS150219-03		1	15.00	0.5	S			2/19/15	0			.
27	C3759	LCSS150219-03		1	15.00	0.5	S			2/19/15	0		*dble acid surr.	.
28	C3760	15-01281-011MS		1	15.03	0.5	S			2/19/15	0			.
29	C3761	15-01281-011MSD		1	15.02	0.5	S			2/19/15	0			.
30	C3762	01281	1	1	15.66	1	S	2/18/15	2/19/15	2/19/15	33.6			DPX-104A
31	C3763	01281	2	1	15.36	0.5	S	2/18/15	2/19/15	2/19/15	15.2			DPX-104B
32	C3764	01281	3	1	15.69	1	S	2/18/15	2/19/15	2/19/15	15.4			DPX-105A
33	C3765	01281	4	1	15.02	0.5	S	2/18/15	2/19/15	2/19/15	21.2			DPX-105B
34	C3766	01281	5	5	15.28	1	S	2/18/15	2/19/15	2/19/15	35.3			DPX-106A
35	C3767	01281	6	1	15.23	0.5	S	2/18/15	2/19/15	2/19/15	19.0			DPX-106B
36	C3768	01281	7	1	15.12	0.5	S	2/18/15	2/19/15	2/19/15	20.6			DPX-111A
37	C3769	01281	8	1	15.55	0.5	S	2/18/15	2/19/15	2/19/15	27.6			DPX-111B
38	C3770	01281	9	1	15.26	0.5	S	2/18/15	2/19/15	2/19/15	35.7			DPX-112A
39	C3771	01281	10	1	15.18	0.5	S	2/18/15	2/19/15	2/19/15	36.5			DPX-112B
40	C3772	01281	11	1	15.06	0.5	S	2/18/15	2/19/15	2/19/15	37.9			DPX-113A
41	C3773	01281	12	1	15.16	0.5	S	2/18/15	2/19/15	2/19/15	35.9			DPX-113B
42	C3774	01281	13	1	15.04	0.5	S	2/18/15	2/19/15	2/19/15	33.6			DPX-126
43	C3775	01281	14	1	15.25	0.5	S	2/18/15	2/19/15	2/19/15	39.4			DPX-127
44	C3776	01281	15	1	15.09	0.5	S	2/18/15	2/19/15	2/19/15	41.3			DPX-128
45	C3777	01281	16	1	15.00	0.5	S	2/18/15	2/19/15	2/19/15	30.6			DPX-129

ABN005-15

DATE:01/22/15

DFTPP		Rec. Date	EXP.Date	
Dftpp 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	1.25ml of each/250ml CH2CL2
Pentachlorophenol 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	
Benzidine 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	**final conc: 50ug/ml**
DDT 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	

EXP:7/15

DATE: 01/23/15	Conc :	Rec/Prep		ABN008-15	ABN009-15	ABN010-15	ABN011-15	ABN012-15	ABN013-15
BNAMIX1 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-13	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-16	50ul	50ul	50ul	50ul	50ul	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Nov-16	50ul	50ul	50ul	50ul	50ul	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-16	20ul	20ul	20ul	20ul	20ul	20ul
PAH mix (CPI-238513)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
PHENOL mix(CPI-238668)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
BN mix (CPI-199335)	2000ug/ml	Oct-14	Oct-16	0.5ul	5ul	10ul	20ul	40ul	80ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Oct-15	0.5ul	5ul	10ul	20ul	40ul	80ul
OLMO4 mix(CPI- 219588)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
EXTRA (ABN007-15)	2000ug/ml	Jan-15	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
DIOXANE (SUPELCO-LB914570)	2000ug/ml	Dec-14	Dec-15	0.5ul	5ul	10ul	20ul	40ul	80ul
2,3,4,6-Tetrachlorophenol(RESTEK a010265)	1000ug/ml	Dec-14	Sep-22	1ul	10ul	20ul	40ul	80ul	160ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:7/15									

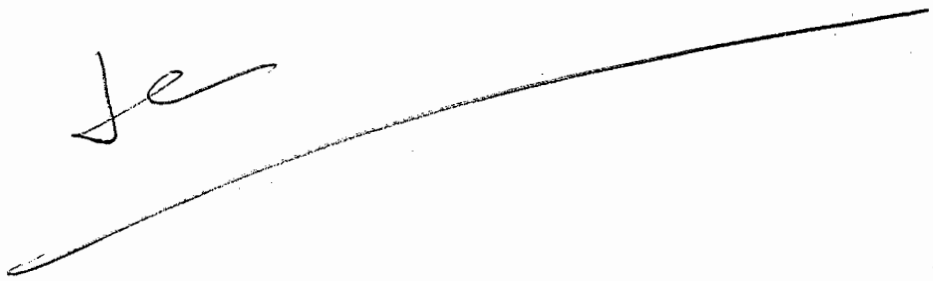
DATE: 01/23/15	Conc :	Rec/Prep		ABN014-15	ABN015-15	ABN016-15	ABN017-15	ABN018-15	ABN019-15
BNAMIX2 STD		Date	Exp Date	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:07/15									

ABN004-15

DATE: 01/21/15

40ng BNA CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-15	20ul
ABN001-15	287ug/ml	Jan-15	Jul-15	140ul
Final Volume				1ml

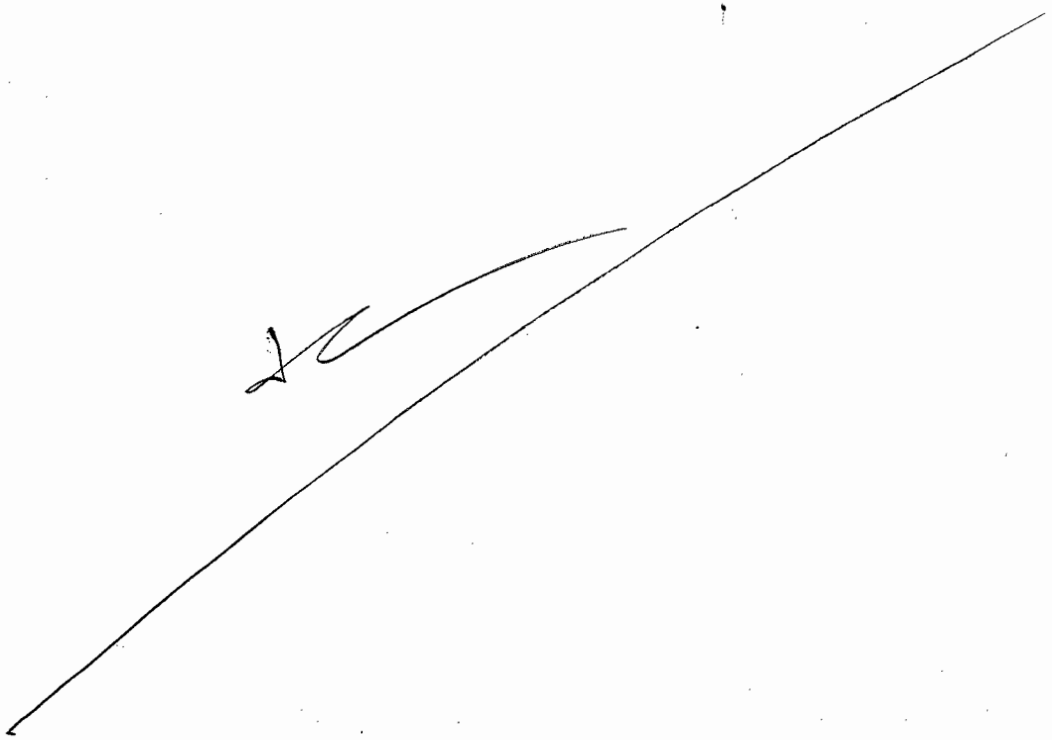
EXP:07/15



ABN031-15

DATE: 01/23/15 **40ng BNA - MIX2 CHECK STD**	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI027)	4000ug/ml	May-12	May-15	10ul
ADD ON #2 mix(ECS-8270A203)	2000ug/mL	Jan-15	Nov-16	20ul
BENZIDINES mix (SUPELCO-LC00780)	2000ug/mL	Jan-15	May-16	20ul
Final Volume				1ml

EXP:07/15



TCLP
SEMI-VOLATILE ORGANICS

TCLP
SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Lab Sample ID	Matrix	File ID	S1	#	S2	#	S3	#	S4	#	S5	#	S6	#
CCV040BNA2		B7652.D	N/A		N/A		N/A		N/A		N/A		N/A	
BLKA150220-03	AQUEOUS	B7674.D	21		13		$ 46		52		56		67	
TCLP150219	LEACHATE	B7675.D	21		13		$ 46		49		58		67	
LCSA150220-03	AQUEOUS	B7676.D	23		14		$ 47		51		71		79	
E15-01273-001MS	AQUEOUS	B7677.D	29		20		46		50		69		80	
E15-01273-001MSD	AQUEOUS	B7678.D	28		22		45		48		62		72	
E15-01273-001	LEACHATE	B7679.D	27		18		44		51		64		67	

	DKQPs		IAL	
	Aqueous	Soil	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	15-110	30-130	10-100	28-108
S2 (PHL) = Phenol-d5	15-110	30-130	10-102	34-107
S3 (NBZ) = Nitrobenzene-d5	30-130	30-130	27-102	26-104
S4 (FBP) = 2-Fluorobiphenyl	30-130	30-130	26-101	32-128
S5 (TBP) = 2,4,6-Tribromophenol	15-110	30-130	22-115	35-126
S6 (TPH) = Terphenyl-d14	30-130	30-130	23-124	32-135

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference
N/A Not applicable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-03
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7676.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	DKQP
N-Nitrosodimethylamine	30.0	12.1	40	$	40-140	70-130
Pyridine	30.0	10.6	35		20-120	20-160
Benzaldehyde	30.0	8.4	28		10-110	20-160
Phenol	30.0	12.2	41		30-140	20-160
Aniline	30.0	21.3	71		40-140	70-130
Bis(2-chloroethyl) ether	30.0	19.9	66	$	40-140	70-130
2-Chlorophenol	30.0	15.2	51		30-140	20-160
1,3-Dichlorobenzene	30.0	16.9	56	$	40-140	70-130
1,4-Dichlorobenzene	30.0	16.6	55	$	40-140	70-130
Benzyl alcohol	30.0	13.2	44	$	40-140	70-130
1,2-Dichlorobenzene	30.0	17.0	57	$	40-140	70-130
2-Methylphenol	30.0	13.4	45		30-140	20-160
Bis(2-chloroisopropyl) ether	30.0	19.0	63	$	40-140	70-130
4-Methylphenol	30.0	13.8	46	$	30-140	70-130
N-Nitrosodi-n-propylamine	30.0	19.5	65	$	40-140	70-130
Acetophenone	30.0	20.5	68	$	40-140	70-130
3-Methylphenol	30.0	13.8	46		30-140	20-160
Hexachloroethane	30.0	16.1	54	$	40-140	70-130
Nitrobenzene	30.0	16.1	54	$	40-140	70-130
Isophorone	30.0	16.9	56	$	40-140	70-130
2-Nitrophenol	30.0	14.8	49		30-140	20-160
2,4-Dimethylphenol	30.0	17.4	58		30-140	20-160
Bis(2-chloroethoxy) methane	30.0	16.1	54	$	40-140	70-130
Benzoic acid	30.0	14.3	48		30-140	20-160
2,4-Dimethylaniline	30.0	16.7	56	$	40-140	70-130
2,4-Dichlorophenol	30.0	17.2	57		30-140	20-160
1,2,4-Trichlorobenzene	30.0	16.0	53	$	40-140	70-130
Naphthalene	30.0	15.9	53	$	40-140	70-130
4-Chloroaniline	30.0	16.2	54	$	40-140	70-130
Hexachlorobutadiene	30.0	17.8	59	$	40-140	70-130
Caprolactam	30.0	13.1	44	$	40-140	70-130
4-Chloro-3-methylphenol	30.0	16.6	55		30-140	20-160
2-Methylnaphthalene	30.0	18.2	61	$	40-140	70-130
Hexachlorocyclopentadiene	30.0	12.3	41		5-105	20-160
2,4,6-Trichlorophenol	30.0	18.4	61		30-140	20-160
2,4,5-Trichlorophenol	30.0	21.0	70		30-140	20-160
1,1'-Biphenyl	30.0	18.5	62	$	40-140	70-130
2-Chloronaphthalene	30.0	18.1	60	$	40-140	70-130
2-Nitroaniline	30.0	21.1	70		40-140	70-130
Dimethyl phthalate	30.0	18.2	61	$	40-140	70-130
2,6-Dinitrotoluene	30.0	18.2	61	$	40-140	70-130
Acenaphthylene	30.0	16.8	56	$	40-140	70-130
3-Nitroaniline	30.0	20.3	68	$	40-140	70-130
Acenaphthene	30.0	17.7	59		40-140	20-160
2,4-Dinitrophenol	30.0	16.2	54		5-105	20-160

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150220-03
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7676.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Rec Limits IAL	Rec Limits DKQP
4-Nitrophenol	30.0	15.0	50		30-140	20-160
2,4-Dinitrotoluene	30.0	23.5	78		40-140	70-130
Dibenzofuran	30.0	20.9	70		40-140	70-130
Diethyl phthalate	30.0	24.3	81		40-140	70-130
Fluorene	30.0	19.9	66	$	40-140	70-130
4-Chlorophenyl phenyl ether	30.0	21.1	70		40-140	70-130
4-Nitroaniline	30.0	26.5	88		40-140	70-130
1,2,4,5-Tetrachlorobenzene	30.0	18.7	62	$	40-140	70-130
2,3,4,6-Tetrachlorophenol	30.0	20.6	69	$	40-140	70-130
4,6-Dinitro-2-methylphenol	30.0	23.8	79		10-110	20-160
N-Nitrosodiphenylamine	30.0	27.5	92		40-140	70-130
1,2-Diphenylhydrazine	30.0	20.7	69	$	40-140	70-130
4-Bromophenyl phenyl ether	30.0	23.1	77		40-140	70-130
Hexachlorobenzene	30.0	21.6	72		40-140	70-130
Atrazine	30.0	27.5	92		20-120	20-160
Pentachlorophenol	30.0	25.4	85		30-140	20-160
Phenanthrene	30.0	22.4	75		40-140	70-130
Anthracene	30.0	24.0	80		40-140	70-130
Carbazole	30.0	26.6	89		40-140	70-130
Di-n-butyl phthalate	30.0	26.3	88		40-140	70-130
Fluoranthene	30.0	24.2	81		40-140	70-130
Benzidine	30.0	11.7	39		5-105	20-160
Pyrene	30.0	26.1	87		40-140	70-130
3,3'-Dimethylbenzidine	30.0	11.1	37		5-105	20-160
Butyl benzyl phthalate	30.0	26.3	88		40-140	70-130
3,3'-Dichlorobenzidine	30.0	30.3	101		40-140	70-130
Benzo[a]anthracene	30.0	27.0	90		40-140	70-130
Chrysene	30.0	29.4	98		40-140	70-130
Bis(2-ethylhexyl) phthalate	30.0	27.1	90		40-140	70-130
Di-n-octyl phthalate	30.0	30.9	103		40-140	70-130
Benzo[b]fluoranthene	30.0	35.3	118		40-140	70-130
Benzo[k]fluoranthene	30.0	35.6	119		40-140	70-130
Benzo[a]pyrene	30.0	35.5	118		40-140	70-130
Indeno[1,2,3-cd]pyrene	30.0	36.1	120		40-140	70-130
Dibenz[a,h]anthracene	30.0	36.8	123		40-140	70-130
Benzo[g,h,i]perylene	30.0	35.1	117		40-140	70-130

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
MS Data file: B7677.D
MSD Data file: B7678.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD limits IAL	DKQP
N-Nitrosodimethylamine	40.0	0.0	20.6	52	$	20.4	51	$	1		40-140/20	70-130/20
Pyridine	40.0	0.0	16.3	41		16.0	40		2		20-120/20	20-160/20
Benzaldehyde	40.0	0.0	9.5	24		10.2	26		7		10-110/20	20-160/20
Phenol	40.0	0.0	18.0	45		17.7	44		2		30-140/20	20-160/20
Aniline	40.0	0.0	19.4	49	$	19.3	48	$	1		40-140/20	70-130/20
Bis(2-chloroethyl) ether	40.0	0.0	18.7	47	$	18.2	46	$	3		40-140/20	70-130/20
2-Chlorophenol	40.0	0.0	15.5	39		16.0	40		3		30-140/20	20-160/20
1,3-Dichlorobenzene	40.0	0.0	17.2	43	$	17.7	44	$	3		40-140/20	70-130/20
1,4-Dichlorobenzene	40.0	0.0	16.3	41	$	16.6	42	$	2		40-140/20	70-130/20
Benzyl alcohol	40.0	0.0	17.7	44	$	16.9	42	$	5		40-140/20	70-130/20
1,2-Dichlorobenzene	40.0	0.0	17.2	43	$	17.8	45	$	3		40-140/20	70-130/20
2-Methylphenol	40.0	0.0	16.8	42		17.0	43		1		30-140/20	20-160/20
Bis(2-chloroisopropyl) ether	40.0	0.0	19.0	48	$	19.4	49	$	2		40-140/20	70-130/20
4-Methylphenol	40.0	0.0	18.2	46	$	18.4	46	$	1		30-140/20	70-130/20
N-Nitrosodi-n-propylamine	40.0	0.0	20.2	51	$	20.3	51	$	0		40-140/20	70-130/20
Acetophenone	40.0	0.0	22.0	55	$	21.2	53	$	4		40-140/20	70-130/20
3-Methylphenol	40.0	0.0	18.2	46		18.4	46		1		30-140/20	20-160/20
Hexachloroethane	40.0	0.0	16.6	42	$	17.0	43	$	2		40-140/20	70-130/20
Nitrobenzene	40.0	0.0	19.1	48	$	19.1	48	$	0		40-140/20	70-130/20
Isophorone	40.0	0.0	19.7	49	$	19.3	48	$	2		40-140/20	70-130/20
2-Nitrophenol	40.0	0.0	17.6	44		17.0	43		3		30-140/20	20-160/20
2,4-Dimethylphenol	40.0	0.0	19.3	48		18.5	46		4		30-140/20	20-160/20
Bis(2-chloroethoxy) methane	40.0	0.0	18.6	47	$	18.2	46	$	2		40-140/20	70-130/20
Benzoic acid	40.0	0.0	19.6	49		16.1	40		20		30-140/20	20-160/20
2,4-Dimethylaniline	40.0	0.0	19.9	50	$	19.4	49	$	3		40-140/20	70-130/20
2,4-Dichlorophenol	40.0	0.0	18.9	47		18.4	46		3		30-140/20	20-160/20
1,2,4-Trichlorobenzene	40.0	0.0	18.5	46	$	18.4	46	$	1		40-140/20	70-130/20
Naphthalene	40.0	0.0	18.4	46	$	18.0	45	$	2		40-140/20	70-130/20
4-Chloroaniline	40.0	0.0	19.8	50	$	19.2	48	$	3		40-140/20	70-130/20
Hexachlorobutadiene	40.0	0.0	19.5	49	$	19.5	49	$	0		40-140/20	70-130/20
Caprolactam	40.0	0.0	18.9	47	$	19.3	48	$	2		40-140/20	70-130/20
4-Chloro-3-methylphenol	40.0	0.0	20.1	50		19.5	49		3		30-140/20	20-160/20
2-Methylnaphthalene	40.0	0.0	21.7	54	$	20.2	51	$	7		40-140/20	70-130/20
Hexachlorocyclopentadiene	40.0	0.0	14.7	37		14.4	36		2		5-105/20	20-160/20
2,4,6-Trichlorophenol	40.0	0.0	20.5	51		19.2	48		7		30-140/20	20-160/20
2,4,5-Trichlorophenol	40.0	0.0	24.0	60		23.0	58		4		30-140/20	20-160/20
1,1'-Biphenyl	40.0	0.0	22.4	56	$	21.9	55	$	2		40-140/20	70-130/20
2-Chloronaphthalene	40.0	0.0	20.9	52	$	20.8	52	$	0		40-140/20	70-130/20
2-Nitroaniline	40.0	0.0	25.6	64	$	25.2	63	$	2		40-140/20	70-130/20
Dimethyl phthalate	40.0	0.0	21.1	53	$	20.0	50	$	5		40-140/20	70-130/20
2,6-Dinitrotoluene	40.0	0.0	23.6	59	$	23.2	58	$	2		40-140/20	70-130/20
Acenaphthylene	40.0	0.0	20.8	52	$	19.5	49	$	6		40-140/20	70-130/20
3-Nitroaniline	40.0	0.0	26.8	67	$	24.3	61	$	10		40-140/20	70-130/20
Acenaphthene	40.0	0.0	20.6	52		20.8	52		1		40-140/20	20-160/20
2,4-Dinitrophenol	40.0	0.0	18.3	46		15.2	38		19		5-105/20	20-160/20

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
MS Data file: B7677.D
MSD Data file: B7678.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Rec/RPD IAL Limits	Rec/RPD DKQP Limits
4-Nitrophenol	40.0	0.0	23.7	59		20.8	52		13		30-140/20	20-160/20
2,4-Dinitrotoluene	40.0	0.0	27.1	68	$	26.6	67	$	2		40-140/20	70-130/20
Dibenzofuran	40.0	0.0	25.3	63	$	24.3	61	$	4		40-140/20	70-130/20
Diethyl phthalate	40.0	0.0	27.3	68	$	25.3	63	$	8		40-140/20	70-130/20
Fluorene	40.0	0.0	24.8	62	$	23.7	59	$	5		40-140/20	70-130/20
4-Chlorophenyl phenyl ether	40.0	0.0	25.3	63	$	24.5	61	$	3		40-140/20	70-130/20
4-Nitroaniline	40.0	0.0	32.3	81		29.8	75		8		40-140/20	70-130/20
1,2,4,5-Tetrachlorobenzene	40.0	0.0	21.3	53	$	21.0	53	$	1		40-140/20	70-130/20
2,3,4,6-Tetrachlorophenol	40.0	0.0	23.0	58	$	19.9	50	$	14		40-140/20	70-130/20
4,6-Dinitro-2-methylphenol	40.0	0.0	25.9	65		27.2	68		5		10-110/20	20-160/20
N-Nitrosodiphenylamine	40.0	0.0	31.3	78		29.4	74		6		40-140/20	70-130/20
1,2-Diphenylhydrazine	40.0	0.0	25.8	65	$	24.2	61	$	6		40-140/20	70-130/20
4-Bromophenyl phenyl ether	40.0	0.0	27.3	68	$	24.6	62	$	10		40-140/20	70-130/20
Hexachlorobenzene	40.0	0.0	25.1	63	$	23.2	58	$	8		40-140/20	70-130/20
Atrazine	40.0	0.0	32.5	81		30.4	76		7		20-120/20	20-160/20
Pentachlorophenol	40.0	0.0	28.8	72		28.5	71		1		30-140/20	20-160/20
Phenanthrene	40.0	0.0	26.1	65	$	24.9	62	$	5		40-140/20	70-130/20
Anthracene	40.0	0.0	27.2	68	$	26.0	65	$	5		40-140/20	70-130/20
Carbazole	40.0	0.0	30.8	77		28.1	70		9		40-140/20	70-130/20
Di-n-butyl phthalate	40.0	0.0	31.2	78		28.5	71		9		40-140/20	70-130/20
Fluoranthene	40.0	0.0	29.0	73		26.6	67	$	9		40-140/20	70-130/20
Benzidine	40.0	0.0	14.4	36		11.9	30		19		5-105/20	20-160/20
Pyrene	40.0	0.0	32.3	81		29.2	73		10		40-140/20	70-130/20
3,3'-Dimethylbenzidine	40.0	0.0	12.5	31		10.9	27		14		5-105/20	20-160/20
Butyl benzyl phthalate	40.0	0.0	32.5	81		28.7	72		12		40-140/20	70-130/20
3,3'-Dichlorobenzidine	40.0	0.0	37.1	93		32.7	82		13		40-140/20	70-130/20
Benzo[a]anthracene	40.0	0.0	33.7	84		30.2	76		11		40-140/20	70-130/20
Chrysene	40.0	0.0	34.7	87		31.5	79		10		40-140/20	70-130/20
Bis(2-ethylhexyl) phthalate	40.0	0.0	33.0	83		28.1	70		16		40-140/20	70-130/20
Di-n-octyl phthalate	40.0	0.0	38.9	97		35.5	89		9		40-140/20	70-130/20
Benzo[b]fluoranthene	40.0	0.0	41.2	103		38.0	95		8		40-140/20	70-130/20
Benzo[k]fluoranthene	40.0	0.0	49.7	124		45.1	113		10		40-140/20	70-130/20
Benzo[a]pyrene	40.0	0.0	47.3	118		43.5	109		8		40-140/20	70-130/20
Indeno[1,2,3-cd]pyrene	40.0	0.0	47.4	119		43.8	110		8		40-140/20	70-130/20
Dibenz[a,h]anthracene	40.0	0.0	49.1	123		45.8	115		7		40-140/20	70-130/20
Benzo[g,h,i]perylene	40.0	0.0	46.7	117		43.3	108		8		40-140/20	70-130/20

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B7674.D

Instrument ID: MSDB

Date Extracted: 02/20/15

Matrix: LEACHATE

Date Analyzed: 02/20/2015

Time Analyzed: 16:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	TCLP150219	02/20/2015	16:55
.	LCSA150220-03	02/20/2015	17:12
.	E15-01273-001MS	02/20/2015	17:29
.	E15-01273-001MSD	02/20/2015	17:46
GPEC-WC1	E15-01273-001	02/20/2015	18:03

FORM IV SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B7540.D

DFTPP Injection Date : 02/17/2015

Inst ID: MSDB

DFTPP Injection Time: 07:59

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	50.9	
68	Less than 2.0% of mass 69	0.7	(1.4)1
69	Mass 69 relative abundance	50.4	
70	Less than 2.0% of mass 69	0.4	(0.8)1
127	40.0 - 60.0% of mass 198	52.3	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.6	
275	10.0 - 30.0% of mass 198	19.0	
365	Greater than 1.0% of mass 198	2.6	
441	Present, but less than mass 443	7.74	(80.4)3
442	40.0 - 100.0% of mass 198	51.5	
443	17.0 - 23.0% of mass 442	9.6	(18.7)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN011-15	ICC040BNA1	B7541.D	02/17/2015	08:27
ABN008-15	ICC001BNA1	B7542.D	02/17/2015	08:44
ABN009-15	ICC010BNA1	B7543.D	02/17/2015	09:01
ABN010-15	ICC020BNA1	B7544.D	02/17/2015	09:18
ABN012-15	ICC080BNA1	B7545.D	02/17/2015	09:35
ABN013-15	ICC160BNA1	B7546.D	02/17/2015	09:53
ABN019-15	ICC160BNA2	B7547.D	02/17/2015	10:10
ABN018-15	ICC080BNA2	B7548.D	02/17/2015	10:27
ABN017-15	ICC040BNA2	B7549.D	02/17/2015	10:44
ABN016-15	ICC020BNA2	B7550.D	02/17/2015	11:01
ABN015-15	ICC010BNA2	B7551.D	02/17/2015	11:18
ABN014-15	ICC001BNA2	B7552.D	02/17/2015	11:36
ABN004-15	ICV040BNA1	B7558.D	02/17/2015	13:12
ABN031-15	ICV040BNA2	B7559.D	02/17/2015	13:29

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B7650.D

DFTPP Injection Date : 02/20/2015

Inst ID: MSDB

DFTPP Injection Time: 10:04

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	57.3	
68	Less than 2.0% of mass 69	0.7	(1.1)1
69	Mass 69 relative abundance	59.1	
70	Less than 2.0% of mass 69	0.6	(1.0)1
127	40.0 - 60.0% of mass 198	58.5	
197	Less than 1.0% of mass 198	0.6	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.1	
275	10.0 - 30.0% of mass 198	20.8	
365	Greater than 1.0% of mass 198	3.2	
441	Present, but less than mass 443	8.48	(77.5)3
442	40.0 - 100.0% of mass 198	51.4	
443	17.0 - 23.0% of mass 442	10.9	(21.3)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN004-15	CCV040BNA1	B7651.D	02/20/2015	10:14
ABN031-15	CCV040BNA2	B7652.D	02/20/2015	10:31
.	BLKA150220-03	B7674.D	02/20/2015	16:32
.	TCLP150219	B7675.D	02/20/2015	16:55
.	LCSA150220-03	B7676.D	02/20/2015	17:12
.	E15-01273-001MS	B7677.D	02/20/2015	17:29
.	E15-01273-001MSD	B7678.D	02/20/2015	17:46
GPEC-WC1	E15-01273-001	B7679.D	02/20/2015	18:03

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7541.D

Date Analyzed: 02/17/2015

Instrument ID: MSDB

Time Analyzed: 08:27

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	265194		3.63		1020973		4.40		580734		5.43	
	UPPER LIMIT	530388		4.13		2041946		4.90		1161468		5.93	
	LOWER LIMIT	132597		3.13		510487		3.90		290367		4.93	
	LAB SAMPLE ID												
01	ICC001BNA1	249918		3.63		984282		4.40		572049		5.43	
02	ICC010BNA1	266766		3.63		1048584		4.40		589759		5.43	
03	ICC020BNA1	264017		3.63		1006969		4.40		582660		5.43	
04	ICC080BNA1	252846		3.63		954046		4.40		544113		5.43	
05	ICC160BNA1	256961		3.64		973549		4.41		546858		5.43	
06	ICC160BNA2	260332		3.63		1021817		4.40		572066		5.43	
07	ICC080BNA2	248093		3.63		964115		4.40		537275		5.43	
08	ICC040BNA2	244613		3.63		945145		4.40		534323		5.42	
09	ICC020BNA2	280541		3.63		1057602		4.40		604787		5.43	
10	ICC010BNA2	294317		3.63		1121813		4.40		623673		5.43	
11	ICC001BNA2	266988		3.63		1051949		4.40		588074		5.43	
12	ICV040BNA1	251755		3.63		955520		4.40		528177		5.43	
13	ICV040BNA2	260289		3.63		1006846		4.40		565692		5.43	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7541.D Date Analyzed: 02/17/2015

Instrument ID: MSDB Time Analyzed: 08:27

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	913175	6.34	687309	7.93	465631	9.19
	UPPER LIMIT	1826350	6.84	1374618	8.43	931262	9.69
	LOWER LIMIT	456588	5.84	343655	7.43	232816	8.69
	LAB SAMPLE ID						
01	ICC001BNA1	912219	6.34	817150	7.95	575957	9.21
02	ICC010BNA1	952946	6.34	829114	7.95	543635	9.20
03	ICC020BNA1	921697	6.34	742687	7.96	493542	9.22
04	ICC080BNA1	818451	6.34	612317	7.93	434851	9.18
05	ICC160BNA1	805034	6.34	592953	7.94	453776	9.19
06	ICC160BNA2	894081	6.34	700244	7.93	523880	9.19
07	ICC080BNA2	864948	6.34	740917	7.93	539163	9.19
08	ICC040BNA2	849485	6.34	738367	7.93	556975	9.18
09	ICC020BNA2	956779	6.34	780984	7.92	555867	9.17
10	ICC010BNA2	985722	6.34	783467	7.91	546239	9.17
11	ICC001BNA2	935116	6.34	761940	7.91	544616	9.17
12	ICV040BNA1	800179	6.33	615650	7.89	408464	9.14
13	ICV040BNA2	897048	6.34	728224	7.88	512976	9.13
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7651.D

Date Analyzed: 02/20/2015

Instrument ID: MSDB

Time Analyzed: 10:14

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	188553		3.63		732149		4.40		401688		5.42	
	UPPER LIMIT	377106		4.13		1464298		4.90		803376		5.92	
	LOWER LIMIT	94277		3.13		366075		3.90		200844		4.92	
	LAB SAMPLE ID												
01	CCV040BNA2	169759		3.63		680872		4.39		390445		5.42	
02	BLKA150220-03	231862		3.62		888279		4.39		463551		5.42	
03	TCLP150219	156420		3.63		607604		4.39		336371		5.42	
04	LCSA150220-03	129033		3.63		554614		4.39		303475		5.42	
05	E15-01273-001MS	122417		3.63		472402		4.39		259617		5.42	
06	E15-01273-001MSD	140801		3.62		545232		4.39		294751		5.42	
07	E15-01273-001	163530		3.63		621637		4.39		327580		5.42	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B7651.D

Date Analyzed: 02/20/2015

Instrument ID: MSDB

Time Analyzed: 10:14

	40 ppm	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	631572		6.34		457744		7.95		287679		9.20	
	UPPER LIMIT	1263144		6.84		915488		8.45		575358		9.70	
	LOWER LIMIT	315786		5.84		228872		7.45		143840		8.70	
	LAB SAMPLE ID												
01	CCV040BNA2	658326		6.33		550146		7.93		402557		9.19	
02	BLKA150220-03	690950		6.34		555163		7.94		319451		9.19	
03	TCLP150219	485182		6.33		390488		7.89		226831		9.15	
04	LCSA150220-03	444364		6.33		340489		7.90		211186		9.14	
05	E15-01273-001MS	380833		6.33		283838		7.91		167458		9.15	
06	E15-01273-001MSD	433750		6.33		329861		7.93		189240		9.19	
07	E15-01273-001	489861		6.34		398097		7.97		226518		9.23	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

TCLP
SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7679.D
Acq On : 20 Feb 2015 18:03
Operator : DANA
Sample : GPEC-WC1,E15-01273-001,T,50.00ml,100,1
Misc : 150220-03,02/20/15,02/19/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 23 09:14:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	163530	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	621637	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	327580	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	489861	40.00	UG	0.00
82) Chrysene-d12	7.97	240	398097	40.00	UG	0.04
92) Perylene-d12	9.23	264	226518	40.00	UG	0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	157904	27.18	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 27.18%			
6) Phenol-d5	3.38	99	127751	17.79	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 17.79%			
24) Nitrobenzene-d5	3.96	82	147633	22.24	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 44.48%			
47) 2-Fluorobiphenyl	5.01	172	284336	25.50	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.00%			
70) 2,4,6-Tribromophenol	5.95	330	140595	64.47	UG	-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 64.47%			
84) Terphenyl-d14	7.25	244	363019	33.50	UG	0.02
Spiked Amount 50.000	Range 23 - 124		Recovery = 67.00%			

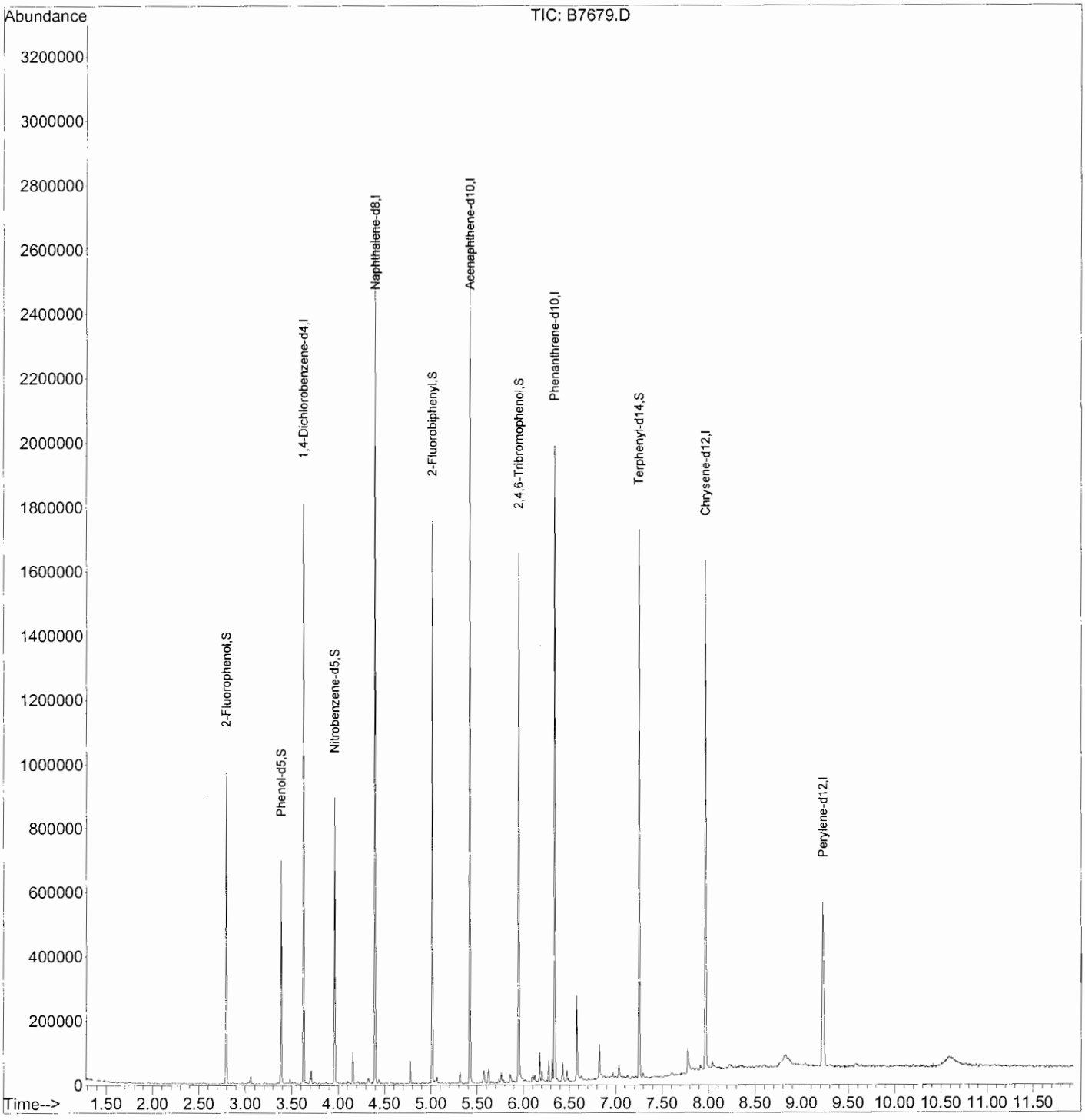
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7679.D
Acq On : 20 Feb 2015 18:03
Operator : DANA
Sample : GPEC-WC1,E15-01273-001,T,50.00ml,100,1
Misc : 150220-03,02/20/15,02/19/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 23 09:14:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



TCLP
SEMI-VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_B

Method Path : C:\MSDCHEM\1\METHODS\
Method File : BW0215.M
Title : BNA CALIBRATION METHOD
Last Update : Tue Feb 17 12:23:34 2015
Response Via : Initial Calibration

Calibration Files
1 =B7542.D 10 =B7543.D 20 =B7544.D
40 =B7541.D 80 =B7545.D 160 =B7546.D =

		Compound	1	10	20	40	80	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	1.263	0.967	1.025	0.988	1.001	1.042	1.048	10.39
3)	T	Pyridine	1.563	1.299	1.413	1.326	1.356	1.404	1.393	6.75
4)	S	2-Fluorophenol	1.360	1.422	1.468	1.430	1.406	1.442	1.421	2.57
5)	T	Benzaldehyde	0.379	0.384	0.358	0.375	0.259	0.250	0.334	18.66
6)	S	Phenol-d5	1.743	1.745	1.804	1.761	1.730	1.757	1.757	1.45
7)	MC	Phenol	2.183	1.941	1.915	1.942	1.851	1.606	1.906	9.74
8)	T	Aniline	0.992	0.933	0.948	0.927	0.881	0.689	0.895	11.96
9)	T	Bis(2-chloroethyl	1.278	1.179	1.182	1.146	1.149	1.247	1.197	4.51
10)	M	2-Chlorophenol	1.749	1.538	1.574	1.565	1.491	1.481	1.566	6.21
11)	T	1,3-Dichlorobenze	1.922	1.651	1.681	1.642	1.557	1.643	1.683	7.40
12)	MC	1,4-Dichlorobenze	1.997	1.669	1.685	1.669	1.593	1.522	1.689	9.64
13)	T	Benzyl alcohol	1.146	0.998	1.028	1.032	1.003	0.854	1.010	9.28
14)	T	1,2-Dichlorobenze	1.930	1.552	1.597	1.577	1.489	1.486	1.605	10.32
15)	T	2-Methylphenol	1.622	1.322	1.370	1.346	1.280	1.237	1.363	9.95
16)	T	Bis(2-chloroisopr	3.008	2.489	2.594	2.566	2.570	2.568	2.633	7.11
17)	T	4-Methylphenol	1.484	1.303	1.408	1.340	1.306	1.119	1.327	9.27
18)	MP	N-Nitrosodi-n-pro	1.423	1.145	1.213	1.189	1.127	0.972	1.178	12.43
19)	T	Acetophenone	2.160	1.901	1.927	1.921	1.877	1.800	1.931	6.29
20)	T	3-Methylphenol	1.484	1.303	1.408	1.340	1.306	1.119	1.327	9.27
21)	T	Hexachloroethane	0.795	0.625	0.636	0.645	0.619	0.602	0.654	10.82
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.409	0.395	0.410	0.420	0.438	0.492	0.427	8.12
25)	T	Nitrobenzene	0.495	0.384	0.405	0.393	0.385	0.396	0.410	10.38
26)	T	Isophorone	0.867	0.732	0.783	0.767	0.751	0.674	0.762	8.38
27)	TC	2-Nitrophenol	0.198	0.177	0.177	0.186	0.173	0.176	0.181	5.15
28)	T	2,4-Dimethylpheno	0.430	0.364	0.386	0.385	0.367	0.358	0.382	6.82
29)	T	Bis(2-chloroethox	0.541	0.451	0.470	0.455	0.447	0.438	0.467	8.12
30)	T	Benzoic acid	0.167	0.147	0.167	0.192	0.152	0.172	0.166	9.60
31)	T	2,4-Dimethylanili	0.478	0.399	0.446	0.421	0.401	0.370	0.419	9.16
32)	TC	2,4-Dichloropheno	0.325	0.303	0.320	0.318	0.306	0.270	0.307	6.54
33)	M	1,2,4-Trichlorobe	0.383	0.338	0.350	0.338	0.323	0.310	0.340	7.36
34)	T	Naphthalene	1.258	1.119	1.162	1.119	1.078	1.022	1.126	7.08
35)	T	4-Chloroaniline	0.673	0.570	0.598	0.580	0.567	0.533	0.587	8.05
36)	T	4-Aminotoluene	0.660	0.616	0.634	0.611	0.579	0.473	0.595	11.01
37)	TC	Hexachlorobutadie	0.206	0.192	0.207	0.194	0.191	0.183	0.195	4.67
38)	T	Caprolactam	0.203	0.167	0.178	0.178	0.172	0.160	0.176	8.45
39)	T	2-Aminotoluene	0.660	0.616	0.634	0.611	0.579	0.473	0.595	11.01
40)	MC	4-Chloro-3-methyl	0.386	0.305	0.333	0.321	0.313	0.285	0.324	10.63
41)	T	2-Methylnaphthale	0.763	0.683	0.726	0.706	0.646	0.615	0.690	7.77
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.350	0.348	0.371	0.387	0.381	0.358	0.366	4.42
45)	TC	2,4,6-Trichloroph	0.429	0.368	0.375	0.385	0.375	0.361	0.382	6.37
46)	T	2,4,5-Trichloroph	0.414	0.378	0.395	0.396	0.377	0.353	0.386	5.42
47)	S	2-Fluorobiphenyl	1.385	1.370	1.377	1.350	1.310	1.378	1.362	2.05
48)	T	1,1'-Biphenyl	1.715	1.502	1.501	1.475	1.429	1.322	1.491	8.64
49)	T	2-Chloronaphthale	1.287	1.133	1.182	1.145	1.088	1.018	1.142	7.93
50)	T	2-Nitroaniline	0.363	0.318	0.308	0.338	0.326	0.321	0.329	5.90
51)	T	Dimethyl phthalat	1.411	1.316	1.329	1.303	1.274	1.188	1.303	5.59
52)	T	2,6-Dinitrotoluen	0.203	0.209	0.224	0.253	0.236	0.241	0.228	8.46
53)	T	Acenaphthylene	2.100	1.917	1.910	1.922	1.779	1.661	1.882	7.90

54)	T	3-Nitroaniline	0.272	0.260	0.287	0.297	0.300	0.273	0.281	5.62
55)	MC	Acenaphthene	1.373	1.194	1.183	1.172	1.064	0.971	1.159	11.71
56)	TP	2,4-Dinitrophenol	0.052	0.047	0.044	0.061	0.069	0.056	0.055	16.84
57)	MP	4-Nitrophenol	0.221	0.221	0.227	0.242	0.238	0.217	0.228	4.51
58)	M	2,4-Dinitrotoluen	0.254	0.262	0.286	0.319	0.345	0.342	0.301	13.20
59)	T	Dibenzofuran	1.795	1.731	1.788	1.725	1.780	1.660	1.746	2.97
60)	T	Diethyl phthalate	1.526	1.373	1.381	1.383	1.403	1.325	1.398	4.83
61)	T	Fluorene	1.537	1.430	1.433	1.455	1.419	1.296	1.428	5.45
62)	T	4-Chlorophenyl ph	0.798	0.644	0.668	0.651	0.679	0.632	0.679	8.96
63)	T	4-Nitroaniline	0.328	0.300	0.314	0.337	0.325	0.306	0.318	4.43
64)		1,2,4,5-Tetrachlo	0.663	0.580	0.602	0.584	0.552	0.499	0.580	9.38
65)	T	2,3,4,6-Tetrachlo	0.403	0.477	0.445	0.354	0.310	0.302	0.382	18.89
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.085	0.064	0.068	0.080	0.100	0.080	0.079	16.25
68)	TC	N-Nitrosodiphenyl	0.656	0.600	0.616	0.618	0.653	0.626	0.628	3.52
69)	T	1,2-Diphenylhydra	1.121	0.995	1.039	1.059	1.124	1.061	1.067	4.65
70)	S	2,4,6-Tribromophe	0.169	0.178	0.182	0.177	0.183	0.181	0.178	2.93
71)	T	4-Bromophenyl phe	0.275	0.251	0.258	0.258	0.260	0.229	0.255	5.92
72)	T	Hexachlorobenzene	0.388	0.307	0.310	0.303	0.282	0.252	0.307	14.70
73)	T	Atrazine	0.268	0.222	0.227	0.230	0.220	0.199	0.228	9.92
74)	MC	Pentachlorophenol	0.143	0.130	0.133	0.147	0.151	0.153	0.143	6.65
75)	T	Phenanthrene	1.397	1.138	1.148	1.114	1.104	0.929	1.138	13.18
76)	T	Anthracene	1.255	1.097	1.122	1.126	1.059	0.921	1.097	9.88
77)	T	Carbazole	1.170	1.021	1.002	0.986	0.982	0.837	1.000	10.63
78)	T	Di-n-butyl phthal	1.472	1.323	1.347	1.356	1.285	1.168	1.325	7.49
79)	TC	Fluoranthene	1.300	1.121	1.120	1.096	1.035	0.904	1.096	11.79
80)	T	Benzidine	0.480	0.534	0.599	0.535	0.438	0.425	0.502	13.25
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.489	1.305	1.407	1.478	1.383	1.199	1.377	8.00
84)	S	Terphenyl-d14	1.082	1.042	1.103	1.160	1.107	1.040	1.089	4.16
85)	T	3,3'-Dimethylbenz	0.559	0.668	0.795	0.775	0.606	0.519	0.654	17.38
86)	T	Butyl benzyl phth	0.744	0.622	0.645	0.684	0.641	0.554	0.648	9.80
87)	T	3,3'-Dichlorobenz	0.498	0.420	0.403	0.393	0.336	0.299	0.392	17.65
88)	T	Benzo[a]anthracen	1.400	1.109	1.135	1.174	1.125	0.989	1.156	11.70
89)	T	Chrysene	1.161	0.995	1.041	1.089	1.019	0.913	1.036	8.12
90)	T	Bis(2-ethylhexyl)	0.946	0.842	0.883	0.958	0.910	0.779	0.886	7.61
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	2.066	1.933	1.987	2.180	1.966	1.666	1.966	8.73
94)	T	Benzo[b]fluoranth	1.648	1.510	1.602	1.687	1.595	1.562	1.601	3.89
95)	T	Benzo[k]fluoranth	1.464	1.318	1.310	1.290	1.258	1.269	1.318	5.68
96)	TC	Benzo[a]pyrene	1.479	1.265	1.307	1.385	1.326	1.247	1.335	6.43
97)	T	Indeno[1,2,3-cd]p	1.833	1.392	1.532	1.608	1.724	1.669	1.626	9.46
98)	T	Dibenz[a,h]anthra	1.457	1.160	1.246	1.346	1.427	1.363	1.333	8.42
99)	T	Benzo[g,h,i]peryl	1.863	1.157	1.241	1.355	1.422	1.438	1.413	17.40

(#) = Out of Range

BW0215.M Tue Feb 17 13:56:07 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	249918	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	984282	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	572049	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	912219	40.00	UG		0.00
82) Chrysene-d12	7.95	240	817150	40.00	UG		0.02
92) Perylene-d12	9.21	264	575957	40.00	UG		0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	849935	95.14	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 95.14%				
6) Phenol-d5	3.40	99	1088716	98.93	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 98.93%				
24) Nitrobenzene-d5	3.97	82	503204	48.66	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 97.32%				
47) 2-Fluorobiphenyl	5.02	172	990298	51.28	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 102.56%#				
70) 2,4,6-Tribromophenol	5.95	330	384441	95.48	UG		-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 95.48%				
84) Terphenyl-d14	7.24	244	1105093	46.65	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 93.30%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	7892	1.28	UG		88
3) Pyridine	1.73	52	9766	1.18	UG		36
7) Phenol	3.40	94	13637	1.12	UG		91
8) Aniline	3.43	66	6195	1.07	UG	#	71
9) Bis(2-chloroethyl) ether	3.46	63	7985	1.12	UG		78
10) 2-Chlorophenol	3.51	128	10927	1.12	UG		95
11) 1,3-Dichlorobenzene	3.61	146	12010	1.17	UG	#	90
12) 1,4-Dichlorobenzene	3.64	146	12476	1.20	UG		86
13) Benzyl alcohol	3.70	108	7161	1.11	UG		94
14) 1,2-Dichlorobenzene	3.75	146	12059	1.22	UG		84
15) 2-Methylphenol	3.77	108	10134	1.21	UG		92
16) Bis(2-chloroisopropyl) eth	3.80	45	18792	1.17	UG	#	75
17) 4-Methylphenol	3.85	108	9274	1.11	UG		95
18) N-Nitrosodi-n-propylamine	3.88	70	8888	1.20	UG		87
19) Acetophenone	3.87	105	13498	1.12	UG		97
20) 3-Methylphenol	3.85	108	9274	1.11	UG		95
21) Hexachloroethane	3.95	117	4966	1.23	UG		88
25) Nitrobenzene	3.98	77	12191	1.26	UG		91
26) Isophorone	4.12	82	21346	1.13	UG		87
27) 2-Nitrophenol	4.17	139	4874	1.06	UG	#	55
28) 2,4-Dimethylphenol	4.17	107	10573	1.12	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	13324	1.19	UG		89
30) Benzoic acid	4.19	105	4110m	0.87	UG		
31) 2,4-Dimethylaniline	4.29	121	11774	1.14	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	7999	1.02	UG		87
33) 1,2,4-Trichlorobenzene	4.37	180	9420	1.13	UG		87
34) Naphthalene	4.41	128	30944	1.12	UG	#	97
35) 4-Chloroaniline	4.43	127	16551	1.16	UG		99
36) 4-Aminotoluene	3.90	106	16237	1.08	UG	#	57
37) Hexachlorobutadiene	4.51	225	5059	1.06	UG		96
38) Caprolactam	4.59	55	5004m	1.14	UG		
39) 2-Aminotoluene	3.90	106	16237	1.08	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	9506	1.20	UG		79
41) 2-Methylnaphthalene	4.81	142	18773	1.08	UG		91
44) Hexachlorocyclopentadiene	4.94	237	5004	0.90	UG	#	45
45) 2,4,6-Trichlorophenol	4.97	196	6136	1.12	UG		99
46) 2,4,5-Trichlorophenol	5.00	196	5915	1.04	UG		89
48) 1,1'-Biphenyl	5.07	154	24520	1.16	UG		100
49) 2-Chloronaphthalene	5.09	162	18400	1.12	UG		92
50) 2-Nitroaniline	5.14	65	5196	1.07	UG		75
51) Dimethyl phthalate	5.24	163	20173	1.08	UG		96
52) 2,6-Dinitrotoluene	5.29	165	2903	0.80	UG		50
53) Acenaphthylene	5.33	152	30038	1.09	UG		95
54) 3-Nitroaniline	5.37	138	3897	0.92	UG	#	61
55) Acenaphthene	5.44	153	19629	1.17	UG		95
56) 2,4-Dinitrophenol	5.43	184	737m	0.84	UG		
57) 4-Nitrophenol	5.43	65	3156m	0.91	UG		
58) 2,4-Dinitrotoluene	5.52	165	3629	0.80	UG		75
59) Dibenzofuran	5.54	168	25672	1.04	UG		88
60) Diethyl phthalate	5.68	149	21818	1.10	UG		96
61) Fluorene	5.78	166	21984	1.06	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	11412	1.23	UG		88
63) 4-Nitroaniline	5.76	138	4696	0.98	UG		68
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	9483	1.14	UG		69
65) 2,3,4,6-Tetrachlorophenol	5.64	232	5767m	1.14	UG		
67) 4,6-Dinitro-2-methylphenol	5.81	198	1928m	1.06	UG		
68) N-Nitrosodiphenylamine	5.83	169	14965	1.06	UG		92
69) 1,2-Diphenylhydrazine	5.86	77	25565	1.06	UG		87
71) 4-Bromophenyl phenyl ether	6.07	248	6280	1.07	UG	#	67
72) Hexachlorobenzene	6.17	284	8838	1.28	UG		94
73) Atrazine	6.15	200	6121	1.17	UG		86
74) Pentachlorophenol	6.26	266	3266	0.97	UG		71
75) Phenanthrene	6.35	178	31858	1.25	UG		100
76) Anthracene	6.38	178	28619	1.11	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration

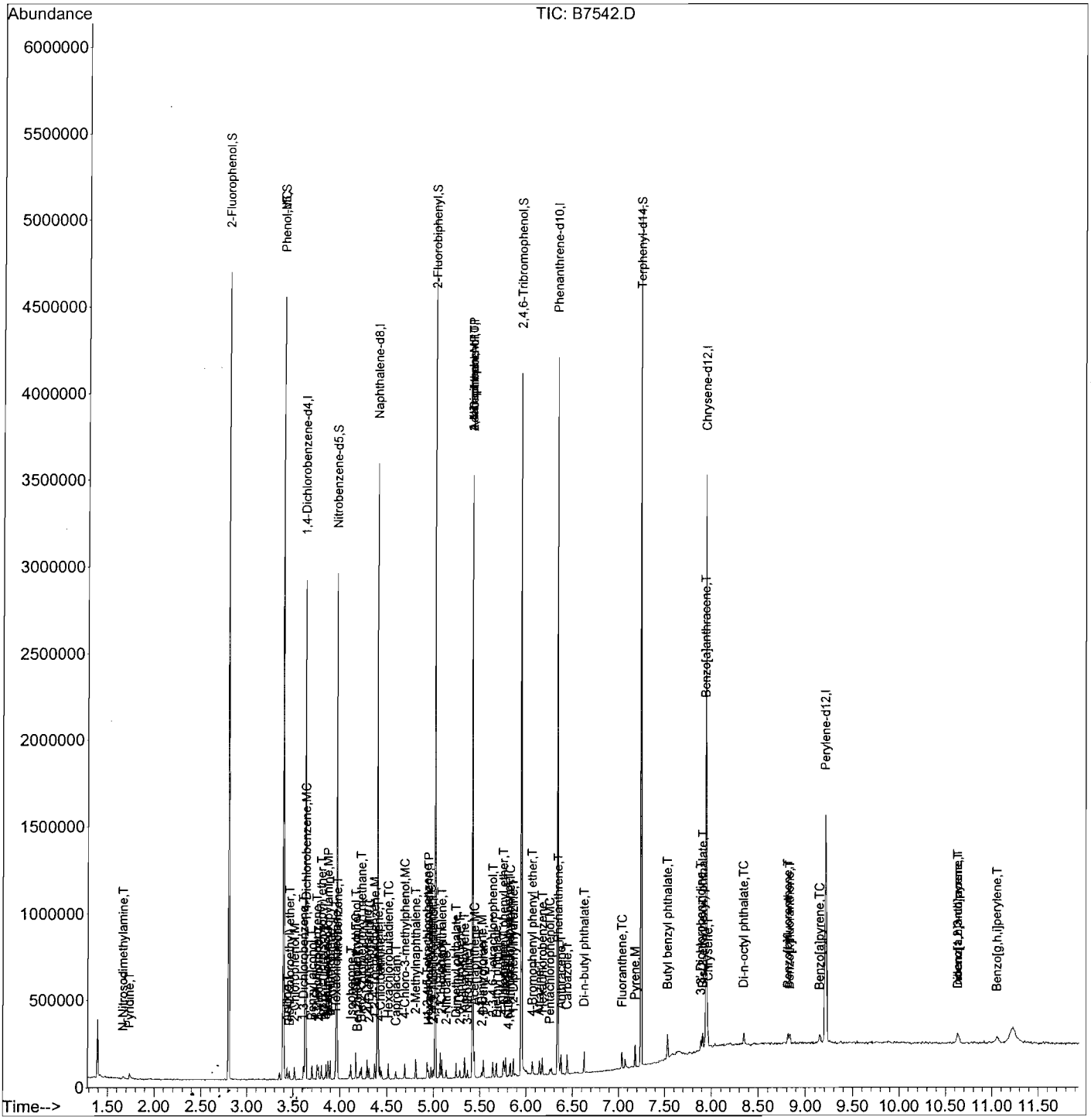
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.44	167	26693	1.19	UG	96
78) Di-n-butyl phthalate	6.63	149	33572	1.09	UG	96
79) Fluoranthene	7.04	202	29651	1.19	UG	89
83) Pyrene	7.18	202	30420	1.01	UG	89
86) Butyl benzyl phthalate	7.53	149	15204	1.09	UG	74
87) 3,3'-Dichlorobenzidine	7.89	252	10174	1.27	UG	90
88) Benzo[a]anthracene	7.94	228	28608	1.19	UG	98
89) Chrysene	7.96	228	23709	1.07	UG	95
90) Bis(2-ethylhexyl) phthalat	7.91	149	19335	0.99	UG	93
93) Di-n-octyl phthalate	8.35	149	29743	0.95	UG	86
94) Benzo[b]fluoranthene	8.81	252	23734	0.98	UG	89
95) Benzo[k]fluoranthene	8.83	252	21076	1.13	UG	92
96) Benzo[a]pyrene	9.15	252	21299	1.07	UG	98
97) Indeno[1,2,3-cd]pyrene	10.63	276	26392	1.14	UG	71
98) Dibenz[a,h]anthracene	10.63	278	20976	1.08	UG	81
99) Benzo[g,h,i]perylene	11.06	276	26831	1.38	UG	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7542.D
Acq On : 17 Feb 2015 8:44
Operator : DANA
Sample : ABN008-15,ICC001BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 17 10:08:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 08:42:45 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	266766	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	1048584	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	589759	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	952946	40.00	UG		0.00
82) Chrysene-d12	7.95	240	829114	40.00	UG		0.02
92) Perylene-d12	9.20	264	543635	40.00	UG		0.02
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	948083	101.90	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.90%#				
6) Phenol-d5	3.40	99	1163715	99.60	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 99.60%				
24) Nitrobenzene-d5	3.97	82	517942	47.65	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 95.30%				
47) 2-Fluorobiphenyl	5.02	172	1010017	50.09	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 100.18%				
70) 2,4,6-Tribromophenol	5.95	330	423856	103.10	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 103.10%				
84) Terphenyl-d14	7.24	244	1079495	46.47	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 92.94%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	64501	8.59	UG		86
3) Pyridine	1.72	52	86602	8.99	UG		44
7) Phenol	3.40	94	129480	9.41	UG		1
8) Aniline	3.43	66	62223	9.73	UG		78
9) Bis(2-chloroethyl) ether	3.46	63	78659	9.73	UG		73
10) 2-Chlorophenol	3.51	128	102542	9.28	UG		92
11) 1,3-Dichlorobenzene	3.61	146	110086	9.26	UG	#	92
12) 1,4-Dichlorobenzene	3.64	146	111319	9.11	UG		54
13) Benzyl alcohol	3.70	108	66588	9.17	UG		95
14) 1,2-Dichlorobenzene	3.76	146	103507	8.85	UG		91
15) 2-Methylphenol	3.77	108	88144	8.91	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	166012	8.93	UG		88
17) 4-Methylphenol	3.85	108	86920	9.23	UG		96
18) N-Nitrosodi-n-propylamine	3.88	70	76368	8.77	UG		85
19) Acetophenone	3.87	105	126806	9.32	UG		96
20) 3-Methylphenol	3.85	108	86920	9.23	UG		96
21) Hexachloroethane	3.95	117	41687	8.68	UG		87
25) Nitrobenzene	3.98	77	100771	8.65	UG		95
26) Isophorone	4.12	82	191862	8.95	UG		89
27) 2-Nitrophenol	4.17	139	46357	9.20	UG		79
28) 2,4-Dimethylphenol	4.17	107	95447	8.94	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	118340	9.06	UG		98
30) Benzoic acid	4.20	105	38482	8.18	UG		61
31) 2,4-Dimethylaniline	4.29	121	104646	8.88	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	79369	9.42	UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	88714	9.39	UG		90
34) Naphthalene	4.41	128	293421	9.42	UG	#	98
35) 4-Chloroaniline	4.43	127	149374	9.10	UG		91
36) 4-Aminotoluene	3.90	106	161379	9.69	UG	#	56
37) Hexachlorobutadiene	4.51	225	50206	9.58	UG		96
38) Caprolactam	4.60	55	43877	8.78	UG	#	1
39) 2-Aminotoluene	3.90	106	161379	9.69	UG	#	57
40) 4-Chloro-3-methylphenol	4.69	107	79914	8.62	UG		87
41) 2-Methylnaphthalene	4.81	142	179088	9.30	UG		100
44) Hexachlorocyclopentadiene	4.94	237	51368	9.45	UG	#	39
45) 2,4,6-Trichlorophenol	4.98	196	54277	9.05	UG		91
46) 2,4,5-Trichlorophenol	5.00	196	55709	9.33	UG		95
48) 1,1'-Biphenyl	5.07	154	221523	9.42	UG		99
49) 2-Chloronaphthalene	5.09	162	167052	9.32	UG		87
50) 2-Nitroaniline	5.14	65	46843	9.06	UG		77
51) Dimethyl phthalate	5.25	163	194064	9.70	UG		94
52) 2,6-Dinitrotoluene	5.29	165	30815	9.18	UG		72
53) Acenaphthylene	5.33	152	282570	9.53	UG		99
54) 3-Nitroaniline	5.37	138	38273	9.12	UG	#	68
55) Acenaphthene	5.44	153	175976	9.38	UG		92
56) 2,4-Dinitrophenol	5.43	184	6992m	7.78	UG		
57) 4-Nitrophenol	5.44	65	32597	7.15	UG		87
58) 2,4-Dinitrotoluene	5.52	165	38685	9.17	UG		98
59) Dibenzofuran	5.54	168	255152	9.83	UG		91
60) Diethyl phthalate	5.68	149	202375	9.44	UG		94
61) Fluorene	5.78	166	210840	9.56	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	94992	8.89	UG		88
63) 4-Nitroaniline	5.77	138	44276	9.03	UG		84
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	85476	9.30	UG		68
65) 2,3,4,6-Tetrachlorophenol	5.64	232	70365m	9.41	UG		
67) 4,6-Dinitro-2-methylphenol	5.81	198	15190m	7.97	UG		
68) N-Nitrosodiphenylamine	5.83	169	142884	9.41	UG		94
69) 1,2-Diphenylhydrazine	5.87	77	236990	9.13	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	59851	9.43	UG		91
72) Hexachlorobenzene	6.18	284	73209	8.90	UG		91
73) Atrazine	6.15	200	52985	8.92	UG		93
74) Pentachlorophenol	6.26	266	30920	8.95	UG	#	47
75) Phenanthrene	6.35	178	271005	9.06	UG		97
76) Anthracene	6.38	178	261455	9.22	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration

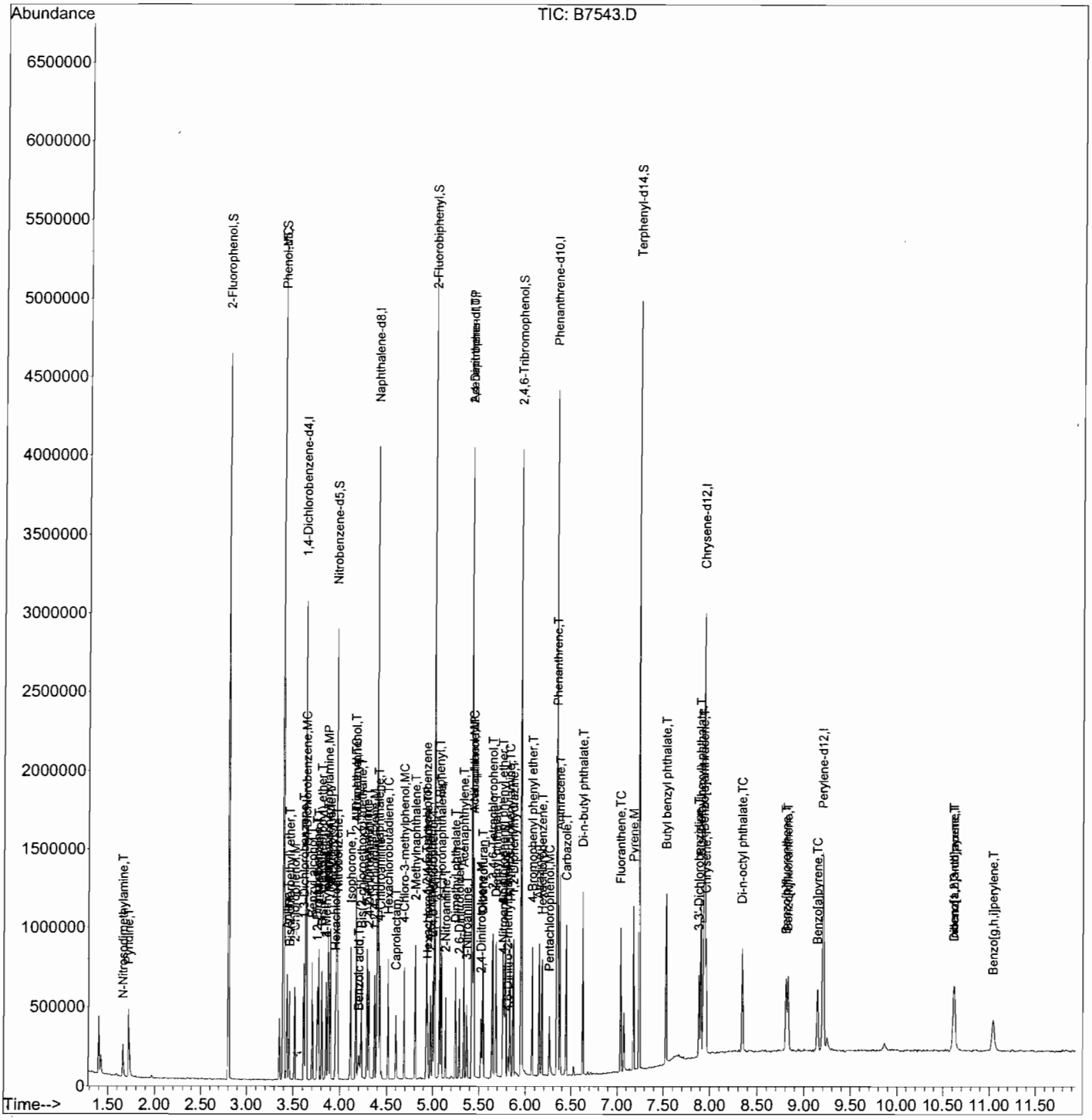
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	243191	9.47	UG	98
78) Di-n-butyl phthalate	6.63	149	315124	9.36	UG	98
79) Fluoranthene	7.03	202	267174	9.36	UG	97
83) Pyrene	7.18	202	270437	8.79	UG	94
86) Butyl benzyl phthalate	7.53	149	128924	8.71	UG	88
87) 3,3'-Dichlorobenzidine	7.88	252	87007	9.42	UG	92
88) Benzo[a]anthracene	7.93	228	229900	8.62	UG	97
89) Chrysene	7.96	228	206192	8.84	UG	98
90) Bis(2-ethylhexyl) phthalat	7.90	149	174497	8.84	UG	94
93) Di-n-octyl phthalate	8.34	149	262691	9.11	UG	88
94) Benzo[b]fluoranthene	8.81	252	205239	9.06	UG	84
95) Benzo[k]fluoranthene	8.83	252	179077	9.57	UG	94
96) Benzo[a]pyrene	9.14	252	171857	8.83	UG	90
97) Indeno[1,2,3-cd]pyrene	10.62	276	189150	8.09	UG	75
98) Dibenz[a,h]anthracene	10.62	278	157622	8.27	UG	89
99) Benzo[g,h,i]perylene	11.04	276	157258	7.19	UG	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7543.D
Acq On : 17 Feb 2015 9:01
Operator : DANA
Sample : ABN009-15,ICC010BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 17 10:09:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:25:13 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	264017	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	1006969	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	582660	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	921697	40.00	UG		0.00
82) Chrysene-d12	7.96	240	742687	40.00	UG		0.03
92) Perylene-d12	9.22	264	493542	40.00	UG		0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.81	112	969104	104.58	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 104.58%#				
6) Phenol-d5	3.40	99	1190546	103.09	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 103.09%#				
24) Nitrobenzene-d5	3.97	82	515471	50.17	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 100.34%				
47) 2-Fluorobiphenyl	5.02	172	1002738	50.31	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 100.62%				
70) 2,4,6-Tribromophenol	5.95	330	418390	104.14	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 104.14%				
84) Terphenyl-d14	7.25	244	1023810	50.38	UG		0.01
Spiked Amount 50.000	Range 23 - 124		Recovery = 100.76%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	135301	19.11	UG		87
3) Pyridine	1.72	52	186466	20.24	UG		43
7) Phenol	3.40	94	252843	18.94	UG		1
8) Aniline	3.43	66	125172	19.96	UG		83
9) Bis(2-chloroethyl) ether	3.46	63	156038	19.68	UG		76
10) 2-Chlorophenol	3.52	128	207732	19.46	UG		92
11) 1,3-Dichlorobenzene	3.61	146	221960	19.35	UG	#	94
12) 1,4-Dichlorobenzene	3.64	146	222476	18.95	UG		52
13) Benzyl alcohol	3.71	108	135646	19.41	UG		95
14) 1,2-Dichlorobenzene	3.76	146	210831	18.94	UG		92
15) 2-Methylphenol	3.77	108	180888	19.17	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	342375	19.30	UG		87
17) 4-Methylphenol	3.85	108	185931	20.48	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	160173	19.38	UG		82
19) Acetophenone	3.87	105	254387	19.33	UG		76
20) 3-Methylphenol	3.85	108	185931	20.47	UG		100
21) Hexachloroethane	3.95	117	83924	18.47	UG		87
25) Nitrobenzene	3.98	77	204138	19.11	UG		96
26) Isophorone	4.12	82	394116	19.84	UG		89
27) 2-Nitrophenol	4.17	139	89185	18.94	UG		71
28) 2,4-Dimethylphenol	4.17	107	194596	19.67	UG		94

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	236686	19.48	UG		99
30) Benzoic acid	4.21	105	83928	19.78	UG		49
31) 2,4-Dimethylaniline	4.29	121	224597	20.62	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	161123	20.31	UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	176376	19.85	UG		91
34) Naphthalene	4.41	128	585147	19.94	UG	#	99
35) 4-Chloroaniline	4.43	127	301188	19.69	UG		92
36) 4-Aminotoluene	3.90	106	319119	20.16	UG	#	56
37) Hexachlorobutadiene	4.51	225	103990	20.96	UG		97
38) Caprolactam	4.60	55	89457	19.44	UG	#	1
39) 2-Aminotoluene	3.90	106	319119	20.16	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	167599	19.73	UG		85
41) 2-Methylnaphthalene	4.81	142	365305	20.23	UG		100
44) Hexachlorocyclopentadiene	4.94	237	107959	20.48	UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	109154	19.02	UG		92
46) 2,4,5-Trichlorophenol	5.00	196	115178	19.98	UG		92
48) 1,1'-Biphenyl	5.07	154	437159	19.19	UG		99
49) 2-Chloronaphthalene	5.09	162	344404	19.90	UG		91
50) 2-Nitroaniline	5.14	65	89870	18.16	UG		79
51) Dimethyl phthalate	5.25	163	387078	19.78	UG		96
52) 2,6-Dinitrotoluene	5.29	165	65143	20.19	UG		75
53) Acenaphthylene	5.33	152	556431	19.29	UG		98
54) 3-Nitroaniline	5.37	138	83584	20.77	UG		76
55) Acenaphthene	5.44	153	344737	19.00	UG		91
56) 2,4-Dinitrophenol	5.43	184	12899	16.34	UG	#	100
57) 4-Nitrophenol	5.44	65	66142	16.23	UG		89
58) 2,4-Dinitrotoluene	5.52	165	83383	20.57	UG		95
59) Dibenzofuran	5.54	168	520858	20.43	UG		92
60) Diethyl phthalate	5.69	149	402301	19.35	UG		95
61) Fluorene	5.78	166	417456	19.44	UG		99
62) 4-Chlorophenyl phenyl ethe	5.76	204	194561	19.14	UG		86
63) 4-Nitroaniline	5.77	138	91411	19.50	UG		87
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	175439	19.78	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	129689m	16.17	UG		
67) 4,6-Dinitro-2-methylphenol	5.82	198	31531	19.03	UG	#	1
68) N-Nitrosodiphenylamine	5.84	169	283835	19.71	UG		95
69) 1,2-Diphenylhydrazine	5.87	77	478889	19.64	UG		87
71) 4-Bromophenyl phenyl ether	6.07	248	118962	19.75	UG		87
72) Hexachlorobenzene	6.18	284	142878	18.64	UG		91
73) Atrazine	6.15	200	104715	18.90	UG		96
74) Pentachlorophenol	6.26	266	61338	19.02	UG	#	42
75) Phenanthrene	6.35	178	528842	18.87	UG		96
76) Anthracene	6.38	178	516992	19.35	UG		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration

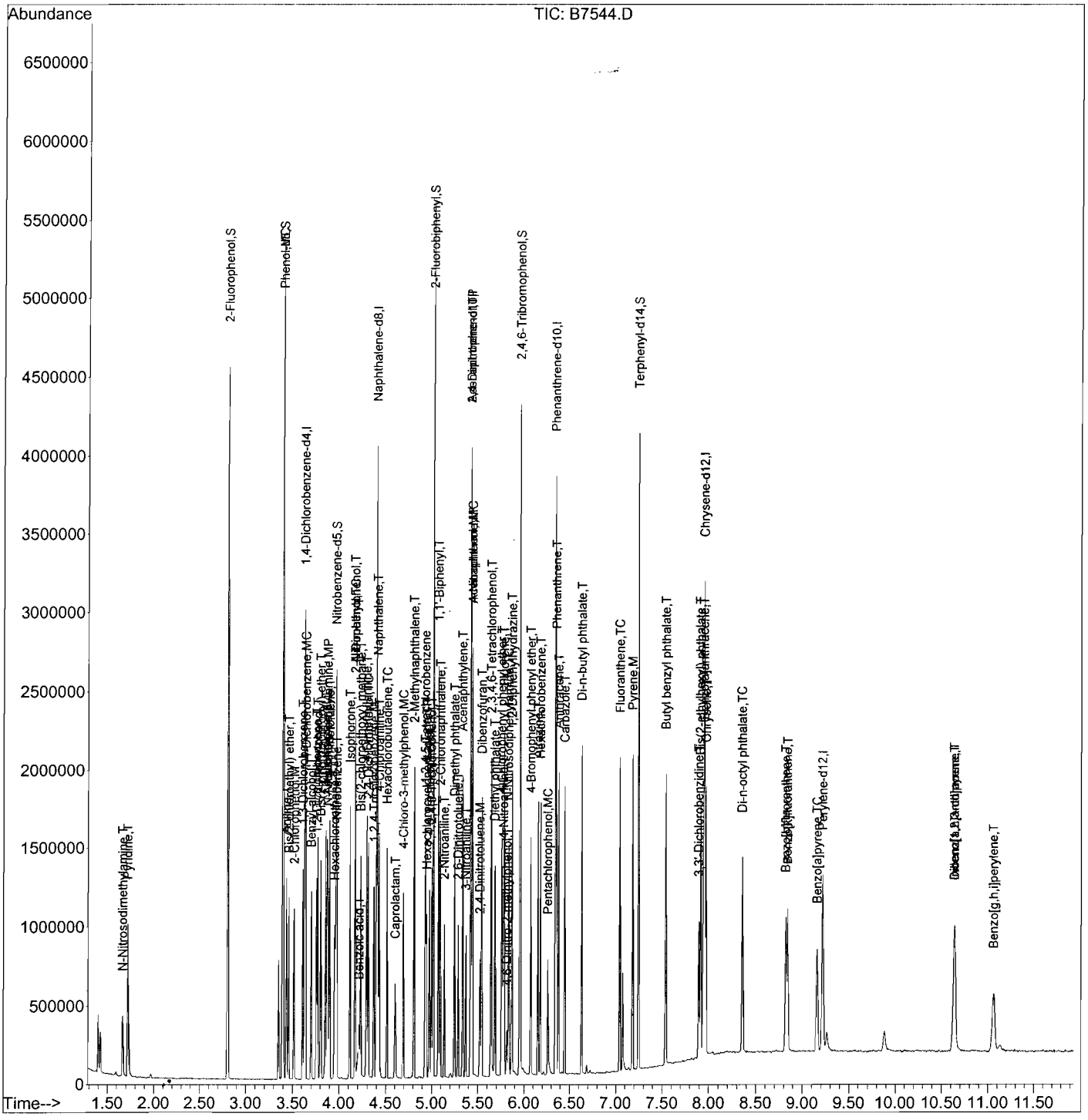
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	461745	18.92	UG	97
78) Di-n-butyl phthalate	6.63	149	620880	19.48	UG	98
79) Fluoranthene	7.04	202	516298	19.11	UG	100
83) Pyrene	7.18	202	522627	19.77	UG	95
86) Butyl benzyl phthalate	7.54	149	239499	18.88	UG	88
87) 3,3'-Dichlorobenzidine	7.90	252	149573	18.43	UG	94
88) Benzo[a]anthracene	7.95	228	421541	18.49	UG	96
89) Chrysene	7.97	228	386602	19.25	UG	97
90) Bis(2-ethylhexyl) phthalat	7.92	149	327997	19.30	UG	93
93) Di-n-octyl phthalate	8.36	149	490457	19.30	UG	90
94) Benzo[b]fluoranthene	8.82	252	395348	19.84	UG	84
95) Benzo[k]fluoranthene	8.84	252	323279	19.30	UG	91
96) Benzo[a]pyrene	9.16	252	322467	18.99	UG	88
97) Indeno[1,2,3-cd]pyrene	10.64	276	378056	19.02	UG	80
98) Dibenz[a,h]anthracene	10.64	278	307435	18.86	UG	89
99) Benzo[g,h,i]perylene	11.07	276	306184	17.01	UG	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7544.D
Acq On : 17 Feb 2015 9:18
Operator : DANA
Sample : ABN010-15,ICC020BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 17 10:08:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:26:04 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	265194m	40.00	UG	-0.09
23) Naphthalene-d8	4.40	136	1020973	40.00	UG	-0.09
43) Acenaphthene-d10	5.43	164	580734	40.00	UG	-0.10
66) Phenanthrene-d10	6.34	188	913175	40.00	UG	-0.09
82) Chrysene-d12	7.93	240	687309	40.00	UG	-0.12
92) Perylene-d12	9.19	264	465631	40.00	UG	-0.21
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	947963	111.26	UG	-0.10
Spiked Amount 100.000	Range 10 - 100		Recovery = 111.26%#			
6) Phenol-d5	3.40	99	1167809m	110.73	UG	-0.09
Spiked Amount 100.000	Range 10 - 102		Recovery = 110.73%#			
24) Nitrobenzene-d5	3.97	82	536380	46.41	UG	-0.09
Spiked Amount 50.000	Range 27 - 102		Recovery = 92.82%			
47) 2-Fluorobiphenyl	5.02	172	980177	52.87	UG	-0.09
Spiked Amount 50.000	Range 26 - 101		Recovery = 105.74%#			
70) 2,4,6-Tribromophenol	5.96	330	403062	134.65	UG	-0.10
Spiked Amount 100.000	Range 22 - 115		Recovery = 134.65%#			
84) Terphenyl-d14	7.24	244	996334	54.61	UG	-0.10
Spiked Amount 50.000	Range 23 - 124		Recovery = 109.22%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.66	74	261917	48.85	UG	90
3) Pyridine	1.71	52	351643	48.75	UG	41
7) Phenol	3.41	94	515107	44.04	UG	1
8) Aniline	3.43	66	245704m	46.30	UG	
9) Bis(2-chloroethyl) ether	3.46	63	303876m	48.16	UG	
10) 2-Chlorophenol	3.52	128	414946	40.12	UG	92
11) 1,3-Dichlorobenzene	3.61	146	435447m	39.08	UG	
12) 1,4-Dichlorobenzene	3.64	146	442638m	38.88	UG	
13) Benzyl alcohol	3.71	108	273686m	43.90	UG	
14) 1,2-Dichlorobenzene	3.76	146	418128m	39.53	UG	
15) 2-Methylphenol	3.77	108	356827m	40.98	UG	
16) Bis(2-chloroisopropyl) eth	3.80	45	680460	54.02	UG	87
17) 4-Methylphenol	3.85	108	355267	41.07	UG	98
18) N-Nitrosodi-n-propylamine	3.88	70	315401m	42.58	UG	
19) Acetophenone	3.88	105	509382	39.29	UG	77
20) 3-Methylphenol	3.85	108	355490	41.12	UG	98
21) Hexachloroethane	3.96	117	171089m	38.81	UG	
25) Nitrobenzene	3.98	77	401492	43.02	UG	97
26) Isophorone	4.12	82	783528	42.08	UG	89
27) 2-Nitrophenol	4.17	139	190226	36.90	UG	72
28) 2,4-Dimethylphenol	4.18	107	393347	37.74	UG	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	464912	45.90 UG		98
30) Benzoic acid	4.22	105	195976	33.32 UG		50
31) 2,4-Dimethylaniline	4.29	121	429447	38.47 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	324159	38.15 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	344979	35.62 UG		91
34) Naphthalene	4.41	128	1142871	39.50 UG	#	97
35) 4-Chloroaniline	4.43	127	592410	38.86 UG		99
36) 4-Aminotoluene	3.90	106	624134	41.81 UG	#	56
37) Hexachlorobutadiene	4.51	225	198140	36.84 UG		98
38) Caprolactam	4.62	55	181432	49.64 UG	#	1
39) 2-Aminotoluene	3.90	106	624134	41.81 UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	328017	36.53 UG		86
41) 2-Methylnaphthalene	4.81	142	720699	36.71 UG		99
44) Hexachlorocyclopentadiene	4.94	237	224813	54.12 UG	#	35
45) 2,4,6-Trichlorophenol	4.98	196	223337	42.24 UG		97
46) 2,4,5-Trichlorophenol	5.00	196	229997	43.46 UG		93
48) 1,1'-Biphenyl	5.07	154	856346	42.59 UG		99
49) 2-Chloronaphthalene	5.09	162	664718	42.82 UG		89
50) 2-Nitroaniline	5.14	65	196491	42.33 UG		80
51) Dimethyl phthalate	5.25	163	756461	40.46 UG		96
52) 2,6-Dinitrotoluene	5.29	165	146687	35.64 UG		77
53) Acenaphthylene	5.34	152	1116460	42.91 UG		98
54) 3-Nitroaniline	5.37	138	172204	41.05 UG		77
55) Acenaphthene	5.44	153	680428	41.05 UG		91
56) 2,4-Dinitrophenol	5.43	184	35419	21.40 UG	#	100
57) 4-Nitrophenol	5.44	65	140746	42.83 UG		93
58) 2,4-Dinitrotoluene	5.53	165	185082	37.60 UG		96
59) Dibenzofuran	5.54	168	1001633	41.30 UG		91
60) Diethyl phthalate	5.69	149	803030	40.61 UG		95
61) Fluorene	5.79	166	845258	43.53 UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	378140	39.86 UG		85
63) 4-Nitroaniline	5.78	138	195488	43.42 UG		90
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	339252	43.69 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	205522	34.70 UG		96
67) 4,6-Dinitro-2-methylphenol	5.82	198	73086	23.83 UG	#	11
68) N-Nitrosodiphenylamine	5.84	169	564781	41.32 UG		94
69) 1,2-Diphenylhydrazine	5.87	77	966855	43.72 UG		87
71) 4-Bromophenyl phenyl ether	6.08	248	235291	41.48 UG		89
72) Hexachlorobenzene	6.18	284	277048	48.48 UG		92
73) Atrazine	6.16	200	210383	40.42 UG		95
74) Pentachlorophenol	6.26	266	134138	38.53 UG	#	42
75) Phenanthrene	6.36	178	1016916	39.09 UG		96
76) Anthracene	6.38	178	1027800	39.66 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration

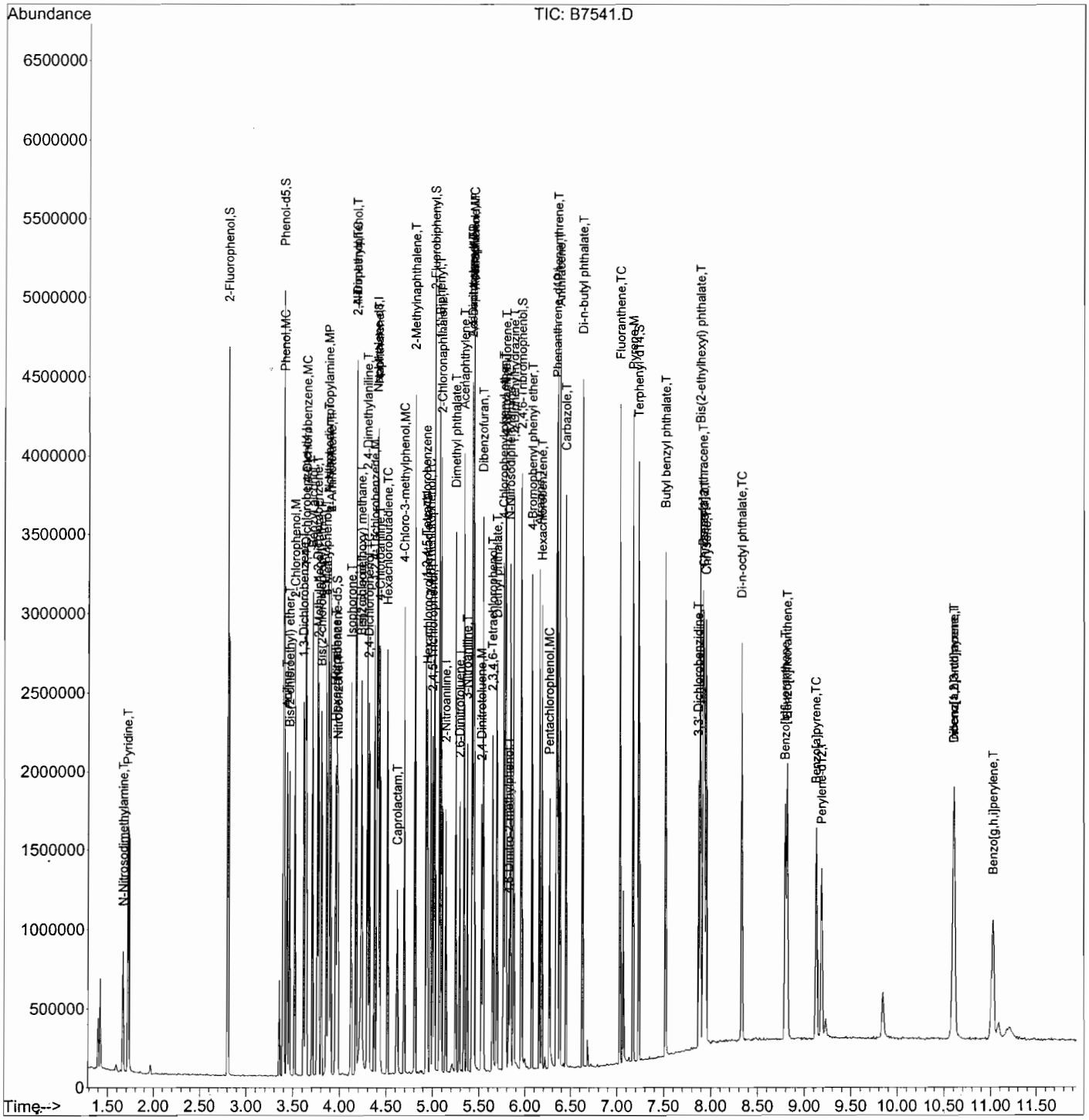
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	900047	38.01	UG	97
78) Di-n-butyl phthalate	6.63	149	1237831	38.98	UG	98
79) Fluoranthene	7.03	202	1000736	38.20	UG	99
83) Pyrene	7.17	202	1016145	41.83	UG	95
86) Butyl benzyl phthalate	7.52	149	469934	41.92	UG	87
87) 3,3'-Dichlorobenzidine	7.87	252	270421	36.68	UG	91
88) Benzo[a]anthracene	7.92	228	807114	37.59	UG	96
89) Chrysene	7.95	228	748817	40.70	UG	96
90) Bis(2-ethylhexyl) phthalat	7.89	149	658410	39.22	UG	93
93) Di-n-octyl phthalate	8.33	149	1015061	40.97	UG	91
94) Benzo[b]fluoranthene	8.80	252	785502	43.17	UG	83
95) Benzo[k]fluoranthene	8.82	252	600807m	36.18	UG	
96) Benzo[a]pyrene	9.13	252	644960	40.72	UG	86
97) Indeno[1,2,3-cd]pyrene	10.61	276	748559	39.52	UG	74
98) Dibenz[a,h]anthracene	10.61	278	626912	40.59	UG	89
99) Benzo[g,h,i]perylene	11.03	276	630942	39.53	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7541.D
Acq On : 17 Feb 2015 8:27
Operator : DANA
Sample : ABN011-15,ICC040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 17 08:42:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Jan 26 13:22:50 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	252846	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	954046	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	544113	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	818451	40.00	UG		0.00
82) Chrysene-d12	7.93	240	612317	40.00	UG		0.00
92) Perylene-d12	9.18	264	434851	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	888458	98.98	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 98.98%				
6) Phenol-d5	3.40	99	1093854	98.15	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 98.15%				
24) Nitrobenzene-d5	3.97	82	521791	53.56	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 107.12%#				
47) 2-Fluorobiphenyl	5.02	172	890874	47.79	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 95.58%				
70) 2,4,6-Tribromophenol	5.96	330	374037	103.77	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 103.77%				
84) Terphenyl-d14	7.23	244	847594	50.50	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 101.00%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.67	74	506304	75.51	UG		88
3) Pyridine	1.72	52	685661	77.48	UG		41
7) Phenol	3.41	94	935815	74.19	UG		1
8) Aniline	3.44	66	445722	74.24	UG		81
9) Bis(2-chloroethyl) ether	3.46	63	580863	76.81	UG		77
10) 2-Chlorophenol	3.52	128	753786	74.24	UG		92
11) 1,3-Dichlorobenzene	3.61	146	787152	72.23	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	805760	72.63	UG		49
13) Benzyl alcohol	3.71	108	507261	76.35	UG		96
14) 1,2-Dichlorobenzene	3.76	146	752820	71.57	UG		92
15) 2-Methylphenol	3.77	108	647220	72.37	UG		98
16) Bis(2-chloroisopropyl) eth	3.81	45	1299820	77.19	UG		86
17) 4-Methylphenol	3.86	108	660275	75.48	UG		98
18) N-Nitrosodi-n-propylamine	3.89	70	570147	72.59	UG		79
19) Acetophenone	3.88	105	948994	75.92	UG		78
20) 3-Methylphenol	3.86	108	660275	75.46	UG		97
21) Hexachloroethane	3.96	117	313059	73.35	UG		84
25) Nitrobenzene	3.98	77	735486	73.48	UG		95
26) Isophorone	4.12	82	1433843	76.35	UG		88
27) 2-Nitrophenol	4.18	139	330834	75.14	UG		68
28) 2,4-Dimethylphenol	4.18	107	700982	75.09	UG		92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	852232	74.50 UG		99
30) Benzoic acid	4.24	105	290196m	72.37 UG		
31) 2,4-Dimethylaniline	4.30	121	764572	73.51 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	584417	77.46 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	615417	73.23 UG		91
34) Naphthalene	4.42	128	2056713	74.04 UG	#	98
35) 4-Chloroaniline	4.43	127	1082002	74.96 UG		99
36) 4-Aminotoluene	3.90	106	1104170	73.47 UG	#	55
37) Hexachlorobutadiene	4.52	225	364978	76.73 UG		97
38) Caprolactam	4.63	55	327851	75.72 UG	#	1
39) 2-Aminotoluene	3.90	106	1104170	73.47 UG	#	57
40) 4-Chloro-3-methylphenol	4.70	107	597804	74.52 UG		88
41) 2-Methylnaphthalene	4.81	142	1233139	71.87 UG		100
44) Hexachlorocyclopentadiene	4.94	237	414137	83.64 UG	#	38
45) 2,4,6-Trichlorophenol	4.98	196	408265	77.13 UG		96
46) 2,4,5-Trichlorophenol	5.00	196	410781	76.31 UG		93
48) 1,1'-Biphenyl	5.08	154	1554831	73.84 UG		100
49) 2-Chloronaphthalene	5.09	162	1183818	73.34 UG		90
50) 2-Nitroaniline	5.14	65	354659	78.54 UG		79
51) Dimethyl phthalate	5.25	163	1386186	76.08 UG		95
52) 2,6-Dinitrotoluene	5.29	165	257252	85.17 UG		77
53) Acenaphthylene	5.34	152	1936410	72.54 UG		98
54) 3-Nitroaniline	5.38	138	326965	86.19 UG		77
55) Acenaphthene	5.45	153	1157463	69.16 UG		93
56) 2,4-Dinitrophenol	5.44	184	75490m	109.04 UG		
57) 4-Nitrophenol	5.44	65	259118	71.44 UG		90
58) 2,4-Dinitrotoluene	5.53	165	375744	98.56 UG		75
59) Dibenzofuran	5.55	168	1937245	80.94 UG		91
60) Diethyl phthalate	5.69	149	1527053	79.31 UG		96
61) Fluorene	5.79	166	1544337	77.55 UG		98
62) 4-Chlorophenyl phenyl ethe	5.77	204	739303	78.73 UG		87
63) 4-Nitroaniline	5.79	138	354189	81.43 UG		89
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	600314	72.67 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.65	232	336909	42.79 UG		94
67) 4,6-Dinitro-2-methylphenol	5.83	198	164383	113.57 UG	#	38
68) N-Nitrosodiphenylamine	5.84	169	1068626	83.89 UG		94
69) 1,2-Diphenylhydrazine	5.87	77	1840539	85.39 UG		86
71) 4-Bromophenyl phenyl ether	6.08	248	426118	79.91 UG		90
72) Hexachlorobenzene	6.18	284	462068	69.05 UG		89
73) Atrazine	6.16	200	359568	74.12 UG		95
74) Pentachlorophenol	6.26	266	247926	87.65 UG	#	40
75) Phenanthrene	6.36	178	1807071	73.66 UG		96
76) Anthracene	6.38	178	1733926	73.69 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration

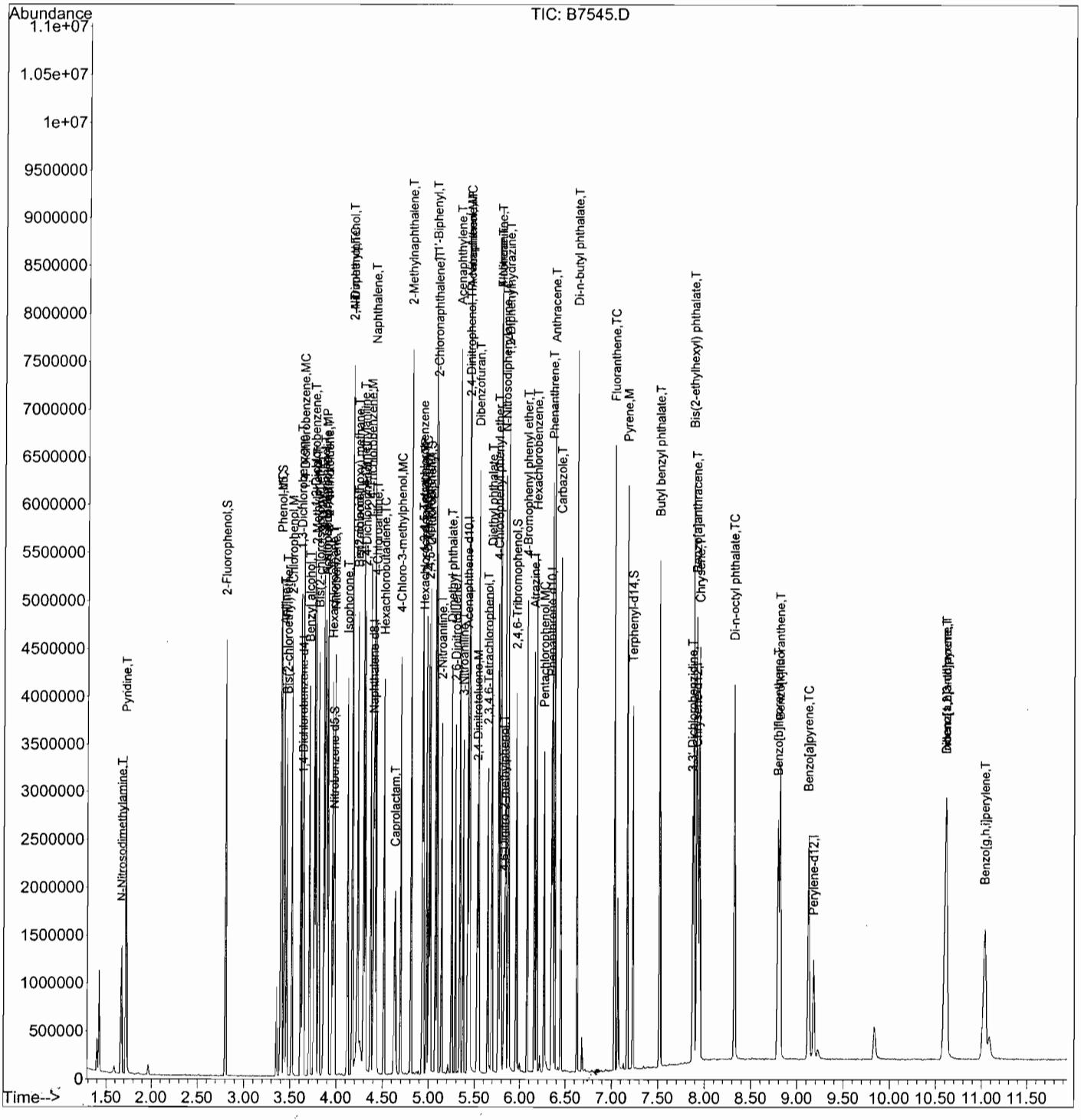
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Carbazole	6.45	167	1606955	75.18	UG	97
78) Di-n-butyl phthalate	6.63	149	2102966	74.78	UG	98
79) Fluoranthene	7.03	202	1693577	71.39	UG	99
83) Pyrene	7.17	202	1693534	77.91	UG	96
86) Butyl benzyl phthalate	7.52	149	785441	76.16	UG	87
87) 3,3'-Dichlorobenzidine	7.87	252	411496	62.73	UG	93
88) Benzo[a]anthracene	7.92	228	1378245	74.73	UG	97
89) Chrysene	7.95	228	1247650	76.07	UG	97
90) Bis(2-ethylhexyl) phthalat	7.89	149	1113977	80.20	UG	94
93) Di-n-octyl phthalate	8.33	149	1709415	77.02	UG	91
94) Benzo[b]fluoranthene	8.80	252	1387492	79.18	UG	83
95) Benzo[k]fluoranthene	8.82	252	1094292	74.82	UG	93
96) Benzo[a]pyrene	9.13	252	1153395	78.07	UG	87
97) Indeno[1,2,3-cd]pyrene	10.62	276	1499186	86.67	UG	80
98) Dibenz[a,h]anthracene	10.62	278	1241437	87.69	UG	90
99) Benzo[g,h,i]perylene	11.04	276	1237011	81.04	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7545.D
Acq On : 17 Feb 2015 9:35
Operator : DANA
Sample : ABN012-15,ICC080BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 17 09:48:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:37:04 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.64	152	256961	40.00	UG		0.00
23) Naphthalene-d8	4.41	136	973549	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	546858	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	805034	40.00	UG		0.00
82) Chrysene-d12	7.94	240	592953	40.00	UG		0.00
92) Perylene-d12	9.19	264	453776	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.81	112	926391	101.76	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.76%#				
6) Phenol-d5	3.41	99	1128495m	100.00	UG		0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 100.00%				
24) Nitrobenzene-d5	3.97	82	598643	59.37	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 118.74%#				
47) 2-Fluorobiphenyl	5.02	172	941630	50.70	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 101.40%#				
70) 2,4,6-Tribromophenol	5.96	330	364397	102.01	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 102.01%				
84) Terphenyl-d14	7.23	244	770529	47.31	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 94.62%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.69	74	1070535	158.89	UG		88
3) Pyridine	1.73	52	1443212	161.48	UG		40
7) Phenol	3.42	94	1650558	130.66	UG		1
8) Aniline	3.44	66	708077	117.74	UG		68
9) Bis(2-chloroethyl) ether	3.47	63	1282196	168.18	UG		53
10) 2-Chlorophenol	3.52	128	1522002	149.66	UG		92
11) 1,3-Dichlorobenzene	3.61	146	1689063	155.53	UG	#	93
12) 1,4-Dichlorobenzene	3.65	146	1563955	141.32	UG		49
13) Benzyl alcohol	3.72	108	877367	131.14	UG		93
14) 1,2-Dichlorobenzene	3.76	146	1526955	145.92	UG		91
15) 2-Methylphenol	3.78	108	1271608	142.63	UG		86
16) Bis(2-chloroisopropyl) eth	3.81	45	2639911	155.34	UG		83
17) 4-Methylphenol	3.87	108	1150484	130.89	UG		87
18) N-Nitrosodi-n-propylamine	3.90	70	999229	127.54	UG		79
19) Acetophenone	3.89	105	1850366	147.17	UG		73
20) 3-Methylphenol	3.87	108	1150549	130.88	UG		87
21) Hexachloroethane	3.96	117	618600	145.03	UG		86
25) Nitrobenzene	3.99	77	1541507	153.43	UG		95
26) Isophorone	4.13	82	2622806	138.12	UG		88
27) 2-Nitrophenol	4.18	139	685181	154.38	UG		70
28) 2,4-Dimethylphenol	4.19	107	1395779	148.35	UG		91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.24	93	1705733	148.17 UG		100
30) Benzoic acid	4.26	105	668961	166.67 UG		46
31) 2,4-Dimethylaniline	4.30	121	1441869	138.09 UG	#	33
32) 2,4-Dichlorophenol	4.32	162	1050491	137.31 UG		95
33) 1,2,4-Trichlorobenzene	4.38	180	1207831	143.26 UG		91
34) Naphthalene	4.42	128	3979896	142.53 UG	#	94
35) 4-Chloroaniline	4.43	127	2074179	142.61 UG		93
36) 4-Aminotoluene	3.91	106	1842991	122.16 UG	#	55
37) Hexachlorobutadiene	4.52	225	712647	148.03 UG		98
38) Caprolactam	4.66	55	622073	142.32 UG	#	1
39) 2-Aminotoluene	3.91	106	1842991	122.16 UG	#	57
40) 4-Chloro-3-methylphenol	4.70	107	1111585	137.68 UG		85
41) 2-Methylnaphthalene	4.82	142	2395960	139.68 UG		100
44) Hexachlorocyclopentadiene	4.94	237	783904	156.10 UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	789295	149.44 UG		96
46) 2,4,5-Trichlorophenol	5.01	196	772043	144.04 UG		95
48) 1,1'-Biphenyl	5.08	154	2892134	138.79 UG		99
49) 2-Chloronaphthalene	5.10	162	2225728	139.52 UG		90
50) 2-Nitroaniline	5.15	65	702809	155.42 UG		78
51) Dimethyl phthalate	5.25	163	2598046	143.27 UG		95
52) 2,6-Dinitrotoluene	5.30	165	527550	171.56 UG		79
53) Acenaphthylene	5.35	152	3633643	138.02 UG		97
54) 3-Nitroaniline	5.38	138	597028	154.20 UG		80
55) Acenaphthene	5.45	153	2123260	129.75 UG		93
56) 2,4-Dinitrophenol	5.44	184	122243m	163.41 UG		
57) 4-Nitrophenol	5.45	65	475136	133.19 UG		86
58) 2,4-Dinitrotoluene	5.54	165	748601	186.71 UG		76
59) Dibenzofuran	5.55	168	3631158	150.59 UG		89
60) Diethyl phthalate	5.70	149	2897915	150.01 UG		95
61) Fluorene	5.79	166	2834043	142.48 UG		98
62) 4-Chlorophenyl phenyl ethe	5.77	204	1381862	146.89 UG		87
63) 4-Nitroaniline	5.80	138	668391	152.35 UG		89
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	1091150	133.88 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.66	232	659609	91.91 UG		93
67) 4,6-Dinitro-2-methylphenol	5.84	198	256441m	182.94 UG		
68) N-Nitrosodiphenylamine	5.85	169	2017348	159.45 UG		94
69) 1,2-Diphenylhydrazine	5.88	77	3417009	159.03 UG		87
71) 4-Bromophenyl phenyl ether	6.08	248	737958	140.73 UG		86
72) Hexachlorobenzene	6.19	284	810418	126.58 UG		89
73) Atrazine	6.17	200	642277	136.60 UG		93
74) Pentachlorophenol	6.27	266	491373	173.29 UG	#	45
75) Phenanthrene	6.36	178	2992254	126.01 UG		96
76) Anthracene	6.39	178	2966368	130.23 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration

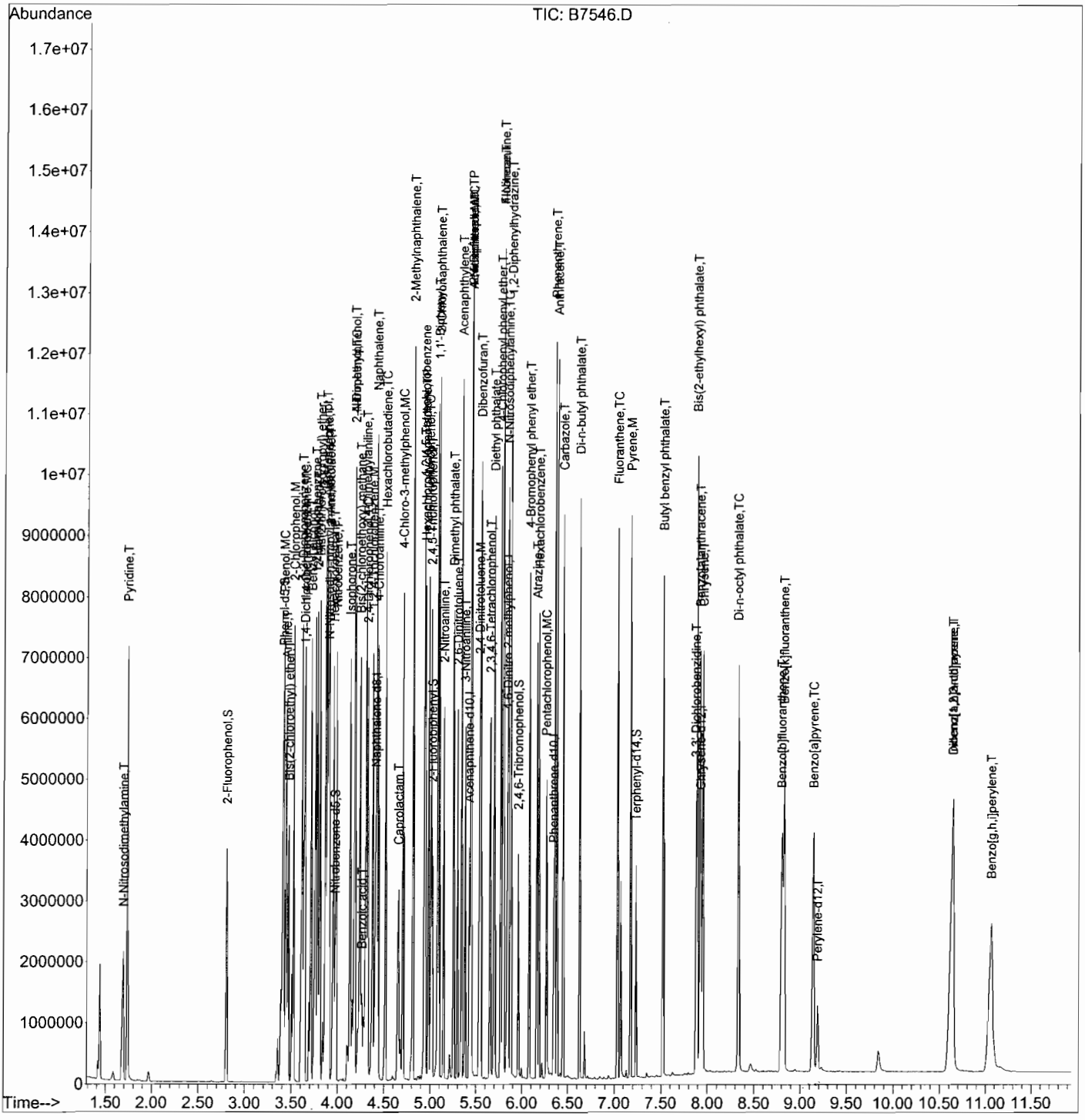
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.45	167	2696331	129.81 UG	97
78) Di-n-butyl phthalate	6.63	149	3761835	137.80 UG	98
79) Fluoranthene	7.04	202	2911000	127.49 UG	97
83) Pyrene	7.18	202	2844328	135.84 UG	97
86) Butyl benzyl phthalate	7.52	149	1313002	132.74 UG	86
87) 3,3'-Dichlorobenzidine	7.88	252	709474	116.73 UG	94
88) Benzo[a]anthracene	7.93	228	2346152	133.12 UG	96
89) Chrysene	7.96	228	2166314	137.74 UG	97
90) Bis(2-ethylhexyl) phthalat	7.89	149	1848443	137.35 UG	94
93) Di-n-octyl phthalate	8.33	149	3023853	131.55 UG	91
94) Benzo[b]fluoranthene	8.80	252	2835643	155.39 UG	79
95) Benzo[k]fluoranthene	8.83	252	2304084m	152.94 UG	
96) Benzo[a]pyrene	9.14	252	2264144	147.58 UG	87
97) Indeno[1,2,3-cd]pyrene	10.64	276	3029096	165.07 UG	80
98) Dibenz[a,h]anthracene	10.64	278	2474651	164.36 UG	91
99) Benzo[g,h,i]perylene	11.07	276	2610222	163.45 UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7546.D
Acq On : 17 Feb 2015 9:53
Operator : DANA
Sample : ABN013-15,ICC160BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 17 10:06:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 09:50:30 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7552.D
Acq On : 17 Feb 2015 11:36
Operator : DANA
Sample : ABN014-15,ICC001BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 17 12:22:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

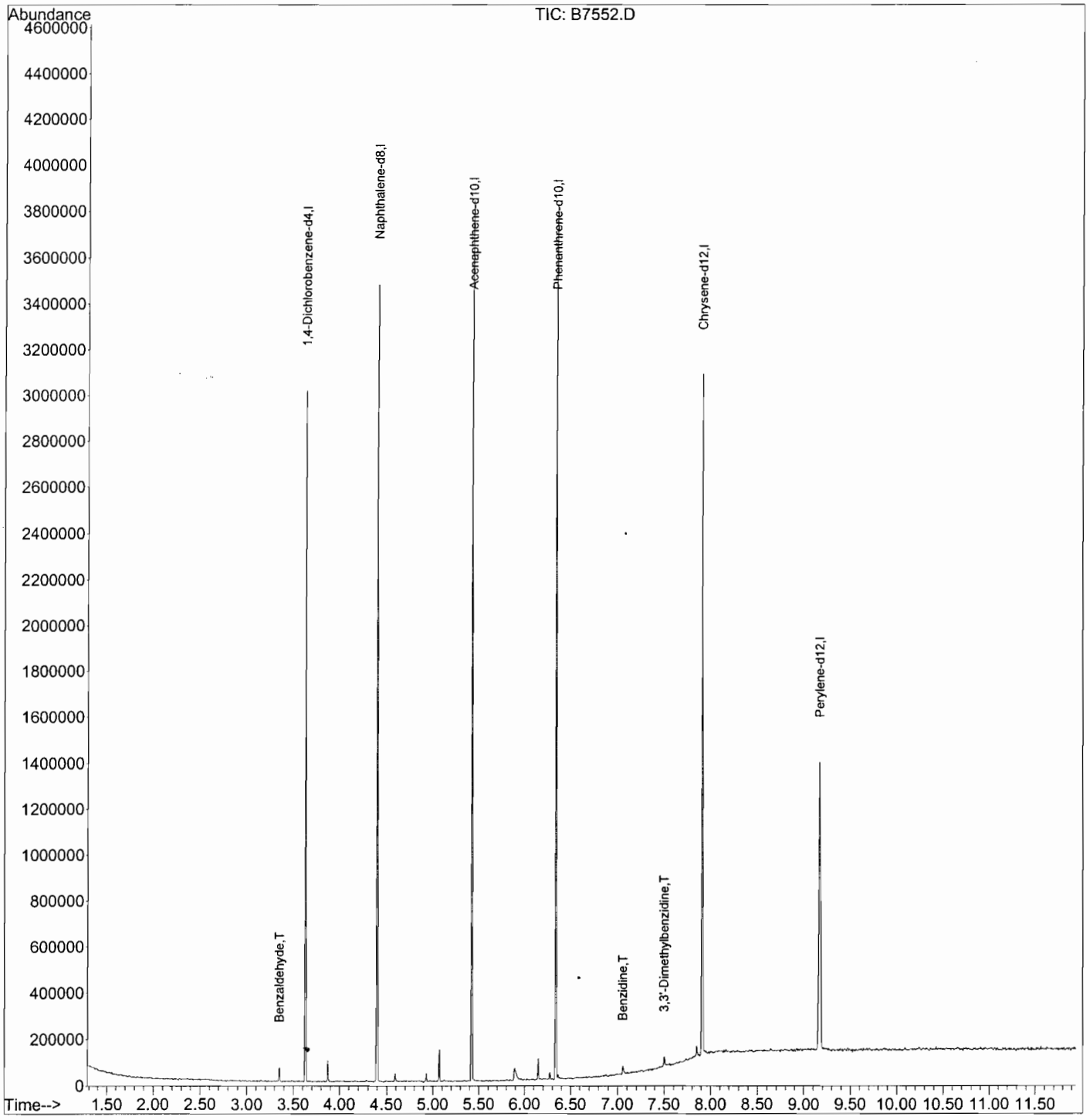
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	266988	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1051949	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	588074	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	935116	40.00	UG	0.00
82) Chrysene-d12	7.91	240	761940	40.00	UG	-0.02
92) Perylene-d12	9.17	264	544616	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	2370m	1.18	UG	
80) Benzidine	7.05	184	10955	1.09	UG	97
85) 3,3'-Dimethylbenzidine	7.50	212	11415	1.07	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7552.D
Acq On : 17 Feb 2015 11:36
Operator : DANA
Sample : ABN014-15,ICC001BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 17 12:22:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7551.D
Acq On : 17 Feb 2015 11:18
Operator : DANA
Sample : ABN015-15,ICC010BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 12:23:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

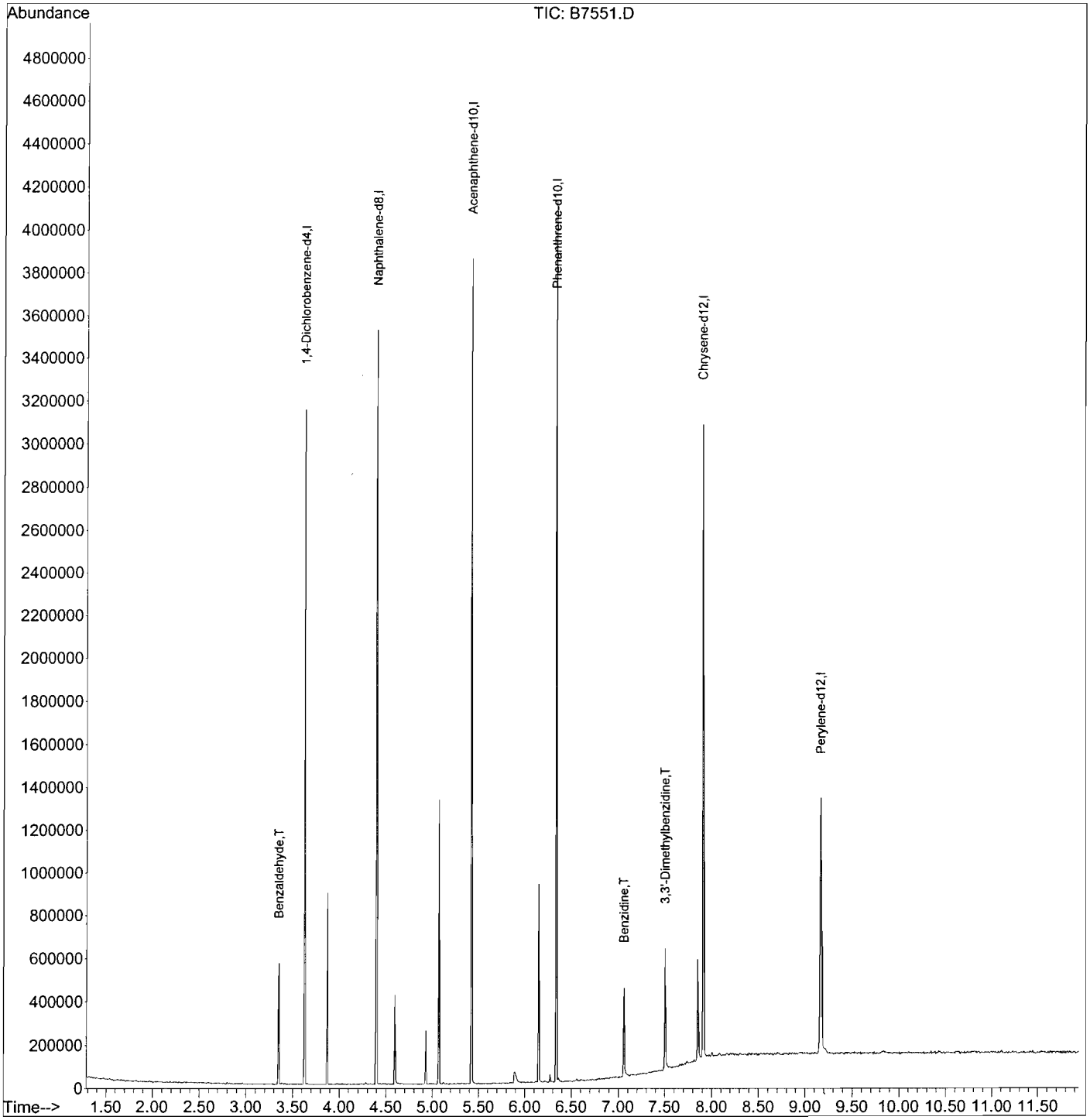
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	294317	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1121813	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	623673	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	985722	40.00	UG	0.00
82) Chrysene-d12	7.91	240	783467	40.00	UG	-0.02
92) Perylene-d12	9.17	264	546239	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	25603m	11.52	UG	
80) Benzidine	7.06	184	127285	11.98	UG	95
85) 3,3'-Dimethylbenzidine	7.50	212	138514	12.58	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7551.D
Acq On : 17 Feb 2015 11:18
Operator : DANA
Sample : ABN015-15,ICC010BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 17 12:23:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7550.D
Acq On : 17 Feb 2015 11:01
Operator : DANA
Sample : ABN016-15,ICC020BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 17 12:22:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

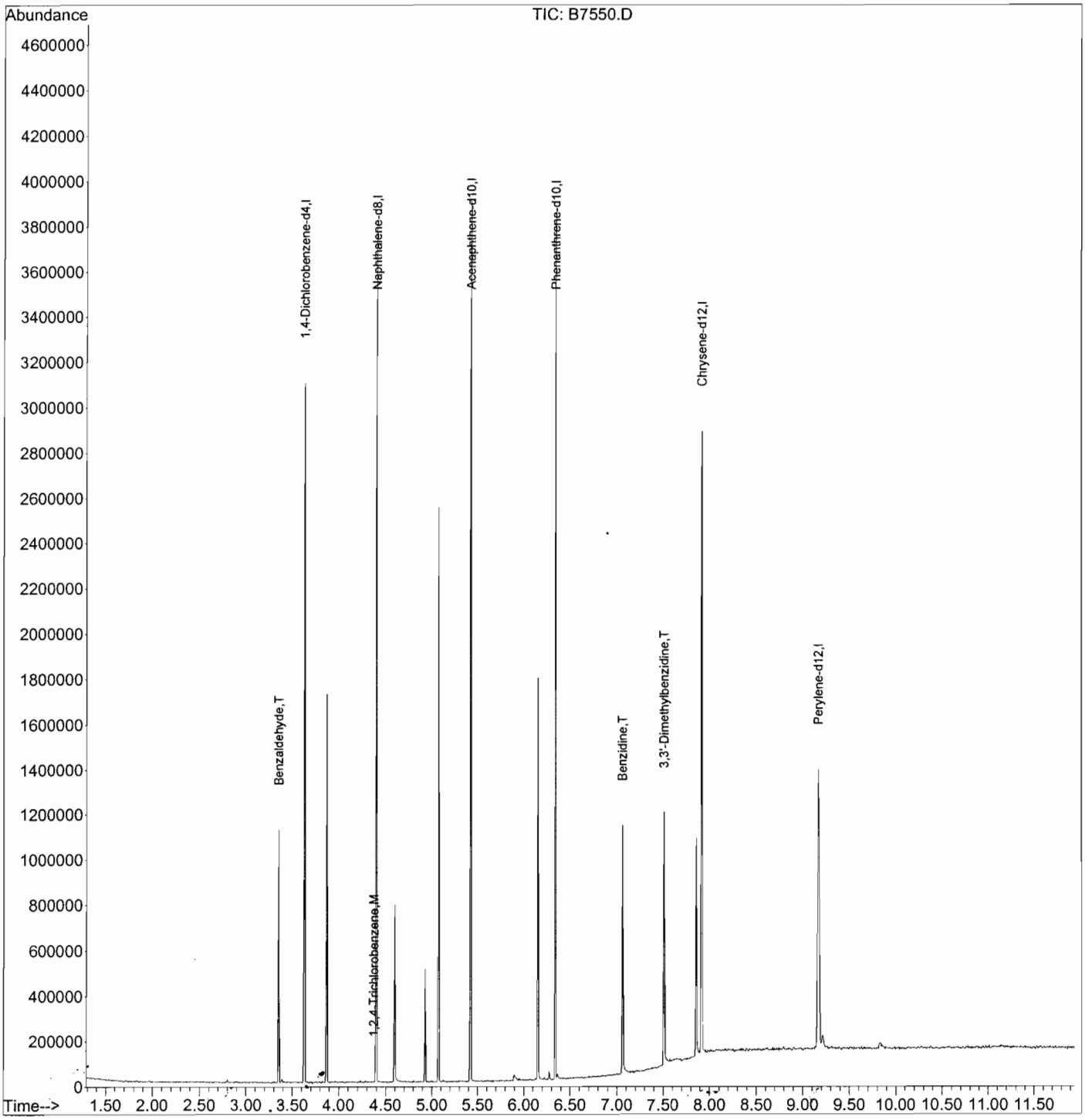
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	280541	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1057602	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	604787	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	956779	40.00	UG	0.00
82) Chrysene-d12	7.92	240	780984	40.00	UG	-0.01
92) Perylene-d12	9.17	264	555867	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	47255m	22.31	UG	
33) 1,2,4-Trichlorobenzene	4.37	180	322	0.04	UG	# 35
80) Benzidine	7.06	184	275855	26.76	UG	94
85) 3,3'-Dimethylbenzidine	7.51	212	295324	26.90	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7550.D
Acq On : 17 Feb 2015 11:01
Operator : DANA
Sample : ABN016-15,ICC020BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 17 12:22:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7549.D
Acq On : 17 Feb 2015 10:44
Operator : DANA
Sample : ABN017-15,ICC040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 17 12:19:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration

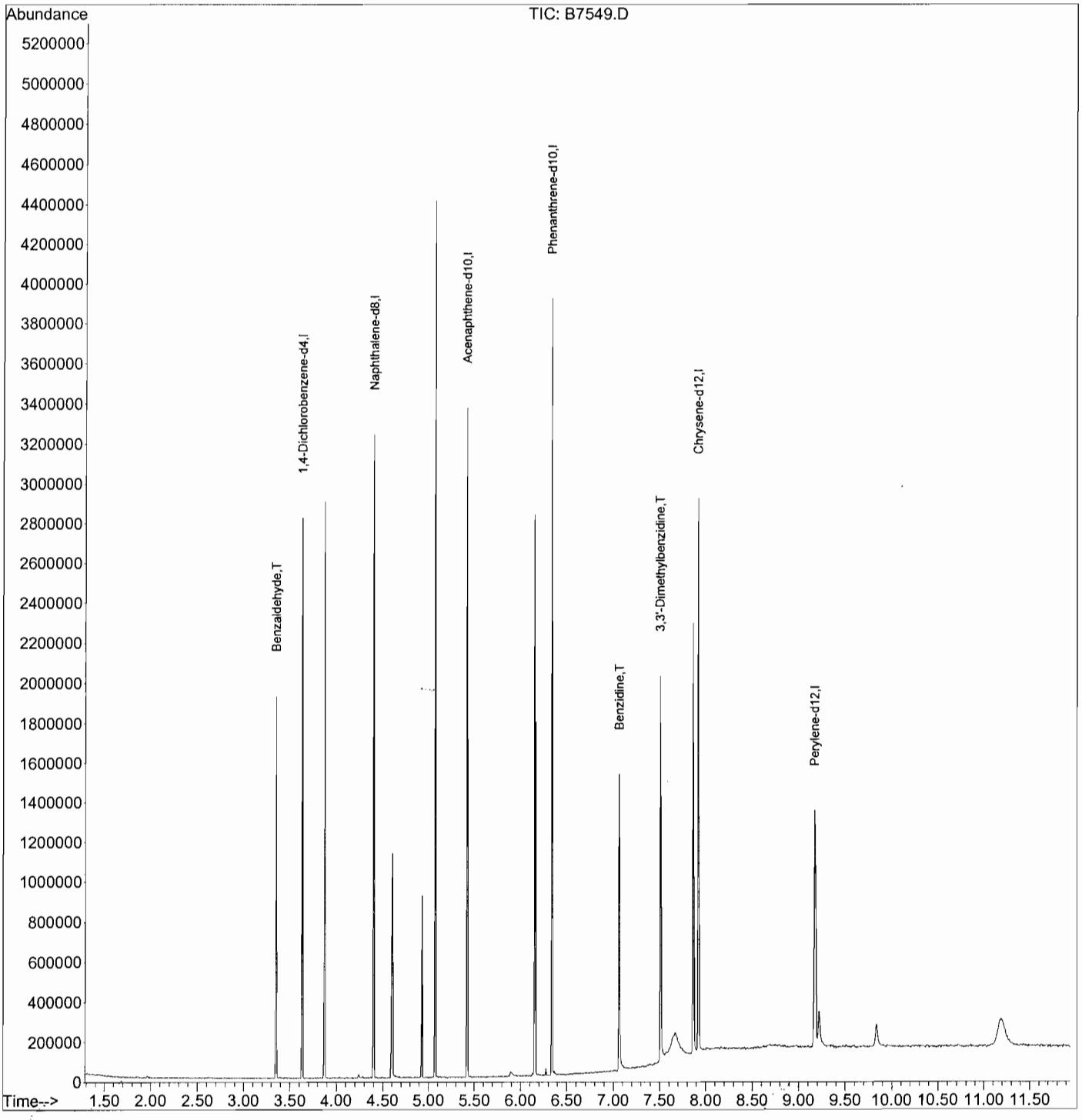
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	244613	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	945145	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	534323	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	849485	40.00	UG	0.00
82) Chrysene-d12	7.93	240	738367	40.00	UG	0.00
92) Perylene-d12	9.18	264	556975	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	99448m	53.85	UG	
80) Benzidine	7.07	184	488614	53.38	UG	96
85) 3,3'-Dimethylbenzidine	7.51	212	532857	51.34	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7549.D
Acq On : 17 Feb 2015 10:44
Operator : DANA
Sample : ABN017-15,ICC040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 17 12:19:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:41:18 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7548.D
Acq On : 17 Feb 2015 10:27
Operator : DANA
Sample : ABN018-15,ICC080BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 12:21:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:24:52 2015
Response via : Initial Calibration

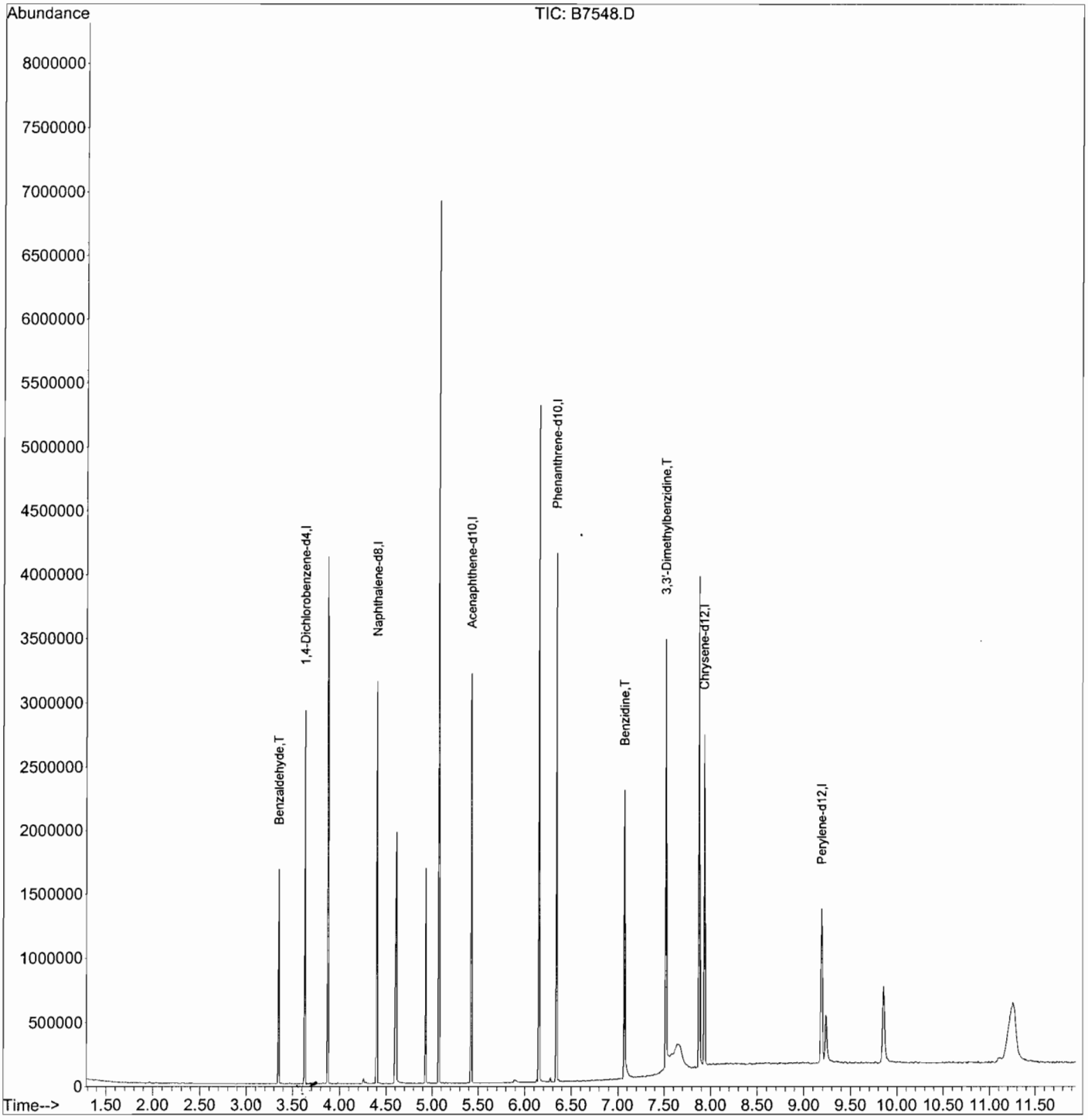
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	248093	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	964115	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	537275	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	864948	40.00	UG	0.00
82) Chrysene-d12	7.93	240	740917	40.00	UG	0.00
92) Perylene-d12	9.19	264	539163	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	131085m	104.73	UG	
80) Benzidine	7.07	184	716146	78.01	UG	95
85) 3,3'-Dimethylbenzidine	7.52	212	741741	77.18	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7548.D
Acq On : 17 Feb 2015 10:27
Operator : DANA
Sample : ABN018-15,ICC080BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 17 12:21:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:24:52 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7547.D
Acq On : 17 Feb 2015 10:10
Operator : DANA
Sample : ABN019-15,ICC160BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 12:20:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:23:35 2015
Response via : Initial Calibration

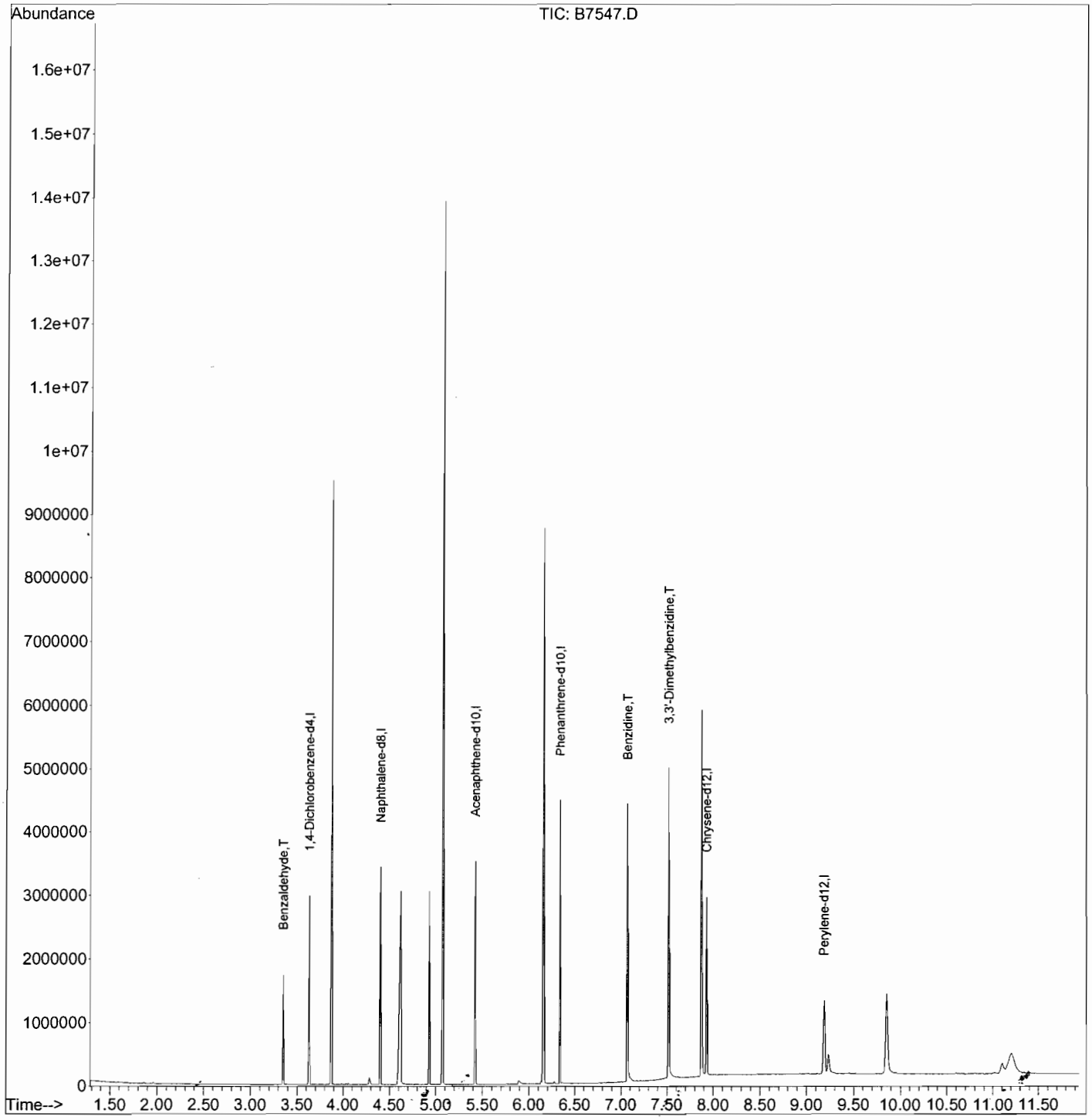
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	260332	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1021817	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	572066	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	894081	40.00	UG	0.00
82) Chrysene-d12	7.93	240	700244	40.00	UG	0.00
92) Perylene-d12	9.19	264	523880	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	256939m	195.62	UG	
80) Benzidine	7.07	184	1367138	143.91	UG	95
85) 3,3'-Dimethylbenzidine	7.52	212	1230580	135.48	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7547.D
Acq On : 17 Feb 2015 10:10
Operator : DANA
Sample : ABN019-15,ICC160BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 17 12:20:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 10:23:35 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 5.00min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00
2	T	N-Nitrosodimethylamine	1.048	0.950	9.4	91	0.00
3	T	Pyridine	1.393	1.317	5.5	94	0.00
4	S	2-Fluorophenol	1.421	1.444	-1.6	96	0.00
5	T	Benzaldehyde	0.334	0.360	-7.8	94	0.00
6	S	Phenol-d5	1.757	1.794	-2.1	97	0.00
7	MC	Phenol	1.906	1.894	0.6	93	0.00
8	T	Aniline	0.895	0.886	1.0	91	0.00
9	T	Bis(2-chloroethyl) ether	1.197	1.118	6.6	93	0.00
10	M	2-Chlorophenol	1.566	1.541	1.6	93	0.00
11	T	1,3-Dichlorobenzene	1.683	1.619	3.8	94	0.00
12	MC	1,4-Dichlorobenzene	1.689	1.685	0.2	96	0.00
13	T	Benzyl alcohol	1.010	1.004	0.6	92	0.00
14	T	1,2-Dichlorobenzene	1.605	1.562	2.7	94	0.00
15	T	2-Methylphenol	1.363	1.309	4.0	92	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.633	2.454	6.8	91	0.00
17	T	4-Methylphenol	1.327	1.314	1.0	93	0.00
18	MP	N-Nitrosodi-n-propylamine	1.178	1.099	6.7	88	0.00
19	T	Acetophenone	1.931	1.895	1.9	94	0.00
20	T	3-Methylphenol	1.327	1.314	1.0	93	0.00
21	T	Hexachloroethane	0.654	0.611	6.6	90	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00
24	S	Nitrobenzene-d5	0.427	0.387	9.4	86	0.00
25	T	Nitrobenzene	0.410	0.366	10.7	87	0.00
26	T	Isophorone	0.762	0.732	3.9	89	0.00
27	TC	2-Nitrophenol	0.181	0.161	11.0	81	0.00
28	T	2,4-Dimethylphenol	0.382	0.383	-0.3	93	0.00
29	T	Bis(2-chloroethoxy) methane	0.467	0.453	3.0	93	0.00
30	T	Benzoic acid	0.166	0.153	7.8	75	0.00
31	T	2,4-Dimethylaniline	0.419	0.419	0.0	93	0.00
32	TC	2,4-Dichlorophenol	0.307	0.302	1.6	89	0.00
33	M	1,2,4-Trichlorobenzene	0.340	0.329	3.2	91	0.00
34	T	Naphthalene	1.126	1.141	-1.3	95	0.00
35	T	4-Chloroaniline	0.587	0.576	1.9	93	0.00
36	T	4-Aminotoluene	0.595	0.593	0.3	91	0.00
37	TC	Hexachlorobutadiene	0.195	0.185	5.1	89	0.00
38	T	Caprolactam	0.176	0.158	10.2	83	0.00
39	T	2-Aminotoluene	0.595	0.593	0.3	91	0.00
40	MC	4-Chloro-3-methylphenol	0.324	0.308	4.9	90	0.00
41	T	2-Methylnaphthalene	0.690	0.706	-2.3	94	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00
44	TP	Hexachlorocyclopentadiene	0.366	0.349	4.6	82	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.380	0.5	90	0.00
46	T	2,4,5-Trichlorophenol	0.386	0.385	0.3	88	0.00

47	S	2-Fluorobiphenyl	1.362	1.403	-3.0	94	0.00
48	T	1,1'-Biphenyl	1.491	1.553	-4.2	96	0.00
49	T	2-Chloronaphthalene	1.142	1.181	-3.4	94	0.00
50	T	2-Nitroaniline	0.329	0.297	9.7	80	0.00
51	T	Dimethyl phthalate	1.303	1.311	-0.6	92	0.00
52	T	2,6-Dinitrotoluene	0.228	0.223	2.2	80	0.00
53	T	Acenaphthylene	1.882	1.982	-5.3	94	0.00
54	T	3-Nitroaniline	0.281	0.273	2.8	84	0.00
55	MC	Acenaphthene	1.159	1.178	-1.6	91	0.00
56	TP	2,4-Dinitrophenol	0.055	0.054	1.8	81	0.00
57	MP	4-Nitrophenol	0.228	0.206	9.6	77	0.00
58	M	2,4-Dinitrotoluene	0.301	0.270	10.3	77	0.00
59	T	Dibenzofuran	1.746	1.644	5.8	87	0.00
60	T	Diethyl phthalate	1.398	1.255	10.2	83	0.00
61	T	Fluorene	1.428	1.314	8.0	82	0.00
62	T	4-Chlorophenyl phenyl ether	0.679	0.610	10.2	85	0.00
63	T	4-Nitroaniline	0.318	0.285	10.4	77	0.00
64		1,2,4,5-Tetrachlorobenzene	0.580	0.590	-1.7	92	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.382	0.335	12.3	86	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	88	-0.01
67	T	4,6-Dinitro-2-methylphenol	0.079	0.083	-5.1	90	0.00
68	TC	N-Nitrosodiphenylamine	0.628	0.594	5.4	84	0.00
69	T	1,2-Diphenylhydrazine	1.067	1.024	4.0	85	0.00
70	S	2,4,6-Tribromophenol	0.178	0.176	1.1	88	0.00
71	T	4-Bromophenyl phenyl ether	0.255	0.255	0.0	87	0.00
72	T	Hexachlorobenzene	0.307	0.306	0.3	88	-0.01
73	T	Atrazine	0.228	0.233	-2.2	89	0.00
74	MC	Pentachlorophenol	0.143	0.140	2.1	84	0.00
75	T	Phenanthrene	1.138	1.168	-2.6	92	0.00
76	T	Anthracene	1.097	1.150	-4.8	89	-0.01
77	T	Carbazole	1.000	1.022	-2.2	91	0.00
78	T	Di-n-butyl phthalate	1.325	1.337	-0.9	86	-0.01
79	TC	Fluoranthene	1.096	1.105	-0.8	88	-0.02
80	T	Benzidine	0.502	0.532	-6.0	98	-0.02
82	I	Chrysene-d12	1.000	1.000	0.0	90	-0.04
83	M	Pyrene	1.377	1.455	-5.7	88	-0.02
84	S	Terphenyl-d14	1.089	1.126	-3.4	87	-0.03
85	T	3,3'-Dimethylbenzidine	0.654	0.682	-4.3	93	-0.03
86	T	Butyl benzyl phthalate	0.648	0.630	2.8	83	-0.03
87	T	3,3'-Dichlorobenzidine	0.392	0.342	12.8	78	-0.04
88	T	Benzo[a]anthracene	1.156	1.132	2.1	86	-0.04
89	T	Chrysene	1.036	1.069	-3.2	88	-0.04
90	T	Bis(2-ethylhexyl) phthalate	0.886	0.874	1.4	82	-0.04
92	I	Perylene-d12	1.000	1.000	0.0	88	-0.04
93	TC	Di-n-octyl phthalate	1.966	1.915	2.6	77	-0.04
94	T	Benzo[b]fluoranthene	1.601	1.537	4.0	80	-0.04
95	T	Benzo[k]fluoranthene	1.318	1.441	-9.3	98	-0.04
96	TC	Benzo[a]pyrene	1.335	1.315	1.5	83	-0.04
97	T	Indeno[1,2,3-cd]pyrene	1.626	1.672	-2.8	91	-0.04
98	T	Dibenz[a,h]anthracene	1.333	1.399	-5.0	91	-0.04
99	T	Benzo[g,h,i]perylene	1.413	1.359	3.8	88	-0.04

(#) = Out of Range

BW0215.M Tue Feb 17 13:56:37 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	251755	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	955520	40.00	UG		0.00
43) Acenaphthene-d10	5.43	164	528177	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	800179	40.00	UG		-0.01
82) Chrysene-d12	7.89	240	615650	40.00	UG		-0.04
92) Perylene-d12	9.14	264	408464	40.00	UG		-0.04
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	908823	101.60	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 101.60%#				
6) Phenol-d5	3.40	99	1129234	102.14	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 102.14%#				
24) Nitrobenzene-d5	3.97	82	461978	45.27	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 90.54%				
47) 2-Fluorobiphenyl	5.02	172	926240	51.52	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 103.04%#				
70) 2,4,6-Tribromophenol	5.95	330	352723	99.01	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 99.01%				
84) Terphenyl-d14	7.21	244	866239	51.69	UG		-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 103.38%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.66	74	239251	36.29	UG		88
3) Pyridine	1.71	52	331593	37.81	UG		43
7) Phenol	3.41	94	476827	39.74	UG		1
8) Aniline	3.43	66	222932	39.58	UG		81
9) Bis(2-chloroethyl) ether	3.46	63	281420	37.36	UG		77
10) 2-Chlorophenol	3.52	128	387895	39.35	UG		92
11) 1,3-Dichlorobenzene	3.61	146	407548	38.48	UG	#	94
12) 1,4-Dichlorobenzene	3.64	146	424293	39.91	UG		50
13) Benzyl alcohol	3.71	108	252764	39.76	UG		99
14) 1,2-Dichlorobenzene	3.76	146	393213	38.92	UG		94
15) 2-Methylphenol	3.77	108	329520	38.42	UG		96
16) Bis(2-chloroisopropyl) eth	3.80	45	617764	37.28	UG		87
17) 4-Methylphenol	3.85	108	330784	39.61	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	276695	37.31	UG		82
19) Acetophenone	3.88	105	476956	39.24	UG		79
20) 3-Methylphenol	3.85	108	330784	39.61	UG		100
21) Hexachloroethane	3.95	117	153797	37.39	UG		85
25) Nitrobenzene	3.98	77	349964	35.73	UG		96
26) Isophorone	4.12	82	699577	38.41	UG		89
27) 2-Nitrophenol	4.17	139	154129	35.59	UG		72
28) 2,4-Dimethylphenol	4.18	107	366219	40.14	UG		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	432695	38.77	UG		99
30) Benzoic acid	4.22	105	146416	36.91	UG		48
31) 2,4-Dimethylaniline	4.29	121	400089	39.95	UG	#	33
32) 2,4-Dichlorophenol	4.31	162	288325	39.33	UG		96
33) 1,2,4-Trichlorobenzene	4.37	180	314603	38.69	UG		93
34) Naphthalene	4.41	128	1089853	40.50	UG	#	95
35) 4-Chloroaniline	4.43	127	550432	39.27	UG		96
36) 4-Aminotoluene	3.90	106	566359	39.82	UG	#	56
37) Hexachlorobutadiene	4.51	225	176949	37.92	UG		98
38) Caprolactam	4.62	55	151139	35.89	UG	#	1
39) 2-Aminotoluene	3.90	106	566359	39.82	UG	#	58
40) 4-Chloro-3-methylphenol	4.69	107	294776	38.08	UG		88
41) 2-Methylnaphthalene	4.81	142	674407	40.93	UG		100
44) Hexachlorocyclopentadiene	4.94	237	184387	38.17	UG	#	36
45) 2,4,6-Trichlorophenol	4.98	196	200858	39.81	UG		95
46) 2,4,5-Trichlorophenol	5.00	196	203178	39.91	UG		93
48) 1,1'-Biphenyl	5.07	154	820321	41.68	UG		99
49) 2-Chloronaphthalene	5.09	162	623960	41.38	UG		91
50) 2-Nitroaniline	5.14	65	156991	36.12	UG		83
51) Dimethyl phthalate	5.25	163	692349	40.23	UG		95
52) 2,6-Dinitrotoluene	5.29	165	117999	39.26	UG		78
53) Acenaphthylene	5.34	152	1046615	42.12	UG		98
54) 3-Nitroaniline	5.37	138	144250	38.81	UG		76
55) Acenaphthene	5.44	153	622325	40.66	UG		91
56) 2,4-Dinitrophenol	5.43	184	28778m	39.69	UG		
57) 4-Nitrophenol	5.44	65	109040	36.26	UG		93
58) 2,4-Dinitrotoluene	5.53	165	142455	35.79	UG		92
59) Dibenzofuran	5.54	168	868256	37.65	UG		92
60) Diethyl phthalate	5.69	149	662965	35.91	UG		95
61) Fluorene	5.78	166	694053	36.80	UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	322135	35.94	UG		87
63) 4-Nitroaniline	5.78	138	150353	35.77	UG		88
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	311461	40.67	UG		68
65) 2,3,4,6-Tetrachlorophenol	5.64	232	177171m	35.14	UG		
67) 4,6-Dinitro-2-methylphenol	5.82	198	66139m	41.60	UG		
68) N-Nitrosodiphenylamine	5.84	169	475340	37.82	UG		94
69) 1,2-Diphenylhydrazine	5.87	77	819533	38.41	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	204362	40.01	UG		88
72) Hexachlorobenzene	6.17	284	244533	39.81	UG		92
73) Atrazine	6.15	200	186234	40.85	UG		94
74) Pentachlorophenol	6.26	266	112128	39.24	UG	#	44
75) Phenanthrene	6.35	178	934619	41.05	UG		96
76) Anthracene	6.37	178	919864	41.93	UG		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

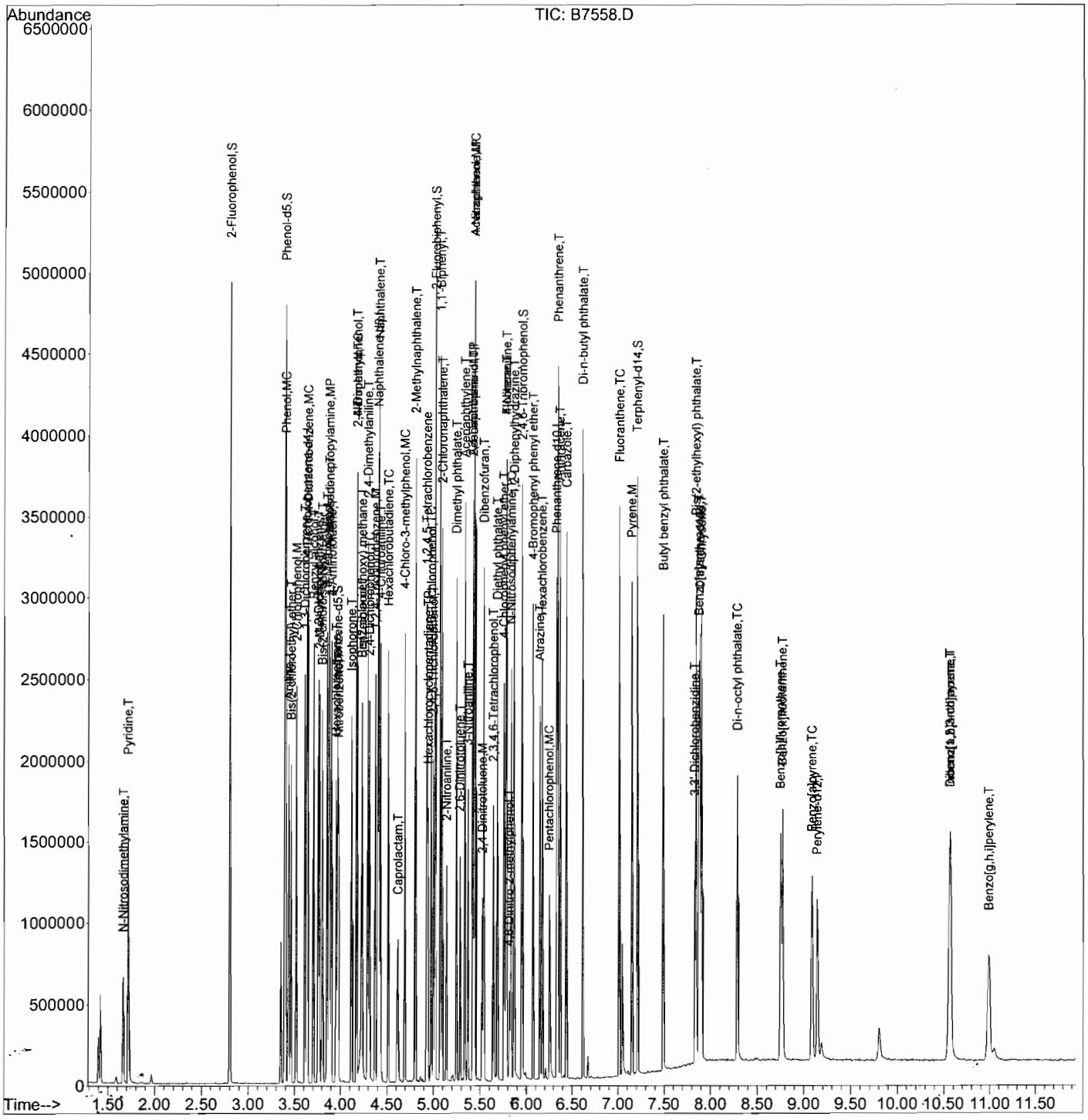
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.44	167	817787	40.89 UG	97
78) Di-n-butyl phthalate	6.62	149	1069743	40.36 UG	98
79) Fluoranthene	7.02	202	884505	40.34 UG	98
83) Pyrene	7.15	202	895891	42.27 UG	95
86) Butyl benzyl phthalate	7.49	149	388045	38.89 UG	86
87) 3,3'-Dichlorobenzidine	7.83	252	210846	34.99 UG	92
88) Benzo[a]anthracene	7.88	228	696835	39.18 UG	96
89) Chrysene	7.91	228	658330	41.27 UG	96
90) Bis(2-ethylhexyl) phthalat	7.85	149	537855	39.42 UG	93
93) Di-n-octyl phthalate	8.29	149	782222	38.96 UG	91
94) Benzo[b]fluoranthene	8.75	252	627868	38.41 UG	85
95) Benzo[k]fluoranthene	8.77	252	588658	43.73 UG	91
96) Benzo[a]pyrene	9.09	252	537048	39.40 UG	89
97) Indeno[1,2,3-cd]pyrene	10.57	276	682785	41.12 UG	77
98) Dibenz[a,h]anthracene	10.57	278	571638	41.99 UG	90
99) Benzo[g,h,i]perylene	10.99	276	555237	38.49 UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7558.D
Acq On : 17 Feb 2015 13:12
Operator : DANA
Sample : ABN004-15,ICV040BNA1,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 17 13:53:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7559.D
Acq On : 17 Feb 2015 13:29
Operator : DANA
Sample : ABN031-15,ICV040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 17 13:55:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

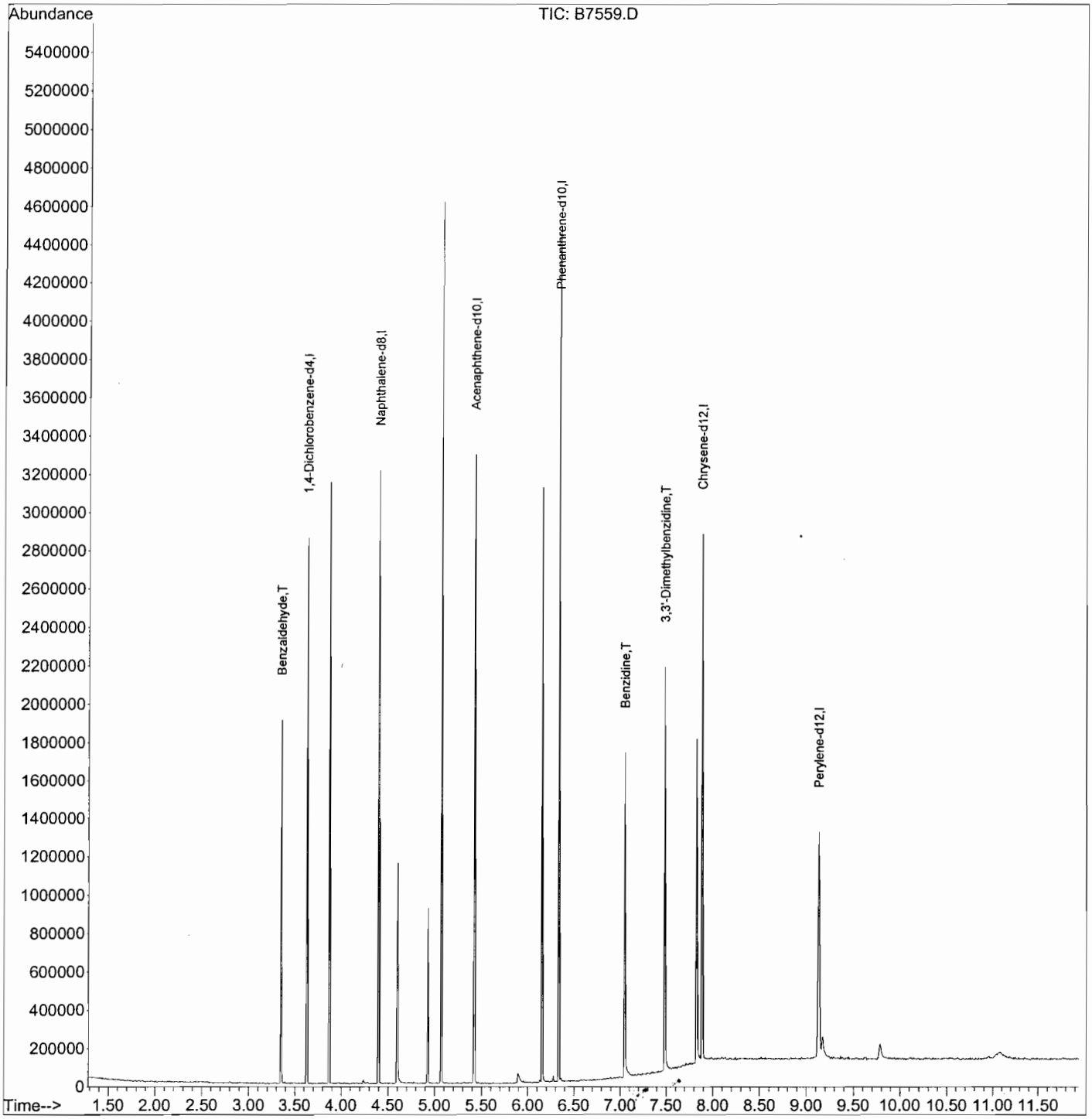
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	260289	40.00	UG	0.00
23) Naphthalene-d8	4.40	136	1006846	40.00	UG	0.00
43) Acenaphthene-d10	5.43	164	565692	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	897048	40.00	UG	0.00
82) Chrysene-d12	7.88	240	728224	40.00	UG	-0.05
92) Perylene-d12	9.13	264	512976	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery =	0.00%#		
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery =	0.00%#		
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery =	0.00%#		
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	93732m	43.10	UG	
80) Benzidine	7.05	184	476899	42.38	UG	95
85) 3,3'-Dimethylbenzidine	7.48	212	496924	41.76	UG	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7559.D
Acq On : 17 Feb 2015 13:29
Operator : DANA
Sample : ABN031-15,ICV040BNA2,A,1000ml,100,1
Misc : NA,NA,NA,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 17 13:55:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 20 10:28:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 5.00min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.00
2	T	N-Nitrosodimethylamine	1.048	0.973	7.2	70	-0.02
3	T	Pyridine	1.393	1.329	4.6	71	-0.01
4	S	2-Fluorophenol	1.421	1.280	9.9	64	0.00
5	T	Benzaldehyde	0.334	0.364	-9.0	62	0.00
6	S	Phenol-d5	1.757	1.617	8.0	65	0.00
7	MC	Phenol	1.906	1.767	7.3	65	0.00
8	T	Aniline	0.895	0.861	3.8	66	0.00
9	T	Bis(2-chloroethyl) ether	1.197	1.181	1.3	73	0.00
10	M	2-Chlorophenol	1.566	1.380	11.9	63	0.00
11	T	1,3-Dichlorobenzene	1.683	1.594	5.3	69	0.00
12	MC	1,4-Dichlorobenzene	1.689	1.552	8.1	66	0.00
13	T	Benzyl alcohol	1.010	0.914	9.5	63	0.00
14	T	1,2-Dichlorobenzene	1.605	1.481	7.7	67	0.00
15	T	2-Methylphenol	1.363	1.226	10.1	65	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.633	2.779	-5.5	77	0.00
17	T	4-Methylphenol	1.327	1.304	1.7	69	0.00
18	MP	N-Nitrosodi-n-propylamine	1.178	1.174	0.3	70	0.00
19	T	Acetophenone	1.931	2.029	-5.1	75	0.00
20	T	3-Methylphenol	1.327	1.304	1.7	69	0.00
21	T	Hexachloroethane	0.654	0.618	5.5	68	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	72	0.00
24	S	Nitrobenzene-d5	0.427	0.388	9.1	66	0.00
25	T	Nitrobenzene	0.410	0.399	2.7	73	0.00
26	T	Isophorone	0.762	0.738	3.1	69	0.00
27	TC	2-Nitrophenol	0.181	0.162	10.5	62	0.00
28	T	2,4-Dimethylphenol	0.382	0.335	12.3	62	0.00
29	T	Bis(2-chloroethoxy) methane	0.467	0.445	4.7	70	0.00
30	T	Benzoic acid	0.166	0.170	-2.4	63	0.00
31	T	2,4-Dimethylaniline	0.419	0.394	6.0	67	0.00
32	TC	2,4-Dichlorophenol	0.307	0.285	7.2	64	0.00
33	M	1,2,4-Trichlorobenzene	0.340	0.320	5.9	68	0.00
34	T	Naphthalene	1.126	1.066	5.3	68	0.00
35	T	4-Chloroaniline	0.587	0.560	4.6	69	0.00
36	T	4-Aminotoluene	0.595	0.558	6.2	65	-0.01
37	TC	Hexachlorobutadiene	0.195	0.201	-3.1	74	0.00
38	T	Caprolactam	0.176	0.186	-5.7	75	0.00
39	T	2-Aminotoluene	0.595	0.558	6.2	65	-0.01
40	MC	4-Chloro-3-methylphenol	0.324	0.309	4.6	69	0.00
41	T	2-Methylnaphthalene	0.690	0.673	2.5	68	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	69	0.00
44	TP	Hexachlorocyclopentadiene	0.366	0.383	-4.6	68	0.00
45	TC	2,4,6-Trichlorophenol	0.382	0.367	3.9	66	0.00
46	T	2,4,5-Trichlorophenol	0.386	0.405	-4.9	71	0.00

47	S	2-Fluorobiphenyl	1.362	1.292	5.1	66	0.00
48	T	1,1'-Biphenyl	1.491	1.571	-5.4	74	0.00
49	T	2-Chloronaphthalene	1.142	1.142	0.0	69	0.00
50	T	2-Nitroaniline	0.329	0.344	-4.6	70	0.00
51	T	Dimethyl phthalate	1.303	1.304	-0.1	69	0.00
52	T	2,6-Dinitrotoluene	0.228	0.225	1.3	62	0.00
53	T	Acenaphthylene	1.882	1.850	1.7	67	0.00
54	T	3-Nitroaniline	0.281	0.298	-6.0	69	0.00
55	MC	Acenaphthene	1.159	1.137	1.9	67	0.00
56	TP	2,4-Dinitrophenol	0.055	0.059	-7.3	67	0.00
57	MP	4-Nitrophenol	0.228	0.245	-7.5	70	0.00
58	M	2,4-Dinitrotoluene	0.301	0.335	-11.3	73	0.00
59	T	Dibenzofuran	1.746	1.890	-8.2	76	0.00
60	T	Diethyl phthalate	1.398	1.555	-11.2	78	0.00
61	T	Fluorene	1.428	1.549	-8.5	74	0.00
62	T	4-Chlorophenyl phenyl ether	0.679	0.774	-14.0	82	0.00
63	T	4-Nitroaniline	0.318	0.358	-12.6	74	0.00
64		1,2,4,5-Tetrachlorobenzene	0.580	0.595	-2.6	71	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.382	0.362	5.2	71	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	69	0.00
67	T	4,6-Dinitro-2-methylphenol	0.079	0.088	-11.4	76	0.00
68	TC	N-Nitrosodiphenylamine	0.628	0.720	-14.6	81	0.00
69	T	1,2-Diphenylhydrazine	1.067	1.111	-4.1	73	0.00
70	S	2,4,6-Tribromophenol	0.178	0.176	1.1	69	0.00
71	T	4-Bromophenyl phenyl ether	0.255	0.277	-8.6	74	0.00
72	T	Hexachlorobenzene	0.307	0.304	1.0	69	0.00
73	T	Atrazine	0.228	0.200	12.3	60	0.00
74	MC	Pentachlorophenol	0.143	0.150	-4.9	71	0.00
75	T	Phenanthrene	1.138	1.130	0.7	70	0.00
76	T	Anthracene	1.097	1.144	-4.3	70	0.00
77	T	Carbazole	1.000	1.032	-3.2	72	0.00
78	T	Di-n-butyl phthalate	1.325	1.341	-1.2	68	0.00
79	TC	Fluoranthene	1.096	1.090	0.5	69	0.00
80	T	Benzidine	0.502	0.455	9.4	61	0.00
82	I	Chrysene-d12	1.000	1.000	0.0	67	0.02
83	M	Pyrene	1.377	1.523	-10.6	69	0.00
84	S	Terphenyl-d14	1.089	1.134	-4.1	65	0.00
85	T	3,3'-Dimethylbenzidine	0.654	0.606	7.3	63	0.00
86	T	Butyl benzyl phthalate	0.648	0.706	-9.0	69	0.01
87	T	3,3'-Dichlorobenzidine	0.392	0.371	5.4	63	0.02
88	T	Benzo[a]anthracene	1.156	1.228	-6.2	70	0.02
89	T	Chrysene	1.036	1.126	-8.7	69	0.01
90	T	Bis(2-ethylhexyl) phthalate	0.886	0.929	-4.9	65	0.02
92	I	Perylene-d12	1.000	1.000	0.0	62	0.01
93	TC	Di-n-octyl phthalate	1.966	2.199	-11.9	62	0.01
94	T	Benzo[b]fluoranthene	1.601	1.747	-9.1	64	0.01
95	T	Benzo[k]fluoranthene	1.318	1.390	-5.5	67	0.01
96	TC	Benzo[a]pyrene	1.335	1.531	-14.7	68	0.02
97	T	Indeno[1,2,3-cd]pyrene	1.626	1.795	-10.4	69	0.02
98	T	Dibenz[a,h]anthracene	1.333	1.519	-14.0	70	0.02
99	T	Benzo[g,h,i]perylene	1.413	1.586	-12.2	72	0.01

(#) = Out of Range

BW0215.M Fri Feb 20 13:40:44 2015 MSD_B

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	188553	40.00	UG		0.00
23) Naphthalene-d8	4.40	136	732149	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	401688	40.00	UG		0.00
66) Phenanthrene-d10	6.34	188	631572	40.00	UG		0.00
82) Chrysene-d12	7.95	240	457744	40.00	UG		0.02
92) Perylene-d12	9.20	264	287679	40.00	UG		0.01
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	603211	90.04	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 90.04%				
6) Phenol-d5	3.40	99	762424	92.08	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 92.08%				
24) Nitrobenzene-d5	3.97	82	355384	45.45	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 90.90%				
47) 2-Fluorobiphenyl	5.02	172	648902	47.46	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 94.92%				
70) 2,4,6-Tribromophenol	5.95	330	277575	98.72	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 98.72%				
84) Terphenyl-d14	7.24	244	648680	52.06	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 104.12%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.65	74	183383	37.14	UG		77
3) Pyridine	1.70	52	250671	38.17	UG		40
7) Phenol	3.40	94	333253	37.08	UG		1
8) Aniline	3.43	66	162251	38.46	UG		77
9) Bis(2-chloroethyl) ether	3.46	63	222729	39.48	UG		73
10) 2-Chlorophenol	3.51	128	260294	35.26	UG		92
11) 1,3-Dichlorobenzene	3.61	146	300547	37.89	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	292651	36.75	UG		50
13) Benzyl alcohol	3.70	108	172384	36.20	UG		87
14) 1,2-Dichlorobenzene	3.75	146	279258	36.91	UG		93
15) 2-Methylphenol	3.77	108	231087	35.97	UG		99
16) Bis(2-chloroisopropyl) eth	3.80	45	524067	42.23	UG		86
17) 4-Methylphenol	3.85	108	245935	39.32	UG		99
18) N-Nitrosodi-n-propylamine	3.88	70	221448	39.87	UG		78
19) Acetophenone	3.87	105	382667	42.04	UG		74
20) 3-Methylphenol	3.85	108	245935	39.32	UG		99
21) Hexachloroethane	3.95	117	116432	37.79	UG		83
25) Nitrobenzene	3.98	77	292365	38.96	UG		93
26) Isophorone	4.12	82	540155	38.71	UG		88
27) 2-Nitrophenol	4.17	139	118606	35.74	UG		59
28) 2,4-Dimethylphenol	4.17	107	245378	35.10	UG		89

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) Bis(2-chloroethoxy) methan	4.23	93	325522	38.07 UG		98
30) Benzoic acid	4.22	105	124109m	40.83 UG		
31) 2,4-Dimethylaniline	4.29	121	288331	37.58 UG	#	33
32) 2,4-Dichlorophenol	4.31	162	208864	37.18 UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	234650	37.67 UG		92
34) Naphthalene	4.41	128	780513	37.86 UG	#	100
35) 4-Chloroaniline	4.43	127	409851	38.16 UG		97
36) 4-Aminotoluene	3.89	106	408265	37.46 UG	#	52
37) Hexachlorobutadiene	4.51	225	147151	41.16 UG		97
38) Caprolactam	4.61	55	136279	42.24 UG	#	1
39) 2-Aminotoluene	3.89	106	408265	37.46 UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	226235	38.15 UG		82
41) 2-Methylnaphthalene	4.81	142	492429	39.00 UG		99
44) Hexachlorocyclopentadiene	4.94	237	153866	41.88 UG	#	37
45) 2,4,6-Trichlorophenol	4.98	196	147595	38.47 UG		93
46) 2,4,5-Trichlorophenol	5.00	196	162538	41.98 UG		92
48) 1,1'-Biphenyl	5.07	154	631251	42.17 UG		100
49) 2-Chloronaphthalene	5.09	162	458894	40.02 UG		88
50) 2-Nitroaniline	5.14	65	138098	41.78 UG		74
51) Dimethyl phthalate	5.25	163	523853	40.03 UG		96
52) 2,6-Dinitrotoluene	5.29	165	90414	39.55 UG		65
53) Acenaphthylene	5.33	152	743049	39.32 UG		98
54) 3-Nitroaniline	5.37	138	119541	42.29 UG		71
55) Acenaphthene	5.44	153	456631	39.23 UG		92
56) 2,4-Dinitrophenol	5.43	184	23566m	42.73 UG		
57) 4-Nitrophenol	5.44	65	98305	42.98 UG		82
58) 2,4-Dinitrotoluene	5.53	165	134507	44.44 UG		99
59) Dibenzofuran	5.54	168	759336	43.30 UG		87
60) Diethyl phthalate	5.69	149	624553	44.48 UG		95
61) Fluorene	5.78	166	622268	43.38 UG		97
62) 4-Chlorophenyl phenyl ethe	5.76	204	311055	45.64 UG		85
63) 4-Nitroaniline	5.78	138	143770	44.97 UG		80
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	239185	41.07 UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	145483	37.95 UG		94
67) 4,6-Dinitro-2-methylphenol	5.82	198	55388m	44.14 UG		
68) N-Nitrosodiphenylamine	5.84	169	454808	45.85 UG		95
69) 1,2-Diphenylhydrazine	5.87	77	701891	41.68 UG		86
71) 4-Bromophenyl phenyl ether	6.08	248	175112	43.44 UG		86
72) Hexachlorobenzene	6.18	284	192264	39.66 UG		90
73) Atrazine	6.16	200	126367m	35.11 UG		
74) Pentachlorophenol	6.26	266	95029	42.13 UG	#	41
75) Phenanthrene	6.35	178	713705	39.72 UG		96
76) Anthracene	6.38	178	722485	41.72 UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

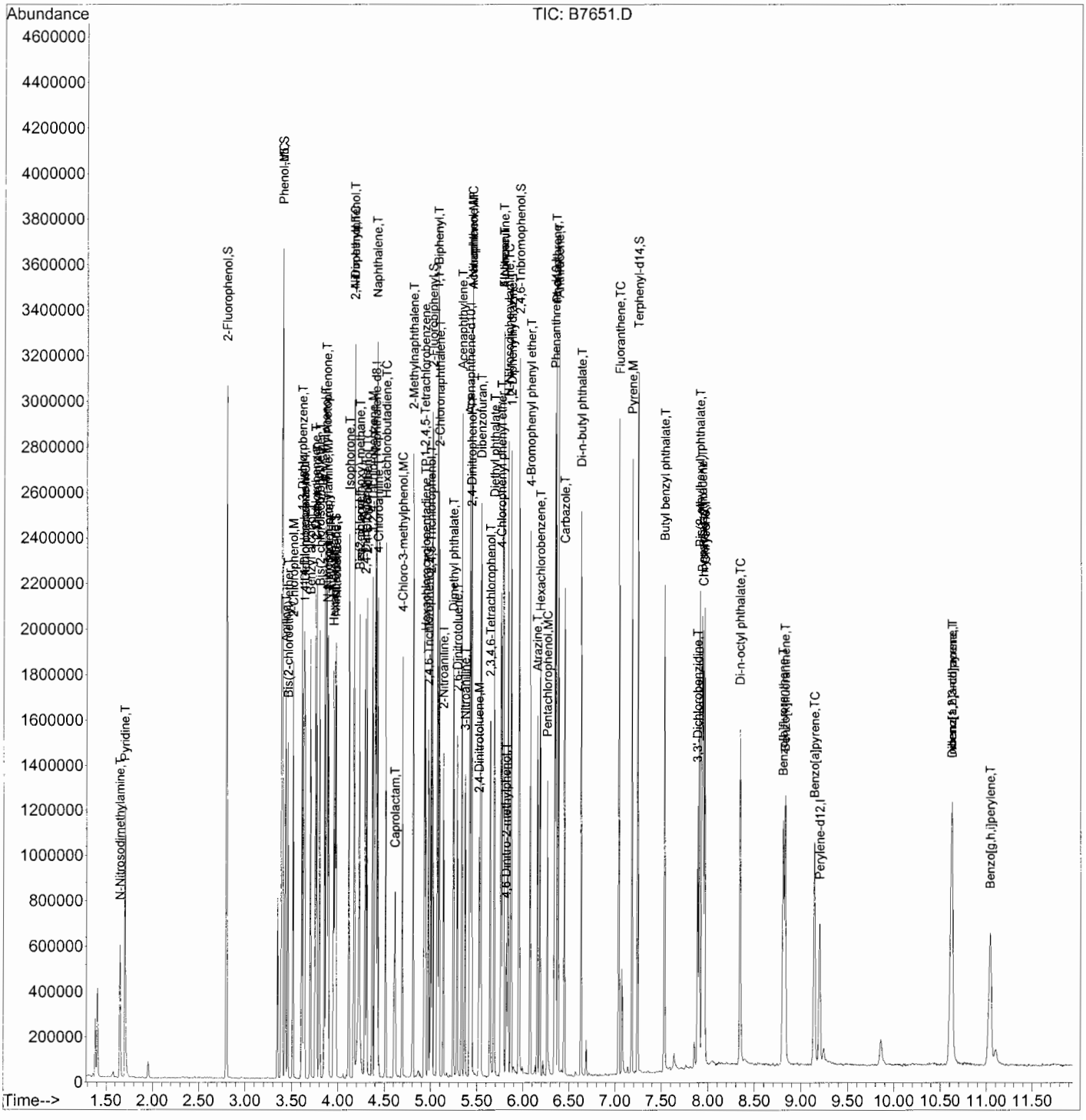
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Carbazole	6.45	167	651861	41.30 UG	97
78) Di-n-butyl phthalate	6.63	149	847073	40.49 UG	98
79) Fluoranthene	7.04	202	688458	39.78 UG	97
83) Pyrene	7.18	202	697256	44.25 UG	97
86) Butyl benzyl phthalate	7.53	149	323029	43.54 UG	85
87) 3,3'-Dichlorobenzidine	7.89	252	170007	37.94 UG	92
88) Benzo[a]anthracene	7.94	228	562263	42.52 UG	96
89) Chrysene	7.96	228	515451	43.46 UG	97
90) Bis(2-ethylhexyl) phthalat	7.91	149	425424	41.94 UG	94
93) Di-n-octyl phthalate	8.34	149	632659	44.74 UG	91
94) Benzo[b]fluoranthene	8.81	252	502536	43.65 UG	84
95) Benzo[k]fluoranthene	8.83	252	399761m	42.17 UG	
96) Benzo[a]pyrene	9.14	252	440354m	45.87 UG	
97) Indeno[1,2,3-cd]pyrene	10.62	276	516479m	44.16 UG	
98) Dibenz[a,h]anthracene	10.62	278	436950m	45.57 UG	
99) Benzo[g,h,i]perylene	11.04	276	456383m	44.92 UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7651.D
Acq On : 20 Feb 2015 10:14
Operator : DANA
Sample : ABN004-15,CCV040BNA1
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 23 09:17:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7652.D
Acq On : 20 Feb 2015 10:31
Operator : DANA
Sample : ABN031-15,CCV040BNA2
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 23 09:18:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

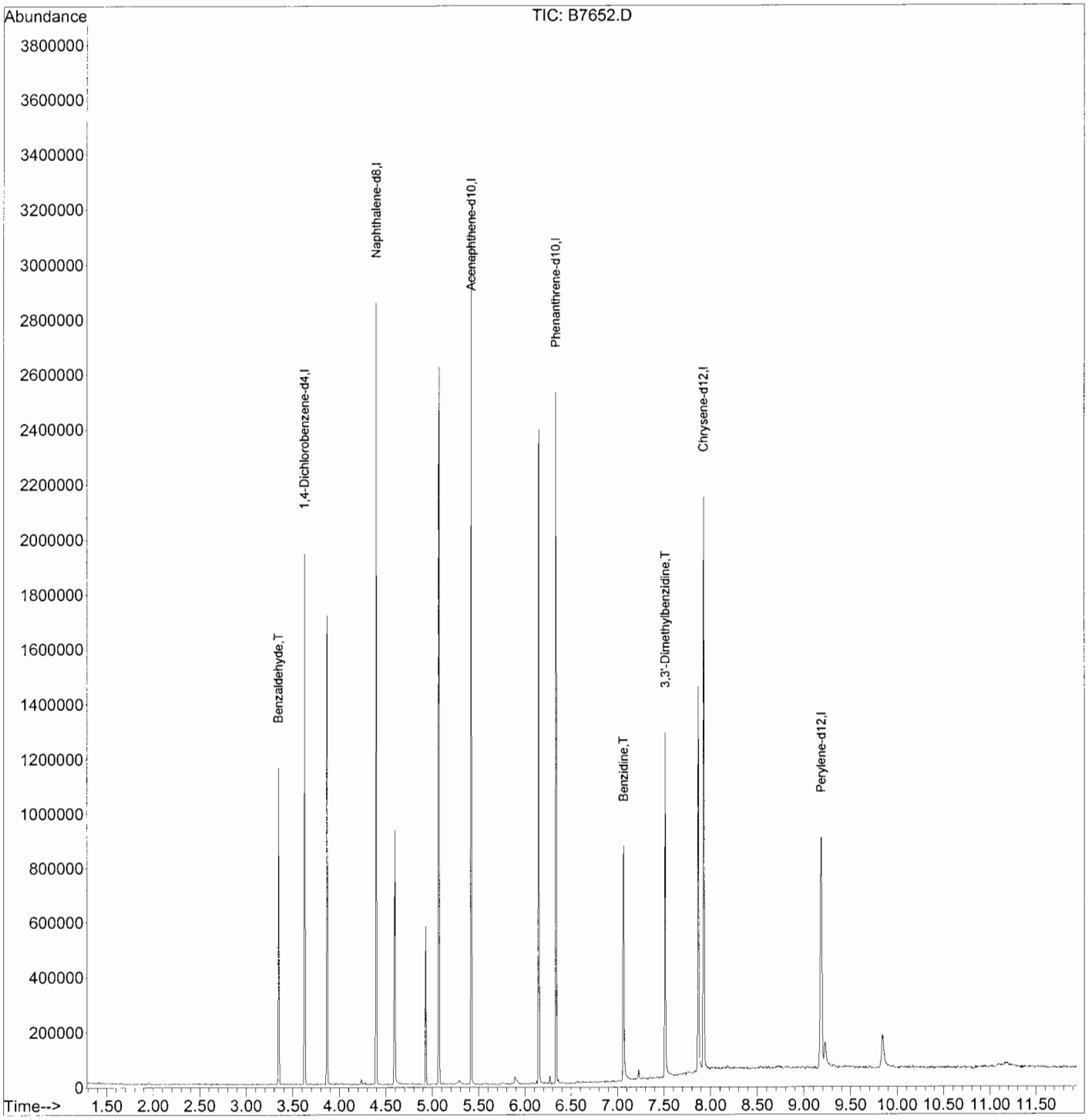
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	169759	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	680872	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	390445	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	658326	40.00	UG	-0.01
82) Chrysene-d12	7.93	240	550146	40.00	UG	0.00
92) Perylene-d12	9.19	264	402557	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 10 - 102		Recovery = 0.00%#			
24) Nitrobenzene-d5	0.00	82	0d	0.00	UG	
Spiked Amount 50.000	Range 27 - 102		Recovery = 0.00%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 26 - 101		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 22 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	0.00	244	0d	0.00	UG	
Spiked Amount 50.000	Range 23 - 124		Recovery = 0.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	3.35	106	61861m	43.61	UG	
80) Benzidine	7.07	184	299327m	36.25	UG	
85) 3,3'-Dimethylbenzidine	7.51	212	333385m	37.08	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7652.D
Acq On : 20 Feb 2015 10:31
Operator : DANA
Sample : ABN031-15,CCV040BNA2
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 23 09:18:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

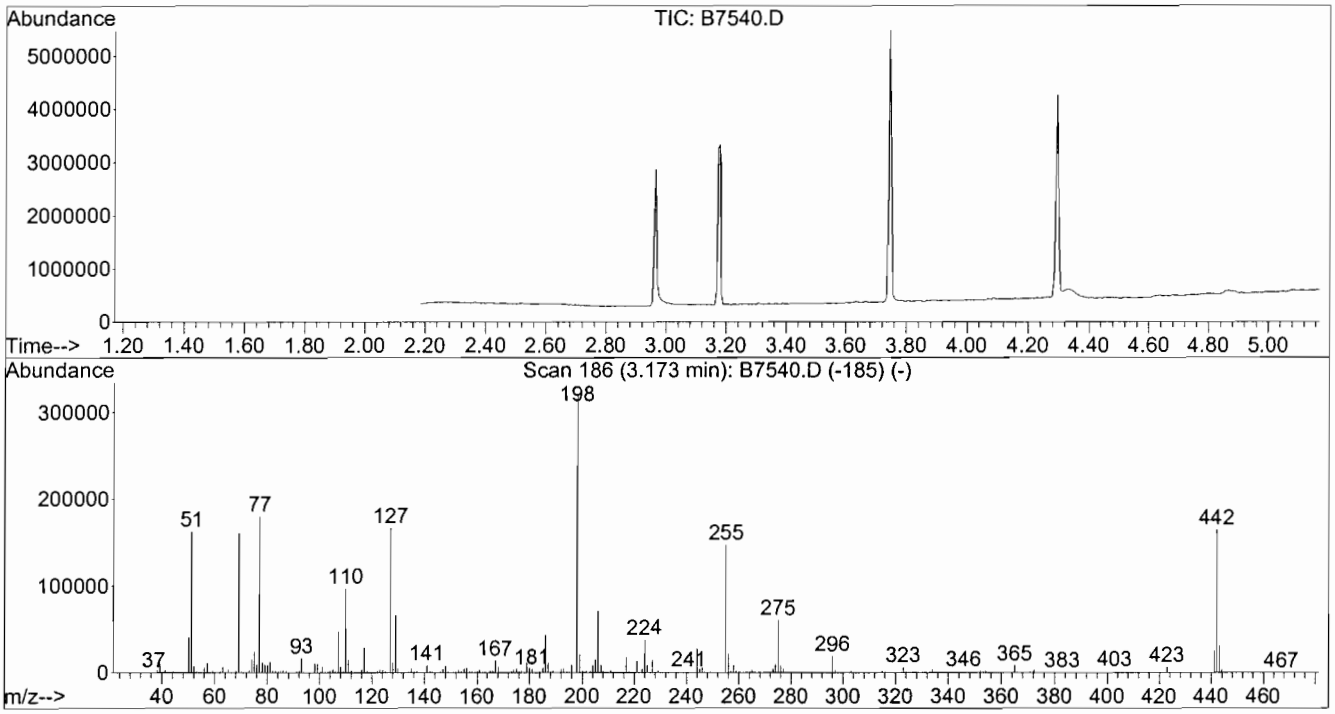


TCLP
SEMI-VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : B7540.D
Acq On : 17 Feb 2015 7:59
Operator : DANA
Sample : ABN005-15,DFTPP(150217)
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP1.M
Title :
Last Update : Fri Oct 07 04:35:10 2011



Spectrum Information: Scan 186

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.9	162448	PASS
68	69	0.00	2	1.4	2194	PASS
69	198	0.00	100	50.4	161048	PASS
70	69	0.00	2	0.8	1214	PASS
127	198	40	60	52.3	166840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	319224	PASS
199	198	5	9	6.6	20964	PASS
275	198	10	30	19.0	60768	PASS
365	198	1	100	2.6	8177	PASS
441	443	0.01	100	80.4	24758	PASS
442	198	40	100	51.5	164559	PASS
443	442	17	23	18.7	30810	PASS

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	159	50.10	41396	64.10	839	77.10	180096
37.05	646	51.10	162448	65.05	3297	78.10	11811
38.15	3030	52.10	7618	66.05	595	79.10	8776
39.20	17469	53.10	1091	67.05	314	80.05	8656
40.10	1299	56.10	5629	68.20	2194	81.10	12289
41.20	2952	57.20	10984	69.10	161048	82.10	2196
42.20	836	58.10	925	70.10	1214	83.10	1877
43.20	1360	59.30	1881	73.10	2522	84.10	1114
44.10	1832	61.10	1228	74.10	14671	85.10	2399
45.10	258	62.10	1559	75.10	24178	86.00	2589
47.10	559	63.10	6629	76.10	9285	87.10	1497

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.00	192	102.10	645	113.00	337	125.05	1765
91.00	1546	103.10	1136	114.10	587	127.05	166840
92.10	2219	104.00	2580	115.10	786	128.00	11504
93.05	16731	105.10	3711	116.10	3551	129.10	67135
94.00	314	106.00	1470	117.00	28717	130.00	5204
95.10	69	107.10	48043	118.05	2455	131.00	759
96.15	470	108.05	7014	119.15	891	132.00	443
98.10	10771	109.10	1584	120.10	146	133.00	599
99.10	9904	110.00	97330	122.05	2289	134.05	1180
100.10	474	111.10	15400	123.00	3872	135.05	4933
101.10	7159	112.10	2390	124.10	2877	136.10	1693

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.10	1798	147.00	4497	158.00	1543	169.00	1042
138.05	517	148.00	7811	159.10	1261	170.15	701
139.00	519	149.00	1616	159.95	1814	171.90	868
140.20	826	150.10	558	160.95	3320	173.10	1407
141.00	8589	151.05	927	162.10	1067	174.00	3758
142.10	2004	152.00	589	163.00	370	175.00	4793
143.00	1356	153.00	3242	163.95	84	176.05	1933
144.10	610	154.00	1716	165.00	2263	176.95	2353
145.00	511	155.05	4302	166.05	2389	177.85	597
146.00	1483	156.00	5563	166.95	14240	178.95	11556
146.20	965	157.10	1514	168.05	7108	180.05	5525

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	4227	191.00	527	204.00	8449	216.00	923
181.80	347	192.00	4165	205.00	15194	217.00	18326
182.20	171	192.95	4674	206.00	70989	218.00	1640
182.95	390	194.10	1320	207.05	8861	219.00	702
184.00	1518	194.90	722	208.00	2191	221.00	13688
185.10	5790	196.05	9090	209.00	860	223.00	4212
186.10	43718	197.95	319224	211.00	2122	224.00	37994
187.05	11556	199.00	20964	212.10	293	225.05	8724
188.00	1230	200.10	2021	213.15	321	227.00	14934
188.90	1921	201.50	1839	213.90	3	228.05	1089
190.00	605	203.05	1468	214.95	416	229.10	2496

Scan 186 (3.173 min): B7540.D (-185)

ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
230.05	583	242.05	1384	253.10	332	265.80	222
231.00	1550	243.00	1835	255.00	147239	267.20	249
231.80	481	244.00	27718	256.00	21931	269.10	235
232.90	525	245.00	4134	257.00	1719	269.80	246
234.00	901	246.00	5467	257.90	8077	270.90	493
235.00	734	246.80	944	258.90	1803	271.90	223
236.00	993	248.00	173	260.00	290	273.00	4613
237.00	1244	249.00	657	260.90	355	274.00	9810
237.90	238	249.80	364	262.00	343	275.00	60768
238.85	917	251.00	515	263.00	338	275.95	7757
241.05	1235	251.70	333	265.00	3386	276.95	4513

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.90	747	291.85	391	307.10	174	324.00	961
278.90	163	293.00	1147	307.80	371	325.80	151
281.05	24	294.10	209	310.10	143	326.85	1253
282.15	642	296.00	18894	313.10	281	328.00	818
283.10	237	296.95	2523	314.00	1313	331.80	323
284.20	210	297.90	248	314.90	2026	333.00	303
284.80	1005	299.00	319	316.10	911	334.00	3681
285.10	864	301.00	385	317.10	279	335.00	1008
286.30	330	302.00	261	320.90	648	336.00	243
289.10	402	303.00	1929	321.90	516	338.40	173
291.20	276	304.10	584	323.00	6423	339.10	142

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
340.80	693	361.10	141	384.10	293	409.90	249
341.90	147	363.90	174	388.90	185	414.80	169
342.40	143	365.00	8177	389.90	413	420.70	1053
345.80	1675	365.90	1181	390.40	177	421.90	1731
347.05	81	370.20	191	391.90	267	422.90	6457
352.10	2060	370.80	570	397.20	221	423.80	1459
353.10	1318	372.10	2999	400.90	272	424.70	428
354.10	1787	373.00	780	402.00	1077	441.00	24758
355.00	332	374.10	216	402.90	1567	441.95	164559
356.00	519	376.90	286	403.90	323	442.95	30810
357.10	290	382.80	726	405.40	154	443.90	3476

Scan 186 (3.173 min): B7540.D (-185)
ABN005-15,DFTPP(150217)
Modified:subtracted

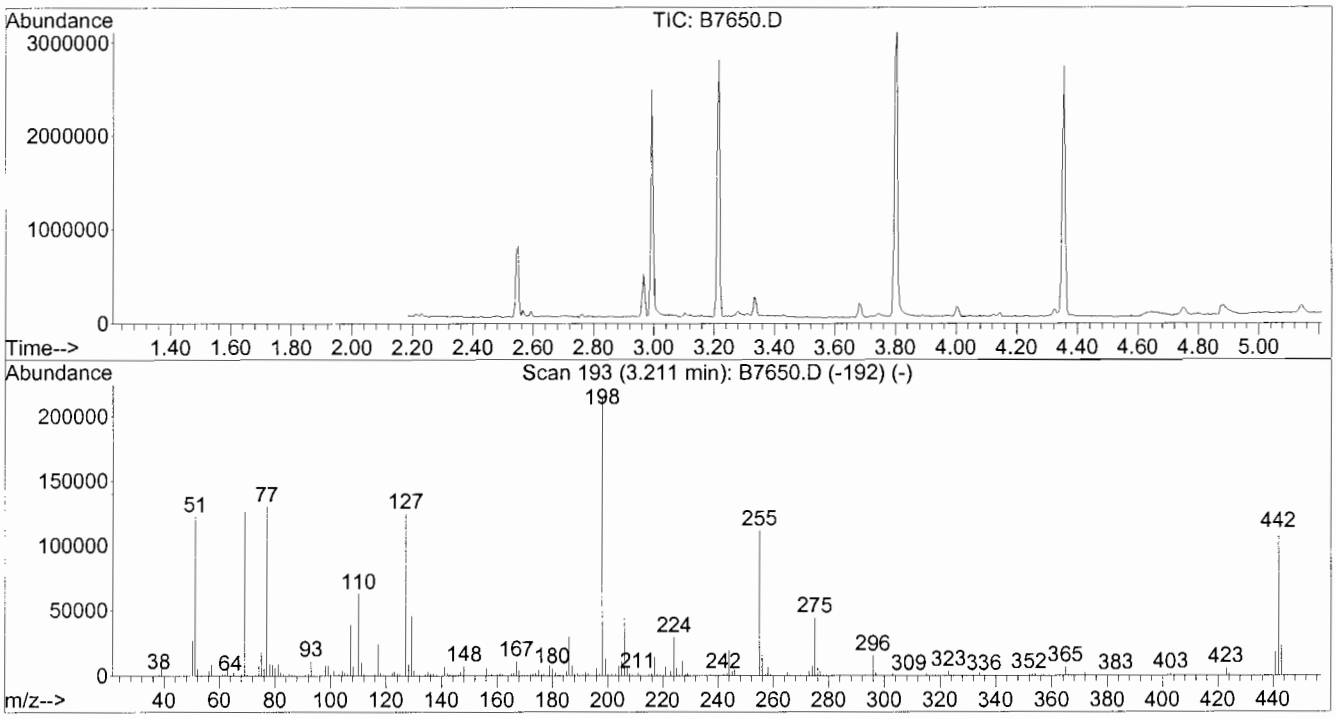
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
467.00	162						

DFTPP

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7650.D
Acq On : 20 Feb 2015 10:04
Operator : DANA
Sample : ABN005-15,DFTPP022015
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP1.M
Title :
Last Update : Fri Oct 07 04:35:10 2011



Spectrum Information: Scan 193

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.3	122464	PASS
68	69	0.00	2	1.1	1386	PASS
69	198	0.00	100	59.1	126248	PASS
70	69	0.00	2	1.0	1309	PASS
127	198	40	60	58.5	124929	PASS
197	198	0.00	1	0.6	1177	PASS
198	198	100	100	100.0	213632	PASS
199	198	5	9	6.1	13063	PASS
275	198	10	30	20.8	44453	PASS
365	198	1	100	3.2	6739	PASS
441	443	0.01	100	77.5	18134	PASS
442	198	40	100	51.4	109900	PASS
443	442	17	23	21.3	23391	PASS

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	210	55.15	350	66.10	151	78.10	8866
37.00	429	56.10	4003	67.20	79	79.10	8509
38.15	1653	57.10	8641	68.05	1386	80.10	5936
39.20	12514	58.10	529	69.10	126248	81.10	9049
45.10	201	59.00	270	70.05	1309	82.05	2624
47.00	290	60.00	255	71.10	380	83.10	1312
48.10	298	61.15	1456	73.20	614	85.10	1456
50.20	26986	62.10	1348	74.15	9160	86.10	1019
51.20	122464	63.10	5124	75.10	18045	87.05	279
52.05	5428	64.10	367	76.10	5867	88.00	67
53.30	353	65.15	2495	77.10	130224	91.00	1499

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1778	104.10	4043	117.05	24329	129.10	45824
93.10	11195	105.10	2637	118.10	2484	130.10	4333
94.05	796	106.10	1606	119.30	633	131.05	802
96.15	444	107.10	39535	120.00	516	132.00	443
97.00	356	108.10	7083	120.90	341	132.95	20
98.10	8234	110.05	62822	122.15	2260	134.10	1009
99.10	8033	111.05	10437	123.00	3340	135.05	3109
100.00	1088	112.00	1474	124.05	1691	136.10	1640
101.10	3959	112.90	548	124.95	1245	137.05	1963
102.00	293	114.20	330	127.10	124929	138.20	550
102.95	1688	116.00	1577	128.05	10525	139.15	167

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.15	604	151.05	1044	161.90	1234	173.00	1590
141.05	6776	152.10	503	163.20	593	174.00	2068
142.10	2141	153.00	317	164.10	140	175.10	4703
143.00	1192	154.10	1598	165.10	1561	176.05	1070
144.10	380	155.05	2362	166.00	1917	177.00	1858
145.00	306	156.05	5423	167.00	11109	178.00	688
146.10	728	157.00	636	167.95	4042	179.00	7895
146.95	3115	158.00	2162	169.00	824	180.05	5817
148.10	7371	159.00	501	170.10	613	181.05	2633
149.00	777	160.00	1420	171.00	459	182.20	494
150.00	563	161.00	1970	172.00	1096	182.80	250

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.80	674	194.05	43	207.10	6769	220.20	283
185.10	3378	195.95	5888	208.05	1799	220.95	6859
186.05	29588	197.00	1177	208.90	580	222.95	3783
187.10	7952	198.00	213632	210.90	2186	224.10	29370
188.10	1441	199.05	13063	211.70	404	225.00	6076
189.10	2390	200.00	1368	213.10	73	226.05	606
189.80	260	201.50	1390	215.00	1099	227.00	11621
190.10	225	202.95	1552	215.90	1813	228.10	1306
191.00	779	204.10	7637	217.00	14150	229.00	2225
192.00	2879	205.00	11149	217.90	1245	229.90	416
193.00	2284	206.10	49977	219.00	547	231.00	882

Scan 193 (3.211 min): B7650.D (-192)

ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
232.10	230	243.20	1780	255.95	16465	270.30	169
232.80	297	244.00	19572	257.05	1108	271.90	295
234.00	758	245.05	3180	257.95	6673	272.90	3620
235.10	620	246.00	5122	259.00	986	274.00	7502
235.90	613	247.15	572	259.90	202	275.00	44453
237.10	1005	248.90	504	260.90	437	276.00	6102
238.00	222	251.00	387	263.20	217	277.00	3783
239.00	422	252.20	240	265.00	2461	278.10	887
240.00	561	252.90	40	265.90	521	279.10	195
241.00	528	254.00	639	266.80	170	281.20	412
242.05	1816	255.00	111475	269.90	200	282.00	252

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.00	810	303.80	610	322.00	255	336.00	289
284.00	279	308.10	223	323.10	3647	339.00	165
285.00	705	308.90	256	324.00	879	341.10	673
290.10	141	313.10	159	326.90	828	345.95	677
291.80	164	314.00	938	328.00	466	351.90	1282
292.20	295	314.90	1718	328.90	292	353.00	1302
293.10	900	315.90	811	331.90	376	354.10	1558
296.00	15503	317.00	203	332.40	260	356.10	193
297.00	2561	318.30	232	333.00	411	357.10	177
302.00	200	320.30	188	334.10	2325	358.80	154
303.00	1936	321.00	442	335.00	787	365.00	6739

Scan 193 (3.211 min): B7650.D (-192)
ABN005-15,DFTPP022015
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.90	1150	403.00	1515	444.00	1463		
369.80	225	404.10	633				
370.60	383	404.90	164				
372.00	2246	414.90	157				
372.90	447	420.90	545				
383.20	902	421.90	733				
389.80	313	423.00	5686				
390.00	304	424.00	1645				
390.90	269	440.85	18134				
400.90	242	442.00	109900				
401.90	1157	443.00	23391				

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA150220-03
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7674.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		1.00	0.185
Pyridine	ND		1.00	0.154
Benzaldehyde	ND		1.00	0.237
Phenol	ND		1.00	0.113
Aniline	ND		1.00	0.200
Bis(2-chloroethyl) ether	ND		1.00	0.131
2-Chlorophenol	ND		1.00	0.144
1,3-Dichlorobenzene	ND		1.00	0.112
1,4-Dichlorobenzene	ND		1.00	0.133
Benzyl alcohol	ND		1.00	0.128
1,2-Dichlorobenzene	ND		1.00	0.153
2-Methylphenol	ND		1.00	0.294
Bis(2-chloroisopropyl) ether	ND		1.00	0.127
4-Methylphenol **	ND		1.00	0.203
N-Nitrosodi-n-propylamine	ND		1.00	0.186
Acetophenone	ND		1.00	0.144
3-Methylphenol	ND		1.00	0.203
Hexachloroethane	ND		1.00	0.150
Nitrobenzene	ND		1.00	0.124
Isophorone	ND		1.00	0.127
2-Nitrophenol	ND		1.00	0.205
2,4-Dimethylphenol	ND		1.00	0.144
Bis(2-chloroethoxy) methane	ND		1.00	0.113
Benzoic acid	ND		1.00	0.184
2,4-Dimethylaniline	ND		1.00	0.221
2,4-Dichlorophenol	ND		1.00	0.136
1,2,4-Trichlorobenzene	ND		1.00	0.221
Naphthalene	ND		1.00	0.123
4-Chloroaniline	ND		1.00	0.135
4-Aminotoluene	ND		1.00	0.158
Hexachlorobutadiene	ND		1.00	0.167
Caprolactam	ND		1.00	0.232
2-Aminotoluene	ND		1.00	0.158
4-Chloro-3-methylphenol	ND		1.00	0.162
2-Methylnaphthalene	ND		1.00	0.112
Hexachlorocyclopentadiene	ND		1.00	0.158
2,4,6-Trichlorophenol	ND		1.00	0.118
2,4,5-Trichlorophenol	ND		1.00	0.306
1,1'-Biphenyl	ND		1.00	0.105
2-Chloronaphthalene	ND		1.00	0.256
2-Nitroaniline	ND		1.00	0.202
Dimethyl phthalate	ND		1.00	0.131

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA150220-03
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7674.D

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.207
Acenaphthylene	ND		1.00	0.107
3-Nitroaniline	ND		1.00	0.156
Acenaphthene	ND		1.00	0.122
2,4-Dinitrophenol	ND		1.00	0.413
4-Nitrophenol	ND		1.00	0.157
2,4-Dinitrotoluene	ND		1.00	0.164
Dibenzofuran	ND		1.00	0.123
Diethyl phthalate	ND		1.00	0.127
Fluorene	ND		1.00	0.176
4-Chlorophenyl phenyl ether	ND		1.00	0.133
4-Nitroaniline	ND		1.00	0.193
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.222
2,3,4,6-Tetrachlorophenol	ND		1.00	0.231
4,6-Dinitro-2-methylphenol	ND		1.00	0.194
N-Nitrosodiphenylamine	ND		1.00	0.117
1,2-Diphenylhydrazine	ND		1.00	0.106
4-Bromophenyl phenyl ether	ND		1.00	0.182
Hexachlorobenzene	ND		1.00	0.188
Atrazine	ND		1.00	0.259
Pentachlorophenol	ND		1.00	0.160
Phenanthrene	ND		1.00	0.111
Anthracene	ND		1.00	0.155
Carbazole	ND		1.00	0.119
Di-n-butyl phthalate	ND		1.00	0.177
Fluoranthene	ND		1.00	0.118
Benzidine	ND		1.00	0.192
Pyrene	ND		1.00	0.142
3,3'-Dimethylbenzidine	ND		1.00	0.254
Butyl benzyl phthalate	ND		1.00	0.245
3,3'-Dichlorobenzidine	ND		1.00	0.197
Benzo[a]anthracene	ND		1.00	0.109
Chrysene	ND		1.00	0.149
Bis(2-ethylhexyl) phthalate	ND		1.00	0.429
Di-n-octyl phthalate	ND		1.00	0.175
Benzo[b]fluoranthene	ND		1.00	0.220
Benzo[k]fluoranthene	ND		1.00	0.289
Benzo[a]pyrene	ND		1.00	0.176
Indeno[1,2,3-cd]pyrene	ND		1.00	0.238
Dibenz[a,h]anthracene	ND		1.00	0.217
Benzo[g,h,i]perylene	ND		1.00	0.183

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: TCLP150219
Client ID: .
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/20/2015
Data file: B7675.D

GC/MS Column: DB-5
Sample wt/vol: 50.00ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00308
1,4-Dichlorobenzene	ND		0.020	0.00266
2-Methylphenol	ND		0.020	0.00588
4-Methylphenol	ND		0.020	0.00406
3-Methylphenol	ND		0.020	0.00406
Hexachloroethane	ND		0.020	0.003
Nitrobenzene	ND		0.020	0.00248
Hexachlorobutadiene	ND		0.020	0.00334
2,4,6-Trichlorophenol	ND		0.020	0.00236
2,4,5-Trichlorophenol	ND		0.020	0.00612
2,4-Dinitrotoluene	ND		0.020	0.00328
Hexachlorobenzene	ND		0.020	0.00376
Pentachlorophenol	ND		0.020	0.0032

Total Target Compounds (13): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7674.D
Acq On : 20 Feb 2015 16:32
Operator : DANA
Sample : .,BLKA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 09:14:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.62	152	231862	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	888279	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	463551	40.00	UG	0.00
66) Phenanthrene-d10	6.34	188	690950	40.00	UG	0.00
82) Chrysene-d12	7.94	240	555163	40.00	UG	0.00
92) Perylene-d12	9.19	264	319451	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	174496	21.18	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 21.18%			
6) Phenol-d5	3.38	99	128151	12.59	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 12.59%			
24) Nitrobenzene-d5	3.96	82	217710	22.95	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 45.90%			
47) 2-Fluorobiphenyl	5.01	172	409450	25.95	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.90%			
70) 2,4,6-Tribromophenol	5.95	330	173339	56.35	UG	0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 56.35%			
84) Terphenyl-d14	7.24	244	508879	33.67	UG	0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 67.34%			

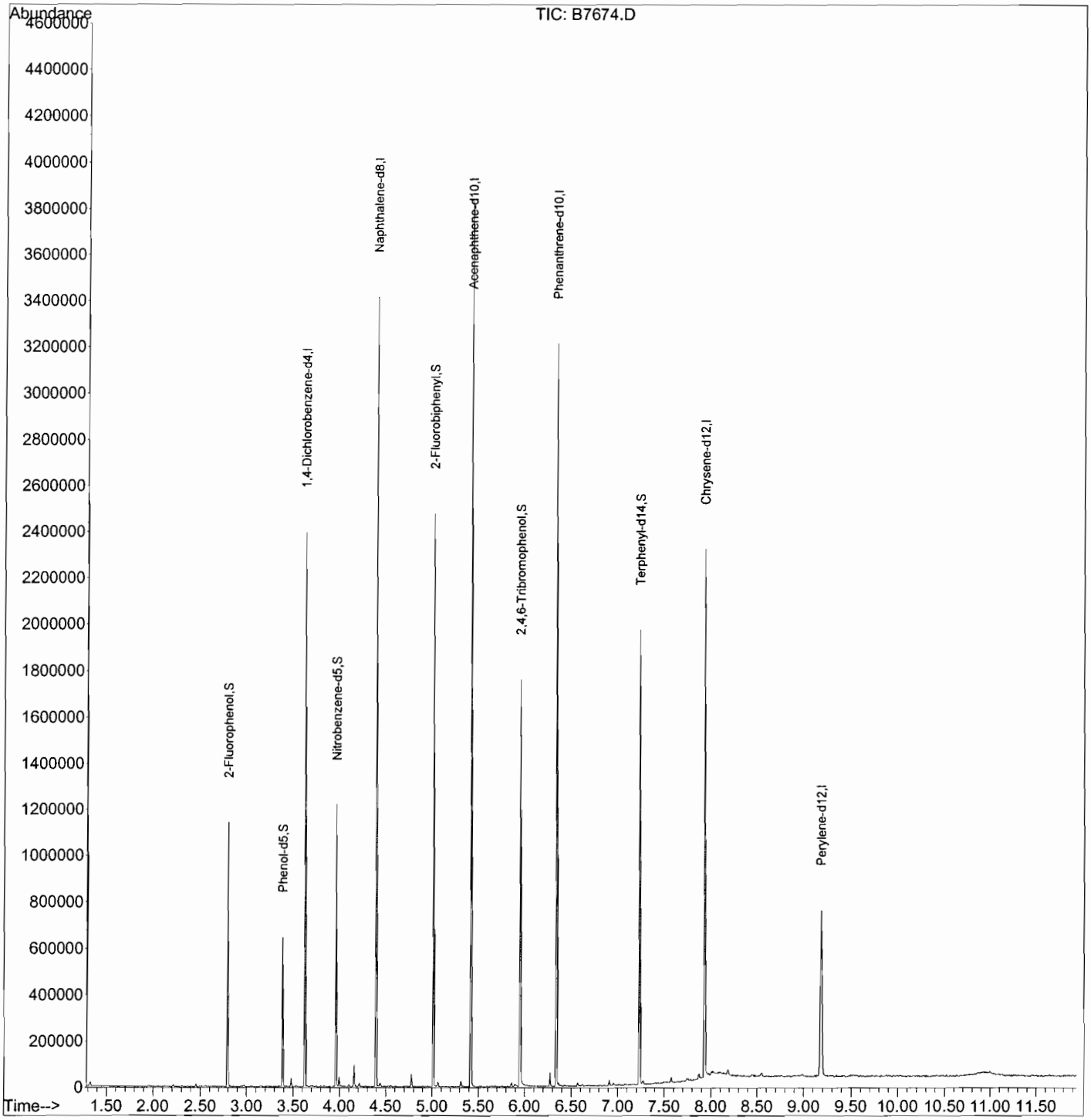
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7674.D
Acq On : 20 Feb 2015 16:32
Operator : DANA
Sample : .,BLKA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 09:14:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7675.D
Acq On : 20 Feb 2015 16:55
Operator : DANA
Sample : .,TCLP150219,T,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 23 09:14:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	156420	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	607604	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	336371	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	485182	40.00	UG	-0.01
82) Chrysene-d12	7.89	240	390488	40.00	UG	-0.04
92) Perylene-d12	9.15	264	226831	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	115422	20.77	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 20.77%			
6) Phenol-d5	3.38	99	86698	12.62	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 12.62%			
24) Nitrobenzene-d5	3.96	82	149825	23.09	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 46.18%			
47) 2-Fluorobiphenyl	5.01	172	281743	24.61	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 49.22%			
70) 2,4,6-Tribromophenol	5.95	330	125016	57.88	UG	-0.01
Spiked Amount 100.000	Range 22 - 115		Recovery = 57.88%			
84) Terphenyl-d14	7.21	244	353511	33.26	UG	-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 66.52%			

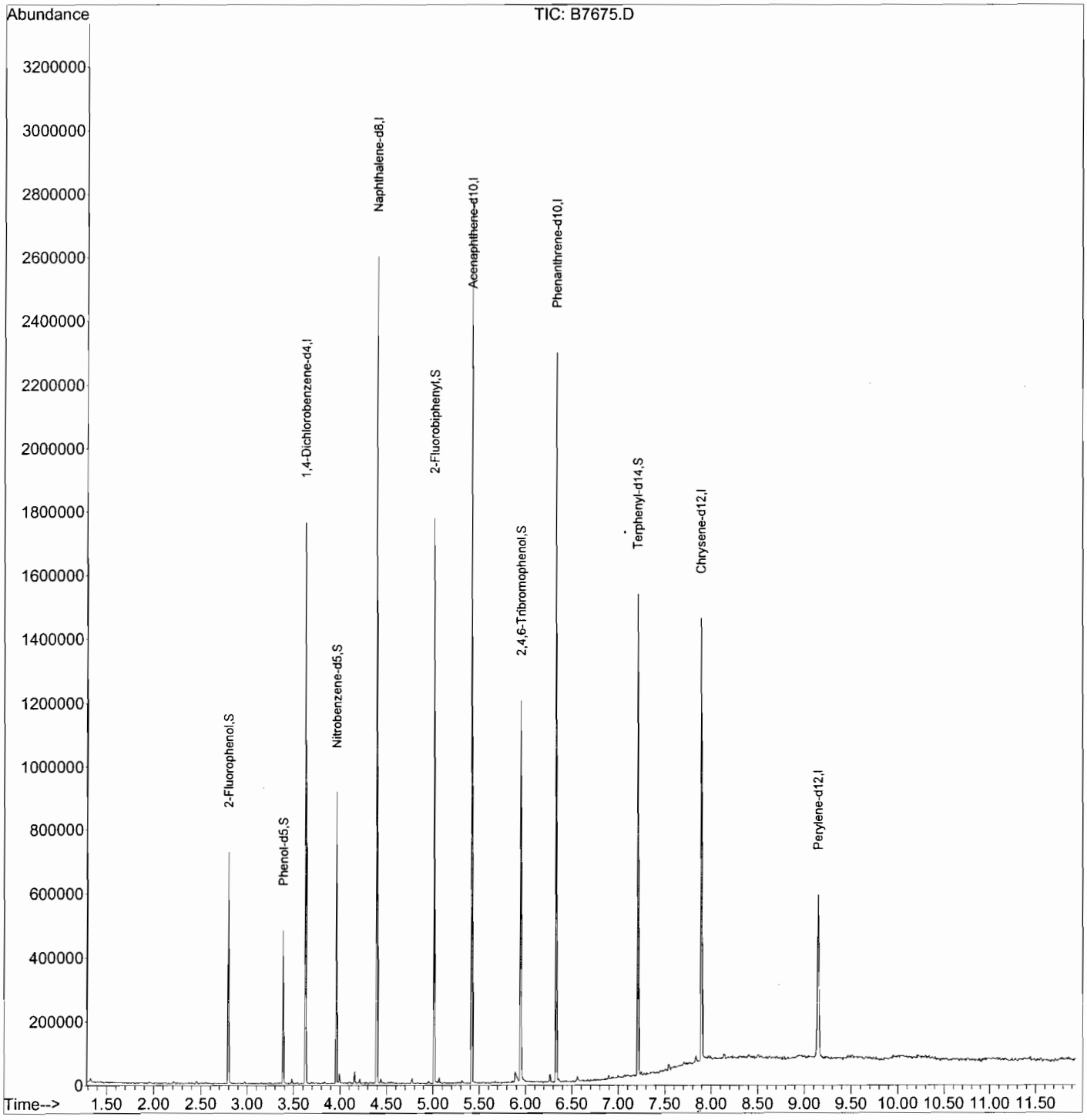
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7675.D
Acq On : 20 Feb 2015 16:55
Operator : DANA
Sample : .,TCLP150219,T,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 23 09:14:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	129033m	40.00	UG	0.00
23) Naphthalene-d8	4.39	136	554614	40.00	UG	0.00
43) Acenaphthene-d10	5.42	164	303475	40.00	UG	0.00
66) Phenanthrene-d10	6.33	188	444364	40.00	UG	-0.01
82) Chrysene-d12	7.90	240	340489	40.00	UG	-0.03
92) Perylene-d12	9.14	264	211186m	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.80	112	103580	22.59	UG	0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 22.59%			
6) Phenol-d5	3.38	99	78825	13.91	UG	-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 13.91%			
24) Nitrobenzene-d5	3.96	82	139879	23.61	UG	0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 47.22%			
47) 2-Fluorobiphenyl	5.01	172	265643	25.72	UG	0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 51.44%			
70) 2,4,6-Tribromophenol	5.95	330	141237	71.39	UG	0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 71.39%			
84) Terphenyl-d14	7.21	244	365068	39.39	UG	-0.03
Spiked Amount 50.000	Range 23 - 124		Recovery = 78.78%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.64	74	40737m	12.05	UG	
3) Pyridine	1.71	52	47735m	10.62	UG	
5) Benzaldehyde	3.35	106	9055m	8.40	UG	
7) Phenol	3.40	94	75307m	12.25	UG	
8) Aniline	3.43	66	61493m	21.30	UG	
9) Bis(2-chloroethyl) ether	3.45	63	76772m	19.88	UG	
10) 2-Chlorophenol	3.51	128	76604	15.16	UG	91
11) 1,3-Dichlorobenzene	3.61	146	91950m	16.94	UG	
12) 1,4-Dichlorobenzene	3.64	146	90353m	16.58	UG	
13) Benzyl alcohol	3.70	108	42894m	13.16	UG	
14) 1,2-Dichlorobenzene	3.75	146	87907	16.98	UG	91
15) 2-Methylphenol	3.76	108	58847m	13.39	UG	
16) Bis(2-chloroisopropyl) eth	3.80	45	161518	19.02	UG	87
17) 4-Methylphenol	3.85	108	59272	13.85	UG	96
18) N-Nitrosodi-n-propylamine	3.88	70	74066m	19.49	UG	
19) Acetophenone	3.87	105	127475	20.46	UG	80
20) 3-Methylphenol	3.85	108	59272	13.85	UG	96
21) Hexachloroethane	3.95	117	33880	16.07	UG	82
25) Nitrobenzene	3.97	77	91415	16.08	UG	94
26) Isophorone	4.11	82	178793	16.91	UG	86
27) 2-Nitrophenol	4.17	139	37174	14.79	UG	54

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	91872	17.35	UG		85
29) Bis(2-chloroethoxy) methan	4.22	93	104319	16.10	UG		96
30) Benzoic acid	4.19	105	32858m	14.27	UG		
31) 2,4-Dimethylaniline	4.29	121	97001	16.69	UG	#	33
32) 2,4-Dichlorophenol	4.30	162	73220	17.21	UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	75351	15.97	UG		93
34) Naphthalene	4.40	128	247698	15.86	UG	#	98
35) 4-Chloroaniline	4.42	127	131582	16.17	UG		94
36) 4-Aminotoluene	3.89	106	149154	18.07	UG	#	53
37) Hexachlorobutadiene	4.51	225	48181	17.79	UG		96
38) Caprolactam	4.59	55	32021m	13.10	UG		
39) 2-Aminotoluene	3.89	106	149154	18.07	UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	74626	16.61	UG		87
41) 2-Methylnaphthalene	4.81	142	174200	18.21	UG		100
44) Hexachlorocyclopentadiene	4.94	237	34051m	12.27	UG		
45) 2,4,6-Trichlorophenol	4.97	196	53232	18.36	UG		99
46) 2,4,5-Trichlorophenol	4.99	196	61425	21.00	UG		93
48) 1,1'-Biphenyl	5.07	154	209293	18.51	UG		98
49) 2-Chloronaphthalene	5.09	162	156437	18.06	UG		90
50) 2-Nitroaniline	5.14	65	52666	21.09	UG		71
51) Dimethyl phthalate	5.24	163	180041	18.21	UG		96
52) 2,6-Dinitrotoluene	5.29	165	31346	18.15	UG		60
53) Acenaphthylene	5.33	152	240393	16.84	UG		98
54) 3-Nitroaniline	5.37	138	43319	20.28	UG		70
55) Acenaphthene	5.44	153	155517	17.68	UG		90
56) 2,4-Dinitrophenol	5.43	184	6761	16.23	UG	#	100
57) 4-Nitrophenol	5.43	65	26001m	15.05	UG		
58) 2,4-Dinitrotoluene	5.52	165	53814	23.53	UG		98
59) Dibenzofuran	5.54	168	276737	20.89	UG		85
60) Diethyl phthalate	5.68	149	257472	24.27	UG		96
61) Fluorene	5.78	166	215306	19.87	UG		95
62) 4-Chlorophenyl phenyl ethe	5.76	204	108891	21.15	UG		85
63) 4-Nitroaniline	5.77	138	64074	26.53	UG		74
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	82066	18.65	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	59651	20.59	UG		94
67) 4,6-Dinitro-2-methylphenol	5.81	198	20968	23.75	UG	#	27
68) N-Nitrosodiphenylamine	5.83	169	191984	27.51	UG		93
69) 1,2-Diphenylhydrazine	5.86	77	245164	20.69	UG		85
71) 4-Bromophenyl phenyl ether	6.07	248	65608	23.13	UG		83
72) Hexachlorobenzene	6.17	284	73781	21.63	UG		86
73) Atrazine	6.15	200	69730	27.54	UG		90
74) Pentachlorophenol	6.26	266	40322	25.41	UG	#	39
75) Phenanthrene	6.35	178	283104	22.39	UG		95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

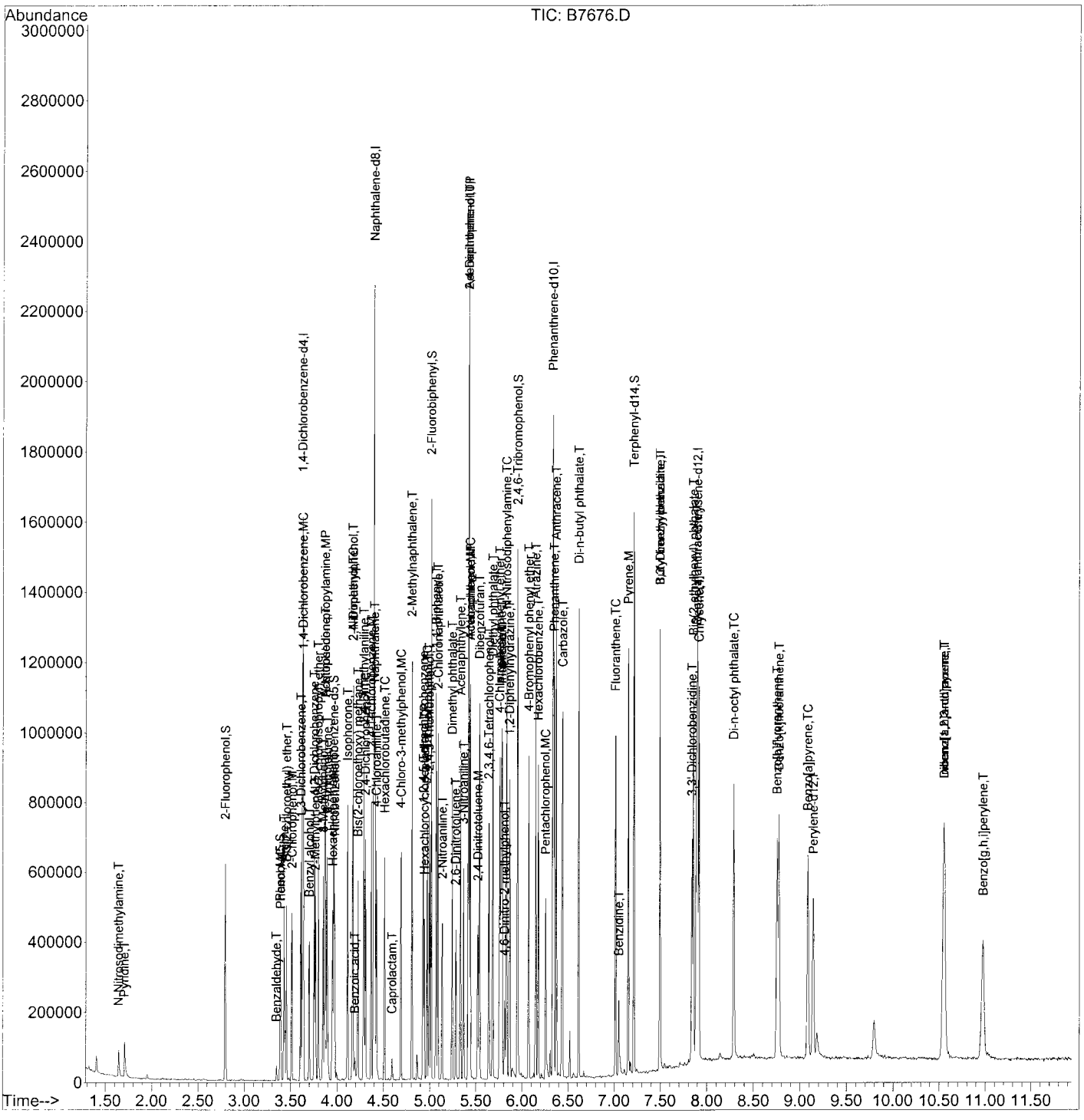
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	292817	24.03	UG	98
77) Carbazole	6.44	167	295869	26.64	UG	95
78) Di-n-butyl phthalate	6.62	149	387307	26.31	UG	98
79) Fluoranthene	7.02	202	294564	24.19	UG	98
80) Benzidine	7.05	184	65411	11.74	UG	95
83) Pyrene	7.15	202	306482	26.15	UG	98
85) 3,3'-Dimethylbenzidine	7.49	212	61716	11.09	UG	88
86) Butyl benzyl phthalate	7.49	149	145389	26.35	UG	83
87) 3,3'-Dichlorobenzidine	7.84	252	100849	30.26	UG	92
88) Benzo[a]anthracene	7.89	228	265564	27.00	UG	95
89) Chrysene	7.91	228	259146	29.38	UG	97
90) Bis(2-ethylhexyl) phthalat	7.86	149	204208	27.06	UG	96
93) Di-n-octyl phthalate	8.29	149	320507	30.87	UG	90
94) Benzo[b]fluoranthene	8.75	252	298119	35.27	UG	83
95) Benzo[k]fluoranthene	8.77	252	247443	35.55	UG	90
96) Benzo[a]pyrene	9.08	252	249856m	35.45	UG	
97) Indeno[1,2,3-cd]pyrene	10.55	276	309640m	36.07	UG	
98) Dibenz[a,h]anthracene	10.55	278	259376m	36.85	UG	
99) Benzo[g,h,i]perylene	10.98	276	261844m	35.10	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7676.D
Acq On : 20 Feb 2015 17:12
Operator : DANA
Sample : .,LCSA150220-03,A,1000ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 23 09:14:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.63	152	122417	40.00	UG		0.00
23) Naphthalene-d8	4.39	136	472402	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	259617	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	380833	40.00	UG		-0.01
82) Chrysene-d12	7.91	240	283838	40.00	UG		-0.02
92) Perylene-d12	9.15	264	167458	40.00	UG		-0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	126138	29.00	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 29.00%				
6) Phenol-d5	3.38	99	108997	20.27	UG		-0.01
Spiked Amount 100.000	Range 10 - 102		Recovery = 20.27%				
24) Nitrobenzene-d5	3.96	82	116611	23.11	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 46.22%				
47) 2-Fluorobiphenyl	5.01	172	218985	24.78	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 49.56%				
70) 2,4,6-Tribromophenol	5.95	330	116583	68.76	UG		0.00
Spiked Amount 100.000	Range 22 - 115		Recovery = 68.76%				
84) Terphenyl-d14	7.22	244	310698	40.21	UG		-0.02
Spiked Amount 50.000	Range 23 - 124		Recovery = 80.42%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.64	74	65942m	20.57	UG		
3) Pyridine	1.70	52	69407m	16.28	UG		
5) Benzaldehyde	3.35	106	9766m	9.55	UG		
7) Phenol	3.40	94	104808m	17.96	UG		
8) Aniline	3.43	66	53252	19.44	UG		73
9) Bis(2-chloroethyl) ether	3.45	63	68584	18.72	UG		71
10) 2-Chlorophenol	3.51	128	74186	15.48	UG		91
11) 1,3-Dichlorobenzene	3.61	146	88496	17.18	UG	#	93
12) 1,4-Dichlorobenzene	3.64	146	84048	16.26	UG		52
13) Benzyl alcohol	3.70	108	54738	17.71	UG		93
14) 1,2-Dichlorobenzene	3.75	146	84446	17.19	UG		92
15) 2-Methylphenol	3.76	108	70107	16.81	UG		98
16) Bis(2-chloroisopropyl) eth	3.80	45	153052	19.00	UG		87
17) 4-Methylphenol	3.85	108	73702	18.15	UG		100
18) N-Nitrosodi-n-propylamine	3.88	70	72860	20.20	UG		79
19) Acetophenone	3.87	105	129869	21.97	UG		78
20) 3-Methylphenol	3.85	108	73702	18.15	UG		100
21) Hexachloroethane	3.95	117	33197	16.60	UG		86
25) Nitrobenzene	3.97	77	92476	19.10	UG		91
26) Isophorone	4.11	82	177127	19.67	UG		88
27) 2-Nitrophenol	4.17	139	37596	17.56	UG		60

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	86939	19.28	UG		90
29) Bis(2-chloroethoxy) methan	4.22	93	102648	18.60	UG		96
30) Benzoic acid	4.20	105	38531m	19.65	UG		
31) 2,4-Dimethylaniline	4.29	121	98644	19.92	UG	#	33
32) 2,4-Dichlorophenol	4.30	162	68326	18.85	UG		95
33) 1,2,4-Trichlorobenzene	4.37	180	74489	18.53	UG		92
34) Naphthalene	4.41	128	244531	18.38	UG	#	60
35) 4-Chloroaniline	4.42	127	137093	19.78	UG		56
36) 4-Aminotoluene	3.89	106	156478	22.25	UG	#	53
37) Hexachlorobutadiene	4.51	225	44901	19.46	UG		99
38) Caprolactam	4.59	55	39268m	18.86	UG		
39) 2-Aminotoluene	3.89	106	156478	22.25	UG	#	55
40) 4-Chloro-3-methylphenol	4.69	107	77036	20.13	UG		84
41) 2-Methylnaphthalene	4.81	142	176591	21.68	UG		99
44) Hexachlorocyclopentadiene	4.94	237	34800	14.66	UG	#	40
45) 2,4,6-Trichlorophenol	4.97	196	50922	20.53	UG		98
46) 2,4,5-Trichlorophenol	4.99	196	59950	23.96	UG		94
48) 1,1'-Biphenyl	5.07	154	216335	22.36	UG		98
49) 2-Chloronaphthalene	5.09	162	155235	20.94	UG		89
50) 2-Nitroaniline	5.14	65	54771	25.64	UG		74
51) Dimethyl phthalate	5.24	163	178595	21.11	UG		96
52) 2,6-Dinitrotoluene	5.29	165	34799	23.55	UG		62
53) Acenaphthylene	5.33	152	253938	20.79	UG		97
54) 3-Nitroaniline	5.37	138	49049	26.85	UG		75
55) Acenaphthene	5.44	153	155300	20.64	UG		93
56) 2,4-Dinitrophenol	5.43	184	6516	18.28	UG	#	100
57) 4-Nitrophenol	5.43	65	34970m	23.66	UG		
58) 2,4-Dinitrotoluene	5.52	165	52974	27.08	UG		84
59) Dibenzofuran	5.54	168	286579	25.28	UG		85
60) Diethyl phthalate	5.68	149	247635	27.29	UG		95
61) Fluorene	5.78	166	230292	24.84	UG		98
62) 4-Chlorophenyl phenyl ethe	5.76	204	111650	25.35	UG		86
63) 4-Nitroaniline	5.77	138	66674	32.27	UG		78
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	80069	21.27	UG		67
65) 2,3,4,6-Tetrachlorophenol	5.64	232	57017	23.01	UG		90
67) 4,6-Dinitro-2-methylphenol	5.81	198	19587	25.89	UG	#	1
68) N-Nitrosodiphenylamine	5.83	169	186979	31.26	UG		94
69) 1,2-Diphenylhydrazine	5.86	77	262072	25.81	UG		86
71) 4-Bromophenyl phenyl ether	6.07	248	66379	27.31	UG		85
72) Hexachlorobenzene	6.18	284	73372	25.10	UG		85
73) Atrazine	6.15	200	70442	32.46	UG		93
74) Pentachlorophenol	6.26	266	39198	28.82	UG	#	46
75) Phenanthrene	6.35	178	283143	26.13	UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

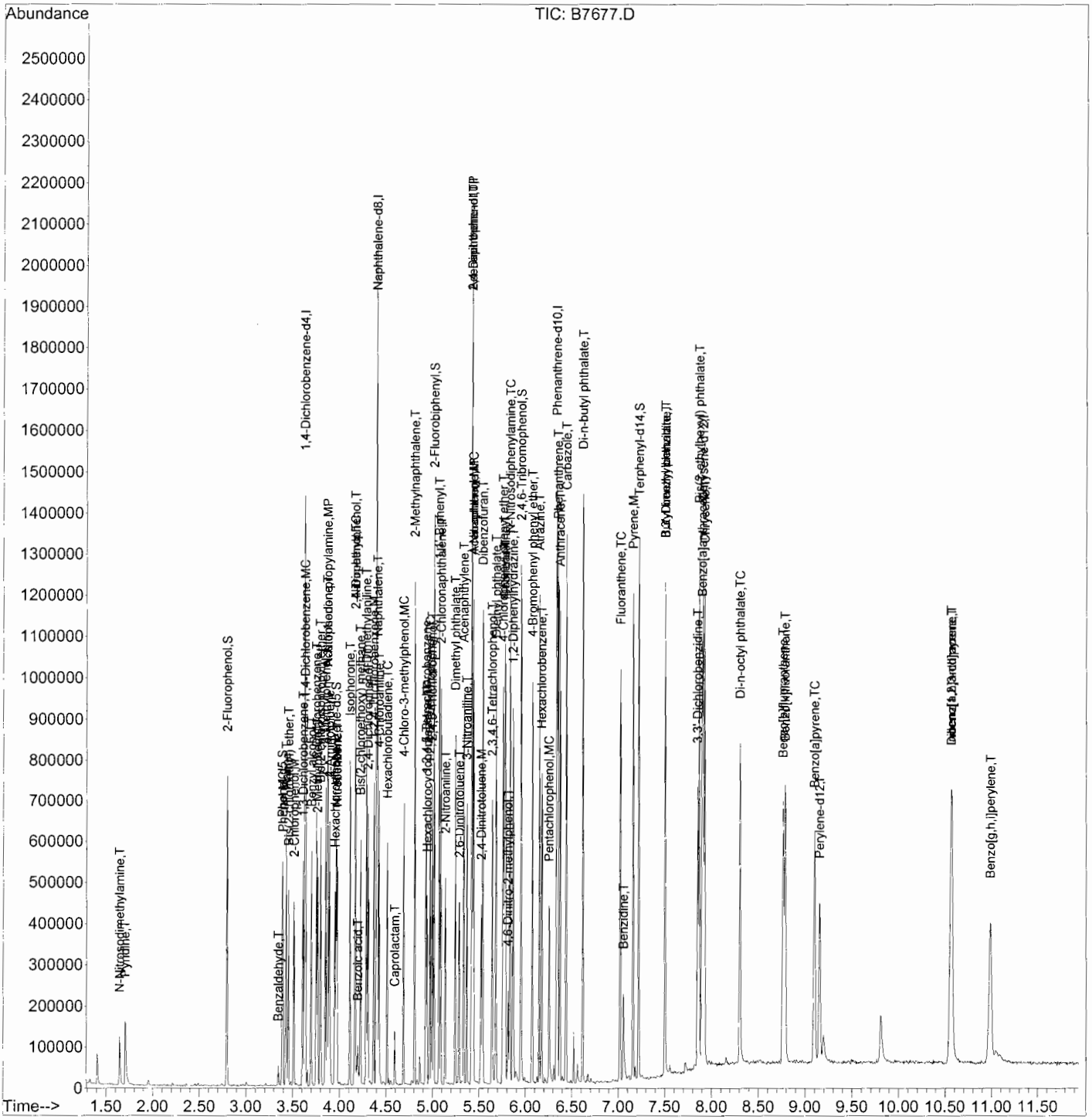
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	284101	27.21	UG	98
77) Carbazole	6.44	167	293079	30.79	UG	96
78) Di-n-butyl phthalate	6.62	149	393788	31.21	UG	97
79) Fluoranthene	7.02	202	302164	28.96	UG	98
80) Benzidine	7.05	184	68758	14.39	UG	96
83) Pyrene	7.16	202	315183	32.26	UG	97
85) 3,3'-Dimethylbenzidine	7.50	212	58180	12.54	UG	88
86) Butyl benzyl phthalate	7.50	149	149493	32.50	UG	84
87) 3,3'-Dichlorobenzidine	7.85	252	103057	37.09	UG	92
88) Benzo[a]anthracene	7.90	228	276527	33.72	UG	96
89) Chrysene	7.93	228	255128	34.69	UG	98
90) Bis(2-ethylhexyl) phthalat	7.87	149	207338	32.96	UG	95
93) Di-n-octyl phthalate	8.30	149	320460	38.93	UG	90
94) Benzo[b]fluoranthene	8.76	252	275873	41.16	UG	84
95) Benzo[k]fluoranthene	8.79	252	274531	49.75	UG	88
96) Benzo[a]pyrene	9.10	252	264490	47.33	UG	87
97) Indeno[1,2,3-cd]pyrene	10.56	276	322581	47.38	UG	84
98) Dibenz[a,h]anthracene	10.57	278	274094	49.11	UG	91
99) Benzo[g,h,i]perylene	10.99	276	276448	46.74	UG	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7677.D
Acq On : 20 Feb 2015 17:29
Operator : DANA
Sample : .,E15-01273-001MS,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 23 09:14:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.62	152	140801	40.00	UG		0.00
23) Naphthalene-d8	4.39	136	545232	40.00	UG		0.00
43) Acenaphthene-d10	5.42	164	294751	40.00	UG		0.00
66) Phenanthrene-d10	6.33	188	433750	40.00	UG		-0.01
82) Chrysene-d12	7.93	240	329861	40.00	UG		0.00
92) Perylene-d12	9.19	264	189240	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.80	112	141128	28.21	UG		0.00
Spiked Amount 100.000	Range 10 - 100		Recovery = 28.21%				
6) Phenol-d5	3.39	99	133977	21.67	UG		0.00
Spiked Amount 100.000	Range 10 - 102		Recovery = 21.67%				
24) Nitrobenzene-d5	3.96	82	131695	22.61	UG		0.00
Spiked Amount 50.000	Range 27 - 102		Recovery = 45.22%				
47) 2-Fluorobiphenyl	5.01	172	240289	23.95	UG		0.00
Spiked Amount 50.000	Range 26 - 101		Recovery = 47.90%				
70) 2,4,6-Tribromophenol	5.94	330	118945	61.60	UG		-0.02
Spiked Amount 100.000	Range 22 - 115		Recovery = 61.60%				
84) Terphenyl-d14	7.23	244	324908	36.19	UG		0.00
Spiked Amount 50.000	Range 23 - 124		Recovery = 72.38%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.65	74	75327m	20.43	UG		
3) Pyridine	1.70	52	78323m	15.97	UG		
5) Benzaldehyde	3.35	106	11973m	10.18	UG		
7) Phenol	3.40	94	118768m	17.70	UG		
8) Aniline	3.43	66	60788	19.30	UG		71
9) Bis(2-chloroethyl) ether	3.45	63	76763	18.22	UG		74
10) 2-Chlorophenol	3.51	128	88232	16.01	UG		91
11) 1,3-Dichlorobenzene	3.61	146	104668	17.67	UG	#	92
12) 1,4-Dichlorobenzene	3.64	146	98794	16.61	UG		51
13) Benzyl alcohol	3.70	108	60126	16.91	UG		83
14) 1,2-Dichlorobenzene	3.75	146	100824	17.85	UG		90
15) 2-Methylphenol	3.77	108	81443	16.98	UG		98
16) Bis(2-chloroisopropyl) eth	3.80	45	180176	19.44	UG		86
17) 4-Methylphenol	3.85	108	85867	18.39	UG		99
18) N-Nitrosodi-n-propylamine	3.88	70	84350	20.34	UG		76
19) Acetophenone	3.87	105	144415	21.25	UG		76
20) 3-Methylphenol	3.85	108	85867	18.38	UG		99
21) Hexachloroethane	3.95	117	39227	17.05	UG		82
25) Nitrobenzene	3.97	77	106490	19.06	UG		93
26) Isophorone	4.11	82	200381	19.28	UG		86
27) 2-Nitrophenol	4.17	139	41959	16.98	UG		53

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
28) 2,4-Dimethylphenol	4.17	107	96347	18.51 UG		87
29) Bis(2-chloroethoxy) methan	4.22	93	116028	18.22 UG		97
30) Benzoic acid	4.20	105	36429m	16.09 UG		
31) 2,4-Dimethylaniline	4.29	121	110805	19.39 UG	#	33
32) 2,4-Dichlorophenol	4.30	162	77137	18.44 UG		94
33) 1,2,4-Trichlorobenzene	4.37	180	85572	18.45 UG		92
34) Naphthalene	4.41	128	276631	18.02 UG	#	99
35) 4-Chloroaniline	4.42	127	153955	19.25 UG		96
36) 4-Aminotoluene	3.89	106	177650	21.89 UG	#	53
37) Hexachlorobutadiene	4.51	225	51911	19.50 UG		98
38) Caprolactam	4.59	55	46447m	19.33 UG		
39) 2-Aminotoluene	3.89	106	177650	21.89 UG	#	54
40) 4-Chloro-3-methylphenol	4.69	107	86117	19.50 UG		86
41) 2-Methylnaphthalene	4.81	142	189965	20.20 UG		97
44) Hexachlorocyclopentadiene	4.94	237	38867	14.42 UG	#	37
45) 2,4,6-Trichlorophenol	4.97	196	54064	19.20 UG		94
46) 2,4,5-Trichlorophenol	4.99	196	65412	23.02 UG		93
48) 1,1'-Biphenyl	5.07	154	240132	21.86 UG		100
49) 2-Chloronaphthalene	5.09	162	175371	20.84 UG		88
50) 2-Nitroaniline	5.14	65	61198	25.23 UG		76
51) Dimethyl phthalate	5.24	163	192147	20.01 UG		96
52) 2,6-Dinitrotoluene	5.29	165	38997	23.25 UG		69
53) Acenaphthylene	5.33	152	270187	19.49 UG		97
54) 3-Nitroaniline	5.37	138	50322	24.26 UG		68
55) Acenaphthene	5.44	153	177723	20.81 UG		90
56) 2,4-Dinitrophenol	5.43	184	6170m	15.25 UG		
57) 4-Nitrophenol	5.43	65	34888m	20.79 UG		
58) 2,4-Dinitrotoluene	5.52	165	59002	26.56 UG		98
59) Dibenzofuran	5.54	168	313273	24.34 UG		85
60) Diethyl phthalate	5.68	149	260497	25.28 UG		94
61) Fluorene	5.78	166	248981	23.65 UG		99
62) 4-Chlorophenyl phenyl ethe	5.75	204	122523	24.50 UG		84
63) 4-Nitroaniline	5.77	138	69925	29.81 UG		79
64) 1,2,4,5-Tetrachlorobenzene	4.93	216	89653	20.98 UG		66
65) 2,3,4,6-Tetrachlorophenol	5.64	232	56039	19.92 UG		96
67) 4,6-Dinitro-2-methylphenol	5.80	198	23408m	27.16 UG		
68) N-Nitrosodiphenylamine	5.83	169	200207	29.39 UG		95
69) 1,2-Diphenylhydrazine	5.86	77	279596	24.18 UG		85
71) 4-Bromophenyl phenyl ether	6.07	248	68118	24.60 UG		79
72) Hexachlorobenzene	6.17	284	77274	23.21 UG		85
73) Atrazine	6.14	200	75075	30.38 UG		91
74) Pentachlorophenol	6.25	266	44180m	28.52 UG		
75) Phenanthrene	6.34	178	307374	24.91 UG		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration

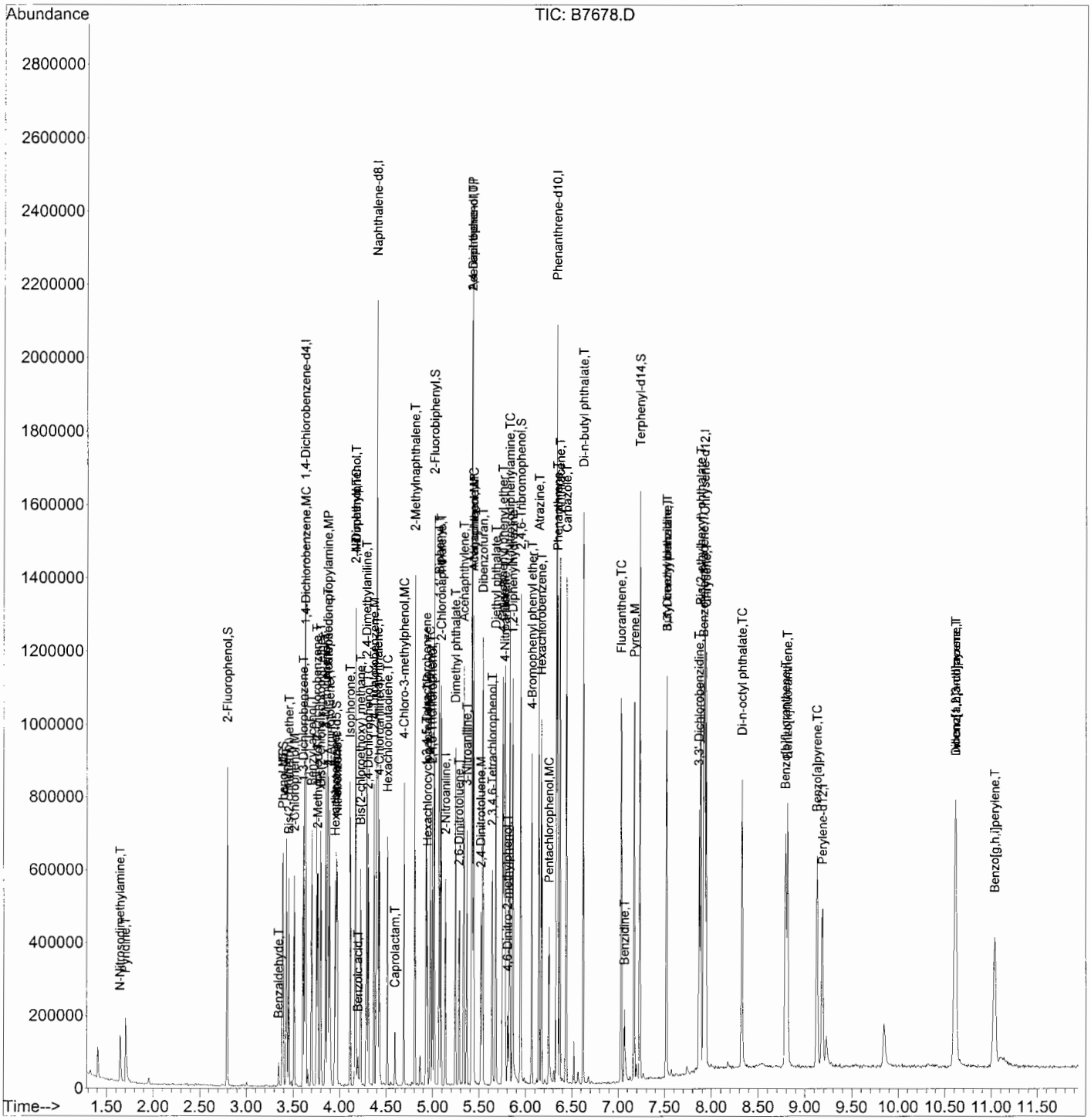
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Anthracene	6.37	178	308781	25.96	UG	98
77) Carbazole	6.44	167	304435	28.08	UG	96
78) Di-n-butyl phthalate	6.62	149	409836	28.52	UG	97
79) Fluoranthene	7.03	202	315652	26.56	UG	98
80) Benzidine	7.07	184	64489	11.85	UG	92
83) Pyrene	7.17	202	331054	29.15	UG	98
85) 3,3'-Dimethylbenzidine	7.51	212	58941	10.93	UG	89
86) Butyl benzyl phthalate	7.52	149	153588	28.73	UG	84
87) 3,3'-Dichlorobenzidine	7.87	252	105462	32.66	UG	97
88) Benzo[a]anthracene	7.91	228	287412	30.16	UG	96
89) Chrysene	7.94	228	268805	31.45	UG	97
90) Bis(2-ethylhexyl) phthalat	7.88	149	205184	28.07	UG	93
93) Di-n-octyl phthalate	8.33	149	330348	35.51	UG	92
94) Benzo[b]fluoranthene	8.79	252	288110	38.04	UG	83
95) Benzo[k]fluoranthene	8.81	252	281088	45.07	UG	89
96) Benzo[a]pyrene	9.13	252	274529	43.47	UG	87
97) Indeno[1,2,3-cd]pyrene	10.61	276	336870	43.79	UG	85
98) Dibenz[a,h]anthracene	10.61	278	288883	45.80	UG	92
99) Benzo[g,h,i]perylene	11.03	276	289420	43.30	UG	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : B7678.D
Acq On : 20 Feb 2015 17:46
Operator : DANA
Sample : .,E15-01273-001MSD,A,50.00ml,100,1
Misc : 150220-03,02/20/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 23 09:14:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\BW0215.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Feb 17 12:23:34 2015
Response via : Initial Calibration



TCLP
SEMI-VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC

EXTRACTION LOG - SEMIVOLATILES
(BN/AE/BNA)

Extraction Date/Time: 2/20/2015 11:05:00 AM **Tray ID:** **Batch ID: 150220-03**

Technician: F. Lowell **Matrix: Aqueous**

Sample	*V			%	Initial	Final	Surrogate (# : ul)		Spike (# : ul)		%		
ID #	/C	*F	Test	Moist	(ml)	(ml)	BN	Acid	BNA	Color	SED	Comments	Due
BLKA150220-03	BLK		TCLP BNA	-	1000	1.00	BNS025 : 50	AES026 : 50					
LCSA150220-03	LCS		TCLP BNA	-	1000	1.00	BNS025 : 50	AES026 : 50	BNA Matrix 105				
01273-001MS	MS		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50	BNA MATRIX 140				
01273-001MSD	MSD		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50	BNA MATRIX 140				
TCLP150219	-		TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50					
01273-001	1	1	TCLP BNA	-	50.00	1.00	BNS025 : 50	AES026 : 50				R-72; TCLP(2/19/15)	

Custody Transfer

-	Date	Time	Signature	Comments
Drop Off to Organic				
Receipt at Organic				

*V/C=Vap/Cell
*F=Funnel

Color: 1 = Clear; 2 = Light Yellow
3 = Yellow-Gold; 4 = Brown; 5 = Black

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 2/176/2015 **BATCH ID:** _____

INSTRUMENT: _____ **(yymmdd-##)** _____

TUNE FILE: DFTPP.U

METHOD 1 BW0215 P: 0.59

METHOD 2 BD0215 B: 1.08

METHOD 3 BSIM0215 D: 0

ANALYST: Dana

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
1	B7561	ABN005-14	DFTPP	1	1000	1	A				100	7:59		.
2	B7562	ABN011-14	ICC40ngBN/	1	1000	1	A				100			.
3	B7563	ABN008-15	ICC1ngBNA	1	1000	1	A				100			.
4	B7564	ABN009-15	ICC10ngBN/	1	1000	1	A				100			.
5	B7565	ABN010-15	ICC20ngBN/	1	1000	1	A				100			.
6	B7566	ABN012-15	ICC80ngBN/	1	1000	1	A				100			.
7	B7567	ABN013-15	ICC160ngBN	1	1000	1	A				100			.
8	B7568	ABN019-15	ICC160ngBN	1	1000	1	A				100			.
9	B7569	ABN018-15	ICC80ngBN/	1	1000	1	A				100			.
10	B7570	ABN017-15	ICC40ngBN/	1	1000	1	A				100			.
11	B7571	ABN016-15	ICC20ngBN/	1	1000	1	A				100			.
12	B7572	ABN015-15	ICC10ngBN/	1	1000	1	A				100			.
13	B7573	ABN014-15	ICV001BNA	1	1000	1	A				100			.
14	B7574	ABN027-15	0.5ng-SIM	1	1000	1	A				100			.
15	B7575	ABN025-15	0.1ng-SIM	1	1000	1	A				100			.
16	B7576	ABN026-15	0.2ng-SIM	1	1000	1	A				100			.
17	B7577	ABN028-15	001ng-SIM	1	1000	1	A				100			.
18	B7578	ABN029-15	002ng-SIM	1	1000	1	A				100			.
19	B7579	ABN004-15	ICV40ngBN/	1	1000	1	A				100			.
20	B7580	ABN031-15	ICC40ngBN/	1	1000	1	A				100			.
21	B7581	ABN030-15	0.5ng-SIM	1	1000	1	A				100	13:46		.

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE:	2/20/2015	**BATCH ID:**	**150220-01**
INSTRUMENT:	B	**(yymmdd-##)**	**150220-03**
TUNE FILE:	DFTPP.U		
METHOD 1	**BW0215**		
METHOD 2	BSIM0215		
METHOD 3	BD0215		
ANALYST:	Dana Initial		

	ISTD.Lot ECS SVI028
P(limit:2) =	1.19
B(limit:2) =	0.47
D(limit=20%) :	0

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
1	B7650	ABN005-15	FTPP0218	1	1000	1	A				100	10:04	OK	.
2	B7651	ABN004-15	CV040BNA	1	1000	1	A				100		OK	.
3	B7652	ABN031-15	CV040BNA	1	1000	1	A				100		OK	.
4	B7653	ABN030-15	CV000.5S	1	1000	1	Ia				100		OK	.
5	B7654	LKA150220-01		1	1000	1	Ia			2/20/15	100		OK	.
6	B7655	01267	2	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	FB-2-18-
7	B7656	01267	3	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-1/14.
8	B7657	01267	4	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-2/19.
9	B7658	01267	5	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-3R/17
10	B7659	01267	6	1	1000	1	Ia	2/18/15	2/19/15	2/20/15	100		OK	MW-4/9.2
11	B7660	01276	1	1	500	0.5	Ia	2/19/15	2/19/15	2/20/15	100		OK	TEMP-2
12	B7661	LKA150220-01		1	1000	1	A			2/20/15	100		OK	.
13	B7662	CSA150220-01		1	1000	1	A			2/20/15	100		OK	.
14	B7663	5-01276-001MS		1	500.0	0.5	A			2/20/15	100		OK	.
15	B7664	5-01276-001MSD		1	500.0	0.5	A			2/20/15	100		OK	.
16	B7665	01267	2	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	FB-2-18-
17	B7666	01267	3	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-1/14.
18	B7667	01267	4	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-2/19.
19	B7668	01267	5	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-3R/17
20	B7669	01267	6	1	1000	1	A	2/18/15	2/19/15	2/20/15	100		OK	MW-4/9.2
21	B7670	01276	1	1	500	0.5	A	2/19/15	2/19/15	2/20/15	100		OK	TEMP-2
22	B7671	01280	1	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		RR 20x	B-2/3/6.
23	B7672	01280	2	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		OK	B-5/8/4.
24	B7673	01280	3	1	1000	1	A	2/19/15	2/19/15	2/20/15	100		RR 20x	B-3/4/2.
25	B7674	LKA150220-03		1	1000	1	A			2/20/15	100		OK	.
26	B7675	**TCLP150219**		1	**50.00**	**1**	T			2/20/15	100		OK	.
27	B7676	CSA150220-03		1	1000	1	A			2/20/15	100		OK	.
28	B7677	**5-01273-001MS**		1	**50.00**	1	A			2/20/15	100		OK	.
29	B7678	**5-01273-001MSD**		1	**50.00**	**1**	A			2/20/15	100		OK	.
30	B7679	**01273**	**1**	1	**50.00**	**1**	T	2/18/15	2/19/15	2/20/15	100		OK	GPEC-WC1
31	B7680	01280	1DL	20	1000	1	A	2/19/15	2/19/15	2/20/15	100		OK	B-2/3/6.
32	B7681	01280	3DL	20	1000	1	A	2/19/15	2/19/15	2/20/15	100	18:37	OK	B-3/4/2.

DATE: 01/23/15	Conc :	Rec/Prep		ABN008-15	ABN009-15	ABN010-15	ABN011-15	ABN012-15	ABN013-15
BNAMIX1 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-13	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-16	50ul	50ul	50ul	50ul	50ul	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Nov-16	50ul	50ul	50ul	50ul	50ul	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-16	20ul	20ul	20ul	20ul	20ul	20ul
PAH mix (CPI-238513)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
PHENOL mix(CPI-238668)	2000ug/ml	Oct-14	Oct-17	0.5ul	5ul	10ul	20ul	40ul	80ul
BN mix (CPI-199335)	2000ug/ml	Oct-14	Oct-16	0.5ul	5ul	10ul	20ul	40ul	80ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Oct-15	0.5ul	5ul	10ul	20ul	40ul	80ul
OLMO4 mix(CPI- 219588)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
EXTRA (ABN007-15)	2000ug/ml	Jan-15	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
DIOXANE (SUPELCO-LB914570)	2000ug/ml	Dec-14	Dec-15	0.5ul	5ul	10ul	20ul	40ul	80ul
2,3,4,6-Tetrachlorophenol(RESTEK a010265)	1000ug/ml	Dec-14	Sep-22	1ul	10ul	20ul	40ul	80ul	160ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:7/15									

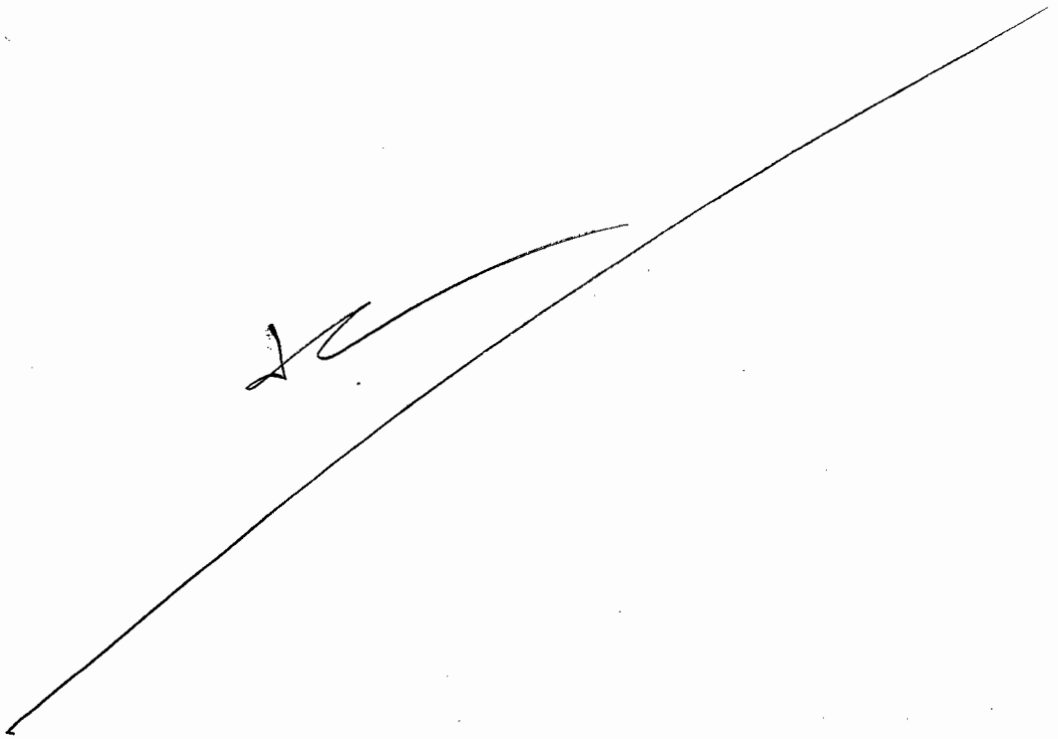
DATE: 01/23/15	Conc :	Rec/Prep		ABN014-15	ABN015-15	ABN016-15	ABN017-15	ABN018-15	ABN019-15
BNAMIX2 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**160**
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
BENZIDINES mix (CPI-238667)	2000ug/ml	Oct-14	Jan-16	0.5ul	5ul	10ul	20ul	40ul	80ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:07/15									

ABN031-15

DATE: 01/23/15

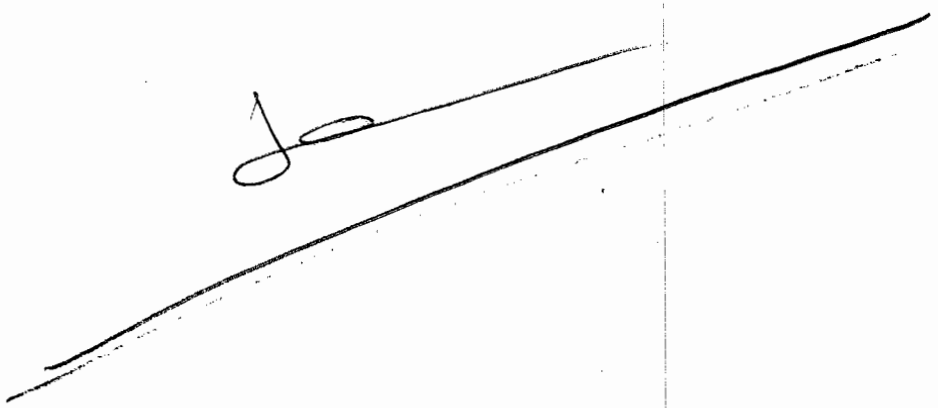
40ng BNA - MIX2 CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI027)	4000ug/ml	May-12	May-15	10ul
ADD ON #2 mix(ECS-8270A203)	2000ug/mL	Jan-15	Nov-16	20ul
BENZIDINES mix (SUPELCO-LC00780)	2000ug/mL	Jan-15	May-16	20ul
Final Volume				1ml

EXP:07/15



				ABN025-15	ABN026-15	ABN027-15	ABN028-15	ABN029-15
DATE : 01/23/15	Conc :	Rec/Prep						
SIM STD		Date	Exp Date	0.02/0.1	0.04/0.2	0.1/0.5	0.2/1	0.5/2
ISTD (ABN020-15)	200ug/ml	01/23/15	7/15	5ul	5ul	5ul	5ul	5ul
Hexachlorobenzene(ABN022-15)	10ug/ml	01/23/15	1/16	2ul	4ul	10ul	20ul	50ul
BNA Mix (ABN021-15)	20ug/ml	01/23/15	1/16	5ul	10ul	25ul	50ul	100ul
Final Volume				1mL	1mL	1mL	1mL	1mL
EXP:07/15								

ABN-030-15		Rec/Prep		
DATE : 01/23/15	Conc :	Date	Exp Date	
0.5ng SIM check STD				0.1/0.5
ISTD (ABN020-15)	200ug/ml	01/23/15	7/15	5ul
Hexachlorobenzene(ABN024-15)	10ug/ml	01/23/15	1/16	10ul
BNA Mix (ABN023-15)	20ug/ml	01/23/15	1/16	25ul
Final Volume				1ml
EXP:07/15				

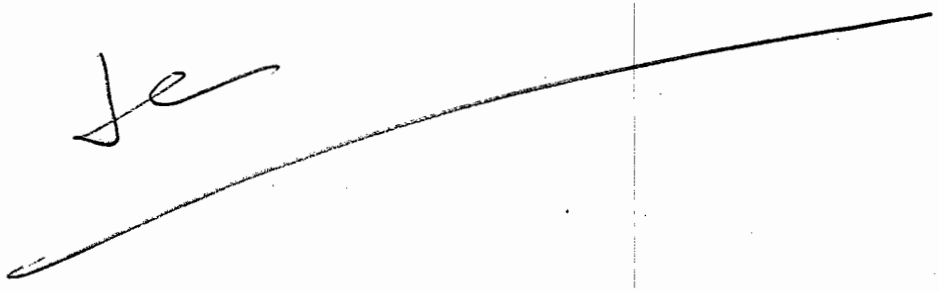


ABN004-15

DATE: 01/21/15

40ng BNA CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul
DIOXANE-d8(ABN-003-15)	1000ug/ml	Jan-15	Jan-15	20ul
ABN001-15	287ug/ml	Jan-15	Jul-15	140ul
Final Volume				1ml

EXP:07/15



ABN005-15

DATE:01/22/15

DFTPP		Rec. Date	EXP.Date	
Dftpp 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	1.25ml of each/250ml CH2CL2
Pentachlorophenol 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	
Benzidine 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	**final conc: 50ug/ml**
DDT 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	

EXP:7/15

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/19/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150219-06	SOIL	106		92		103		92	
PCB	LCSS150219-06	SOIL	106		94		103		93	
PCB	01273-001MS	SOIL	98		94		96		92	
PCB	01273-001MSD	SOIL	99		104		97		139	
GPEC-WC1	E15-01273-001	SOIL	96		115		94		143	
SB-7B/6-	E15-01264-001	SOIL	115		99		110		102	
SB-7N1A/	E15-01264-004	SOIL	107		97		102		94	
SB-7E1A/	E15-01264-008	SOIL	105		78		98		109	
SB-7S1A/	E15-01264-012	SOIL	102		90		93		92	
SB-7W1A/	E15-01264-016	SOIL	106		96		99		106	
REP02181	E15-01264-036	SOIL	108		93		101		142	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150219-06
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	471.1	94	40 - 140
Aroclor-1260	500	0.0	470.8	94	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-01273-001
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	481.1	96	40 - 140
Aroclor-1260	500	0.0	486.3	97	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	474.6	95	1	50/30	40 - 140
Aroclor-1260	0.0	485.3	97	0	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

PCB METHOD BLANK SUMMARY

Lab File ID: R3400.D

Instrument ID: GC-R

Date Extracted: 02/19/2015

Matrix: SOIL

Date Analyzed: 02/19/2015

Time Analyzed: 17:03

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150219-06	02/19/2015	17:21
PCB	01273-001MS	02/19/2015	17:38
PCB	01273-001MSD	02/19/2015	17:55
GPEC-WC1	E15-01273-001	02/19/2015	18:13
SB-7B/6-	E15-01264-001	02/19/2015	19:05
SB-7N1A/	E15-01264-004	02/19/2015	19:22
SB-7E1A/	E15-01264-008	02/19/2015	19:40
SB-7S1A/	E15-01264-012	02/19/2015	19:57
SB-7W1A/	E15-01264-016	02/19/2015	20:15
REP02181	E15-01264-036	02/19/2015	20:32

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.05 **TCMX 2** 2.89 **DCB 2** 12.57

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150219-06	02/19/2015	17:03	2.72		12.05		2.89		12.57	
PCB	LCSS150219-06	02/19/2015	17:21	2.72		12.05		2.88		12.56	
PCB	01273-001MS	02/19/2015	17:38	2.72		12.05		2.88		12.57	
PCB	01273-001MSD	02/19/2015	17:55	2.72		12.05		2.88		12.57	
GPEC-WC1	E15-01273-001	02/19/2015	18:13	2.72		12.05		2.88		12.57	
SB-7B/6-	E15-01264-001	02/19/2015	19:05	2.72		12.05		2.88		12.56	
SB-7N1A/	E15-01264-004	02/19/2015	19:22	2.72		12.05		2.88		12.56	
SB-7E1A/	E15-01264-008	02/19/2015	19:40	2.72		12.05		2.88		12.57	
SB-7S1A/	E15-01264-012	02/19/2015	19:57	2.72		12.05		2.88		12.56	
SB-7W1A/	E15-01264-016	02/19/2015	20:15	2.72		12.05		2.88		12.57	
REP02181	E15-01264-036	02/19/2015	20:32	2.72		12.05		2.88		12.57	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3404.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 18:13
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	1572.0E6	9974.9E6	95.630	94.482
Spiked Amount 200.000			Recovery	=	47.81%	47.24%
2) S DCB	12.05	12.57	651.7E6	4528.3E6	115.076	142.786m
Spiked Amount 200.000			Recovery	=	57.54%	71.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

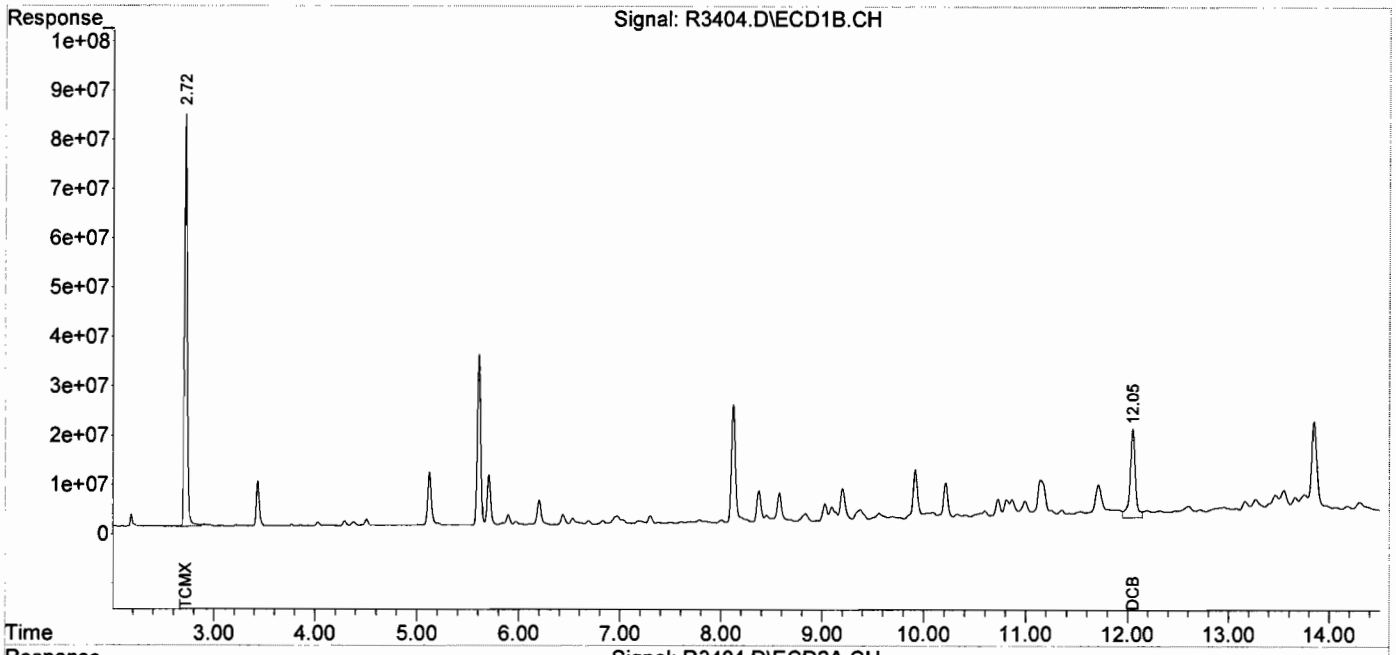
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

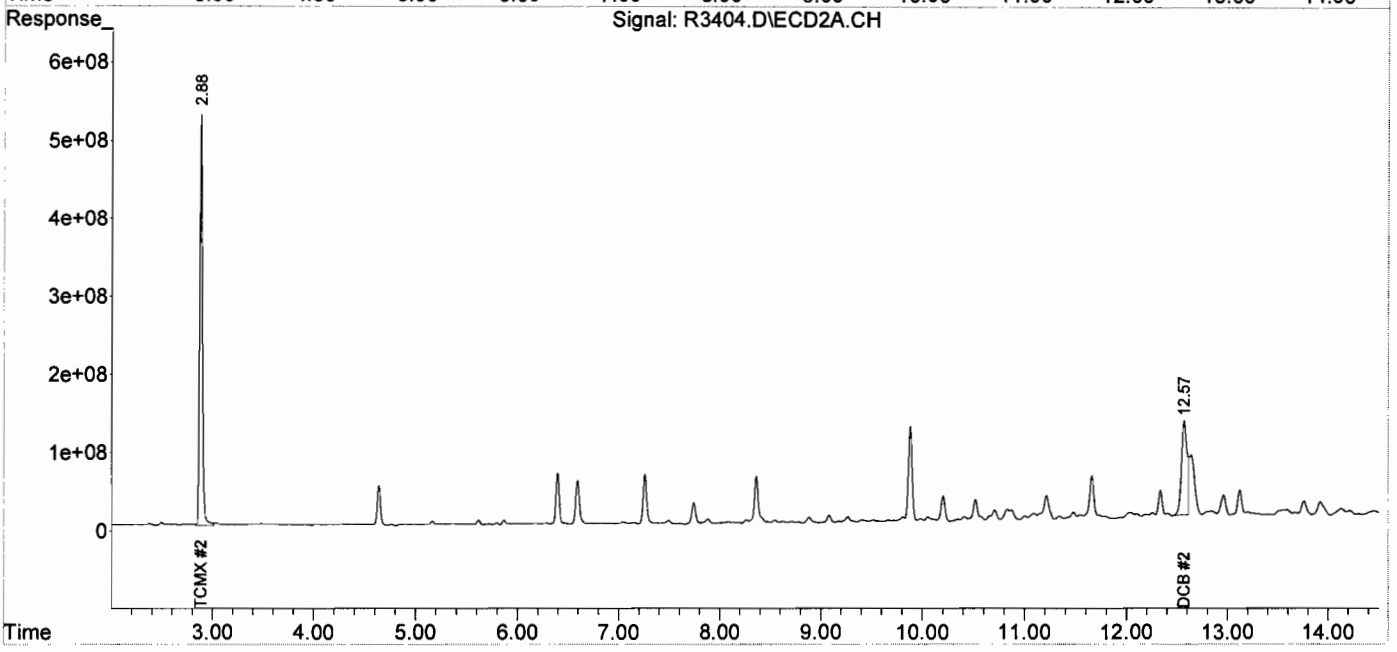
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3404.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 18:13
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB STANDARDS

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.18	3.18	3.18	3.18	3.18	3.18	3.11	3.25
Aroclor-1016 {2}	4.00	4.00	4.00	4.00	4.00	4.00	3.93	4.07
Aroclor-1016 {3}	4.55	4.55	4.55	4.55	4.55	4.55	4.48	4.62
Aroclor-1016 {4}	5.01	5.01	5.01	5.01	5.01	5.01	4.94	5.08
Aroclor-1016 {5}	5.45	5.45	5.45	5.45	5.45	5.45	5.38	5.52
Aroclor-1221			2.10				2.03	2.17
Aroclor-1221 {2}			2.98				2.91	3.05
Aroclor-1221 {3}			3.10				3.03	3.17
Aroclor-1221 {4}			3.18				3.11	3.25
Aroclor-1221 {5}			3.77				3.70	3.84
Aroclor-1232			3.18				3.11	3.25
Aroclor-1232 {2}			4.00				3.93	4.07
Aroclor-1232 {3}			4.66				4.59	4.73
Aroclor-1232 {4}			5.31				5.24	5.38
Aroclor-1232 {5}			5.45				5.38	5.52
Aroclor-1242			4.00				3.93	4.07
Aroclor-1242 {2}			4.94				4.87	5.01
Aroclor-1242 {3}			5.26				5.19	5.33
Aroclor-1242 {4}			5.95				5.88	6.02
Aroclor-1242 {5}			6.23				6.16	6.30
Aroclor-1248			4.40				4.32	4.48
Aroclor-1248 {2}			4.94				4.86	5.02
Aroclor-1248 {3}			5.26				5.18	5.34
Aroclor-1248 {4}			5.96				5.88	6.04
Aroclor-1248 {5}			6.23				6.15	6.31
Aroclor-1254			6.35				6.27	6.43
Aroclor-1254 {2}			6.79				6.71	6.87
Aroclor-1254 {3}			6.95				6.86	7.04
Aroclor-1254 {4}			7.39				7.30	7.48
Aroclor-1254 {5}			8.24				8.15	8.33
Aroclor-1260	8.24	8.24	8.24	8.24	8.24	8.24	7.34	9.14
Aroclor-1260 {2}	8.92	8.92	8.92	8.92	8.92	8.92	8.02	9.82
Aroclor-1260 {3}	9.40	9.39	9.39	9.40	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.88	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.95	10.94	10.95	10.95	10.95	10.95	10.05	11.85

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	334646	290297	289626	268132	280588	292658	8.58
Aroclor-1016 {2}	448534	387275	395850	372582	383511	397550	7.47
Aroclor-1016 {3}	582764	498111	506481	475374	499228	512392	8.01
Aroclor-1016 {4}	309866	265494	256254	241041	251885	264908	10.05
Aroclor-1016 {5}	447008	387499	402765	386546	411964	407156	6.07
Aroclor-1221			130252				
Aroclor-1221 {2}			210461				
Aroclor-1221 {3}			134508				
Aroclor-1221 {4}			460364				
Aroclor-1221 {5}			104896				
Aroclor-1232			323549				
Aroclor-1232 {2}			190065				
Aroclor-1232 {3}			166290				
Aroclor-1232 {4}			132314				
Aroclor-1232 {5}			227266				
Aroclor-1242			356248				
Aroclor-1242 {2}			232709				
Aroclor-1242 {3}			324864				
Aroclor-1242 {4}			451857				
Aroclor-1242 {5}			425731				
Aroclor-1248			739644				
Aroclor-1248 {2}			436612				
Aroclor-1248 {3}			570008				
Aroclor-1248 {4}			833779				
Aroclor-1248 {5}			697246				
Aroclor-1254			962649				
Aroclor-1254 {2}			608131				
Aroclor-1254 {3}			1157444				
Aroclor-1254 {4}			1213711				
Aroclor-1254 {5}			1133241				
Aroclor-1260	1226015	1033007	1112075	1032907	1158256	1112452	7.47
Aroclor-1260 {2}	770299	631919	656162	608465	685227	670414	9.35
Aroclor-1260 {3}	1773014	1430500	1578117	1441933	1669179	1578549	9.32
Aroclor-1260 {4}	844097	715071	776418	699378	848383	776669	8.98
Aroclor-1260 {5}	486715	399693	404378	356362	446539	418737	11.85
					Average %RSD		8.72

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.78	3.77	3.77	3.78	3.77	3.77	3.70	3.84
Aroclor-1016 {2}	4.39	4.38	4.37	4.38	4.38	4.38	4.31	4.45
Aroclor-1016 {3}	5.14	5.13	5.13	5.14	5.13	5.13	5.06	5.20
Aroclor-1016 {4}	5.35	5.34	5.34	5.35	5.34	5.34	5.27	5.41
Aroclor-1016 {5}	5.53	5.52	5.52	5.53	5.52	5.52	5.45	5.59
Aroclor-1221			2.44				2.37	2.51
Aroclor-1221 {2}			3.45				3.38	3.52
Aroclor-1221 {3}			3.69				3.62	3.76
Aroclor-1221 {4}			3.78				3.71	3.85
Aroclor-1221 {5}			5.14				5.07	5.21
Aroclor-1232			3.77				3.70	3.84
Aroclor-1232 {2}			4.76				4.69	4.83
Aroclor-1232 {3}			5.34				5.27	5.41
Aroclor-1232 {4}			5.52				5.45	5.59
Aroclor-1232 {5}			6.12				6.05	6.19
Aroclor-1242			4.76				4.69	4.83
Aroclor-1242 {2}			5.52				5.45	5.59
Aroclor-1242 {3}			6.12				6.05	6.19
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.81				6.74	6.88
Aroclor-1248			5.13				5.05	5.21
Aroclor-1248 {2}			5.72				5.64	5.80
Aroclor-1248 {3}			6.12				6.04	6.20
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.62				6.54	6.70
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.15				8.06	8.24
Aroclor-1254 {4}			8.33				8.24	8.42
Aroclor-1254 {5}			9.16				9.07	9.25
Aroclor-1260	7.91	7.90	7.90	7.91	7.90	7.90	7.00	8.80
Aroclor-1260 {2}	8.16	8.15	8.15	8.16	8.15	8.16	7.26	9.06
Aroclor-1260 {3}	9.77	9.76	9.76	9.77	9.76	9.76	8.86	10.66
Aroclor-1260 {4}	10.27	10.27	10.27	10.27	10.27	10.27	9.37	11.17
Aroclor-1260 {5}	10.87	10.86	10.86	10.87	10.86	10.86	9.96	11.76

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	2244125	1929985	1806068	1589477	1566127	1827156	15.22
Aroclor-1016 {2}	4213361	3601735	3339319	3060558	2951727	3433340	14.68
Aroclor-1016 {3}	10530478	8200450	7710370	7090673	7178416	8142077	17.29
Aroclor-1016 {4}	4574459	3811673	3443945	3121062	3110471	3612322	16.88
Aroclor-1016 {5}	2855623	2867711	2539815	2345609	2392752	2600302	9.58
Aroclor-1221			948711				
Aroclor-1221 {2}			1449945				
Aroclor-1221 {3}			878710				
Aroclor-1221 {4}			2926520				
Aroclor-1221 {5}			700890				
Aroclor-1232			2100384				
Aroclor-1232 {2}			909978				
Aroclor-1232 {3}			1845458				
Aroclor-1232 {4}			1228252				
Aroclor-1232 {5}			1989693				
Aroclor-1242			1524168				
Aroclor-1242 {2}			2288400				
Aroclor-1242 {3}			3334472				
Aroclor-1242 {4}			2791426				
Aroclor-1242 {5}			5242295				
Aroclor-1248			4742904				
Aroclor-1248 {2}			6932980				
Aroclor-1248 {3}			5138683				
Aroclor-1248 {4}			4734512				
Aroclor-1248 {5}			2326610				
Aroclor-1254			6299784				
Aroclor-1254 {2}			4553514				
Aroclor-1254 {3}			3411360				
Aroclor-1254 {4}			4739280				
Aroclor-1254 {5}			6831093				
Aroclor-1260	3687945	3451800	3038352	2796158	2906768	3176204	11.93
Aroclor-1260 {2}	6186522	4964078	4340433	4030248	4130831	4730423	18.84
Aroclor-1260 {3}	5527342	4658623	4156636	3825169	4215125	4476579	14.70
Aroclor-1260 {4}	11629768	9237162	9246276	8478951	9817091	9681850	12.27
Aroclor-1260 {5}	8108416	6804923	6419290	5800366	6870061	6800611	12.44
					Average %RSD		14.38

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.53				8.41	8.65
Aroclor-1262 {2}			9.40				9.28	9.52
Aroclor-1262 {3}			10.03				9.91	10.15
Aroclor-1262 {4}			10.12				10.00	10.24
Aroclor-1262 {5}			10.95				10.83	11.07
Aroclor-1268			10.03				9.91	10.15
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			10.72				10.60	10.84
Aroclor-1268 {5}			11.56				11.44	11.68

GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.76				9.64	9.88
Aroclor-1262 {2}			10.27				10.15	10.39
Aroclor-1262 {3}			10.77				10.65	10.89
Aroclor-1262 {4}			10.86				10.74	10.98
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.77				10.65	10.89
Aroclor-1268 {2}			10.85				10.73	10.97
Aroclor-1268 {3}			11.11				10.99	11.23
Aroclor-1268 {4}			11.25				11.13	11.37
Aroclor-1268 {5}			12.34				12.22	12.46

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/18/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3345.D R3346.D R3347.D R3348.D R3349.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1106126				
Aroclor-1262 {2}			2120925				
Aroclor-1262 {3}			841505				
Aroclor-1262 {4}			882786				
Aroclor-1262 {5}			736984				
Aroclor-1268			2305941				
Aroclor-1268 {2}			2178984				
Aroclor-1268 {3}			1851457				
Aroclor-1268 {4}			468092				
Aroclor-1268 {5}			5951632				

GC Column (2nd): DB-1701P

Data File: R3345.C R3346.C R3347.C R3348.C R3349.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5539833				
Aroclor-1262 {2}			12792233				
Aroclor-1262 {3}			4404590				
Aroclor-1262 {4}			8556302				
Aroclor-1262 {5}			1714927				
Aroclor-1268			12496132				
Aroclor-1268 {2}			12123884				
Aroclor-1268 {3}			10295633				
Aroclor-1268 {4}			2653820				
Aroclor-1268 {5}			32791853				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	62094454	480.6E6	3.777	4.553
Spiked Amount 200.000			Recovery	=	1.89%	2.28%
2) S DCB	12.05	12.57	26792729	150.4E6	4.731	4.818m
Spiked Amount 200.000			Recovery	=	2.37%	2.41%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.78	3346459	22441253	11.435	12.271m
4) L2 Aroclor-1016 {2}	4.00	4.39	4485339	42133606	11.282	12.020m
5) L2 Aroclor-1016 {3}	4.55	5.14	5827639	105.3E6	11.373	12.960m
6) L2 Aroclor-1016 {4}	5.01	5.35	3098665	45744588	11.697	12.717m
7) L2 Aroclor-1016 {5}	5.45	5.53	4470081	28556228	10.979	10.704m
Sum Aroclor-1016			21228183	244.2E6	56.766	60.671
Average Aroclor-1016					11.353	12.134
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.91	12260153	36879450	11.021	11.409m
34) L8 Aroclor-1260 {2}	8.92	8.16	7702986	61865220	11.490	13.071m
35) L8 Aroclor-1260 {3}	9.40	9.77	17730145	55273419	11.232	12.347
36) L8 Aroclor-1260 {4}	9.88	10.27	8440966	116.3E6	10.868	12.012
37) L8 Aroclor-1260 {5}	10.95	10.87	4867150	81084156	11.623	11.924m
Sum Aroclor-1260			51001399	351.4E6	56.234	60.763
Average Aroclor-1260					11.247	12.153
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

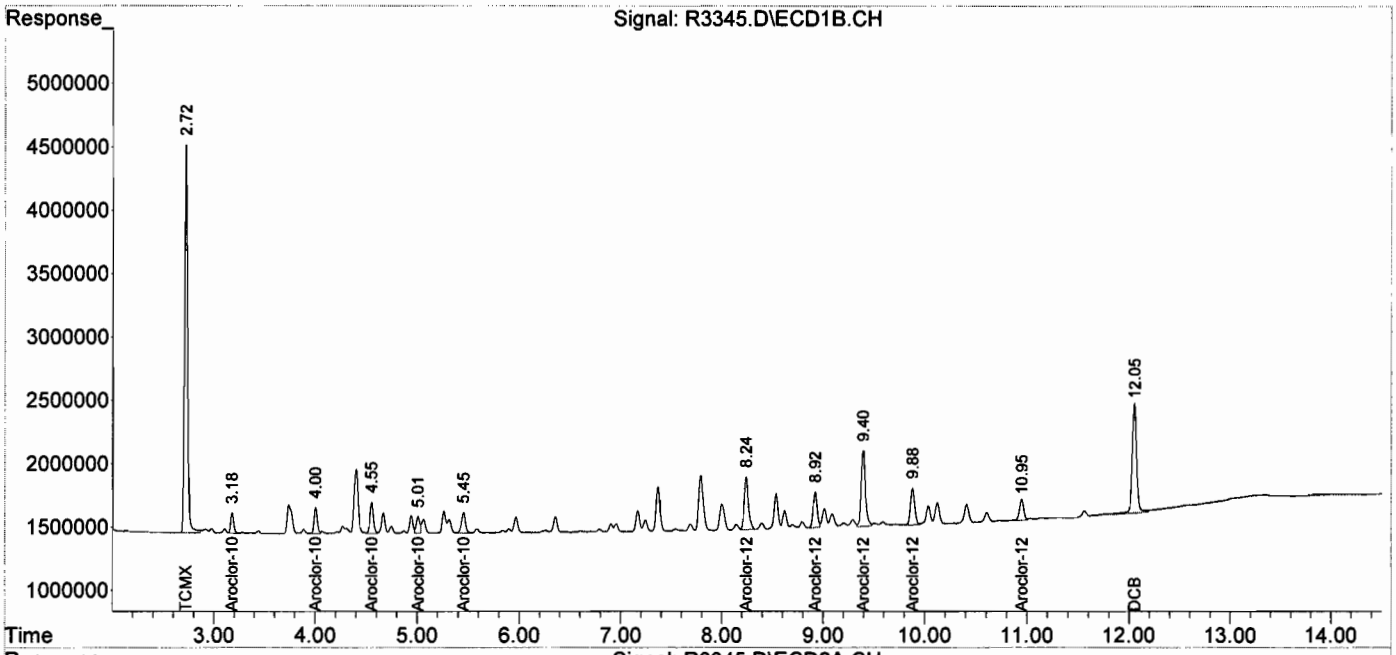
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

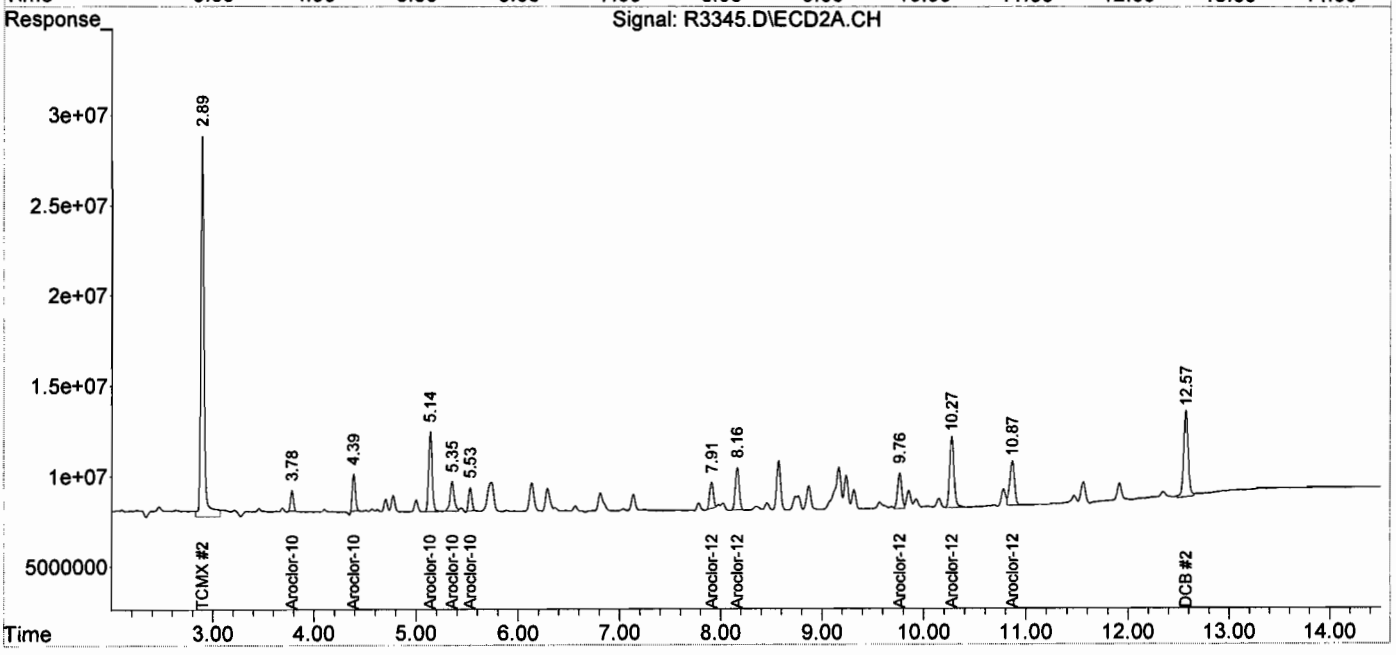
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3345.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:34
Operator : JS
Sample : ICC_8082_L1_IAS_5141,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:29:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	296.6E6	1877.5E6	18.041	17.784
Spiked Amount 200.000			Recovery =		9.02%	8.89%
2) S DCB	12.05	12.57	104.3E6	629.9E6	18.424	20.181
Spiked Amount 200.000			Recovery =		9.21%	10.09%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	14514838	96499237	49.597	52.765m
4) L2 Aroclor-1016 {2}	4.00	4.38	19363759	180.1E6	48.708	51.374m
5) L2 Aroclor-1016 {3}	4.55	5.13	24905526	410.0E6	48.606	50.463
6) L2 Aroclor-1016 {4}	5.01	5.34	13274697	190.6E6	50.111	52.982
7) L2 Aroclor-1016 {5}	5.45	5.52	19374928	143.4E6	47.586	53.745
Sum Aroclor-1016			91433749	1020.6E6	244.607	261.330
Average Aroclor-1016					48.921	52.266
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	51650341	172.6E6	46.429	53.391
34) L8 Aroclor-1260 {2}	8.92	8.15	31595954	248.2E6	47.129	52.440
35) L8 Aroclor-1260 {3}	9.39	9.76	71525009	232.9E6	45.311	52.033
36) L8 Aroclor-1260 {4}	9.88	10.27	35753535	461.9E6	46.034	47.703
37) L8 Aroclor-1260 {5}	10.94	10.86	19984631	340.2E6	47.726	50.035
Sum Aroclor-1260			210.5E6	1455.8E6	232.629	255.603
Average Aroclor-1260					46.526	51.121
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

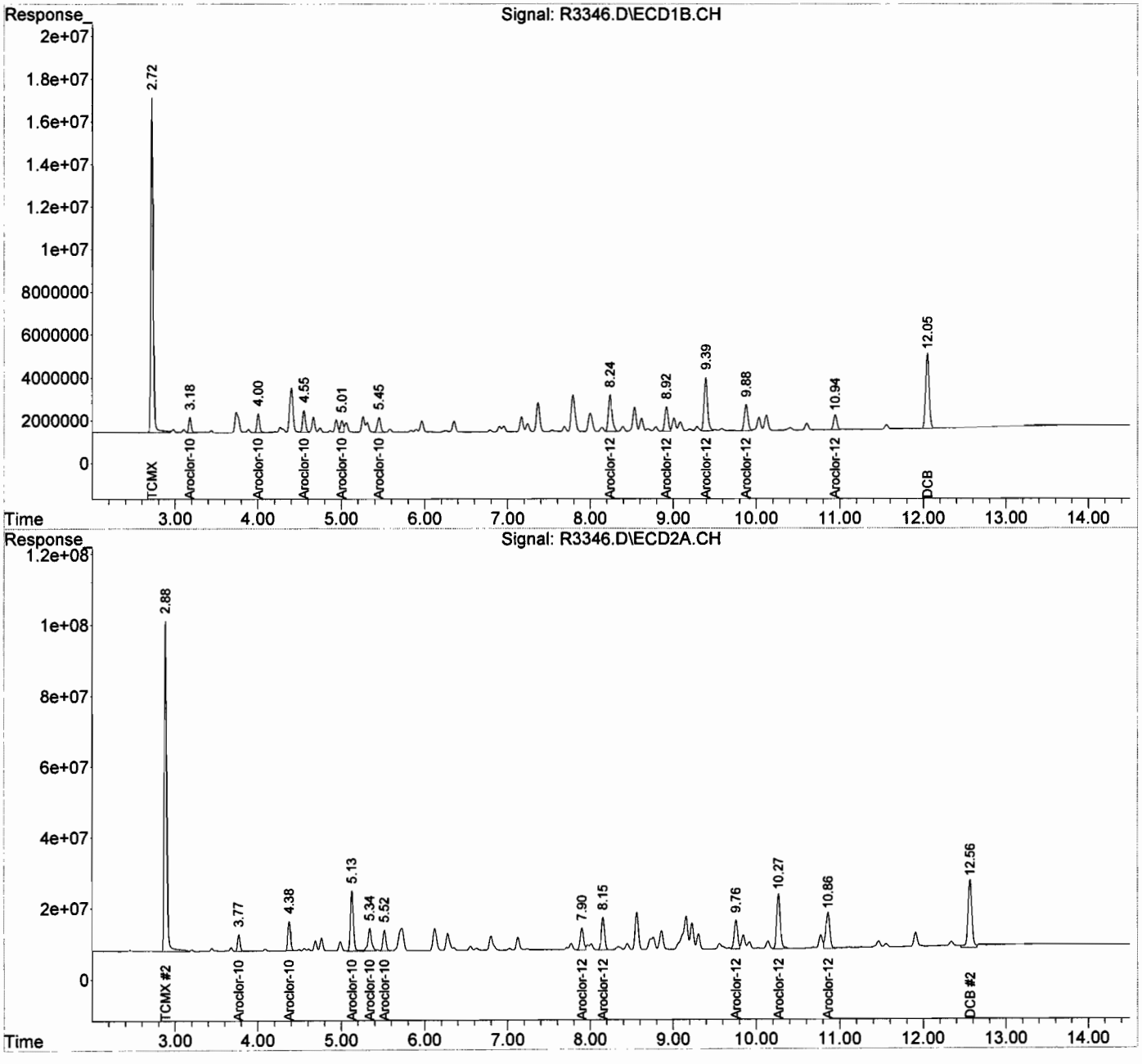
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3346.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:52
Operator : JS
Sample : ICC_8082_L2_IAS_5140,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:22:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3537.4E6	21489.8E6	215.195	203.550
Spiked Amount 200.000			Recovery	=	107.60%	101.78%
2) S DCB	12.05	12.56	1111.3E6	5940.2E6	196.229	190.311
Spiked Amount 200.000			Recovery	=	98.11%	95.16%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	144.8E6	903.0E6	494.821	493.773
4) L2 Aroclor-1016 {2}	4.00	4.37	197.9E6	1669.7E6	497.862	476.309
5) L2 Aroclor-1016 {3}	4.55	5.13	253.2E6	3855.2E6	494.232	474.475
6) L2 Aroclor-1016 {4}	5.01	5.34	128.1E6	1722.0E6	483.666	478.707
7) L2 Aroclor-1016 {5}	5.45	5.52	201.4E6	1269.9E6	494.608	475.998
Sum Aroclor-1016			925.5E6	9419.8E6	2465.189	2399.263
Average Aroclor-1016					493.038	479.853
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	556.0E6	1519.2E6	499.830	469.959
34) L8 Aroclor-1260 {2}	8.92	8.15	328.1E6	2170.2E6	489.370	458.520
35) L8 Aroclor-1260 {3}	9.39	9.76	789.1E6	2078.3E6	499.863	464.265
36) L8 Aroclor-1260 {4}	9.88	10.27	388.2E6	4623.1E6	499.838	477.506
37) L8 Aroclor-1260 {5}	10.95	10.86	202.2E6	3209.6E6	482.854	471.996
Sum Aroclor-1260			2263.6E6	13600.5E6	2471.756	2342.245
Average Aroclor-1260					494.351	468.449
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

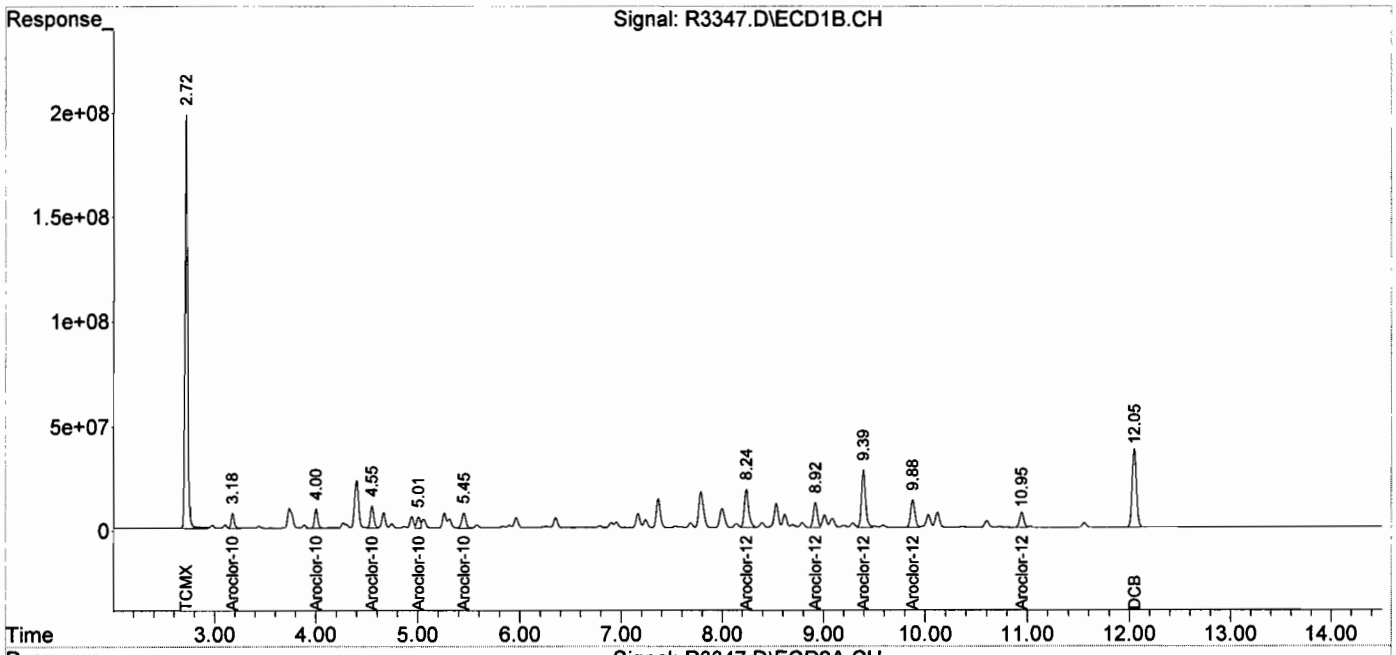
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

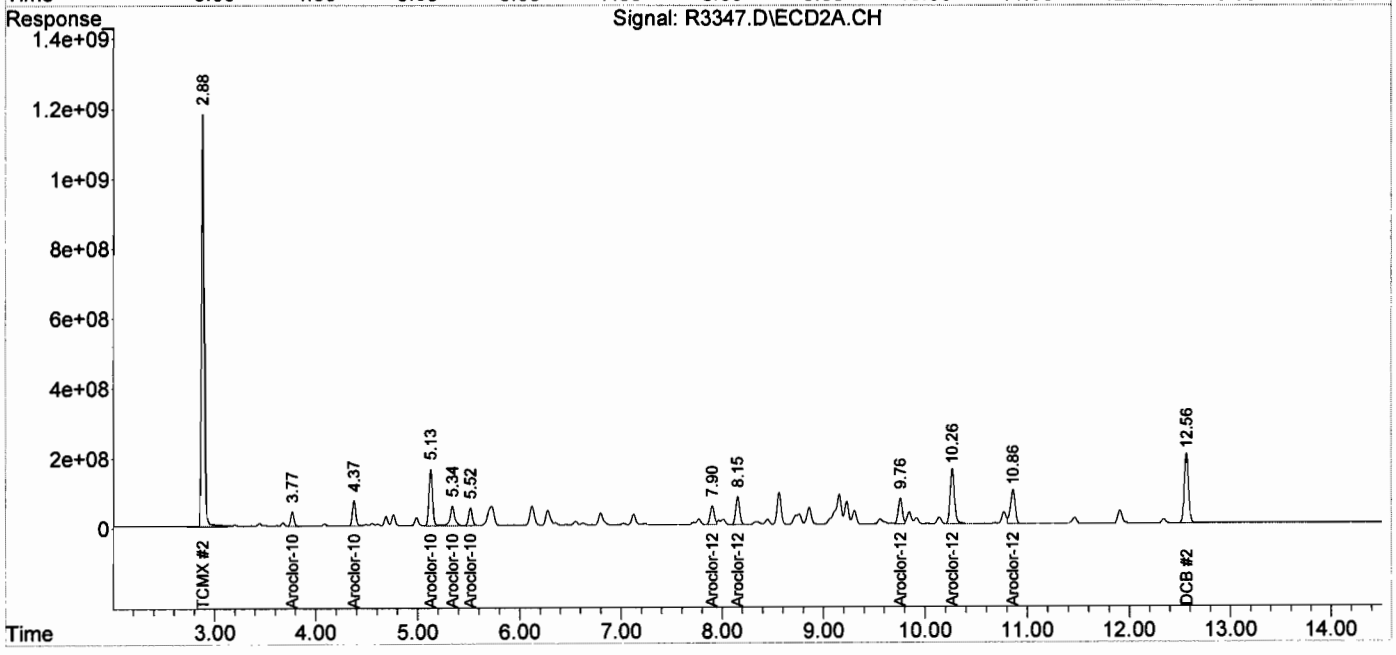
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3347.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 12:09
Operator : JS
Sample : ICC_8082_L3_IAS_5139,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	6642.9E6	42402.0E6	404.114	401.630
Spiked Amount 200.000			Recovery	=	202.06%	200.82%
2) S DCB	12.05	12.57	1965.6E6	10638.0E6	347.055	340.819
Spiked Amount 200.000			Recovery	=	173.53%	170.41%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.78	268.1E6	1589.5E6	916.196	869.115
4) L2 Aroclor-1016 {2}	4.00	4.38	372.6E6	3060.6E6	937.194	873.096
5) L2 Aroclor-1016 {3}	4.55	5.14	475.4E6	7090.7E6	927.756	872.681
6) L2 Aroclor-1016 {4}	5.01	5.35	241.0E6	3121.1E6	909.903	867.653
7) L2 Aroclor-1016 {5}	5.45	5.53	386.5E6	2345.6E6	949.380	879.203
Sum Aroclor-1016			1743.7E6	17207.4E6	4640.429	4361.748
Average Aroclor-1016					928.086	872.350
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.91	1032.9E6	2796.2E6	928.496	864.995
34) L8 Aroclor-1260 {2}	8.92	8.16	608.5E6	4030.2E6	907.595	851.504
35) L8 Aroclor-1260 {3}	9.40	9.77	1441.9E6	3825.2E6	913.455	854.485
36) L8 Aroclor-1260 {4}	9.88	10.27	699.4E6	8479.0E6	900.484	875.757
37) L8 Aroclor-1260 {5}	10.95	10.87	356.4E6	5800.4E6	851.040	852.976
Sum Aroclor-1260			4139.0E6	24930.9E6	4501.070	4299.717
Average Aroclor-1260					900.214	859.943
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

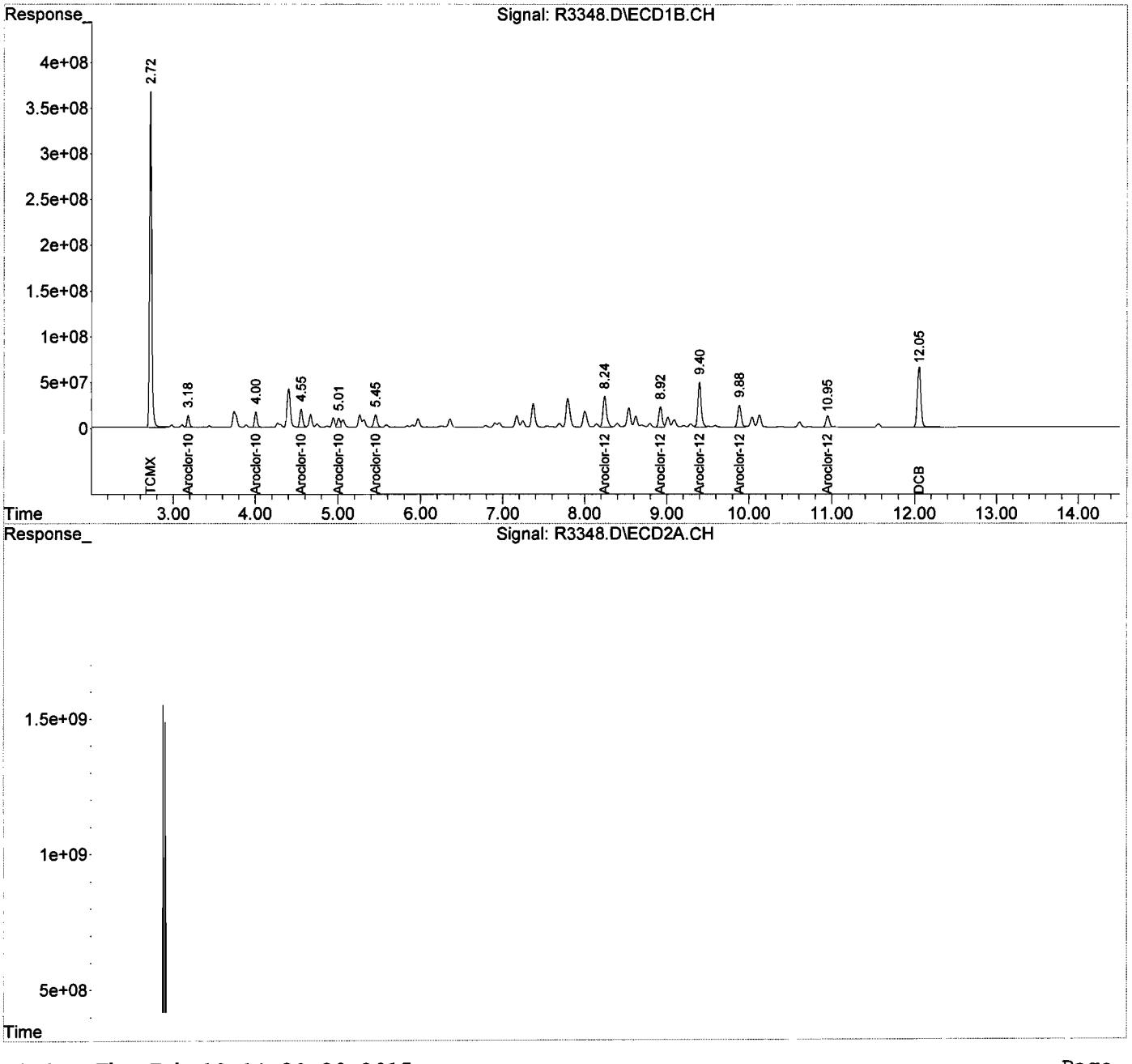
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

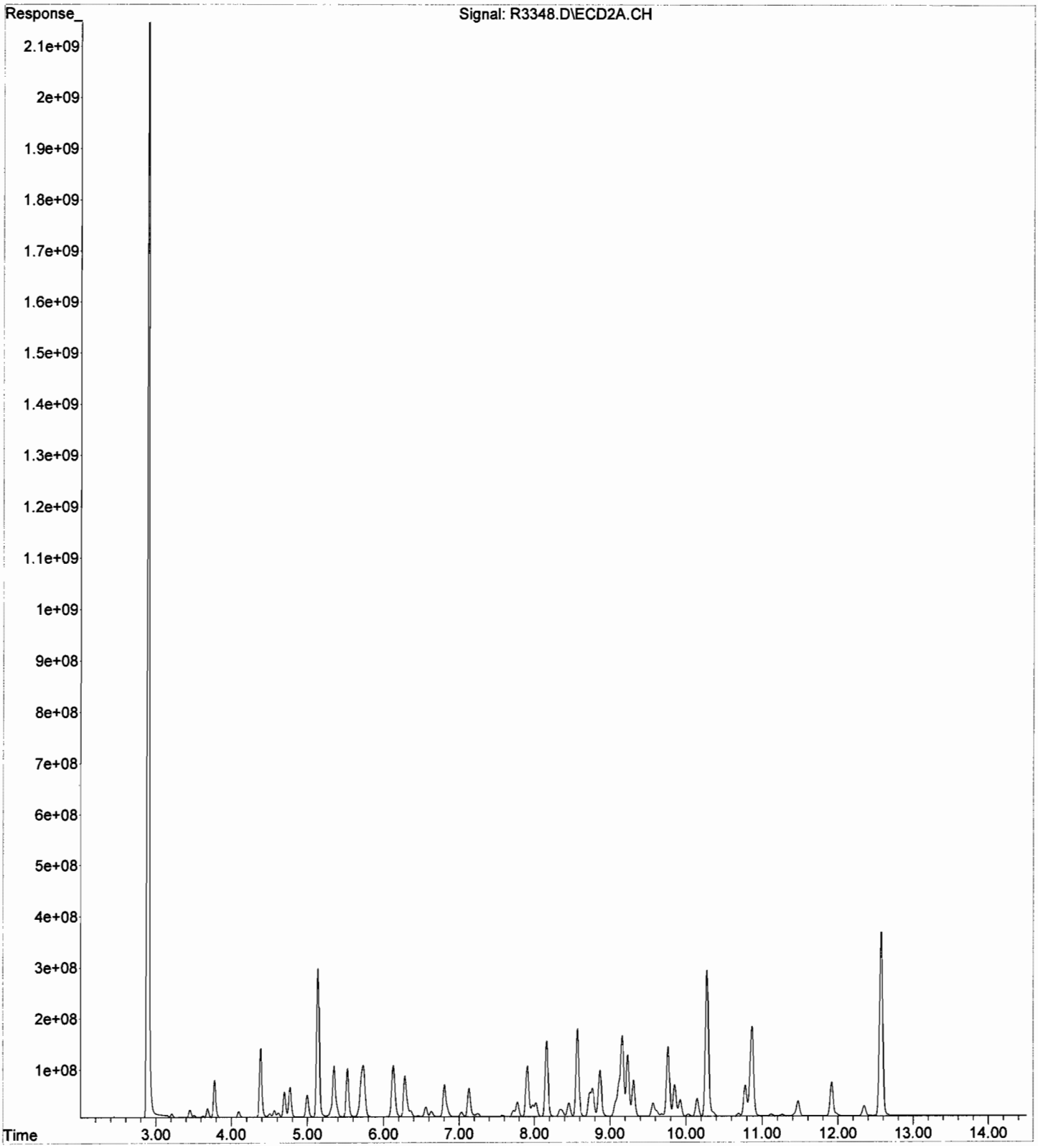
Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3348.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:12
Operator : JS
Sample : ICC_8082_L4_IAS_5138,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:20:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File :C:\MSDCHEM\1\DATA\02-18-15\R3348.D
Operator : JS
Acquired : 18 Feb 2015 13:12 using AcqMethod RPCB0218.M
Instrument : GC_R
Sample Name: ICC_8082_L4_IAS_5138,1_PPM
Misc Info : NA,NA,NA,1
Vial Number: 4



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	2.72	2.91	14036.0E6	80309.6E6	853.862	760.689
Spiked Amount	200.000			Recovery	=	426.93%	380.34%
2) S	DCB	12.05	12.57	4745.4E6	26548.3E6	837.886	850.550
Spiked Amount	200.000			Recovery	=	418.94%	425.27%
	Target Compounds						
3) L2	Aroclor-1016	3.18	3.77	561.2E6	3132.3E6	1917.515	1712.695
4) L2	Aroclor-1016 {2}	4.00	4.38	767.0E6	5903.5E6	1929.370	1684.098
5) L2	Aroclor-1016 {3}	4.55	5.13	998.5E6	14356.8E6	1948.621	1766.960
6) L2	Aroclor-1016 {4}	5.01	5.34	503.8E6	6220.9E6	1901.680	1729.418
7) L2	Aroclor-1016 {5}	5.45	5.52	823.9E6	4785.5E6	2023.614	1793.746
Sum	Aroclor-1016			3654.4E6	34399.0E6	9720.799	8686.918
Average	Aroclor-1016					1944.160	1737.384
Sum	Aroclor-1221			0	0	N.D.	N.D.
Average	Aroclor-1221					0.000	0.000
Sum	Aroclor-1232			0	0	N.D.	N.D.
Average	Aroclor-1232					0.000	0.000
Sum	Aroclor-1242			0	0	N.D.	N.D.
Average	Aroclor-1242					0.000	0.000
Sum	Aroclor-1248			0	0	N.D.	N.D.
Average	Aroclor-1248					0.000	0.000
Sum	Aroclor-1254			0	0	N.D.	N.D.
Average	Aroclor-1254					0.000	0.000
33) L8	Aroclor-1260	8.24	7.90	2316.5E6	5813.5E6	2082.347	1798.424
34) L8	Aroclor-1260 {2}	8.92	8.15	1370.5E6	8261.7E6	2044.190	1745.510
35) L8	Aroclor-1260 {3}	9.39	9.76	3338.4E6	8430.2E6	2114.827	1883.190
36) L8	Aroclor-1260 {4}	9.88	10.27	1696.8E6	19634.2E6	2184.671	2027.937
37) L8	Aroclor-1260 {5}	10.95	10.86	893.1E6	13740.1E6	2132.787	2020.562
Sum	Aroclor-1260			9615.2E6	55879.8E6	10558.823	9475.624
Average	Aroclor-1260					2111.765	1895.125
Sum	Aroclor-1262			0	0	N.D.	N.D.
Average	Aroclor-1262					0.000	0.000
Sum	Aroclor-1268			0	0	N.D.	N.D.
Average	Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

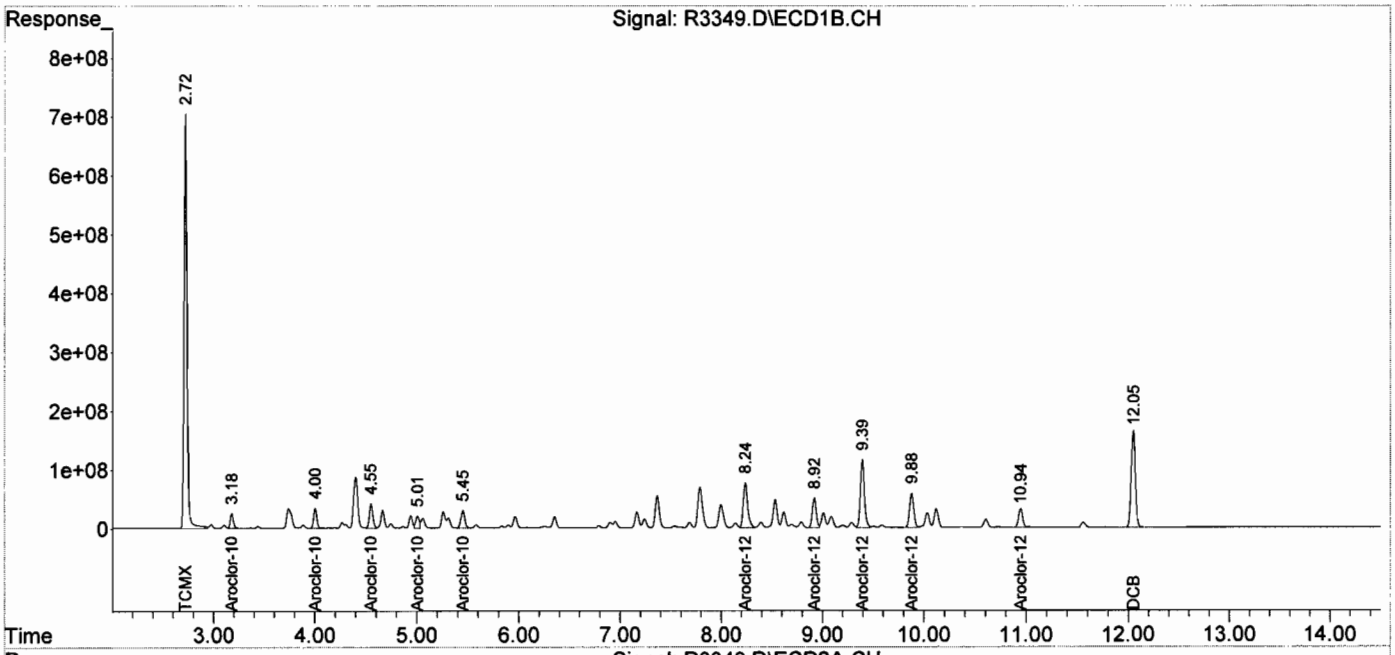
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

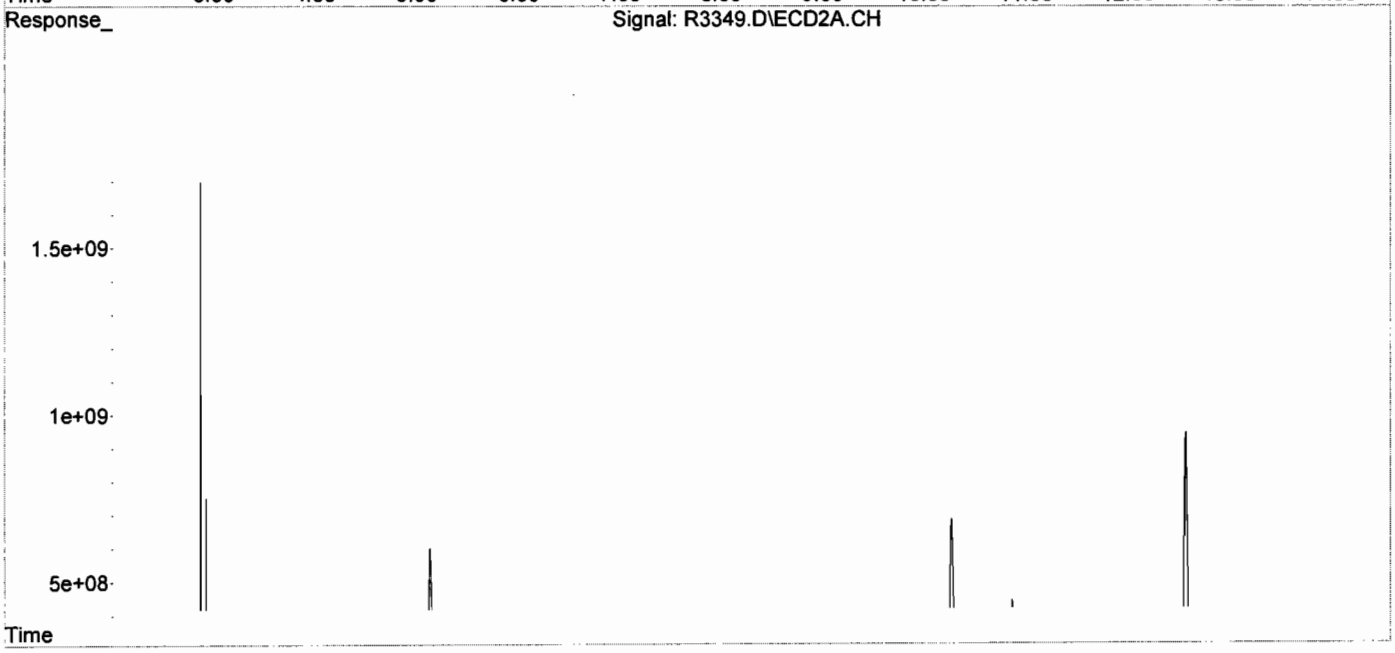
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3349.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:30
Operator : JS
Sample : ICC_8082_L5_IAS_5137,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

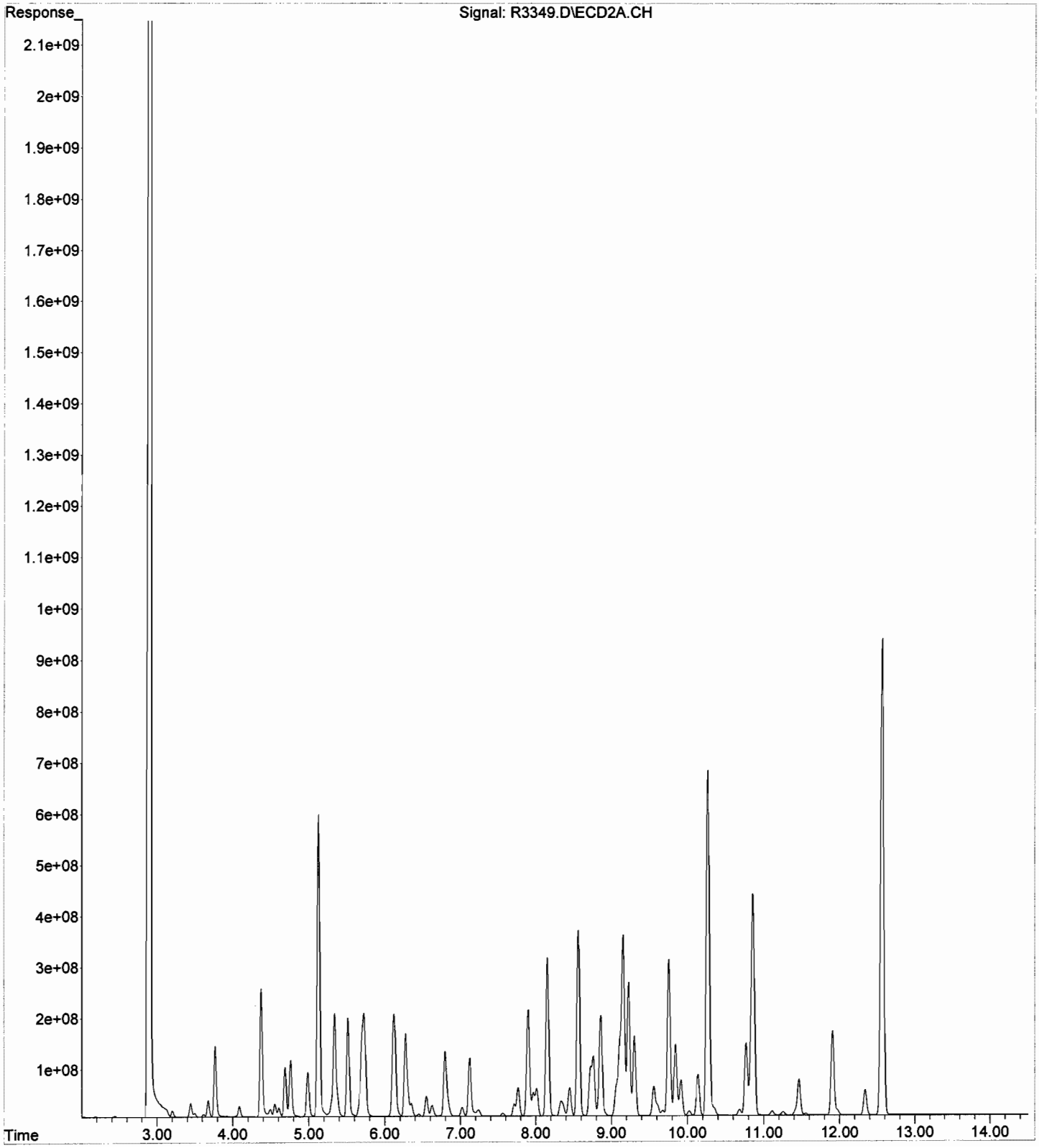
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:12:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:11:45 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





File :C:\MSDCHEM\1\DATA\02-18-15\R3349.D
Operator : JS
Acquired : 18 Feb 2015 13:30 using AcqMethod RPCB0218.M
Instrument : GC_R
Sample Name: ICC_8082_L5_IAS_5137,2_PPM
Misc Info : NA,NA,NA,1
Vial Number: 5



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3350.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:56
Operator : JS
Sample : ICC_8082_1221_IAS_5158,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:31:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:31:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

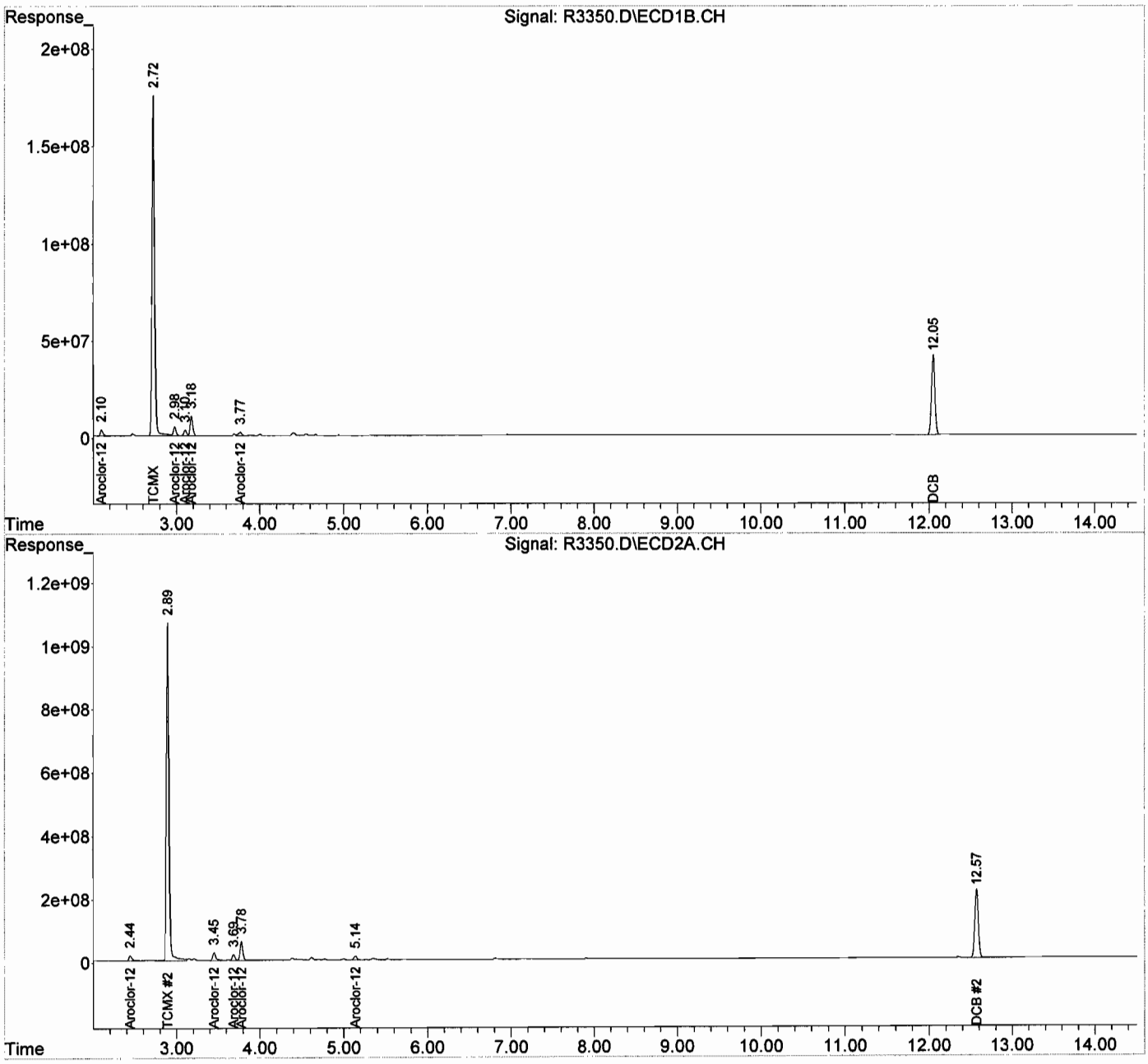
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3613.4E6	22170.7E6	219.818	210.000
Spiked Amount 200.000			Recovery	=	109.91%	105.00%
2) S DCB	12.05	12.57	1178.2E6	6428.9E6	208.025	202.718
Spiked Amount 200.000			Recovery	=	104.01%	101.36%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
8) L3 Aroclor-1221	2.10	2.44	65126185	474.4E6	500.000	500.000
9) L3 Aroclor-1221 {2}	2.98	3.45	105.2E6	725.0E6	500.000	500.000
10) L3 Aroclor-1221 {3}	3.10	3.69	67253871	439.4E6	500.000	500.000
11) L3 Aroclor-1221 {4}	3.18	3.78	230.2E6	1463.3E6	500.000	500.000
12) L3 Aroclor-1221 {5}	3.77	5.14	52447870	350.4E6	500.000	500.000
Sum Aroclor-1221			520.2E6	3452.4E6	2500.000	2500.000
Average Aroclor-1221					500.000	500.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3350.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 13:56
Operator : JS
Sample : ICC_8082_1221_IAS_5158,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:31:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:31:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3351.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:13
Operator : JS
Sample : ICC_8082_1232_IAS_5159,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:33:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3796.9E6	23520.6E6	230.977	222.786
Spiked Amount 200.000			Recovery	=	115.49%	111.39%
2) S DCB	12.05	12.57	1249.0E6	6724.2E6	220.527	212.029
Spiked Amount 200.000			Recovery	=	110.26%	106.01%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
13) L4 Aroclor-1232	3.18	3.77	161.8E6	1050.2E6	500.000	500.000
14) L4 Aroclor-1232 {2}	4.00	4.76	95032500	455.0E6	500.000	500.000
15) L4 Aroclor-1232 {3}	4.66	5.34	83145125	922.7E6	500.000	500.000
16) L4 Aroclor-1232 {4}	5.31	5.52	66156801	614.1E6	500.000	500.000
17) L4 Aroclor-1232 {5}	5.45	6.12	113.6E6	994.8E6	500.000	500.000
Sum Aroclor-1232			519.7E6	4036.9E6	2500.000	2500.000
Average Aroclor-1232					500.000	500.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

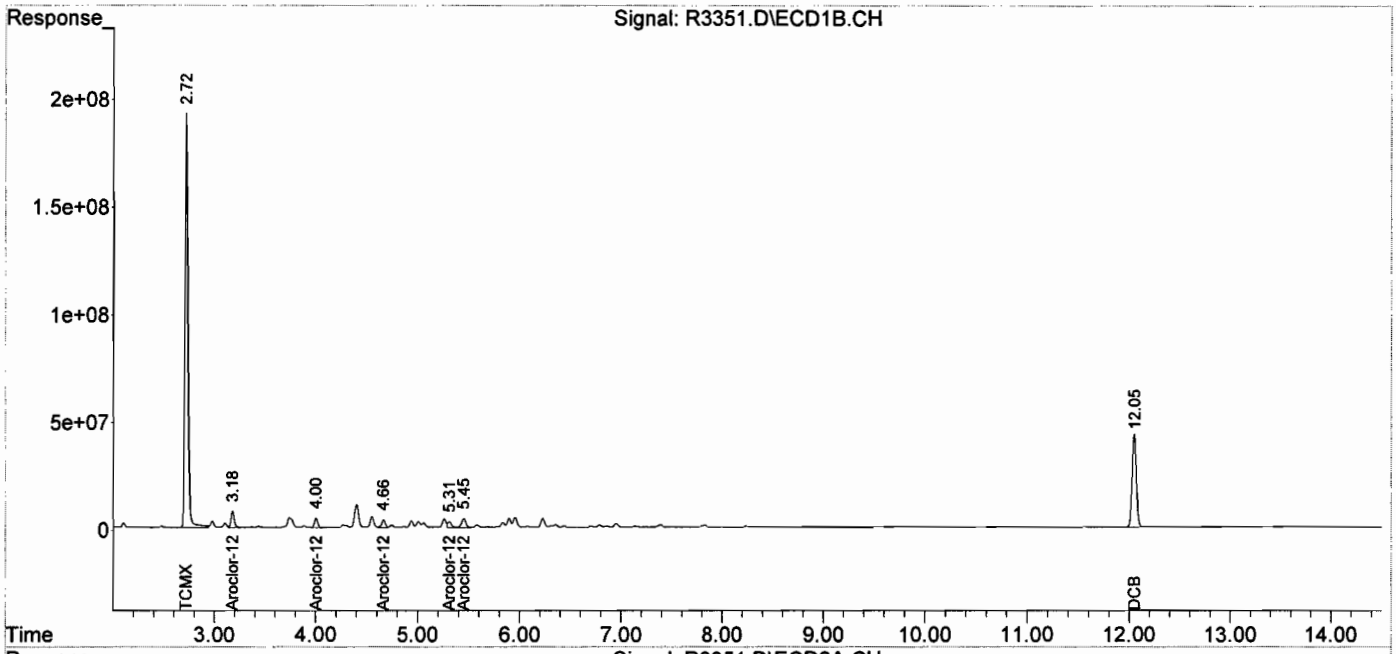
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

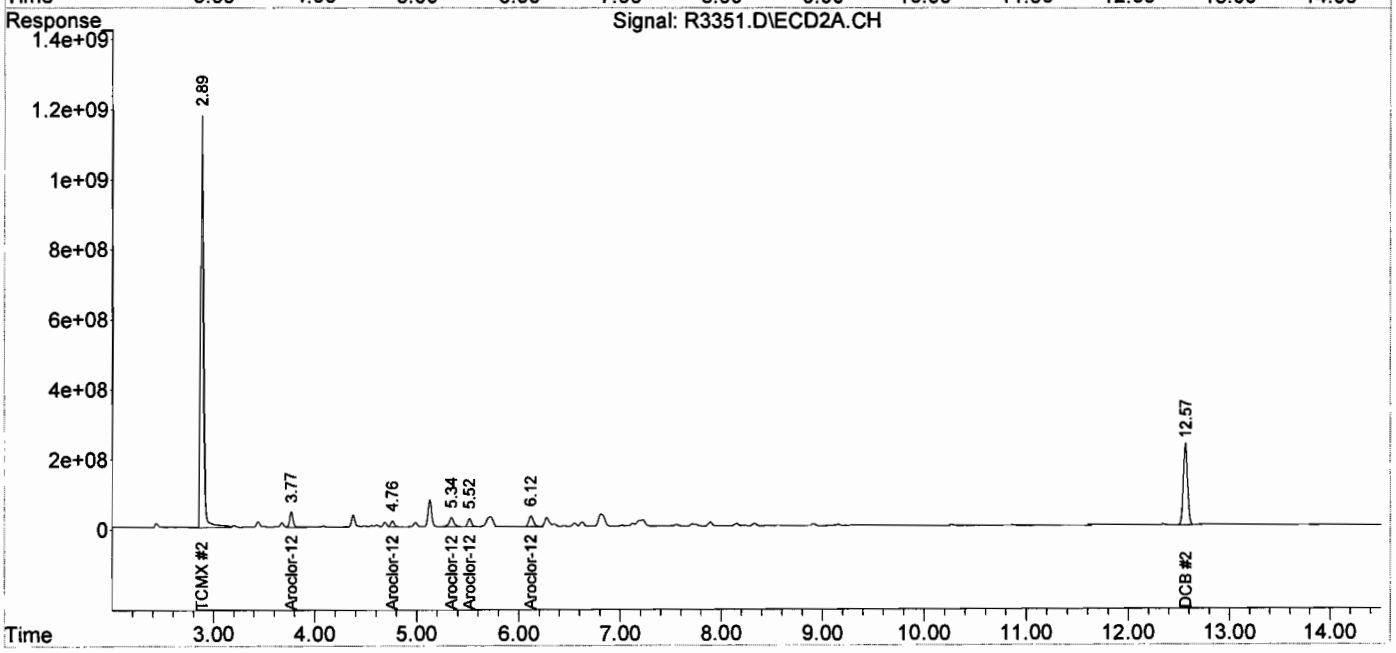
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3351.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:13
Operator : JS
Sample : ICC_8082_1232_IAS_5159,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:33:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3352.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:31
Operator : JS
Sample : ICC_8082_1242_IAS_5160,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:34:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:34:32 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3662.3E6	22884.9E6	222.791	216.765
Spiked Amount 200.000			Recovery	=	111.40%	108.38%
2) S DCB	12.05	12.56	1216.4E6	6658.6E6	214.774	209.959
Spiked Amount 200.000			Recovery	=	107.39%	104.98%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
18) L5 Aroclor-1242	4.00	4.76	178.1E6	762.1E6	500.000	500.000
19) L5 Aroclor-1242 {2}	4.94	5.52	116.4E6	1144.2E6	500.000	500.000
20) L5 Aroclor-1242 {3}	5.26	6.12	162.4E6	1667.2E6	500.000	500.000
21) L5 Aroclor-1242 {4}	5.95	6.27	225.9E6	1395.7E6	500.000	500.000
22) L5 Aroclor-1242 {5}	6.23	6.81	212.9E6	2621.1E6	500.000	500.000
Sum Aroclor-1242			895.7E6	7590.4E6	2500.000	2500.000
Average Aroclor-1242					500.000	500.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

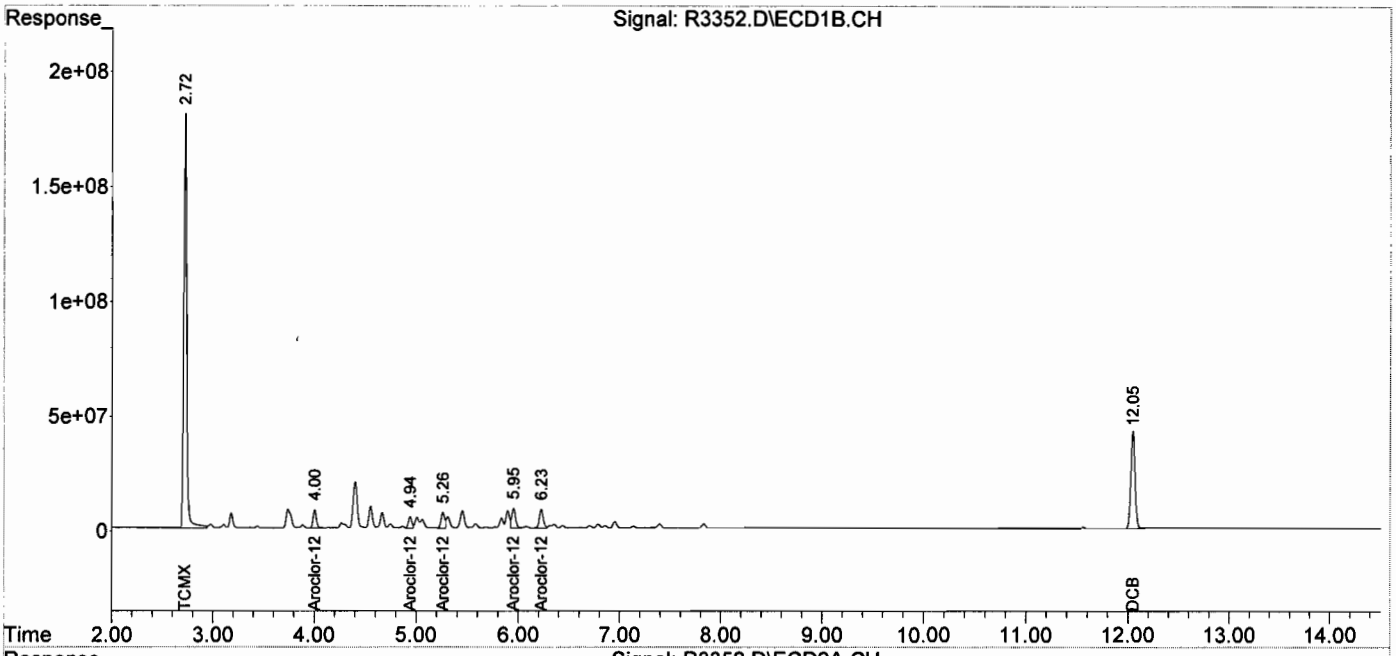
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

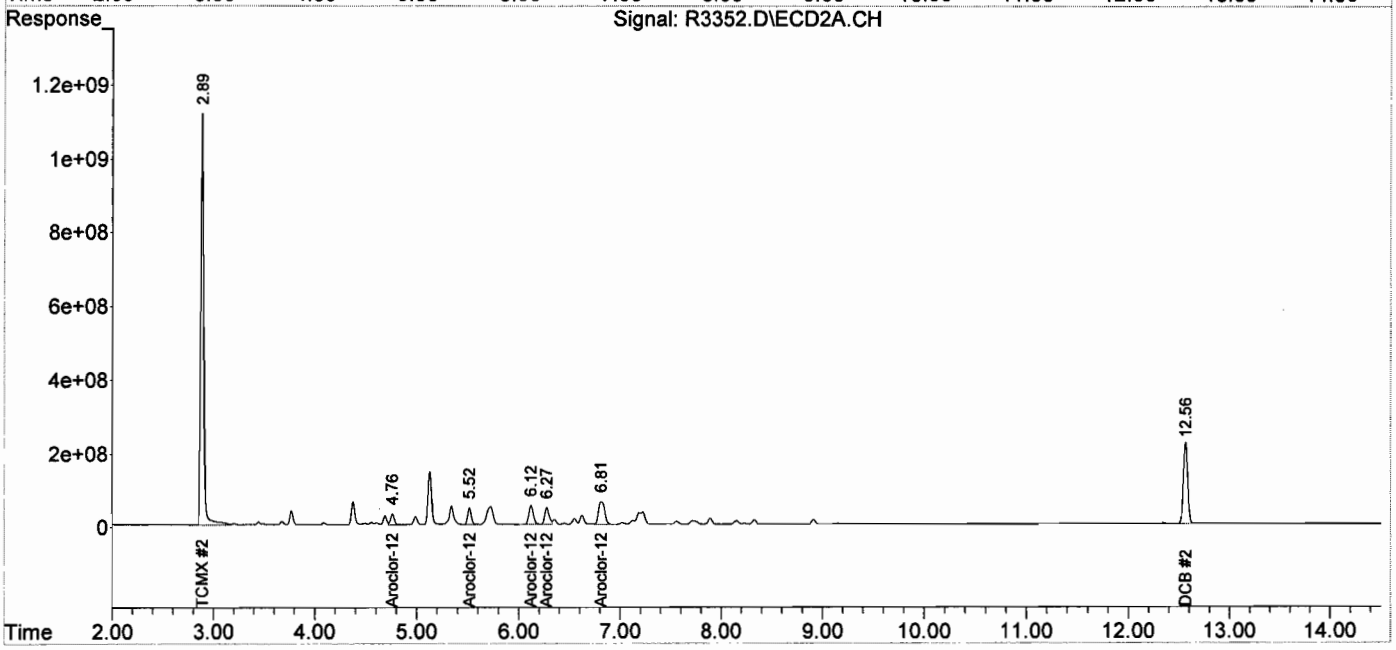
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3352.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:31
Operator : JS
Sample : ICC_8082_1242_IAS_5160,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:34:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:34:32 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3353.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:48
Operator : JS
Sample : ICC_8082_1248_IAS_5161,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:41:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:40:50 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

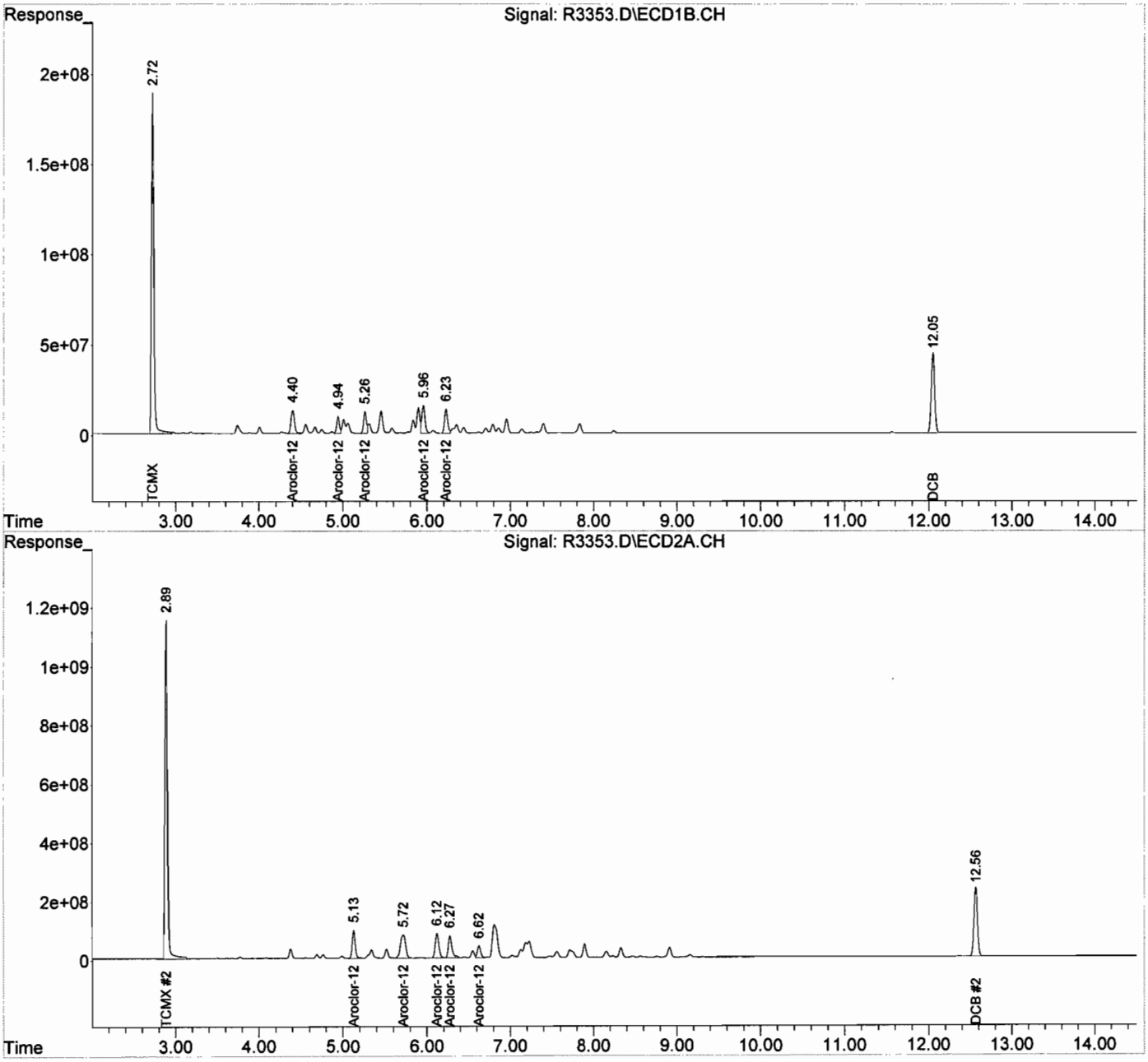
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3783.7E6	23537.5E6	230.177	222.946
Spiked Amount 200.000			Recovery	=	115.09%	111.47%
2) S DCB	12.05	12.57	1255.0E6	6861.3E6	221.601	216.351
Spiked Amount 200.000			Recovery	=	110.80%	108.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.40	5.13	369.8E6	2371.5E6	500.000	500.000
24) L6 Aroclor-1248 {2}	4.94	5.72	218.3E6	3466.5E6	500.000	500.000
25) L6 Aroclor-1248 {3}	5.26	6.12	285.0E6	2569.3E6	500.000	500.000
26) L6 Aroclor-1248 {4}	5.96	6.27	416.9E6	2367.3E6	500.000	500.000
27) L6 Aroclor-1248 {5}	6.23	6.62	348.6E6	1163.3E6	500.000	500.000
Sum Aroclor-1248			1638.6E6	11937.8E6	2500.000	2500.000
Average Aroclor-1248					500.000	500.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3353.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 14:48
Operator : JS
Sample : ICC_8082_1248_IAS_5161,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:41:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:40:50 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3354.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:06
Operator : JS
Sample : ICC_8082_1254_IAS_5162,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:49:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:49:22 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3685.2E6	22810.8E6	224.182	216.063
Spiked Amount 200.000			Recovery	=	112.09%	108.03%
2) S DCB	12.05	12.56	1121.7E6	6014.8E6	198.050	189.660
Spiked Amount 200.000			Recovery	=	99.03%	94.83%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.35	7.12	481.3E6	3149.9E6	500.000	500.000
29) L7 Aroclor-1254 {2}	6.79	7.71	304.1E6	2276.8E6	500.000	500.000
30) L7 Aroclor-1254 {3}	6.95	8.15	578.7E6	1705.7E6	500.000	500.000
31) L7 Aroclor-1254 {4}	7.39	8.33	606.9E6	2369.6E6	500.000	500.000
32) L7 Aroclor-1254 {5}	8.24	9.16	566.6E6	3415.5E6	500.000	500.000
Sum Aroclor-1254			2537.6E6	12917.5E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

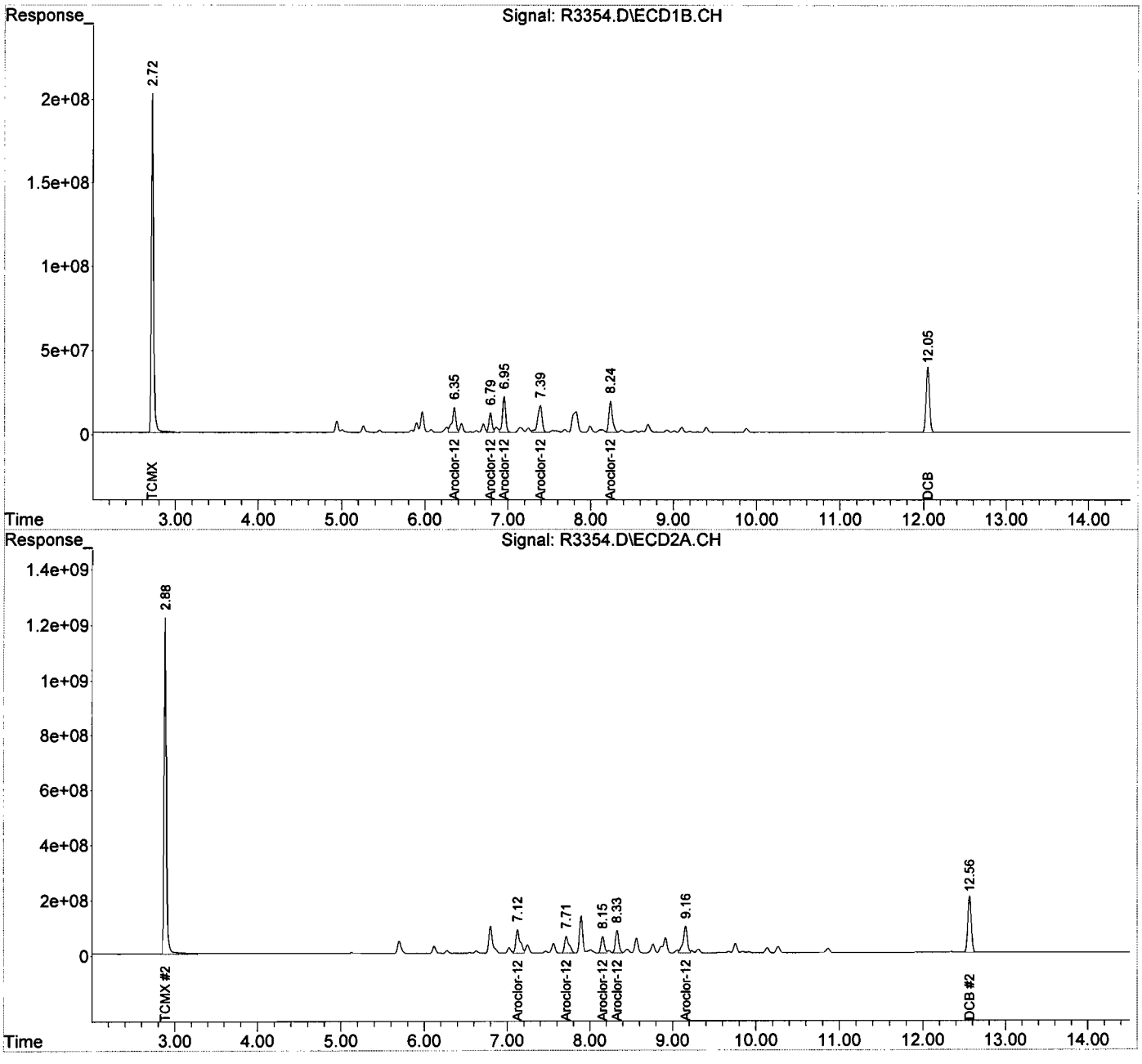
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3354.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:06
Operator : JS
Sample : ICC_8082_1254_IAS_5162,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:49:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:49:22 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3355.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:23
Operator : JS
Sample : ICC_8082_1262_IAS_5163,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:53:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:52:41 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3773.6E6	23398.2E6	229.559	221.627
Spiked Amount 200.000			Recovery	=	114.78%	110.81%
2) S DCB	12.05	12.57	1247.0E6	6717.5E6	220.185	211.817
Spiked Amount 200.000			Recovery	=	110.09%	105.91%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
38) L9 Aroclor-1262	8.53	9.76	553.1E6	2769.9E6	500.000	500.000
39) L9 Aroclor-1262 {2}	9.40	10.27	1060.5E6	6396.1E6	500.000	500.000
40) L9 Aroclor-1262 {3}	10.03	10.77	420.8E6	2202.3E6	500.000	500.000
41) L9 Aroclor-1262 {4}	10.12	10.86	441.4E6	4278.2E6	500.000	500.000
42) L9 Aroclor-1262 {5}	10.95	11.46	368.5E6	857.5E6	500.000	500.000
Sum Aroclor-1262			2844.2E6	16503.9E6	2500.000	2500.000
Average Aroclor-1262					500.000	500.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

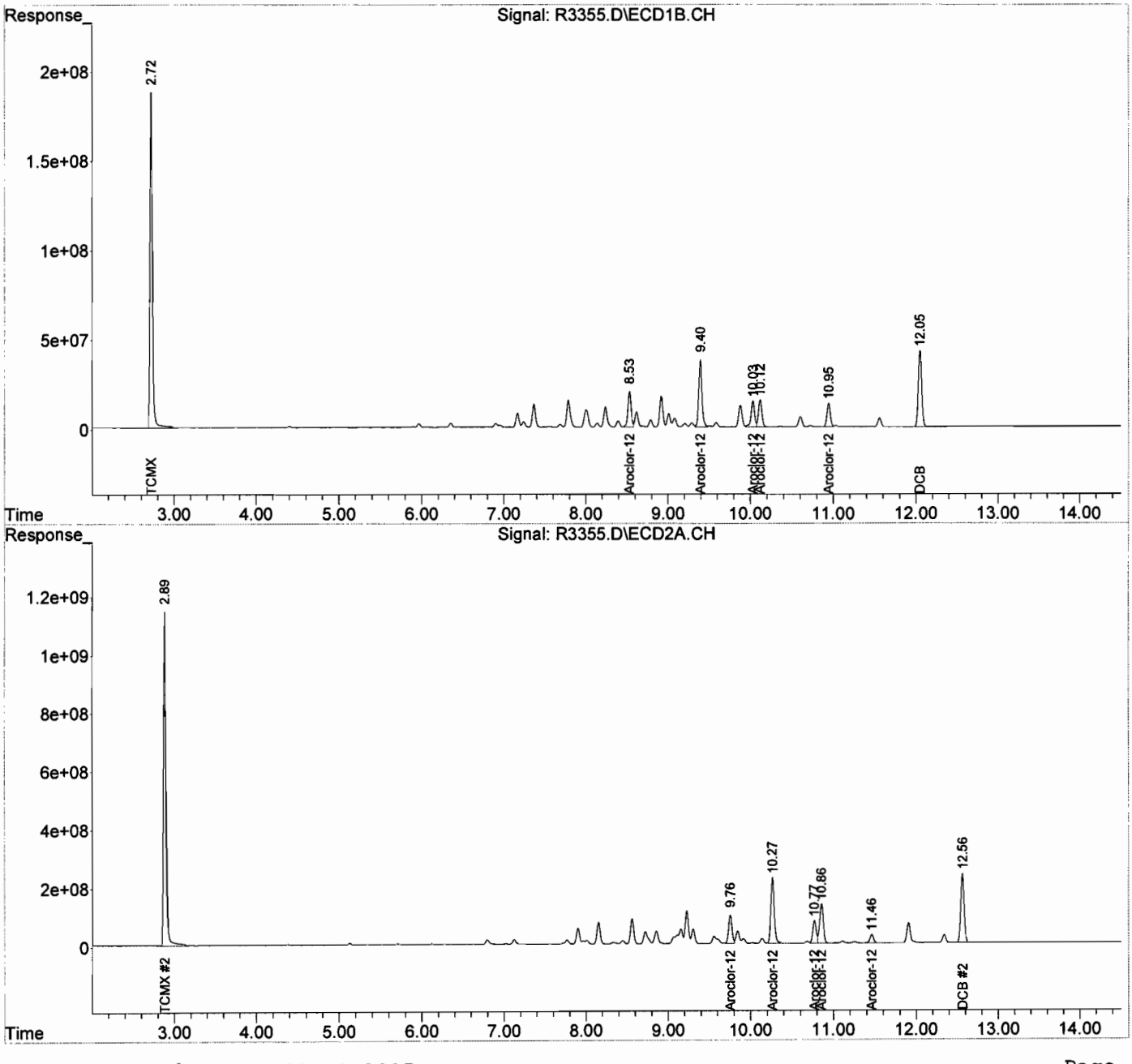
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3355.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:23
Operator : JS
Sample : ICC_8082_1262_IAS_5163,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:53:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:52:41 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3356.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:40
Operator : JS
Sample : ICC_8082_1268_IAS_5164,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:59:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:58:59 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3819.8E6	23594.3E6	232.374	223.484
Spiked Amount 200.000			Recovery	=	116.19%	111.74%
2) S DCB	12.05	12.57	1795.1E6	9715.8E6	316.951	306.358
Spiked Amount 200.000			Recovery	=	158.48%	153.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
43) L10 Aroclor-1268	10.03	10.77	1153.0E6	6248.1E6	500.000	500.000
44) L10 Aroclor-1268 {2}	10.12	10.85	1089.5E6	6061.9E6	500.000	500.000
45) L10 Aroclor-1268 {3}	10.59	11.11	925.7E6	5147.8E6	500.000	500.000
46) L10 Aroclor-1268 {4}	10.72	11.25	234.0E6	1326.9E6	500.000	500.000
47) L10 Aroclor-1268 {5}	11.56	12.34	2975.8E6	16395.9E6	500.000	500.000
Sum Aroclor-1268			6378.1E6	35180.7E6	2500.000	2500.000
Average Aroclor-1268					500.000	500.000

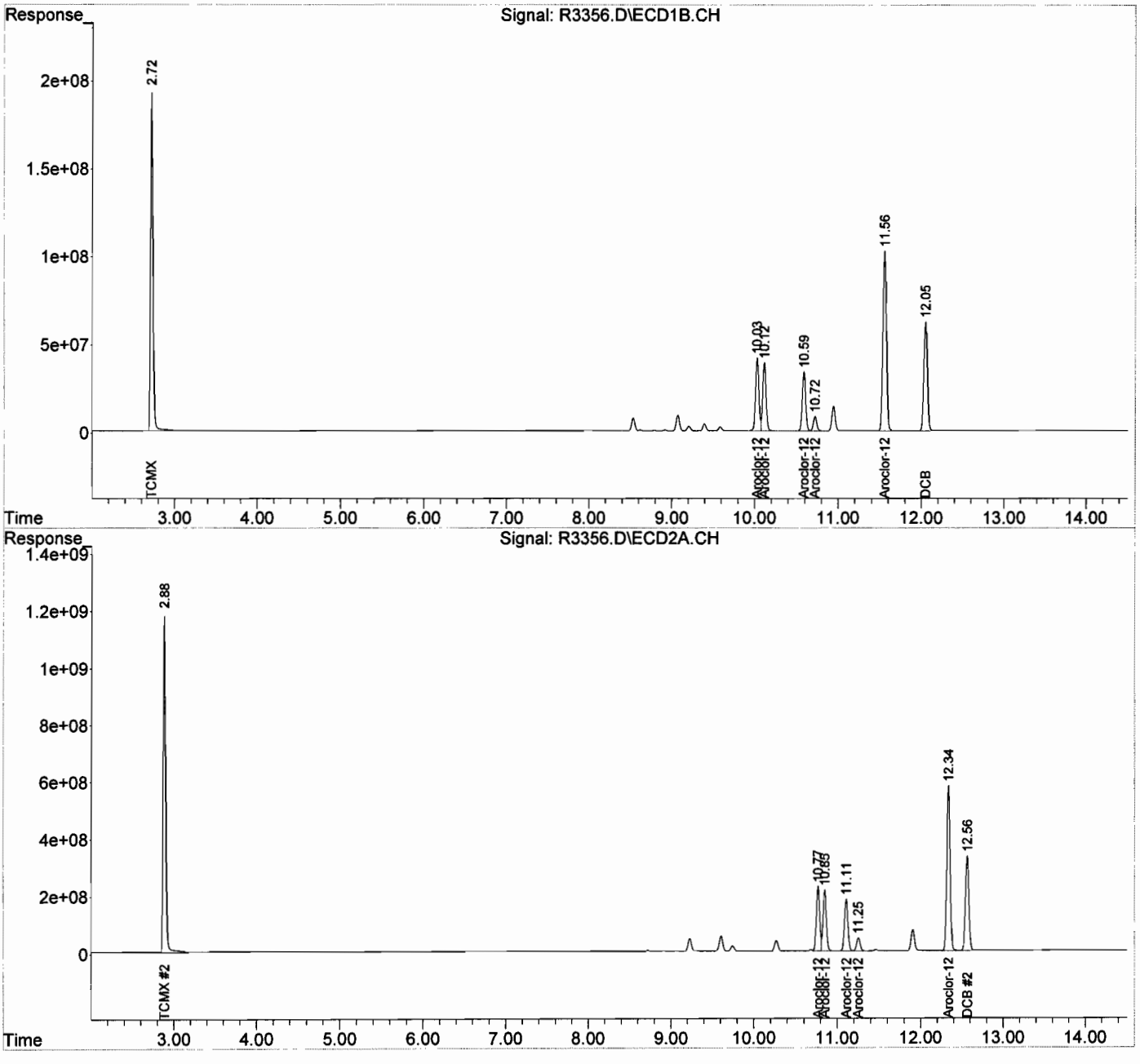
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3356.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:40
Operator : JS
Sample : ICC_8082_1268_IAS_5164,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 18 15:59:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 15:58:59 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-R

Data File: R3357.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	270069	7.72
Aroclor-1016 {2}	4.00	3.93	4.07	397550	364183	8.39
Aroclor-1016 {3}	4.55	4.48	4.62	512392	469991	8.27
Aroclor-1016 {4}	5.01	4.94	5.08	264908	239693	9.52
Aroclor-1016 {5}	5.45	5.38	5.52	407156	376327	7.57
Aroclor-1260	8.24	7.34	9.14	1112452	1085048	2.46
Aroclor-1260 {2}	8.92	8.02	9.82	670414	643902	3.95
Aroclor-1260 {3}	9.39	8.50	10.30	1578549	1562089	1.04
Aroclor-1260 {4}	9.88	8.98	10.78	776669	776165	0.06
Aroclor-1260 {5}	10.95	10.05	11.85	418737	410924	1.87

Data File: R3357.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	1703991	6.74
Aroclor-1016 {2}	4.38	4.31	4.45	3433340	3197251	6.88
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	7294642	10.41
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3239481	10.32
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2462681	5.29
Aroclor-1260	7.90	7.00	8.80	3176204	2971097	6.46
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4256667	10.02
Aroclor-1260 {3}	9.76	8.86	10.66	4476579	4226312	5.59
Aroclor-1260 {4}	10.27	9.37	11.17	9681850	9338424	3.55
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	6473558	4.81

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/19/2015 **Instrument ID:** GC-R

Data File: R3399.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	294331	0.57
Aroclor-1016 {2}	4.00	3.93	4.07	397550	404377	1.72
Aroclor-1016 {3}	4.55	4.48	4.62	512392	510390	0.39
Aroclor-1016 {4}	5.01	4.94	5.08	264908	257129	2.94
Aroclor-1016 {5}	5.45	5.38	5.52	407156	409564	0.59
Aroclor-1260	8.24	7.34	9.14	1112452	1105990	0.58
Aroclor-1260 {2}	8.92	8.02	9.82	670414	639187	4.66
Aroclor-1260 {3}	9.40	8.50	10.30	1578549	1544782	2.14
Aroclor-1260 {4}	9.88	8.98	10.78	776669	756872	2.55
Aroclor-1260 {5}	10.95	10.05	11.85	418737	382023	8.77

Data File: R3399.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	2008521	9.93
Aroclor-1016 {2}	4.37	4.31	4.45	3433340	3199646	6.81
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	8022969	1.46
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3700059	2.43
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2363474	9.11
Aroclor-1260	7.90	7.00	8.80	3176204	3148109	0.88
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4544620	3.93
Aroclor-1260 {3}	9.76	8.86	10.66	4476579	3786900	15.41
Aroclor-1260 {4}	10.27	9.37	11.17	9681850	9259155	4.37
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	6606832	2.85

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/19/2015 **Instrument ID:** GC-R

Data File: R3415.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.11	3.25	292658	294733	0.71
Aroclor-1016 {2}	4.00	3.93	4.07	397550	398023	0.12
Aroclor-1016 {3}	4.55	4.48	4.62	512392	501786	2.07
Aroclor-1016 {4}	5.01	4.94	5.08	264908	255465	3.56
Aroclor-1016 {5}	5.45	5.38	5.52	407156	404931	0.55
Aroclor-1260	8.24	7.34	9.14	1112452	1090621	1.96
Aroclor-1260 {2}	8.92	8.02	9.82	670414	633185	5.55
Aroclor-1260 {3}	9.40	8.50	10.30	1578549	1535347	2.74
Aroclor-1260 {4}	9.88	8.98	10.78	776669	753173	3.03
Aroclor-1260 {5}	10.95	10.05	11.85	418737	411825	1.65

Data File: R3415.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.70	3.84	1827156	1856529	1.61
Aroclor-1016 {2}	4.37	4.31	4.45	3433340	3005528	12.46
Aroclor-1016 {3}	5.13	5.06	5.20	8142077	7594977	6.72
Aroclor-1016 {4}	5.34	5.27	5.41	3612322	3346366	7.36
Aroclor-1016 {5}	5.52	5.45	5.59	2600302	2138775	17.75
Aroclor-1260	7.90	7.00	8.80	3176204	2850660	10.25
Aroclor-1260 {2}	8.15	7.26	9.06	4730423	4102384	13.28
Aroclor-1260 {3}	9.75	8.86	10.66	4476579	3660915	18.22
Aroclor-1260 {4}	10.26	9.37	11.17	9681850	8728330	9.85
Aroclor-1260 {5}	10.86	9.96	11.76	6800611	5970371	12.21

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3357.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:58
Operator : JS
Sample : ICV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 19 14:14:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3252.8E6	20230.5E6	197.877	191.623
Spiked Amount 200.000			Recovery	=	98.94%	95.81%
2) S DCB	12.05	12.57	1119.5E6	5955.0E6	197.664	187.773
Spiked Amount 200.000			Recovery	=	98.83%	93.89%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	135.0E6	852.0E6	461.408	466.296
4) L2 Aroclor-1016 {2}	4.00	4.38	182.1E6	1598.6E6	458.034	465.618
5) L2 Aroclor-1016 {3}	4.55	5.13	235.0E6	3647.3E6	458.625	447.959
6) L2 Aroclor-1016 {4}	5.01	5.34	119.8E6	1619.7E6	452.408	448.393
7) L2 Aroclor-1016 {5}	5.45	5.52	188.2E6	1231.3E6	462.141	473.538
Sum Aroclor-1016			860.1E6	8949.0E6	2292.616	2301.804
Average Aroclor-1016					458.523	460.361
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	542.5E6	1485.5E6	487.683	467.712
34) L8 Aroclor-1260 {2}	8.92	8.15	322.0E6	2128.3E6	480.227	449.925
35) L8 Aroclor-1260 {3}	9.39	9.76	781.0E6	2113.2E6	494.786	472.047
36) L8 Aroclor-1260 {4}	9.88	10.27	388.1E6	4669.2E6	499.675	482.264
37) L8 Aroclor-1260 {5}	10.95	10.86	205.5E6	3236.8E6	490.670	475.954
Sum Aroclor-1260			2239.1E6	13633.0E6	2453.042	2347.902
Average Aroclor-1260					490.608	469.580
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : R3357.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 15:58
Operator : JS
Sample : ICV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 19 14:14:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3544.9E6	22035.3E6	215.651	208.717
Spiked Amount 200.000			Recovery	=	107.83%	104.36%
2) S DCB	12.05	12.56	991.3E6	5761.4E6	175.038	181.670
Spiked Amount 200.000			Recovery	=	87.52%	90.83%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	147.2E6	1004.3E6	502.859	549.630
4) L2 Aroclor-1016 {2}	4.00	4.37	202.2E6	1599.8E6	508.585	465.967
5) L2 Aroclor-1016 {3}	4.55	5.13	255.2E6	4011.5E6	498.046	492.686
6) L2 Aroclor-1016 {4}	5.01	5.34	128.6E6	1850.0E6	485.318	512.144
7) L2 Aroclor-1016 {5}	5.45	5.52	204.8E6	1181.7E6	502.956	454.461
Sum Aroclor-1016			937.9E6	9647.3E6	2497.765	2474.888
Average Aroclor-1016					499.553	494.978
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	553.0E6	1574.1E6	497.096	495.577
34) L8 Aroclor-1260 {2}	8.92	8.15	319.6E6	2272.3E6	476.710	480.361
35) L8 Aroclor-1260 {3}	9.40	9.76	772.4E6	1893.5E6	489.304	422.968
36) L8 Aroclor-1260 {4}	9.88	10.27	378.4E6	4629.6E6	487.255	478.171
37) L8 Aroclor-1260 {5}	10.95	10.86	191.0E6	3303.4E6	456.161	485.753
Sum Aroclor-1260			2214.4E6	13672.8E6	2406.526	2362.830
Average Aroclor-1260					481.305	472.566
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

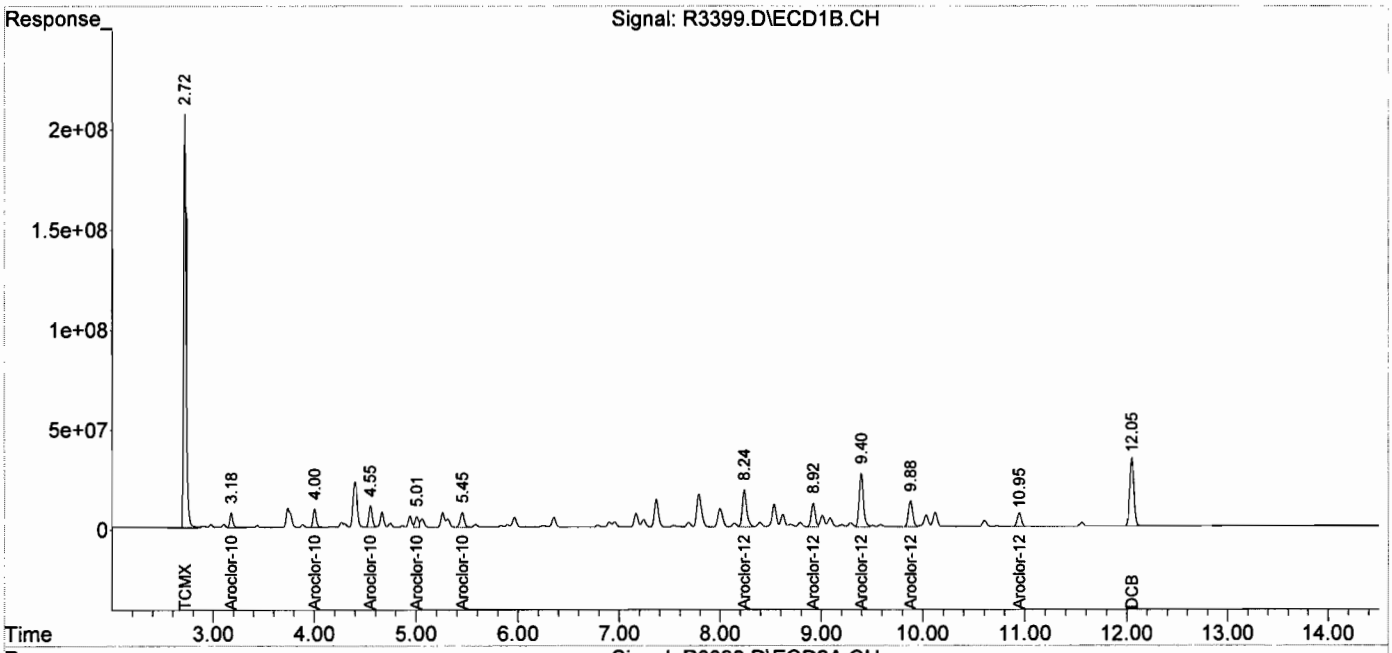
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

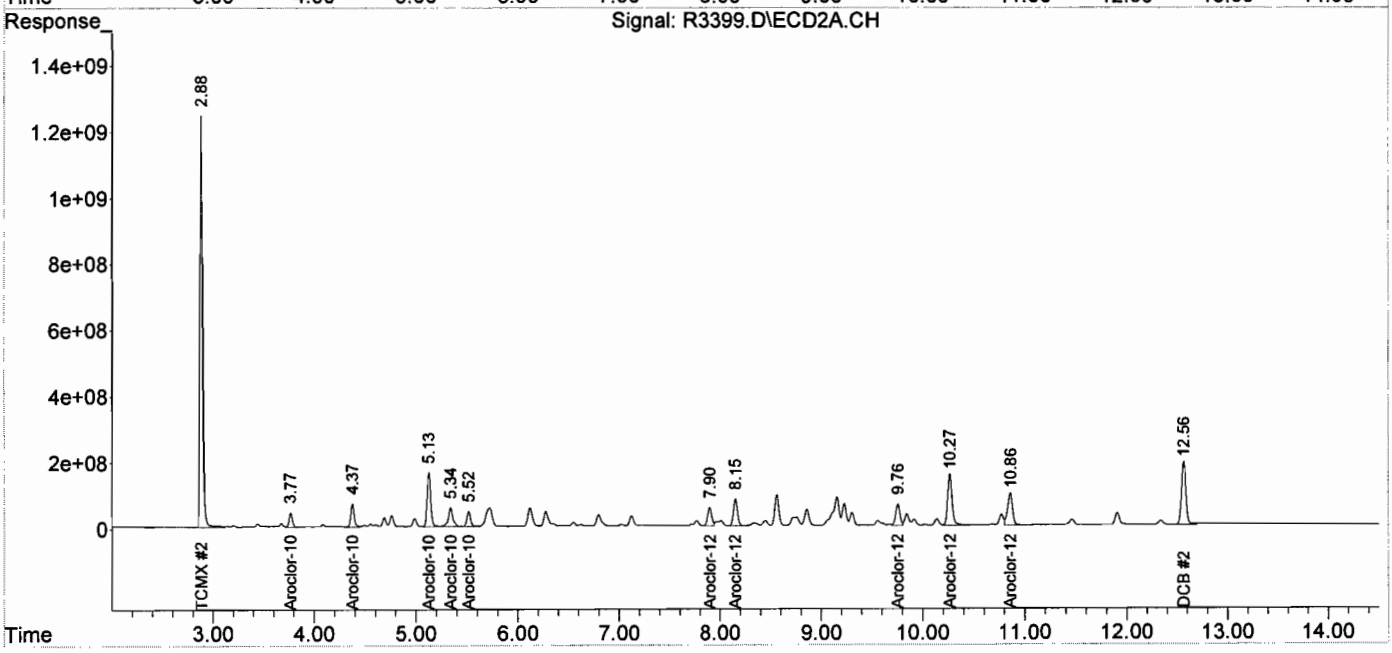
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3399.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 16:23
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 10:36:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3546.5E6	21551.6E6	215.744	204.136
Spiked Amount 200.000			Recovery	=	107.87%	102.07%
2) S DCB	12.05	12.56	1090.8E6	5280.3E6	192.603	166.499
Spiked Amount 200.000			Recovery	=	96.30%	83.25%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	147.4E6	928.3E6	503.546	508.038
4) L2 Aroclor-1016 {2}	4.00	4.37	199.0E6	1502.8E6	500.594	437.697
5) L2 Aroclor-1016 {3}	4.55	5.13	250.9E6	3797.5E6	489.651	466.403
6) L2 Aroclor-1016 {4}	5.01	5.34	127.7E6	1673.2E6	482.177	463.188
7) L2 Aroclor-1016 {5}	5.45	5.52	202.5E6	1069.4E6	497.267	411.255
Sum Aroclor-1016			927.5E6	8971.1E6	2473.235	2286.581
Average Aroclor-1016					494.647	457.316
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	545.3E6	1425.3E6	490.188	448.753
34) L8 Aroclor-1260 {2}	8.92	8.15	316.6E6	2051.2E6	472.234	433.617
35) L8 Aroclor-1260 {3}	9.40	9.75	767.7E6	1830.5E6	486.316	408.896m
36) L8 Aroclor-1260 {4}	9.88	10.26	376.6E6	4364.2E6	484.874	450.757
37) L8 Aroclor-1260 {5}	10.95	10.86	205.9E6	2985.2E6	491.746	438.958
Sum Aroclor-1260			2212.1E6	12656.3E6	2425.358	2180.982
Average Aroclor-1260					485.072	436.196
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

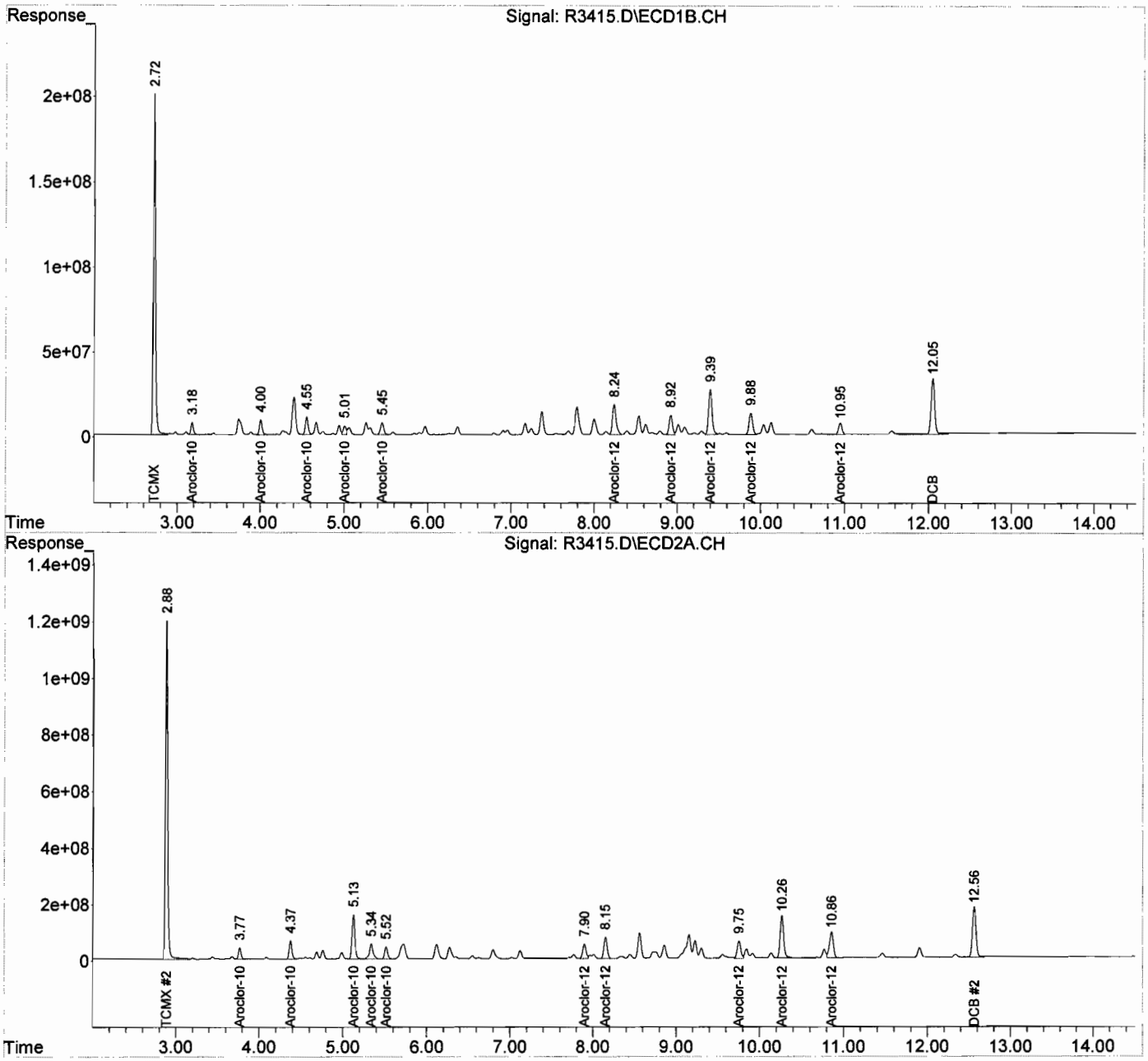
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3415.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 21:42
Operator : JS
Sample : CCV_8082_C_IAS_5143,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 12:12:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150219-06
Client ID: PCB
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/19/2015
Data file: R3400.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3400.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:03
Operator : JS
Sample : PCB,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:10:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.89	3480.7E6	21765.1E6	211.741	206.158
Spiked Amount 200.000			Recovery	=	105.87%	103.08%
2) S DCB	12.05	12.57	1039.2E6	5852.5E6	183.493	184.541
Spiked Amount 200.000			Recovery	=	91.75%	92.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

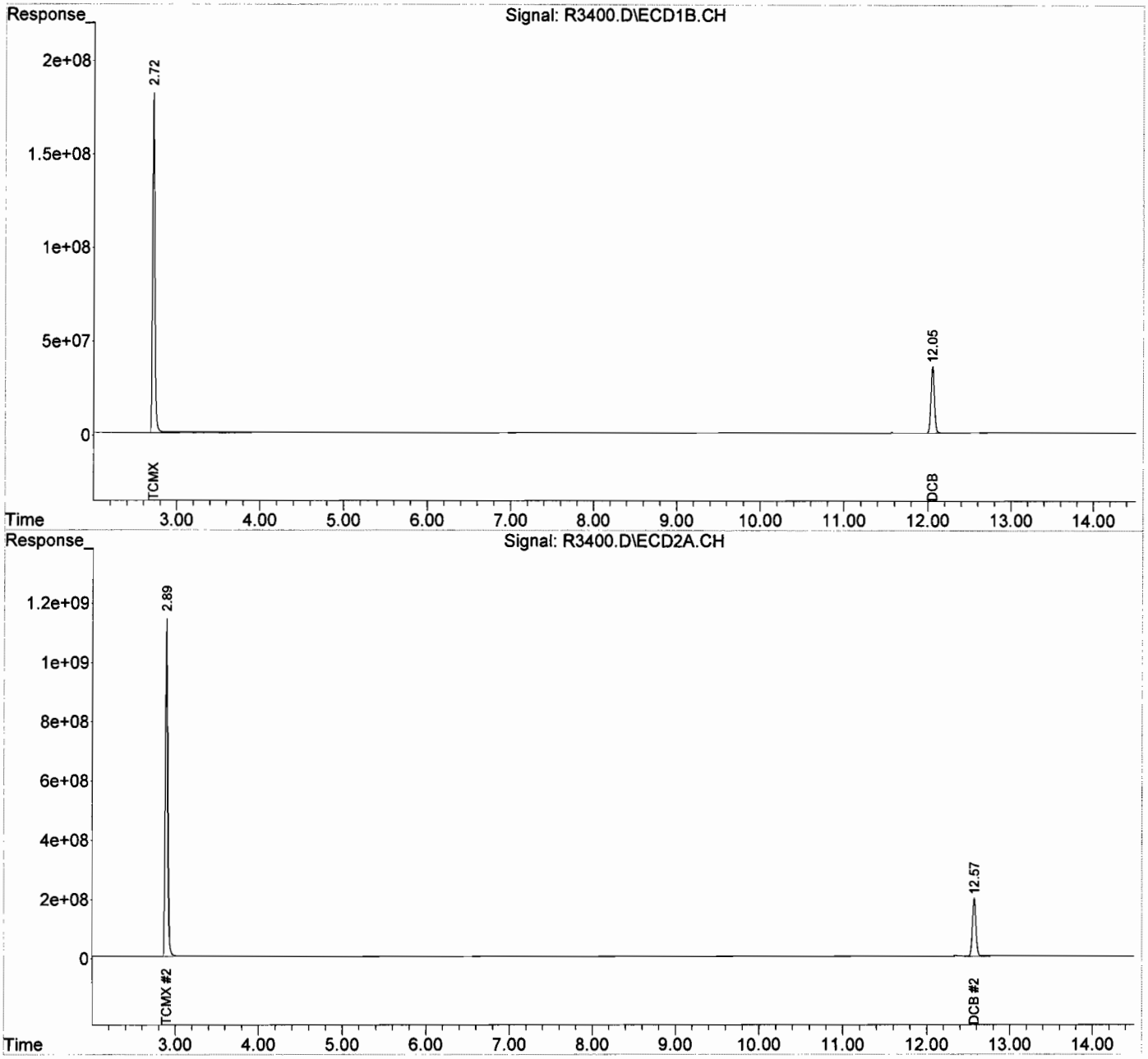
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3400.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:03
Operator : JS
Sample : PCB,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:10:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3475.9E6	21755.2E6	211.454	206.065
Spiked Amount 200.000			Recovery	=	105.73%	103.03%
2) S DCB	12.05	12.56	1061.1E6	5879.5E6	187.360	185.394
Spiked Amount 200.000			Recovery	=	93.68%	92.70%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	138.2E6	1021.0E6	472.170	558.791
4) L2 Aroclor-1016 {2}	4.00	4.37	187.5E6	1755.7E6	471.532	511.362
5) L2 Aroclor-1016 {3}	4.55	5.13	243.0E6	3933.5E6	474.261	483.107
6) L2 Aroclor-1016 {4}	5.00	5.34	122.9E6	1842.6E6	464.042	510.101
7) L2 Aroclor-1016 {5}	5.45	5.51	192.8E6	1362.1E6	473.504	523.821
Sum Aroclor-1016			884.4E6	9914.9E6	2355.510	2587.181
Average Aroclor-1016					471.102	517.436
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	521.9E6	1547.4E6	469.178	487.195
34) L8 Aroclor-1260 {2}	8.92	8.15	313.0E6	2216.5E6	466.879	468.569
35) L8 Aroclor-1260 {3}	9.39	9.76	757.0E6	2097.5E6	479.567	468.555
36) L8 Aroclor-1260 {4}	9.88	10.27	372.5E6	4430.4E6	479.604	457.594
37) L8 Aroclor-1260 {5}	10.95	10.86	192.2E6	3216.7E6	458.994	472.995
Sum Aroclor-1260			2156.7E6	13508.5E6	2354.222	2354.908
Average Aroclor-1260					470.844	470.982
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

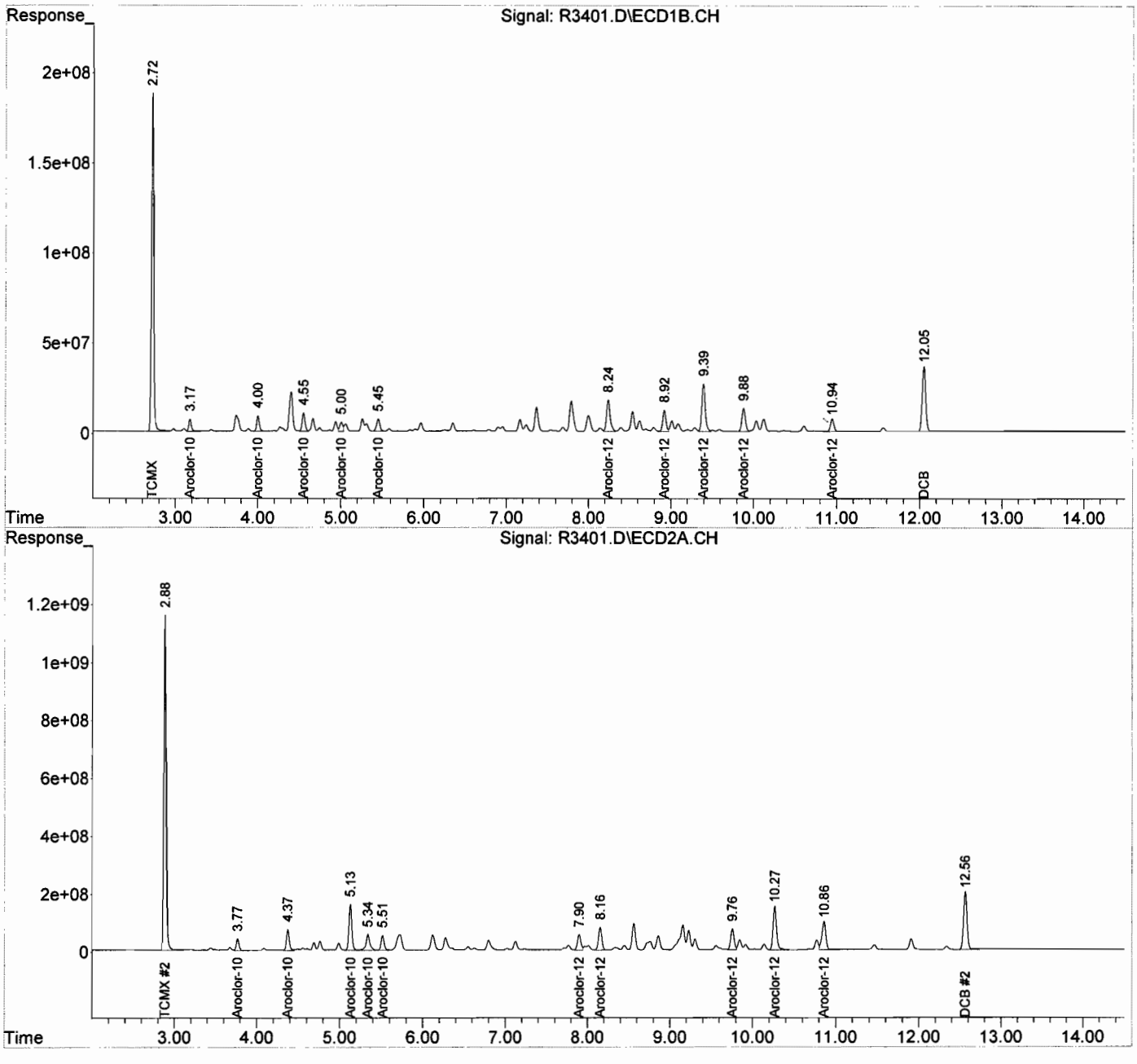
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3401.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:21
Operator : JS
Sample : PCB,LCSS150219-06,S,5g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:13:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.72	2.88	1614.7E6	10170.0E6	98.225	96.330	
Spiked Amount 200.000			Recovery	=	49.11%	48.16%	
2) S DCB	12.05	12.57	529.8E6	2918.2E6	93.538	92.017	
Spiked Amount 200.000			Recovery	=	46.77%	46.01%	
Target Compounds							
3) L2 Aroclor-1016	3.18	3.77	68599869	513.8E6	234.403	281.226	
4) L2 Aroclor-1016 {2}	4.00	4.37	98408375	942.1E6	247.537	274.384	
5) L2 Aroclor-1016 {3}	4.55	5.13	127.4E6	2021.2E6	248.553	248.247	
6) L2 Aroclor-1016 {4}	5.00	5.34	62623228	990.7E6	236.396	274.264	
7) L2 Aroclor-1016 {5}	5.45	5.51	96024407	726.1E6	235.842	279.248	
Sum Aroclor-1016			453.0E6	5194.0E6	1202.730	1357.368	
Average Aroclor-1016					240.546	271.474	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.24	7.89	252.7E6	876.3E6	227.192	275.889	
34) L8 Aroclor-1260 {2}	8.92	8.15	138.2E6	1108.4E6	206.167	234.310	
35) L8 Aroclor-1260 {3}	9.39	9.76	388.5E6	1031.8E6	246.127	230.486	
36) L8 Aroclor-1260 {4}	9.88	10.27	299.0E6	2035.9E6	384.978	210.280	#
37) L8 Aroclor-1260 {5}	10.95	10.86	108.0E6	1800.3E6	257.819m	264.729	
Sum Aroclor-1260			1186.4E6	6852.7E6	1322.283	1215.695	
Average Aroclor-1260					264.457	243.139	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

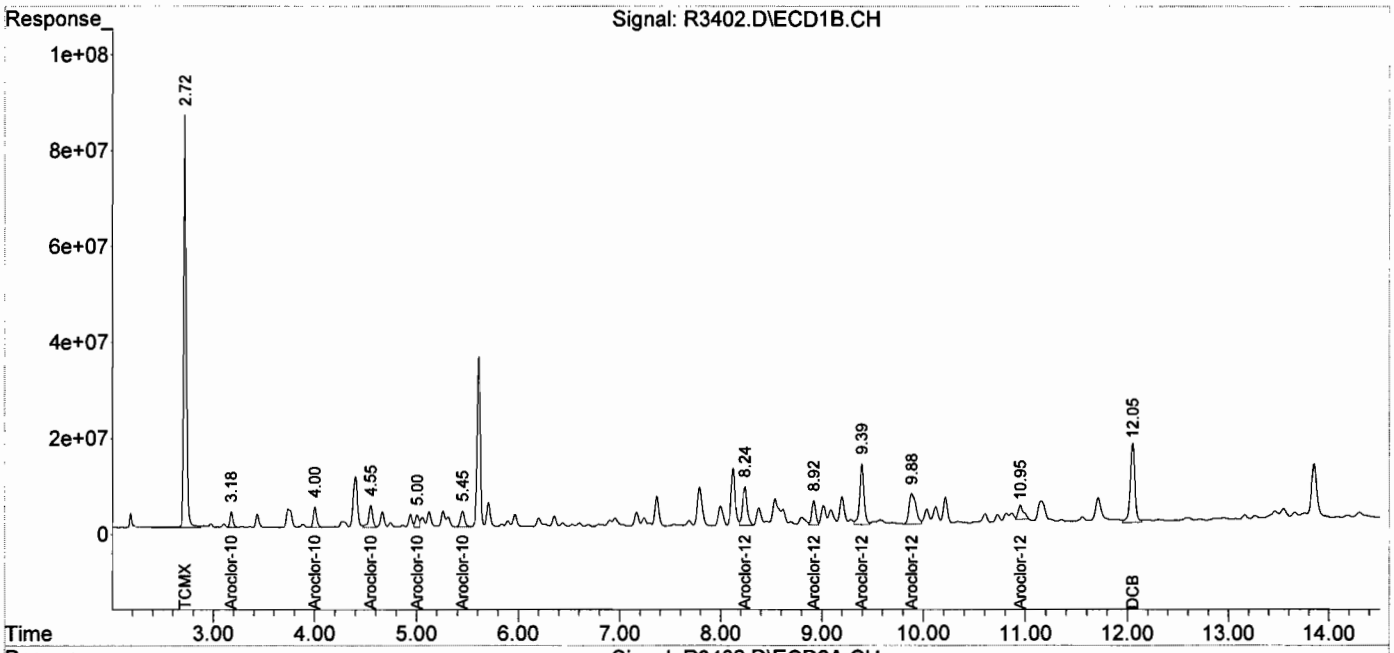
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

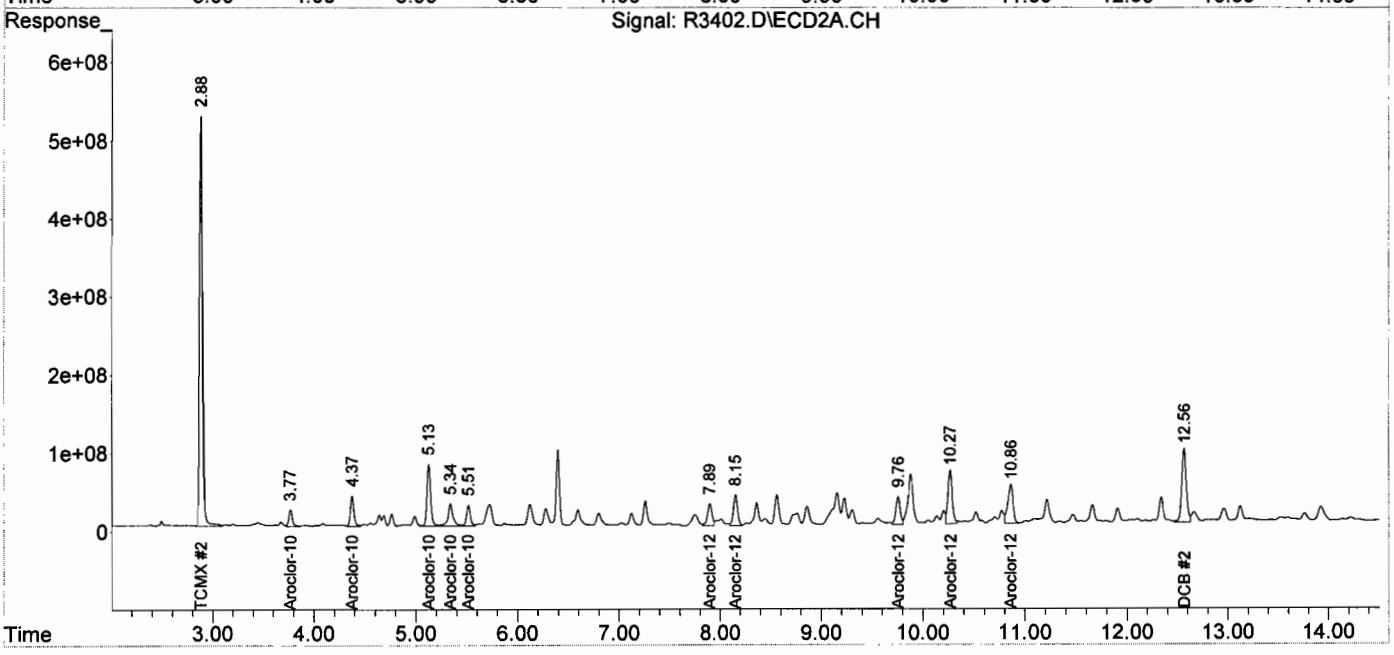
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3402.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:38
Operator : JS
Sample : PCB,01273-001MS,S,5.27g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:17:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	1633.7E6	10258.1E6	99.384	97.164
Spiked Amount 200.000			Recovery	=	49.69%	48.58%
2) S DCB	12.05	12.57	588.8E6	4423.1E6	103.970	139.470m#
Spiked Amount 200.000			Recovery	=	51.99%	69.73%
Target Compounds						
3) L2 Aroclor-1016	3.18	3.77	67755579	488.7E6	231.518	267.449
4) L2 Aroclor-1016 {2}	4.00	4.37	97251112	917.9E6	244.626	267.346
5) L2 Aroclor-1016 {3}	4.55	5.13	129.3E6	1942.5E6	252.440	238.581
6) L2 Aroclor-1016 {4}	5.01	5.34	60487056	930.8E6	228.332	257.660
7) L2 Aroclor-1016 {5}	5.45	5.51	93440509	687.5E6	229.495	264.376
Sum Aroclor-1016			448.3E6	4967.3E6	1186.412	1295.412
Average Aroclor-1016					237.282	259.082
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.24	7.90	257.1E6	809.2E6	231.134	254.773
34) L8 Aroclor-1260 {2}	8.92	8.15	142.5E6	1079.2E6	212.570	228.141
35) L8 Aroclor-1260 {3}	9.39	9.76	399.7E6	1067.7E6	253.205	238.501
36) L8 Aroclor-1260 {4}	9.91	10.27	347.7E6	1943.7E6	447.702	200.761 #
37) L8 Aroclor-1260 {5}	10.95	10.86	126.5E6	1979.8E6	302.107m	291.128
Sum Aroclor-1260			1273.6E6	6879.7E6	1446.718	1213.305
Average Aroclor-1260					289.344	242.661
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

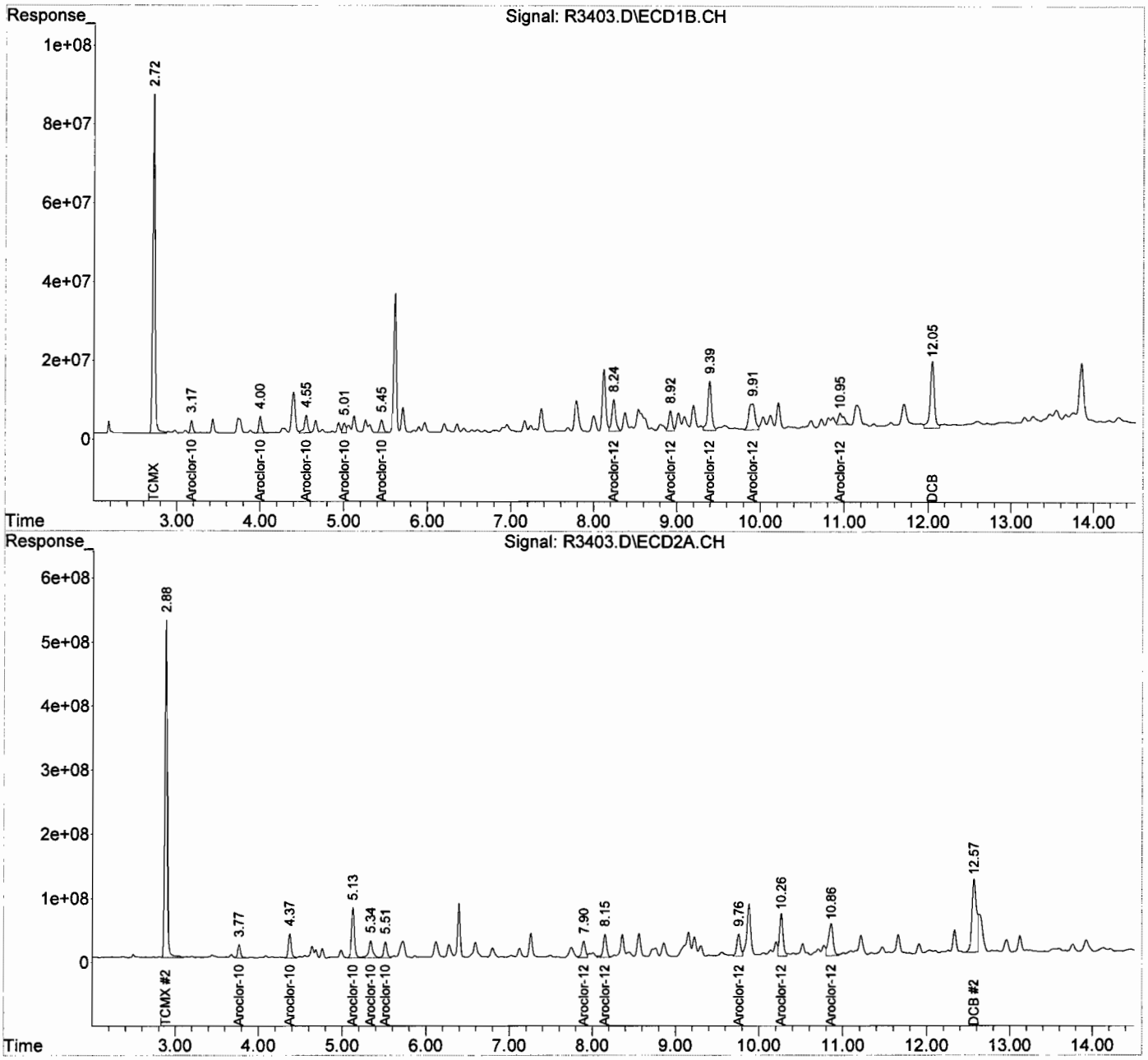
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-19-15\
Data File : R3403.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Feb 2015 17:55
Operator : JS
Sample : PCB,01273-001MSD,S,5.60g,10.6,20
Misc : NA,02/19/15,NA,2
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 11:16:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0218.M
Quant Title :
QLast Update : Wed Feb 18 16:04:31 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



PCB RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Soil)

Extraction Date/Time: 02/19/2015 14:29

Batch ID: **150219-06**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-06	PCB/Pest	5.00	20	40	1			
LCSS150219-06	PCB	5	20	40	1	100		
01273-001MS	PCB	5.27	20	40	4	100		R-48
01273-001MSD	PCB	5.60	20	40	4	100		R-48
LCSS150219-06	Pesticides	5.00	20	40	1		100	
01273-001MS	Pesticides	5.09	20	40	4		100	R-48
01273-001MSD	Pesticides	5.93	20	40	4		100	R-48

Standard Info	Surrogate IAS #
Solvent	RA#74-17/RA#74-13
Surrogate	IAS#5134
SPK 1	IAS#5175
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	PCB/Pest	5.31	20	40	4	10.6	R-48	01273-001MS / 150219-06	01273-001MS / 150219-06
2	01264-001	PCB	5.10	20	40	3	22.8		01273-001MS / 150219-06	
3	01264-004	PCB	5.66	20	40	4	15.5		01273-001MS / 150219-06	
4	01264-008	PCB	5.20	20	40	3	15.0		01273-001MS / 150219-06	
5	01264-012	PCB	5.27	20	40	4	15.3		01273-001MS / 150219-06	
6	01264-016	PCB	5.41	20	40	4	16.4		01273-001MS / 150219-06	
7	01264-036	PCB	5.23	20	40	3	16.2		01273-001MS / 150219-06	
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/19/2015 14:29
Weighed	Archie	02/19/2015 14:47
Surrogated	Archie	02/19/2015 14:48
Filtered	Archie	02/19/2015 16:39
Transferred	Archie	02/19/2015 16:39
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

PCB

DATE	2/18/2015 0:00	**Extra. Batch**	**150217-15**	BS	**Soil**
INSTRUMENT	**R**		**150218-07**	BS	Soil
METHOD	**RPCB0218**				
SYS METHOD	**8082A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	R3343		HEXANE									
2	99	R3344		ISOOCTANE									
3	1	R3345		ICC_8082_L1_IAS_5141,0.01_PPM									
4	2	R3346		ICC_8082_L2_IAS_5140,0.05_PPM									
5	3	R3347		ICC_8082_L3_IAS_5139,0.5_PPM									
6	4	R3348		ICC_8082_L4_IAS_5138,1_PPM									
7	5	R3349		ICC_8082_L5_IAS_5137,2_PPM									
8	6	R3350		ICC_8082_1221_IAS_5158,0.5_PPM									
9	7	R3351		ICC_8082_1232_IAS_5159,0.5_PPM									
10	8	R3352		ICC_8082_1242_IAS_5160,0.5_PPM									
11	9	R3353		ICC_8082_1248_IAS_5161,0.5_PPM									
12	10	R3354		ICC_8082_1254_IAS_5162,0.5_PPM									
13	11	R3355		ICC_8082_1262_IAS_5163,0.5_PPM									
14	12	R3356		ICC_8082_1268_IAS_5164,0.5_PPM									
15	13	R3357		ICV_8082_C_IAS_5143,0.5_PPM									

LABORATORY CHRONICLE - GC

PCB

DATE	2/19/2015 0:00	**Extra. Batch**	**150218-12**	BA	**Aqueous**
INSTRUMENT	**R**		**150218-08**	BS	Soil (Sonic)
METHOD	**RPCB0218**		**150219-06**	BS	Soil
SYS METHOD	**8082A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

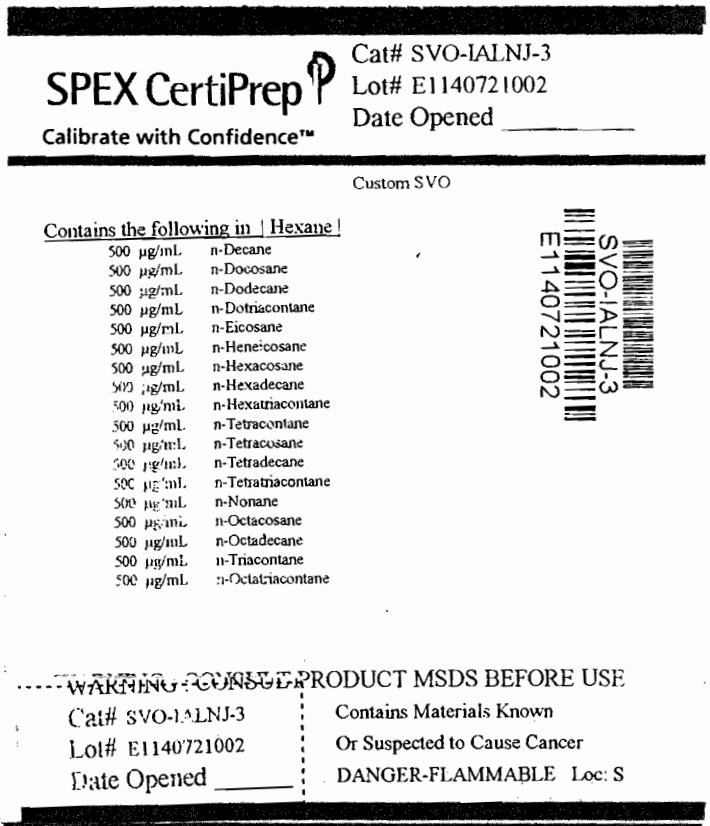
	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
20	1	R3399	CCV_8082_C_IAS_5143,0.5_PPM			1							
21	19	R3400		BLKS150219-06		1	5.00	20	S			2/19/15	0
22	20	R3401		LCSS150219-06		1	5	20	S			2/19/15	0
23	21	R3402		01273-001MS		2	5.27	20	S			2/19/15	10.6
24	22	R3403		01273-001MSD		2	5.60	20	S			2/19/15	10.6
25	23	R3404		01273	1	2	5.31	20	S	2/18/15	2/19/15	2/19/15	10.6
26	100	R3405		HEXANE		1							
27	100	R3406		HEXANE		1							
28	24	R3407		01264	1	1	5.10	20	S	2/18/15	2/19/15	2/19/15	22.8
29	25	R3408		01264	4	1	5.66	20	S	2/18/15	2/19/15	2/19/15	15.5
30	26	R3409		01264	8	1	5.20	20	S	2/18/15	2/19/15	2/19/15	15.0
31	27	R3410		01264	12	1	5.27	20	S	2/18/15	2/19/15	2/19/15	15.3
32	28	R3411		01264	16	1	5.41	20	S	2/18/15	2/19/15	2/19/15	16.4
33	29	R3412		01264	36	1	5.23	20	S	2/18/15	2/19/15	2/19/15	16.2
34	100	R3413		HEXANE		1							
35	100	R3414		HEXANE		1							
36	1	R3415	CCV_8082_C_IAS_5143,0.5_PPM			1							

STANDARD IAS#	STANDARD NAME:	ALI SPIKE		
5172				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/16/14	SPEX	SVO-IAL NJ-3	E1140721002	500 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/16/15	—			500PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	ARO SPIKE		
5173				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/16/14	SPEX	SVO-IAL NJ-4	E1140718009	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/16/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB Spike Stock (1016/1260)		
5174				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/31/14	CHEM SERVICE	1016 S11086J4 1260 S11092J4	254 0100 2302000	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	10ml of 1016 + 10ml of 1260			500 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5175				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/31/14	IAS # 5174	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
7/30/24	HEXANE		138465	



SPEX CertiPrep
Calibrate with Confidence™

Cat# SVO-IALNJ-3
Lot# E1140721002
Date Opened _____

Custom SVO

Contains the following in | Hexane |

500 µg/mL	n-Decane
500 µg/mL	n-Docosane
500 µg/mL	n-Dodecane
500 µg/mL	n-Dotriacontane
500 µg/mL	n-Eicosane
500 µg/mL	n-Heneicosane
500 µg/mL	n-Hexacosane
500 µg/mL	n-Hexadecane
500 µg/mL	n-Hexatriacontane
500 µg/mL	n-Tetracontane
500 µg/mL	n-Tetracosane
500 µg/mL	n-Tetradecane
500 µg/mL	n-Tetratriacontane
500 µg/mL	n-Nonane
500 µg/mL	n-Octacosane
500 µg/mL	n-Octadecane
500 µg/mL	n-Triacontane
500 µg/mL	n-Octatriacontane

SVO-IALNJ-3
E1140721002

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Cat# SVO-IALNJ-3
Lot# E1140721002
Date Opened _____

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: S

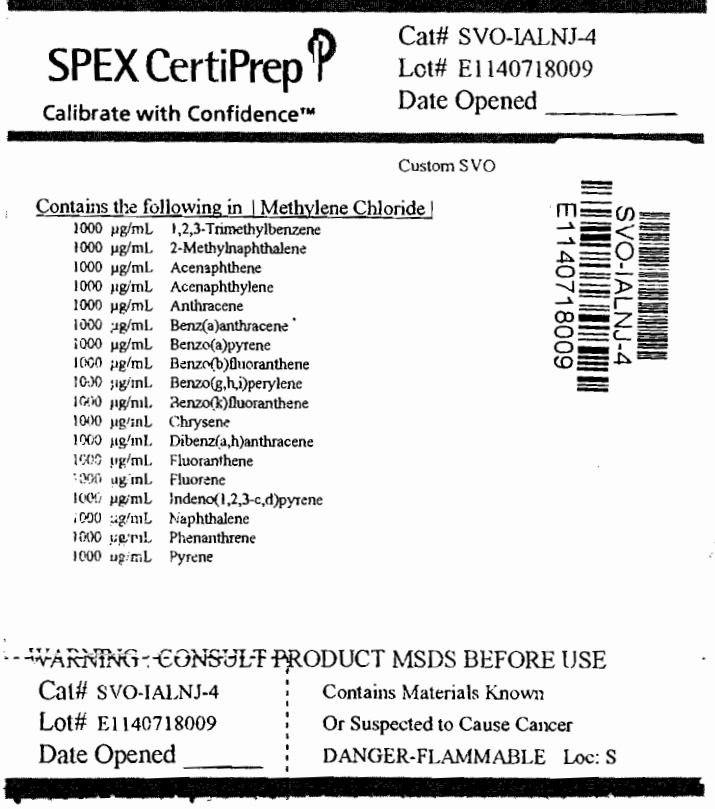
S-11086J4-5ML Exp 4/30/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 2540100

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD



SPEX CertiPrep
Calibrate with Confidence™

Cat# SVO-IALNJ-4
Lot# E1140718009
Date Opened _____

Custom SVO

Contains the following in | Methylene Chloride |

1000 µg/mL	1,2,3-Trimethylbenzene
1000 µg/mL	2-Methylnaphthalene
1000 µg/mL	Acenaphthene
1000 µg/mL	Acenaphthylene
1000 µg/mL	Anthracene
1000 µg/mL	Benz(a)anthracene
1000 µg/mL	Benzo(a)pyrene
1000 µg/mL	Benzo(b)fluoranthene
1000 µg/mL	Benzo(g,h,i)perylene
1000 µg/mL	Benzo(k)fluoranthene
1000 µg/mL	Chrysene
1000 µg/mL	Dibenz(a,h)anthracene
1000 µg/mL	Fluoranthene
1000 µg/mL	Fluorene
1000 µg/mL	Indeno(1,2,3-c,d)pyrene
1000 µg/mL	Naphthalene
1000 µg/mL	Phenanthrene
1000 µg/mL	Pyrene

SVO-IALNJ-4
E1140718009

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Cat# SVO-IALNJ-4
Lot# E1140718009
Date Opened _____

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: S

S-11092J4-5ML Exp 12/31/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution

Lot: 2302000

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

S-10542B3-5ML Exp 9/30/2017

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot:3168100

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 9/30/2017

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot:3168100

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

BZ-209J4-5ML Exp 11/30/2016

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution

Lot: 2188800

1000ug/ml In Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

NOTEBOOK INSERT LABEL

Aroclor 1016 **48097**
Lot: XA10671V EXP: OCT/2017 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

SUPELCO
Solutions within.
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16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260 **4-4809**
Lot: LC02622 EXP: AUG/2016 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
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STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10542B3 DCB B2-20924	3168100 2158800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ml of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock Chml of IAS#5135 + 400 µl of SURR. (IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
5137				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS #5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:5			2 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V59-10	

STANDARD IAS#	STANDARD NAME:	PCB L4 (1016/1260)		
5138				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10			1 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB L3 (1016/1260)		
5139				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5136	—	—	10 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:20			0.5 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
5140				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5136 33	—	—	0.5 PPM + SURR.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10			0.05 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB98893 EXP: MAY/2016 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

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STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
5140				
STD.PREP.DATE	Co.NAME 33	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5136	—	—	0.5 PPM + SURRO.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:50			0.01 PPM + SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB HORIBA STANDARD (SECOND SOURCE)		
5142				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS #4978	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/30/15	1:10 (1ML of ~~#4978 + 1016 1ML 1260~~ IAS #5134 Dual SURROG.) → 10ML ISOOCTANE			10 PPM + 4 PPM SURROG.
SOLVENT EXP.DATE	SOLVENT USED: ISOOCTANE		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	PCB L3 (SECOND SOURCE)		
5143				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5142	—	—	10 PPM + 4 PPM SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/30/15	1:20			0.5 PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED: ISOOCTANE		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	1221 PCB		
5144				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-8098	LB 98893	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
5/31/16	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
4976				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			0.05ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
4977				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:50			0.01 ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB STOCK (second source)		
4978				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	ChemService	(1016) S-11086J4 (1260) S-11092J4	2540100 2302000	1,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~6/30~~/15	1:10 (1mL of 1016, 1mL 1260 → 10mL)			100ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB Working Standard (second source)		
4979				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4978	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:10 stock (IAS #4978) + 400uL surrog (IAS #4828) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

NOTEBOOK INSERT LABEL

Aroclor 1232 **4-4805**

Lot: LC01902 EXP: JUL/2018 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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NOTEBOOK INSERT LABEL

Aroclor 1242 **44806**

Lot: LC07107V EXP: APR/2017 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

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16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1248 **4-4807**

Lot: LC08888V EXP: JUL/2017 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
Solutions within.™
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1254 **4-4808**

Lot: LB98272 EXP: FEB/2016 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
Solutions within.™
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16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	1232 PCB		
5145				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4805	LC01902	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/31/18	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB		
5146				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	44806	LC07107V	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/17	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB		
5147				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4807	LC08888V	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/31/17	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB		
5148				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4808	LB98272	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/16	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA

Catalog# 32409
This product contains PCB's
Aroclor® 1262 Standard

1000 ug/mL each in Hexane
Lot# A097027 Exp. Date: 10/2019 Store: 25°C nomin

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA

Catalog# 32410
This product contains PCB's
Aroclor® 1268 Standard

1000 ug/mL each in Hexane
Lot# A094374 Exp. Date: 06/2018 Store: 25°C nominal

STANDARD IAS#	STANDARD NAME:	PCB 1262		
5149				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	RESTEK	32409	A097027	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/31/19	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	PCB 1268		
5150				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	RESTEK	32410	A094374	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/30/19	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1221 PCB STOCK		
5151				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5144	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100 µl of 1221 (IAS# 5144)) + 1:25 (SURROG. 400 µl (IAS# 5134)) → 10 ML			10PPM + 4PPM SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/04/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB STOCK		
5152				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5145	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100 µl (1232) of 5145) + 1:25 (SURROG. 400 µl (IAS# 5134)) → 10 ML			10PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/04/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB STOCK		
5153				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5146	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1242 IAS#5146) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB STOCK		
5154				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5147	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1248 IAS# 5147) + 1:25 (400µl of surr. IAS# 5134) → 10 ML			10 PPM + 4PPM SURR
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB STOCK		
5155				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5148	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1254 IAS # 5148) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1262 PCB STOCK		
5156				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5149	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of 1262 IAS# 5149) + 1:25 (400µl of surr. IAS#5134) → 10 ML			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1268 PCB STOCK		
5157				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5150	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:100 (100µl of IAS# 5150 1268 # ~~1:25~~ (400µl of IAS# 5134 SURR.) 510ML			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	ISOOCTANE		V559-10	

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
5158				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5151	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
5159				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5152	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
5160				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5153	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	ISOOctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1248 PCB L3		
5161				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5154	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1254 PCB L3		
5162				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5155	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10 PPM + 4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1262 PCB L3		
5163				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS#5156	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10PPM+4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1268 PCB L3		
5164				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS # 5157	—	—	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/11/15	1:20			10PPM+4PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

NOTEBOOK INSERT LABEL

Aroclor 1016 **4-8097**

Lot: LB95199 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

SUPELCO
Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260 **4-4809**

Lot: LB92109 EXP: APR/2015 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED:_____

SUPELCO
Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809 ~~8097~~	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:			
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:			
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

PESTICIDE DATA

PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/20/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150219-06	SOIL	102		90		101		87	
Pest	LCSS150219-06	SOIL	101		84		100		97	
Pest	01273-001MS	SOIL	94		82		98		120	
Pest	01273-001MSD	SOIL	98		81		100		110	
GPEC-WC1	E15-01273-001	SOIL	91		94		95		130	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150219-06
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8322.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	78.9	79	
beta-BHC	100.0	0.0	74.4	74	
gamma-BHC (Lindane)	100.0	0.0	78.5	79	
delta-BHC	100.0	0.0	74.7	75	
Heptachlor	100.0	0.0	77.0	77	
Aldrin	100.0	0.0	79.9	80	
Heptachlor epoxide	100.0	0.0	79.4	79	
Endosulfan I	100.0	0.0	81.9	82	
4,4'-DDE	100.0	0.0	79.5	80	
Dieldrin	100.0	0.0	69.0	69	
Endrin	100.0	0.0	74.9	75	
Endosulfan II	100.0	0.0	80.1	80	
4,4'-DDD	100.0	0.0	74.8	75	
Endrin aldehyde	100.0	0.0	73.7	74	
Endosulfan sulfate	100.0	0.0	75.6	76	
4,4'-DDT	100.0	0.0	73.7	74	
Endrin ketone	100.0	0.0	79.2	79	
Methoxychlor	100.0	0.0	72.0	72	
alpha-Chlordane	100.0	0.0	78.9	79	
gamma-Chlordane	100.0	0.0	79.4	79	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01273-001
Date Received: 02/19/2015
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
MS Data file: O8323.D
MSD Data file: O8324.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.6
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
alpha-BHC	100.0	0.0	74.2	74		75.0	75	1
beta-BHC	100.0	0.0	77.3	77		76.8	77	1
gamma-BHC (Lindane)	100.0	0.0	75.1	75		71.2	71	5
delta-BHC	100.0	0.0	71.4	71		72.8	73	2
Heptachlor	100.0	0.0	70.8	71		70.0	70	1
Aldrin	100.0	0.0	74.8	75		73.9	74	1
Heptachlor epoxide	100.0	0.0	72.4	72		71.8	72	1
Endosulfan I	100.0	0.0	72.1	72		75.1	75	4
4,4'-DDE	100.0	0.0	74.9	75		74.6	75	0
Dieldrin	100.0	0.0	61.8	62		64.3	64	4
Endrin	100.0	0.0	78.8	79		75.7	76	4
Endosulfan II	100.0	0.0	72.5	73		72.1	72	1
4,4'-DDD	100.0	0.0	84.7	85		81.5	82	4
Endrin aldehyde	100.0	0.0	69.7	70		64.5	65	8
Endosulfan sulfate	100.0	0.0	71.6	72		68.7	69	4
4,4'-DDT	100.0	0.0	77.7	78		75.3	75	3
Endrin ketone	100.0	0.0	80.0	80		71.3	71	12
Methoxychlor	100.0	0.0	82.7	83		76.5	77	8
alpha-Chlordane	100.0	0.0	71.3	71		70.0	70	2
gamma-Chlordane	100.0	0.0	68.2	68		67.0	67	2

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O8321.D

Instrument ID: GC-O

Date Extracted: 02/19/2015

Matrix: SOIL

Date Analyzed: 02/20/2015

Time Analyzed: 17:08

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150219-06	02/20/2015	17:20
Pest	01273-001MS	02/20/2015	17:33
Pest	01273-001MSD	02/20/2015	17:46
GPEC-WC1	E15-01273-001	02/20/2015	17:58

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150219-06	02/20/2015	17:08	1.81		6.60		2.08		8.15	
Pest	LCSS150219-06	02/20/2015	17:20	1.81		6.60		2.08		8.15	
Pest	01273-001MS	02/20/2015	17:33	1.81		6.60		2.08		8.15	
Pest	01273-001MSD	02/20/2015	17:46	1.81		6.60		2.08		8.15	
GPEC-WC1	E15-01273-001	02/20/2015	17:58	1.81		6.59		2.08		8.14	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8325.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:58
Operator : IB
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:48:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17975562	28260321	181.781	189.589
Spiked Amount 200.000	Range 10 - 180		Recovery =		90.89%	94.79%
2) S DCB	6.59	8.14	8571813	16116924	187.891	259.152m#
Spiked Amount 200.000	Range 10 - 180		Recovery =		93.95%	129.58%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

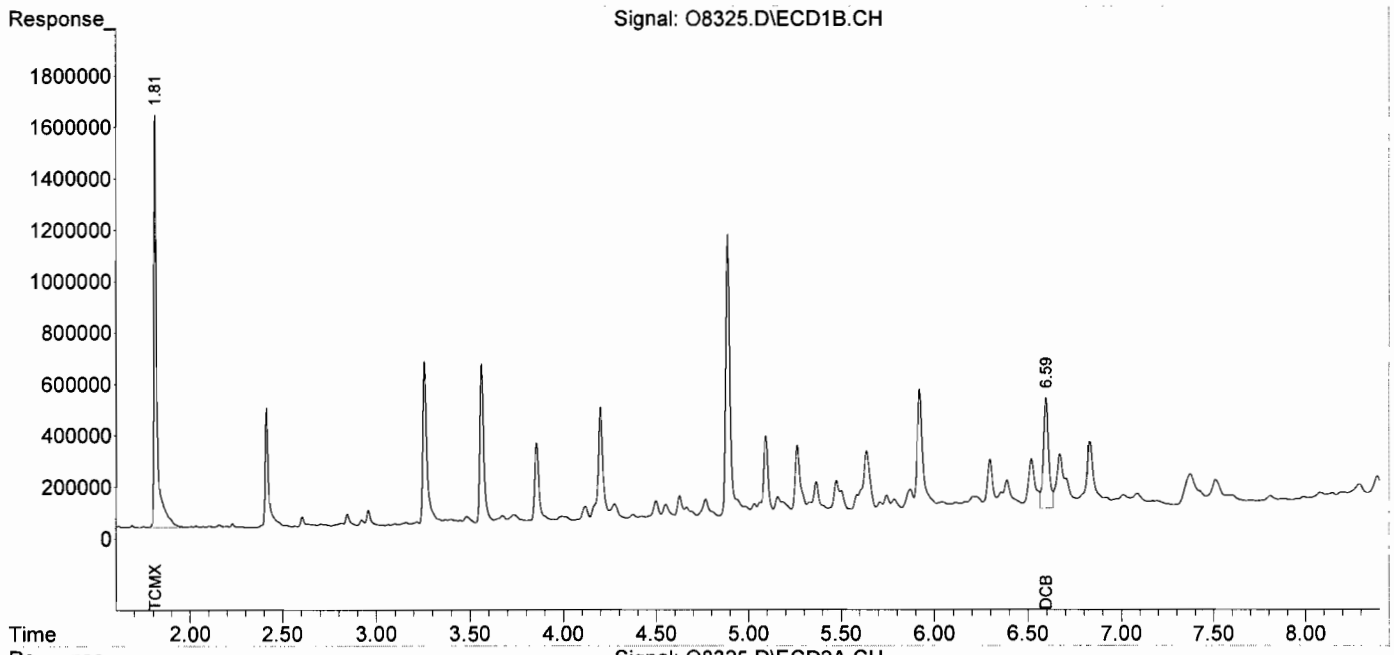
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

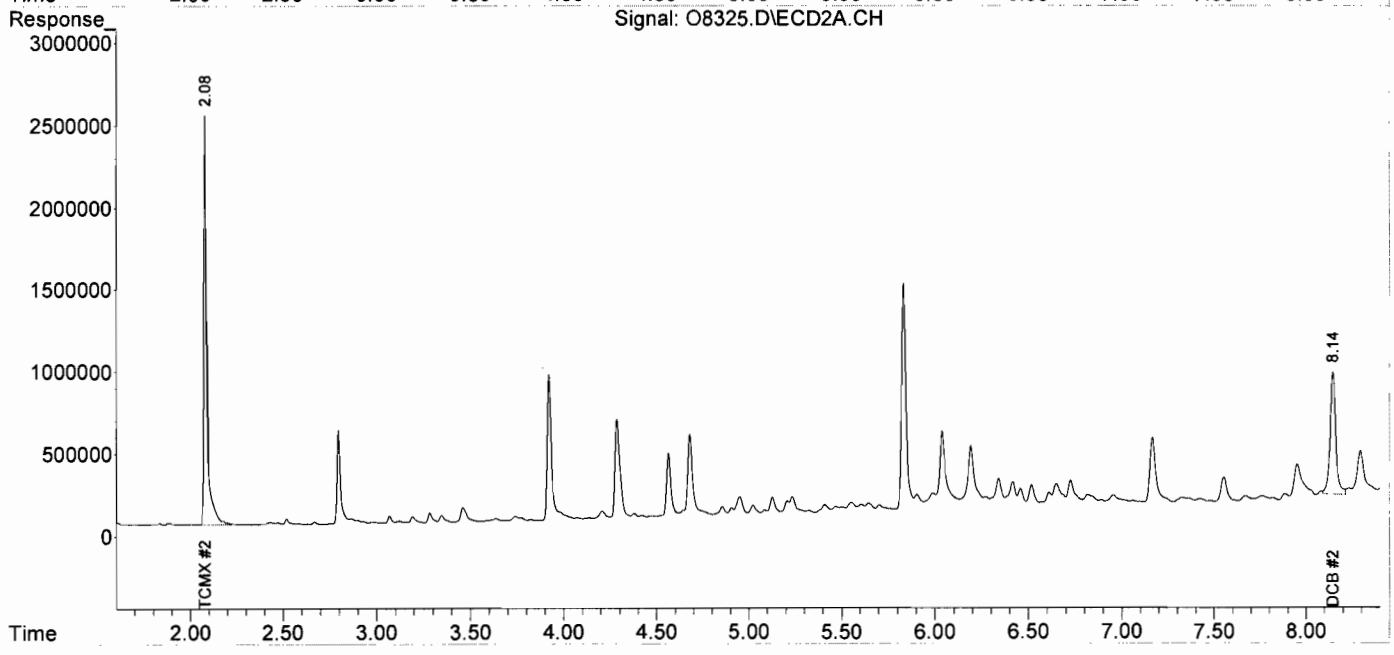
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8325.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:58
Operator : IB
Sample : GPEC-WC1,E15-01273-001,S,5.31g,10.6,20
Misc : 150219-06,02/19/15,02/19/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:48:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE STANDARDS

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8317.D O8316.D O8315.D O8314.D O8313.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.13	2.13	2.13	2.13	2.13	2.13	2.07	2.19
beta-BHC	2.38	2.38	2.38	2.38	2.38	2.38	2.32	2.44
gamma-BHC	2.33	2.33	2.33	2.33	2.33	2.33	2.27	2.39
delta-BHC	2.51	2.51	2.51	2.51	2.52	2.51	2.45	2.57
Heptachlor	2.66	2.66	2.66	2.66	2.67	2.67	2.59	2.75
Aldrin	2.89	2.89	2.89	2.90	2.90	2.90	2.82	2.98
Heptachlor epoxide	3.38	3.38	3.38	3.38	3.39	3.38	3.30	3.46
Endosulfan I	3.73	3.73	3.73	3.73	3.73	3.73	3.65	3.81
4,4'-DDE	3.67	3.67	3.67	3.67	3.67	3.67	3.57	3.77
Dieldrin	3.94	3.94	3.94	3.94	3.95	3.94	3.84	4.04
Endrin	4.16	4.16	4.16	4.16	4.16	4.16	4.06	4.26
Endosulfan II	4.37	4.37	4.37	4.37	4.37	4.37	4.27	4.47
4,4'-DDD	4.22	4.22	4.22	4.22	4.23	4.22	4.12	4.32
Endrin aldehyde	4.78	4.78	4.78	4.78	4.78	4.78	4.66	4.90
Endosulfan sulfate	5.21	5.22	5.22	5.21	5.22	5.22	5.10	5.34
4,4'-DDT	4.49	4.49	4.49	4.49	4.49	4.49	4.37	4.61
Endrin ketone	5.50	5.50	5.50	5.50	5.50	5.50	5.38	5.62
Methoxychlor	4.98	4.98	4.98	4.98	4.98	4.98	4.86	5.10
alpha-Chlordane	3.60	3.60	3.61	3.61	3.61	3.61	3.53	3.69
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.61				2.53	2.69
Chlordane {2}			3.00				2.92	3.08
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.60				3.52	3.68
Chlordane {5}			4.31				4.23	4.39
Toxaphene 500 ppb			4.48				4.40	4.56
Toxaphene {2}			4.75				4.67	4.83
Toxaphene {3}			5.11				5.03	5.19
Toxaphene {4}			5.48				5.40	5.56
Toxaphene {5}			5.64				5.56	5.72

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O8317.D O8316.D O8315.D O8314.D O8313.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	173433	194063	195057	237542	191608	198340	11.91
beta-BHC	88575	77997	92666	96893	84067	88039	8.36
gamma-BHC	157228	166815	154533	199489	155327	166678	11.39
delta-BHC	168557	171097	176015	214343	174483	180899	10.46
Heptachlor	158910	163215	163976	197471	157008	168116	9.91
Aldrin	158683	163919	164950	197194	157663	168482	9.71
Heptachlor epoxide	150092	147477	148518	175652	140545	152457	8.84
Endosulfan I	147629	144248	145989	173216	138722	149961	8.95
4,4'-DDE	120276	129612	134211	160794	130456	135070	11.30
Dieldrin	146364	151024	153612	183677	148337	156603	9.82
Endrin	113493	120627	122091	149696	119137	125009	11.34
Endosulfan II	134861	124318	127821	152959	123585	132709	9.17
4,4'-DDD	113020	109584	115685	138187	114578	118211	9.65
Endrin aldehyde	122856	102294	106455	125827	103958	112278	9.94
Endosulfan sulfate	132377	108345	112614	134629	110627	119718	10.61
4,4'-DDT	79787	91837	98945	125699	103288	99911	16.95
Endrin ketone	155862	138044	142703	166983	134848	147688	9.10
Methoxychlor	42787	47656	50261	63250	50596	50910	14.87
alpha-Chlordane	147762	143296	144335	170242	136583	148444	8.65
gamma-Chlordane	149524	149002	149887	178383	143223	154004	9.02
Chlordane 500 ppb			3960				
Chlordane {2}			4953				
Chlordane {3}			14412				
Chlordane {4}			22881				
Chlordane {5}			3567				
Toxaphene 500 ppb			2135				
Toxaphene {2}			3804				
Toxaphene {3}			3964				
Toxaphene {4}			3722				
Toxaphene {5}			1591				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O8317.C O8316.C O8315.C O8314.C O8313.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.51	2.51	2.51	2.51	2.52	2.51	2.45	2.57
beta-BHC	2.86	2.86	2.86	2.86	2.86	2.86	2.80	2.92
gamma-BHC	2.80	2.80	2.80	2.80	2.81	2.80	2.74	2.86
delta-BHC	3.12	3.12	3.12	3.12	3.12	3.12	3.06	3.18
Heptachlor	3.18	3.18	3.18	3.18	3.19	3.18	3.10	3.26
Aldrin	3.48	3.48	3.48	3.48	3.49	3.48	3.40	3.56
Heptachlor epoxide	4.02	4.02	4.02	4.02	4.02	4.02	3.94	4.10
Endosulfan I	4.41	4.41	4.41	4.41	4.42	4.41	4.33	4.49
4,4'-DDE	4.51	4.51	4.51	4.51	4.51	4.51	4.41	4.61
Dieldrin	4.69	4.69	4.69	4.69	4.69	4.69	4.59	4.79
Endrin	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Endosulfan II	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDD	5.11	5.11	5.11	5.11	5.11	5.11	5.01	5.21
Endrin aldehyde	5.59	5.59	5.59	5.59	5.59	5.59	5.47	5.71
Endosulfan sulfate	5.89	5.89	5.89	5.89	5.89	5.89	5.77	6.01
4,4'-DDT	5.44	5.44	5.45	5.45	5.45	5.45	5.33	5.57
Endrin ketone	6.49	6.49	6.49	6.49	6.49	6.49	6.37	6.61
Methoxychlor	6.20	6.20	6.20	6.20	6.20	6.20	6.08	6.32
alpha-Chlordane	4.35	4.35	4.35	4.35	4.35	4.35	4.27	4.43
gamma-Chlordane	4.20	4.20	4.20	4.20	4.21	4.20	4.12	4.28
Chlordane 500 ppb			3.06				2.98	3.14
Chlordane {2}			3.61				3.53	3.69
Chlordane {3}			4.20				4.12	4.28
Chlordane {4}			4.29				4.21	4.37
Chlordane {5}			4.35				4.27	4.43
Toxaphene 500 ppb			5.32				5.24	5.40
Toxaphene {2}			5.59				5.51	5.67
Toxaphene {3}			5.88				5.80	5.96
Toxaphene {4}			6.16				6.08	6.24
Toxaphene {5}			6.60				6.52	6.68

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O8317.C O8316.C O8315.C O8314.C O8313.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	221620	268777	276045	343300	272349	276418	15.72
beta-BHC	120466	104332	112126	128498	106816	114448	8.73
gamma-BHC	207380	239616	239267	303132	242309	246341	14.14
delta-BHC	218481	229059	237759	298939	242175	245282	12.77
Heptachlor	203182	221354	230409	284262	228592	233560	12.98
Aldrin	208297	224152	230348	282616	227380	234558	12.01
Heptachlor epoxide	195491	201219	206439	251113	202391	211331	10.69
Endosulfan I	176480	182477	188493	230059	185799	192661	11.10
4,4'-DDE	172443	186080	196024	241080	196929	198511	12.98
Dieldrin	184036	201848	210818	260057	212505	213853	13.18
Endrin	134638	151368	157137	200418	160720	160856	15.09
Endosulfan II	185859	176539	183269	221598	181428	189739	9.56
4,4'-DDD	143543	143810	154385	190315	159156	158242	12.11
Endrin aldehyde	168722	138364	145112	174682	144917	154359	10.50
Endosulfan sulfate	183313	145749	152452	186747	154647	164582	11.54
4,4'-DDT	94449	106339	120528	154451	132577	121669	19.15
Endrin ketone	196229	195994	201505	237744	197796	205854	8.73
Methoxychlor	61352	59866	64159	80624	64107	66021	12.67
alpha-Chlordane	190897	194993	200293	243486	196472	205228	10.55
gamma-Chlordane	193461	200010	207069	254618	204935	212019	11.50
Chlordane 500 ppb			5541				
Chlordane {2}			6052				
Chlordane {3}			18904				
Chlordane {4}			14646				
Chlordane {5}			15830				
Toxaphene 500 ppb			4902				
Toxaphene {2}			4212				
Toxaphene {3}			2616				
Toxaphene {4}			5528				
Toxaphene {5}			3655				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08313.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:32
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:24:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

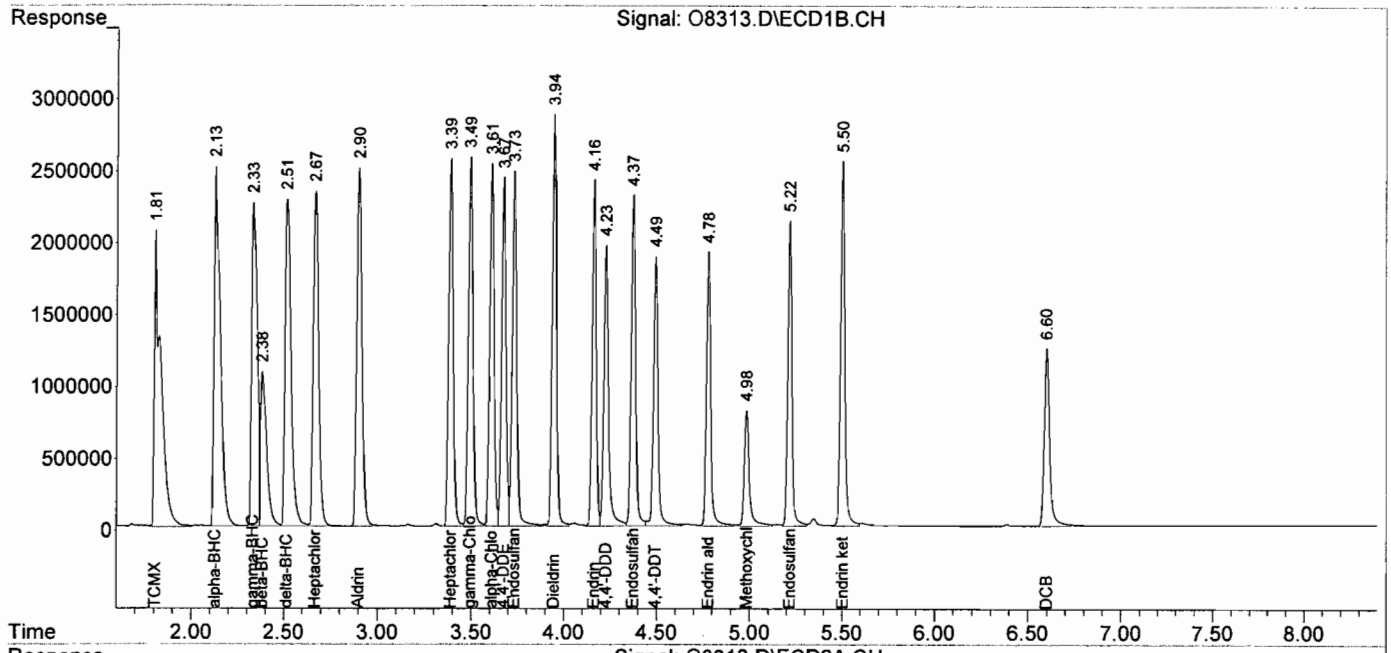
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	51587956	77912190	541.752m	546.700
	Spiked Amount 200.000	Range 10 - 180		Recovery =		270.88%#	273.35%#
2) S	DCB	6.60	8.15	25184705	33046176	548.861	563.460
	Spiked Amount 200.000	Range 10 - 180		Recovery =		274.43%#	281.73%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	57482366	81704717	289.817	295.584
4) T	beta-BHC	2.38	2.86	25219962	32044844	286.462	279.995
5) T	gamma-BHC (Linda	2.33	2.81	46598091	72692846	279.569	295.090
6) T	delta-BHC	2.52	3.12	52344817	72652427	289.360	296.199
7) T	Heptachlor	2.67	3.19	47102288	68577654	280.177	293.619
8) T	Aldrin	2.90	3.49	47298947	68213865	280.736	290.818
9) T	Heptachlor epoxi	3.39	4.02	42163459	60717349	276.560	287.310
10) T	Endosulfan I	3.73	4.42	41616707	55739603	277.517	289.314
11) T	4,4'-DDE	3.67	4.51	39136768	59078567	289.753	297.609
12) T	Dieldrin	3.95	4.69	44501109	63751545	284.166	298.110
13) T	Endrin	4.16	5.01	35741037	48215884	285.908	299.745
14) T	Endosulfan II	4.37	5.23	37075592	54428516	279.375	286.860
15) T	4,4'-DDD	4.23	5.11	34373531	47746940	290.781	301.734
16) T	Endrin aldehyde	4.78	5.59	31187477	43475228	277.770	281.649
17) T	Endosulfan sulfa	5.22	5.89	33188160	46394201	277.218	281.891
18) T	4,4'-DDT	4.49	5.45	30986445	39773106	310.140	324.202m
19) T	Endrin ketone	5.50	6.49	40454408	59338908	273.918	290.325
20) T	Methoxychlor	4.98	6.20	15178734	19232225	298.148	292.337m
21) T	alpha-Chlordane	3.61	4.35	40974905	58941618	276.030	287.200
22) T	gamma-Chlordane	3.49	4.21	42966776	61480535	278.998	289.977
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

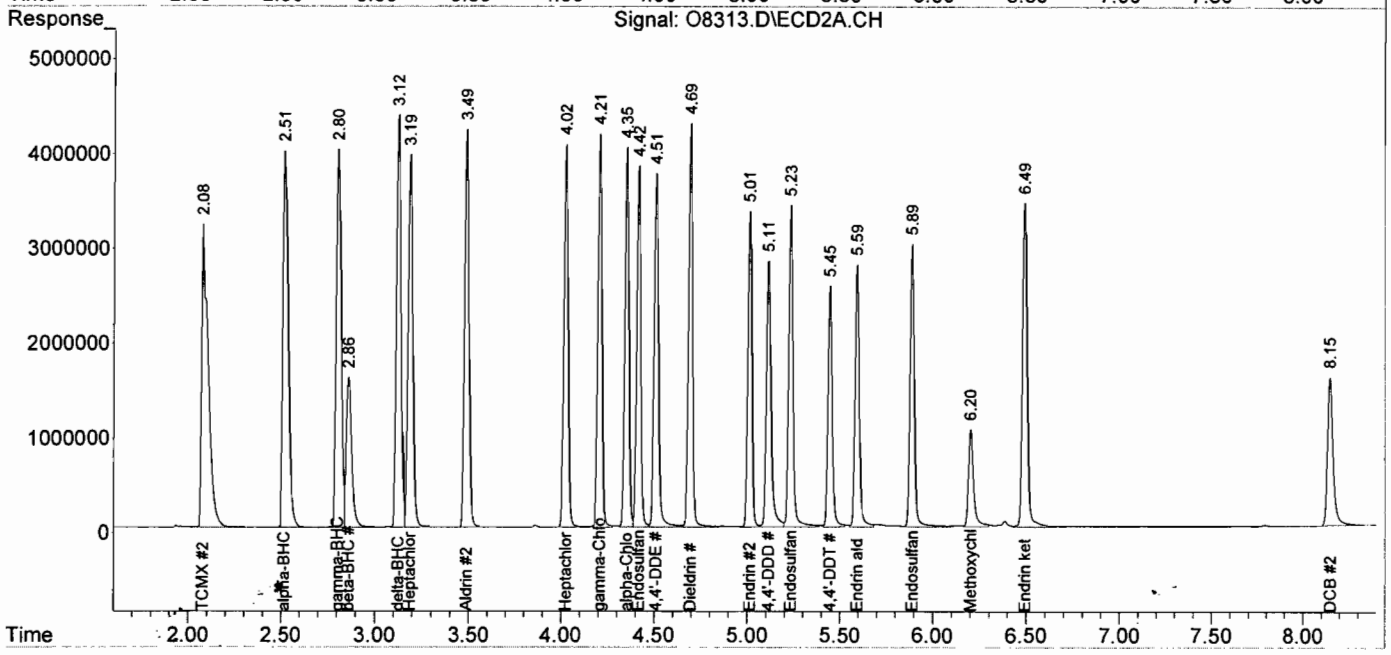
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8313.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:32
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:24:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08314.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:45
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

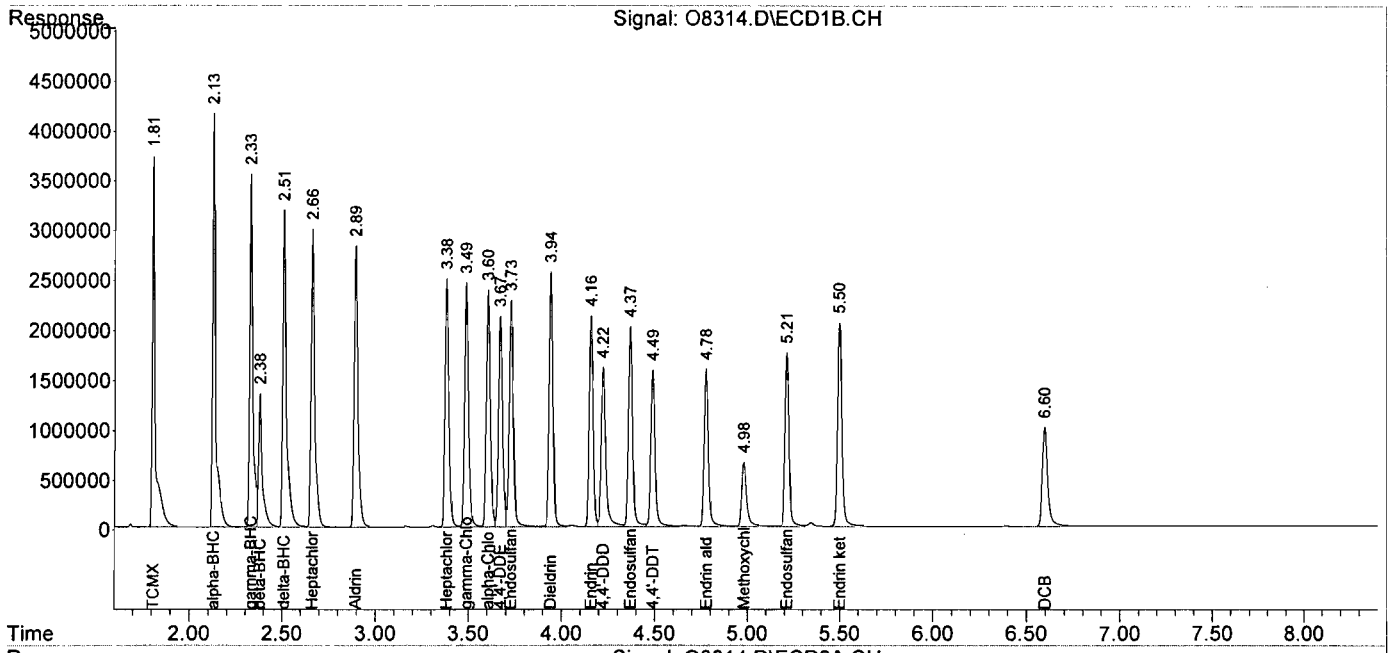
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	41890217	64890079	439.911	455.326
	Spiked Amount 200.000	Range 10 - 180		Recovery =		219.96%#	227.66%#
2) S	DCB	6.60	8.15	20380986	26772914	444.171	456.497
	Spiked Amount 200.000	Range 10 - 180		Recovery =		222.09%#	228.25%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	47508335	68659919	239.529	248.392
4) T	beta-BHC	2.38	2.86	19378590	25699569	220.113	224.553
5) T	gamma-BHC (Linda	2.33	2.80	39897832	60626437	239.370	246.108
6) T	delta-BHC	2.51	3.12	42868561	59787723	236.975	243.750
7) T	Heptachlor	2.66	3.18	39494292	56852373	234.923	243.417
8) T	Aldrin	2.90	3.48	39438840	56523235	234.084	240.977
9) T	Heptachlor epoxi	3.38	4.02	35130486	50222523	230.429	237.649
10) T	Endosulfan I	3.73	4.41	34643109	46011803	231.014	238.822
11) T	4,4'-DDE	3.67	4.51	32158844	48215949	238.091	242.888
12) T	Dieldrin	3.94	4.69	36735497	52011330	234.578	243.211
13) T	Endrin	4.16	5.01	29939216	40083578	239.497	249.189
14) T	Endosulfan II	4.37	5.23	30591808	44319656	230.518	233.582
15) T	4,4'-DDD	4.22	5.11	27637455	38062999	233.798	240.537
16) T	Endrin aldehyde	4.78	5.59	25165463	34936418	224.135	226.332
17) T	Endosulfan sulfa	5.21	5.89	26925786	37349483	224.909	226.936
18) T	4,4'-DDT	4.49	5.45	25139843	30890292	251.622	251.795m
19) T	Endrin ketone	5.50	6.49	33396670	47548890	226.130	232.640
20) T	Methoxychlor	4.98	6.20	12650045	16124754	248.478	245.103
21) T	alpha-Chlordane	3.61	4.35	34048494	48697133	229.370	237.283
22) T	gamma-Chlordane	3.49	4.20	35676585	50923693	231.660	240.185
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

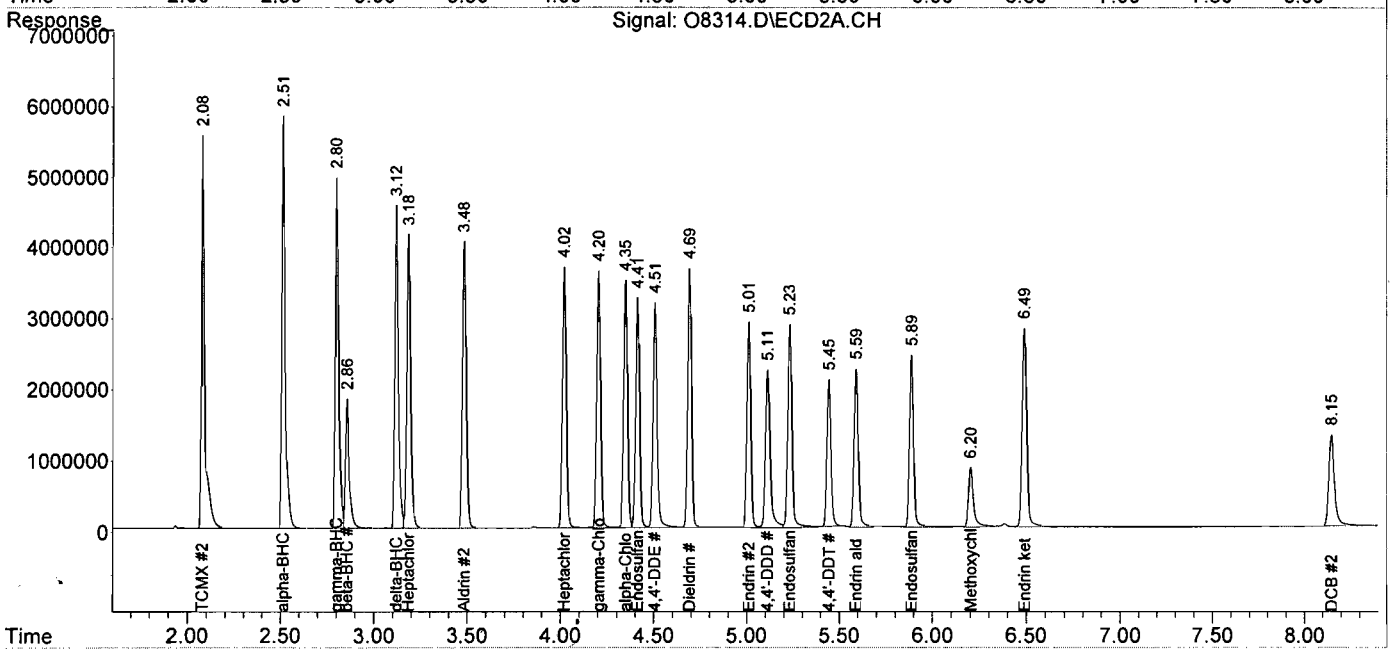
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8314.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:45
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08315.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:57
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:22:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18420435	27270240	193.442m	191.352
	Spiked Amount 200.000	Range 10 - 180		Recovery =		96.72%	95.68%
2) S	DCB	6.60	8.15	8883110	11126531	193.593	189.715
	Spiked Amount 200.000	Range 10 - 180		Recovery =		96.80%	94.86%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	19505677	27604497	98.344	99.865
4) T	beta-BHC	2.38	2.86	9266594	11212628	105.255	97.972
5) T	gamma-BHC (Linda	2.33	2.80	15453271	23926710	92.713	97.128
6) T	delta-BHC	2.51	3.12	17601481	23775937	97.300	96.933
7) T	Heptachlor	2.66	3.18	16397567	23040911	97.537	98.651
8) T	Aldrin	2.89	3.48	16495023	23034796	97.904	98.205
9) T	Heptachlor epoxi	3.38	4.02	14851799	20643930	97.417	97.685
10) T	Endosulfan I	3.73	4.41	14598933	18849265	97.352	97.836
11) T	4,4'-DDE	3.67	4.51	13421066	19602378	99.364	98.747
12) T	Dieldrin	3.94	4.69	15361153	21081777	98.090	98.581
13) T	Endrin	4.16	5.01	12209057	15713709	97.666	97.688
14) T	Endosulfan II	4.37	5.23	12782068	18326939	96.317	96.590
15) T	4,4'-DDD	4.22	5.11	11568507	15438488	97.863	97.563
16) T	Endrin aldehyde	4.78	5.59	10645541	14511162	94.814	94.009
17) T	Endosulfan sulfa	5.22	5.89	11261417	15245208	94.066	92.630
18) T	4,4'-DDT	4.49	5.45	9894487	12052850	99.033	98.246
19) T	Endrin ketone	5.50	6.49	14270293	20150490	96.625	98.589
20) T	Methoxychlor	4.98	6.20	5026120	6415860	98.726	97.524
21) T	alpha-Chlordane	3.61	4.35	14433477	20029304	97.232	97.595
22) T	gamma-Chlordane	3.49	4.20	14988727	20706879	97.327	97.665
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

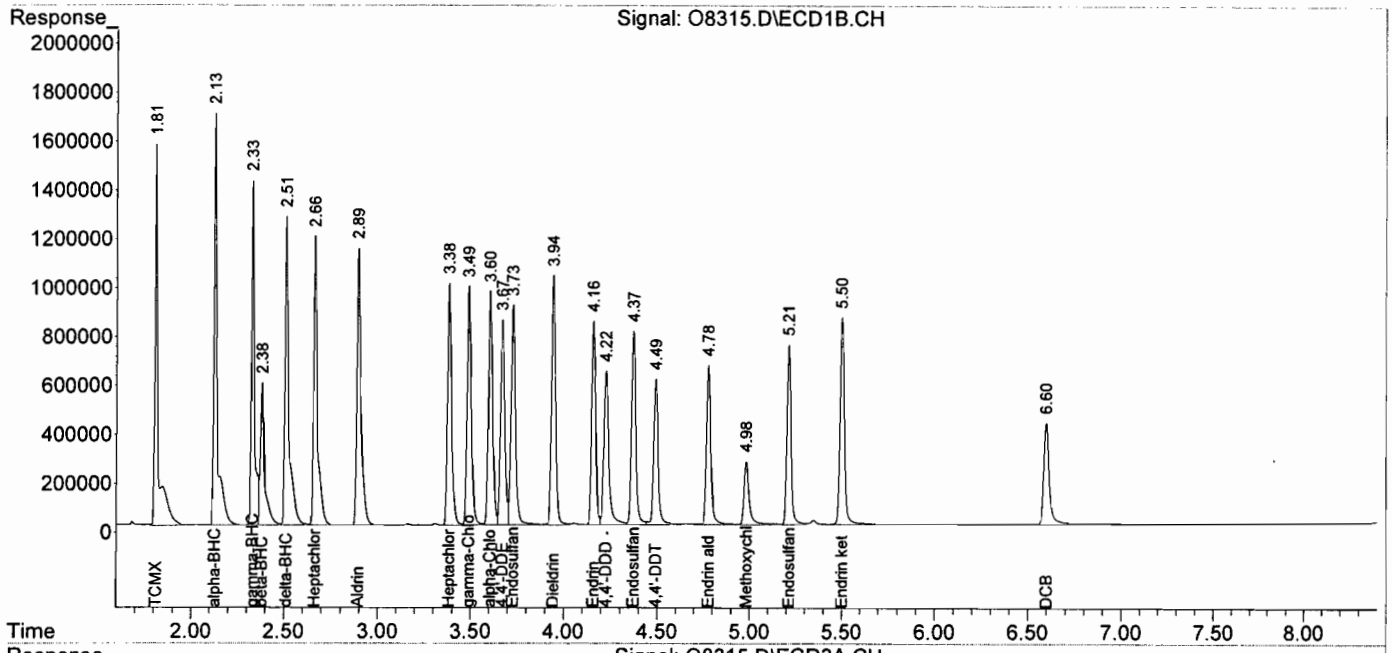
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

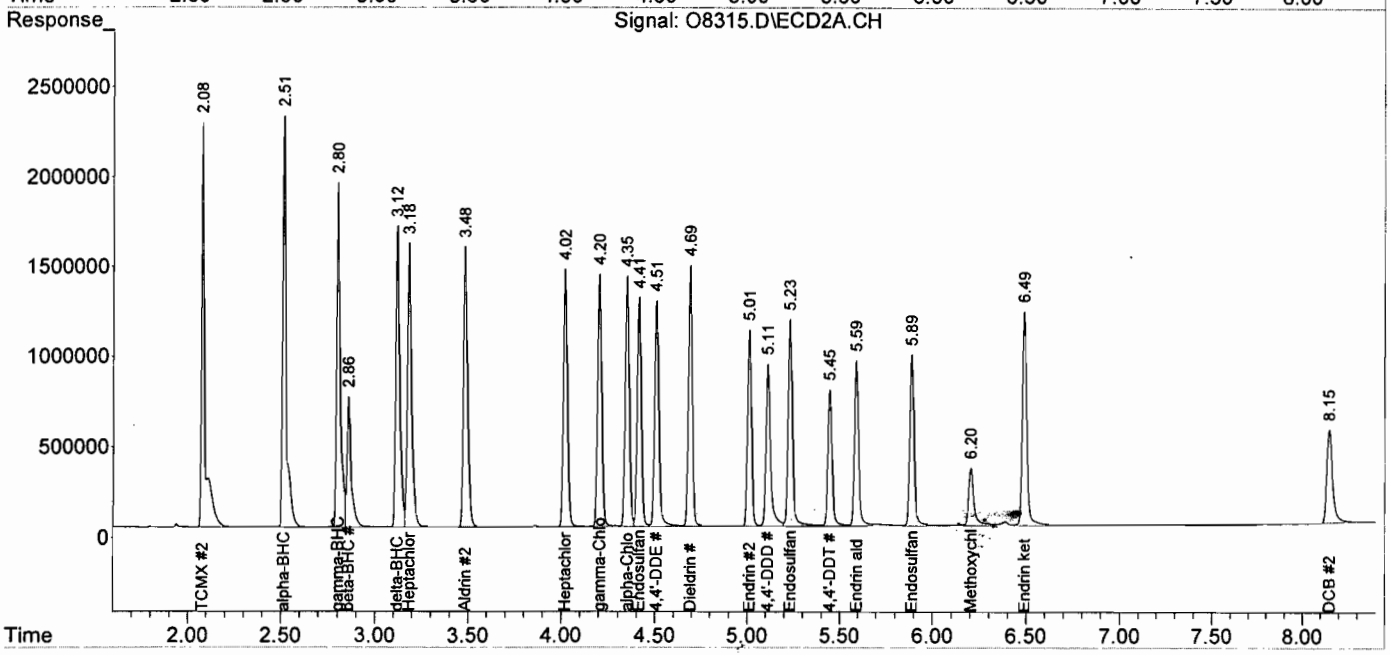
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8315.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 11:57
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:22:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08316.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:10
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

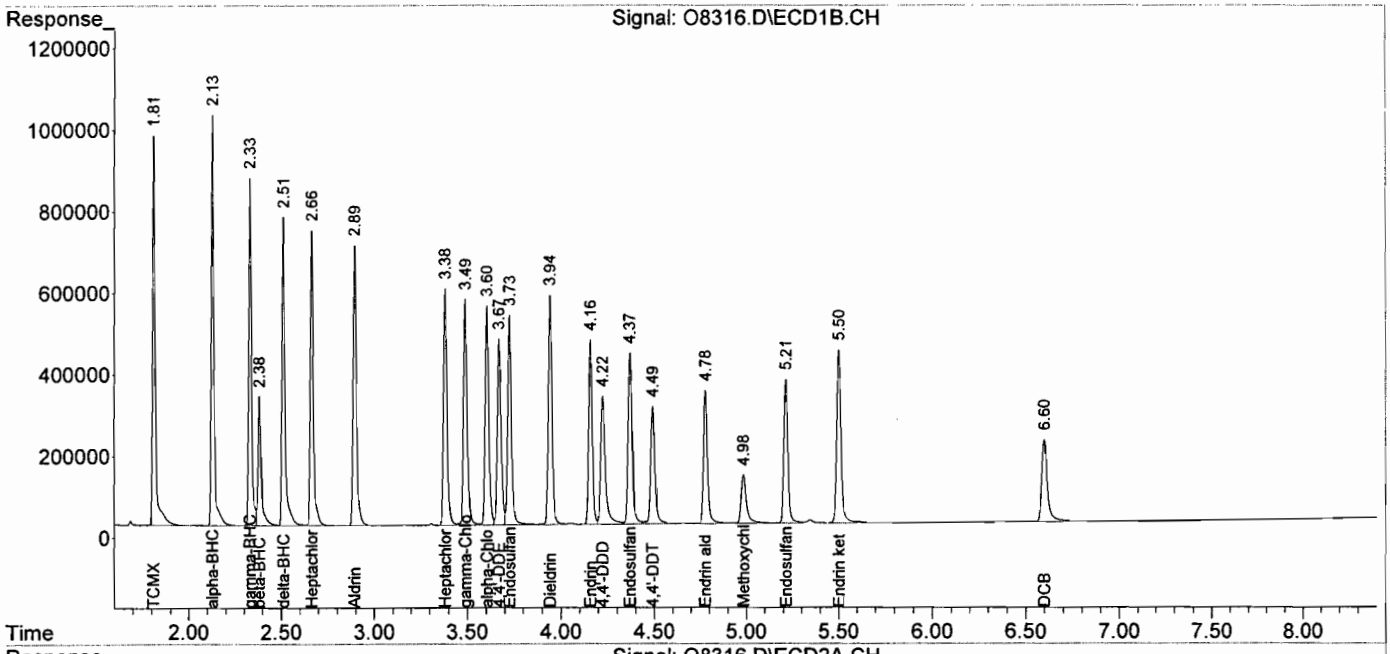
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	9225212	13749205	96.879	96.476
	Spiked Amount 200.000	Range 10 - 180		Recovery =		48.44%	48.24%
2) S	DCB	6.60	8.15	4440167	5461634	96.766	93.125
	Spiked Amount 200.000	Range 10 - 180		Recovery =		48.38%	46.56%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	9703133	13438861	48.922	48.618
4) T	beta-BHC	2.38	2.86	3899844	5216625	44.297	45.581
5) T	gamma-BHC (Linda	2.33	2.80	8340761	11980783	50.041	48.635
6) T	delta-BHC	2.51	3.12	8554829	11452937	47.291	46.693
7) T	Heptachlor	2.66	3.18	8160755	11067689	48.542	47.387
8) T	Aldrin	2.89	3.48	8195930	11207591	48.646	47.782
9) T	Heptachlor epoxi	3.38	4.02	7373826	10060962	48.367	47.608
10) T	Endosulfan I	3.73	4.41	7212413	9123828	48.095	47.357
11) T	4,4'-DDE	3.67	4.51	6480582	9303978	47.980	46.869
12) T	Dieldrin	3.94	4.69	7551187	10092393	48.219	47.193
13) T	Endrin	4.16	5.01	6031337	7568401	48.247	47.051
14) T	Endosulfan II	4.37	5.23	6215912	8826947	46.839	46.522
15) T	4,4'-DDD	4.22	5.11	5479200	7190482	46.351	45.440
16) T	Endrin aldehyde	4.78	5.59	5114700	6918196	45.554	44.819
17) T	Endosulfan sulfa	5.22	5.89	5417260	7287452	45.250	44.279
18) T	4,4'-DDT	4.49	5.44	4591851	5316960	45.959	43.340m
19) T	Endrin ketone	5.50	6.49	6902189	9799708	46.735	47.947
20) T	Methoxychlor	4.98	6.20	2382778	2993290	46.804	45.499m
21) T	alpha-Chlordane	3.60	4.35	7164799	9749673	48.266	47.506
22) T	gamma-Chlordane	3.49	4.20	7450115	10000522	48.376	47.168
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

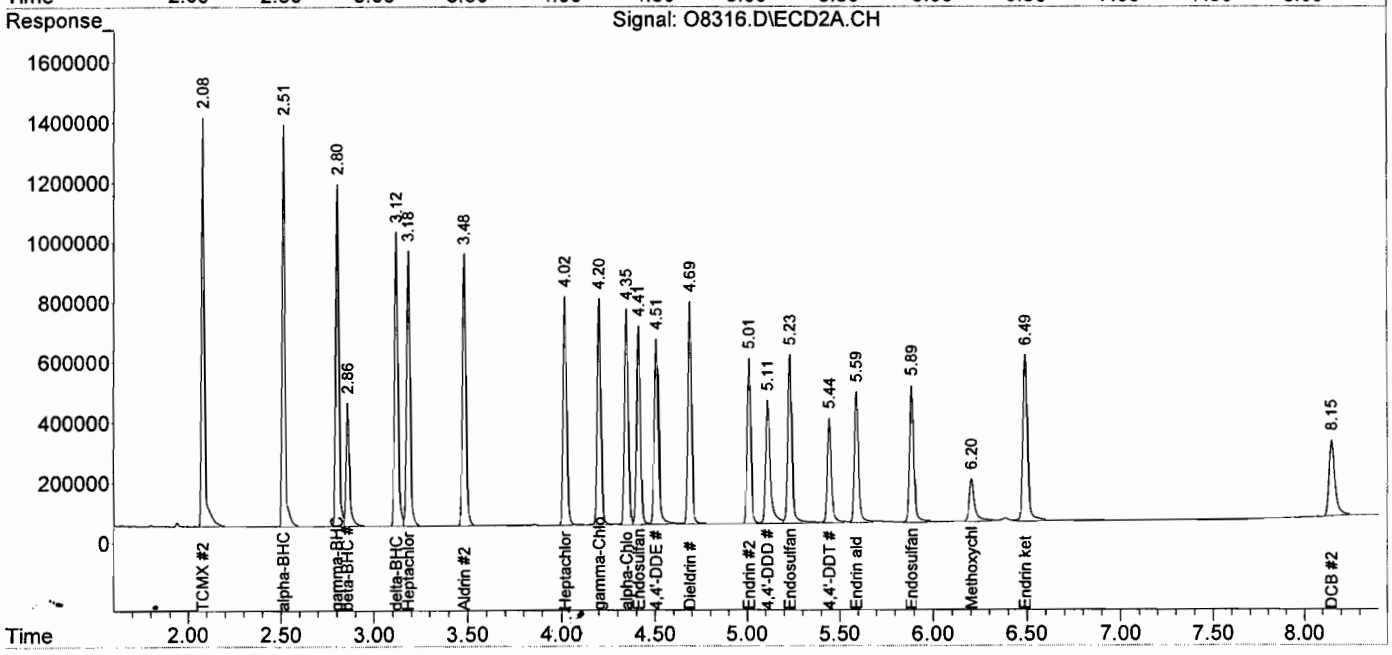
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8316.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:10
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08317.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:23
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

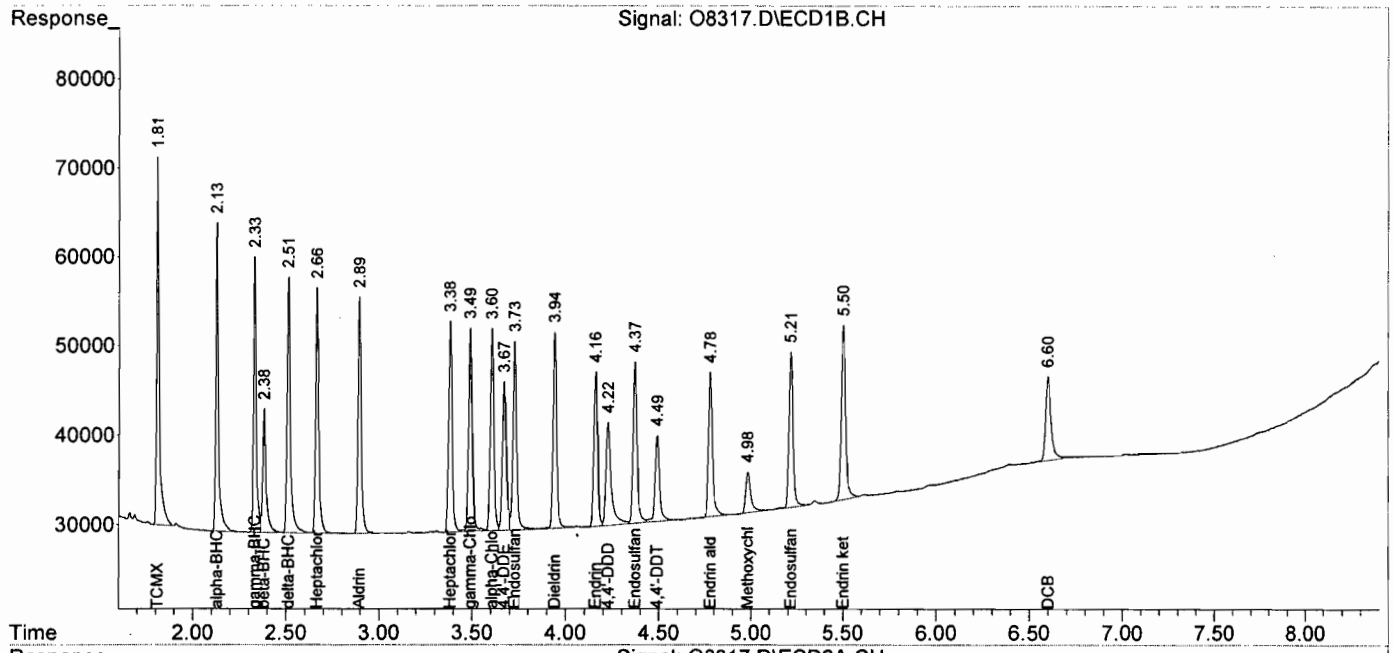
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	403910	586583	4.242	4.116
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.12%#	2.06%#
2) S	DCB	6.60	8.15	187282	252422	4.082m	4.304m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.04%#	2.15%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	346866	443239	1.749	1.604
4) T	beta-BHC	2.38	2.86	177150	240932	2.012	2.105
5) T	gamma-BHC (Linda	2.33	2.80	314455	414761	1.887	1.684
6) T	delta-BHC	2.51	3.12	337114	436962	1.864	1.781
7) T	Heptachlor	2.66	3.18	317821	406363	1.890	1.740
8) T	Aldrin	2.89	3.48	317366	416593	1.884	1.776
9) T	Heptachlor epoxi	3.38	4.02	300183	390981	1.969	1.850
10) T	Endosulfan I	3.73	4.41	295259	352961	1.969	1.832
11) T	4,4'-DDE	3.67	4.51	240551	344885	1.781	1.737
12) T	Dieldrin	3.94	4.69	292728	368072	1.869	1.721
13) T	Endrin	4.16	5.01	226987	269277	1.816	1.674
14) T	Endosulfan II	4.37	5.23	269722	371719	2.032	1.959
15) T	4,4'-DDD	4.22	5.11	226040	287087	1.912	1.814
16) T	Endrin aldehyde	4.78	5.59	245711	337444	2.188	2.186
17) T	Endosulfan sulfa	5.21	5.89	264754	366626	2.211	2.228
18) T	4,4'-DDT	4.49	5.44	159574	188899	1.597	1.540m
19) T	Endrin ketone	5.50	6.49	311724	392458	2.111	1.920m
20) T	Methoxychlor	4.98	6.20	85575	122703	1.681	1.865m
21) T	alpha-Chlordane	3.60	4.35	295524	381795	1.991	1.860
22) T	gamma-Chlordane	3.49	4.20	299048	386922	1.942	1.825
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

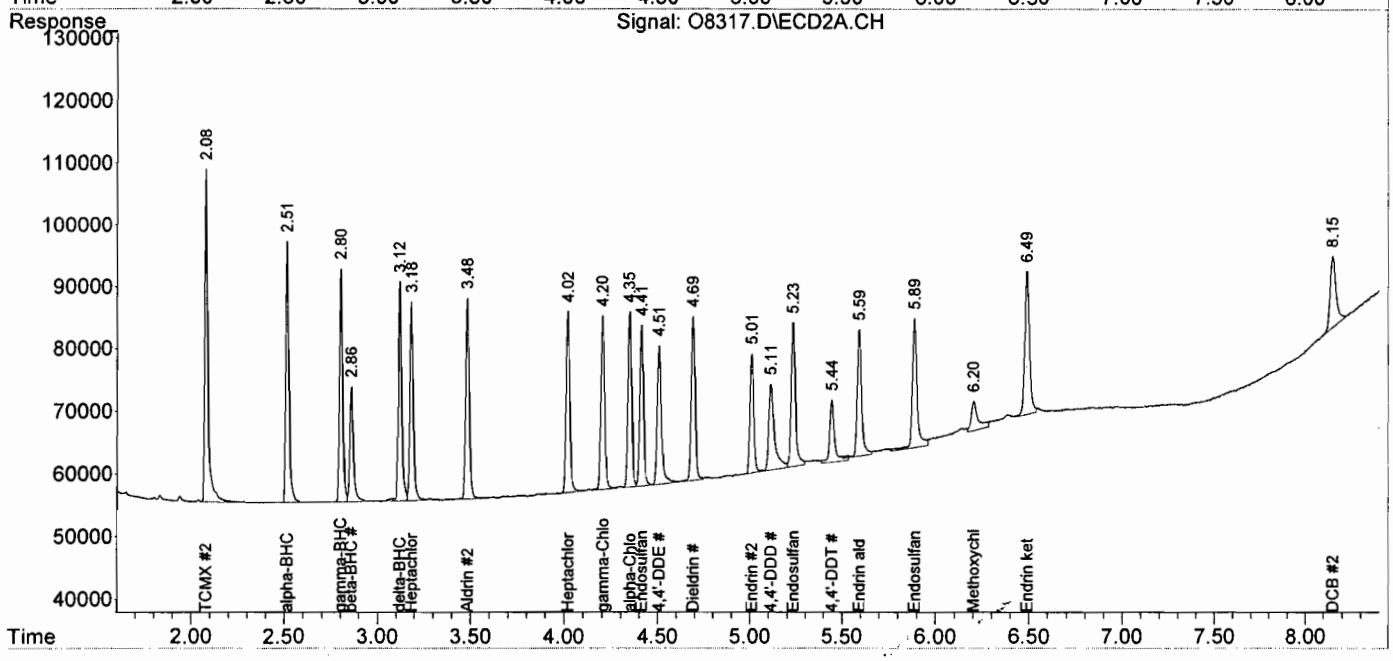
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8317.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:23
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:37:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:21:49 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8318.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:35
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:45:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22099019	33818037	223.480	226.873
Spiked Amount 200.000	Range 10 - 180		Recovery =		111.74%	113.44%
2) S DCB	6.60	8.15	8791388	14244838	192.704	229.050
Spiked Amount 200.000	Range 10 - 180		Recovery =		96.35%	114.53%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.48	5.32	1067748	2451235	500.000	500.000
29) L2 Toxaphene {2}	4.75	5.59	1902083	2106162	500.000	500.000
30) L2 Toxaphene {3}	5.11	5.88	1981835	1308155	500.000	500.000
31) L2 Toxaphene {4}	5.48	6.16	1860895	2763761	500.000	500.000
32) L2 Toxaphene {5}	5.64	6.60	795344	1827576	500.000	500.000
Sum Toxaphene			7607905	10456890	2500.000	2500.000
Average Toxaphene					500.000	500.000

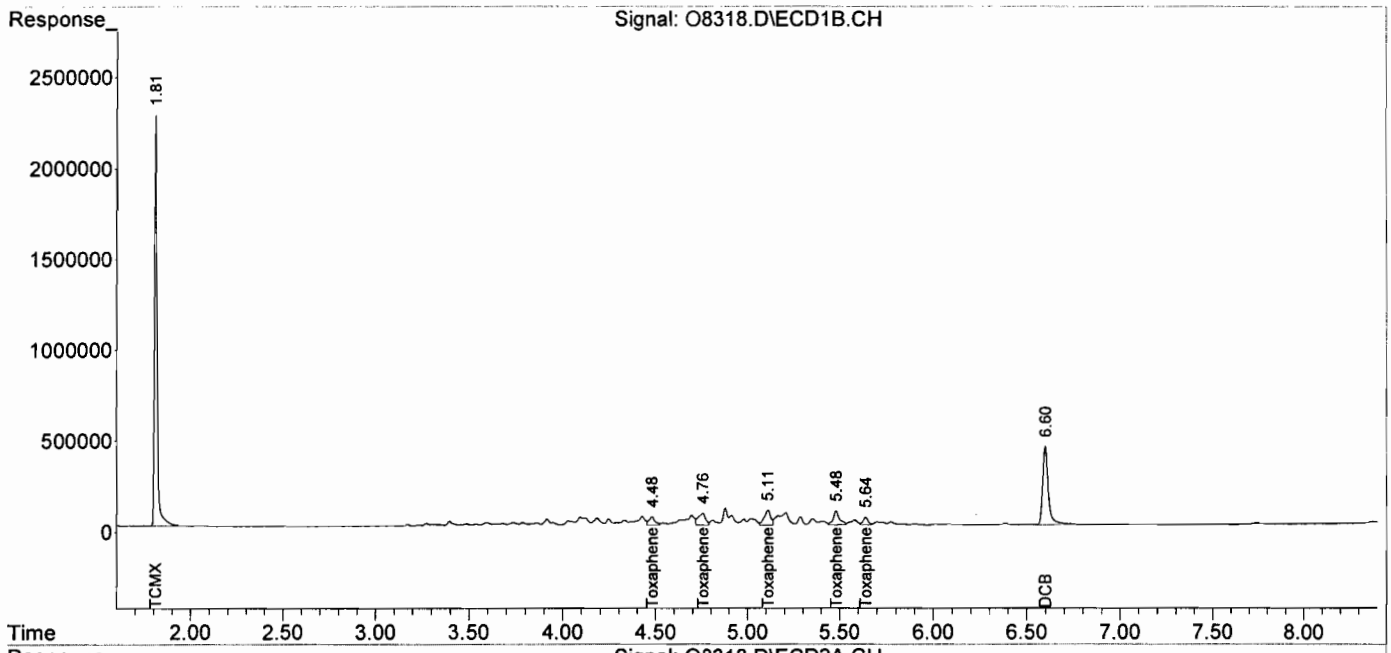
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

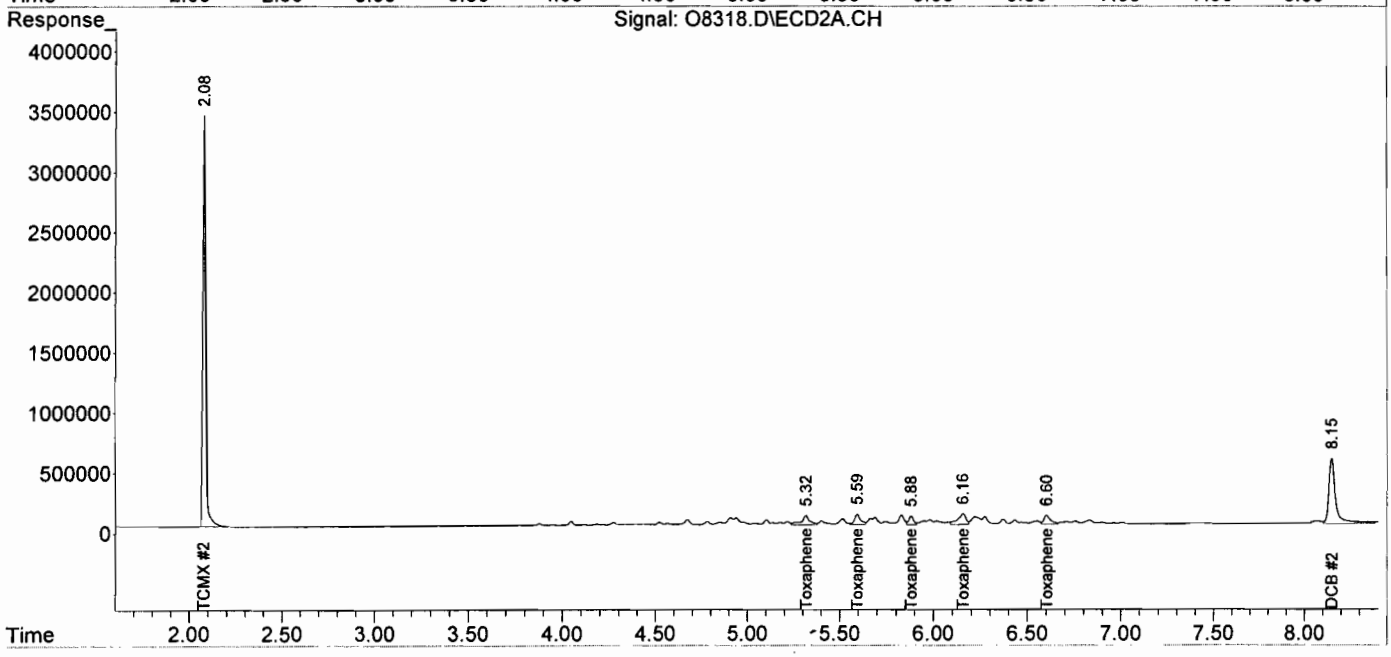
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8318.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:35
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:45:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8319.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:48
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:42:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:42:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	19375647	29957945	201.488	206.320
Spiked Amount 200.000	Range 10 - 180		Recovery =		100.74%	103.16%
2) S DCB	6.60	8.15	9193904	12425636	199.764	205.818
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.88%	102.91%
Target Compounds						
23) L1 Chlordane	2.61	3.06	1979914	2770433	500.000	500.000
24) L1 Chlordane {2}	3.00	3.61	2476431	3025964	500.000	500.000
25) L1 Chlordane {3}	3.49	4.20	7206175	9451932	500.000	500.000
26) L1 Chlordane {4}	3.60	4.29	11440368	7322849	500.000	500.000
27) L1 Chlordane {5}	4.31	4.35	1783666	7914965	500.000	500.000
Sum Chlordane			24886555	30486144	2500.000	2500.000
Average Chlordane					500.000	500.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

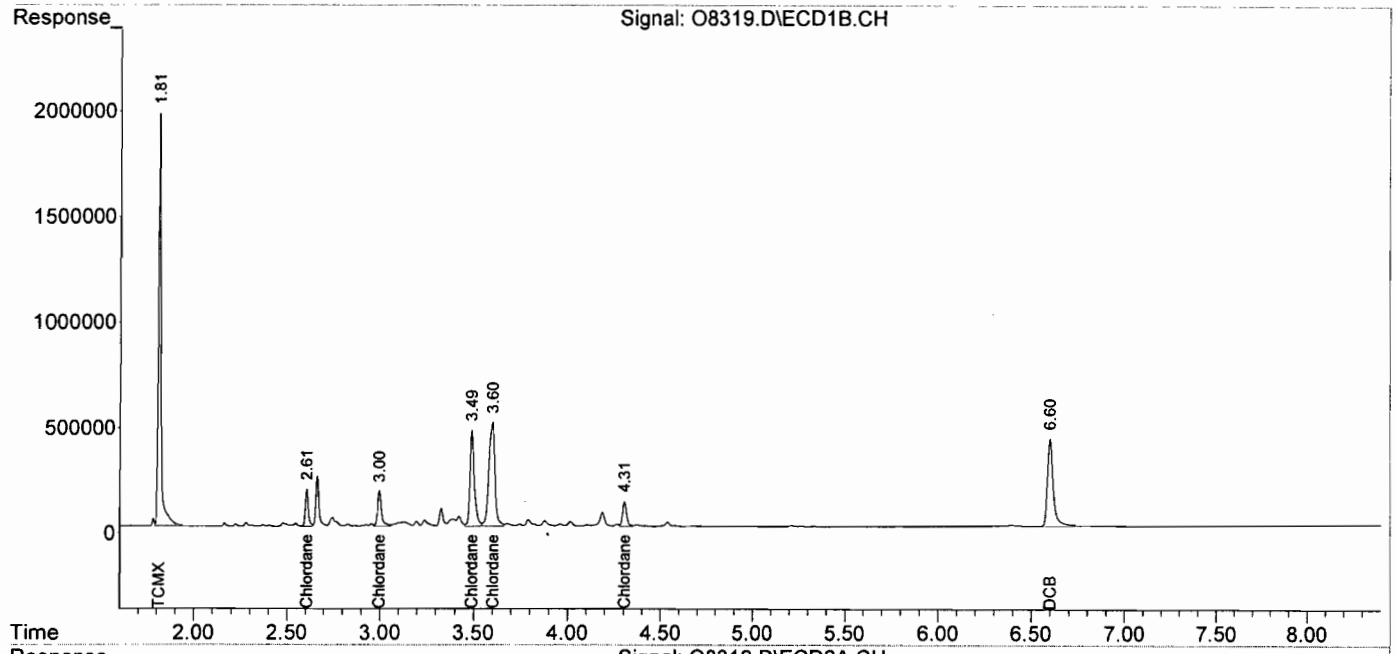
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

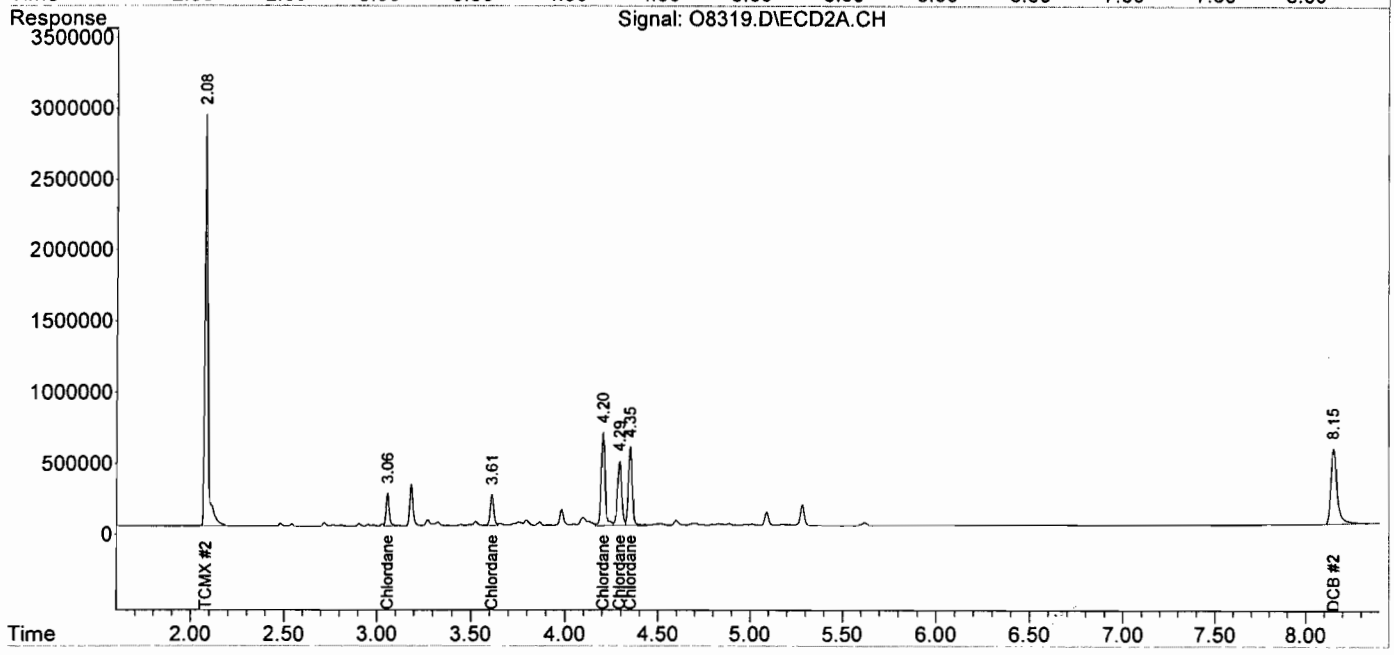
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8319.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 12:48
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:42:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:42:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8320.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.15	2.07	2.19	198340	179103	9.70
beta-BHC	2.40	2.32	2.44	88039	72246	17.94
gamma-BHC	2.35	2.27	2.39	166678	153893	7.67
delta-BHC	2.53	2.45	2.57	180899	166222	8.11
Heptachlor	2.68	2.59	2.75	168116	157353	6.40
Aldrin	2.91	2.82	2.98	168482	153513	8.88
Heptachlor epoxide	3.39	3.30	3.46	152457	135375	11.20
Endosulfan I	3.73	3.65	3.81	149961	133676	10.86
4,4'-DDE	3.68	3.57	3.77	135070	130346	3.50
Dieldrin	3.95	3.84	4.04	156603	142731	8.86
Endrin	4.16	4.06	4.26	125009	126502	1.19
Endosulfan II	4.37	4.27	4.47	132709	122311	7.84
4,4'-DDD	4.23	4.12	4.32	118211	110845	6.23
Endrin aldehyde	4.78	4.66	4.90	112278	100925	10.11
Endosulfan sulfate	5.22	5.10	5.34	119718	109085	8.88
4,4'-DDT	4.49	4.37	4.61	99911	110968	11.07
Endrin ketone	5.50	5.38	5.62	147688	135768	8.07
Methoxychlor	4.98	4.86	5.10	50910	54596	7.24
alpha-Chlordane	3.61	3.53	3.69	148444	133992	9.74
gamma-Chlordane	3.50	3.41	3.57	154004	139274	9.56

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8320.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.45	2.57	276418	251265	9.10
beta-BHC	2.87	2.80	2.92	114448	104987	8.27
gamma-BHC	2.82	2.74	2.86	246341	224152	9.01
delta-BHC	3.13	3.06	3.18	245282	225413	8.10
Heptachlor	3.20	3.10	3.26	233560	215189	7.87
Aldrin	3.50	3.40	3.56	234558	214111	8.72
Heptachlor epoxide	4.03	3.94	4.10	211331	191457	9.40
Endosulfan I	4.42	4.33	4.49	192661	174496	9.43
4,4'-DDE	4.51	4.41	4.61	198511	188911	4.84
Dieldrin	4.70	4.59	4.79	213853	194546	9.03
Endrin	5.02	4.91	5.11	160856	167267	3.99
Endosulfan II	5.24	5.13	5.33	189739	169075	10.89
4,4'-DDD	5.12	5.01	5.21	158242	147993	6.48
Endrin aldehyde	5.60	5.47	5.71	154359	138297	10.41
Endosulfan sulfate	5.89	5.77	6.01	164582	153025	7.02
4,4'-DDT	5.45	5.33	5.57	121669	140071	15.12
Endrin ketone	6.50	6.37	6.61	205854	185662	9.81
Methoxychlor	6.21	6.08	6.32	66021	73150	10.80
alpha-Chlordane	4.36	4.27	4.43	205228	185989	9.37
gamma-Chlordane	4.21	4.12	4.28	212019	193139	8.90

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8326.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.16	2.07	2.19	198340	183097	7.69
beta-BHC	2.40	2.32	2.44	88039	73102	16.97
gamma-BHC	2.35	2.27	2.39	166678	162321	2.61
delta-BHC	2.53	2.45	2.57	180899	169529	6.29
Heptachlor	2.68	2.59	2.75	168116	155428	7.55
Aldrin	2.91	2.82	2.98	168482	156380	7.18
Heptachlor epoxide	3.39	3.30	3.46	152457	140520	7.83
Endosulfan I	3.74	3.65	3.81	149961	138175	7.86
4,4'-DDE	3.68	3.57	3.77	135070	131265	2.82
Dieldrin	3.95	3.84	4.04	156603	145267	7.24
Endrin	4.17	4.06	4.26	125009	123051	1.57
Endosulfan II	4.38	4.27	4.47	132709	122733	7.52
4,4'-DDD	4.23	4.12	4.32	118211	115965	1.90
Endrin aldehyde	4.78	4.66	4.90	112278	98425	12.34
Endosulfan sulfate	5.22	5.10	5.34	119718	108828	9.10
4,4'-DDT	4.50	4.37	4.61	99911	94897	5.02
Endrin ketone	5.50	5.38	5.62	147688	135351	8.35
Methoxychlor	4.98	4.86	5.10	50910	49851	2.08
alpha-Chlordane	3.61	3.53	3.69	148444	136700	7.91
gamma-Chlordane	3.50	3.41	3.57	154004	142681	7.35

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 **Instrument ID:** GC-O

Data File: O8326.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.45	2.57	276418	256773	7.11
beta-BHC	2.87	2.80	2.92	114448	105285	8.01
gamma-BHC	2.82	2.74	2.86	246341	227088	7.82
delta-BHC	3.13	3.06	3.18	245282	229077	6.61
Heptachlor	3.20	3.10	3.26	233560	212474	9.03
Aldrin	3.50	3.40	3.56	234558	214602	8.51
Heptachlor epoxide	4.03	3.94	4.10	211331	193329	8.52
Endosulfan I	4.42	4.33	4.49	192661	176998	8.13
4,4'-DDE	4.51	4.41	4.61	198511	186558	6.02
Dieldrin	4.70	4.59	4.79	213853	198435	7.21
Endrin	5.02	4.91	5.11	160856	161973	0.69
Endosulfan II	5.24	5.13	5.33	189739	177784	6.30
4,4'-DDD	5.11	5.01	5.21	158242	156127	1.34
Endrin aldehyde	5.59	5.47	5.71	154359	142778	7.50
Endosulfan sulfate	5.89	5.77	6.01	164582	156171	5.11
4,4'-DDT	5.45	5.33	5.57	121669	114576	5.83
Endrin ketone	6.49	6.37	6.61	205854	208651	1.36
Methoxychlor	6.20	6.08	6.32	66021	71600	8.45
alpha-Chlordane	4.36	4.27	4.43	205228	187445	8.67
gamma-Chlordane	4.21	4.12	4.28	212019	194285	8.36

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08320.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 13:07
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:18:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

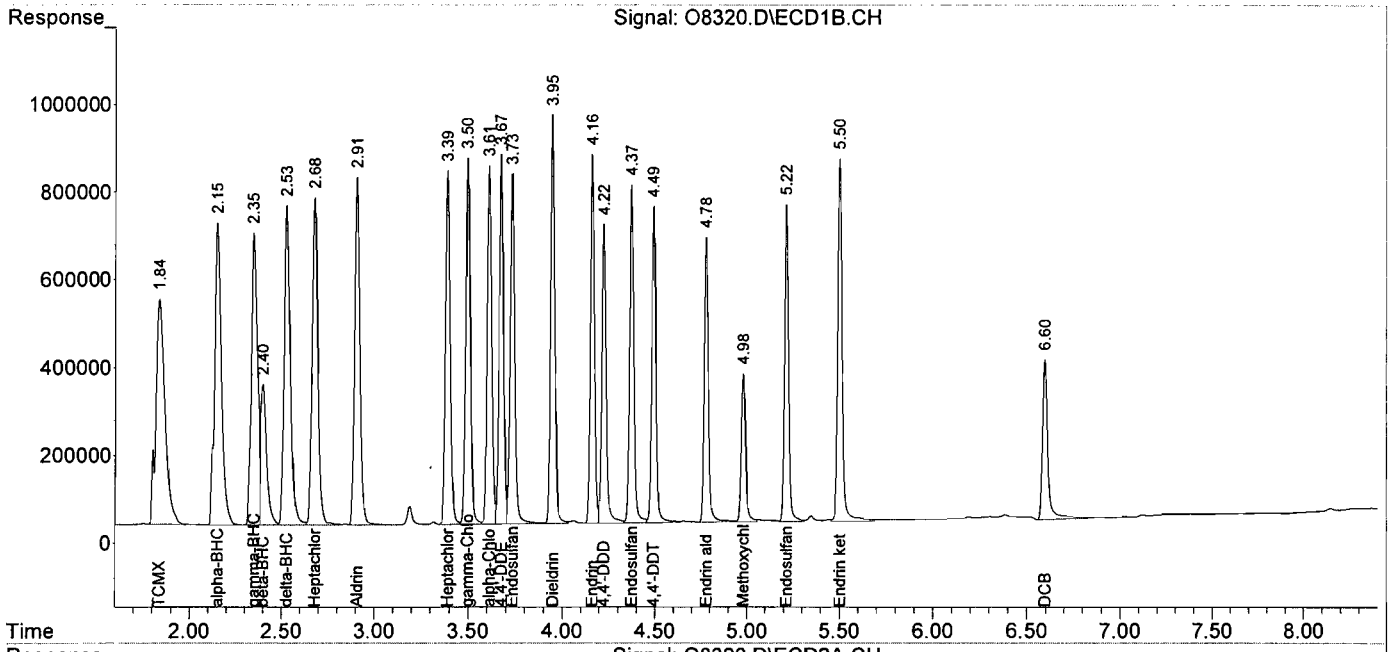
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.84	2.10	17107297	25397952	173.000	170.386
	Spiked Amount 200.000	Range 10 - 180		Recovery =		86.50%	85.19%
2) S	DCB	6.60	8.15	7406978	10728640	162.358	172.511
	Spiked Amount 200.000	Range 10 - 180		Recovery =		81.18%	86.26%
	Target Compounds						
3) T	alpha-BHC	2.15	2.53	17910307	25126538	90.301	90.900
4) T	beta-BHC	2.40	2.87	7224628	10498668	82.061	91.733
5) T	gamma-BHC (Linda	2.35	2.82	15389260	22415237	92.329	90.993
6) T	delta-BHC	2.53	3.13	16622199	22541298	91.887	91.899
7) T	Heptachlor	2.68	3.20	15735314	21518857	93.598	92.134
8) T	Aldrin	2.91	3.50	15351309	21411077	91.116	91.282
9) T	Heptachlor epoxi	3.39	4.03	13537540	19145718	88.796	90.596
10) T	Endosulfan I	3.73	4.42	13367621	17449560	89.141	90.571
11) T	4,4'-DDE	3.68	4.51	13034553	18891074	96.502	95.164
12) T	Dieldrin	3.95	4.70	14273137	19454596	91.142	90.972
13) T	Endrin	4.16	5.02	12650151	16726703	101.194	103.985
14) T	Endosulfan II	4.37	5.24	12231060	16907519	92.165	89.109
15) T	4,4'-DDD	4.23	5.12	11084469	14799306	93.769	93.523
16) T	Endrin aldehyde	4.78	5.60	10092537	13829686	89.889	89.594
17) T	Endosulfan sulfa	5.22	5.89	10908519	15302492	91.118	92.978
18) T	4,4'-DDT	4.49	5.45	11096765	14007053	111.066	115.124
19) T	Endrin ketone	5.50	6.50	13576826	18566238	91.929	90.191
20) T	Methoxychlor	4.98	6.21	5459584	7314954	107.240	110.797m
21) T	alpha-Chlordane	3.61	4.36	13399199	18598882	90.265	90.625
22) T	gamma-Chlordane	3.50	4.21	13927404	19313905	90.435	91.095
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

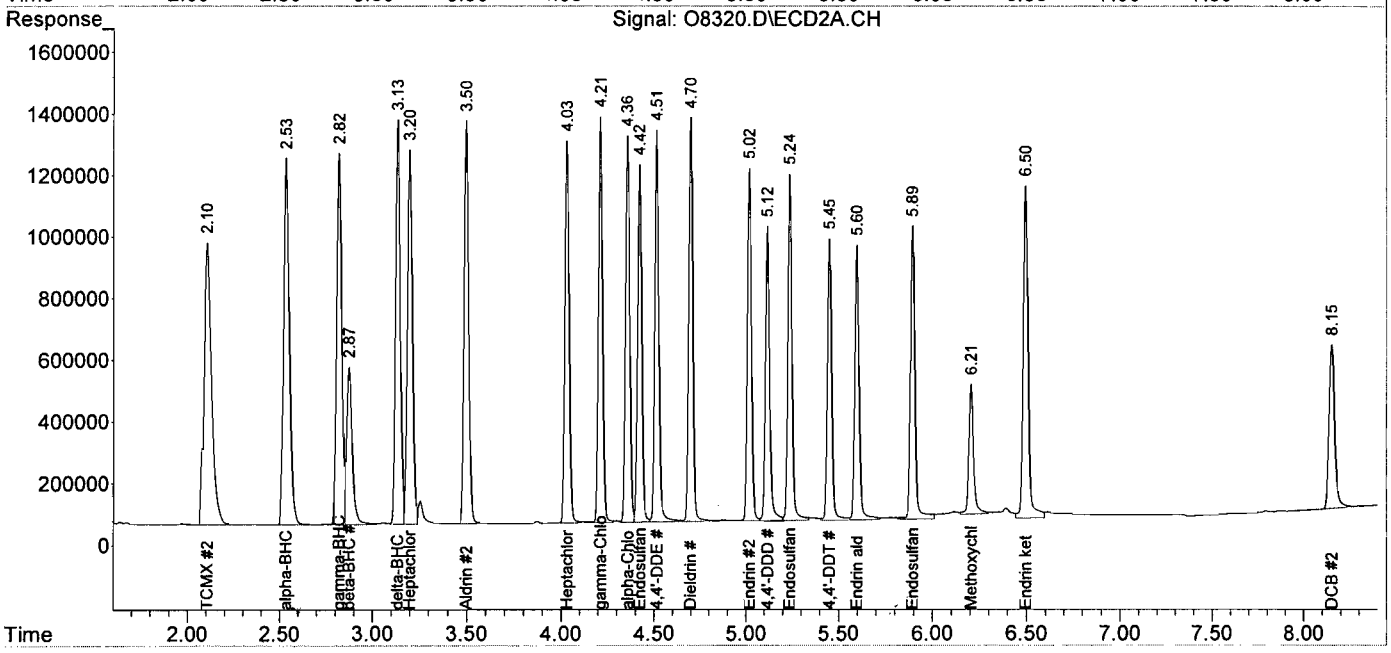
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8320.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 13:07
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 20 13:18:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08326.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 18:23
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:51:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

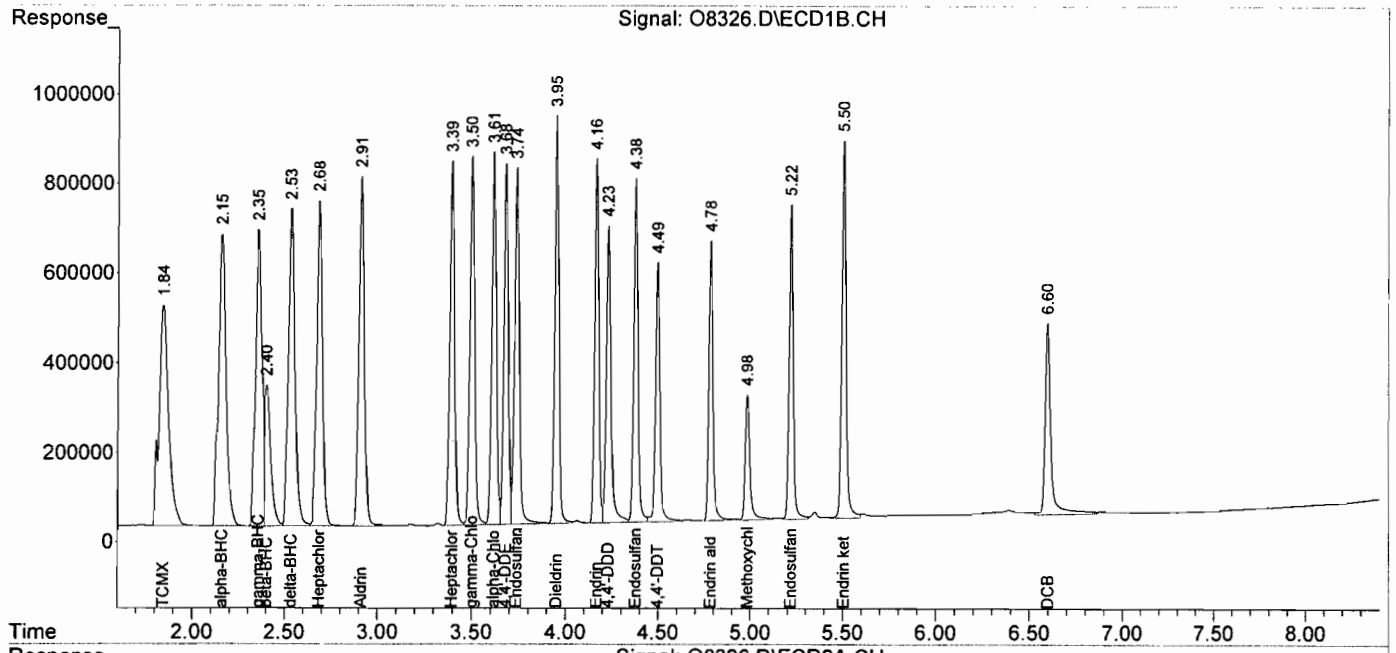
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	TCMX	1.84	2.11	17586002	25871563	177.841	173.563	
	Spiked Amount 200.000	Range 10 - 180		Recovery =		88.92%	86.78%	
2) S	DCB	6.60	8.15	9223631	17005619	202.179	273.442	#
	Spiked Amount 200.000	Range 10 - 180		Recovery =		101.09%	136.72%	
	Target Compounds							
3) T	alpha-BHC	2.16	2.53	18309720	25677309	92.315	92.893	
4) T	beta-BHC	2.40	2.87	7310194	10528516	83.033	91.994	
5) T	gamma-BHC (Linda	2.35	2.82	16232104	22708816	97.386	92.184	
6) T	delta-BHC	2.53	3.13	16952888	22907741	93.715	93.393	
7) T	Heptachlor	2.68	3.20	15542800	21247381	92.453	90.972	
8) T	Aldrin	2.91	3.50	15638009	21460212	92.817	91.492	
9) T	Heptachlor epoxi	3.39	4.03	14051989	19332869	92.170	91.482	
10) T	Endosulfan I	3.74	4.42	13817486	17699762	92.141	91.870	
11) T	4,4'-DDE	3.68	4.51	13126464	18655833	97.183	93.979	
12) T	Dieldrin	3.95	4.70	14526651	19843537	92.761	92.791	
13) T	Endrin	4.17	5.02	12305095	16197323	98.434	100.694	
14) T	Endosulfan II	4.38	5.24	12273271	17778354	92.483	93.699	
15) T	4,4'-DDD	4.23	5.11	11596506	15612681	98.100	98.663	
16) T	Endrin aldehyde	4.78	5.59	9842540	14277823	87.662	92.497	
17) T	Endosulfan sulfa	5.22	5.89	10882758	15617055	90.903	94.889	
18) T	4,4'-DDT	4.50	5.45	9489749	11457566	94.982	94.170	
19) T	Endrin ketone	5.50	6.49	13535091	20865138	91.646	101.359	
20) T	Methoxychlor	4.98	6.20	4985092	7160019	97.920	108.450	
21) T	alpha-Chlordane	3.61	4.36	13670015	18744468	92.089	91.335	
22) T	gamma-Chlordane	3.50	4.21	14268050	19428515	92.647	91.636	
	Sum Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

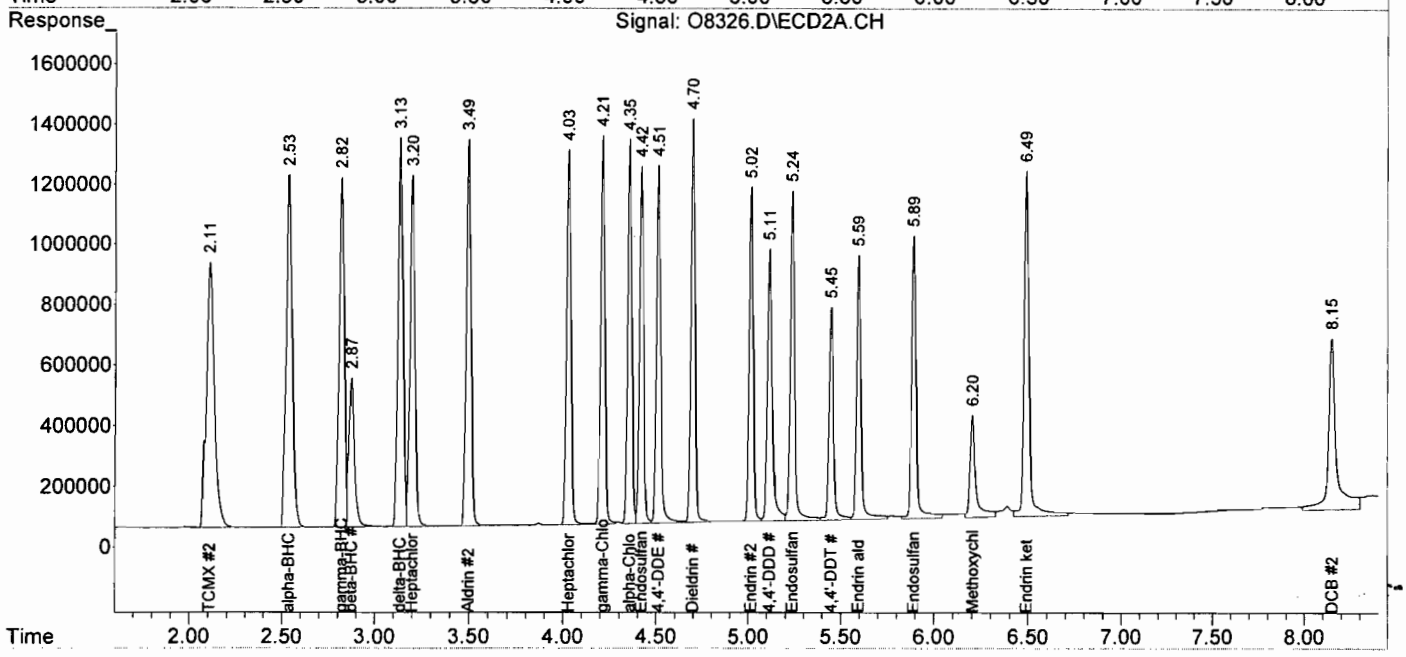
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8326.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 18:23
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:51:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150219-06	02/20/2015	17:08	1.81		6.60		2.08		8.15	
Pest	LCSS150219-06	02/20/2015	17:20	1.81		6.60		2.08		8.15	
Pest	01273-001MS	02/20/2015	17:33	1.81		6.60		2.08		8.15	
Pest	01273-001MSD	02/20/2015	17:46	1.81		6.60		2.08		8.15	
GPEC-WC1	E15-01273-001	02/20/2015	17:58	1.81		6.59		2.08		8.14	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 02/20/2015

Data file: O8309.D Mon Feb 23 09:12:04 2015

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	9238791	Endrin (1)	10384387	5.24	6.66
DDD	370105	Endrin ketone	428925		
DDE	140284	Endrin aldehyde	311830		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	10436408	Endrin (2)	13784047	6.02	6.21
DDD	469751	Endrin ketone	585524		
DDE	199095	Endrin aldehyde	326508		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08309.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 10:41
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:12:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.67	4.51	140284	199095	1.039	1.003
13) T	Endrin	4.16	5.02	10384387	13784047	83.069	85.692
15) T	4,4'-DDD	4.22	5.12	370105	469751	3.131	2.969m
16) T	Endrin aldehyde	4.78	5.60	311830	326508	2.777	2.115m
18) T	4,4'-DDT	4.49	5.45	9238791	10436408	92.470	85.777
19) T	Endrin ketone	5.50	6.50	428925	585524	2.904m	2.844m
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

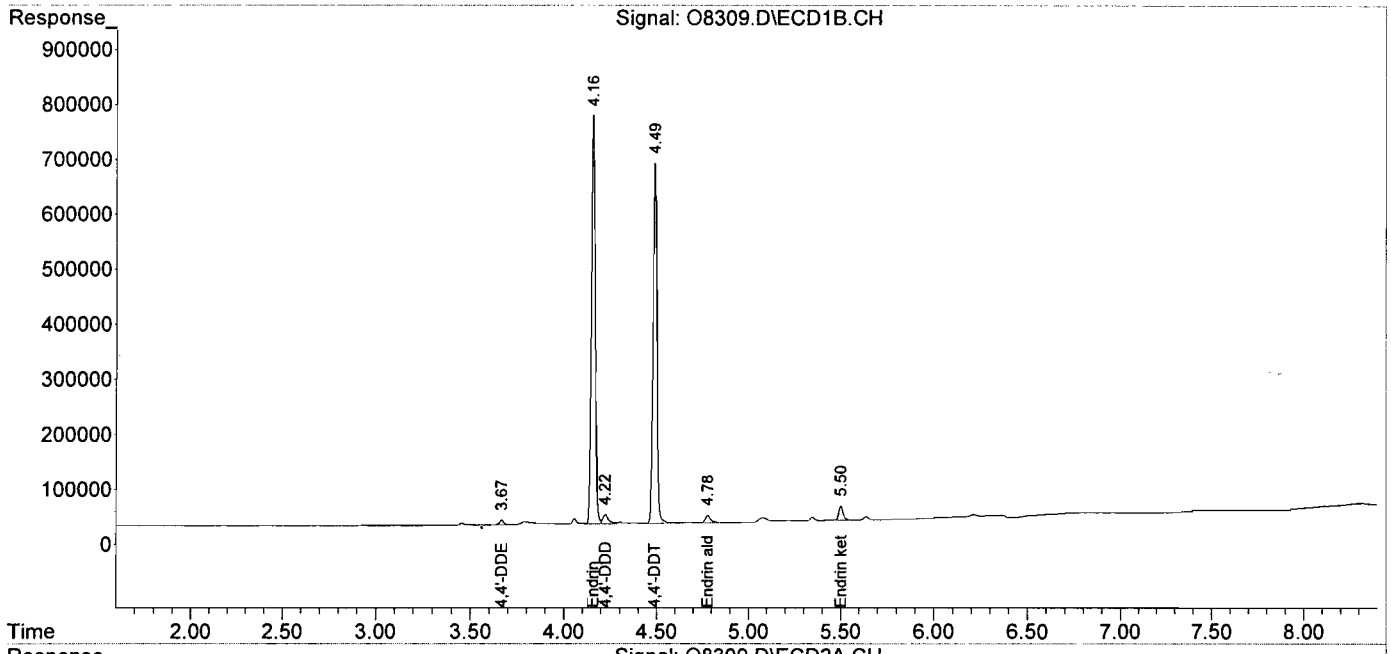
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

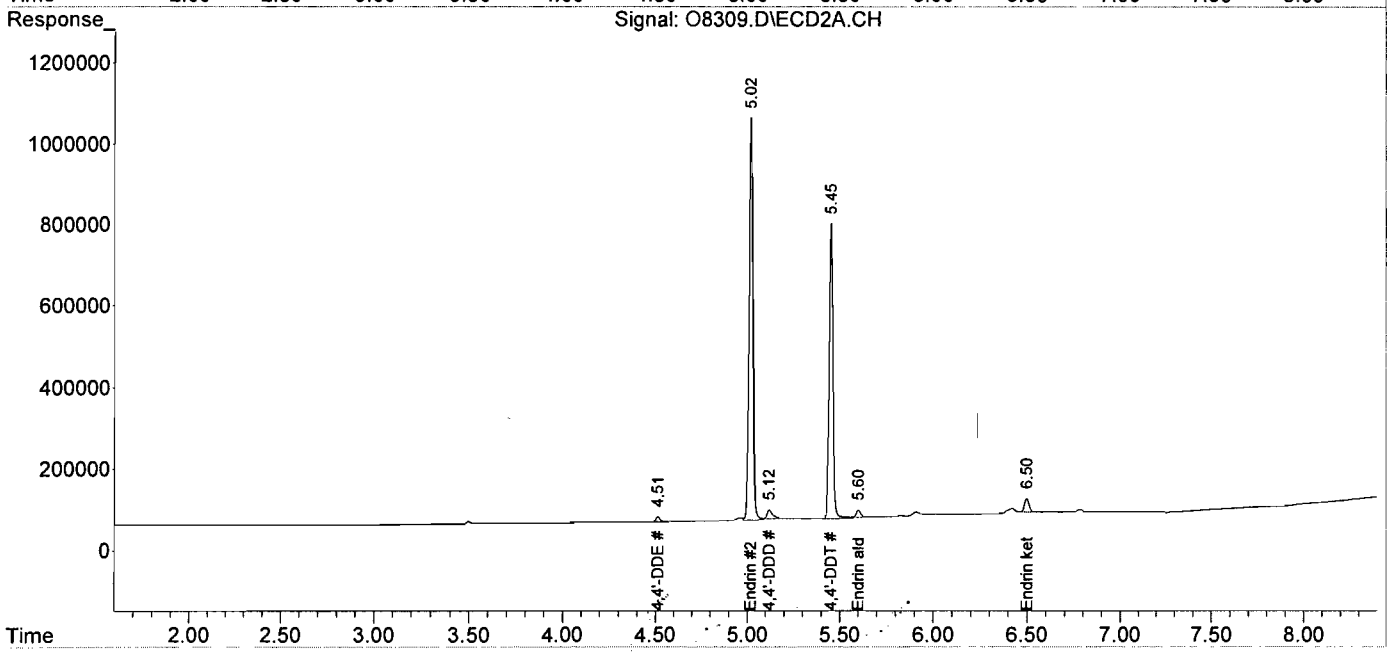
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8309.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 10:41
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:12:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:44:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150219-06
Client ID: Pest
Date Received: NA
Date Extracted: 02/19/2015
Date Analyzed: 02/20/2015
Data file: O8321.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.008	0.004
beta-BHC	ND		0.008	0.004
gamma-BHC (Lindane)	ND		0.008	0.004
delta-BHC	ND		0.008	0.004
Heptachlor	ND		0.008	0.004
Aldrin	ND		0.008	0.004
Heptachlor epoxide	ND		0.008	0.004
Endosulfan I	ND		0.008	0.004
4,4'-DDE	ND		0.008	0.004
Dieldrin	ND		0.008	0.004
Endrin	ND		0.008	0.004
Endosulfan II	ND		0.008	0.004
4,4'-DDD	ND		0.008	0.004
Endrin aldehyde	ND		0.008	0.004
Endosulfan sulfate	ND		0.008	0.004
4,4'-DDT	ND		0.008	0.004
Endrin ketone	ND		0.008	0.004
Methoxychlor	ND		0.008	0.004
alpha-Chlordane	ND		0.008	0.004
gamma-Chlordane	ND		0.008	0.004
Toxaphene	ND		0.100	0.048
Endosulfan (I and II)	ND		0.008	0.004
Chlordane (alpha and gamma)	ND		0.008	0.004

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8321.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:08
Operator : IB
Sample : Pest,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:46:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

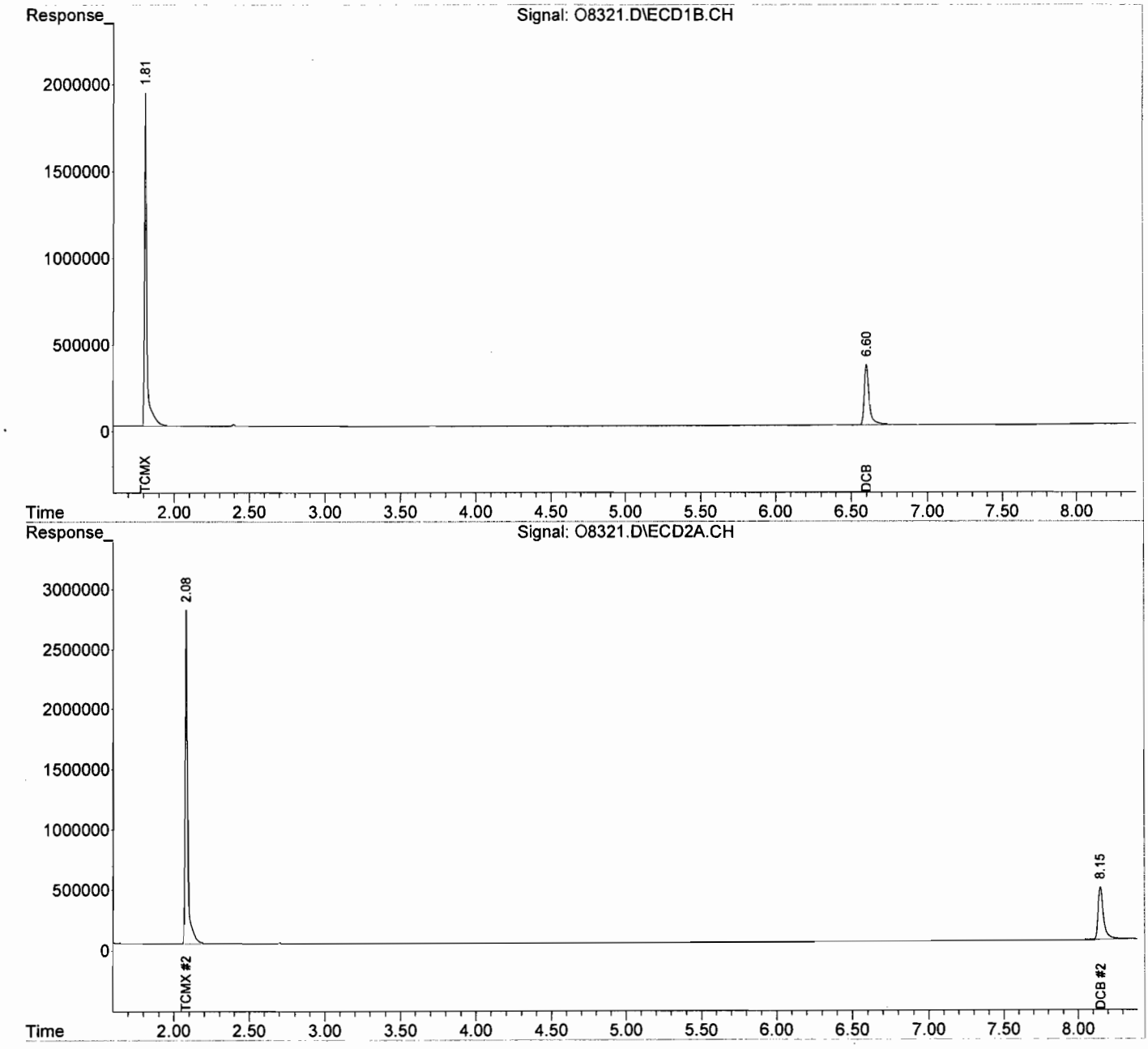
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	20071697	30204554	202.978	202.632
Spiked Amount 200.000	Range 10 - 180		Recovery =		101.49%	101.32%
2) S DCB	6.60	8.15	8208748	10851605	179.933	174.488
Spiked Amount 200.000	Range 10 - 180		Recovery =		89.97%	87.24%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8321.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:08
Operator : IB
Sample : Pest,BLKS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:46:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08322.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:20
Operator : IB
Sample : Pest,LCSS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19938202	29919283	201.628	200.718
	Spiked Amount 200.000	Range 10 - 180		Recovery =		100.81%	100.36%
2) S	DCB	6.60	8.15	7626586	12094232	167.172	194.469
	Spiked Amount 200.000	Range 10 - 180		Recovery =		83.59%	97.23%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	15651388	22055079	78.912	79.789
4) T	beta-BHC	2.38	2.86	7078385	8514235	80.400	74.394
5) T	gamma-BHC (Linda	2.33	2.80	13078530	19906960	78.466	80.811
6) T	delta-BHC	2.51	3.12	13723858	18326582	75.865	74.716
7) T	Heptachlor	2.66	3.18	12937710	18516524	76.957	79.280
8) T	Aldrin	2.90	3.48	13572954	18728934	80.560	79.848
9) T	Heptachlor epoxi	3.38	4.02	12105074	16865959	79.400	79.808
10) T	Endosulfan I	3.73	4.41	12911193	15786137	86.097	81.937
11) T	4,4'-DDE	3.67	4.51	10734241	16010052	79.472	80.651
12) T	Dieldrin	3.94	4.69	10802376	15147398	68.979	70.831
13) T	Endrin	4.16	5.01	9357263	12172933	74.853	75.676
14) T	Endosulfan II	4.37	5.23	10623147	15670391	80.049	82.589
15) T	4,4'-DDD	4.23	5.12	9072532	11843520	76.749	74.844
16) T	Endrin aldehyde	4.78	5.59	8488967	11368922	75.607	73.652
17) T	Endosulfan sulfa	5.22	5.89	9080991	12445579	75.853	75.619
18) T	4,4'-DDT	4.49	5.45	7760172	8966780	77.671	73.698
19) T	Endrin ketone	5.50	6.49	11689413	16480608	79.149	80.060
20) T	Methoxychlor	4.99	6.21	3817531	4754749	74.986	72.018
21) T	alpha-Chlordane	3.61	4.35	11713699	16192488	78.910	78.900
22) T	gamma-Chlordane	3.49	4.20	12220830	17034524	79.354	80.344
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

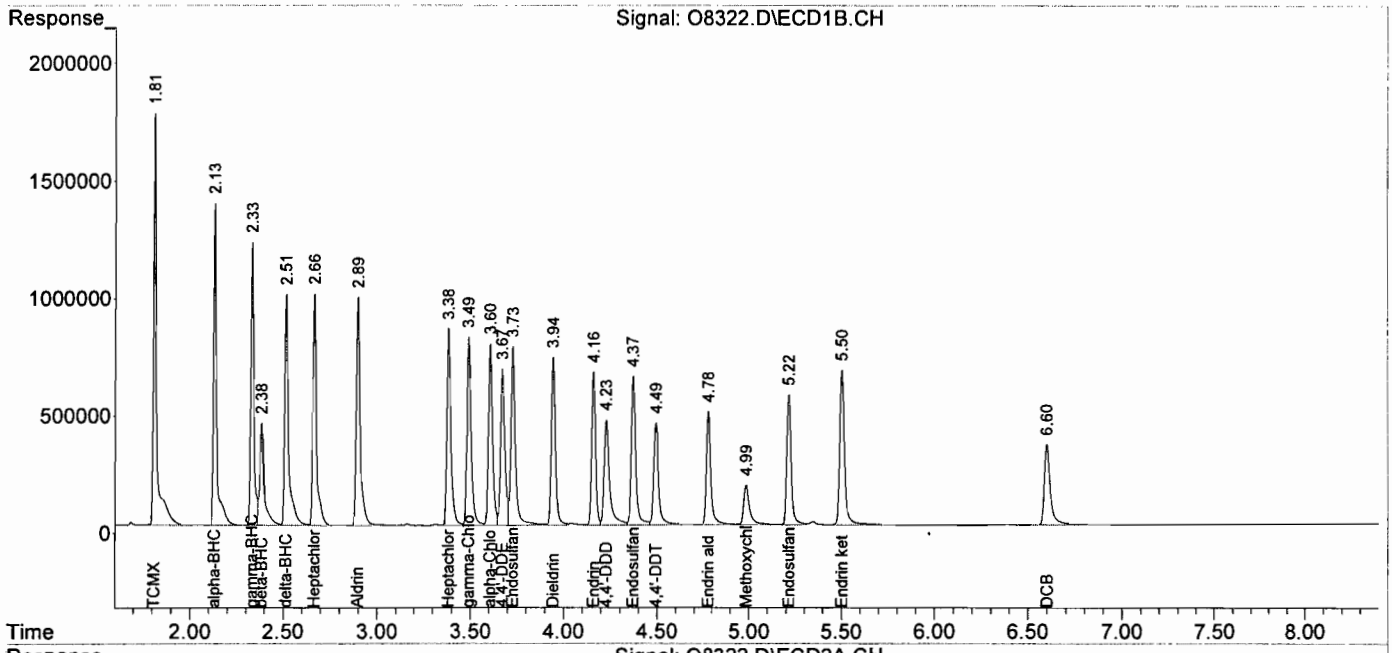
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

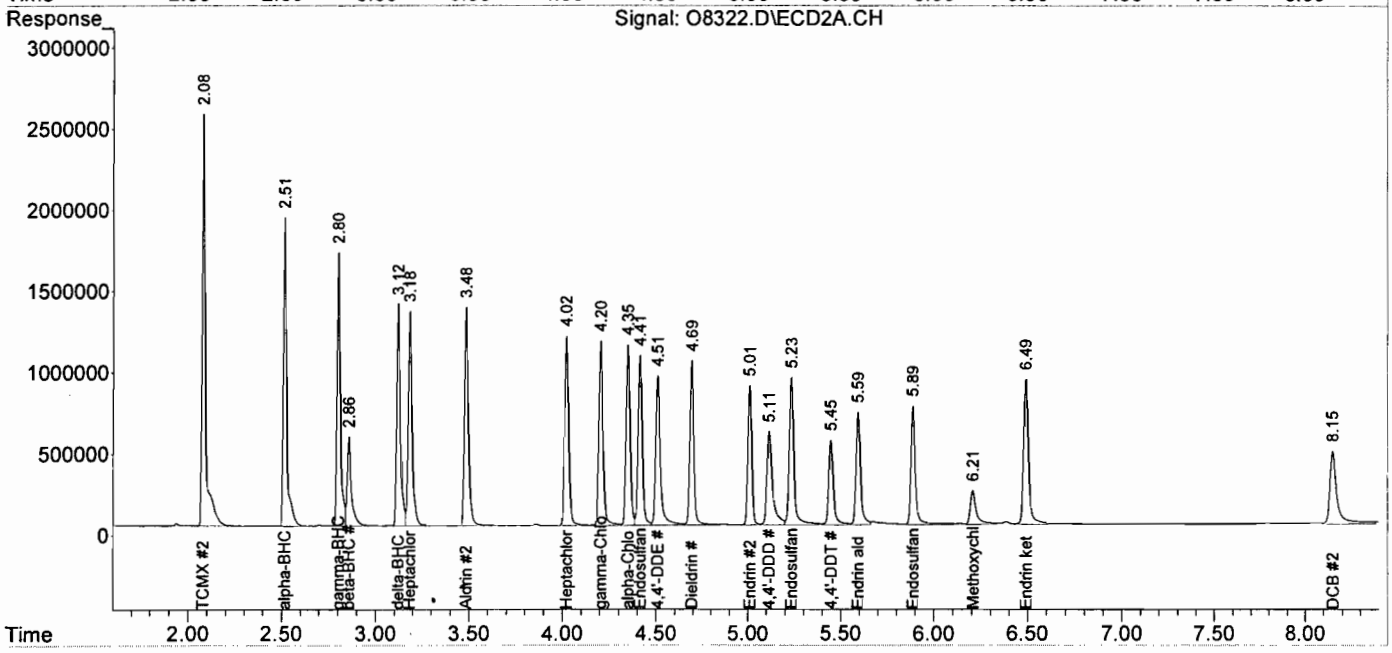
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8322.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:20
Operator : IB
Sample : Pest,LCSS150219-06,S,5.00g,0,20
Misc : NA,02/19/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08323.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:33
Operator : IB
Sample : Pest,01273-001MS,S,5.09g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:02:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

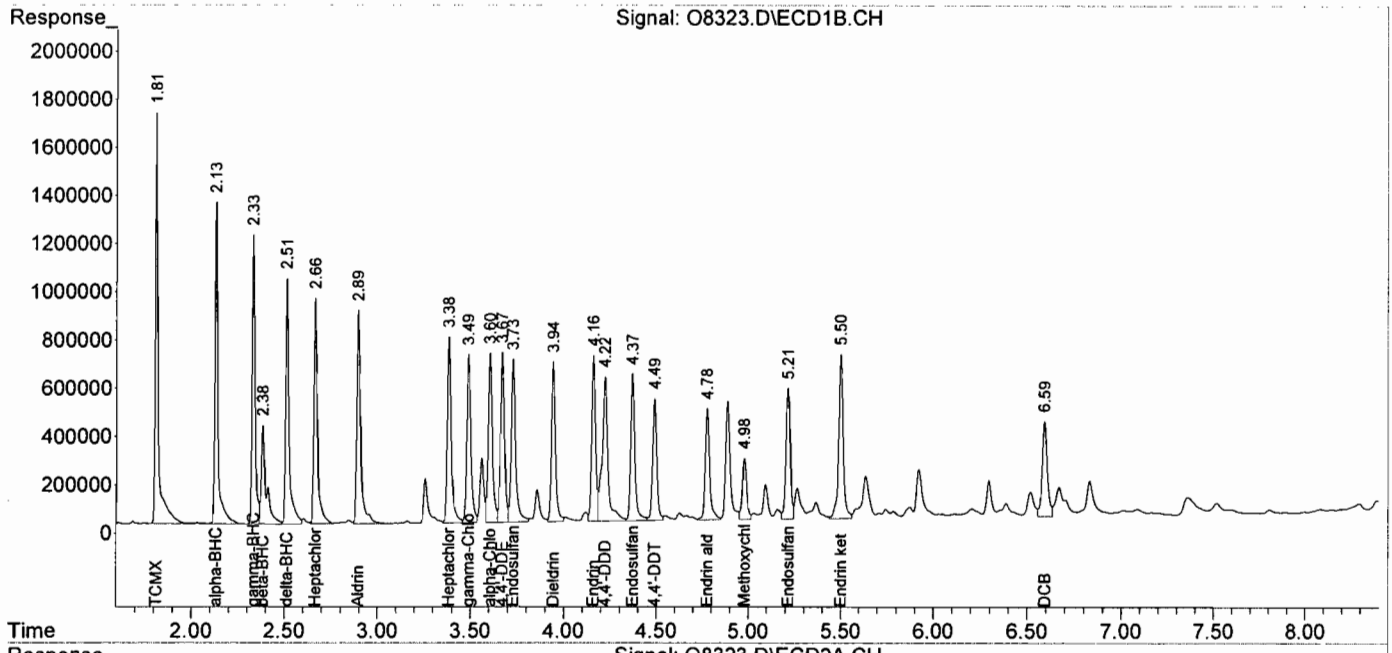
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18675395	29136955	188.858	195.470
	Spiked Amount 200.000	Range 10 - 180		Recovery =		94.43%	97.73%
2) S	DCB	6.60	8.15	7480974	14896656	163.980	239.531 #
	Spiked Amount 200.000	Range 10 - 180		Recovery =		81.99%	119.77%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	14720506	21332658	74.218	77.175
4) T	beta-BHC	2.38	2.86	7363087	8842937	83.634m	77.266
5) T	gamma-BHC (Linda	2.33	2.80	12524355	20654029	75.141	83.843
6) T	delta-BHC	2.51	3.12	12907142	18511985	71.350	75.472
7) T	Heptachlor	2.66	3.18	11900202	17322810	70.786	74.169
8) T	Aldrin	2.90	3.48	12604439	17974117	74.812	76.630
9) T	Heptachlor epoxi	3.38	4.02	11038811	16054342	72.406	75.968
10) T	Endosulfan I	3.73	4.41	10804662	14875093	72.050	77.208
11) T	4,4'-DDE	3.67	4.51	10206394	14858829	75.564	74.851
12) T	Dieldrin	3.94	4.69	9679576	19434938	61.810	90.880 #
13) T	Endrin	4.16	5.01	9846035	13615481	78.763	84.644
14) T	Endosulfan II	4.37	5.23	9621325	15509811	72.500	81.743
15) T	4,4'-DDD	4.22	5.11	12775586	13398101	108.074	84.668
16) T	Endrin aldehyde	4.78	5.59	7826030	11946571	69.702	77.395
17) T	Endosulfan sulfa	5.21	5.89	8575577	14125556	71.631	85.827
18) T	4,4'-DDT	4.49	5.44	7763286	9771688	77.702	80.314
19) T	Endrin ketone	5.50	6.49	11813332	17639806	79.988	85.691
20) T	Methoxychlor	4.98	6.20	4208444	8409936	82.664	127.382m#
21) T	alpha-Chlordane	3.60	4.35	10584751	15740004	71.305	76.695
22) T	gamma-Chlordane	3.49	4.20	10499697	15485463	68.178	73.038
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

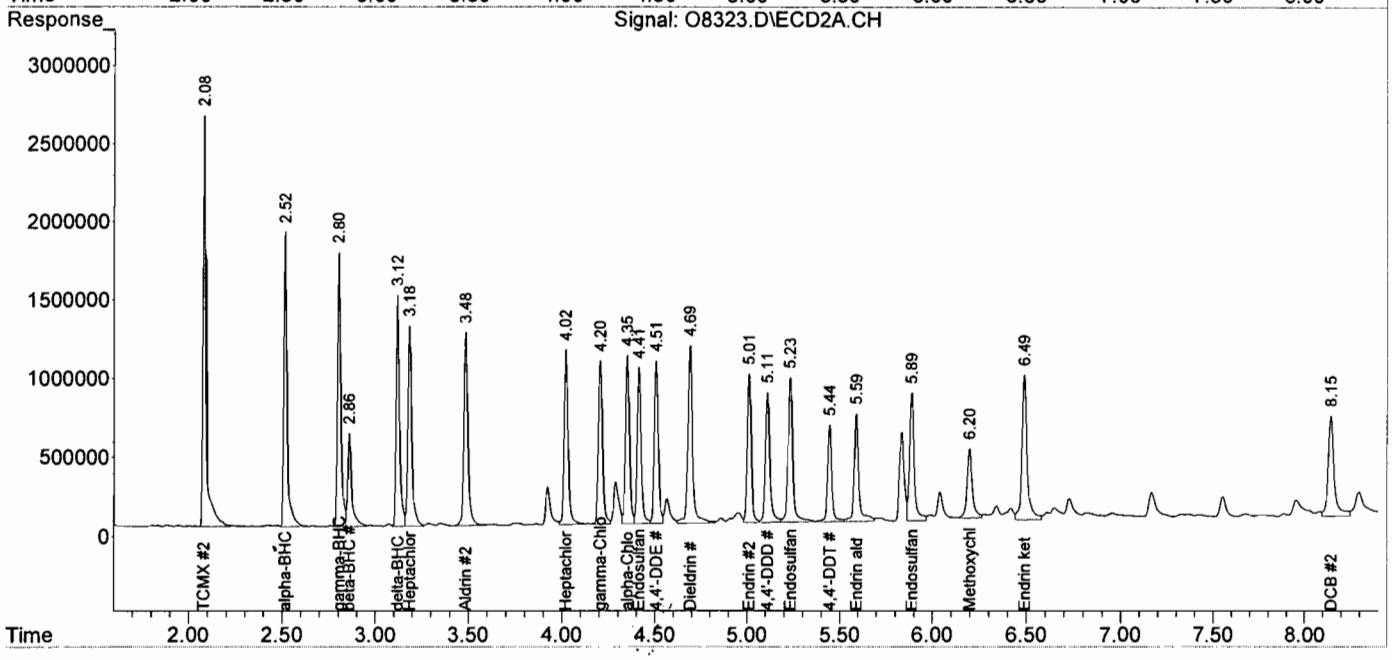
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8323.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:33
Operator : IB
Sample : Pest,01273-001MS,S,5.09g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 09:02:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : 08324.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:46
Operator : IB
Sample : Pest,01273-001MSD,S,5.93g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19344181	29648882	195.621	198.904
Spiked Amount	200.000	Range 10 - 180		Recovery =		97.81%	99.45%
2) S	DCB	6.60	8.15	7392180	13618686	162.034	218.981 #
Spiked Amount	200.000	Range 10 - 180		Recovery =		81.02%	109.49%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	14878158	21221989	75.013	76.775
4) T	beta-BHC	2.38	2.86	7398092	8792682	84.032	76.827
5) T	gamma-BHC (Linda	2.33	2.80	11867721	19371943	71.201	78.639
6) T	delta-BHC	2.51	3.12	13165573	18156576	72.779	74.023
7) T	Heptachlor	2.66	3.18	11763182	17039147	69.971	72.954
8) T	Aldrin	2.90	3.48	12453550	17691884	73.916	75.426
9) T	Heptachlor epoxi	3.38	4.02	10939236	15700329	71.753	74.293
10) T	Endosulfan I	3.73	4.41	11253989	14870331	75.046	77.184
11) T	4,4'-DDE	3.67	4.51	10147744	14813835	75.130	74.625
12) T	Dieldrin	3.94	4.69	10072475	16136615	64.319	75.457
13) T	Endrin	4.16	5.01	9460211	13120055	75.676	81.564
14) T	Endosulfan II	4.37	5.23	9561015	15035939	72.045	79.245
15) T	4,4'-DDD	4.22	5.11	10694894	12889856	90.473	81.457
16) T	Endrin aldehyde	4.78	5.59	7240963	10720354	64.491	69.451
17) T	Endosulfan sulfa	5.22	5.89	8223575	13207574	68.691	80.249
18) T	4,4'-DDT	4.49	5.45	7524429	9607991	75.311	78.968
19) T	Endrin ketone	5.50	6.49	10533982	16599898	71.326	80.639
20) T	Methoxychlor	4.98	6.20	3896234	6680592	76.532	101.188m#
21) T	alpha-Chlordane	3.61	4.35	10385246	15125370	69.961	73.700
22) T	gamma-Chlordane	3.49	4.20	10323527	15084113	67.034	71.145
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

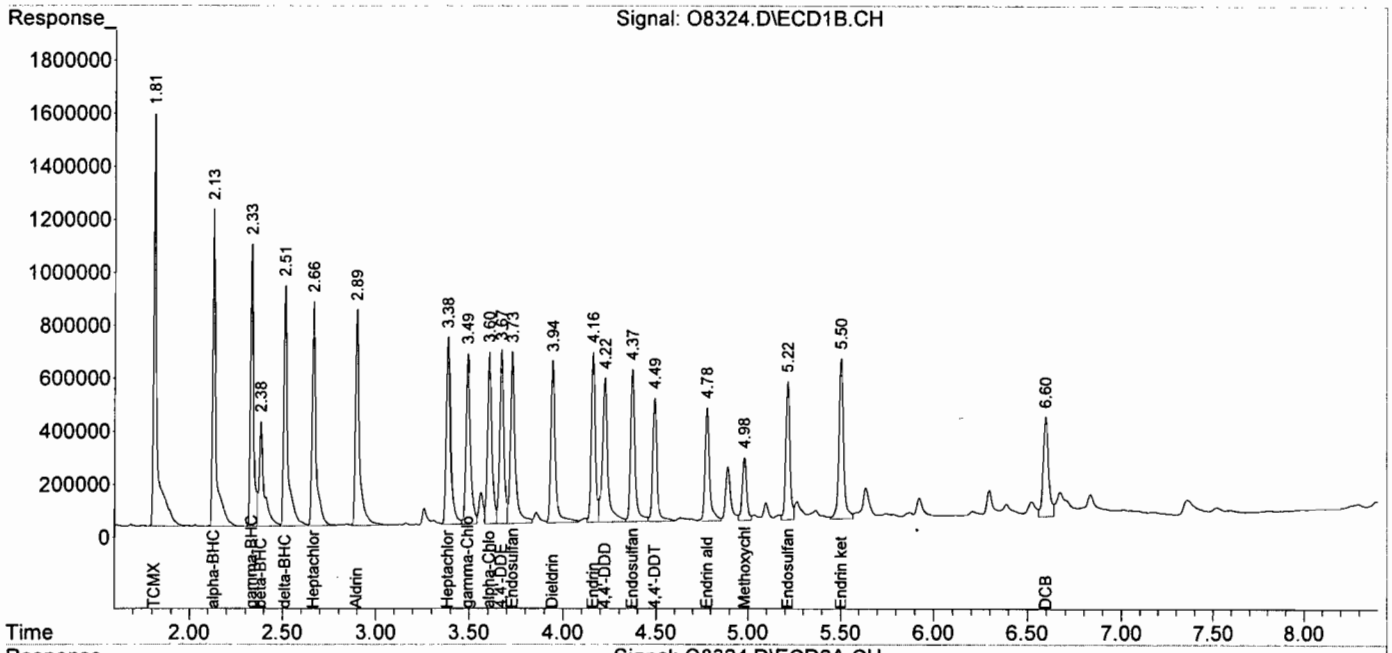
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

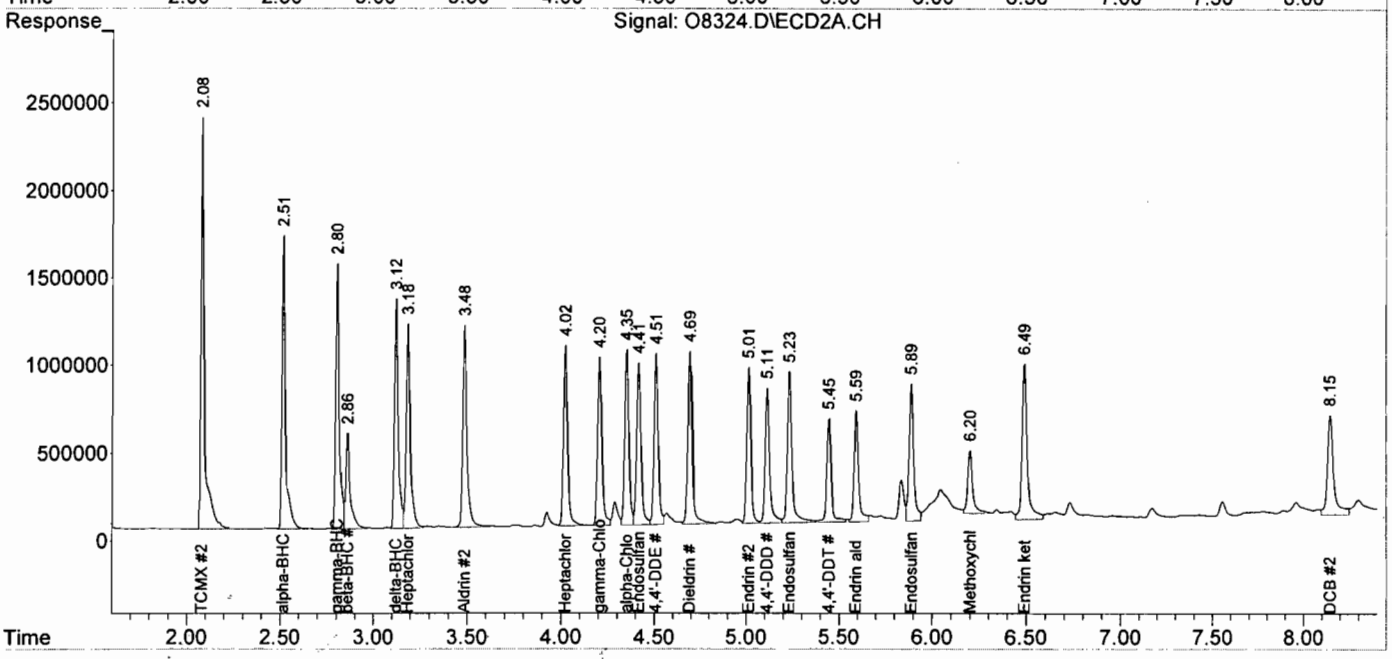
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-20-15\
Data File : O8324.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Feb 2015 17:46
Operator : IB
Sample : Pest,01273-001MSD,S,5.93g,10.6,20
Misc : NA,02/19/15,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 08:49:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0220.M
Quant Title :
QLast Update : Fri Feb 20 13:18:08 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Soil)

Extraction Date/Time: 02/19/2015 14:29

Batch ID: **150219-06**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-06	PCB/Pest	5.00	20	40	1			
LCSS150219-06	PCB	5	20	40	1	100		
01273-001MS	PCB	5.27	20	40	4	100		R-48
01273-001MSD	PCB	5.60	20	40	4	100		R-48
LCSS150219-06	Pesticides	5.00	20	40	1		100	
01273-001MS	Pesticides	5.09	20	40	4		100	R-48
01273-001MSD	Pesticides	5.93	20	40	4		100	R-48

Standard Info	Surrogate IAS #
Solvent	RA#74-17/RA#74-13
Surrogate	IAS#5134
SPK 1	IAS#5175
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	PCB/Pest	5.31	20	40	4		R-48	01273-001MS / 150219-06	01273-001MS / 150219-06
2	01264-001	PCB	5.10	20	40	3			01273-001MS / 150219-06	
3	01264-004	PCB	5.66	20	40	4			01273-001MS / 150219-06	
4	01264-008	PCB	5.20	20	40	3			01273-001MS / 150219-06	
5	01264-012	PCB	5.27	20	40	4			01273-001MS / 150219-06	
6	01264-016	PCB	5.41	20	40	4			01273-001MS / 150219-06	
7	01264-036	PCB	5.23	20	40	3			01273-001MS / 150219-06	
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/19/2015 14:29
Weighed	Archie	02/19/2015 14:47
Surrogated	Archie	02/19/2015 14:48
Filtered	Archie	02/19/2015 16:39
Transferred	Archie	02/19/2015 16:39
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Pest

DATE 2/20/2015 9:19 **Extra. Batch** 150219-06 BS Soil

INSTRUMENT O

METHOD OPST0220

SYS METHOD 8081B (eg. 8015B M, 3810)

ANALYST Iwona

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8309		ENDRIN/DDT						1			
2	100	O8310		HEXANE						1			
3	99	O8311		ISOOCTANE						1			
4	95	O8312		PRIMER						1			
5	5	O8313	ICC_PEST_L5_IAS_5248,300_PPB							1			
6	6	O8314	ICC_PEST_L4_IAS_5249,200_PPB							1			
7	9	O8315	ICC_PEST_L3_IAS_5250,100_PPB							1			
8	7	O8316	ICC_PEST_L2_IAS_5251,50_PPB							1			
9	8	O8317	ICC_PEST_L1_IAS_5252,2_PPB							1			
10	3	O8318	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	O8319	ICC_CHLOR_C_IAS_5254,0.5_PPM							1			
12	2	O8320	ICV_PEST_C_IAS_5171,100_PPB							1			
13	10	O8321		BLKS150219-06		1	5.00	20	S			2/19/15	0
14	11	O8322		LCSS150219-06		1	5.00	20	S			2/19/15	0
15	12	O8323		01273-001MS		1	5.09	20	S			2/19/15	10.6
16	13	O8324		01273-001MSD		1	5.93	20	S			2/19/15	10.6
17	14	O8325		01273	1	1	5.31	20	S	2/18/15	2/19/15	2/19/15	10.6
18	22	O8326	CCV_PEST_C_IAS_5171,100_PPB							1			

STANDARD IAS#	STANDARD NAME:	Pest L-1		
5252				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:500			2PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Stock		
5253				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	SUPELCO	48065-U	LC01899	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/20/16	100µl (SUPELCO) → 10ml isooctane			10 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Hale. Std.		
5254				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5253	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl (IAS# 5253) Chlad 20 µl (IAS# 5134) Surr. → 10ml isooctane			500PPB Chlordane 200PPB surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Endrin / DDT Mole. Std.		
5255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5056	—	—	5PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/28/15	1:50			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pest L-5		
5248				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5246 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:3,33			300PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-4		
5249				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:5			200PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-3		
5250				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-2		
5251				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:20			50PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	8011 Holding Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-308I-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 Surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809 ~~8097~~	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500µl Tox (IAS# 5167) 20µl surr (IAS# 5134) → 10ml (isooctane)			500PPB (Tox) / 2000PB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO		L1
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10562B3 DCB B2-20924	3168100 2188800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ML of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS# 5135 + 400 µl of SURR.) (IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep	ACE-8081-S	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

TCLP
PESTICIDE DATA

TCLP
PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/10/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150209-14	AQUEOUS	88		86		90		82	
Pest	TCLP150206	AQUEOUS	88		84		89		89	
Pest	00895-001MS	LEACHATE	89		104		92		105	
Pest	00895-001MSD	LEACHATE	90		102		93		104	
GROWES_W	E15-00895-001	LEACHATE	81		91		86		93	
TSCA_W.C	E15-00896-001	LEACHATE	84		99		89		96	
Pest	LCSA150209-14	AQUEOUS	88		82		91		84	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/23/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150223-08	AQUEOUS	102		92		105		96	
Pest	TCLP150219	AQUEOUS	103		96		108		94	
Pest	LCSA150223-08	AQUEOUS	104		98		109		98	
GPEC-WC1	E15-01273-001	LEACHATE	93		105		103		100	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150223-08
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0148.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	74.0	74	
beta-BHC	100.0	0.0	66.8	67	
gamma-BHC (Lindane)	100.0	0.0	75.5	76	
delta-BHC	100.0	0.0	68.5	69	
Heptachlor	100.0	0.0	73.4	73	
Aldrin	100.0	0.0	76.5	77	
Heptachlor epoxide	100.0	0.0	75.3	75	
Endosulfan I	100.0	0.0	76.6	77	
4,4'-DDE	100.0	0.0	77.3	77	
Dieldrin	100.0	0.0	66.9	67	
Endrin	100.0	0.0	75.1	75	
Endosulfan II	100.0	0.0	74.3	74	
4,4'-DDD	100.0	0.0	75.5	76	
Endrin aldehyde	100.0	0.0	68.3	68	
Endosulfan sulfate	100.0	0.0	70.0	70	
4,4'-DDT	100.0	0.0	76.3	76	
Endrin ketone	100.0	0.0	76.0	76	
Methoxychlor	100.0	0.0	81.5	82	
alpha-Chlordane	100.0	0.0	75.0	75	
gamma-Chlordane	100.0	0.0	75.4	75	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-00895-001
Date Received: 02/05/2015
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
MS Data file: O8182.D
MSD Data file: O8183.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
alpha-BHC	100.0	0.0	67.5	68		70.8	71	5
beta-BHC	100.0	0.0	58.5	59		64.7	65	10
gamma-BHC (Lindane)	100.0	0.0	74.5	75		76.9	77	3
delta-BHC	100.0	0.0	67.6	68		71.3	71	5
Heptachlor	100.0	0.0	74.2	74		77.4	77	4
Aldrin	100.0	0.0	72.0	72		74.4	74	3
Heptachlor epoxide	100.0	0.0	73.6	74		75.2	75	2
Endosulfan I	100.0	0.0	76.7	77		78.2	78	2
4,4'-DDE	100.0	0.0	78.3	78		80.4	80	3
Dieldrin	100.0	0.0	66.7	67		68.0	68	2
Endrin	100.0	0.0	92.3	92		94.8	95	3
Endosulfan II	100.0	0.0	73.3	73		76.1	76	4
4,4'-DDD	100.0	0.0	71.7	72		73.7	74	3
Endrin aldehyde	100.0	0.0	64.0	64		66.7	67	4
Endosulfan sulfate	100.0	0.0	72.2	72		76.4	76	6
4,4'-DDT	100.0	0.0	86.5	87		91.4	91	6
Endrin ketone	100.0	0.0	69.3	69		72.4	72	4
Methoxychlor	100.0	0.0	94.1	94		101.0	101	7
alpha-Chlordane	100.0	0.0	74.3	74		75.6	76	2
gamma-Chlordane	100.0	0.0	76.0	76		77.4	77	2

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID:	O8180.D	Instrument ID:	GC-O
Date Extracted:	02/09/2015	Matrix:	AQUEOUS
Date Analyzed:	02/10/2015	Time Analyzed:	12:12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	TCLP150206	02/10/2015	12:25
Pest	00895-001MS	02/10/2015	12:50
Pest	00895-001MSD	02/10/2015	13:03
GROWES_W	E15-00895-001	02/10/2015	13:15
TSCA_W.C	E15-00896-001	02/10/2015	13:28
Pest	LCSA150209-14	02/10/2015	14:19

PESTICIDE METHOD BLANK SUMMARY

Lab File ID:	V0146.D	Instrument ID:	GC-V
Date Extracted:	02/23/2015	Matrix:	AQUEOUS
Date Analyzed:	02/23/2015	Time Analyzed:	14:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	TCLP150219	02/23/2015	14:49
Pest	LCSA150223-08	02/23/2015	15:01
GPEC-WC1	E15-01273-001	02/23/2015	15:12

TCLP
PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0149.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:12
Operator : IB
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-08,02/23/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.06	140.0E6	40198243	186.601	205.911
Spiked Amount 200.000			Recovery	=	93.30%	102.96%
2) S DCB	6.05	6.73	59069128	16224576	209.643	199.827
Spiked Amount 200.000			Recovery	=	104.82%	99.91%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

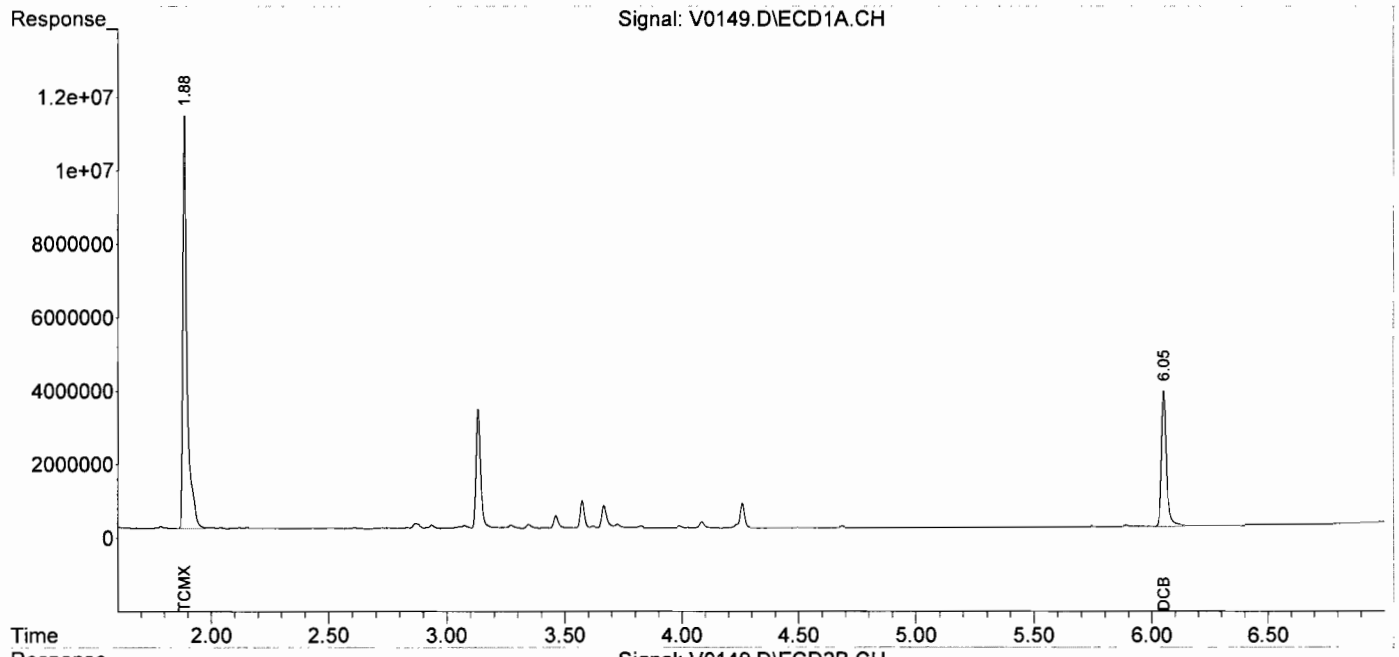
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

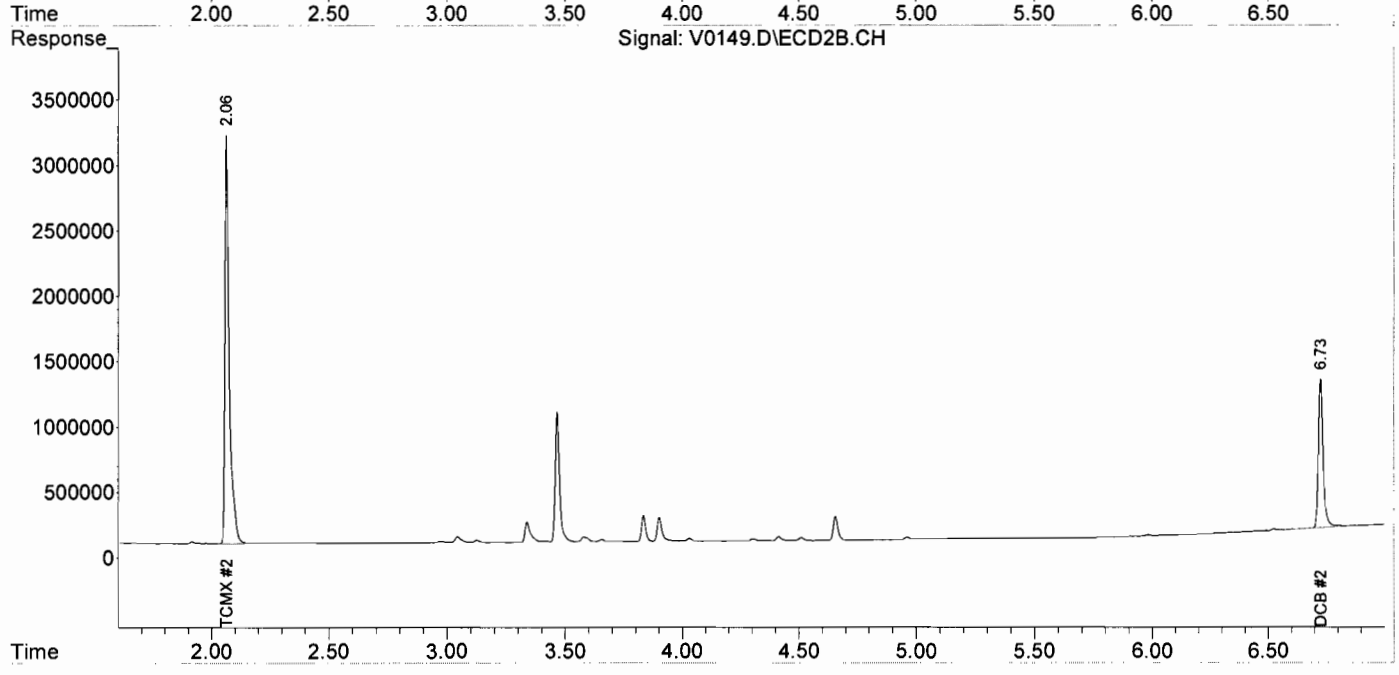
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0149.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:12
Operator : IB
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-08,02/23/15,02/19/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE STANDARDS

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8043.D O8042.D O8041.D O8040.D O8039.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.13	2.13	2.13	2.13	2.13	2.13	2.07	2.19
beta-BHC	2.38	2.38	2.38	2.38	2.38	2.38	2.32	2.44
gamma-BHC	2.33	2.33	2.33	2.33	2.33	2.33	2.27	2.39
delta-BHC	2.51	2.51	2.51	2.51	2.51	2.51	2.45	2.57
Heptachlor	2.66	2.66	2.67	2.67	2.67	2.66	2.58	2.74
Aldrin	2.89	2.90	2.90	2.90	2.90	2.90	2.82	2.98
Heptachlor epoxide	3.38	3.38	3.38	3.39	3.38	3.38	3.30	3.46
Endosulfan I	3.73	3.73	3.73	3.73	3.73	3.73	3.65	3.81
4,4'-DDE	3.67	3.67	3.67	3.67	3.67	3.67	3.57	3.77
Dieldrin	3.94	3.94	3.94	3.94	3.94	3.94	3.84	4.04
Endrin	4.16	4.16	4.16	4.16	4.16	4.16	4.06	4.26
Endosulfan II	4.37	4.37	4.37	4.37	4.37	4.37	4.27	4.47
4,4'-DDD	4.22	4.22	4.22	4.22	4.22	4.22	4.12	4.32
Endrin aldehyde	4.78	4.78	4.78	4.78	4.78	4.78	4.66	4.90
Endosulfan sulfate	5.22	5.22	5.22	5.22	5.22	5.22	5.10	5.34
4,4'-DDT	4.49	4.49	4.49	4.49	4.49	4.49	4.37	4.61
Endrin ketone	5.50	5.50	5.50	5.50	5.50	5.50	5.38	5.62
Methoxychlor	4.98	4.98	4.98	4.98	4.98	4.98	4.86	5.10
alpha-Chlordane	3.60	3.61	3.61	3.61	3.61	3.61	3.53	3.69
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.61				2.53	2.69
Chlordane {2}			3.00				2.92	3.08
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.60				3.52	3.68
Chlordane {5}			4.31				4.23	4.39
Toxaphene 500 ppb			4.76				4.68	4.84
Toxaphene {2}			4.88				4.80	4.96
Toxaphene {3}			5.11				5.03	5.19
Toxaphene {4}			5.48				5.40	5.56
Toxaphene {5}			5.64				5.56	5.72

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (1st): RTX-CLP1

Data File: O8043.D O8042.D O8041.D O8040.D O8039.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	174569	189043	189399	195825	187234	187214	4.16
beta-BHC	93104	77777	83873	86442	80636	84366	6.97
gamma-BHC	150478	162704	155468	158536	152133	155864	3.16
delta-BHC	159659	169092	170441	177038	168744	168995	3.67
Heptachlor	156434	153850	153678	156801	149332	154019	1.94
Aldrin	159596	160523	160785	163897	155257	160012	1.94
Heptachlor epoxide	151016	144749	144212	145464	137184	144525	3.41
Endosulfan I	148932	141683	140090	142568	134202	141495	3.73
4,4'-DDE	122670	128945	130612	135019	127987	129047	3.46
Dieldrin	147822	148446	148919	151976	142989	148030	2.19
Endrin	100630	106276	107793	113596	108767	107412	4.35
Endosulfan II	136080	126828	125916	128501	120486	127562	4.41
4,4'-DDD	113428	109635	110790	114956	108054	111373	2.52
Endrin aldehyde	127517	107760	107151	108836	101666	110586	8.92
Endosulfan sulfate	127322	111761	111269	114353	106439	114229	6.88
4,4'-DDT	80757	92158	96367	105130	100797	95042	9.83
Endrin ketone	166919	145759	143025	144249	133357	146662	8.40
Methoxychlor	40378	45577	46213	49143	46448	45552	7.02
alpha-Chlordane	148668	142026	141168	142932	134900	141939	3.46
gamma-Chlordane	150291	147896	146398	149868	141827	147256	2.32
Chlordane 500 ppb			4252				
Chlordane {2}			5382				
Chlordane {3}			15780				
Chlordane {4}			24978				
Chlordane {5}			4043				
Toxaphene 500 ppb			4041				
Toxaphene {2}			3288				
Toxaphene {3}			4300				
Toxaphene {4}			4108				
Toxaphene {5}			1931				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (2nd): RTX-CLP2

Data File: O8043.C O8042.C O8041.C O8040.C O8039.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.51	2.52	2.51	2.52	2.52	2.52	2.46	2.58
beta-BHC	2.86	2.86	2.86	2.86	2.86	2.86	2.80	2.92
gamma-BHC	2.80	2.80	2.80	2.80	2.80	2.80	2.74	2.86
delta-BHC	3.12	3.12	3.12	3.12	3.12	3.12	3.06	3.18
Heptachlor	3.18	3.19	3.19	3.19	3.19	3.19	3.11	3.27
Aldrin	3.48	3.48	3.49	3.49	3.49	3.48	3.40	3.56
Heptachlor epoxide	4.02	4.02	4.02	4.02	4.02	4.02	3.94	4.10
Endosulfan I	4.41	4.41	4.42	4.42	4.42	4.41	4.33	4.49
4,4'-DDE	4.51	4.51	4.51	4.51	4.51	4.51	4.41	4.61
Dieldrin	4.69	4.69	4.69	4.69	4.69	4.69	4.59	4.79
Endrin	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Endosulfan II	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDD	5.11	5.11	5.11	5.11	5.11	5.11	5.01	5.21
Endrin aldehyde	5.59	5.59	5.59	5.59	5.59	5.59	5.47	5.71
Endosulfan sulfate	5.89	5.89	5.89	5.89	5.89	5.89	5.77	6.01
4,4'-DDT	5.45	5.45	5.45	5.45	5.45	5.45	5.33	5.57
Endrin ketone	6.49	6.49	6.49	6.49	6.49	6.49	6.37	6.61
Methoxychlor	6.21	6.21	6.21	6.20	6.20	6.20	6.08	6.32
alpha-Chlordane	4.35	4.35	4.35	4.35	4.35	4.35	4.27	4.43
gamma-Chlordane	4.20	4.20	4.21	4.21	4.21	4.20	4.12	4.28
Chlordane 500 ppb			3.06				2.98	3.14
Chlordane {2}			3.61				3.53	3.69
Chlordane {3}			4.20				4.12	4.28
Chlordane {4}			4.29				4.21	4.37
Chlordane {5}			4.35				4.27	4.43
Toxaphene 500 ppb			5.32				5.24	5.40
Toxaphene {2}			5.60				5.52	5.68
Toxaphene {3}			5.88				5.80	5.96
Toxaphene {4}			6.16				6.08	6.24
Toxaphene {5}			6.60				6.52	6.68

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 01/22/2015 **Instrument ID:** GC-O

GC Column (2nd): RTX-CLP2

Data File: O8043.C O8042.C O8041.C O8040.C O8039.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	216827	253312	257672	268082	260324	251243	7.95
beta-BHC	117378	101282	101195	103983	100878	104943	6.73
gamma-BHC	198536	227408	229244	239924	229580	224938	6.92
delta-BHC	198936	219546	223795	236618	227778	221335	6.33
Heptachlor	186204	200023	204958	215468	207236	202778	5.33
Aldrin	198215	214003	217847	225860	217377	214661	4.74
Heptachlor epoxide	190748	190964	193495	200237	191795	193448	2.04
Endosulfan I	169591	174346	177124	183599	175833	176098	2.88
4,4'-DDE	169247	180729	185319	194753	186778	183365	5.11
Dieldrin	180243	191498	196872	205387	197445	194289	4.78
Endrin	113720	129048	133962	145533	141376	132728	9.34
Endosulfan II	173843	170968	172134	177693	168764	172680	1.94
4,4'-DDD	137597	139017	143343	152254	145796	143601	4.07
Endrin aldehyde	155476	146798	147463	151155	142494	148677	3.29
Endosulfan sulfate	148905	142285	144007	151208	144002	146081	2.59
4,4'-DDT	83502	104337	113069	129088	125799	111159	16.53
Endrin ketone	211267	197017	190085	194503	182251	195024	5.47
Methoxychlor	49656	55199	56757	60749	58400	56152	7.43
alpha-Chlordane	190062	187778	189712	196863	188745	190632	1.89
gamma-Chlordane	188079	192533	197267	205622	197351	196170	3.33
Chlordane 500 ppb			6221				
Chlordane {2}			6419				
Chlordane {3}			20052				
Chlordane {4}			15455				
Chlordane {5}			16727				
Toxaphene 500 ppb			5003				
Toxaphene {2}			4207				
Toxaphene {3}			2656				
Toxaphene {4}			5464				
Toxaphene {5}			3809				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8039.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 10:56
Operator : IB
Sample : ICC_PEST_L5_IAS_5113,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	55352740	84785057	543.245	569.098
	Spiked Amount 200.000	Range 10 - 180		Recovery =		271.62%#	284.55%#
2) S	DCB	6.60	8.15	24043108	32678557	546.201	578.272
	Spiked Amount 200.000	Range 10 - 180		Recovery =		273.10%#	289.14%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	56170213	78097237	300.032	310.843
4) T	beta-BHC	2.38	2.86	24190716	30263331	286.735	288.378
5) T	gamma-BHC (Linda	2.33	2.80	45639954	68874114	292.820	306.191
6) T	delta-BHC	2.51	3.12	50623318	68333514	299.555	308.733
7) T	Heptachlor	2.67	3.19	44799660	62170905	290.870	306.596
8) T	Aldrin	2.90	3.49	46577088	65213244	291.086	303.797
9) T	Heptachlor epoxi	3.38	4.02	41155117	57538427	284.761	297.437
10) T	Endosulfan I	3.73	4.42	40260511	52749878	284.536	299.548
11) T	4,4'-DDE	3.67	4.51	38396145	56033448	297.537	305.584
12) T	Dieldrin	3.94	4.69	42896836	59233617	289.784	304.874
13) T	Endrin	4.16	5.01	32630135	42412825	303.784	319.547
14) T	Endosulfan II	4.37	5.23	36145653	50629141	283.357	293.196
15) T	4,4'-DDD	4.22	5.11	32416119	43738694	291.060	304.584
16) T	Endrin aldehyde	4.78	5.59	30499823	42748191	275.802	287.523
17) T	Endosulfan sulfa	5.22	5.89	31931603	43200533	279.541	300.218
18) T	4,4'-DDT	4.49	5.45	30239247	37739643	318.167	343.117
19) T	Endrin ketone	5.50	6.49	40006964	54675349	272.784	283.301
20) T	Methoxychlor	4.98	6.20	13934295	17520030	305.900	312.010
21) T	alpha-Chlordane	3.61	4.35	40470135	56623589	285.124	297.031
22) T	gamma-Chlordane	3.49	4.21	42548128	59205288	288.940	301.805
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

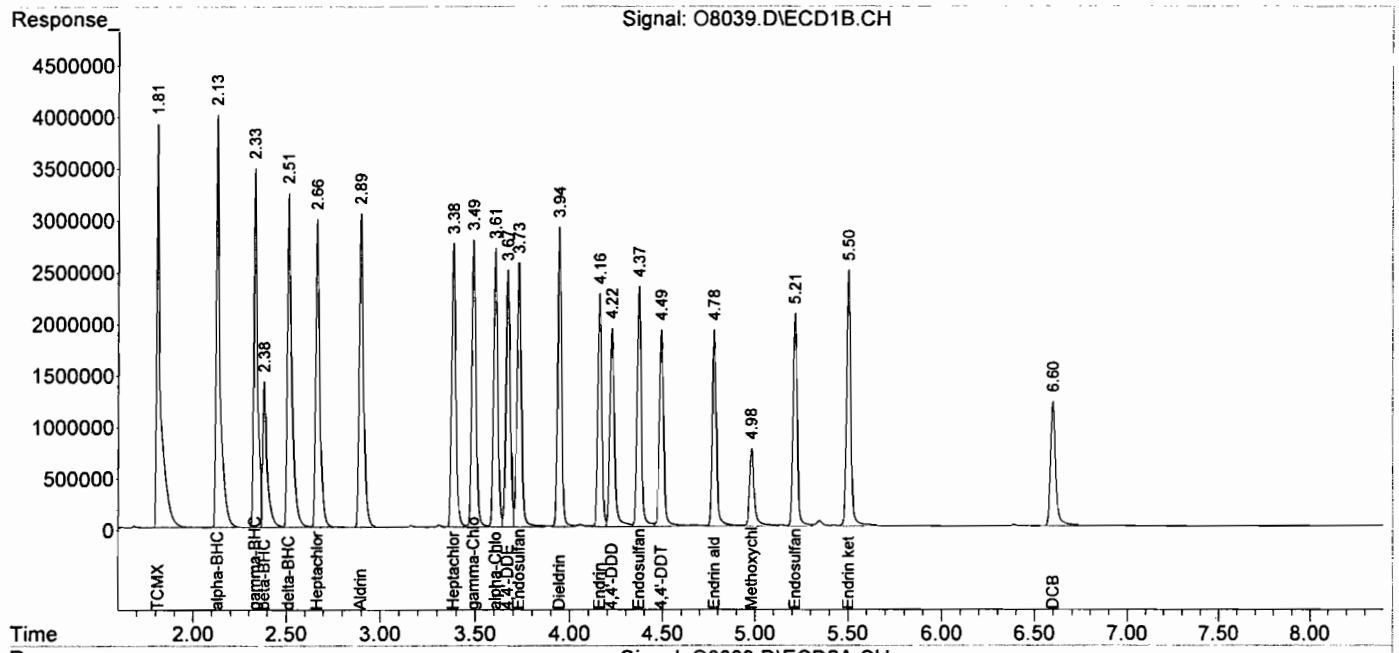
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

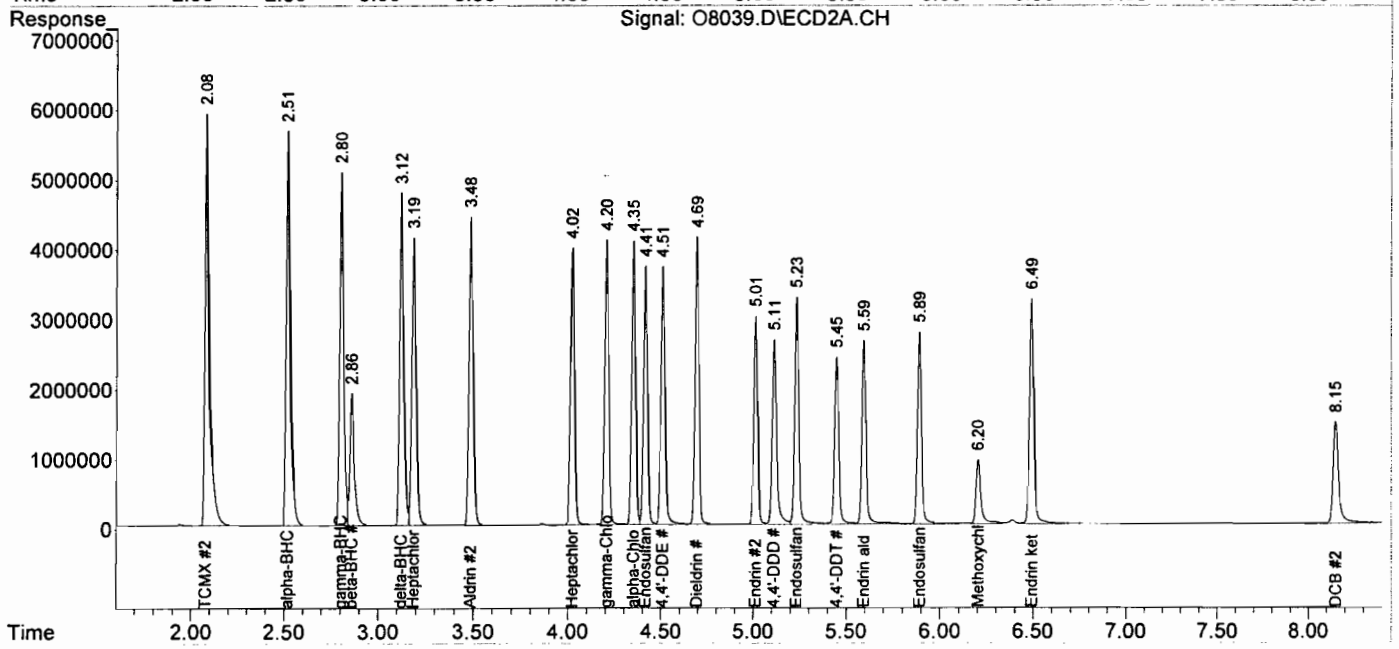
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8039.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 10:56
Operator : IB
Sample : ICC_PEST_L5_IAS_5113,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8040.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:09
Operator : IB
Sample : ICC_PEST_L4_IAS_5114,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	39860188	59715851	391.197	400.827
	Spiked Amount 200.000	Range 10 - 180		Recovery =		195.60%#	200.41%#
2) S	DCB	6.60	8.15	17097264	21426761	388.408	379.163
	Spiked Amount 200.000	Range 10 - 180		Recovery =		194.20%#	189.58%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	39165044	53616471	209.199	213.405
4) T	beta-BHC	2.38	2.86	17288331	20796574	204.920	198.170
5) T	gamma-BHC (Linda	2.33	2.80	31707146	47984899	203.429	213.325
6) T	delta-BHC	2.51	3.12	35407687	47323698	209.519	213.810
7) T	Heptachlor	2.67	3.19	31360224	43093598	203.612	212.516
8) T	Aldrin	2.90	3.49	32779307	45172076	204.856	210.435
9) T	Heptachlor epoxi	3.39	4.02	29092839	40047385	201.300	207.019
10) T	Endosulfan I	3.73	4.42	28513678	36719874	201.517	208.519
11) T	4,4'-DDE	3.67	4.51	27003876	38950669	209.256	212.421
12) T	Dieldrin	3.94	4.69	30395259	41077343	205.331	211.424
13) T	Endrin	4.16	5.01	22719170	29106572	211.513	219.295
14) T	Endosulfan II	4.37	5.23	25700164	35538612	201.472	205.806
15) T	4,4'-DDD	4.22	5.11	22991199	30450705	206.435	212.050
16) T	Endrin aldehyde	4.78	5.59	21767214	30231034	196.835	203.333
17) T	Endosulfan sulfa	5.22	5.89	22870536	30241524	200.217	210.161
18) T	4,4'-DDT	4.49	5.45	21026096	25817560	221.229	234.725
19) T	Endrin ketone	5.50	6.49	28849776	38900631	196.710	201.564
20) T	Methoxychlor	4.98	6.20	9828605	12149735	215.767	216.372
21) T	alpha-Chlordane	3.61	4.35	28586439	39372525	201.400	206.537
22) T	gamma-Chlordane	3.49	4.21	29973647	41124352	203.548	209.636
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

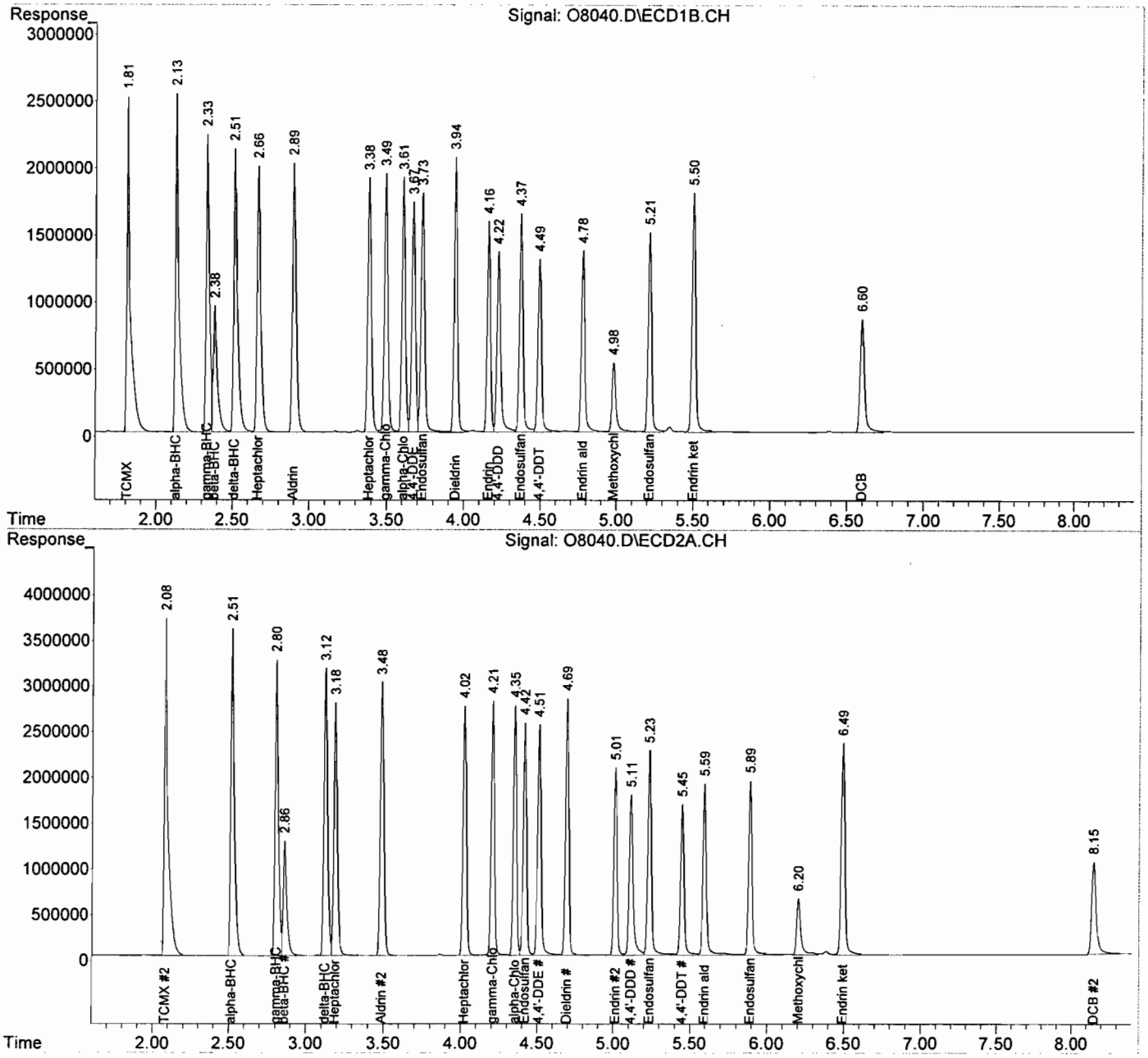
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8040.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:09
Operator : IB
Sample : ICC_PEST_L4_IAS_5114,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:22
Operator : IB
Sample : ICC_PEST_L3_IAS_5115,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19940920	29386310	195.705	197.248
	Spiked Amount 200.000	Range 10 - 180		Recovery =		97.85%	98.62%
2) S	DCB	6.60	8.15	8431431	11984286	191.542	212.071
	Spiked Amount 200.000	Range 10 - 180		Recovery =		95.77%	106.04%
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	18939883	25767171	101.167	102.559
4) T	beta-BHC	2.38	2.86	8387317	10119463	99.416	96.428
5) T	gamma-BHC (Linda	2.33	2.80	15546792	22924417	99.746	101.914
6) T	delta-BHC	2.51	3.12	17044053	22379522	100.855	101.112
7) T	Heptachlor	2.67	3.19	15367841	20495841	99.779	101.075
8) T	Aldrin	2.90	3.49	16078516	21784749	100.483	101.485
9) T	Heptachlor epoxi	3.38	4.02	14421215	19349517	99.784	100.025
10) T	Endosulfan I	3.73	4.42	14009041	17712370	99.007	100.582
11) T	4,4'-DDE	3.67	4.51	13061163	18531898	101.213	101.065
12) T	Dieldrin	3.94	4.69	14891871	19687171	100.600	101.329
13) T	Endrin	4.16	5.01	10779343	13396190	100.355	100.930
14) T	Endosulfan II	4.37	5.23	12591588	17213373	98.709	99.684
15) T	4,4'-DDD	4.22	5.11	11079002	14334317	99.477	99.820
16) T	Endrin aldehyde	4.78	5.59	10715129	14746285	96.894	99.183
17) T	Endosulfan sulfa	5.22	5.89	11126877	14400747	97.409	100.077
18) T	4,4'-DDT	4.49	5.45	9636710	11306885	101.394	102.799
19) T	Endrin ketone	5.50	6.49	14302510	19008470	97.520	98.493
20) T	Methoxychlor	4.98	6.21	4621266	5675716	101.451	101.077
21) T	alpha-Chlordane	3.61	4.35	14116766	18971152	99.457	99.517
22) T	gamma-Chlordane	3.49	4.21	14639783	19726699	99.417	100.559
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

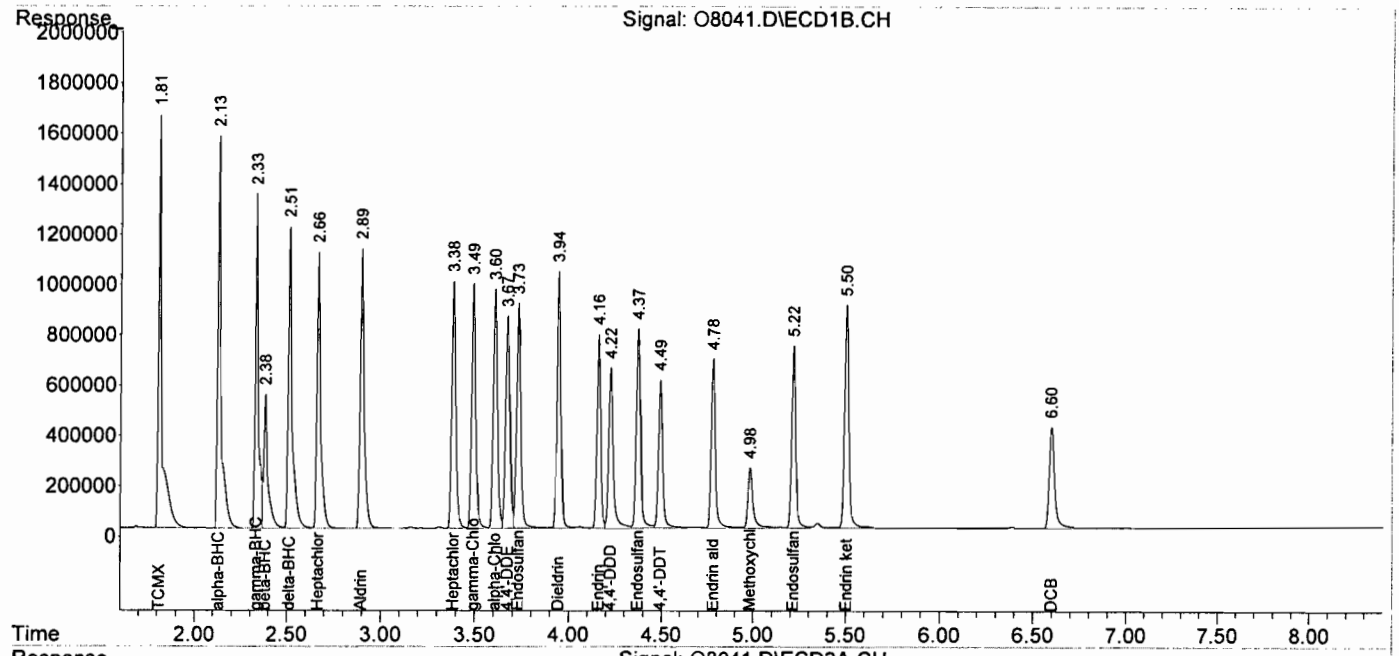
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

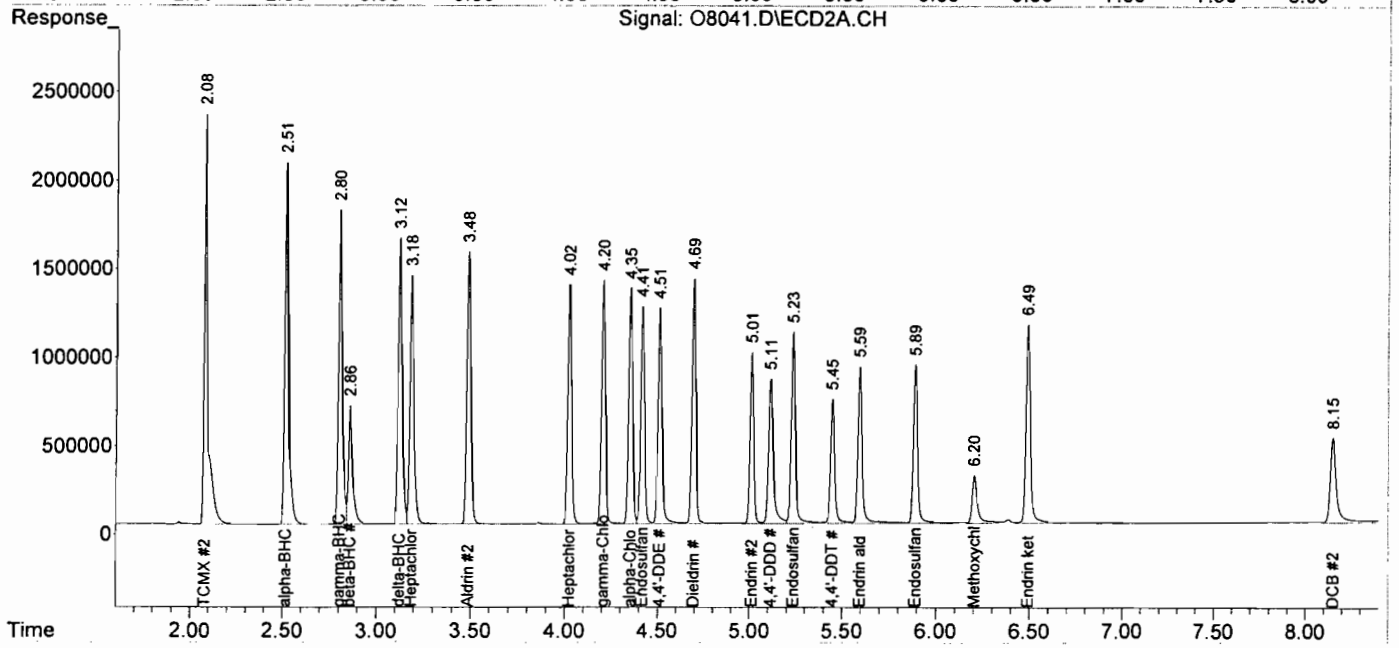
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:22
Operator : IB
Sample : ICC_PEST_L3_IAS_5115,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:29:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:34
Operator : IB
Sample : ICC_PEST_L2_IAS_5116,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	10281040	14921333	100.900	100.156
	Spiked Amount 200.000	Range 10 - 180		Recovery =		50.45%	50.08%
2) S	DCB	6.60	8.15	4428562	5219635	100.606	92.365
	Spiked Amount 200.000	Range 10 - 180		Recovery =		50.30%	46.18%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	9452167	12665593	50.489	50.412
4) T	beta-BHC	2.38	2.86	3888836	5064119	46.095	48.256
5) T	gamma-BHC (Linda	2.33	2.80	8135192	11370377	52.194	50.549
6) T	delta-BHC	2.51	3.12	8454624	10977324	50.029	49.596
7) T	Heptachlor	2.66	3.19	7692520	10001163	49.945	49.321
8) T	Aldrin	2.90	3.48	8026168	10700137	50.160	49.847
9) T	Heptachlor epoxi	3.38	4.02	7237433	9548192	50.077	49.358
10) T	Endosulfan I	3.73	4.41	7084154	8717279	50.066	49.502
11) T	4,4'-DDE	3.67	4.51	6447270	9036472	49.961	49.281
12) T	Dieldrin	3.94	4.69	7422289	9574923	50.140	49.282
13) T	Endrin	4.16	5.01	5313782	6452419	49.471	48.614
14) T	Endosulfan II	4.37	5.23	6341424	8548378	49.712	49.504
15) T	4,4'-DDD	4.22	5.11	5481774	6950839	49.220	48.404
16) T	Endrin aldehyde	4.78	5.59	5388008	7339919	48.722	49.368
17) T	Endosulfan sulfa	5.22	5.89	5588070	7114248	48.920	49.440
18) T	4,4'-DDT	4.49	5.45	4607924	5216851	48.483	47.430
19) T	Endrin ketone	5.50	6.49	7287936	9850837	49.692	51.042
20) T	Methoxychlor	4.98	6.21	2278874	2759937	50.028	49.151
21) T	alpha-Chlordane	3.61	4.35	7101306	9388923	50.031	49.252
22) T	gamma-Chlordane	3.49	4.20	7394809	9626657	50.217	49.073
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

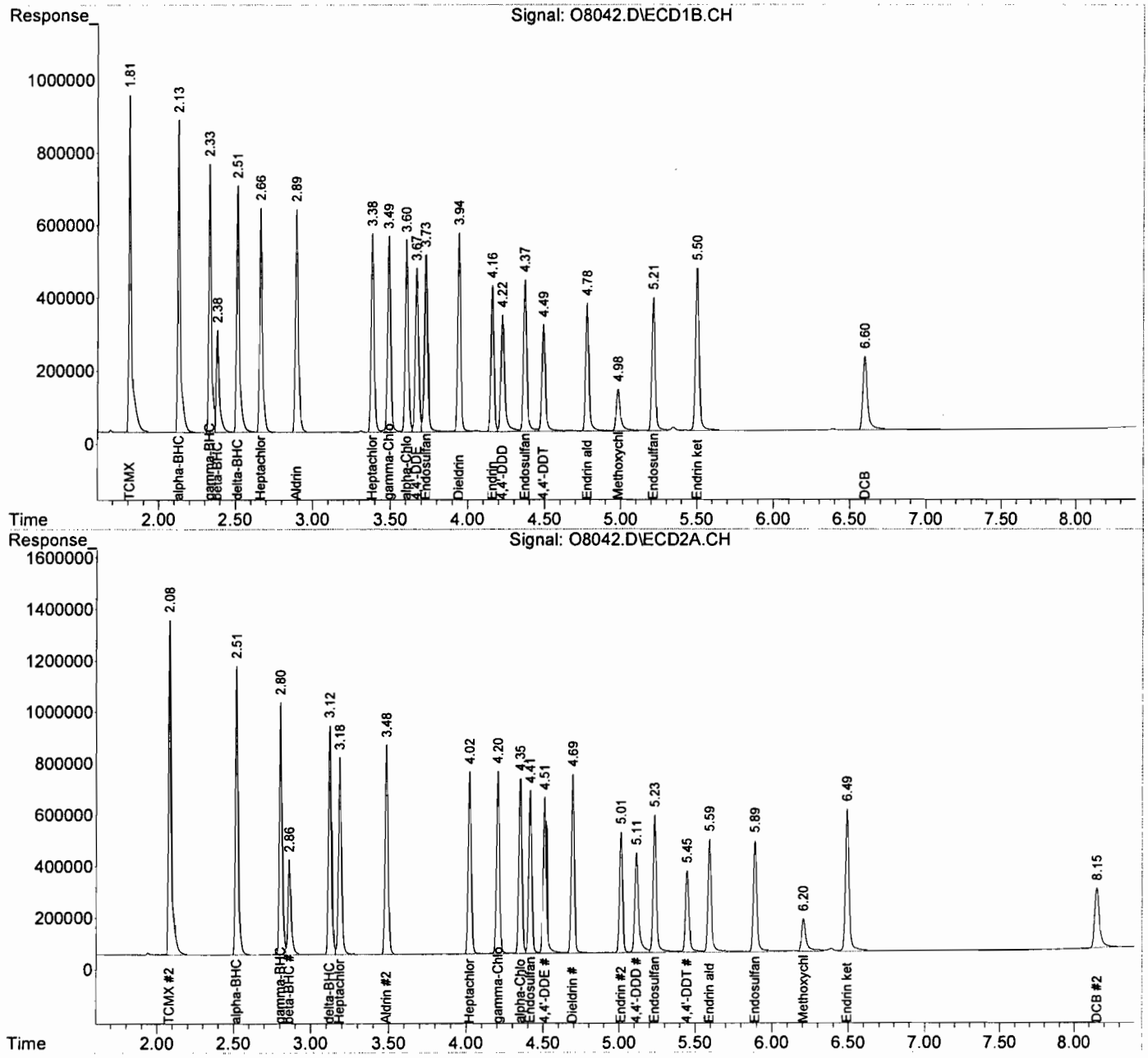
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:34
Operator : IB
Sample : ICC_PEST_L2_IAS_5116,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:30:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:47
Operator : IB
Sample : ICC_PEST_L1_IAS_5117,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	460177	632658	4.516	4.247
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.26%#	2.12%#
2) S	DCB	6.60	8.15	196189	243267	4.457m	4.305m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		2.23%#	2.15%#
	Target Compounds						
3) T	alpha-BHC	2.13	2.51	349138	433654	1.865	1.726
4) T	beta-BHC	2.38	2.86	186208	234756	2.207	2.237
5) T	gamma-BHC (Linda	2.33	2.80	300955	397071	1.931	1.765
6) T	delta-BHC	2.51	3.12	319318	397873	1.890	1.798
7) T	Heptachlor	2.66	3.18	312869	372409	2.031	1.837
8) T	Aldrin	2.89	3.48	319193	396430	1.995	1.847
9) T	Heptachlor epoxi	3.38	4.02	302032	381496	2.090	1.972
10) T	Endosulfan I	3.73	4.41	297864	339182	2.105	1.926
11) T	4,4'-DDE	3.67	4.51	245341	338494	1.901	1.846
12) T	Dieldrin	3.94	4.69	295643	360486	1.997	1.855
13) T	Endrin	4.16	5.01	201260	227440	1.874	1.714
14) T	Endosulfan II	4.37	5.23	272160	347686	2.134	2.013
15) T	4,4'-DDD	4.22	5.11	226855	275194	2.037	1.916
16) T	Endrin aldehyde	4.78	5.59	255034	310952	2.306	2.091
17) T	Endosulfan sulfa	5.22	5.89	254643	297809	2.229	2.070m
18) T	4,4'-DDT	4.49	5.45	161515	167003	1.699	1.518m
19) T	Endrin ketone	5.50	6.49	333837	422533	2.276	2.189m
20) T	Methoxychlor	4.98	6.21	80757	99312	1.773	1.769
21) T	alpha-Chlordane	3.60	4.35	297335	380125	2.095	1.994
22) T	gamma-Chlordane	3.49	4.20	300581	376158	2.041	1.918
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

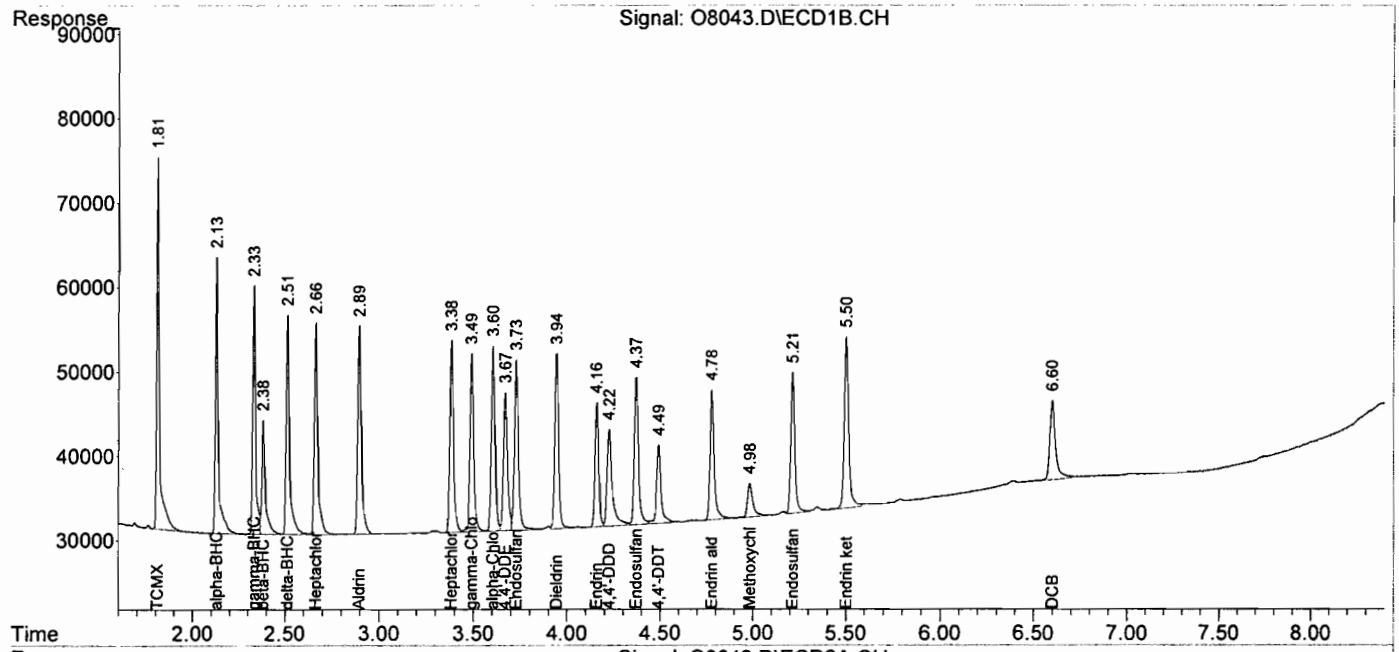
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

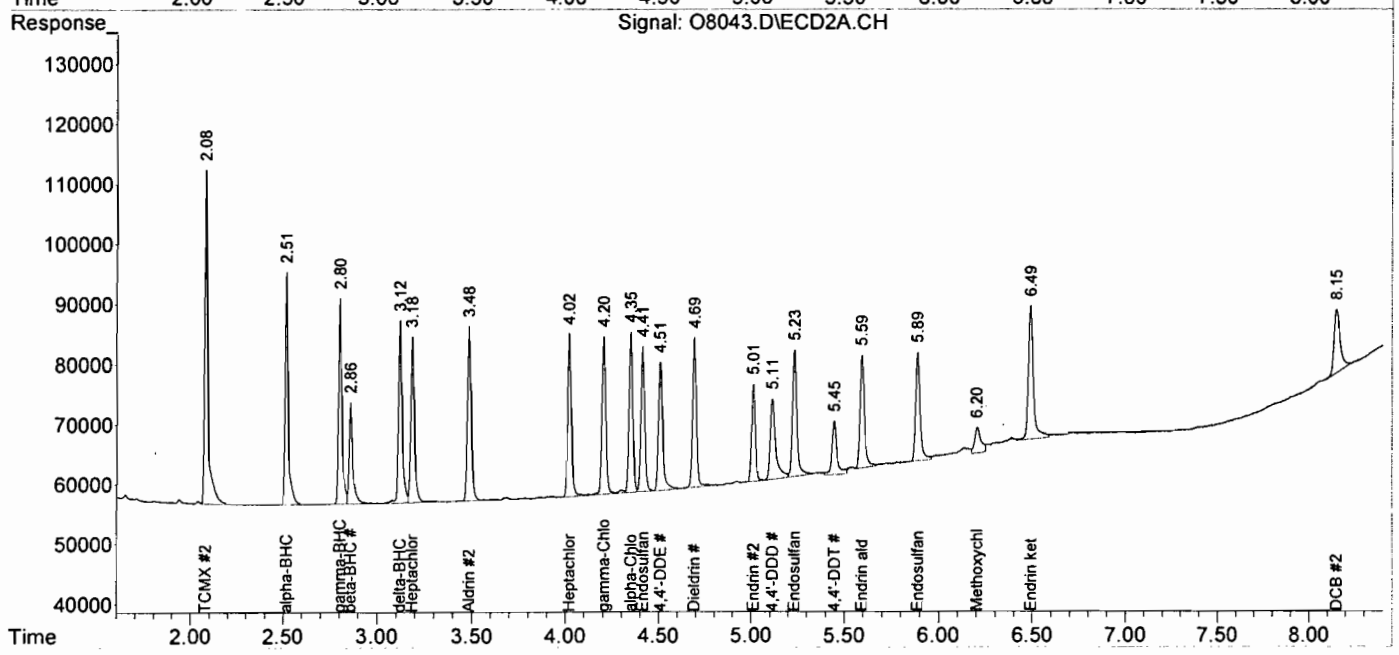
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:47
Operator : IB
Sample : ICC_PEST_L1_IAS_5117,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:28:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:33:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22096756	33003329	212.369	216.276
Spiked Amount 200.000	Range 10 - 180		Recovery =		106.18%	108.14%
2) S DCB	6.60	8.15	9166910	13080479	206.478	228.323
Spiked Amount 200.000	Range 10 - 180		Recovery =		103.24%	114.16%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.76	5.32	2020596	2501650	500.000	500.000
29) L2 Toxaphene {2}	4.88	5.60	1643777	2103447	500.000	500.000
30) L2 Toxaphene {3}	5.11	5.88	2149758	1328192	500.000	500.000
31) L2 Toxaphene {4}	5.48	6.16	2053754	2731958	500.000	500.000
32) L2 Toxaphene {5}	5.64	6.60	965479	1904599	500.000	500.000
Sum Toxaphene			8833364	10569846	2500.000	2500.000
Average Toxaphene					500.000	500.000

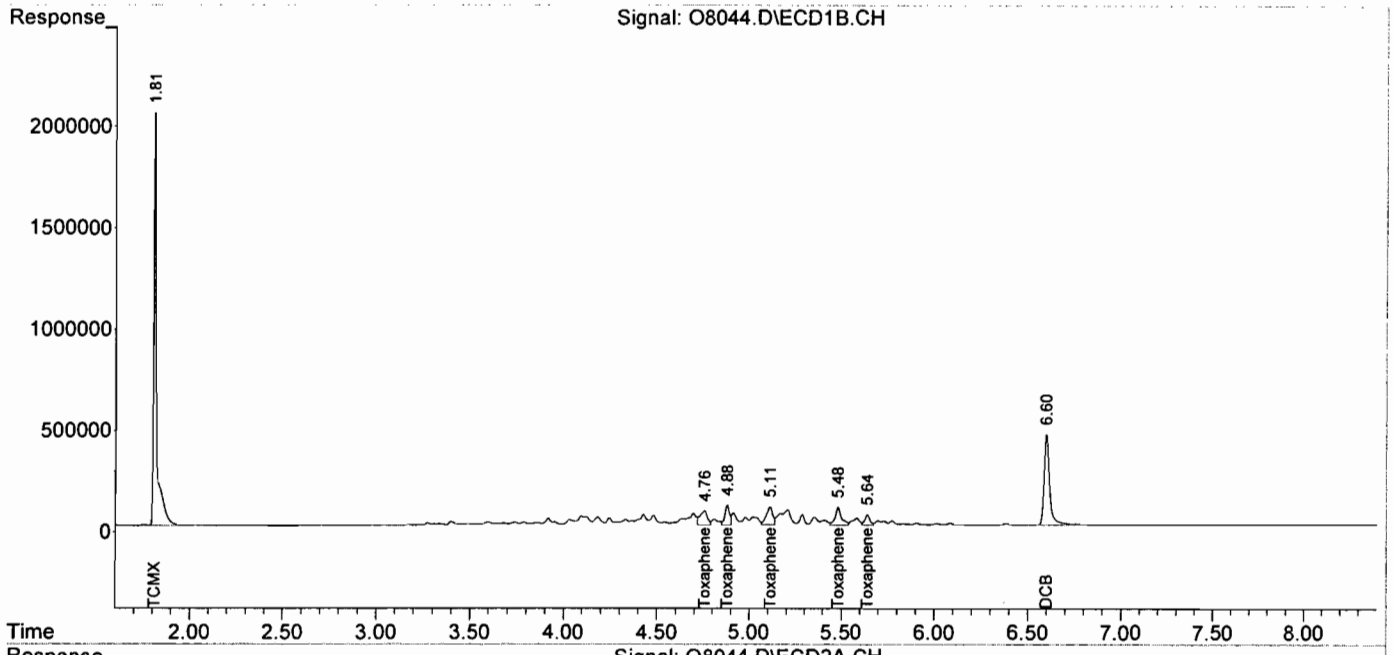
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 11:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:33:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:33:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 12:12
Operator : IB
Sample : ICC_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:34:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:34:23 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	20160938	29675894	197.438	198.805
Spiked Amount 200.000	Range 10 - 180		Recovery =		98.72%	99.40%
2) S DCB	6.60	8.15	8350765	10720503	191.618	195.169
Spiked Amount 200.000	Range 10 - 180		Recovery =		95.81%	97.58%
Target Compounds						
23) L1 Chlordane	2.61	3.06	2126085	3110685	500.000	500.000
24) L1 Chlordane {2}	3.00	3.61	2690912	3209361	500.000	500.000
25) L1 Chlordane {3}	3.49	4.20	7890068	10025995	500.000	500.000
26) L1 Chlordane {4}	3.60	4.29	12489117	7727480	500.000	500.000
27) L1 Chlordane {5}	4.31	4.35	2021637	8363619	500.000	500.000
Sum Chlordane			27217818	32437139	2500.000	2500.000
Average Chlordane					500.000	500.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

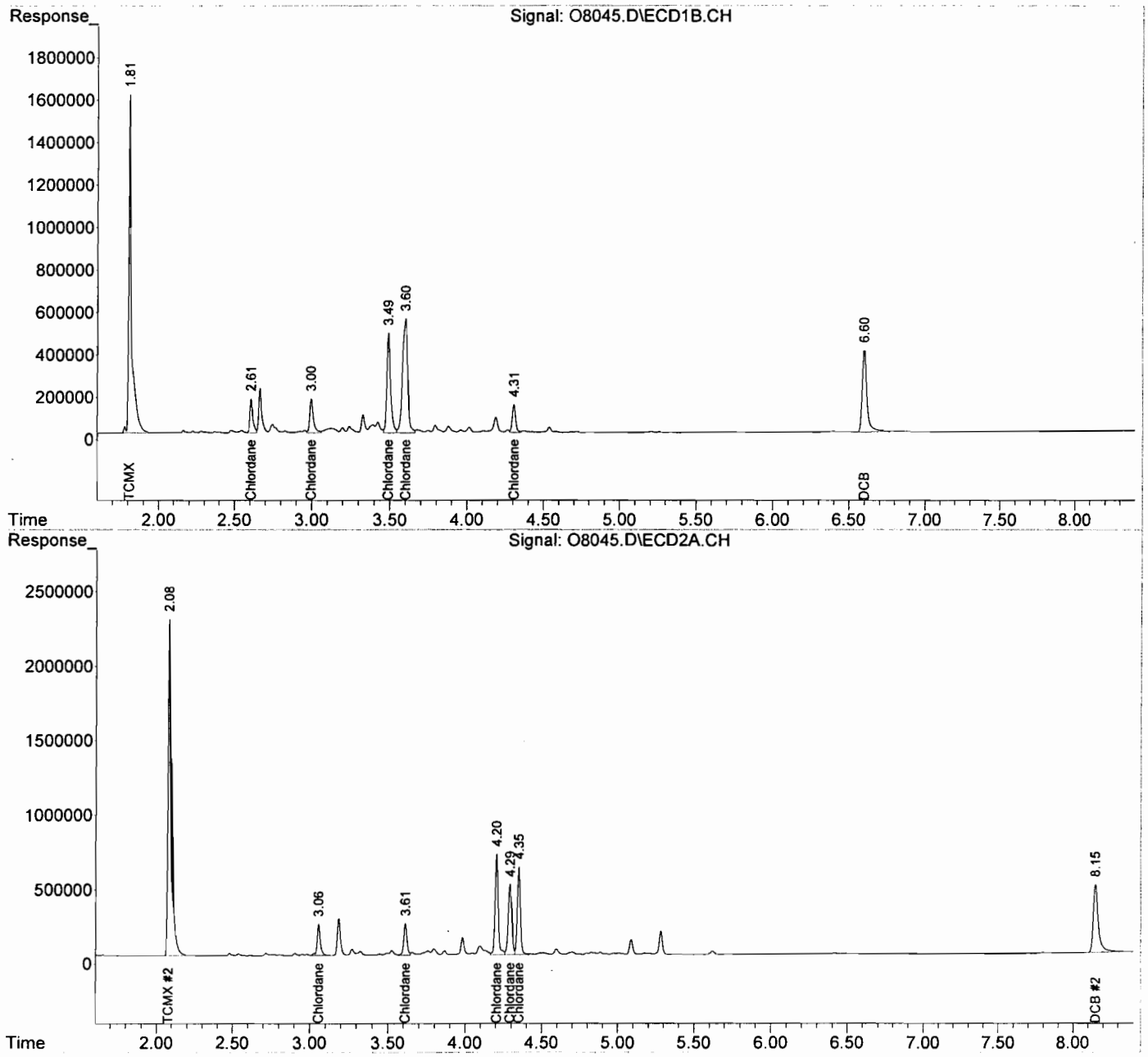
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 12:12
Operator : IB
Sample : ICC_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 15:34:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:34:23 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 15:50
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 16:00:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:35:07 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	20607039	30806062	202.242	206.778
	Spiked Amount 200.000	Range 10 - 180		Recovery =		101.12%	103.39%
2) S	DCB	6.60	8.16	8792194	10828118	201.374	192.695
	Spiked Amount 200.000	Range 10 - 180		Recovery =		100.69%	96.35%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	18995513	25906202	101.464	103.112
4) T	beta-BHC	2.38	2.86	7891252	9871347	93.536	94.064
5) T	gamma-BHC (Linda	2.33	2.80	16312829	23781495	104.661	105.724
6) T	delta-BHC	2.51	3.12	16913422	22098679	100.082	99.843
7) T	Heptachlor	2.66	3.19	15140289	20718481	98.301	102.173
8) T	Aldrin	2.89	3.49	16233389	22216031	101.451	103.494
9) T	Heptachlor epoxi	3.38	4.02	14477038	19624647	100.170	101.447
10) T	Endosulfan I	3.73	4.42	14701416	18154614	103.901	103.094
11) T	4,4'-DDE	3.67	4.51	13101367	18949801	101.524	103.344
12) T	Dieldrin	3.94	4.70	13032806	17518768	88.041	90.169
13) T	Endrin	4.16	5.01	10484527	12989349	97.610	97.865
14) T	Endosulfan II	4.37	5.24	12754969	17920142	99.990	103.776
15) T	4,4'-DDD	4.22	5.12	10820556	13726055	97.156	95.584
16) T	Endrin aldehyde	4.78	5.60	10839646	13991248	98.020	94.105
17) T	Endosulfan sulfa	5.22	5.89	11080896	14570792	97.006	99.744
18) T	4,4'-DDT	4.49	5.45	9876692	11408110	103.919	102.629
19) T	Endrin ketone	5.50	6.50	14737582	19937517	100.487	102.231
20) T	Methoxychlor	4.98	6.21	4602861	5535376	101.047	98.578
21) T	alpha-Chlordane	3.61	4.35	14134405	19289725	99.581	101.188
22) T	gamma-Chlordane	3.49	4.21	14681477	19924771	99.700	101.569
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

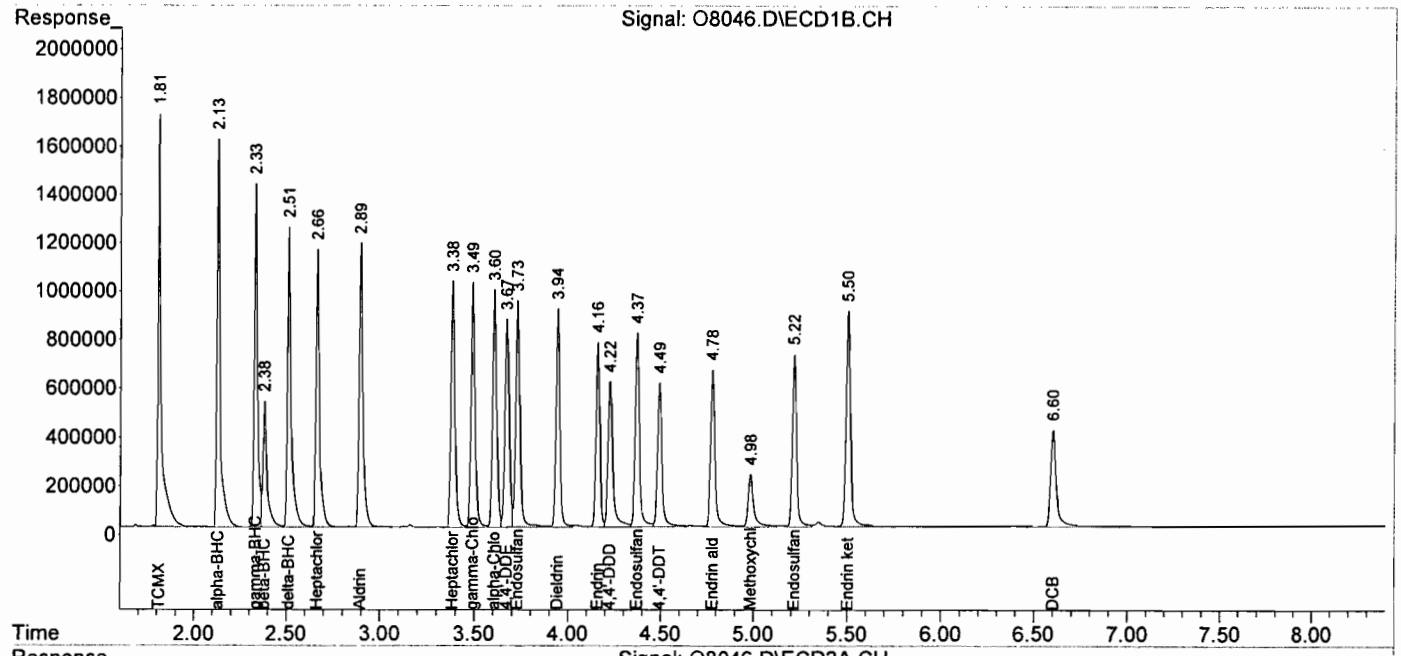
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

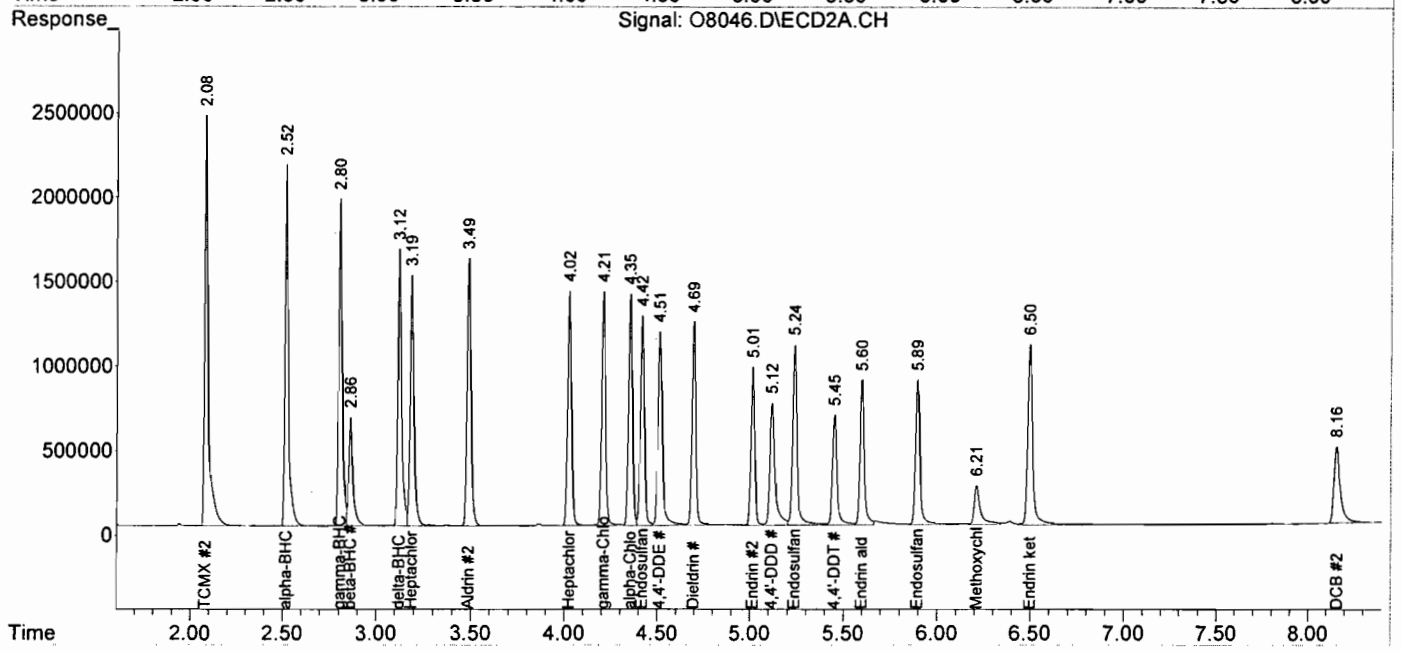
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\O_15\O_JAN_15\01-22-15\
Data File : O8046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Jan 2015 15:50
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jan 22 16:00:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Thu Jan 22 15:35:07 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0142.D V0141.D V0140.D V0139.D V0138.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.24	2.24	2.23	2.23	2.23	2.23	2.17	2.29
beta-BHC	2.50	2.50	2.49	2.49	2.49	2.49	2.43	2.55
gamma-BHC	2.45	2.45	2.43	2.43	2.43	2.44	2.38	2.50
delta-BHC	2.62	2.62	2.61	2.61	2.61	2.62	2.56	2.68
Heptachlor	2.77	2.77	2.76	2.76	2.76	2.76	2.68	2.84
Aldrin	2.98	2.98	2.97	2.97	2.97	2.97	2.89	3.05
Heptachlor epoxide	3.40	3.40	3.40	3.40	3.40	3.40	3.32	3.48
Endosulfan I	3.69	3.69	3.68	3.68	3.69	3.69	3.61	3.77
4,4'-DDE	3.64	3.64	3.64	3.64	3.64	3.64	3.54	3.74
Dieldrin	3.86	3.86	3.86	3.86	3.86	3.86	3.76	3.96
Endrin	4.04	4.03	4.03	4.03	4.03	4.03	3.93	4.13
Endosulfan II	4.21	4.21	4.20	4.20	4.20	4.20	4.10	4.30
4,4'-DDD	4.08	4.08	4.08	4.08	4.08	4.08	3.98	4.18
Endrin aldehyde	4.54	4.54	4.53	4.53	4.54	4.54	4.42	4.66
Endosulfan sulfate	4.90	4.90	4.90	4.90	4.90	4.90	4.78	5.02
4,4'-DDT	4.30	4.30	4.30	4.30	4.30	4.30	4.18	4.42
Endrin ketone	5.14	5.14	5.14	5.14	5.14	5.14	5.02	5.26
Methoxychlor	4.70	4.69	4.69	4.69	4.69	4.69	4.57	4.81
alpha-Chlordane	3.59	3.59	3.58	3.58	3.59	3.59	3.51	3.67
gamma-Chlordane	3.49	3.49	3.49	3.49	3.49	3.49	3.41	3.57
Chlordane 500 ppb			2.72				2.64	2.80
Chlordane {2}			3.07				2.99	3.15
Chlordane {3}			3.49				3.41	3.57
Chlordane {4}			3.58				3.50	3.66
Chlordane {5}			4.16				4.08	4.24
Toxaphene 500 ppb			4.25				4.17	4.33
Toxaphene {2}			4.62				4.54	4.70
Toxaphene {3}			4.81				4.73	4.89
Toxaphene {4}			5.12				5.04	5.20
Toxaphene {5}			5.26				5.18	5.34

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0142.D V0141.D V0140.D V0139.D V0138.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	1490806	1315254	1677693	1805919	1786419	1615218	12.95
beta-BHC	749370	521498	616779	637538	632276	631492	12.83
gamma-BHC	1350968	1160763	1467100	1573893	1545616	1419668	11.87
delta-BHC	1659760	1199451	1482492	1566030	1558405	1493227	11.78
Heptachlor	1246297	1021491	1275676	1323870	1292470	1231961	9.82
Aldrin	1318317	1101752	1358112	1411211	1377722	1313423	9.37
Heptachlor epoxide	1229299	944767	1131869	1137535	1091060	1106906	9.38
Endosulfan I	1199168	929059	1110680	1127419	1085040	1090273	9.13
4,4'-DDE	1046482	891920	1105418	1161201	1138099	1068624	10.09
Dieldrin	1184844	948963	1156761	1175237	1133206	1119802	8.71
Endrin	907919	736978	911146	942853	898999	879579	9.26
Endosulfan II	1121538	789177	938549	951741	919341	944069	12.55
4,4'-DDD	997843	820219	961492	994042	982501	951219	7.84
Endrin aldehyde	1033927	656371	758910	763612	738717	790308	18.08
Endosulfan sulfate	1102064	688721	802919	813043	792745	839898	18.44
4,4'-DDT	600830	570942	745949	821267	820537	711905	16.79
Endrin ketone	1117407	767860	888243	896418	876623	909310	14.02
Methoxychlor	302225	270032	329945	347031	339610	317769	9.95
alpha-Chlordane	1198067	941178	1157238	1214181	1188556	1139844	9.91
gamma-Chlordane	1251101	993597	1220211	1285668	1260949	1202305	9.90
Chlordane 500 ppb			32032				
Chlordane {2}			37842				
Chlordane {3}			107838				
Chlordane {4}			168665				
Chlordane {5}			26670				
Toxaphene 500 ppb			19362				
Toxaphene {2}			22154				
Toxaphene {3}			26890				
Toxaphene {4}			23364				
Toxaphene {5}			9817				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0142.C V0141.C V0140.C V0139.C V0138.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.49	2.49	2.48	2.48	2.48	2.48	2.42	2.54
beta-BHC	2.80	2.80	2.79	2.79	2.79	2.79	2.73	2.85
gamma-BHC	2.75	2.75	2.73	2.74	2.74	2.74	2.68	2.80
delta-BHC	3.01	3.01	3.01	3.01	3.01	3.01	2.95	3.07
Heptachlor	3.08	3.08	3.07	3.07	3.07	3.08	3.00	3.16
Aldrin	3.32	3.32	3.32	3.32	3.32	3.32	3.24	3.40
Heptachlor epoxide	3.74	3.74	3.74	3.74	3.74	3.74	3.66	3.82
Endosulfan I	4.04	4.04	4.04	4.04	4.04	4.04	3.96	4.12
4,4'-DDE	4.12	4.12	4.11	4.11	4.12	4.12	4.02	4.22
Dieldrin	4.26	4.26	4.26	4.26	4.26	4.26	4.16	4.36
Endrin	4.50	4.51	4.50	4.50	4.50	4.50	4.40	4.60
Endosulfan II	4.68	4.68	4.68	4.68	4.68	4.68	4.58	4.78
4,4'-DDD	4.58	4.58	4.58	4.58	4.58	4.58	4.48	4.68
Endrin aldehyde	4.96	4.96	4.96	4.96	4.96	4.96	4.84	5.08
Endosulfan sulfate	5.21	5.21	5.21	5.21	5.21	5.21	5.09	5.33
4,4'-DDT	4.85	4.85	4.85	4.85	4.85	4.85	4.73	4.97
Endrin ketone	5.70	5.70	5.70	5.70	5.70	5.70	5.58	5.82
Methoxychlor	5.46	5.46	5.46	5.46	5.46	5.46	5.34	5.58
alpha-Chlordane	4.00	4.00	3.99	3.99	3.99	3.99	3.91	4.07
gamma-Chlordane	3.88	3.88	3.88	3.88	3.88	3.88	3.80	3.96
Chlordane 500 ppb			2.97				2.89	3.05
Chlordane {2}			3.42				3.34	3.50
Chlordane {3}			3.89				3.81	3.97
Chlordane {4}			3.96				3.88	4.04
Chlordane {5}			4.00				3.92	4.08
Toxaphene 500 ppb			4.75				4.67	4.83
Toxaphene {2}			4.97				4.89	5.05
Toxaphene {3}			5.17				5.09	5.25
Toxaphene {4}			5.44				5.36	5.52
Toxaphene {5}			5.81				5.73	5.89

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0142.C V0141.C V0140.C V0139.C V0138.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	394026	329664	419732	452148	445723	408258	12.15
beta-BHC	202996	125862	146849	153436	152167	156262	18.16
gamma-BHC	368951	284926	359451	387895	380868	356418	11.62
delta-BHC	438173	283723	352586	375663	371091	364247	15.20
Heptachlor	352100	258730	324421	348193	345478	325784	11.97
Aldrin	369724	271015	335295	359721	355594	338270	11.72
Heptachlor epoxide	327869	239266	293007	312470	308203	296163	11.53
Endosulfan I	306367	220231	268548	284016	281215	272075	11.77
4,4'-DDE	305347	227327	275202	294219	293179	279055	11.06
Dieldrin	317178	238941	295431	316853	314901	296661	11.30
Endrin	233548	181712	227902	247840	243972	226995	11.69
Endosulfan II	296233	203172	246353	260009	258210	252795	13.23
4,4'-DDD	247656	197010	230950	244269	245147	233006	9.08
Endrin aldehyde	263192	161738	191278	199111	198765	202817	18.28
Endosulfan sulfate	298605	181279	216342	226662	227151	230008	18.56
4,4'-DDT	154216	135295	176987	198954	201598	173410	16.52
Endrin ketone	282760	204303	241395	253247	255815	247504	11.51
Methoxychlor	77864	61652	76927	84091	83964	76900	11.90
alpha-Chlordane	315478	224523	274763	294027	290774	279913	12.22
gamma-Chlordane	314778	240793	295052	316237	313540	296080	10.84
Chlordane 500 ppb			8966				
Chlordane {2}			8016				
Chlordane {3}			24538				
Chlordane {4}			19537				
Chlordane {5}			21308				
Toxaphene 500 ppb			4788				
Toxaphene {2}			4935				
Toxaphene {3}			3998				
Toxaphene {4}			4670				
Toxaphene {5}			3547				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:52
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.88	2.06	461.7E6	122.1E6	611.562	614.992
	Spiked Amount 200.000			Recovery	=	305.78%	307.50%
2) S	DCB	6.05	6.73	166.2E6	51207076	588.041	629.565
	Spiked Amount 200.000			Recovery	=	294.02%	314.78%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	535.9E6	133.7E6	330.201	327.530
4) T	beta-BHC	2.49	2.79	189.7E6	45650015	300.373	292.138
5) T	gamma-BHC (Linda	2.43	2.74	463.7E6	114.3E6	326.615	320.580
6) T	delta-BHC	2.61	3.01	467.5E6	111.3E6	313.095	305.637
7) T	Heptachlor	2.76	3.07	387.7E6	103.6E6	314.735	318.135
8) T	Aldrin	2.97	3.32	413.3E6	106.7E6	314.687	315.364
9) T	Heptachlor epoxi	3.40	3.74	327.3E6	92460808	295.705	312.196
10) T	Endosulfan I	3.69	4.04	325.5E6	84364548	298.560	310.078
11) T	4,4'-DDE	3.64	4.12	341.4E6	87953799	319.504	315.185
12) T	Dieldrin	3.86	4.26	340.0E6	94470200	303.591	318.445
13) T	Endrin	4.03	4.50	269.7E6	73191556	306.624	322.437
14) T	Endosulfan II	4.20	4.68	275.8E6	77462956	292.142	306.425
15) T	4,4'-DDD	4.08	4.58	294.8E6	73544020	309.866	315.631
16) T	Endrin aldehyde	4.54	4.96	221.6E6	59629568	281.209	291.913
17) T	Endosulfan sulfa	4.90	5.21	237.8E6	68145182	283.593	297.504
18) T	4,4'-DDT	4.30	4.85	246.2E6	60479461	345.778	348.765
19) T	Endrin ketone	5.14	5.70	263.0E6	76744485	289.216	310.074
20) T	Methoxychlor	4.69	5.46	101.9E6	25189298	320.620	325.108
21) T	alpha-Chlordane	3.59	3.99	356.6E6	87232066	312.821	311.640
22) T	gamma-Chlordane	3.49	3.88	378.3E6	94062082	314.633	317.691
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

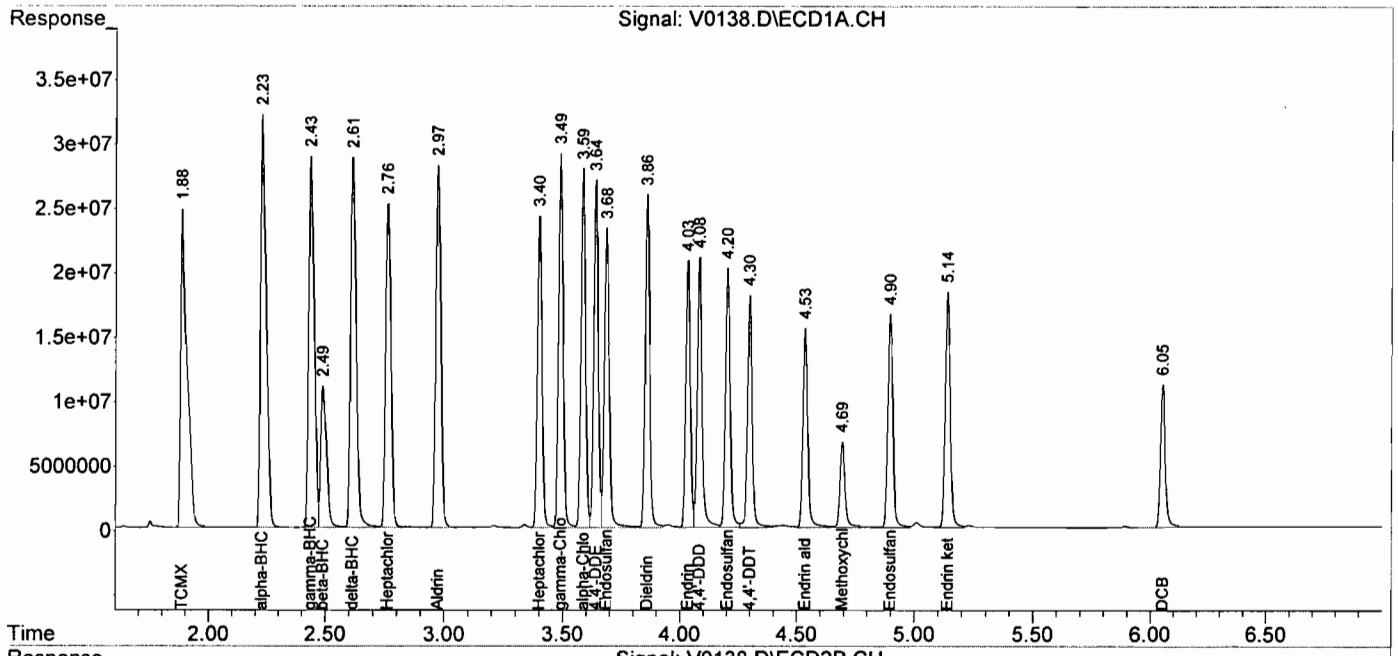
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

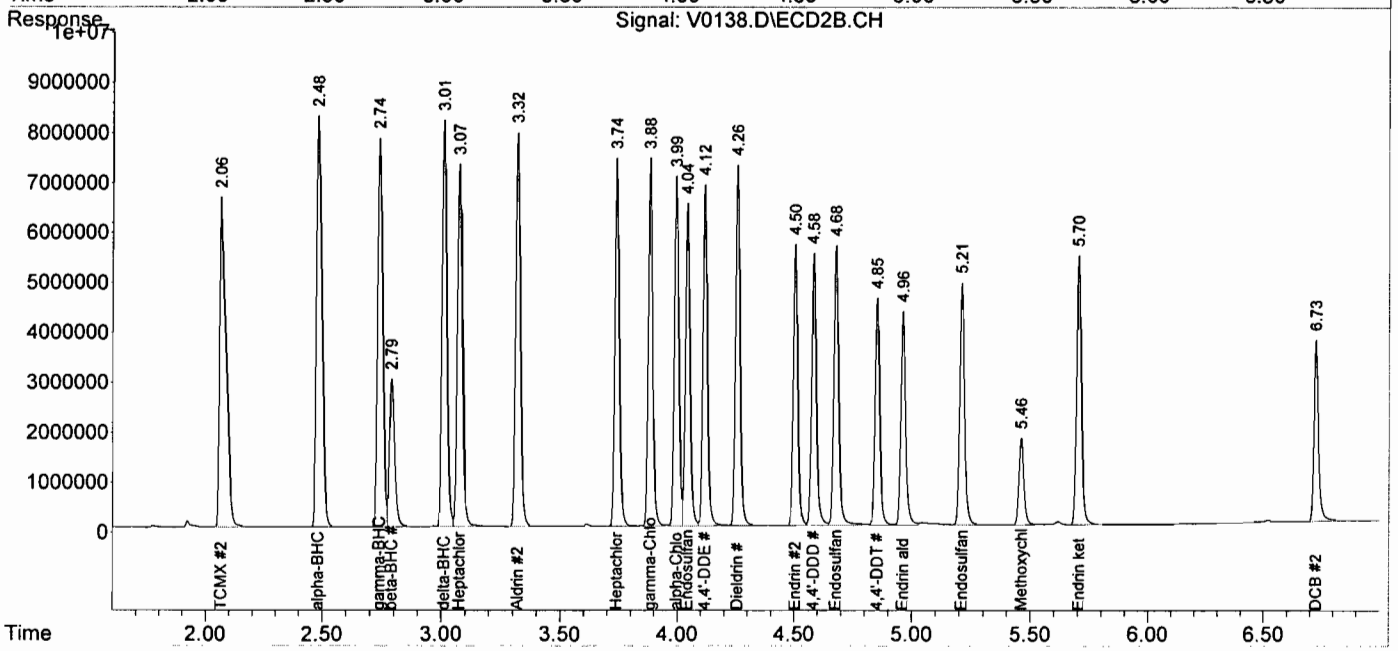
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:52
Operator : IB
Sample : ICC_PEST_L5_IAS_5248,300_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:03
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1)	S	TCMX	1.89	2.06	313.2E6	82577214	414.885	415.973
	Spiked Amount	200.000			Recovery	=	207.44%	207.99%
2)	S	DCB	6.05	6.73	113.2E6	34072272	400.629	418.901
	Spiked Amount	200.000			Recovery	=	200.31%	209.45%
	Target Compounds							
3)	T	alpha-BHC	2.23	2.48	361.2E6	90429523	222.537	221.501
4)	T	beta-BHC	2.49	2.79	127.5E6	30687231	201.915	196.383
5)	T	gamma-BHC (Linda	2.43	2.74	314.8E6	77578910	221.727	217.663
6)	T	delta-BHC	2.61	3.01	313.2E6	75132548	209.751	206.268
7)	T	Heptachlor	2.76	3.07	264.8E6	69638551	214.921	213.757
8)	T	Aldrin	2.97	3.32	282.2E6	71944236	214.891	212.683
9)	T	Heptachlor epoxi	3.40	3.74	227.5E6	62493962	205.534	211.012
10)	T	Endosulfan I	3.68	4.04	225.5E6	56803252	206.814	208.778
11)	T	4,4'-DDE	3.64	4.11	232.2E6	58843794	217.326	210.868
12)	T	Dieldrin	3.86	4.26	235.0E6	63370544	209.901	213.613
13)	T	Endrin	4.03	4.50	188.6E6	49568013	214.387	218.366
14)	T	Endosulfan II	4.20	4.68	190.3E6	52001816	201.625	205.707
15)	T	4,4'-DDD	4.08	4.58	198.8E6	48853879	209.004	209.667
16)	T	Endrin aldehyde	4.53	4.96	152.7E6	39822247	193.791	194.948
17)	T	Endosulfan sulfa	4.90	5.21	162.6E6	45332490	193.903	197.910
18)	T	4,4'-DDT	4.30	4.85	164.3E6	39790863	230.724	229.461
19)	T	Endrin ketone	5.14	5.70	179.3E6	50649426	197.164	204.641
20)	T	Methoxychlor	4.69	5.46	69406268	16818170	218.418	217.065
21)	T	alpha-Chlordane	3.58	3.99	242.8E6	58805395	213.043	210.085
22)	T	gamma-Chlordane	3.49	3.88	257.1E6	63247489	213.867	213.616
	Sum Chlordane				0	0	N.D.	N.D.
Average	Chlordane						0.000	0.000
	Sum Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

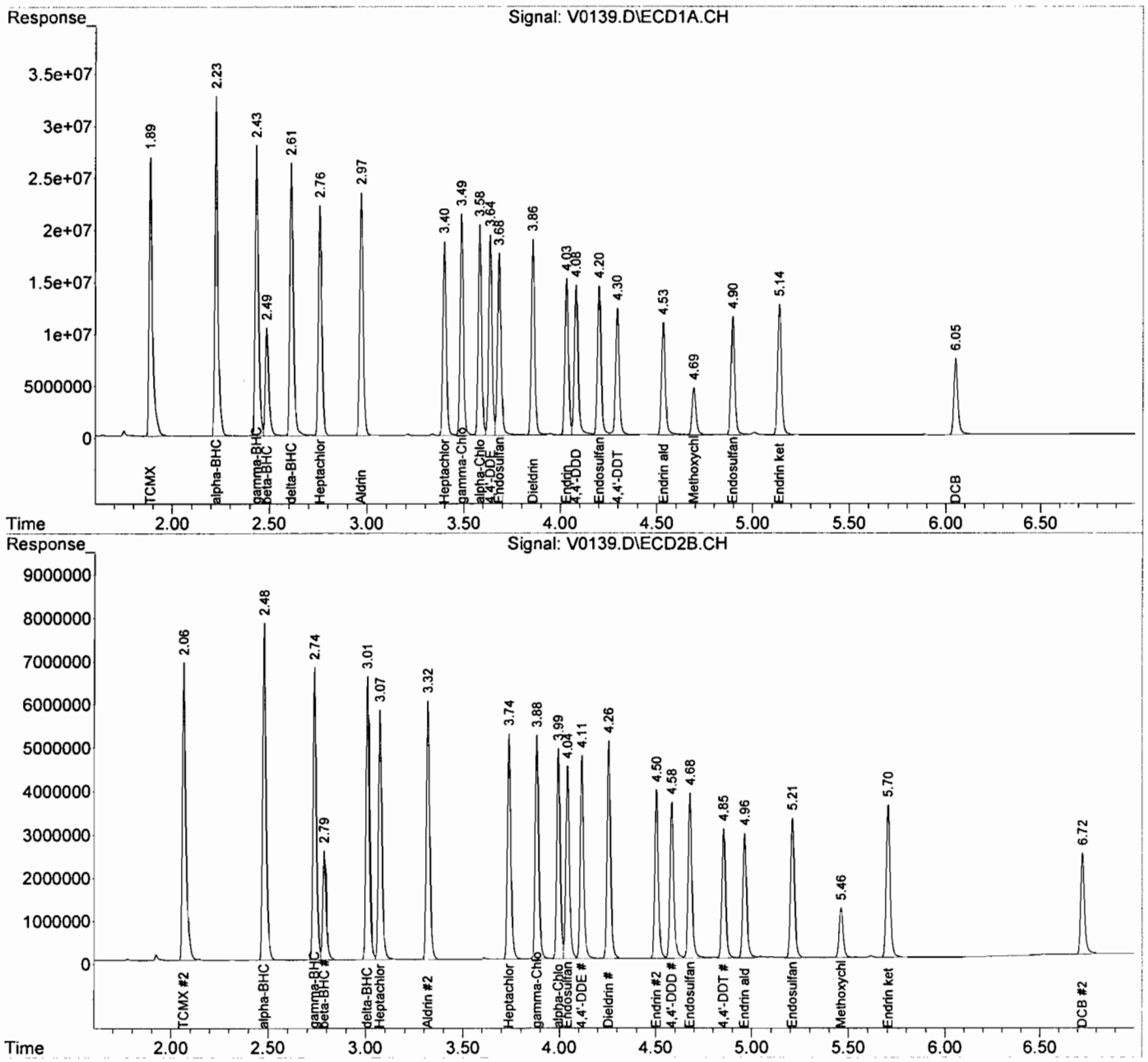
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:03
Operator : IB
Sample : ICC_PEST_L4_IAS_5249,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:14
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 12:59:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

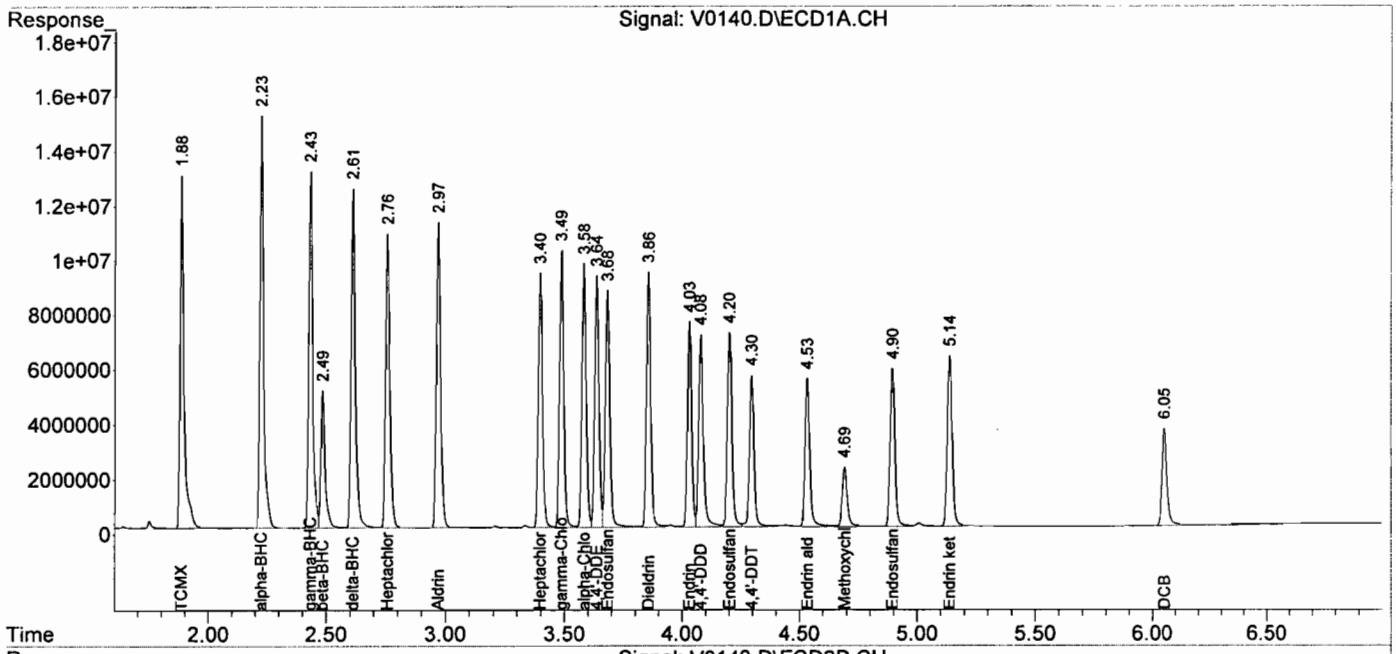
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	149.5E6	39258190	198.048	197.758
	Spiked Amount 200.000			Recovery	=	99.02%	98.88%
2) S	DCB	6.05	6.73	55028412	16505326	194.717	202.924
	Spiked Amount 200.000			Recovery	=	97.36%	101.46%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	167.8E6	41973186	103.368	102.810
4) T	beta-BHC	2.49	2.79	61677891	14684854	97.670	93.976
5) T	gamma-BHC (Linda	2.43	2.73	146.7E6	35945095	103.341	100.851
6) T	delta-BHC	2.61	3.01	148.2E6	35258575	99.281	96.798
7) T	Heptachlor	2.76	3.07	127.6E6	32442092	103.548	99.582
8) T	Aldrin	2.97	3.32	135.8E6	33529481	103.403	99.121
9) T	Heptachlor epoxi	3.40	3.74	113.2E6	29300745	102.255	98.935
10) T	Endosulfan I	3.68	4.04	111.1E6	26854772	101.872	98.703
11) T	4,4'-DDE	3.64	4.11	110.5E6	27520163	103.443	98.619
12) T	Dieldrin	3.86	4.26	115.7E6	29543110	103.301	99.586
13) T	Endrin	4.03	4.50	91114640	22790163	103.589	100.400
14) T	Endosulfan II	4.20	4.68	93854871	24635338	99.415	97.452
15) T	4,4'-DDD	4.08	4.58	96149207	23094976	101.080	99.117
16) T	Endrin aldehyde	4.53	4.96	75891005	19127761	96.299	93.639
17) T	Endosulfan sulfa	4.90	5.21	80291885	21634159	95.744	94.449
18) T	4,4'-DDT	4.30	4.85	74594890	17698711	104.782	102.063
19) T	Endrin ketone	5.14	5.70	88824290	24139464	97.683	97.532
20) T	Methoxychlor	4.69	5.46	32994496	7692748	103.832	99.287
21) T	alpha-Chlordane	3.58	3.99	115.7E6	27476289	101.526	98.160
22) T	gamma-Chlordane	3.49	3.88	122.0E6	29505185	101.489	99.653
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

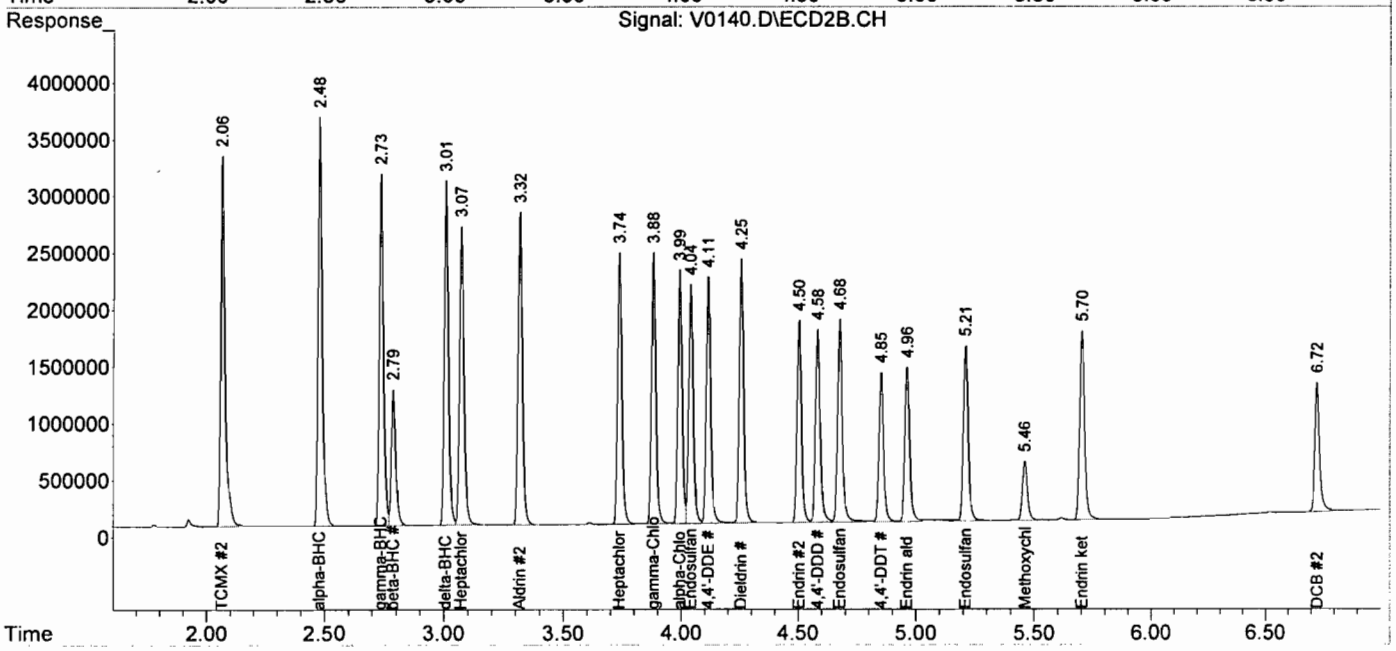
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:14
Operator : IB
Sample : ICC_PEST_L3_IAS_5250,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 12:59:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:25
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1) S	TCMX		1.91	2.08	62828120	16260504	83.226m	81.910
Spiked Amount		200.000			Recovery	=	41.61%	40.95%
2) S	DCB		6.05	6.73	23990791	7041963	84.891	86.577
Spiked Amount		200.000			Recovery	=	42.45%	43.29%
	Target Compounds							
3) T	alpha-BHC		2.24	2.49	65762705	16483205	40.519	40.374
4) T	beta-BHC		2.50	2.80	26074884	6293110	41.291	40.273
5) T	gamma-BHC (Linda		2.45	2.75	58038162	14246302	40.882	39.971
6) T	delta-BHC		2.62	3.01	59972529	14186159	40.163	38.947
7) T	Heptachlor		2.77	3.08	51074570	12936500	41.458	39.709
8) T	Aldrin		2.98	3.32	55087610	13550741	41.942	40.059
9) T	Heptachlor epoxi		3.40	3.74	47238354	11963305	42.676	40.394
10) T	Endosulfan I		3.69	4.04	46452927	11011542	42.607	40.472
11) T	4,4'-DDE		3.64	4.12	44595995	11366351	41.732	40.732
12) T	Dieldrin		3.86	4.26	47448148	11947062	42.372	40.272
13) T	Endrin		4.03	4.51	36848908	9085608	41.894	40.026
14) T	Endosulfan II		4.21	4.68	39458870	10158597	41.797	40.185
15) T	4,4'-DDD		4.08	4.58	41010945	9850520	43.114	42.276
16) T	Endrin aldehyde		4.54	4.96	32818570	8086884	41.644	39.589
17) T	Endosulfan sulfa		4.90	5.21	34436032	9063964	41.063	39.571
18) T	4,4'-DDT		4.30	4.85	28547102	6764752	40.100	39.010
19) T	Endrin ketone		5.14	5.70	38393023	10215153	42.222	41.273
20) T	Methoxychlor		4.69	5.46	13501607	3082624	42.489	39.786
21) T	alpha-Chlordane		3.59	4.00	47058921	11226140	41.285	40.106
22) T	gamma-Chlordane		3.49	3.88	49679851	12039654	41.320	40.663
Sum	Chlordane				0	0	N.D.	N.D.
Average	Chlordane						0.000	0.000
Sum	Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

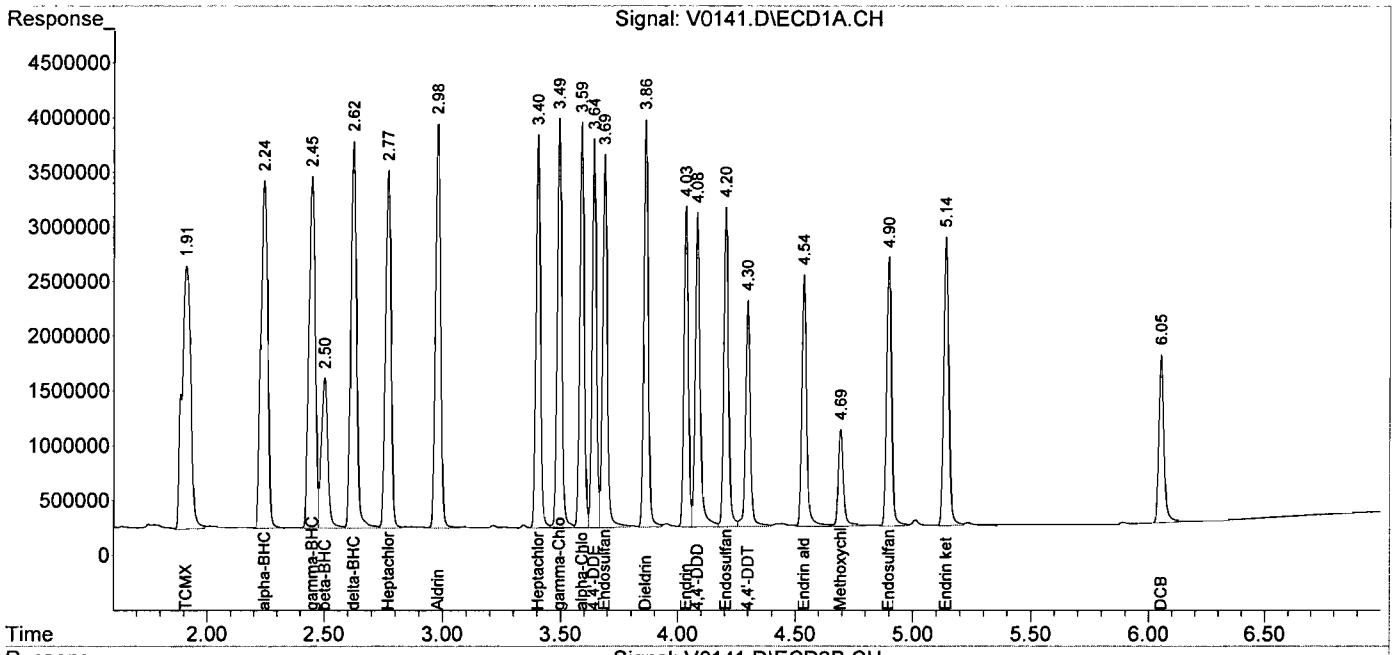
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

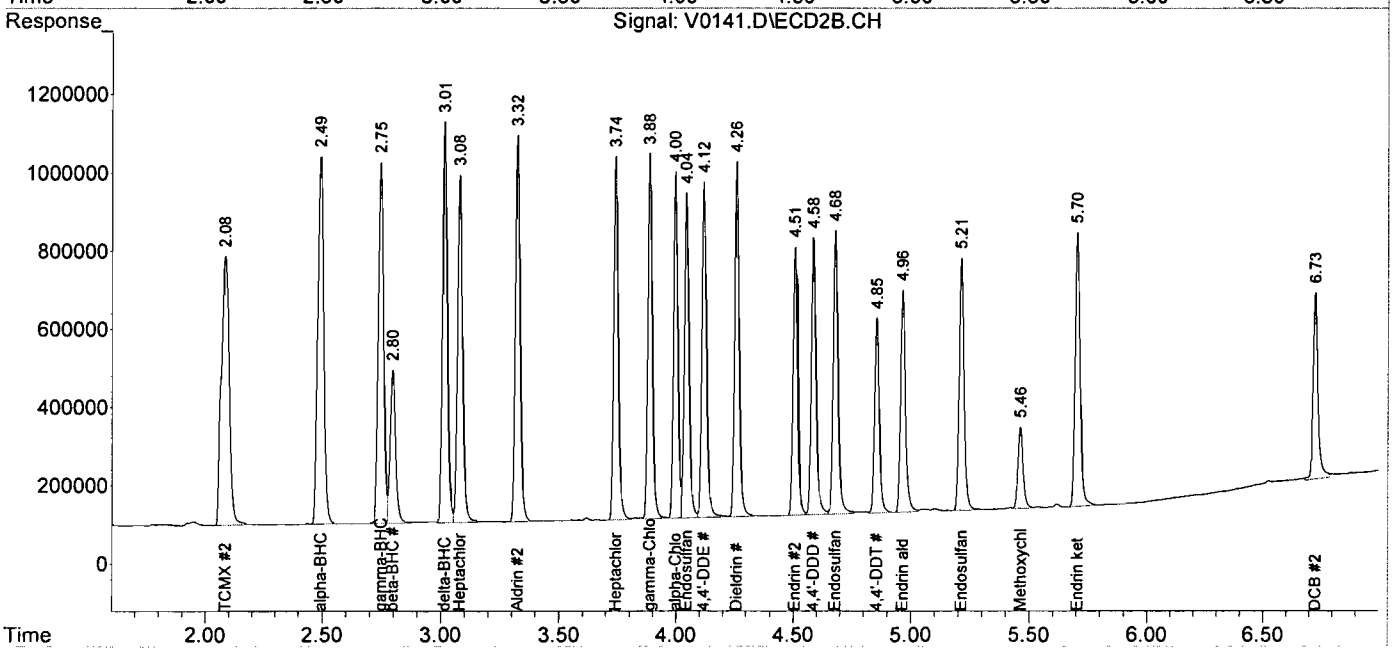
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:25
Operator : IB
Sample : ICC_PEST_L2_IAS_5251,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:00:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:37
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.91	2.08	3357303	862737	4.447m	4.346m
	Spiked Amount 200.000			Recovery =		2.22%	2.17%
2) S	DCB	6.05	6.73	1351841	341063	4.783	4.193m
	Spiked Amount 200.000			Recovery =		2.39%	2.10%
	Target Compounds						
3) T	alpha-BHC	2.24	2.49	2981612	788052	1.837m	1.930
4) T	beta-BHC	2.50	2.80	1498739	405991	2.373	2.598
5) T	gamma-BHC (Linda	2.45	2.75	2701935	737901	1.903	2.070
6) T	delta-BHC	2.62	3.01	3319520	876347	2.223	2.406
7) T	Heptachlor	2.77	3.08	2492594	704200	2.023	2.162
8) T	Aldrin	2.98	3.32	2636633	739447	2.007	2.186
9) T	Heptachlor epoxi	3.40	3.74	2458599	655737	2.221	2.214
10) T	Endosulfan I	3.69	4.04	2398335	612733	2.200	2.252
11) T	4,4'-DDE	3.64	4.12	2092963	610693	1.959	2.188
12) T	Dieldrin	3.86	4.26	2369687	634356	2.116	2.138
13) T	Endrin	4.04	4.50	1815838	467096	2.064	2.058
14) T	Endosulfan II	4.21	4.68	2243076	592466	2.376	2.344
15) T	4,4'-DDD	4.08	4.58	1995687	495312	2.098	2.126
16) T	Endrin aldehyde	4.54	4.96	2067854	526385	2.624m	2.577m
17) T	Endosulfan sulfa	4.90	5.21	2204128	597209	2.628m	2.607m
18) T	4,4'-DDT	4.30	4.85	1201659	308432	1.688	1.779
19) T	Endrin ketone	5.14	5.70	2234814	565520	2.458	2.285
20) T	Methoxychlor	4.70	5.46	604451	155728	1.902	2.010m
21) T	alpha-Chlordane	3.59	4.00	2396133	630956	2.102	2.254
22) T	gamma-Chlordane	3.49	3.88	2502201	629556	2.081	2.126
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

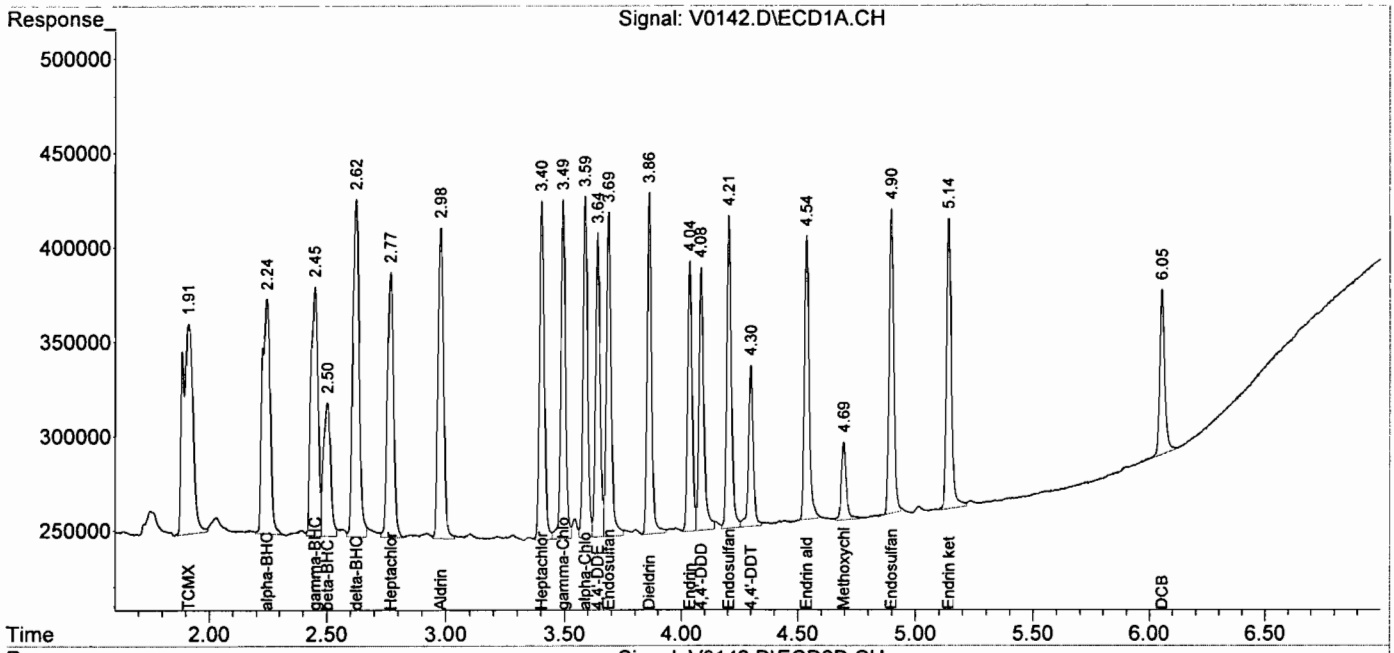
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

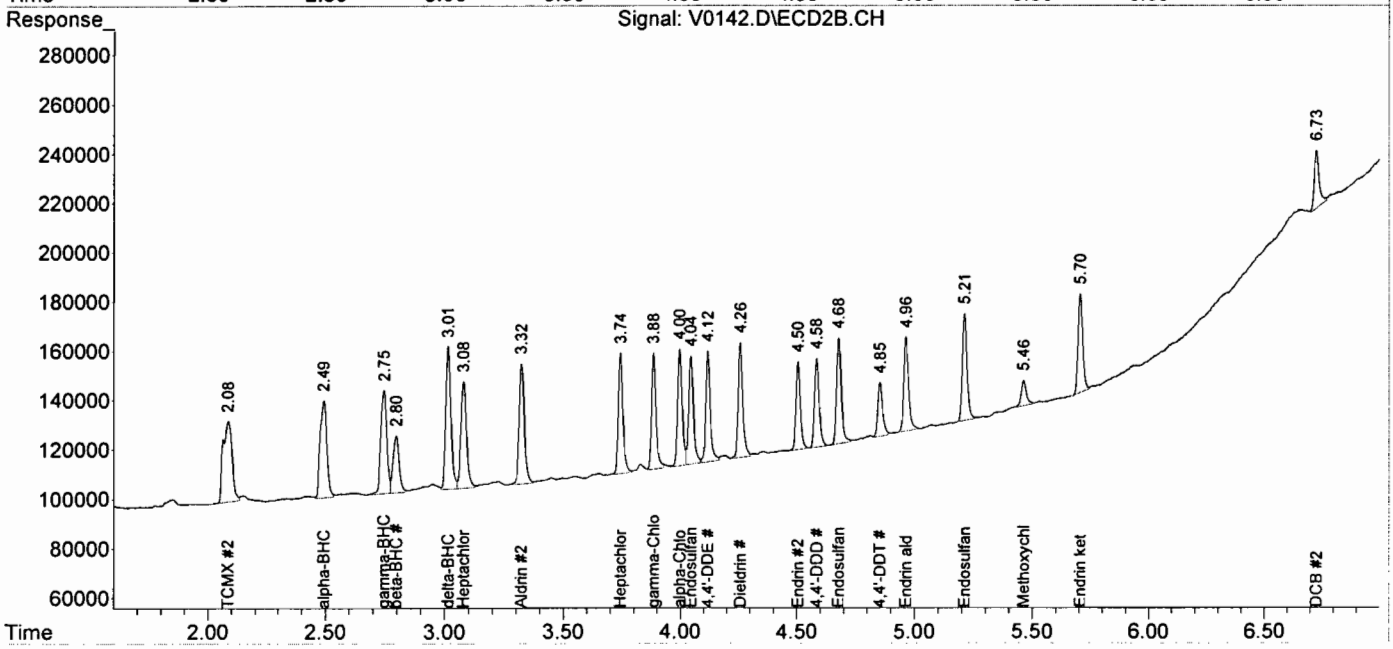
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:37
Operator : IB
Sample : ICC_PEST_L1_IAS_5252,2_PPB
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:03:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 12:50:27 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:49:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:28:26 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.91	2.09	162.0E6	42113628	211.798m	210.931m
Spiked Amount 200.000			Recovery	=	105.90%	105.47%
2) S DCB	6.05	6.73	52780439	15136214	188.260	188.312
Spiked Amount 200.000			Recovery	=	94.13%	94.16%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.25	4.75	9680800	2393767	500.000	500.000
29) L2 Toxaphene {2}	4.62	4.97	11077130	2467280	500.000	500.000
30) L2 Toxaphene {3}	4.81	5.17	13445107	1998806	500.000	500.000
31) L2 Toxaphene {4}	5.12	5.44	11681853	2335065	500.000	500.000
32) L2 Toxaphene {5}	5.26	5.81	4908452	1773569	500.000	500.000
Sum Toxaphene			50793342	10968487	2500.000	2500.000
Average Toxaphene					500.000	500.000

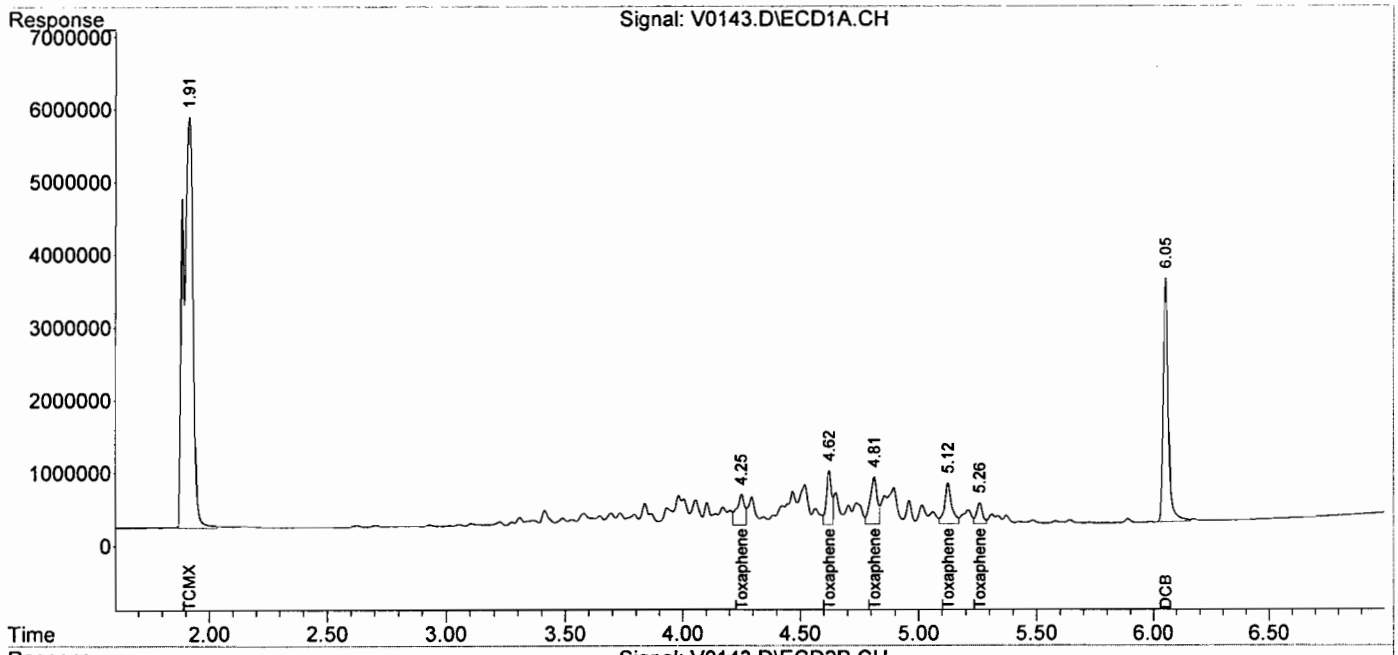
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

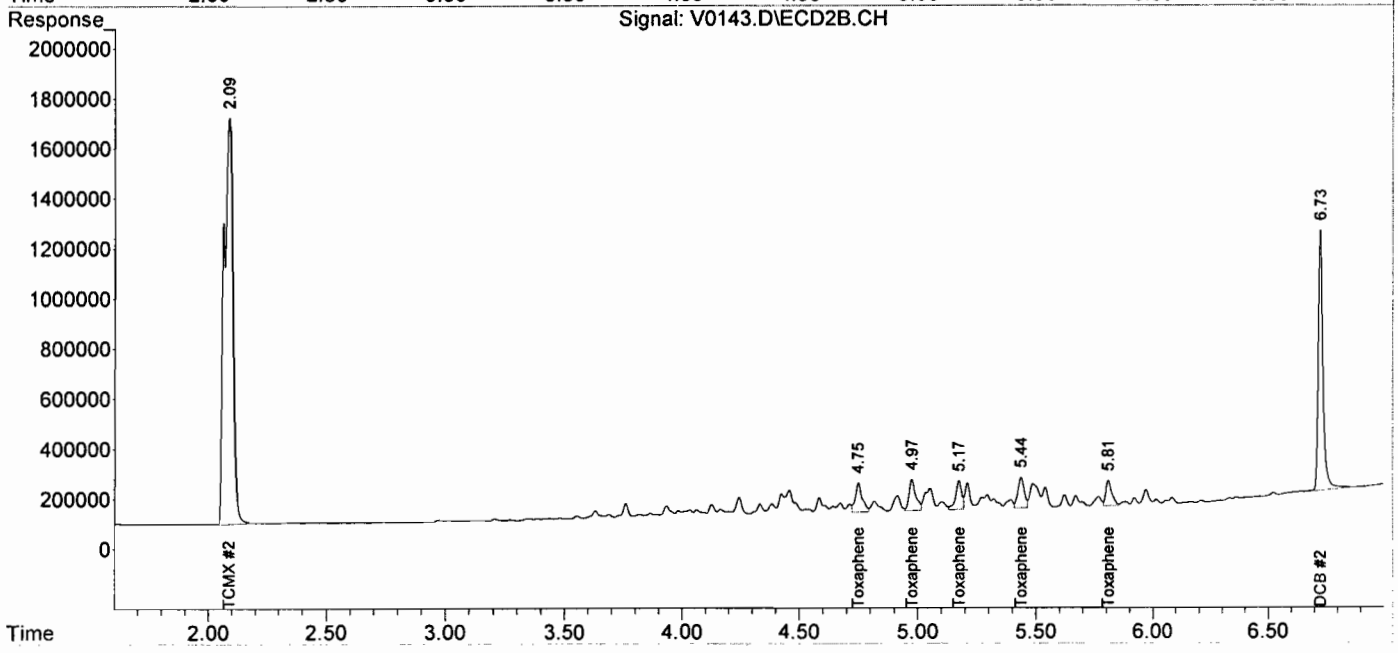
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 12:59
Operator : IB
Sample : ICC_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:49:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:28:26 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0144.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:10
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:50:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds							
1)	S TCMX		1.91	2.09	146.4E6	37579334	195.168m	192.496
	Spiked Amount	200.000			Recovery	=	97.58%	96.25%
2)	S DCB		6.05	6.73	54182345	15950783	192.299	196.455
	Spiked Amount	200.000			Recovery	=	96.15%	98.23%
	Target Compounds							
23)	L1 Chlordane		2.72	2.97	16015918	4482787	500.000	500.000
24)	L1 Chlordane {2}		3.07	3.42	18921053	4007936	500.000	500.000
25)	L1 Chlordane {3}		3.49	3.89	53918914	12268809	500.000	500.000
26)	L1 Chlordane {4}		3.58	3.96	84332346	9768633	500.000	500.000
27)	L1 Chlordane {5}		4.16	4.00	13335198	10653956	500.000	500.000
	Sum Chlordane				186.5E6	41182122	2500.000	2500.000
Average	Chlordane						500.000	500.000
	Sum Toxaphene				0	0	N.D.	N.D.
Average	Toxaphene						0.000	0.000

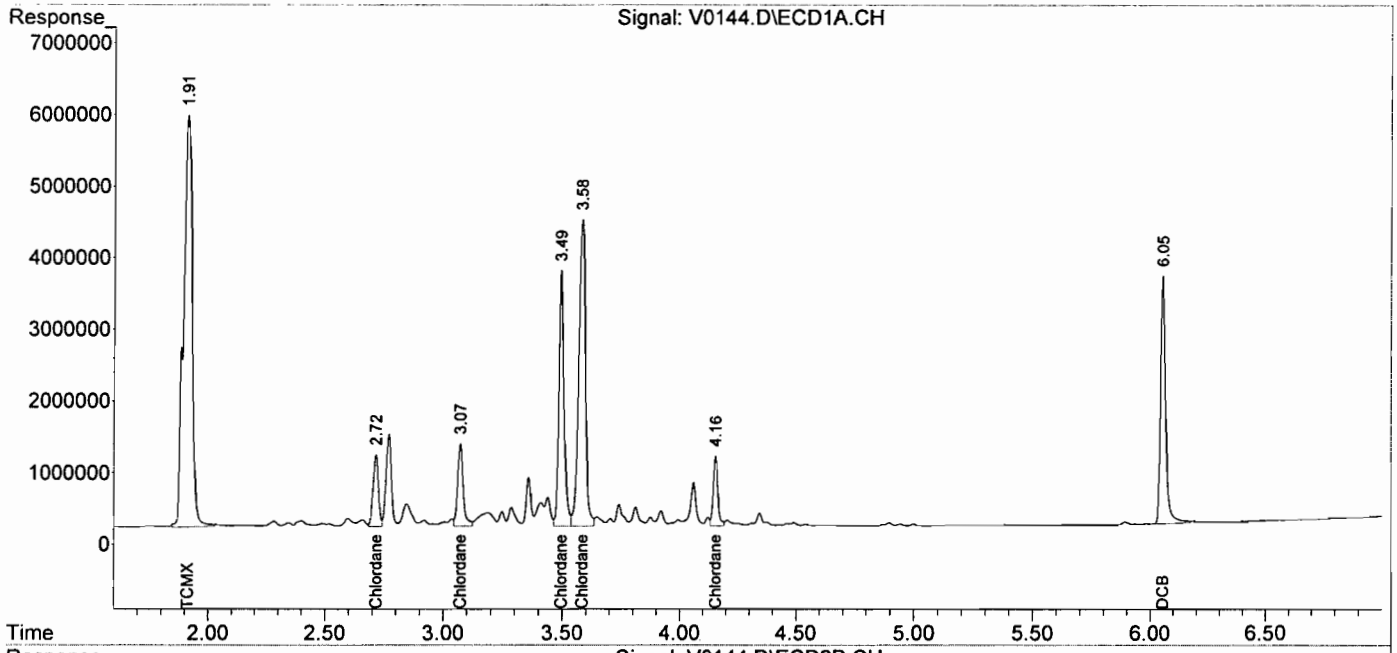
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

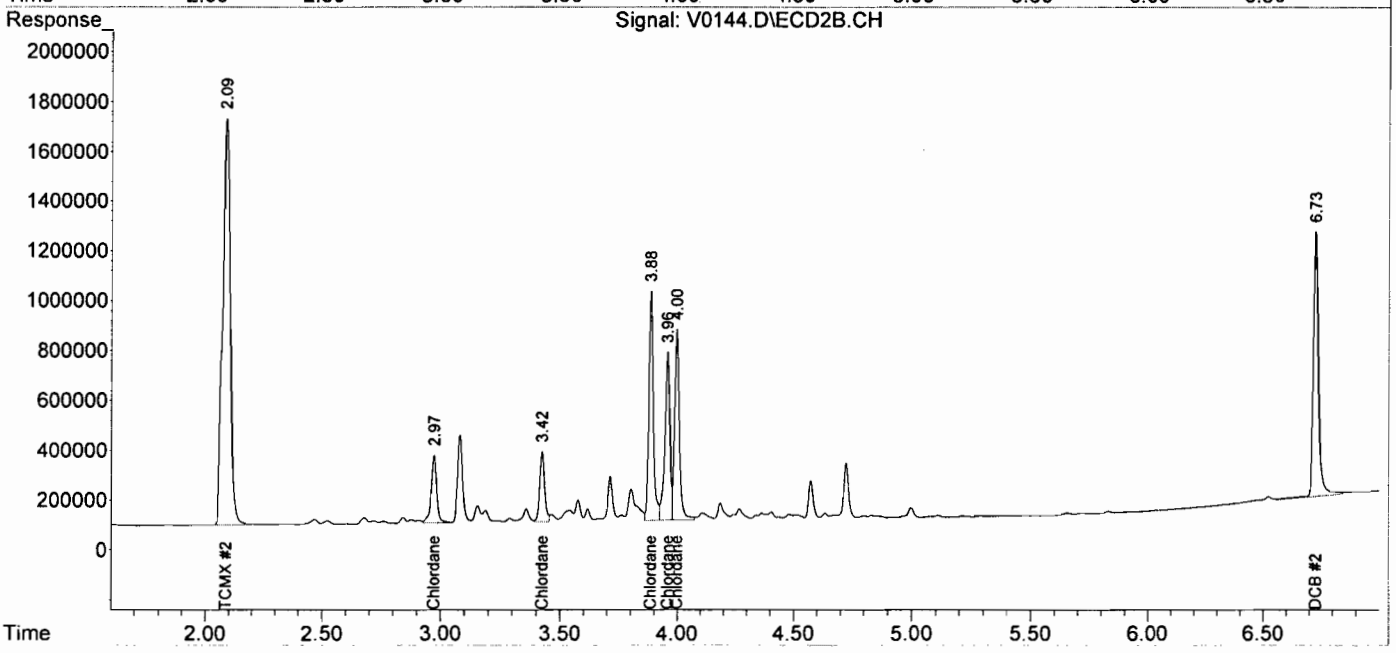
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0144.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:10
Operator : IB
Sample : ICC_CHLOR_C_IAS_5254,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 13:50:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0145.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.25	2.17	2.29	1615218	1520144	5.89
beta-BHC	2.51	2.43	2.55	631492	538468	14.73
gamma-BHC	2.46	2.38	2.50	1419668	1377834	2.95
delta-BHC	2.63	2.56	2.68	1493227	1345053	9.92
Heptachlor	2.78	2.68	2.84	1231961	1177862	4.39
Aldrin	2.99	2.89	3.05	1313423	1239175	5.65
Heptachlor epoxide	3.41	3.32	3.48	1106906	1022031	7.67
Endosulfan I	3.70	3.61	3.77	1090273	1004520	7.87
4,4'-DDE	3.65	3.54	3.74	1068624	1004625	5.99
Dieldrin	3.87	3.76	3.96	1119802	907427	18.97
Endrin	4.04	3.93	4.13	879579	825745	6.12
Endosulfan II	4.22	4.10	4.30	944069	832950	11.77
4,4'-DDD	4.09	3.98	4.18	951219	869444	8.60
Endrin aldehyde	4.55	4.42	4.66	790308	650632	17.67
Endosulfan sulfate	4.91	4.78	5.02	839898	697119	17.00
4,4'-DDT	4.31	4.18	4.42	711905	676393	4.99
Endrin ketone	5.15	5.02	5.26	909310	777691	14.47
Methoxychlor	4.71	4.57	4.81	317769	288359	9.26
alpha-Chlordane	3.60	3.51	3.67	1139844	1040143	8.75
gamma-Chlordane	3.50	3.41	3.57	1202305	1099139	8.58

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0145.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.49	2.42	2.54	408258	384471	5.83
beta-BHC	2.80	2.73	2.85	156262	132639	15.12
gamma-BHC	2.75	2.68	2.80	356418	345100	3.18
delta-BHC	3.02	2.95	3.07	364247	322559	11.45
Heptachlor	3.08	3.00	3.16	325784	308213	5.39
Aldrin	3.33	3.24	3.40	338270	314785	6.94
Heptachlor epoxide	3.74	3.66	3.82	296163	269955	8.85
Endosulfan I	4.05	3.96	4.12	272075	247993	8.85
4,4'-DDE	4.12	4.02	4.22	279055	260755	6.56
Dieldrin	4.26	4.16	4.36	296661	238161	19.72
Endrin	4.51	4.40	4.60	226995	213334	6.02
Endosulfan II	4.68	4.58	4.78	252795	224795	11.08
4,4'-DDD	4.59	4.48	4.68	233006	214912	7.77
Endrin aldehyde	4.97	4.84	5.08	202817	172292	15.05
Endosulfan sulfate	5.22	5.09	5.33	230008	197838	13.99
4,4'-DDT	4.86	4.73	4.97	173410	166518	3.97
Endrin ketone	5.71	5.58	5.82	247504	225926	8.72
Methoxychlor	5.47	5.34	5.58	76900	73859	3.95
alpha-Chlordane	4.00	3.91	4.07	279913	251945	9.99
gamma-Chlordane	3.89	3.80	3.96	296080	268015	9.48

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0150.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.23	2.17	2.29	1615218	1675051	3.70
beta-BHC	2.49	2.43	2.55	631492	591410	6.35
gamma-BHC	2.44	2.38	2.50	1419668	1514335	6.67
delta-BHC	2.62	2.56	2.68	1493227	1468790	1.64
Heptachlor	2.77	2.68	2.84	1231961	1285234	4.32
Aldrin	2.98	2.89	3.05	1313423	1350065	2.79
Heptachlor epoxide	3.41	3.32	3.48	1106906	1120065	1.19
Endosulfan I	3.69	3.61	3.77	1090273	1099427	0.84
4,4'-DDE	3.65	3.54	3.74	1068624	1092146	2.20
Dieldrin	3.87	3.76	3.96	1119802	987475	11.82
Endrin	4.04	3.93	4.13	879579	885730	0.70
Endosulfan II	4.21	4.10	4.30	944069	922628	2.27
4,4'-DDD	4.09	3.98	4.18	951219	947263	0.42
Endrin aldehyde	4.55	4.42	4.66	790308	733704	7.16
Endosulfan sulfate	4.91	4.78	5.02	839898	783796	6.68
4,4'-DDT	4.31	4.18	4.42	711905	750582	5.43
Endrin ketone	5.15	5.02	5.26	909310	885167	2.66
Methoxychlor	4.70	4.57	4.81	317769	326417	2.72
alpha-Chlordane	3.59	3.51	3.67	1139844	1142094	0.20
gamma-Chlordane	3.50	3.41	3.57	1202305	1204888	0.21

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/23/2015 **Instrument ID:** GC-V

Data File: V0150.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.48	2.42	2.54	408258	440269	7.84
beta-BHC	2.79	2.73	2.85	156262	147763	5.44
gamma-BHC	2.74	2.68	2.80	356418	391251	9.77
delta-BHC	3.01	2.95	3.07	364247	361937	0.63
Heptachlor	3.08	3.00	3.16	325784	341731	4.89
Aldrin	3.32	3.24	3.40	338270	355459	5.08
Heptachlor epoxide	3.74	3.66	3.82	296163	304380	2.77
Endosulfan I	4.04	3.96	4.12	272075	276997	1.81
4,4'-DDE	4.12	4.02	4.22	279055	292395	4.78
Dieldrin	4.26	4.16	4.36	296661	268928	9.35
Endrin	4.51	4.40	4.60	226995	236579	4.22
Endosulfan II	4.68	4.58	4.78	252795	254117	0.52
4,4'-DDD	4.59	4.48	4.68	233006	241324	3.57
Endrin aldehyde	4.97	4.84	5.08	202817	196430	3.15
Endosulfan sulfate	5.22	5.09	5.33	230008	224712	2.30
4,4'-DDT	4.86	4.73	4.97	173410	190806	10.03
Endrin ketone	5.71	5.58	5.82	247504	259241	4.74
Methoxychlor	5.47	5.34	5.58	76900	87918	14.33
alpha-Chlordane	4.00	3.91	4.07	279913	283276	1.20
gamma-Chlordane	3.89	3.80	3.96	296080	301203	1.73

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:54
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 14:03:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.91	2.09	159.7E6	43097627	212.853m	220.763
	Spiked Amount 200.000			Recovery	=	106.43%	110.38%
2) S	DCB	6.06	6.73	42166271	14994009	149.653	184.671
	Spiked Amount 200.000			Recovery	=	74.83%	92.34%
	Target Compounds						
3) T	alpha-BHC	2.25	2.49	152.0E6	38447106	94.114	94.173
4) T	beta-BHC	2.51	2.80	53846804	13263904	85.269	84.883
5) T	gamma-BHC (Linda	2.46	2.75	137.8E6	34510017	97.053	96.825
6) T	delta-BHC	2.63	3.02	134.5E6	32255891	90.077	88.555
7) T	Heptachlor	2.78	3.08	117.8E6	30821255	95.609	94.606
8) T	Aldrin	2.99	3.33	123.9E6	31478529	94.347	93.057
9) T	Heptachlor epoxi	3.41	3.74	102.2E6	26995530	92.332	91.151
10) T	Endosulfan I	3.70	4.05	100.5E6	24799296	92.135	91.149
11) T	4,4'-DDE	3.65	4.12	100.5E6	26075506	94.011	93.442
12) T	Dieldrin	3.87	4.26	90742662	23816081	81.035	80.281
13) T	Endrin	4.04	4.51	82574492	21333370	93.880	93.982
14) T	Endosulfan II	4.22	4.68	83295023	22479541	88.230	88.924
15) T	4,4'-DDD	4.09	4.59	86944381	21491250	91.403	92.235
16) T	Endrin aldehyde	4.55	4.97	65063162	17229151	82.326	84.949
17) T	Endosulfan sulfa	4.91	5.22	69711868	19783803	83.000	86.014
18) T	4,4'-DDT	4.31	4.86	67639265	16651842	95.012	96.026
19) T	Endrin ketone	5.15	5.71	77769120	22592649	85.525	91.282
20) T	Methoxychlor	4.71	5.47	28835879	7385852	90.745	96.045
21) T	alpha-Chlordane	3.60	4.00	104.0E6	25194515	91.253	90.008
22) T	gamma-Chlordane	3.50	3.89	109.9E6	26801461	91.419	90.521
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

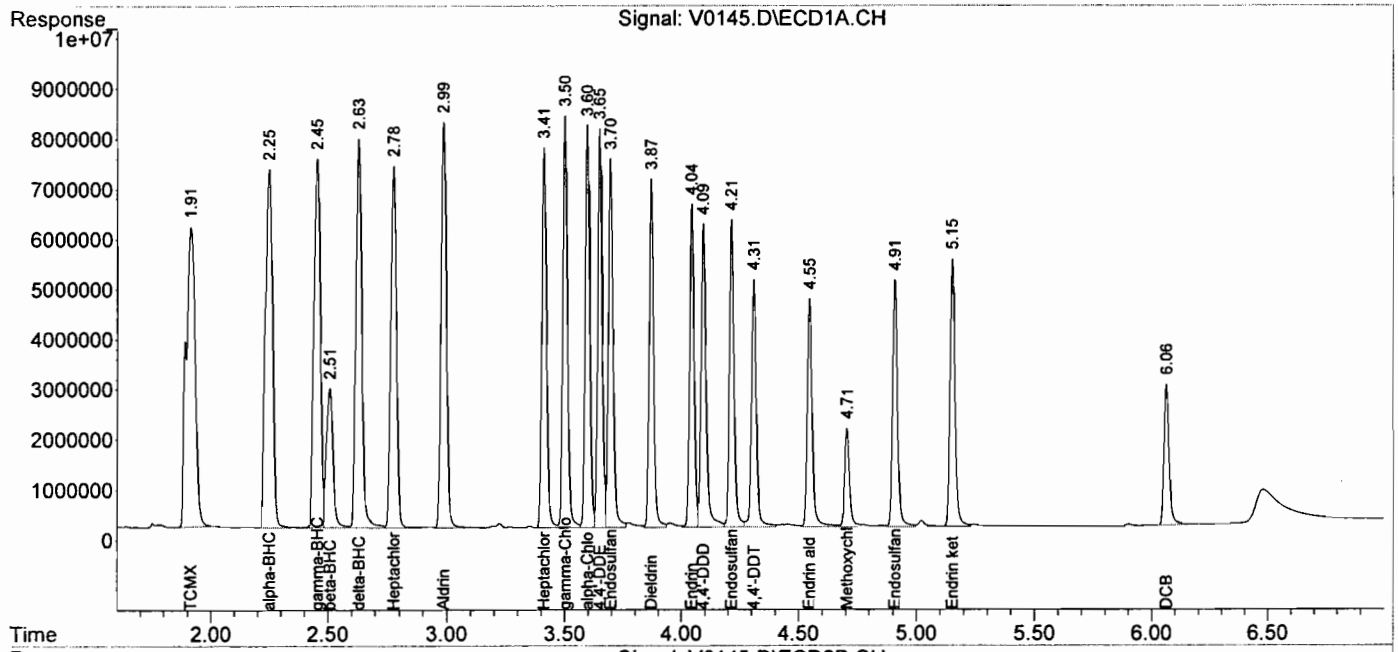
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

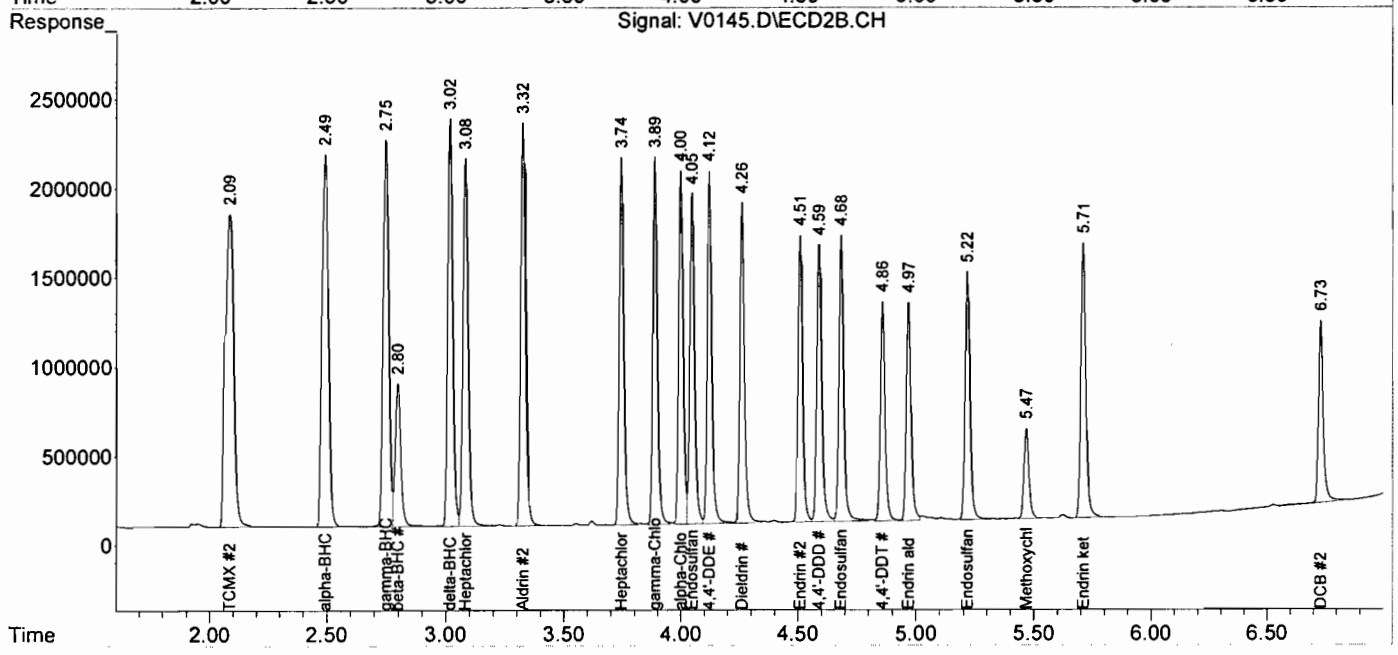
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 13:54
Operator : IB
Sample : ICV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 14:03:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0150.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 17:00
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:32:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	168.5E6	48231478	224.610	247.061
Spiked Amount	200.000			Recovery	=	112.31%	123.53%
2) S	DCB	6.06	6.73	50660103	17144947	179.798	211.163
Spiked Amount	200.000			Recovery	=	89.90%	105.58%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	167.5E6	44026916	103.704	107.841
4) T	beta-BHC	2.49	2.79	59141025	14776319	93.653	94.561
5) T	gamma-BHC (Linda	2.44	2.74	151.4E6	39125148	106.668	109.773
6) T	delta-BHC	2.62	3.01	146.9E6	36193685	98.363	99.366
7) T	Heptachlor	2.77	3.08	128.5E6	34173107	104.324	104.895
8) T	Aldrin	2.98	3.32	135.0E6	35545853	102.790	105.081
9) T	Heptachlor epoxi	3.41	3.74	112.0E6	30438042	101.189	102.775
10) T	Endosulfan I	3.69	4.04	109.9E6	27699658	100.840	101.809
11) T	4,4'-DDE	3.65	4.12	109.2E6	29239474	102.201	104.780
12) T	Dieldrin	3.87	4.26	98747544	26892818	88.183	90.652
13) T	Endrin	4.04	4.51	88572984	23657913	100.699	104.222
14) T	Endosulfan II	4.21	4.68	92262794	25411717	97.729	100.523
15) T	4,4'-DDD	4.09	4.59	94726342	24132433	99.584	103.570
16) T	Endrin aldehyde	4.55	4.97	73370370	19643034	92.838	96.851
17) T	Endosulfan sulfa	4.91	5.22	78379638	22471154	93.320	97.697
18) T	4,4'-DDT	4.31	4.86	75058249	19080629	105.433	110.032
19) T	Endrin ketone	5.15	5.71	88516676	25924140	97.345	104.742
20) T	Methoxychlor	4.70	5.47	32641684	8791765	102.722	114.328
21) T	alpha-Chlordane	3.59	4.00	114.2E6	28327582	100.197	101.201
22) T	gamma-Chlordane	3.50	3.89	120.5E6	30120298	100.215	101.730
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

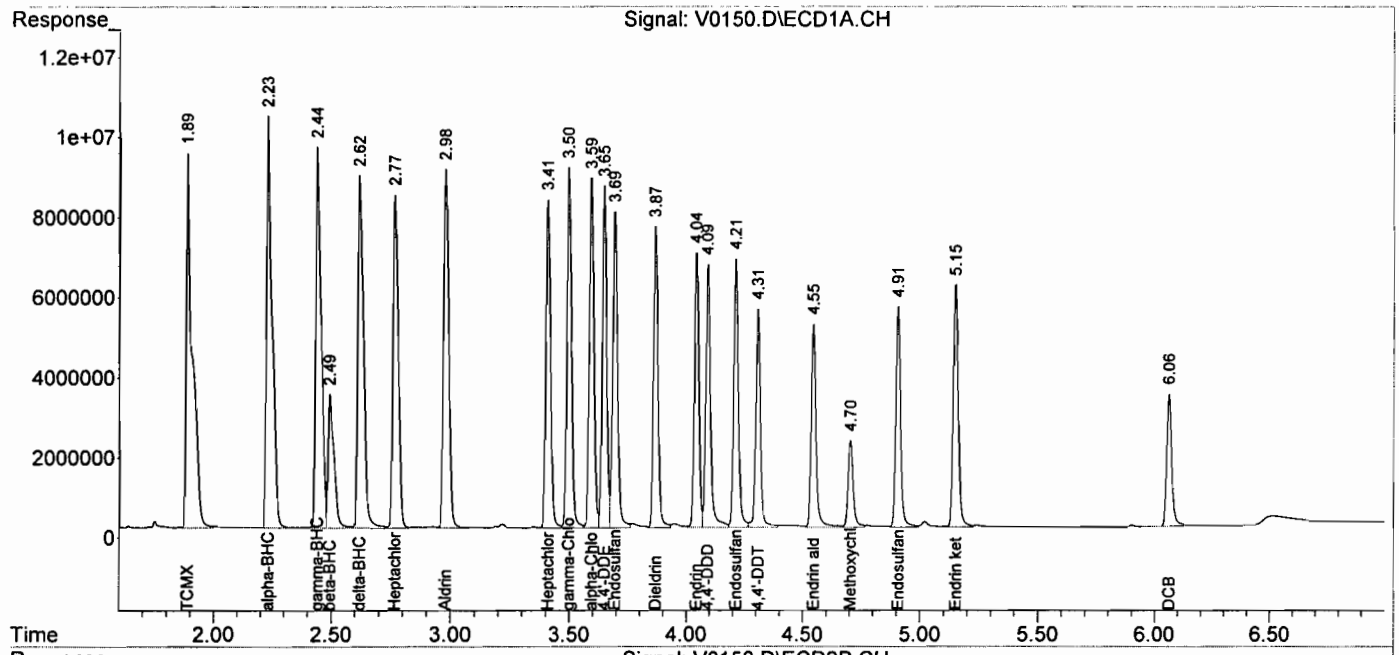
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

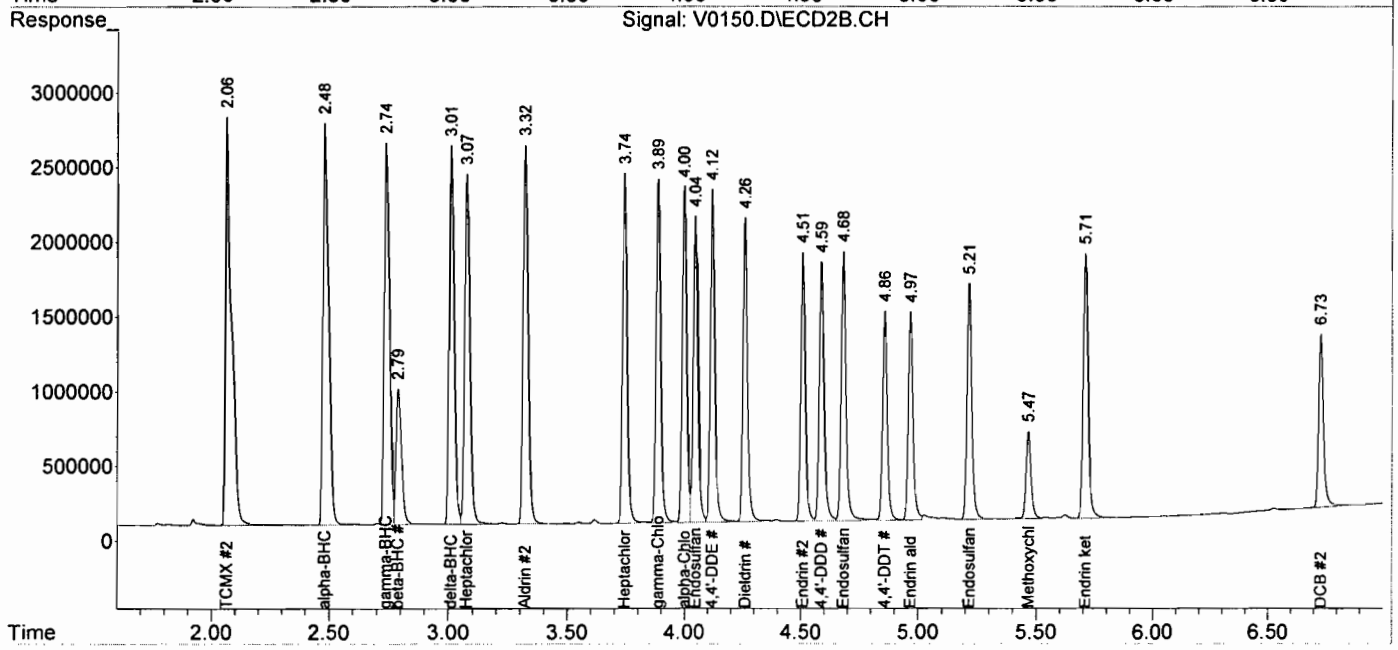
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0150.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 17:00
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:32:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8177.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.07	2.19	187214	179093	4.34
beta-BHC	2.38	2.32	2.44	84366	71174	15.64
gamma-BHC	2.33	2.27	2.39	155864	157096	0.79
delta-BHC	2.51	2.45	2.57	168995	162155	4.05
Heptachlor	2.66	2.58	2.74	154019	148655	3.48
Aldrin	2.89	2.82	2.98	160012	151819	5.12
Heptachlor epoxide	3.38	3.30	3.46	144525	134581	6.88
Endosulfan I	3.73	3.65	3.81	141495	129838	8.24
4,4'-DDE	3.67	3.57	3.77	129047	125939	2.41
Dieldrin	3.94	3.84	4.04	148030	122234	17.43
Endrin	4.16	4.06	4.26	107412	121079	12.72
Endosulfan II	4.37	4.27	4.47	127562	118150	7.38
4,4'-DDD	4.22	4.12	4.32	111373	105485	5.29
Endrin aldehyde	4.78	4.66	4.90	110586	94559	14.49
Endosulfan sulfate	5.21	5.10	5.34	114229	104174	8.80
4,4'-DDT	4.49	4.37	4.61	95042	99403	4.59
Endrin ketone	5.50	5.38	5.62	146662	130665	10.91
Methoxychlor	4.98	4.86	5.10	45552	50208	10.22
alpha-Chlordane	3.60	3.53	3.69	141939	131168	7.59
gamma-Chlordane	3.49	3.41	3.57	147256	136437	7.35
Chlordane 500 ppb	2.61	2.53	2.69	4252	4933	16.01
Chlordane {2}	3.00	2.92	3.08	5382	6026	11.98
Chlordane {3}	3.49	3.41	3.57	15780	17921	13.57
Chlordane {4}	3.60	3.52	3.68	24978	28044	12.27
Chlordane {5}	4.30	4.23	4.39	4043	4456	10.20
Toxaphene 500 ppb	4.75	4.68	4.84	4041	4431	9.66
Toxaphene {2}	4.88	4.80	4.96	3288	3511	6.81
Toxaphene {3}	5.11	5.03	5.19	4300	4524	5.22
Toxaphene {4}	5.48	5.40	5.56	4108	4496	9.47
Toxaphene {5}	5.64	5.56	5.72	1931	2297	18.94

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8177.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.52	2.46	2.58	251243	246345	1.95
beta-BHC	2.86	2.80	2.92	104943	91894	12.43
gamma-BHC	2.81	2.74	2.86	224938	230452	2.45
delta-BHC	3.12	3.06	3.18	221335	218184	1.42
Heptachlor	3.19	3.11	3.27	202778	207076	2.12
Aldrin	3.49	3.40	3.56	214661	209049	2.61
Heptachlor epoxide	4.03	3.94	4.10	193448	184620	4.56
Endosulfan I	4.42	4.33	4.49	176098	169187	3.92
4,4'-DDE	4.51	4.41	4.61	183365	178721	2.53
Dieldrin	4.70	4.59	4.79	194289	162164	16.53
Endrin	5.02	4.91	5.11	132728	155043	16.81
Endosulfan II	5.24	5.13	5.33	172680	162291	6.02
4,4'-DDD	5.12	5.01	5.21	143601	135411	5.70
Endrin aldehyde	5.60	5.47	5.71	148677	125585	15.53
Endosulfan sulfate	5.90	5.77	6.01	146081	143519	1.75
4,4'-DDT	5.45	5.33	5.57	111159	123742	11.32
Endrin ketone	6.50	6.37	6.61	195024	176104	9.70
Methoxychlor	6.21	6.08	6.32	56152	65799	17.18
alpha-Chlordane	4.36	4.27	4.43	190632	179156	6.02
gamma-Chlordane	4.21	4.12	4.28	196170	185157	5.61
Chlordane 500 ppb	3.06	2.98	3.14	6221	7447	19.70
Chlordane {2}	3.61	3.53	3.69	6419	7257	13.06
Chlordane {3}	4.20	4.12	4.28	20052	22977	14.59
Chlordane {4}	4.29	4.21	4.37	15455	17386	12.49
Chlordane {5}	4.35	4.27	4.43	16727	18976	13.44
Toxaphene 500 ppb	5.32	5.24	5.40	5003	5415	8.23
Toxaphene {2}	5.60	5.52	5.68	4207	4916	16.86
Toxaphene {3}	5.89	5.80	5.96	2656	3115	17.25
Toxaphene {4}	6.17	6.08	6.24	5464	5104	6.59
Toxaphene {5}	6.61	6.52	6.68	3809	4205	10.40

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8187.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.07	2.19	187214	175033	6.51
beta-BHC	2.38	2.32	2.44	84366	84559	0.23
gamma-BHC	2.33	2.27	2.39	155864	137074	12.06
delta-BHC	2.51	2.45	2.57	168995	161126	4.66
Heptachlor	2.66	2.58	2.74	154019	148188	3.79
Aldrin	2.89	2.82	2.98	160012	150085	6.20
Heptachlor epoxide	3.38	3.30	3.46	144525	134723	6.78
Endosulfan I	3.73	3.65	3.81	141495	132177	6.59
4,4'-DDE	3.67	3.57	3.77	129047	126059	2.32
Dieldrin	3.94	3.84	4.04	148030	123655	16.47
Endrin	4.16	4.06	4.26	107412	121440	13.06
Endosulfan II	4.37	4.27	4.47	127562	120520	5.52
4,4'-DDD	4.22	4.12	4.32	111373	106573	4.31
Endrin aldehyde	4.78	4.66	4.90	110586	96516	12.72
Endosulfan sulfate	5.21	5.10	5.34	114229	109732	3.94
4,4'-DDT	4.49	4.37	4.61	95042	103294	8.68
Endrin ketone	5.50	5.38	5.62	146662	138112	5.83
Methoxychlor	4.98	4.86	5.10	45552	50634	11.16
alpha-Chlordane	3.60	3.53	3.69	141939	132685	6.52
gamma-Chlordane	3.49	3.41	3.57	147256	137251	6.79

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/10/2015 **Instrument ID:** GC-O

Data File: O8187.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.52	2.46	2.58	251243	241327	3.95
beta-BHC	2.86	2.80	2.92	104943	99838	4.86
gamma-BHC	2.80	2.74	2.86	224938	223881	0.47
delta-BHC	3.12	3.06	3.18	221335	216995	1.96
Heptachlor	3.19	3.11	3.27	202778	212741	4.91
Aldrin	3.49	3.40	3.56	214661	208777	2.74
Heptachlor epoxide	4.03	3.94	4.10	193448	186138	3.78
Endosulfan I	4.42	4.33	4.49	176098	172682	1.94
4,4'-DDE	4.51	4.41	4.61	183365	182081	0.70
Dieldrin	4.70	4.59	4.79	194289	166712	14.19
Endrin	5.02	4.91	5.11	132728	158350	19.30
Endosulfan II	5.24	5.13	5.33	172680	170099	1.50
4,4'-DDD	5.12	5.01	5.21	143601	138718	3.40
Endrin aldehyde	5.60	5.47	5.71	148677	129548	12.87
Endosulfan sulfate	5.90	5.77	6.01	146081	152676	4.51
4,4'-DDT	5.45	5.33	5.57	111159	127574	14.77
Endrin ketone	6.50	6.37	6.61	195024	188452	3.37
Methoxychlor	6.21	6.08	6.32	56152	63524	13.13
alpha-Chlordane	4.36	4.27	4.43	190632	182607	4.21
gamma-Chlordane	4.21	4.12	4.28	196170	187566	4.39

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8177.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 10:45
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 11:45:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	19351303	29199425	189.918	195.994
	Spiked Amount 200.000	Range 10 - 180		Recovery =		94.96%	98.00%
2) S	DCB	6.60	8.16	7940130	9825831	181.859	174.858
	Spiked Amount 200.000	Range 10 - 180		Recovery =		90.93%	87.43%
	Target Compounds						
3) T	alpha-BHC	2.12	2.52	17909344	24634507	95.662	98.050
4) T	beta-BHC	2.38	2.86	7117386	9189356	84.363	87.565
5) T	gamma-BHC (Linda	2.33	2.81	15709583	23045197	100.791	102.451
6) T	delta-BHC	2.51	3.12	16215473	21818421	95.952	98.576
7) T	Heptachlor	2.66	3.19	14865488	20707564	96.517	102.119
8) T	Aldrin	2.89	3.49	15181946	20904929	94.880	97.386
9) T	Heptachlor epoxi	3.38	4.03	13458114	18461965	93.120	95.436
10) T	Endosulfan I	3.73	4.42	12983776	16918673	91.761	96.075
11) T	4,4'-DDE	3.67	4.51	12593909	17872059	97.592	97.467
12) T	Dieldrin	3.94	4.70	12223365	16216427	82.573	83.465
13) T	Endrin	4.16	5.02	12107923	15504263	112.724	116.812
14) T	Endosulfan II	4.37	5.24	11815002	16229097	92.622	93.984
15) T	4,4'-DDD	4.22	5.12	10548531	13541094	94.714	94.296
16) T	Endrin aldehyde	4.78	5.60	9455940	12558479	85.507	84.468
17) T	Endosulfan sulfa	5.21	5.90	10417380	14351876	91.198	98.246
18) T	4,4'-DDT	4.49	5.45	9940290	12374196	104.588	111.320
19) T	Endrin ketone	5.50	6.50	13066450	17610426	89.093	90.299
20) T	Methoxychlor	4.98	6.21	5020791	6579864	110.221	117.179
21) T	alpha-Chlordane	3.60	4.36	13116794	17915648	92.412	93.980
22) T	gamma-Chlordane	3.49	4.21	13643701	18515694	92.653	94.386
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

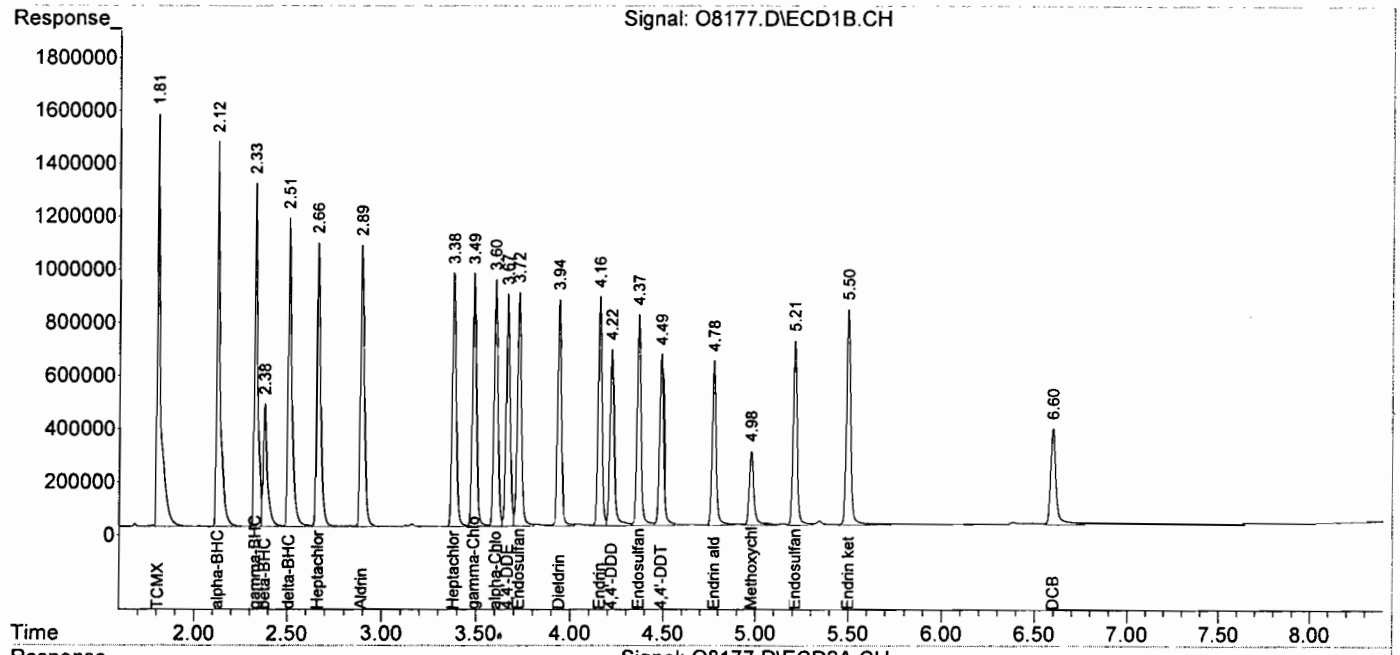
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

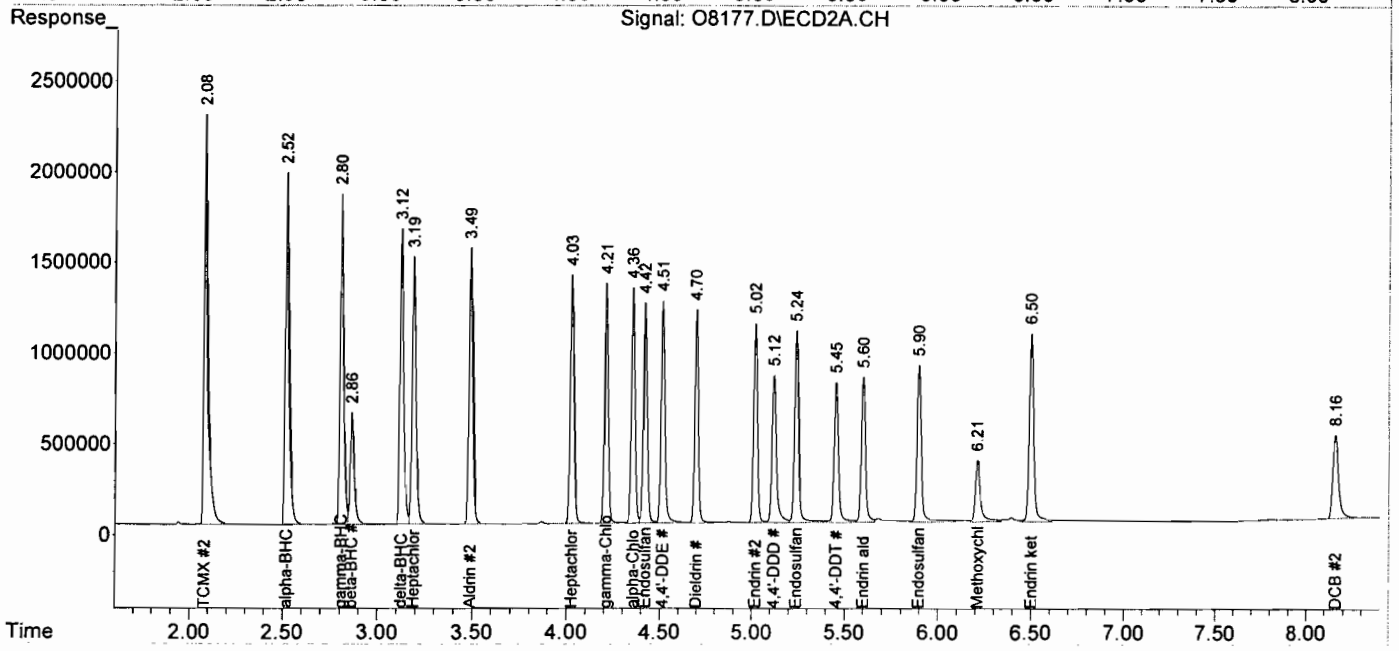
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8177.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 10:45
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 11:45:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08178.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 11:47
Operator : IB
Sample : CCV_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	23521783	35737825	230.848	239.881
Spiked Amount 200.000	Range 10 - 180		Recovery =		115.42%	119.94%
2) S DCB	6.60	8.16	8520613	14168992	195.154	252.148 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		97.58%	126.07%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	4.75	5.32	2215693	2707507	548.277	541.144
29) L2 Toxaphene {2}	4.88	5.60	1755693	2458067	534.042	584.295
30) L2 Toxaphene {3}	5.11	5.89	2261930	1557284	526.089	586.242m
31) L2 Toxaphene {4}	5.48	6.17	2248162	2551939	547.330	467.053m
32) L2 Toxaphene {5}	5.64	6.61	1148381	2102682	594.721	552.001
Sum Toxaphene			9629859	11377480	2750.460	2730.736
Average Toxaphene					550.092	546.147

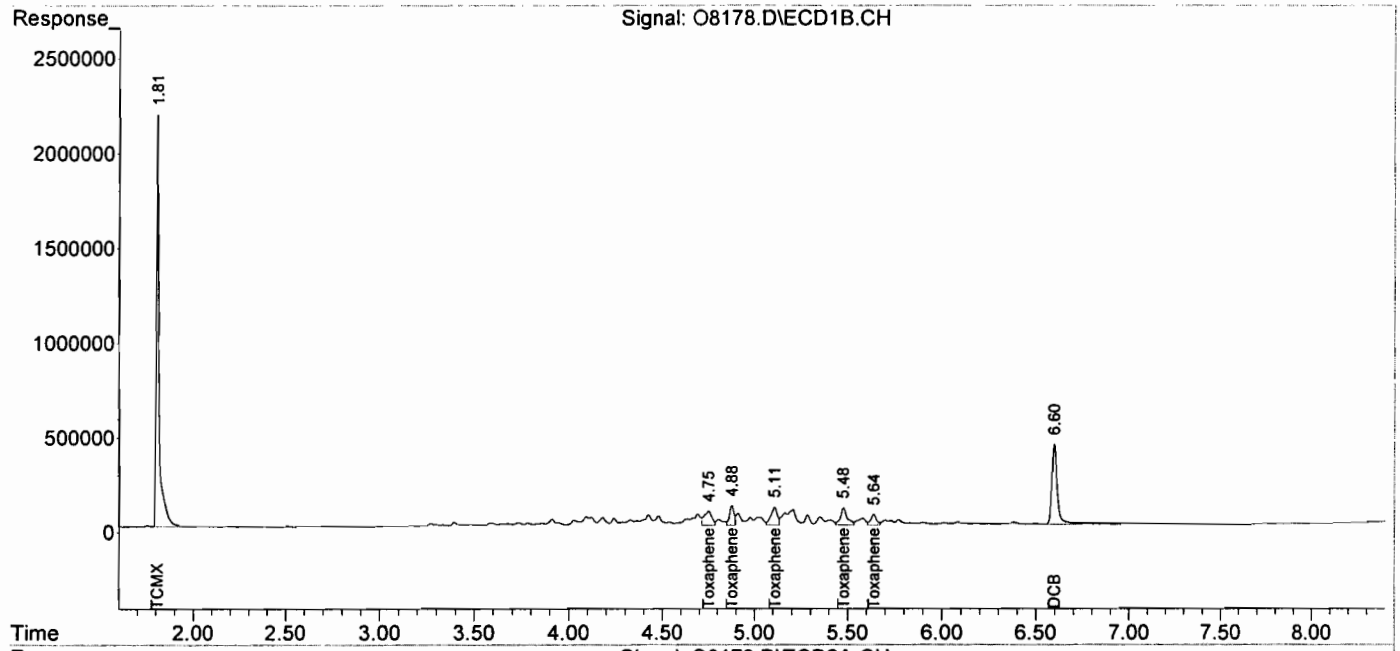
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8178.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 11:47
Operator : IB
Sample : CCV_TOX_C_IAS_5168,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8179.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:00
Operator : IB
Sample : CCV_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	22367276	34301965	219.518	230.243
Spiked Amount 200.000	Range 10 - 180		Recovery =		109.76%	115.12%
2) S DCB	6.60	8.15	8701652	11508571	199.300	204.804
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.65%	102.40%
Target Compounds						
23) L1 Chlordane	2.61	3.06	2466504	3723627	580.058	598.522
24) L1 Chlordane {2}	3.00	3.61	3013244	3628476	559.893	565.296
25) L1 Chlordane {3}	3.49	4.20	8960496	11488353	567.834	572.928
26) L1 Chlordane {4}	3.60	4.29	14021761	8692892	561.359	562.466
27) L1 Chlordane {5}	4.30	4.35	2227930	9487957	551.021	567.216
Sum Chlordane			30689934	37021305	2820.165	2866.428
Average Chlordane					564.033	573.286
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

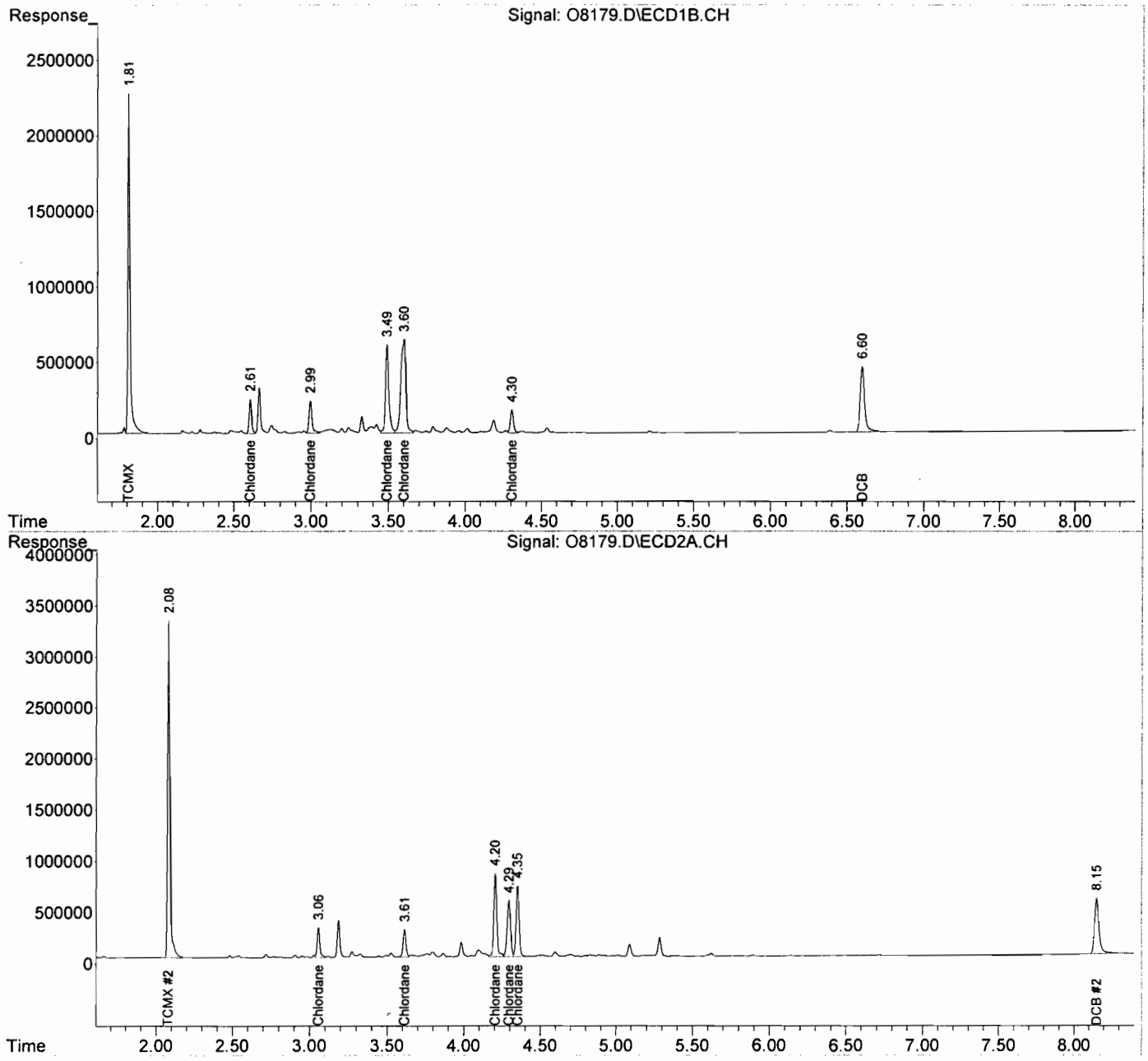
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8179.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:00
Operator : IB
Sample : CCV_CHLOR_C_IAS_5118,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:12:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8187.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 16:06
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 16:18:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18990286	28571892	186.375m	191.781m
	Spiked Amount 200.000	Range 10 - 180		Recovery =		93.19%	95.89%
2) S	DCB	6.60	8.16	8659947	10778980	198.345	191.820
	Spiked Amount 200.000	Range 10 - 180		Recovery =		99.17%	95.91%
	Target Compounds						
3) T	alpha-BHC	2.12	2.52	17503280	24132656	93.493	96.053
4) T	beta-BHC	2.38	2.86	8455887	9983797	100.228m	95.135
5) T	gamma-BHC (Linda	2.33	2.80	13707381	22388121	87.945m	99.530
6) T	delta-BHC	2.51	3.12	16112634	21699467	95.344	98.039
7) T	Heptachlor	2.66	3.19	14818835	21274119	96.214	104.913
8) T	Aldrin	2.89	3.49	15008476	20877682	93.796	97.259
9) T	Heptachlor epoxi	3.38	4.03	13472254	18613833	93.218	96.222
10) T	Endosulfan I	3.73	4.42	13217683	17268220	93.414	98.060
11) T	4,4'-DDE	3.67	4.51	12605906	18208090	97.685	99.300
12) T	Dieldrin	3.94	4.70	12365496	16671161	83.534	85.806
13) T	Endrin	4.16	5.02	12143981	15834959	113.059	119.304
14) T	Endosulfan II	4.37	5.24	12052012	17009853	94.480	98.505
15) T	4,4'-DDD	4.22	5.12	10657253	13871771	95.690	96.599
16) T	Endrin aldehyde	4.78	5.60	9651627	12954812	87.277	87.134
17) T	Endosulfan sulfa	5.21	5.90	10973165	15267580	96.063	104.514
18) T	4,4'-DDT	4.49	5.45	10329443	12757428	108.683	114.768
19) T	Endrin ketone	5.50	6.50	13811232	18845194	94.171	96.630
20) T	Methoxychlor	4.98	6.21	5063431	6352388	111.158m	113.128m
21) T	alpha-Chlordane	3.60	4.36	13268466	18260652	93.480	95.790
22) T	gamma-Chlordane	3.49	4.21	13725062	18756606	93.205	95.614
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

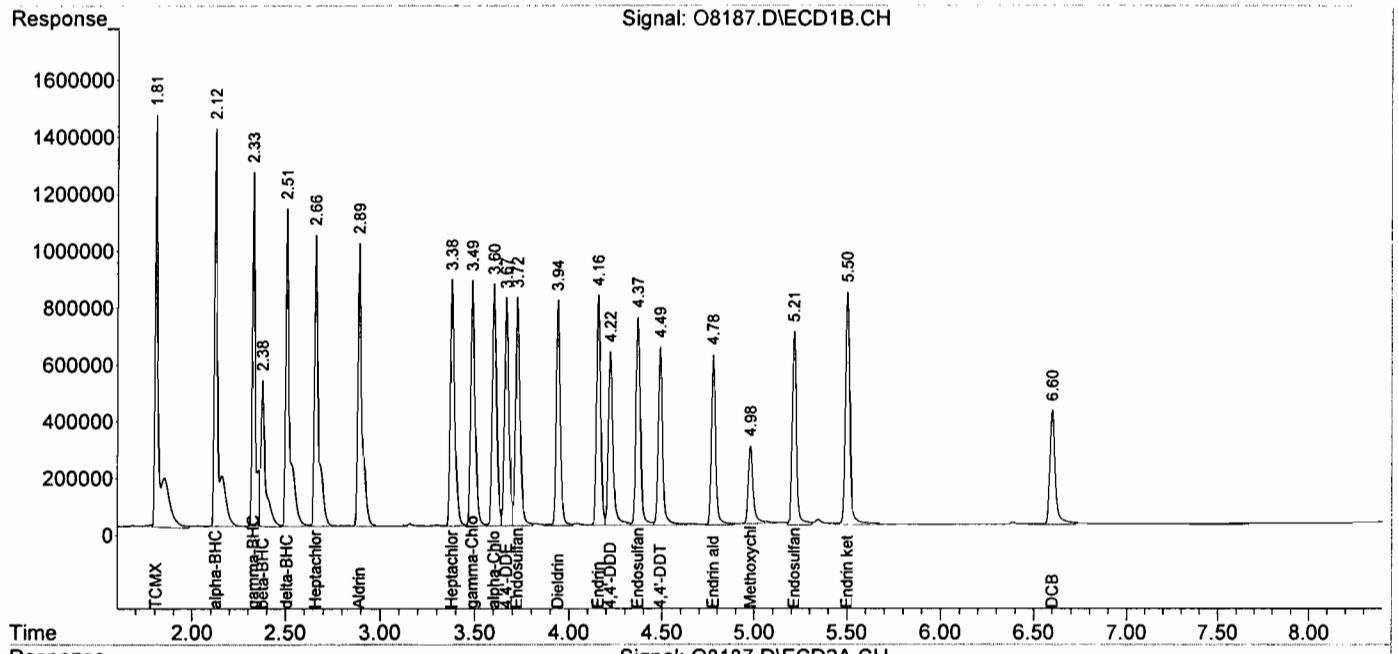
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

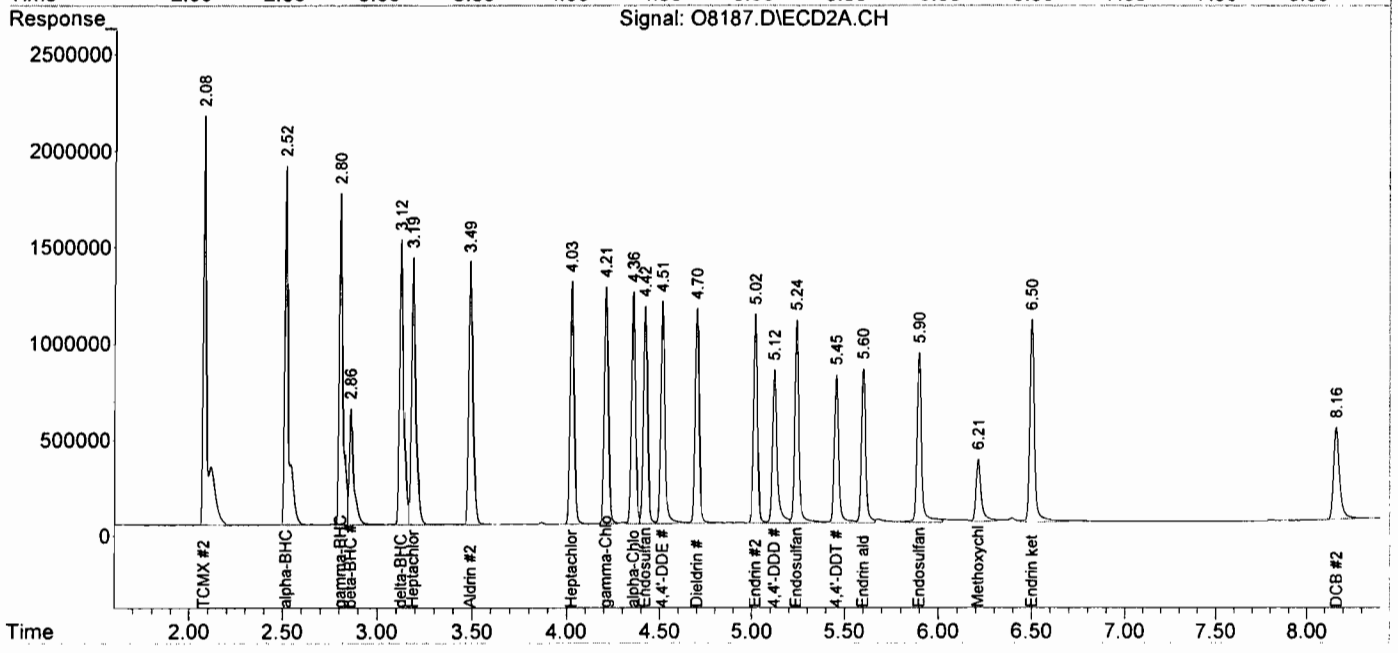
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8187.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 16:06
Operator : IB
Sample : CCV_PEST_C_IAS_5171,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 16:18:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.81 **DCB 1** 6.60 **TCMX 2** 2.08 **DCB 2** 8.15

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150209-14	02/10/2015	12:12	1.81		6.60		2.08		8.15	
Pest	TCLP150206	02/10/2015	12:25	1.81		6.60		2.08		8.15	
Pest	00895-001MS	02/10/2015	12:50	1.81		6.60		2.08		8.15	
Pest	00895-001MSD	02/10/2015	13:03	1.81		6.60		2.08		8.15	
GROWES_W	E15-00895-001	02/10/2015	13:15	1.81		6.60		2.08		8.15	
TSCA_W.C	E15-00896-001	02/10/2015	13:28	1.81		6.60		2.08		8.15	
Pest	LCSA150209-14	02/10/2015	14:19	1.81		6.60		2.08		8.16	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-V **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.89 **DCB 1** 6.06 **TCMX 2** 2.06 **DCB 2** 6.73

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150223-08	02/23/2015	14:38	1.89		6.06		2.06		6.73	
Pest	TCLP150219	02/23/2015	14:49	1.89		6.05		2.06		6.73	
Pest	LCSA150223-08	02/23/2015	15:01	1.89		6.05		2.06		6.73	
GPEC-WC1	E15-01273-001	02/23/2015	15:12	1.88		6.05		2.06		6.73	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 02/10/2015

Data file: O8175.D Tue Feb 10 09:31:45 2015

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	9120388	Endrin (1)	10611303	4.36	5.20
DDD	267522	Endrin ketone	424868		
DDE	148625	Endrin aldehyde	157184		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	11436185	Endrin (2)	13615409	2.36	4.84
DDD	276343	Endrin ketone	503100		
DDE	0	Endrin aldehyde	189958		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08175.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 9:09
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 09:31:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.67	0.00	148625	0	1.152	N.D. d#
13) T	Endrin	4.16	5.02	10611303	13615409	98.790	102.581
15) T	4,4'-DDD	4.22	5.12	267522	276343	2.402m	1.924m
16) T	Endrin aldehyde	4.78	5.60	157184	189958	1.421m	1.278m
18) T	4,4'-DDT	4.49	5.45	9120388	11436185	95.961	102.881m
19) T	Endrin ketone	5.50	6.50	424868	503100	2.897m	2.580m
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

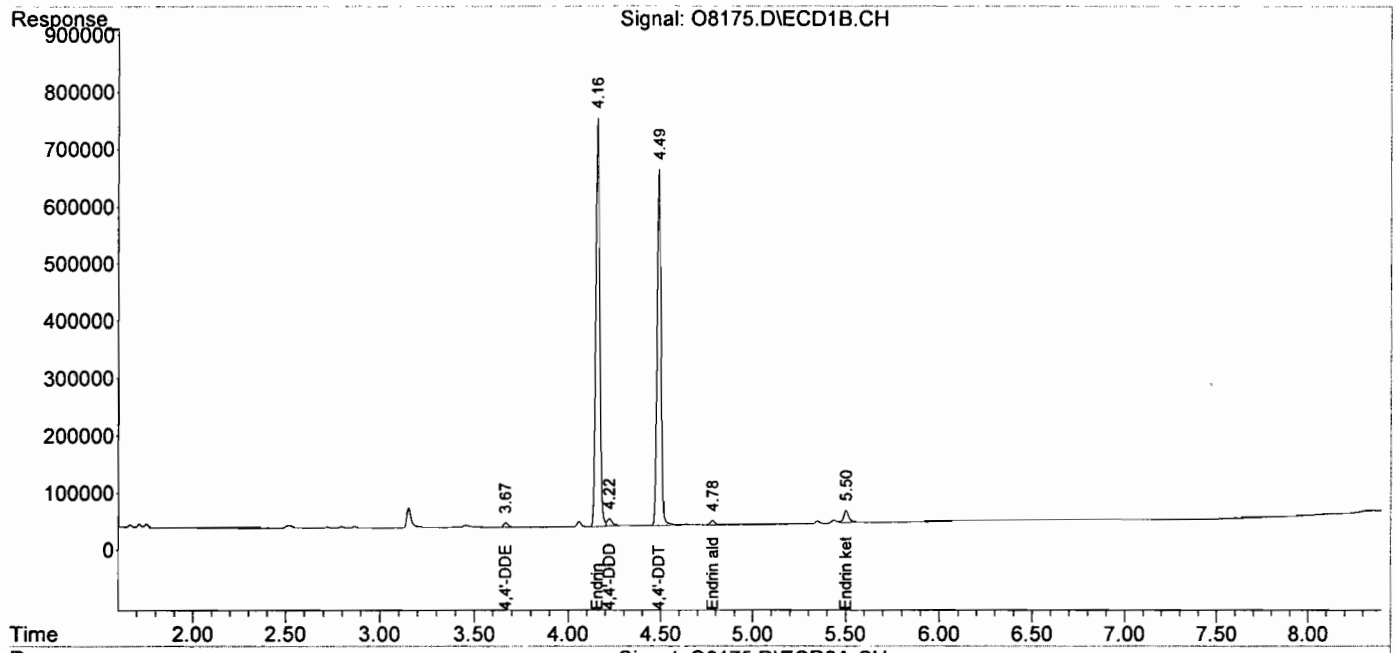
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

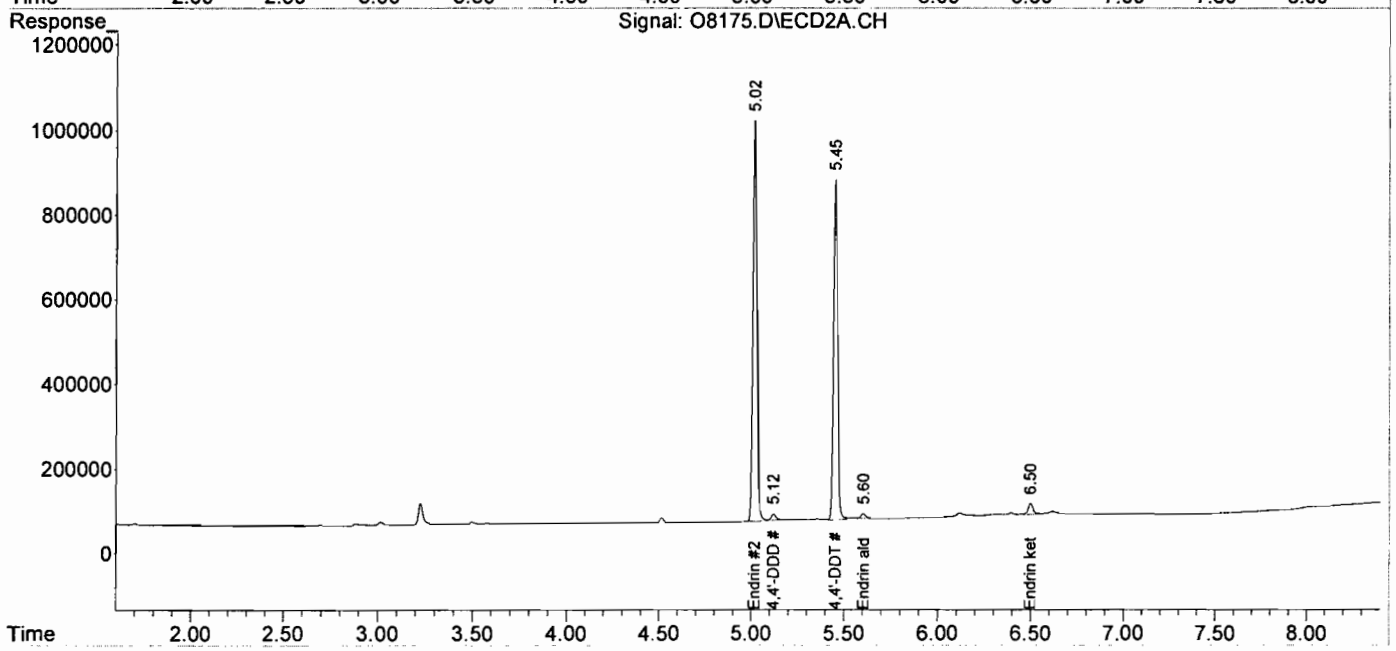
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8175.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 9:09
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 09:31:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Mon Feb 09 12:08:48 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Date Analyzed: 02/23/2015

Data file: V0134.D	Mon Feb 23 11:18:11 2015			**% Breakdown**	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	48882465	Endrin (1)	62258396	7.22	5.85
DDD	2814555	Endrin ketone	2325520		
DDE	992014	Endrin aldehyde	1540538		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	13977162	Endrin (2)	17603713	7.80	6.17
DDD	893816	Endrin ketone	704579		
DDE	289103	Endrin aldehyde	452195		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:08
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 11:18:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Wed Jan 28 10:17:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
	Target Compounds						
11) T	4,4'-DDE	3.65	4.12	992014	289103	1.045m	1.256m
13) T	Endrin	4.04	4.51	62258396	17603713	75.318	84.379
15) T	4,4'-DDD	4.09	4.59	2814555	893816	3.455m	4.743m#
16) T	Endrin aldehyde	4.55	4.97	1540538	452195	2.247m	2.824m#
18) T	4,4'-DDT	4.31	4.86	48882465	13977162	68.045	85.122 #
19) T	Endrin ketone	5.15	5.71	2325520	704579	2.816	3.627 #
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

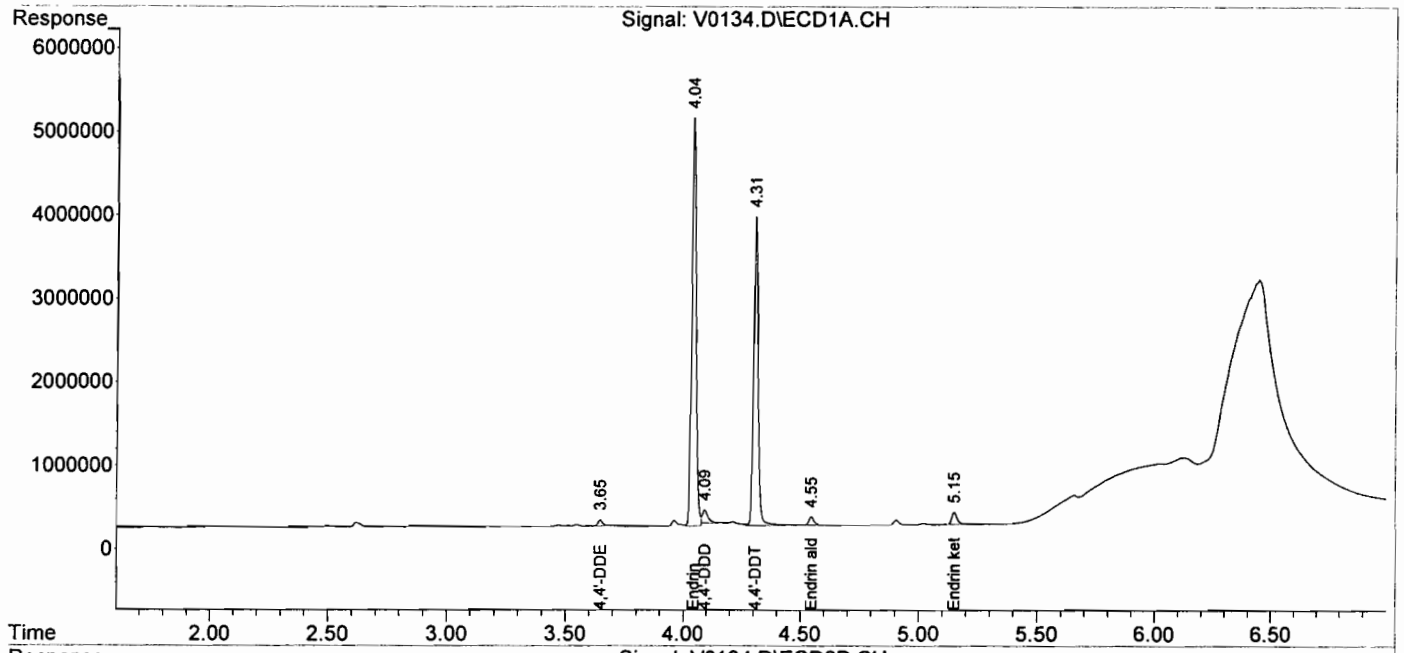
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

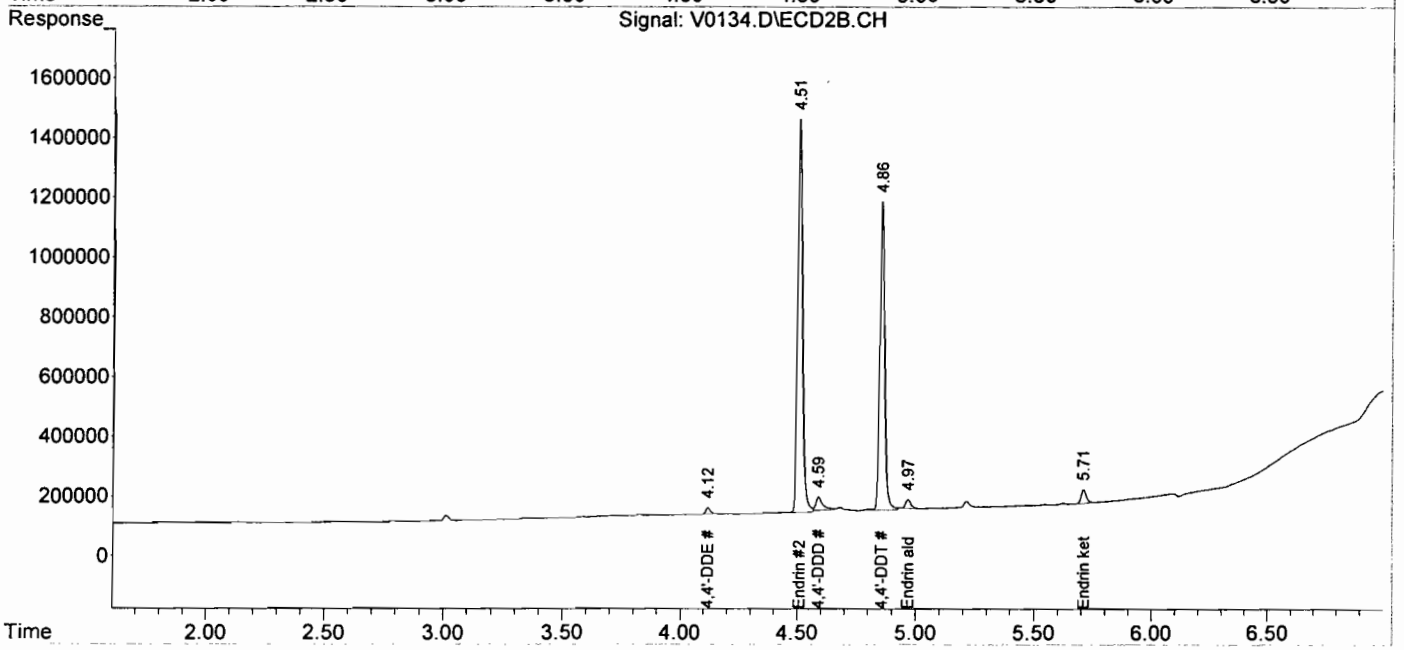
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 11:08
Operator : IB
Sample : ENDRIN/DDT
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 23 11:18:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Wed Jan 28 10:17:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: BLKA150209-14
Client ID: Pest
Date Received: NA
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
Data file: O8180.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: TCLP150206
Client ID: Pest
Date Received: NA
Date Extracted: 02/09/2015
Date Analyzed: 02/10/2015
Data file: O8181.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8180.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:12
Operator : IB
Sample : Pest,BLKA150209-14,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17935087	26742769	176.019	179.504
Spiked Amount 200.000	Range 10 - 180		Recovery =		88.01%	89.75%
2) S DCB	6.60	8.15	7522600	9204441	172.296	163.800
Spiked Amount 200.000	Range 10 - 180		Recovery =		86.15%	81.90%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

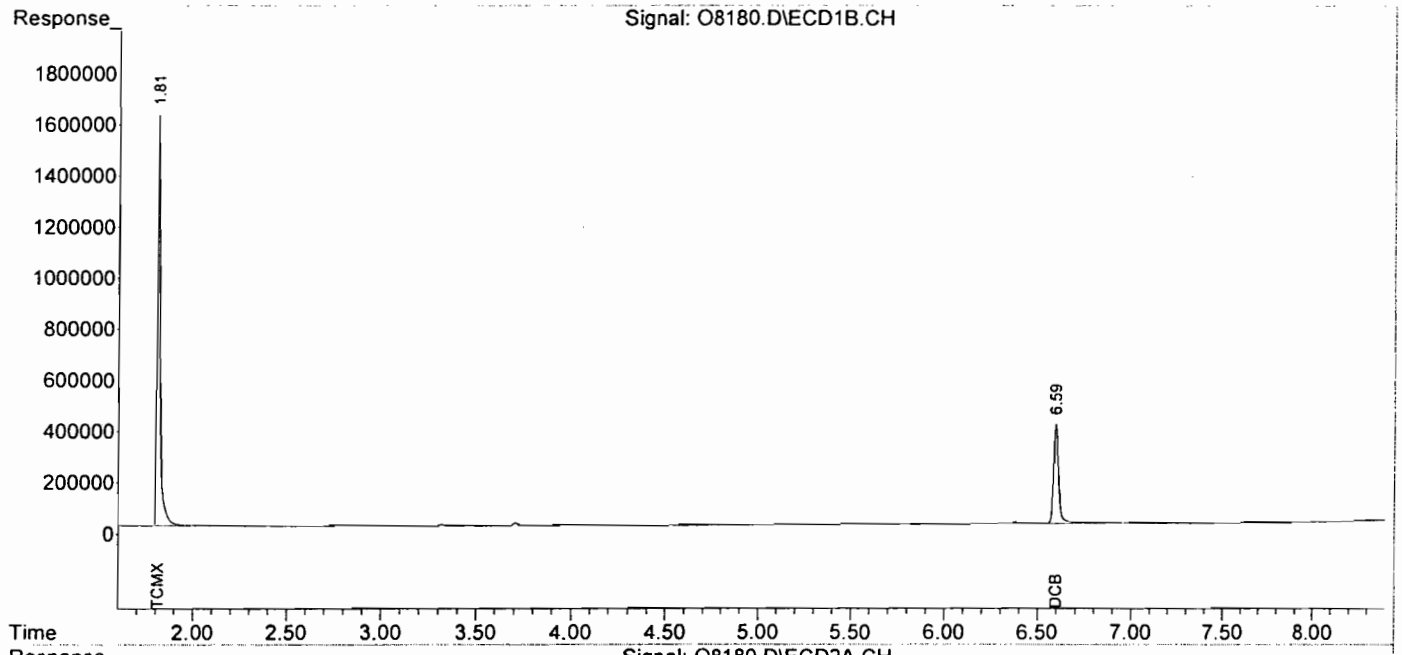
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

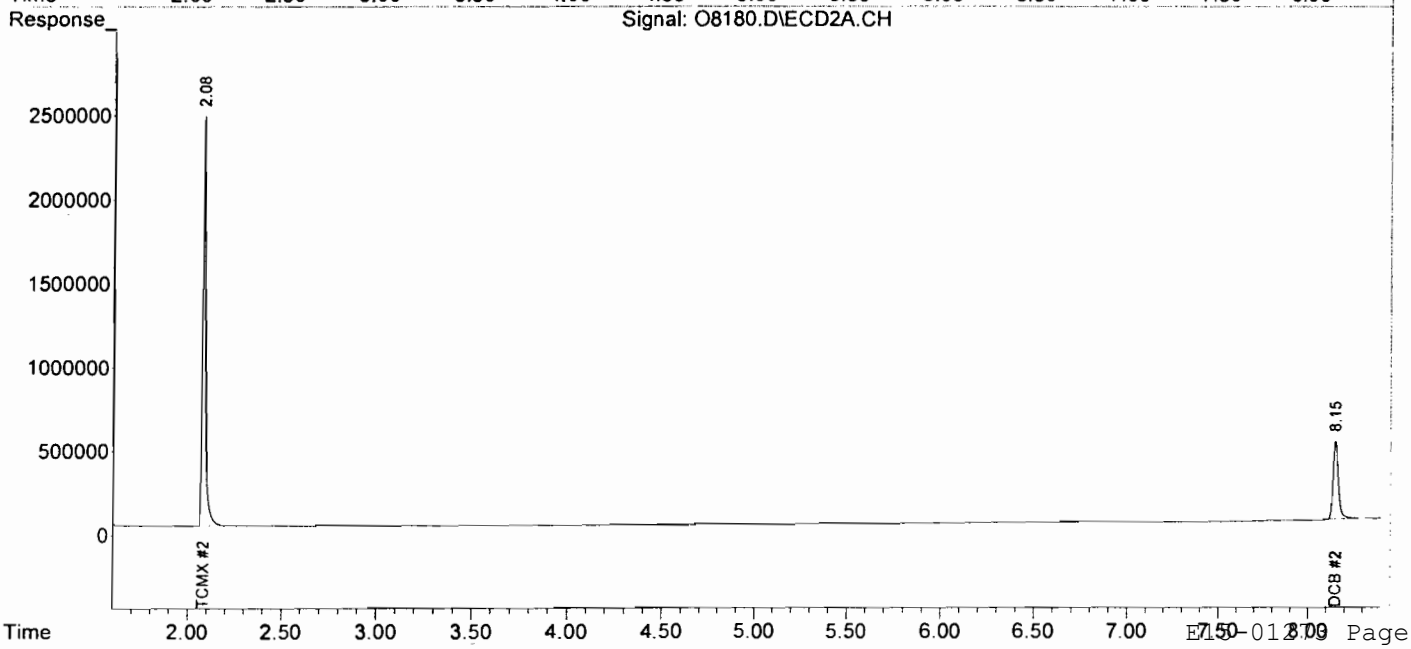
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8180.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:12
Operator : IB
Sample : Pest,BLKA150209-14,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : 08181.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:25
Operator : IB
Sample : Pest,TCLP150206,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	17962059	26647623	176.284	178.865
Spiked Amount 200.000	Range 10 - 180		Recovery =		88.14%	89.43%
2) S DCB	6.60	8.15	7349012	9957501	168.320	177.201m
Spiked Amount 200.000	Range 10 - 180		Recovery =		84.16%	88.60%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

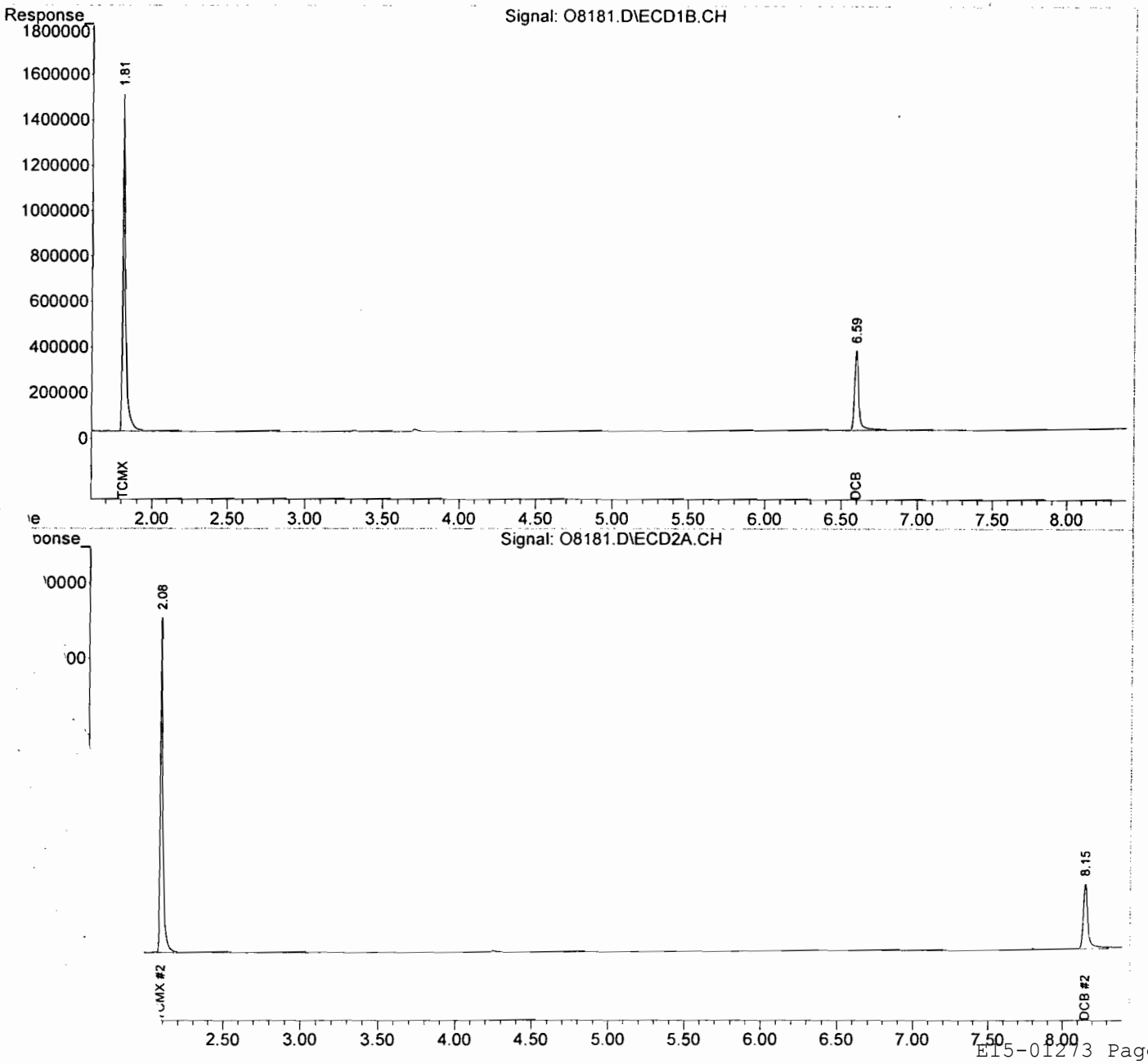
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8181.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:25
Operator : IB
Sample : Pest,TCLP150206,A,200ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:13:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: BLKA150223-08
Client ID: Pest
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0146.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: TCLP150219
Client ID: Pest
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/23/2015
Data file: V0147.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0146.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:38
Operator : IB
Sample : Pest,BLKA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:44:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.89	2.06	152.4E6	40933898	203.156	209.680
Spiked Amount 200.000			Recovery	=	101.58%	104.84%
2) S DCB	6.06	6.73	51597696	15526898	183.126	191.234
Spiked Amount 200.000			Recovery	=	91.56%	95.62%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

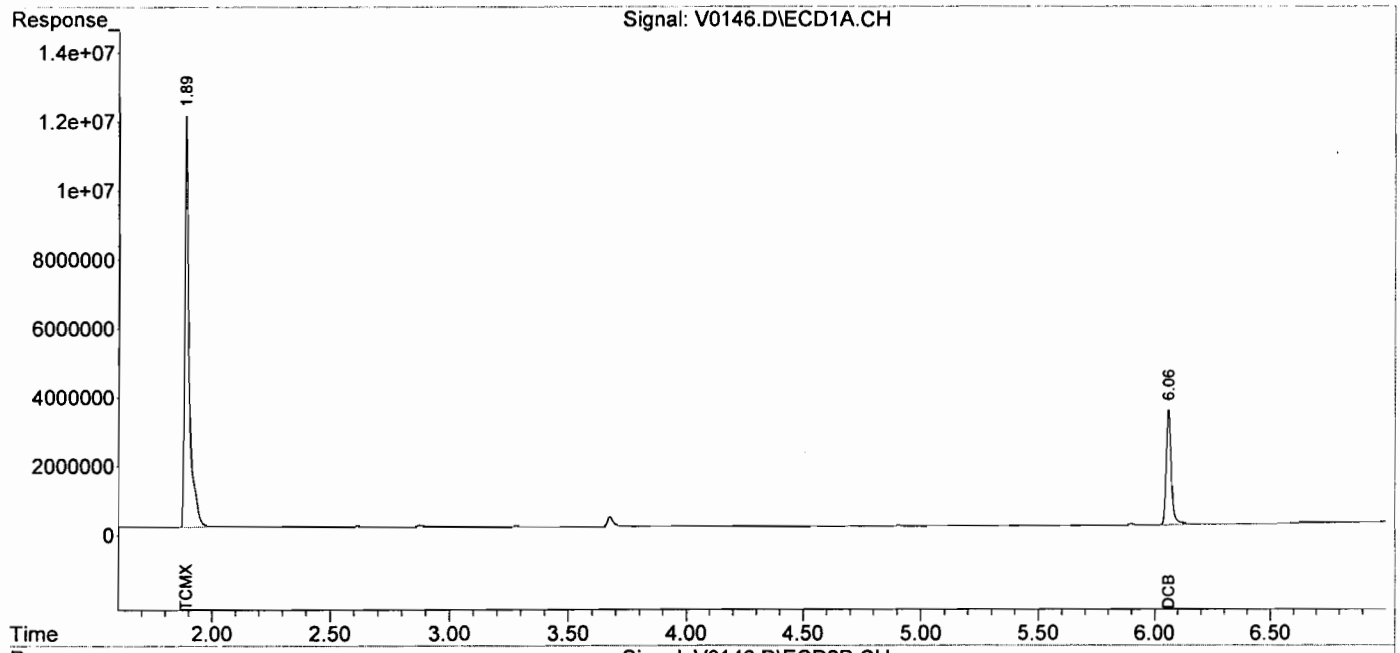
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

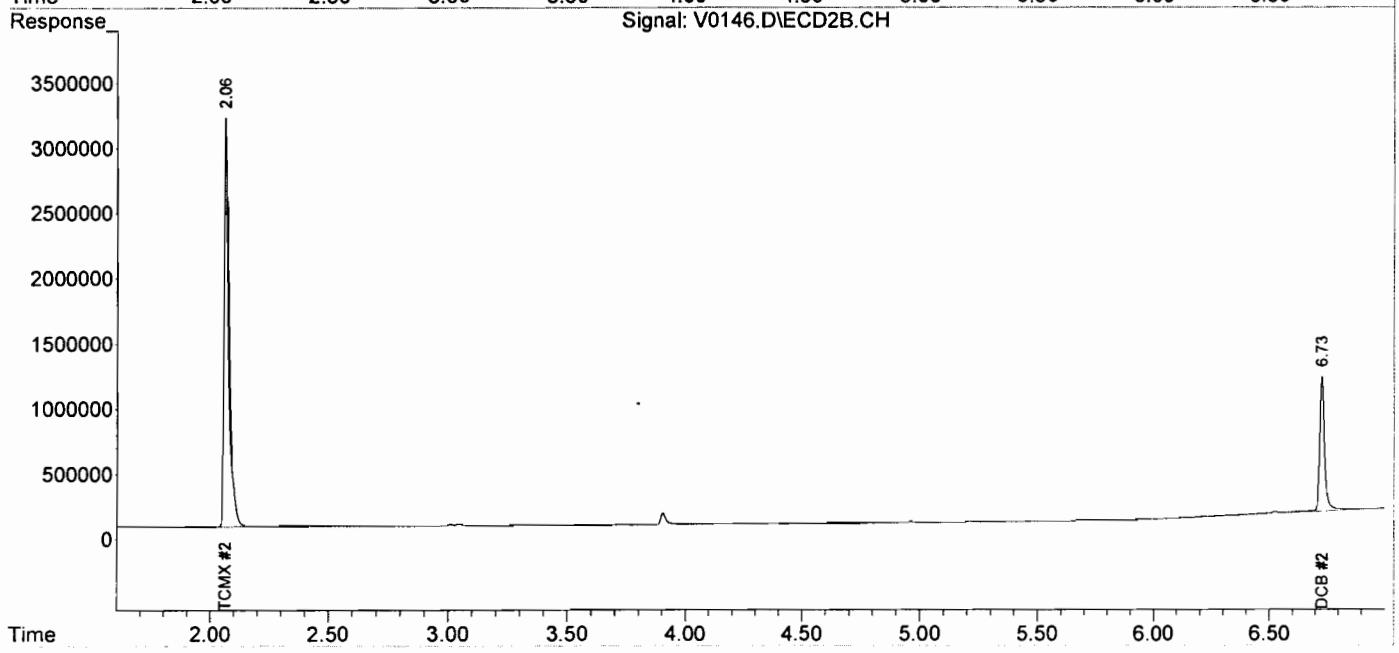
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0146.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:38
Operator : IB
Sample : Pest,BLKA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:44:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0147.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:49
Operator : IB
Sample : Pest,TCLP150219,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:41:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.89	2.06	154.5E6	42035396	205.881	215.322
Spiked Amount 200.000			Recovery	=	102.94%	107.66%
2) S DCB	6.05	6.73	54239725	15255234	192.503	187.888
Spiked Amount 200.000			Recovery	=	96.25%	93.94%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

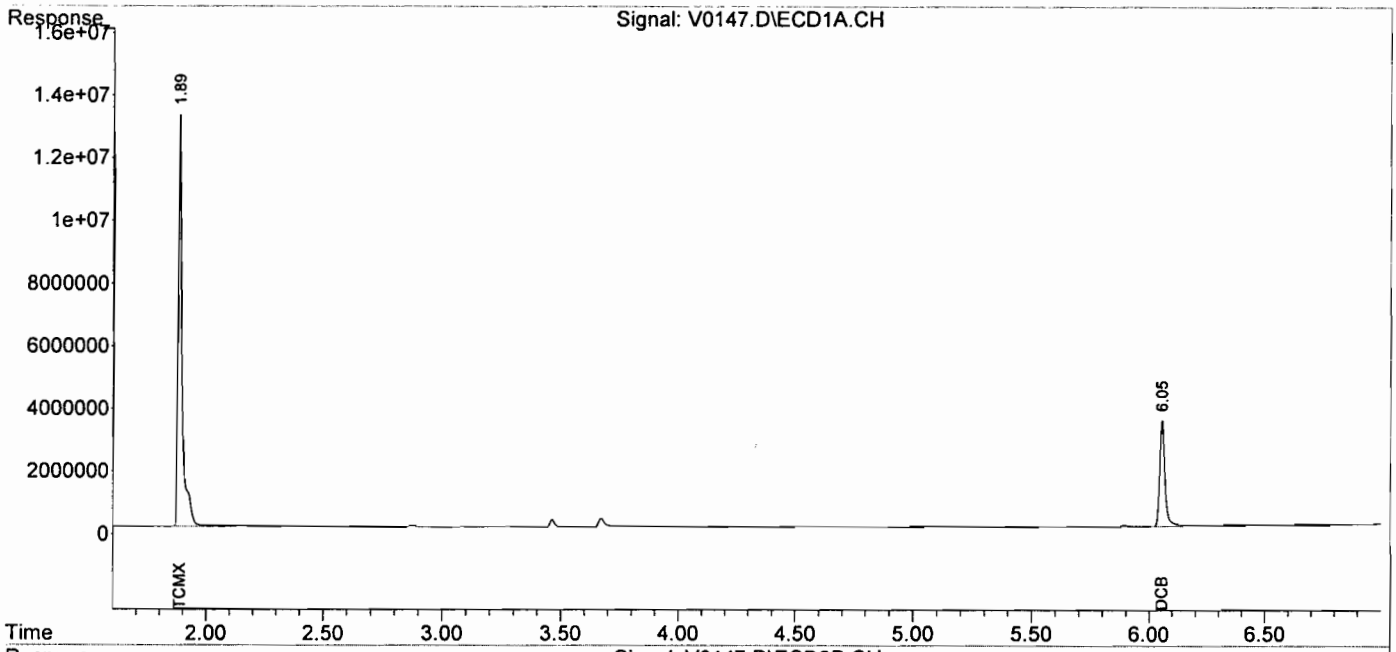
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

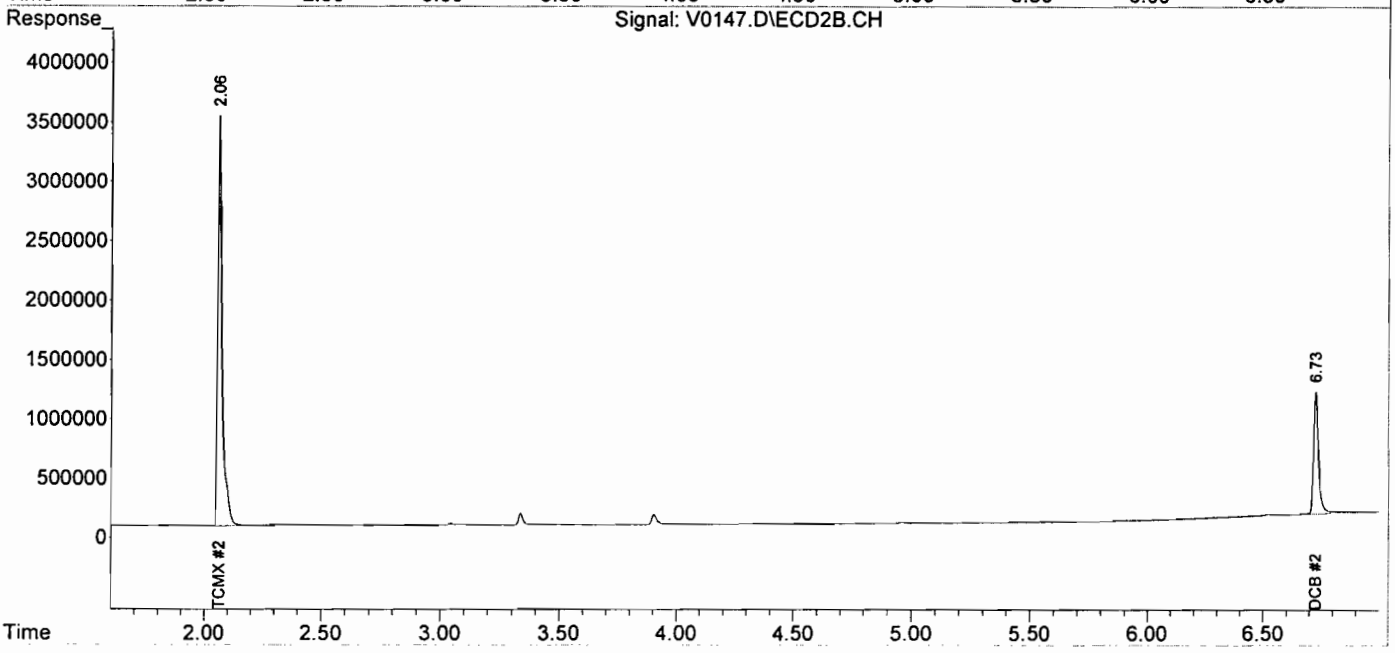
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0147.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 14:49
Operator : IB
Sample : Pest,TCLP150219,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:41:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8182.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:50
Operator : IB
Sample : Pest,00895-001MS,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18083534	27540303	177.476	184.857
	Spiked Amount 200.000	Range 10 - 180		Recovery =		88.74%	92.43%
2) S	DCB	6.60	8.15	9078537	11801646	207.932	210.019
	Spiked Amount 200.000	Range 10 - 180		Recovery =		103.97%	105.01%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	12635080	18072353	67.490	71.932
4) T	beta-BHC	2.38	2.86	4937394	6807957	58.523	64.873
5) T	gamma-BHC (Linda	2.33	2.80	11616594	16913298	74.530	75.191
6) T	delta-BHC	2.51	3.12	11426171	15901234	67.612	71.842
7) T	Heptachlor	2.66	3.18	11424221	16018628	74.174	78.996
8) T	Aldrin	2.89	3.48	11523546	16260367	72.017	75.749
9) T	Heptachlor epoxi	3.38	4.02	10638946	14792010	73.613	76.465
10) T	Endosulfan I	3.73	4.41	10852553	13790519	76.699	78.311
11) T	4,4'-DDE	3.67	4.51	10158718	14355478	78.721	78.289
12) T	Dieldrin	3.94	4.69	9869678	13308791	66.673	68.500
13) T	Endrin	4.16	5.01	9914725	12988666	92.305	97.859
14) T	Endosulfan II	4.37	5.23	9355410	13092705	73.340	75.821
15) T	4,4'-DDD	4.22	5.11	7990309	11065656	71.744	77.058
16) T	Endrin aldehyde	4.78	5.59	7072383	9516624	63.954	64.009
17) T	Endosulfan sulfa	5.21	5.89	8245088	10918741	72.181	74.744
18) T	4,4'-DDT	4.49	5.45	8217881	10441997	86.466	93.938
19) T	Endrin ketone	5.50	6.49	10163330	14096368	69.298	72.280
20) T	Methoxychlor	4.98	6.20	4285084	5515539	94.070	98.225
21) T	alpha-Chlordane	3.60	4.35	10547008	14635048	74.307	76.771
22) T	gamma-Chlordane	3.49	4.20	11194402	15522628	76.020	79.128
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

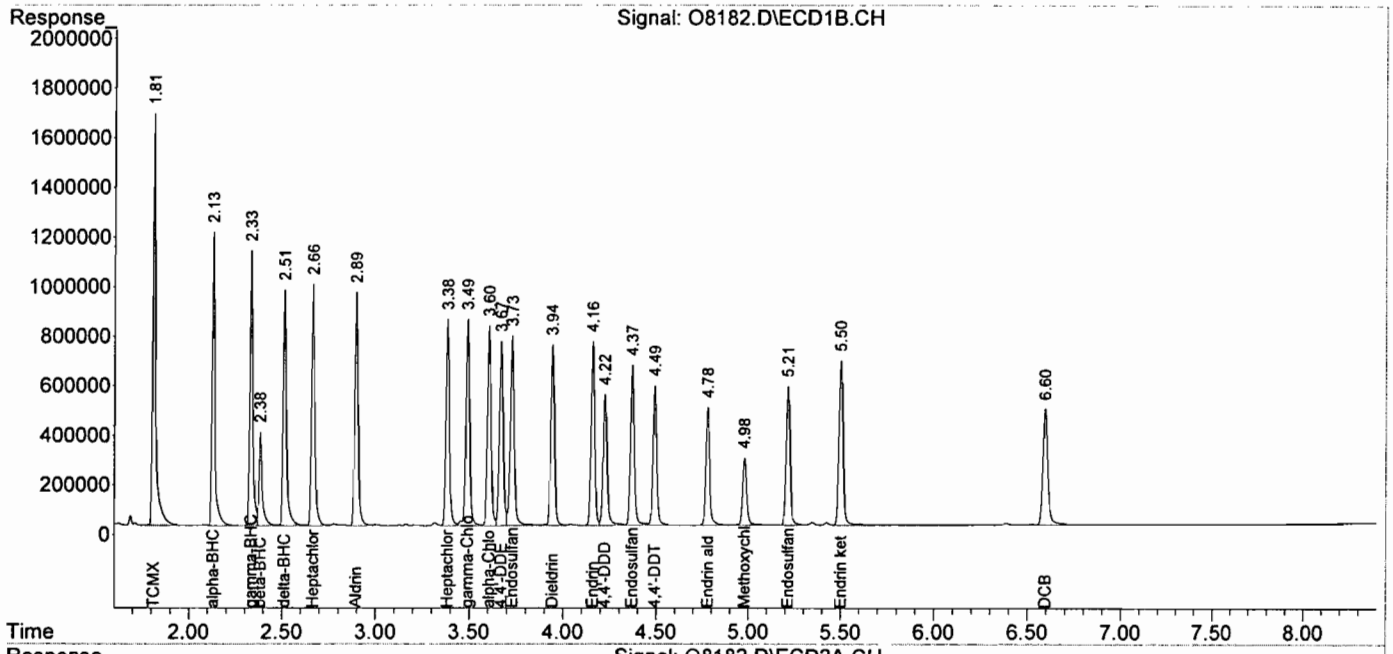
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

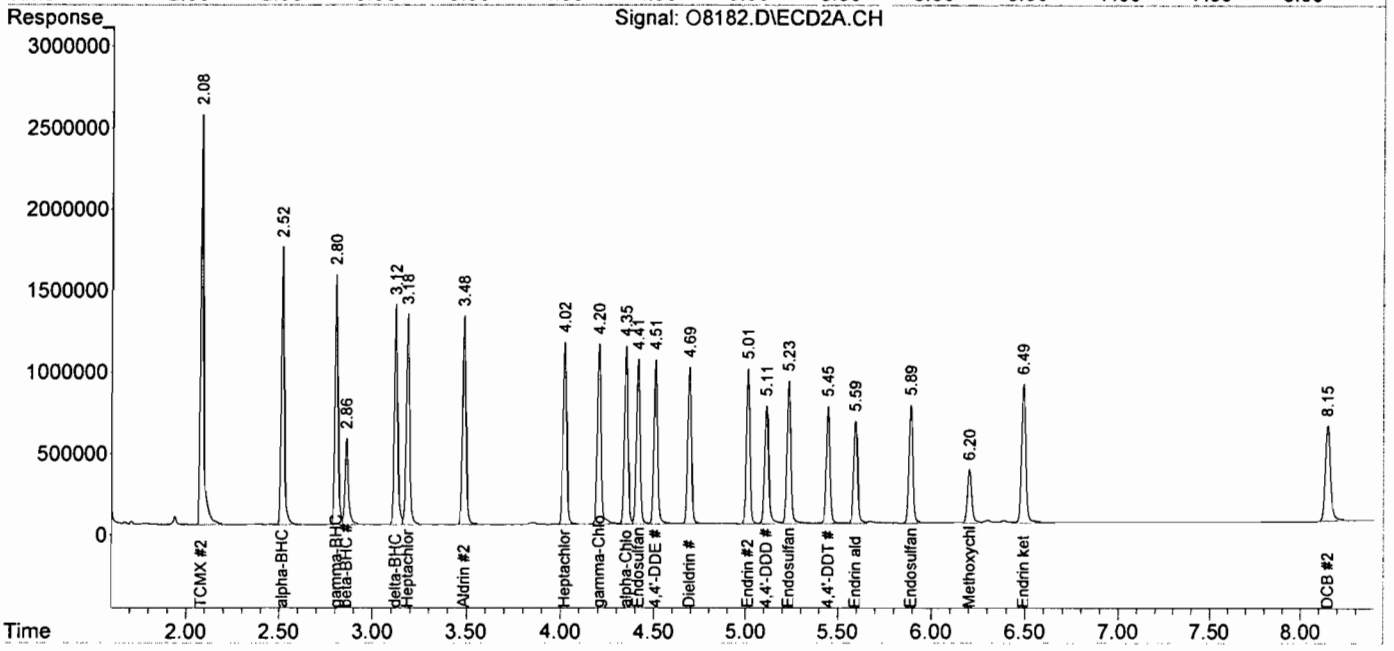
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8182.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 12:50
Operator : IB
Sample : Pest,00895-001MS,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8183.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:03
Operator : IB
Sample : Pest,00895-001MSD,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.81	2.08	18274433	27785428	179.350	186.503
Spiked Amount	200.000	Range	10 - 180	Recovery	=	89.67%	93.25%
2) S	DCB	6.60	8.15	8942231	11731282	204.811	208.767
Spiked Amount	200.000	Range	10 - 180	Recovery	=	102.41%	104.38%
	Target Compounds						
3) T	alpha-BHC	2.13	2.52	13259680	18698354	70.826	74.423
4) T	beta-BHC	2.38	2.86	5456322	7334095	64.674	69.886
5) T	gamma-BHC (Linda	2.33	2.80	11977768	17494723	76.848	77.776
6) T	delta-BHC	2.51	3.12	12056592	16829909	71.343	76.038
7) T	Heptachlor	2.66	3.18	11927827	16693332	77.444	82.323
8) T	Aldrin	2.89	3.48	11897374	16666721	74.353	77.642
9) T	Heptachlor epoxi	3.38	4.02	10862960	15136006	75.163	78.243
10) T	Endosulfan I	3.73	4.41	11068938	14092324	78.228	80.025
11) T	4,4'-DDE	3.67	4.51	10542574	14741090	81.696	80.392
12) T	Dieldrin	3.94	4.69	10069610	13618113	68.024	70.092
13) T	Endrin	4.16	5.01	10186117	13373937	94.832	100.762
14) T	Endosulfan II	4.37	5.23	9708145	13573542	76.105	78.605
15) T	4,4'-DDD	4.22	5.11	8211821	11525520	73.733	80.261
16) T	Endrin aldehyde	4.78	5.59	7374435	9924458	66.685	66.752
17) T	Endosulfan sulfa	5.21	5.89	8725902	11610772	76.390	79.482
18) T	4,4'-DDT	4.49	5.45	8689146	11093160	91.424	99.796
19) T	Endrin ketone	5.50	6.49	10619847	14889880	72.411	76.349
20) T	Methoxychlor	4.98	6.20	4601272	6152005	101.012	109.560
21) T	alpha-Chlordane	3.60	4.35	10728404	14944648	75.585	78.395
22) T	gamma-Chlordane	3.49	4.20	11403719	15949507	77.441	81.304
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

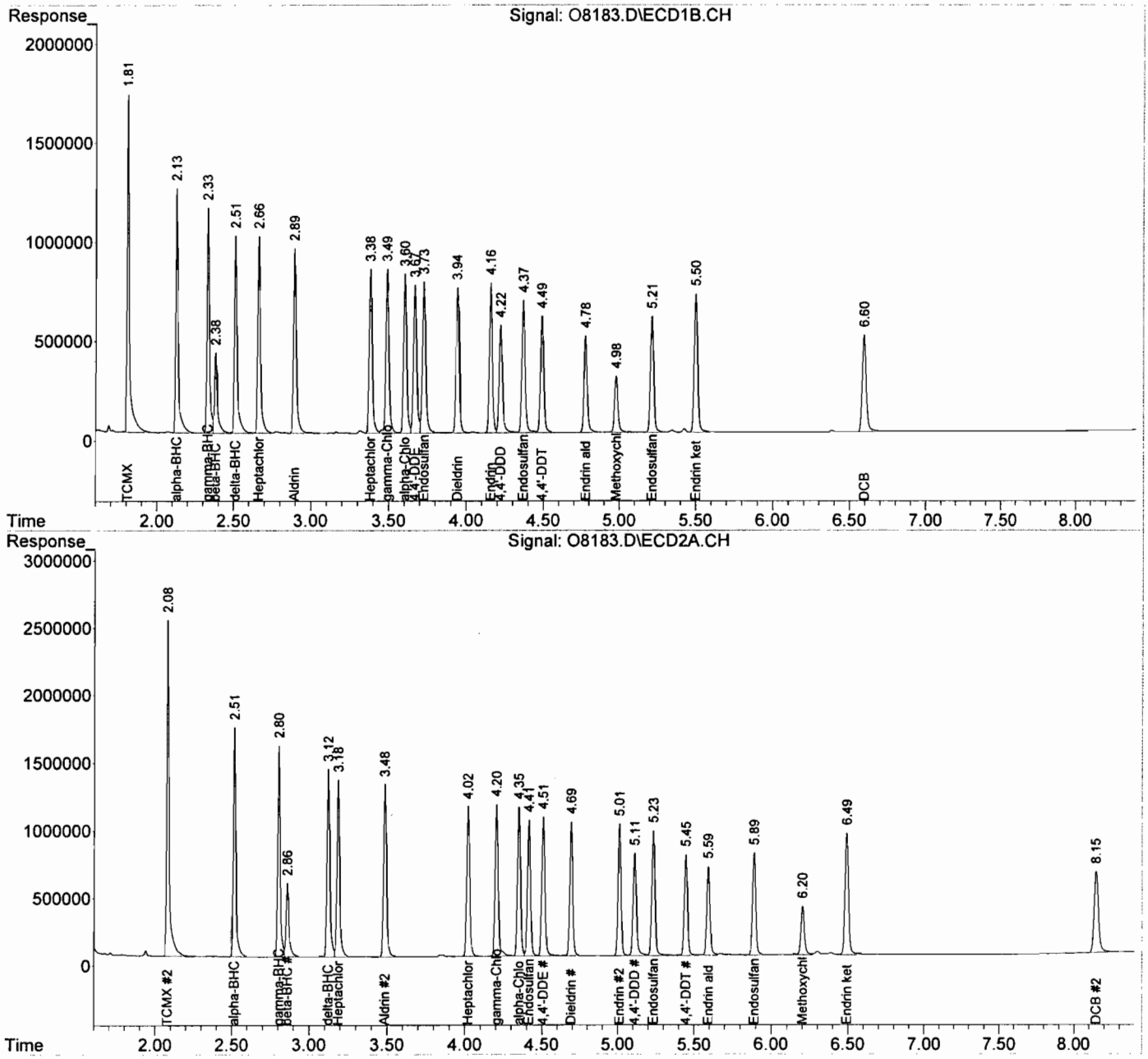
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8183.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:03
Operator : IB
Sample : Pest,00895-001MSD,T,50ml,100,5
Misc : NA,02/09/15,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:19:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8184.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:15
Operator : IB
Sample : GROWES_W,E15-00895-001,T,200ml,100,5
Misc : 150209-14,02/09/15,02/05/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:21:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.81	2.08	16552148	25630332	162.447	172.037
Spiked Amount 200.000	Range 10 - 180		Recovery =		81.22%	86.02%
2) S DCB	6.60	8.15	7903218	10436883	181.013	185.732
Spiked Amount 200.000	Range 10 - 180		Recovery =		90.51%	92.87%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

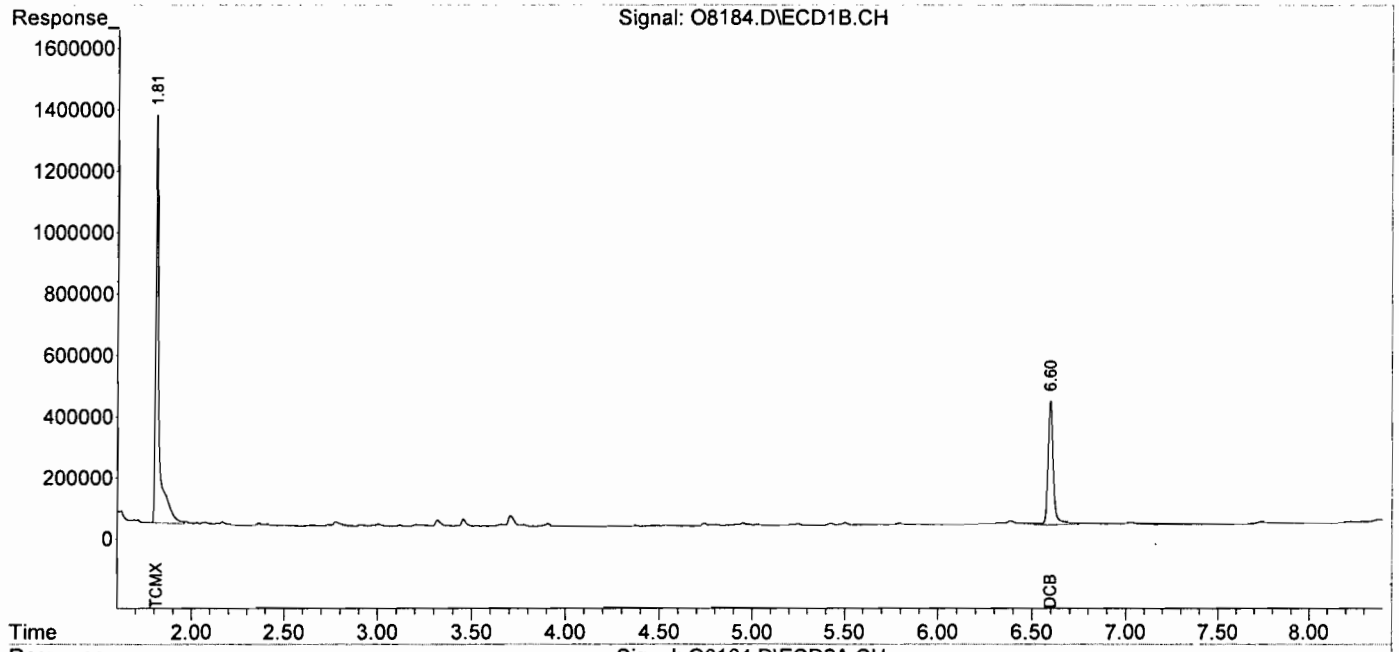
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

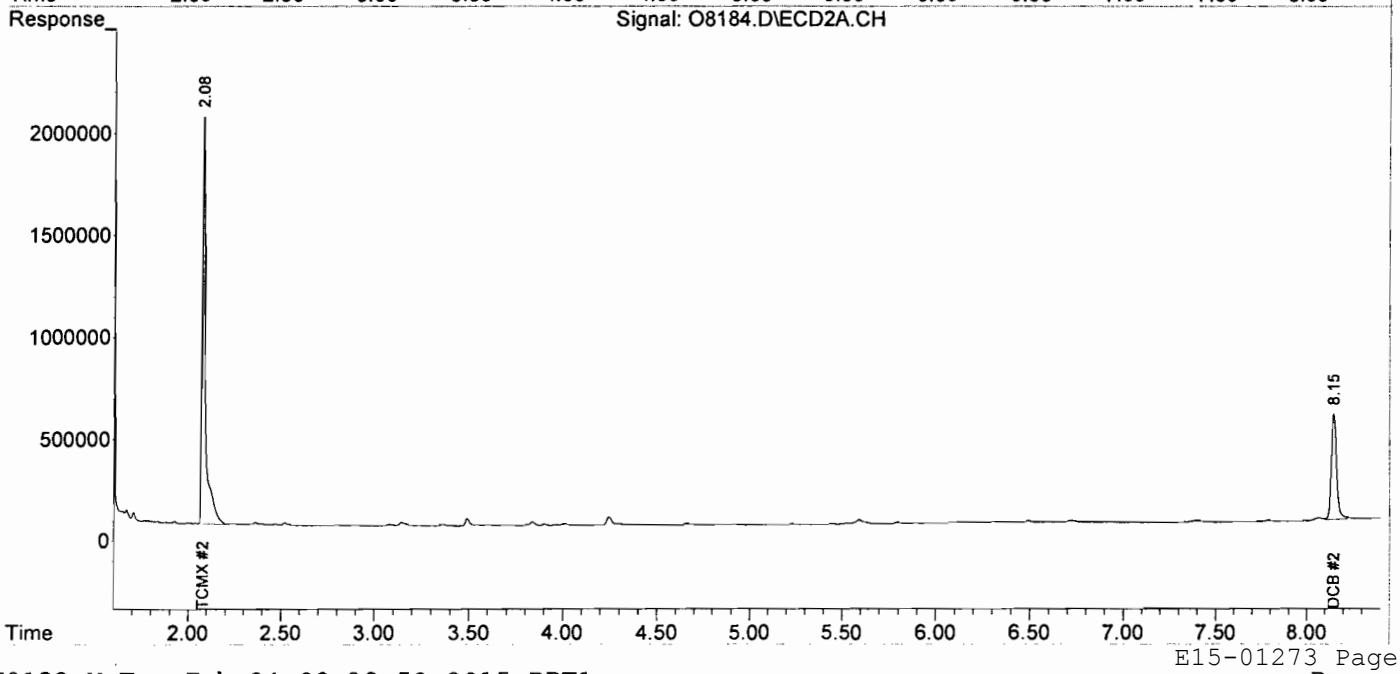
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-10-15\
Data File : O8184.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 10 Feb 2015 13:15
Operator : IB
Sample : GROWES_W,E15-00895-001,T,200ml,100,5
Misc : 150209-14,02/09/15,02/05/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 10 14:21:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0122.M
Quant Title :
QLast Update : Tue Feb 10 11:46:03 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0148.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:01
Operator : IB
Sample : Pest,LCSA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	TCMX	1.89	2.06	155.4E6	42365609	207.154	217.014
	Spiked Amount 200.000			Recovery	=	103.58%	108.51%
2) S	DCB	6.05	6.73	55202401	15892649	195.919	195.739
	Spiked Amount 200.000			Recovery	=	97.96%	97.87%
	Target Compounds						
3) T	alpha-BHC	2.23	2.48	119.5E6	31301194	73.978	76.670
4) T	beta-BHC	2.49	2.79	42192720	10499189	66.814	67.190
5) T	gamma-BHC (Linda	2.43	2.73	107.1E6	27496942	75.468	77.148
6) T	delta-BHC	2.61	3.01	102.3E6	25447022	68.527	69.862
7) T	Heptachlor	2.76	3.07	90421542	24263018	73.396	74.476
8) T	Aldrin	2.97	3.32	100.4E6	25960005	76.472	76.744
9) T	Heptachlor epoxi	3.40	3.74	83359916	22453775	75.309	75.816
10) T	Endosulfan I	3.69	4.04	85836395	20845255	78.729	76.616
11) T	4,4'-DDE	3.64	4.12	82752090	21574805	77.438	77.314
12) T	Dieldrin	3.86	4.26	75832396	19839561	67.719	66.876
13) T	Endrin	4.03	4.50	66064312	17098807	75.109	75.327
14) T	Endosulfan II	4.21	4.68	70174778	18915411	74.332	74.825
15) T	4,4'-DDD	4.08	4.58	71849317	17827422	75.534	76.510
16) T	Endrin aldehyde	4.54	4.96	54809260	13854716	69.352	68.311
17) T	Endosulfan sulfa	4.90	5.21	60725092	16107084	72.301	70.028
18) T	4,4'-DDT	4.30	4.85	54418308	13228742	76.440	76.286
19) T	Endrin ketone	5.14	5.70	69743083	18803460	76.699	75.972
20) T	Methoxychlor	4.70	5.46	25882696	6305254	81.451	81.993
21) T	alpha-Chlordane	3.59	3.99	85427599	21177203	74.947	75.656
22) T	gamma-Chlordane	3.49	3.88	90671584	23842077	75.415	80.526
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

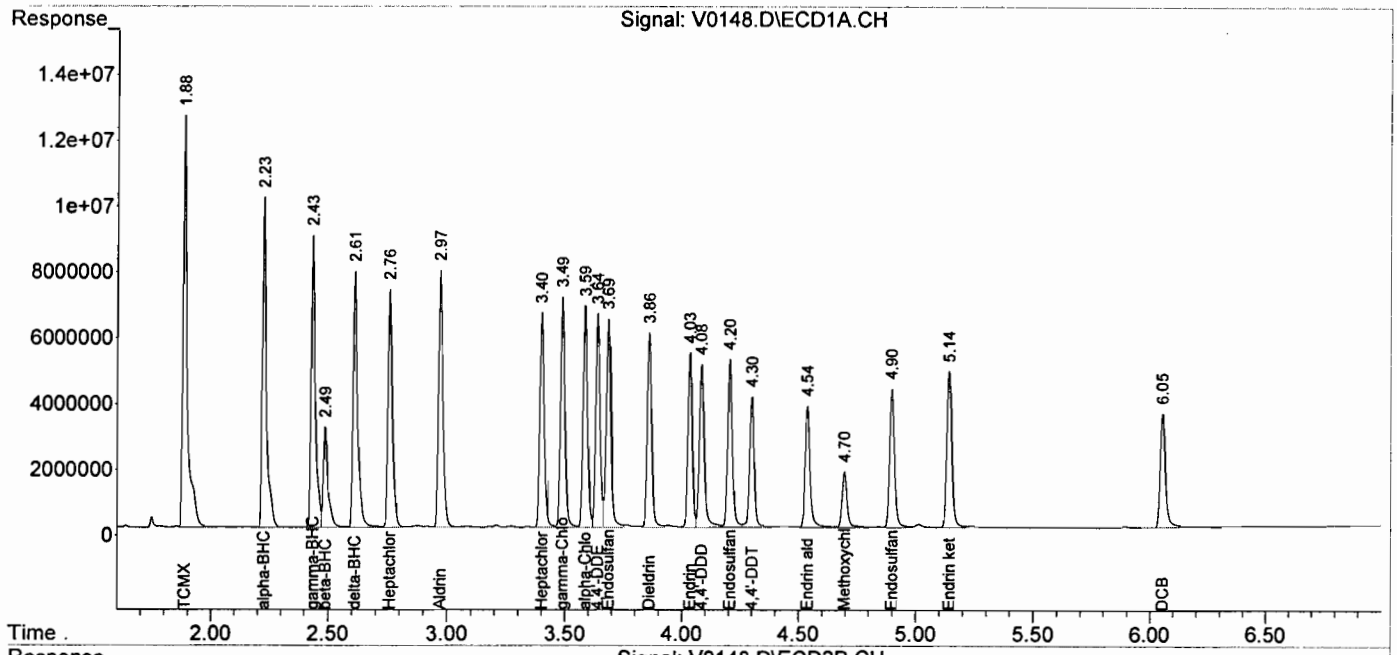
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

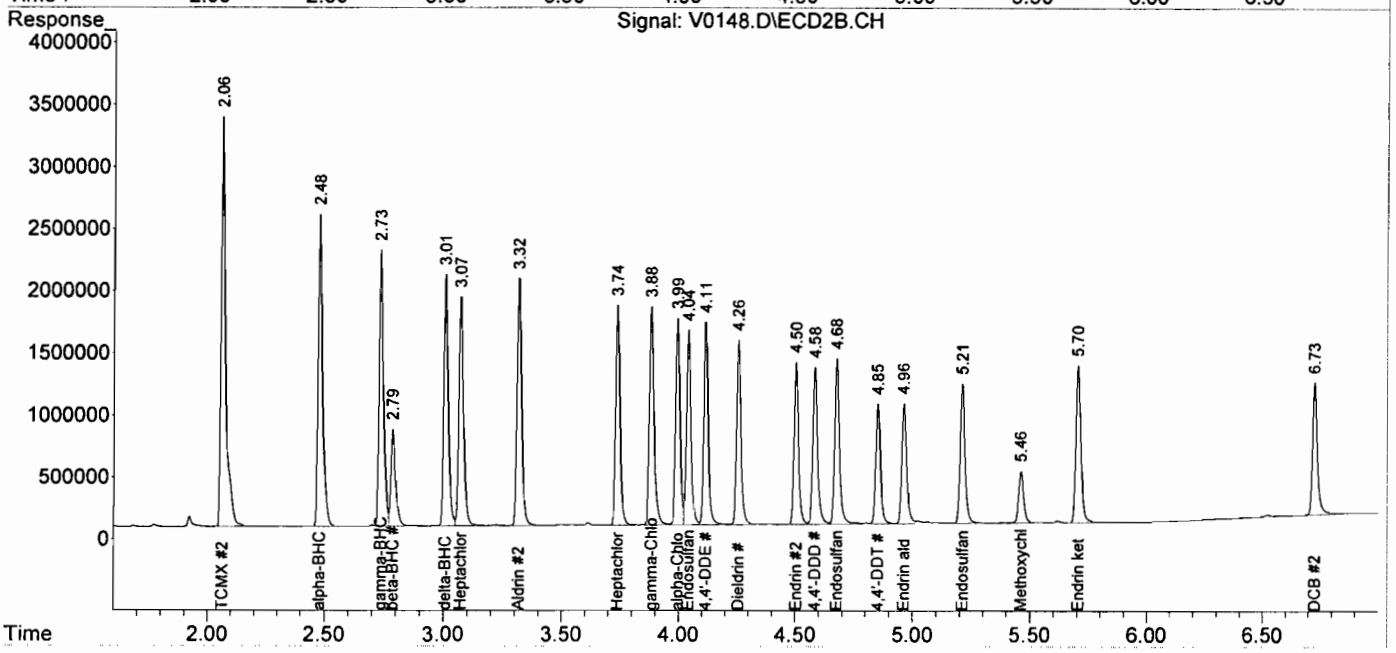
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-23-15\
Data File : V0148.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Feb 2015 15:01
Operator : IB
Sample : Pest,LCSA150223-08,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Feb 24 08:34:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0223.M
Quant Title :
QLast Update : Mon Feb 23 13:50:19 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
PESTICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Aqueous)

Extraction Date/Time: 02/09/2015 16:27

Batch ID: **150209-14**

Tray: 19

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150209-14	TCLP Pesticides	200	5	10	1			
LCSA150209-14	TCLP Pesticides	200	5	10	1		25	
00895-001MS	TCLP Pesticides	50	5	10	1		25	TCLP150206
00895-001MSD	TCLP Pesticides	50	5	10	1		25	TCLP150206
TCLP150206	TCLP Pesticides	200	5	10	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-17
Surrogate	IAS#5134
SPK 1	
SPK 2	IAS#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	00895-001	TCLP Pesticides	200	5	10	1	0	TCLP150206		00895-001MS / 150209-14
2	00896-001	TCLP Pesticides	200	5	10	1	0	TCLP150206		00895-001MS / 150209-14
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/09/2015 16:27
Weighed	Archie	02/09/2015 16:49
Surrogated	Archie	02/09/2015 16:50
Filtered	Archie	02/09/2015 17:46
Transferred	Archie	02/09/2015 17:46
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Aqueous)

Extraction Date/Time: 02/23/2015 13:38

Batch ID: **150223-08**

Tray: **47**

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150223-08	TCLP Pesticides	200	5	10	1			
LCSA150223-08	TCLP Pesticides	200	5	10	1		25	
TCLP150219	TCLP Pesticides	200	5	10	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-17
Surrogate	#5134
SPK 1	
SPK 2	#5081

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TCLP Pesticides	200	5	10	1	10.6	R-72; TCLP150219		00895-001MS / 150209-14
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/23/2015 13:38
Weighed	Archie	02/23/2015 13:39
Surrogated	Archie	02/23/2015 13:40
Filtered	Archie	02/23/2015 13:51
Transferred	Archie	02/23/2015 13:51
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Pest

DATE	1/22/2015 9:19	**Extra. Batch**	
INSTRUMENT	O		
METHOD	OPST0122		
SYS METHOD	8081B (eg. 8015B M, 3810)		
ANALYST	Iwona		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8035		ENDRIN/DDT						1			
2	100	O8036		HEXANE						1			
3	99	O8037		ISOOCTANE						1			
4	95	O8038		PRIMER						1			
5	5	O8039	ICC_PEST_L5_IAS_5113,300_PPB							1			
6	6	O8040	ICC_PEST_L4_IAS_5114,200_PPB							1			
7	9	O8041	ICC_PEST_L3_IAS_5115,100_PPB							1			
8	7	O8042	ICC_PEST_L2_IAS_5116,50_PPB							1			
9	8	O8043	ICC_PEST_L1_IAS_5117,2_PPB							1			
10	3	O8044	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	O8045	ICC_CHLOR_C_IAS_5118,0.5_PPM							1			
12	2	O8046	ICV_PEST_C_IAS_5171,100_PPB							1			

LABORATORY CHRONICLE - GC

Pest

DATE 2/23/2015 15:00 **Extra. Batch** 150223-08 BA Aqueous

INSTRUMENT V

METHOD VPST0223

SYS METHOD 8081B (eg. 8015B M, 3810)

ANALYST Iwona

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	V0134		ENDRIN/DDT						1			
2	##	V0135		HEXANE						1			
3	99	V0136		ISOOCTANE						1			
4	95	V0137		PRIMER						1			
5	5	V0138	ICC_PEST_L5_IAS_5248,300_PPB							1			
6	6	V0139	ICC_PEST_L4_IAS_5249,200_PPB							1			
7	9	V0140	ICC_PEST_L3_IAS_5250,100_PPB							1			
8	7	V0141	ICC_PEST_L2_IAS_5251,50_PPB							1			
9	8	V0142	ICC_PEST_L1_IAS_5252,2_PPB							1			
10	3	V0143	ICC_TOX_C_IAS_5168,0.5_PPM							1			
11	4	V0144	ICC_CHLOR_C_IAS_5254,0.5_PPM							1			
12	2	V0145	ICV_PEST_C_IAS_5171,100_PPB							1			
13	10	V0146		BLKA150223-08		1	200	5	A			2/23/15	100
14	11	V0147		TCLP150219		1	200	5	A			2/23/15	100
15	12	V0148		LCSA150223-08		1	200	5	A			2/23/15	100
16	13	V0149		01273	1	1	200	5	T	2/18/15	2/19/15	2/23/15	100
17	2	V0150	CCV_PEST_C_IAS_5171,100_PPB							1			

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-~~4809~~ 8097JS	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 mg/mL (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500 µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl TOX (IAS# 5167) 20 µl surr (IAS# 5134) → 10ml (isooctane)			500 PPB (Tox) / 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Post L-2		
5116				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:20			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Post L-1		
5117				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:500			2PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Chlordane Hold. Std		
5118				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 4968	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
JB ~~05/07/15~~ 02/28/15	500ml (IAS# 4968) chlor 200ml (IAS# 5078) surr. → 10ml isooctane			500PPB Chlord 200 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	DRO spike 1		
5119				
~~STD.PREP.DATE~~	~~Co.NAME~~	~~CAT. No.~~	~~LOT No.~~	INITIAL CONCENTRATION
11/11/14	colson	~~PA#~~	(wet chem)	neat
STD.EXP.DATE	DILUTION			~~FINAL CONCENTRATION~~
5/11/15	1g of fuel oil #2 → 10ml			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	Hexane			BM

STANDARD IAS#	STANDARD NAME:	Pest Stock		
5113				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	ULTRA	PPM-808C-1	CL-1069	1000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~11/07/15~~ 02/28/15	10µl (ULTRA) + 200µl (surr. IAS#5078) → 10ml isooctane			1000PPB 2000 PPB surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-5		
5113				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:3,33			300PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/08/24 04 JB	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-4		
5114				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:5			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Pest L-3		
5115				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
11/07/14	IAS# 5112	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl of Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10542B3 DCB B2-20924	3168100 2188800	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ml of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS#5135 + 400 µl of SURR. IAS#5134 → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep.	ACE-8081-S	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			IM ~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	Pest L-1		
5252				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:500			2PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Stock		
5253				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	SUPELCO	48065-U	LC01899	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/20/16	100 µl (SUPELCO) → 10ml isooctane			10 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Chlordane Hale. Std.		
5254				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5253	—	—	10PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500 µl (IAS# 5253) Chlad 200 µl (IAS# 5134) Surr. → 10ml isooctane			500PPB Chlordane 200PPB surrogate
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Endrin / DDT Hale. std.		
5255				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5056	—	—	5PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/28/15	1:50			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-5		
5248				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5246 5247	—	—	1000PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:3,33			300 PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-4		
5249				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000 PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:5			200 PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-3		
5250				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000 PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:10			100PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Post L-2		
5251				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
02/20/15	IAS# 5247	—	—	1000PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	1:20			50PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 Holding Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~			VOID	
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-2081-5	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10ml (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPM 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	1016 PCB		
5165				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-~~4809~~ 8097 JS	LB95199	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	1260 PCB		
5166				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	4-4809	LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
04/30/15	—			1000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	Toxaphene Stock		
5167				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	SUPELCO	47616-U	LC02537	200 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/19/15	500µl (SUPELCO) → 10ml (isooctane) (1:20)			10 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	Toxaphene Work. Std.		
5168				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/19/14	IAS# 5167	—	—	10 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	500µl TOX (IAS# 5167) 20µl surr (IAS# 5134) → 10ml (Isooctane)			500PPB (Tox) / 2000PB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JB

STANDARD IAS#	STANDARD NAME:	NJ-EPH-DRO L1		
5133				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/4/14	5128	—	—	2000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/4/15	1:100 (10µl of IAS 5128 + 990 µl of Hexane)			20 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/2024	Hexane		141523	JH

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5134				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/10/14	CHEM SERVICE	TCMX S-10562B3 DCB B2-2094	31G3100 21588DO	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/10/15	10ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
5135				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	SUPELCO	1016: 48097 1260: 4-4809	XA 10671V LC 02622	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/11/15	1:10 (1ML of 1016, 1260) → 10ML isooctane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5136				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/11/14	IAS# 5135	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/11/15	1:10 Stock (1ml of IAS# 5135 + 400 µl of SURR. IAS# 5134) → 10ML ISOOCT.			10 PPM + 4 PPM SURR.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	Pest SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex CertiPrep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~JS 5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

LABORATORY CHRONICLE - GC

Pest

DATE	2/10/2015 9:19	**Extra. Batch**	**150209-14**	BA	Aqueous
INSTRUMENT	**O**		**150209-10**	BS	Soil (Sonic)
METHOD	**OPST0122**				
SYS METHOD	**8081B** (eg. 8015B M, 3810)				
ANALYST	**Iwona**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	1	O8175		ENDRIN/DDT						1			
2	95	O8176		PRIME									
3	2	O8177	CCV_PEST_C_IAS_5171,100_PPB							1			
4	3	O8178	CCV_TOX_C_IAS_5168,0.5_PPM							1			
5	4	O8179	CCV_CHLOR_C_IAS_5118,0.5_PPM							1			
6	5	O8180		BLKA150209-14		1	200	5	A			2/9/15	100
7	6	O8181		TCLP150206		1	200	5	A			2/9/15	100
8	8	O8182		00895-001MS		1	50	5	T			2/9/15	100
9	9	O8183		00895-001MSD		1	50	5	T			2/9/15	100
10	10	O8184		00895	1	1	200	5	T	2/5/15	2/5/15	2/9/15	100
11	11	O8185		00896	1	1	200	5	T	2/5/15	2/5/15	2/9/15	100
12	7	O8186		LCSA150209-14		1	200	5	A			2/9/15	100
13	2	O8187	CCV_PEST_C_IAS_5171,100_PPB							1			
14	12	O8188		BLKS150209-10		1	30.00	5	S			2/9/15	0
15	13	O8189		LCSS150209-10		1	30.00	5	S			2/9/15	0
16	14	O8190		01008	1	5	30.01	5	S	2/6/15	2/6/15	2/9/15	17.3
17	15	O8191		01008	2	1	30.61	5	S	2/6/15	2/6/15	2/9/15	20.9
18	16	O8192		01008	3	5	30.91	5	S	2/6/15	2/6/15	2/9/15	13.4
19	17	O8193		01008	4	5	30.26	5	S	2/6/15	2/6/15	2/9/15	20.1
20	18	O8194		01008	5	5	30.14	5	S	2/6/15	2/6/15	2/9/15	13.2
21	19	O8195		01008	7	1	30.41	5	S	2/6/15	2/6/15	2/9/15	13.4
22	20	O8196		01008	8	1	30.66	5	S	2/6/15	2/6/15	2/9/15	18.1
23	2	O8197	CCV_PEST_C_IAS_5171,100_PPB							1			

HERBICIDE DATA

HERBICIDE QC SUMMARY

HERBICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/23/2015

Client ID	Lab Sample ID	Matrix	DCPA 1 % rec	#	DCPA 2 % rec	#
Herb	BLKS150220-11	SOIL	76		79	
GPEC-WC1	E15-01273-001	SOIL	79		89	
Herb	LCSS150220-11	SOIL	88		98	

Surrogate QC Limits	Soil	Aqueous/Leachate
DCPA = 2,4-Dichlorophenylacetic acid	30-150	30-150
	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150220-11
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2564.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
Dalapon	200.0	0.0	163.2	82	
Dicamba	200.0	0.0	176.1	88	
2,4-D	200.0	0.0	143.1	72	
2,4,5-TP (Silvex)	200.0	0.0	197.2	99	
2,4,5-T	200.0	0.0	211.3	106	
2,4-DB	200.0	0.0	134.8	67	
Dinoseb	200.0	0.0	111.7	56	

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01088-007
Date Received: 02/11/2015
Date Extracted: 02/17/2015
Date Analyzed: 02/18/2015
MS Data file: W2552.D
MSD Data file: W2553.D

GC Column: DB-5/DB1701P
Sample wt/vol: 15.34g
Matrix-Units: Soil-mg/Kg
% Moisture: 9.90
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
Dalapon	200.00	0.0	143.5	72		137.9	69	4
Dicamba	200.00	0.0	134.0	67		143.9	72	7
2,4-D	200.00	0.0	102.4	51		120.9	60	17
2,4,5-TP (Silvex)	200.00	0.0	147.9	74		163.6	82	10
2,4,5-T	200.00	0.0	150.6	75		157.7	79	5
2,4-DB	200.00	0.0	110.8	55		125.1	63	12
Dinoseb	200.00	0.0	93.2	47		72.9	36	24

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2550.D	Instrument ID:	GC-W
Date Extracted:	02/17/2015	Matrix:	SOIL
Date Analyzed:	02/18/2015	Time Analyzed:	09:33

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	LCSS150217-07	02/18/2015	09:47
Herb	01088-007MS	02/18/2015	10:01
Herb	01088-007MSD	02/18/2015	10:14
JA_DB_CO	E15-01128-007	02/18/2015	10:28
JA_MH_A_	E15-01129-007	02/18/2015	10:42
DS_MH-A_	E15-01087-007	02/18/2015	10:56
DS_DB-A_	E15-01088-007	02/18/2015	11:10

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2562.D	Instrument ID:	GC-W
Date Extracted:	02/20/2015	Matrix:	SOIL
Date Analyzed:	02/23/2015	Time Analyzed:	13:59

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1	E15-01273-001	02/23/2015	14:27
Herb	LCSS150220-11	02/23/2015	16:44

HERBICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

DCPA 1 **5.06** **DCPA 2** **4.85**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	DCPA 1 RT	#	DCPA 2 RT	#
Herb	BLKS150220-11	02/23/2015	13:59	5.06		4.85	
GPEC-WC1	E15-01273-001	02/23/2015	14:27	5.06		4.84	
Herb	LCSS150220-11	02/23/2015	16:44	5.06		4.84	

Surrogate QC Limits

DCPA = 2,4-Dichlorophenylacetic acid (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

HERBICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2563.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 14:27
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,15.50g,10.6,5
Misc : 150220-11,02/20/15,02/19/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 15:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	189.4E6	40525711	79.093	88.743
Spiked Amount	100.000			Recovery	=	79.09%	88.74%
	Target Compounds						

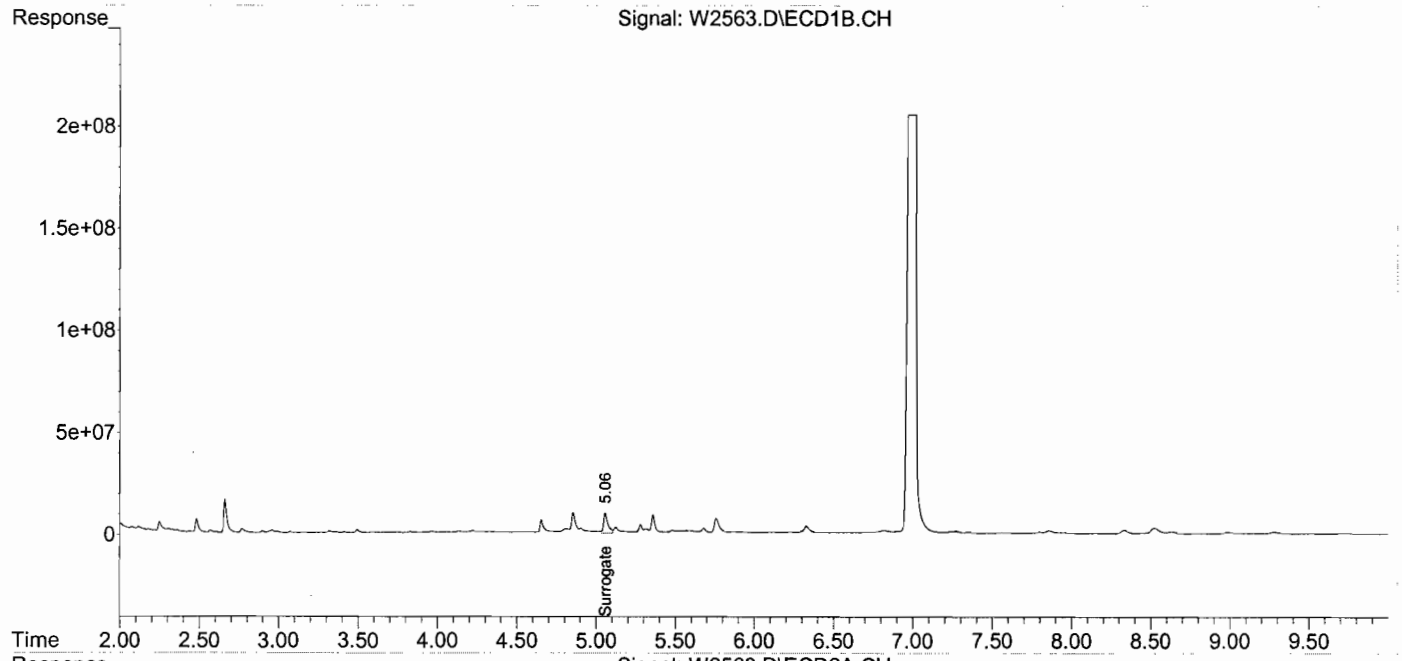
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

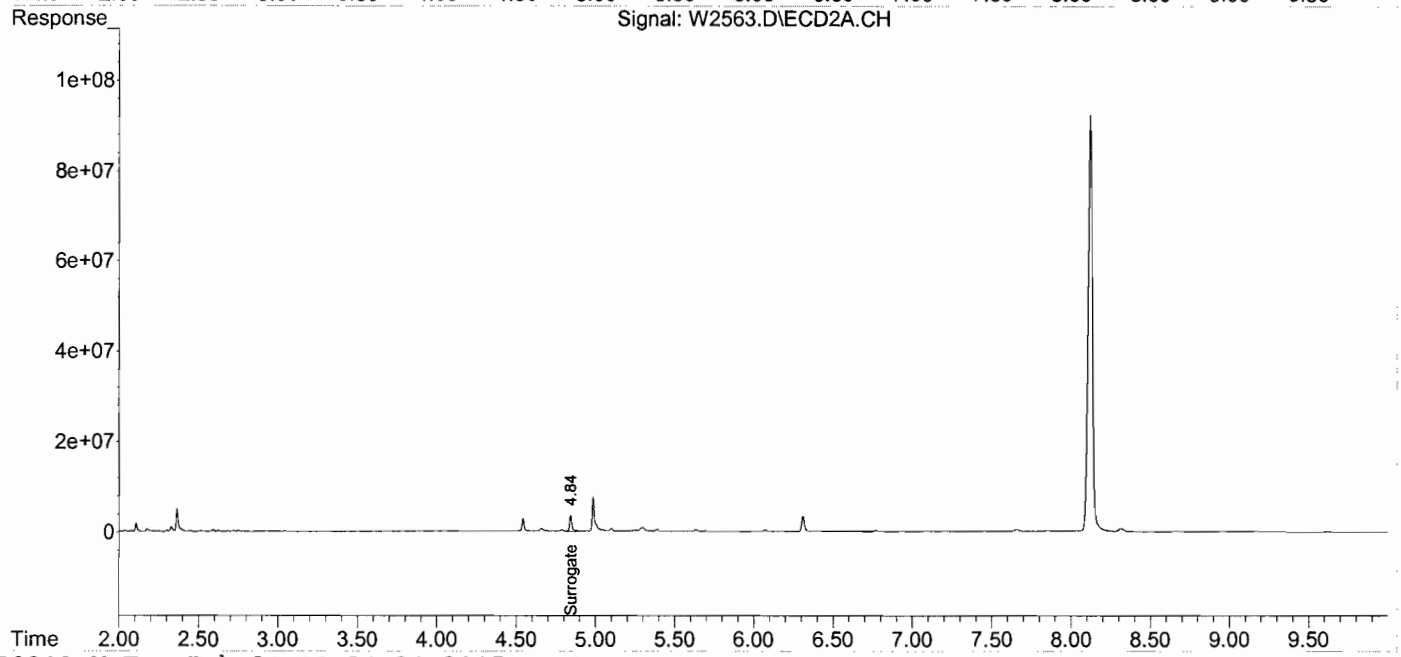
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2563.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 14:27
Operator : JS
Sample : GPEC-WC1,E15-01273-001,S,15.50g,10.6,5
Misc : 150220-11,02/20/15,02/19/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 15:56:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE STANDARDS

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.45	2.45	2.45	2.45	2.45	2.45	2.38	2.52
Dicamba	5.17	5.17	5.17	5.17	5.17	5.17	5.10	5.24
2,4-D	5.68	5.68	5.68	5.68	5.67	5.68	5.60	5.76
2,4,5-TP (Silvex)	6.18	6.18	6.18	6.18	6.18	6.18	6.09	6.27
2,4,5-T	6.37	6.36	6.36	6.36	6.36	6.36	6.27	6.45
2,4-DB	6.75	6.75	6.75	6.74	6.74	6.75	6.66	6.84
Dinoseb	7.76	7.76	7.76	7.76	7.76	7.76	7.67	7.85

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.10	2.10	2.10	2.10	2.10	2.10	2.03	2.17
Dicamba	4.94	4.94	4.94	4.94	4.94	4.94	4.87	5.01
2,4-D	5.44	5.44	5.44	5.44	5.44	5.44	5.36	5.52
2,4,5-TP (Silvex)	5.89	5.89	5.89	5.89	5.89	5.89	5.80	5.98
2,4,5-T	6.11	6.11	6.11	6.11	6.11	6.11	6.02	6.20
2,4-DB	6.44	6.44	6.43	6.43	6.43	6.44	6.35	6.53
Dinoseb	6.67	6.67	6.67	6.67	6.67	6.67	6.58	6.76

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	903207	875903	896803	952818	830288	891804	4.99
Dicamba	2414762	2144372	2181960	2375414	2142152	2251732	5.89
2,4-D	1030492	895263	777527	831600	676964	842369	15.69
Silvex	3142754	3193771	3290176	3665519	3207793	3300003	6.40
2,4,5-T	3329848	3179782	3105259	3374720	2873510	3172624	6.30
2,4-DB	673628	691239	665854	714327	578164	664642	7.79
Dinoseb	2645710	2307269	2293579	2550211	2193909	2398136	7.95

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	152894	151228	159265	171230	151149	157153	5.44
Dicamba	370790	390680	405277	447236	398737	402544	6.99
2,4-D	116908	127719	116341	123187	107739	118379	6.40
Silvex	580383	613234	633347	694311	620480	628351	6.64
2,4,5-T	508107	525218	543977	589855	527488	538929	5.78
2,4-DB	80559	78679	80096	80710	72375	78484	4.47
Dinoseb	385779	371992	406005	438700	394625	399420	6.32

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

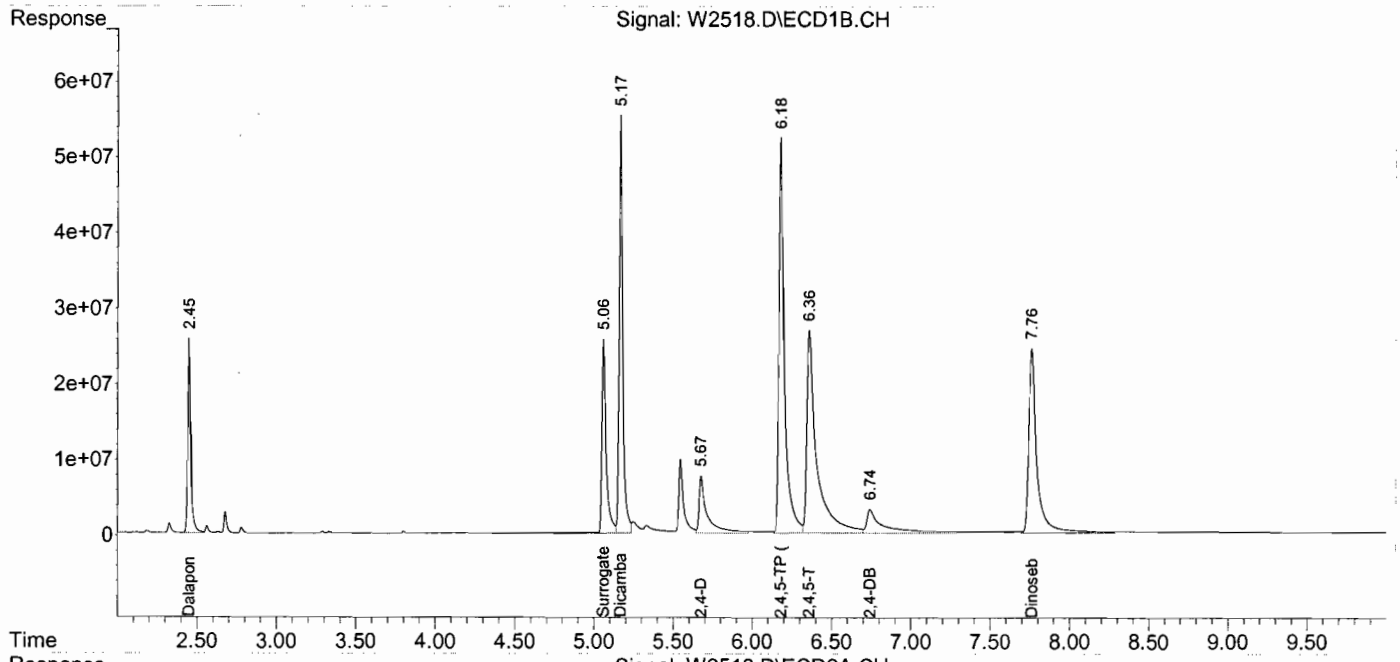
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	463.8E6	88855081	193.644	194.575
	Spiked Amount 100.000			Recovery	=	193.64%	194.57%
	Target Compounds						
2) T	Dalapon	2.45	2.10	332.1E6	60459496	372.408	393.905m
3) T	Dicamba	5.17	4.94	856.9E6	159.5E6	380.534	396.217
7) T	2,4-D	5.67	5.44	270.8E6	43095683	321.457	364.048
8) T	2,4,5-TP (Silvex	6.18	5.89	1283.1E6	248.2E6	388.823	394.989
9) T	2,4,5-T	6.36	6.11	1149.4E6	211.0E6	362.288	391.508
10) T	2,4-DB	6.74	6.43	231.3E6	28949933	354.335	368.864
11) T	Dinoseb	7.76	6.67	877.6E6	157.9E6	365.936	395.198

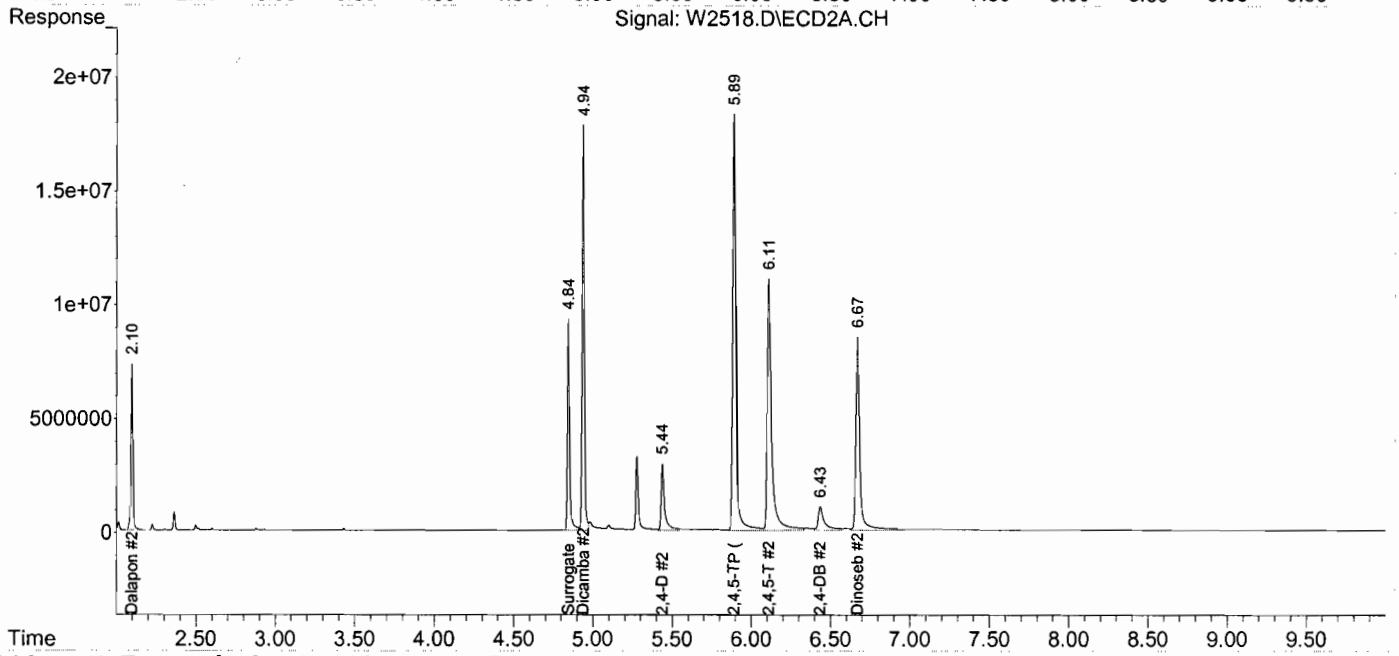
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	323.7E6	62261589	135.161	136.341
		Spiked Amount 100.000			Recovery	=	135.16%	136.34%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	238.2E6	42807415	267.104	278.898m
3)	T	Dicamba	5.17	4.94	593.9E6	111.8E6	263.732	277.756
7)	T	2,4-D	5.68	5.44	207.9E6	30796847	246.804	260.155
8)	T	2,4,5-TP (Silvex	6.18	5.89	916.4E6	173.6E6	277.691	276.243
9)	T	2,4,5-T	6.36	6.11	843.7E6	147.5E6	265.925	273.624
10)	T	2,4-DB	6.74	6.43	178.6E6	20177583	273.615	257.092
11)	T	Dinoseb	7.76	6.67	637.6E6	109.7E6	265.853	274.586

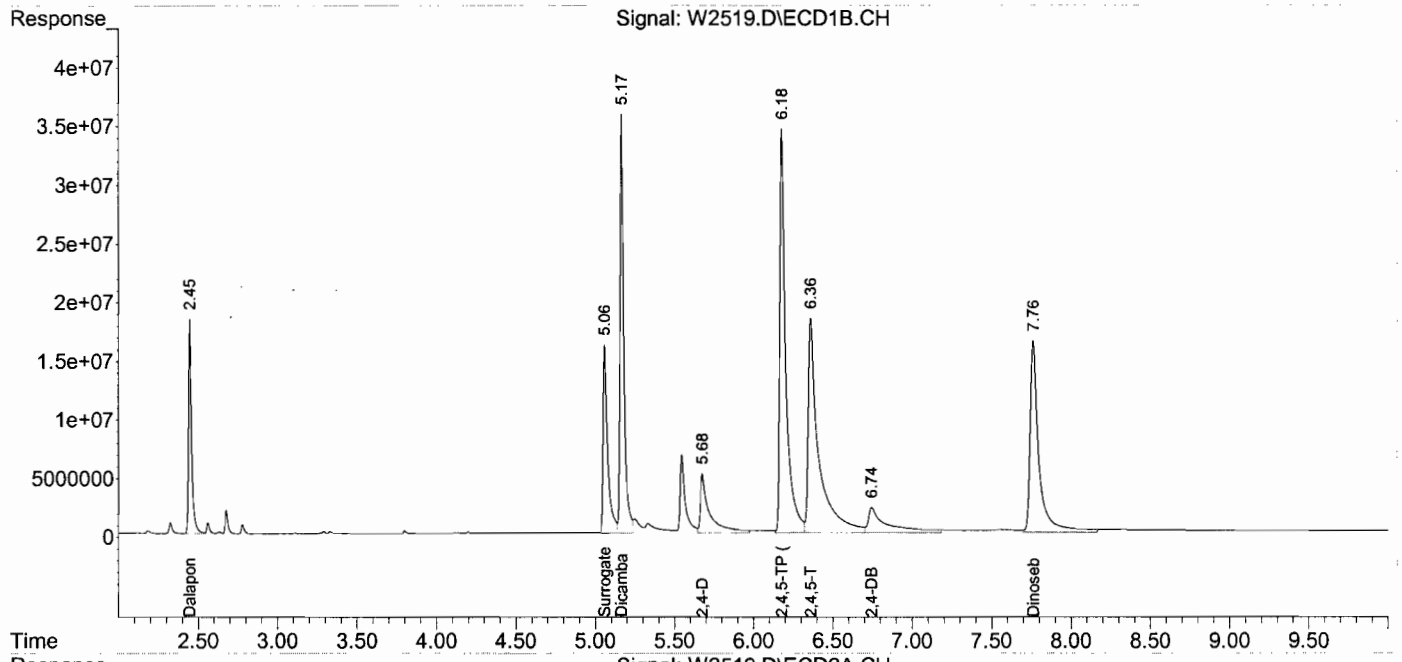
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

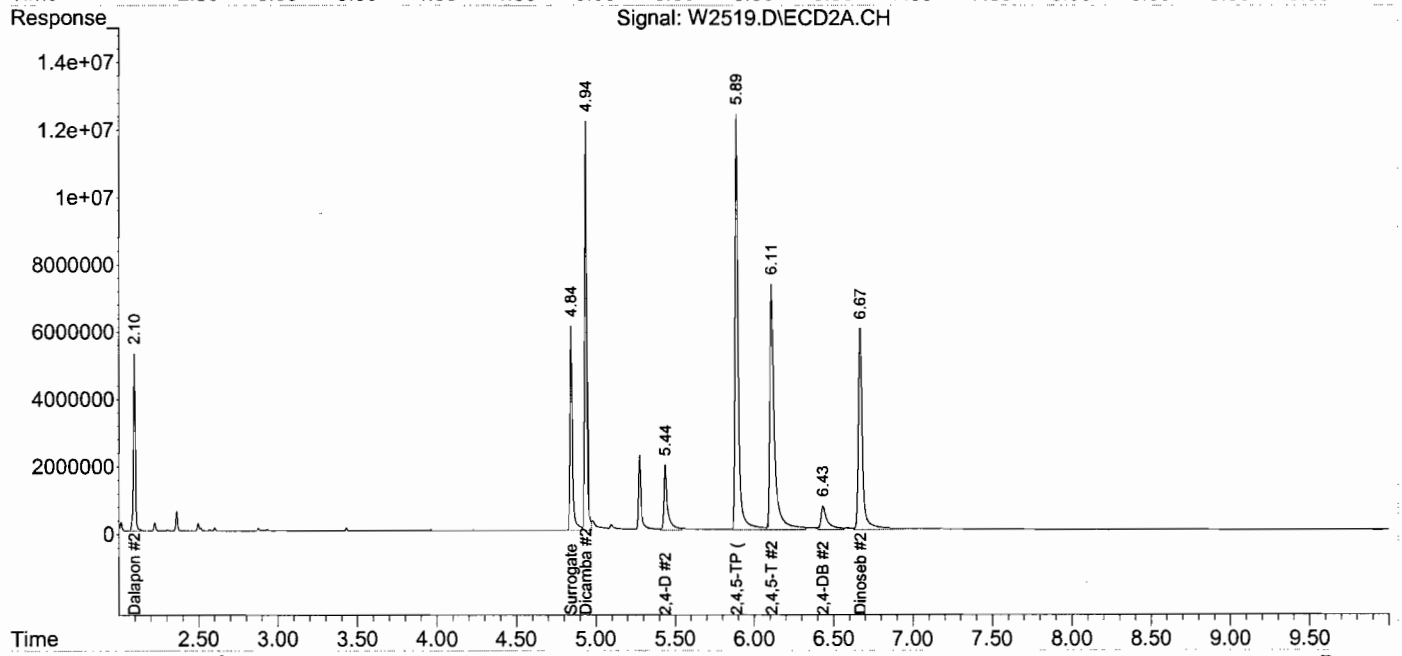
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	240.9E6	45325512	100.565	99.254
		Spiked Amount 100.000			Recovery	=	100.57%	99.25%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	179.4E6	31853010	201.121	207.528m
3)	T	Dicamba	5.17	4.94	436.4E6	81055369	193.803	201.358
7)	T	2,4-D	5.68	5.44	155.5E6	23268227	184.605	196.557
8)	T	2,4,5-TP (Silvex	6.18	5.89	658.0E6	126.7E6	199.404	201.590
9)	T	2,4,5-T	6.36	6.11	621.1E6	108.8E6	195.753	201.873
10)	T	2,4-DB	6.75	6.43	133.2E6	16019235	204.038	204.108
11)	T	Dinoseb	7.76	6.67	458.7E6	81201099	191.280	203.297

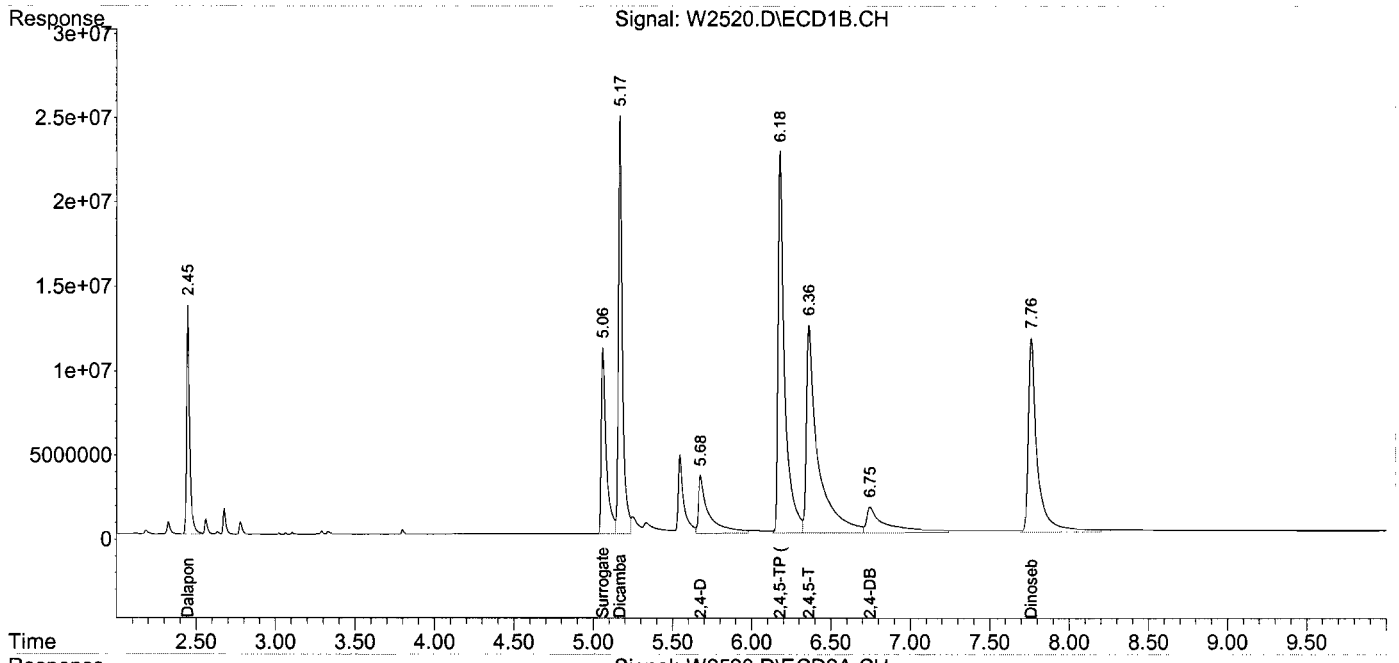
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

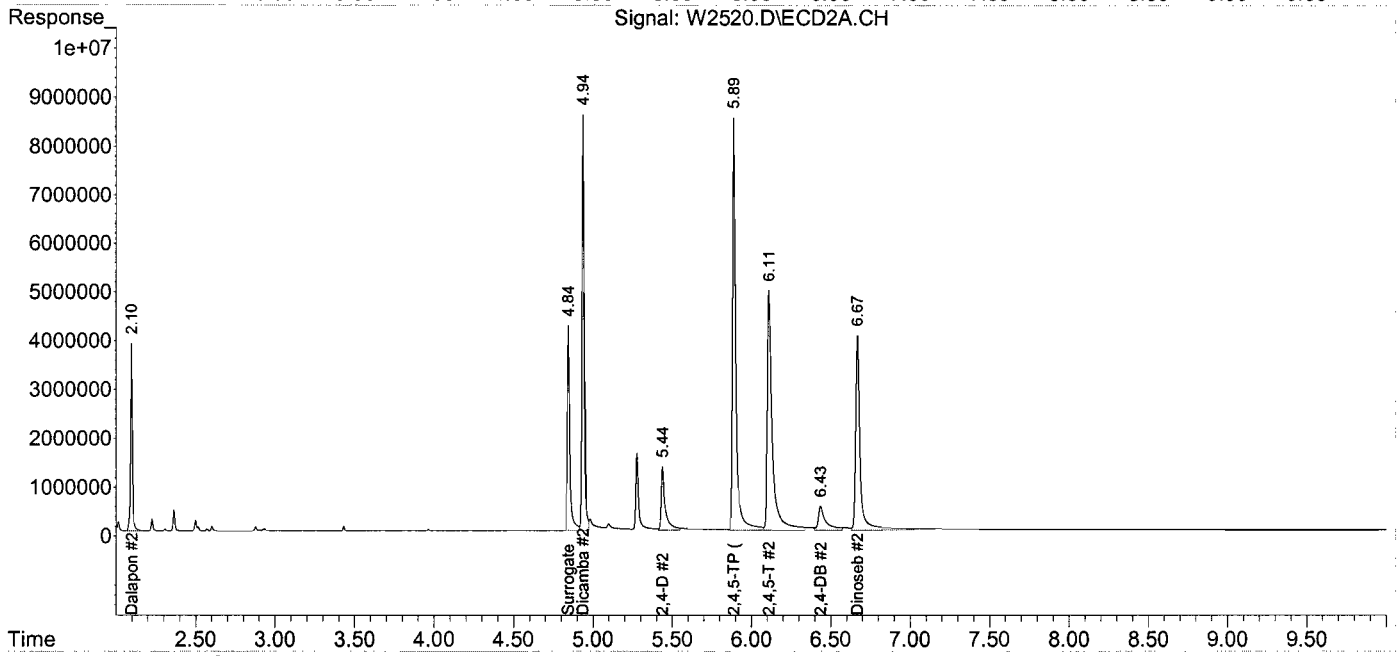
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	118.8E6	22486106	49.600	49.240
	Spiked Amount 100.000			Recovery	=	49.60%	49.24%
	Target Compounds						
2) T	Dalapon	2.45	2.10	87590319	15122838	98.217	98.528m
3) T	Dicamba	5.17	4.94	214.4E6	39067980	95.232	97.053
7) T	2,4-D	5.68	5.44	89526306	12771920	106.279	107.890
8) T	2,4,5-TP (Silvex	6.18	5.89	319.4E6	61323350	96.781	97.594
9) T	2,4,5-T	6.36	6.11	318.0E6	52521844	100.226	97.456
10) T	2,4-DB	6.75	6.44	69123888	7867947	105.909m	100.249
11) T	Dinoseb	7.76	6.67	230.7E6	37199216	96.211	93.133

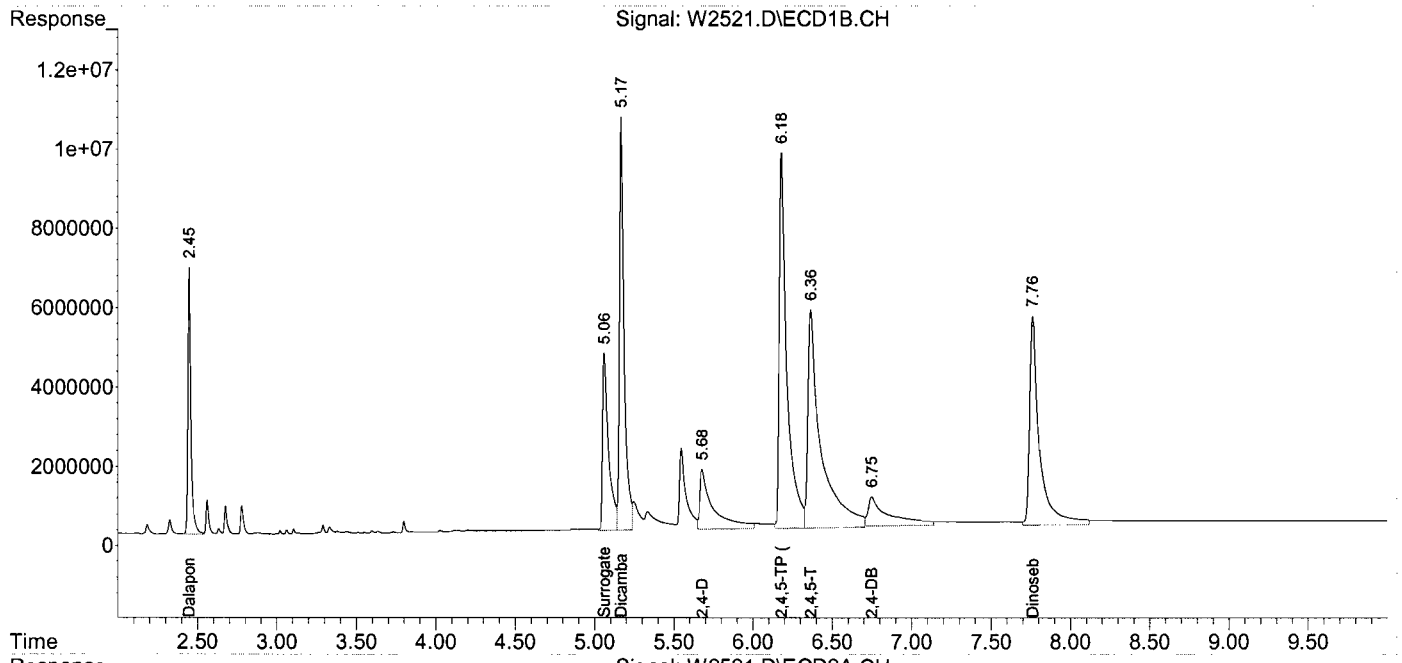
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

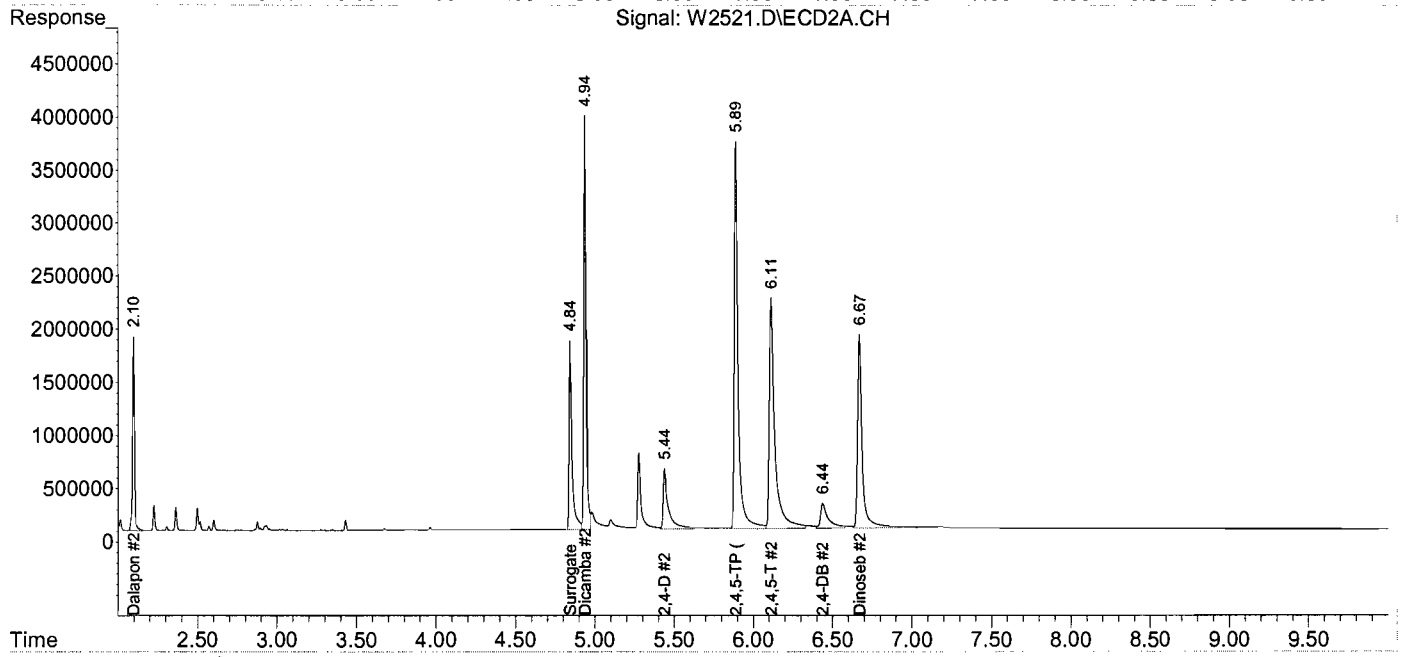
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	57052341	10949160	23.821	23.976
	Spiked Amount 100.000			Recovery	=	23.82%	23.98%
	Target Compounds						
2) T	Dalapon	2.45	2.10	45160353	7644706	50.639	49.807m
3) T	Dicamba	5.17	4.94	120.7E6	18539504	53.620	46.056
7) T	2,4-D	5.68	5.44	51524595	5845395	61.166	49.379
8) T	2,4,5-TP (Silvex	6.18	5.89	157.1E6	29019174	47.617	46.183
9) T	2,4,5-T	6.37	6.11	166.5E6	25405343	52.478	47.140
10) T	2,4-DB	6.75	6.44	33681400	4027968	51.605m	51.322
11) T	Dinoseb	7.76	6.67	132.3E6	19288965	55.162	48.292

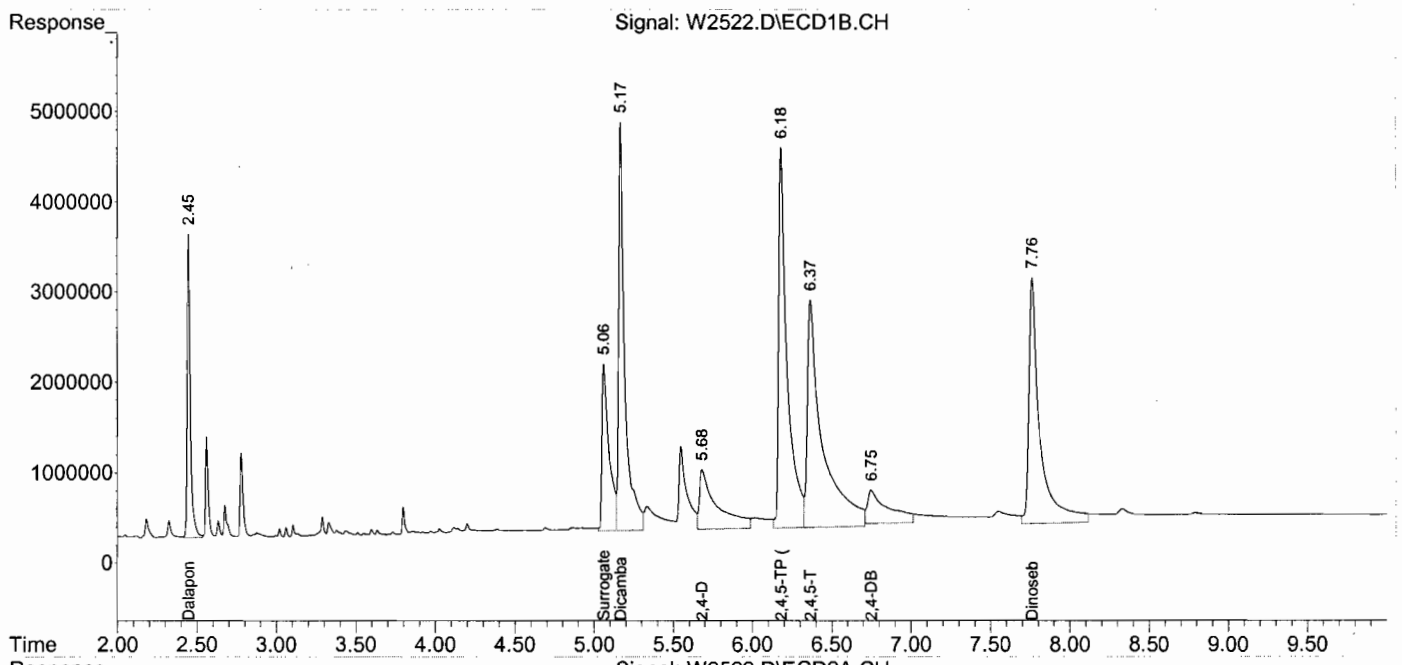
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

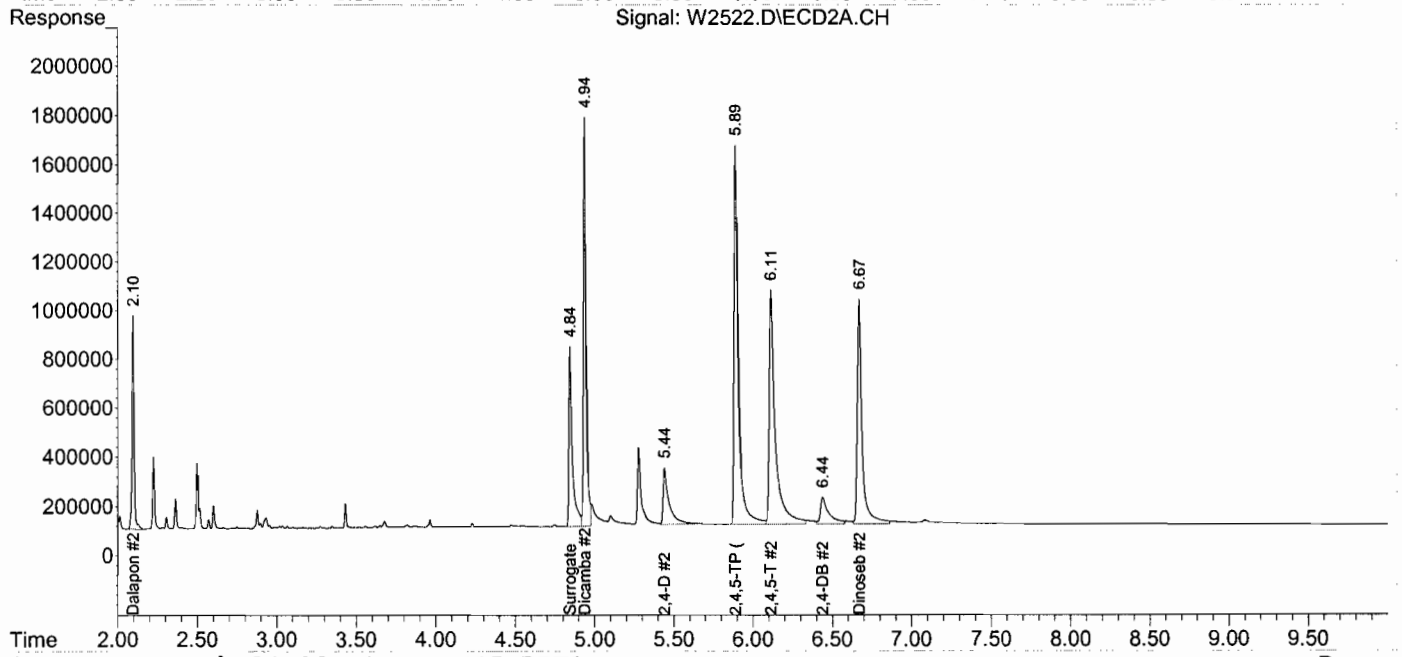
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/13/2015 **Instrument ID:** GC-W

Data File: W2523.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	885073	0.75
Dicamba	5.17	5.10	5.24	2251732	2164694	3.87
2,4-D	5.68	5.60	5.76	842369	775793	7.90
Silvex	6.18	6.09	6.27	3300003	3181521	3.59
2,4,5-T	6.36	6.27	6.45	3172624	3069412	3.25
2,4-DB	6.75	6.66	6.84	664642	660089	0.69
Dinoseb	7.76	7.67	7.85	2398136	2351998	1.92

GC Column (2nd): RTX-CLP2

Data File: W2523.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	155435	1.09
Dicamba	4.94	4.87	5.01	402544	398337	1.05
2,4-D	5.44	5.36	5.52	118379	113194	4.38
Silvex	5.89	5.80	5.98	628351	619519	1.41
2,4,5-T	6.11	6.02	6.20	538929	540251	0.25
2,4-DB	6.44	6.35	6.53	78484	76061	3.09
Dinoseb	6.67	6.58	6.76	399420	407471	2.02

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-W

Data File: W2549.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	843992	5.36
Dicamba	5.17	5.10	5.24	2251732	2264565	0.57
2,4-D	5.68	5.60	5.76	842369	789449	6.28
Silvex	6.18	6.09	6.27	3300003	3373629	2.23
2,4,5-T	6.36	6.27	6.45	3172624	3082462	2.84
2,4-DB	6.75	6.66	6.84	664642	694438	4.48
Dinoseb	7.76	7.67	7.85	2398136	2305691	3.85

GC Column (2nd): RTX-CLP2

Data File: W2549.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	165220	5.13
Dicamba	4.94	4.87	5.01	402544	464877	15.48
2,4-D	5.44	5.36	5.52	118379	126396	6.77
Silvex	5.89	5.80	5.98	628351	718146	14.29
2,4,5-T	6.11	6.02	6.20	538929	606353	12.51
2,4-DB	6.44	6.35	6.53	78484	82870	5.59
Dinoseb	6.67	6.58	6.76	399420	431824	8.11

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/18/2015 **Instrument ID:** GC-W

Data File: W2559.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	889221	0.29
Dicamba	5.17	5.10	5.24	2251732	2377163	5.57
2,4-D	5.68	5.60	5.76	842369	849164	0.81
Silvex	6.18	6.09	6.27	3300003	3558360	7.83
2,4,5-T	6.36	6.27	6.45	3172624	3229983	1.81
2,4-DB	6.75	6.66	6.84	664642	664758	0.02
Dinoseb	7.76	7.67	7.85	2398136	2403182	0.21

GC Column (2nd): RTX-CLP2

Data File: W2559.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.09	2.03	2.17	157153	166554	5.98
Dicamba	4.94	4.87	5.01	402544	471016	17.01
2,4-D	5.44	5.36	5.52	118379	126813	7.12
Silvex	5.89	5.80	5.98	628351	723587	15.16
2,4,5-T	6.11	6.02	6.20	538929	605403	12.33
2,4-DB	6.44	6.35	6.53	78484	81117	3.35
Dinoseb	6.67	6.58	6.76	399420	426490	6.78

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/23/2015 **Instrument ID:** GC-W

Data File: W2561.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	783106	12.19
Dicamba	5.17	5.10	5.24	2251732	2222269	1.31
2,4-D	5.68	5.60	5.76	842369	853451	1.32
Silvex	6.18	6.09	6.27	3300003	3364896	1.97
2,4,5-T	6.36	6.27	6.45	3172624	3139475	1.04
2,4-DB	6.75	6.66	6.84	664642	686349	3.27
Dinoseb	7.76	7.67	7.85	2398136	2434103	1.50

GC Column (2nd): RTX-CLP2

Data File: W2561.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	137733	12.36
Dicamba	4.94	4.87	5.01	402544	408462	1.47
2,4-D	5.44	5.36	5.52	118379	115527	2.41
Silvex	5.90	5.80	5.98	628351	647391	3.03
2,4,5-T	6.12	6.02	6.20	538929	557811	3.50
2,4-DB	6.44	6.35	6.53	78484	85293	8.68
Dinoseb	6.68	6.58	6.76	399420	423995	6.15

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/23/2015 **Instrument ID:** GC-W

Data File: W2565.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	782233	12.29
Dicamba	5.17	5.10	5.24	2251732	2167185	3.75
2,4-D	5.67	5.60	5.76	842369	765786	9.09
Silvex	6.18	6.09	6.27	3300003	3249315	1.54
2,4,5-T	6.36	6.27	6.45	3172624	2992298	5.68
2,4-DB	6.74	6.66	6.84	664642	641561	3.47
Dinoseb	7.76	7.67	7.85	2398136	2288497	4.57

GC Column (2nd): RTX-CLP2

Data File: W2565.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	137375	12.59
Dicamba	4.94	4.87	5.01	402544	414693	3.02
2,4-D	5.44	5.36	5.52	118379	121822	2.91
Silvex	5.89	5.80	5.98	628351	668218	6.34
2,4,5-T	6.11	6.02	6.20	538929	582424	8.07
2,4-DB	6.43	6.35	6.53	78484	85782	9.30
Dinoseb	6.67	6.58	6.76	399420	439935	10.14

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	238.5E6	44438391	99.589	97.311
	Spiked Amount 100.000			Recovery	=	99.59%	97.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	177.0E6	31087017	198.491	197.813
3) T	Dicamba	5.17	4.94	432.9E6	79667336	192.269	197.910
7) T	2,4-D	5.68	5.44	155.2E6	22638862	184.193	191.241
8) T	2,4,5-TP (Silvex	6.18	5.89	636.3E6	123.9E6	192.819	197.189
9) T	2,4,5-T	6.36	6.11	613.9E6	108.1E6	193.494	200.491
10) T	2,4-DB	6.75	6.44	132.0E6	15212252	198.630	193.826
11) T	Dinoseb	7.76	6.67	470.4E6	81494177	196.152	204.031

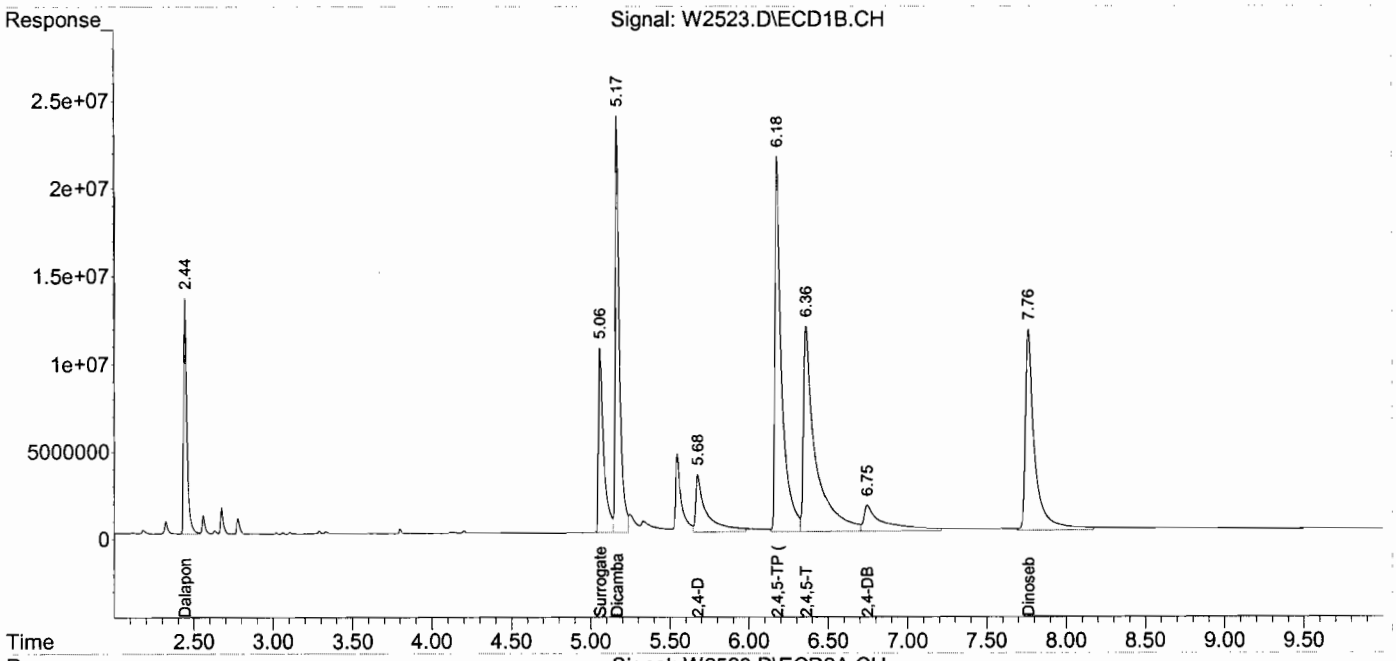
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

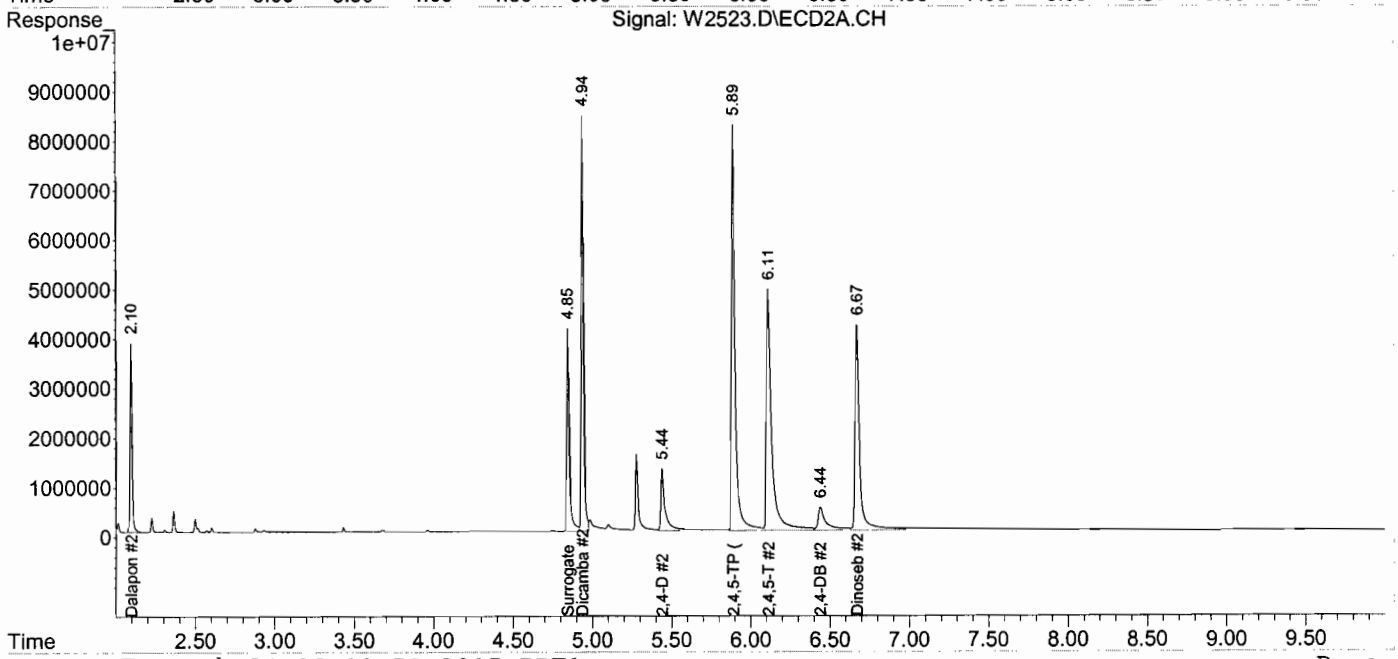
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:18
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:31:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	246.0E6	51287766	102.702	112.310
	Spiked Amount 100.000			Recovery	=	102.70%	112.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	168.8E6	33043937	189.277	210.266m
3) T	Dicamba	5.17	4.94	452.9E6	92975494	201.140	230.970
7) T	2,4-D	5.68	5.44	157.9E6	25279243	187.435	213.545
8) T	2,4,5-TP (Silvex	6.18	5.89	674.7E6	143.6E6	204.462	228.581
9) T	2,4,5-T	6.36	6.11	616.5E6	121.3E6	194.316	225.021
10) T	2,4-DB	6.75	6.44	138.9E6	16574015	208.966	211.177
11) T	Dinoseb	7.76	6.67	461.1E6	86364887	192.290	216.225

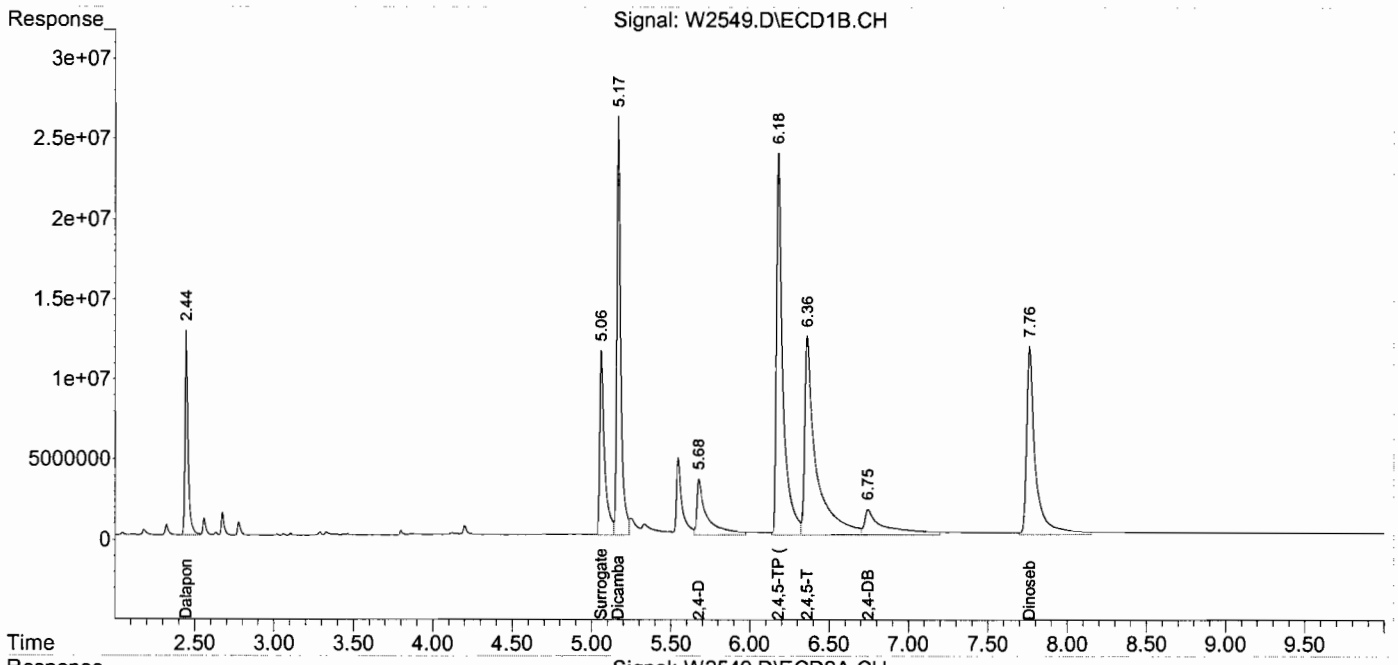
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

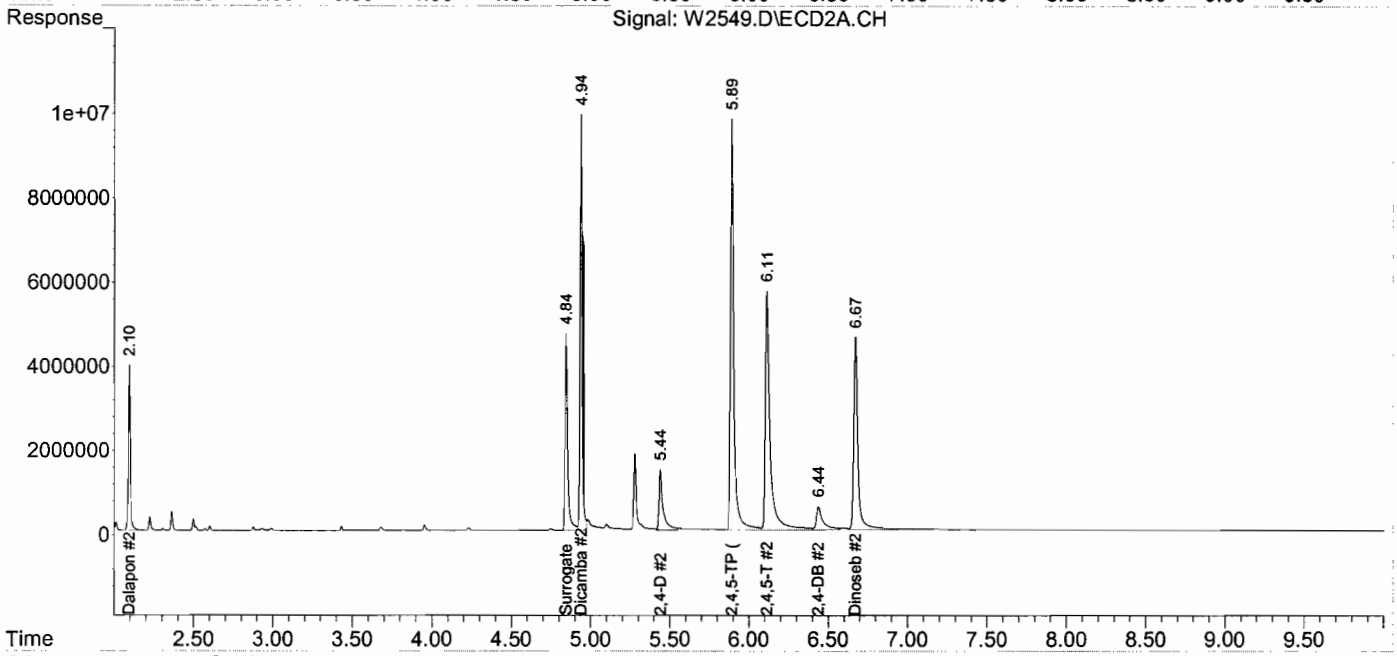
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2549.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:18
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:31:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2559.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:38
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:50:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	259.8E6	52050451	108.478	113.980
	Spiked Amount 100.000			Recovery	=	108.48%	113.98%
	Target Compounds						
2) T	Dalapon	2.45	2.09	177.8E6	33310840	199.421	211.964m
3) T	Dicamba	5.17	4.94	475.4E6	94203115	211.141	234.019
7) T	2,4-D	5.68	5.44	169.8E6	25362576	201.613	214.249
8) T	2,4,5-TP (Silvex	6.18	5.89	711.7E6	144.7E6	215.658	230.313
9) T	2,4,5-T	6.36	6.11	646.0E6	121.1E6	203.616	224.669
10) T	2,4-DB	6.75	6.44	133.0E6	16223413	200.035	206.710
11) T	Dinoseb	7.76	6.67	480.6E6	85297962	200.421	213.554

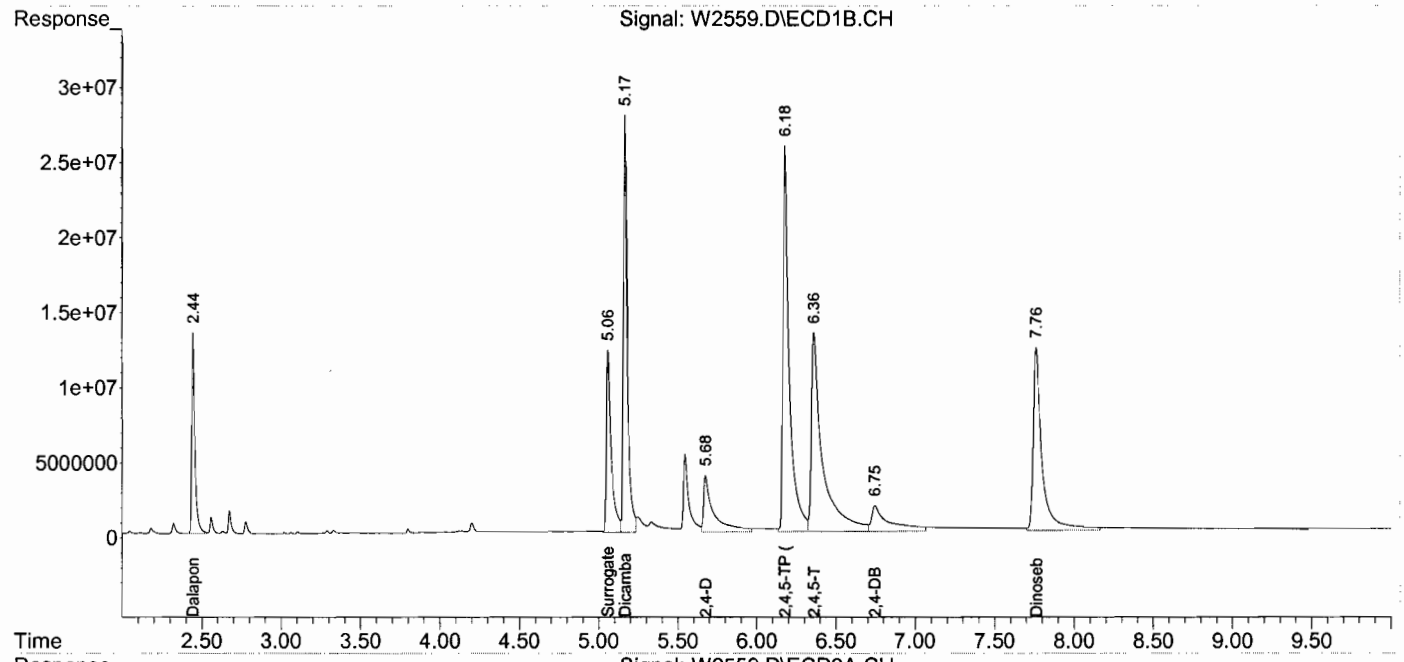
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

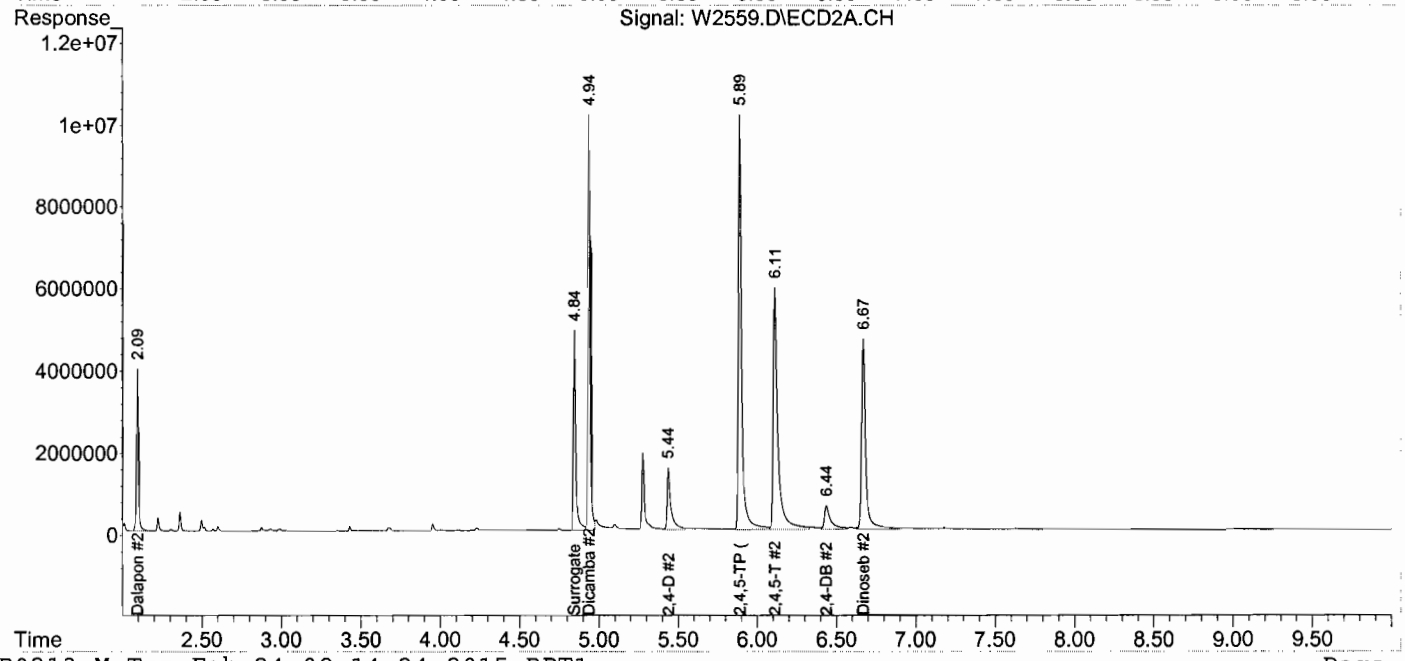
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-18-15\
Data File : W2559.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 11:38
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:50:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2561.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 9:39
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 09:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.85	251.5E6	45678401	105.020	100.027
		Spiked Amount 100.000			Recovery	=	105.02%	100.03%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	156.6E6	27546687	175.623	175.286
3)	T	Dicamba	5.17	4.94	444.5E6	81692392	197.383	202.940
7)	T	2,4-D	5.68	5.44	170.7E6	23105437	202.631	195.182
8)	T	2,4,5-TP (Silvex	6.18	5.90	673.0E6	129.5E6	203.933	206.060
9)	T	2,4,5-T	6.36	6.12	627.9E6	111.6E6	197.910	207.007
10)	T	2,4-DB	6.75	6.44	137.3E6	17058620	206.532	217.351
11)	T	Dinoseb	7.76	6.68	486.8E6	84799091	203.000	212.305

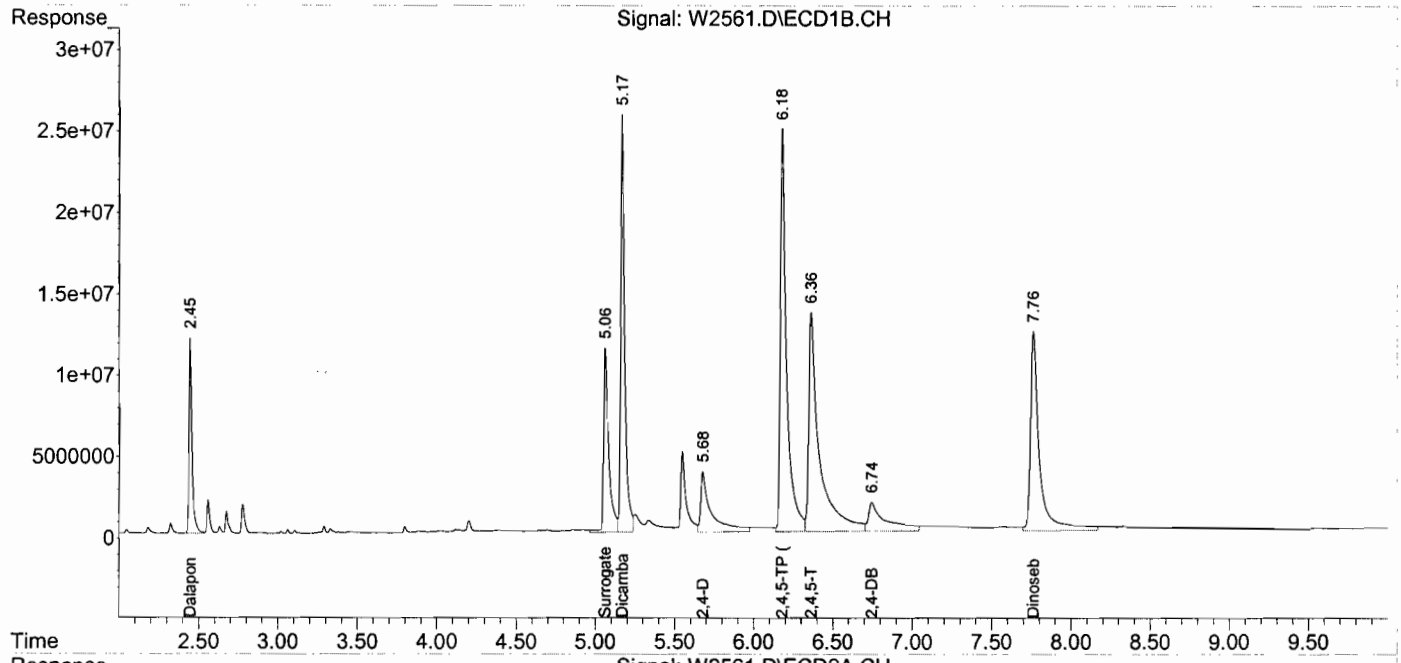
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

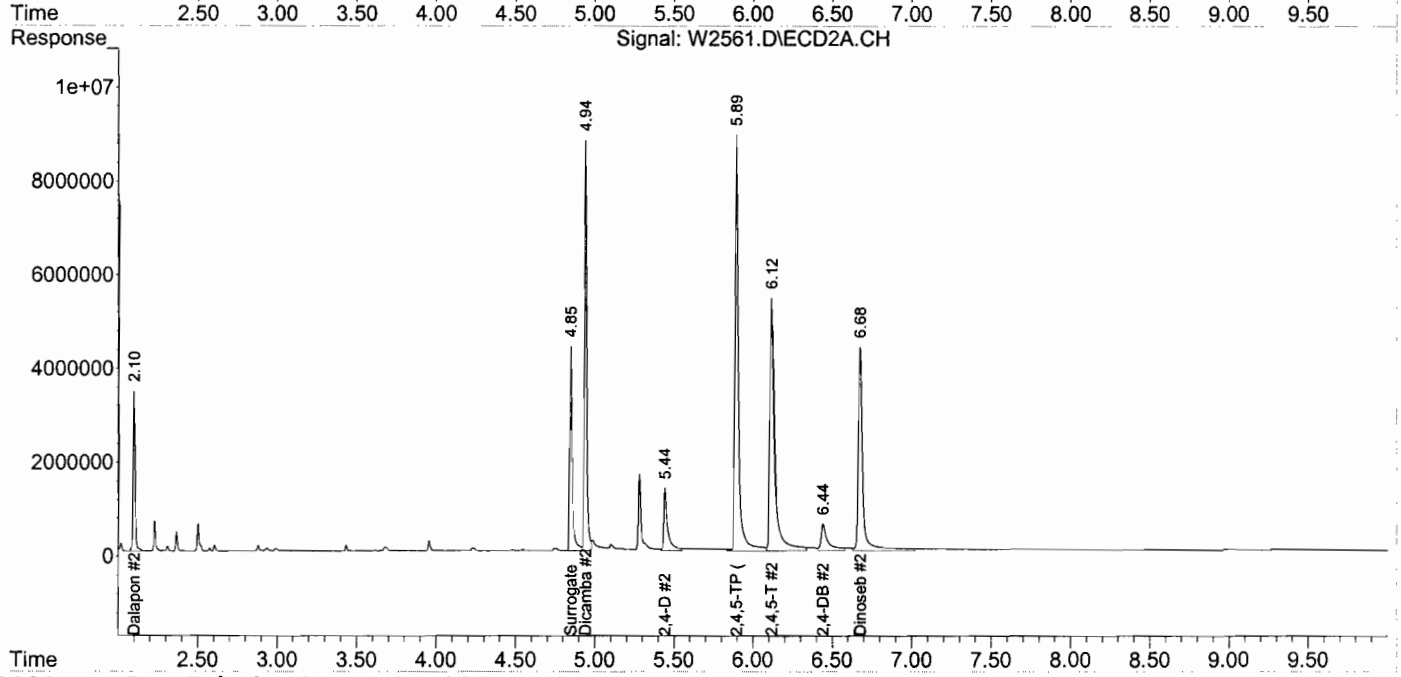
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2561.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 9:39
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 09:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2565.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:58
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 08:59:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	240.9E6	46451559	100.588	101.720
	Spiked Amount 100.000			Recovery	=	100.59%	101.72%
	Target Compounds						
2) T	Dalapon	2.45	2.10	156.4E6	27475062	175.427	174.830
3) T	Dicamba	5.17	4.94	433.4E6	82938648	192.490	206.036
7) T	2,4-D	5.67	5.44	153.2E6	24364435	181.817	205.817
8) T	2,4,5-TP (Silvex	6.18	5.89	649.9E6	133.6E6	196.928	212.689
9) T	2,4,5-T	6.36	6.11	598.5E6	116.5E6	188.632	216.141
10) T	2,4-DB	6.74	6.43	128.3E6	17156311	193.055	218.596
11) T	Dinoseb	7.76	6.67	457.7E6	87986976	190.856	220.287

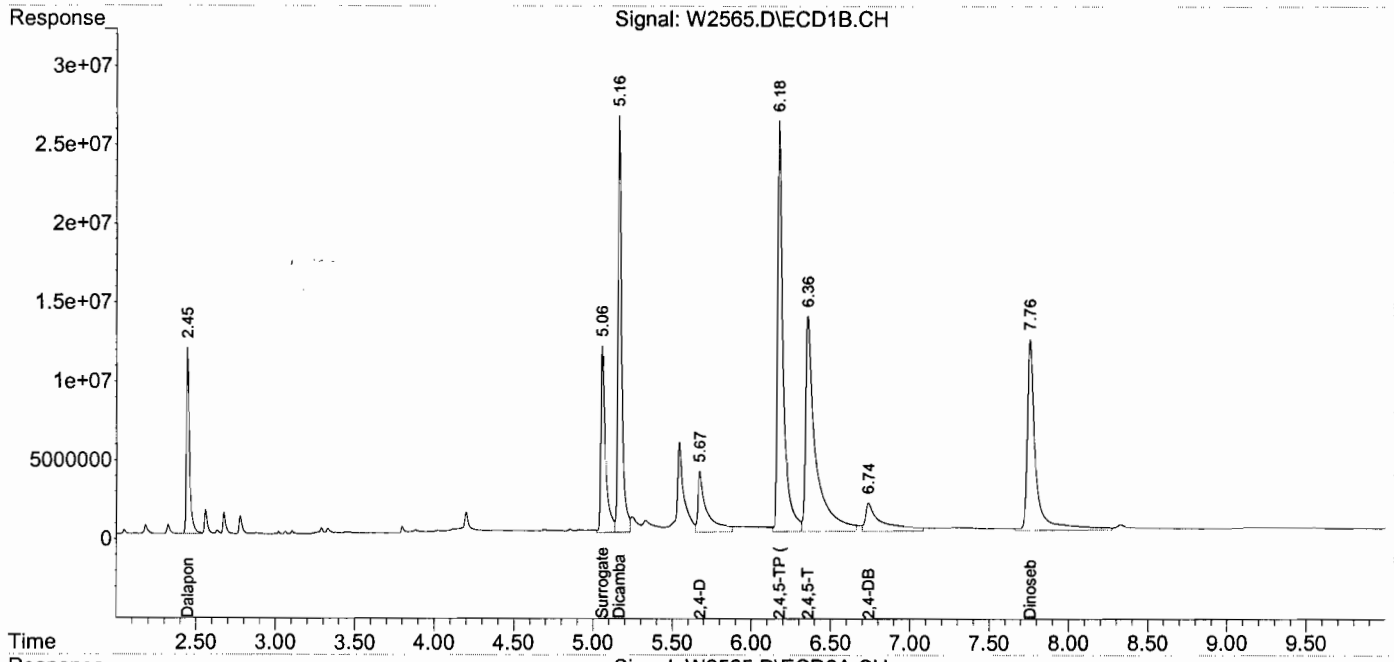
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

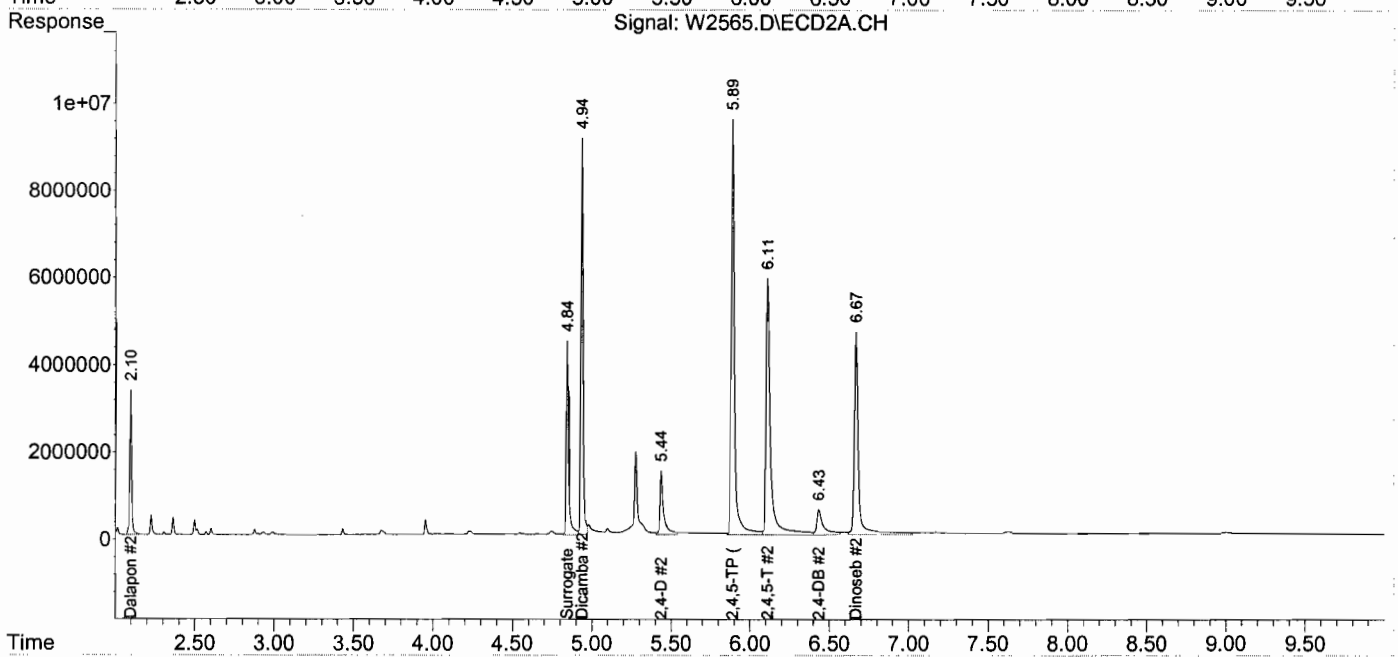
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2565.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:58
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 08:59:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: BLKS150217-07
Client ID: Herb
Date Received: NA
Date Extracted: 02/17/2015
Date Analyzed: 02/18/2015
Data file: W2550.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.00835	0.00334
Dicamba	ND		0.00835	0.00334
2,4-D	ND		0.00835	0.00334
2,4,5-TP (Silvex)	ND		0.00835	0.00334
2,4,5-T	ND		0.00835	0.00334
2,4-DB	ND		0.00835	0.00334
Dinoseb	ND		0.00835	0.00334

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:33
Operator : JS
Sample : Herb,BLKS150217-07,S,30g,0,5
Misc : NA,02/17/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:59:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	160.2E6	35445507	66.896m	77.619
Spiked Amount	100.000			Recovery	=	66.90%	77.62%
	Target Compounds						

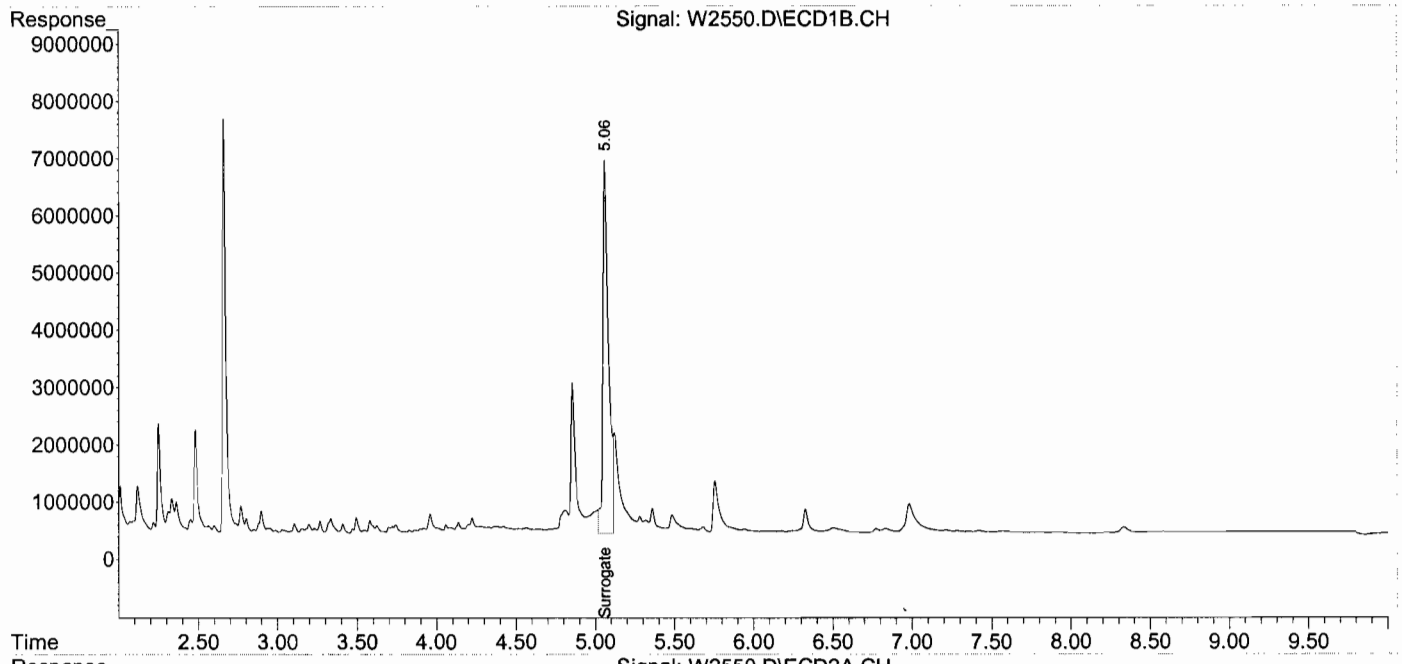
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

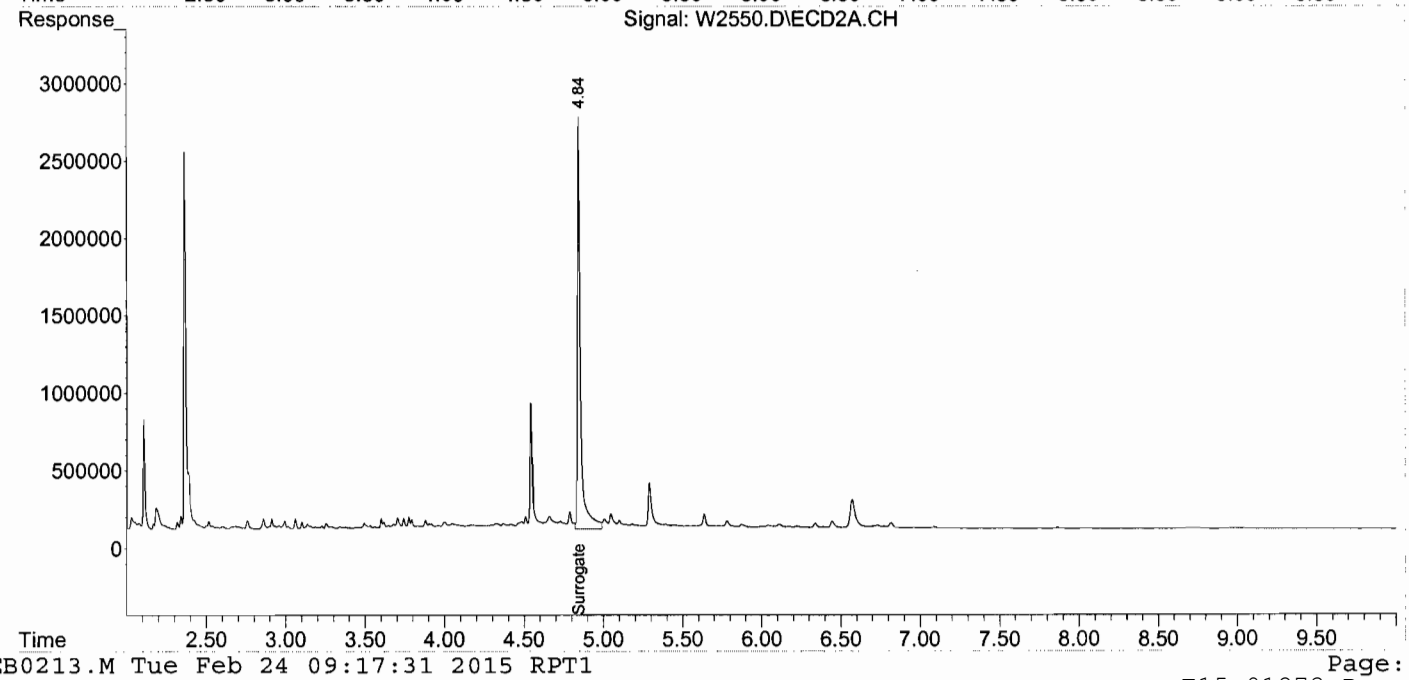
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 9:33
Operator : JS
Sample : Herb,BLKS150217-07,S,30g,0,5
Misc : NA,02/17/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 09:59:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

HERBICIDES

Lab ID: BLKS150220-11
Client ID: Herb
Date Received: NA
Date Extracted: 02/20/2015
Date Analyzed: 02/23/2015
Data file: W2562.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dalapon	ND		0.00835	0.00334
Dicamba	ND		0.00835	0.00334
2,4-D	ND		0.00835	0.00334
2,4,5-TP (Silvex)	ND		0.00835	0.00334
2,4,5-T	ND		0.00835	0.00334
2,4-DB	ND		0.00835	0.00334
Dinoseb	ND		0.00835	0.00334

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2562.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 13:59
Operator : JS
Sample : Herb,BLKS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 14:12:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S Surrogate	5.06	4.85	183.0E6	36110691	76.406	79.075
Spiked Amount 100.000			Recovery =		76.41%	79.08%
Target Compounds						

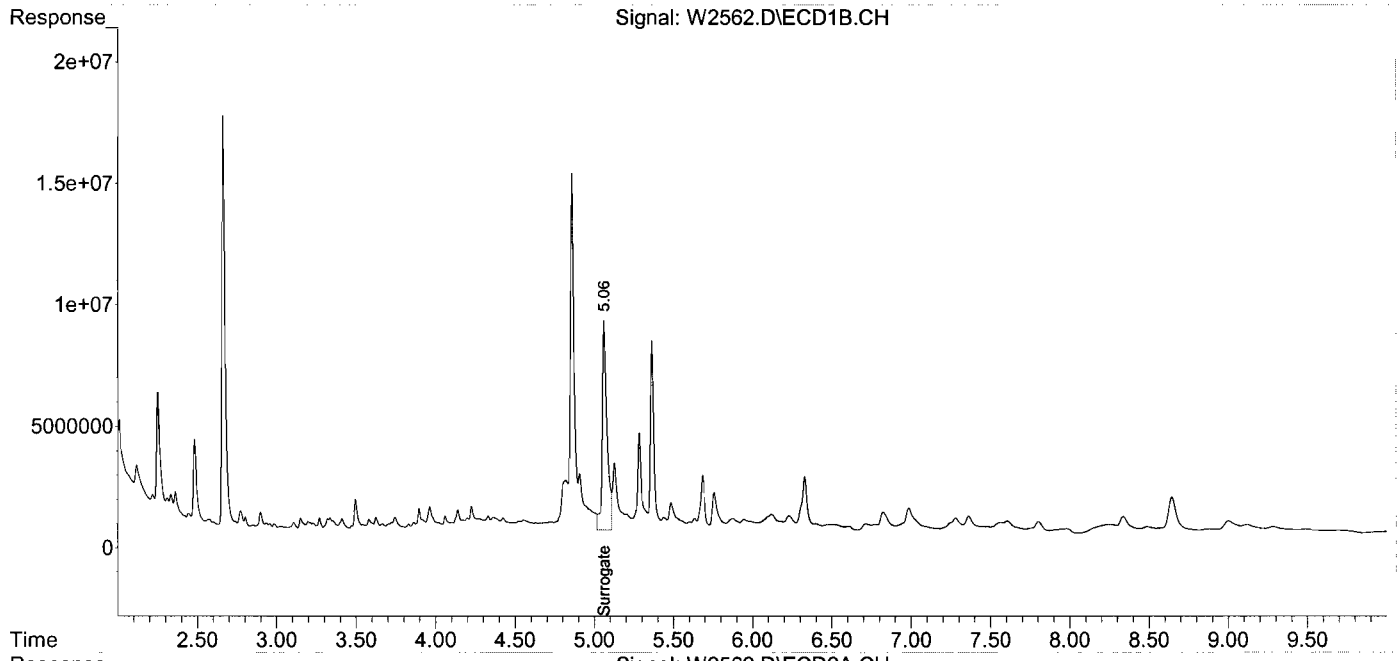
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

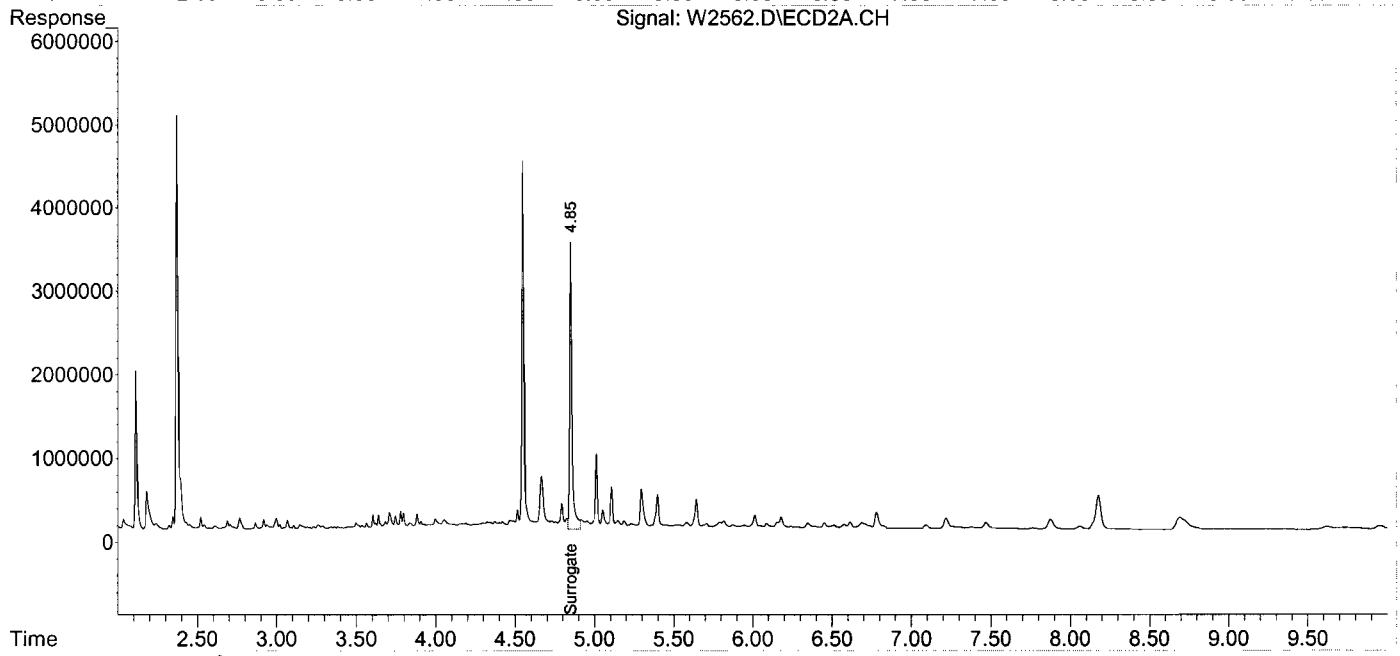
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2562.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 13:59
Operator : JS
Sample : Herb,BLKS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 14:12:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2564.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:44
Operator : JS
Sample : Herb,LCSS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 16:55:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	210.2E6	44894051	87.767	98.309
	Spiked Amount 100.000			Recovery	=	87.77%	98.31%
	Target Compounds						
2) T	Dalapon	2.43	2.08	145.6E6	29420154	163.215	187.207m
3) T	Dicamba	5.16	4.94	396.4E6	78234220	176.045	194.350
7) T	2,4-D	5.67	5.43	120.5E6	25681642	143.104	216.944 #
8) T	2,4,5-TP (Silvex	6.18	5.89	650.7E6	125.6E6	197.180	199.933
9) T	2,4,5-T	6.35	6.11	672.0E6	113.9E6	211.814	211.320
10) T	2,4-DB	6.74	6.43	89582816	18383964	134.783	234.238 #
11) T	Dinoseb	7.76	6.67	267.8E6	52934814	111.655	132.529

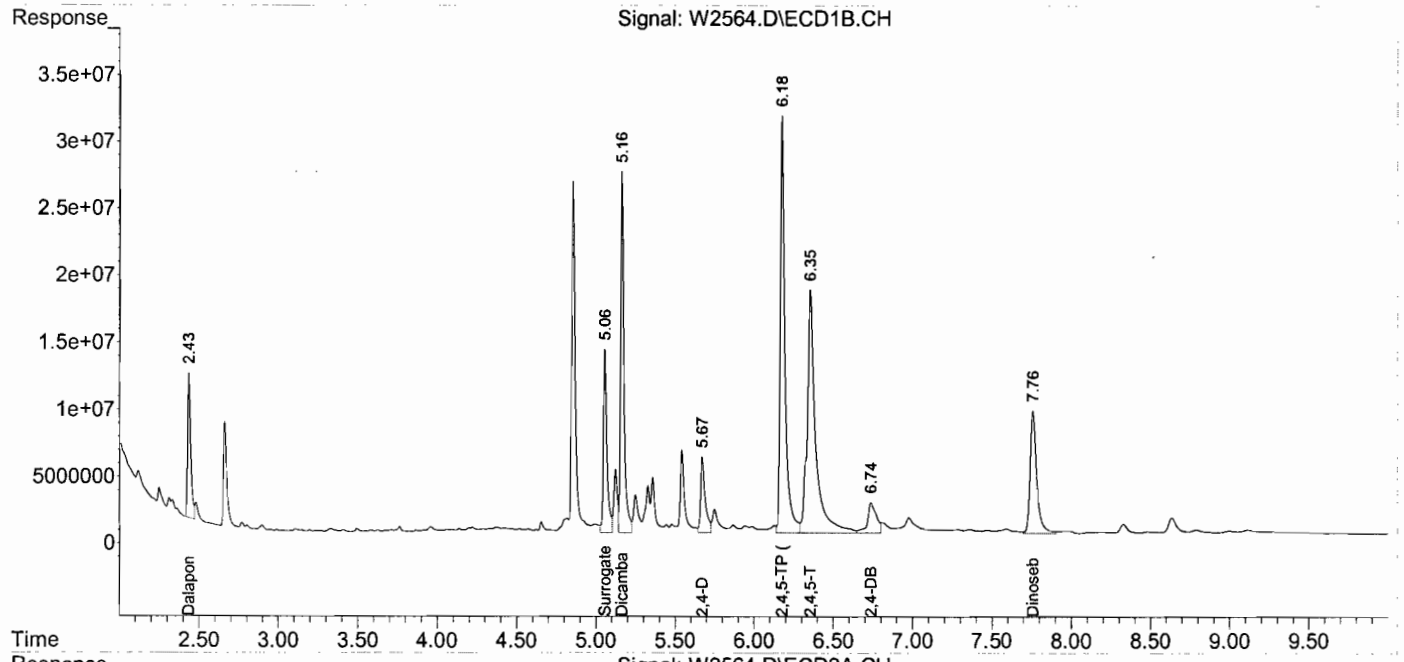
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

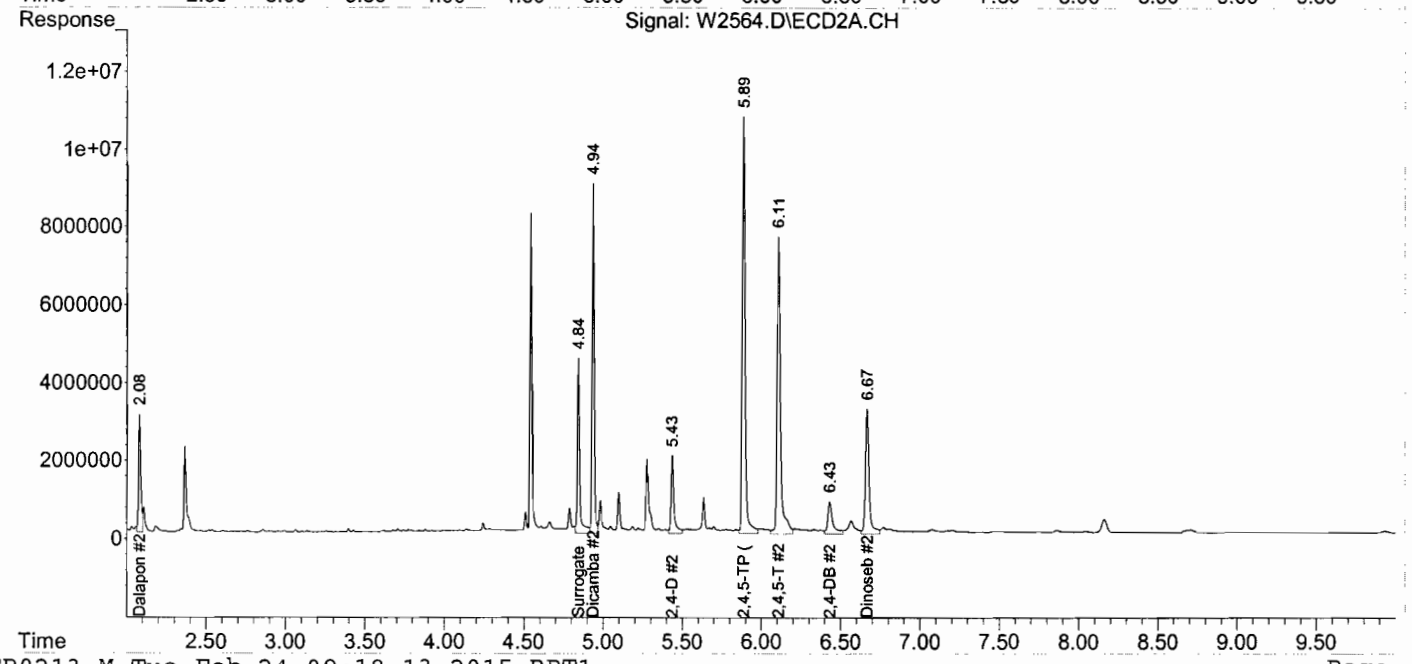
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-23-15\
Data File : W2564.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Feb 2015 16:44
Operator : JS
Sample : Herb,LCSS150220-11,S,30.00g,0,5
Misc : NA,02/20/15,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 23 16:55:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2552.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:01
Operator : JS
Sample : Herb,01088-007MS,S,15.17g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:42:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	155.9E6	33834230	65.110m	74.090
		Spiked Amount 100.000			Recovery	=	65.11%	74.09%
		Target Compounds						
2)	T	Dalapon	2.43	2.08	128.0E6	24936831	143.540m	158.678m
3)	T	Dicamba	5.16	4.94	301.7E6	64017286	133.991m	159.032
7)	T	2,4-D	5.67	5.44	86291457	20835627	102.439m	176.008 #
8)	T	2,4,5-TP (Silvex	6.18	5.89	488.2E6	102.1E6	147.925m	162.507
9)	T	2,4,5-T	6.36	6.11	477.7E6	95511070	150.564m	177.224
10)	T	2,4-DB	6.74	6.43	73638647	13382489	110.794m	170.512 #
11)	T	Dinoseb	7.76	6.67	223.5E6	44991389	93.192m	112.642

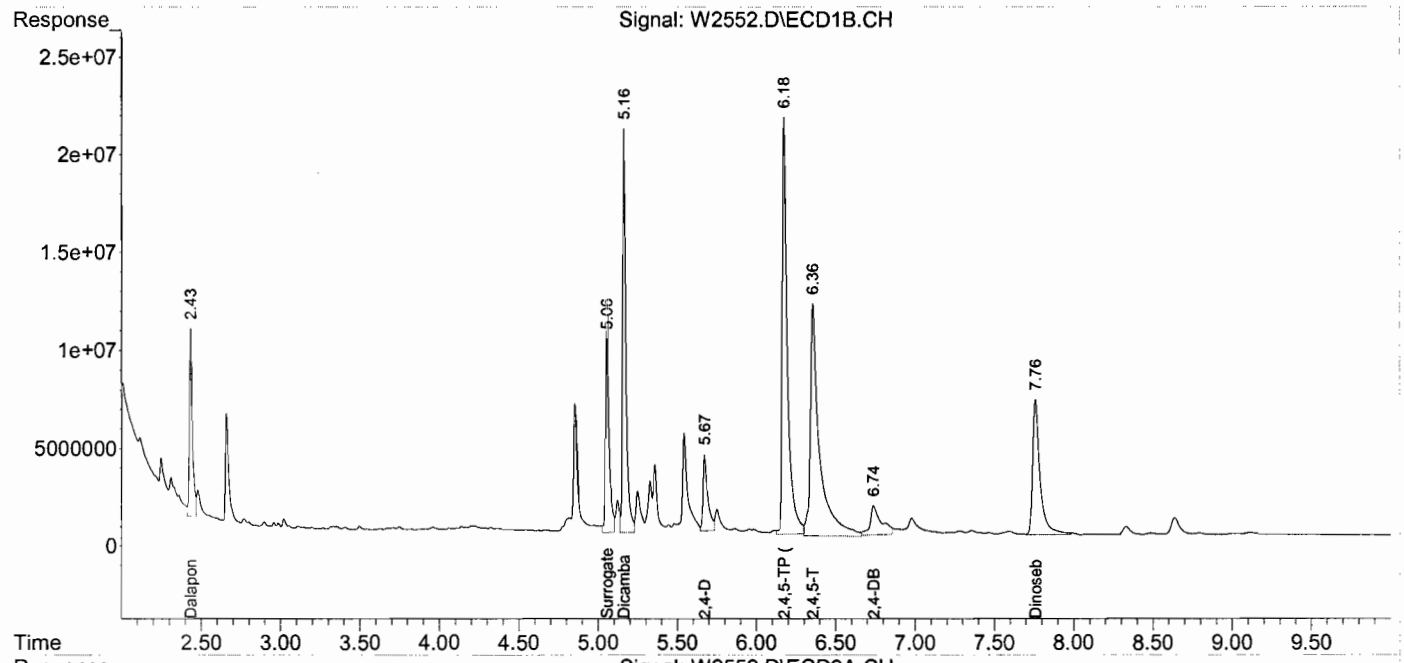
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

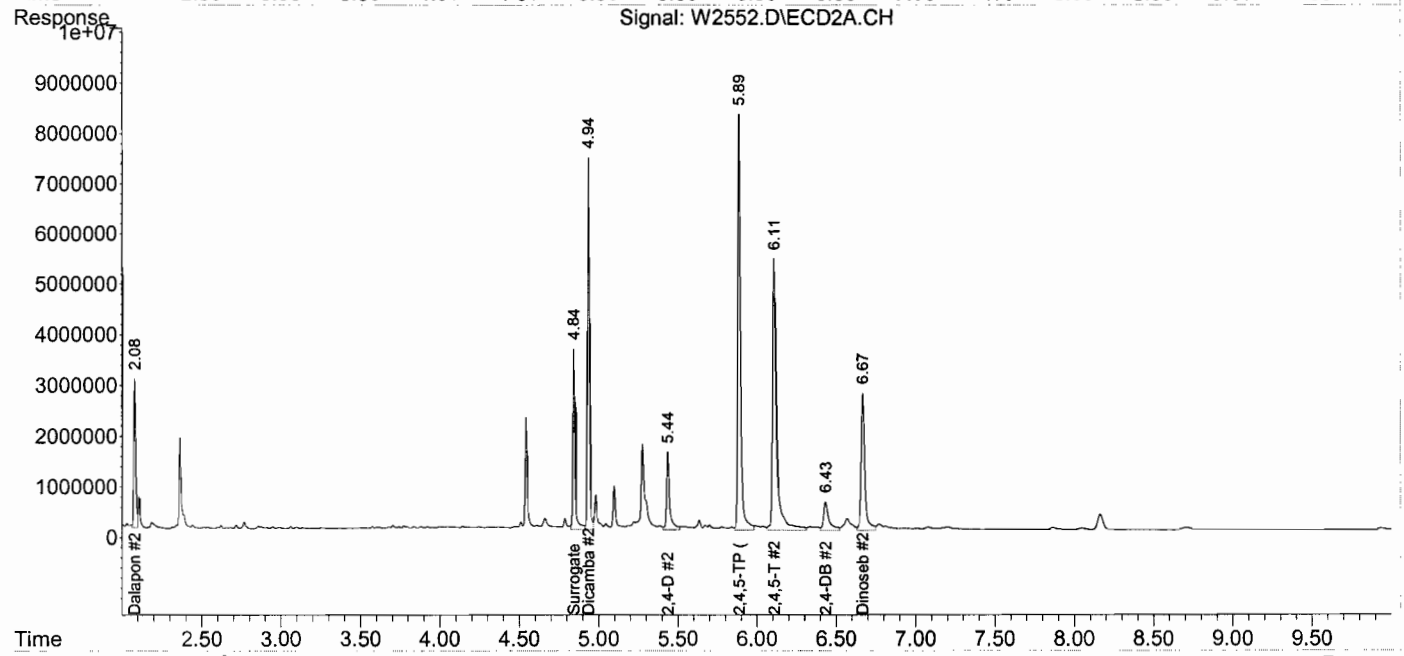
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2552.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:01
Operator : JS
Sample : Herb,01088-007MS,S,15.17g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 11:42:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2553.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:14
Operator : JS
Sample : Herb,01088-007MSD,S,15.29g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 10:52:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	173.6E6	36661574	72.494	80.282
	Spiked Amount 100.000			Recovery	=	72.49%	80.28%
	Target Compounds						
2) T	Dalapon	2.43	2.08	123.0E6	27485144	137.896	174.894m#
3) T	Dicamba	5.16	4.94	324.0E6	69069007	143.873	171.581
7) T	2,4-D	5.67	5.44	101.8E6	21944582	120.877	185.376 #
8) T	2,4,5-TP (Silvex	6.18	5.89	539.9E6	110.4E6	163.595	175.627
9) T	2,4,5-T	6.36	6.11	500.4E6	99705961	157.733	185.008
10) T	2,4-DB	6.74	6.43	83128500	13843182	125.073m	176.382 #
11) T	Dinoseb	7.76	6.67	174.7E6	32067232	72.857	80.284

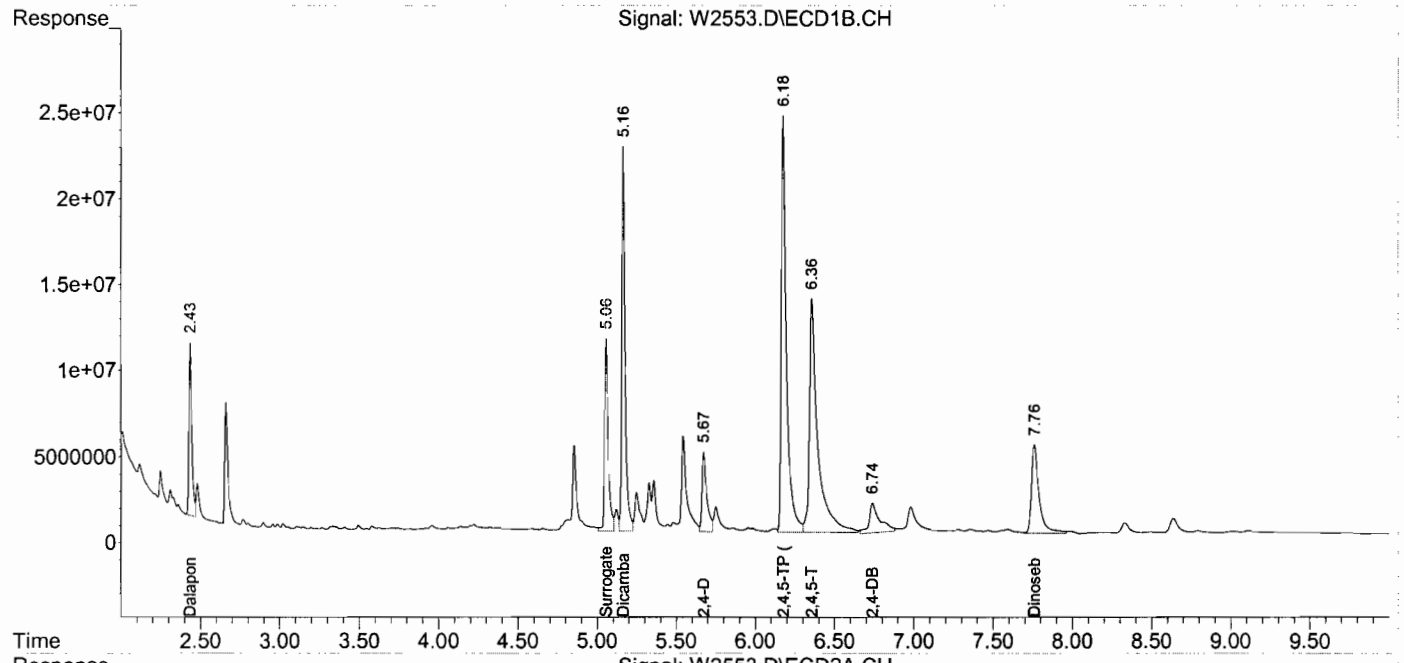
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

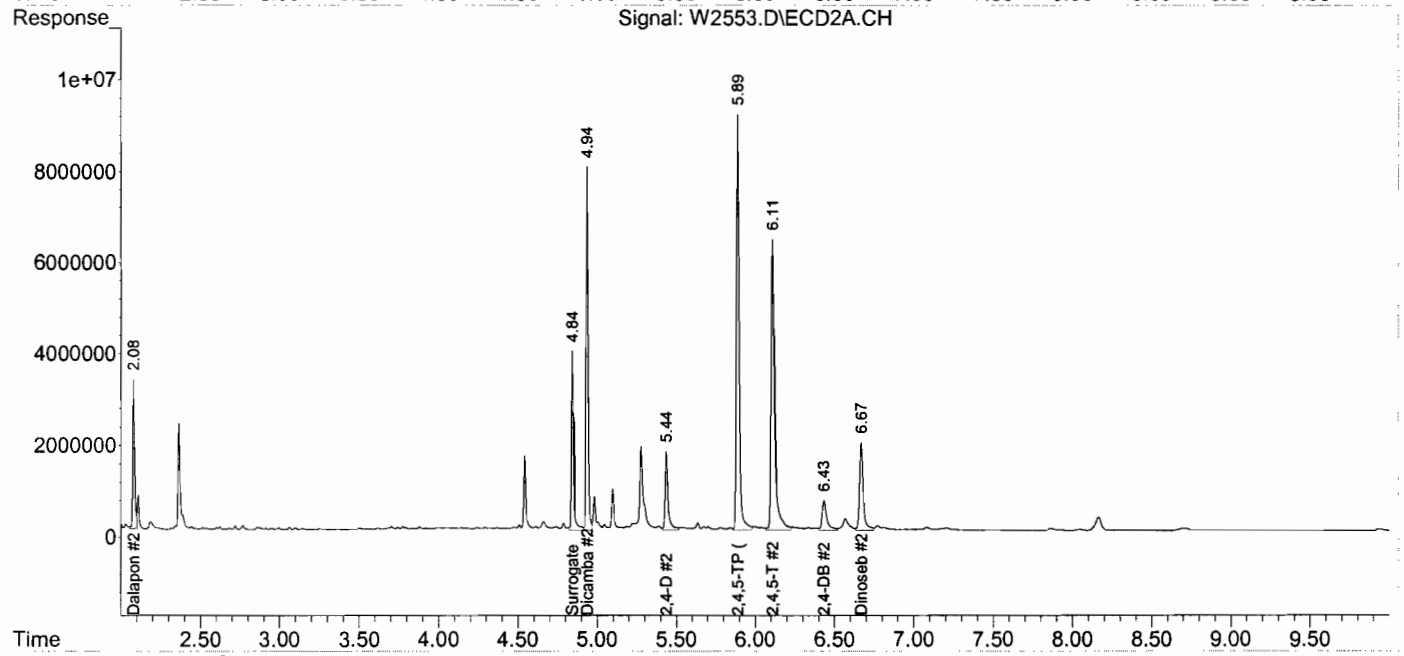
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-18-15\
Data File : W2553.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Feb 2015 10:14
Operator : JS
Sample : Herb,01088-007MSD,S,15.29g,9.90,5
Misc : NA,02/17/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 18 10:52:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBICIDE RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Soil)

Extraction Date/Time: 02/17/2015 10:43

Batch ID: **150217-07**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150217-07	Herbicides	30	5	25	1			
LCSS150217-07	Herbicides	30	5	25	1	10		
01088-007MS	Herbicides	15.17	5	25	1	10		R-72
01088-007MSD	Herbicides	15.29	5	25	1	10		R-72

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	#5082
SPK 1	#~~5163~~ 5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01128-007	Herbicides	15.65	5	25	2	12.3	R-72	01088-007MS / 150217-07	
2	01129-007	Herbicides	15.33	5	25	2	10.4	R-72	01088-007MS / 150217-07	
3	01087-007	Herbicides	15.90	5	25	1	12.3	R-72	01088-007MS / 150217-07	
4	01088-007	Herbicides	15.34	5	25	1	9.90	R-72	01088-007MS / 150217-07	
5										
6										
7										
8										
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14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/17/2015 10:43
Weighed	Archie	02/17/2015 10:59
Surrogated	Archie	02/17/2015 17:23
Filtered	Archie	02/17/2015 17:37
Transferred	Archie	02/17/2015 17:37
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Soil (Sonic))

Extraction Date/Time: 02/20/2015 16:28

Batch ID: **150220-11**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150220-11	Herbicides	30.00	5	25	1			
LCSS150220-11	Herbicides	30.00	5	25	1	10		
01088-007 ~~01273-001~~MS	Herbicides	~~0000~~ 15.17	5	~~0000~~ 25	1	~~0000~~ 10		
01088-007 ~~01273-001~~MSD	Herbicides	~~0000~~ 15.29	5	~~0000~~ 25	1	~~0000~~ 10		

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	IAS#5082
SPK 1	IAS#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	Herbicides	15.50	5	25	4	10.6	RE-EXTRACT BATCH: 150219-05; R-48 01273-001MS / 150220-11		
2										
3										
4										
5										
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	By	Date/Time
Batched	Archie	02/20/2015 16:28
Weighed	Archie	02/20/2015 18:45
Surrogated	Archie	02/20/2015 18:45
Filtered	Archie	02/20/2015 19:05
Transferred	Archie	02/20/2015 19:05
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Herb

DATE	2/13/2015 0:00	**Extra. Batch**	
INSTRUMENT	W		
METHOD	WHEB0213		
SYS METHOD	8151A (eg. 8015B M, 3810)		
ANALYST	Justyna		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2517	HEXANE										
2	1	W2518	ICC_HERB_L5_IAS_5095,400_PPB										
3	2	W2519	ICC_HERB_L4_IAS_5096,250_PPB										
4	3	W2520	ICC_HERB_L3_IAS_5097,200_PPB										
5	4	W2521	ICC_HERB_L2_IAS_5098,100_PPB										
6	5	W2522	ICC_HERB_L1_IAS_5099,50_PPB										
7	6	W2523	ICV_HERB_C_IAS_5101,200_PPB										

LABORATORY CHRONICLE - GC

Herb

DATE 2/18/2015 0:00 **Extra. Batch** 150217-07 BS **Soil**

INSTRUMENT W

METHOD WHEB0213

SYS METHOD 8151A (eg. 8015B M, 3810)

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2548		HEXANE									
2	1	W2549		CCV_HERB_C_IAS_5101,200_PPB		1							
3	2	W2550		BLKS150217-07		1	30	5	S			2/17/15	0
4	3	W2551		LCSS150217-07		1	30	5	S			2/17/15	0
5	4	W2552		01088-007MS		1	15.17	5	S			2/17/15	9.90
6	5	W2553		01088-007MSD		1	15.29	5	S			2/17/15	9.90
7	6	W2554		01128	7	1	15.65	5	S	2/11/15	2/12/15	2/17/15	12.3
8	7	W2555		01129	7	1	15.33	5	S	2/11/15	2/12/15	2/17/15	10.4
9	8	W2556		01087	7	1	15.90	5	S	2/10/15	2/11/15	2/17/15	12.3
10	9	W2557		01088	7	1	15.34	5	S	2/10/15	2/11/15	2/17/15	9.90
11	100	W2558		HEXANE									
12	1	W2559		CCV_HERB_C_IAS_5101,200_PPB		1							

LABORATORY CHRONICLE - GC

Herb

DATE 2/23/2015 0:00 **Extra. Batch** 150220-11 BS **oil (Sonic)**

INSTRUMENT W

METHOD WHEB0213

SYS METHOD 8151A (eg. 8015B M, 3810)

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2560		HEXANE									
2	1	W2561		CCV_HERB_C_IAS_5101,200_PPB		1							
3	6	W2562		BLKS150220-11		1	30.00	5	S			2/20/15	0
4	8	W2563		01273	1	1	15.50	5	S	2/18/15	2/19/15	2/20/15	10.6
5	7	W2564		LCSS150220-11		1	30.00	5	S			2/20/15	0
6	1	W2565		CCV_HERB_C_IAS_5101,200_PPB		1							

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) + 10µl of (32057) ~~+10µl of core~~ → 10ml HEX			2000PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	~~IAS~~ # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

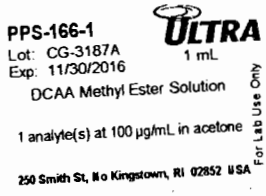
STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2 PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
Lot: CG-3187A
Exp: 11/30/2016
ULTRA
1 mL
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR.STD.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# ~~5092~~ SOLL + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/6/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

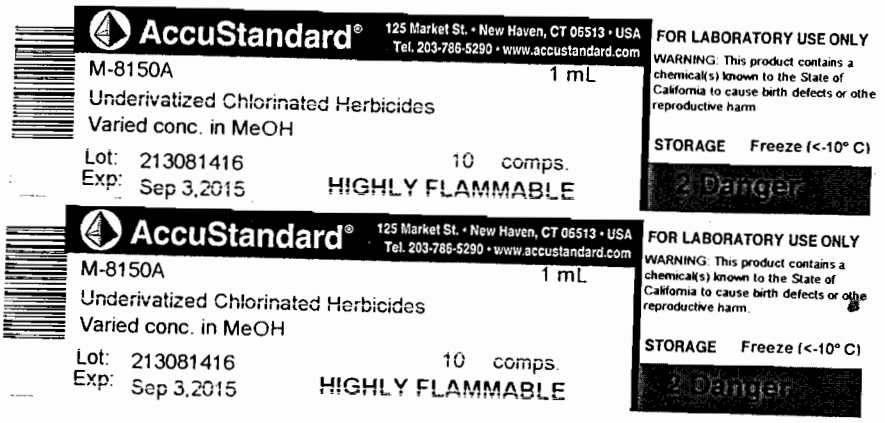
For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS



SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000 µg/mL	Aldrin
1000 µg/mL	alpha-BHC
1000 µg/mL	alpha-Chlordane
1000 µg/mL	beta-BHC
1000 µg/mL	delta-BHC
1000 µg/mL	Dieldrin
1000 µg/mL	Endosulfan I
1000 µg/mL	Endosulfan II
1000 µg/mL	Endosulfan sulfate
1000 µg/mL	Endrin
1000 µg/mL	Endrin aldehyde
1000 µg/mL	Endrin ketone
1000 µg/mL	gamma-BHC
1000 µg/mL	gamma-Chlordane
1000 µg/mL	Heptachlor
1000 µg/mL	Heptachlor epoxide (Isomer B)
1000 µg/mL	Methoxychlor
1000 µg/mL	p,p'-DDD
1000 µg/mL	p,p'-DDE
1000 µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE
Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:	8011 Working Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-8081-5	T1111006012	1000 PPM (mg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

13

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

T1111006012 ACE-8081-S

FREEZER ITEM

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-165-1
Lot: CL-2302
Exp: 07/31/2016

ULTRA
1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, N. Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~1.25 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

S-11086J4-5ML Exp 12/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 1111790

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

S-11092J4-5ML Exp 3/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-

Arochlor 1260 Solution

Lot: 664400

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

PPS-166-1

Lot: CG-3187

Exp: 10/31/2014

ULTRA

1 mL

DCAA Methyl Ester Solution

1 analyte(s) at 100 µg/mL in acetone

250 Smith St, No Kingstown, RI 02852 USA

For Lab Use Only

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog# 32055

This product is photosensitive.

Herbicide Mix #1/ME (Methyl Ester)

200 ug/mL each in Hexane

Lot# A095323 Exp. Date: 05/2020 Store: 10°C or colder

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog# 32057

This product is photosensitive.

Herbicide Mix #2/ME (Methyl Ester)

2000 ug/mL each in Hexane

Lot# A094613 Exp. Date: 04/2020 Store: 10°C or colder

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) Cat # + 8µl of (32057) Cat # ~~+10µl of EASH~~ → 10ml HEX JS			2000 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

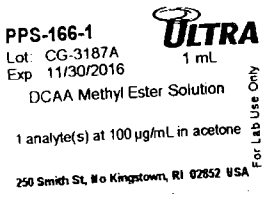
STANDARD IAS#	STANDARD NAME:	PCB LS (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2 PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
Lot: CG-3187A
Exp 11/30/2016
ULTRA
1 mL
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR. STD.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# 5092 ~~5092~~ + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides
Varied conc. in MeOH

Lot: 213081416 10 comps.
Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or othe reproductive harm.

STORAGE Freeze (<-10° C)

2 Danger

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides
Varied conc. in MeOH

Lot: 213081416 10 comps.
Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or othe reproductive harm.

STORAGE Freeze (<-10° C)

2 Danger

SPEX CertiPrep
Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in [Benzene:Hexane:Toluene]

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE
Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:	8011 Working Std (2nd so		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~				
STD.EXP.DATE	DILUTION	VOID		FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	ACE-2081-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 Surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	Isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

T1111006012 ACE-8081-S

FREEZER ITEM

—WARNING—CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-166-1
Lot: CL-2302
Exp: 07/31/2016

ULTRA 1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, N Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-5	T111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	~~1:8~~ 1:50			~~125 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	Chem Service	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

TCLP
HERBICIDE DATA

TCLP
HERBICIDE QC SUMMARY

HERBICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 02/24/2015

Client ID	Lab Sample ID	Matrix	DCPA 1 % rec	#	DCPA 2 % rec	#
Herb	BLKA150223-05	AQUEOUS	66		66	
Herb	LCSA150223-05	AQUEOUS	78		74	
Herb	TCLP150219	AQUEOUS	58		72	
GPEC-WC1	E15-01273-001	LEACHATE	15	M	20	M

Surrogate QC Limits	Soil	Aqueous/Leachate
DCPA = 2,4-Dichlorophenylacetic acid	30-150	30-150
	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150223-05
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2569.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
Dalapon	200.0	0.0	136.3	68	
Dicamba	200.0	0.0	151.9	76	
2,4-D	200.0	0.0	118.8	59	
2,4,5-TP (Silvex)	200.0	0.0	164.7	82	
2,4,5-T	200.0	0.0	161.4	81	
2,4-DB	200.0	0.0	110.0	55	
Dinoseb	200.0	0.0	127.5	64	

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-01088-007
Date Received: 02/11/2015
Date Extracted: 02/13/2015
Date Analyzed: 02/17/2015
MS Data file: W2529.D
MSD Data file: W2530.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dalapon	200.00	0.0	51.7	26	*	61.3	31		17	
Dicamba	200.00	0.0	49.1	25	*	74.5	37		41	*
2,4-D	200.00	0.0	87.1	44		86.4	43		1	
2,4,5-TP (Silvex)	200.00	0.0	85.2	43		98.8	49		15	
2,4,5-T	200.00	0.0	108.3	54		120.3	60		10	
2,4-DB	200.00	0.0	74.0	37		70.2	35		5	
Dinoseb	200.00	0.0	17.9	9	*	32.6	16	*	58	*

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2526.D	Instrument ID:	GC-W
Date Extracted:	02/13/2015	Matrix:	AQUEOUS
Date Analyzed:	02/17/2015	Time Analyzed:	09:27

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	TCLP150211	02/17/2015	09:41
Herb	LCSA150213-04	02/17/2015	09:54
Herb	01088-007MS	02/17/2015	10:08
Herb	01088-007MSD	02/17/2015	10:22
DS_MH-A_	E15-01087-007	02/17/2015	10:36
DS_DB-A_	E15-01088-007	02/17/2015	10:50

HERBICIDE METHOD BLANK SUMMARY

Lab File ID:	W2568.D	Instrument ID:	GC-W
Date Extracted:	02/23/2015	Matrix:	AQUEOUS
Date Analyzed:	02/24/2015	Time Analyzed:	10:13

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Herb	LCSA150223-05	02/24/2015	10:27
Herb	TCLP150219	02/24/2015	10:41
GPEC-WC1	E15-01273-001	02/24/2015	10:55

HERBICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

DCPA 1 5.06 **DCPA 2** 4.85

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	DCPA 1 RT	#	DCPA 2 RT	#
Herb	BLKA150223-05	02/24/2015	10:13	5.06		4.85	
Herb	LCSA150223-05	02/24/2015	10:27	5.06		4.84	
Herb	TCLP150219	02/24/2015	10:41	5.06		4.84	
GPEC-WC1	E15-01273-001	02/24/2015	10:55	5.06		4.84	

Surrogate QC Limits

DCPA = 2,4-Dichlorophenylacetic acid (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

TCLP
HERBICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2571.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:55
Operator : JS
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-05,02/23/15,02/19/15,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 11:24:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S Surrogate	5.06	4.84	34718939	9068756	14.496m	19.859 #
Spiked Amount 100.000			Recovery	=	14.50%	19.86%
Target Compounds						

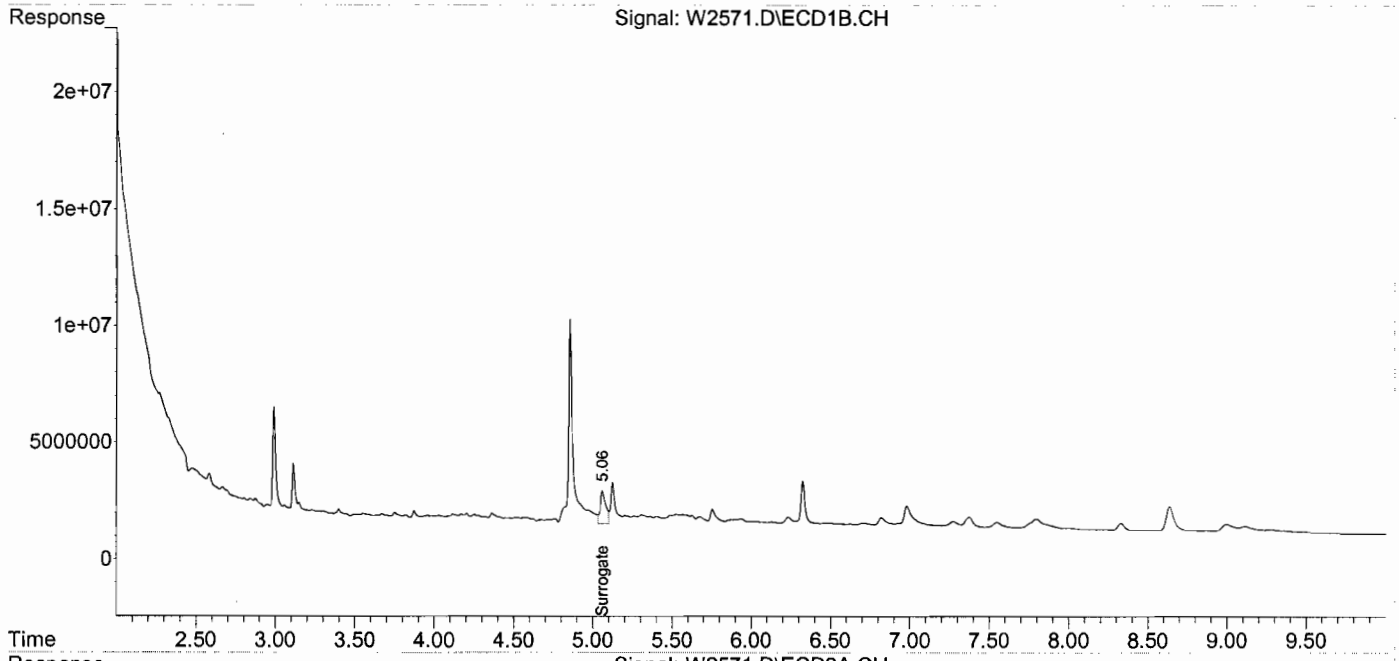
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

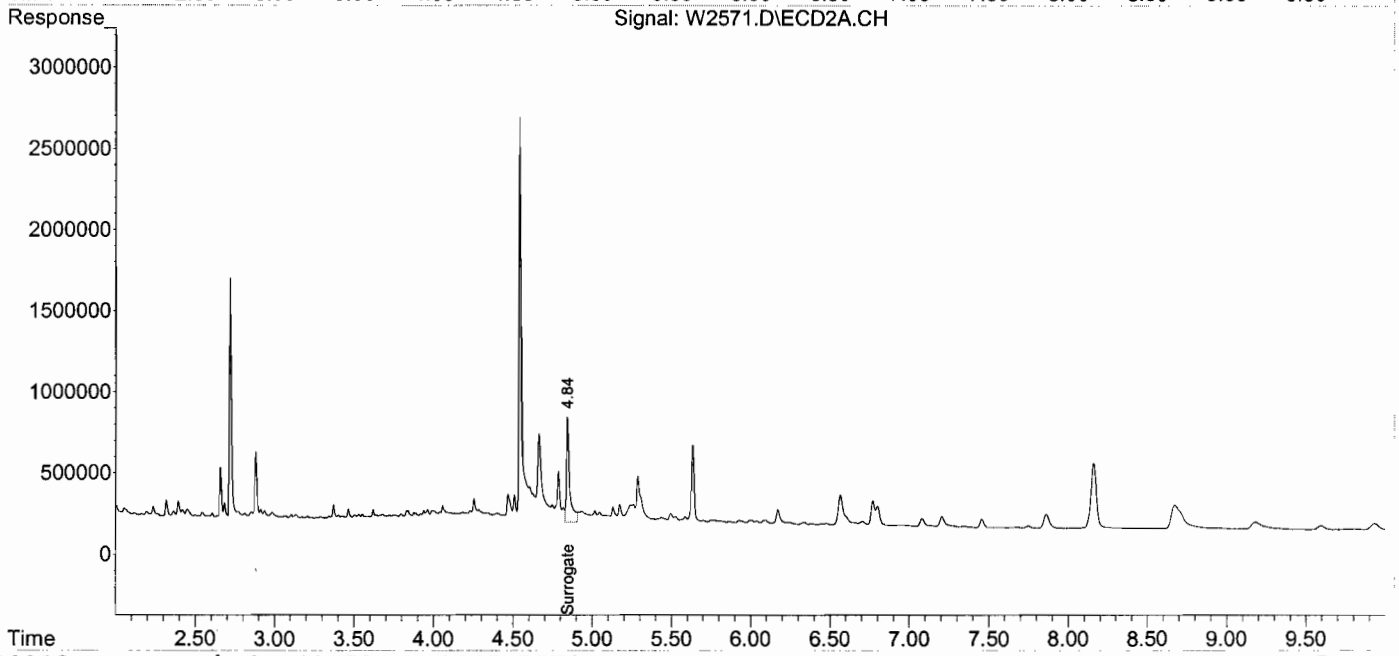
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2571.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:55
Operator : JS
Sample : GPEC-WC1,E15-01273-001,T,200ml,100,5
Misc : 150223-05,02/23/15,02/19/15,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 11:24:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
HERBICIDE STANDARDS

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 Instrument ID: GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.45	2.45	2.45	2.45	2.45	2.45	2.38	2.52
Dicamba	5.17	5.17	5.17	5.17	5.17	5.17	5.10	5.24
2,4-D	5.68	5.68	5.68	5.68	5.67	5.68	5.60	5.76
2,4,5-TP (Silvex)	6.18	6.18	6.18	6.18	6.18	6.18	6.09	6.27
2,4,5-T	6.37	6.36	6.36	6.36	6.36	6.36	6.27	6.45
2,4-DB	6.75	6.75	6.75	6.74	6.74	6.75	6.66	6.84
Dinoseb	7.76	7.76	7.76	7.76	7.76	7.76	7.67	7.85

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	50	100	200	250	400	RT	FROM	TO
Dalapon	2.10	2.10	2.10	2.10	2.10	2.10	2.03	2.17
Dicamba	4.94	4.94	4.94	4.94	4.94	4.94	4.87	5.01
2,4-D	5.44	5.44	5.44	5.44	5.44	5.44	5.36	5.52
2,4,5-TP (Silvex)	5.89	5.89	5.89	5.89	5.89	5.89	5.80	5.98
2,4,5-T	6.11	6.11	6.11	6.11	6.11	6.11	6.02	6.20
2,4-DB	6.44	6.44	6.43	6.43	6.43	6.44	6.35	6.53
Dinoseb	6.67	6.67	6.67	6.67	6.67	6.67	6.58	6.76

HERBICIDE INITIAL CALIBRATION

Date Analyzed: 02/13/2015 **Instrument ID:** GC-W

GC Column (1st): RTX-CLP1

Data File: W2522.D W2521.D W2520.D W2519.D W2518.D

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	903207	875903	896803	952818	830288	891804	4.99
Dicamba	2414762	2144372	2181960	2375414	2142152	2251732	5.89
2,4-D	1030492	895263	777527	831600	676964	842369	15.69
Silvex	3142754	3193771	3290176	3665519	3207793	3300003	6.40
2,4,5-T	3329848	3179782	3105259	3374720	2873510	3172624	6.30
2,4-DB	673628	691239	665854	714327	578164	664642	7.79
Dinoseb	2645710	2307269	2293579	2550211	2193909	2398136	7.95

GC Column (2nd): RTX-CLP2

Data File: W2522.C W2521.C W2520.C W2519.C W2518.C

Compound	CALIBRATION FACTORS					MEAN CF	%RSD
	50	100	200	250	400		
Dalapon	152894	151228	159265	171230	151149	157153	5.44
Dicamba	370790	390680	405277	447236	398737	402544	6.99
2,4-D	116908	127719	116341	123187	107739	118379	6.40
Silvex	580383	613234	633347	694311	620480	628351	6.64
2,4,5-T	508107	525218	543977	589855	527488	538929	5.78
2,4-DB	80559	78679	80096	80710	72375	78484	4.47
Dinoseb	385779	371992	406005	438700	394625	399420	6.32

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	463.8E6	88855081	193.644	194.575
		Spiked Amount 100.000			Recovery	=	193.64%	194.57%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	332.1E6	60459496	372.408	393.905m
3)	T	Dicamba	5.17	4.94	856.9E6	159.5E6	380.534	396.217
7)	T	2,4-D	5.67	5.44	270.8E6	43095683	321.457	364.048
8)	T	2,4,5-TP (Silvex	6.18	5.89	1283.1E6	248.2E6	388.823	394.989
9)	T	2,4,5-T	6.36	6.11	1149.4E6	211.0E6	362.288	391.508
10)	T	2,4-DB	6.74	6.43	231.3E6	28949933	354.335	368.864
11)	T	Dinoseb	7.76	6.67	877.6E6	157.9E6	365.936	395.198

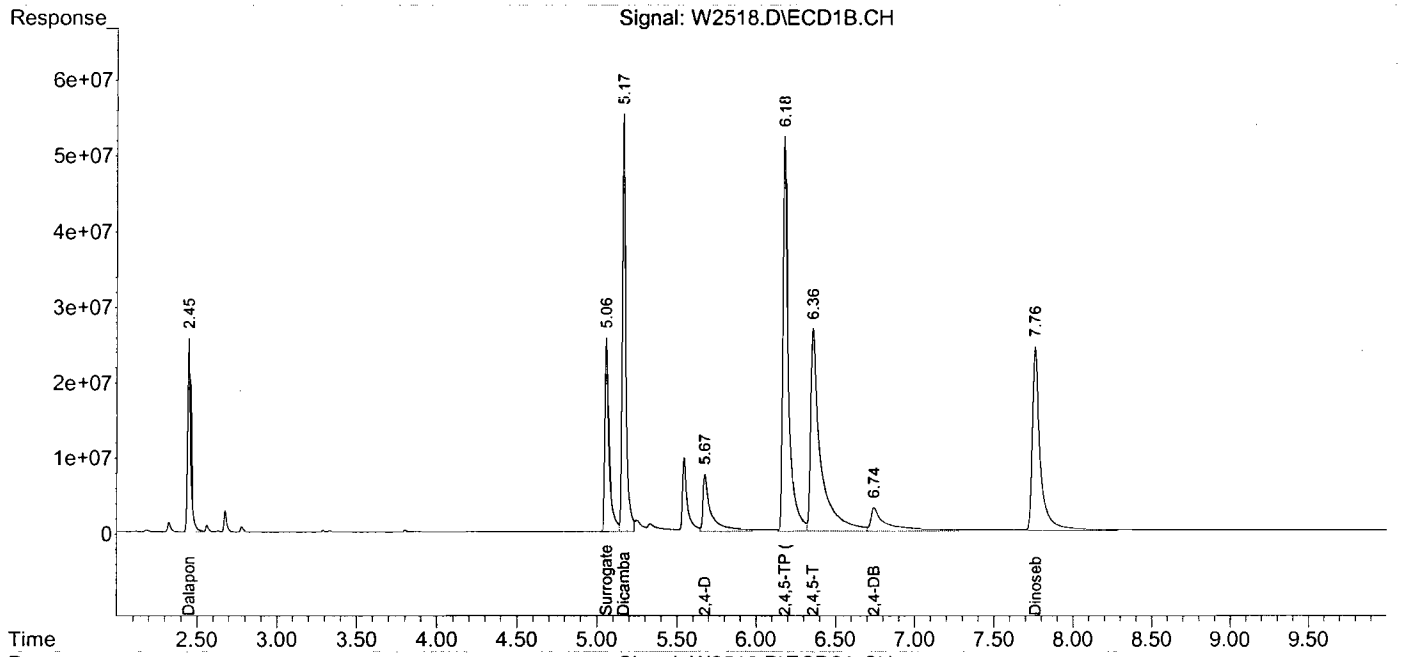
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

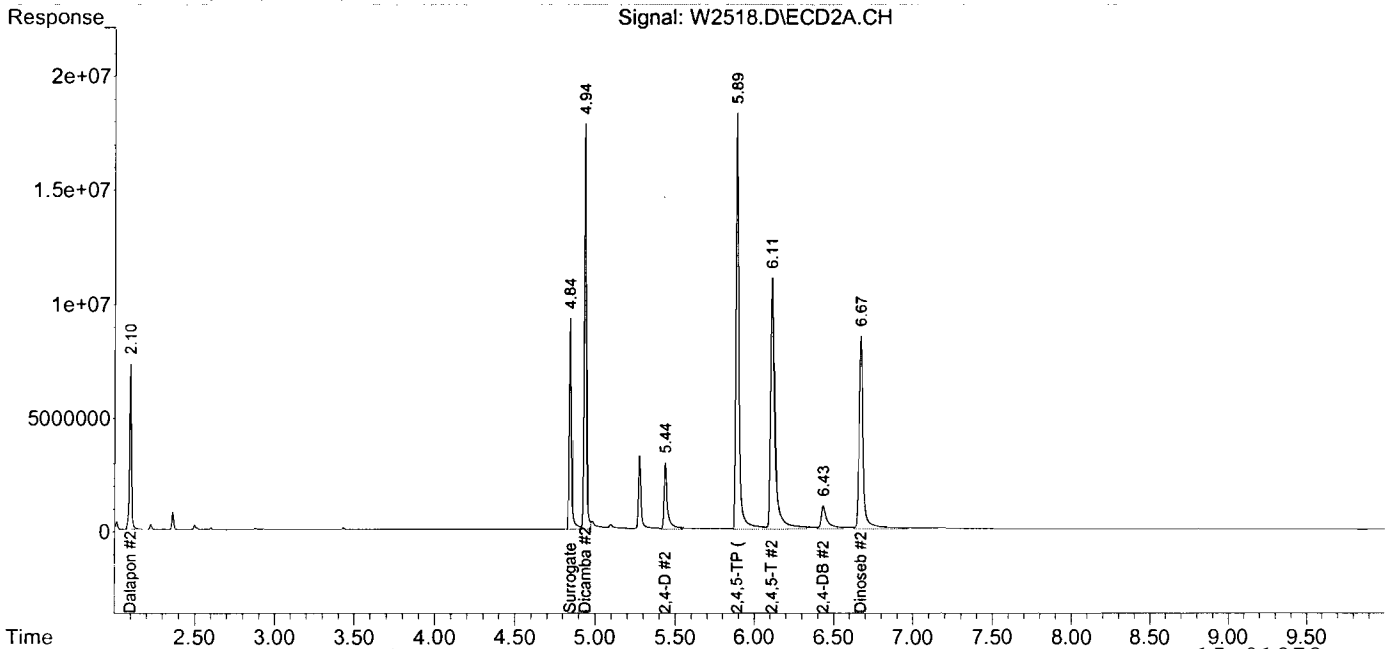
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 9:53
Operator : JS
Sample : ICC_HERB_L5_IAS_5095,400_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	323.7E6	62261589	135.161	136.341
	Spiked Amount 100.000			Recovery	=	135.16%	136.34%
	Target Compounds						
2) T	Dalapon	2.45	2.10	238.2E6	42807415	267.104	278.898m
3) T	Dicamba	5.17	4.94	593.9E6	111.8E6	263.732	277.756
7) T	2,4-D	5.68	5.44	207.9E6	30796847	246.804	260.155
8) T	2,4,5-TP (Silvex	6.18	5.89	916.4E6	173.6E6	277.691	276.243
9) T	2,4,5-T	6.36	6.11	843.7E6	147.5E6	265.925	273.624
10) T	2,4-DB	6.74	6.43	178.6E6	20177583	273.615	257.092
11) T	Dinoseb	7.76	6.67	637.6E6	109.7E6	265.853	274.586

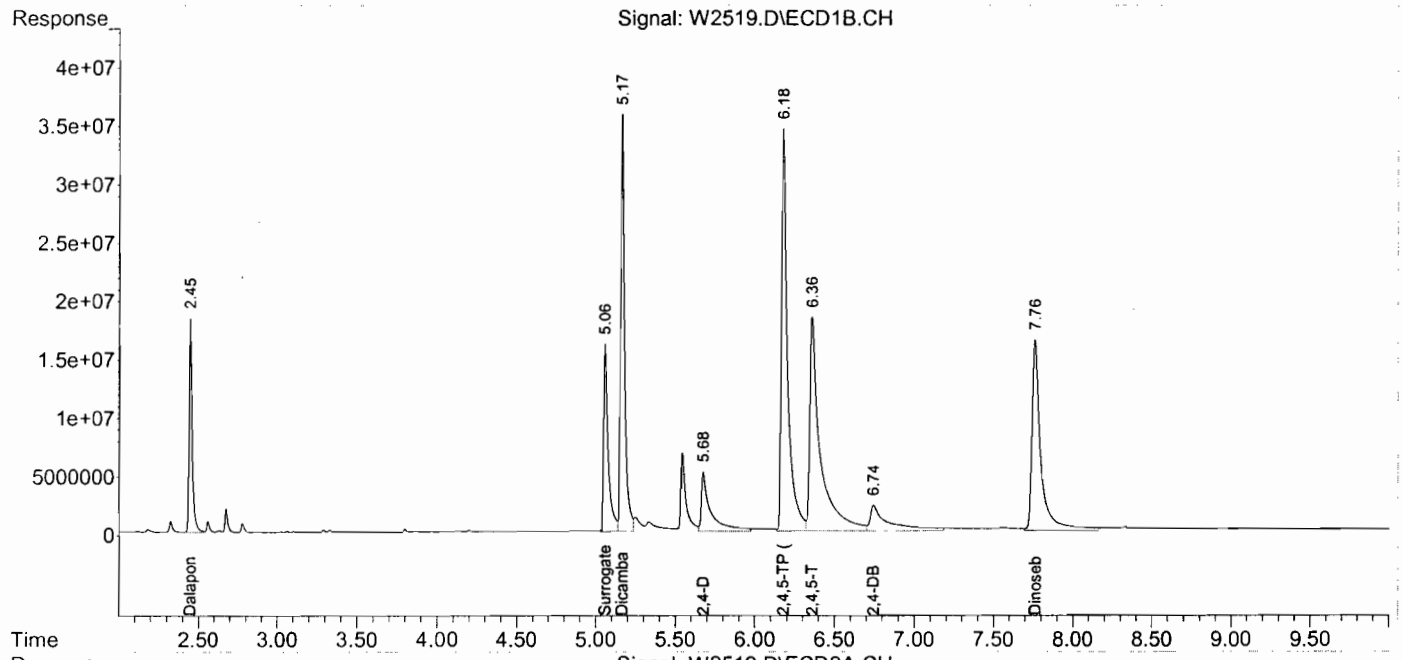
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

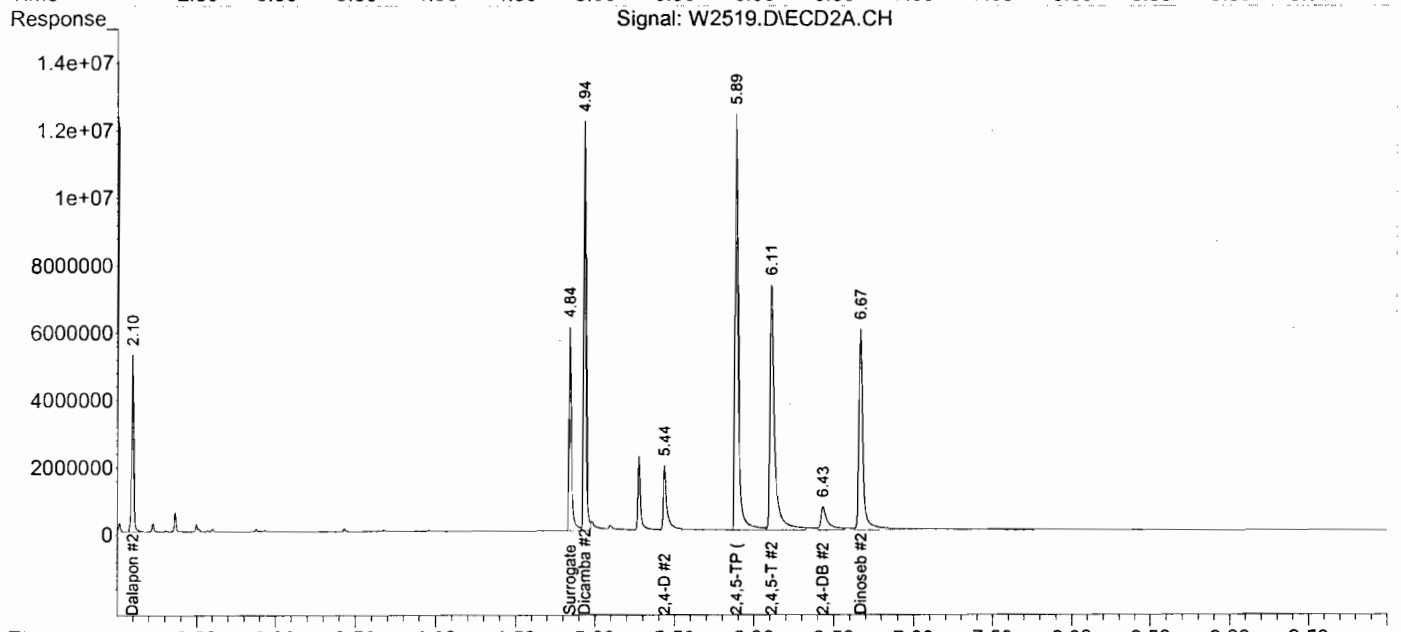
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2519.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:07
Operator : JS
Sample : ICC_HERB_L4_IAS_5096,250_PPB
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:07:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
		System Monitoring Compounds						
1)	S	Surrogate	5.06	4.84	240.9E6	45325512	100.565	99.254
		Spiked Amount 100.000			Recovery	=	100.57%	99.25%
		Target Compounds						
2)	T	Dalapon	2.45	2.10	179.4E6	31853010	201.121	207.528m
3)	T	Dicamba	5.17	4.94	436.4E6	81055369	193.803	201.358
7)	T	2,4-D	5.68	5.44	155.5E6	23268227	184.605	196.557
8)	T	2,4,5-TP (Silvex	6.18	5.89	658.0E6	126.7E6	199.404	201.590
9)	T	2,4,5-T	6.36	6.11	621.1E6	108.8E6	195.753	201.873
10)	T	2,4-DB	6.75	6.43	133.2E6	16019235	204.038	204.108
11)	T	Dinoseb	7.76	6.67	458.7E6	81201099	191.280	203.297

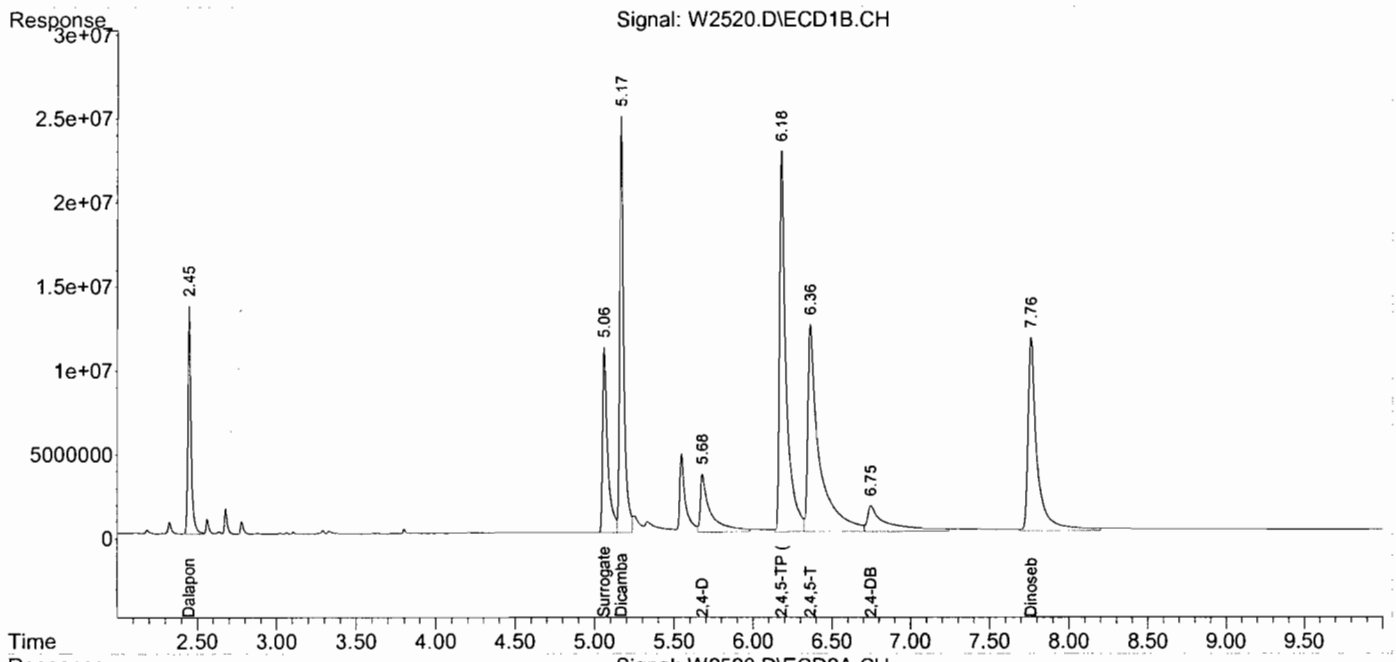
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

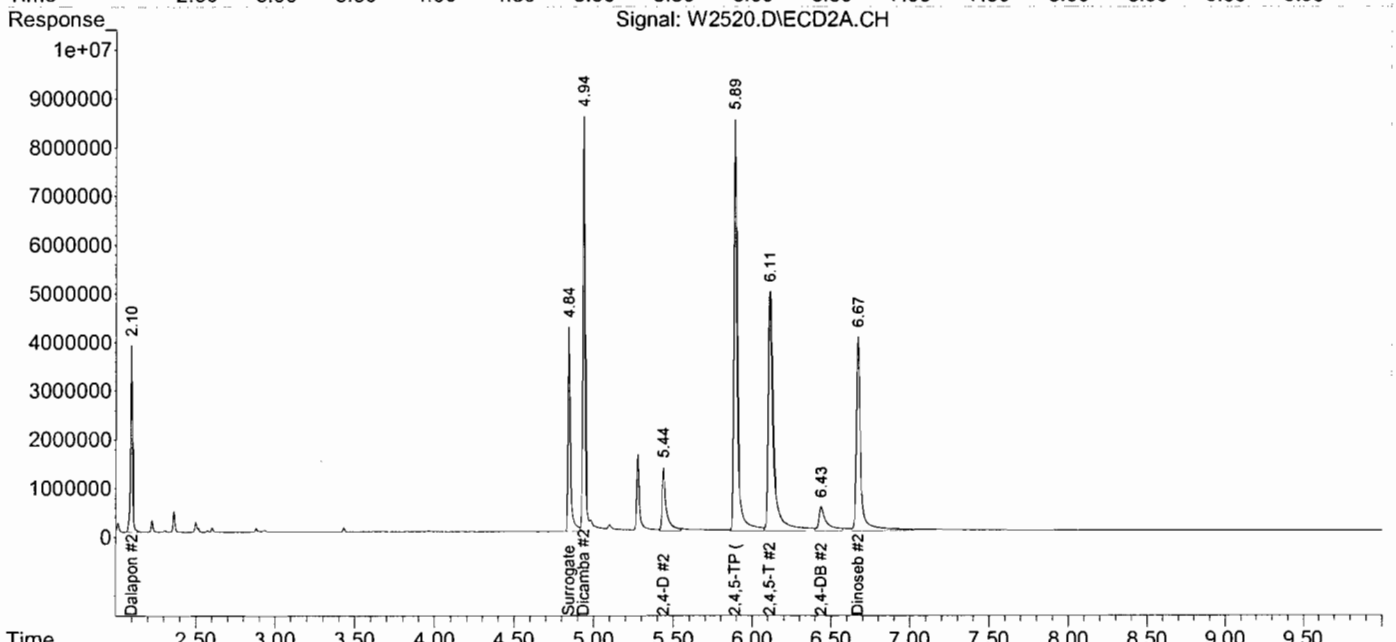
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:21
Operator : JS
Sample : ICC_HERB_L3_IAS_5097,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	118.8E6	22486106	49.600	49.240
	Spiked Amount 100.000			Recovery	=	49.60%	49.24%
	Target Compounds						
2) T	Dalapon	2.45	2.10	87590319	15122838	98.217	98.528m
3) T	Dicamba	5.17	4.94	214.4E6	39067980	95.232	97.053
7) T	2,4-D	5.68	5.44	89526306	12771920	106.279	107.890
8) T	2,4,5-TP (Silvex	6.18	5.89	319.4E6	61323350	96.781	97.594
9) T	2,4,5-T	6.36	6.11	318.0E6	52521844	100.226	97.456
10) T	2,4-DB	6.75	6.44	69123888	7867947	105.909m	100.249
11) T	Dinoseb	7.76	6.67	230.7E6	37199216	96.211	93.133

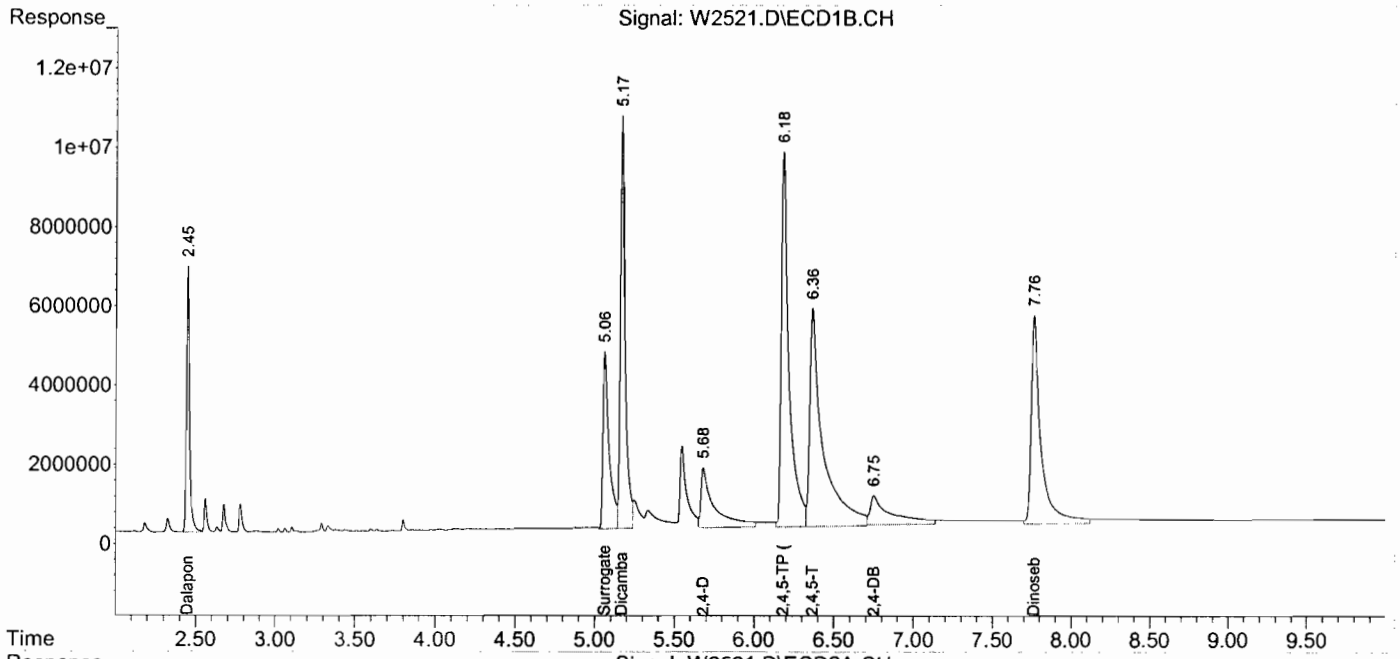
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

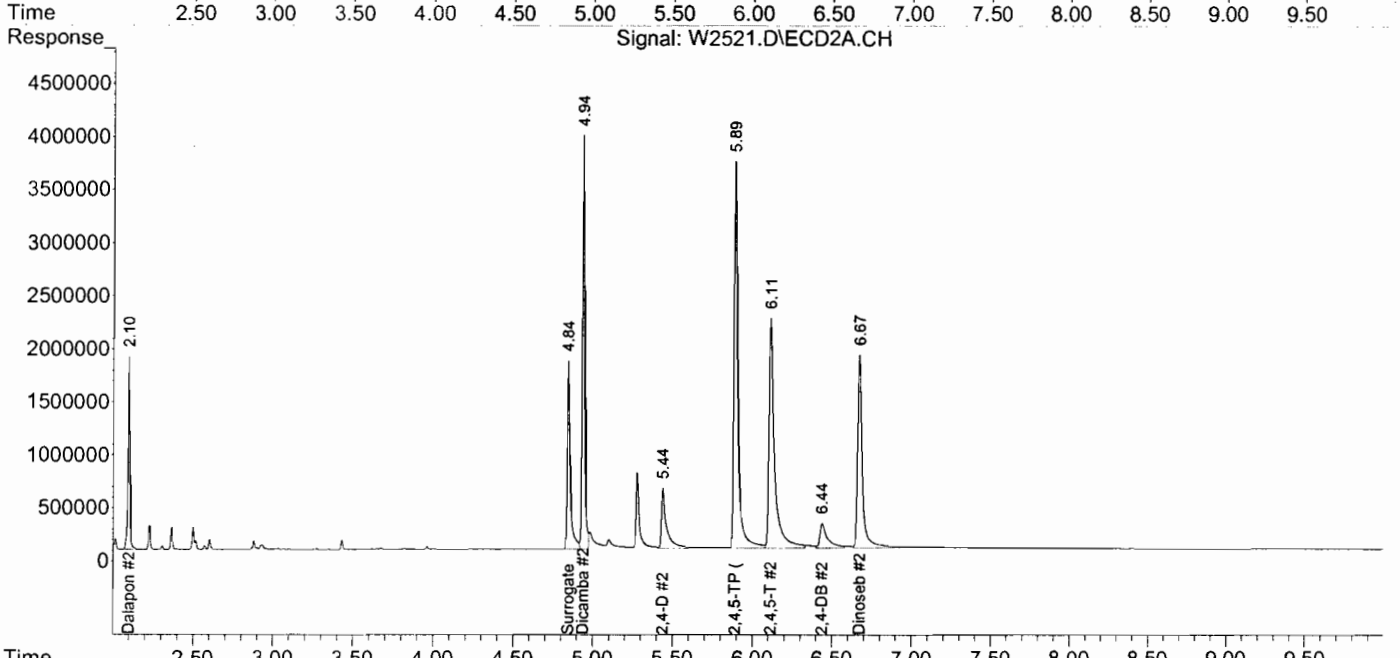
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2521.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:35
Operator : JS
Sample : ICC_HERB_L2_IAS_5098,100_PPB
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:08:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	57052341	10949160	23.821	23.976
	Spiked Amount 100.000			Recovery	=	23.82%	23.98%
	Target Compounds						
2) T	Dalapon	2.45	2.10	45160353	7644706	50.639	49.807m
3) T	Dicamba	5.17	4.94	120.7E6	18539504	53.620	46.056
7) T	2,4-D	5.68	5.44	51524595	5845395	61.166	49.379
8) T	2,4,5-TP (Silvex	6.18	5.89	157.1E6	29019174	47.617	46.183
9) T	2,4,5-T	6.37	6.11	166.5E6	25405343	52.478	47.140
10) T	2,4-DB	6.75	6.44	33681400	4027968	51.605m	51.322
11) T	Dinoseb	7.76	6.67	132.3E6	19288965	55.162	48.292

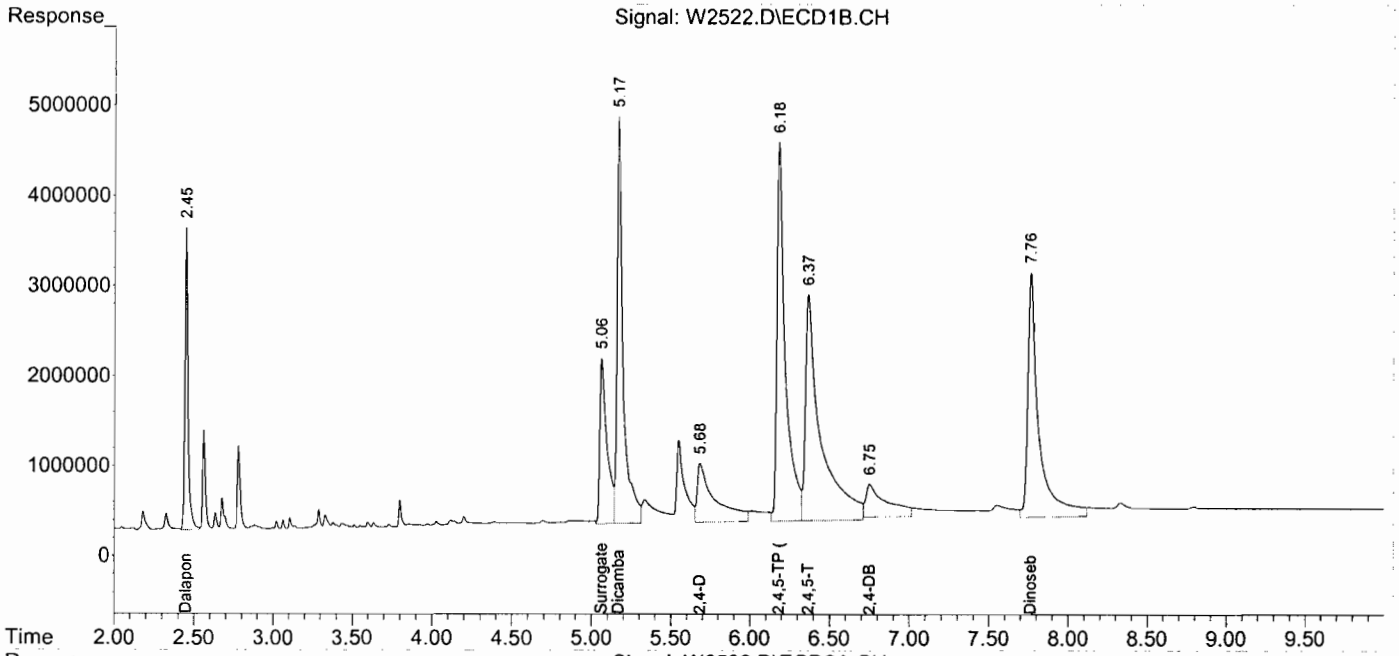
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

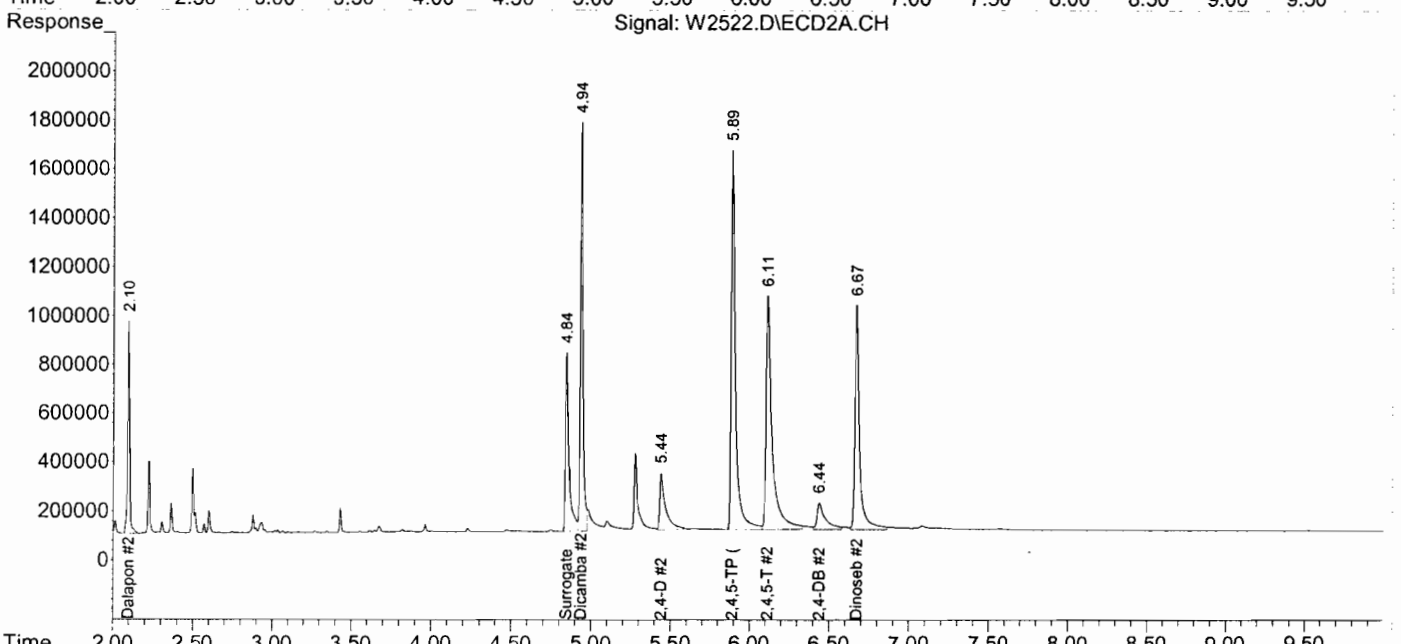
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2522.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 10:49
Operator : JS
Sample : ICC_HERB_L1_IAS_5099,50_PPB
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:05:16 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/13/2015 **Instrument ID:** GC-W

Data File: W2523.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	885073	0.75
Dicamba	5.17	5.10	5.24	2251732	2164694	3.87
2,4-D	5.68	5.60	5.76	842369	775793	7.90
Silvex	6.18	6.09	6.27	3300003	3181521	3.59
2,4,5-T	6.36	6.27	6.45	3172624	3069412	3.25
2,4-DB	6.75	6.66	6.84	664642	660089	0.69
Dinoseb	7.76	7.67	7.85	2398136	2351998	1.92

GC Column (2nd): RTX-CLP2

Data File: W2523.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	155435	1.09
Dicamba	4.94	4.87	5.01	402544	398337	1.05
2,4-D	5.44	5.36	5.52	118379	113194	4.38
Silvex	5.89	5.80	5.98	628351	619519	1.41
2,4,5-T	6.11	6.02	6.20	538929	540251	0.25
2,4-DB	6.44	6.35	6.53	78484	76061	3.09
Dinoseb	6.67	6.58	6.76	399420	407471	2.02

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/17/2015 **Instrument ID:** GC-W

Data File: W2525.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	897407	0.63
Dicamba	5.17	5.10	5.24	2251732	2213478	1.70
2,4-D	5.68	5.60	5.76	842369	809416	3.91
Silvex	6.18	6.09	6.27	3300003	3382992	2.51
2,4,5-T	6.36	6.27	6.45	3172624	3128596	1.39
2,4-DB	6.75	6.66	6.84	664642	688537	3.60
Dinoseb	7.76	7.67	7.85	2398136	2377675	0.85

GC Column (2nd): RTX-CLP2

Data File: W2525.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	153015	2.63
Dicamba	4.94	4.87	5.01	402544	416289	3.41
2,4-D	5.44	5.36	5.52	118379	114055	3.65
Silvex	5.89	5.80	5.98	628351	638345	1.59
2,4,5-T	6.11	6.02	6.20	538929	527755	2.07
2,4-DB	6.44	6.35	6.53	78484	79853	1.74
Dinoseb	6.67	6.58	6.76	399420	390730	2.18

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/17/2015 **Instrument ID:** GC-W

Data File: W2537.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	733283	17.78
Dicamba	5.17	5.10	5.24	2251732	1871661	16.88
2,4-D	5.68	5.60	5.76	842369	678117	19.50
Silvex	6.18	6.09	6.27	3300003	2818232	14.60
2,4,5-T	6.36	6.27	6.45	3172624	2617136	17.51
2,4-DB	6.75	6.66	6.84	664642	620825	6.59
Dinoseb	7.76	7.67	7.85	2398136	2004814	16.40

GC Column (2nd): RTX-CLP2

Data File: W2537.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	169170	7.65
Dicamba	4.94	4.87	5.01	402544	440335	9.39
2,4-D	5.44	5.36	5.52	118379	120121	1.47
Silvex	5.89	5.80	5.98	628351	675123	7.44
2,4,5-T	6.11	6.02	6.20	538929	570131	5.79
2,4-DB	6.44	6.35	6.53	78484	77111	1.75
Dinoseb	6.67	6.58	6.76	399420	399620	0.05

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/24/2015 **Instrument ID:** GC-W

Data File: W2567.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	758346	14.96
Dicamba	5.17	5.10	5.24	2251732	2279182	1.22
2,4-D	5.67	5.60	5.76	842369	815700	3.17
Silvex	6.18	6.09	6.27	3300003	3474974	5.30
2,4,5-T	6.36	6.27	6.45	3172624	3207108	1.09
2,4-DB	6.74	6.66	6.84	664642	730029	9.84
Dinoseb	7.76	7.67	7.85	2398136	2376985	0.88

GC Column (2nd): RTX-CLP2

Data File: W2567.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.10	2.03	2.17	157153	130253	17.12
Dicamba	4.94	4.87	5.01	402544	417561	3.73
2,4-D	5.44	5.36	5.52	118379	118324	0.05
Silvex	5.89	5.80	5.98	628351	664996	5.83
2,4,5-T	6.11	6.02	6.20	538929	570348	5.83
2,4-DB	6.43	6.35	6.53	78484	83385	6.24
Dinoseb	6.67	6.58	6.76	399420	427585	7.05

HERBCIDE CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 02/24/2015 **Instrument ID:** GC-W

Data File: W2574.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.45	2.38	2.52	891804	892618	0.09
Dicamba	5.17	5.10	5.24	2251732	2266514	0.66
2,4-D	5.68	5.60	5.76	842369	748681	11.12
Silvex	6.18	6.09	6.27	3300003	3382757	2.51
2,4,5-T	6.36	6.27	6.45	3172624	3064715	3.40
2,4-DB	6.74	6.66	6.84	664642	632916	4.77
Dinoseb	7.76	7.67	7.85	2398136	2017352	15.88

GC Column (2nd): RTX-CLP2

Data File: W2574.C

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Dalapon	2.09	2.03	2.17	157153	173188	10.20
Dicamba	4.94	4.87	5.01	402544	464448	15.38
2,4-D	5.44	5.36	5.52	118379	129757	9.61
Silvex	5.89	5.80	5.98	628351	731245	16.38
2,4,5-T	6.11	6.02	6.20	538929	618883	14.84
2,4-DB	6.43	6.35	6.53	78484	89158	13.60
Dinoseb	6.67	6.58	6.76	399420	396380	0.76

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	238.5E6	44438391	99.589	97.311
	Spiked Amount 100.000			Recovery	=	99.59%	97.31%
	Target Compounds						
2) T	Dalapon	2.45	2.10	177.0E6	31087017	198.491	197.813
3) T	Dicamba	5.17	4.94	432.9E6	79667336	192.269	197.910
7) T	2,4-D	5.68	5.44	155.2E6	22638862	184.193	191.241
8) T	2,4,5-TP (Silvex	6.18	5.89	636.3E6	123.9E6	192.819	197.189
9) T	2,4,5-T	6.36	6.11	613.9E6	108.1E6	193.494	200.491
10) T	2,4-DB	6.75	6.44	132.0E6	15212252	198.630	193.826
11) T	Dinoseb	7.76	6.67	470.4E6	81494177	196.152	204.031

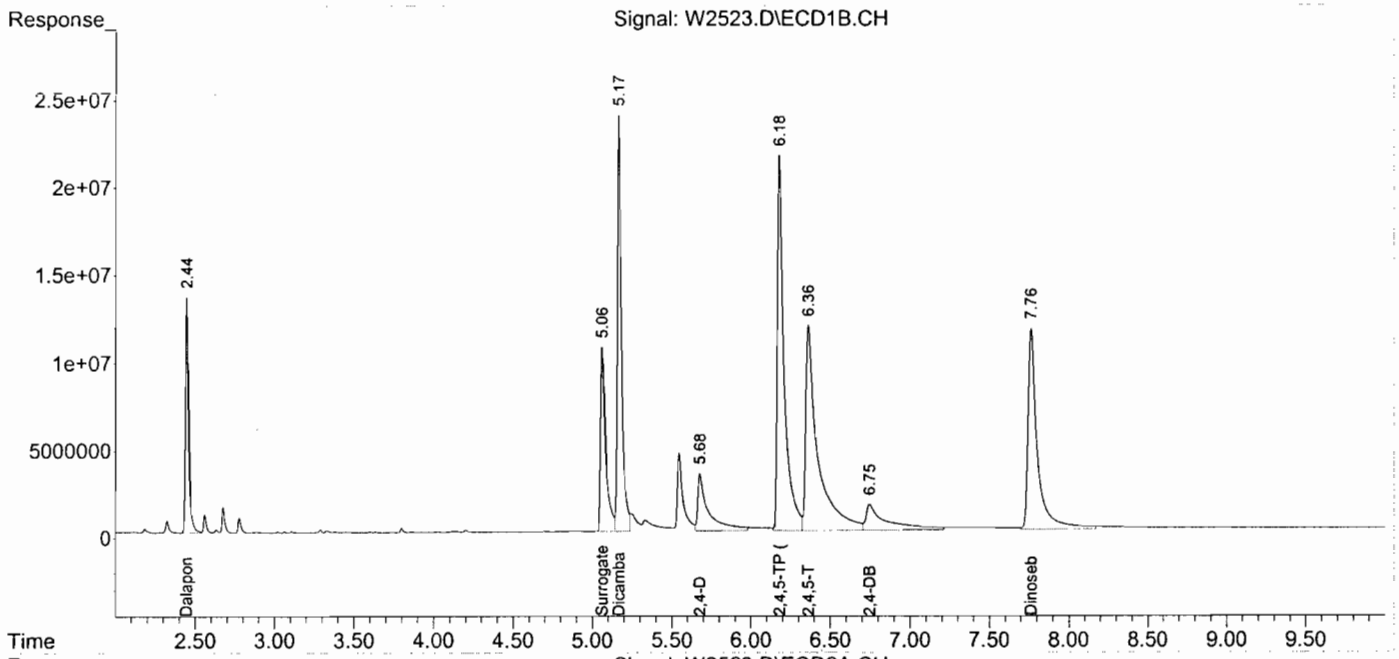
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

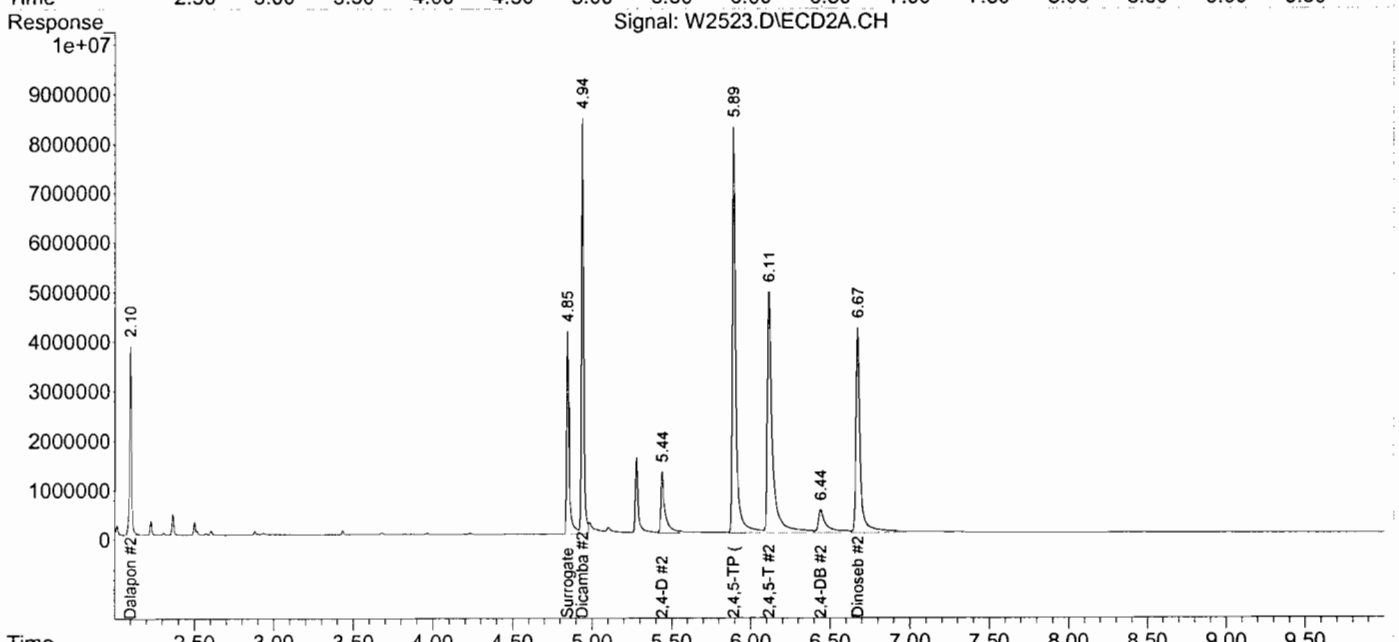
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-13-15\
Data File : W2523.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 13 Feb 2015 11:07
Operator : JS
Sample : ICV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 13 11:44:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2525.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:00
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 09:11:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	245.1E6	45709987	102.317	100.096
	Spiked Amount 100.000			Recovery	=	102.32%	100.10%
	Target Compounds						
2) T	Dalapon	2.45	2.10	179.5E6	30603040	201.257	194.734
3) T	Dicamba	5.17	4.94	442.7E6	83257725	196.602	206.829
7) T	2,4-D	5.68	5.44	161.9E6	22811025	192.176	192.695
8) T	2,4,5-TP (Silvex	6.18	5.89	676.6E6	127.7E6	205.030	203.181
9) T	2,4,5-T	6.36	6.11	625.7E6	105.6E6	197.225	195.853
10) T	2,4-DB	6.75	6.44	137.7E6	15970549	207.190	203.488
11) T	Dinoseb	7.76	6.67	475.5E6	78146000	198.294	195.648

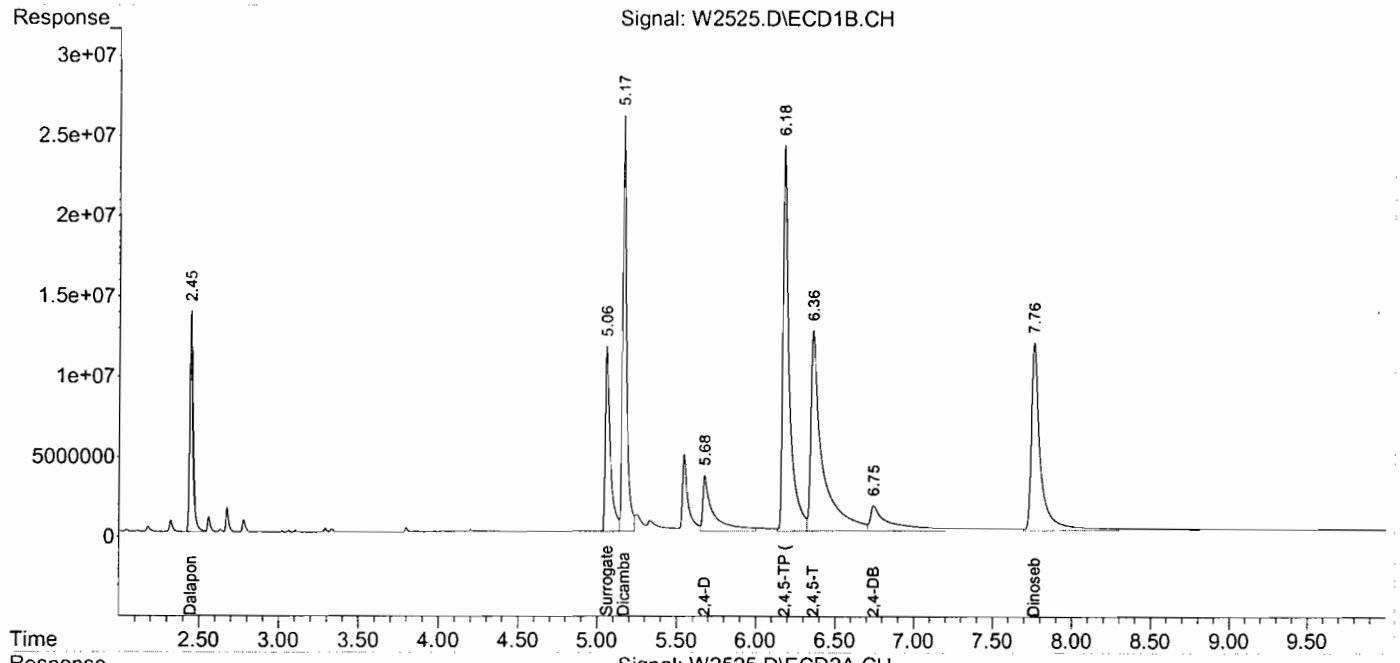
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

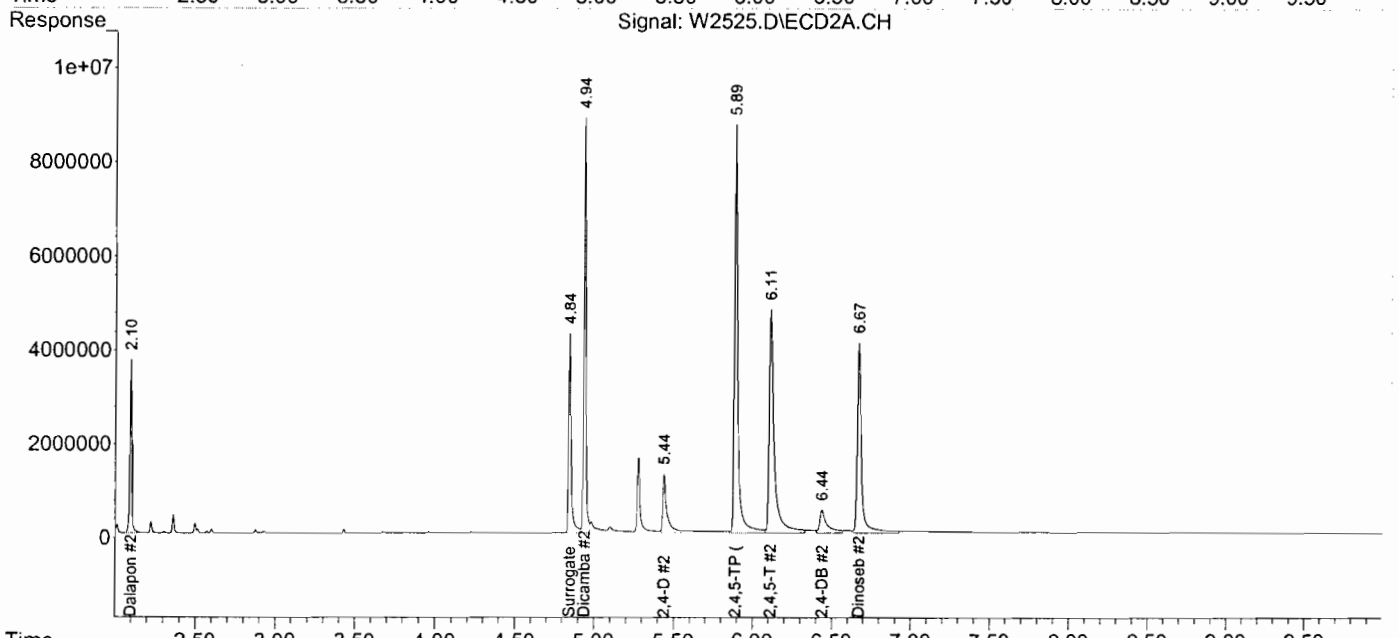
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2525.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:00
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 09:11:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 13:15
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 13:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	208.4E6	49293556	87.012	107.943
	Spiked Amount 100.000			Recovery =		87.01%	107.94%
	Target Compounds						
2) T	Dalapon	2.45	2.10	146.7E6	33834026	164.449	215.293m#
3) T	Dicamba	5.17	4.94	374.3E6	88067023	166.242	218.776 #
7) T	2,4-D	5.68	5.44	135.6E6	24024155	161.002	202.943 #
8) T	2,4,5-TP (Silvex	6.18	5.89	563.6E6	135.0E6	170.802	214.887 #
9) T	2,4,5-T	6.36	6.11	523.4E6	114.0E6	164.982	211.579 #
10) T	2,4-DB	6.75	6.44	124.2E6	15422189	186.815	196.501
11) T	Dinoseb	7.76	6.67	401.0E6	79923940	167.198	200.100

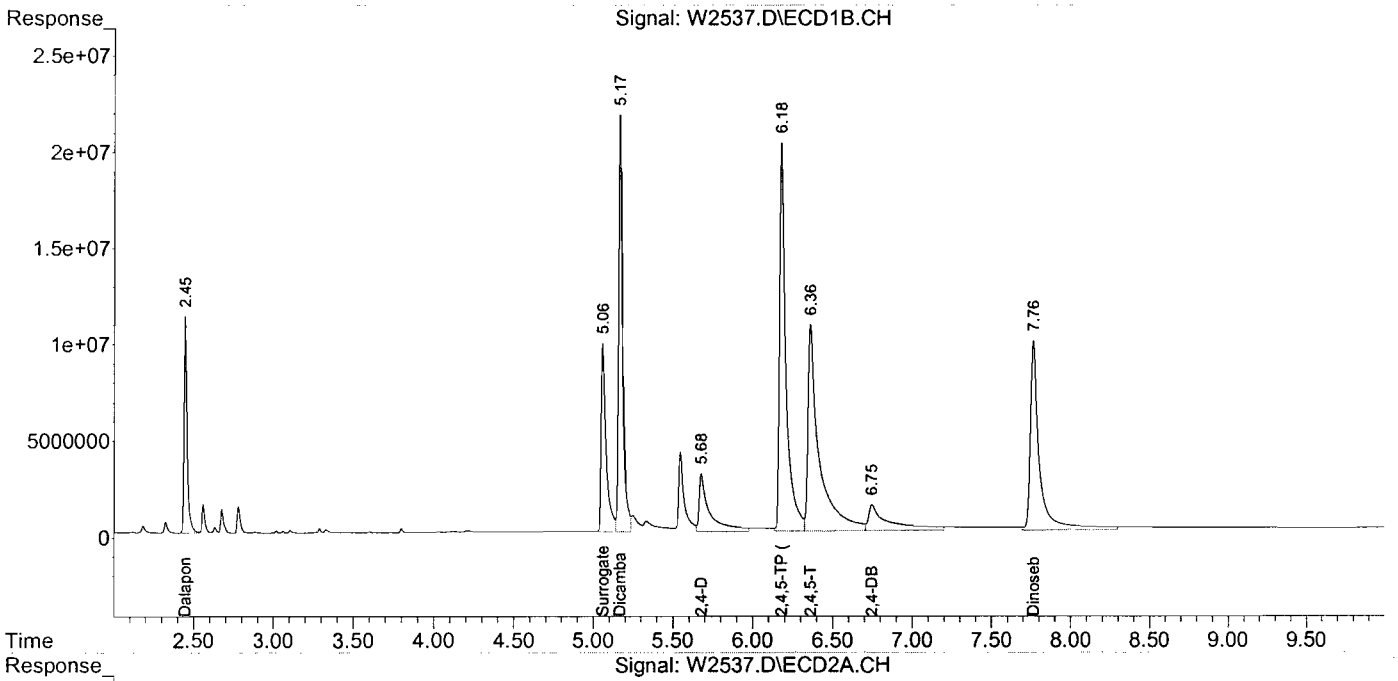
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

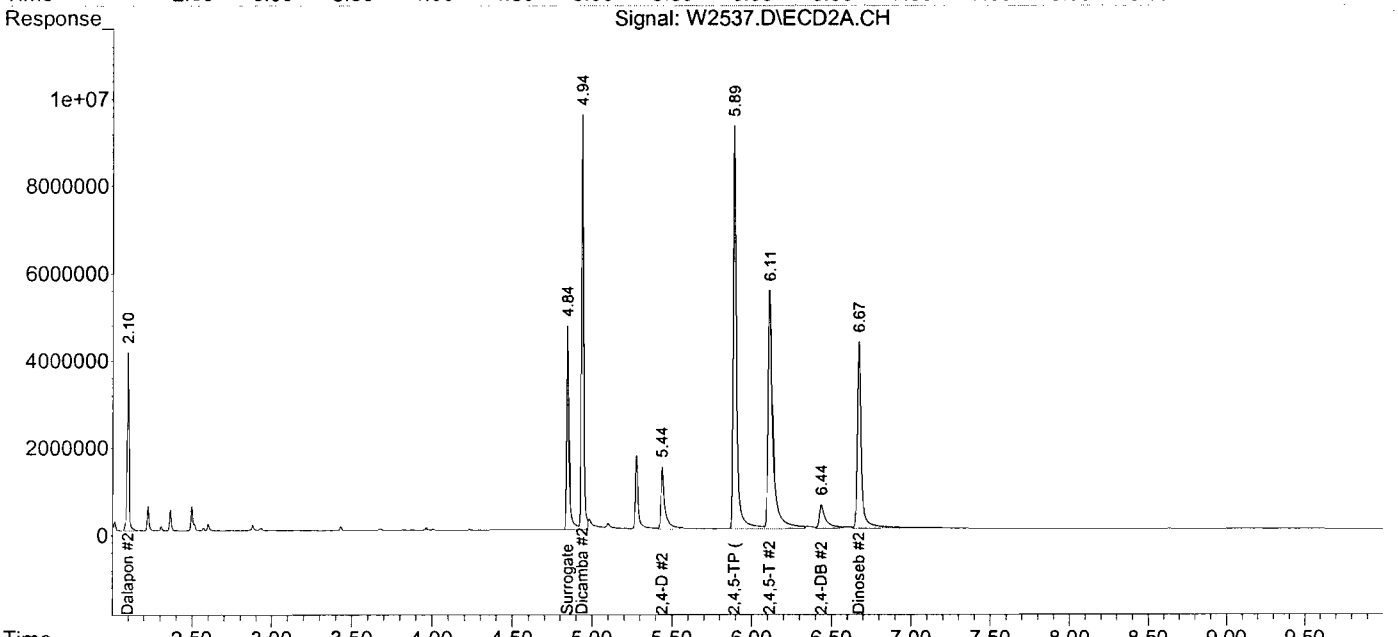
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 13:15
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 13:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2567.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 9:52
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:06:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	252.8E6	46511780	105.557	101.852
	Spiked Amount 100.000			Recovery	=	105.56%	101.85%
	Target Compounds						
2) T	Dalapon	2.45	2.10	151.7E6	26050560	170.070	165.765m
3) T	Dicamba	5.17	4.94	455.8E6	83512118	202.438	207.461
7) T	2,4-D	5.67	5.44	163.1E6	23664815	193.668	199.907
8) T	2,4,5-TP (Silvex	6.18	5.89	695.0E6	133.0E6	210.604	211.664
9) T	2,4,5-T	6.36	6.11	641.4E6	114.1E6	202.174	211.660
10) T	2,4-DB	6.74	6.43	146.0E6	16677059	219.676	212.490
11) T	Dinoseb	7.76	6.67	475.4E6	85516914	198.236	214.102

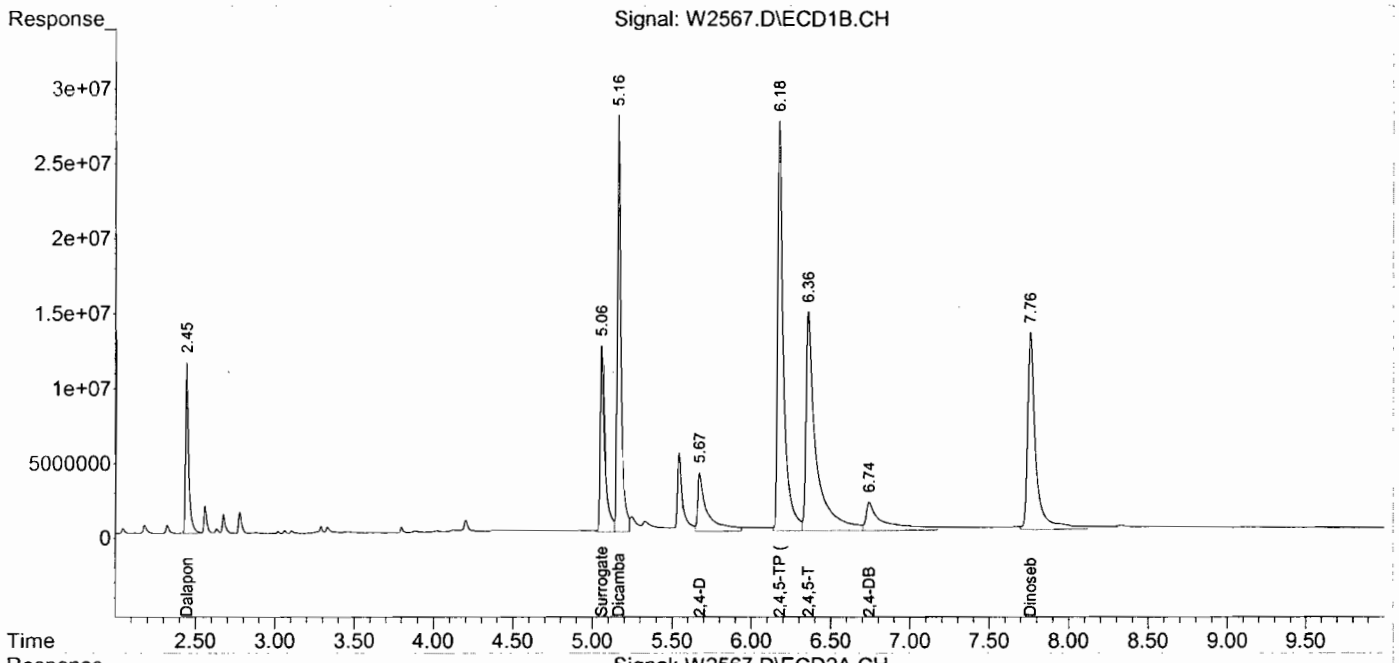
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

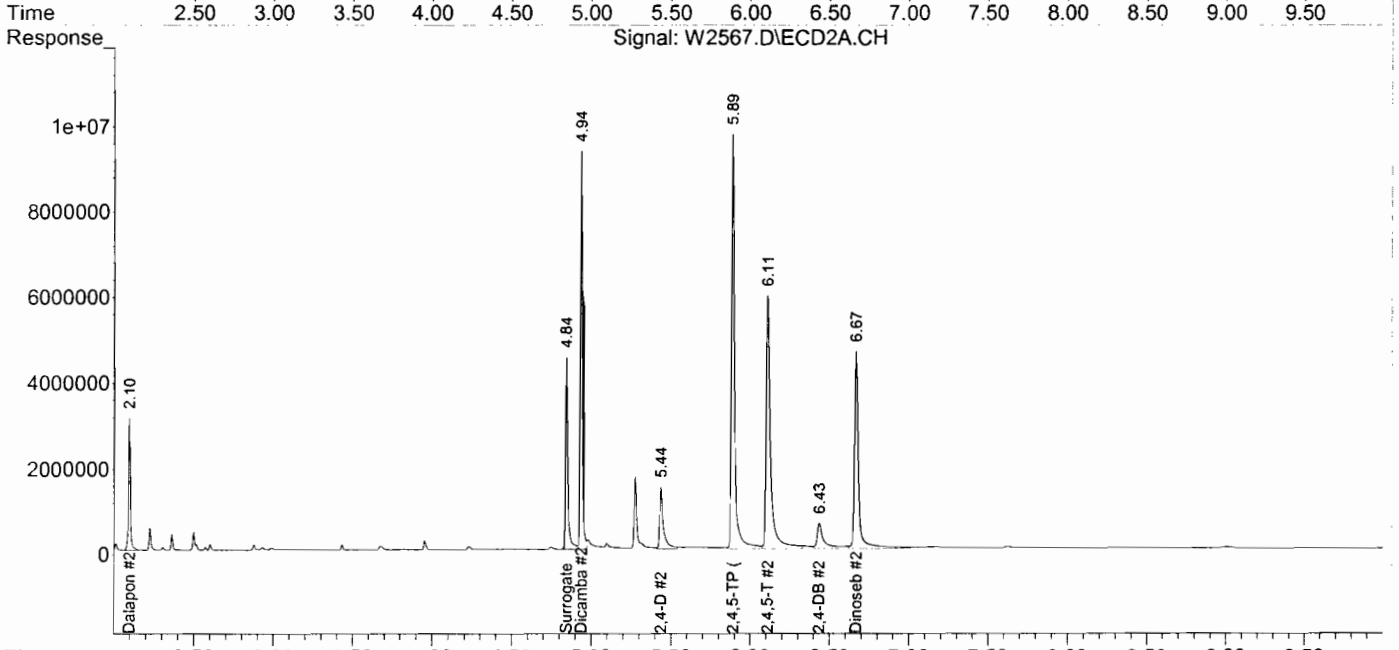
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2567.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 9:52
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:06:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 13:46
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 13:57:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

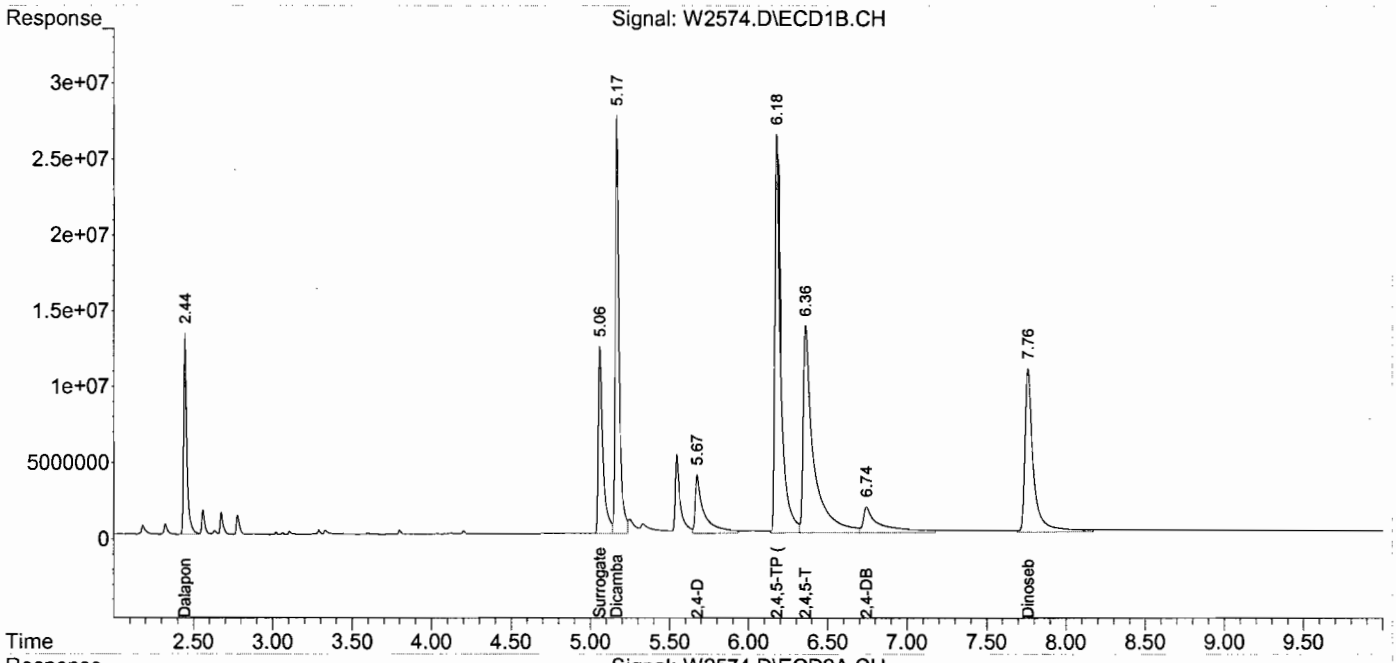
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	248.3E6	51849811	103.688	113.541
	Spiked Amount 100.000			Recovery	=	103.69%	113.54%
	Target Compounds						
2) T	Dalapon	2.45	2.09	178.5E6	34637504	200.183	220.406m
3) T	Dicamba	5.17	4.94	453.3E6	92889544	201.313	230.756
7) T	2,4-D	5.67	5.44	149.7E6	25951326	177.756	219.222
8) T	2,4,5-TP (Silvex	6.18	5.89	676.6E6	146.2E6	205.015	232.751
9) T	2,4,5-T	6.36	6.11	612.9E6	123.8E6	193.198	229.671
10) T	2,4-DB	6.74	6.43	126.6E6	17831560	190.453	227.200
11) T	Dinoseb	7.76	6.67	403.5E6	79276046	168.243	198.478

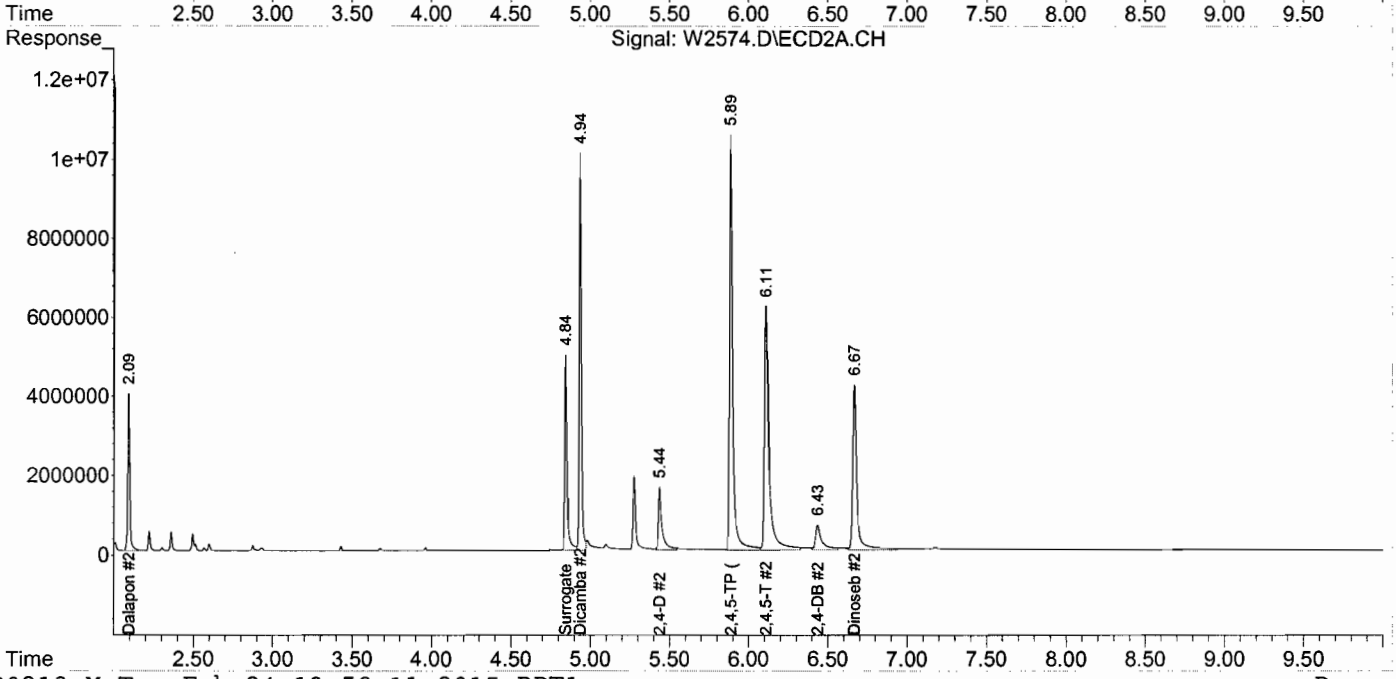
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\02-24-15\
Data File : W2574.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 13:46
Operator : JS
Sample : CCV_HERB_C_IAS_5101,200_PPB
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 13:57:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP
HERBICIDE RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: BLKA150213-04
Client ID: Herb
Date Received: NA
Date Extracted: 02/13/2015
Date Analyzed: 02/17/2015
Data file: W2526.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2526.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:27
Operator : JS
Sample : Herb,BLKA150213-04,A,200ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 10:11:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	159.4E6	33376035	66.562	73.087
	Spiked Amount 100.000			Recovery	=	66.56%	73.09%
	Target Compounds						

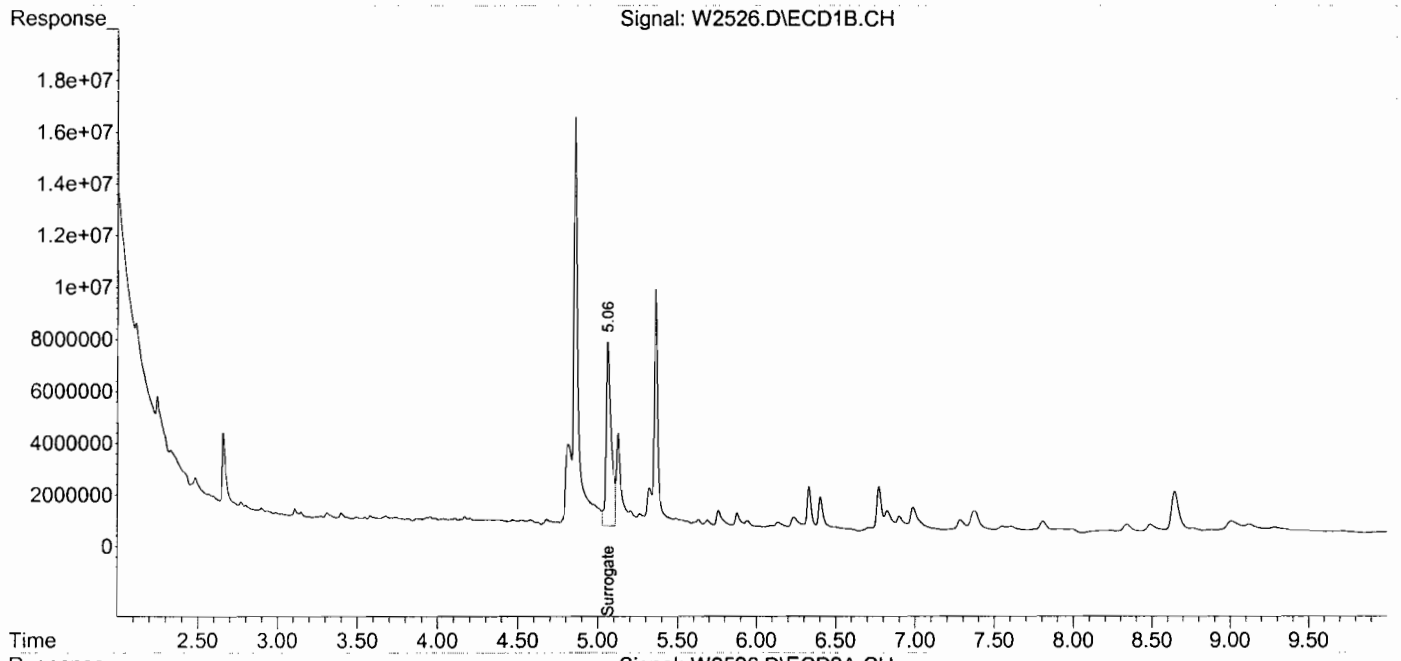
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

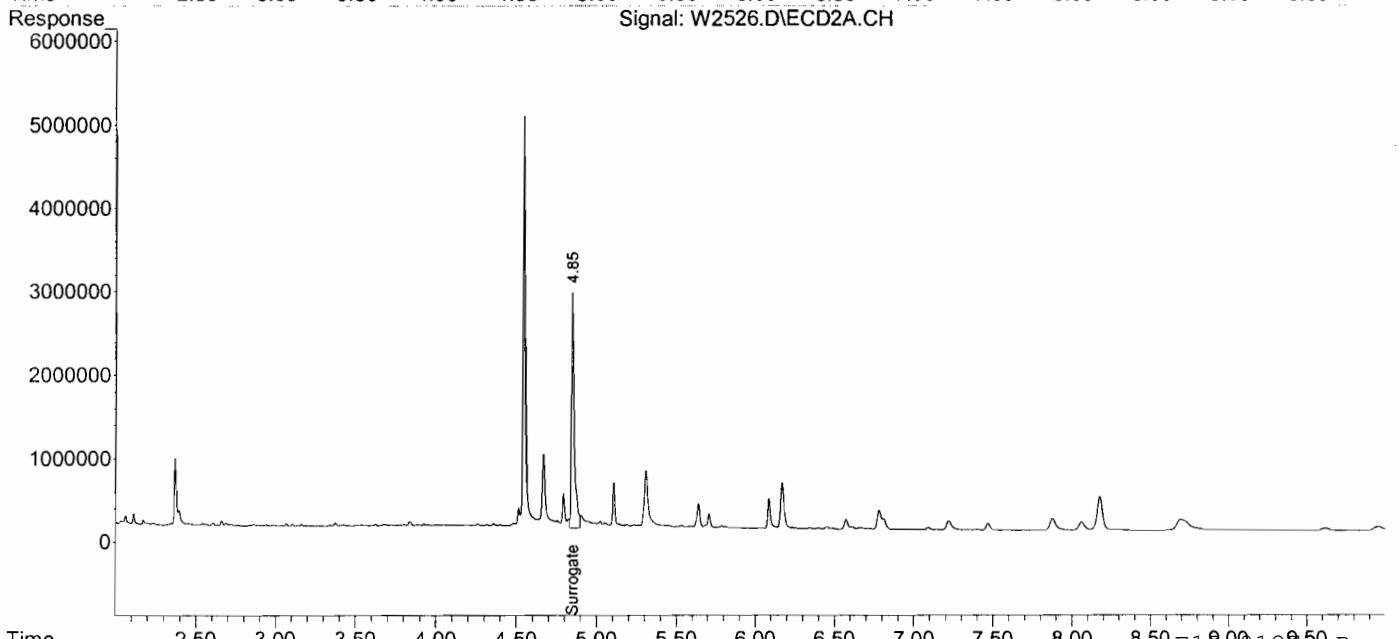
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\02-17-15\
Data File : W2526.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 9:27
Operator : JS
Sample : Herb,BLKA150213-04,A,200ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 10:11:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: BLKA150223-05
Client ID: Herb
Date Received: NA
Date Extracted: 02/23/2015
Date Analyzed: 02/24/2015
Data file: W2568.D

GC Column: DB-5/DB1701P
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.00125	0.0005
2,4,5-TP (Silvex)	ND		0.00125	0.0005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2568.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:13
Operator : JS
Sample : Herb,BLKA150223-05,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:26:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.85	157.4E6	30081879	65.704m	65.873
	Spiked Amount 100.000			Recovery	=	65.70%	65.87%
	Target Compounds						

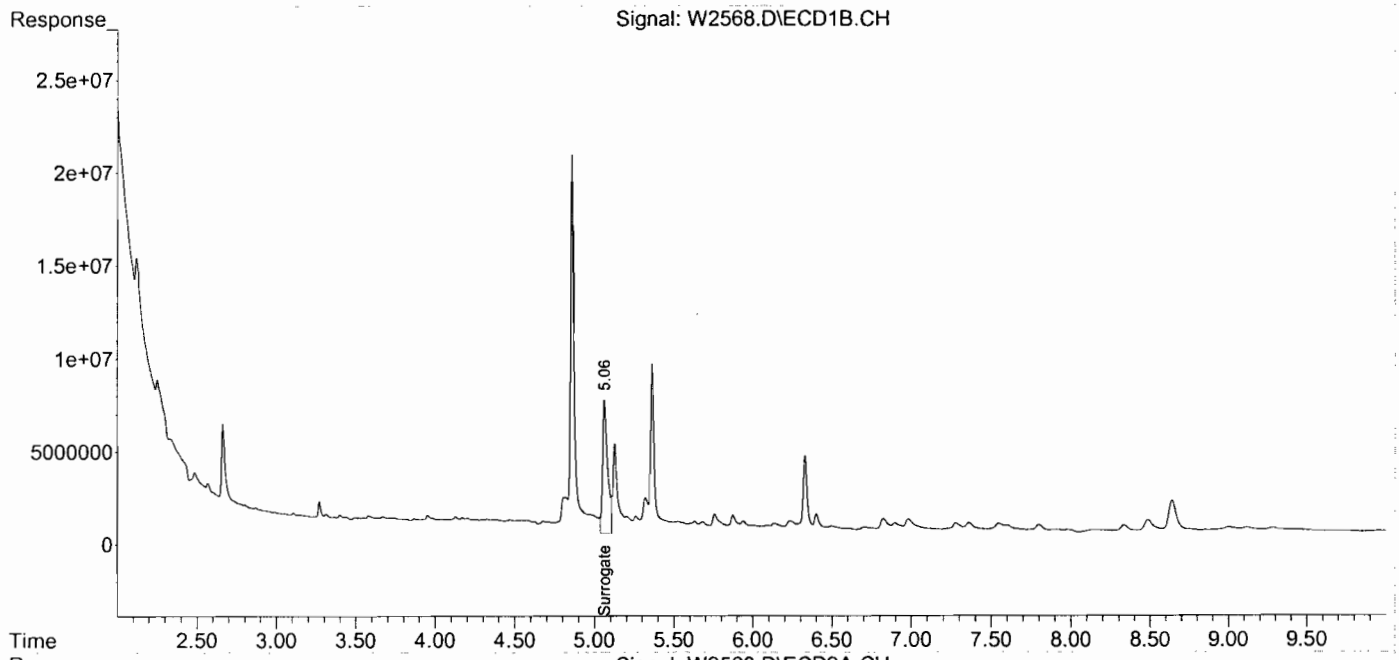
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

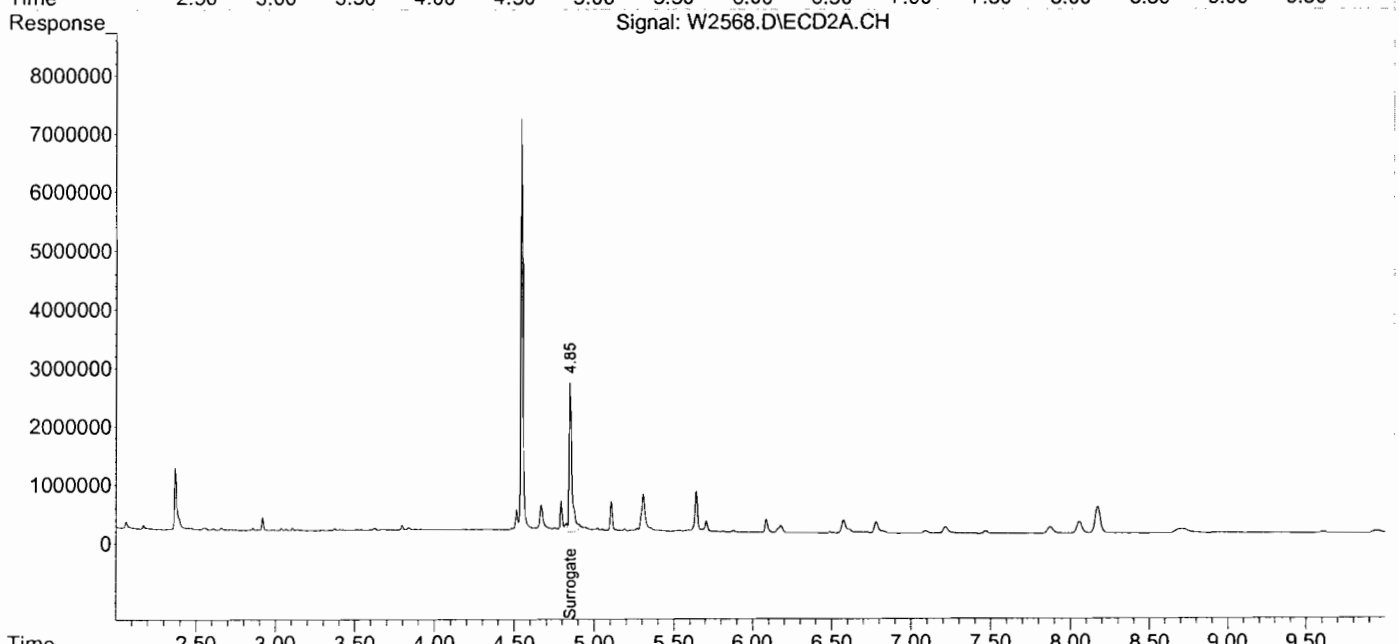
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2568.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:13
Operator : JS
Sample : Herb,BLKA150223-05,A,200ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:26:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:27
Operator : JS
Sample : Herb,LCSA150223-05,A,1000ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:40:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	Surrogate	5.06	4.84	185.9E6	33967778	77.624m	74.383	
	Spiked Amount 100.000			Recovery	=	77.62%	74.38%	
	Target Compounds							
2) T	Dalapon	2.44	2.08	121.6E6	26331365	136.306	167.552	
3) T	Dicamba	5.16	4.94	342.1E6	65128014	151.943m	161.791	
7) T	2,4-D	5.67	5.44	100.1E6	19443334	118.801m	164.247	#
8) T	2,4,5-TP (Silvex	6.18	5.89	551.0E6	103.5E6	166.965m	164.688	
9) T	2,4,5-T	6.36	6.11	511.9E6	94304686	161.352m	174.985	
10) T	2,4-DB	6.74	6.43	73119669	10888061	110.014m	138.730	#
11) T	Dinoseb	7.76	6.67	309.1E6	50927309	128.907m	127.503	

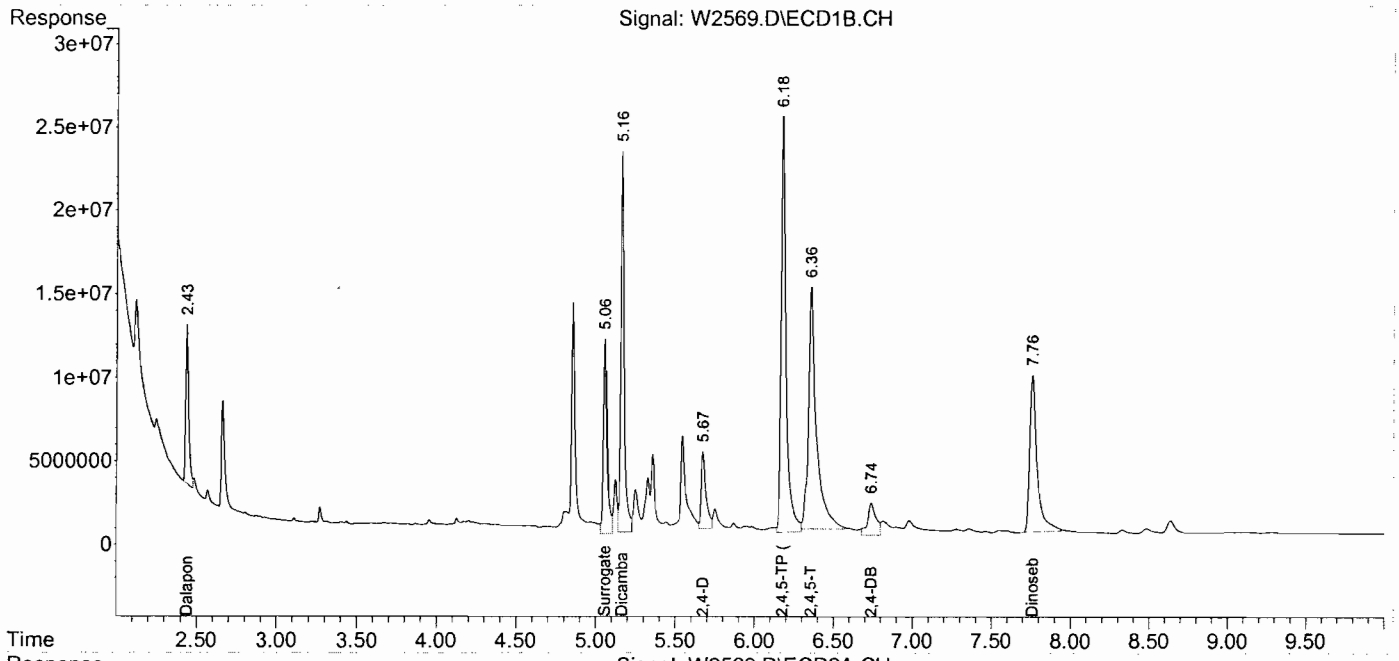
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

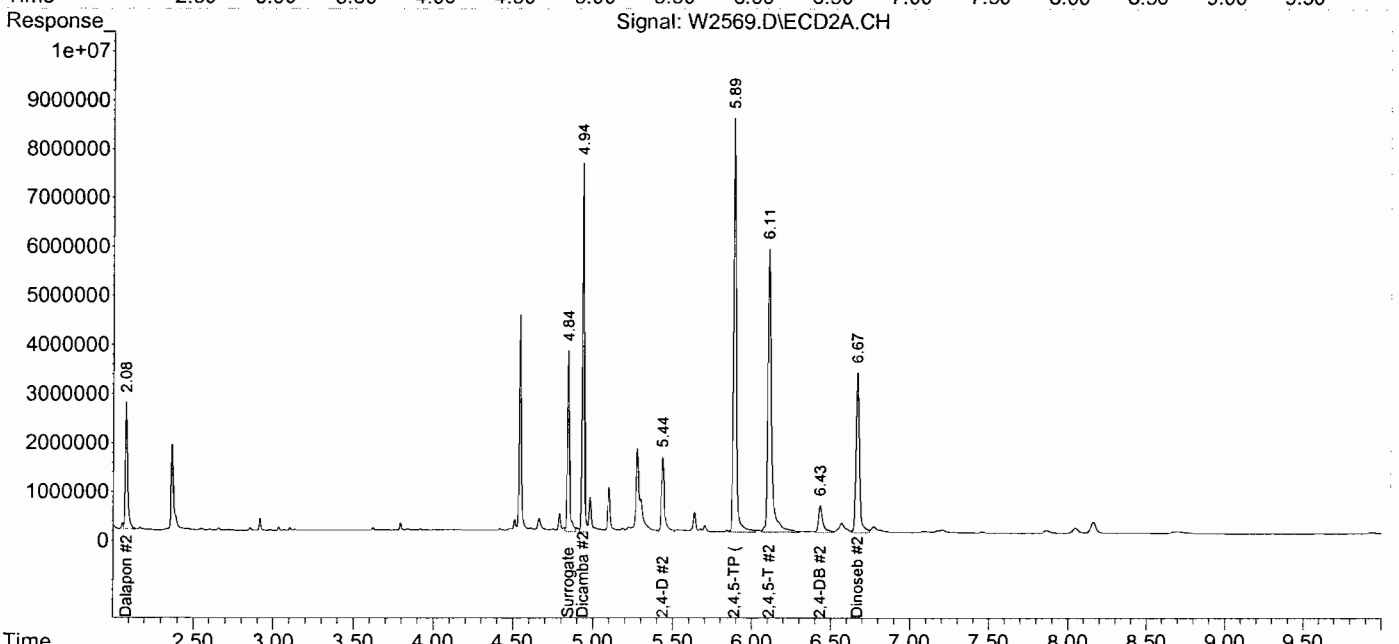
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-24-15\
Data File : W2569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 24 Feb 2015 10:27
Operator : JS
Sample : Herb,LCSA150223-05,A,1000ml,100,5
Misc : NA,02/23/15,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 24 10:40:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Mon Feb 23 14:11:57 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:08
Operator : JS
Sample : Herb,01088-007MS,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:17:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	Surrogate	5.04	4.84	156.0E6	14367095	65.140m	31.461	#
	Spiked Amount 100.000			Recovery	=	65.14%	31.46%	
	Target Compounds							
2) T	Dalapon	2.44	2.08	46110973	12092507	51.705m	76.947	#
3) T	Dicamba	5.16	4.94	110.4E6	23716845	49.045m	58.917	
7) T	2,4-D	5.67	5.44	73397592	18194329	87.132m	153.696	#
8) T	2,4,5-TP (Silvex	6.18	5.89	281.1E6	63210221	85.196m	100.597	
9) T	2,4,5-T	6.36	6.11	343.6E6	68203661	108.290m	126.554	
10) T	2,4-DB	6.74	6.43	49209521	12525196	74.039m	159.589	#
11) T	Dinoseb	7.76	6.67	43520053	7145638	18.147m	17.890	

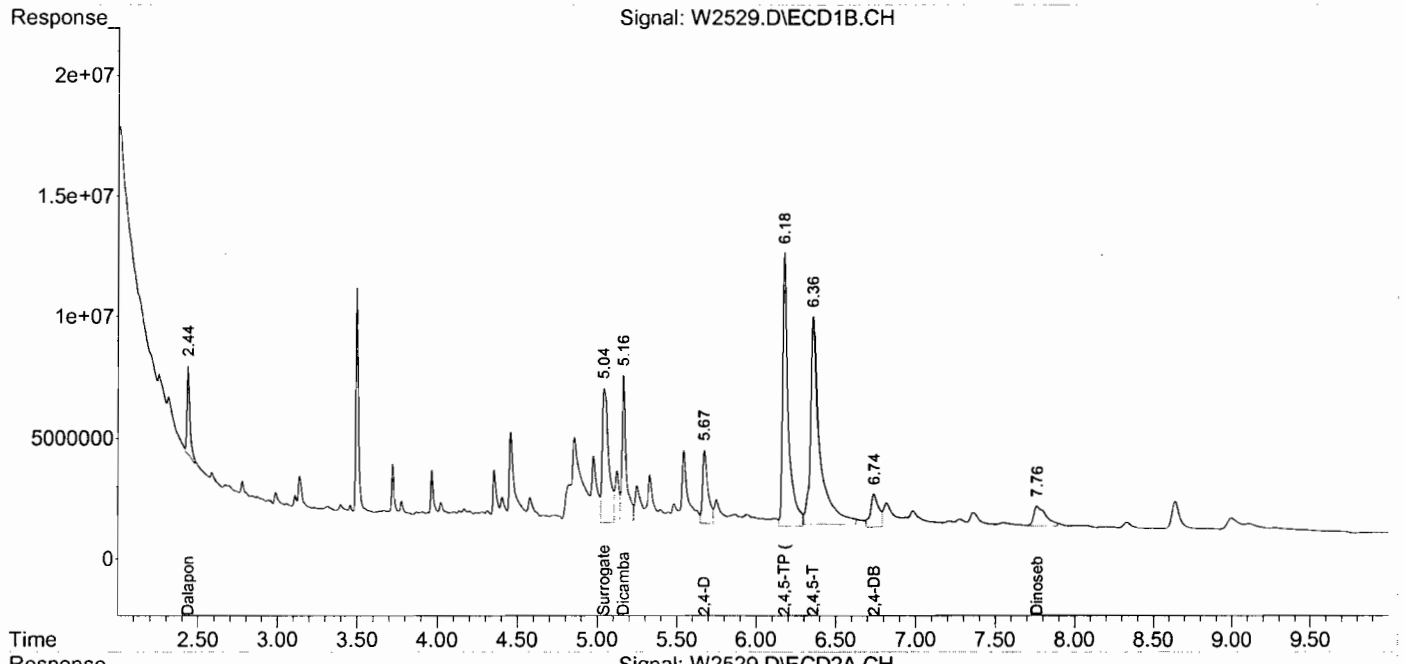
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

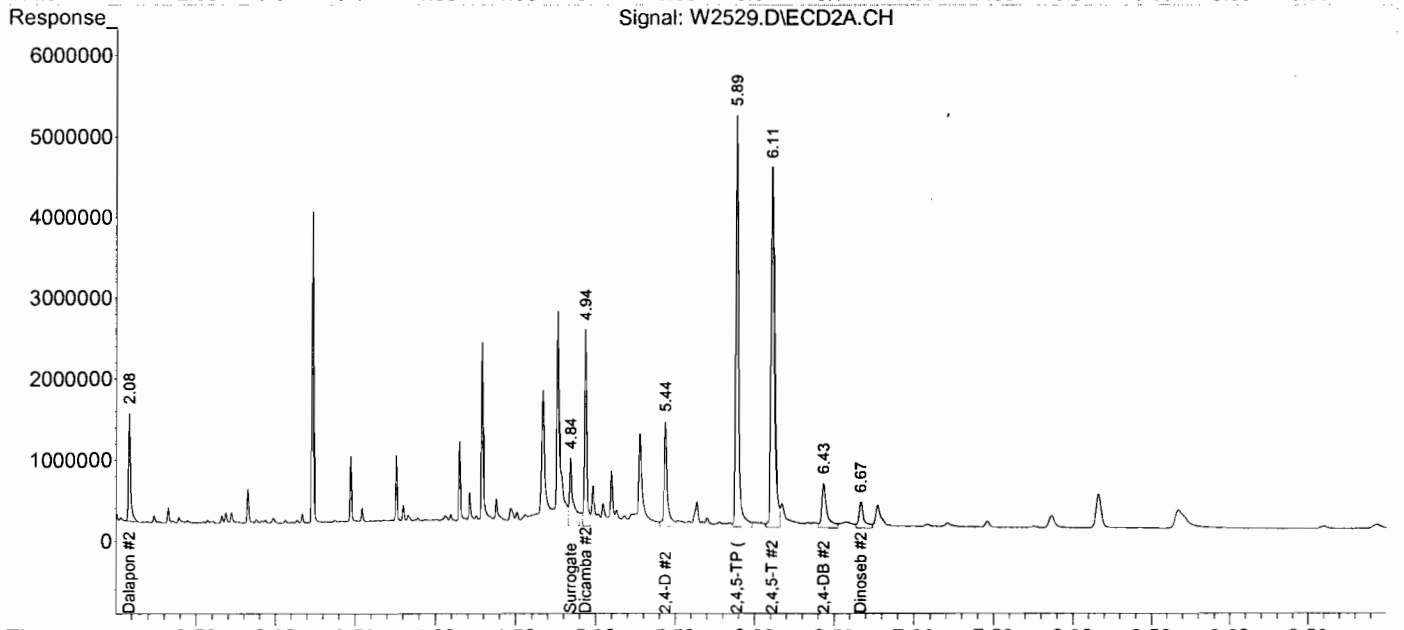
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:08
Operator : JS
Sample : Herb,01088-007MS,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:17:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:22
Operator : JS
Sample : Herb,01088-007MSD,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:20:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1) S	Surrogate	5.06	4.84	124.6E6	18569193	52.020	40.663
	Spiked Amount 100.000			Recovery	=	52.02%	40.66%
	Target Compounds						
2) T	Dalapon	2.44	2.08	54644381	15925883	61.274m	101.340m#
3) T	Dicamba	5.16	4.94	167.8E6	39082539	74.529m	97.089 #
7) T	2,4-D	5.67	5.44	72792597	17864615	86.414	150.910 #
8) T	2,4,5-TP (Silvex	6.18	5.89	326.0E6	76878746	98.777	122.350
9) T	2,4,5-T	6.36	6.11	381.7E6	74664671	120.311	138.543
10) T	2,4-DB	6.74	6.43	46622946	11578707	70.147	147.529 #
11) T	Dinoseb	7.76	6.67	79582217	13038694	33.185	32.644

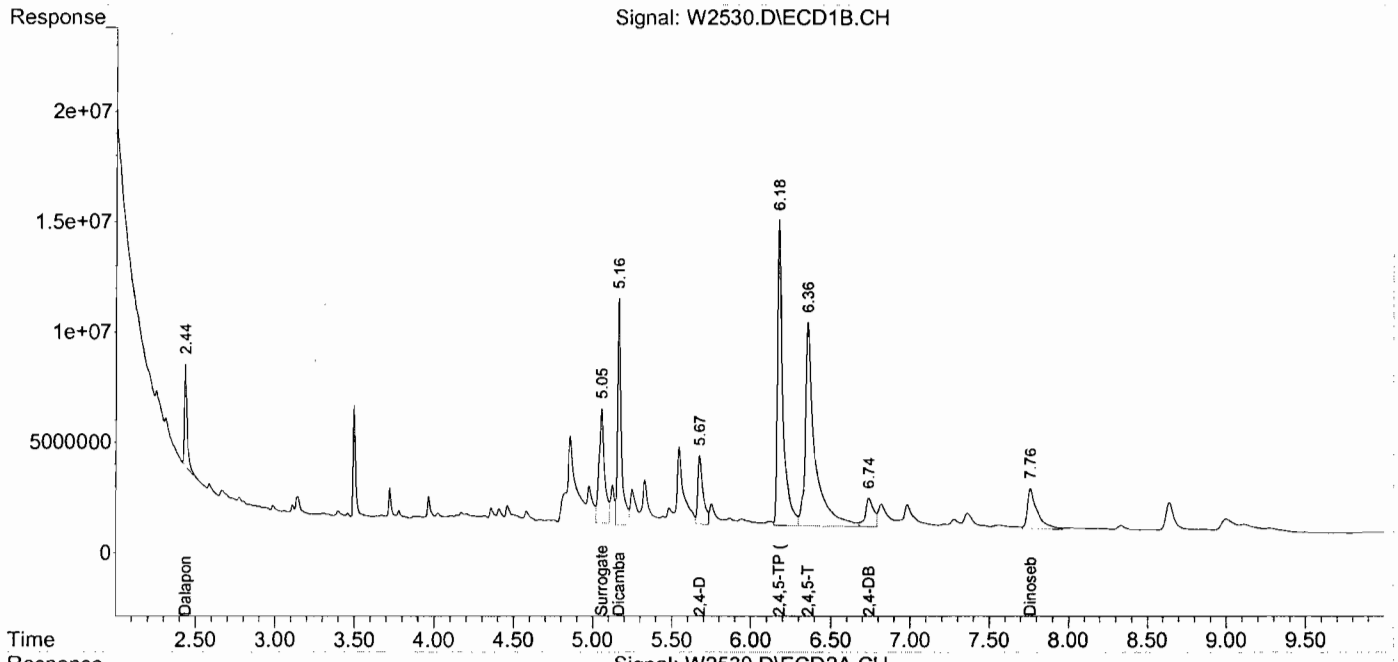
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

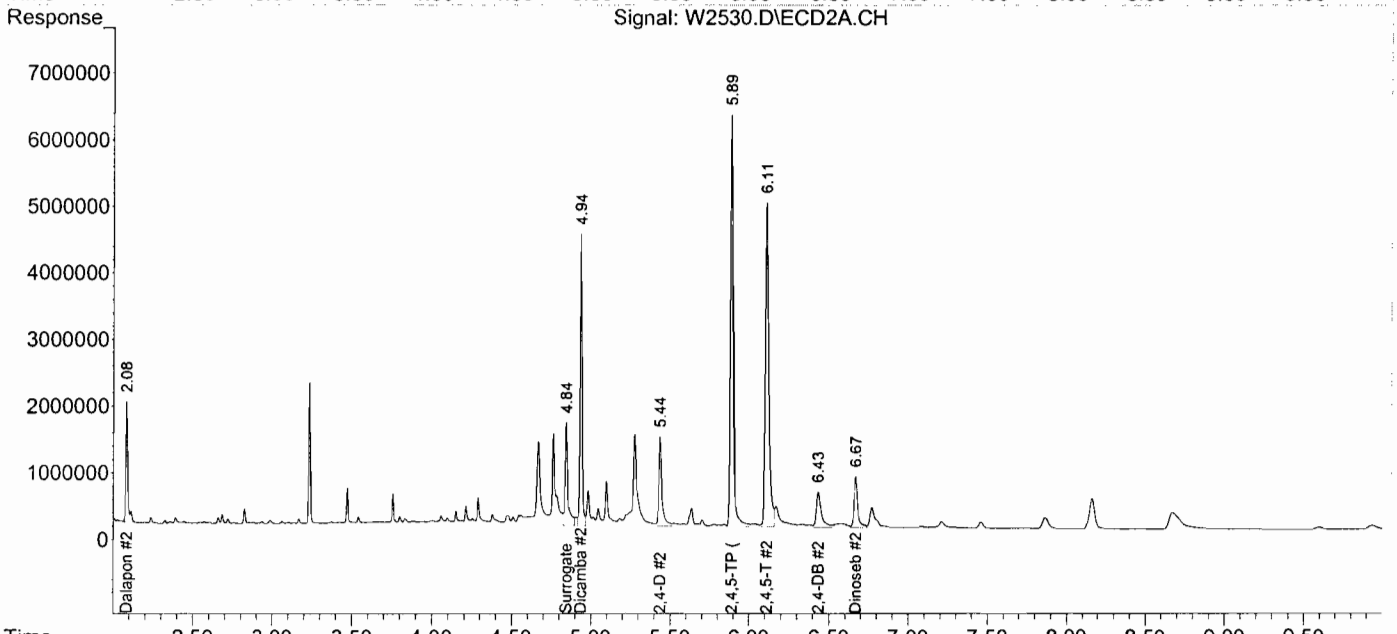
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\02-17-15\
Data File : W2530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 17 Feb 2015 10:22
Operator : JS
Sample : Herb,01088-007MSD,T,100ml,100,5
Misc : NA,02/13/15,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Feb 17 11:20:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\WHEB0213.M
Quant Title :
QLast Update : Fri Feb 13 11:10:28 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





TCLP HERBICIDE
RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Aqueous)

Extraction Date/Time: 02/13/2015 10:43

Batch ID: **150213-04**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150213-04	TCLP Herbicides	200	5	25	1			
LCSA150213-04	Herbicides	1000	5	25	1	10		
01088-007MS	TCLP Herbicides	100	5	25	1	10		R-72; TCLP150211
01088-007MSD	TCLP Herbicides	100	5	25	1	10		R-72; TCLP150211
TCLP150211	TCLP Herbicides	200	5	25	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#74-1
Surrogate	#5082
SPK 1	#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01087-007	TCLP Herbicides	200	5	25	1	12.3	R-72; TCLP150211	01088-007MS / 150213-04	
2	01088-007	TCLP Herbicides	200	5	25	1	9.90	R-72; TCLP150211	01088-007MS / 150213-04	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/13/2015 10:43
Weighed	Archie	02/13/2015 16:52
Surrogated	Archie	02/13/2015 16:52
Filtered	Archie	02/13/2015 16:52
Transferred	Archie	02/13/2015 16:52
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

GC Extraction

Integrated Analytical Laboratories, LLC

Herb (Aqueous)

Extraction Date/Time: 02/23/2015 10:46

Batch ID: **150223-05**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKA150223-05	TCLP Herbicides	200	5	25	1			
LCSA150223-05	Herbicides	1000	5	25	1	10		
TCLP150219	TCLP Herbicides	200	5	25	1			

Standard Info	Surrogate IAS #
Solvent	RA#74-20/RA#75-5
Surrogate	#5082
SPK 1	#5169
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TCLP Herbicides	200	5	25	1	10.6	R-72; TCLP150219	01088-007MS / 150213-04	
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	02/23/2015 10:46
Weighed	Archie	02/23/2015 10:47
Surrogated	Archie	02/23/2015 17:25
Filtered	Archie	02/23/2015 17:25
Transferred	Archie	02/23/2015 17:25
Fractionated		

Comments:

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

Herb

DATE	2/13/2015 0:00	**Extra. Batch**	
INSTRUMENT	**W**		
METHOD	**WHEB0213**		
SYS METHOD	**8151A** (eg. 8015B M, 3810)		
ANALYST	**Justyna**		
	Initial		

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2517	HEXANE										
2	1	W2518	ICC_HERB_L5_IAS_5095,400_PPB										
3	2	W2519	ICC_HERB_L4_IAS_5096,250_PPB										
4	3	W2520	ICC_HERB_L3_IAS_5097,200_PPB										
5	4	W2521	ICC_HERB_L2_IAS_5098,100_PPB										
6	5	W2522	ICC_HERB_L1_IAS_5099,50_PPB										
7	6	W2523	ICV_HERB_C_IAS_5101,200_PPB										

LABORATORY CHRONICLE - GC

Herb

DATE	2/17/2015 0:00	**Extra. Batch**	**150213-04**	BA	**Aqueous**
INSTRUMENT	**W**		**150212-07**	BS	Soil (Sonic)
METHOD	**WHEB0213**		**150217-08**	BA	Aqueous
SYS METHOD	**8151A** (eg. 8015B M, 3810)				
ANALYST	**Justyna**				
	Initial				

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	W2524		HEXANE									
2	1	W2525		CCV_HERB_C_IAS_5101,200_PPB		1							
3	2	W2526		BLKA150213-04		1	200	5	A			2/13/15	100
4	3	W2527		TCLP150211		1	200	5	A			2/13/15	100
5	4	W2528		LCSA150213-04		1	1000	5	A			2/13/15	100
6	5	W2529		01088-007MS		1	100	5	T			2/13/15	100
7	6	W2530		01088-007MSD		1	100	5	T			2/13/15	100
8	7	W2531		01087	7	1	200	5	T	2/10/15	2/11/15	2/13/15	100
9	8	W2532		01088	7	1	200	5	T	2/10/15	2/11/15	2/13/15	100
10	100	W2533		HEXANE									
11	100	W2534		HEXANE									
12	9	W2535		BLKS150212-07		1	30.00	5	S			2/12/15	0
13	10	W2536		LCSS150212-07		1	30.00	5	S			2/12/15	0
14	1	W2537		CCV_HERB_C_IAS_5101,200_PPB		1							

S-11086J4-5ML Exp 12/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1016 Solution

Lot: 1111790

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

S-11092J4-5ML Exp 3/31/2014

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-

Arochlor 1260 Solution

Lot: 664400

1000ug/ml in Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

WARNING!: READ your MSDS before HANDLING

CAUTION CONTAINS PCBs (Polychlorinated Biphenyls)

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

PPS-166-1

Lot: CG-3187

Exp: 10/31/2014

ULTRA

1 mL

DCAA Methyl Ester Solution

1 analyte(s) at 100 µg/mL in acetone

250 Smith St, No Kingstown, RI 02852 USA

For Lab Use Only

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Cataloq# 32055

This product is photosensitive.

Herbicide Mix #1/ME (Methyl Ester)

200 ug/mL each in Hexane

Lot# A095323 Exp. Date: 05/2020 Store: 10°C or colder

RESTEK

110 Benner Circle
Bellefonte, PA 16823

Made in USA

Cataloq# 32057

This product is photosensitive.

Herbicide Mix #2/ME (Methyl Ester)

2000 ug/mL each in Hexane

Lot# A094619 Exp. Date: 04/2020 Store: 10°C or colder

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK (II SOURCE)		
5100				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	RESTEK	32055 32057 DALAPON	A095323 A094618	200 PPM 2000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	100µl of (32055) + 0µl of (32057) ~~+0µl of EAS#~~ → 10ml HEX JS			2000PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE WORK. STAND (II SOURCE)		
5101				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	EAS # 5100	—	—	2000 PPB
STD.EXP.DATE	~~1ml of~~ DILUTION			FINAL CONCENTRATION
04/23/15	1ml of IAS# 5100 + 50µl of IAS# 5093 SURROG. → 10ml HEX			200 PPB + 100 PPB SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
5102				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 Stock (IAS #4826) + 400µl surrog. (IAS #5078) → 10ml			10 ppm + 4 ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

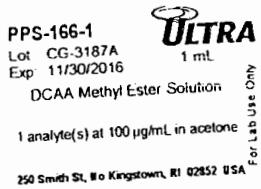
STANDARD IAS#	STANDARD NAME:	PCB LS (1016/1260)		
5103				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/29/14	IAS # 5102	—	—	10 PPM + SURROG.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:5			2PPM + SURROG.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/4/24	ISOOCTANE		V559-10	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L4		
5096				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:8			250 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L3		
5097				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			200 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L2		
5098				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:20			100 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L1		
5099				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:40			50 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS


PPS-166-1
ULTRA
Lot CG-3187A
1 mL
Exp 11/30/2016
DCAA Methyl Ester Solution
1 analyte(s) at 100 µg/mL in acetone
For Lab Use Only
250 Smith St, N o Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 1		
5092				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5091	—	—	200 - 2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:10			20-200 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/17/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERB. CALIBRATION SURROGATE		
5093				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	ULTRA	CG-3187A	PPS-166-1	100 µg/ml (PPM)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
10/23/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE STOCK 2		
5094				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS# 5092	—	—	20-200 PPM 100 PPM SURR. SS
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1ml of IAS# 5092 FULL + 0.5 ml of IAS# 5093 → 10ml of HEXANE			2-20 µg/ml (PPM) 5 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

STANDARD IAS#	STANDARD NAME:	HERBICIDE L5		
5095				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	IAS # 5094	—	—	2 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	1:5			400 PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		141535	JS

EPA 8150 Herbicide Methyl Derivatives Mix 4-7375

Lot: LB91484 EXP: MAR/2015 STORAGE: REFRIGERATE 1 x 1ml

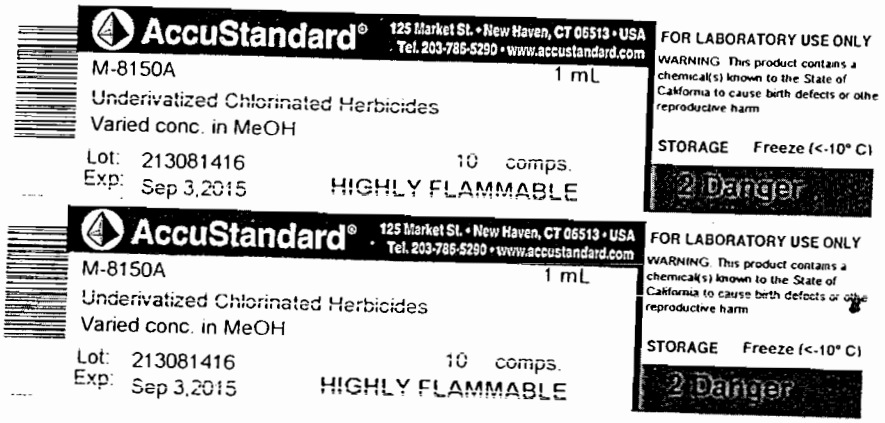
For laboratory use only. Not for drug, household, or other use.

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS



AccuStandard® 125 Market St. • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

Underivatized Chlorinated Herbicides

Varied conc. in MeOH

Lot: 213081416 10 comps.

Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY

WARNING This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm

STORAGE Freeze (<-10° C)

2 Danger

AccuStandard® 125 Market St. • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com

M-8150A 1 mL

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Varied conc. in MeOH

Lot: 213081416 10 comps.

Exp: Sep 3,2015 HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY

WARNING This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm

STORAGE Freeze (<-10° C)

2 Danger

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S

Lot# T1111006012

Date Opened 12/23/14 BB

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000 µg/mL	Aldrin
1000 µg/mL	alpha-BHC
1000 µg/mL	alpha-Chlordane
1000 µg/mL	beta-BHC
1000 µg/mL	delta-BHC
1000 µg/mL	Dieldrin
1000 µg/mL	Endosulfan I
1000 µg/mL	Endosulfan II
1000 µg/mL	Endosulfan sulfate
1000 µg/mL	Endrin
1000 µg/mL	Endrin aldehyde
1000 µg/mL	Endrin ketone
1000 µg/mL	gamma-BHC
1000 µg/mL	gamma-Chlordane
1000 µg/mL	Heptachlor
1000 µg/mL	Heptachlor epoxide (Isomer B)
1000 µg/mL	Methoxychlor
1000 µg/mL	p,p'-DDD
1000 µg/mL	p,p'-DDE
1000 µg/mL	p,p'-DDT

ACE-8081-S T1111006012

FREEZER ITEM

PRODUCT MSDS BEFORE USE

Contains Materials Known

Or Suspected to Cause Cancer

DANGER-FLAMMABLE Loc: F

STANDARD IAS#	STANDARD NAME:			
5169		SOIL Working Std (2nd so		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
~~12/19/14~~			VOID	
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:

STANDARD IAS#	STANDARD NAME:	HERBICIDE SPIKE		
5169				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATIOI
12/22/14	Accu Standard	M-8150A	21308141G	100 µg/ml (ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/22/15	—			100 µg/ml (PPM)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
5170				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	Spex CertiPrep.	AXE-3081-S	T1111006012	1000 PPM (µg/mL)
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/23/15	10µl (SpexCertiPrep) + 200µl (IAS# 5134 surr.) → 10ml (isooctane)			1000 PPB 2000 PPB surr.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	Pesticides Work. std. (2nd source).		
5171				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
12/23/14	IAS# 5170	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
06/23/15	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/24	isooctane		V559-10	

SPEX CertiPrep

Calibrate with Confidence™

Cat# ACE-8081-S
Lot# T1111006012
Date Opened 09/25/14

13

ACES Program 8081

Contains the following in | Benzene:Hexane:Toluene |

1000	µg/mL	Aldrin
1000	µg/mL	alpha-BHC
1000	µg/mL	alpha-Chlordane
1000	µg/mL	beta-BHC
1000	µg/mL	delta-BHC
1000	µg/mL	Dieldrin
1000	µg/mL	Endosulfan I
1000	µg/mL	Endosulfan II
1000	µg/mL	Endosulfan sulfate
1000	µg/mL	Endrin
1000	µg/mL	Endrin aldehyde
1000	µg/mL	Endrin ketone
1000	µg/mL	gamma-BHC
1000	µg/mL	gamma-Chlordane
1000	µg/mL	Heptachlor
1000	µg/mL	Heptachlor epoxide (Isomer B)
1000	µg/mL	Methoxychlor
1000	µg/mL	p,p'-DDD
1000	µg/mL	p,p'-DDE
1000	µg/mL	p,p'-DDT

ACE-8081-S
T1111006012

FREEZER ITEM

WARNING - CONSULT PRODUCT MSDS BEFORE USE

Contains Materials Known
Or Suspected to Cause Cancer
DANGER-FLAMMABLE Loc: F

PPS-165-1
Lot CL-2302
Exp 07/31/2016

ULTRA
1 mL

2,4-Dichlorophenylacetic Acid (DCAA) Solution

1 analyte(s) at 100 µg/mL in acetone

For Lab Use Only

250 Smith St, No Kingstown, RI 02852 USA

STANDARD IAS#	STANDARD NAME:	Post SPIKE		
5081				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/25/14	Spex Certiprep.	ACE-8081-S	FIII/006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/25/15	+8 1:50			~~1:25 PPM~~ 20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	Hexane		B8465	

STANDARD IAS#	STANDARD NAME:	HERBICIDES EXTRACTION SURROGATE		
~~5011~~ 5082				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/26/14	ULTRA	PPS-165	CL-2302	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
3/26/15	—			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	

STANDARD IAS#	STANDARD NAME:	PCB SPIKE WORKING STANDARD		
5083				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
9/29/14	IAS #4972	—	—	500 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	1:5			100 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5084				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/10/2014	chemservice	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/10/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:

DBC 4.96

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
TPH-DRO	BLKS150219-08	SOIL	02/20/2015	13:21	84	4.98	
GPEC-WC1	01273-001	SOIL	02/20/2015	13:34	87	4.96	
TPH-DRO	LCSS150219-08	SOIL	02/20/2015	13:48	81	4.96	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.1 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS150219-08

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	902	90.2		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 01126-001MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	972	97.2		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	960	96.0		1.25		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB0622.D
Instrument ID: GC-Q
Date Extracted: 02/13/2015
Matrix: SOIL
Date Analyzed: 02/13/2015
Time Analyzed: 17:14

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B-1/2/3/	01126-001	02/13/2015	17:28
B-1/2/3/	01127-001	02/13/2015	17:42
JA_DB_GR	01128-002	02/13/2015	17:55
JA_DB_GR	01128-003	02/13/2015	18:09
JA_DB_GR	01128-004	02/13/2015	18:23
JA_DB_GR	01128-005	02/13/2015	18:36
JA_DB_GR	01128-006	02/13/2015	18:50
JA_MH_A_	01129-002	02/13/2015	19:04
JA_MH_A_	01129-003	02/13/2015	19:18
JA_MH_A_	01129-004	02/13/2015	19:31
JA_MH_A_	01129-005	02/13/2015	19:45
JA_MH_A_	01129-006	02/13/2015	19:58
B-1/2/3/	01142-001	02/13/2015	20:12
TPH-DRO	01126-001MS	02/13/2015	20:26
TPH-DRO	01126-001MSD	02/13/2015	20:39
TPH-DRO	LCSS150213-01	02/13/2015	20:53

TPH METHOD BLANK SUMMARY

Lab File ID: QB0771.D
Instrument ID: GC-Q
Date Extracted: 02/19/2015
Matrix: SOIL
Date Analyzed: 02/20/2015
Time Analyzed: 13:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC-WC1	01273-001	02/20/2015	13:34
TPH-DRO	LCSS150219-08	02/20/2015	13:48

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0772.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:34 pm
Operator : RG
Sample : GPEC-WC1,01273-001,S,10.71g,10.6,02/19/15,15
Misc : 150219-08,02/18/15,02/19/15,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	15936788	87.093 ng
Spiked Amount 100.000		Recovery =	87.09%
Target Compounds			
3) H TPH-DRO	3.300	83400172	229.156 ng

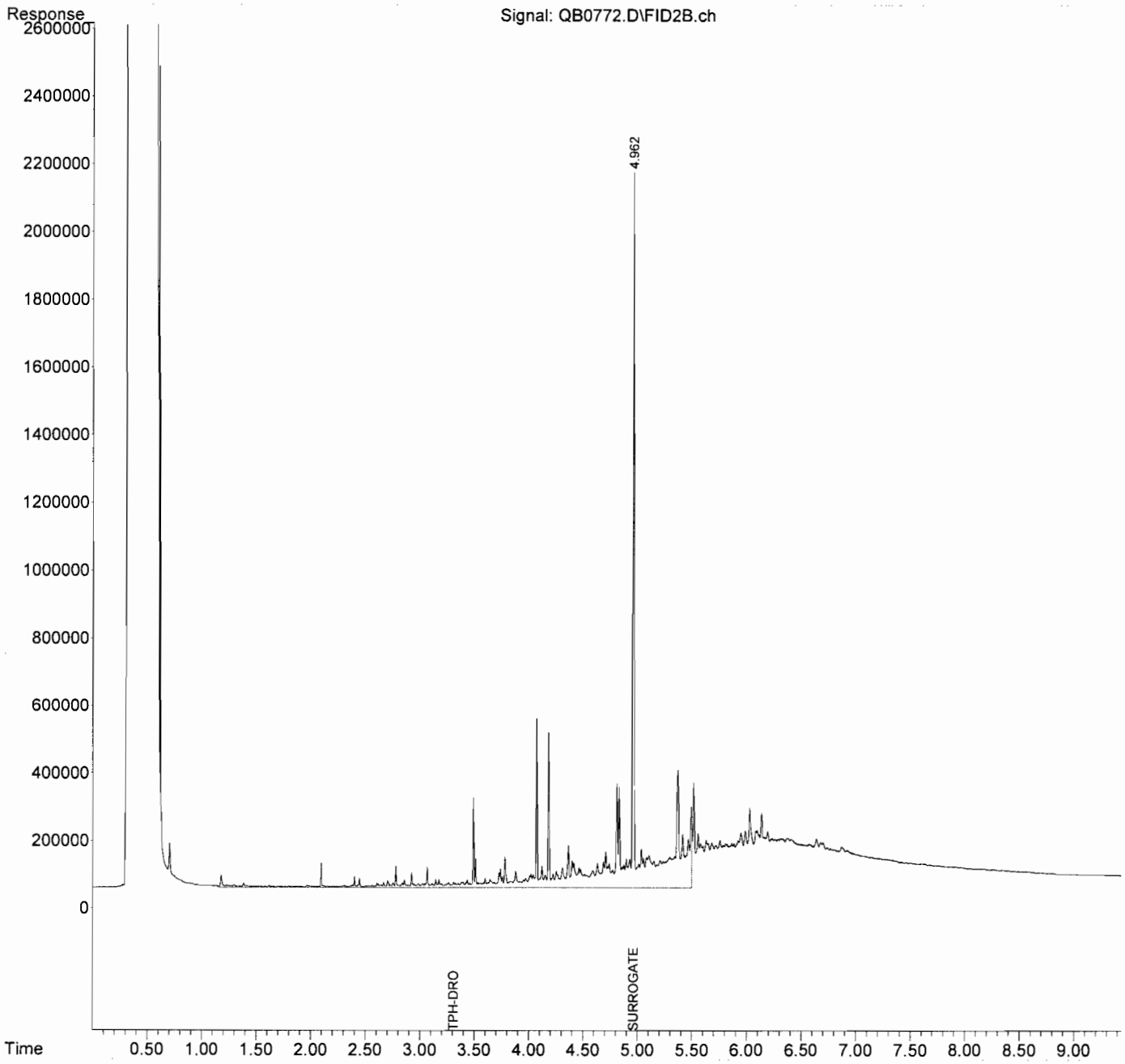
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0772.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:34 pm
Operator : RG
Sample : GPEC-WC1,01273-001,S,10.71g,10.6,02/19/15,15
Misc : 150219-08,02/18/15,02/19/15,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:58:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/04/2015 Instrument ID: GC-Q

Date File: QB0443.D QB0442.D QB0441.D QB0440.D QB0439.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.20	3.40

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RF	%RSD
TPH-DRO	42.6	32.9	31.6	41.8	33.1	36.4	14.7

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 02/20/2015 12:04

Date File: QB0767.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		36.4	36.2	0.549

Date Analyzed: 02/20/2015 14:02

Date File: QB0774.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		36.4	35.3	3.02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0443.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:44 pm
Operator : BM
Sample : DRO_L1_IAS_5090,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:56 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.963	784231	4.283	ng	m
Spiked Amount 100.000		Recovery = 4.28%			
Target Compounds					
3) H TPH-DRO	3.300	17022511	46.774	ng	

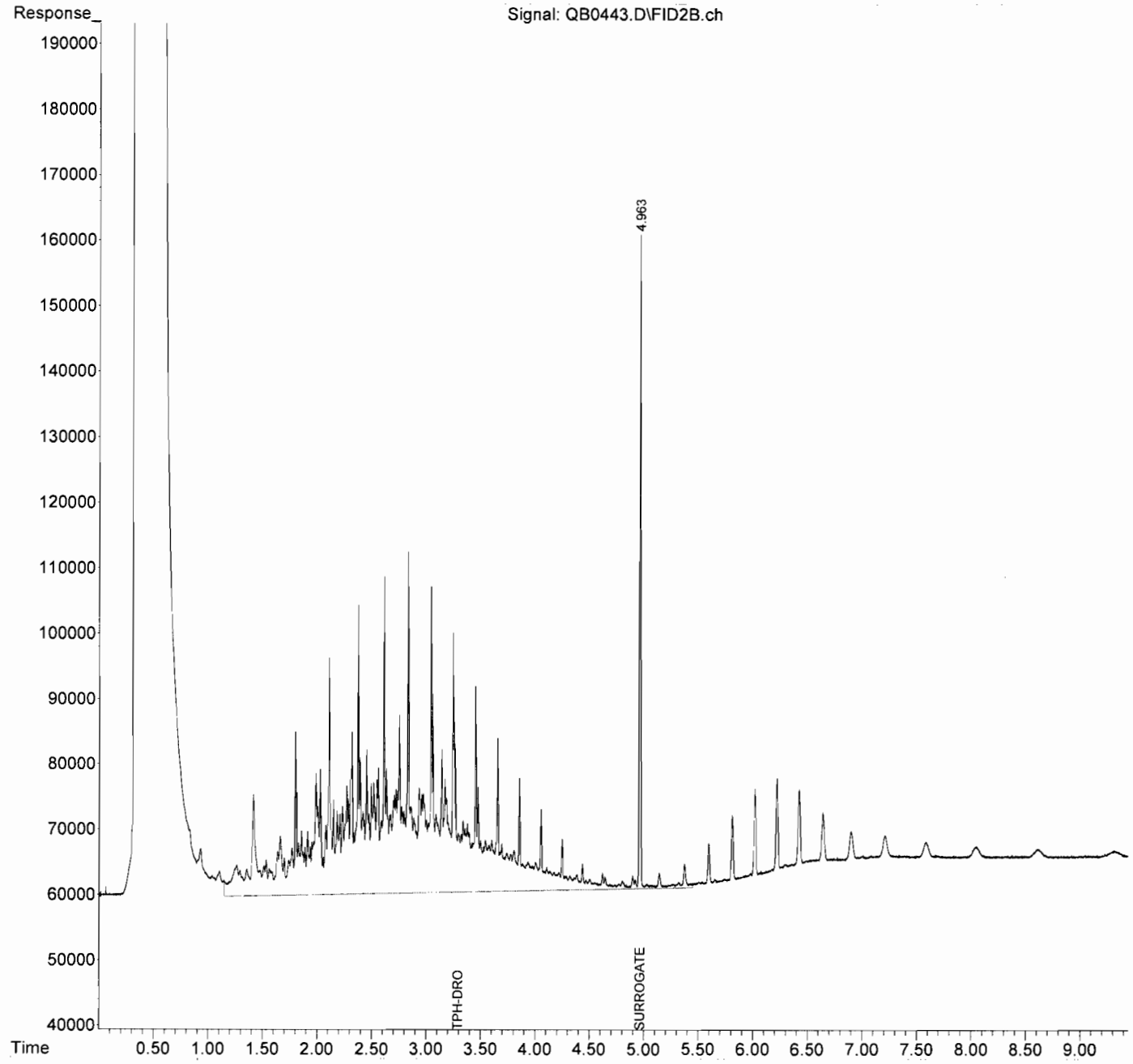
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0443.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:44 pm
Operator : BM
Sample : DRO_L1_IAS_5090,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:56 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0442.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:29 pm
Operator : BM
Sample : DRO_L2_IAS_5089,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:25 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.951	8322689	45.452 ng
Spiked Amount 100.000		Recovery =	45.45%
Target Compounds			
3) H TPH-DRO	3.300	164744951	452.679 ng

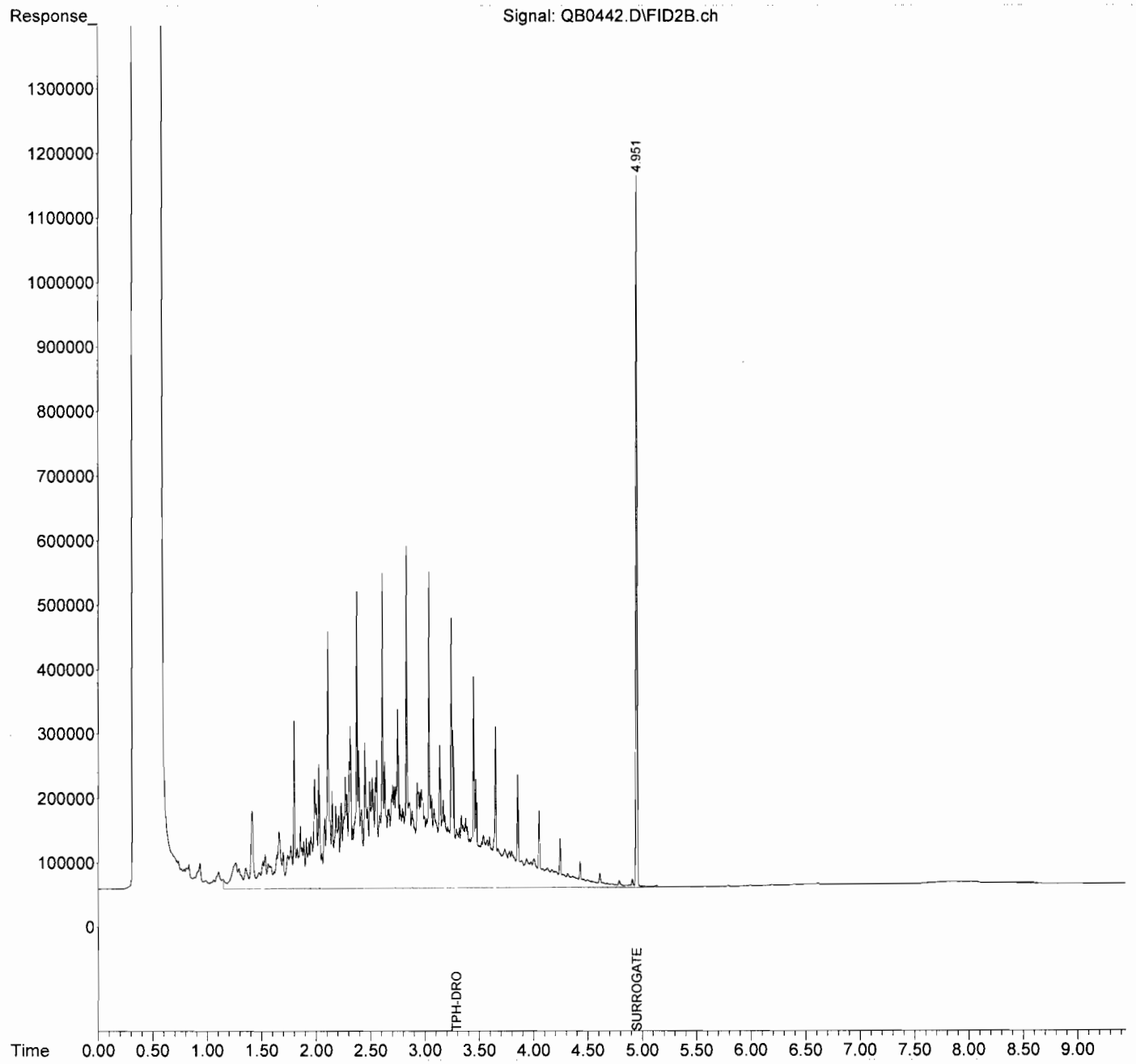
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0442.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:29 pm
Operator : BM
Sample : DRO_L2_IAS_5089,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:25 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0441.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:15 pm
Operator : BM
Sample : DRO_L3_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:06 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.971	17194026	93.899 ng
Spiked Amount 100.000		Recovery =	93.90%
Target Compounds			
3) H TPH-DRO	3.300	315700589	867.469 ng

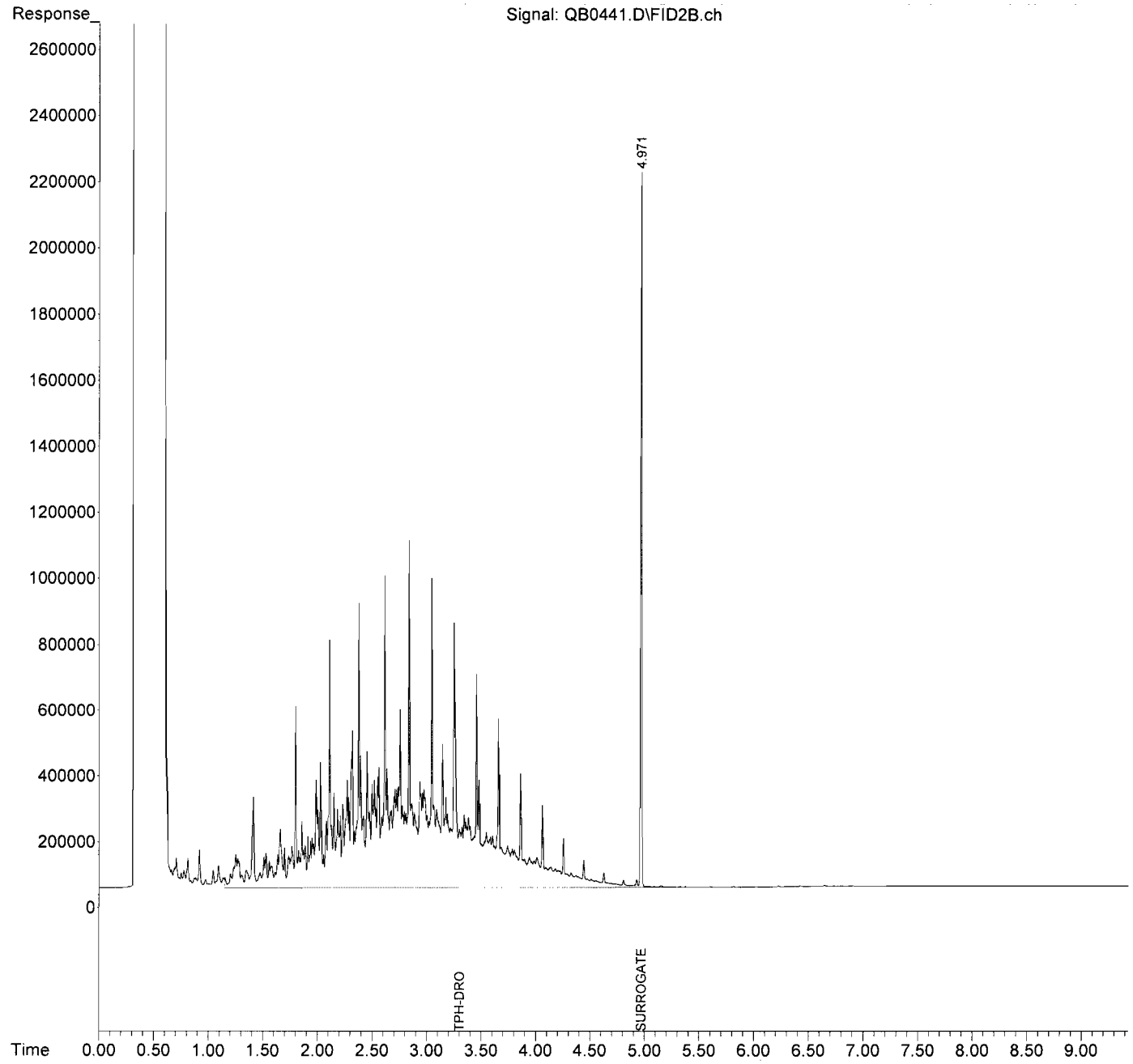
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0441.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:15 pm
Operator : BM
Sample : DRO_L3_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:44:06 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0440.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:02 pm
Operator : BM
Sample : DRO_L4_IAS_5087,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:47 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.967	42249310	230.730 ng
Spiked Amount 100.000		Recovery = 230.73%	
Target Compounds			
3) H TPH-DRO	3.300	836932743	2299.688 ng

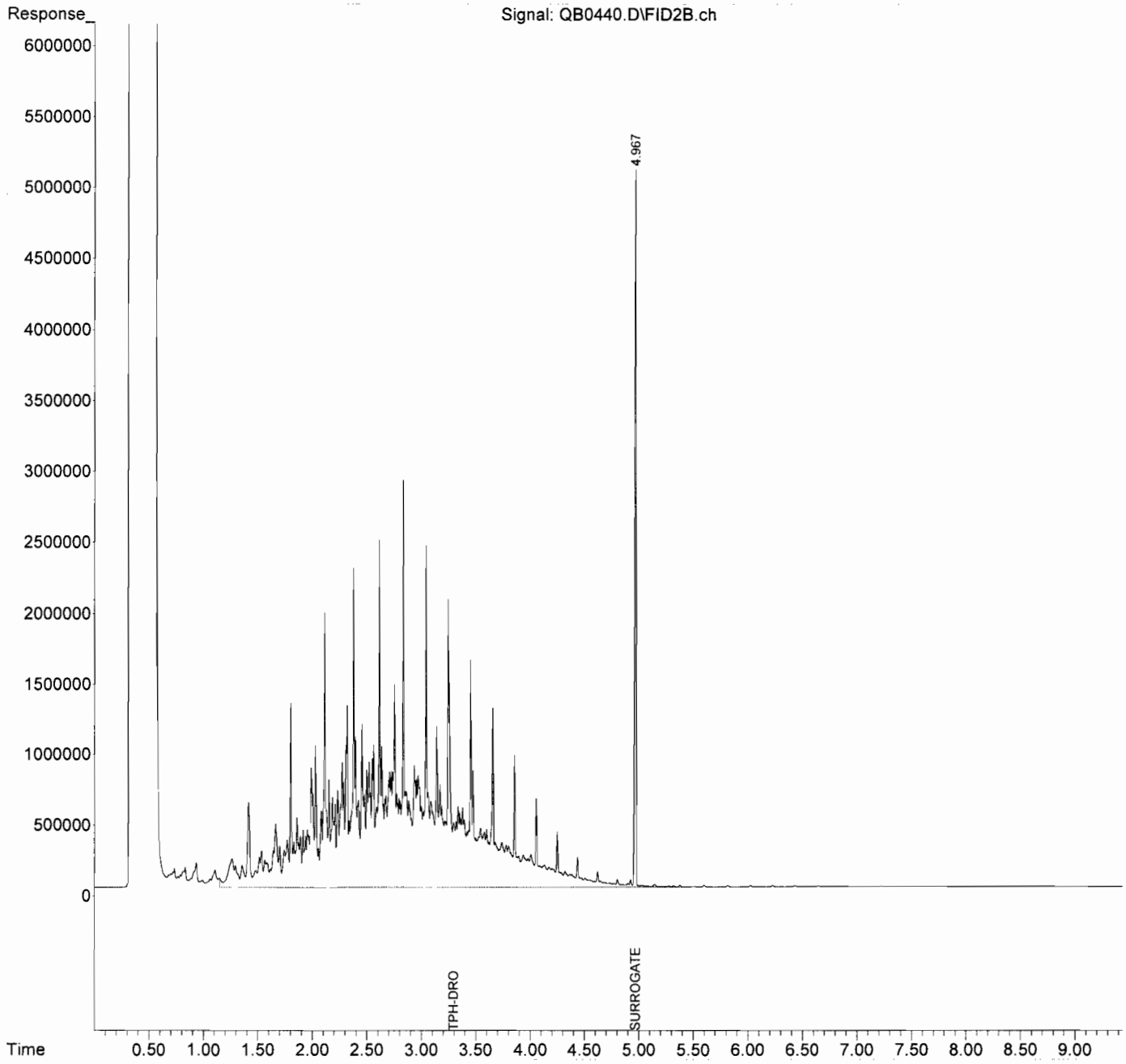
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0440.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 1:02 pm
Operator : BM
Sample : DRO_L4_IAS_5087,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:47 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0439.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 12:48 pm
Operator : BM
Sample : DRO_L5_IAS_5086,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:28 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.985	84614240	462.092 ng
Spiked Amount 100.000		Recovery = 462.09%	
Target Compounds			
3) H TPH-DRO	3.300	1652545295	4540.794 ng

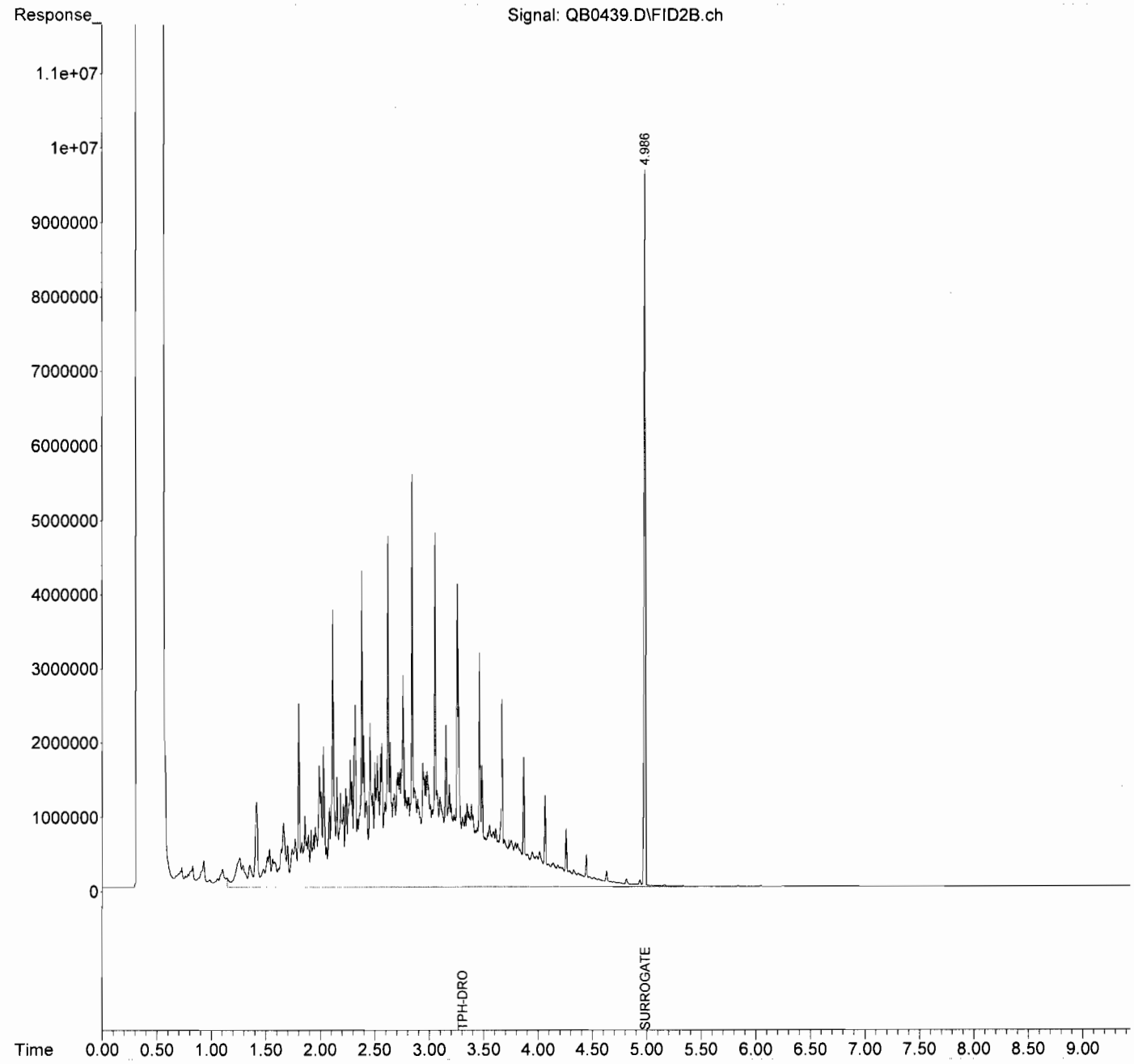
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0439.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 12:48 pm
Operator : BM
Sample : DRO_L5_IAS_5086,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:43:28 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:42:54 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0444.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 2:31 pm
Operator : BM
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:45:59 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.990	17200317	93.998 ng
Spiked Amount 100.000		Recovery = 94.00%	
Target Compounds			
3) H TPH-DRO	3.300	314560424	864.306 ng

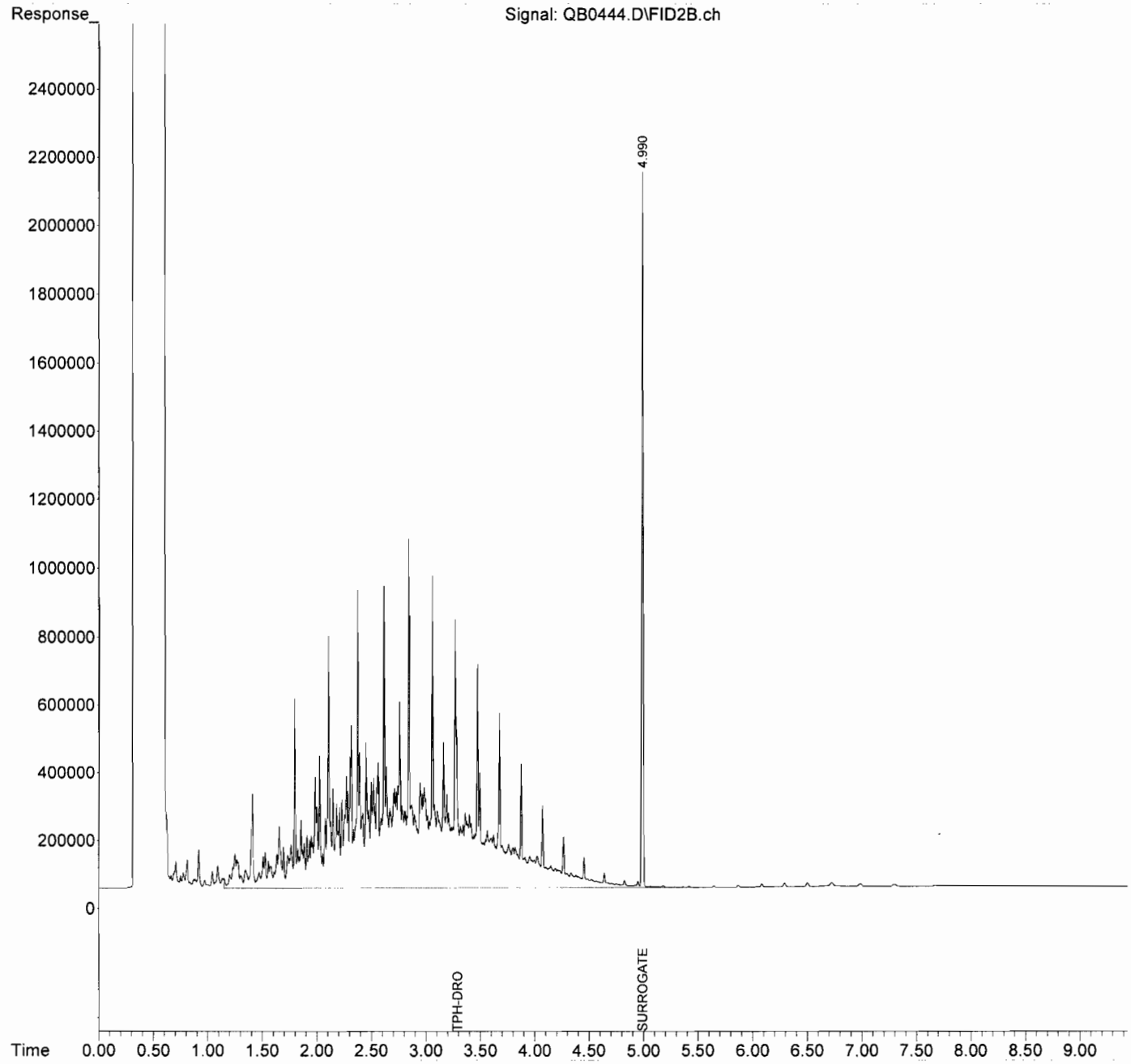
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-04-15\
Data File : QB0444.D
Signal(s) : FID2B.ch
Acq On : 4 Feb 15 2:31 pm
Operator : BM
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:45:59 2015
Quant Method : C:\msdchem\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0767.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 12:04 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 12:39:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.962	20582619	112.482 ng
Spiked Amount 100.000		Recovery = 112.48%	
Target Compounds			
3) H TPH-DRO	3.300	361665036	993.733 ng

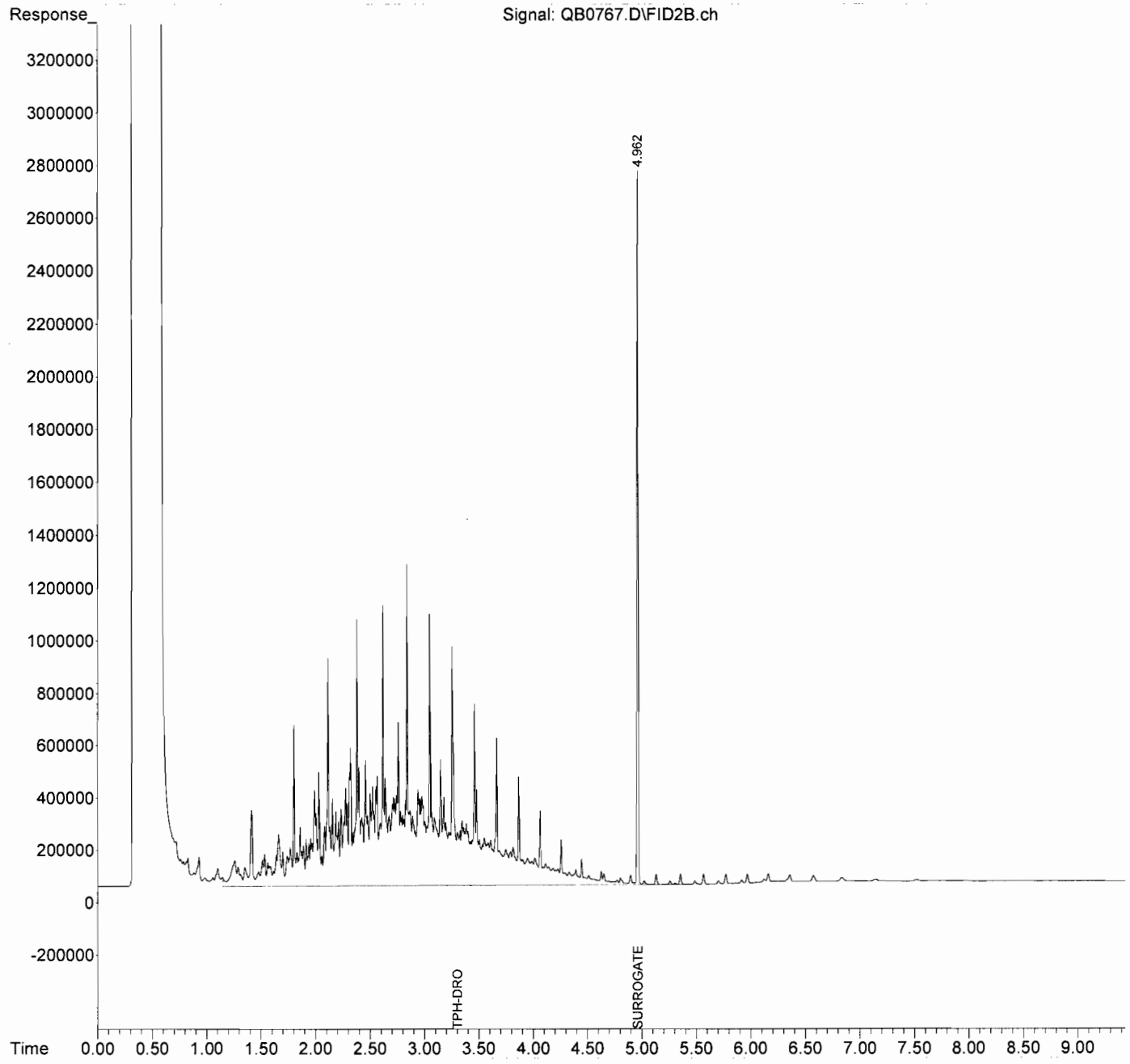
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0767.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 12:04 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 12:39:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0774.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 2:02 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 14:21:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.964	20772026	113.517 ng
Spiked Amount 100.000		Recovery = 113.52%	
Target Compounds			
3) H TPH-DRO	3.300	352775468	969.308 ng

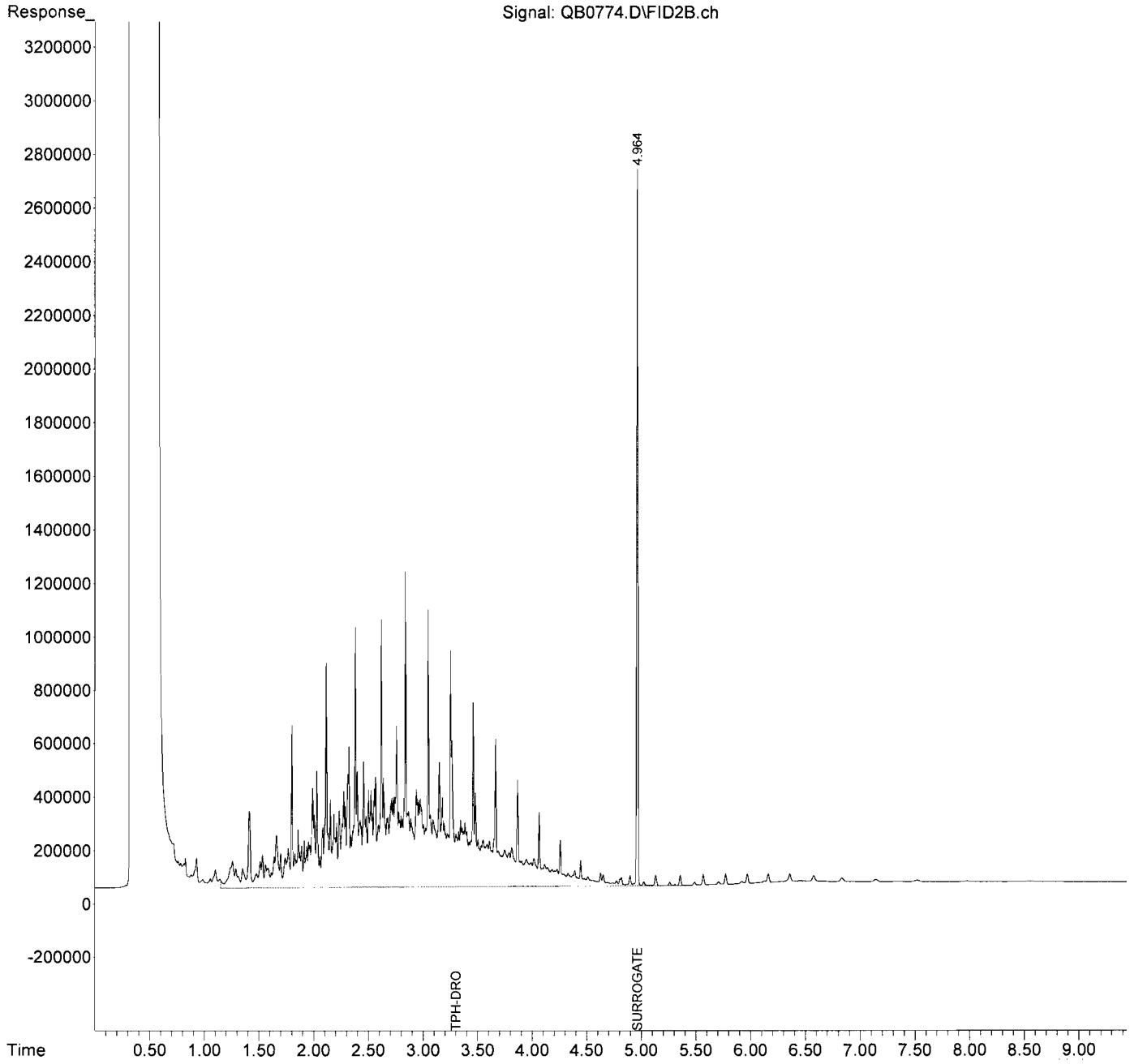
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0774.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 2:02 pm
Operator : RG
Sample : DRO_C_IAS_5088,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 14:21:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS150213-01	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/13/2015	Dilution Factor:	1
Date Analyzed:	02/13/2015	% Moisture:	0
Data File:	QB0622.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS150219-08	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	02/19/2015	Dilution Factor:	1
Date Analyzed:	02/20/2015	% Moisture:	0
Data File:	QB0771.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0771.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:21 pm
Operator : RG
Sample : TPH-DRO,BLKS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:57:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.976	15414342	84.238 ng
Spiked Amount 100.000		Recovery =	84.24%
Target Compounds			

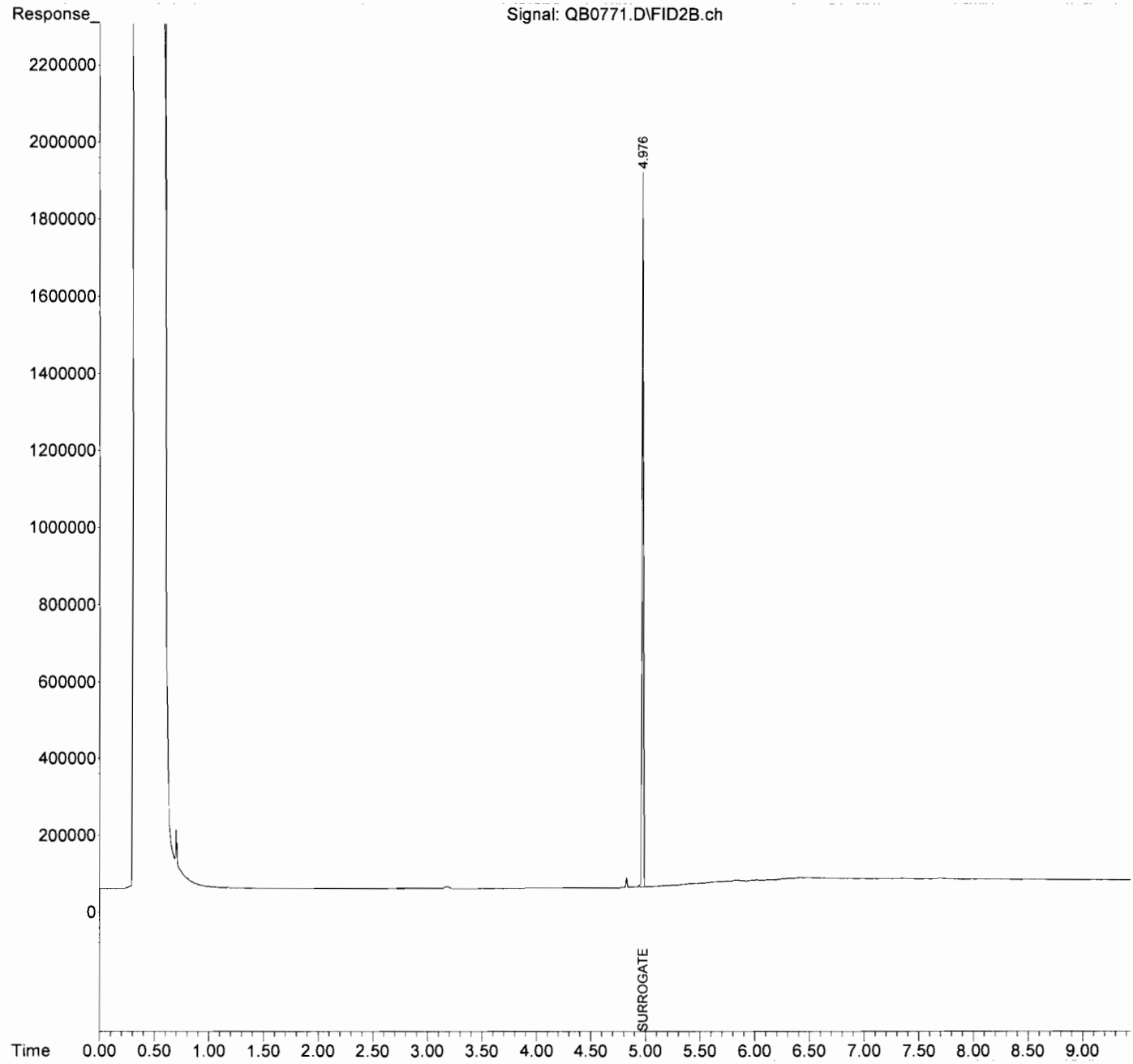
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0771.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:21 pm
Operator : RG
Sample : TPH-DRO,BLKS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:57:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0773.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:48 pm
Operator : RG
Sample : TPH-DRO,LCSS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:59:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.960	14883844	81.339 ng
Spiked Amount 100.000		Recovery =	81.34%
Target Compounds			
3) H TPH-DRO	3.300	328364282	902.234 ng

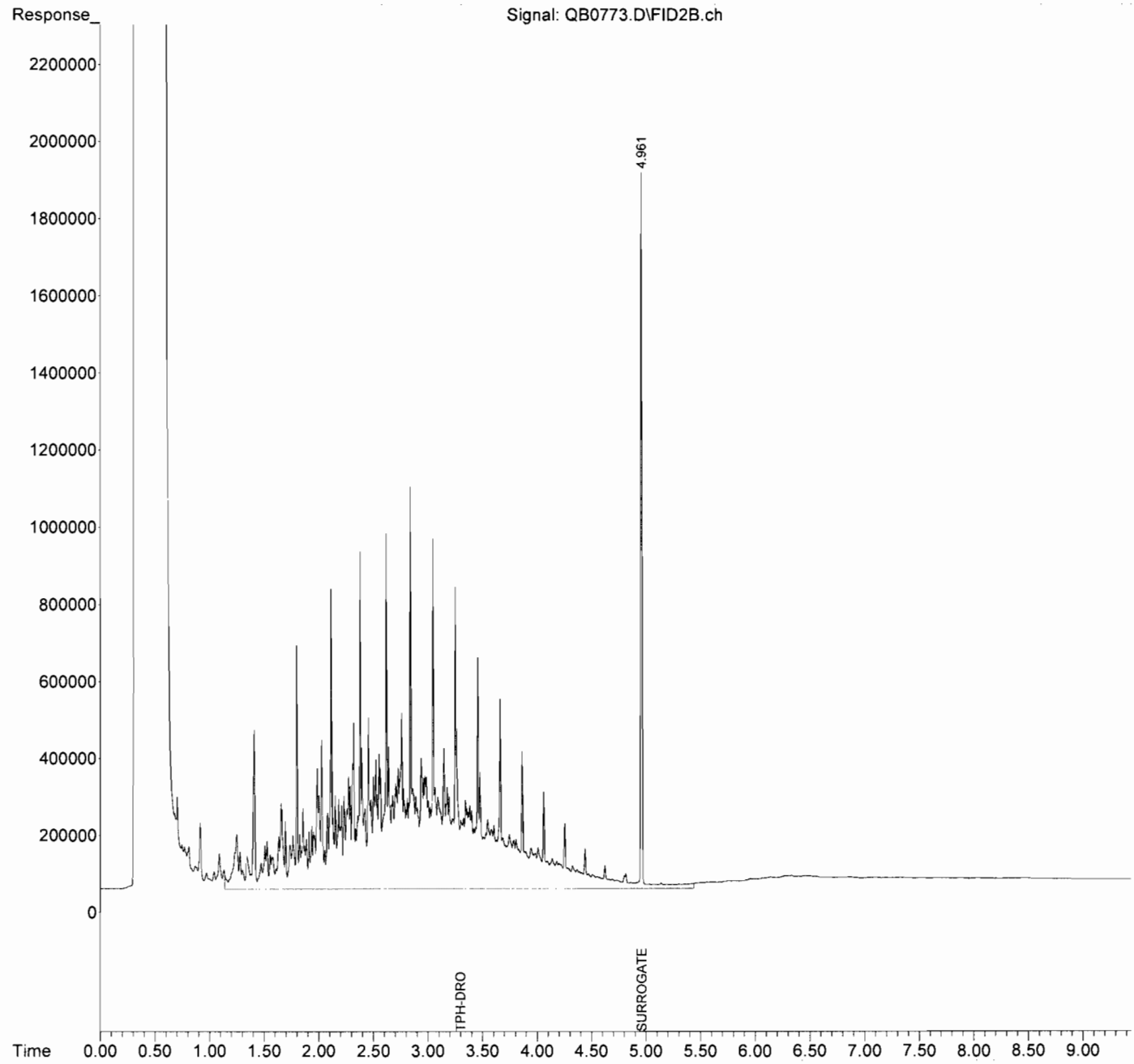
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-20-15\
Data File : QB0773.D
Signal(s) : FID2B.ch
Acq On : 20 Feb 15 1:48 pm
Operator : RG
Sample : TPH-DRO,LCSS150219-08,S,10.0g,0,02/19/15,15
Misc : 150219-08,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 20 13:59:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0636.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:26 pm
Operator : RG
Sample : TPH-DRO,01126-001MS,S,10.24g,5.10,02/13/15,15
Misc : 150213-01,NA,NA,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.954	15213823	83.142 ng
Spiked Amount 100.000		Recovery =	83.14%
Target Compounds			
3) H TPH-DRO	3.300	353850074	972.261 ng

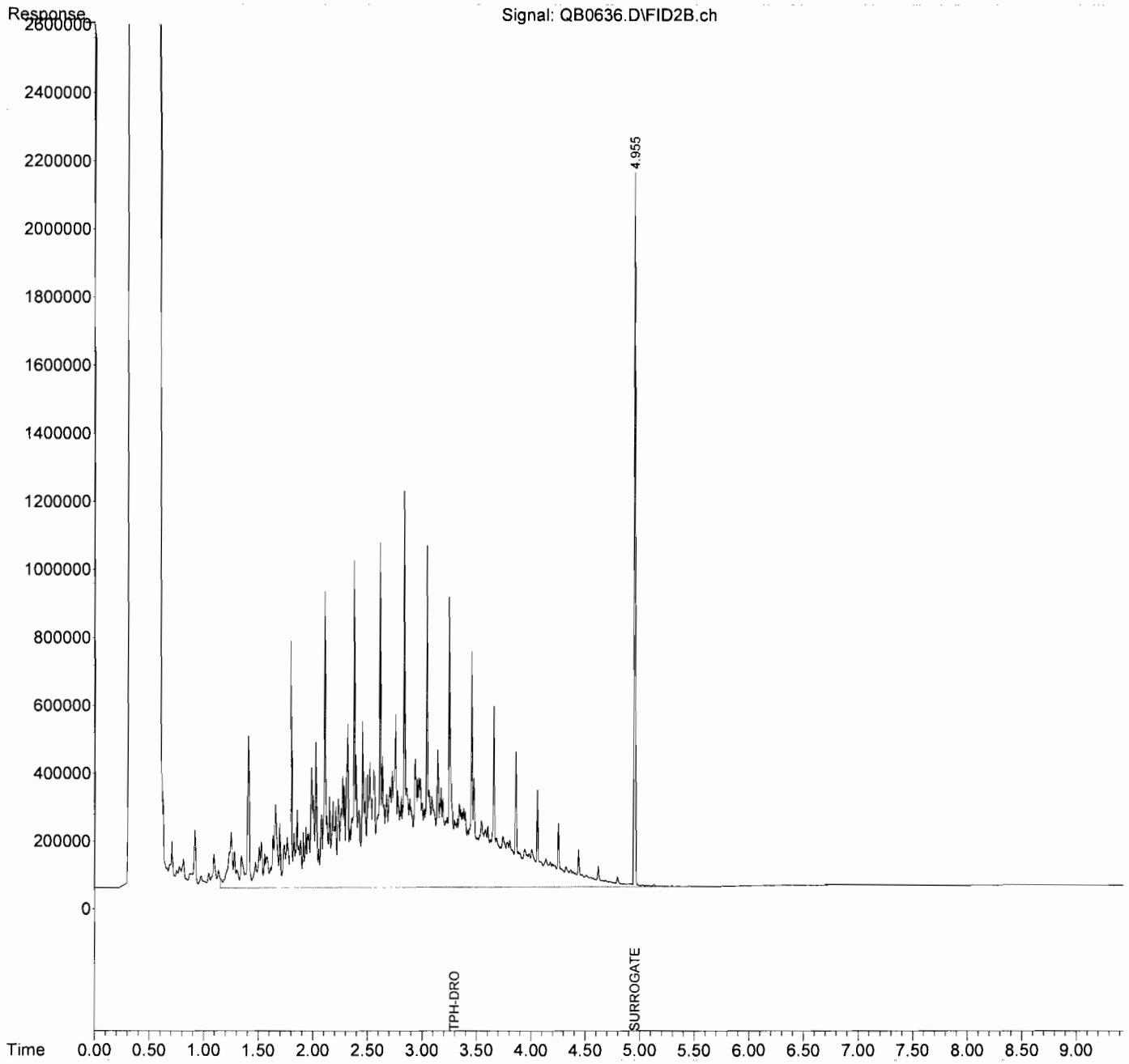
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0636.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:26 pm
Operator : RG
Sample : TPH-DRO,01126-001MS,S,10.24g,5.10,02/13/15,15
Misc : 150213-01,NA,NA,1
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0637.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:39 pm
Operator : RG
Sample : TPH-DRO,01126-001MSD,S,10.24g,5.10,02/13/15,1
Misc : 150213-01,NA,NA,1
ALS Vial : 69 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.954	14988910	81.913 ng
Spiked Amount 100.000		Recovery =	81.91%
Target Compounds			
3) H TPH-DRO	3.300	349457791	960.192 ng

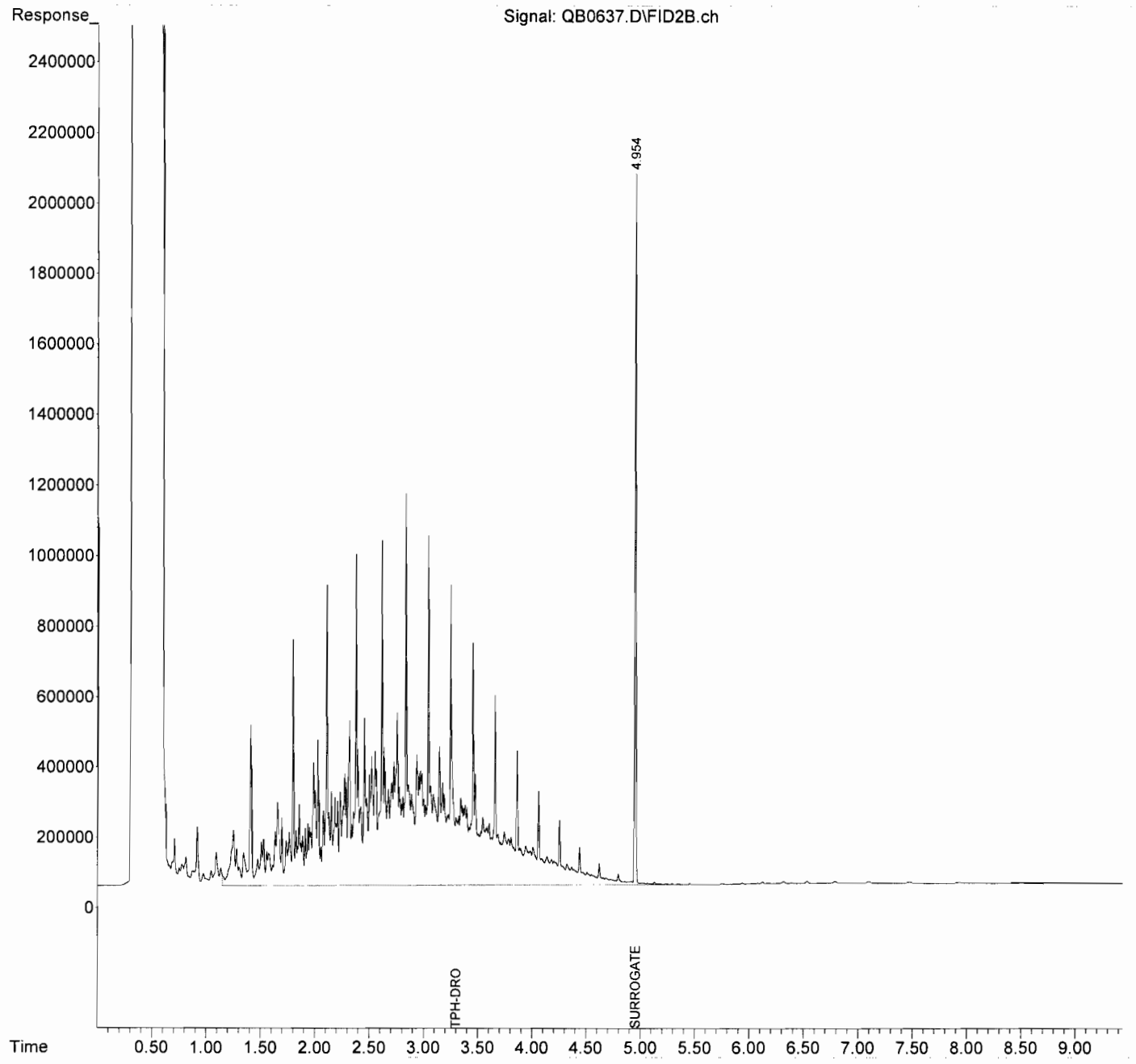
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\02-13-15\
Data File : QB0637.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 15 8:39 pm
Operator : RG
Sample : TPH-DRO,01126-001MSD,S,10.24g,5.10,02/13/15,1
Misc : 150213-01,NA,NA,1
ALS Vial : 69 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 17 12:26:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0204.M
Quant Title :
QLast Update : Wed Feb 04 14:45:26 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

TPH-DRO (Soil)

Extraction Date/Time: 02/19/2015 16:20

Batch ID: **150219-08**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)	Comments
BLKS150219-08	TPH-DRO	10	15	10				
LCSS150219-08	TPH-DRO	10	15	10		150		

Standard Info	Surrogate IAS #
Solvent	71-18/74-17
Surrogate	5084
SPK 1	5120
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	01273-001	TPH-DRO	10.71	15	10			R-48	01126-001MS / 150213-01	
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Elma	02/19/2015 16:20
Weighed	Elma	02/19/2015 16:25
Surrogated	Elma	02/19/2015 16:25
Filtered		
Transferred		
Fractionated		

Comments:

55-57

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

DATE: 2/4/2015 12:00 **CURVE**

INSTRUMENT: Q TPH-ITPH-DRO

TEST GROUP: TPH-DRO TPH-DRO

METHOD QBDR0204

System Method: 8015 D (eg. 8015B M, 3810, QAM-025)

ANALYST: Bei DRO/ NJ-EPH-DRO

Initial

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
51	QB0437		CH2CL2									
52	QB0438		DRO_RT_IAS_5231,100_PPM									
53	QB0439		DRO_L5_IAS_5086,5000_PPM									
54	QB0440		DRO_L4_IAS_5087,2000_PPM									
55	QB0441		DRO_L3_IAS_5088,1000_PPM									
56	QB0442		DRO_L2_IAS_5089,500_PPM									
57	QB0443		DRO_L1_IAS_5090,40_PPM									
55	QB0444		DRO_C_IAS_5088,1000_PPM									

DATE:	2/20/2015 0:00		**150219-08**	BS	Soil
INSTRUMENT:	Q	TPH-ITPH-DRO	**150219-04**		
TEST GROUP:	TPH-DRO	TPH-DRO			
METHOD	QBDR0204				
System Method:	8015 D	(eg. 8015B M, 3810, QAM-025)			
ANALYST:	Rachael ~~Latha~~	DRO/ NJ-EPH-DRO			
		Initial			

2/20/2015

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	51	QB0765		CH2CL2		1			S	15			100
2	53	QB0766		DRO_RT_IAS_5231,10(		1			S	15			100
3	54	QB0767		DRO_C_IAS_5088,100(		1			S	15			100
1	55	QB0771		BLKS150219-08		1	10.0	2/19/15	S	15			0
2	56	QB0772		01273	1	1	10.71	2/19/15	S	15	2/18/15	2/19/15	10.6
3	57	QB0773		LCSS150219-08		1	10.0	2/19/15	S	15			0
4	54	QB0774		DRO_C_IAS_5088,100(		1			S	15			100

STANDARD IAS#	STANDARD NAME:	8011 L-3		
5228				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPM/4PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	5 µl (IAS# 5225) → 10ml Isooctane			1PPb/2PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 L-2		
5229				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPM/4PPb
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	2.5 µl (IAS# 5225) → 10ml Isooctane			0.5PPb/1PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	8011 L-1		
5230				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/12/15	IAS# 5225	—	—	2PPb 2PPM/4PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/12/15	1.25 µl (IAS# 5225) → 10ml Isooctane			0.25PPb/0.5PPb
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
08/04/2024	Isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	DP10 RT standard		
5231				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/12/2015	Restek	31482	A076690	200 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/12/2015	1:2			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
7/30/2024	Hexane		138465	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 1		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/16/2014	Chem Service	N-11638-1G	2884300	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/16/2015	1g → 10ml of CH_2Cl_2			100,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 2		
5085				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/16/2014	Chem Service IAS: 5084	—	—	100,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/16/2015	1:10			10,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L5		
5086				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	Accustandard	DRO-ALL-102-LCS-10X-R1	212061335	50,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1ml stock + 500µl surr2(#5085) + 8500µl CH_2Cl_2			5,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L4		
5087				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	# 5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:2.5			2,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L3		
5088				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2014	1:5			1,000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L2		
5089				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:10			500 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	DRO L1		
5090				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/20/2014	#5086	—	—	5,000PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
4/20/2015	1:125			40 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
9/16/2024	CH_2Cl_2		146049	BM

STANDARD IAS#	STANDARD NAME:	HERBICIDE MIX		
5091				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
10/23/14	Supelco	4-7375	LB91484	200-2000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	—			200-2000 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			2/23/15 09:48		2/23/15 10:44		2/23/15 11:37		2/23/15 12:30	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	25.1	100	25.5	102	24.8	99.2	25.0	100
Antimony	0.250	25.0	23.2	92.8	23.6	94.4	23.2	92.8	23.6	94.4
Arsenic	0.250	25.0	23.0	92.0	23.3	93.2	23.1	92.4	23.2	92.8
Barium	0.500	25.0	23.5	94.0	23.2	92.8	23.5	94.0	23.0	92.0
Beryllium	0.200	25.0	24.8	99.2	24.6	98.4	24.3	97.2	24.2	96.8
Cadmium	0.125	25.0	23.6	94.4	23.5	94.0	23.9	95.6	22.7	90.8
Calcium	5.00	250	243	97.2	241	96.4	239	95.6	249	99.6
Chromium	0.500	25.0	23.5	94.0	23.7	94.8	23.7	94.8	24.0	96.0
Cobalt	0.500	25.0	23.4	93.6	23.6	94.4	23.8	95.2	23.7	94.8
Copper	0.500	25.0	23.5	94.0	23.5	94.0	24.8	99.2	23.9	95.6
Iron	5.00	250	234	93.6	237	94.8	237	94.8	235	94.0
Lead	0.500	25.0	23.4	93.6	23.4	93.6	23.5	94.0	23.1	92.4
Magnesium	5.00	250	242	96.8	244	97.6	241	96.4	247	98.8
Manganese	0.250	25.0	24.2	96.8	24.4	97.6	24.1	96.4	24.3	97.2
Mercury	0.120	5.00	5.00	100	5.00	100	4.77	95.4	5.35	107
Nickel	0.500	25.0	23.2	92.8	23.5	94.0	23.7	94.8	23.7	94.8
Potassium	5.00	250	239	95.6	243	97.2	240	96.0	247	98.8
Selenium	0.500	25.0	23.7	94.8	25.5	102	24.1	96.4	24.7	98.8
Silver	0.125	25.0	25.1	100	25.1	100	25.0	100	24.8	99.2
Sodium	5.00	250	246	98.4	248	99.2	246	98.4	258	103
Thallium	0.125	25.0	23.4	93.6	23.6	94.4	23.5	94.0	23.0	92.0
Vanadium	0.500	25.0	23.8	95.2	24.2	96.8	23.7	94.8	24.1	96.4
Zinc	0.500	25.0	24.1	96.4	24.3	97.2	24.3	97.2	24.1	96.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

2/23/15 13:22

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	24.7	98.8						
Antimony	0.250	25.0	23.9	95.6						
Arsenic	0.250	25.0	22.7	90.8						
Barium	0.500	25.0	23.4	93.6						
Beryllium	0.200	25.0	24.3	97.2						
Cadmium	0.125	25.0	23.5	94.0						
Calcium	5.00	250	274	110						
Chromium	0.500	25.0	22.9	91.6						
Cobalt	0.500	25.0	23.2	92.8						
Copper	0.500	25.0	25.1	100						
Iron	5.00	250	274	110						
Lead	0.500	25.0	23.4	93.6						
Magnesium	5.00	250	269	108						
Manganese	0.250	25.0	23.3	93.2						
Nickel	0.500	25.0	23.0	92.0						
Potassium	5.00	250	255	102						
Selenium	0.500	25.0	23.5	94.0						
Silver	0.125	25.0	25.1	100						
Sodium	5.00	250	270	108						
Thallium	0.125	25.0	23.6	94.4						
Vanadium	0.500	25.0	23.5	94.0						
Zinc	0.500	25.0	23.3	93.2						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

		2/23/15 09:56	2/23/15 10:49	2/23/15 11:42	2/23/15 12:34	2/23/15 13:27	
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Aluminum	0.0005	ND	ND	ND	ND	ND	
Antimony	0.00025	ND	ND	ND	ND	ND	
Arsenic	0.00025	ND	ND	ND	ND	ND	
Barium	0.0005	ND	ND	ND	ND	ND	
Beryllium	0.0002	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Calcium	0.005	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Cobalt	0.0005	ND	ND	ND	ND	ND	
Copper	0.0005	ND	ND	ND	ND	ND	
Iron	0.005	ND	ND	ND	ND	ND	
Lead	0.0005	ND	ND	ND	ND	ND	
Magnesium	0.005	ND	ND	ND	ND	ND	
Manganese	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00012	ND	ND	ND	ND		
Nickel	0.0005	ND	ND	ND	ND	ND	
Potassium	0.005	ND	ND	ND	ND	ND	
Selenium	0.0005	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	
Sodium	0.005	ND	ND	ND	ND	ND	
Thallium	0.000125	ND	ND	ND	ND	ND	
Vanadium	0.0005	ND	ND	ND	ND	ND	
Zinc	0.0005	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

02/23/2015 10:01 AM

Batch (Page) #: 079
Associated Lab Case for Blank 1: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Unit: ppm (mg/kg) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKS150220-01
Aluminum	0.500	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.500	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	5.00	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	5.00	ND
Lead	0.500	ND
Magnesium	5.00	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	5.00	ND
Selenium	0.500	ND
Silver	0.125	ND
Sodium	5.00	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	0.500	ND

Associated Sample for Blank 1:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	95100	92000	92.0	NA
Calcium	100000	-	96800	94500	94.5	NA
Iron	100000	-	96100	93700	93.7	NA
Potassium	100000	-	97300	94900	94.9	NA
Magnesium	100000	-	96800	93500	93.5	NA
Sodium	100000	-	101000	97800	97.8	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2380	2340	117	NA
Titanium	2000	-	2050	1990	99.5	NA
Silver	-	20.0	-	21.0	105	80-120
Arsenic	-	20.0	-	20.5	103	80-120
Cadmium	-	20.0	-	19.5	97.5	80-120
Cobalt	-	20.0	-	20.8	104	80-120
Chromium	-	20.0	-	20.4	102	80-120
Copper	-	20.0	-	20.8	104	80-120
Manganese	-	20.0	-	21.4	107	80-120
Nickel	-	20.0	-	19.9	99.5	80-120
Zinc	-	20.0	-	19.9	99.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS150220-01 TRUE	LCSS150220-01 FOUND	LCSS150220-01 %R(1)	TRUE	FOUND	%R(1)
Aluminum	200	202	101			
Antimony	40.0	40.2	101			
Arsenic	40.0	40.6	102			
Barium	40.0	40.6	102			
Beryllium	40.0	43.7	109			
Cadmium	40.0	41.1	103			
Calcium	200	202	101			
Chromium	40.0	41.7	104			
Cobalt	40.0	40.2	101			
Copper	40.0	42.1	105			
Iron	200	203	102			
Lead	40.0	42.4	106			
Magnesium	200	208	104			
Manganese	40.0	39.7	99.3			
Mercury	0.500	0.596	119			
Nickel	40.0	41.8	105			
Potassium	200	200	100			
Selenium	40.0	41.7	104			
Silver	40.0	44.3	111			
Sodium	200	216	108			
Thallium	40.0	39.3	98.3			
Vanadium	40.0	40.4	101			
Zinc	40.0	39.7	99.3			

(1) Control Limits % Recovery = 80-120%

LCSS150220-01 2/23/15 10:05

01158-021~022; 01224-001; 01273-001; 01281-001

01281-002~016

METALS QUALITY CONTROL

LOW LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 079
SDG #: E15-01158, E15-01273, E15-01281, E15-01224

Matrix: Soil Method: 6020A Units: ppb (ug/L)

2/23/15 09:52

ANALYTE	INST. MDL	LLICV TRUE	LLICV FOUND	LLICV % R
Aluminum	0.500	0.500	0.515	103
Antimony	0.250	0.500	0.535	107
Arsenic	0.250	0.500	0.488	97.6
Barium	0.500	0.500	0.591	118
Beryllium	0.200	0.500	0.577	115
Cadmium	0.125	0.500	0.557	111
Calcium	5.00	5.00	5.37	107
Chromium	0.500	0.500	0.618	124
Cobalt	0.500	0.500	0.537	107
Copper	0.500	0.500	0.539	108
Iron	5.00	5.00	5.43	109
Lead	0.500	0.500	0.549	110
Magnesium	5.00	5.00	5.34	107
Manganese	0.250	0.500	0.508	102
Nickel	0.500	0.500	0.606	121
Potassium	5.00	5.00	5.20	104
Selenium	0.500	0.500	0.454	90.8
Silver	0.125	0.500	0.500	100
Sodium	5.00	5.00	6.12	122
Thallium	0.125	0.500	0.588	118
Vanadium	0.500	0.500	0.494	98.8
Zinc	0.500	0.500	0.596	119

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	2/23/15 10:23 SSR1	2/23/15 10:09 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	12300	11800	NC	242					75-125
Antimony	48.1	0.485	98.4	48.4					75-125
Arsenic	50.2	3.24	97.0	48.4					75-125
Barium	224	171	110	48.4					75-125
Beryllium	51.4	0.488	105	48.4					75-125
Cadmium	48.0	0.157	98.8	48.4					75-125
Calcium	1430	1180	103	242					75-125
Chromium	65.0	16.1	101	48.4					75-125
Cobalt	53.4	6.29	97.3	48.4					75-125
Copper	60.9	11.9	101	48.4					75-125
Iron	16500	15800	NC	242					75-125
Lead	71.8	20.5	106	48.4					75-125
Magnesium	2330	2050	116	242					75-125
Manganese	202	153	101	48.4					75-125
Mercury	0.754	0.049	117	0.605					75-125
Nickel	60.2	11.4	101	48.4					75-125
Potassium	1050	803	102	242					75-125
Selenium	50.6	2.21	100.0	48.4					75-125
Silver	60.2	ND	124	48.4					75-125
Sodium	337	87.1	103	242					75-125
Thallium	46.7	0.767	94.9	48.4					75-125
Vanadium	78.1	29.7	100	48.4					75-125
Zinc	157	110	97.1	48.4					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E15-01158-021
% Solids: 82.6
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	2/23/15 10:09 S1	2/23/15 10:14 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	11800	12100	2.51				
Antimony	20	0.485	0.465	4.21				
Arsenic	20	3.24	3.43	5.70				
Barium	20	171	173	1.16				
Beryllium	20	0.488	0.463	5.26				
Cadmium	20	0.157	0.164	4.36				
Calcium	20	1180	1230	4.15				
Chromium	20	16.1	16.3	1.23				
Cobalt	20	6.29	6.45	2.51				
Copper	20	11.9	12.0	0.837				
Iron	20	15800	16200	2.50				
Lead	20	20.5	21.0	2.41				
Magnesium	20	2050	2100	2.41				
Manganese	20	153	157	2.58				
Mercury	20	0.049	0.047	4.17				
Nickel	20	11.4	11.8	3.45				
Potassium	20	803	825	2.70				
Selenium	20	2.21	2.00	9.98				
Silver	NA	ND	ND	NC				
Sodium	20	87.1	92.4	5.91				
Thallium	20	0.767	0.747	2.64				
Vanadium	20	29.7	30.6	2.99				
Zinc	20	110	113	2.69				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E15-01158-021
% Solids: 82.6
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 079
SDG #: E15-01158, E15-01224, E15-01273, E15-01281

Matrix: Soil Concentration/Units: ppm (mg/kg)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	2/23/15 10:09 SR	2/23/15 10:18 SDR	% Difference	2/23/15 10:27 SPR	SA	% Recovery
Aluminum	11800	12400	4.96			
Antimony	0.485	ND	NC	40.5	48.4	82.7
Arsenic	3.24	3.29	1.53	43.4	48.4	83.0
Barium	171	169	1.18			
Beryllium	0.488	ND	NC	40.6	48.4	82.9
Cadmium	0.157	ND	NC	39.1	48.4	80.5
Calcium	1180	1170	0.851			
Chromium	16.1	16.5	2.45			
Cobalt	6.29	6.32	0.476	46.7	48.4	83.5
Copper	11.9	11.8	0.844			
Iron	15800	16100	1.88			
Lead	20.5	20.6	0.487			
Magnesium	2050	2170	5.69			
Manganese	153	156	1.94			
Nickel	11.4	12.0	5.13			
Potassium	803	809	0.744			
Selenium	2.21	ND	NC	41.7	48.4	81.6
Silver	ND	ND	NC	38.9	48.4	80.4
Sodium	87.1	90.5	3.83	869	968	80.8
Thallium	0.767	0.781	1.81	41.1	48.4	83.3
Vanadium	29.7	29.5	0.676			
Zinc	110	113	2.69			

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

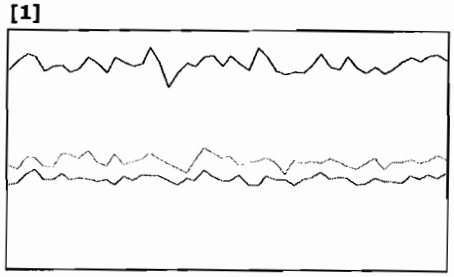
Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E15-01158-021
QC Sample 1 for following samples:
01158-021~022; 01224-001; 01273-001; 01281-001
01281-002~016

Tune Report

Batch Folder D:\Data\6020\pg079a.b
Report Comment
Instrument Name G3281A JP12382037

[1]



Mass	Range	Count	RSD%	Background
59	5000	1897	4.454	1.700
89	5000	2270	5.070	1.400
205	5000	4314	3.812	2.500

Ratio (oxide) 156/140 0.369 % **Ratio (2+)** 70/140 3.250 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.31

Tune Parameters
Plasma Paramters

RF Power	1550 W	Carrier Gas	1.01 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-2.0 V	Omega Lens	8.3 V	Deflect	1.8 V
Extract 2	-190.0 V	Cell Entrance	-24 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7	5000	3724	3.329	7.800
89	20000	15221	4.763	5.300
205	10000	6165	3.667	14.500
59	10000	7064	3.711	2.500

Ratio (oxide) 156/140 1.031 % **Ratio (2+)** 70/140 10.769 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.413

Mass	Peak Height	Axis	W-50%	W-X%
7	3735.23	7.00	0.64	0.733
89	14755.72	89.00	0.61	0.731
205	6097.19	205.00	0.60	0.741
59	7000.51	58.95	0.65	0.735

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Tune Report

RF Power	1550 W	Carrier Gas	1.05 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-3.1 V	Omega Lens	7.8 V	Deflect	12.8 V
Extract 2	-185.0 V	Cell Entrance	-26 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-54 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

METALS INTERNAL STANDARD AREA SUMMARY
2015 PG079
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	1901180		126570		931750		5993003		7388471		4361567		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1330826	70	88599	70	652225	70	4195102	70	5171930	70	3053097	70	
	Upper Limit	2281416	120	151884	120	1118100	120	7191604	120	8866165	120	5233880	120	
004CALS.d	STD1	1915213	101	126085	100	938468	101	5988787	100	7365679	100	4360863	100	
005CALS.d	STD2	1927728	101	127323	101	927762	100	5974588	100	7319475	99	4338819	99	
006CALS.d	STD3	1882785	99	125465	99	918376	99	5920615	99	7328306	99	4359299	100	
007CALS.d	STD4	1917539	101	125213	99	928233	100	6038235	101	7430978	101	4459298	102	
008CALS.d	STD5	1933870	102	124397	98	918862	99	5973631	100	7412976	100	4446332	102	
010_CCV.d	ICV	1932746	102	125357	99	923635	99	5961066	99	7394132	100	4370877	100	
011LCCV.d	LLICV	1936903	102	125978	100	926323	99	5956048	99	7334681	99	4353359	100	
012_ICB.d	ICB	1930896	102	124999	99	929893	100	5998603	100	7351095	99	4366528	100	
013SMPL.d	BLKS150220-01	1929562	101	122993	97	915461	98	5873781	98	7259933	98	4293540	98	
014SMPL.d	LCSS150220-01	1920046	101	122607	97	921148	99	5908339	99	7311647	99	4310515	99	
015SMPL.d	E15-01158-021	2013130	106	127272	101	956500	103	5909876	99	7425119	100	4330447	99	
016SMPL.d	E15-01158-021DUP	2042827	107	128144	101	970160	104	6018828	100	7542394	102	4355923	100	
017SMPL.d	E15-01158-021SD	2062415	108	129999	103	972512	104	6182814	103	7578020	103	4469564	102	
018SMPL.d	E15-01158-021MS	2064113	109	129747	103	978886	105	6084533	102	7628597	103	4430768	102	
019SMPL.d	E15-01158-021PS	2053738	108	128442	101	983162	106	6115259	102	7646376	103	4444203	102	
022SMPL.d	E15-01273-001	2022177	106	126909	100	986418	106	6061472	101	7592311	103	4430851	102	
023_CCV.d	CCV	2019218	106	129999	103	969270	104	6228002	104	7539941	102	4429153	102	
024_CCB.d	CCB	1967398	103	126780	100	951871	102	6100274	102	7435989	101	4389644	101	
025SMPL.d	E15-01158-022	2051378	108	128824	102	973866	105	6070190	101	7543434	102	4388274	101	
026SMPL.d	E15-01281-001	1984046	104	131499	104	1058006	114	5951981	99	7453895	101	4394041	101	
027SMPL.d	E15-01281-002	1860739	98	112852	89	922163	99	5610921	94	7242457	98	4351469	100	
028SMPL.d	E15-01281-003	1882282	99	115595	91	946324	102	5668933	95	7359123	100	4406212	101	
029SMPL.d	E15-01281-004	1849302	97	115963	92	977796	105	5669824	95	7337508	99	4362039	100	
030SMPL.d	E15-01281-005	1929070	101	115209	91	973684	105	5724804	96	7344474	99	4401482	101	
031SMPL.d	E15-01281-006	1842548	97	130752	103	911138	98	5731985	96	7359640	100	4387337	101	
032SMPL.d	E15-01281-007	1850980	97	116169	92	986258	106	5715596	95	7330366	99	4414873	101	
033SMPL.d	E15-01281-008	1863064	98	117342	93	947450	102	5692861	95	7409386	100	4373906	100	
034SMPL.d	E15-01281-009	1882739	99	114649	91	942265	101	5708464	95	7509506	102	4436383	102	
035_CCV.d	CCV	2012212	106	121878	96	967729	104	6209502	104	7748994	105	4568640	105	
036_CCB.d	CCB	2018997	106	123138	97	967752	104	6258581	104	7711496	104	4550401	104	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

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METALS INTERNAL STANDARD AREA SUMMARY
2015 PG079
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	1901180		126570		931750		5993003		7388471		4361567		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1330826	70	88599	70	652225	70	4195102	70	5171930	70	3053097	70	
	Upper Limit	2281416	120	151884	120	1118100	120	7191604	120	8866165	120	5233880	120	
037SMPL.d	E15-01281-010	1953808	103	119877	95	992264	106	5905431	99	7595900	103	4521687	104	
038SMPL.d	E15-01281-011	2003991	105	120799	95	1004452	108	5945230	99	7664278	104	4597045	105	
039SMPL.d	E15-01281-012	1983257	104	119423	94	1003728	108	5920724	99	7610848	103	4517369	104	
040SMPL.d	E15-01281-013	2033892	107	119757	95	992356	107	5982734	100	7633326	103	4434585	102	
041SMPL.d	E15-01281-014	2035213	107	120414	95	997427	107	6046663	101	7697941	104	4442092	102	
042SMPL.d	E15-01281-015	2040651	107	121840	96	985115	106	6001742	100	7645745	103	4433998	102	
043SMPL.d	E15-01281-016	1962250	103	117972	93	981635	105	5887117	98	7384497	100	4288805	98	
044SMPL.d	E15-01224-001	2054490	108	118831	94	996656	107	5850452	98	7447997	101	4209643	97	
047_CCV.d	CCV	2126776	112	126798	100	1034810	111	6402457	107	7758915	105	4534694	104	
048_CCB.d	CCB	2106194	111	129251	102	1024902	110	6391850	107	7701153	104	4468439	102	
049SMPL.d	E15-01281-001	2151106	113	128995	102	1021514	110	6282920	105	7679107	104	4501612	103	
050SMPL.d	E15-01281-002	2174625	114	126265	100	1014789	109	6342478	106	7720360	104	4508185	103	
051SMPL.d	E15-01281-003	2198265	116	126417	100	1006118	108	6255430	104	7645524	103	4490295	103	
052SMPL.d	E15-01281-004	2163933	114	124476	98	1004167	108	6235913	104	7617753	103	4480394	103	
053SMPL.d	E15-01281-005	2196943	116	124269	98	1001868	108	6197299	103	7549179	102	4435709	102	
054SMPL.d	E15-01281-007	2188391	115	123203	97	990719	106	6167901	103	7528672	102	4425767	101	
055SMPL.d	E15-01281-011	2164220	114	114796	91	1001869	108	6206153	104	7566511	102	4412096	101	
057ICSA.d	ICSA	1914010	101	125010	99	1054498	113	5509853	92	7395562	100	3907130	90	
058ICSB.d	ICSAB	1922097	101	129375	102	1086444	117	5624381	94	7484678	101	3927738	90	
059_CCV.d	CCV	2076299	109	131331	104	1036899	111	6551042	109	7986442	108	4641439	106	
060_CCB.d	CCB	2046039	108	113263	89	1027725	110	6475247	108	7854946	106	4585057	105	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

METALS RAW DATA

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:17:45-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	46740	0.00
Mg	24	1	1	632	2.22
Al	27	1	1	453	2.88
K	39	1	1	48312	0.00
Ca	44	1	1	559	2.86
Ti	47	1	1	7	750.38
V	51	1	1	1448	0.55
Cr	52	1	1	3076	0.05
Mn	55	1	1	586	1.04
Fe	56	1	1	17506	0.00
Co	59	1	1	169	13.94
Ni	60	1	1	976	1.32
Cu	63	1	1	31611	0.01
Zn	66	1	1	1340	0.65
As	75	1	1	61	45.79
Se	78	1	1	29	140.24
Be	9	2	2	56	71.98
B	11	2	2	40497	0.01
Mo	95	2	2	567	1.51
Ag	107	2	2	433	6.82
Cd	111	2	2	41	102.22
Sn	118	2	2	4186	0.25
Sb	121	2	2	270	6.14
Ba	137	2	2	267	5.63
Tl	205	2	2	1300	0.50
Pb	208	2	2	3056	0.26

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	126570	0.12
Li	6	2	2	1901180	0.14
Ge	72	2	2	931750	0.47
Rh	103	2	2	5993003	0.26
Tb	159	2	2	7388471	0.48
Bi	209	2	2	4361567	0.20

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:22:04-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	56629	0.00
Mg	24	1	1	4981	0.02
Al	27	1	1	731	0.73
K	39	1	1	51996	0.00
Ca	44	1	1	746	0.93
Ti	47	1	1	146	17.54
V	51	1	1	5903	0.03
Cr	52	1	1	8937	0.03
Mn	55	1	1	3851	0.08
Fe	56	1	1	66490	0.00
Co	59	1	1	10003	0.03
Ni	60	1	1	3847	0.03
Cu	63	1	1	38612	0.01
Zn	66	1	1	2484	0.20
As	75	1	1	763	0.81
Se	78	1	1	81	46.79
Be	9	2	2	5087	0.06
B	11	2	2	43472	0.01
Mo	95	2	2	9008	0.04
Ag	107	2	2	4601	0.10
Cd	111	2	2	3690	0.09
Sn	118	2	2	15837	0.02
Sb	121	2	2	15844	0.03
Ba	137	2	2	5902	0.07
Tl	205	2	2	33015	0.00
Pb	208	2	2	27153	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126085	1.14	126570	99.62	70	120	
Li	6	2	2	1915213	0.59	1901180	100.74	70	120	
Ge	72	2	2	938468	0.40	931750	100.72	70	120	
Rh	103	2	2	5988787	1.24	5993003	99.93	70	120	
Tb	159	2	2	7365679	0.87	7388471	99.69	70	120	
Bi	209	2	2	4360863	0.77	4361567	99.98	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:26:28-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	125342	0.00
Mg	24	1	1	43691	0.00
Al	27	1	1	2356	0.08
K	39	1	1	85101	0.00
Ca	44	1	1	2416	0.34
Ti	47	1	1	1361	0.41
V	51	1	1	45820	0.00
Cr	52	1	1	59837	0.00
Mn	55	1	1	31005	0.00
Fe	56	1	1	499385	0.00
Co	59	1	1	94628	0.00
Ni	60	1	1	27158	0.01
Cu	63	1	1	100327	0.00
Zn	66	1	1	11637	0.02
As	75	1	1	7467	0.03
Se	78	1	1	468	0.99
Be	9	2	2	52083	0.00
B	11	2	2	68707	0.00
Mo	95	2	2	80976	0.00
Ag	107	2	2	53080	0.01
Cd	111	2	2	39858	0.00
Sn	118	2	2	118716	0.00
Sb	121	2	2	157966	0.00
Ba	137	2	2	57144	0.00
Tl	205	2	2	322427	0.00
Pb	208	2	2	230998	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	127323	0.64	126570	100.60	70	120	
Li	6	2	2	1927728	0.69	1901180	101.40	70	120	
Ge	72	2	2	927762	0.43	931750	99.57	70	120	
Rh	103	2	2	5974588	0.48	5993003	99.69	70	120	
Tb	159	2	2	7319475	0.63	7388471	99.07	70	120	
Bi	209	2	2	4338819	0.73	4361567	99.48	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:30:47-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	428120	0.00
Mg	24	1	1	204485	0.00
Al	27	1	1	9104	0.01
K	39	1	1	226294	0.00
Ca	44	1	1	9856	0.02
Ti	47	1	1	6585	0.09
V	51	1	1	213825	0.00
Cr	52	1	1	273959	0.00
Mn	55	1	1	147598	0.00
Fe	56	1	1	2332081	0.00
Co	59	1	1	449279	0.00
Ni	60	1	1	126388	0.00
Cu	63	1	1	368360	0.00
Zn	66	1	1	51776	0.00
As	75	1	1	35199	0.01
Se	78	1	1	2259	0.33
Be	9	2	2	250433	0.00
B	11	2	2	188403	0.00
Mo	95	2	2	391551	0.00
Ag	107	2	2	265219	0.00
Cd	111	2	2	193256	0.00
Sn	118	2	2	562278	0.00
Sb	121	2	2	767049	0.00
Ba	137	2	2	278806	0.00
Tl	205	2	2	1587476	0.00
Pb	208	2	2	1101186	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125465	1.01	126570	99.13	70	120	
Li	6	2	2	1882785	1.20	1901180	99.03	70	120	
Ge	72	2	2	918376	0.42	931750	98.56	70	120	
Rh	103	2	2	5920615	0.68	5993003	98.79	70	120	
Tb	159	2	2	7328306	0.30	7388471	99.19	70	120	
Bi	209	2	2	4359299	0.65	4361567	99.95	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:35:09-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	823011	0.00
Mg	24	1	1	415926	0.00
Al	27	1	1	18167	0.01
K	39	1	1	413076	0.00
Ca	44	1	1	19367	0.01
Ti	47	1	1	13566	0.03
V	51	1	1	433255	0.00
Cr	52	1	1	552491	0.00
Mn	55	1	1	299875	0.00
Fe	56	1	1	4745431	0.00
Co	59	1	1	910105	0.00
Ni	60	1	1	256171	0.00
Cu	63	1	1	719651	0.00
Zn	66	1	1	102149	0.00
As	75	1	1	71029	0.00
Se	78	1	1	4399	0.10
Be	9	2	2	512907	0.00
B	11	2	2	338911	0.00
Mo	95	2	2	793710	0.00
Ag	107	2	2	540777	0.00
Cd	111	2	2	394477	0.00
Sn	118	2	2	1137127	0.00
Sb	121	2	2	1572702	0.00
Ba	137	2	2	560260	0.00
Tl	205	2	2	3272314	0.00
Pb	208	2	2	2339594	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125213	0.12	126570	98.93	70	120	
Li	6	2	2	1917539	0.10	1901180	100.86	70	120	
Ge	72	2	2	928233	0.98	931750	99.62	70	120	
Rh	103	2	2	6038235	1.19	5993003	100.75	70	120	
Tb	159	2	2	7430978	0.79	7388471	100.58	70	120	
Bi	209	2	2	4459298	0.69	4361567	102.24	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T09:39:28-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	1521202	0.00
Mg	24	1	1	820373	0.00
Al	27	1	1	34734	0.00
K	39	1	1	766961	0.00
Ca	44	1	1	38290	0.00
Ti	47	1	1	26824	0.01
V	51	1	1	856246	0.00
Cr	52	1	1	1090919	0.00
Mn	55	1	1	594462	0.00
Fe	56	1	1	9352642	0.00
Co	59	1	1	1789307	0.00
Ni	60	1	1	498488	0.00
Cu	63	1	1	1364345	0.00
Zn	66	1	1	201195	0.00
As	75	1	1	140644	0.00
Se	78	1	1	8781	0.04
Be	9	2	2	940231	0.00
B	11	2	2	645268	0.00
Mo	95	2	2	1571062	0.00
Ag	107	2	2	1065675	0.00
Cd	111	2	2	781204	0.00
Sn	118	2	2	2289608	0.00
Sb	121	2	2	3134023	0.00
Ba	137	2	2	1112041	0.00
Tl	205	2	2	6492182	0.00
Pb	208	2	2	4646177	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	124397	0.70	126570	98.28	70	120	
Li	6	2	2	1933870	0.59	1901180	101.72	70	120	
Ge	72	2	2	918862	0.80	931750	98.62	70	120	
Rh	103	2	2	5973631	1.12	5993003	99.68	70	120	
Tb	159	2	2	7412976	0.74	7388471	100.33	70	120	
Bi	209	2	2	4446332	0.54	4361567	101.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:48:10-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	246.062	ppb	1.355	415797	0.45	250	98.4	90	110	
Mg	24	1	1	242.081	ppb	1.930	200727	1.17	250	96.8	90	110	
Al	27	1	1	25.081	ppb	2.436	11450	1.65	25	100.3	90	110	
K	39	1	1	239.016	ppb	2.576	221283	1.29	250	95.6	90	110	
Ca	44	1	1	243.198	ppb	1.373	9176	1.86	250	97.3	90	110	
Ti	47	1	1	23.973	ppb	2.412	6483	2.31	25	95.9	90	110	
V	51	1	1	23.775	ppb	2.015	206232	1.25	25	95.1	90	110	
Cr	52	1	1	23.527	ppb	0.876	261005	0.44	25	94.1	90	110	
Mn	55	1	1	24.162	ppb	1.231	139745	0.95	25	96.6	90	110	
Fe	56	1	1	234.489	ppb	1.318	2310325	0.61	250	93.8	90	110	
Co	59	1	1	23.386	ppb	1.139	422575	0.46	25	93.5	90	110	
Ni	60	1	1	23.203	ppb	2.058	117719	1.43	25	92.8	90	110	
Cu	63	1	1	23.508	ppb	1.366	348737	0.61	25	94.0	90	110	
Zn	66	1	1	24.076	ppb	1.339	48046	0.82	25	96.3	90	110	
As	75	1	1	22.983	ppb	1.299	32631	2.01	25	91.9	90	110	
Se	78	1	1	23.741	ppb	6.336	1969	5.52	25	95.0	90	110	
Be	9	2	2	24.836	ppb	1.814	238945	1.39	25	99.3	90	110	
B	11	2	2	23.586	ppb	1.140	183464	0.37	25	94.3	90	110	
Mo	95	2	2	23.486	ppb	0.307	368680	0.35	25	93.9	90	110	
Ag	107	2	2	25.093	ppb	0.644	906877	0.02	25	100.4	90	110	
Cd	111	2	2	23.609	ppb	0.779	185321	1.00	25	94.4	90	110	
Sn	118	2	2	23.486	ppb	1.428	537439	1.01	25	93.9	90	110	
Sb	121	2	2	23.187	ppb	0.993	724827	0.27	25	92.7	90	110	
Ba	137	2	2	23.536	ppb	0.332	261373	0.78	25	94.1	90	110	
Tl	205	2	2	23.383	ppb	0.831	1494573	1.03	25	93.5	90	110	
Pb	208	2	2	23.369	ppb	0.725	1029199	1.05	25	93.5	90	110	
Si	29	2	2	559.990	ppb	0.639	493115	0.47	536	104.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125357	0.75	126570	99.04	70	120	
Li	6	2	2	1932746	0.60	1901180	101.66	70	120	
Ge	72	2	2	923635	0.29	931750	99.13	70	120	
Rh	103	2	2	5961066	0.63	5993003	99.47	70	120	
Tb	159	2	2	7394132	0.76	7388471	100.08	70	120	
Bi	209	2	2	4370877	0.34	4361567	100.21	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:52:32-05:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	6.115	6.332	69427	1.07	5	122.3	70	130	
Mg	24	1	1	5.340	1.511	7031	0.93	5	106.8	70	130	
Al	27	1	1	0.515	6.935	1626	5.21	0.5	103.0	70	130	
K	39	1	1	5.197	10.741	55003	0.72	5	103.9	70	130	
Ca	44	1	1	5.373	0.972	1542	1.62	5	107.5	70	130	
Ti	47	1	1	0.556	14.955	158	15.28	0.5	111.2	70	130	
V	51	1	1	0.494	6.188	5717	4.18	0.5	98.8	70	130	
Cr	52	1	1	0.618	1.762	9867	1.42	0.5	123.5	70	130	
Mn	55	1	1	0.508	1.965	4982	2.69	0.5	101.5	70	130	
Fe	56	1	1	5.430	1.759	111211	0.51	5	108.6	70	130	
Co	59	1	1	0.537	0.839	9917	0.32	0.5	107.4	70	130	
Ni	60	1	1	0.606	2.017	5403	1.72	0.5	121.2	70	130	
Cu	63	1	1	0.539	14.619	38786	3.66	0.5	107.8	70	130	
Zn	66	1	1	0.596	13.991	3074	6.90	0.5	119.2	70	130	
As	75	1	1	0.488	3.596	756	3.98	0.5	97.6	70	130	
Se	78	1	1	0.454	41.000	87	26.93	0.5	90.9	70	130	
Be	9	2	2	0.577	7.188	5620	6.74	0.5	115.5	70	130	
B	11	2	2	0.863	8.422	46477	0.84	0.5	172.7	70	130	> +- 30%
Mo	95	2	2	0.561	2.965	9342	2.79	0.5	112.1	70	130	
Ag	107	2	2	0.500	4.226	19772	3.93	0.5	99.9	70	130	
Cd	111	2	2	0.557	5.555	4424	5.80	0.5	111.4	70	130	
Sn	118	2	2	0.936	4.335	25396	4.20	0.5	187.2	70	130	> +- 30%
Sb	121	2	2	0.535	3.520	16868	3.74	0.5	107.1	70	130	
Ba	137	2	2	0.591	5.520	6814	5.14	0.5	118.2	70	130	
Tl	205	2	2	0.588	3.207	38696	2.63	0.5	117.6	70	130	
Pb	208	2	2	0.549	4.409	27973	3.54	0.5	109.8	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125978	1.11	126570	99.53	70	120	
Li	6	2	2	1936903	0.82	1901180	101.88	70	120	
Ge	72	2	2	926323	0.65	931750	99.42	70	120	
Rh	103	2	2	5956048	0.59	5993003	99.38	70	120	
Tb	159	2	2	7334681	0.42	7388471	99.27	70	120	
Bi	209	2	2	4353359	0.70	4361567	99.81	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T09:56:51-05:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.618	ppb	140.3	54088	20.7	5	
Mg	24	1	1	0.408	ppb	11.2	1110	4.7	5	
Al	27	1	1	0.120	ppb	17.0	1200	8.9	0.5	
K	39	1	1	-0.038	ppb	-256.5	47477	1.1	5	
Ca	44	1	1	-0.377	ppb	-20.6	483	2.8	5	
Ti	47	1	1	0.033	ppb	119.5	16	68.9	0.5	
V	51	1	1	-0.013	ppb	-43.6	1319	3.5	0.5	
Cr	52	1	1	0.041	ppb	100.8	3483	12.8	0.5	
Mn	55	1	1	0.244	ppb	3.1	2679	2.3	0.5	
Fe	56	1	1	1.180	ppb	3.5	37509	2.1	5	
Co	59	1	1	0.022	ppb	3.5	561	2.4	0.5	
Ni	60	1	1	0.069	ppb	8.1	1465	3.0	0.5	
Cu	63	1	1	-0.036	ppb	-36.7	27083	5.4	0.5	
Zn	66	1	1	-0.069	ppb	-74.4	1123	13.4	0.5	
As	75	1	1	0.012	ppb	80.0	78	17.8	0.5	
Se	78	1	1	0.073	ppb	41.3	38	10.2	0.5	
Be	9	2	2	0.021	ppb	23.5	259	17.8	0.5	
B	11	2	2	-0.218	ppb	-165.5	39818	5.5	0.5	
Mo	95	2	2	0.045	ppb	16.3	1271	9.6	0.5	
Ag	107	2	2	0.011	ppb	34.9	856	17.5	0.5	
Cd	111	2	2	0.018	ppb	20.8	182	15.4	0.5	
Sn	118	2	2	0.101	ppb	21.4	6499	7.9	0.5	
Sb	121	2	2	0.015	ppb	14.7	737	10.0	0.5	
Ba	137	2	2	0.028	ppb	44.8	582	23.9	0.5	
Tl	205	2	2	0.050	ppb	7.4	4461	5.9	0.125	
Pb	208	2	2	0.030	ppb	25.5	4424	7.6	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	124999	0.20	126570	98.76	70	120	
Li	6	2	2	1930896	0.72	1901180	101.56	70	120	
Ge	72	2	2	929893	0.76	931750	99.80	70	120	
Rh	103	2	2	5998603	0.70	5993003	100.09	70	120	
Tb	159	2	2	7351095	0.90	7388471	99.49	70	120	
Bi	209	2	2	4366528	0.64	4361567	100.11	70	120	

Sample Report

Sample Table

Sample Name	BLKS150220-01
Data File Name	013SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:01:15-05:00
Sample Type	Sample
Dilution	1000
Comment	079;S150220-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	3.815	3815.066	ppb	23.14	59258	50000	
Mg	24	72	1	1	1.851	1851.402	ppb	5.44	2116	50000	
Al	27	72	1	1	0.364	363.894	ppb	1.43	744	20000	
K	39	72	1	1	-0.154	-153.555	ppb	-265.99	46837	50000	
Ca	44	72	1	1	0.100	100.238	ppb	1645.15	547	150000	
Ti	47	72	1	1	-0.003	-3.482	ppb	-417.62	6	15000	
V	51	72	1	1	0.011	11.296	ppb	55.13	1502	20000	
Cr	52	72	1	1	0.067	66.905	ppb	18.83	3708	20000	
Mn	55	72	1	1	0.019	19.084	ppb	32.70	681	20000	
Fe	56	72	1	1	0.561	560.660	ppb	6.21	22189	50000	
Co	59	72	1	1	0.003	2.968	ppb	18.37	217	20000	
Ni	60	72	1	1	0.050	49.974	ppb	34.35	1195	20000	
Cu	63	72	1	1	-0.109	-108.501	ppb	-98.36	29284	20000	
Zn	66	72	1	1	-0.031	-31.214	ppb	-198.60	1240	15000	
As	75	72	1	1	-0.003	-2.662	ppb	-1064.38	56	20000	
Se	78	72	1	1	0.112	112.380	ppb	71.82	38	20000	
Be	9	6	2	2	0.003	3.388	ppb	35.20	89	20000	
B	11	6	2	2	-0.116	-116.406	ppb	-189.18	40397	15000	
Mo	95	103	2	2	0.016	15.615	ppb	55.29	796	20000	
Ag	107	103	2	2	0.016	15.572	ppb	51.54	915	1000	
Cd	111	72	2	2	0.003	3.435	ppb	150.86	67	15000	
Sn	118	103	2	2	0.296	296.130	ppb	9.61	10728	15000	
Sb	121	159	2	2	0.002	2.323	ppb	79.04	337	20000	
Ba	137	103	2	2	0.019	18.773	ppb	52.79	467	20000	
Tl	205	209	2	2	0.025	24.668	ppb	10.12	2827	20000	
Pb	208	209	2	2	0.006	6.218	ppb	91.59	3286	20000	
Si	29	72	2	2	61.089	61088.904	ppb	143.58	195503	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	122993	0.54	126570	97.17	70	120	
Li	6	2	1929562	0.38	1901180	101.49	70	120	
Ge	72	2	915461	0.90	931750	98.25	70	120	
Rh	103	2	5873781	0.27	5993003	98.01	70	120	
Tb	159	2	7259933	0.46	7388471	98.26	70	120	
Bi	209	2	4293540	0.77	4361567	98.44	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCSS150220-01
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:05:32-05:00
Sample Type	Sample
Dilution	1000
Comment	079;S150220-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	216.413	216413.314	ppb	1.66	363136	50000	
Mg	24	72	1	1	207.642	207641.793	ppb	1.49	168492	50000	
Al	27	72	1	1	202.159	202159.393	ppb	1.14	69120	20000	
K	39	72	1	1	200.227	200226.683	ppb	1.83	188911	50000	
Ca	44	72	1	1	202.259	202259.329	ppb	1.28	8044	150000	
Ti	47	72	1	1	41.620	41620.075	ppb	0.73	11003	15000	
V	51	72	1	1	40.427	40427.097	ppb	0.95	342021	20000	
Cr	52	72	1	1	41.693	41693.138	ppb	1.17	450087	20000	
Mn	55	72	1	1	39.664	39663.559	ppb	1.14	232592	20000	
Fe	56	72	1	1	203.309	203308.635	ppb	1.76	1888375	50000	
Co	59	72	1	1	40.210	40210.331	ppb	1.35	710542	20000	
Ni	60	72	1	1	41.805	41804.518	ppb	0.90	206702	20000	
Cu	63	72	1	1	42.056	42056.103	ppb	0.91	586068	20000	
Zn	66	72	1	1	39.717	39716.922	ppb	1.15	79578	15000	
As	75	72	1	1	40.641	40640.908	ppb	1.02	56386	20000	
Se	78	72	1	1	41.736	41736.091	ppb	4.58	3624	20000	
Be	9	6	2	2	43.702	43701.859	ppb	0.99	417672	20000	
B	11	6	2	2	-0.034	-33.507	ppb	-522.80	40702	15000	
Mo	95	103	2	2	40.573	40572.964	ppb	0.35	630883	20000	
Ag	107	103	2	2	44.292	44292.436	ppb	0.86	1586238	1000	
Cd	111	72	2	2	41.150	41149.909	ppb	0.60	322106	15000	
Sn	118	103	2	2	0.307	307.124	ppb	2.86	11039	15000	
Sb	121	159	2	2	40.158	40158.255	ppb	0.06	1241226	20000	
Ba	137	103	2	2	40.636	40636.106	ppb	0.57	447089	20000	
Tl	205	209	2	2	39.313	39312.641	ppb	1.26	2476871	20000	
Pb	208	209	2	2	42.370	42369.747	ppb	1.16	1908113	20000	
Si	29	72	2	2	17.446	17446.365	ppb	187.80	170976	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	122607	0.75	126570	96.87	70	120	
Li	6	2	1920046	0.54	1901180	100.99	70	120	
Ge	72	2	921148	0.71	931750	98.86	70	120	
Rh	103	2	5908339	0.81	5993003	98.59	70	120	
Tb	159	2	7311647	0.81	7388471	98.96	70	120	
Bi	209	2	4310515	1.22	4361567	98.83	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:09:55-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	72.023	87147.304	ppb	2.61	156800	50000	
Mg	24	72	1	1	1695.870	2052003.179	ppb	1.84	1423856	50000	
Al	27	72	1	1	9782.621	11836971.778	ppb	1.86	3450318	20000	
K	39	72	1	1	663.555	802901.361	ppb	1.87	537443	50000	
Ca	44	72	1	1	971.948	1176057.389	ppb	2.05	37981	150000	
Ti	47	72	1	1	223.064	269907.302	ppb	0.86	61187	15000	
V	51	72	1	1	24.552	29708.393	ppb	1.82	216182	20000	
Cr	52	72	1	1	13.265	16050.521	ppb	1.54	150751	20000	
Mn	55	72	1	1	126.716	153325.951	ppb	1.81	770027	20000	
Fe	56	72	1	1	13092.372	15841769.636	ppb	1.79	125114120	50000	
Co	59	72	1	1	5.199	6290.465	ppb	2.29	95504	20000	
Ni	60	72	1	1	9.451	11435.863	ppb	1.27	49266	20000	
Cu	63	72	1	1	9.830	11894.289	ppb	0.61	166562	20000	
Zn	66	72	1	1	90.645	109680.738	ppb	1.83	186797	15000	
As	75	72	1	1	2.681	3244.202	ppb	6.13	3920	20000	
Se	78	72	1	1	1.826	2208.992	ppb	16.24	192	20000	
Be	9	6	2	2	0.404	488.450	ppb	11.35	4105	20000	
B	11	6	2	2	2.765	3346.155	ppb	9.14	60258	15000	
Mo	95	103	2	2	0.400	483.529	ppb	4.57	6769	20000	
Ag	107	103	2	2	0.161	194.403	ppb	12.63	2123	1000	
Cd	111	72	2	2	0.129	156.649	ppb	21.13	1093	15000	
Sn	118	103	2	2	0.792	958.652	ppb	0.76	21964	15000	
Sb	121	159	2	2	0.401	484.621	ppb	3.02	12841	20000	
Ba	137	103	2	2	140.988	170595.309	ppb	0.73	1550952	20000	
Tl	205	209	2	2	0.634	767.034	ppb	0.61	41397	20000	
Pb	208	209	2	2	16.975	20539.387	ppb	0.48	769875	20000	
Si	29	72	2	2	537.785	650719.359	ppb	2.71	497043	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	127272	0.72	126570	100.55	70	120	
Li	6	2	2013130	0.58	1901180	105.89	70	120	
Ge	72	2	956500	0.91	931750	102.66	70	120	
Rh	103	2	5909876	0.41	5993003	98.61	70	120	
Tb	159	2	7425119	0.56	7388471	100.50	70	120	
Bi	209	2	4330447	0.87	4361567	99.29	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021DUP
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:14:16-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	76.342	92373.470	ppb	1.06	164519	50000	
Mg	24	72	1	1	1734.786	2099091.621	ppb	0.22	1466621	50000	
Al	27	72	1	1	10034.740	12142035.165	ppb	0.67	3563794	20000	
K	39	72	1	1	682.078	825314.740	ppb	1.55	554911	50000	
Ca	44	72	1	1	1013.783	1226677.468	ppb	0.45	39866	150000	
Ti	47	72	1	1	228.369	276326.946	ppb	1.60	63074	15000	
V	51	72	1	1	25.251	30553.614	ppb	0.63	223835	20000	
Cr	52	72	1	1	13.481	16312.331	ppb	0.70	154220	20000	
Mn	55	72	1	1	129.630	156852.729	ppb	0.41	793193	20000	
Fe	56	72	1	1	13398.450	16212124.932	ppb	0.39	128927245	50000	
Co	59	72	1	1	5.328	6447.052	ppb	1.19	98557	20000	
Ni	60	72	1	1	9.719	11759.579	ppb	1.06	50983	20000	
Cu	63	72	1	1	9.914	11995.943	ppb	0.78	168861	20000	
Zn	66	72	1	1	93.078	112624.347	ppb	0.14	193103	15000	
As	75	72	1	1	2.831	3425.616	ppb	2.24	4163	20000	
Se	78	72	1	1	1.649	1995.474	ppb	14.58	178	20000	
Be	9	6	2	2	0.383	463.114	ppb	7.20	3953	20000	
B	11	6	2	2	2.675	3237.207	ppb	7.78	60584	15000	
Mo	95	103	2	2	0.366	442.749	ppb	6.30	6362	20000	
Ag	107	103	2	2	0.045	54.728	ppb	6.08	1893	1000	
Cd	111	72	2	2	0.136	164.001	ppb	12.95	1159	15000	
Sn	118	103	2	2	0.760	919.810	ppb	3.02	21630	15000	
Sb	121	159	2	2	0.385	465.351	ppb	3.07	12537	20000	
Ba	137	103	2	2	142.717	172688.153	ppb	0.24	1598936	20000	
Tl	205	209	2	2	0.617	746.520	ppb	3.77	18130	20000	
Pb	208	209	2	2	17.342	20984.390	ppb	0.51	791105	20000	
Si	29	72	2	2	560.862	678643.069	ppb	1.91	518513	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	128144	0.09	126570	101.24	70	120	
Li	6	2	2042827	1.04	1901180	107.45	70	120	
Ge	72	2	970160	0.35	931750	104.12	70	120	
Rh	103	2	6018828	0.67	5993003	100.43	70	120	
Tb	159	2	7542394	0.54	7388471	102.08	70	120	
Bi	209	2	4355923	0.57	4361567	99.87	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021SD
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:18:42-05:00
Sample Type	Sample
Dilution	6050
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	14.966	90547.021	ppb	1.33	81835	50000	
Mg	24	72	1	1	358.344	2167983.645	ppb	1.75	307821	50000	
Al	27	72	1	1	2047.941	12390043.100	ppb	1.09	738167	20000	
K	39	72	1	1	133.706	808923.498	ppb	2.51	150233	50000	
Ca	44	72	1	1	194.153	1174623.501	ppb	4.08	8208	150000	
Ti	47	72	1	1	44.999	272241.884	ppb	1.85	12612	15000	
V	51	72	1	1	4.875	29496.185	ppb	0.56	45042	20000	
Cr	52	72	1	1	2.727	16501.243	ppb	1.94	34170	20000	
Mn	55	72	1	1	25.769	155903.290	ppb	0.58	160438	20000	
Fe	56	72	1	1	2663.766	16115784.178	ppb	1.04	26016256	50000	
Co	59	72	1	1	1.044	6316.751	ppb	2.23	19730	20000	
Ni	60	72	1	1	1.987	12018.685	ppb	0.67	11369	20000	
Cu	63	72	1	1	1.950	11795.681	ppb	2.20	59776	20000	
Zn	66	72	1	1	18.694	113100.115	ppb	2.40	40442	15000	
As	75	72	1	1	0.543	3286.926	ppb	3.78	861	20000	
Se	78	72	1	1	0.367	2222.174	ppb	74.06	63	20000	
Be	9	6	2	2	0.080	481.654	ppb	9.99	878	20000	
B	11	6	2	2	0.143	868.099	ppb	190.61	44850	15000	
Mo	95	103	2	2	0.077	467.643	ppb	10.36	1841	20000	
Ag	107	103	2	2	0.021	124.713	ppb	47.07	1130	1000	
Cd	111	72	2	2	0.023	137.068	ppb	20.98	230	15000	
Sn	118	103	2	2	0.113	684.013	ppb	13.21	6981	15000	
Sb	121	159	2	2	0.085	514.485	ppb	11.16	3001	20000	
Ba	137	103	2	2	27.852	168501.647	ppb	0.27	320758	20000	
Tl	205	209	2	2	0.129	781.333	ppb	3.76	9156	20000	
Pb	208	209	2	2	3.404	20596.600	ppb	0.97	161863	20000	
Si	29	72	2	2	127.542	771629.357	ppb	12.25	249340	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	129999	0.85	126570	102.71	70	120	
Li	6	2	2062415	0.84	1901180	108.48	70	120	
Ge	72	2	972512	0.42	931750	104.37	70	120	
Rh	103	2	6182814	0.23	5993003	103.17	70	120	
Tb	159	2	7578020	0.19	7388471	102.57	70	120	
Bi	209	2	4469564	0.57	4361567	102.48	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021MS
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:23:00-05:00
Sample Type	Sample
Dilution	1210
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	278.161	336575.111	ppb	1.99	480239	50000	
Mg	24	72	1	1	1928.964	2334046.449	ppb	1.91	1650940	50000	
Al	27	72	1	1	10143.242	12273322.642	ppb	1.34	3647119	20000	
K	39	72	1	1	866.494	1048457.564	ppb	1.68	700312	50000	
Ca	44	72	1	1	1178.593	1426097.572	ppb	1.40	46830	150000	
Ti	47	72	1	1	266.051	321921.286	ppb	1.79	74391	15000	
V	51	72	1	1	64.517	78065.873	ppb	1.63	576704	20000	
Cr	52	72	1	1	53.683	64956.186	ppb	1.73	612334	20000	
Mn	55	72	1	1	166.677	201679.520	ppb	1.10	1032403	20000	
Fe	56	72	1	1	13611.089	16469418.125	ppb	1.61	132599947	50000	
Co	59	72	1	1	44.133	53401.214	ppb	1.74	825240	20000	
Ni	60	72	1	1	49.747	60194.295	ppb	1.05	260100	20000	
Cu	63	72	1	1	50.323	60891.203	ppb	1.38	735726	20000	
Zn	66	72	1	1	130.020	157324.584	ppb	2.02	272550	15000	
As	75	72	1	1	41.478	50188.838	ppb	2.70	60894	20000	
Se	78	72	1	1	41.858	50647.723	ppb	3.36	3846	20000	
Be	9	6	2	2	42.514	51442.460	ppb	0.59	436810	20000	
B	11	6	2	2	3.041	3679.794	ppb	2.54	63563	15000	
Mo	95	103	2	2	40.651	49188.170	ppb	0.62	650942	20000	
Ag	107	103	2	2	149.156	180479.117	ppb	0.17	1620204	1000	
Cd	111	72	2	2	39.643	47968.428	ppb	0.85	329776	15000	
Sn	118	103	2	2	1.084	1312.222	ppb	2.94	29389	15000	
Sb	121	159	2	2	39.769	48120.215	ppb	0.93	1282460	20000	
Ba	137	103	2	2	185.269	224175.698	ppb	0.99	2098220	20000	
Tl	205	209	2	2	38.609	46716.353	ppb	0.83	2500592	20000	
Pb	208	209	2	2	59.379	71848.257	ppb	0.20	2747709	20000	
Si	29	72	2	2	531.124	642660.345	ppb	2.45	504461	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	129747	0.83	126570	102.51	70	120	
Li	6	2	2064113	0.44	1901180	108.57	70	120	
Ge	72	2	978886	0.78	931750	105.06	70	120	
Rh	103	2	6084533	0.67	5993003	101.53	70	120	
Tb	159	2	7628597	0.96	7388471	103.25	70	120	
Bi	209	2	4430768	0.41	4361567	101.59	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01158-021PS
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:27:27-05:00
Sample Type	Sample
Dilution	968
Comment	079;S150220-01;1.21;2.50g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	897.494	868774.220	ppb	2.62	1428199	50000	
Mg	24	72	1	1	2693.697	2607498.570	ppb	2.09	2281917	50000	
Al	27	72	1	1	10890.514	10542017.640	ppb	1.83	3876187	20000	
K	39	72	1	1	1529.425	1480483.565	ppb	4.41	1185949	50000	
Ca	44	72	1	1	1904.981	1844021.905	ppb	1.32	74582	150000	
Ti	47	72	1	1	250.420	242406.209	ppb	1.53	69316	15000	
V	51	72	1	1	66.697	64562.696	ppb	1.87	590116	20000	
Cr	52	72	1	1	53.613	51897.233	ppb	1.93	605366	20000	
Mn	55	72	1	1	178.733	173013.269	ppb	1.69	1095836	20000	
Fe	56	72	1	1	15412.617	14919413.065	ppb	1.76	148633052	50000	
Co	59	72	1	1	48.266	46721.299	ppb	1.68	828855	20000	
Ni	60	72	1	1	49.148	47575.562	ppb	1.07	254391	20000	
Cu	63	72	1	1	49.270	47693.485	ppb	1.36	713740	20000	
Zn	66	72	1	1	139.636	135168.074	ppb	1.52	289659	15000	
As	75	72	1	1	44.872	43435.627	ppb	2.67	60503	20000	
Se	78	72	1	1	43.109	41729.607	ppb	4.80	3641	20000	
Be	9	6	2	2	41.895	40554.651	ppb	0.77	428288	20000	
B	11	6	2	2	3.408	3298.563	ppb	5.33	65590	15000	
Mo	95	103	2	2	40.332	39040.985	ppb	0.52	649110	20000	
Ag	107	103	2	2	40.174	38888.056	ppb	1.03	1315792	1000	
Cd	111	72	2	2	40.399	39106.447	ppb	0.80	313185	15000	
Sn	118	103	2	2	1.143	1106.330	ppb	3.75	30896	15000	
Sb	121	159	2	2	41.854	40514.761	ppb	0.71	1255292	20000	
Ba	137	103	2	2	194.632	188403.839	ppb	0.32	2215427	20000	
Tl	205	209	2	2	42.461	41102.599	ppb	0.05	2559387	20000	
Pb	208	209	2	2	59.066	57175.418	ppb	0.66	2741499	20000	
Si	29	72	2	2	688.759	666718.876	ppb	4.46	606077	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	128442	1.03	126570	101.48	70	120	
Li	6	2	2053738	0.45	1901180	108.02	70	120	
Ge	72	2	983162	0.69	931750	105.52	70	120	
Rh	103	2	6115259	0.59	5993003	102.04	70	120	
Tb	159	2	7646376	0.53	7388471	103.49	70	120	
Bi	209	2	4444203	0.73	4361567	101.89	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001
Data File Name	022SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T10:40:30-05:00
Sample Type	Sample
Dilution	1181.434599
Comment	079;S150220-01;1.12;2.37g;50ml;50;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	671.933	793844.337	ppb	1.83	1068331	50000	
Mg	24	72	1	1	1885.595	2227707.728	ppb	1.95	1578489	50000	
Al	27	72	1	1	5375.742	6351087.397	ppb	0.32	1890937	20000	
K	39	72	1	1	687.046	811699.735	ppb	0.87	553240	50000	
Ca	44	72	1	1	6761.854	7988688.829	ppb	1.07	260145	150000	
Ti	47	72	1	1	282.171	333366.630	ppb	1.26	77174	15000	
V	51	72	1	1	22.966	27133.206	ppb	2.21	201721	20000	
Cr	52	72	1	1	15.914	18801.917	ppb	1.20	179730	20000	
Mn	55	72	1	1	285.178	336919.106	ppb	1.37	1727294	20000	
Fe	56	72	1	1	15052.416	17783444.920	ppb	1.29	143431678	50000	
Co	59	72	1	1	5.490	6486.504	ppb	1.52	100564	20000	
Ni	60	72	1	1	17.974	21234.585	ppb	1.88	92536	20000	
Cu	63	72	1	1	149.255	176334.571	ppb	1.45	2072003	20000	
Zn	66	72	1	1	266.827	315239.113	ppb	1.51	545674	15000	
As	75	72	1	1	12.336	14574.192	ppb	0.08	17759	20000	
Se	78	72	1	1	1.305	1541.304	ppb	31.90	146	20000	
Be	9	6	2	2	0.406	479.785	ppb	4.08	4146	20000	
B	11	6	2	2	3.014	3560.443	ppb	7.90	62105	15000	
Mo	95	103	2	2	0.902	1065.103	ppb	3.91	14943	20000	
Ag	107	103	2	2	1.341	1584.063	ppb	1.62	14943	1000	
Cd	111	72	2	2	0.551	651.031	ppb	6.47	4661	15000	
Sn	118	103	2	2	12.886	15224.465	ppb	0.49	301783	15000	
Sb	121	159	2	2	4.625	5464.369	ppb	0.74	148689	20000	
Ba	137	103	2	2	152.007	179586.552	ppb	0.31	1715059	20000	
Tl	205	209	2	2	0.239	281.829	ppb	2.52	16765	20000	
Pb	208	209	2	2	253.168	299101.742	ppb	0.39	11705129	20000	
Si	29	72	2	2	420.905	497271.232	ppb	5.57	438530	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	126909	1.04	126570	100.27	70	120	
Li	6	2	2022177	0.71	1901180	106.36	70	120	
Ge	72	2	986418	0.61	931750	105.87	70	120	
Rh	103	2	6061472	0.37	5993003	101.14	70	120	
Tb	159	2	7592311	0.36	7388471	102.76	70	120	
Bi	209	2	4430851	0.67	4361567	101.59	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:44:57-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	247.574	ppb	1.503	433557	0.80	250	99.0	90	110	
Mg	24	1	1	243.578	ppb	0.523	209461	0.05	250	97.4	90	110	
Al	27	1	1	25.462	ppb	2.071	12048	1.63	25	101.8	90	110	
K	39	1	1	243.362	ppb	1.675	232761	0.82	250	97.3	90	110	
Ca	44	1	1	241.301	ppb	2.077	9445	1.39	250	96.5	90	110	
Ti	47	1	1	24.089	ppb	2.246	6755	1.98	25	96.4	90	110	
V	51	1	1	24.200	ppb	1.141	217679	0.69	25	96.8	90	110	
Cr	52	1	1	23.748	ppb	0.880	273186	0.33	25	95.0	90	110	
Mn	55	1	1	24.372	ppb	1.011	146176	0.72	25	97.5	90	110	
Fe	56	1	1	237.096	ppb	0.669	2422415	0.12	250	94.8	90	110	
Co	59	1	1	23.609	ppb	0.634	442422	0.28	25	94.4	90	110	
Ni	60	1	1	23.510	ppb	1.539	123687	0.97	25	94.0	90	110	
Cu	63	1	1	23.527	ppb	0.594	361935	0.14	25	94.1	90	110	
Zn	66	1	1	24.280	ppb	2.664	50233	2.03	25	97.1	90	110	
As	75	1	1	23.285	ppb	0.219	34282	0.57	25	93.1	90	110	
Se	78	1	1	25.452	ppb	10.270	2187	9.58	25	101.8	90	110	
Be	9	2	2	24.552	ppb	0.377	246797	0.62	25	98.2	90	110	
B	11	2	2	23.609	ppb	3.863	191793	2.16	25	94.4	90	110	
Mo	95	2	2	23.354	ppb	0.564	383032	0.05	25	93.4	90	110	
Ag	107	2	2	25.073	ppb	0.122	946744	0.48	25	100.3	90	110	
Cd	111	2	2	23.503	ppb	0.606	193606	0.21	25	94.0	90	110	
Sn	118	2	2	23.384	ppb	0.699	559113	0.46	25	93.5	90	110	
Sb	121	2	2	23.611	ppb	0.764	752677	0.52	25	94.4	90	110	
Ba	137	2	2	23.246	ppb	1.168	269715	1.15	25	93.0	90	110	
Tl	205	2	2	23.585	ppb	0.451	1527544	0.58	25	94.3	90	110	
Pb	208	2	2	23.447	ppb	0.419	1046389	0.13	25	93.8	90	110	
Si	29	2	2	556.658	ppb	1.834	515391	0.92	536	103.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129999	0.56	126570	102.71	70	120	
Li	6	2	2	2019218	0.98	1901180	106.21	70	120	
Ge	72	2	2	969270	0.49	931750	104.03	70	120	
Rh	103	2	2	6228002	0.51	5993003	103.92	70	120	
Tb	159	2	2	7539941	0.29	7388471	102.05	70	120	
Bi	209	2	2	4429153	0.47	4361567	101.55	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T10:49:14-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.641	ppb	95.65	55134	14.2	5	
Mg	24	1	1	0.567	ppb	15.80	1318	8.4	5	
Al	27	1	1	0.121	ppb	22.90	1222	11.7	0.5	
K	39	1	1	0.218	ppb	57.53	49757	1.5	5	
Ca	44	1	1	-0.342	ppb	-44.75	497	5.5	5	
Ti	47	1	1	0.037	ppb	88.26	17	52.9	0.5	
V	51	1	1	-0.034	ppb	-30.15	1157	7.5	0.5	
Cr	52	1	1	0.035	ppb	56.17	3469	6.5	0.5	
Mn	55	1	1	0.268	ppb	2.29	2920	2.0	0.5	
Fe	56	1	1	1.333	ppb	2.83	40710	1.6	5	
Co	59	1	1	0.021	ppb	16.83	560	11.7	0.5	
Ni	60	1	1	0.076	ppb	9.90	1536	3.4	0.5	
Cu	63	1	1	-0.063	ppb	-11.90	24273	3.8	0.5	
Zn	66	1	1	-0.099	ppb	-9.99	1052	2.5	0.5	
As	75	1	1	0.012	ppb	106.44	79	24.0	0.5	
Se	78	1	1	0.000	ppb	-39494.60	29	54.5	0.5	
Be	9	2	2	0.016	ppb	21.98	219	15.5	0.5	
B	11	2	2	-0.249	ppb	-72.50	40375	2.1	0.5	
Mo	95	2	2	0.039	ppb	50.36	1200	26.6	0.5	
Ag	107	2	2	0.016	ppb	14.47	1067	7.9	0.5	
Cd	111	2	2	0.013	ppb	18.56	144	13.3	0.5	
Sn	118	2	2	0.103	ppb	7.92	6654	2.8	0.5	
Sb	121	2	2	0.025	ppb	17.63	1056	12.4	0.5	
Ba	137	2	2	0.021	ppb	31.09	515	14.0	0.5	
Tl	205	2	2	0.091	ppb	5.17	7148	5.1	0.125	
Pb	208	2	2	0.036	ppb	18.07	4716	5.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126780	0.21	126570	100.17	70	120	
Li	6	2	2	1967398	0.65	1901180	103.48	70	120	
Ge	72	2	2	951871	0.50	931750	102.16	70	120	
Rh	103	2	2	6100274	0.69	5993003	101.79	70	120	
Tb	159	2	2	7435989	1.07	7388471	100.64	70	120	
Bi	209	2	2	4389644	1.09	4361567	100.64	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T12:30:34-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	258.318	ppb	2.701	439224	4.50	250	103.3	90	110	
Mg	24	1	1	246.960	ppb	3.243	206969	0.55	250	98.8	90	110	
Al	27	1	1	24.954	ppb	6.154	11510	2.50	25	99.8	90	110	
K	39	1	1	247.448	ppb	4.016	229859	0.65	250	99.0	90	110	
Ca	44	1	1	249.194	ppb	1.662	9493	2.39	250	99.7	90	110	
Ti	47	1	1	23.742	ppb	6.021	6486	3.22	25	95.0	90	110	
V	51	1	1	24.074	ppb	3.870	211030	0.35	25	96.3	90	110	
Cr	52	1	1	24.042	ppb	3.893	269467	0.27	25	96.2	90	110	
Mn	55	1	1	24.313	ppb	3.264	142125	0.60	25	97.3	90	110	
Fe	56	1	1	234.953	ppb	3.947	2339383	0.56	250	94.0	90	110	
Co	59	1	1	23.729	ppb	3.886	433324	0.24	25	94.9	90	110	
Ni	60	1	1	23.721	ppb	2.970	121642	1.70	25	94.9	90	110	
Cu	63	1	1	23.861	ppb	3.593	357299	0.48	25	95.4	90	110	
Zn	66	1	1	24.140	ppb	4.650	48672	0.78	25	96.6	90	110	
As	75	1	1	23.150	ppb	3.481	33218	1.56	25	92.6	90	110	
Se	78	1	1	24.746	ppb	8.330	2071	4.56	25	99.0	90	110	
Be	9	2	2	24.233	ppb	1.238	256555	1.53	25	96.9	90	110	
B	11	2	2	22.850	ppb	4.877	196937	2.39	25	91.4	90	110	
Mo	95	2	2	23.371	ppb	0.572	394054	0.27	25	93.5	90	110	
Ag	107	2	2	24.773	ppb	0.674	961635	0.28	25	99.1	90	110	
Cd	111	2	2	22.749	ppb	2.722	200055	2.34	25	91.0	90	110	
Sn	118	2	2	23.387	ppb	0.195	574847	0.58	25	93.5	90	110	
Sb	121	2	2	23.630	ppb	1.064	775107	0.10	25	94.5	90	110	
Ba	137	2	2	23.040	ppb	0.567	274818	0.35	25	92.2	90	110	
Tl	205	2	2	23.020	ppb	0.339	1526463	0.47	25	92.1	90	110	
Pb	208	2	2	23.089	ppb	0.256	1055029	0.52	25	92.4	90	110	
Si	29	2	2	550.117	ppb	1.158	545906	0.65	536	102.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	126798	3.72	126570	100.18	70	120	
Li	6	2	2	2126776	1.36	1901180	111.87	70	120	
Ge	72	2	2	1034810	0.46	931750	111.06	70	120	
Rh	103	2	2	6402457	0.41	5993003	106.83	70	120	
Tb	159	2	2	7758915	1.08	7388471	105.01	70	120	
Bi	209	2	2	4534694	0.75	4361567	103.97	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T12:34:50-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.276	ppb	17.12	51383	0.8	5	
Mg	24	1	1	0.549	ppb	5.04	1321	3.8	5	
Al	27	1	1	0.109	ppb	22.20	1181	12.1	0.5	
K	39	1	1	0.423	ppb	12.00	52044	1.7	5	
Ca	44	1	1	0.098	ppb	264.90	589	7.2	5	
Ti	47	1	1	0.019	ppb	33.05	12	15.7	0.5	
V	51	1	1	-0.073	ppb	-11.06	828	7.5	0.5	
Cr	52	1	1	0.020	ppb	69.39	3368	4.8	0.5	
Mn	55	1	1	0.223	ppb	10.57	2577	6.9	0.5	
Fe	56	1	1	1.371	ppb	2.86	42169	1.3	5	
Co	59	1	1	0.021	ppb	19.30	568	12.4	0.5	
Ni	60	1	1	0.071	ppb	16.82	1531	4.8	0.5	
Cu	63	1	1	-0.015	ppb	-72.12	30529	2.9	0.5	
Zn	66	1	1	-0.179	ppb	-10.89	832	6.7	0.5	
As	75	1	1	0.003	ppb	471.81	67	30.4	0.5	
Se	78	1	1	0.073	ppb	198.72	39	47.2	0.5	
Be	9	2	2	0.017	ppb	35.57	237	27.1	0.5	
B	11	2	2	-0.576	ppb	-7.70	41077	0.2	0.5	
Mo	95	2	2	0.047	ppb	33.88	1389	18.7	0.5	
Ag	107	2	2	0.016	ppb	23.58	1126	13.5	0.5	
Cd	111	2	2	0.020	ppb	11.88	222	10.0	0.5	
Sn	118	2	2	0.132	ppb	9.35	7670	4.3	0.5	
Sb	121	2	2	0.026	ppb	23.73	1122	17.9	0.5	
Ba	137	2	2	0.027	ppb	27.11	611	14.4	0.5	
Tl	205	2	2	0.027	ppb	17.59	3123	9.7	0.125	
Pb	208	2	2	0.030	ppb	1.04	4520	0.4	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129251	1.35	126570	102.12	70	120	
Li	6	2	2	2106194	0.79	1901180	110.78	70	120	
Ge	72	2	2	1024902	0.57	931750	110.00	70	120	
Rh	103	2	2	6391850	0.40	5993003	106.66	70	120	
Tb	159	2	2	7701153	0.29	7388471	104.23	70	120	
Bi	209	2	2	4468439	0.41	4361567	102.45	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	057ICSA.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2015-02-23T13:13:54-05:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	95148.365	ppb	32961550.6	1.2	5000000	
Ti	47	1	1	2047.424	ppb	551594.7	0.8	50000	
V	51	1	1	-0.044	ppb	1055.6	8.8	5	
Cr	52	1	1	1.180	ppb	15937.8	0.2	5	
Mn	55	1	1	2.288	ppb	14224.9	1.7	5	
Co	59	1	1	1.794	ppb	32475.2	1.1	5	
Ni	60	1	1	1.754	ppb	9763.5	0.6	5	
Cu	63	1	1	1.429	ppb	50468.9	1.4	5	
Zn	66	1	1	1.432	ppb	4200.8	4.4	5	
As	75	1	1	0.225	ppb	377.8	10.2	5	
Se	78	1	1	0.117	ppb	38.9	57.1	5	
Be	9	2	2	0.000	ppb	55.6	69.3	5	
B	11	2	2	-0.133	ppb	39977.5	2.4	5	
Mo	95	2	2	2378.079	ppb	34446853.5	0.2	50000	
Ag	107	2	2	0.073	ppb	2548.8	7.5	5	
Cd	111	2	2	2.303	ppb	20680.6	5.5	5	
Sn	118	2	2	0.242	ppb	8930.0	3.5	5	
Sb	121	2	2	0.775	ppb	24487.0	1.4	5	
Ba	137	2	2	0.608	ppb	6480.2	4.8	5	
Tl	205	2	2	0.015	ppb	2015.3	6.8	1.25	
Pb	208	2	2	0.280	ppb	14161.5	0.7	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	125010	0.38	126570	98.77	70	120	
Li	6	2	2	1914010	1.25	1901180	100.67	70	120	
Ge	72	2	2	1054498	1.60	931750	113.17	70	120	
Rh	103	2	2	5509853	1.74	5993003	91.94	70	120	
Tb	159	2	2	7395562	0.80	7388471	100.10	70	120	
Bi	209	2	2	3907130	1.01	4361567	89.58	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	058ICSB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:18:19-05:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	91979.054	1.485	32975206	1.27	100000	92.0	-1000	1000	
Ti	47	1	1	1993.566	1.585	555825	1.35	5000	39.9	-1000	1000	
V	51	1	1	-0.045	-24.536	1082	8.91	0.5	-8.9	-1000	1000	
Cr	52	1	1	20.424	1.196	234265	0.97	20	102.1	80	120	
Mn	55	1	1	21.365	1.463	132486	1.23	20	106.8	80	120	
Co	59	1	1	20.754	1.420	387071	1.20	20	103.8	80	120	
Ni	60	1	1	19.935	1.244	104531	1.05	20	99.7	80	120	
Cu	63	1	1	20.821	1.552	322491	1.18	20	104.1	80	120	
Zn	66	1	1	19.873	2.157	42702	1.88	20	99.4	80	120	
As	75	1	1	20.471	1.646	30000	1.41	20	102.4	80	120	
Se	78	1	1	0.188	33.243	47	12.37	0.5	37.7	-1000	1000	
Be	9	2	2	0.001	412.249	63	44.41	0.5	0.1	-1000	1000	
B	11	2	2	0.053	398.726	41258	3.04	2	2.6	-1000	1000	
Mo	95	2	2	2338.250	0.780	34579842	0.23	5000	46.8	-1000	1000	
Ag	107	2	2	21.019	0.461	768780	0.79	20	105.1	80	120	
Cd	111	2	2	19.492	0.887	179991	1.33	20	97.5	80	120	
Sn	118	2	2	0.224	12.435	8733	6.35	0.5	44.9	-1000	1000	
Sb	121	2	2	0.773	2.172	24736	2.03	0.5	154.7	-1000	1000	
Ba	137	2	2	0.575	3.894	6273	4.04	0.5	115.1	-1000	1000	
Tl	205	2	2	0.012	47.601	1875	17.93	0.125	9.8	-1000	1000	
Pb	208	2	2	0.245	7.429	12801	5.93	0.125	196.2	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	129375	0.23	126570	102.22	70	120	
Li	6	2	2	1922097	0.21	1901180	101.10	70	120	
Ge	72	2	2	1086444	0.57	931750	116.60	70	120	
Rh	103	2	2	5624381	0.56	5993003	93.85	70	120	
Tb	159	2	2	7484678	0.78	7388471	101.30	70	120	
Bi	209	2	2	3927738	0.11	4361567	90.05	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	059_CCV.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:22:50-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	269.798	ppb	1.736	472953	1.63	250	107.9	90	110	
Mg	24	1	1	269.425	ppb	5.556	233992	5.74	250	107.8	90	110	
Al	27	1	1	24.739	ppb	31.769	27533	31.75	25	99.0	90	110	
K	39	1	1	255.205	ppb	1.681	244132	0.71	250	102.1	90	110	
Ca	44	1	1	274.011	ppb	8.388	10759	8.26	250	109.6	90	110	
Ti	47	1	1	24.267	ppb	3.196	6873	1.73	25	97.1	90	110	
V	51	1	1	23.472	ppb	2.166	213308	1.09	25	93.9	90	110	
Cr	52	1	1	22.937	ppb	1.236	266649	0.54	25	91.7	90	110	
Mn	55	1	1	23.293	ppb	1.633	141148	0.78	25	93.2	90	110	
Fe	56	1	1	274.001	ppb	7.778	2825385	7.93	250	109.6	90	110	
Co	59	1	1	23.160	ppb	1.818	438406	0.82	25	92.6	90	110	
Ni	60	1	1	22.975	ppb	1.176	122126	0.31	25	91.9	90	110	
Cu	63	1	1	25.149	ppb	1.427	388550	0.18	25	100.6	90	110	
Zn	66	1	1	23.276	ppb	0.705	48708	0.80	25	93.1	90	110	
As	75	1	1	22.727	ppb	1.602	33803	2.03	25	90.9	90	110	
Se	78	1	1	23.487	ppb	4.167	2042	5.31	25	93.9	90	110	
Be	9	2	2	24.262	ppb	1.300	250764	0.80	25	97.0	90	110	
B	11	2	2	23.754	ppb	0.457	198189	0.92	25	95.0	90	110	
Mo	95	2	2	24.371	ppb	0.679	420425	0.44	25	97.5	90	110	
Ag	107	2	2	25.079	ppb	0.898	996098	0.63	25	100.3	90	110	
Cd	111	2	2	23.468	ppb	0.780	206802	0.48	25	93.9	90	110	
Sn	118	2	2	23.681	ppb	1.228	595523	0.87	25	94.7	90	110	
Sb	121	2	2	23.901	ppb	0.691	807017	0.44	25	95.6	90	110	
Ba	137	2	2	23.411	ppb	1.278	285724	1.17	25	93.6	90	110	
Tl	205	2	2	23.593	ppb	0.542	1601265	0.44	25	94.4	90	110	
Pb	208	2	2	23.428	ppb	0.460	1095673	0.18	25	93.7	90	110	
Si	29	2	2	563.035	ppb	0.302	555614	0.48	536	105.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	131331	1.47	126570	103.76	70	120	
Li	6	2	2	2076299	0.83	1901180	109.21	70	120	
Ge	72	2	2	1036899	0.31	931750	111.29	70	120	
Rh	103	2	2	6551042	0.35	5993003	109.31	70	120	
Tb	159	2	2	7986442	0.46	7388471	108.09	70	120	
Bi	209	2	2	4641439	0.30	4361567	106.42	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	060_CCB.d
Data Path Name	D:\Data\6020\pg079a.b
Acq Date Time	2015-02-23T13:27:06-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	1.931	ppb	36.27	63666	6.7	5	
Mg	24	1	1	3.242	ppb	25.06	3992	9.8	5	
Al	27	1	1	0.317	ppb	16.31	1981	0.8	0.5	
K	39	1	1	2.593	ppb	53.19	57156	1.0	5	
Ca	44	1	1	0.744	ppb	53.74	618	3.3	5	
Ti	47	1	1	0.184	ppb	53.11	52	51.6	0.5	
V	51	1	1	0.057	ppb	156.33	1686	28.3	0.5	
Cr	52	1	1	0.199	ppb	60.61	4626	13.3	0.5	
Mn	55	1	1	0.346	ppb	23.91	3170	8.4	0.5	
Fe	56	1	1	3.828	ppb	23.30	74032	6.0	5	
Co	59	1	1	0.150	ppb	60.90	2478	45.4	0.5	
Ni	60	1	1	0.237	ppb	44.11	2376	15.5	0.5	
Cu	63	1	1	0.254	ppb	35.55	54205	4.8	0.5	
Zn	66	1	1	-0.008	ppb	-875.08	1162	5.0	0.5	
As	75	1	1	0.102	ppb	80.44	177	46.5	0.5	
Se	78	1	1	0.247	ppb	64.94	53	31.2	0.5	
Be	9	2	2	0.024	ppb	37.47	304	31.1	0.5	
B	11	2	2	0.038	ppb	91.38	43825	0.8	0.5	
Mo	95	2	2	0.353	ppb	9.12	6628	8.5	0.5	
Ag	107	2	2	0.021	ppb	5.23	1360	2.9	0.5	
Cd	111	2	2	0.016	ppb	34.11	189	27.0	0.5	
Sn	118	2	2	0.147	ppb	3.37	8155	1.0	0.5	
Sb	121	2	2	0.028	ppb	25.57	1222	19.2	0.5	
Ba	137	2	2	0.044	ppb	6.75	822	4.7	0.5	
Tl	205	2	2	0.031	ppb	4.43	3416	3.3	0.125	
Pb	208	2	2	0.043	ppb	16.55	5254	5.9	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	113263	11.76	126570	89.49	70	120	
Li	6	2	2	2046039	1.18	1901180	107.62	70	120	
Ge	72	2	2	1027725	1.17	931750	110.30	70	120	
Rh	103	2	2	6475247	0.65	5993003	108.05	70	120	
Tb	159	2	2	7854946	0.69	7388471	106.31	70	120	
Bi	209	2	2	4585057	0.64	4361567	105.12	70	120	

Analytical Sequence

Method : 7471B Soil

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		BLKS150220-01-079
10	10		LCSS150220-01-079
11	11		E15-01158-021
12	12		E15-01158-021DUP
13	13		E15-01158-021MS
14	14		E15-01273-001
15	15		E15-01158-022
16	16		E15-01281-001x100
17	17		E15-01281-002x100
18	18		E15-01281-003x100
19	2	QC	CCV
20	1	QC	CCB
21	19		E15-01281-004x100
22	20		E15-01281-005x100
23	21		E15-01281-006
24	22		E15-01281-007x100
25	23		E15-01281-008x10
26	24		E15-01281-009x10
27	25		E15-01281-010x10
28	26		E15-01281-011x10
29	27		E15-01281-012x10
30	28		E15-01281-013x10
31	2	QC	CCV
32	1	QC	CCB
33	29		E15-01281-014
34	30		E15-01281-015x10
35	31		E15-01281-016x100
36	32		E15-01224-001
37	2	QC	CCV
38	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\079.SIF
Batch ID: 079SOIL
Results Data Set: pg079bhg_15
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 2/20/2015 3:52:31 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	0.0000	0.0000	15:53:24	Yes
2		[0.00]	0.0060	0.0060	0.0005	15:53:57	Yes
3		[0.00]	0.0062	0.0062	0.0005	15:54:30	Yes
Mean:		[0.00]	0.0040				
SD:		0.00	0.0035				
%RSD:		0.00	86.63				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 2/20/2015 3:54:49 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0146	0.0186	0.0026	15:55:43	Yes
2		[0.25]	0.0138	0.0178	0.0026	15:56:15	Yes
3		[0.25]	0.0134	0.0174	0.0026	15:56:48	Yes
Mean:		[0.25]	0.0139				
SD:		0.00	0.0006				
%RSD:		0.00	4.49				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.05563 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 2/20/2015 3:57:08 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1181	0.1221	0.0233	15:58:02	Yes
2		[2.500]	0.1208	0.1248	0.0239	15:58:35	Yes
3		[2.500]	0.1219	0.1260	0.0240	15:59:08	Yes
Mean:		[2.500]	0.1203				
SD:		0.000	0.0020				
%RSD:		0.000	1.64				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999888 Slope: 0.04777 Intercept: 0.00093

Sequence No.: 4
Autosampler Location: 5
Sample ID: Calib Std 3
Date Collected: 2/20/2015 3:59:29 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2252	0.2293	0.0449	16:00:23	Yes
2		[5.000]	0.2332	0.2373	0.0463	16:00:57	Yes
3		[5.000]	0.2320	0.2361	0.0459	16:01:29	Yes
Mean:		[5.000]	0.2301				
SD:		0.000	0.0043				
%RSD:		0.000	1.87				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999736 Slope: 0.04596 Intercept: 0.00203

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: Calib Std 4 **Date Collected: 2/20/2015 4:01:51 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 4

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.3256	0.3297	0.0653	16:02:46	Yes
2		[7.500]	0.3356	0.3397	0.0664	16:03:19	Yes
3		[7.500]	0.3363	0.3403	0.0668	16:03:52	Yes
Mean:		[7.500]	0.3325				
SD:		0.000	0.0060				
%RSD:		0.000	1.80				

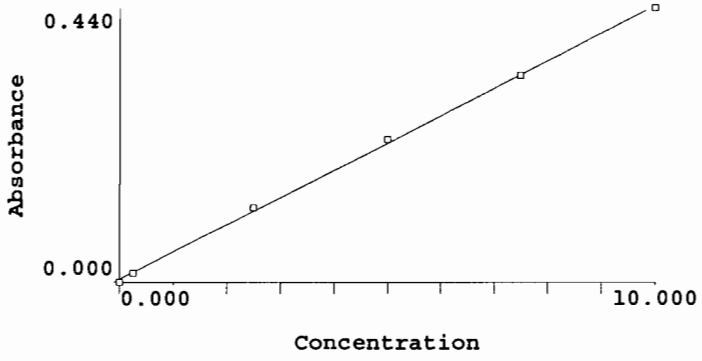
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999491 Slope: 0.04442 Intercept: 0.00389

Sequence No.: 6 **Autosampler Location: 7**
Sample ID: Calib Std 5 **Date Collected: 2/20/2015 4:04:13 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 5

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4300	0.4341	0.0857	16:05:09	Yes
2		[10.000]	0.4451	0.4491	0.0876	16:05:42	Yes
3		[10.000]	0.4453	0.4494	0.0878	16:06:15	Yes
Mean:		[10.000]	0.4401				
SD:		0.000	0.0087				
%RSD:		0.000	1.99				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999652 Slope: 0.04385 Intercept: 0.00494



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank 1	0.0000	0	-0.11275	0.00	86.6
Calib Std 1	0.0139	0.25	0.20436	0.00	4.5
Calib Std 2	0.1203	2.500	2.62960	0.00	1.6
Calib Std 3	0.2301	5.000	5.13533	0.00	1.9
Calib Std 4	0.3325	7.500	7.46952	0.01	1.8

Calib Std 5 0.4401 10.000 9.92394 0.01 2.0
Correlation Coef.: 0.999652 Slope: 0.04385 Intercept: 0.00494

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 2/20/2015 4:06:58 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.9166	0.2206	0.2246	0.0442	16:07:52	Yes
2		5.0334	0.2257	0.2297	0.0450	16:08:24	Yes
3		5.0487	0.2263	0.2304	0.0451	16:08:57	Yes
Mean:		4.9996	0.2242				
SD:		0.07226	0.0032				
%RSD:		1.4453	1.41				

QC value within limits for Hg 253.7 Recovery = 99.99%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/20/2015 4:09:17 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.08586	0.0012	0.0052	0.0004	16:10:10	Yes
2		-0.10941	0.0001	0.0042	0.0003	16:10:43	Yes
3		-0.12100	-0.0004	0.0037	0.0003	16:11:15	Yes
Mean:		-0.10542	0.0003				
SD:		0.01790	0.0008				
%RSD:		16.982	244.29				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BLKS150220-01-079 **Date Collected: 2/20/2015 4:11:35 PM**
Analyst: DK **Data Type: Original**

Replicate Data: BLKS150220-01-079

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00977	-0.09766	0.0007	0.0047	0.0004	16:12:27	Yes
2	-0.00992	-0.09922	0.0006	0.0046	0.0004	16:13:00	Yes
3	-0.01041	-0.10409	0.0004	0.0044	0.0004	16:13:33	Yes
Mean:	-0.01003	-0.10032	0.0005				
SD:	0.00034	0.00335	0.0001				
%RSD:	3.3435	3.3435	26.99				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: LCSS150220-01-079 **Date Collected: 2/20/2015 4:13:52 PM**
Analyst: DK **Data Type: Original**

Replicate Data: LCSS150220-01-079

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.58170	5.8170	0.2835	0.2849	0.0575	16:14:44	Yes
2	0.60141	6.0141	0.2931	0.2945	0.0594	16:15:17	Yes
3	0.60433	6.0433	0.2945	0.2959	0.0593	16:15:50	Yes
Mean:	0.59581	5.9581	0.2904				
SD:	0.01231	0.12312	0.0060				
%RSD:	2.0664	2.0664	2.07				

Sequence No.: 11
Sample ID: E15-01158-021
Analyst: DK
Autosampler Location: 11
Date Collected: 2/20/2015 4:16:09 PM
Data Type: Original

Replicate Data: E15-01158-021

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.05042	0.41670	0.0232	0.0273	0.0048	16:17:02	Yes
2	0.04837	0.39977	0.0225	0.0265	0.0049	16:17:35	Yes
3	0.04748	0.39240	0.0222	0.0262	0.0049	16:18:08	Yes
Mean:	0.04876	0.40296	0.0226				
SD:	0.00151	0.01246	0.0005				
%RSD:	3.0925	3.0925	2.42				

Sequence No.: 12
Sample ID: E15-01158-021DUP
Analyst: DK
Autosampler Location: 12
Date Collected: 2/20/2015 4:18:28 PM
Data Type: Original

Replicate Data: E15-01158-021DUP

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.04709	0.38920	0.0220	0.0261	0.0048	16:19:21	Yes
2	0.04685	0.38722	0.0219	0.0260	0.0049	16:19:53	Yes
3	0.04548	0.37587	0.0214	0.0255	0.0049	16:20:26	Yes
Mean:	0.04648	0.38410	0.0218				
SD:	0.00087	0.00719	0.0003				
%RSD:	1.8722	1.8722	1.45				

Sequence No.: 13
Sample ID: E15-01158-021MS
Analyst: DK
Autosampler Location: 13
Date Collected: 2/20/2015 4:20:45 PM
Data Type: Original

Replicate Data: E15-01158-021MS

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.74536	6.1600	0.2751	0.2791	0.0569	16:21:39	Yes
2	0.76022	6.2828	0.2805	0.2845	0.0580	16:22:12	Yes
3	0.75526	6.2418	0.2787	0.2827	0.0575	16:22:45	Yes
Mean:	0.75361	6.2282	0.2781				
SD:	0.00757	0.06254	0.0027				
%RSD:	1.0042	1.0042	0.99				

Sequence No.: 14
Sample ID: E15-01273-001
Analyst: DK
Autosampler Location: 14
Date Collected: 2/20/2015 4:23:05 PM
Data Type: Original

Replicate Data: E15-01273-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.2669	12.669	0.5605	0.5646	0.1213	16:23:59	Yes
	Sample concentration is greater than that of the highest standard.						
2	1.2242	12.242	0.5418	0.5458	0.1219	16:24:31	Yes
	Sample concentration is greater than that of the highest standard.						
3	1.2284	12.284	0.5436	0.5477	0.1219	16:25:04	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	1.2398	12.398	0.5487				
SD:	0.02356	0.23556	0.0103				
%RSD:	1.9000	1.9000	1.88				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 15
Sample ID: E15-01158-022
Analyst: DK
Autosampler Location: 15
Date Collected: 2/20/2015 4:25:46 PM
Data Type: Original

Replicate Data: E15-01158-022

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.07349	0.68334	0.0349	0.0390	0.0075	16:26:40	Yes
2	0.07293	0.67817	0.0347	0.0387	0.0076	16:27:13	Yes
3	0.07278	0.67674	0.0346	0.0387	0.0077	16:27:46	Yes
Mean:	0.07307	0.67942	0.0347				
SD:	0.00037	0.00347	0.0002				
%RSD:	0.51115	0.51115	0.44				

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: E15-01281-001x100 **Date Collected: 2/20/2015 4:28:06 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-001x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	324.00	21.886	0.9647	0.9688	0.1982	16:29:00	Yes
	Sample concentration is greater than that of the highest standard.						
2	331.57	22.398	0.9872	0.9912	0.2017	16:29:33	Yes
	Sample concentration is greater than that of the highest standard.						
3	333.59	22.534	0.9931	0.9972	0.2016	16:30:06	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	329.72	22.272	0.9817				
SD:	5.0561	0.34154	0.0150				
%RSD:	1.5334	1.5334	1.53				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: E15-01281-002x100 **Date Collected: 2/20/2015 4:30:48 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-002x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	162.89	13.804	0.6103	0.6144	0.1241	16:31:42	Yes
	Sample concentration is greater than that of the highest standard.						
2	155.24	13.156	0.5819	0.5859	0.1144	16:32:15	Yes
	Sample concentration is greater than that of the highest standard.						
3	115.01	9.7468	0.4324	0.4364	0.0859	16:32:48	Yes
Mean:	144.38	12.236	0.5415				
SD:	25.720	2.1797	0.0956				
%RSD:	17.814	17.814	17.65				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: E15-01281-003x100 **Date Collected: 2/20/2015 4:33:31 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-003x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	109.90	9.1274	0.4052	0.4093	0.0824	16:34:25	Yes
2	112.65	9.3554	0.4152	0.4193	0.0846	16:34:58	Yes
3	112.40	9.3346	0.4143	0.4183	0.0842	16:35:31	Yes
Mean:	111.65	9.2724	0.4116				
SD:	1.5176	0.12604	0.0055				
%RSD:	1.3593	1.3593	1.34				

Sequence No.: 19 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 4:36:14 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.8852	0.2192	0.2232	0.0444	16:37:07	Yes
2		5.0651	0.2271	0.2311	0.0459	16:37:40	Yes
3		5.0423	0.2261	0.2301	0.0458	16:38:12	Yes
Mean:		4.9976	0.2241				
SD:		0.09794	0.0043				
%RSD:		1.9599	1.92				

QC value within limits for Hg 253.7 Recovery = 99.95%
All analyte(s) passed QC.

==========

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 4:38:32 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.13331	-0.0009	0.0031	0.0003	16:39:25	Yes
2		-0.14000	-0.0012	0.0029	0.0002	16:39:58	Yes
3		-0.14276	-0.0013	0.0027	0.0002	16:40:30	Yes
Mean:		-0.13869	-0.0011				
SD:		0.00486	0.0002				
%RSD:		3.5017	18.72				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 21 **Autosampler Location: 19**
Sample ID: E15-01281-004x100 **Date Collected: 2/20/2015 4:40:50 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-004x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	165.93	12.804	0.5664	0.5705	0.1148	16:41:44	Yes
	Sample concentration is greater than that of the highest standard.						
2	171.64	13.245	0.5858	0.5898	0.1185	16:42:17	Yes
	Sample concentration is greater than that of the highest standard.						
3	167.36	12.914	0.5713	0.5753	0.1153	16:42:50	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	168.31	12.988	0.5745				
SD:	2.9752	0.22958	0.0101				
%RSD:	1.7677	1.7677	1.75				

Sample concentration is greater than that of the highest standard.

==========

Sequence No.: 22 **Autosampler Location: 20**
Sample ID: E15-01281-005x100 **Date Collected: 2/20/2015 4:43:33 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-005x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	546.71	36.683	1.6136	1.6177	0.3204	16:44:28	Yes
	Sample concentration is greater than that of the highest standard.						
2	560.59	37.613	1.6544	1.6585	0.3283	16:45:01	Yes
	Sample concentration is greater than that of the highest standard.						
3	562.08	37.714	1.6588	1.6629	0.3280	16:45:33	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	556.46	37.337	1.6423				
SD:	8.4742	0.56859	0.0249				
%RSD:	1.5229	1.5229	1.52				

Sample concentration is greater than that of the highest standard.

==========

Sequence No.: 23 **Autosampler Location: 21**

Sample ID: E15-01281-006 Date Collected: 2/20/2015 4:46:16 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-006

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	8.7883	71.450	3.1383	3.1423	0.6044	16:47:12	Yes
	Sample concentration is greater than that of the highest standard.						
2	8.9018	72.372	3.1787	3.1828	0.6124	16:47:45	Yes
	Sample concentration is greater than that of the highest standard.						
3	8.8918	72.291	3.1752	3.1792	0.6147	16:48:18	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	8.8606	72.038	3.1641				
SD:	0.06283	0.51084	0.0224				
%RSD:	0.70913	0.70913	0.71				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 24 Autosampler Location: 22
Sample ID: E15-01281-007x100 Date Collected: 2/20/2015 4:49:01 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-007x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	149.83	11.891	0.5264	0.5305	0.1048	16:49:57	Yes
	Sample concentration is greater than that of the highest standard.						
2	150.83	11.970	0.5299	0.5339	0.1067	16:50:30	Yes
	Sample concentration is greater than that of the highest standard.						
3	152.14	12.074	0.5345	0.5385	0.1071	16:51:02	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	150.93	11.979	0.5303				
SD:	1.1581	0.09191	0.0040				
%RSD:	0.76728	0.76728	0.76				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 25 Autosampler Location: 23
Sample ID: E15-01281-008x10 Date Collected: 2/20/2015 4:51:46 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-008x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	54.841	41.329	1.8174	1.8214	0.3637	16:52:42	Yes
	Sample concentration is greater than that of the highest standard.						
2	57.470	43.311	1.9043	1.9083	0.3826	16:53:14	Yes
	Sample concentration is greater than that of the highest standard.						
3	58.330	43.959	1.9327	1.9368	0.3880	16:53:47	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	56.880	42.866	1.8848				
SD:	1.8179	1.3700	0.0601				
%RSD:	3.1959	3.1959	3.19				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 26 Autosampler Location: 24
Sample ID: E15-01281-009x10 Date Collected: 2/20/2015 4:54:31 PM
Analyst: DK Data Type: Original

Replicate Data: E15-01281-009x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	37.850	24.748	1.0902	1.0943	0.2221	16:55:23	Yes
	Sample concentration is greater than that of the highest standard.						
2	38.641	25.265	1.1129	1.1170	0.2286	16:55:56	Yes
	Sample concentration is greater than that of the highest standard.						
3	39.076	25.550	1.1254	1.1294	0.2285	16:56:29	Yes

Sample concentration is greater than that of the highest standard.

Mean:	38.522	25.188	1.1095
SD:	0.62149	0.40636	0.0178
%RSD:	1.6133	1.6133	1.61

Sample concentration is greater than that of the highest standard.

Sequence No.: 27 **Autosampler Location: 25**
Sample ID: E15-01281-010x10 **Date Collected: 2/20/2015 4:57:09 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-010x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	21.502	14.243	0.6296	0.6336	0.1298	16:58:02	Yes
	Sample concentration is greater than that of the highest standard.						
2	22.658	15.009	0.6631	0.6672	0.1376	16:58:35	Yes
	Sample concentration is greater than that of the highest standard.						
3	23.197	15.366	0.6788	0.6829	0.1399	16:59:08	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	22.452	14.873	0.6572				
SD:	0.86589	0.57359	0.0252				
%RSD:	3.8566	3.8566	3.83				

Sample concentration is greater than that of the highest standard.

Sequence No.: 28 **Autosampler Location: 26**
Sample ID: E15-01281-011x10 **Date Collected: 2/20/2015 4:59:48 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-011x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	16.011	9.9447	0.4411	0.4451	0.0897	17:00:40	Yes
2	16.934	10.518	0.4662	0.4702	0.0933	17:01:13	Yes
3	17.306	10.749	0.4763	0.4804	0.0959	17:01:46	Yes
Mean:	16.751	10.404	0.4612				
SD:	0.66694	0.41425	0.0182				
%RSD:	3.9816	3.9816	3.94				

Sequence No.: 29 **Autosampler Location: 27**
Sample ID: E15-01281-012x10 **Date Collected: 2/20/2015 5:02:27 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-012x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	13.567	9.0449	0.4016	0.4056	0.0815	17:03:20	Yes
2	13.885	9.2567	0.4109	0.4149	0.0827	17:03:53	Yes
3	13.788	9.1923	0.4081	0.4121	0.0819	17:04:26	Yes
Mean:	13.747	9.1647	0.4068				
SD:	0.16289	0.10859	0.0048				
%RSD:	1.1849	1.1849	1.17				

Sequence No.: 30 **Autosampler Location: 28**
Sample ID: E15-01281-013x10 **Date Collected: 2/20/2015 5:05:06 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-013x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	32.537	21.979	0.9688	0.9728	0.1940	17:06:00	Yes
	Sample concentration is greater than that of the highest standard.						
2	33.673	22.746	1.0024	1.0065	0.1996	17:06:32	Yes
	Sample concentration is greater than that of the highest standard.						
3	34.179	23.088	1.0174	1.0215	0.2031	17:07:05	Yes

Sample concentration is greater than that of the highest standard.

Mean:	33.463	22.604	0.9962
SD:	0.84095	0.56806	0.0249
%RSD:	2.5131	2.5131	2.50

Sample concentration is greater than that of the highest standard.

Sequence No.: 31 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 5:07:46 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		4.6651	0.2095	0.2136	0.0429	17:08:40	Yes
2		4.8246	0.2165	0.2206	0.0435	17:09:12	Yes
3		4.8158	0.2161	0.2202	0.0435	17:09:45	Yes
Mean:		4.7685	0.2141				
SD:		0.08961	0.0039				
%RSD:		1.8792	1.84				

QC value within limits for Hg 253.7 Recovery = 95.37%
All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 5:10:05 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.13228	-0.0009	0.0032	0.0003	17:10:58	Yes
2		-0.12944	-0.0007	0.0033	0.0003	17:11:30	Yes
3		-0.14118	-0.0012	0.0028	0.0002	17:12:03	Yes
Mean:		-0.13430	-0.0009				
SD:		0.00612	0.0003				
%RSD:		4.5595	28.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33 **Autosampler Location: 29**
Sample ID: E15-01281-014 **Date Collected: 2/20/2015 5:12:22 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-014

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.2507	33.095	1.4563	1.4603	0.2974	17:13:16	Yes
	Sample concentration is greater than that of the highest standard.						
2	5.1587	32.516	1.4309	1.4349	0.2993	17:13:48	Yes
	Sample concentration is greater than that of the highest standard.						
3	5.2820	33.292	1.4649	1.4690	0.3032	17:14:21	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	5.2304	32.968	1.4507				
SD:	0.06406	0.40379	0.0177				
%RSD:	1.2248	1.2248	1.22				

Sample concentration is greater than that of the highest standard.

Sequence No.: 34 **Autosampler Location: 30**
Sample ID: E15-01281-015x10 **Date Collected: 2/20/2015 5:15:02 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-015x10

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	44.439	26.140	1.1513	1.1553	0.2256	17:15:56	Yes

Sample concentration is greater than that of the highest standard.

2	44.887	26.404	1.1629	1.1669	0.2293	17:16:29	Yes
	Sample concentration is greater than that of the highest standard.						
3	45.192	26.584	1.1707	1.1748	0.2290	17:17:02	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	44.839	26.376	1.1616				
SD:	0.37888	0.22287	0.0098				
%RSD:	0.84497	0.84497	0.84				

Sample concentration is greater than that of the highest standard.

Sequence No.: 35 **Autosampler Location: 31**
Sample ID: E15-01281-016x100 **Date Collected: 2/20/2015 5:17:43 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01281-016x100

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	94.617	6.5706	0.2931	0.2971	0.0599	17:18:37	Yes
2	95.769	6.6506	0.2966	0.3006	0.0606	17:19:10	Yes
3	96.069	6.6715	0.2975	0.3016	0.0606	17:19:43	Yes
Mean:	95.485	6.6309	0.2957				
SD:	0.76682	0.05325	0.0023				
%RSD:	0.80309	0.80309	0.79				

Sequence No.: 36 **Autosampler Location: 32**
Sample ID: E15-01224-001 **Date Collected: 2/20/2015 5:20:03 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01224-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01620	0.12857	0.0106	0.0146	0.0024	17:20:57	Yes
2	0.01639	0.13014	0.0107	0.0147	0.0024	17:21:30	Yes
3	0.01178	0.09354	0.0090	0.0131	0.0023	17:22:03	Yes
Mean:	0.01479	0.11742	0.0101				
SD:	0.00261	0.02069	0.0009				
%RSD:	17.622	17.622	8.99				

Sequence No.: 37 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/20/2015 5:22:23 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		7.2437	0.3226	0.3267	0.0456	17:23:17	Yes
2		4.3807	0.1971	0.2011	0.0432	17:23:49	Yes
3		4.4377	0.1996	0.2036	0.0430	17:24:22	Yes
Mean:		5.3541	0.2397				
SD:		1.6368	0.0718				
%RSD:		30.571	29.94				

QC value within limits for Hg 253.7 Recovery = 107.08%
All analyte(s) passed QC.

Sequence No.: 38 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/20/2015 5:24:42 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.48446	-0.0163	-0.0123	-0.0001	17:25:34	Yes
2		-0.23560	-0.0054	-0.0013	0.0002	17:26:07	Yes
3		-0.25698	-0.0063	-0.0023	0.0002	17:26:40	Yes

Mean:	-0.32568	-0.0093
SD:	0.13792	0.0060
%RSD:	42.349	64.77

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

METALS PREP LOGS
STANDARD PREP LOGS

2015 PG: 079 METALS'S DIGESTION LOG

Date: 02/20/15 07:30

MATRIX: SOIL	PREP. SOLUTION	DATE	LOT #	ANALYSIS METHOD: 6020A	Hg DIG. DATE: 2/20/15
DIGESTION METHOD: 3050B	NaCl:	1/5/15	134874	Hg ANAL. METHOD: 7471B	
SPIKES: 1.0ml M507, M508	Hydroxylamine:	1/5/15	138012	LOT# HNO3: 143747	ICPMS ICV: M331
Hg DIGESTION METHOD: 7471B	KMnO4:	1/7/15	133921	LOT# H2SO4:143680	ICPMS Cal. Stds.: M327,M361
Hg SPIKE: 2.50 PPB M493-3	1:1 HNO3:	2/6/15		LOT# HCL: 146027	
Hg ICV: 2.50 PPB M455-1	AQUAREGIA:	2/20/15			

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (g)	BASE final vol ml	Hg (g)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						0.5	50			M493-3		
Hg	STD2 2.50 PPB						0.5	50			M493-3		
Hg	STD3 5.00 PPB						0.5	50			M493-3		
Hg	STD4 7.50 PPB						0.5	50			M493-3		
Hg	STD5 10.0 PPB						0.5	50			M493-3		
Hg	ICV 5.00 PPB						0.5	50			M455-1		
	BLKS150220-01			1	2.50	50	0.50	50			BMS1		
	LCSS150220-01			1	2.50	50	0.50	50			BSS1		
TAL	E15-01158-021		Y	1.21	2.50	50	0.500	50	U1	3/3			
	E15-01158-021DUP		Y	1.21	2.50	50	0.500	50	U1				
	E15-01158-021MS		Y	1.21	2.50	50	0.500	50	U1				
TAL	E15-01273-001		B	1.12	2.37	50	0.560	50	U1	2/23	R-48(2/23 11:00)		
TAL	E15-01158-022		Y	1.14	2.35	50	0.530	50	U1	3/3			
TAL	E15-01281-001		Y	1.51	2.26	50	0.510	50	U1	2/24	R-72(2/24 16:00)		
TAL	E15-01281-002		Y	1.18	2.44	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-003		Y	1.18	2.35	50	0.490	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-004		Y	1.27	2.25	50	0.490	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-005		Y	1.55	2.27	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-006		Y	1.23	2.31	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-007		Y	1.26	2.26	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-008		Y	1.38	2.28	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-009		Y	1.56	2.38	50	0.510	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-010		Y	1.57	2.26	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-011		Y	1.61	2.35	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-012		Y	1.56	2.41	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-013		Y	1.51	2.27	50	0.510	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-014		Y	1.65	2.41	50	0.520	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-015		Y	1.70	2.42	50	0.500	50	U1		R-72(2/24 16:00)		
TAL	E15-01281-016		Y	1.44	2.25	50	0.500	50	U1		R-72(2/24 16:00)		
PPM	E15-01224-001		N	1.31	2.34	50	0.520	50	U1	2/24	R-1WK		

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/20/15 - 1105	Received by:	2/20/15 11[illegible]
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/20/15 - 0900	Received by:	2/20/15 0900
Relinquished by:		Received by:	
Disposal:			

	SAMPLE	2101		BLKS150220-01	1000
	SAMPLE	2102		LCSS150220-01	1000
	SAMPLE	2103		E15-01158-021	1210
	SAMPLE	2104		E15-01158-021DUP	1210
	SAMPLE	2105		E15-01158-021SD	6050
	SAMPLE	2106		E15-01158-021MS	1210
	SAMPLE	2107		E15-01158-021PS	968
	SAMPLE	2108		E15-01273-001	1181.435
	SAMPLE	2109		E15-01158-022	1212.766
	SAMPLE	2110		E15-01281-001	1670.354
	SAMPLE	2111		E15-01281-002	1209.016
	SAMPLE	2112		E15-01281-003	1255.319
	SAMPLE	2201		E15-01281-004	1411.111
	SAMPLE	2202		E15-01281-005	1707.048
	SAMPLE	2203		E15-01281-006	1331.169
	SAMPLE	2204		E15-01281-007	1393.805
	SAMPLE	2205		E15-01281-008	1513.158
	SAMPLE	2206		E15-01281-009	1638.655
	SAMPLE	2207		E15-01281-010	1736.726
	SAMPLE	2208		E15-01281-011	1712.766
	SAMPLE	2209		E15-01281-012	1618.257
	SAMPLE	2210		E15-01281-013	1662.996
	SAMPLE	2211		E15-01281-014	1711.618
	SAMPLE	2212		E15-01281-015	1756.198
	SAMPLE	2301		E15-01281-016	1600
	SAMPLE	2302		E15-01224-001	1399.573

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 020315

Standard Name	020315-01	020315-02	020315-03	020315-04	020315-05	020315-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15
Standard Name	020315-07	020315-08	020315-09	020315-10	020315-11	020315-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15
Standard Name	020315-13	020315-14	020315-15	020315-16	020315-17	020315-18
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15
Standard Name	020315-19	020315-20	020315-21	020315-22	020315-23	020315-24
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Agilent 7700 prep 1

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-3	CL10-122YPY	M-506	8/30/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-905	S140424021	M-499	4/2015	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-486	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL11-99YPY	M-514	11/30/2015	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

INITIAL

2/3/15
DATE

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			2/23/15 17:15		2/23/15 18:11		2/23/15 18:29			
	INST.	ICV & CCV	ICV		CCV		CCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	25.0	23.7	94.8	23.2	92.8	23.2	92.8		
Barium	0.500	25.0	23.6	94.4	24.2	96.8	24.0	96.0		
Cadmium	0.125	25.0	24.2	96.8	24.4	97.6	24.3	97.2		
Chromium	0.500	25.0	22.9	91.6	26.0	104	25.7	103		
Lead	0.250	25.0	22.8	91.2	22.9	91.6	22.8	91.2		
Mercury	0.150	5.00	4.63	92.6	4.63	92.6				
Selenium	0.500	25.0	23.5	94.0	24.7	98.8	25.7	103		
Silver	0.125	25.0	25.0	100	25.1	100	25.1	100		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Concentration/Units: ppm (mg/L)

		2/23/15 17:23	2/23/15 18:15	2/23/15 18:33			
ANALYTE	INST. MDL	ICB	CCB	CCB			
Arsenic	0.0005	ND	ND	ND			
Barium	0.0005	ND	ND	ND			
Cadmium	0.000125	ND	ND	ND			
Chromium	0.0005	ND	ND	ND			
Lead	0.00025	ND	ND	ND			
Mercury	0.00015	ND	ND				
Selenium	0.0005	ND	ND	ND			
Silver	0.000125	ND	ND	ND			

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

02/23/2015 05:32 PM

Batch (Page) #: 083
Associated Lab Case for Blank 1: E15-01273

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKT150223-01
Arsenic	0.100	ND
Barium	0.100	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Selenium	0.100	ND
Silver	0.025	ND

Associated Sample for Blank 1:

01273-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 083
SDG #: E15-01273

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	104000	101000	101	NA
Calcium	100000	-	99100	97000	97.0	NA
Iron	100000	-	97900	96000	96.0	NA
Potassium	100000	-	95900	94300	94.3	NA
Magnesium	100000	-	95600	94100	94.1	NA
Sodium	100000	-	101000	100000	100	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2280	2310	116	NA
Titanium	2000	-	2030	1970	98.5	NA
Silver	-	20.0	-	25.5	118.0	80-120
Arsenic	-	20.0	-	20.4	102	80-120
Cadmium	-	20.0	-	20.5	103	80-120
Cobalt	-	20.0	-	20.7	104	80-120
Chromium	-	20.0	-	19.7	98.5	80-120
Copper	-	20.0	-	19.3	96.5	80-120
Manganese	-	20.0	-	20.6	103	80-120
Nickel	-	20.0	-	19.2	96.0	80-120
Zinc	-	20.0	-	18.9	94.5	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Unit: ppm (mg/L)

ANALYTE	LCST150223-01 TRUE	LCST150223-01 FOUND	LCST150223-01 %R(1)	TRUE	FOUND	%R(1)
Arsenic	4.00	3.94	98.5			
Barium	4.00	3.94	98.5			
Cadmium	4.00	4.06	102			
Chromium	4.00	3.80	95.0			
Lead	4.00	3.97	99.3			
Mercury	0.010	0.010	100			
Selenium	4.00	4.01	100			
Silver	4.00	4.63	116			

(1) Control Limits % Recovery = 80-120%

LCST150223-01 2/23/15 17:36
01273-001

METALS QUALITY CONTROL

LOW LEVEL INITIAL CALIBRATION VERIFICATION

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

2/23/15 17:19

ANALYTE	INST. MDL	LLICV TRUE	LLICV FOUND	LLICV % R
Arsenic	0.500	0.500	0.537	107
Barium	0.500	0.500	0.550	110
Cadmium	0.125	0.500	0.513	103
Chromium	0.500	0.500	0.489	97.8
Lead	0.250	0.500	0.533	107
Selenium	0.500	0.500	0.541	108
Silver	0.125	0.500	0.627	125

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	2/23/15 17:54 SSR1	2/23/15 17:41 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	3.88	ND	97.0	4.00					75-125
Barium	4.60	0.779	95.5	4.00					75-125
Cadmium	4.05	ND	101	4.00					75-125
Chromium	3.77	ND	94.3	4.00					75-125
Lead	4.13	0.303	95.7	4.00					75-125
Mercury	0.00944	ND	94.4	0.010					75-125
Selenium	4.24	ND	106	4.00					75-125
Silver	4.51	ND	113	4.00					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E15-01273-001
% Solids: NA
QC Sample 1 for following samples:
01273-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	2/23/15 17:41 S1	2/23/15 17:45 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	20	0.779	0.759	2.60				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Lead	20	0.303	0.290	4.38				
Mercury	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E15-01273-001
% Solids: NA
QC Sample 1 for following samples:
01273-001

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 083
SDG #: E15-01273

Matrix: TCLP Concentration/Units: ppm (mg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	2/23/15 17:41 SR	2/23/15 17:49 SDR	% Difference	2/23/15 17:58 SPR	SA	% Recovery
Arsenic	ND	ND	NC	3.92	4.00	98.0
Barium	0.779	0.763	2.08	4.64	4.00	96.5
Cadmium	ND	ND	NC	4.10	4.00	103
Chromium	ND	ND	NC	3.83	4.00	95.8
Lead	0.303	0.299	1.33	4.18	4.00	96.9
Selenium	ND	ND	NC	3.89	4.00	97.3
Silver	ND	ND	NC	4.55	4.00	114

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

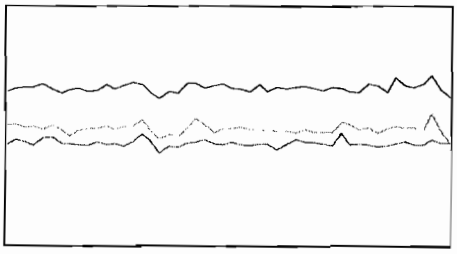
Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E15-01273-001
QC Sample 1 for following samples:
01273-001

Tune Report

Batch Folder D:\Data\6020\pg083.b
Report Comment
Instrument Name G3281A JP12382037

[1]



Mass	Range	Count	RSD%	Background
59	5000	2149	3.336	0.300
89	5000	2452	4.232	0.400
205	10000	6613	2.665	1.800

Ratio (oxide) 156/140 0.354 % **Ratio (2+)** 70/140 3.155 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.31

Tune Parameters
Plasma Paramters

RF Power	1550 W	Carrier Gas	1.01 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	0.0 V	Omega Lens	6.5 V	Deflect	2.6 V
Extract 2	-195.0 V	Cell Entrance	-38 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-68 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7	5000	4097	3.738	7.700
89	20000	16542	3.319	6.500
205	10000	8880	2.674	14.900
59	10000	7877	3.531	2.700

Ratio (oxide) 156/140 1.053 % **Ratio (2+)** 70/140 10.719 %

Integration Time [sec] 0.1 **Sampling Period [sec]** 0.413

Mass	Peak Height	Axis	W-50%	W-X%
7	4025.36	6.95	0.66	0.740
89	16376.78	88.95	0.59	0.708
205	8563.10	205.00	0.58	0.727
59	7789.39	58.90	0.64	0.759

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Tune Report

RF Power	1550 W	Carrier Gas	1.03 L/min	S/C Temp	2 °C
RF Matching	1.70 V	Option Gas	0.0 %	Gas Switch	Makeup Gas
Smpl Depth	10.0 mm	Nebulizer Pump	0.10 rps	Makeup/Dilution Gas	0.00 L/min

Lenses Parameters

Extract 1	-3.1 V	Omega Lens	9.0 V	Deflect	12.6 V
Extract 2	-200.0 V	Cell Entrance	-28 V	Plate Bias	-45 V
Omega Bias	-100 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

E15-01273 Page 1006

METALS INTERNAL STANDARD AREA SUMMARY
2015 PG083
February 23, 2015
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	2043742		146432		1086423		6695900		8185004		4868813		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	1430619	70	102502	70	760496	70	4687130	70	5729503	70	3408169	70	
	Upper Limit	2452490	120	175718	120	1303708	120	8035080	120	9822005	120	5842576	120	
004CALS.d	STD1	2043901	100	142563	97	1078683	99	6694266	100	8129207	99	4892648	100	
005CALS.d	STD2	2044743	100	144783	99	1072590	99	6724510	100	8164192	100	4896084	101	
006CALS.d	STD3	2043168	100	141323	97	1054540	97	6680710	100	8135753	99	4918234	101	
007CALS.d	STD4	2030145	99	138785	95	1054728	97	6630311	99	8133140	99	4858869	100	
008CALS.d	STD5	2052912	100	140513	96	1063528	98	6627269	99	8199255	100	4912131	101	
010_CCV.d	ICV	2029721	99	139660	95	1038297	96	6597450	99	8106235	99	4836054	99	
011LCCV.d	LLICV	2031782	99	140287	96	1057452	97	6595765	99	8084860	99	4848011	100	
012_ICB.d	ICB	1999999	98	138512	95	1050858	97	6558967	98	8035311	98	4808393	99	
013SMPL.d	TCLP150219	2010550	98	139276	95	1051378	97	6595471	99	8091160	99	4864031	100	
014SMPL.d	BLKT150223-01	1998112	98	139668	95	1041058	96	6573894	98	7990756	98	4828291	99	
015SMPL.d	LCST150223-01	2034129	100	139383	95	1048343	96	6597398	99	8132072	99	4854241	100	
016SMPL.d	E15-01273-001	2010465	98	137107	94	1033581	95	6494453	97	8069797	99	4850569	100	
017SMPL.d	E15-01273-001DUP	2012038	98	137162	94	1037325	95	6493466	97	8012365	98	4842405	99	
018SMPL.d	E15-01273-001SD	2008304	98	138851	95	1036595	95	6480596	97	7985633	98	4804368	99	
019SMPL.d	E15-01273-001MS	1982419	97	135340	92	1019748	94	6408419	96	7936107	97	4774058	98	
020SMPL.d	E15-01273-001PS	2018064	99	135923	93	1033902	95	6505775	97	8115304	99	4860538	100	
022ICSA.d	ICSA	1821268	89	131752	90	1097259	101	5723408	85	7839380	96	4357910	90	
023_CCV.d	CCV	1937068	95	134218	92	1030732	95	6547654	98	8233855	101	4918121	101	
024_CCB.d	CCB	1929321	94	134669	92	1041501	96	6599649	99	8184945	100	4956591	102	
025ICSB.d	ICSAB	1797955	88	133269	91	1120560	103	5838879	87	8035904	98	4405708	90	
027_CCV.d	FINAL CCV	1930448	94	137962	94	1045433	96	6658889	99	8375945	102	5024609	103	
028_CCB.d	FINAL CCB	1918719	94	138225	94	1055690	97	6665769	100	8324531	102	5029614	103	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

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TCLP
METALS RAW DATA

	SAMPLE	2101		TCLP150219	200
	SAMPLE	2102		BLKT150223-01	200
	SAMPLE	2103		LCST150223-01	200
	SAMPLE	2104		E15-01273-001	200
	SAMPLE	2105		E15-01273-001DUP	200
	SAMPLE	2106		E15-01273-001SD	1000
	SAMPLE	2107		E15-01273-001MS	200
	SAMPLE	2108		E15-01273-001PS	200

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	001SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:36:07-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	002SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:40:25-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

TuneStep	TuneModeName
1	1
2	2

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:44:47-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	84723	0.02
Mg	24	1	1	4429	0.89
Al	27	1	1	2964	1.34
K	39	1	1	53314	0.00
Ca	44	1	1	2256	1.81
Ti	47	1	1	20	220.50
V	51	1	1	1259	1.19
Cr	52	1	1	18295	0.27
Mn	55	1	1	10491	0.61
Fe	56	1	1	200935	0.04
Co	59	1	1	906	6.12
Ni	60	1	1	7486	0.50
Cu	63	1	1	36944	0.04
Zn	66	1	1	6827	0.59
As	75	1	1	66	23.69
Se	78	1	1	30	133.55
Be	9	2	2	78	66.21
B	11	2	2	41834	0.01
Mo	95	2	2	845	1.65
Ag	107	2	2	482	0.73
Cd	111	2	2	22	389.75
Sn	118	2	2	1361016	0.00
Sb	121	2	2	282	8.45
Ba	137	2	2	1108	1.07
Tl	205	2	2	22291	0.01
Pb	208	2	2	6243	0.05

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	146432	38.14
Li	6	2	2	2043742	0.24
Ge	72	2	2	1086423	1.05
Rh	103	2	2	6695900	0.13
Tb	159	2	2	8185004	0.75
Bi	209	2	2	4868813	0.10

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:49:04-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	65396	0.00
Mg	24	1	1	6520	0.02
Al	27	1	1	1218	0.06
K	39	1	1	54236	0.00
Ca	44	1	1	1570	0.46
Ti	47	1	1	153	19.07
V	51	1	1	6035	0.02
Cr	52	1	1	13144	0.02
Mn	55	1	1	5615	0.07
Fe	56	1	1	99172	0.00
Co	59	1	1	11350	0.02
Ni	60	1	1	5555	0.06
Cu	63	1	1	35649	0.00
Zn	66	1	1	3458	0.12
As	75	1	1	888	0.66
Se	78	1	1	89	28.71
Be	9	2	2	5909	0.11
B	11	2	2	45107	0.01
Mo	95	2	2	9208	0.02
Ag	107	2	2	5965	0.13
Cd	111	2	2	4487	0.23
Sn	118	2	2	302589	0.00
Sb	121	2	2	17535	0.01
Ba	137	2	2	6962	0.06
Tl	205	2	2	55818	0.00
Pb	208	2	2	29566	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	142563	0.26	146432	97.36	70	120	
Li	6	2	2	2043901	0.24	2043742	100.01	70	120	
Ge	72	2	2	1078683	0.60	1086423	99.29	70	120	
Rh	103	2	2	6694266	0.59	6695900	99.98	70	120	
Tb	159	2	2	8129207	0.96	8185004	99.32	70	120	
Bi	209	2	2	4892648	0.46	4868813	100.49	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:53:26-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	141350	0.00
Mg	24	1	1	50006	0.00
Al	27	1	1	2755	0.12
K	39	1	1	90366	0.00
Ca	44	1	1	3763	0.75
Ti	47	1	1	1540	0.03
V	51	1	1	50389	0.00
Cr	52	1	1	68475	0.00
Mn	55	1	1	35527	0.00
Fe	56	1	1	568436	0.00
Co	59	1	1	108274	0.00
Ni	60	1	1	31839	0.01
Cu	63	1	1	107856	0.00
Zn	66	1	1	13649	0.00
As	75	1	1	8267	0.01
Se	78	1	1	538	0.77
Be	9	2	2	58763	0.00
B	11	2	2	76074	0.00
Mo	95	2	2	88633	0.00
Ag	107	2	2	59635	0.00
Cd	111	2	2	44413	0.01
Sn	118	2	2	302610	0.00
Sb	121	2	2	176100	0.00
Ba	137	2	2	62360	0.00
Tl	205	2	2	365769	0.00
Pb	208	2	2	248270	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	144783	1.26	146432	98.87	70	120	
Li	6	2	2	2044743	0.41	2043742	100.05	70	120	
Ge	72	2	2	1072590	0.72	1086423	98.73	70	120	
Rh	103	2	2	6724510	0.42	6695900	100.43	70	120	
Tb	159	2	2	8164192	0.82	8185004	99.75	70	120	
Bi	209	2	2	4896084	0.61	4868813	100.56	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T16:57:43-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	490369	0.00
Mg	24	1	1	234831	0.00
Al	27	1	1	10336	0.00
K	39	1	1	246389	0.00
Ca	44	1	1	11059	0.03
Ti	47	1	1	7606	0.04
V	51	1	1	241667	0.00
Cr	52	1	1	311518	0.00
Mn	55	1	1	165351	0.00
Fe	56	1	1	2660539	0.00
Co	59	1	1	519578	0.00
Ni	60	1	1	148869	0.00
Cu	63	1	1	422190	0.00
Zn	66	1	1	60303	0.00
As	75	1	1	39660	0.00
Se	78	1	1	2525	0.11
Be	9	2	2	285586	0.00
B	11	2	2	209487	0.00
Mo	95	2	2	421953	0.00
Ag	107	2	2	293236	0.00
Cd	111	2	2	213588	0.00
Sn	118	2	2	764075	0.00
Sb	121	2	2	861597	0.00
Ba	137	2	2	301775	0.00
Tl	205	2	2	1742029	0.00
Pb	208	2	2	1194852	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	141323	0.77	146432	96.51	70	120	
Li	6	2	2	2043168	0.10	2043742	99.97	70	120	
Ge	72	2	2	1054540	0.11	1086423	97.07	70	120	
Rh	103	2	2	6680710	0.71	6695900	99.77	70	120	
Tb	159	2	2	8135753	0.45	8185004	99.40	70	120	
Bi	209	2	2	4918234	0.73	4868813	101.02	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:02:06-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	923076	0.00
Mg	24	1	1	466161	0.00
Al	27	1	1	20139	0.00
K	39	1	1	443586	0.00
Ca	44	1	1	21729	0.00
Ti	47	1	1	14524	0.01
V	51	1	1	478252	0.00
Cr	52	1	1	616606	0.00
Mn	55	1	1	325741	0.00
Fe	56	1	1	5264392	0.00
Co	59	1	1	1029777	0.00
Ni	60	1	1	292220	0.00
Cu	63	1	1	809211	0.00
Zn	66	1	1	115601	0.00
As	75	1	1	78609	0.00
Se	78	1	1	4790	0.13
Be	9	2	2	572132	0.00
B	11	2	2	375634	0.00
Mo	95	2	2	847670	0.00
Ag	107	2	2	591524	0.00
Cd	111	2	2	431822	0.00
Sn	118	2	2	1402888	0.00
Sb	121	2	2	1747309	0.00
Ba	137	2	2	599463	0.00
Tl	205	2	2	3461623	0.00
Pb	208	2	2	2442365	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138785	0.60	146432	94.78	70	120	
Li	6	2	2	2030145	0.70	2043742	99.33	70	120	
Ge	72	2	2	1054728	0.82	1086423	97.08	70	120	
Rh	103	2	2	6630311	0.04	6695900	99.02	70	120	
Tb	159	2	2	8133140	0.60	8185004	99.37	70	120	
Bi	209	2	2	4858869	0.84	4868813	99.80	70	120	

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Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:06:24-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	1738492	0.00
Mg	24	1	1	933940	0.00
Al	27	1	1	39035	0.00
K	39	1	1	840930	0.00
Ca	44	1	1	42197	0.00
Ti	47	1	1	29769	0.00
V	51	1	1	960894	0.00
Cr	52	1	1	1234695	0.00
Mn	55	1	1	652178	0.00
Fe	56	1	1	10476748	0.00
Co	59	1	1	2067510	0.00
Ni	60	1	1	585193	0.00
Cu	63	1	1	1583831	0.00
Zn	66	1	1	230973	0.00
As	75	1	1	156721	0.00
Se	78	1	1	9699	0.04
Be	9	2	2	1055215	0.00
B	11	2	2	712657	0.00
Mo	95	2	2	1681130	0.00
Ag	107	2	2	1165692	0.00
Cd	111	2	2	859536	0.00
Sn	118	2	2	2663486	0.00
Sb	121	2	2	3477305	0.00
Ba	137	2	2	1193226	0.00
Tl	205	2	2	6846386	0.00
Pb	208	2	2	4884582	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	140513	0.93	146432	95.96	70	120	
Li	6	2	2	2052912	0.92	2043742	100.45	70	120	
Ge	72	2	2	1063528	1.21	1086423	97.89	70	120	
Rh	103	2	2	6627269	0.95	6695900	98.98	70	120	
Tb	159	2	2	8199255	1.59	8185004	100.17	70	120	
Bi	209	2	2	4912131	0.95	4868813	100.89	70	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	009SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:10:48-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-9.437	-9.437	ppb	-3.25	71213	50000	
Mg	24	72	1	1	1.463	1.463	ppb	9.32	5647	50000	
Al	27	72	1	1	-0.079	-0.079	ppb	-193.17	2832	20000	
K	39	72	1	1	-6.152	-6.152	ppb	-2.16	51855	50000	
Ca	44	72	1	1	-17.730	-17.730	ppb	-10.12	1459	150000	
Ti	47	72	1	1	0.089	0.089	ppb	93.16	46	15000	
V	51	72	1	1	-0.023	-0.023	ppb	-18.70	1088	20000	
Cr	52	72	1	1	-0.823	-0.823	ppb	-1.04	7153	20000	
Mn	55	72	1	1	-1.162	-1.162	ppb	-1.55	2070	20000	
Fe	56	72	1	1	-7.156	-7.156	ppb	-1.01	103384	50000	
Co	59	72	1	1	-0.011	-0.011	ppb	-35.50	621	20000	
Ni	60	72	1	1	-0.753	-0.753	ppb	-2.35	2874	20000	
Cu	63	72	1	1	-0.522	-0.522	ppb	-5.47	29950	20000	
Zn	66	72	1	1	-2.127	-2.127	ppb	-4.11	1798	15000	
As	75	72	1	1	0.019	0.019	ppb	50.31	99	20000	
Se	78	72	1	1	-0.004	-0.004	ppb	-1931.98	32	20000	
Be	9	6	2	2	0.019	0.019	ppb	32.50	282	20000	
B	11	6	2	2	1.293	1.293	ppb	11.56	49680	15000	
Mo	95	103	2	2	0.123	0.123	ppb	11.38	2908	20000	
Ag	107	103	2	2	0.030	0.030	ppb	17.44	1545	1000	
Cd	111	72	2	2	0.011	0.011	ppb	38.33	115	15000	
Sn	118	103	2	2	-136.272	-136.272	ppb	-0.08	166389	15000	
Sb	121	159	2	2	0.010	0.010	ppb	15.39	633	20000	
Ba	137	103	2	2	-0.022	-0.022	ppb	-16.27	833	20000	
Tl	205	209	2	2	0.301	0.301	ppb	3.36	42389	20000	
Pb	208	209	2	2	-0.009	-0.009	ppb	-55.55	5761	20000	
Si	29	72	2	2	54.622	54.622	ppb	6.84	208726	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	141557	0.42	146432	96.67	70	120	
Li	6	2	2011234	0.65	2043742	98.41	70	120	
Ge	72	2	1049410	0.76	1086423	96.59	70	120	
Rh	103	2	6630539	0.27	6695900	99.02	70	120	
Tb	159	2	8083308	0.72	8185004	98.76	70	120	
Bi	209	2	4831912	0.38	4868813	99.24	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:15:05-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	230.104	ppb	1.641	464782	0.67	250	92.0	90	110	
Mg	24	1	1	239.887	ppb	1.440	225978	0.74	250	96.0	90	110	
Al	27	1	1	25.710	ppb	3.977	13014	2.64	25	102.8	90	110	
K	39	1	1	233.770	ppb	0.880	237905	0.12	250	93.5	90	110	
Ca	44	1	1	250.032	ppb	3.338	10672	2.19	250	100.0	90	110	
Ti	47	1	1	23.578	ppb	1.801	6979	1.36	25	94.3	90	110	
V	51	1	1	23.696	ppb	1.604	227533	1.06	25	94.8	90	110	
Cr	52	1	1	22.876	ppb	0.906	293094	0.55	25	91.5	90	110	
Mn	55	1	1	25.888	ppb	0.895	151858	0.21	25	103.6	90	110	
Fe	56	1	1	234.348	ppb	1.358	2568677	0.63	250	93.7	90	110	
Co	59	1	1	23.426	ppb	1.772	482737	1.11	25	93.7	90	110	
Ni	60	1	1	22.528	ppb	0.348	136349	0.76	25	90.1	90	110	
Cu	63	1	1	22.942	ppb	1.047	390554	0.46	25	91.8	90	110	
Zn	66	1	1	25.359	ppb	0.840	55073	0.06	25	101.4	90	110	
As	75	1	1	23.722	ppb	2.377	37120	1.89	25	94.9	90	110	
Se	78	1	1	23.534	ppb	4.981	2295	4.54	25	94.1	90	110	
Be	9	2	2	24.651	ppb	0.596	263122	0.78	25	98.6	90	110	
B	11	2	2	23.982	ppb	0.883	200853	0.95	25	95.9	90	110	
Mo	95	2	2	23.414	ppb	0.871	393006	0.65	25	93.7	90	110	
Ag	107	2	2	24.954	ppb	0.374	986166	0.35	25	99.8	90	110	
Cd	111	2	2	24.189	ppb	1.027	203572	1.55	25	96.8	90	110	
Sn	118	2	2	25.678	ppb	0.357	696668	0.28	25	102.7	90	110	
Sb	121	2	2	23.462	ppb	0.174	809009	0.11	25	93.8	90	110	
Ba	137	2	2	23.586	ppb	0.736	281228	0.84	25	94.3	90	110	
Tl	205	2	2	23.688	ppb	0.323	1620045	0.04	25	94.8	90	110	
Pb	208	2	2	22.827	ppb	0.660	1103273	0.62	25	91.3	90	110	
Si	29	2	2	534.178	ppb	2.962	554467	1.53	536	99.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	139660	0.68	146432	95.38	70	120	
Li	6	2	2	2029721	0.41	2043742	99.31	70	120	
Ge	72	2	2	1038297	0.52	1086423	95.57	70	120	
Rh	103	2	2	6597450	0.23	6695900	98.53	70	120	
Tb	159	2	2	8106235	0.13	8185004	99.04	70	120	
Bi	209	2	2	4836054	0.36	4868813	99.33	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:19:27-05:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	4.836	0.476	74743	0.74	5	96.7	70	130	
Mg	24	1	1	4.789	0.252	8685	0.71	5	95.8	70	130	
Al	27	1	1	0.467	1.663	1935	2.25	0.5	93.4	70	130	
K	39	1	1	5.048	29.602	57476	1.18	5	101.0	70	130	
Ca	44	1	1	5.319	45.607	2225	1.12	5	106.4	70	130	
Ti	47	1	1	0.453	34.143	153	30.20	0.5	90.7	70	130	
V	51	1	1	0.473	1.792	5840	2.21	0.5	94.6	70	130	
Cr	52	1	1	0.489	2.118	12327	1.40	0.5	97.9	70	130	
Mn	55	1	1	0.572	0.844	6252	1.53	0.5	114.3	70	130	
Fe	56	1	1	4.776	0.521	136917	0.33	5	95.5	70	130	
Co	59	1	1	0.520	2.273	11584	1.34	0.5	104.0	70	130	
Ni	60	1	1	0.530	5.916	6552	5.17	0.5	105.9	70	130	
Cu	63	1	1	0.515	4.888	35017	4.19	0.5	103.0	70	130	
Zn	66	1	1	0.522	1.474	3895	1.88	0.5	104.3	70	130	
As	75	1	1	0.537	7.042	910	6.51	0.5	107.3	70	130	
Se	78	1	1	0.541	33.318	84	19.87	0.5	108.2	70	130	
Be	9	2	2	0.561	7.634	6072	7.75	0.5	112.2	70	130	
B	11	2	2	0.553	10.244	47273	0.92	0.5	110.6	70	130	
Mo	95	2	2	0.543	4.988	9931	4.63	0.5	108.7	70	130	
Ag	107	2	2	0.627	1.801	22361	1.91	0.5	125.5	70	130	
Cd	111	2	2	0.513	5.852	4420	5.14	0.5	102.7	70	130	
Sn	118	2	2	0.484	3.733	142783	3.85	0.5	96.8	70	130	
Sb	121	2	2	0.541	1.706	18874	1.42	0.5	108.2	70	130	
Ba	137	2	2	0.550	1.713	7622	1.66	0.5	110.0	70	130	
Tl	205	2	2	0.555	1.938	59729	1.19	0.5	111.0	70	130	
Pb	208	2	2	0.533	6.473	31879	5.22	0.5	106.5	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	140287	0.82	146432	95.80	70	120	
Li	6	2	2	2031782	0.31	2043742	99.41	70	120	
Ge	72	2	2	1057452	0.70	1086423	97.33	70	120	
Rh	103	2	2	6595765	0.19	6695900	98.50	70	120	
Tb	159	2	2	8084860	0.27	8185004	98.78	70	120	
Bi	209	2	2	4848011	0.11	4868813	99.57	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:23:45-05:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-22.085	ppb	-1.3	49022	1.1	5	
Mg	24	1	1	-2.639	ppb	-7.5	1765	10.5	5	
Al	27	1	1	-3.728	ppb	-2.5	1490	2.5	0.5	
K	39	1	1	-8.909	ppb	-8.1	48613	1.4	5	
Ca	44	1	1	-27.764	ppb	-7.6	1035	7.7	5	
Ti	47	1	1	0.020	ppb	286.4	24	68.6	0.5	
V	51	1	1	-0.008	ppb	-59.6	1209	3.5	0.5	
Cr	52	1	1	-0.970	ppb	-0.6	5244	1.6	0.5	
Mn	55	1	1	-0.943	ppb	-1.1	3408	2.0	0.5	
Fe	56	1	1	-11.883	ppb	-0.7	53275	1.3	5	
Co	59	1	1	-0.007	ppb	-29.0	681	5.9	0.5	
Ni	60	1	1	-0.935	ppb	-2.2	1777	6.8	0.5	
Cu	63	1	1	-1.008	ppb	-1.7	21877	1.5	0.5	
Zn	66	1	1	-2.281	ppb	-2.1	1419	7.7	0.5	
As	75	1	1	0.019	ppb	75.3	97	22.6	0.5	
Se	78	1	1	0.074	ppb	146.2	39	26.2	0.5	
Be	9	2	2	0.028	ppb	12.0	374	9.5	0.5	
B	11	2	2	0.172	ppb	15.8	42065	0.9	0.5	
Mo	95	2	2	0.026	ppb	54.7	1260	18.9	0.5	
Ag	107	2	2	0.026	ppb	18.5	1385	12.3	0.5	
Cd	111	2	2	0.018	ppb	14.5	178	12.5	0.5	
Sn	118	2	2	-141.709	ppb	-0.1	117971	1.3	0.5	
Sb	121	2	2	0.022	ppb	15.3	1019	11.7	0.5	
Ba	137	2	2	-0.034	ppb	-20.0	682	12.0	0.5	
Tl	205	2	2	0.037	ppb	25.5	24511	2.3	0.125	
Pb	208	2	2	-0.008	ppb	-35.4	5773	2.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138512	0.32	146432	94.59	70	120	
Li	6	2	2	1999999	0.49	2043742	97.86	70	120	
Ge	72	2	2	1050858	0.25	1086423	96.73	70	120	
Rh	103	2	2	6558967	0.20	6695900	97.95	70	120	
Tb	159	2	2	8035311	0.76	8185004	98.17	70	120	
Bi	209	2	2	4808393	0.30	4868813	98.76	70	120	

Sample Report

Sample Table

Sample Name	TCLP150219
Data File Name	013SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:28:07-05:00
Sample Type	Sample
Dilution	200
Comment	083;;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-25.254	-5050.758	ppb	-2.78	44079	50000	
Mg	24	72	1	1	-2.167	-433.497	ppb	-4.54	2208	50000	
Al	27	72	1	1	-5.452	-1090.342	ppb	-3.72	890	20000	
K	39	72	1	1	-10.086	-2017.230	ppb	-10.82	47962	50000	
Ca	44	72	1	1	-29.970	-5994.063	ppb	-2.52	953	150000	
Ti	47	72	1	1	-0.011	-2.152	ppb	-156.16	16	15000	
V	51	72	1	1	-0.010	-1.957	ppb	-23.05	1200	20000	
Cr	52	72	1	1	-0.924	-184.850	ppb	-1.75	5821	20000	
Mn	55	72	1	1	-1.311	-262.249	ppb	-0.91	1090	20000	
Fe	56	72	1	1	-14.467	-2893.385	ppb	-0.27	27254	50000	
Co	59	72	1	1	-0.030	-6.071	ppb	-2.12	207	20000	
Ni	60	72	1	1	-1.023	-204.592	ppb	-2.55	1283	20000	
Cu	63	72	1	1	-0.924	-184.755	ppb	-1.01	23295	20000	
Zn	66	72	1	1	-2.474	-494.841	ppb	-0.78	1000	15000	
As	75	72	1	1	-0.012	-2.424	ppb	-34.96	49	20000	
Se	78	72	1	1	-0.008	-1.635	ppb	-2885.25	31	20000	
Be	9	6	2	2	0.003	0.651	ppb	222.47	111	20000	
B	11	6	2	2	0.020	4.047	ppb	1668.54	41285	15000	
Mo	95	103	2	2	-0.013	-2.680	ppb	-45.38	608	20000	
Ag	107	103	2	2	0.014	2.739	ppb	22.13	952	1000	
Cd	111	72	2	2	0.005	1.055	ppb	65.04	67	15000	
Sn	118	103	2	2	-140.966	-28193.111	ppb	-0.17	125033	15000	
Sb	121	159	2	2	0.000	-0.025	ppb	-144.87	274	20000	
Ba	137	103	2	2	-0.061	-12.265	ppb	-13.53	363	20000	
Tl	205	209	2	2	0.008	1.539	ppb	124.26	22792	20000	
Pb	208	209	2	2	-0.040	-8.025	ppb	-12.43	4298	20000	
Si	29	72	2	2	45.528	9105.564	ppb	6.42	203252	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139276	1.03	146432	95.11	70	120	
Li	6	2	2010550	0.34	2043742	98.38	70	120	
Ge	72	2	1051378	0.71	1086423	96.77	70	120	
Rh	103	2	6595471	0.30	6695900	98.50	70	120	
Tb	159	2	8091160	0.29	8185004	98.85	70	120	
Bi	209	2	4864031	0.24	4868813	99.90	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	BLKT150223-01
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:32:25-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-26.158	-5231.670	ppb	-1.72	42720	50000	
Mg	24	72	1	1	-2.420	-483.951	ppb	-3.67	1981	50000	
Al	27	72	1	1	-5.769	-1153.870	ppb	-3.35	780	20000	
K	39	72	1	1	-10.334	-2066.747	ppb	-4.47	47910	50000	
Ca	44	72	1	1	-30.890	-6178.007	ppb	-7.30	920	150000	
Ti	47	72	1	1	-0.045	-8.936	ppb	-14.50	6	15000	
V	51	72	1	1	-0.007	-1.379	ppb	-47.49	1231	20000	
Cr	52	72	1	1	-0.939	-187.815	ppb	-2.07	5660	20000	
Mn	55	72	1	1	-1.316	-263.227	ppb	-0.14	1062	20000	
Fe	56	72	1	1	-14.640	-2928.012	ppb	-0.27	25560	50000	
Co	59	72	1	1	-0.031	-6.206	ppb	-4.37	193	20000	
Ni	60	72	1	1	-1.002	-200.407	ppb	-0.61	1407	20000	
Cu	63	72	1	1	-0.979	-195.887	ppb	-2.10	22504	20000	
Zn	66	72	1	1	-2.503	-500.527	ppb	-0.70	940	15000	
As	75	72	1	1	0.003	0.686	ppb	265.06	73	20000	
Se	78	72	1	1	-0.103	-20.594	ppb	-70.55	22	20000	
Be	9	6	2	2	0.000	0.037	ppb	3482.88	78	20000	
B	11	6	2	2	0.176	35.229	ppb	87.53	42050	15000	
Mo	95	103	2	2	-0.022	-4.347	ppb	-15.52	467	20000	
Ag	107	103	2	2	0.020	4.011	ppb	24.07	1171	1000	
Cd	111	72	2	2	0.005	1.067	ppb	126.83	67	15000	
Sn	118	103	2	2	-142.426	-28485.254	ppb	-0.24	112067	15000	
Sb	121	159	2	2	-0.002	-0.417	ppb	-111.23	204	20000	
Ba	137	103	2	2	-0.063	-12.624	ppb	-15.77	341	20000	
Tl	205	209	2	2	-0.010	-1.902	ppb	-108.19	21464	20000	
Pb	208	209	2	2	-0.044	-8.774	ppb	-17.79	4086	20000	
Si	29	72	2	2	49.216	9843.273	ppb	7.42	203611	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139668	0.41	146432	95.38	70	120	
Li	6	2	1998112	0.71	2043742	97.77	70	120	
Ge	72	2	1041058	0.68	1086423	95.82	70	120	
Rh	103	2	6573894	0.51	6695900	98.18	70	120	
Tb	159	2	7990756	0.44	8185004	97.63	70	120	
Bi	209	2	4828291	0.19	4868813	99.17	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCST150223-01
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:36:48-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	75.817	15163.311	ppb	2.52	210242	50000	
Mg	24	72	1	1	95.785	19156.908	ppb	1.54	92576	50000	
Al	27	72	1	1	97.546	19509.196	ppb	4.46	37252	20000	
K	39	72	1	1	85.574	17114.815	ppb	1.97	122306	50000	
Ca	44	72	1	1	65.305	13060.955	ppb	11.11	4708	150000	
Ti	47	72	1	1	19.108	3821.550	ppb	5.15	5646	15000	
V	51	72	1	1	18.999	3799.892	ppb	1.28	182328	20000	
Cr	52	72	1	1	19.004	3800.829	ppb	1.20	245857	20000	
Mn	55	72	1	1	17.797	3559.454	ppb	0.98	122574	20000	
Fe	56	72	1	1	82.593	16518.649	ppb	1.65	1016616	50000	
Co	59	72	1	1	19.108	3821.699	ppb	1.21	393136	20000	
Ni	60	72	1	1	18.910	3782.084	ppb	1.82	115360	20000	
Cu	63	72	1	1	19.188	3837.572	ppb	1.74	332105	20000	
Zn	66	72	1	1	17.216	3443.219	ppb	1.22	44576	15000	
As	75	72	1	1	19.690	3938.031	ppb	1.33	30761	20000	
Se	78	72	1	1	20.053	4010.608	ppb	6.54	1956	20000	
Be	9	6	2	2	20.716	4143.199	ppb	0.41	221613	20000	
B	11	6	2	2	0.054	10.766	ppb	227.87	41998	15000	
Mo	95	103	2	2	19.364	3872.884	ppb	0.34	325174	20000	
Ag	107	103	2	2	23.174	4634.858	ppb	0.44	809093	1000	
Cd	111	72	2	2	20.321	4064.164	ppb	0.84	172662	15000	
Sn	118	103	2	2	-146.155	-29230.995	ppb	-0.11	80312	15000	
Sb	121	159	2	2	19.600	3919.966	ppb	0.73	678008	20000	
Ba	137	103	2	2	19.704	3940.801	ppb	1.32	235114	20000	
Tl	205	209	2	2	20.350	4069.928	ppb	1.63	1400211	20000	
Pb	208	209	2	2	19.828	3965.581	ppb	0.26	962762	20000	
Si	29	72	2	2	45.546	9109.142	ppb	11.32	202685	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	139383	1.21	146432	95.19	70	120	
Li	6	2	2034129	0.30	2043742	99.53	70	120	
Ge	72	2	1048343	0.68	1086423	96.49	70	120	
Rh	103	2	6597398	0.95	6695900	98.53	70	120	
Tb	159	2	8132072	0.72	8185004	99.35	70	120	
Bi	209	2	4854241	0.64	4868813	99.70	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:41:06-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6343.994	1268798.800	ppb	1.37	10342303	50000	
Mg	24	72	1	1	34.116	6823.234	ppb	2.01	35104	50000	
Al	27	72	1	1	2.173	434.659	ppb	10.39	3525	20000	
K	39	72	1	1	1.326	265.166	ppb	69.72	55940	50000	
Ca	44	72	1	1	1455.484	291096.890	ppb	1.06	58531	150000	
Ti	47	72	1	1	-0.029	-5.803	ppb	-68.49	10	15000	
V	51	72	1	1	-0.006	-1.161	ppb	-129.59	1219	20000	
Cr	52	72	1	1	-0.951	-190.150	ppb	-1.62	5418	20000	
Mn	55	72	1	1	23.389	4677.848	ppb	0.50	155547	20000	
Fe	56	72	1	1	-11.015	-2203.078	ppb	-8.34	61425	50000	
Co	59	72	1	1	0.114	22.874	ppb	4.85	3127	20000	
Ni	60	72	1	1	-0.812	-162.380	ppb	-1.36	2451	20000	
Cu	63	72	1	1	-0.097	-19.437	ppb	-8.73	35418	20000	
Zn	66	72	1	1	6.617	1323.366	ppb	2.23	20776	15000	
As	75	72	1	1	0.025	4.923	ppb	97.22	104	20000	
Se	78	72	1	1	-0.087	-17.328	ppb	-227.79	23	20000	
Be	9	6	2	2	0.006	1.143	ppb	58.12	137	20000	
B	11	6	2	2	0.315	62.966	ppb	80.58	43231	15000	
Mo	95	103	2	2	-0.004	-0.813	ppb	-217.23	752	20000	
Ag	107	103	2	2	0.025	5.066	ppb	10.62	1337	1000	
Cd	111	72	2	2	0.046	9.137	ppb	35.41	404	15000	
Sn	118	103	2	2	-146.308	-29261.592	ppb	-0.07	77755	15000	
Sb	121	159	2	2	0.050	9.935	ppb	8.67	1982	20000	
Ba	137	103	2	2	3.894	778.839	ppb	2.31	46603	20000	
Tl	205	209	2	2	-0.012	-2.324	ppb	-108.27	21420	20000	
Pb	208	209	2	2	1.517	303.311	ppb	0.51	79327	20000	
Si	29	72	2	2	105.537	21107.484	ppb	11.88	237884	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	137107	0.27	146432	93.63	70	120	
Li	6	2	2010465	0.45	2043742	98.37	70	120	
Ge	72	2	1033581	0.38	1086423	95.14	70	120	
Rh	103	2	6494453	0.66	6695900	96.99	70	120	
Tb	159	2	8069797	0.23	8185004	98.59	70	120	
Bi	209	2	4850569	0.73	4868813	99.63	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001DUP
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:45:29-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6143.306	1228661.189	ppb	0.16	10022103	50000	
Mg	24	72	1	1	32.594	6518.772	ppb	1.27	33739	50000	
Al	27	72	1	1	1.573	314.509	ppb	31.91	3318	20000	
K	39	72	1	1	1.436	287.190	ppb	18.70	56046	50000	
Ca	44	72	1	1	1419.939	283987.784	ppb	1.03	57179	150000	
Ti	47	72	1	1	-0.056	-11.172	ppb	-11.83	2	15000	
V	51	72	1	1	0.007	1.483	ppb	30.83	1343	20000	
Cr	52	72	1	1	-0.946	-189.206	ppb	-1.54	5477	20000	
Mn	55	72	1	1	22.660	4531.987	ppb	0.69	151044	20000	
Fe	56	72	1	1	-11.694	-2338.871	ppb	-0.64	54649	50000	
Co	59	72	1	1	0.100	19.916	ppb	6.44	2829	20000	
Ni	60	72	1	1	-0.842	-168.461	ppb	-4.18	2280	20000	
Cu	63	72	1	1	-0.147	-29.305	ppb	-12.18	34686	20000	
Zn	66	72	1	1	6.415	1282.913	ppb	1.34	20345	15000	
As	75	72	1	1	0.022	4.329	ppb	90.39	100	20000	
Se	78	72	1	1	-0.029	-5.721	ppb	-248.72	29	20000	
Be	9	6	2	2	0.004	0.856	ppb	151.05	122	20000	
B	11	6	2	2	0.283	56.613	ppb	42.65	43049	15000	
Mo	95	103	2	2	-0.010	-2.028	ppb	-55.83	652	20000	
Ag	107	103	2	2	0.021	4.249	ppb	10.36	1197	1000	
Cd	111	72	2	2	0.053	10.593	ppb	8.12	467	15000	
Sn	118	103	2	2	-145.311	-29062.135	ppb	-0.05	86212	15000	
Sb	121	159	2	2	0.046	9.299	ppb	10.17	1860	20000	
Ba	137	103	2	2	3.793	758.644	ppb	1.03	45417	20000	
Tl	205	209	2	2	-0.036	-7.263	ppb	-6.10	19717	20000	
Pb	208	209	2	2	1.451	290.277	ppb	2.73	76054	20000	
Si	29	72	2	2	98.657	19731.331	ppb	3.74	234374	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	137162	0.82	146432	93.67	70	120	
Li	6	2	2012038	0.73	2043742	98.45	70	120	
Ge	72	2	1037325	0.53	1086423	95.48	70	120	
Rh	103	2	6493466	0.57	6695900	96.98	70	120	
Tb	159	2	8012365	0.05	8185004	97.89	70	120	
Bi	209	2	4842405	0.30	4868813	99.46	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001SD
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T17:49:47-05:00
Sample Type	Sample
Dilution	1000
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1189.415	1189414.679	ppb	1.56	2033199	50000	
Mg	24	72	1	1	4.641	4640.878	ppb	14.09	8463	50000	
Al	27	72	1	1	-4.246	-4245.525	ppb	-8.66	1312	20000	
K	39	72	1	1	-7.750	-7749.642	ppb	-8.76	49630	50000	
Ca	44	72	1	1	260.171	260171.026	ppb	0.57	12343	150000	
Ti	47	72	1	1	0.012	11.916	ppb	517.71	22	15000	
V	51	72	1	1	0.036	36.326	ppb	138.91	1637	20000	
Cr	52	72	1	1	-0.916	-915.659	ppb	-5.09	5910	20000	
Mn	55	72	1	1	3.402	3401.688	ppb	2.31	30939	20000	
Fe	56	72	1	1	-14.049	-14049.057	ppb	-2.96	31435	50000	
Co	59	72	1	1	0.027	26.803	ppb	184.27	1380	20000	
Ni	60	72	1	1	-0.947	-947.238	ppb	-9.28	1714	20000	
Cu	63	72	1	1	-0.787	-787.060	ppb	-6.44	25320	20000	
Zn	66	72	1	1	-0.689	-689.325	ppb	-23.97	4934	15000	
As	75	72	1	1	0.038	37.800	ppb	136.45	127	20000	
Se	78	72	1	1	0.014	13.799	ppb	1135.95	33	20000	
Be	9	6	2	2	0.002	2.232	ppb	216.29	100	20000	
B	11	6	2	2	-0.064	-64.091	ppb	-157.33	40690	15000	
Mo	95	103	2	2	-0.018	-17.946	ppb	-13.19	522	20000	
Ag	107	103	2	2	0.016	16.232	ppb	5.46	1022	1000	
Cd	111	72	2	2	0.019	18.622	ppb	18.64	178	15000	
Sn	118	103	2	2	-144.928	-144928.399	ppb	-0.08	89281	15000	
Sb	121	159	2	2	0.006	6.205	ppb	24.70	485	20000	
Ba	137	103	2	2	0.763	762.798	ppb	8.68	9034	20000	
Tl	205	209	2	2	-0.019	-18.680	ppb	-42.41	20744	20000	
Pb	208	209	2	2	0.299	299.409	ppb	7.27	18497	20000	
Si	29	72	2	2	49.704	49704.221	ppb	5.99	203045	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	138851	0.81	146432	94.82	70	120	
Li	6	2	2008304	0.26	2043742	98.27	70	120	
Ge	72	2	1036595	0.62	1086423	95.41	70	120	
Rh	103	2	6480596	0.31	6695900	96.78	70	120	
Tb	159	2	7985633	0.46	8185004	97.56	70	120	
Bi	209	2	4804368	0.61	4868813	98.68	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001MS
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:54:09-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6349.082	1269816.408	ppb	2.11	10215760	50000	
Mg	24	72	1	1	128.671	25734.278	ppb	1.29	119354	50000	
Al	27	72	1	1	103.136	20627.133	ppb	1.61	38096	20000	
K	39	72	1	1	96.846	19369.199	ppb	1.78	127262	50000	
Ca	44	72	1	1	1519.022	303804.347	ppb	1.45	60204	150000	
Ti	47	72	1	1	19.142	3828.468	ppb	2.05	5493	15000	
V	51	72	1	1	19.004	3800.860	ppb	1.55	177084	20000	
Cr	52	72	1	1	18.846	3769.130	ppb	0.59	236884	20000	
Mn	55	72	1	1	41.740	8348.053	ppb	2.02	266793	20000	
Fe	56	72	1	1	84.013	16802.652	ppb	1.95	1001164	50000	
Co	59	72	1	1	18.964	3792.787	ppb	1.14	378857	20000	
Ni	60	72	1	1	18.907	3781.402	ppb	0.89	112003	20000	
Cu	63	72	1	1	20.003	4000.523	ppb	1.68	334625	20000	
Zn	66	72	1	1	25.943	5188.607	ppb	3.29	62028	15000	
As	75	72	1	1	19.395	3879.098	ppb	2.73	29424	20000	
Se	78	72	1	1	21.193	4238.509	ppb	8.45	2005	20000	
Be	9	6	2	2	20.673	4134.699	ppb	1.35	215529	20000	
B	11	6	2	2	0.136	27.181	ppb	129.02	41459	15000	
Mo	95	103	2	2	18.995	3799.022	ppb	0.90	309857	20000	
Ag	107	103	2	2	22.560	4511.954	ppb	0.97	765077	1000	
Cd	111	72	2	2	20.234	4046.836	ppb	2.27	167230	15000	
Sn	118	103	2	2	-145.538	-29107.501	ppb	-0.17	83183	15000	
Sb	121	159	2	2	19.228	3845.652	ppb	1.40	649123	20000	
Ba	137	103	2	2	23.007	4601.456	ppb	0.56	266497	20000	
Tl	205	209	2	2	19.292	3858.418	ppb	0.52	1306565	20000	
Pb	208	209	2	2	20.655	4131.022	ppb	0.54	986131	20000	
Si	29	72	2	2	98.353	19670.546	ppb	2.85	230220	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135340	1.11	146432	92.43	70	120	
Li	6	2	1982419	0.45	2043742	97.00	70	120	
Ge	72	2	1019748	0.49	1086423	93.86	70	120	
Rh	103	2	6408419	0.52	6695900	95.71	70	120	
Tb	159	2	7936107	0.47	8185004	96.96	70	120	
Bi	209	2	4774058	0.98	4868813	98.05	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E15-01273-001PS
Data File Name	020SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T17:58:27-05:00
Sample Type	Sample
Dilution	200
Comment	083;T150223-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6379.903	1275980.634	ppb	1.60	10310169	50000	
Mg	24	72	1	1	131.082	26216.492	ppb	1.59	122042	50000	
Al	27	72	1	1	104.390	20878.070	ppb	0.93	38695	20000	
K	39	72	1	1	99.746	19949.108	ppb	1.38	130012	50000	
Ca	44	72	1	1	1533.007	306601.369	ppb	1.56	61003	150000	
Ti	47	72	1	1	18.840	3767.984	ppb	2.69	5431	15000	
V	51	72	1	1	19.223	3844.621	ppb	0.83	179893	20000	
Cr	52	72	1	1	19.143	3828.620	ppb	1.39	241398	20000	
Mn	55	72	1	1	42.277	8455.417	ppb	1.47	271295	20000	
Fe	56	72	1	1	84.990	16997.927	ppb	1.49	1015261	50000	
Co	59	72	1	1	19.252	3850.321	ppb	1.28	386262	20000	
Ni	60	72	1	1	19.243	3848.580	ppb	2.69	114359	20000	
Cu	63	72	1	1	20.241	4048.269	ppb	1.05	339667	20000	
Zn	66	72	1	1	26.616	5323.238	ppb	0.81	63759	15000	
As	75	72	1	1	19.586	3917.167	ppb	1.76	29840	20000	
Se	78	72	1	1	19.459	3891.711	ppb	4.64	1852	20000	
Be	9	6	2	2	20.561	4112.116	ppb	3.34	218157	20000	
B	11	6	2	2	0.333	66.575	ppb	44.27	43517	15000	
Mo	95	103	2	2	19.188	3837.613	ppb	3.42	317640	20000	
Ag	107	103	2	2	22.769	4553.780	ppb	2.81	783673	1000	
Cd	111	72	2	2	20.484	4096.714	ppb	4.50	171576	15000	
Sn	118	103	2	2	-146.816	-29363.297	ppb	-0.23	73593	15000	
Sb	121	159	2	2	19.420	3884.003	ppb	3.06	670211	20000	
Ba	137	103	2	2	23.190	4638.013	ppb	4.10	272566	20000	
Tl	205	209	2	2	19.389	3877.811	ppb	3.13	1336351	20000	
Pb	208	209	2	2	20.887	4177.416	ppb	3.38	1014805	20000	
Si	29	72	2	2	108.736	21747.102	ppb	6.89	239962	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135923	0.51	146432	92.82	70	120	
Li	6	2	2018064	1.26	2043742	98.74	70	120	
Ge	72	2	1033902	1.50	1086423	95.17	70	120	
Rh	103	2	6505775	1.61	6695900	97.16	70	120	
Tb	159	2	8115304	1.57	8185004	99.15	70	120	
Bi	209	2	4860538	1.66	4868813	99.83	70	120	

TuneStep	TuneModeName
1	1
2	2

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Sample Report

Sample Table

Sample Name	RINSE
Data File Name	021SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:02:50-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-8.732	-8.732	ppb	-3.46	69208	50000	
Mg	24	72	1	1	1.395	1.395	ppb	12.85	5338	50000	
Al	27	72	1	1	-0.491	-0.491	ppb	-20.95	2566	20000	
K	39	72	1	1	-4.069	-4.069	ppb	-23.55	51145	50000	
Ca	44	72	1	1	-21.488	-21.488	ppb	-6.40	1251	150000	
Ti	47	72	1	1	0.084	0.084	ppb	15.26	42	15000	
V	51	72	1	1	0.011	0.011	ppb	157.38	1355	20000	
Cr	52	72	1	1	-0.894	-0.894	ppb	-2.00	6013	20000	
Mn	55	72	1	1	-1.214	-1.214	ppb	-1.86	1662	20000	
Fe	56	72	1	1	-7.911	-7.911	ppb	-1.72	91368	50000	
Co	59	72	1	1	-0.012	-0.012	ppb	-18.71	571	20000	
Ni	60	72	1	1	-0.797	-0.797	ppb	-1.44	2501	20000	
Cu	63	72	1	1	-0.853	-0.853	ppb	-1.22	23689	20000	
Zn	66	72	1	1	-2.163	-2.163	ppb	-3.09	1641	15000	
As	75	72	1	1	-0.014	-0.014	ppb	-79.68	44	20000	
Se	78	72	1	1	-0.024	-0.024	ppb	-305.64	29	20000	
Be	9	6	2	2	0.155	0.155	ppb	146.61	1749	20000	
B	11	6	2	2	0.454	0.454	ppb	49.55	44623	15000	
Mo	95	103	2	2	0.229	0.229	ppb	93.37	4703	20000	
Ag	107	103	2	2	0.192	0.192	ppb	131.39	7261	1000	
Cd	111	72	2	2	0.160	0.160	ppb	145.12	1393	15000	
Sn	118	103	2	2	-146.568	-146.568	ppb	-0.18	76701	15000	
Sb	121	159	2	2	0.139	0.139	ppb	154.91	5139	20000	
Ba	137	103	2	2	0.118	0.118	ppb	183.29	2523	20000	
Tl	205	209	2	2	0.122	0.122	ppb	176.11	30854	20000	
Pb	208	209	2	2	0.119	0.119	ppb	189.68	12169	20000	
Si	29	72	2	2	38.097	38.097	ppb	8.42	197225	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	135334	0.51	146432	92.42	70	120	
Li	6	2	2032767	0.74	2043742	99.46	70	120	
Ge	72	2	1044946	0.99	1086423	96.18	70	120	
Rh	103	2	6591113	1.77	6695900	98.44	70	120	
Tb	159	2	8102658	1.38	8185004	98.99	70	120	
Bi	209	2	4899404	1.42	4868813	100.63	70	120	

TuneStep	TuneModeName
1	1
2	2

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	022ICSA.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:07:07-05:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	103742.056	ppb	34631880.6	1.1	5000000	
Ti	47	1	1	2030.972	ppb	565597.8	0.1	50000	
V	51	1	1	-0.006	ppb	1172.3	9.8	5	
Cr	52	1	1	0.217	ppb	18507.3	1.6	5	
Mn	55	1	1	1.056	ppb	15258.1	1.6	5	
Co	59	1	1	1.739	ppb	34541.7	1.4	5	
Ni	60	1	1	0.778	ppb	10955.4	2.3	5	
Cu	63	1	1	0.520	ppb	42992.5	0.3	5	
Zn	66	1	1	-0.597	ppb	4873.2	0.6	5	
As	75	1	1	0.236	ppb	412.3	6.5	5	
Se	78	1	1	0.045	ppb	34.4	29.6	5	
Be	9	2	2	0.108	ppb	1126.4	154.4	5	
B	11	2	2	0.382	ppb	39561.9	3.5	5	
Mo	95	2	2	2282.166	ppb	33140841.3	2.5	50000	
Ag	107	2	2	0.186	ppb	6122.9	98.5	5	
Cd	111	2	2	2.376	ppb	21166.6	8.6	5	
Sn	118	2	2	-146.129	ppb	69884.9	3.8	5	
Sb	121	2	2	0.809	ppb	27263.3	15.9	5	
Ba	137	2	2	0.706	ppb	8244.6	25.7	5	
Tl	205	2	2	0.059	ppb	23656.5	44.5	1.25	
Pb	208	2	2	0.282	ppb	17873.7	42.4	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	131752	0.55	146432	89.97	70	120	
Li	6	2	2	1821268	1.81	2043742	89.11	70	120	
Ge	72	2	2	1097259	1.60	1086423	101.00	70	120	
Rh	103	2	2	5723408	2.15	6695900	85.48	70	120	
Tb	159	2	2	7839380	1.50	8185004	95.78	70	120	
Bi	209	2	2	4357910	1.38	4868813	89.51	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:11:37-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	234.028	ppb	0.343	452912	0.39	250	93.6	90	110	
Mg	24	1	1	234.448	ppb	0.231	212355	0.18	250	93.8	90	110	
Al	27	1	1	25.130	ppb	4.290	12286	3.12	25	100.5	90	110	
K	39	1	1	229.285	ppb	1.120	225285	0.61	250	91.7	90	110	
Ca	44	1	1	236.549	ppb	1.750	9815	1.14	250	94.6	90	110	
Ti	47	1	1	22.801	ppb	3.288	6486	3.04	25	91.2	90	110	
V	51	1	1	23.507	ppb	0.149	216949	0.20	25	94.0	90	110	
Cr	52	1	1	26.013	ppb	0.579	276899	0.42	25	104.1	90	110	
Mn	55	1	1	25.343	ppb	0.925	143063	0.76	25	101.4	90	110	
Fe	56	1	1	231.562	ppb	0.854	2441370	0.73	250	92.6	90	110	
Co	59	1	1	23.291	ppb	0.799	461304	0.58	25	93.2	90	110	
Ni	60	1	1	25.954	ppb	1.195	130388	0.96	25	103.8	90	110	
Cu	63	1	1	23.869	ppb	0.655	389051	0.37	25	95.5	90	110	
Zn	66	1	1	24.913	ppb	0.839	52107	0.89	25	99.7	90	110	
As	75	1	1	23.220	ppb	0.494	34923	0.72	25	92.9	90	110	
Se	78	1	1	24.705	ppb	6.058	2001	5.76	25	98.8	90	110	
Be	9	2	2	24.854	ppb	0.611	253170	0.84	25	99.4	90	110	
B	11	2	2	24.105	ppb	0.880	192460	0.25	25	96.4	90	110	
Mo	95	2	2	23.728	ppb	0.308	395269	0.33	25	94.9	90	110	
Ag	107	2	2	25.124	ppb	0.342	985410	0.16	25	100.5	90	110	
Cd	111	2	2	24.419	ppb	0.970	203988	0.74	25	97.7	90	110	
Sn	118	2	2	23.915	ppb	0.731	643969	0.89	25	95.7	90	110	
Sb	121	2	2	23.224	ppb	0.473	813391	0.64	25	92.9	90	110	
Ba	137	2	2	24.176	ppb	0.934	286065	1.08	25	96.7	90	110	
Tl	205	2	2	23.751	ppb	0.268	1651890	0.35	25	95.0	90	110	
Pb	208	2	2	22.939	ppb	0.534	1127486	0.33	25	91.8	90	110	
Si	29	2	2	500.366	ppb	0.864	526411	1.15	536	93.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	134218	0.24	146432	91.66	70	120	
Li	6	2	2	1937068	0.94	2043742	94.78	70	120	
Ge	72	2	2	1030732	1.01	1086423	94.87	70	120	
Rh	103	2	2	6547654	0.25	6695900	97.79	70	120	
Tb	159	2	2	8233855	0.37	8185004	100.60	70	120	
Bi	209	2	2	4918121	0.36	4868813	101.01	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:15:54-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-16.435	ppb	-2.23	56632	0.3	5	
Mg	24	1	1	-1.716	ppb	-5.51	2538	3.7	5	
Al	27	1	1	-2.880	ppb	-4.06	1738	2.4	0.5	
K	39	1	1	-6.442	ppb	-13.16	49111	0.4	5	
Ca	44	1	1	-28.965	ppb	-3.29	960	3.1	5	
Ti	47	1	1	0.081	ppb	82.43	41	46.1	0.5	
V	51	1	1	-0.043	ppb	-21.43	857	9.4	0.5	
Cr	52	1	1	-1.015	ppb	-0.30	4573	1.6	0.5	
Mn	55	1	1	-0.952	ppb	-1.47	3261	1.8	0.5	
Fe	56	1	1	-10.998	ppb	-0.65	60511	0.3	5	
Co	59	1	1	-0.010	ppb	-21.99	603	7.1	0.5	
Ni	60	1	1	-0.893	ppb	-1.27	1961	2.4	0.5	
Cu	63	1	1	-0.032	ppb	-157.23	35760	2.6	0.5	
Zn	66	1	1	-2.390	ppb	-1.99	1147	8.7	0.5	
As	75	1	1	0.006	ppb	283.86	74	33.9	0.5	
Se	78	1	1	-0.142	ppb	-30.22	18	21.7	0.5	
Be	9	2	2	0.019	ppb	14.78	263	9.8	0.5	
B	11	2	2	0.122	ppb	73.15	40264	2.0	0.5	
Mo	95	2	2	0.144	ppb	8.73	3253	7.0	0.5	
Ag	107	2	2	0.028	ppb	6.09	1460	3.8	0.5	
Cd	111	2	2	0.018	ppb	8.87	174	7.4	0.5	
Sn	118	2	2	-147.225	ppb	-0.11	71097	1.4	0.5	
Sb	121	2	2	0.022	ppb	18.29	1034	14.0	0.5	
Ba	137	2	2	-0.033	ppb	-30.93	700	16.8	0.5	
Tl	205	2	2	-0.004	ppb	-3.21	22422	0.8	0.125	
Pb	208	2	2	-0.015	ppb	-24.19	5598	4.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	134669	0.87	146432	91.97	70	120	
Li	6	2	2	1929321	1.25	2043742	94.40	70	120	
Ge	72	2	2	1041501	0.99	1086423	95.87	70	120	
Rh	103	2	2	6599649	0.54	6695900	98.56	70	120	
Tb	159	2	2	8184945	0.69	8185004	100.00	70	120	
Bi	209	2	2	4956591	0.76	4868813	101.80	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	025ICSB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:20:16-05:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	100813.910	1.761	34039723	0.93	100000	100.8	-1000	1000	
Ti	47	1	1	1973.607	1.451	555918	0.65	5000	39.5	-1000	1000	
V	51	1	1	-0.017	-29.941	1087	4.13	0.5	-3.3	-1000	1000	
Cr	52	1	1	19.697	1.836	243053	1.09	20	98.5	80	120	
Mn	55	1	1	20.625	1.173	134386	0.67	20	103.1	80	120	
Co	59	1	1	20.706	1.365	407266	0.53	20	103.5	80	120	
Ni	60	1	1	19.243	1.806	112122	0.85	20	96.2	80	120	
Cu	63	1	1	19.271	1.395	318783	0.85	20	96.4	80	120	
Zn	66	1	1	18.907	2.280	46198	1.30	20	94.5	80	120	
As	75	1	1	20.400	1.494	30470	0.87	20	102.0	80	120	
Se	78	1	1	0.066	169.509	37	27.27	0.5	13.2	-1000	1000	
Be	9	2	2	0.004	129.447	104	43.30	0.5	0.8	-1000	1000	
B	11	2	2	0.522	39.650	39870	2.29	2	26.1	-1000	1000	
Mo	95	2	2	2307.667	0.349	34209456	0.58	5000	46.2	-1000	1000	
Ag	107	2	2	25.489	0.310	787553	0.19	20	127.4	80	120	> +-20%
Cd	111	2	2	20.533	1.163	186492	1.75	20	102.7	80	120	
Sn	118	2	2	-146.170	-0.426	70963	6.66	0.5	-29234.0	-1000	1000	> +-20%
Sb	121	2	2	0.738	2.834	25504	2.49	0.5	147.7	-1000	1000	
Ba	137	2	2	0.578	4.593	7044	3.74	0.5	115.6	-1000	1000	
Tl	205	2	2	-0.064	-6.503	16264	1.44	0.125	-50.9	-1000	1000	
Pb	208	2	2	0.163	4.077	12778	2.09	0.125	130.3	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	133269	0.84	146432	91.01	70	120	
Li	6	2	2	1797955	0.87	2043742	87.97	70	120	
Ge	72	2	2	1120560	0.77	1086423	103.14	70	120	
Rh	103	2	2	5838879	0.26	6695900	87.20	70	120	
Tb	159	2	2	8035904	0.34	8185004	98.18	70	120	
Bi	209	2	2	4405708	0.26	4868813	90.49	70	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	026SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2015-02-23T18:24:41-05:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	5.262	5.262	ppb	22.67	93461	50000	
Mg	24	72	1	1	1.922	1.922	ppb	6.91	5931	50000	
Al	27	72	1	1	-0.505	-0.505	ppb	-29.60	2615	20000	
K	39	72	1	1	2.699	2.699	ppb	5.76	57430	50000	
Ca	44	72	1	1	-21.301	-21.301	ppb	-11.96	1285	150000	
Ti	47	72	1	1	0.142	0.142	ppb	44.55	60	15000	
V	51	72	1	1	-0.031	-0.031	ppb	-5.89	995	20000	
Cr	52	72	1	1	-0.902	-0.902	ppb	-4.96	6040	20000	
Mn	55	72	1	1	-1.197	-1.197	ppb	-2.52	1803	20000	
Fe	56	72	1	1	-6.344	-6.344	ppb	-6.16	109127	50000	
Co	59	72	1	1	-0.013	-0.013	ppb	-31.97	566	20000	
Ni	60	72	1	1	-0.711	-0.711	ppb	-1.83	3040	20000	
Cu	63	72	1	1	1.776	1.776	ppb	6.56	64208	20000	
Zn	66	72	1	1	-2.216	-2.216	ppb	-0.64	1558	15000	
As	75	72	1	1	0.003	0.003	ppb	364.82	72	20000	
Se	78	72	1	1	-0.007	-0.007	ppb	-1692.86	31	20000	
Be	9	6	2	2	0.007	0.007	ppb	32.54	144	20000	
B	11	6	2	2	0.674	0.674	ppb	14.46	43774	15000	
Mo	95	103	2	2	0.536	0.536	ppb	5.11	9909	20000	
Ag	107	103	2	2	0.036	0.036	ppb	7.28	1763	1000	
Cd	111	72	2	2	0.018	0.018	ppb	48.95	174	15000	
Sn	118	103	2	2	-146.600	-146.600	ppb	-0.13	77214	15000	
Sb	121	159	2	2	0.003	0.003	ppb	116.80	396	20000	
Ba	137	103	2	2	-0.040	-0.040	ppb	-28.78	626	20000	
Tl	205	209	2	2	-0.050	-0.050	ppb	-10.85	19561	20000	
Pb	208	209	2	2	-0.019	-0.019	ppb	-42.11	5524	20000	
Si	29	72	2	2	30.589	30.589	ppb	7.33	194800	100000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	138169	0.15	146432	94.36	70	120	
Li	6	2	1930436	0.63	2043742	94.46	70	120	
Ge	72	2	1057852	0.62	1086423	97.37	70	120	
Rh	103	2	6661739	0.72	6695900	99.49	70	120	
Tb	159	2	8355714	0.41	8185004	102.09	70	120	
Bi	209	2	5035342	0.60	4868813	103.42	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	Final CCV
Data File Name	027_CCV.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:29:03-05:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	230.658	ppb	0.822	460069	1.09	250	92.3	90	110	
Mg	24	1	1	233.220	ppb	0.710	217159	0.96	250	93.3	90	110	
Al	27	1	1	25.563	ppb	2.902	12799	2.28	25	102.3	90	110	
K	39	1	1	258.971	ppb	0.779	227210	0.54	250	103.6	90	110	
Ca	44	1	1	230.781	ppb	2.813	9895	2.64	250	92.3	90	110	
Ti	47	1	1	22.612	ppb	2.403	6613	2.83	25	90.4	90	110	
V	51	1	1	23.216	ppb	0.200	220254	0.30	25	92.9	90	110	
Cr	52	1	1	25.708	ppb	0.562	281477	0.25	25	102.8	90	110	
Mn	55	1	1	24.996	ppb	0.489	145168	0.35	25	100.0	90	110	
Fe	56	1	1	228.811	ppb	0.300	2481710	0.48	250	91.5	90	110	
Co	59	1	1	23.047	ppb	0.332	469209	0.14	25	92.2	90	110	
Ni	60	1	1	25.801	ppb	0.456	133277	0.78	25	103.2	90	110	
Cu	63	1	1	24.360	ppb	0.635	407363	0.24	25	97.4	90	110	
Zn	66	1	1	24.944	ppb	1.217	53620	1.38	25	99.8	90	110	
As	75	1	1	23.234	ppb	1.620	35920	1.89	25	92.9	90	110	
Se	78	1	1	25.690	ppb	1.090	2138	0.63	25	102.8	90	110	
Be	9	2	2	24.683	ppb	1.188	250586	1.69	25	98.7	90	110	
B	11	2	2	24.575	ppb	1.438	194783	1.39	25	98.3	90	110	
Mo	95	2	2	23.547	ppb	1.078	398922	1.12	25	94.2	90	110	
Ag	107	2	2	25.118	ppb	0.768	1001894	0.81	25	100.5	90	110	
Cd	111	2	2	24.298	ppb	0.622	205887	0.58	25	97.2	90	110	
Sn	118	2	2	24.070	ppb	0.341	659144	0.37	25	96.3	90	110	
Sb	121	2	2	23.363	ppb	0.823	832370	0.89	25	93.5	90	110	
Ba	137	2	2	23.995	ppb	0.507	288750	0.39	25	96.0	90	110	
Tl	205	2	2	23.503	ppb	0.851	1670349	1.69	25	94.0	90	110	
Pb	208	2	2	22.817	ppb	0.139	1145825	0.94	25	91.3	90	110	
Si	29	2	2	539.416	ppb	1.448	519194	0.81	536	100.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	137962	0.45	146432	94.22	70	120	
Li	6	2	2	1930448	0.56	2043742	94.46	70	120	
Ge	72	2	2	1045433	0.55	1086423	96.23	70	120	
Rh	103	2	2	6658889	0.11	6695900	99.45	70	120	
Tb	159	2	2	8375945	0.52	8185004	102.33	70	120	
Bi	209	2	2	5024609	0.99	4868813	103.20	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Final CCB
Data File Name	028_CCB.d
Data Path Name	D:\Data\6020\pg083.b
Acq Date Time	2015-02-23T18:33:20-05:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.919	ppb	33.20	297358	23.3	5	
Mg	24	1	1	0.937	ppb	29.76	126314	28.4	5	
Al	27	1	1	0.100	ppb	29.68	51320	27.6	0.5	
K	39	1	1	0.903	ppb	30.80	154186	19.3	5	
Ca	44	1	1	0.775	ppb	38.39	6391	25.2	5	
Ti	47	1	1	0.155	ppb	37.85	829	36.6	0.5	
V	51	1	1	0.018	ppb	95.40	1452	10.7	0.5	
Cr	52	1	1	-1.039	ppb	-4.12	6100	6.7	0.5	
Mn	55	1	1	-0.987	ppb	-3.55	3975	4.5	0.5	
Fe	56	1	1	1.010	ppb	32.86	1439447	28.5	5	
Co	59	1	1	0.074	ppb	35.84	2320	22.7	0.5	
Ni	60	1	1	-0.908	ppb	-2.38	2628	3.5	0.5	
Cu	63	1	1	0.038	ppb	8.93	47524	2.1	0.5	
Zn	66	1	1	-2.658	ppb	-1.19	1382	3.9	0.5	
As	75	1	1	0.080	ppb	29.57	191	18.8	0.5	
Se	78	1	1	0.182	ppb	141.07	47	44.6	0.5	
Be	9	2	2	0.019	ppb	28.08	263	20.0	0.5	
B	11	2	2	0.298	ppb	33.23	41151	2.4	0.5	
Mo	95	2	2	0.089	ppb	10.38	2349	6.4	0.5	
Ag	107	2	2	0.029	ppb	15.17	1641	10.6	0.5	
Cd	111	2	2	0.025	ppb	35.78	237	31.9	0.5	
Sn	118	2	2	0.140	ppb	0.27	73022	0.3	0.5	
Sb	121	2	2	0.018	ppb	22.77	926	16.3	0.5	
Ba	137	2	2	-0.033	ppb	-26.87	708	14.6	0.5	
Tl	205	2	2	-0.012	ppb	-140.02	22210	4.8	0.125	
Pb	208	2	2	-0.011	ppb	-133.86	5884	13.3	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	138225	0.51	146432	94.40	70	120	
Li	6	2	2	1918719	0.90	2043742	93.88	70	120	
Ge	72	2	2	1055690	0.61	1086423	97.17	70	120	
Rh	103	2	2	6665769	0.52	6695900	99.55	70	120	
Tb	159	2	2	8324531	0.62	8185004	101.70	70	120	
Bi	209	2	2	5029614	0.43	4868813	103.30	70	120	

Analytical Sequence

Method : 7470A TCLP

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		TCLP150219-083
10	10		BLKT150223-01-083
11	11		LCST150223-01-083
12	12		E15-01273-001
13	13		E15-01273-001DUP
14	14		E15-01273-001MS
15	2	QC	CCV
16	1	QC	CCB

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\083.SIF
Batch ID: 083LEACHATE (TCLP)
Results Data Set: pg083ahg_15
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Method Loaded
Method Name: 7470A TCLP
Method Last Saved: 7/16/2013 2:55:27 PM
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 2/23/2015 12:36:01 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0013	0.0013	0.0001	12:36:54	Yes
2		[0.00]	0.0009	0.0009	0.0001	12:37:26	Yes
3		[0.00]	0.0015	0.0015	0.0001	12:37:58	Yes
Mean:		[0.00]	0.0012				
SD:		0.00	0.0003				
%RSD:		0.00	23.33				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 2/23/2015 12:38:18 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0112	0.0124	0.0021	12:39:11	Yes
2		[0.25]	0.0113	0.0125	0.0021	12:39:43	Yes
3		[0.25]	0.0110	0.0123	0.0021	12:40:16	Yes
Mean:		[0.25]	0.0112				
SD:		0.00	0.0001				
%RSD:		0.00	0.97				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.04461 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 2/23/2015 12:40:36 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1093	0.1106	0.0202	12:41:30	Yes
2		[2.500]	0.1137	0.1149	0.0209	12:42:03	Yes
3		[2.500]	0.1137	0.1150	0.0208	12:42:36	Yes
Mean:		[2.500]	0.1123				
SD:		0.000	0.0025				
%RSD:		0.000	2.25				

Standard number 2 applied. [2.500]
Correlation Coef.: 1.000000 Slope: 0.04492 Intercept: -0.00004

Sequence No.: 4
Autosampler Location: 5

Sample ID: Calib Std 3
Analyst:
Date Collected: 2/23/2015 12:42:56 PM
Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2212	0.2225	0.0406	12:43:51	Yes
2		[5.000]	0.2266	0.2278	0.0416	12:44:24	Yes
3		[5.000]	0.2275	0.2287	0.0417	12:44:57	Yes
Mean:		[5.000]	0.2251				
SD:		0.000	0.0034				
%RSD:		0.000	1.50				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999999 Slope: 0.04502 Intercept: -0.00010

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Autosampler Location: 6
Date Collected: 2/23/2015 12:45:18 PM
Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.3213	0.3225	0.0587	12:46:13	Yes
2		[7.500]	0.3328	0.3340	0.0611	12:46:46	Yes
3		[7.500]	0.3367	0.3380	0.0614	12:47:18	Yes
Mean:		[7.500]	0.3302				
SD:		0.000	0.0080				
%RSD:		0.000	2.43				

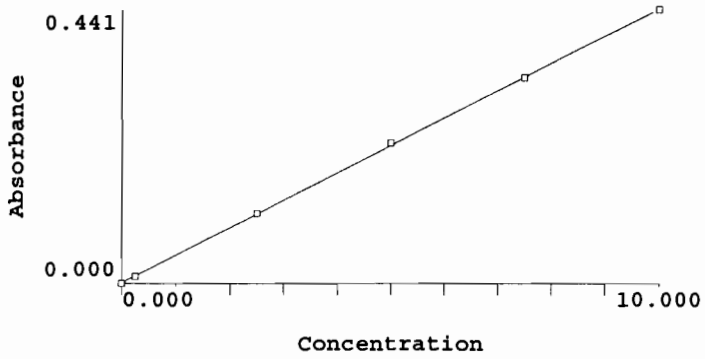
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999894 Slope: 0.04423 Intercept: 0.00086

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:
Autosampler Location: 7
Date Collected: 2/23/2015 12:47:40 PM
Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4319	0.4331	0.0789	12:48:35	Yes
2		[10.000]	0.4455	0.4468	0.0809	12:49:08	Yes
3		[10.000]	0.4457	0.4469	0.0809	12:49:41	Yes
Mean:		[10.000]	0.4410				
SD:		0.000	0.0079				
%RSD:		0.000	1.80				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999940 Slope: 0.04408 Intercept: 0.00114



Calibration data for Hg 253.7
Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

Calib Blank 1	0.0000	0	-0.02575	0.00	23.3
Calib Std 1	0.0112	0.25	0.22728	0.00	1.0
Calib Std 2	0.1123	2.500	2.52097	0.00	2.3
Calib Std 3	0.2251	5.000	5.08115	0.00	1.5
Calib Std 4	0.3302	7.500	7.46642	0.01	2.4
Calib Std 5	0.4410	10.000	9.97994	0.01	1.8

Correlation Coef.: 0.999940 Slope: 0.04408 Intercept: 0.00114

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 2/23/2015 12:50:03 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00455	4.5453	0.2015	0.2027	0.0374	12:50:56	Yes
2	0.00468	4.6789	0.2074	0.2086	0.0380	12:51:29	Yes
3	0.00467	4.6746	0.2072	0.2084	0.0384	12:52:02	Yes
Mean:	0.00463	4.6329	0.2053				
SD:	0.00008	0.07595	0.0033				
%RSD:	1.6393	1.6393	1.63				

QC value within limits for Hg 253.7 Recovery = 92.66%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/23/2015 12:52:21 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00208	0.0010	0.0023	0.0002	12:53:14	Yes
2	-0.00003	-0.02584	-0.0000	0.0012	0.0001	12:53:47	Yes
3	-0.00003	-0.03402	-0.0004	0.0009	0.0001	12:54:19	Yes
Mean:	-0.00002	-0.02064	0.0002				
SD:	0.00002	0.01659	0.0007				
%RSD:	80.367	80.367	324.93				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: TCLP150219-083 **Date Collected: 2/23/2015 12:54:39 PM**
Analyst: DK **Data Type: Original**

Replicate Data: TCLP150219-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00005	-0.02281	0.0001	0.0014	0.0001	12:55:31	Yes
2	-0.00005	-0.02715	-0.0001	0.0012	0.0001	12:56:04	Yes
3	-0.00004	-0.02114	0.0002	0.0014	0.0001	12:56:36	Yes
Mean:	-0.00005	-0.02370	0.0001				
SD:	0.00001	0.00310	0.0001				
%RSD:	13.098	13.098	151.48				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: BLKT150223-01-083 **Date Collected: 2/23/2015 12:56:55 PM**
Analyst: DK **Data Type: Original**

Replicate Data: BLKT150223-01-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00006	-0.02795	-0.0001	0.0011	0.0001	12:57:48	Yes
2	-0.00006	-0.02982	-0.0002	0.0011	0.0001	12:58:20	Yes
3	-0.00007	-0.03610	-0.0005	0.0008	0.0001	12:58:53	Yes

Mean:	-0.00006	-0.03129	-0.0002
SD:	0.00001	0.00427	0.0002
%RSD:	13.643	13.643	77.05

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: LCST150223-01-083 **Date Collected: 2/23/2015 12:59:12 PM**
Analyst: DK **Data Type: Original**

Replicate Data: LCST150223-01-083

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01008	5.0391	0.2233	0.2245	0.0411	13:00:05	Yes
2	0.01033	5.1666	0.2289	0.2301	0.0419	13:00:38	Yes
3	0.01041	5.2071	0.2307	0.2319	0.0418	13:01:11	Yes
Mean:	0.01028	5.1376	0.2276				
SD:	0.00018	0.08769	0.0039				
%RSD:	1.7069	1.7069	1.70				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: E15-01273-001 **Date Collected: 2/23/2015 1:01:30 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00009	0.04564	0.0031	0.0044	0.0004	13:02:23	Yes
2	-0.00001	-0.00287	0.0010	0.0022	0.0002	13:02:56	Yes
3	0.00000	-0.00241	0.0010	0.0023	0.0002	13:03:29	Yes
Mean:	0.00003	0.01345	0.0017				
SD:	0.00006	0.02788	0.0012				
%RSD:	207.25	207.25	71.11				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: E15-01273-001DUP **Date Collected: 2/23/2015 1:03:49 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001DUP

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00012	0.05959	0.0038	0.0050	0.0003	13:04:42	Yes
2	-0.00005	-0.02260	0.0001	0.0014	0.0001	13:05:15	Yes
3	-0.00007	-0.03383	-0.0004	0.0009	0.0001	13:05:48	Yes
Mean:	0.00000	0.00106	0.0012				
SD:	0.00010	0.05100	0.0022				
%RSD:	>999.9%	>999.9%	190.26				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: E15-01273-001MS **Date Collected: 2/23/2015 1:06:08 PM**
Analyst: DK **Data Type: Original**

Replicate Data: E15-01273-001MS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00926	4.6287	0.2052	0.2064	0.0380	13:07:02	Yes
2	0.00950	4.7509	0.2105	0.2118	0.0389	13:07:35	Yes
3	0.00957	4.7853	0.2121	0.2133	0.0390	13:08:07	Yes
Mean:	0.00944	4.7216	0.2093				
SD:	0.00016	0.08233	0.0036				
%RSD:	1.7436	1.7436	1.73				

Sequence No.: 15 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 2/23/2015 1:08:28 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00452	4.5210	0.2004	0.2017	0.0373	13:09:22	Yes
2	0.00469	4.6898	0.2079	0.2091	0.0385	13:09:54	Yes
3	0.00468	4.6837	0.2076	0.2088	0.0380	13:10:27	Yes
Mean:	0.00463	4.6315	0.2053				
SD:	0.00010	0.09575	0.0042				
%RSD:	2.0674	2.0674	2.06				

QC value within limits for Hg 253.7 Recovery = 92.63%
All analyte(s) passed QC.

Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2015 1:10:47 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.01726	0.0004	0.0016	0.0002	13:11:39	Yes
2	-0.00002	-0.02097	0.0002	0.0015	0.0001	13:12:12	Yes
3	-0.00003	-0.03419	-0.0004	0.0009	0.0001	13:12:45	Yes
Mean:	-0.00002	-0.02414	0.0001				
SD:	0.00001	0.00890	0.0004				
%RSD:	36.862	36.862	552.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP METALS
PREP LOGS
STANDARD PREP LOGS

2015 PG: 083

METALS'S DIGESTION LOG

Date: 02/23/15 07:30

MATRIX: LEACHATE (TCLP)
DIGESTION METHOD: 3010A
SPIKES: 1.00ml M473
Hg DIGESTION METHOD: 7470A
Hg SPIKE: 2.50 PPB M493-3
Hg ICV: 2.50 PPB M455-1

PREP. SOLUTION	DATE	LOT #
NaCl:	2/6/15	134874
Hydroxylamine:	2/6/15	138012
KMnO4:	2/6/15	133921
K2S2O8:	12/30/14	117411

ANALYSIS METHOD: 6020A
Hg ANAL. METHOD: 1311/7470A
LOT# HNO3: 143747
LOT# H2SO4: 143680
LOT# HCL: 146027

Hg DIG. DATE: 2/23/15
ICPMS ICV: M331
ICPMS Cal. Stds.: M327,M361

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M493-3		
Hg	STD2 2.50 PPB						25	50			M493-3		
Hg	STD3 5.00 PPB						25	50			M493-3		
Hg	STD4 7.50 PPB						25	50			M493-3		
Hg	STD5 10.0 PPB						25	50			M493-3		
Hg	ICV 5.00 PPB						25	50			M455-1		
	TCLP150219				25	50	25	50					
	BLKT150223-01				25	50	25	50			BMT1		
	LCST150223-01				25	50	25	50			BST1		
TCLP	E15-01273-001	*	B		25	50	25	50	U1-LT	2/24	R-72(2/24 11:00); TCLP150219		
	E15-01273-001DUP	*	B		25	50	25	50	U1-LT				
	E15-01273-001MS	*	B		25	50	25	50	U1-LT				

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/23/15 - 0900 - [signature]	Received by:	2/23/15 9:00 OK
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	2/23/15 - 1100 - [signature]	Received by:	2/23/15 11:00 OK
Relinquished by:		Received by:	
Disposal:			

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 020315

Standard Name	020315-01	020315-02	020315-03	020315-04	020315-05	020315-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15
Standard Name	020315-07	020315-08	020315-09	020315-10	020315-11	020315-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15	2/9/15
Standard Name	020315-13	020315-14	020315-15	020315-16	020315-17	020315-18
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15	2/17/15
Standard Name	020315-19	020315-20	020315-21	020315-22	020315-23	020315-24
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15	2/23/15
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK	DK	DK	
Date	2/3/15	2/9/15	2/17/15	2/23/15	

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-3	CL10-122YPY	M-506	8/30/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-905	S140424021	M-499	4/2015	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-486	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL11-99YPY	M-514	11/30/2015	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

INITIAL

2/3/15
DATE

GENERAL ANALYTICAL CHEMISTRY

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Free Cyanide

Matrix: Soil
Unit: mg/Kg

Batch: AP150-0001
Method: 9016

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 1.50	NA	NA	NA	NA	NA
LCS	LCSS150220	51.1	50	NA	NA	102	80-120
SAMPLE	E15-01273-001	< 1.70	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 1.70	NA	NC	NC	NA	NA
MS	E15-01273-001MS	56.5	55.9	NA	NA	101	75-125
MSD	E15-01273-001MSD	55.9	55.9	1.07	20	100	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

pH/Corrosivity

Matrix: Soil
Unit: SU

Batch: AP023-0041
Method: 9045C

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
LCS	LCSS150220	7.03	7	NA	NA	100	90-110
SAMPLE	E15-01273-001	7.73	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	7.75	NA	0.258	20	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION VERIFICATION

pH/Corrosivity

Batch: AP023-0041	Date & Time: 02/20/2015 08:26
Method: 9045C	Analyst: Deborah Szachara

	True Value	Result (mg/Kg)	% REC

	True Value	Result (mg/L)	% REC
CCV.14	7.00	7.06	101

NJDEP FORM M-9A (12/94)

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Organic Halides (TOX)

Matrix: Soil
Unit: mg/Kg

Batch: AP067-0004
Method: 9023

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 10.0	NA	NA	NA	NA	NA
LCS	LCSS150220	2.29	2.5	NA	NA	91.6	88-112
SAMPLE	E15-01273-001	< 11.2	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 11.2	NA	NC	NC	NA	NA
MS	E15-01273-001MS	101	112	NA	NA	90.2	75-125
MSD	E15-01273-001MSD	109	112	7.62	20	97.3	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Organic Carbon (TOC)

Matrix: Soil
Unit: mg/Kg

Batch: AP030-0008
Method: Lloyd Kahn

Date: 02/23/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150223	< 588	NA	NA	NA	NA	NA
SAMPLE	E15-01273-001	91800	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	100000	NA	8.55	20	NA	NA
MS	E15-01273-001MS	148000	54100	NA	NA	104	75-125
MSD	E15-01273-001MSD	151000	51300	2.01	20	115	75-125

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Cyanide, Reactive

Matrix: Soil
Unit: mg/Kg

Batch: AP045-0004
Method: 7.3.3.2

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 10.0	NA	NA	NA	NA	NA
LCS	LCSS150220	33.0	250	NA	NA	13.2	NO LIMIT
SAMPLE	E15-01273-001	< 11.2	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 11.2	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Ignitability

Matrix: Soil
Unit: Yes/No

Batch: AP068-0004
Method: 1030

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
SAMPLE	E15-01301-001	NO	NA	NA	NA	NA	NA
DUP	E15-01301-001DUP	NO	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01301-001
E15-01301-002
E15-01301-003
E15-01301-004
E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfide, Reactive

Matrix: Soil
Unit: mg/Kg

Batch: AP044-0004
Method: 7.3.4.2

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS150220	< 16.0	NA	NA	NA	NA	NA
LCS	LCSS150220	448	500	NA	NA	89.6	NO LIMIT
SAMPLE	E15-01273-001	< 17.9	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 17.9	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E15-01273-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

GENERAL ANALYTICAL CHEMISTRY
RAW DATA
INSTRUMENT LOGS

IAL

Free Cyanide

SW846 9016

4.1g/l NaOH	RA 65-10/2/19/15	stockCN_WCCNS/	RA 60-19/1/13/15
2.05g/L NaOH	RA 65-10/2/19/15	InterCN sol. WCCNint/	2/20/15
Phosphate Buffer	WCCNbuff/ 2/19/15	second source stock_WCCNS2/	RA 60-13/1/13/15
Acidified Buffer	WCAcidCNbuff/ 2/19/15	second source Inter. WCCNint2/	2/20/15
Pyridine-Barb.	WCCNpyr/ 2/19/15	Chloramine T	2/20/15

date analyzed 2/20/15 15:00 Water Calc 0.433 x ug/L from curve x dil. factor = ug/L free CN

analyst [signature] Soil Calc. ug/l free CN x (0.5L/sample wt (g)(tot. solids pct.))= mg/Kg Free CN

Set A, Set B	Cl2 +/-	S +/-	Abs. Set A	Abs. Set B	Abs. Average	Result ug/l or mg/Kg
S300, S300	-	-	.680	.675	.678	
S150, S150	-	-	.317	.324	.320	
S100, S100	-	-	.221	.213	.220	CC = 0.99949
S50, S50	-	-	.122	.117	.120	M = 0.00224
S25, S25	-	-	.047	.049	.048	B = -0.0021
S10, S10	-	-	.020	.020	.020	
S5, S5	-	-	.010	.013	.012	
S2, S2	-	-	.004	.003	.004	
S0, S0	-	-	.000	.000	.000	
ICV	-	-				
ICB	-	-				
CCV	-	-				
CCB	-	-				
MB, MB	-	-				
LCS, LCS	-	-				
MDL 5ug	—	—	.020			9.9 x 0.433 = 4.3ug/L
MDL 5ug	—	—	.019			9.4 x 0.433 = 4.1
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.019			9.4 x 0.433 = 4.1
MDL 5ug	—	—	.018			9.0 x 0.433 = 3.9
MDL 5ug	—	—	.017			8.5 x 0.433 = 3.7

9 = 0.2ug/L

3.9 x 0.2 = 0.6ug/L

IAL

Free Cyanide

SW846 9016

4.1g/l NaOH	RA 65-10 2/19/15	stockCN_WCCNS/	RA 60-19 1/13/15
2.05g/L NaOH	RA 65-10 2/19/15	InterCN sol.	WCCNint/ 2/20/15
Phosphate Buffer	WCCNbuff/ 2/19/15	second source	stock_WCCNS2/ RA 60-13 1/13/15
Acidified Buffer	WCAcidCNbuff/ 2/19/15	second source	Inter. WCCNint2/ 2/20/15
Pyridine-Barb.	WCCNpyr/ 2/19/15	Chloramine T	2/20/15

date analyzed 2/20/15 17:30 Water Calc 0.433 x ug/L from curve x dil. factor = ug/L free CN

analyst Soil Calc. ug/l free CN x (0.5L/sample wt (g)(tot. solids pct.))= mg/Kg Free CN

Spk - 55.9 mg/L

Set A, Set B	Cl2 +/-	S +/-	Abs. Set A	Abs. Set B	Abs. Average	Result ug/l or mg/Kg
S300, S300	-	-				
S150, S150	-	-				
S100, S100	-	-		2/20/15		CC = 0.99945
S50, S50	-	-				M = 0.00224
S25, S25	-	-				B = -0.0021
S10, S10	-	-				
S5, S5	-	-				
S2, S2	-	-				
S0, S0	-	-				
ICV -2	-	-	.214			96 ug/L (96%)
ICB	-	-	.000			< 3 ug/L
CCV -1	-	-	.222			100 ug/L (100%)
CCB	-	-	.000			< 3 ug/L
MB, MB	-	-	.000			< 1.5 mg/kg (100%)
LCS, LCS -2	-	-	.526			236 x 0.433 = 102 x 0.5 = 51.1 mg/kg
89.4 1273-001	—	—	.000			< 1.7 mg/kg
89.4 -001D	—	—	.000			< 1.7 mg/kg (101%)
89.4 -001S	—	—	.522			234 x 0.433 = 101 x 0.559 = 56.5
89.4 -001SD	—	—	.518			232 x 0.433 = 100 x 0.559 = 55.9
RI std	—	—	.017			8.5 x 0.433 = 3.7 x 0.5 = 1.8 (100%)
CCV - 2	—	—	.222			100 ug/L (96%)
CCB -	—	—	.000			< 3 ug/L

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 15:00

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
Free Cyanide	0.000	300	150	100	50.0	25.0, 10.0	5.00, 2.00	100	96

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 15:00

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
Free Cyanide	96	100	100	100	100		
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
Free Cyanide							
ANALYTE		CCV7	% REC	CCV8	% REC		
Free Cyanide							

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
Free Cyanide	<3.0	<3.0	<3.0			<1.5
Free Cyanide		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: Soil

CONTRACT NO: _____

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
Free Cyanide	RESULTS	ADDED	CONC.	% REC				
LCSS	<1.5	50.0	51.1	102	85-115%			

NJDEP FORM G-2 (12/94)

2/18/15 pH 4.00 7.02 10.06 97% 20C
DS RA 69-8 RA 72-8 RA 69-10
pH 7.02 7.03
1232-003 11.55
↓-003D 11.56
4500HB 1232-004 11.50
AP023-0036 1235-001 9.42
1231-001 7.26
↓-002 ~~7.37 7.4~~ 7.54
1234-001 10.31
↓-002 10.28
pH 7.02 7.01
pH 7.02 7.01
9045C AP023-0037 246-006 6.62
↓-006D 6.63
1174-0011 7.02
pH 7.02 7.03

2/19/15 pH 4.00 7.03 10.09 97% 18C
DS RA 69-8 RA 72-8 RA 69-10
AP023-0038 pH 7.03 7.04
1233-001 8.99
4500HB ↓-001D 9.03
pH 7.03 7.06
AP023-0039 pH 7.03 7.03
1224-001 7.24
9045C ↓-001D 7.25
pH 7.03 7.00

2/20/15 pH 4.00 7.04 10.12 96% 21C 82.6
DS RA 69-8 RA 72-8 RA 69-10
4500HB pH 7.04 7.04
1250-001 5.79

2/20/15 1256-001 5.73
DS ↓-002/002D 7.15/7.18
-003 7.19
AP023-0040 -004 7.29
-005 7.10
-006 7.11
↓-007 7.62
1280-001 7.34
↓-002 7.54
↓-003 7.42
pH ~~7.03 7~~ 7.04 7.03
pH ~~7.03~~ 7.04 7.03
1273-001 7.73
↓001D 7.75
9045C AP023-0041 pH 7.04 7.06

1517 1518 1519 1520 1521 1523 1524 1525 1526 1529 1528 1534 1538 1536 1537
1009 1011 1012 1013 1014 1019 1020 1021
827 843 843
8 44 852/853 854 855 856 857 858 859 904 906 907 908 945 946 949

E15-02273 Page 105

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 8:26

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
pH		4.00	7.04	10.12				7.04	7.03

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 8:26

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
pH	7.03	7.06	100				
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
pH							
ANALYTE		CCV7	% REC	CCV8	% REC		
pH							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/L CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
pH						
		5	6	7	8	

NJDEP FORM M-10 (12/94)

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO:

MATRIX: WATER

CONTRACT NO:

UNITS (circle one): (mg/L)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
pH	RESULTS	ADDED	CONC.	% REC				
ICV	NA	7.04	7.06	100	90-110%			

NJDEP FORM G-2 (12/94)

EOX

Method 9023

Trichlorobenzene Stock (1ul = 10ug)- WCEOXtcbS/ 1/9/15
Trichlorobenzene Standard (1ul = 0.1ug)- WCEOXtcbStd/ 1/9/15
Acetate- RA 55-6
um Chloride Stock (1ul = 1ug)- WCEOXCIS/ 65-70 / 1-12-15
trolyte Solution- WCEOXelect/ 7/9/14 7/9/14

1M KCl- WCEOXkcl/ 7/6/14
10% KNO3- WCEOXkno3/ 7/6/14
Conc. Sulfuric Acid- RA 55-25

e Extracted 3/20/15 11:00
e Analyzed 3/20/15
lyst

Tichlorobenzene Standard Checks (2.2-2.8ug)
1) 2.2963
2) 2.2904
3) 2.2837
RSD (<5) <5

Ethyl Acetate Blank (<0.1ug) <0.1

culation
g Cl/Vol.Inject *L*)*Vol. Extract *L*)/(weight *g**((%TS)/100)) = EOX mg/Kg 11 mg/kg SM

mple ID	weight (g)	Vol. Extract (ml)	%TS	Vol. Inject (uL)	ug Cl	Result (mg/Kg)
BLKS	1.00	5.0	100	25	0.0189	< 10.0
1873-001	1.00		89.4		0.0152	< 11.2
-001D	1.00		89.4		0.0236	< 11.2
-001S	1.00		89.4		0.4499	101
-001SD	1.00		89.4		0.4867	109
MSLK	1.00		100		0.1221	24.4 (81%)

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 11:00

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
TOX								2.5000	2.2863

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/20/15
INITIAL CALIBRATION TIME: 11:00

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
TOX	2.2863						
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
TOX							
ANALYTE		CCV7	% REC	CCV8	% REC		
TOX							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
TOX						<10.0
TOX		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: Soil

CONTRACT NO: _____

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
TOX	RESULTS	ADDED	CONC.	% REC				
ICV	ND	2.5000	2.2863	91	88-112			

NJDEP FORM G-2 (12/94)

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL PROJECT NO: _____
INITIAL CALIBRATION DATE: 2/23/15 CONTRACT NO: _____
INITIAL CALIBRATION TIME: 9:15

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
TOC(S)	<588							4000	3760

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 2/23/15
INITIAL CALIBRATION TIME: 9:15

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
TOC(S)	3760	3699	92.5				
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
TOC							
ANALYTE		CCV7	% REC	CCV8	% REC		
TOC							

NJDEP FORM M-9B (12/94)

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPA-RATION BLANK
TOC(S)						<588
TOC		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO:

MATRIX: Soil

CONTRACT NO:

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
TOC(S)	RESULTS	ADDED	CONC.	% REC				
ICV	<588	4000	3760	94	90 - 110			

NJDEP FORM G-2 (12/94)

Calibration Report Print Date/Time: 2015/02/23 11:24:44

Cal. Curve ID: TOCSOIL061902
Created: 01/30/2015 11:24
Calibration Factor (m): 6.655e+04
Y Intercept (b): 860714
r-squared: 0.99506

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
S0	78576	0.000	-11.753	Low Sample De	01/30/2015 10:23
S50	4293566	50.000	51.583		01/30/2015 10:29
S100	7798682	100.000	104.252	Max Integrati	01/30/2015 10:39
S200	14160743	200.000	199.851	Max Integrati	01/30/2015 11:06
S300	20435956	300.000	294.145	Max Integrati	01/30/2015 11:11
S400	29434174	400.000	429.355	Max Integrati	01/30/2015 11:17
s600	39630384	600.000	582.567	Max Integrati	01/30/2015 11:23

IAL **TOC Soils** *Lloyd Kahn, 1988*

US Region II

KHP 1st Source-1 (20000mg/L)	WCTOCsoil1/01-30-15
KHP 2nd Source-2 (20000mg/L)	WCTOCsoil2/01-30-15
Phosphoric Acid (1:1)	1/30/2015
Analyst	ED
Date/Time Analyzed	2/23/15 915-1210

Calibration Date	01/30/15
Slope	6.655 E+04
Intercept	860714
Correlation Coefficient	0.99506

TOC mg/Kg = ug/(weight(g))

*** samples are dried at 103°C w/ phosphoric acid***

BATCH # AP030-0008(S)

Sample ID	weight (g)	TS%	ug (from instrument)	Result (mg/Kg)	MDL (mg/Kg)	% Rec.
ICV2-4000	0.0500		187.8930	3760		94%
BLKS150223	0.0500		0.2483	<588		
01273-001	0.0059		541.5410	91800	sd = 3814	RPD=8.55
01273-001	0.0050		500.7225	100100	x̄ = 95025	
01273-001	0.0050		475.4367	95800	rsd = 4.01	
01273-001	0.0037		341.7242	92400		
01273-001S	0.0037		548.2773	148200 (Spk=54100)		104%
01273-001SD	0.0040		609.8187	OVER. RANGE		RPD=2.01
01273-001SD	0.0039		588.7785	151000 (Spk=51300)		115%
CCV2-4000	0.0500		184.9480	3699		92.5%
RLS001-1000	0.0500		45.0484	901		90.1%

Ignitability Method 1030

AP068-0004

2/20/15 ED				
1530	01301-001	SOIL	RPD=NC	NO
	-001D			NO
	-002			NO
	-003			NO
	-004			NO
	01273-001			NO
2/23/15 ED				
1645	01311-003	SOIL		NO
	01309-007			NO

IAL

Reactive Cyanide Log

lot No.

SW846 Chpt. 7, 9014
Method7.3.3.2

1000mg/L Cyanide Sol.- WCCNS/ 011315
D (0.0192N)AgNO3 WCCNAgNO3/ 011315
Rhodanine WCCNRhod/ RA # 67-13

Batch ID# AP045-0004(S)

Analyst ED
date distilled 2/20/15 Scrubber- E mg/L Cyanide = (A-B)/C*D*2*26.02*1000
date analyzed 2/20/15 1600 Result HCN mg/Kg = E*0.05/(F*(100-G/100))
Total volume of scrubber is 50ml

Sample ID	sample vol. (g or ml) F	%Moist G	scrubber volume used (ml) C	ml titrated AgNO3 scrubber A	ml titrate AgNO3 blank(ml) B	Result (mg/Kg) or (mg/L)
BLKS 150220	10g		25.0	0.10	0.05	ND
LCSS150220			50.0	0.38		33.0
01273-001			25.0	0.10		ND
01273-001D				0.10		ND
01301-001				0.10		ND
-002				0.10		ND
-003				0.10		ND
-004				0.10		ND

L

Reactive Sulfide Log

lot No.

SW846 Chpt. 7, 9034
Method 7.3.4.2

Starch RA# 61-12

)0mg/L Sulfide Sol.- WcsulfideS/ 021905

HCl RA# 65-3

Batch ID# AP044-0004(S)

)25N Iodine RA# 69-16 Standardized 01/23/15

)25N Na2S2O3 RA# 69-7 Standardized 12/23/14

ıalyst DJ

ıte distilled 2/20/15

ıte analyzed 2/20/15 1645

Scrubber- D mg/L Sulfide = 400(A-B)/C

Result H2S mg/Kg= D*0.05/(E*(100-F/100))

)tal volume of scrubber is 50ml

ample ID	sample vol. (g or ml) E	%Moist F	scrubber volume used (ml) C	0.025N Iodine (ml) A	0.025N Na2S2O3 (ml) B	Result (mg/Kg) or (mg/L)
BLKS150220	10g		25.0	5.0	4.9	ND
LCSS150220	↓		50.0	15.0	3.8	448
01273-001			25.0	5.0	4.7	ND
↓ -001D			↓	5.0	4.7	ND
01301-001				5.0	4.8	ND
-002				5.0	4.7	ND
-003				5.0	4.7	ND
-004	↓		↓	5.0	4.8	ND

GENERAL ANALYTICAL CHEMISTRY
STANDARD PREP LOGS

Analyst/Date [signature] 2/19/15

NaOH extract solution/ 2/19/15 pH of solution 12.6

PbCO3/ M39-2

Extract volume is 500ml

Date samples filtered

No.	Sample ID	sample wt.(g)	Time start	Time End	pH at 5 min. pH 12.3-12.5	pH at 60 min. pH ≥ 11
1	MB	1.000	14:00	15:00	yes	yes
2	LCS	1.000	↓	↓	yes	yes
3	01273-001	1.000			yes	yes
4	-001D	1.000			yes	yes
5	-001S	1.000			yes	yes
6	-001SD	1.000			yes	yes
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

RA 60-19

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by DNV Certificate number CERT-08052-2006-AQ-HOU-ANAB

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P223**	**Mfg. Date**	**11/21/2011**
Lot Number	**115392**		
Description	**POTASSIUM CYANIDE, CERTIFIED**		
Country of Origin	**United States**	**Recommended Retest Date**	**Nov-2016**

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE GRANULES
ASSAY	%	>= 98	99.6
CHLORIDE	%	<= 0.5	<0.5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.03	<0.030
LEAD (Pb)	ppm	<= 2	<2.0
PHOSPHATE (PO4)	%	<= 0.02	<0.020
SODIUM (Na)	%	<= 1.0	<1.0
SULFATE (SO4)	%	<= 0.04	<0.040
SULFIDE	%	<= 0.002	<0.0020
THIOCYANATE (SCN)	PASS/FAIL	= P.T. (ABOUT 0.02%)	P.T. (ABOUT 0.02%)

Edgar E. Hess

Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

RA 60-18

Potassium cyanide, ACS, 96.0% min

Stock Number: 12136
Lot Number: D07W007

Analysis

Test	Limits	Results
Assay	96.0 % min	98.4 %
Chloride	0.5 % max	< 0.5 %
Phosphate	0.005 % max	< 0.005 %
Sulfate	0.04 % max	< 0.04 %
Sulfide	0.003 % max	< 0.003 %
Thiocyanate	To pass test	Passes test
Iron	0.03 % max	< 0.03 %
Sodium	0.5 % max	< 0.5 %
Lead	0.0002 % max	< 0.0002 %

Certified by:

Quality Control

NORTH AMERICA
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Email: info@alfa.com

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Free Cyanide Standards

Standard Cyanide Solution (2mg/L) Pipet the calculated value (approx 2ml) of 1000mg/L stock cyanide solution into a 1-L volumetric flask and dilute to volume using 4.1mg/l NaOH solution. This solution is used in the preparation of the standards

Second Source Cyanide Solution (2mg/L) Pipet the calculated value (approx 2ml) of 1000mg/L stock cyanide solution into a 1-L volumetric flask and dilute to volume using 4.1mg/l NaOH solution. This solution is used in the preparation of the ICV.

Preparation of Calibration Standards

	Conc. ug/L	mls 2mg/l standard solution added to 100ml volumetric flask	
1	S0	0	dilute each standard to volume with 4.1g/L NaOH
2	S2	0.1	
3	S5	0.25	
4	S10	0.5	
5	S25	1.25	
6	S50	2.5	
7	S100	5	
8	S150	7.5	
9	S300	15	

Preparation of ICV		mls 2mg/l second source solution added to 100ml volumetric flask	
1	S100	5	dilute ICV standard to volume with 4.1g/L NaOH

Preparation of CCV		mls 2mg/l standard solution added to 100ml volumetric flask	
1	S100	5	dilute each standard to volume with 4.1g/L NaOH

Preparation of RLSTD		mls 2mg/l standard solution added to 100ml volumetric flask	
1	S2	0.1	dilute each standard to volume with 4.1g/L NaOH

For soil spikes		mls 2mg/l standard solution added to 500ml extraction fluid
1	50mg/Kg	25

For soil RLSTD		mls 2mg/l standard solution added to 500ml extraction fluid
1	1mg/Kg	0.5

Pyridine-barbituric acid reagent- Add 15.0g of barbituric acid to a 250ml volumetric flask. Wash down the sides of the flask with just enough dist. water to moisten the barbituric acid. Add 75ml of pyridine and swirl to mix. Slowly add 15ml of conc. hydrochloric acid and swirl to mix. Using additional dist. water, bring volume to approximately 230ml. Stir to dissolve and cool the solution to room temperature. Dilute to final volume with dist. water and mix. It is recommended the reagent be prepared weekly and stored in a dark place. Discard and prepare a new batch if a precipitate develops.

RA No Barb Acid	RA No Pyridine	RA No HCl	Date Prep.	Init.
MA 73-03	MA 74-02	MA 72-13	2/19/15	B

Potassium Phosphate Solution (190g/L)- Add 400ml of dist. water to a 2-L beaker. Next, measure 19ml of 50% NaOH solution, transfer to beaker, and dissolve. Add 190g of potassium phospate monobasic and stir to dissolve. Bring the volume to approximately 950ml to aid in the dissolution. Adjust the pH of the solution so that it is within the range of 5.9-6.1, using 100-g/L NaOH or conc. phosphoric acid. Transfer the solution to a 1-L volumetric flask, and dilute to volume with dist. water.

RA No KH2PO4	RA No NaOH	Date Prep	pH	Init.
~~RA 58-12~~ RA 44-29 c/m	RA 53-3	7/16/12	6.0	
RA 44-29	RA 60-9	11/26/12	6.0	
RA 44-29	RA 60-9	2/17/14	6.0	
~~RA 73-~~ RA 69-11	RA 65-10	8/3/14	6.0	
RA 73-8	RA 65-10	7/19/15	6.0	

Acidified Potassium Phosphate Buffer- Add 8.0ml of concentrated phosphoric acid to 100ml of 190g/L potassium phosphate solution.

RA No KH2PO4	RA No H3PO4	Date Prep		Init.
RA 44-29	RA 55-12	6/14/12		
RA 44-29	RA 55-12	7/16/12		
RA 44-29	RA 55-12	8/21/12		
RA 44-29	RA 55-12	11/26/12		
RA 44-29	RA 55-12	1/17/14		
~~RA 73-1~~ RA 69-11	RA 70-12	8/3/14		
RA 73-8	RA 70-12	7/19/15		

Sodium Hydroxide Solution (2.05g/L) - Measure 2.68ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. This solution is used only for the preparation of initial demonstration of proficiency samples, method blanks, matrix spikes, and LCS.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
~~RA 53-3~~ RA 60-9 11/26/12	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	9/19/15				

Sodium Hydroxide Extraction Solution (pH 12.3-12.5)(for soils) - Measure 1.65ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. Using ph paper, check to ensure that the extraction solution is in the proper pH range. Add additional 50% NaOH, if necessary, to adjust the pH to the proper range.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12 (pH 12.5)		RA 65-10	8/7/14 12.6	
RA 53-3	7/6/12 (pH 12.6)		RA 65-10	8/14/14 12.7	
RA 53-3	7/17/12 (pH 12.6)		RA 65-10	8/15/14 12.7	
~~RA 53-3~~ RA 60-9 11/26/12	8/21/12 (pH 12.5)		RA 65-10	8/15/14 12.7	
RA 60-9	11/26/12 (12.6)		RA 65-10	8/18/14 12.7	
RA 60-9	11/30/12 12.5		RA 65-10	8/21/14 12.3	
RA 60-9	—		RA 65-10	8/29/14 12.4	
			RA 65-10	9/4/14 12.5	
			RA 65-10	9/15/14 12.5	
			RA 65-10	9/22/14 12.5	
			RA 65-10	9/24/14 12.5	
			RA 65-10	9/30/14 12.5	
			RA 65-10	10/6/14 12.6	

20L

Sodium Hydroxide Extraction Solution (pH 12.3-12.5)(for soils) - Measure 1.65ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water. Using ph paper, check to ensure that the extraction solution is in the proper pH range. Add additional 50% NaOH, if necessary, to adjust the pH to the proper range.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
~~RA 60-9~~ RA 65-10	10/16/14	12.6			
RA 65-10	10/21/14	12.6			
RA 65-10	2/19/15	12.6			

50% Sodium hydroxide solution- dissolve 100g of NaOH into 100ml of dist. water. Mix. Cool. Bring to volume with dist. water in a 200ml volumetric flask

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Sodium Hydroxide Solution (4.1g/L)- Measure 5.36ml of 50% NaOH and transfer to a 1-L volumetric flask containing approximately 800ml of dist. water. Stir until dissolved. Adjust the final volume to 1-L using dist. water.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Second Source Stock Cyanide Solution (1000mg/l) - Add 500ml of 4.1g/L sodium hydroxide solution in a 1-L flask. Dissolve in 2.51g KCN. Bring to volume with dist. water using additional 4.1g/L sodium hydroxide solution.

RA No KCN	Date Prep	Init.	RA No KCN	Date Prep	Init.
8196 - EM Science	6/7/12				
RA 60-13	11/5/12	GK			
RA 60-13	1/17/14				
RA 60-13	8/3/14				
RA 60-18	1/13/15	KA			

Sodium Hydroxide Solution (100g/L) - weigh 100g of NaOH into 800ml dist. water. Stir until dissolved. Cool. Bring to volume with distilled water in a 1-L volumetric flask.

RA No NaOH	Date Prep	Init.	RA No NaOH	Date Prep	Init.
RA 53-3	6/11/12				
RA 60-9	11/26/12				
RA 60-9	1/17/14				
RA 65-10	8/3/14				
RA 65-10	2/19/15				

Silver Nitrate Solution, 0.0192N - Prepare by crushing approximately 5g of AgNO3 crystals, Mallinckrodt, AR, and drying to a constant weight at 40°C. Dissolve 3.2647g of dried AgNO3 in 800ml distilled water in a 1000ml volumetric flask. Bring to volume with distilled water.

RA No AgNO3	Date Prep	Init.	RA No AgNO3	Date Prep	Init.
RA 44-4	6/7/12	EK			
RA 44-4	7/6/12	EK			
RA 44-4	8/21/12	EK			
RA 44-4	11/20/12	EK			
RA 65-21 rec.	1/15/14 exp. 5/20/15	EK			
RA 65-21	exp 5/20/15	EK			

Stock Cyanide Solution (1000mg/l) - Add 500ml of 4.1g/L sodium hydroxide solution in a 1-L flask. Dissolve in 2.51g KCN. Bring to volume with dist. water using additional 4.1g/L sodium hydroxide solution.

RA No KCN	Date Prep	Init.	RA No KCN	Date Prep	Init.
B2608DP-Alkal	6/7/12	EK			
RA 60-19	11/5/12	EK			
RA 60-19	1/17/14	EK			
RA 60-19	8/3/14	EK			
RA 60-19	1/13/15	KA			

	Receipt date	open date	exp. date
RA 69-8 pH 4	01/07/14	5/01/14	12/31/17
RA 72-8 pH 7	7/15/14	8/15/14	5/2016
RA 69-10 pH 10	01/09/14	5/21/14	12/31/14
RA 74-9 pH 2	12/04/14	12/4/14	09/2016
RA 74-15 pH 10	11/18/14	12/17/14	11/2015
RA 75-7 pH 12	01/22/15		10/31/2015

HACH COMPANY

P.O.Box 389
Loveland, CO 80539
(970) 669-3050

An ISO 9001 Certified Company

RA-69-8
Rec'd 01/07/14

Certificate of Analysis

COMMODITY: **Buffer Solution pH 4.01**
COMMODITY NUMBER: **22834-56** MANUFACTURE DATE: **12/12/2013** DATE OF ANALYSIS: **12/13/2013**
LOT NUMBER: **A3345**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution @25C	3.985 to 4.025	4.0110

The expiration date is Dec 2017

The item 2283456 is traceable to NIST standards SRM 185h Potassium Hydrogen Phthalate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

HACH COMPANY

PA72 8
Lcd 7/15/14

P.O.Box 389
Loveland, CO 80539
(970) 669-3050

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Certificate of Analysis

COMMODITY:**Buffer Solution pH 7.00**
COMMODITY NUMBER: **22835-56** MANUFACTURE DATE: **5/23/2014** DATE OF ANALYSIS: **5/23/2014**
LOT NUMBER: **A4142**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution @ 25C	6.98 to 7.02	7.006

The expiration date is May 2016

The item 2283556 is traceable to NIST standards SRM 186-I-g, 186-II-g Potassium Dihydrogen Phosphate and Disodium Hydrogen Phosphate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

HACH COMPANY

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Loveland, CO 80539
(970) 669-3050

RA 69-10
recd 01/07/14

Certificate of Analysis

COMMODITY: **Buffer Solution pH 10.01**
COMMODITY NUMBER: **22836-56** MANUFACTURE DATE: **12/16/2013** DATE OF ANALYSIS: **12/16/2013**
LOT NUMBER: **A3346**

TEST	*SPECIFICATIONS*	*RESULTS*
pH of the solution	9.995 to 10.035	10.0240

The expiration date is Dec 2014

The item 2283656 is traceable to NIST standards SRM 191d-1, 191d-11 Sodium Bicarbonate and Sodium Carbonate LOT N/A.

Certified by Scott Als

Scott Als
Analytical Services Chemist

AL

EOX Reagents and Standards

Electrolyte Solution- Dissolve 1.35g of Sodium Acetate, EM Science, suprapur, in 850ml glacial acetic acid, Fisher, ACS. Bring to volume in a 1000ml erlenmeyer flask with dist. water

WCEOXelect/ date prep

Sodium Acetate RA No.	Glacial Acetic Acid RA No.	date prep	
RA 13-1	RA 41-13	11/11/09	
RA 13-1	RA 41-18	4/5/10	
RA 13-1	Lot 4R2274	9/13/10	
RA 13-1	RA 41-13	6/17/11	
RA 13-1	RA 41-8	3/19/12	
RA 63-05	RA 63-14	3/13/13	
RA 63-25	RA 63-14	7/13/13	
RA 63-25	RA 63-14	2/19/14	

Trichlorobenzene Stock (10000~~ug~~mg/L)- Add 1170ul 1,2,4, trichlorobenzene, Aldrich, 99+%, to 80ml ethyl acetate, Aldrich, 99.8%, anhydrous, in a 100ml volumetric flask. Bring to volume with ethyl acetate.

10ml

WCEOXtcbS/ date prep

1ml = 100mg

1,2,4 Trichlorobenzene RA No.	Ethyl Acetate RA No.	date prep	
RA 3-7	RA 30-1	3/5/09	
RA 3-7	RA 30-1	10/21/09	
RA 3-7	RA 30-1	4/5/10	
RA 3-7	RA 30-1	11/5/10	
RA 3-7	RA 30-1	1/28/11	
RA 3-7	RA 55-6	3/30/11	
RA 3-7	RA 55-6	10/24/11	
RA 3-7	RA 55-6	4/5/12	
~~RA 3-~~ RA 55-10	~~RA 55-10~~ RA55-9	10/8/13	
RA 55-10	RA 55-6	2/26/13	
RA 55-10	RA 55-6	1/9/14	
RA 55-10	RA 55-6	6/23/14	
RA 55-10	RA 55-6	1/9/15	

10000mg / 1000 mL

10 mg / 1 mL

10mg / 1mL

0.10g / 1mL

10mL = 0.1g 100 mg

10mL = 100mg

100g → 5mL

100 mg/kg Spike

0001

EOX Reagents and Standards

4L

mg
richlorobenzene Standard (100~~ug~~/L)- Add 1000ul WCEOXtcbS to 90ml ethyl acetate
a 100ml volumetric flask. Bring to volume with ethyl acetate.
1ul = 0.1ug)
25ul = 2.5ug)

WCEOXtcbStd/ date prep

Ethyl Acetate

WCEOXtcbS date prep	RA No.	date prep
3/5/09	LA 30-1	3/5/09
10/22/09	RA 30-1	10/22/09
4/5/10	RA 30-1	4/5/10
11/5/10	RA 30-1	4/5/10
11/28/11	RA 30-1	11/28/11
3/30/11	RA 55-6	3/30/11
10/4/11	RA 55-6	10/4/11
4/5/12	RA 55-6	4/5/12
10/8/12	~~RA 55-10~~ RA 55-9	10/8/12
2/26/13	RA 55-6	2/26/13
10/9/13	RA 55-6	10/9/13
6/23/14	RA 55-6	6/23/14
1/8/15	RA 55-6	1/8/15

Conc. Sulfuric Acid- RA. No.

Sodium Chloride Stock (1000mg/L)- Dissolve 0.1648g of sodium chloride, Fisher, ACS, into a 100ml volumetric flask. Bring to volume with distilled water.

WCEOXCIS/ date prep

Sodium Chloride

RA No.	date prep
RA 47-3	2/3/09
RA-47-3	8/14/09
RA 47-3	4/5/10
RA 47-3	3/10/11
RA 47-3	01/10/11
RA 47-3	3/10/12
RA 35-5	1/10/13
RA 35-5	1/10/13
RA 35-5	1/5/14
RA 35-5	2/10/14
RA 65-20	1/12/15

IAL

EOX Reagents and Standards

1M KCl- Dissolve 7.4551g into 100ml dist. water.

KCl

WCEOXkcl/date prep

RA. No.	date prep
Baker	9/13/28
Baker	4/5/10
Baker	4/8/11
Baker RA3-22	3/13/12
Fisher RA-25-13	3/23/13
Baker RA-25-13	7/16/14

10% KNO3- Dissolve 100g of KNO3 into 1000ml dist. water

KNO3

WCEOXkno3/date prep

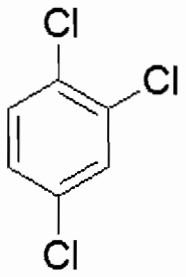
RA. No.	date prep
Aldrich	11/10/28
Aldrich	4/5/10
Fisher RA-4B-4	3/30/11
Fisher RA-4B-4	3/26/12
Fisher RA-4-04	3/28/13
Fisher RA-4B-4	7/16/14

3050 Spruce Street,Saint Louis,MO 63103,USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
1,2,4-Trichlorobenzene - anhydrous, ≥99%

Product Number:	**296104**
Lot Number:	**69596LMV**
Brand:	SIAL
CAS Number:	120-82-1
MDL Number:	MFCD00000547
Formula:	C6H3Cl3
Formula Weight:	181.45 g/mol
Quality Release Date:	06 OCT 2010



Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Solid or Liquid	Liquid
Infrared spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.0 %	99.5 %
Water (by Karl Fischer)	≤ 0.002 %	< 0.001 %

Jennifer Baughman, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certificate of Analysis

Date of Release: *11/1/2012*

Product: ***Sodium Chloride GR ACS, Crystals***

Catalog No.: ***SX0420 all size codes***

Grade: ***Meets ACS Specifications, Meets Reagent Specifications for testing USP/NF monographs***

CAS #: ***7647-14-5***

Country of Origin: ***USA***

FW: ***58.44***

Lot No.: ***VJ30C***

NaCl

	Requirement			
Characteristic	**Minimum**	**Maximum**	**Results**	**UOM**
Assay (argentometric)	99.0		99.99	%
Barium (Ba)	Passes test (about 0.001%)		Passes	%
Bromide (Br)		0.01	0.01	%
Calcium (Ca)		0.002	0.002	%
Chlorate and nitrate (as NO3)		0.003	0.003	%
Heavy metals (as Pb)		5	2.0	ppm
Insoluble matter		0.005	0.0032	%
Iodide (I)		0.002	0.002	%
Iron (Fe)		2	0.1	ppm
Magnesium (Mg)		0.001	0.0001	%
pH of a 5% solution at 25C	5.0	9.0	5.96	
Phosphate (PO4)		5	5	ppm
Potassium (K)		0.005	0.005	%
Sulfate (SO4)		0.004	0.004	%

Joe Schoellkopff

Quality Control Manager

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EMD Chemicals Inc.
480 South Democrat Road
Gibbstown, NJ 08027
Phone: 856-423-6300
Fax: 856-423-4389
www.emdchemicals.com

IAL *TOC soils Standards*

Injection Weights (ug)	Injection Volumes of WCTOCsoilS1 (ul)
0	0
50	2.5
100	5
200	10
300	15
400	20
600	30

ICV2/CCV2 concentration
400 ug 20 ul.

Spike(MS1/MSD1) concentration
200 ug 10 ul.

RLSTD1 concentartion
50 µg 2.50µl.

ssium Biphthalate(KHP)- (20000mg/L)- Dissolve 4.256g of Potassium Biphthalate into 80ml dist water in a 100ml volumetric flask. Bring to volume with dist. water.

WCTOCsoilS/date prep

RA No.	date prep	RA No.	date prep
56-21	06-27-13 ED		
56-21	12-18-13 ED		
96-21	7-3-14 ED		
56-21	1-30-15 ED		

Add 10ul of WCTOCsoilS for Spike, directly into boat- on top of soil.

* for spikes (MS + MSD, CCV & RLSTD. as of 1/24/14. 1st source for MS/MSD, RLSTD

Second Source Potassium Biphthalate (KHP)- (20000mg/L)- Dissolve 4.256g of Second Source Potassium ithalate into 80ml dist water in a 100ml volumetric flask. Bring to volume with dist. water.

WCTOCsoilS2/date prep

RA No.	date prep	RA No.	date prep
44-21 06CO	06-27-13 ED		
44-21	12-18-13 ED		
Hfq 51-19	7-3-14 ED		
Hfq 51-19	1-30-15 ED		

Add 10ul of WCTOCsoilS2 for LCSS, directly into boat- on top of sand or blank soil.

* for ICV. as of 1/24/14. 2nd source for ICV2 CCV2

Phosphoric Acid (1:1)- Add 50ml of conc H3PO4 to 30ml of dist. water in a 100ml volumetric flask. Bring to volume with dist. water.

RA # 55-12 / 01-15-13 ED
RA # 44-12 / 01-20-14 ED
RA # 44-12 / 01-30-15 ED

RA No. /Date prep

AA 56-21

Potassium Phthalate, Crystal

AR®, A.C.S., Primary Standard

Product No. 6704
Specifications current as of: Jun 4 2012

TEST	SPECIFICATION
Meets ACS Reagent Chemical Requirements	
For Laboratory Research or Manufacturing Use	
ACS - Assay ($1\text{-}KOCOC_6H_4\text{-}2\text{-}COOH$)	99.95 - 100.05 %
ACS - Chlorine Compounds (as Cl)	<= 0.003 %
ACS - Heavy Metals (as Pb)	<= 5 ppm
ACS - Insoluble Matter	<= 0.005 %
ACS - Iron (Fe)	<= 5 ppm
ACS - pH of 0.05M Solution at 25°C	4.00 - 4.02
ACS - Sodium (Na)	<= 0.005 %
ACS - Sulfur Compounds (as S)	<= 0.002 %
Traceable to NIST	
Appearance (white crystals)	

http://app.avantormaterials.com/DistributorRedirect/DistributorRedirect.aspx?a=avantor&l... 6/4/2012

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

RA# 51-19

Potassium hydrogen phthalate, primary standard, ACS, 99.95-100.05%

Stock Number: 33351
Lot Number: G31U018

Analysis

Test	Limits	Results
Insoluble matter	0.005 % max	0.002 %
Assay	99.95 - 100.05 %	99.98 %
pH of 0.05 M soln at 25°C	4.00 - 4.02	4.01
Heavy metals	5 ppm max	< 5 ppm
Iron	5 ppm max	< 5 ppm
Sulfur compounds	0.002 % max	< 0.002 %
Chlorine compounds	0.003 % max	< 0.003 %
Sodium	0.005 % max	0.005 %

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Quality Control

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Hexavalent Chromium

HEXAVALENT CHROMIUM QC SUMMARY

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Hexavalent Chromium

Matrix: Soil
Unit: mg/Kg

Batch: AP011-0015
Method: 3060A/7196A

Date: 02/20/2015

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
ICV	ICV	0.462	0.5	NA	NA	92.4	90-110
ICB	ICB	< 0.004	NA	NA	NA	NA	NA
BLK	BLKS150220	< 0.167	NA	NA	NA	NA	NA
LCS	LCSS150220	33.6	40	NA	NA	84.0	80-120
SAMPLE	E15-01273-001	< 0.187	NA	NA	NA	NA	NA
DUP	E15-01273-001DUP	< 0.187	NA	NC	NC	NA	NA
MS	E15-01273-001MS	19.9	44.7	NA	NA	44.5	75-125
INS	E15-01273-001INS	1040	1080	NA	NA	96.3	75-125
PS	E15-01273-001PS	40.4	44.7	NA	NA	90.4	85-115

The above blank result applies to the follow samples:

E15-01273-001
E15-00620-008

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Hexavalent Chromium
RAW DATA
INSTRUMENT LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Cal Batch ID: 150220S1
Method: 3060A/7196A
Matrix: Soil
Date & Time: 02/20/2015 14:32
Analyst: Deborah Szachara

Batch ID: AP011-0015
Date & Time: 02/20/2015 14:32

((abs.-blankabs.)-b)/m=mg/L
((mg/L)*0.1)/kg sample*(%TS/100)=Cr6 mg/Kg -dwb

m:	1.05459	RL (mg/Kg):	1.00
b:	0.006088	MDL (mg/Kg):	0.167
Wt. Cr (mg):	0.1	Spike Added (mg/Kg):	44.7
PbCrO4 (mg):	15	Spike Added (mg/Kg):	1080

Data Loc	Sample ID	Color dig.	3060A 7.0-8.0 pH adj.	7196A 1.5-2.5 pH adj.	Blank 1.5-2.5 pH adj.	Vol	DF	% Moist	unit	Abs.	Blank Abs.	Corr. Abs.	Result mg/L	Result (1)	Result (2)	MDL	RL	Q	Unit (2)
001	S0.000	Clear	7.2	2.2	-	100	1	100	ml	0.000	-	-	-	-	-	-	-	-	-
002	S0.025	Clear	7.2	2.3	-	100	1	100	ml	0.026	-	-	-	-	-	-	-	-	-
003	S0.050	Clear	7.3	2.4	-	100	1	100	ml	0.069	-	-	-	-	-	-	-	-	-
004	S0.100	Clear	7.4	2.2	-	100	1	100	ml	0.115	-	-	-	-	-	-	-	-	-
005	S0.200	Clear	7.2	2.1	-	100	1	100	ml	0.213	-	-	-	-	-	-	-	-	-
006	S0.500	Clear	7.3	2.2	-	100	1	100	ml	0.531	-	-	-	-	-	-	-	-	-
007	S0.750	Clear	7.4	2.3	-	100	1	100	ml	0.813	-	-	-	-	-	-	-	-	-
008	S1.000	Clear	7.3	2.3	-	100	1	100	ml	1.050	-	-	-	-	-	-	-	-	-
009	ICV	Clear	7.3	2.3	-	100	1	100	ml	0.493	0.000	0.493	0.462	0.462	0.462	0.004	0.025		Aqueous-mg/L
010	ICB	Clear	7.4	2.4	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L
011	CCV	Clear	7.3	2.2	-	100	1	100	ml	0.495	0.000	0.495	0.464	0.464	0.464	0.004	0.025		Aqueous-mg/L
012	CCB	Clear	7.3	2.3	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L
013	BLKS150220	Clear	7.3	2.2	-	2.5	1	0	g	0.000	0.000	0.000	-0.006	-0.231	ND	0.167	1.00		Soil-mg/Kg
014	LCSS150220	Clear	7.4	1.9	-	2.5	1	0	g	0.891	0.000	0.891	0.839	33.564	33.6	0.167	1.00		Soil-mg/Kg
015	RLSTD	Clear	7.3	1.9	-	2.5	1	0	g	0.023	0.000	0.023	0.016	0.641	0.641	0.167	1.00	J	Soil-mg/Kg
016	E15-01273-001	Clear	7.2	2.5	2.5	2.5	1	10.6	g	0.007	0.007	0.000	-0.006	-0.258	ND	0.187	1.12		Soil-mg/Kg
017	E15-01273-001DUP	Clear	7.0	1.8	1.8	2.5	1	10.6	g	0.006	0.006	0.000	-0.006	-0.258	ND	0.187	1.12		Soil-mg/Kg
018	E15-01273-001MS	Clear	7.2	2.3	2.3	2.5	1	10.6	g	0.481	0.006	0.475	0.445	19.894	19.9	0.187	1.12		Soil-mg/Kg
019	E15-01273-001INS	Yellow	7.3	2.5	2.5	2.5	50	10.6	g	0.498	0.000	0.498	0.466	1043.509	1040	9.34	55.9		Soil-mg/Kg
020	E15-01273-001PS	Clear	7.3	2.4	2.4	2.5	1	10.6	g	0.966	0.007	0.959	0.904	40.429	40.4	0.187	1.12		Soil-mg/Kg
021	E15-00620-008	Yellow	7.2	2.4	2.4	2.5	1	72.3	g	0.035	0.033	0.002	-0.004	-0.560	ND	0.603	3.61		Soil-mg/Kg
022	CCV	Clear	7.4	2.3	-	100	1	100	ml	0.497	0.000	0.497	0.466	0.466	0.466	0.004	0.025		Aqueous-mg/L
023	CCB	Clear	7.2	2.3	-	100	1	100	ml	0.000	0.000	0.000	-0.006	-0.006	ND	0.004	0.025		Aqueous-mg/L

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Calibration Log

Test:	**Hexavalent Chromium**	Analyst:	**Deborah Szachara**
Method:	**3060A/7196A**	Date:	**02/20/2015 14:32**
Matrix:	**Soil**	Cal. Batch:	**150220S1**

mg/L	Abs.
0.000	0.000
0.025	0.026
0.050	0.069
0.100	0.115
0.200	0.213
0.500	0.531
0.750	0.813
1.000	1.050

R^2=	0.99974
Slope=	1.0546
Intercept=	0.0061

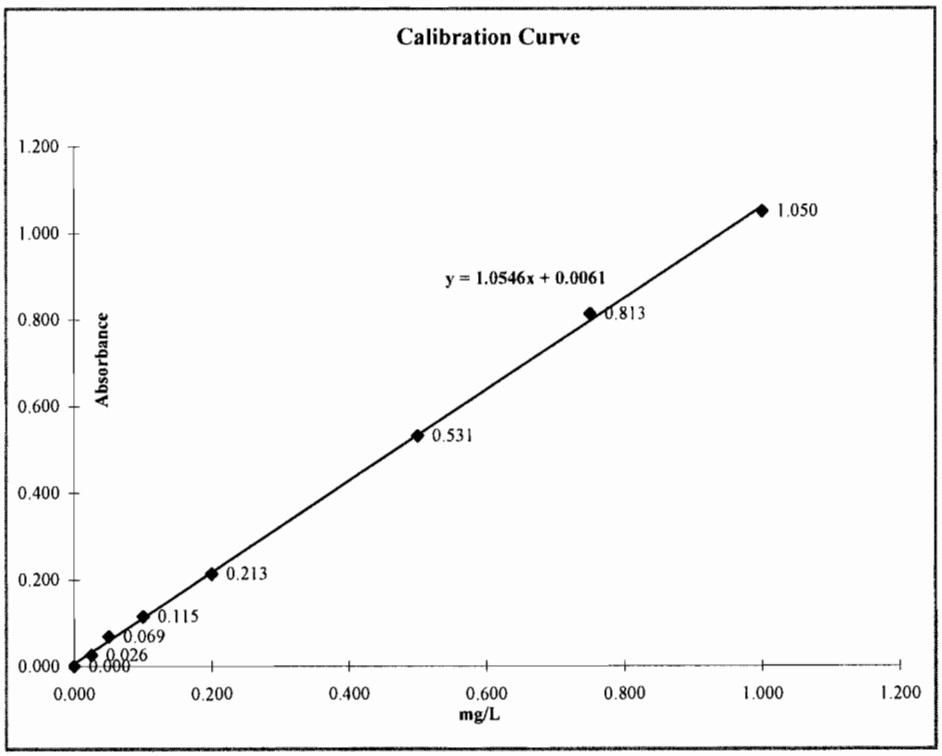
INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Date:	**Friday, 02/20/2015**
Method:	**3060A/7196A**
Matrix:	**Soil**
Analyst:	**Deborah Szachara**

mg/L	Abs.
0.000	0.000
0.025	0.026
0.050	0.069
0.100	0.115
0.200	0.213
0.500	0.531
0.750	0.813
1.000	1.050

R^2=	**0.99974**
Slope=	**1.0546**
Intercept=	**0.0061**



Comments:

Cal. Batch ID: 150220S1

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION VERIFICATION

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara

	True Value	Result (mg/Kg)	% REC
BLKS150220		< 0.167	

	True Value	Result (mg/L)	% REC
ICV.009	0.500	0.462	92.4
CCV.011	0.500	0.464	92.8
CCV.022	0.500	0.466	93.2

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara

	Result (mg/Kg)
BLKS150220	< 0.167

	Result (mg/L)
ICB.010	< 0.004
CCB.012	< 0.004
CCB.023	< 0.004

NJDEP FORM M-9A (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

MATRIX SPIKE RECOVERY DATA SHEET

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara
Matrix: Soil	Unit: mg/Kg

	SAMPLE	AMOUNT	SPIKE		CONTROL
	RESULTS	ADDED	CONC.	% REC	LIMIT
E15-01273-001MS	< 0.187	44.7	19.9	44.5	75-125
E15-01273-001INS	< 0.187	1080	1040	96.3	75-125
E15-01273-001PS	< 0.187	44.7	40.4	90.4	85-115

NJDEP FORM G-2 (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

Hexavalent Chromium

Batch: AP011-0015	Date & Time: 02/20/2015 14:32
Method: 3060A/7196A	Analyst: Deborah Szachara
Matrix: Soil	Unit: mg/Kg

	SAMPLE	AMOUNT	SPIKE		CONTROL
	RESULTS	ADDED	CONC.	% REC	LIMIT
LCSS150220	< 0.167	40.0	33.6	84.0	80-120%

NJDEP FORM G-2 (12/94)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Characterization Log

Test:	**Cr-VI (Hexavalent Chromium)**	Analyst:	**Deborah Szachara**
Matrix:	**3060A/7196A**	Date:	**2/20/2015**
Method:	**Soil**	Batch ID:	**AP011-0015**

	Date/Time	Analyst
S2-pH-Eh	**2/20/2015 9:45**	**Deborah Szachara**
COD	**2/20/2015 14:00**	**Deborah Szachara**

Sample ID	S2 odor (POS/NEG)	pH (SU)	Eh (mV)	pH, Eh temp-°C	COD (mg/Kg)	Characterization Reducing or Oxidizing
E15-01273-001	NEG	7.73	400	17	84100	Reducing
E15-01273-001DUP	NEG	7.75	399	17		Reducing
E15-00620-008	NEG	6.97	242	17		Reducing

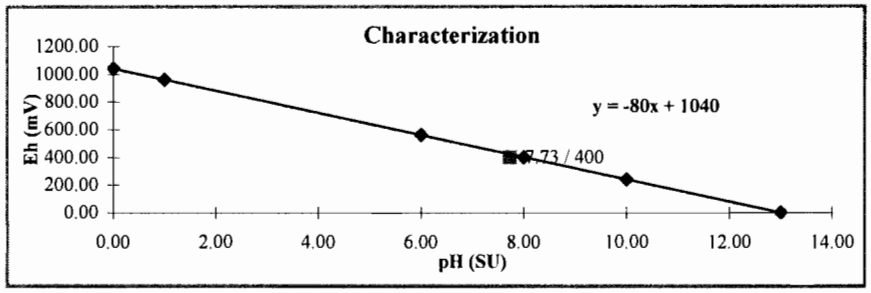
INTEGRATED ANALYTICAL LABORATORIES, LLC.

Characterization

pH (SU)	Eh (mV)
0.00	1040.00
1.00	960.00
6.00	560.00
8.00	400.00
10.00	240.00
13.00	0.00

R2=	-1
Slope=	-80
Intercept=	1040

pH (SU)	Eh (mV)		Sample ID
7.73	**400**	**Reducing**	**E15-01273-001**



INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture Log

Sample ID	Matrix	Pan Wt.	Wet Wt.	Dry Wt.	% Solids	% Moist	Factor	Jar
E15-01273-001	Soil	0.95	5.29	4.83	89.4	10.6	1.12	U2

HEXAVALENT CHROMIUM
STANDARD & DIGESTION LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Digestion Log

Test:	**Cr-VI (Hexavalent Chromium)**	Analyst:	**Deborah Szachara**
Method:	**3060A/7196A**	Date:	**02/20/2015**
Matrix:	**Soil**	Batch:	**AP011-0015**

*alkaline digestion must be at least 60 min, and have a temperature of 90-95°C

No.	Sample ID	Date	Time Start	Time End*	Temp (°C)
1	BLKS150220	02/20/2015	07:45	08:45	94
2	LCSS150220	02/20/2015	07:45	08:45	94
3	RLSTD	02/20/2015	07:45	08:45	94
4	E15-01273-001	02/20/2015	07:45	08:45	94
5	E15-01273-001DUP	02/20/2015	07:45	08:45	94
6	E15-01273-001MS	02/20/2015	07:45	08:45	94
7	E15-01273-001INS	02/20/2015	07:45	08:45	94
8	E15-00620-008	02/20/2015	09:00	10:00	94
9					
10					
11					
12					
13					
14					
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25					
26					

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Hexavalent Chromium

Date Analyzed 02/20/2015 **Method 3060A/7196A**

5.0M Nitric Acid	RA	71-23/Fisher
Magnesium Chloride	RA	71-17/Alfa Aesar
Phosphate Buffer	WCCr6Buff/	09/22/2014
Lead Chromate	RA	43-19/Fluka
Digestion Solution	WCCr6Dig./	02/04/2015

Potassium Dichromate Stock (50mg/L)	WCCr6S/	12/29/2014
Potassium Dichromate Int. (5mg/L)	WCCr6SInt/	02/20/2015
Potassium Dichromate Second Source (50mg/L)	WCCr6S2/	12/29/2014
Potassium Dichromate Second Source Int.(5mg/L)	WCCr6S2Int/	02/20/2015

10% Sulfuric Acid	RA	72-14/Fisher
Diphenylcarbazide Sol.	WCCr6DPC/	02/05/2015

Certificate of Analysis

Alfa Aesar
A Johnson Matthey Company

rec'd 4/14/16

RA SO-7

Potassium dichromate, ACS, 99.0% min

Stock Number: 13450
Lot Number: F17U021

Analysis

Test	Limits	Results
Assay	99.0 % min	101.07 %
Insoluble matter	0.005 % max	0.003 %
Loss on drying	0.05 % max	0.032 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	0.0007 %
Calcium	0.003 % max	0.001 %
Sodium	0.02 % max	0.0025 %
Appearance		Orange-red crystals
Identification		Passes

Certified by:

Quality Control

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KOREA
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EMD™

Certificate of Analysis

LA 50-6

EMD Chemicals Inc.
480 S. Democrat Road
Gibbstown, NJ 08027
Phone 856-423-6300
Fax 856-423-4389

Name: Potassium Dichromate
GR ACS
Meets ACS Specifications

Formula: $K_2Cr_2O_7$

Item Number: PX1445-1, PX1445-11, PX1445-2, PX1445-20, PX1445-5, PX1445-7, PX1445-901

Formula Wt: 294.18

Lot Number: 47250933

Data Order No: 000410980

CHARACTERISTIC	REQUIREMENT		RESULTS	UNITS
	Min.	Max.		
Assay (Iodometric)	99.0		99.73	%
Insoluble matter		0.005	< 0.0005	%
Chloride (Cl)		0.001	0.0005	%
Sulfate (SO4)		0.005	0.0008	%
Calcium (Ca)		0.003	0.0010	%
Iron (Fe)		0.001	< 0.0001	%
Sodium (Na)		0.02	0.0050	%
Loss on drying (105°C)		0.05	0.02	%

Charles M. Wilson,
Quality Assurance Manager

Release Date: 9/20/2007

EMD Chemicals Inc.
(Formerly EM Science, A Division of EM Industries, Inc.)
An Affiliate of Merck KGaA, Darmstadt, Germany

Potassium Dichromate Stock (50mg/L)- Dissolve 141.4 mg of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

WCCr6S/ date prep

K2Cr2O7				K2Cr2O7			
RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-7	AlfaAesar	1/14/13	DS	50-7	AlfaAesar	3/20/14	DS
50-7	AlfaAesar	7/09/13	DS	50-7	AlfaAesar	9/22/14	DS
50-7	AlfaAesar	12/18/13	DS	50-7	AlfaAesar	12/29/14	DS

Potassium Dichromate Int. (5mg/L)- Dilute 10.00ml of potassium dichromate stock solution to 100ml in a 100ml volumetric flask.

WCCr6SInt./ date prep

Potassium Dichromate Second Source (50mg/L)- Dissolve 141.4 mg of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

WCCr6S2/ date prep

K2Cr2O7				K2Cr2O7			
RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-6	EMD	1/14/13	DS	50-6	EMD	3/20/14	DS
50-6	EMD	7/9/13	DS	50-6	EMD	9/20/14	DS
50-6	EMD	12/18/13	DS	50-6	EMD	12/09/14	DS

Potassium Dichromate Second Source Int. (5mg/L)- Dilute 10.00ml of potassium dichromate second source stock solution to a 100ml in a 100ml volumetric flask.

WCCr6S2Int./ date prep

Standards-

Conc. mg/L	5mg/L Int. added to 100ml volumetric + 50ml digestion sol. (ml)	
0.000	0.0	(digestion solution added for soil analysis only)
0.025	0.5	
0.050	1.0	
0.100	2.0	
0.200	4.0	
0.500	10.0	Bring standards to volume with dist. water.
0.750	15.0	
1.00	20.0	

2nd Source Check

Conc. mg/L	2nd, 5mg/L Int. added to 100ml volumetric + 50ml digestion sol. (ml)	
0.50	10.0	(digestion solution added for soil analysis only)
		Bring standards to volume with dist. water.

Spike

Conc. mg/L	5mg/L Int. added to 100ml volumetric	
0.50	10.0	
		Bring spike to volume with sample .

IAL Hexavalent Chromium Reagents

½ Sulfuric Acid- Add 100ml of conc. H2SO4 to 500ml dist. water. Bring to 1000ml with dist. water

RA No. / date prep

Diphenylcarbazide Solution- Dissolve 250mg of 1,5 diphenylcarbazide in 50ml acetone. Store in a brown bottle. Discard when the solution becomes discolored.

WCCr6DPC/ date prep

Acetone		1,5 DPC			
RA Number	Supplier	RA Number	Supplier	Date Prep	Prep by
63-7	MaCron	64-19	AlfaAesar	5/06/13	DS
63-7	Macron	64-19	AlfaAesar	5/24/13	DS
63-7	Macron	52-24	AlfaAesar	7/9/13	DS
63-7	Macronchem	52-24	AlfaAesar	8/15/13	DS
63-7	Macronchem	64-19	AlfaAesar	9/16/13	DS
63-7	Macronchem	64-19	AlfaAesar	10/02/13	DS
63-7	Macronchem	52-24	AlfaAesar	10/24/13	DS
63-7	macronchem	52-24	AlfaAesar	11/20/13	DS
66-4	macronchem	64-19	AlfaAesar	12/17/13	DS
66-4	macronchem	64-19	AlfaAesar	01/07/14	DS
66-4	Macronchem	64-19	AlfaAesar	02/14/14	DS
66-4	Macronchem	64-19	AlfaAesar	04/02/14	DS
66-4	Macronchem	64-19	AlfaAesar	4/16/14	DS
66-4	Macronchem	64-19	AlfaAesar	5/15/14	DS
66-4	Macronchem	64-19	AlfaAesar	6/25/14	DS
66-4	Macronchem	64-19	AlfaAesar	7/21/14	DS
66-4	Macronchem	64-19	AlfaAesar	8/14/14	DS
66-4	Macronchem	64-19	AlfaAesar	9/2/14	DS
66-4	Macronchem	64-19	AlfaAesar	9/22/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	~~9/23/14~~ 10/22/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	11/04/14	DS 11/04/14
66-4	Mallinckrodt	64-19	AlfaAesar	12/08/14	DS
66-4	Mallinckrodt	64-19	AlfaAesar	01/09/15	DS
66-4	Mallinckrodt	64-19	AlfaAesar	02/03/15	DS
71-18	Macron	64-19	AlfaAesar	02/05/15	DS

5.0M HNO3- Add 320ml of conc HNO3 to 500ml dist. water. Bring to a 1000ml with dist. water.

RA No./date prep.

0.5M K2HPO4/0.5M KH2PO4 Buffer 7- Dissolve 87.09g of K2HPO4 and 68.04g KH2PO4 into 700ml of dist. water. Transfer to a 1L volumetric flask and bring to volume with dist. water

WCCr6Buff/ date prep

K2HPO4			KH2PO4			
RA Number	Supplier	Date Prep	RA Number	Supplier	Date Prep	Prep by
			5			

Digestion Solution- Dissolve 20.0 +/- 0.05g NAOH and 30.0 +/- 0.05g Na2CO3 in dist. water in a 1L volumetric flask. Bring to volume with dist. water. The pH of the digestion solution must be checked before using. The pH must be 11.5 or greater, if not, discard. Prepare fresh monthly.

WCCr6Dig./ date prep

NaOH		Na2CO3			
RA Number	Supplier	RA Number	Supplier	pH	DATE/ INIT
65-10	Fisher	71-7	Fisher	12.7	7/21/14 DS
65-10	Fisher	71-7	Fisher	12.8	8/21/14 DS
65-10	Fisher	71-7	Fisher	12.7	9/22/14 DS
65-10	Fisher	71-7	Fisher	12.8	10/22/14 DS
65-10	Fisher	71-7	Fisher	12.7	11/21/14 DS
65-10	Fisher	71-7	Fisher	12.6	12/08/14 DS
65-10	Fisher	71-7	Fisher	12.8	1/08/15 DS
65-10	Fisher	71-7	Fisher	12.9	02/04/15 DS

5.0M HNO3- Add 320ml of conc HNO3 to 500ml dist. water. Bring to a 1000ml with dist. water.

RA No./date prep.

0.5M K2HPO4/0.5M KH2PO4 Buffer 7- Dissolve 87.09g of K2HPO4 and 68.04g KH2PO4 into 700ml of dist. water. Transfer to a 1L volumetric flask and bring to volume with dist. water

WCCr6Buff/ date prep

K2HPO4 / KH2PO4

RA Number	Supplier	Date Prep	RA Number	Supplier	Date Prep	Prep by
B420492	Mall. Kredit	2/2/11	47-24	Mall. Kredit	2/9/11	DS
K03W024	Alfa Aesar	1/10/12	49-22	Mall. Kredit	1/9/12	
K03W024	Alfa Aesar	1/9/13	49-22	Mall. Kredit	1/9/13	
K03W024	Alfa Aesar	01/07/14	53-16	Mallinckrodt	01/07/14	DS
K03W024	Alfa Aesar	09/22/14	53-16	mallinckrodt	9/23/14	DS
~~K03W024~~	~~Alfa Aesar~~	~~10/2/14~~	~~53-16~~		10/22/14	DS 11/4/14

Digestion Solution- Dissolve 20.0 +/- 0.05g NAOH and 30.0 +/- 0.05g Na2CO3 in dist. water in a 1L volumetric flask. Bring to volume with dist. water. The pH of the digestion solution must be checked before using. The pH must be 11.5 or greater, if not, discard. Prepare fresh monthly.

WCCr6Dig./ date prep

NaOH / Na2CO3

RA Number	Supplier	RA Number	Supplier	pH	DATE/ INIT
RA53-3	Baker	RA53-6	Alfa Aesar	12.5	8/11/11
RA53-3	Baker	RA53-6	Alfa Aesar	13.1	9/12/11
RA53-3	Baker	RA53-6	Alfa Aesar	12.9	10/17/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.4	11/3/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	11/10/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.5	12/13/11
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	~~6/15/12~~ 01/05/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.7	1/25/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.9	3/1/12
RA53-3	Baker	RA55-23	Alfa Aesar	~~13.0~~ 12.8	3/13/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.8	4/3/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.9	5/1/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.6	5/8/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.5	6/12/12
RA53-3	Baker	RA55-23	Alfa Aesar	12.6	7/11/12

Potassium Dichromate Spiking Solution (1000mg/L)- Dissolve 2.829g of dried potassium dichromate, K2Cr2O7, in dist. water in a 1L volumetric flask. Bring to volume with dist. water.

1ml = 1mg WCCr6S/ date prep

K2Cr2O7 K2Cr2O7

RA Number	Supplier	Date Prep	Prep by	RA Number	Supplier	Date Prep	Prep by
50-6	EMD	8/23/11	B				

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants Inc
Address: 1 Greenwood Ave Ste 210
Montclair NJ 07042
Telephone #: 9738737710
Fax #: 9735059625
Project Manager: Jerry Zak
EMAIL Address: jzak@geiconsultants.com
Sampled by: M Sweet

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Project Name: Greenpoint
Project Location (State): New York
Bottle Order #:

REPORTING INFO

REPORT TO: Jaimie Wargo
Address:
datagroup@geiconsultants.com
Attn:
FAX #

INVOICE TO: Sandra St Hilaire
Address:
geipayables@geiconsultants.com
Attn:
PO # 125180-2-1207
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-2015 (3-5 day TAT) QAM025

Verbal/Fax: ~~Std 2 wk~~ unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify):
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%...
72 hr - 50%....
96 hr - 35%...
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only	NJ SRP format
NY Cat A	
NJ Reduced	NYSDEC
NJ Regulatory	
NY Cat B	lab approved custom EDD
15% Surcharge applies	
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #
GPEC-WC1-021815		2/18/15	13:35	S	3	1

ANALYTICAL PARAMETERS
See Attached List of Parameters

 # BOTTLES & PRESERVATIVES

HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
						3	

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req:
NJ GWQS
NJ IGW
NJ SRS
NY TOGS
NY CP51
NY Part 375 Restricted
NY Part 375 Unrestricted
Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time		Signature/Company	Date	Time
Relinquished by:		2/19/15	10:56	Received by:		2/19/15	10:56
Relinquished by:		2/19/15	11:52	Received by:		2/19/15	11:52
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 1273

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\COCs\2013 COC

01/2013 rev

E5-02233 Page 1 of 1

201-575-1715

On Feb 18, 2015, at 3:29 PM, Zak, Jerry <JZak@geiconsultants.com> wrote:

Matt:

I talked to Kim James at IAL. She will email us a list of all the parameters that go for 40 CFR. She knows we want them, plus all of the following (there may be some redundancy): (Kim pls confirm you got this.)

- VOCs 8260
- SVOCs 8270
- TAL Metals 6000/7000
- Herbicides 8151A
- Pesticides 8081A
- Free Cyanide 9016
- PCBs 8082
- Hex chromium 3060/7196
- TOC (Lloyd Kahn)
- Reactivity – Sulfur and Cyanide
- Ignitability
- Ph or Corrosivity
- Extractable Organic Halides
- TCLP VOC
- TCLP SVOC
- TCLP Metals and Hg
- TCLP Pesticides
- TCLP Herbicides
- % Solids / % Moisture

TCLP TAT is 72 hrs. None TCLP will be 48 hours.

Thanks.

Jerry

Jerry Zak
Senior Project Manager
<image002.jpg>
GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201 | Glastonbury, CT 06033
T: 860.368.5404 | **M:** 860.558.3866 | **F:** 860.368.5307
www.geiconsultants.com | LinkedIn | Twitter | Facebook

Please consider the environment before printing this e-mail.

RUSH

PROJECT INFORMATION

E15-01273: GREENPOINT WC

To: Jerry Zak
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: jzak@geiconsultants.com;msweet@

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Jerry Zak

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category B	IECT #125180-2-	Feb 19, 2015 @ 11:52	Feb 23, 2015	Feb 23, 2015	Mar 12, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01273-001	GPEC-WC1-021815	NA	02/18/15@13:35	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	RUSH 48 HRS	3/4/2015
	TCLP VO	Analyze	1311/8260C	RUSH 72 HRS	3/4/2015
	TPH-GRO	Analyze	8260C	RUSH 48 HRS	3/4/2015
	TCLP BNA	Analyze	1311/8270D	RUSH 72 HRS	3/4/2015
	TCL BNA	Analyze	8270D	RUSH 48 HRS	3/4/2015
	TCL PCB	Analyze	8082A	RUSH 48 HRS	3/4/2015
	TPH-DRO-48 HR	Analyze	8015D	RUSH 48 HRS	3/4/2015
	TCLP Pesticides	Analyze	1311/8081B	RUSH 72 HRS	3/4/2015
	TCLP Herbicides	Analyze	1311/8151A	RUSH 72 HRS	3/4/2015
	TCL Pesticides	Analyze	8081B	RUSH 48 HRS	3/4/2015
	Herbicides	Analyze	8151A	RUSH 48 HRS	3/4/2015
	TCLP Metals	Analyze	1311/6020A/7470A	RUSH 72 HRS	3/18/2015
	TAL Metals	Analyze	6020A/7471B	RUSH 48 HRS	3/18/2015
	Free Cyanide	Analyze	9016	RUSH 48 HRS	3/4/2015
	TOC	Analyze	Lloyd Kahn	RUSH 48 HRS	3/4/2015
	% Moisture	Analyze	D2216-71	RUSH 48 HRS	2/18/2015
	Ignitability	Analyze	1030	RUSH 48 HRS	3/18/2015
	pH/Corrosivity	Analyze	9045C	RUSH 48 HRS	3/18/2015
	Cyanide, Reactive	Analyze	7.3.3.2	RUSH 48 HRS	3/4/2015
	TOX (Total Organic Halides)	Analyze	9023	RUSH 48 HRS	3/18/2015
	Cr-VI (Hexavalent Chromium)	Analyze	3060A/7196A	RUSH 48 HRS	3/20/2015

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

PROJECT INFORMATION

RUSH

E15-01273: GREENPOINT WC

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	Sulfide, Reactive	Analyze	7.3.4.2	RUSH 48 HRS	2/25/2015

Project Notes:

NOTE 1 taken by Ellen on 02/19/2015 12:15
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

NOTE 2 taken by Ellen on 02/19/2015 12:18
ANY E QUALIFIED RESULTS NEED A COMBINED FORM 1.

NOTE 3 taken by Ellen on 02/19/2015 12:37
TCLP PARAMETERS ON 72 HR TAT, RESULTS DUE 2/24.

REV 1 taken by kim on 02/19/2015 04:11
PER MATT SWEET, ADD TPH (DRO/GRO) TO SAMPLE 001, 48 HR RUSH.

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **01273** CLIENT: Weston Consultants

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 2/18/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KG DATE 2/19/15

Laboratory Custody Chronicle

IAL Case No.

E15-01273

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 2/19/2015@11:52

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	01273-001	Soil	n/a	n/a	2/19/15	Mei
TCLP VO	-001	Soil	n/a	n/a	2/20/15	Mei
TPH-GRO	-001	Soil	n/a	n/a	2/20/15	Xing

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	2/19/15	Kou-Liang	2/20/15	Eleanor
TCLP BNA	-001	Soil	2/20/15	Kou-Liang	2/23/15	Dana

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Herbicides	-001	Soil	2/20/15	Archimede	2/23/15	Margaret
TCL PCB	-001	Soil	2/19/15	Archimede	2/19/15	Justyna
TCL Pesticides	-001	Soil	2/19/15	Archimede	2/20/15	Iwona
TCLP Herbicides	-001	Soil	2/23/15	Archimede	2/24/15	Margaret
TCLP Pesticides	-001	Soil	2/23/15	Archimede	2/23/15	Iwona
TPH-DRO-48 HR	-001	Soil	2/19/15	Archimede	2/20/15	Latha

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TAL Metals	-001	Soil	2/20/15	Frank	2/23/15	Danielle
TCLP Metals	-001	Soil	2/23/15	Frank	2/23/15	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
% Moisture	-001	Soil	n/a	n/a	2/19/15@14:03	Lucy
Cr-Vl (Hexavalent Chromium)	-001	Soil	n/a	n/a	2/20/15	Debbie
Cyanide, Reactive	-001	Soil	n/a	n/a	2/20/15	Elma
Free Cyanide	-001	Soil	n/a	n/a	2/20/15	Robert
Ignitability	-001	Soil	n/a	n/a	2/20/15	Elma
Sulfide, Reactive	-001	Soil	n/a	n/a	2/20/15	Elma
TOC	-001	Soil	n/a	n/a	2/23/15	Elma
TOX (Total Organic Halides)	-001	Soil	n/a	n/a	2/20/15	Robert
pH/Corrosivity	-001	Soil	n/a	n/a	2/20/15	Debbie

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 01736-001
Client ID: GPEC-DCA
Matrix-Units: Soil-mg/Kg
Percent Moisture: 14.0

Date Sampled: 2/27/2013
Time Sampled: 13:36
Date Analyzed: 3/1/13

Compound	Conc	Q	RL	MDL
Chloromethane	ND		0.188	0.043
Vinyl chloride	ND		0.188	0.124
Bromomethane	ND		0.188	0.103
Chloroethane	ND		0.188	0.079
Trichlorofluoromethane	ND		0.188	0.088
Acrolein	ND		3.75	0.446
1,1-Dichloroethene	ND		0.188	0.156
Acetone	ND		0.375	0.069
Methylene chloride	ND		0.375	0.371
Acrylonitrile	ND		3.75	0.294
trans-1,2-Dichloroethene	ND		0.188	0.096
1,1-Dichloroethane	ND		0.188	0.077
cis-1,2-Dichloroethene	ND		0.188	0.069
2-Butanone (MEK)	ND		0.188	0.174
Chloroform	ND		0.188	0.069
1,1,1-Trichloroethane	ND		0.188	0.088
Carbon tetrachloride	ND		0.188	0.133
1,2-Dichloroethane (EDC)	ND		0.188	0.045
Benzene	1.46		0.188	0.045
Trichloroethene	ND		0.188	0.090
1,2-Dichloropropane	ND		0.188	0.069
Bromodichloromethane	ND		0.188	0.058
2-Chloroethyl vinyl ether	ND		0.188	0.066
cis-1,3-Dichloropropene	ND		0.188	0.049
4-Methyl-2-pentanone (MIBK)	ND		0.188	0.049
Toluene	1.18		0.188	0.043

ND = Analyzed for but Not Detected at the MDL
Continued on next page

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 01736-001
Client ID: GPEC-DCA
Matrix-Units: Soil-mg/Kg
Percent Moisture: 14.0

Date Sampled: 2/27/2013
Time Sampled: 13:36
Date Analyzed: 3/1/13

Compound	Conc	Q	RL	MDL
trans-1,3-Dichloropropene	ND		0.188	0.041
1,1,2-Trichloroethane	ND		0.188	0.051
Tetrachloroethene	ND		0.188	0.094
Dibromochloromethane	ND		0.188	0.058
Chlorobenzene	ND		0.188	0.062
1,1,1,2-Tetrachloroethane	ND		0.188	0.045
Ethylbenzene	27.5		0.188	0.068
Total Xylenes	28.0		0.375	0.130
Styrene	ND		0.188	0.045
Bromoform	ND		0.188	0.043
1,1,2,2-Tetrachloroethane	ND		0.188	0.045
1,3-Dichlorobenzene	ND		0.188	0.062
1,4-Dichlorobenzene	ND		0.188	0.052
1,2-Dichlorobenzene	ND		0.188	0.062
1,2,4-Trichlorobenzene	ND		0.188	0.064
TOTAL VO's:	58.1			

ND = Analyzed for but Not Detected at the MDL

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ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Semivolatiles - PAH

Lab ID: 01736-001
Client ID: GPEC-DCA
Matrix-Units: Soil-mg/Kg
Percent Moisture: 14.0

Date Sampled: 2/27/2013
Time Sampled: 13:36
Date Analyzed: 3/5/13

Compound	Conc	Q	RL	MDL
Naphthalene	11.1		0.192	0.057
Acenaphthylene	0.270		0.192	0.134
Acenaphthene	0.698		0.192	0.153
Fluorene	0.600		0.192	0.103
Phenanthrene	2.53		0.192	0.126
Anthracene	0.949		0.192	0.191
Fluoranthene	3.19		0.192	0.076
Pyrene	3.41		0.192	0.142
Benzo[a]anthracene	1.78		0.192	0.184
Chrysene	2.26		0.192	0.130
Benzo[b]fluoranthene	1.63		0.192	0.117
Benzo[k]fluoranthene	2.05		0.192	0.180
Benzo[a]pyrene	2.17		0.192	0.067
Indeno[1,2,3-cd]pyrene	1.48		0.192	0.127
Dibenz[a,h]anthracene	0.665		0.192	0.140
Benzo[g,h,i]perylene	1.80		0.192	0.172

PCB's

Lab ID: 01736-001
Client ID: GPEC-DCA
Matrix-Units: Soil-mg/Kg
Percent Moisture: 14.0

Date Sampled: 2/27/2013
Time Sampled: 13:36
Date Analyzed: 3/4/13

Compound	Conc	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	3.73		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	ND		0.043	0.017
PCBs	3.73		0.043	0.017

ND = Analyzed for but Not Detected at the MDL

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT — MDL = METHOD DETECTION LIMIT

Hydrocarbons

Lab ID: 01736-001 — Date Sampled: 2/27/2013
Client ID: GPEC-DCA — Time Sampled: 13:36
Matrix-Units: Soil-mg/Kg — Date Analyzed: 3/4/13
Percent Moisture: 14.0

Compound	Conc	Q	RL	MDL
TPH-DRO	789		86.4	69.1

Hydrocarbons

Lab ID: 01736-001 — Date Sampled: 2/27/2013
Client ID: GPEC-DCA — Time Sampled: 13:36
Matrix-Units: Soil-mg/Kg — Date Analyzed: 3/4/13
Percent Moisture: 14.0

Compound	Conc	Q	RL	MDL
TPH-GRO	631		9.38	3.75

Metals

Lab ID: 01736-001 — Date Sampled: 2/27/2013
Client ID: GPEC-DCA — Time Sampled: 13:36
Matrix-Units: Soil-mg/Kg — Date Analyzed: 3/1/13
Percent Moisture: 14.0

Parameter	Result	Q	RL	MDL
Antimony	0.355	J	1.24	0.311
Arsenic	17.0		0.622	0.311
Beryllium	0.335	J	0.436	0.249
Cadmium	1.30		0.622	0.156
Chromium	15.5		2.49	0.622
Copper	209		2.49	0.622
Lead	618		0.622	0.156
Mercury	0.502		0.014	0.00689
Nickel	16.5		1.24	0.622
Selenium	1.57	J	2.49	1.24
Silver	0.204	J	0.622	0.156
Thallium	0.202	J	0.622	0.156
Zinc	1100		2.49	2.49

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

TCLP Metals

Lab ID: 01736-001
Client ID: GPEC-DCA
Matrix-Units: TCLP Leachate-mg/L
Percent Moisture: NA

Date Sampled: 2/27/2013
Time Sampled: 13:36
Date Analyzed: 3/13/13

Compound	Conc	Q	RL	MDL
TCLP Lead	1.24		0.100	0.050

General Analytical

Lab ID: 01736-001
Client ID: GPEC-DCA
Percent Moisture: 14.0

Date Sampled: 2/27/2013
Time Sampled: 13:36

Parameter	Result	RL	MDL	Matrix-Units	Date Analyzed
Sulfur as S	ND	1150	959	Soil-mg/Kg	3/7/2013 15:00

Volatiles Special List

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/1/13

Compound	Conc	Q	RL	MDL
Chloromethane	ND		0.097	0.039
Vinyl chloride	ND		0.097	0.051
Bromomethane	ND		0.097	0.041
Chloroethane	ND		0.097	0.043
Trichlorofluoromethane	ND		0.097	0.054
Acrolein	ND		1.93	0.482
1,1-Dichloroethene	ND		0.097	0.038

ND = Analyzed for but Not Detected at the MDL
Continued on next page

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/1/13

Compound	Conc	Q	RL	MDL
Acetone	ND		0.193	0.053
Methylene chloride	ND		0.193	0.191
Acrylonitrile	ND		1.93	0.438
trans-1,2-Dichloroethene	ND		0.097	0.037
1,1-Dichloroethane	ND		0.097	0.028
cis-1,2-Dichloroethene	ND		0.097	0.026
2-Butanone (MEK)	ND		0.097	0.054
Chloroform	ND		0.097	0.036
1,1,1-Trichloroethane	ND		0.097	0.032
Carbon tetrachloride	ND		0.097	0.035
1,2-Dichloroethane (EDC)	ND		0.097	0.036
Benzene	ND		0.097	0.024
Trichloroethene	ND		0.097	0.021
1,2-Dichloropropane	ND		0.097	0.023
Bromodichloromethane	ND		0.097	0.038
2-Chloroethyl vinyl ether	ND		0.097	0.037
cis-1,3-Dichloropropene	ND		0.097	0.025
4-Methyl-2-pentanone (MIBK)	ND		0.097	0.029
Toluene	ND		0.097	0.026
trans-1,3-Dichloropropene	ND		0.097	0.025
1,1,2-Trichloroethane	ND		0.097	0.041
Tetrachloroethene	ND		0.097	0.023
Dibromochloromethane	ND		0.097	0.023
Chlorobenzene	ND		0.097	0.026
1,1,1,2-Tetrachloroethane	ND		0.097	0.021
Ethylbenzene	ND		0.097	0.035

ND = Analyzed for but Not Detected at the MDL
Continued on next page

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT — MDL = METHOD DETECTION LIMIT

Volatiles Special List

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/1/13

Compound	Conc	Q	RL	MDL
Total Xylenes	ND		0.193	0.064
Styrene	ND		0.097	0.039
Bromoform	ND		0.097	0.023
1,1,2,2-Tetrachloroethane	ND		0.097	0.025
1,3-Dichlorobenzene	ND		0.097	0.026
1,4-Dichlorobenzene	ND		0.097	0.029
1,2-Dichlorobenzene	ND		0.097	0.024
1,2,4-Trichlorobenzene	ND		0.097	0.039
TOTAL VO's:	ND			

Semivolatiles - PAH

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/8/13

Compound	Conc	Q	RL	MDL
Naphthalene	0.135		0.040	0.012
Acenaphthylene	0.069		0.040	0.028
Acenaphthene	0.264		0.040	0.032
Fluorene	0.210		0.040	0.021
Phenanthrene	2.39		0.040	0.026
Anthracene	0.740		0.040	0.040
Fluoranthene	4.50		0.040	0.016
Pyrene	3.25		0.040	0.029
Benzo[a]anthracene	1.62		0.040	0.038
Chrysene	2.05		0.040	0.027
Benzo[b]fluoranthene	0.683		0.040	0.024
Benzo[k]fluoranthene	1.00		0.040	0.037
Benzo[a]pyrene	0.897		0.040	0.014
Indeno[1,2,3-cd]pyrene	0.402		0.040	0.026
Dibenz[a,h]anthracene	0.173		0.040	0.029
Benzo[g,h,i]perylene	0.337		0.040	0.036

ND = Analyzed for but Not Detected at the MDL

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

PCB's

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/8/13

Compound	Conc	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
PCBs	ND		0.040	0.016

Hydrocarbons

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/7/13

Compound	Conc	Q	RL	MDL
TPH-DRO	327		88.7	70.9

Hydrocarbons

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/7/13

Compound	Conc	Q	RL	MDL
TPH-GRO	ND		4.83	1.93

ND = Analyzed for but Not Detected at the MDL

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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

Metals

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: Soil-mg/Kg
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/1/13

Parameter	Result	Q	RL	MDL
Antimony	1.16	J	1.23	0.309
Arsenic	9.46		0.617	0.309
Beryllium	0.374	J	0.432	0.247
Cadmium	14.7		0.617	0.154
Chromium	14.0		2.47	0.617
Copper	117		2.47	0.617
Lead	2290		0.617	0.154
Mercury	0.670		0.014	0.00686
Nickel	12.3		1.23	0.617
Selenium	ND		2.47	1.23
Silver	0.496	J	0.617	0.154
Thallium	0.168	J	0.617	0.154
Zinc	609		2.47	2.47

TCLP Metals

Lab ID: 01736-002
Client ID: GPEC-DCB
Matrix-Units: TCLP Leachate-mg/L
Percent Moisture: NA

Date Sampled: 2/27/2013
Time Sampled: 14:00
Date Analyzed: 3/13/13

Compound	Conc	Q	RL	MDL
TCLP Lead	0.983		0.100	0.050

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL

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Phone: 973 361 4252
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Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT
for
GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: GREEN POINT PHASE I WASTE CLASS
Lab Case Number: E13-01736

RL = REPORTING LIMIT MDL = METHOD DETECTION LIMIT

General Analytical

Lab ID: 01736-002
Client ID: GPEC-DCB
Percent Moisture: 16.5

Date Sampled: 2/27/2013
Time Sampled: 14:00

Parameter	Result	RL	MDL	Matrix-Units	Date Analyzed
Sulfur as S	ND	1180	988	Soil-mg/Kg	3/7/2013 15:00

ND = Analyzed for but Not Detected at the MDL

These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Chain of Custody Record

IAL [redacted]
THE LEADER IN ENVIRONMENTAL TESTING

[redacted] Laboratory Location:

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDEC

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager:	Site Contact:	Lab Contact:	COC No:
Company Name: GEI Consultants	Michael Zukauskas	Matthew Sweet	Kim James	
Address: 1 Greenwood Ave Ste 210	Telephone: 973-873-7110	Telephone: 201 575 1715	Telephone:	1 of 1 COCs
City/State/Zip: Montclair NJ 07042	Email: mzukauskas@geiconsultants.com			
Phone: 973 873 7110		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day (5 day)		
Project Name: Greenpoint	Method of Shipment/Carrier: courier			
Project Number: 125180-1-1102	Shipping/Tracking No:			
PO# 125180-1-1102				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Preservation: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Analyses: TPH GRO/DRO	VOC 8260B	SVOC 8270C	PCB 8080	Tot Metals 6010B	Sulfur	Hg 7471			Sample Specific Notes / Special Instructions:
GPEC-DCA	2/27/13	13:36				X							3		1	X	X	X	X	X	X	X			Run
GPEC-DCB	2/27/13	14:00				X							3		2	X	X	X	X	X	X	X			Hold Analysis

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
Analyze for Bayshore Soil Management MGP criteria
Send results to datagroup@geiconsultants.com

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	GEI	2/27/13 17:16	Reception/Fridge	GEI	2/27/13 17:16
[signature]	GEI	2/28/13 9:30	[signature]	IAL	2/28/13 9:30
[signature]	IAL	2/28/12 1747	[signature]	IAL	2/28/13 1747

01736 4°c

TAL-0018 (1008)

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IL 3-01736

PROJECT INFORMATION

** RUSH **

E13-01736

Case No. E13-01736 **Project** GREEN POINT PHASE I WASTE CLASS

Customer	GEI Consultants Inc. - Montclair	**P.O. #**	125180-1-1102
Contact	Maria Stepanova	**Received**	2/28/2013 17:47
EMail	mstepanova@geiconsultants.com; msweet@geiconsultants.com; alambertin@alaonline.com	**Verbal Due**	3/13/2013
	☑ EMail EDDs	**Report Due**	3/22/2013
Phone	(973) 509-9650 **Fax** 1(973) 509-9625		

Report To

1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

400 Unicorn Park Drive
Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format Result Only

Additional Info ☐ State Form ☐ Field Sampling ☐ Conditional

Lab ID	Client Sample ID	Depth Top / Bottom	Sampling Time	Matrix	Unit	# of Containers
01736-001	GPEC-DCA	n/a	2/27/2013@13:36	Soil	mg/Kg	3
01736-002	GPEC-DCB	n/a	2/27/2013@14:00	Soil	mg/Kg	3

Sample #	Tests	Status	QA Method
001	Special VO	Complete	8260B
"	TPH-GRO	Complete	8260B
"	PP/PAH	Complete	8270C
"	PP/PCB	Complete	8082
"	TPH-DRO	Complete	8015B M
"	PP Metals	Complete	6020/7471A
"	TCLP Lead - Pb	Run	1311/6020
"	Sulfur as S	Complete	D129
002	Special VO	Complete	8260B
"	TPH-GRO	Complete	8260B
"	PP/PAH	In Process	8270C
"	PP/PCB	Complete	8082
"	TPH-DRO	Complete	8015B M
"	PP Metals	Complete	6020/7471A
"	TCLP Lead - Pb	Run	1311/6020
"	Sulfur as S	Complete	D129

03/01/2013 08:44 by Ellen - PKNOTE 1

For VO Analyze & Report PP VO+Acetone, 2-Butanone, Cis-1,2-Dichloroethene, 4-Methyl-2-Pentanone, Styrene, 1,1,1,2-Tetrachloroethane & 1,2,4-Trichlorobenzene

03/05/2013 14:16 by melissa - REV 1

AS PER MATT SWEET, RUSH ANALYSIS ON A 96 HOUR TURN, RESULTS DUE TO CLIENT ON 3/7.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

PROJECT INFORMATION

** RUSH **

Case No. E13-01736 **Project** GREEN POINT PHASE I WASTE CLASS

03/06/2013 13:07 by melissa - REV 2

REV 02 DUE 3/13

PET MATT SWEET, ANALYZE SAMPLE 002 FOR ALL ANALYSIS ON A 1 WEEK TURN.

EMAILED RESULTS FOR SAMPLE #1 ON 3/7 BY JB.

03/11/2013 14:22 by melissa - REV 3

REV 03 DUE 3/14

AS PER MATT SWEET, ACTIVATE SAMPLES 001 AND 002 FOR TCLP LEAD ON A 72 HOUR TURN.

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **01736** CLIENT: QET

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 2/28/13

CORRECTIVE ACTION REQUIRED: **YES** [ ] (SEE BELOW) **NO** [ ]

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [KA] DATE 3/1/13

Laboratory Custody Chronicle

IAL Case No.

E13-01736

Client GEI Consultants Inc. - Montclair

Project GREEN POINT PHASE I WASTE CLASS

Received On 2/28/2013@17:47

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	01736-001	Soil	n/a	n/a	3/ 1/13	Mei
"	-002	"	n/a	n/a	3/ 1/13	Mei
TPH-GRO	-001	Soil	n/a	n/a	3/ 1/13	Mei
"	-002	"	n/a	n/a	3/ 1/13	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PAH	-001	Soil	3/ 5/13	Kou-Liang	3/ 5/13	Eleanor
"	-002	"	3/ 6/13	Kou-Liang	3/ 8/13	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	3/ 1/13	Archimede	3/ 4/13	Julia
"	-002	"	3/ 7/13	Archimede	3/ 8/13	Julia
TPH-DRO	-001	Soil	3/ 1/13	Archimede	3/ 4/13	Margaret
"	-002	"	3/ 7/13	Archimede	3/ 7/13	Margaret

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	3/ 1/13	Lisa	3/ 1/13	Danielle
"	-002	"	3/ 1/13	Lisa	3/ 1/13	Danielle
TCLP Lead - Pb	-001	Soil	3/13/13	Lisa	3/13/13	Danielle
"	-002	"	3/13/13	Lisa	3/13/13	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	3/ 7/13	Robert
"	-002	"	n/a	n/a	3/ 7/13	Robert

Mar 13 2013 07:36

E13-01736

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT PHASE 1 WASTE CLASS**
IAL Case Number: **E14-03328**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Sample Summary

IAL Case No.

E14-03328

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE 1 WASTE CLASS

Received On 4/16/2014@17:30

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
03328-001	WC-001	n/a	4/15/2014@14:30	Soil	2

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on May 05, 2014

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) soil sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E14-03328, Project: GREENPOINT PHASE 1 WASTE CLASS) on April 16, 2014 for the analysis of:

(1) Special VO
(1) TPH-GRO
(1) PP/PAH
(1) PP/PCB
(1) TPH-DRO
(1) PP Metals
(1) Metal - TCLP Lead
(1) Sulfur as S

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

5/2/14
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

Volatiles By 8260C

Batch ID: L140418-01	**Matrix:** MEOH

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E14-03328

- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- #001 run straight.

Signature

4/22/2014
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

Volatiles By 8260C

Batch ID: L140418-01	**Matrix:** MEOH

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E14-03328

- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.
- #001 run straight.

Signature

4/22/2014
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

Semivolatiles By **8270D/625**

Batch ID: 140417-04	**Matrix:** Soil

QC
- Calibration Curve met criteria.
- Internal standard recovery met criteria.
- Surrogate recovery met criteria.
- Method blank met criteria.
- Laboratory control sample recovery met criteria.
- Matrix Spike / Matrix Spike Duplicate recoveries met criteria.

E14-03328
- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- 03328-001 performed 2x dilution because of high target compounds;

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-diphenylhydrazine will be directly compared to the applicable criteria for azobenzene and/or 1,2-diphenylhydrazine.

4/23/2014
Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

PCB By 8082A

Batch ID: 140418-12	**Matrix:** Soil

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001

E14-03328

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 001.

Nicole Loomis 4/21/2014

Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

METALS By 6020A/7471B

Batch ID: S140417-02 (PG168)	**Matrix:** Soil

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E14-03328
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Signature

4/21/2014
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E14-03328

METALS By 1311/6020A/7470A

Batch ID: T140422-01 (PG175)	**Matrix:** TCLP Leachate

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- LCS Percent Recovery met criteria.
- MS Percent Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E14-03328
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

Signature

4/23/2014
Date

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE 1 WASTE CLASS
Lab Case No.: E14-03328

Lab ID:	**03328-001**		
Client ID:	**WC-001**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/15/14**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Chloromethane	ND		0.073
Vinyl chloride	ND		0.056
Bromomethane	ND		0.069
Chloroethane	ND		0.073
Trichlorofluoromethane	ND		0.083
Acrolein	ND		0.327
1,1-Dichloroethene	ND		0.065
Acetone	ND		0.098
Methylene chloride	ND		0.228
Acrylonitrile	ND		0.331
trans-1,2-Dichloroethene	ND		0.055
1,1-Dichloroethane	ND		0.052
cis-1,2-Dichloroethene	ND		0.051
2-Butanone (MEK)	ND		0.072
Chloroform	ND		0.084
1,1,1-Trichloroethane	ND		0.060
Carbon tetrachloride	ND		0.085
1,2-Dichloroethane (EDC)	ND		0.045
Benzene	0.182		0.052
Trichloroethene	ND		0.052
1,2-Dichloropropane	ND		0.056
Bromodichloromethane	ND		0.056
2-Chloroethyl vinyl ether	ND		0.054
cis-1,3-Dichloropropene	ND		0.053
4-Methyl-2-pentanone (MIBK)	ND		0.049
Toluene	ND		0.033
trans-1,3-Dichloropropene	ND		0.053
1,1,2-Trichloroethane	ND		0.055
Tetrachloroethene	ND		0.057
Dibromochloromethane	ND		0.047
Chlorobenzene	ND		0.063
1,1,1,2-Tetrachloroethane	ND		0.052
Ethylbenzene	ND		0.056
Total Xylenes	ND		0.140
Styrene	ND		0.060
Bromoform	ND		0.060
1,1,2,2-Tetrachloroethane	ND		0.053
1,3-Dichlorobenzene	ND		0.054
1,4-Dichlorobenzene	ND		0.047
1,2-Dichlorobenzene	ND		0.045
1,2,4-Trichlorobenzene	ND		0.063
TOTAL VO's:	0.182		

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE 1 WASTE CLASS
Lab Case No.: E14-03328

Lab ID:	**03328-001**		
Client ID:	**WC-001**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/15/14**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - PAH (Units)		***(mg/Kg)***	
Naphthalene	0.275		0.023
Acenaphthylene	0.101		0.023
Acenaphthene	0.478		0.035
Fluorene	0.410		0.023
Phenanthrene	4.01		0.023
Anthracene	0.876		0.023
Fluoranthene	4.74	D	0.045
Pyrene	4.02		0.023
Benzo[a]anthracene	2.92		0.023
Chrysene	2.86		0.023
Benzo[b]fluoranthene	1.35		0.023
Benzo[k]fluoranthene	2.36		0.023
Benzo[a]pyrene	1.51		0.023
Indeno[1,2,3-cd]pyrene	0.415		0.023
Dibenz[a,h]anthracene	0.174		0.023
Benzo[g,h,i]perylene	0.351		0.023
PCB's (Units)		***(mg/Kg)***	
Aroclor-1016	ND		0.017
Aroclor-1221	ND		0.017
Aroclor-1232	ND		0.017
Aroclor-1242	ND		0.017
Aroclor-1248	ND		0.017
Aroclor-1254	ND		0.017
Aroclor-1260	ND		0.017
PCBs	ND		0.017
Hydrocarbons (Units)		***(mg/Kg)***	
TPH-DRO	147		68.6
Hydrocarbons (Units)		***(mg/Kg)***	
TPH-GRO	ND		4.58
Metals (Units)		***(mg/Kg)***	
Antimony	120		0.313
Arsenic	19.0		0.313
Beryllium	1.60		0.250
Cadmium	1.24		0.156
Chromium	202		0.625
Copper	560		0.625
Lead	471		0.625
Mercury	2.18		0.024
Nickel	66.5		0.625
Selenium	1.58		0.625
Silver	1.03		0.156
Thallium	ND		0.156
Zinc	776		0.625

D = The compound was reported from the Diluted analysis
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE 1 WASTE CLASS
Lab Case No.: E14-03328

Lab ID:	**03328-001**		
Client ID:	**WC-001**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/15/14**		
PARAMETER(Units)	Conc	Q	MDL
TCLP Metals (Units)	***(mg/L)***		
TCLP Lead	2.74		0.050
General Analytical (Units)			
Sulfur as S(mg/Kg)	1300		944

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, PhD
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Analyzed: 04/18/2014
Data file: L2294.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.114	0.073
Vinyl chloride	ND		0.114	0.056
Bromomethane	ND		0.114	0.069
Chloroethane	ND		0.114	0.073
Trichlorofluoromethane	ND		0.114	0.083
Acrolein	ND		2.29	0.327
1,1-Dichloroethene	ND		0.114	0.065
Acetone	ND		0.229	0.098
Methylene chloride	ND		0.229	0.228
Acrylonitrile	ND		2.29	0.331
trans-1,2-Dichloroethene	ND		0.114	0.055
1,1-Dichloroethane	ND		0.114	0.052
cis-1,2-Dichloroethene	ND		0.114	0.051
2-Butanone (MEK)	ND		0.114	0.072
Chloroform	ND		0.114	0.084
1,1,1-Trichloroethane	ND		0.114	0.060
Carbon tetrachloride	ND		0.114	0.085
1,2-Dichloroethane (EDC)	ND		0.114	0.045
Benzene	0.182		0.114	0.052
Trichloroethene	ND		0.114	0.052
1,2-Dichloropropane	ND		0.114	0.056
Bromodichloromethane	ND		0.114	0.056
2-Chloroethyl vinyl ether	ND		0.114	0.054
cis-1,3-Dichloropropene	ND		0.114	0.053
4-Methyl-2-pentanone (MIBK)	ND		0.114	0.049

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Analyzed: 04/18/2014
Data file: L2294.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.114	0.033
trans-1,3-Dichloropropene	ND		0.114	0.053
1,1,2-Trichloroethane	ND		0.114	0.055
Tetrachloroethene	ND		0.114	0.057
Dibromochloromethane	ND		0.114	0.047
Chlorobenzene	ND		0.114	0.063
1,1,1,2-Tetrachloroethane	ND		0.114	0.052
Ethylbenzene	ND		0.114	0.056
Total Xylenes	ND		0.229	0.140
Styrene	ND		0.114	0.060
Bromoform	ND		0.114	0.060
1,1,2,2-Tetrachloroethane	ND		0.114	0.053
1,3-Dichlorobenzene	ND		0.114	0.054
1,4-Dichlorobenzene	ND		0.114	0.047
1,2-Dichlorobenzene	ND		0.114	0.045
1,2,4-Trichlorobenzene	ND		0.114	0.063

Total Target Compounds (41): 0.182

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: 03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Analyzed: 04/18/2014
Data file: L2294.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		5.72	4.58

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E14-03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5672.D

GC/MS Column: DB-5
Sample wt/vol: 15.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Naphthalene	0.275		0.038	0.023
Acenaphthylene	0.101		0.038	0.023
Acenaphthene	0.478		0.038	0.035
Fluorene	0.410		0.038	0.023
Phenanthrene	4.01		0.038	0.023
Anthracene	0.876		0.038	0.023
Fluoranthene	5.92	E	0.038	0.023
Pyrene	4.02		0.038	0.023
Benzo[a]anthracene	2.92		0.038	0.023
Chrysene	2.86		0.038	0.023
Benzo[b]fluoranthene	1.35		0.038	0.023
Benzo[k]fluoranthene	2.36		0.038	0.023
Benzo[a]pyrene	1.51		0.038	0.023
Indeno[1,2,3-cd]pyrene	0.415		0.038	0.023
Dibenz[a,h]anthracene	0.174		0.038	0.023
Benzo[g,h,i]perylene	0.351		0.038	0.023
Total Target Compounds (16):	28.0	E		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E14-03328-001DL
Client ID: WC-001
Date Received: 04/16/2014
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5679.D

GC/MS Column: DB-5
Sample wt/vol: 15.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Naphthalene	0.253	D	0.075	0.045
Acenaphthylene	0.062	DJ	0.075	0.045
Acenaphthene	0.436	D	0.075	0.069
Fluorene	0.366	D	0.075	0.045
Phenanthrene	3.75	D	0.075	0.045
Anthracene	0.865	D	0.075	0.045
Fluoranthene	4.74	D	0.075	0.045
Pyrene	3.69	D	0.075	0.045
Benzo[a]anthracene	2.38	D	0.075	0.045
Chrysene	2.44	D	0.075	0.045
Benzo[b]fluoranthene	1.53	D	0.075	0.045
Benzo[k]fluoranthene	1.56	D	0.075	0.045
Benzo[a]pyrene	1.85	D	0.075	0.045
Indeno[1,2,3-cd]pyrene	1.11	D	0.075	0.045
Dibenz[a,h]anthracene	0.524	D	0.075	0.045
Benzo[g,h,i]perylene	1.19	D	0.075	0.045
Total Target Compounds (16):	26.7	DJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E14-03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Extracted: 04/18/2014
Date Analyzed: 04/18/2014
Data file: R8242.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	ND		0.042	0.017
PCBs	ND		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT PHASE 1 WASTE CLASS

Lab ID:	03328-001	GC Column:	RTX-5
Client ID:	WC-001	Sample wt/vol:	10g
Date Received:	04/16/2014	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	04/18/2014	Dilution Factor:	1
Date Analyzed:	04/21/2014	%Moisture:	12.6
Data File:	QB2496.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	147		85.8	68.6

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT PHASE 1 WASTE CLASS

Lab ID: E14-03328-001
Client ID: WC-001
Date Collected: 04/15/14 14:30
Date Received: 04/16/14 17:30
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 12.6
Batch #: 168

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	120		1	0.625	0.313	04/18/14 14:19	6020A
Arsenic	19.0		1	0.625	0.313	04/18/14 14:19	6020A
Beryllium	1.60		1	0.625	0.250	04/18/14 14:19	6020A
Cadmium	1.24		1	0.625	0.156	04/18/14 14:19	6020A
Chromium	202		1	0.625	0.625	04/18/14 14:19	6020A
Copper	560		1	0.625	0.625	04/18/14 14:19	6020A
Lead	471		1	0.625	0.625	04/18/14 14:19	6020A
Mercury	2.18		1	0.051	0.024	04/17/14 16:22	7471B
Nickel	66.5		1	0.625	0.625	04/18/14 14:19	6020A
Selenium	1.58		1	0.625	0.625	04/18/14 14:19	6020A
Silver	1.03		1	0.625	0.156	04/18/14 14:19	6020A
Thallium	ND		1	0.625	0.156	04/18/14 14:19	6020A
Zinc	776		1	0.625	0.625	04/18/14 14:19	6020A

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP Lead

Client/Project: GEI-MTCLRGREENPOINT PHASE 1 WASTE CLASS

Batch #: 175
Date Received: 04/16/14 17:30
Method: 1311/6020A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E14-03328-001	WC-001	2.74		1	TCLP Leachate mg/L	0.100	0.050	NA	04/15/14 14:30	04/22/14 18:16

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREENPOINT PHASE 1 WASTE CLASS

Date Received: 04/16/14 17:30
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E14-03328-001	WC-001	1300		1	Soil-mg/Kg	944	1130	87.4	04/15/14 14:30	04/30/14 16:30

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2014

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS140418-01	SOIL	L2291.D	125	93	93
03121-001	MEOH	L2292.D	117	92	93
03328-001	MEOH	L2294.D	117	91	92
03395-001	MEOH	L2295.D	121	95	98
LCSS140418-01	MEOH	L2296.D	106	108	107
03121-001MS	MEOH	L2297.D	104	107	105
03121-001MSD	MEOH	L2298.D	104	106	107
03189-001	MEOH	L2299.D	105	90	90

	Concentration	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	45-154	45-153
SMC2 = Toluene-d8	50 ppb	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	48-149	47-154

Column to be used to flag recovery values

FORM 2

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSS140418-01
Date Received:
Date Analyzed: 04/18/2014
LCS Data file: L2296.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.0	61.9	124
Chloromethane	50.0	0.0	46.5	93
Vinyl chloride	50.0	0.0	46.5	93
Bromomethane	50.0	0.0	49.1	98
Chloroethane	50.0	0.0	51.6	103
Trichlorofluoromethane	50.0	0.0	50.7	101
Acrolein	150	0.0	124.7	83
1,1-Dichloroethene	50.0	0.0	46.5	93
Acetone	50.0	0.0	49.0	98
Carbon disulfide	50.0	0.0	43.3	87
Vinyl acetate	50.0	0.0	35.6	71
Methylene chloride	50.0	0.0	47.0	94
Acrylonitrile	150.0	0.0	168.0	112
tert-Butyl alcohol (TBA)	100.0	0.0	127.9	128
trans-1,2-Dichloroethene	50.0	0.0	45.8	92
Methyl tert-butyl ether (MTBE)	50.0	0.0	55.0	110
1,1-Dichloroethane	50.0	0.0	45.4	91
Diisopropyl ether (DIPE)	50.0	0.0	51.9	104
cis-1,2-Dichloroethene	50.0	0.0	46.8	94
2,2-Dichloropropane	50.0	0.0	47.2	94
2-Butanone (MEK)	50.0	0.0	48.7	97
Bromochloromethane	50.0	0.0	44.5	89
Chloroform	50.0	0.0	45.5	91
1,1,1-Trichloroethane	50.0	0.0	48.8	98
Carbon tetrachloride	50.0	0.0	51.9	104
1,1-Dichloropropene	50.0	0.0	50.6	101
1,2-Dichloroethane (EDC)	50.0	0.0	45.3	91
Benzene	50.0	0.0	48.7	97
Trichloroethene	50.0	0.0	45.7	91
1,2-Dichloropropane	50.0	0.0	48.5	97
Dibromomethane	50.0	0.0	46.0	92
1,4-Dioxane	1500	0.0	1590	106
Bromodichloromethane	50.0	0.0	45.6	91
2-Chloroethyl vinyl ether	50.0	0.0	46.0	92
cis-1,3-Dichloropropene	50.0	0.0	52.1	104
4-Methyl-2-pentanone (MIBK)	50.0	0.0	55.6	111
Toluene	50.0	0.0	49.5	99
trans-1,3-Dichloropropene	50.0	0.0	51.1	102
1,1,2-Trichloroethane	50.0	0.0	46.5	93
Tetrachloroethene	50.0	0.0	50.3	101
1,3-Dichloropropane	50.0	0.0	50.0	100

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 03121-001
Client ID: C-2E4_(0.5-1)/
Date Received: 04/10/2014
Date Analyzed: 04/18/2014
MS Data file: L2297.D
MSD Data file: L2298.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: 11.0
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	57.7	115		51.0	102		12	
Chloromethane	50.0	0.0	41.8	84		43.6	87		4	
Vinyl chloride	50.0	0.0	40.1	80		38.7	77		4	
Bromomethane	50.0	0.0	42.7	85		47.1	94		10	
Chloroethane	50.0	0.0	44.2	88		46.3	93		5	
Trichlorofluoromethane	50.0	0.0	43.5	87		39.7	79		9	
Acrolein	150	0.0	117	78		120	80		3	
1,1-Dichloroethene	50.0	0.0	42.4	85		41.1	82		3	
Acetone	50.0	0.0	47.3	95		47.8	96		1	
Carbon disulfide	50.0	0.0	38.4	77		37.9	76		1	
Vinyl acetate	50.0	0.0	40.8	82		37.1	74		9	
Methylene chloride	50.0	0.0	42.7	85		43.3	87		1	
Acrylonitrile	150	0.0	176	117		167	111		5	
tert-Butyl alcohol (TBA)	100	0.0	128.6	129		122.7	123		5	
trans-1,2-Dichloroethene	50.0	0.0	41.2	82		40.3	81		2	
Methyl tert-butyl ether (MTBE)	50.0	0.0	52.3	105		52.4	105		0	
1,1-Dichloroethane	50.0	0.0	42.9	86		43.2	86		1	
Diisopropyl ether (DIPE)	50.0	0.0	49.6	99		50.7	101		2	
cis-1,2-Dichloroethene	50.0	0.0	43.4	87		45.2	90		4	
2,2-Dichloropropane	50.0	0.0	42.9	86		41.1	82		4	
2-Butanone (MEK)	50.0	0.0	49.9	100		51.7	103		4	
Bromochloromethane	50.0	0.0	42.0	84		43.5	87		4	
Chloroform	50.0	0.0	42.9	86		43.6	87		2	
1,1,1-Trichloroethane	50.0	0.0	45.0	90		44.3	89		2	
Carbon tetrachloride	50.0	0.0	48.3	97		46.5	93		4	
1,1-Dichloropropene	50.0	0.0	47.3	95		46.0	92		3	
1,2-Dichloroethane (EDC)	50.0	0.0	43.7	87		45.4	91		4	
Benzene	50.0	0.0	46.4	93		47.4	95		2	
Trichloroethene	50.0	0.0	43.0	86		43.6	87		1	
1,2-Dichloropropane	50.0	0.0	47.8	96		48.6	97		2	
Dibromomethane	50.0	0.0	44.7	89		45.9	92		3	
1,4-Dioxane	1,500	0.0	1700	113		1861	124		9	
Bromodichloromethane	50.0	0.0	44.0	88		44.8	90		2	
2-Chloroethyl vinyl ether	50.0	0.0	47.8	96		51.0	102		6	
cis-1,3-Dichloropropene	50.0	0.0	51.8	104		53.7	107		4	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	54.2	108		57.4	115		6	
Toluene	50.0	0.0	47.9	96		49.0	98		2	
trans-1,3-Dichloropropene	50.0	0.0	51.7	103		53.2	106		3	
1,1,2-Trichloroethane	50.0	0.0	46.2	92		47.8	96		3	
Tetrachloroethene	50.0	0.0	47.9	96		47.6	95		1	
1,3-Dichloropropane	50.0	0.0	49.9	100		51.7	103		4	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 03121-001
Client ID: C-2E4_(0.5-1)/
Date Received: 04/10/2014
Date Analyzed: 04/18/2014
MS Data file: L2297.D
MSD Data file: L2298.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: 11.0
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	56.7	113		60.9	122		7	
Dibromochloromethane	50.0	0.0	45.9	92		47.6	95		4	
1,2-Dibromoethane (EDB)	50.0	0.0	47.5	95		49.7	99		5	
Chlorobenzene	50.0	0.0	43.7	87		44.7	89		2	
1,1,1,2-Tetrachloroethane	50.0	0.0	42.9	86		43.7	87		2	
Ethylbenzene	50.0	0.0	50.9	102		52.3	105		3	
m,p-Xylene	100	0.0	105.4	105		107.8	108		2	
o-Xylene	50.0	0.0	48.9	98		50.4	101		3	
Styrene	50.0	0.0	54.8	110		56.5	113		3	
Bromoform	50.0	0.0	44.1	88		46.0	92		4	
Isopropylbenzene	50.0	0.0	47.2	94		46.8	94		1	
1,1,2,2-Tetrachloroethane	50.0	0.0	41.5	83		43.3	87		4	
Bromobenzene	50.0	0.0	47.3	95		48.5	97		3	
1,2,3-Trichloropropane	50.0	0.0	45.1	90		47.3	95		5	
n-Propylbenzene	50.0	0.0	50.5	101		50.3	101		0	
2-Chlorotoluene	50.0	0.0	50.5	101		51.5	103		2	
1,3,5-Trimethylbenzene	50.0	0.0	50.5	101		50.1	100		1	
4-Chlorotoluene	50.0	0.0	51.9	104		52.8	106		2	
tert-Butylbenzene	50.0	0.0	45.1	90		43.4	87		4	
1,2,4-Trimethylbenzene	50.0	0.0	50.5	101		51.0	102		1	
sec-Butylbenzene	50.0	0.0	55.3	111		53.2	106		4	
1,3-Dichlorobenzene	50.0	0.0	47.9	96		48.6	97		1	
4-Isopropyltoluene	50.0	0.0	48.0	96		46.3	93		4	
1,4-Dichlorobenzene	50.0	0.0	48.3	97		49.0	98		1	
n-Butylbenzene	50.0	0.0	44.5	89		43.1	86		3	
1,2-Dichlorobenzene	50.0	0.0	48.8	98		50.2	100		3	
1,2-Dibromo-3-chloropropane	50.0	0.0	42.8	86		44.6	89		4	
1,2,4-Trichlorobenzene	50.0	0.0	42.4	85		42.6	85		0	
Hexachlorobutadiene	50.0	0.0	48.9	98		45.8	92		7	
Naphthalene	50.0	0.0	46.2	92		48.3	97		4	
1,2,3-Trichlorobenzene	50.0	0.0	43.2	86		44.3	89		3	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	44.5	89		38.6	77		14	
Methyl acetate	50.0	0.0	42.4	85		42.9	86		1	
Cyclohexane	50.0	0.0	48.0	96		42.4	85		12	
Methylcyclohexane	50.0	0.0	43.8	88		36.4	73		18	

	Leachate Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L2291.D Instrument ID: MSD_L

Date Analyzed: 04/18/2014 Time Analyzed: 15:28

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
C-2E4_(0.5-1)/	03121-001	04/18/2014	15:55
WC-001	03328-001	04/18/2014	16:48
WC	03395-001	04/18/2014	17:16
LCS-50PPB	LCSS140418-01	04/18/2014	17:44
MS	03121-001MS	04/18/2014	18:11
MSD	03121-001MSD	04/18/2014	18:38
SOIL_1	03189-001	04/18/2014	19:06

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L2287.D

Inst ID: MSD_L

BFB Injection Date: 04/18/2014

BFB Injection Time: 13:08

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.4			
75	30.0 - 60.0% of mass 95	44.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.7	(	0.9	)1
174	Great than 50.0% of mass 95	81.1			
175	5.0 - 9.0% of mass 174	6.1	(	7.5	)1
176	95.0 - 101.0% of mass 174	77.2	(	95.2	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L2288.D	04/18/2014	14:05
BLKS140418-01	BLKS140418-01	L2291.D	04/18/2014	15:28
C-2E4_(0.5-1)/	03121-001	L2292.D	04/18/2014	15:55
WC-001	03328-001	L2294.D	04/18/2014	16:48
WC	03395-001	L2295.D	04/18/2014	17:16
LCS-50PPB	LCSS140418-01	L2296.D	04/18/2014	17:44
MS	03121-001MS	L2297.D	04/18/2014	18:11
MSD	03121-001MSD	L2298.D	04/18/2014	18:38
SOIL_1	03189-001	L2299.D	04/18/2014	19:06

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM040714.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Apr 08 12:50:10 2014
Response Via : Initial Calibration

Calibration Files
1 =L1914.D 2 =L1918.D 5 =L1916.D
20 =L1917.D 100 =L1919.D 200 =L1920.D 150 =L1921.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.351	0.324	0.368	0.328	0.350	0.438	0.406	0.366	11.41
3)	TP	Chloromethane	0.354	0.402	0.468	0.376	0.343	0.350	0.336	0.376	12.38
4)	C	Vinyl chloride	0.496	0.535	0.436	0.394	0.391	0.383	0.366	0.429	14.85
5)	T	Bromomethane	0.333	0.298	0.283	0.282	0.236	0.209	0.217	0.265	17.26
6)	T	Chloroethane	0.173	0.197	0.196	0.202	0.176	0.158	0.160	0.181	9.99
7)	T	Trichlorofluorome	0.625	0.660	0.559	0.611	0.669	0.626	0.603	0.622	5.91
8)	T	Acrolein	0.060	0.055	0.059	0.047	0.049	0.045	0.045	0.051	12.73
9)	MC	1,1-Dichloroethen	0.426	0.503	0.421	0.384	0.395	0.390	0.367	0.412	10.90
10)	T	Acetone		0.121	0.118	0.121	0.100	0.095	0.097	0.109	11.50
11)	T	Carbon disulfide	1.598	1.629	1.361	1.221	1.219	1.197	1.153	1.340	14.77
12)	T	Vinyl acetate	1.249	1.550	1.162	1.028	1.617	1.591	1.618	1.402	17.73
13)	T	Methylene chlorid		0.563	0.480	0.464	0.420	0.413	0.413	0.459	12.76
14)	T	Acrylonitrile	0.138	0.129	0.143	0.110	0.112	0.107	0.107	0.121	12.83
15)	T	tert-Butyl alcoho		0.021	0.026	0.024	0.024	0.025	0.026	0.025	7.13
16)	T	trans-1,2-Dichlor	0.628	0.529	0.591	0.479	0.454	0.438	0.422	0.506	15.71
17)	T	Methyl tert-butyl	1.186	1.333	1.214	0.992	0.916	0.933	0.934	1.073	15.69
18)	TP	1,1-Dichloroethan	1.275	1.361	1.132	0.973	0.943	0.947	0.928	1.080	16.53
19)	T	Diisopropyl ether	1.530	1.654	1.564	1.538	1.491	1.458	1.470	1.529	4.37
20)	T	cis-1,2-Dichloroe	0.761	0.765	0.662	0.627	0.644	0.644	0.639	0.677	8.73
21)	T	2,2-Dichloropropa	0.767	0.652	0.549	0.482	0.519	0.511	0.497	0.568	18.33
22)	T	2-Butanone (MEK)	0.262	0.271	0.251	0.225	0.225	0.214	0.225	0.239	9.20
23)	T	Bromochloromethan	0.493	0.506	0.407	0.360	0.347	0.348	0.349	0.401	17.50
25)	C	Chloroform	1.358	1.439	1.188	1.036	1.000	0.988	0.972	1.140	16.83
26)	T	1,1,1-Trichloroet	0.850	0.897	0.761	0.713	0.748	0.757	0.728	0.779	8.72
27)	T	Carbon tetrachlor	0.672	0.758	0.671	0.655	0.717	0.711	0.678	0.694	5.16
28)	T	1,1-Dichloroprope	0.604	0.680	0.573	0.609	0.663	0.665	0.640	0.634	6.18
29)	T	1,2-Dichloroethan	1.054	1.147	0.937	0.790	0.747	0.737	0.743	0.879	19.13
30)	S	1,2-Dichloroethan	0.581	0.590	0.591	0.559	0.534	0.501	0.518	0.553	6.57
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.681	1.724	1.542	1.455	1.470	1.456	1.458	1.541	7.48
33)	M	Trichloroethene	0.401	0.427	0.367	0.338	0.375	0.385	0.376	0.381	7.30
34)	C	1,2-Dichloropropa	0.417	0.441	0.365	0.365	0.367	0.365	0.366	0.384	8.26
35)	T	Dibromomethane	0.334	0.342	0.298	0.267	0.263	0.262	0.265	0.290	12.11
36)	T	1,4-Dioxane	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	18.34
37)	T	Bromodichlorometh	0.627	0.722	0.583	0.525	0.533	0.534	0.531	0.579	12.61
38)	T	2-Chloroethyl vin	0.211	0.180	0.198	0.173	0.226	0.241	0.241	0.210	13.19
39)	T	cis-1,3-Dichlorop	0.418	0.460	0.440	0.499	0.587	0.608	0.604	0.517	15.85
40)	T	4-Methyl-2-pentan	0.246	0.192	0.197	0.248	0.299	0.306	0.308	0.257	19.36
41)	S	Toluene-d8	1.038	1.041	1.078	1.102	1.104	1.102	1.108	1.082	2.82
42)	MC	Toluene	0.891	0.965	0.878	0.862	0.902	0.905	0.897	0.900	3.61
43)	T	trans-1,3-Dichlor	0.404	0.404	0.383	0.428	0.525	0.550	0.540	0.462	15.75
44)	T	1,1,2-Trichloroet	0.355	0.366	0.302	0.282	0.292	0.292	0.292	0.312	10.91
45)	T	Tetrachloroethene	0.294	0.304	0.268	0.277	0.309	0.313	0.303	0.295	5.73
46)	T	1,3-Dichloropropa	0.571	0.576	0.533	0.528	0.560	0.561	0.570	0.557	3.40
47)	T	2-Hexanone	0.132	0.133	0.129	0.145	0.185	0.190	0.190	0.158	18.52
48)	T	Dibromochlorometh	0.492	0.525	0.465	0.447	0.467	0.478	0.473	0.478	5.18
49)	T	1,2-Dibromoethane	0.374	0.397	0.356	0.342	0.370	0.378	0.377	0.371	4.71
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.351	1.482	1.246	1.111	1.120	1.135	1.123	1.224	11.79
52)	T	1,1,1,2-Tetrachlo	0.516	0.576	0.465	0.418	0.426	0.433	0.427	0.466	12.75

53)	C	Ethylbenzene	1.126	1.186	1.167	1.413	1.541	1.560	1.542	1.362	14.40
54)	T	m,p-Xylene	0.387	0.465	0.523	0.598	0.629	0.625	0.624	0.550	17.27
55)	T	o-Xylene	0.508	0.553	0.418	0.567	0.650	0.654	0.654	0.572	15.62
56)	T	Styrene	0.683	0.827	0.800	1.075	1.110	1.120	1.160	0.968	19.82
57)	TP	Bromoform	0.325	0.336	0.289	0.277	0.304	0.310	0.310	0.307	6.58
58)	T	Isopropylbenzene	1.048	0.828	0.891	0.990	1.303	1.339	1.309	1.101	19.42
59)	S	Bromofluorobenzen	0.487	0.504	0.529	0.520	0.522	0.517	0.520	0.514	2.78
60)	TP	1,1,2,2-Tetrachlo	0.728	0.762	0.643	0.552	0.545	0.529	0.539	0.614	15.89
61)	T	Bromobenzene	0.423	0.489	0.417	0.435	0.462	0.467	0.468	0.452	5.99
62)	T	1,2,3-Trichloropr	0.494	0.595	0.482	0.435	0.429	0.414	0.422	0.467	13.73
63)	T	n-Propylbenzene	1.061	1.013	0.879	1.193	1.397	1.428	1.416	1.198	18.50
64)	T	2-Chlorotoluene	0.703	0.766	0.807	0.932	0.997	0.995	0.985	0.884	13.89
65)	T	1,3,5-Trimethylbe	0.799	0.809	0.717	0.939	1.076	1.100	1.085	0.932	17.04
66)	T	4-Chlorotoluene	0.760	0.963	1.084	1.164	1.177	1.183	1.180	1.073	14.89
67)	T	tert-Butylbenzene		0.621	0.621	0.592	0.823	0.860	0.836	0.725	17.39
68)	T	1,2,4-Trimethylbe	0.729	0.924	0.856	1.015	1.122	1.142	1.138	0.989	16.17
69)	T	sec-Butylbenzene		0.653	0.600	0.823	0.933	0.896	0.954	0.810	18.52
70)	T	1,3-Dichlorobenze	0.586	0.689	0.651	0.684	0.729	0.729	0.724	0.684	7.61
71)	T	4-Isopropyltoluen		0.838	0.679	0.810	0.986	1.024	1.012	0.891	15.51
72)	T	1,4-Dichlorobenze	0.605	0.776	0.751	0.752	0.760	0.759	0.758	0.737	8.01
73)	T	n-Butylbenzene		0.412	0.315	0.317	0.426	0.449	0.444	0.394	15.72
74)	T	1,2-Dichlorobenze	0.593	0.696	0.668	0.741	0.771	0.761	0.775	0.715	9.38
75)	T	1,2-Dibromo-3-chl	0.074	0.088	0.082	0.079	0.087	0.090	0.091	0.084	7.51
76)	T	1,2,4-Trichlorobe	0.256	0.295	0.219	0.236	0.341	0.377	0.312	0.291	19.78
77)	T	Hexachlorobutadie	0.128	0.138	0.125	0.118	0.134	0.140	0.147	0.133	7.55
78)	T	Naphthalene	1.046	1.093	1.028	0.921	0.888	1.018	1.202	1.028	10.21
79)	T	1,2,3-Trichlorobe	0.284	0.318	0.245	0.294	0.347	0.364	0.334	0.312	13.12
80)	T	1,1,2-Trichloro-1	0.195	0.202	0.177	0.207	0.233	0.221	0.217	0.207	8.95
81)	T	Methyl acetate		0.195	0.240	0.171	0.163	0.156	0.161	0.181	17.65
82)	T	Cyclohexane		0.242	0.220	0.313	0.343	0.330	0.329	0.296	17.51
83)	T	Methylcyclohexane		0.197	0.125	0.163	0.218	0.214	0.212	0.188	19.67

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM040714.M Tue Apr 08 12:50:19 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-07-14\
Data File : L1923.D
Acq On : 7 Apr 2014 15:56
Operator : MEI
Sample : ICV100,ICV100,A,5ml,100
Misc : E
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 08 13:35:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	105	0.00
2	T	Dichlorodifluoromethane	0.366	0.339	7.4	102	0.00
3	TP	Chloromethane	0.376	0.347	7.7	107	0.00
4	C	Vinyl chloride	0.429	0.381	11.2	102	0.00
5	T	Bromomethane	0.265	0.234	11.7	104	-0.01
6	T	Chloroethane	0.181	0.173	4.4	103	-0.01
7	T	Trichlorofluoromethane	0.622	0.570	8.4	90	0.00
8	T	Acrolein	0.051	0.047	7.8	103	0.00
9	MC	1,1-Dichloroethene	0.412	0.371	10.0	99	0.00
10	T	Acetone	0.109	0.102	6.4	108	0.00
11	T	Carbon disulfide	1.340	1.171	12.6	101	0.00
12	T	Vinyl acetate	1.402	1.622	-15.7	106	0.00
13	T	Methylene chloride	0.459	0.421	8.3	105	0.00
14	T	Acrylonitrile	0.121	0.099	18.2	93	0.00
15	T	tert-Butyl alcohol (TBA)	0.025	0.026	-4.0	113	-0.01
16	T	trans-1,2-Dichloroethene	0.506	0.468	7.5	108	0.01
17	T	Methyl tert-butyl ether (MT	1.073	0.957	10.8	110	0.00
18	TP	1,1-Dichloroethane	1.080	0.919	14.9	103	-0.01
19	T	Diisopropyl ether (DIPE)	1.529	1.478	3.3	104	0.00
20	T	cis-1,2-Dichloroethene	0.677	0.635	6.2	104	0.00
21	T	2,2-Dichloropropane	0.568	0.482	15.1	98	0.00
22	T	2-Butanone (MEK)	0.239	0.223	6.7	104	-0.01
23	T	Bromochloromethane	0.401	0.341	15.0	103	0.00
25	C	Chloroform	1.140	0.974	14.6	102	0.00
26	T	1,1,1-Trichloroethane	0.779	0.709	9.0	100	0.00
27	T	Carbon tetrachloride	0.694	0.656	5.5	96	0.00
28	T	1,1-Dichloropropene	0.634	0.627	1.1	99	0.00
29	T	1,2-Dichloroethane (EDC)	0.879	0.746	15.1	105	0.00
30	S	1,2-Dichloroethane-d4	0.553	0.518	6.3	102	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
32	M	Benzene	1.541	1.480	4.0	104	0.00
33	M	Trichloroethene	0.381	0.371	2.6	102	0.00
34	C	1,2-Dichloropropane	0.384	0.371	3.4	104	0.00
35	T	Dibromomethane	0.290	0.265	8.6	104	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	92	0.00
37	T	Bromodichloromethane	0.579	0.536	7.4	104	0.00
38	T	2-Chloroethyl vinyl ether	0.210	0.238	-13.3	108	0.00
39	T	cis-1,3-Dichloropropene	0.517	0.593	-14.7	104	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.257	0.303	-17.9	104	0.00
41	S	Toluene-d8	1.082	1.125	-4.0	105	0.00
42	MC	Toluene	0.900	0.903	-0.3	103	0.00
43	T	trans-1,3-Dichloropropene	0.462	0.535	-15.8	105	0.00
44	T	1,1,2-Trichloroethane	0.312	0.297	4.8	105	0.00
45	T	Tetrachloroethene	0.295	0.304	-3.1	102	0.00
46	T	1,3-Dichloropropane	0.557	0.576	-3.4	106	0.00

47	T	2-Hexanone	0.158	0.186	-17.7	104	0.00
48	T	Dibromochloromethane	0.478	0.475	0.6	105	0.00
49	T	1,2-Dibromoethane (EDB)	0.371	0.380	-2.4	106	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
51	TP	Chlorobenzene	1.224	1.115	8.9	104	0.00
52	T	1,1,1,2-Tetrachloroethane	0.466	0.423	9.2	104	0.00
53	C	Ethylbenzene	1.362	1.525	-12.0	104	0.00
54	T	m,p-Xylene	0.550	0.621	-12.9	104	0.00
55	T	o-Xylene	0.572	0.648	-13.3	105	0.00
56	T	Styrene	0.968	1.143	-18.1	108	0.00
57	TP	Bromoform	0.307	0.307	0.0	106	0.00
58	T	Isopropylbenzene	1.101	1.271	-15.4	102	0.00
59	S	Bromofluorobenzene	0.514	0.523	-1.8	105	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.614	0.545	11.2	105	0.00
61	T	Bromobenzene	0.452	0.465	-2.9	106	0.00
62	T	1,2,3-Trichloropropane	0.467	0.431	7.7	105	0.00
63	T	n-Propylbenzene	1.198	1.369	-14.3	103	0.00
64	T	2-Chlorotoluene	0.884	0.985	-11.4	104	0.00
65	T	1,3,5-Trimethylbenzene	0.932	1.052	-12.9	103	0.00
66	T	4-Chlorotoluene	1.073	1.184	-10.3	106	0.00
67	T	tert-Butylbenzene	0.725	0.794	-9.5	101	0.01
68	T	1,2,4-Trimethylbenzene	0.989	1.111	-12.3	104	0.00
69	T	sec-Butylbenzene	0.810	0.964	-19.0	108	0.00
70	T	1,3-Dichlorobenzene	0.684	0.727	-6.3	105	0.00
71	T	4-Isopropyltoluene	0.891	0.952	-6.8	101	0.00
72	T	1,4-Dichlorobenzene	0.737	0.767	-4.1	106	0.00
73	T	n-Butylbenzene	0.394	0.412	-4.6	102	0.00
74	T	1,2-Dichlorobenzene	0.715	0.767	-7.3	104	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.086	-2.4	104	0.00
76	T	1,2,4-Trichlorobenzene	0.291	0.340	-16.8	105	0.00
77	T	Hexachlorobutadiene	0.133	0.133	0.0	104	0.00
78	T	Naphthalene	1.028	1.221	-18.8	144	0.00
79	T	1,2,3-Trichlorobenzene	0.312	0.341	-9.3	103	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.207	0.191	7.7	86	0.00
81	T	Methyl acetate	0.181	0.168	7.2	108	-0.01
82	T	Cyclohexane	0.296	0.285	3.7	87	0.00
83	T	Methylcyclohexane	0.188	0.175	6.9	84	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM040714.M Tue Apr 08 13:35:31 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2288.D
Acq On : 18 Apr 2014 14:05
Operator : XING
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 18 17:48:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	145	0.00
2	T	Dichlorodifluoromethane	0.366	0.403	-10.1	167	0.00
3	TP	Chloromethane	0.376	0.304	19.1	128	0.00
4	C	Vinyl chloride	0.429	0.360	16.1	133	0.00
5	T	Bromomethane	0.265	0.240	9.4	147	-0.01
6	T	Chloroethane	0.181	0.167	7.7	137	0.00
7	T	Trichlorofluoromethane	0.622	0.714	-14.8	154	0.00
8	T	Acrolein	0.051	0.044	13.7	132	0.00
9	MC	1,1-Dichloroethene	0.412	0.395	4.1	144	0.00
10	T	Acetone	0.109	0.097	11.0	141	0.00
11	T	Carbon disulfide	1.340	1.139	15.0	135	0.00
12	T	Vinyl acetate	1.402	1.368	2.4	122	0.00
13	T	Methylene chloride	0.459	0.401	12.6	138	0.00
14	T	Acrylonitrile	0.121	0.140	-15.7	182	0.00
15	T	tert-Butyl alcohol (TBA)	0.025	0.028	-12.0	168	-0.01
16	T	trans-1,2-Dichloroethene	0.506	0.429	15.2	137	0.00
17	T	Methyl tert-butyl ether (MT	1.073	0.991	7.6	156	0.00
18	TP	1,1-Dichloroethane	1.080	0.953	11.8	146	-0.01
19	T	Diisopropyl ether (DIPE)	1.529	1.462	4.4	142	0.00
20	T	cis-1,2-Dichloroethene	0.677	0.643	5.0	144	0.00
21	T	2,2-Dichloropropane	0.568	0.536	5.6	149	0.00
22	T	2-Butanone (MEK)	0.239	0.226	5.4	145	-0.01
23	T	Bromochloromethane	0.401	0.348	13.2	145	0.00
25	C	Chloroform	1.140	1.011	11.3	146	0.00
26	T	1,1,1-Trichloroethane	0.779	0.810	-4.0	157	0.00
27	T	Carbon tetrachloride	0.694	0.812	-17.0	164	0.00
28	T	1,1-Dichloropropene	0.634	0.722	-13.9	157	0.00
29	T	1,2-Dichloroethane (EDC)	0.879	0.770	12.4	149	0.00
30	S	1,2-Dichloroethane-d4	0.553	0.542	2.0	147	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	143	0.00
32	M	Benzene	1.541	1.531	0.6	149	0.00
33	M	Trichloroethene	0.381	0.390	-2.4	149	0.00
34	C	1,2-Dichloropropane	0.384	0.377	1.8	147	0.00
35	T	Dibromomethane	0.290	0.270	6.9	147	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	139	0.00
37	T	Bromodichloromethane	0.579	0.537	7.3	144	0.00
38	T	2-Chloroethyl vinyl ether	0.210	0.232	-10.5	147	0.00
39	T	cis-1,3-Dichloropropene	0.517	0.592	-14.5	144	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.257	0.294	-14.4	141	0.00
41	S	Toluene-d8	1.082	1.149	-6.2	149	0.00
42	MC	Toluene	0.900	0.947	-5.2	150	0.00
43	T	trans-1,3-Dichloropropene	0.462	0.528	-14.3	144	0.00
44	T	1,1,2-Trichloroethane	0.312	0.296	5.1	145	0.00
45	T	Tetrachloroethene	0.295	0.335	-13.6	156	0.00
46	T	1,3-Dichloropropane	0.557	0.580	-4.1	148	0.00

47	T	2-Hexanone	0.158	0.185	-17.1	143	0.00
48	T	Dibromochloromethane	0.478	0.472	1.3	145	0.00
49	T	1,2-Dibromoethane (EDB)	0.371	0.378	-1.9	146	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	150	0.00
51	TP	Chlorobenzene	1.224	1.121	8.4	150	0.00
52	T	1,1,1,2-Tetrachloroethane	0.466	0.415	10.9	146	0.00
53	C	Ethylbenzene	1.362	1.565	-14.9	152	0.00
54	T	m,p-Xylene	0.550	0.620	-12.7	148	0.00
55	T	o-Xylene	0.572	0.625	-9.3	144	0.00
56	T	Styrene	0.968	1.129	-16.6	152	0.00
57	TP	Bromoform	0.307	0.286	6.8	141	0.00
58	T	Isopropylbenzene	1.101	1.289	-17.1	148	0.00
59	S	Bromofluorobenzene	0.514	0.526	-2.3	151	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.614	0.514	16.3	141	0.00
61	T	Bromobenzene	0.452	0.456	-0.9	148	0.00
62	T	1,2,3-Trichloropropane	0.467	0.420	10.1	146	0.00
63	T	n-Propylbenzene	1.198	1.398	-16.7	150	0.00
64	T	2-Chlorotoluene	0.884	0.971	-9.8	146	0.00
65	T	1,3,5-Trimethylbenzene	0.932	1.058	-13.5	147	0.00
66	T	4-Chlorotoluene	1.073	1.168	-8.9	149	0.00
67	T	tert-Butylbenzene	0.725	0.827	-14.1	151	0.00
68	T	1,2,4-Trimethylbenzene	0.989	1.096	-10.8	146	0.00
69	T	sec-Butylbenzene	0.810	0.953	-17.7	153	0.00
70	T	1,3-Dichlorobenzene	0.684	0.699	-2.2	144	0.00
71	T	4-Isopropyltoluene	0.891	0.992	-11.3	151	0.00
72	T	1,4-Dichlorobenzene	0.737	0.741	-0.5	146	0.00
73	T	n-Butylbenzene	0.394	0.428	-8.6	151	0.00
74	T	1,2-Dichlorobenzene	0.715	0.742	-3.8	144	-0.01
75	T	1,2-Dibromo-3-chloropropane	0.084	0.076	9.5	131	0.00
76	T	1,2,4-Trichlorobenzene	0.291	0.311	-6.9	136	0.00
77	T	Hexachlorobutadiene	0.133	0.136	-2.3	151	0.00
78	T	Naphthalene	1.028	1.110	-8.0	187	0.00
79	T	1,2,3-Trichlorobenzene	0.312	0.290	7.1	125	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.207	0.245	-18.4	157	0.00
81	T	Methyl acetate	0.181	0.166	8.3	152	-0.01
82	T	Cyclohexane	0.296	0.346	-16.9	151	0.00
83	T	Methylcyclohexane	0.188	0.208	-10.6	143	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM040714.M Fri Apr 18 17:48:56 2014 RPT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L1919.D

Instrument ID: MSD_L

Date Analyzed: 04/07/2014

Time Analyzed: 14:08

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	341761		5.94		502353		6.76		469995		10.10	
	UPPER LIMIT	683522		6.44		1004706		7.26		939990		10.60	
	LOWER LIMIT	170880.5		5.44		251176.5		6.26		234997.5		9.60	
	LAB SAMPLE ID												
01	ICC1	326662		5.94		499728		6.76		443421		10.10	
02	ICC5	301677		5.95		462653		6.76		418996		10.10	
03	ICC20	325264		5.94		493099		6.76		450737		10.10	
04	ICC2	295734		5.94		456457		6.76		405470		10.10	
05	ICC200	368634		5.94		539558		6.76		507166		10.10	
06	ICC150	373685		5.94		544527		6.76		506972		10.10	
07	ICV100	359425		5.94		518180		6.76		493307		10.10	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L2288.D

Date Analyzed: 04/18/2014

Instrument ID: MSD_L

Time Analyzed: 14:05

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	494342	5.94	719461	6.76	704084	10.10
	UPPER LIMIT	988684	6.44	1438922	7.26	1408168	10.60
	LOWER LIMIT	247171	5.44	359730.5	6.26	352042	9.60
	LAB SAMPLE ID						
01	BLKS140418-01	366463	5.94	615021	6.76	570008	10.10
02	03121-001	384138	5.94	611238	6.76	553976	10.10
03	03328-001	390116	5.94	613633	6.76	540274	10.10
04	03395-001	280952	5.95	431167	6.77	421871	10.10
05	LCSS140418-01	442745	5.94	658483	6.76	633463	10.10
06	03121-001MS	463849	5.94	685282	6.76	652942	10.10
07	03121-001MSD	460351	5.95	686389	6.76	651743	10.10
08	03189-001	457528	5.94	682500	6.76	588739	10.10
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2294.D
Acq On : 18 Apr 2014 16:48
Operator : XING
Sample : WC-001,03328-001,M,0.05g,12.6
Misc : GEI-MTCLR/GREENPOI,04/15/14,04/16/14,1
ALS Vial : 8 Sample Multiplier: 1

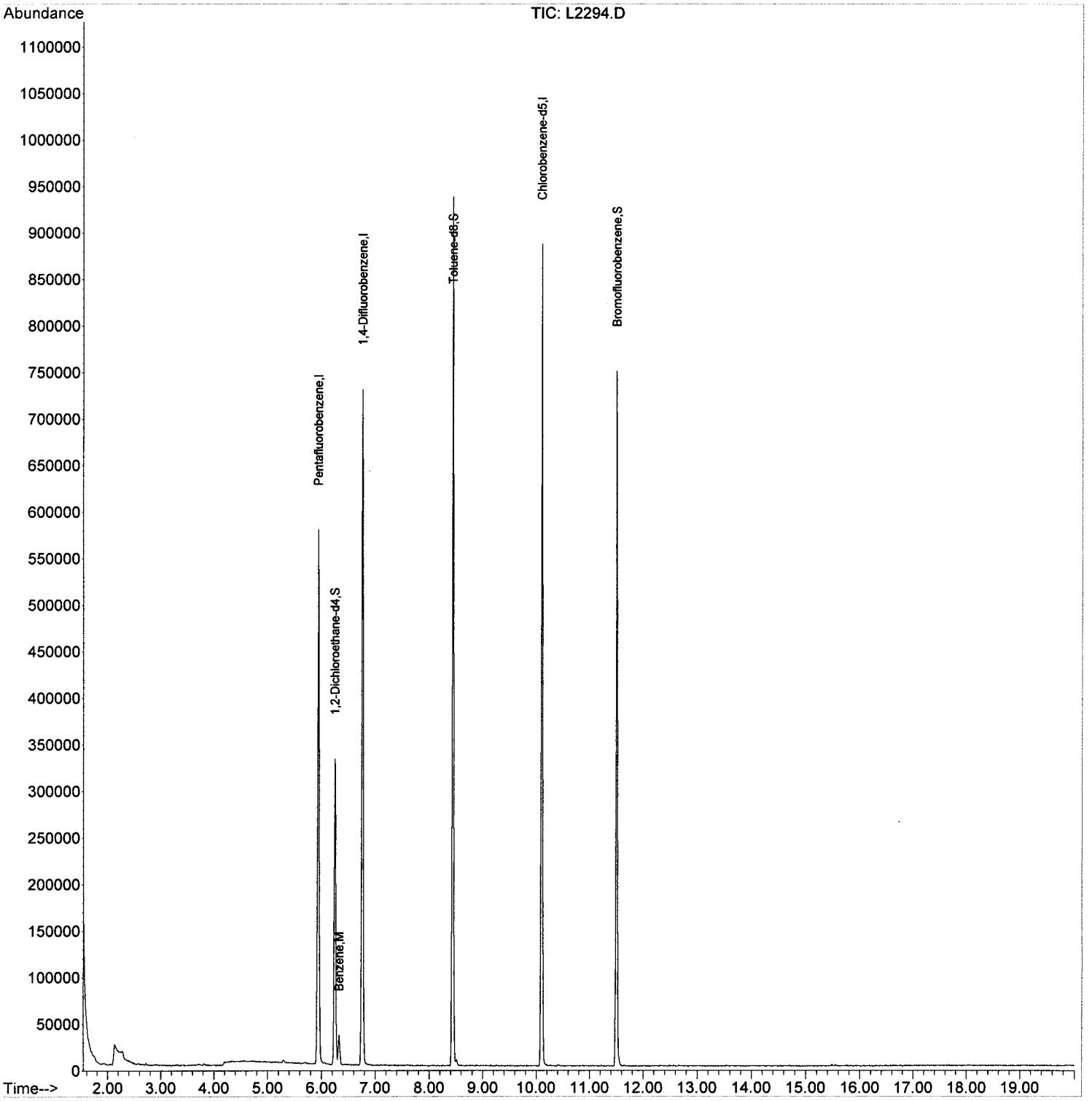
Quant Time: Apr 22 13:57:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.94	168	390116	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.76	114	613633	50.00	UG	0.00
50) Chlorobenzene-d5	10.10	117	540274	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.25	65	251783	58.33	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 116.66%			
41) Toluene-d8	8.44	98	605614	45.61	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 91.22%			
59) Bromofluorobenzene	11.50	95	254819	45.87	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.74%			
Target Compounds						Qvalue
32) Benzene	6.33	78	30093	1.59	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2294.D
Acq On : 18 Apr 2014 16:48
Operator : XING
Sample : WC-001,03328-001,M,0.05g,12.6
Misc : GEI-MTCLR/GREENPOI,04/15/14,04/16/14,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 13:57:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS140418-01
Client ID: BLKS140418-01
Date Received:
Date Analyzed: 04/18/2014
Data file: L2291.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.050	0.018
Vinyl chloride	ND		0.050	0.018
Bromomethane	ND		0.050	0.022
Chloroethane	ND		0.050	0.020
Trichlorofluoromethane	ND		0.050	0.028
Acrolein	ND		1.00	0.085
1,1-Dichloroethene	ND		0.050	0.028
Acetone	ND		0.100	0.043
Methylene chloride	ND		0.100	0.099
Acrylonitrile	ND		1.00	0.094
trans-1,2-Dichloroethene	ND		0.050	0.022
1,1-Dichloroethane	ND		0.050	0.018
cis-1,2-Dichloroethene	ND		0.050	0.013
2-Butanone (MEK)	ND		0.050	0.031
Chloroform	ND		0.050	0.017
1,1,1-Trichloroethane	ND		0.050	0.014
Carbon tetrachloride	ND		0.050	0.023
1,2-Dichloroethane (EDC)	ND		0.050	0.014
Benzene	ND		0.050	0.011
Trichloroethene	ND		0.050	0.013
1,2-Dichloropropane	ND		0.050	0.016
Bromodichloromethane	ND		0.050	0.014
2-Chloroethyl vinyl ether	ND		0.050	0.021
cis-1,3-Dichloropropene	ND		0.050	0.013
4-Methyl-2-pentanone (MIBK)	ND		0.050	0.017

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS140418-01
Client ID: BLKS140418-01
Date Received:
Date Analyzed: 04/18/2014
Data file: L2291.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.012
trans-1,3-Dichloropropene	ND		0.050	0.019
1,1,2-Trichloroethane	ND		0.050	0.012
Tetrachloroethene	ND		0.050	0.015
Dibromochloromethane	ND		0.050	0.013
Chlorobenzene	ND		0.050	0.011
1,1,1,2-Tetrachloroethane	ND		0.050	0.013
Ethylbenzene	ND		0.050	0.018
Total Xylenes	ND		0.100	0.032
Styrene	ND		0.050	0.015
Bromoform	ND		0.050	0.013
1,1,2,2-Tetrachloroethane	ND		0.050	0.020
1,3-Dichlorobenzene	ND		0.050	0.015
1,4-Dichlorobenzene	ND		0.050	0.015
1,2-Dichlorobenzene	ND		0.050	0.019
1,2,4-Trichlorobenzene	ND		0.050	0.022

Total Target Compounds (41): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS140418-01
Client ID: BLKS140418-01
Date Received:
Date Analyzed: 04/18/2014
Data file: L2291.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 15:33:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.94	168	366463	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.76	114	615021	50.00	UG	0.00
50) Chlorobenzene-d5	10.10	117	570008	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.25	65	253582	62.53	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 125.06%			
41) Toluene-d8	8.44	98	619567	46.55	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 93.10%			
59) Bromofluorobenzene	11.50	95	273023	46.58	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 93.16%			

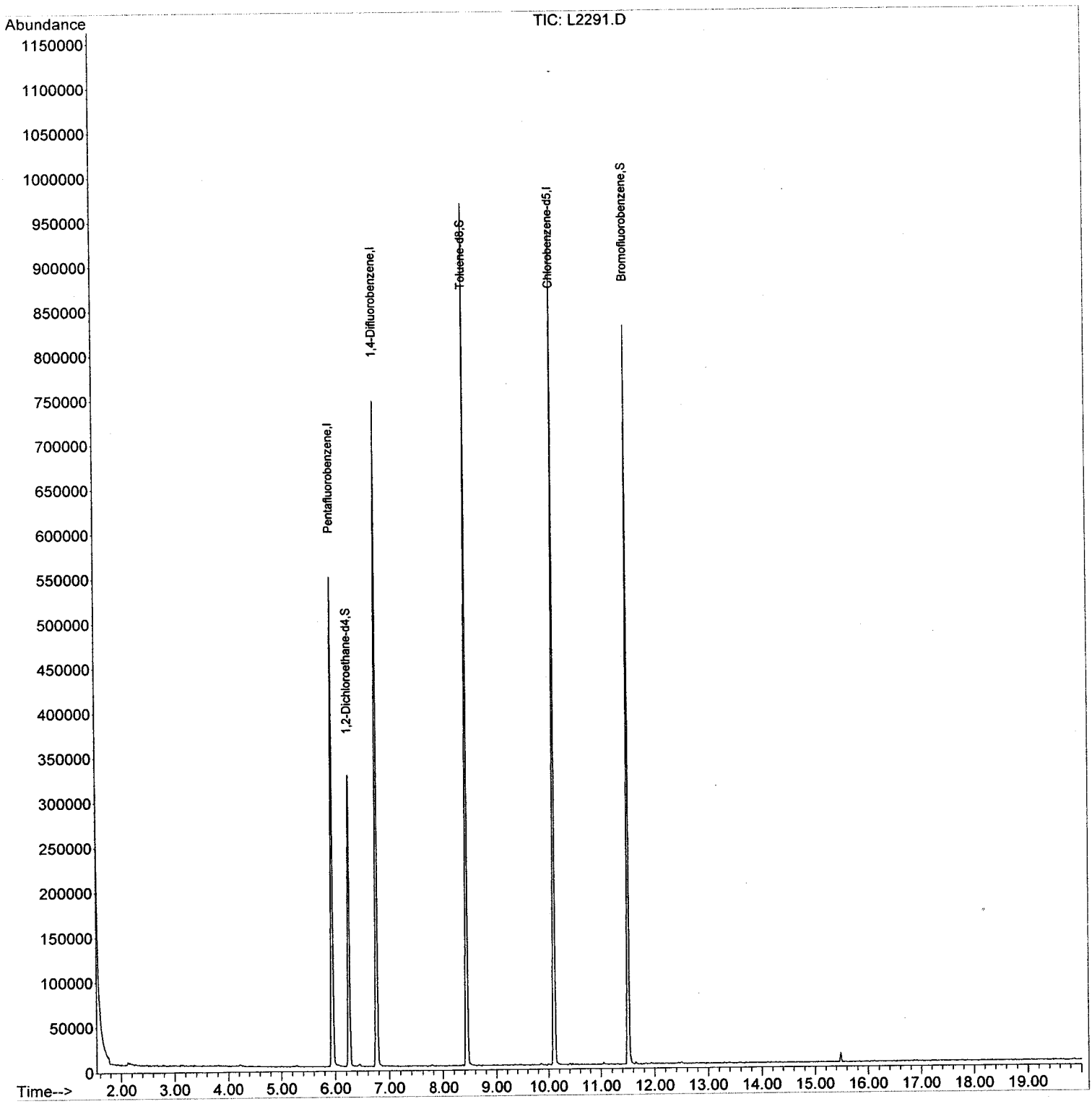
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 15:33:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Apr 08 12:52:37 2014
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LM040714.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.941	427	435	454	rBV	546368	1070141	67.60%	14.161%
2	6.255	457	466	476	rBV	324987	692315	43.73%	9.161%
3	6.763	510	516	526	rBV	743803	1319111	83.32%	17.455%
4	8.438	676	681	699	rBV	964950	1582891	99.98%	20.946%
5	10.103	840	845	859	rVB	930749	1583162	100.00%	20.949%
6	11.504	978	983	993	rBV	825918	1309449	82.71%	17.327%

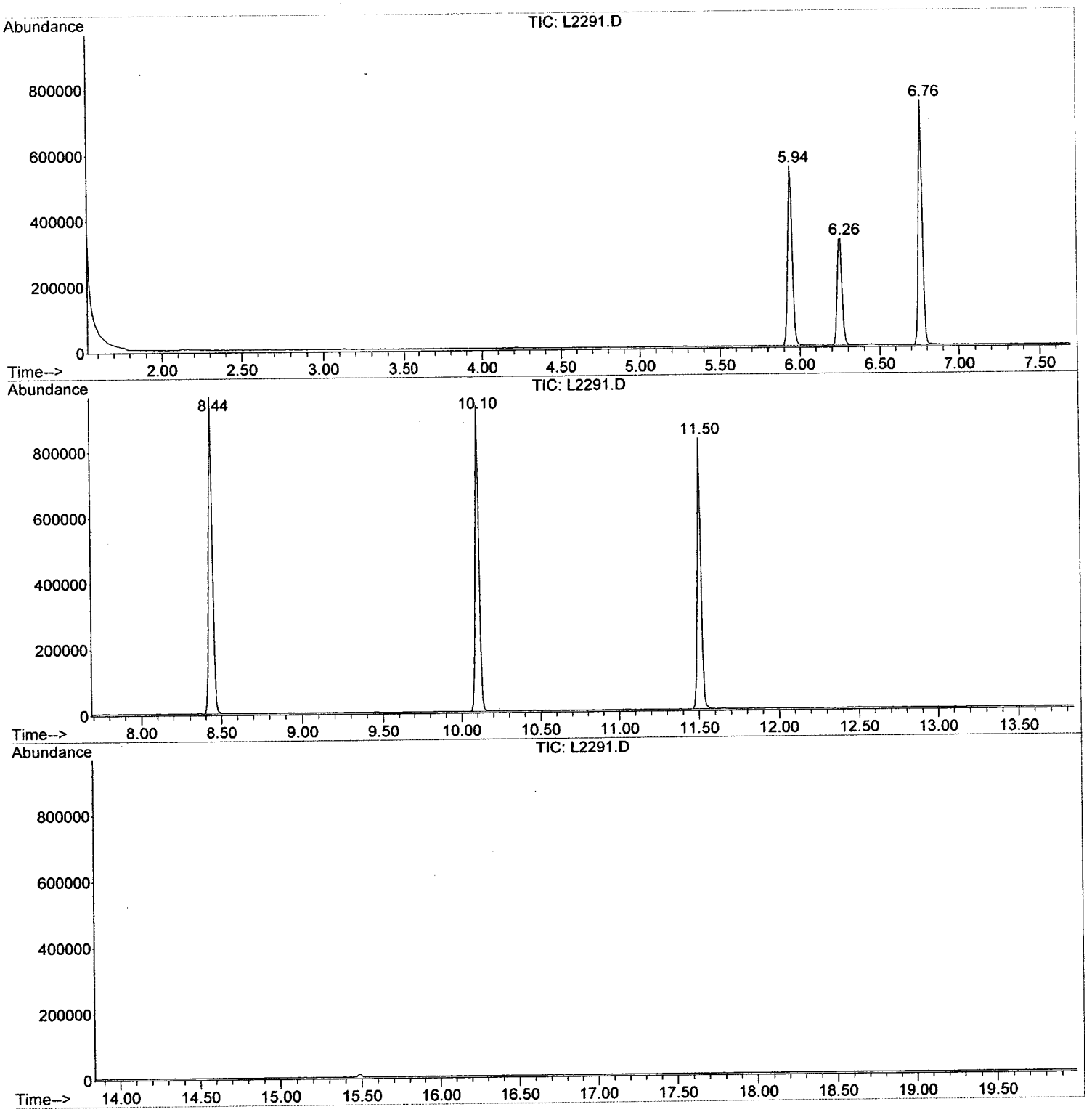
Sum of corrected areas: 7557069

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LM040714.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



GASOLINE RANGE ORGANICS

GASOLINE RANGE ORGANICS
QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2014

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS140418-01	SOIL	L2291.D	111	87	90
03121-001	MEOH	L2292.D	104	86	89
03121-007	MEOH	L2293.D	103	87	87
03328-001	MEOH	L2294.D	103	85	89
LCST140418	MEOH	L2300.D	101	94	93
03328-001MS	MEOH	L2301.D	103	94	90
03328-001MSD	MEOH	L2302.D	101	95	93

	Concentration	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	45-154	45-153
SMC2 = Toluene-d8	50 ppb	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	48-149	47-154

Column to be used to flag recovery values

FORM 2

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCST140418
Date Received:
Date Analyzed: 04/18/2014
LCS Data file: L2300.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	0.0	MS Conc.	%Rec.
TPH-GRO	500	0.0	429	86

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 03328-001
Client ID: WC-001
Date Received: 04/16/2014
Date Analyzed: 04/18/2014
MS Data file: L2301.D
MSD Data file: L2302.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.6
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	0	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
TPH-GRO	500	0.0	410	82		464	93		12	

	Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L2291.D Instrument ID: MSD_L

Date Analyzed: 04/18/2014 Time Analyzed: 15:28

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
C-2E4_(0.5-1)/	03121-001	04/18/2014	15:55
C-2E5_(0.5-1)/	03121-007	04/18/2014	16:21
WC-001	03328-001	04/18/2014	16:48
LCS-500PPB	LCST140418	04/18/2014	19:33
TPHMS	03328-001MS	04/18/2014	20:00
TPHMSD	03328-001MSD	04/18/2014	20:28

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L1514.D

Inst ID: MSD_L

BFB Injection Date: 03/19/2014

BFB Injection Time: 9:26

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.0			
75	30.0 - 60.0% of mass 95	47.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.6	(	0.8	)1
174	Great than 50.0% of mass 95	76.3			
175	5.0 - 9.0% of mass 174	5.6	(	7.3	)1
176	95.0 - 101.0% of mass 174	74.4	(	97.5	)1
177	5.0 - 9.0% of mass 176	4.8	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC100	ICC100	L1516.D	03/19/2014	10:27
ICC200	ICC200	L1517.D	03/19/2014	11:02
ICC1000	ICC1000	L1519.D	03/19/2014	12:11
ICC2000	ICC2000	L1520.D	03/19/2014	12:38
ICC5000	ICC5000	L1521.D	03/19/2014	13:05
ICC50	ICC50	L1524.D	03/19/2014	14:25
ICV1000	ICV1000	L1525.D	03/19/2014	14:52

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L2287.D

BFB Injection Date: 04/18/2014

Inst ID: MSD_L

BFB Injection Time: 13:08

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.4			
75	30.0 - 60.0% of mass 95	44.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.7	(	0.9	)1
174	Great than 50.0% of mass 95	81.1			
175	5.0 - 9.0% of mass 174	6.1	(	7.5	)1
176	95.0 - 101.0% of mass 174	77.2	(	95.2	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV1000	CCV1000	L2289.D	04/18/2014	14:32
BLKS140418-01	BLKS140418-01	L2291.D	04/18/2014	15:28
C-2E4_(0.5-1)/	03121-001	L2292.D	04/18/2014	15:55
C-2E5_(0.5-1)/	03121-007	L2293.D	04/18/2014	16:21
WC-001	03328-001	L2294.D	04/18/2014	16:48
LCS-500PPB	LCST140418	L2300.D	04/18/2014	19:33
TPHMS	03328-001MS	L2301.D	04/18/2014	20:00
TPHMSD	03328-001MSD	L2302.D	04/18/2014	20:28

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LT031914.M
Title : VOLATILE ORGANICS BY EPA 8260
Last Update : Thu Mar 20 17:12:18 2014
Response Via : Initial Calibration

Calibration Files
50 =L1524.D 100 =L1516.D 200 =L1517.D
1000=L1519.D 2000=L1520.D 5000=L1521.D =

		Compound	50	100	200	1000	2000	5000	Avg	%RSD
1)	I	Pentafluorbenzene	----------ISTD----------							
2)	S	1,2-Dichloroethan	0.638	0.636	0.632	0.626	0.618	0.596	0.624	2.49
3)	I	1,4-Difluorobenzene	----------ISTD----------							
4)	S	Toluene-d8	1.139	1.153	1.147	1.171	1.158	1.175	1.157	1.18
5)	I	Chlorobenzene-d5	----------ISTD----------							
6)	S	Bromofluorobenzen	0.528	0.530	0.528	0.535	0.543	0.532	0.533	1.04
7)	H	TPH-GRO	1.073	0.892	0.864	1.123	1.154	0.780	0.981	15.84

(#) = Out of Range

LT031914.M Tue Apr 22 14:52:14 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2289.D
Acq On : 18 Apr 2014 14:32
Operator : XING
Sample : CCV1000,CCV1000,A,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 18 16:09:56 2014
Quant Method : C:\MSDCHEM\1\METHODS\LT031914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Thu Mar 20 17:12:18 2014
Response via : Initial Calibration

Min. RRF : 0.300 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorbenzene	1.000	1.000	0.0	160	0.00
2	S	1,2-Dichloroethane-d4	0.624	0.576	7.7	147	-0.01
3	I	1,4-Difluorobenzene	1.000	1.000	0.0	165	0.00
4	S	Toluene-d8	1.157	1.087	6.1	153	0.00
5	I	Chlorobenzene-d5	1.000	1.000	0.0	172	0.00
6	S	Bromofluorobenzene	0.533	0.498	6.6	160	0.00
7	H	TPH-GRO	0.981	1.100	-12.1	168	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LT031914.M Tue Apr 22 14:57:50 2014 RPT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L1519.D

Date Analyzed: 03/19/2014

Instrument ID: MSD_L

Time Analyzed: 12:11

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	301804	5.94	467881	6.76	434659	10.10
	UPPER LIMIT	603608	6.44	935762	7.26	869318	10.60
	LOWER LIMIT	150902	5.44	233940.5	6.26	217329.5	9.60
	LAB SAMPLE ID						
01	ICC100	300674	5.94	467316	6.76	425323	10.10
02	ICC200	302703	5.94	470958	6.76	426135	10.10
03	ICC2000	310779	5.94	484517	6.76	445371	10.10
04	ICC5000	329424	5.94	503957	6.76	476026	10.10
05	ICC50	283644	5.94	443405	6.76	402347	10.10
06	ICV1000	299570	5.94	467657	6.76	431963	10.10
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L2289.D

Date Analyzed: 04/18/2014

Instrument ID: MSD_L

Time Analyzed: 14:32

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	481580		5.94		771156		6.76		746742		10.10	
	UPPER LIMIT	963160		6.44		1542312		7.26		1493484		10.60	
	LOWER LIMIT	240790		5.44		385578		6.26		373371		9.60	
	LAB SAMPLE ID												
01	BLKS140418-01	366463		5.94		615021		6.76		570008		10.10	
02	03121-001	384138		5.94		611238		6.76		553976		10.10	
03	03121-007	390272		5.94		616283		6.76		560687		10.10	
04	03328-001	390116		5.94		613633		6.76		540274		10.10	
05	LCST140418	442019		5.94		721704		6.76		681699		10.10	
06	03328-001MS	425124		5.95		713867		6.76		687709		10.10	
07	03328-001MSD	420613		5.95		706565		6.76		677930		10.10	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

GASOLINE RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2294.D
Acq On : 18 Apr 2014 16:48
Operator : XING
Sample : WC-001,03328-001,M,0.05g,12.6
Misc : GEI-MTCLR/GREENPOI,04/15/14,04/16/14,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 13:58:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\LT031914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Thu Mar 20 17:12:18 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	5.94	168	390116	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.76	114	613633	50.00	UG	0.00
5) Chlorobenzene-d5	10.10	117	540274	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.25	65	251783	51.72	UG	-0.01
Spiked Amount 50.000	Range 76 - 114		Recovery = 103.44%			
4) Toluene-d8	8.44	98	605614	42.65	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 85.30%#			
6) Bromofluorobenzene	11.50	95	254819	44.27	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 88.54%			

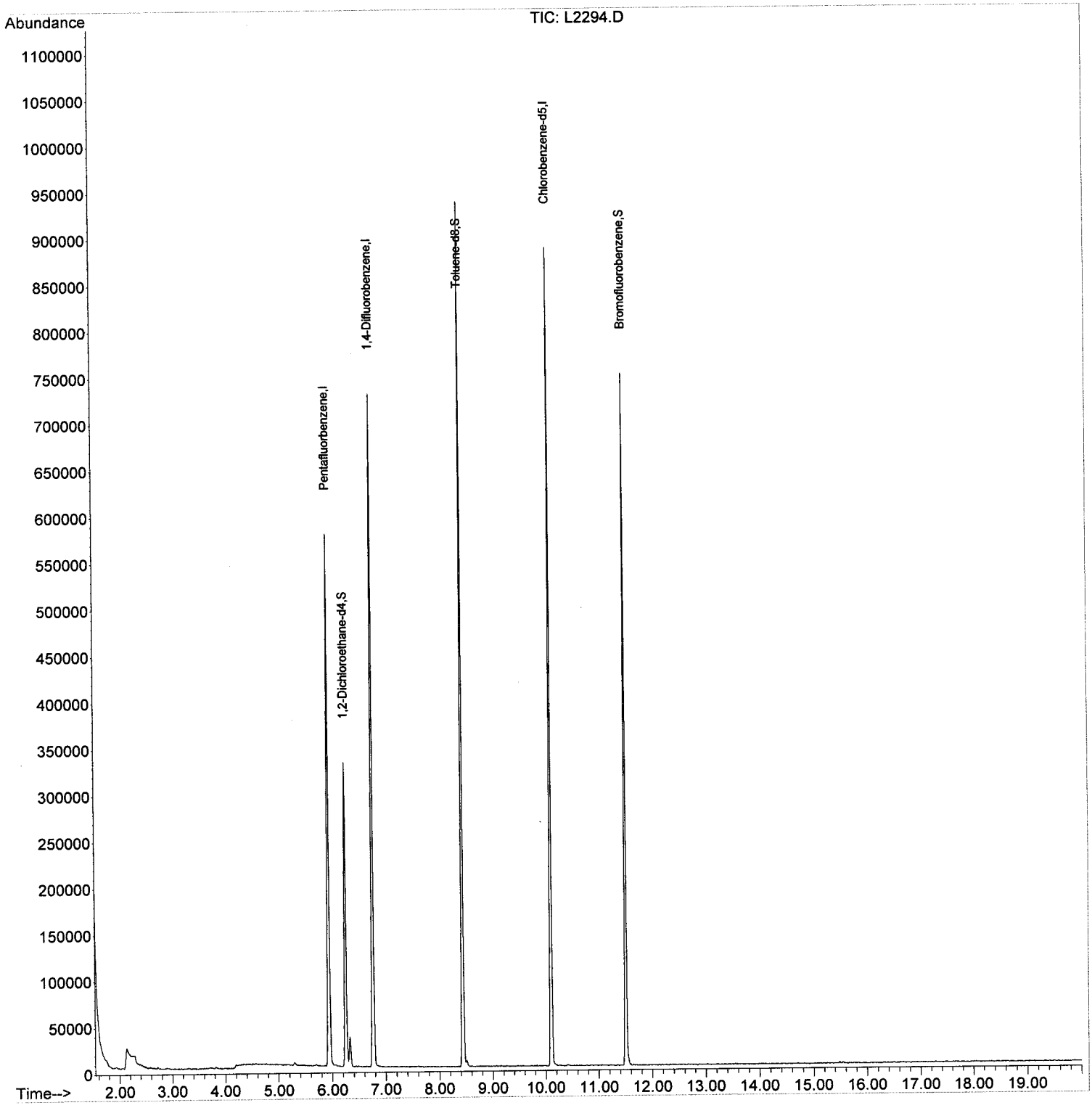
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2294.D
Acq On : 18 Apr 2014 16:48
Operator : XING
Sample : WC-001,03328-001,M,0.05g,12.6
Misc : GEI-MTCLR/GREENPOI,04/15/14,04/16/14,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 13:58:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\LT031914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Thu Mar 20 17:12:18 2014
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: BLKS140418-01
Client ID: BLKS140418-01
Date Received:
Date Analyzed: 04/18/2014
Data file: L2291.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		2.50	2.00

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 13:56:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\LT031914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Thu Mar 20 17:12:18 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	5.94	168	366463	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.76	114	615021	50.00	UG	0.00
5) Chlorobenzene-d5	10.10	117	570008	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.25	65	253582	55.45	UG	-0.01
Spiked Amount 50.000	Range 76 - 114		Recovery = 110.90%			
4) Toluene-d8	8.44	98	619567	43.53	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 87.06%#			
6) Bromofluorobenzene	11.50	95	273023	44.96	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 89.92%			

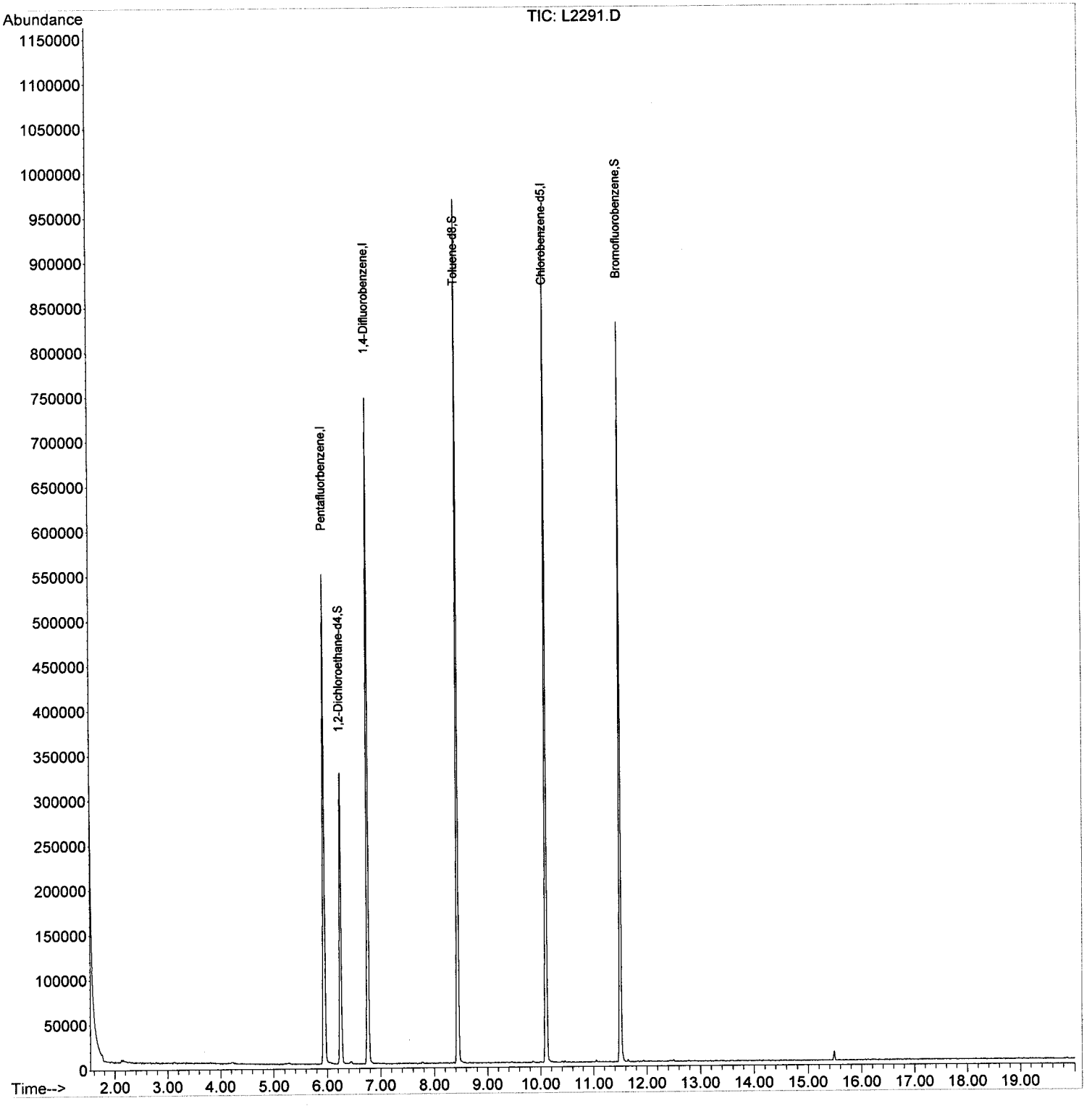
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : L2291.D
Acq On : 18 Apr 2014 15:28
Operator : XING
Sample : BLKS140418-01,BLKS140418-01,S,0.1g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 13:56:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\LT031914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Thu Mar 20 17:12:18 2014
Response via : Initial Calibration



SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/16/2014

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
CCV040BNA2		C5549.D	N/A	N/A	N/A	N/A	N/A	N/A
BLKS140415-06	SOIL	C5550.D	62	73	78	90	95	119
E14-03257-001	SOIL	C5551.D	N/A	N/A	49	65	N/A	58
E14-03285-001	SOIL	C5552.D	N/A	N/A	46	61	N/A	60
E14-03285-002	SOIL	C5553.D	N/A	N/A	55	57	N/A	59
E14-03285-003	SOIL	C5554.D	N/A	N/A	54	64	N/A	70
E14-03257-001DL	SOIL	C5555.D	N/A	N/A	33	54	N/A	51
E14-03285-001DL	SOIL	C5556.D	N/A	N/A	32	48	N/A	48
E14-03231-005DL	SOIL	C5557.D	N/A	N/A	45	69	N/A	63
LCSS140415-06	SOIL	C5558.D	47	47	62	78	67	64
E14-03285-003MS	SOIL	C5559.D	47	52	62	72	46	75
E14-03285-003MSD	SOIL	C5560.D	46	49	59	67	49	66

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2014

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
CCV040BNA2		C5635.D	N/A	N/A	N/A	N/A	N/A	N/A
E14-03286-002DL	SOIL	C5637.D	N/A	N/A	50	50	50	50
E14-03286-007DL	SOIL	C5638.D	30	36	39	60	66	57
BLKS140417-03	SOIL	C5640.D	40	46	46	66	95	79
LCSS140417-03	SOIL	C5641.D	30	37	42	61	80	70
E14-03340-001MS	SOIL	C5642.D	30	34	61	82	51	85
E14-03340-001MSD	SOIL	C5643.D	29	37	60	75	49	82
E14-03340-001	SOIL	C5644.D	N/A	N/A	35	52	N/A	50
E14-03340-002	SOIL	C5645.D	N/A	N/A	42	61	N/A	51
E14-03340-003	SOIL	C5646.D	N/A	N/A	40	59	N/A	50
E14-03340-004	SOIL	C5647.D	N/A	N/A	40	58	N/A	53
E14-03340-005	SOIL	C5648.D	N/A	N/A	39	60	N/A	49
E14-03340-006	SOIL	C5649.D	N/A	N/A	44	62	N/A	50
E14-03340-007	SOIL	C5650.D	N/A	N/A	42	64	N/A	53
E14-03340-008	SOIL	C5651.D	N/A	N/A	42	61	N/A	50
E14-03340-009	SOIL	C5652.D	N/A	N/A	48	68	N/A	61
E14-03340-010	SOIL	C5653.D	N/A	N/A	38	57	N/A	52
E14-03340-011	SOIL	C5654.D	N/A	N/A	40	62	N/A	53
E14-03340-012	SOIL	C5655.D	N/A	N/A	33	55	N/A	50
E14-03340-013	SOIL	C5656.D	N/A	N/A	33	53	N/A	55
E14-03341-001	SOIL	C5657.D	N/A	N/A	31	52	N/A	49
E14-03341-002	SOIL	C5658.D	N/A	N/A	38	64	N/A	53

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2014

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
E14-03341-003	SOIL	C5659.D	N/A	N/A	40	60	N/A	50
E14-03341-004	SOIL	C5660.D	N/A	N/A	34	58	N/A	50
E14-03341-005	SOIL	C5661.D	N/A	N/A	32	55	N/A	51
E14-03341-006	SOIL	C5662.D	N/A	N/A	31	52	N/A	46
E14-03341-007	SOIL	C5663.D	N/A	N/A	41	68	N/A	66
BLKS140417-04	SOIL	C5665.D	55	55	52	79	76	64
LCSS140417-04	SOIL	C5666.D	49	47	63	79	68	66
E14-02943-003	SOIL	C5667.D	N/A	N/A	33	51	N/A	49
E14-02946-025	SOIL	C5668.D	N/A	N/A	36	53	N/A	57
E14-02946-026	SOIL	C5669.D	N/A	N/A	30	50	N/A	45
E14-03052-002	SOIL	C5670.D	N/A	N/A	45	69	N/A	73
E14-03052-004	SOIL	C5671.D	N/A	N/A	40	63	N/A	69
E14-03328-001	SOIL	C5672.D	N/A	N/A	39	59	N/A	64
E14-03021-004	SOIL	C5673.D	N/A	N/A	38	36	N/A	36
E14-02925-011	SOIL	C5674.D	N/A	N/A	40	65	N/A	64
E14-02925-012	SOIL	C5675.D	N/A	N/A	31	52	N/A	56
E14-02925-013	SOIL	C5676.D	N/A	N/A	33	55	N/A	56
E14-02925-014	SOIL	C5677.D	N/A	N/A	30	51	N/A	67
E14-02925-015	SOIL	C5678.D	N/A	N/A	29	47	N/A	58
E14-03328-001DL	SOIL	C5679.D	N/A	N/A	36	54	N/A	N/A

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140415-06
Date Received: NA
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
Data file: C5558.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	26.9	54		40 - 140
Pyridine	50.0	15.5	31		20 - 120
Benzaldehyde	50.0	9.2	18		10 - 110
Phenol	50.0	27.1	54		30 - 140
Aniline	50.0	25.9	52		40 - 140
Bis(2-chloroethyl) ether	50.0	23.4	47		40 - 140
2-Chlorophenol	50.0	28.7	57		30 - 140
1,3-Dichlorobenzene	50.0	31.6	63		40 - 140
1,4-Dichlorobenzene	50.0	30.3	61		40 - 140
Benzyl alcohol	50.0	28.8	58		40 - 140
1,2-Dichlorobenzene	50.0	30.9	62		40 - 140
2-Methylphenol	50.0	28.8	58		30 - 140
Bis(2-chloroisopropyl) ether	50.0	21.2	42		40 - 140
4-Methylphenol	50.0	30.3	61		30 - 140
N-Nitrosodi-n-propylamine	50.0	24.7	49		40 - 140
Acetophenone	50.0	29.6	59		40 - 140
3-Methylphenol	50.0	30.3	61		30 - 140
Hexachloroethane	50.0	23.4	47		40 - 140
Nitrobenzene	50.0	26.9	54		40 - 140
Isophorone	50.0	27.6	55		40 - 140
2-Nitrophenol	50.0	34.1	68		30 - 140
2,4-Dimethylphenol	50.0	31.3	63		30 - 140
Bis(2-chloroethoxy) methane	50.0	28.9	58		40 - 140
Benzoic acid	50.0	32.4	65		30 - 140
2,4-Dimethylaniline	50.0	20.6	41		40 - 140
2,4-Dichlorophenol	50.0	35.0	70		30 - 140
1,2,4-Trichlorobenzene	50.0	34.3	69		40 - 140
Naphthalene	50.0	37.2	74		40 - 140
4-Chloroaniline	50.0	30.6	61		40 - 140
Hexachlorobutadiene	50.0	35.8	72		40 - 140
Caprolactam	50.0	26.8	54		40 - 140
4-Chloro-3-methylphenol	50.0	28.0	56		30 - 140
2-Methylnaphthalene	50.0	36.4	73		40 - 140
Hexachlorocyclopentadiene	50.0	5.4	11		5 - 105
2,4,6-Trichlorophenol	50.0	37.4	75		30 - 140
2,4,5-Trichlorophenol	50.0	38.7	77		30 - 140
1,1'-Biphenyl	50.0	40.2	80		40 - 140
2-Chloronaphthalene	50.0	34.2	68		40 - 140
2-Nitroaniline	50.0	26.1	52		40 - 140
Dimethyl phthalate	50.0	35.9	72		40 - 140
2,6-Dinitrotoluene	50.0	31.3	63		40 - 140
Acenaphthylene	50.0	38.3	77		40 - 140
3-Nitroaniline	50.0	32.5	65		40 - 140
Acenaphthene	50.0	33.9	68		40 - 140
2,4-Dinitrophenol	50.0	31.8	64		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140415-06
Date Received: NA
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
Data file: C5558.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	23.8	48		30 - 140
2,4-Dinitrotoluene	50.0	31.1	62		40 - 140
Dibenzofuran	50.0	36.0	72		40 - 140
Diethyl phthalate	50.0	32.5	65		40 - 140
Fluorene	50.0	34.4	69		40 - 140
4-Chlorophenyl phenyl ether	50.0	36.6	73		40 - 140
4-Nitroaniline	50.0	32.5	65		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	29.2	58		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	36.3	73		40 - 140
4,6-Dinitro-2-methylphenol	50.0	26.6	53		10 - 110
N-Nitrosodiphenylamine	50.0	36.4	73		40 - 140
1,2-Diphenylhydrazine	50.0	25.1	50		40 - 140
4-Bromophenyl phenyl ether	50.0	40.1	80		40 - 140
Hexachlorobenzene	50.0	38.8	78		40 - 140
Atrazine	50.0	41.1	82		20 - 120
Pentachlorophenol	50.0	39.4	79		30 - 140
Phenanthrene	50.0	36.5	73		40 - 140
Anthracene	50.0	37.4	75		40 - 140
Carbazole	50.0	35.1	70		40 - 140
Di-n-butyl phthalate	50.0	40.6	81		40 - 140
Fluoranthene	50.0	37.9	76		40 - 140
Benzidine	50.0	24.7	49		5 - 105
Pyrene	50.0	30.1	60		40 - 140
3,3'-Dimethylbenzidine	50.0	25.6	51		5 - 105
Butyl benzyl phthalate	50.0	31.5	63		40 - 140
3,3'-Dichlorobenzidine	50.0	41.8	84		40 - 140
Benzo[a]anthracene	50.0	38.8	78		40 - 140
Chrysene	50.0	41.1	82		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	37.8	76		40 - 140
Di-n-octyl phthalate	50.0	28.0	56		40 - 140
Benzo[b]fluoranthene	50.0	28.9	58		40 - 140
Benzo[k]fluoranthene	50.0	32.6	65		40 - 140
Benzo[a]pyrene	50.0	32.8	66		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	30.5	61		40 - 140
Dibenz[a,h]anthracene	50.0	32.8	66		40 - 140
Benzo[g,h,i]perylene	50.0	28.6	57		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140417-04
Date Received: NA
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5666.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	30.8	62		40 - 140
Pyridine	50.0	19.0	38		20 - 120
Benzaldehyde	50.0	20.6	41		10 - 110
Phenol	50.0	32.3	65		30 - 140
Aniline	50.0	29.4	59		40 - 140
Bis(2-chloroethyl) ether	50.0	26.9	54		40 - 140
2-Chlorophenol	50.0	31.0	62		30 - 140
1,3-Dichlorobenzene	50.0	33.0	66		40 - 140
1,4-Dichlorobenzene	50.0	36.2	72		40 - 140
Benzyl alcohol	50.0	30.9	62		40 - 140
1,2-Dichlorobenzene	50.0	33.1	66		40 - 140
2-Methylphenol	50.0	30.9	62		30 - 140
Bis(2-chloroisopropyl) ether	50.0	22.2	44		40 - 140
4-Methylphenol	50.0	32.2	64		30 - 140
N-Nitrosodi-n-propylamine	50.0	26.2	52		40 - 140
Acetophenone	50.0	31.9	64		40 - 140
3-Methylphenol	50.0	32.2	64		30 - 140
Hexachloroethane	50.0	24.0	48		40 - 140
Nitrobenzene	50.0	30.6	61		40 - 140
Isophorone	50.0	31.9	64		40 - 140
2-Nitrophenol	50.0	34.3	69		30 - 140
2,4-Dimethylphenol	50.0	37.8	76		30 - 140
Bis(2-chloroethoxy) methane	50.0	34.9	70		40 - 140
Benzoic acid	50.0	35.9	72		30 - 140
2,4-Dimethylaniline	50.0	23.7	47		40 - 140
2,4-Dichlorophenol	50.0	41.2	82		30 - 140
1,2,4-Trichlorobenzene	50.0	38.1	76		40 - 140
Naphthalene	50.0	41.1	82		40 - 140
4-Chloroaniline	50.0	35.0	70		40 - 140
Hexachlorobutadiene	50.0	40.8	82		40 - 140
Caprolactam	50.0	32.4	65		40 - 140
4-Chloro-3-methylphenol	50.0	33.0	66		30 - 140
2-Methylnaphthalene	50.0	39.7	79		40 - 140
Hexachlorocyclopentadiene	50.0	4.1	8		5 - 105
2,4,6-Trichlorophenol	50.0	43.7	87		30 - 140
2,4,5-Trichlorophenol	50.0	44.1	88		30 - 140
1,1'-Biphenyl	50.0	44.4	89		40 - 140
2-Chloronaphthalene	50.0	37.4	75		40 - 140
2-Nitroaniline	50.0	30.3	61		40 - 140
Dimethyl phthalate	50.0	41.9	84		40 - 140
2,6-Dinitrotoluene	50.0	32.2	64		40 - 140
Acenaphthylene	50.0	43.4	87		40 - 140
3-Nitroaniline	50.0	35.2	70		40 - 140
Acenaphthene	50.0	38.4	77		40 - 140
2,4-Dinitrophenol	50.0	8.7	17		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140417-04
Date Received: NA
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5666.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	26.3	53		30 - 140
2,4-Dinitrotoluene	50.0	29.3	59		40 - 140
Dibenzofuran	50.0	40.6	81		40 - 140
Diethyl phthalate	50.0	39.4	79		40 - 140
Fluorene	50.0	39.0	78		40 - 140
4-Chlorophenyl phenyl ether	50.0	42.1	84		40 - 140
4-Nitroaniline	50.0	40.4	81		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	34.2	68		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	20.2	40		40 - 140
4,6-Dinitro-2-methylphenol	50.0	6.7	13		10 - 110
N-Nitrosodiphenylamine	50.0	37.9	76		40 - 140
1,2-Diphenylhydrazine	50.0	25.0	50		40 - 140
4-Bromophenyl phenyl ether	50.0	43.2	86		40 - 140
Hexachlorobenzene	50.0	41.9	84		40 - 140
Atrazine	50.0	41.9	84		20 - 120
Pentachlorophenol	50.0	42.8	86		30 - 140
Phenanthrene	50.0	41.3	83		40 - 140
Anthracene	50.0	42.7	85		40 - 140
Carbazole	50.0	41.2	82		40 - 140
Di-n-butyl phthalate	50.0	44.7	89		40 - 140
Fluoranthene	50.0	48.8	98		40 - 140
Benzidine	50.0	50.0	100		5 - 105
Pyrene	50.0	35.8	72		40 - 140
3,3'-Dimethylbenzidine	50.0	39.6	79		5 - 105
Butyl benzyl phthalate	50.0	37.9	76		40 - 140
3,3'-Dichlorobenzidine	50.0	54.5	109		40 - 140
Benzo[a]anthracene	50.0	45.0	90		40 - 140
Chrysene	50.0	48.9	98		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	44.7	89		40 - 140
Di-n-octyl phthalate	50.0	48.0	96		40 - 140
Benzo[b]fluoranthene	50.0	36.3	73		40 - 140
Benzo[k]fluoranthene	50.0	45.6	91		40 - 140
Benzo[a]pyrene	50.0	39.2	78		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	21.2	42		40 - 140
Dibenz[a,h]anthracene	50.0	23.5	47		40 - 140
Benzo[g,h,i]perylene	50.0	24.0	48		40 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E14-03285-003
Date Received: 04/15/2014
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
MS Data file: C5559.D
MSD Data file: C5560.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
N-Nitrosodimethylamine	50.0	0.0	26.3	53		25.1	50		5		40-140/30
Benzaldehyde	50.0	0.0	25.9	52		24.9	50		4		10-110/30
Phenol	50.0	0.0	30.1	60		28.9	58		4		30-140/30
Aniline	50.0	0.0	22.0	44		20.4	41		8		40-140/30
Bis(2-chloroethyl) ether	50.0	0.0	25.1	50		23.9	48		5		40-140/30
2-Chlorophenol	50.0	0.0	31.0	62		30.4	61		2		30-140/30
1,3-Dichlorobenzene	50.0	0.0	33.7	67		32.3	65		4		40-140/30
1,4-Dichlorobenzene	50.0	0.0	32.9	66		32.3	65		2		40-140/30
Benzyl alcohol	50.0	0.0	32.3	65		31.6	63		2		40-140/30
1,2-Dichlorobenzene	50.0	0.0	33.9	68		32.9	66		3		40-140/30
2-Methylphenol	50.0	0.0	32.4	65		31.6	63		2		30-140/30
Bis(2-chloroisopropyl) ether	50.0	0.0	23.3	47		22.7	45		3		40-140/30
4-Methylphenol	50.0	0.0	34.2	68		31.8	64		7		30-140/30
N-Nitrosodi-n-propylamine	50.0	0.0	28.2	56		26.5	53		6		40-140/30
Acetophenone	50.0	0.0	33.8	68		32.2	64		5		40-140/30
3-Methylphenol	50.0	0.0	34.2	68		31.8	64		7		30-140/30
Hexachloroethane	50.0	0.0	25.0	50		24.1	48		4		40-140/30
Nitrobenzene	50.0	0.0	31.1	62		29.7	59		5		40-140/30
Isophorone	50.0	0.0	33.3	67		30.5	61		9		40-140/30
2-Nitrophenol	50.0	0.0	40.4	81		38.4	77		5		30-140/30
2,4-Dimethylphenol	50.0	0.0	33.1	66		30.7	61		8		30-140/30
Bis(2-chloroethoxy) methane	50.0	0.0	34.8	70		31.6	63		10		40-140/30
Benzoic acid	50.0	0.0	29.8	60		27.5	55		8		30-140/30
2,4-Dimethylaniline	50.0	0.0	20.4	41		20.8	42		2		40-140/30
2,4-Dichlorophenol	50.0	0.0	41.9	84		41.0	82		2		30-140/30
1,2,4-Trichlorobenzene	50.0	0.0	39.2	78		37.4	75		5		40-140/30
Naphthalene	50.0	0.0	44.4	89		40.7	81		9		40-140/30
4-Chloroaniline	50.0	0.0	34.5	69		32.3	65		7		40-140/30
Hexachlorobutadiene	50.0	0.0	42.3	85		38.2	76		10		40-140/30
Caprolactam	50.0	0.0	37.1	74		29.8	60		22		40-140/30
4-Chloro-3-methylphenol	50.0	0.0	37.3	75		36.1	72		3		30-140/30
2-Methylnaphthalene	50.0	0.0	44.0	88		41.0	82		7		40-140/30
Hexachlorocyclopentadiene	50.0	0.0	6.1	12		5.5	11		10		5-105/30
2,4,6-Trichlorophenol	50.0	0.0	43.7	87		40.9	82		7		30-140/30
2,4,5-Trichlorophenol	50.0	0.0	43.4	87		39.8	80		9		30-140/30
1,1'-Biphenyl	50.0	0.0	42.7	85		39.8	80		7		40-140/30
2-Chloronaphthalene	50.0	0.0	36.2	72		35.2	70		3		40-140/30
2-Nitroaniline	50.0	0.0	33.0	66		37.2	74		12		40-140/30
Dimethyl phthalate	50.0	0.0	49.0	98		46.3	93		6		40-140/30
2,6-Dinitrotoluene	50.0	0.0	56.8	114		55.1	110		3		40-140/30
Acenaphthylene	50.0	0.0	43.6	87		42.1	84		4		40-140/30
3-Nitroaniline	50.0	0.0	44.1	88		42.7	85		3		40-140/30
Acenaphthene	50.0	0.0	39.4	79		37.8	76		4		40-140/30
2,4-Dinitrophenol	50.0	0.0	32.7	65		29.0	58		12		5-105/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E14-03285-003
Date Received: 04/15/2014
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
MS Data file: C5559.D
MSD Data file: C5560.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
4-Nitrophenol	50.0	0.0	46.7	93		41.8	84		11		30-140/30
2,4-Dinitrotoluene	50.0	0.0	62.0	124		50.0	100		21		40-140/30
Dibenzofuran	50.0	0.0	39.9	80		38.0	76		5		40-140/30
Diethyl phthalate	50.0	0.0	45.0	90		39.2	78		14		40-140/30
Fluorene	50.0	0.0	35.3	71		34.5	69		2		40-140/30
4-Chlorophenyl phenyl ether	50.0	0.0	38.2	76		38.1	76		0		40-140/30
4-Nitroaniline	50.0	0.0	40.5	81		34.8	70		15		40-140/30
1,2,4,5-Tetrachlorobenzene	50.0	0.0	31.6	63		29.6	59		7		40-140/30
2,3,4,6-Tetrachlorophenol	50.0	0.0	38.9	78		37.9	76		3		40-140/30
4,6-Dinitro-2-methylphenol	50.0	0.0	27.6	55		36.0	72		26		10-110/30
N-Nitrosodiphenylamine	50.0	0.0	33.9	68		36.7	73		8		40-140/30
1,2-Diphenylhydrazine	50.0	0.0	24.5	49		26.1	52		6		40-140/30
4-Bromophenyl phenyl ether	50.0	0.0	25.8	52		29.1	58		12		40-140/30
Hexachlorobenzene	50.0	0.0	25.3	51		28.4	57		12		40-140/30
Atrazine	50.0	0.0	19.1	38		21.1	42		10		20-120/30
Pentachlorophenol	50.0	0.0	27.0	54		31.5	63		15		30-140/30
Phenanthrene	50.0	2.6	34.7	64		36.2	67		4		40-140/30
Anthracene	50.0	1.7	33.1	63		35.8	68		8		40-140/30
Carbazole	50.0	0.0	32.5	65		35.0	70		7		40-140/30
Di-n-butyl phthalate	50.0	0.0	38.7	77		43.5	87		12		40-140/30
Fluoranthene	50.0	1.4	46.2	90		46.0	89		0		40-140/30
Benzidine	50.0	0.0	4.1	8		4.1	8		0		5-105/30
Pyrene	50.0	1.0	46.6	91		38.9	76		18		40-140/30
3,3'-Dimethylbenzidine	50.0	0.0	4.0	8		3.5	7		13		5-105/30
Butyl benzyl phthalate	50.0	0.0	48.1	96		44.2	88		8		40-140/30
3,3'-Dichlorobenzidine	50.0	0.0	41.0	82		40.0	80		2		40-140/30
Benzo[a]anthracene	50.0	0.0	49.6	99		47.1	94		5		40-140/30
Chrysene	50.0	0.0	52.1	104		50.2	100		4		40-140/30
Bis(2-ethylhexyl) phthalate	50.0	0.0	60.8	122		57.0	114		6		40-140/30
Di-n-octyl phthalate	50.0	0.0	40.8	82		38.7	77		5		40-140/30
Benzo[b]fluoranthene	50.0	0.0	40.8	82		37.5	75		8		40-140/30
Benzo[k]fluoranthene	50.0	0.0	39.8	80		38.9	78		2		40-140/30
Benzo[a]pyrene	50.0	0.0	41.5	83		39.8	80		4		40-140/30
Indeno[1,2,3-cd]pyrene	50.0	0.0	39.7	79		38.0	76		4		40-140/30
Dibenz[a,h]anthracene	50.0	0.0	41.0	82		38.9	78		5		40-140/30
Benzo[g,h,i]perylene	50.0	0.0	37.5	75		35.5	71		5		40-140/30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C5550.D

Instrument ID: MSDC

Date Extracted: 04/15/14

Matrix: SOIL

Date Analyzed: 04/16/2014

Time Analyzed: 08:31

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
BG-1	E14-03257-001	04/16/2014	08:46
T-1	E14-03285-001	04/16/2014	09:01
T-2	E14-03285-002	04/16/2014	09:17
T-3	E14-03285-003	04/16/2014	09:32
BG-1	E14-03257-001DL	04/16/2014	09:47
T-1	E14-03285-001DL	04/16/2014	10:02
.	LCSS140415-06	04/16/2014	10:33
.	E14-03285-003MS	04/16/2014	10:48
.	E14-03285-003MSD	04/16/2014	11:04

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C5665.D

Instrument ID: MSDC

Date Extracted: 04/17/14

Matrix: SOIL

Date Analyzed: 04/18/2014

Time Analyzed: 15:36

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS140417-04	04/18/2014	15:52
S-3	E14-02943-003	04/18/2014	16:07
BG-1/0.5	E14-02946-025	04/18/2014	16:23
BG-2/0.5	E14-02946-026	04/18/2014	16:38
SW-2	E14-03052-002	04/18/2014	16:54
SW-4	E14-03052-004	04/18/2014	17:09
WC-001	E14-03328-001	04/18/2014	17:24
BS-4	E14-03021-004	04/18/2014	17:40
TANK-E	E14-02925-011	04/18/2014	17:55
TANK-N	E14-02925-012	04/18/2014	18:10
TANK-S	E14-02925-013	04/18/2014	18:26
PIPE-1	E14-02925-014	04/18/2014	18:41
PIPE-2	E14-02925-015	04/18/2014	18:57
WC-001	E14-03328-001DL	04/18/2014	19:12
BG-2/0.5	E14-02946-026	04/21/2014	16:29

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C5468.D DFTPP Injection Date : 04/14/2014

Inst ID: MSDC DFTPP Injection Time: 06:10

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	53.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	55.5	
70	Less than 2.0% of mass 69	0.3	(0.6)1
127	40.0 - 60.0% of mass 198	58.0	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.2	
275	10.0 - 30.0% of mass 198	25.1	
365	Greater than 1.0% of mass 198	2.3	
441	Present, but less than mass 443	9.57	(73.6)3
442	40.0 - 100.0% of mass 198	60.5	
443	17.0 - 23.0% of mass 442	13.0	(21.5)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN015-14	ICC001BNA1	C5469.D	04/14/2014	06:20
ABN016-14	ICC010BNA1	C5470.D	04/14/2014	06:36
ABN017-14	ICC020BNA1	C5471.D	04/14/2014	06:51
ABN018-14	ICC040BNA1	C5472.D	04/14/2014	07:07
ABN019-14	ICC080BNA1	C5473.D	04/14/2014	07:22
ABN020-14	ICC120BNA1	C5474.D	04/14/2014	07:38
ABN027-14	ICV040BNA1	C5475.D	04/14/2014	07:53
ABN0265-14	ICC120BNA2	C5476.D	04/14/2014	08:24
ABN025-14	ICC080BNA2	C5477.D	04/14/2014	08:40
ABN024-14	ICC040BNA2	C5478.D	04/14/2014	08:55
ABN023-14	ICC020BNA2	C5479.D	04/14/2014	09:11
ABN022-14	ICC010BNA2	C5480.D	04/14/2014	09:27
ABN021-14	ICC001BNA2	C5481.D	04/14/2014	09:42
ABN028-14	ICV040BNA2	C5482.D	04/14/2014	09:58

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C5547.D

DFTPP Injection Date : 04/16/2014

Inst ID: MSDC

DFTPP Injection Time: 07:46

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	48.0	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	52.0	
70	Less than 2.0% of mass 69	0.3	(0.5)1
127	40.0 - 60.0% of mass 198	57.5	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.8	
275	10.0 - 30.0% of mass 198	22.6	
365	Greater than 1.0% of mass 198	1.8	
441	Present, but less than mass 443	8.68	(73.6)3
442	40.0 - 100.0% of mass 198	56.7	
443	17.0 - 23.0% of mass 442	11.8	(20.8)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN027-14	CCV040BNA1	C5548.D	04/16/2014	07:56
ABN028-14	CCV040BNA2	C5549.D	04/16/2014	08:12
.	BLKS140415-06	C5550.D	04/16/2014	08:31
BG-1	E14-03257-001	C5551.D	04/16/2014	08:46
T-1	E14-03285-001	C5552.D	04/16/2014	09:01
T-2	E14-03285-002	C5553.D	04/16/2014	09:17
T-3	E14-03285-003	C5554.D	04/16/2014	09:32
BG-1	E14-03257-001DL	C5555.D	04/16/2014	09:47
T-1	E14-03285-001DL	C5556.D	04/16/2014	10:02
S-5	E14-03231-005DL	C5557.D	04/16/2014	10:18
.	LCSS140415-06	C5558.D	04/16/2014	10:33
.	E14-03285-003MS	C5559.D	04/16/2014	10:48
.	E14-03285-003MSD	C5560.D	04/16/2014	11:04

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C5633.D

DFTPP Injection Date : 04/18/2014

Inst ID: MSDC

DFTPP Injection Time: 08:00

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	35.3	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.0	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	40.0 - 60.0% of mass 198	49.7	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 30.0% of mass 198	22.9	
365	Greater than 1.0% of mass 198	1.7	
441	Present, but less than mass 443	11.15	(78.7)3
442	40.0 - 100.0% of mass 198	73.8	
443	17.0 - 23.0% of mass 442	14.2	(19.2)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN027-14	CCV040BNA1	C5634.D	04/18/2014	08:10
ABN028-14	CCV040BNA2	C5635.D	04/18/2014	08:25
14-045-T	E14-03286-002DL	C5637.D	04/18/2014	08:41
14-045-T	E14-03286-007DL	C5638.D	04/18/2014	08:56
.	BLKS140417-03	C5640.D	04/18/2014	09:28
.	LCSS140417-03	C5641.D	04/18/2014	09:43
.	E14-03340-001MS	C5642.D	04/18/2014	09:59
.	E14-03340-001MSD	C5643.D	04/18/2014	10:14
SP6-1	E14-03340-001	C5644.D	04/18/2014	10:29
SP6-2	E14-03340-002	C5645.D	04/18/2014	10:45
SP6-3	E14-03340-003	C5646.D	04/18/2014	11:00
SP6-4	E14-03340-004	C5647.D	04/18/2014	11:15
SP6-5	E14-03340-005	C5648.D	04/18/2014	11:31
SP6-6	E14-03340-006	C5649.D	04/18/2014	11:46
SP6-7	E14-03340-007	C5650.D	04/18/2014	12:01
SP6-8	E14-03340-008	C5651.D	04/18/2014	12:17
SP6-9	E14-03340-009	C5652.D	04/18/2014	12:32
SP6-10	E14-03340-010	C5653.D	04/18/2014	12:47
SP6-11	E14-03340-011	C5654.D	04/18/2014	13:03
SP6-12	E14-03340-012	C5655.D	04/18/2014	13:18
SP6-13	E14-03340-013	C5656.D	04/18/2014	13:33
SP-7-1	E14-03341-001	C5657.D	04/18/2014	13:49
SP-7-2	E14-03341-002	C5658.D	04/18/2014	14:04

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C5633.D

DFTPP Injection Date : 04/18/2014

Inst ID: MSDC

DFTPP Injection Time: 08:00

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	35.3	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.0	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	40.0 - 60.0% of mass 198	49.7	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.7	
275	10.0 - 30.0% of mass 198	22.9	
365	Greater than 1.0% of mass 198	1.7	
441	Present, but less than mass 443	11.15	(78.7)3
442	40.0 - 100.0% of mass 198	73.8	
443	17.0 - 23.0% of mass 442	14.2	(19.2)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SP-7-3	E14-03341-003	C5659.D	04/18/2014	14:19
SP-7-4	E14-03341-004	C5660.D	04/18/2014	14:35
SP-7-5	E14-03341-005	C5661.D	04/18/2014	14:50
SP-7-6	E14-03341-006	C5662.D	04/18/2014	15:06
SP-7-7	E14-03341-007	C5663.D	04/18/2014	15:21
.	BLKS140417-04	C5665.D	04/18/2014	15:36
.	LCSS140417-04	C5666.D	04/18/2014	15:52
S-3	E14-02943-003	C5667.D	04/18/2014	16:07
BG-1/0.5	E14-02946-025	C5668.D	04/18/2014	16:23
BG-2/0.5	E14-02946-026	C5669.D	04/18/2014	16:38
SW-2	E14-03052-002	C5670.D	04/18/2014	16:54
SW-4	E14-03052-004	C5671.D	04/18/2014	17:09
WC-001	E14-03328-001	C5672.D	04/18/2014	17:24
BS-4	E14-03021-004	C5673.D	04/18/2014	17:40
TANK-E	E14-02925-011	C5674.D	04/18/2014	17:55
TANK-N	E14-02925-012	C5675.D	04/18/2014	18:10
TANK-S	E14-02925-013	C5676.D	04/18/2014	18:26
PIPE-1	E14-02925-014	C5677.D	04/18/2014	18:41
PIPE-2	E14-02925-015	C5678.D	04/18/2014	18:57
WC-001	E14-03328-001DL	C5679.D	04/18/2014	19:12

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS0614.M
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 14 10:00:41 2014
Response Via : Initial Calibration

Calibration Files
1 =C5469.D 10 =C5470.D 20 =C5471.D
40 =C5472.D 80 =C5473.D 120 =C5474.D =

		Compound	1	10	20	40	80	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	N-Nitrosodimethyl	0.740	0.818	0.856	0.840	0.950	0.909	0.852	8.60
3)	T	Pyridine	1.508	1.683	1.601	1.446	1.366	1.208	1.469	11.56
4)	S	2-Fluorophenol	1.533	1.554	1.625	1.630	1.604	1.539	1.581	2.77
5)	T	Benzaldehyde	0.980	0.880	0.853	0.826	0.697	0.598	0.806	17.00
6)	S	Phenol-d5	1.806	1.885	2.011	2.067	1.979	1.937	1.948	4.79
7)	MC	Phenol	1.875	1.809	1.714	1.728	1.688	1.718	1.755	4.07
8)	T	Aniline	0.836	0.845	0.851	0.793	0.824	0.775	0.821	3.71
9)	T	Bis(2-chloroethyl	1.060	1.069	1.066	1.104	1.113	1.055	1.078	2.27
10)	M	2-Chlorophenol	1.491	1.449	1.473	1.382	1.512	1.440	1.458	3.11
11)	T	1,3-Dichlorobenze	1.525	1.466	1.471	1.417	1.512	1.576	1.495	3.70
12)	MC	1,4-Dichlorobenze	1.423	1.436	1.453	1.473	1.503	1.298	1.431	4.97
13)	T	Benzyl alcohol	0.830	0.902	0.933	0.947	0.963	0.977	0.925	5.77
14)	T	1,2-Dichlorobenze	1.441	1.391	1.411	1.359	1.387	1.333	1.387	2.74
15)	T	2-Methylphenol	0.830	0.902	0.934	0.947	0.963	0.979	0.926	5.79
16)	T	Bis(2-chloroisopr	2.036	1.985	2.064	2.020	2.089	1.996	2.032	1.96
17)	T	4-Methylphenol	1.216	1.341	1.358	1.366	1.426	1.327	1.339	5.17
18)	MP	N-Nitrosodi-n-pro	1.111	1.079	1.167	1.082	1.137	1.145	1.120	3.18
19)	T	Acetophenone	1.978	1.878	1.908	1.959	1.993	1.753	1.912	4.66
20)	T	3-Methylphenol	1.220	1.338	1.363	1.364	1.423	1.326	1.339	5.02
21)	T	Hexachloroethane	0.539	0.512	0.533	0.523	0.576	0.554	0.539	4.23
23)	I	Naphthalene-d8	ISTD							
24)	S	Nitrobenzene-d5	0.341	0.341	0.333	0.358	0.388	0.400	0.360	7.70
25)	T	Nitrobenzene	0.368	0.317	0.318	0.342	0.340	0.342	0.338	5.58
26)	T	Isophorone	0.705	0.694	0.698	0.696	0.644	0.618	0.676	5.28
27)	TC	2-Nitrophenol	0.137	0.155	0.149	0.147	0.168	0.159	0.152	6.98
28)	T	2,4-Dimethylpheno	0.291	0.328	0.322	0.335	0.350	0.323	0.325	5.98
29)	T	Bis(2-chloroethox	0.400	0.394	0.390	0.405	0.407	0.390	0.398	1.86
30)	T	Benzoic acid	0.164	0.132	0.151	0.183	0.194	0.150	0.162	14.22
31)	T	2,4-Dimethylanili	0.644	0.579	0.530	0.412	0.564	0.517	0.541	14.32
32)	TC	2,4-Dichloropheno	0.220	0.242	0.225	0.222	0.227	0.231	0.228	3.46
33)	M	1,2,4-Trichlorobe	0.276	0.276	0.264	0.248	0.266	0.251	0.263	4.58
34)	T	Naphthalene	0.862	1.024	1.028	0.899	0.758	0.624	0.866	18.10
35)	T	4-Chloroaniline	0.577	0.549	0.544	0.525	0.527	0.496	0.536	5.07
36)	T	4-Aminotoluene	0.827	0.940	0.860	0.668	0.867	0.808	0.828	10.96
37)	TC	Hexachlorobutadie	0.157	0.140	0.136	0.128	0.132	0.125	0.136	8.47
38)	T	Caprolactam	0.109	0.132	0.127	0.129	0.127	0.125	0.125	6.47
39)	T	2-Aminotoluene	0.832	0.940	0.860	0.668	0.838	0.807	0.824	10.82
40)	MC	4-Chloro-3-methyl	0.270	0.280	0.285	0.279	0.281	0.265	0.277	2.77
41)	T	2-Methylnaphthale	0.647	0.673	0.638	0.611	0.490	0.464	0.587	15.01
43)	I	Acenaphthene-d10	ISTD							
44)	TP	Hexachlorocyclope	0.127	0.155	0.158	0.177	0.209	0.198	0.171	17.81
45)	TC	2,4,6-Trichloroph	0.281	0.297	0.277	0.284	0.315	0.298	0.292	4.91
46)	T	2,4,5-Trichloroph	0.290	0.319	0.313	0.283	0.335	0.326	0.311	6.56
47)	S	2-Fluorobiphenyl	1.332	1.305	1.236	1.272	1.375	1.350	1.312	3.91
48)	T	1,1'-Biphenyl	1.437	1.445	1.366	1.383	1.116	1.028	1.296	13.76
49)	T	2-Chloronaphthale	1.043	1.042	1.009	1.014	1.091	0.964	1.027	4.15
50)	T	2-Nitroaniline	0.215	0.246	0.252	0.288	0.299	0.305	0.268	13.31
51)	T	Dimethyl phthalat	1.036	1.082	1.040	1.038	1.122	0.924	1.040	6.37
52)	T	2,6-Dinitrotoluen	0.159	0.168	0.184	0.201	0.234	0.219	0.194	14.99
53)	T	Acenaphthylene	1.525	1.667	1.621	1.676	1.187	1.069	1.457	18.07

54)	T	3-Nitroaniline	0.186	0.232	0.235	0.300	0.255	0.269		0.246	15.66
55)	MC	Acenaphthene	1.076	1.056	1.030	1.032	1.132	0.881		1.035	8.10
56)	TP	2,4-Dinitrophenol	0.055	0.038	0.044	0.052	0.062	0.065		0.053	19.88
57)	MP	4-Nitrophenol	0.209	0.190	0.181	0.178	0.193	0.213		0.194	7.38
58)	M	2,4-Dinitrotoluen	0.190	0.201	0.210	0.224	0.265	0.267		0.226	14.48
59)	T	Dibenzofuran	1.379	1.415	1.386	1.376	1.376	1.026		1.326	11.16
60)	T	Diethyl phthalate	1.003	1.106	1.071	1.082	1.091	1.028		1.063	3.72
61)	T	Fluorene	1.057	1.170	1.093	1.149	1.197	0.983		1.108	7.22
62)	T	4-Chlorophenyl ph	0.513	0.522	0.491	0.493	0.522	0.507		0.508	2.71
63)	T	4-Nitroaniline	0.186	0.230	0.228	0.230	0.262	0.273		0.235	13.00
64)		1,2,4,5-Tetrachlo	0.717	0.704	0.648	0.546	0.548	0.550		0.619	13.11
65)	T	2,3,4,6-Tetrachlo	0.265	0.229	0.218	0.219	0.220	0.233		0.231	7.72
66)	I	Phenanthrene-d10	----------ISTD----------								
67)	T	4,6-Dinitro-2-met	0.066	0.070	0.062	0.069	0.082	0.087		0.073	13.24
68)	TC	N-Nitrosodiphenyl	0.511	0.532	0.529	0.550	0.574	0.592		0.548	5.52
69)	T	1,2-Diphenylhydra	0.933	0.999	1.026	1.097	0.909	0.732		0.949	13.28
70)	S	2,4,6-Tribromophe	0.123	0.121	0.116	0.127	0.125	0.122		0.122	3.17
71)	T	4-Bromophenyl phe	0.189	0.189	0.182	0.190	0.211	0.199		0.193	5.42
72)	T	Hexachlorobenzene	0.203	0.206	0.204	0.203	0.233	0.212		0.210	5.63
73)	T	Atrazine	0.169	0.182	0.175	0.160	0.187	0.170		0.174	5.61
74)	MC	Pentachlorophenol	0.110	0.111	0.112	0.112	0.128	0.131		0.117	7.93
75)	T	Phenanthrene	0.995	1.014	1.000	1.040	0.905	0.763		0.953	10.86
76)	T	Anthracene	0.943	1.012	1.004	1.029	1.014	0.751		0.959	11.09
77)	T	Carbazole	0.882	0.949	0.952	0.956	0.849	0.757		0.891	8.85
78)	T	Di-n-butyl phthal	0.944	1.033	1.078	1.138	0.934	0.783		0.985	12.80
79)	TC	Fluoranthene	0.871	0.923	0.949	0.955	0.876	0.757		0.888	8.29
80)	T	Benzidine	0.203	0.280	0.281	0.372	0.260	0.281		0.279	19.47
82)	I	Chrysene-d12	----------ISTD----------								
83)	M	Pyrene	1.068	1.144	1.113	1.156	1.239	1.046		1.128	6.13
84)	S	Terphenyl-d14	0.967	1.005	0.954	0.975	0.998	0.949		0.975	2.34
85)	T	3,3'-Dimethylbenz	0.283	0.413	0.428	0.498	0.388	0.364		0.396	18.08
86)	T	Butyl benzyl phth	0.400	0.434	0.447	0.462	0.502	0.489		0.456	8.17
87)	T	3,3'-Dichlorobenz	0.231	0.272	0.278	0.275	0.309	0.278		0.274	9.05
88)	T	Benzo[a]anthracen	0.845	0.831	0.837	0.821	0.901	0.872		0.851	3.50
89)	T	Chrysene	0.754	0.771	0.727	0.784	0.833	0.785		0.776	4.55
90)	T	Bis(2-ethylhexyl)	0.534	0.505	0.537	0.563	0.638	0.648		0.571	10.32
92)	I	Perylene-d12	----------ISTD----------								
93)	TC	Di-n-octyl phthal	1.196	1.219	1.179	1.174	1.243	1.293		1.217	3.72
94)	T	Benzo[b]fluoranth	1.258	0.933	0.975	1.158	1.109	1.274		1.118	12.66
95)	T	Benzo[k]fluoranth	1.145	1.111	1.019	1.061	1.100	1.008		1.074	5.03
96)	TC	Benzo[a]pyrene	0.949	0.944	0.966	1.050	1.105	1.090		1.017	7.18
97)	T	Indeno[1,2,3-cd]p	1.113	1.167	1.244	1.213	1.269	1.286		1.215	5.38
98)	T	Dibenz[a,h]anthra	0.889	0.925	0.982	0.968	1.019	1.042		0.971	5.91
99)	T	Benzo[g,h,i]peryl	1.048	1.000	0.940	1.068	1.078	1.103		1.039	5.75

(#) = Out of Range

CS0614.M Mon Apr 14 10:00:52 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-14-14\
Data File : C5475.D
Acq On : 14 Apr 2014 7:53
Operator : EDM
Sample : ABN027-14,ICVBNA1
Misc : NA,04/02/14,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Apr 14 10:02:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:00:41 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00
2	T	N-Nitrosodimethylamine	0.852	0.795	6.7	103	0.00
3	T	Pyridine	1.469	1.309	10.9	98	0.00
4	S	2-Fluorophenol	1.581	1.572	0.6	105	0.00
5	T	Benzaldehyde	0.806	0.717	11.0	95	0.00
6	S	Phenol-d5	1.948	1.921	1.4	101	0.00
7	MC	Phenol	1.755	1.679	4.3	106	0.00
8	T	Aniline	0.821	0.745	9.3	102	0.00
9	T	Bis(2-chloroethyl) ether	1.078	1.033	4.2	102	0.00
10	M	2-Chlorophenol	1.458	1.348	7.5	106	0.00
11	T	1,3-Dichlorobenzene	1.495	1.375	8.0	106	0.00
12	MC	1,4-Dichlorobenzene	1.431	1.467	-2.5	108	0.00
13	T	Benzyl alcohol	0.925	0.918	0.8	105	0.00
14	T	1,2-Dichlorobenzene	1.387	1.357	2.2	109	0.00
15	T	2-Methylphenol	0.926	0.918	0.9	105	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.032	1.842	9.4	99	0.00
17	T	4-Methylphenol	1.339	1.304	2.6	104	0.00
18	MP	N-Nitrosodi-n-propylamine	1.120	1.027	8.3	103	0.00
19	T	Acetophenone	1.912	1.855	3.0	103	0.00
20	T	3-Methylphenol	1.339	1.301	2.8	104	0.00
21	T	Hexachloroethane	0.539	0.515	4.5	107	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
24	S	Nitrobenzene-d5	0.360	0.371	-3.1	106	0.00
25	T	Nitrobenzene	0.338	0.343	-1.5	103	0.00
26	T	Isophorone	0.676	0.681	-0.7	100	0.00
27	TC	2-Nitrophenol	0.152	0.159	-4.6	111	0.00
28	T	2,4-Dimethylphenol	0.325	0.340	-4.6	104	0.00
29	T	Bis(2-chloroethoxy) methane	0.398	0.407	-2.3	103	0.00
30	T	Benzoic acid	0.162	0.181	-11.7	101	-0.02
31	T	2,4-Dimethylaniline	0.541	0.417	22.9	103	0.00
32	TC	2,4-Dichlorophenol	0.228	0.237	-3.9	109	0.00
33	M	1,2,4-Trichlorobenzene	0.263	0.265	-0.8	109	0.00
34	T	Naphthalene	0.866	0.887	-2.4	101	0.00
35	T	4-Chloroaniline	0.536	0.536	0.0	104	0.00
36	T	4-Aminotoluene	0.828	0.683	17.5	105	0.00
37	TC	Hexachlorobutadiene	0.136	0.131	3.7	105	0.00
38	T	Caprolactam	0.125	0.119	4.8	94	-0.02
39	T	2-Aminotoluene	0.824	0.683	17.1	105	0.00
40	MC	4-Chloro-3-methylphenol	0.277	0.281	-1.4	103	0.00
41	T	2-Methylnaphthalene	0.587	0.618	-5.3	103	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00
44	TP	Hexachlorocyclopentadiene	0.171	0.183	-7.0	105	0.00
45	TC	2,4,6-Trichlorophenol	0.292	0.299	-2.4	107	0.00
46	T	2,4,5-Trichlorophenol	0.311	0.321	-3.2	115	0.00

47	S	2-Fluorobiphenyl	1.312	1.331	-1.4	106	0.00
48	T	1,1'-Biphenyl	1.296	1.450	-11.9	106	0.00
49	T	2-Chloronaphthalene	1.027	1.062	-3.4	106	0.00
50	T	2-Nitroaniline	0.268	0.282	-5.2	99	0.00
51	T	Dimethyl phthalate	1.040	1.090	-4.8	106	-0.01
52	T	2,6-Dinitrotoluene	0.194	0.217	-11.9	109	0.00
53	T	Acenaphthylene	1.457	1.698	-16.5	103	0.00
54	T	3-Nitroaniline	0.246	0.256	-4.1	86	0.00
55	MC	Acenaphthene	1.035	1.053	-1.7	103	0.00
56	TP	2,4-Dinitrophenol	0.053	0.051	3.8	98	0.00
57	MP	4-Nitrophenol	0.194	0.193	0.5	110	0.00
58	M	2,4-Dinitrotoluene	0.226	0.231	-2.2	105	-0.01
59	T	Dibenzofuran	1.326	1.383	-4.3	102	0.00
60	T	Diethyl phthalate	1.063	1.049	1.3	98	0.00
61	T	Fluorene	1.108	1.092	1.4	96	-0.01
62	T	4-Chlorophenyl phenyl ether	0.508	0.493	3.0	101	0.00
63	T	4-Nitroaniline	0.235	0.224	4.7	99	-0.01
64		1,2,4,5-Tetrachlorobenzene	0.619	0.578	6.6	107	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.231	0.214	7.4	99	0.00
66	I	Phenanthrene-d10	1.000	1.000	0.0	104	0.00
67	T	4,6-Dinitro-2-methylphenol	0.073	0.068	6.8	103	-0.01
68	TC	N-Nitrosodiphenylamine	0.548	0.543	0.9	103	0.00
69	T	1,2-Diphenylhydrazine	0.949	1.048	-10.4	99	-0.01
70	S	2,4,6-Tribromophenol	0.122	0.125	-2.5	103	0.00
71	T	4-Bromophenyl phenyl ether	0.193	0.194	-0.5	106	0.00
72	T	Hexachlorobenzene	0.210	0.209	0.5	107	0.00
73	T	Atrazine	0.174	0.162	6.9	105	-0.01
74	MC	Pentachlorophenol	0.117	0.119	-1.7	111	0.00
75	T	Phenanthrene	0.953	1.006	-5.6	101	-0.01
76	T	Anthracene	0.959	1.009	-5.2	102	0.00
77	T	Carbazole	0.891	0.931	-4.5	101	-0.01
78	T	Di-n-butyl phthalate	0.985	1.092	-10.9	100	-0.01
79	TC	Fluoranthene	0.888	0.918	-3.4	100	-0.01
80	T	Benzidine	0.279	0.266	4.7	95	0.02
82	I	Chrysene-d12	1.000	1.000	0.0	96	-0.01
83	M	Pyrene	1.128	1.205	-6.8	100	-0.01
84	S	Terphenyl-d14	0.975	1.026	-5.2	101	-0.01
85	T	3,3'-Dimethylbenzidine	0.396	0.445	-12.4	109	0.03
86	T	Butyl benzyl phthalate	0.456	0.488	-7.0	101	0.00
87	T	3,3'-Dichlorobenzidine	0.274	0.310	-13.1	108	-0.01
88	T	Benzo[a]anthracene	0.851	0.867	-1.9	101	0.00
89	T	Chrysene	0.776	0.769	0.9	94	0.00
90	T	Bis(2-ethylhexyl) phthalate	0.571	0.609	-6.7	104	0.00
92	I	Perylene-d12	1.000	1.000	0.0	102	0.00
93	TC	Di-n-octyl phthalate	1.217	1.143	6.1	100	-0.01
94	T	Benzo[b]fluoranthene	1.118	1.043	6.7	92	-0.01
95	T	Benzo[k]fluoranthene	1.074	1.061	1.2	102	-0.02
96	TC	Benzo[a]pyrene	1.017	1.008	0.9	98	-0.02
97	T	Indeno[1,2,3-cd]pyrene	1.215	1.266	-4.2	107	-0.03
98	T	Dibenz[a,h]anthracene	0.971	1.043	-7.4	110	-0.02
99	T	Benzo[g,h,i]perylene	1.039	1.078	-3.8	103	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0614.M Mon Apr 14 10:02:26 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-16-14\
Data File : C5548.D
Acq On : 16 Apr 2014 7:56
Operator : JC
Sample : ABN027-14,CCV040BNA1
Misc : NA,N/A,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Apr 16 10:21:22 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
2	T	N-Nitrosodimethylamine	0.852	0.735	13.7	75	-0.01
3	T	Pyridine	1.469	1.197	18.5	71	-0.01
4	S	2-Fluorophenol	1.581	1.514	4.2	80	0.00
5	T	Benzaldehyde	0.806	0.659	18.2	90	0.00
6	S	Phenol-d5	1.948	1.948	0.0	81	0.00
7	MC	Phenol	1.755	1.549	11.7	77	0.00
8	T	Aniline	0.821	0.663	19.2	72	0.00
9	T	Bis(2-chloroethyl) ether	1.078	0.873	19.0	68	0.00
10	M	2-Chlorophenol	1.458	1.351	7.3	84	0.00
11	T	1,3-Dichlorobenzene	1.495	1.416	5.3	86	0.00
12	MC	1,4-Dichlorobenzene	1.431	1.392	2.7	81	0.00
13	T	Benzyl alcohol	0.925	0.912	1.4	83	0.00
14	T	1,2-Dichlorobenzene	1.387	1.323	4.6	84	0.00
15	T	2-Methylphenol	0.926	0.912	1.5	83	0.00
16	T	Bis(2-chloroisopropyl) ethe	2.032	1.645	19.0	70	0.00
17	T	4-Methylphenol	1.339	1.307	2.4	82	0.00
18	MP	N-Nitrosodi-n-propylamine	1.120	0.951	15.1	76	0.00
19	T	Acetophenone	1.912	1.739	9.0	76	0.00
20	T	3-Methylphenol	1.339	1.306	2.5	82	0.00
21	T	Hexachloroethane	0.539	0.480	10.9	79	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	86	0.00
24	S	Nitrobenzene-d5	0.360	0.332	7.8	80	0.00
25	T	Nitrobenzene	0.338	0.302	10.7	76	0.00
26	T	Isophorone	0.676	0.608	10.1	75	0.00
27	TC	2-Nitrophenol	0.152	0.158	-3.9	93	0.00
28	T	2,4-Dimethylphenol	0.325	0.317	2.5	82	0.00
29	T	Bis(2-chloroethoxy) methane	0.398	0.368	7.5	78	0.00
30	T	Benzoic acid	0.162	0.194	-19.8	91	-0.02
31	T	2,4-Dimethylaniline	0.541	0.459	15.2	96	0.00
32	TC	2,4-Dichlorophenol	0.228	0.231	-1.3	90	0.00
33	M	1,2,4-Trichlorobenzene	0.263	0.261	0.8	91	0.00
34	T	Naphthalene	0.866	0.946	-9.2	91	0.00
35	T	4-Chloroaniline	0.536	0.504	6.0	83	0.00
36	T	4-Aminotoluene	0.828	0.623	24.8	80	0.00
37	TC	Hexachlorobutadiene	0.136	0.128	5.9	86	0.00
38	T	Caprolactam	0.125	0.127	-1.6	85	-0.02
39	T	2-Aminotoluene	0.824	0.623	24.4	80	0.00
40	MC	4-Chloro-3-methylphenol	0.277	0.272	1.8	84	0.00
41	T	2-Methylnaphthalene	0.587	0.618	-5.3	87	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.01
44	TP	Hexachlorocyclopentadiene	0.171	0.153	10.5	79	0.00
45	TC	2,4,6-Trichlorophenol	0.292	0.294	-0.7	94	0.00
46	T	2,4,5-Trichlorophenol	0.311	0.326	-4.8	105	0.00

47	S	2-Fluorobiphenyl	1.312	1.253	4.5	90	0.00
48	T	1,1'-Biphenyl	1.296	1.365	-5.3	90	0.00
49	T	2-Chloronaphthalene	1.027	1.000	2.6	90	0.00
50	T	2-Nitroaniline	0.268	0.254	5.2	80	0.00
51	T	Dimethyl phthalate	1.040	1.063	-2.2	93	0.00
52	T	2,6-Dinitrotoluene	0.194	0.226	-16.5	102	0.00
53	T	Acenaphthylene	1.457	1.600	-9.8	87	0.00
54	T	3-Nitroaniline	0.246	0.268	-8.9	81	0.00
55	MC	Acenaphthene	1.035	1.037	-0.2	91	0.00
56	TP	2,4-Dinitrophenol	0.053	0.056	-5.7	99	0.00
57	MP	4-Nitrophenol	0.194	0.186	4.1	95	0.00
58	M	2,4-Dinitrotoluene	0.226	0.262	-15.9	107	0.00
59	T	Dibenzofuran	1.326	1.419	-7.0	94	0.01
60	T	Diethyl phthalate	1.063	1.085	-2.1	91	0.01
61	T	Fluorene	1.108	1.115	-0.6	88	0.00
62	T	4-Chlorophenyl phenyl ether	0.508	0.513	-1.0	95	0.01
63	T	4-Nitroaniline	0.235	0.270	-14.9	107	0.00
64		1,2,4,5-Tetrachlorobenzene	0.619	0.535	13.6	89	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.231	0.241	-4.3	100	0.01
66	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.02
67	T	4,6-Dinitro-2-methylphenol	0.073	0.083	-13.7	117	0.00
68	TC	N-Nitrosodiphenylamine	0.548	0.547	0.2	97	0.01
69	T	1,2-Diphenylhydrazine	0.949	0.902	5.0	80	0.01
70	S	2,4,6-Tribromophenol	0.122	0.135	-10.7	103	0.02
71	T	4-Bromophenyl phenyl ether	0.193	0.196	-1.6	100	0.02
72	T	Hexachlorobenzene	0.210	0.209	0.5	100	0.02
73	T	Atrazine	0.174	0.160	8.0	98	0.01
74	MC	Pentachlorophenol	0.117	0.128	-9.4	111	0.02
75	T	Phenanthrene	0.953	1.011	-6.1	95	0.02
76	T	Anthracene	0.959	0.993	-3.5	94	0.02
77	T	Carbazole	0.891	0.959	-7.6	98	0.02
78	T	Di-n-butyl phthalate	0.985	1.146	-16.3	98	0.03
79	TC	Fluoranthene	0.888	0.966	-8.8	99	0.03
80	T	Benzidine	0.279	0.311	-11.5	112	0.02
82	I	Chrysene-d12	1.000	1.000	0.0	103	0.03
83	M	Pyrene	1.128	1.106	2.0	99	0.04
84	S	Terphenyl-d14	0.975	0.920	5.6	97	0.05
85	T	3,3'-Dimethylbenzidine	0.396	0.438	-10.6	108	0.03
86	T	Butyl benzyl phthalate	0.456	0.442	3.1	99	0.04
87	T	3,3'-Dichlorobenzidine	0.274	0.310	-13.1	116	0.03
88	T	Benzo[a]anthracene	0.851	0.846	0.6	106	0.03
89	T	Chrysene	0.776	0.766	1.3	101	0.03
90	T	Bis(2-ethylhexyl) phthalate	0.571	0.605	-6.0	111	0.03
92	I	Perylene-d12	1.000	1.000	0.0	117	0.04
93	TC	Di-n-octyl phthalate	1.217	1.123	7.7	112	0.03
94	T	Benzo[b]fluoranthene	1.118	1.152	-3.0	116	0.03
95	T	Benzo[k]fluoranthene	1.074	1.020	5.0	112	0.03
96	TC	Benzo[a]pyrene	1.017	1.025	-0.8	114	0.03
97	T	Indeno[1,2,3-cd]pyrene	1.215	1.263	-4.0	122	0.02
98	T	Dibenz[a,h]anthracene	0.971	1.037	-6.8	125	0.03
99	T	Benzo[g,h,i]perylene	1.039	1.060	-2.0	116	0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0614.M Wed Apr 16 10:22:11 2014 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : C5634.D
Acq On : 18 Apr 2014 8:10
Operator : JC
Sample : ABN027-14,CCV040BNA1
Misc : NA,N/A,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Apr 21 06:40:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	72	0.00
2	T	N-Nitrosodimethylamine	0.852	0.684	19.7	58	-0.01
3	T	Pyridine	1.469	1.263	14.0	63	-0.01
4	S	2-Fluorophenol	1.581	1.340	15.2	59	0.00
5	T	Benzaldehyde	0.806	0.790	2.0	90	0.00
6	S	Phenol-d5	1.948	1.681	13.7	58	0.00
7	MC	Phenol	1.755	1.432	18.4	59	0.00
8	T	Aniline	0.821	0.684	16.7	62	0.00
9	T	Bis(2-chloroethyl) ether	1.078	1.027	4.7	67	0.00
10	M	2-Chlorophenol	1.458	1.306	10.4	68	0.00
11	T	1,3-Dichlorobenzene	1.495	1.427	4.5	72	0.00
12	MC	1,4-Dichlorobenzene	1.431	1.334	6.8	65	0.00
13	T	Benzyl alcohol	0.925	0.783	15.4	59	-0.01
14	T	1,2-Dichlorobenzene	1.387	1.284	7.4	68	0.00
15	T	2-Methylphenol	0.926	0.783	15.4	59	-0.01
16	T	Bis(2-chloroisopropyl) ethe	2.032	1.576	22.4	56	0.00
17	T	4-Methylphenol	1.339	1.201	10.3	63	0.00
18	MP	N-Nitrosodi-n-propylamine	1.120	1.032	7.9	68	0.00
19	T	Acetophenone	1.912	1.545	19.2	57	-0.01
20	T	3-Methylphenol	1.339	1.200	10.4	63	0.00
21	T	Hexachloroethane	0.539	0.457	15.2	63	0.00
23	I	Naphthalene-d8	1.000	1.000	0.0	67	0.00
24	S	Nitrobenzene-d5	0.360	0.307	14.7	58	0.00
25	T	Nitrobenzene	0.338	0.285	15.7	56	0.00
26	T	Isophorone	0.676	0.561	17.0	54	0.00
27	TC	2-Nitrophenol	0.152	0.167	-9.9	76	0.00
28	T	2,4-Dimethylphenol	0.325	0.306	5.8	62	0.00
29	T	Bis(2-chloroethoxy) methane	0.398	0.319	19.8	53	0.00
30	T	Benzoic acid	0.162	0.182	-12.3	67	-0.02
31	T	2,4-Dimethylaniline	0.541	0.551	-1.8	90	0.00
32	TC	2,4-Dichlorophenol	0.228	0.248	-8.8	75	0.00
33	M	1,2,4-Trichlorobenzene	0.263	0.279	-6.1	76	0.00
34	T	Naphthalene	0.866	0.957	-10.5	72	0.00
35	T	4-Chloroaniline	0.536	0.495	7.6	63	0.00
36	T	4-Aminotoluene	0.828	0.642	22.5	65	0.00
37	TC	Hexachlorobutadiene	0.136	0.149	-9.6	78	0.00
38	T	Caprolactam	0.125	0.110	12.0	58	-0.02
39	T	2-Aminotoluene	0.824	0.642	22.1	65	0.00
40	MC	4-Chloro-3-methylphenol	0.277	0.258	6.9	62	0.00
41	T	2-Methylnaphthalene	0.587	0.625	-6.5	69	0.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	70	0.01
44	TP	Hexachlorocyclopentadiene	0.171	0.146	14.6	58	0.00
45	TC	2,4,6-Trichlorophenol	0.292	0.318	-8.9	79	0.00
46	T	2,4,5-Trichlorophenol	0.311	0.346	-11.3	86	0.00

47	S	2-Fluorobiphenyl	1.312	1.326	-1.1	73	0.00
48	T	1,1'-Biphenyl	1.296	1.360	-4.9	69	0.00
49	T	2-Chloronaphthalene	1.027	1.038	-1.1	72	0.00
50	T	2-Nitroaniline	0.268	0.222	17.2	54	0.00
51	T	Dimethyl phthalate	1.040	1.030	1.0	70	0.00
52	T	2,6-Dinitrotoluene	0.194	0.220	-13.4	77	0.00
53	T	Acenaphthylene	1.457	1.593	-9.3	67	0.00
54	T	3-Nitroaniline	0.246	0.238	3.3	56	0.00
55	MC	Acenaphthene	1.035	1.031	0.4	70	0.00
56	TP	2,4-Dinitrophenol	0.053	0.057	-7.5	76	0.01
57	MP	4-Nitrophenol	0.194	0.163	16.0	64	0.01
58	M	2,4-Dinitrotoluene	0.226	0.242	-7.1	76	0.00
59	T	Dibenzofuran	1.326	1.402	-5.7	72	0.01
60	T	Diethyl phthalate	1.063	1.010	5.0	66	0.01
61	T	Fluorene	1.108	1.117	-0.8	68	0.01
62	T	4-Chlorophenyl phenyl ether	0.508	0.531	-4.5	76	0.01
63	T	4-Nitroaniline	0.235	0.239	-1.7	73	0.01
64		1,2,4,5-Tetrachlorobenzene	0.619	0.620	-0.2	80	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.231	0.257	-11.3	83	0.02
66	I	Phenanthrene-d10	1.000	1.000	0.0	72	0.02
67	T	4,6-Dinitro-2-methylphenol	0.073	0.076	-4.1	79	0.01
68	TC	N-Nitrosodiphenylamine	0.548	0.539	1.6	70	0.01
69	T	1,2-Diphenylhydrazine	0.949	0.777	18.1	51	0.01
70	S	2,4,6-Tribromophenol	0.122	0.157	-28.7	89	0.02
71	T	4-Bromophenyl phenyl ether	0.193	0.222	-15.0	84	0.02
72	T	Hexachlorobenzene	0.210	0.240	-14.3	85	0.02
73	T	Atrazine	0.174	0.166	4.6	75	0.02
74	MC	Pentachlorophenol	0.117	0.136	-16.2	87	0.02
75	T	Phenanthrene	0.953	1.021	-7.1	70	0.02
76	T	Anthracene	0.959	0.996	-3.9	69	0.02
77	T	Carbazole	0.891	0.900	-1.0	68	0.02
78	T	Di-n-butyl phthalate	0.985	1.048	-6.4	66	0.03
79	TC	Fluoranthene	0.888	0.945	-6.4	71	0.04
80	T	Benzidine	0.279	0.289	-3.6	80	0.03
82	I	Chrysene-d12	1.000	1.000	0.0	79	0.03
83	M	Pyrene	1.128	1.006	10.8	69	0.04
84	S	Terphenyl-d14	0.975	0.897	8.0	73	0.05
85	T	3,3'-Dimethylbenzidine	0.396	0.474	-19.7	86	0.03
86	T	Butyl benzyl phthalate	0.456	0.393	13.8	67	0.04
87	T	3,3'-Dichlorobenzidine	0.274	0.321	-17.2	93	0.03
88	T	Benzo[a]anthracene	0.851	0.833	2.1	80	0.03
89	T	Chrysene	0.776	0.739	4.8	75	0.04
90	T	Bis(2-ethylhexyl) phthalate	0.571	0.526	7.9	74	0.03
92	I	Perylene-d12	1.000	1.000	0.0	99	0.03
93	TC	Di-n-octyl phthalate	1.217	1.004	17.5	84	0.02
94	T	Benzo[b]fluoranthene	1.118	1.112	0.5	95	0.03
95	T	Benzo[k]fluoranthene	1.074	1.033	3.8	96	0.02
96	TC	Benzo[a]pyrene	1.017	1.032	-1.5	97	0.02
97	T	Indeno[1,2,3-cd]pyrene	1.215	1.336	-10.0	109	0.01
98	T	Dibenz[a,h]anthracene	0.971	1.095	-12.8	112	0.01
99	T	Benzo[g,h,i]perylene	1.039	1.117	-7.5	103	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS0614.M Mon Apr 21 06:42:00 2014 RPT1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5548.D

Date Analyzed: 04/16/2014

Instrument ID: MSDC

Time Analyzed: 07:56

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	823351		2.50		3434369		3.05		1939365		3.89	
	UPPER LIMIT	1646702		3.00		6868738		3.55		3878730		4.39	
	LOWER LIMIT	411676		2.00		1717185		2.55		969683		3.39	
	LAB SAMPLE ID												
01	CCV040BNA2	1084645		2.50		3743258		3.05		2591356		3.88	
02	BLKS140415-06	796261		2.50		3342436		3.06		1828717		3.90	
03	E14-03257-001	581901		2.50		2342768		3.05		1194095		3.87	
04	E14-03285-001	657481		2.50		2709233		3.05		1342306		3.87	
05	E14-03285-002	626364		2.50		2319810		3.05		1344261		3.88	
06	E14-03285-003	593448		2.50		2253911		3.05		1400032		3.88	
07	E14-03257-001DL	907280		2.50		3300407		3.05		1575514		3.88	
08	E14-03285-001DL	660173		2.50		2565007		3.05		1397726		3.88	
09	E14-03231-005DL	872597		2.50		3334440		3.05		1690739		3.88	
10	LCSS140415-06	664318		2.50		2582706		3.05		1339219		3.88	
11	E14-03285-003MS	555358		2.50		2090898		3.05		1228231		3.89	
12	E14-03285-003MSD	544092		2.50		2094621		3.05		1235307		3.88	
13													
14													
15													
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19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5469.D

Date Analyzed: 04/14/2014

Instrument ID: MSDC

Time Analyzed: 06:20

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	969398		2.50		3816644		3.05		2227111		3.88	
	UPPER LIMIT	1938796		3.00		7633288		3.55		4454222		4.38	
	LOWER LIMIT	484699		2.00		1908322		2.55		1113556		3.38	
	LAB SAMPLE ID												
01	ICC010BNA1	934813		2.50		3706840		3.05		2142378		3.87	
02	ICC020BNA1	881472		2.50		3760479		3.05		2170616		3.88	
03	ICC040BNA1	957328		2.51		3985361		3.05		2132074		3.87	
04	ICC080BNA1	1016211		2.51		4228349		3.06		2097964		3.88	
05	ICC120BNA1	910540		2.51		3846985		3.06		1931633		3.88	
06	ICV040BNA1	1040627		2.51		4076767		3.05		2159118		3.87	
07	ICC120BNA2	1067044		2.50		3955662		3.05		2524163		3.88	
08	ICC080BNA2	1092109		2.50		4411856		3.05		2598422		3.88	
09	ICC040BNA2	1125622		2.50		3971568		3.05		2784123		3.88	
10	ICC020BNA2	1055012		2.50		4028352		3.05		2394530		3.87	
11	ICC010BNA2	978868		2.50		3944557		3.05		2411771		3.88	
12	ICC001BNA2	936342		2.51		3916015		3.05		2268682		3.88	
13	ICV040BNA2	1042656		2.51		4049017		3.05		2629033		3.88	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5469.D

Date Analyzed: 04/14/2014

Instrument ID: MSDC

Time Analyzed: 06:20

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	3337581	4.64	2779729	6.43	1534713	7.84
	UPPER LIMIT	6675162	5.14	5559458	6.93	3069426	8.34
	LOWER LIMIT	1668791	4.14	1389865	5.93	767357	7.34
	LAB SAMPLE ID						
01	ICC010BNA1	3352626	4.64	2740302	6.42	1604518	7.83
02	ICC020BNA1	3253870	4.64	2698496	6.42	1696391	7.83
03	ICC040BNA1	3038084	4.63	2541010	6.42	1777880	7.83
04	ICC080BNA1	2962212	4.64	2269845	6.43	1846139	7.84
05	ICC120BNA1	2739804	4.64	2282129	6.43	1877963	7.84
06	ICV040BNA1	3157947	4.64	2435130	6.42	1818867	7.84
07	ICC120BNA2	3668751	4.64	2621011	6.42	1910924	7.83
08	ICC080BNA2	3670150	4.65	2520077	6.43	1758017	7.86
09	ICC040BNA2	4281928	4.64	3107486	6.43	2089056	7.84
10	ICC020BNA2	3764961	4.63	2729529	6.42	1772246	7.83
11	ICC010BNA2	3601556	4.64	2596497	6.43	1683195	7.84
12	ICC001BNA2	3628725	4.64	2638717	6.43	1578317	7.84
13	ICV040BNA2	4016675	4.64	3101178	6.43	1827764	7.85
14							
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22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5548.D

Date Analyzed: 04/16/2014

Instrument ID: MSDC

Time Analyzed: 07:56

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	2960785	4.67	2620297	6.46	2079053	7.88
	UPPER LIMIT	5921570	5.17	5240594	6.96	4158106	8.38
	LOWER LIMIT	1480393	4.17	1310149	5.96	1039527	7.38
	LAB SAMPLE ID						
01	CCV040BNA2	4056899	4.64	3127915	6.43	2322834	7.85
02	BLKS140415-06	2843874	4.69	2146763	6.49	1941487	7.91
03	E14-03257-001	1692074	4.64	1936325	6.43	1838480	7.87
04	E14-03285-001	1761065	4.64	1765444	6.42	1814732	7.88
05	E14-03285-002	2057685	4.68	2248247	6.47	1957499	7.87
06	E14-03285-003	1791293	4.66	1972310	6.43	1849489	7.85
07	E14-03257-001DL	2086452	4.64	2107378	6.43	2221999	7.85
08	E14-03285-001DL	1994193	4.66	2130269	6.45	2170874	7.88
09	E14-03231-005DL	2374661	4.65	2546274	6.45	2760229	7.88
10	LCSS140415-06	1846954	4.65	1920893	6.44	1986962	7.85
11	E14-03285-003MS	2078759	4.68	1950604	6.46	1899272	7.90
12	E14-03285-003MSD	1846372	4.67	1996199	6.45	1948226	7.86
13							
14							
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21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5634.D

Date Analyzed: 04/18/2014

Instrument ID: MSDC

Time Analyzed: 08:10

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	686519		2.50		2681675		3.05		1500575		3.89	
	UPPER LIMIT	1373038		3.00		5363350		3.55		3001150		4.39	
	LOWER LIMIT	343260		2.00		1340838		2.55		750288		3.39	
	LAB SAMPLE ID												
01	CCV040BNA2	905572		2.50		3563629		3.05		2119601		3.88	
02	E14-03286-002DL	789444		2.50		3134118		3.05		1811940		3.86	
03	E14-03286-007DL	919873		2.50		3477569		3.05		1901487		3.86	
04	BLKS140417-03	727646		2.50		2807505		3.05		1576085		3.89	
05	LCSS140417-03	649132		2.50		2601848		3.05		1534432		3.86	
06	E14-03340-001MS	817436		2.51		3032158		3.08		1577867		3.97	
07	E14-03340-001MSD	531378		2.51		2136528		3.06		1264425		3.90	
08	E14-03340-001	816868		2.50		3179245		3.05		1694731		3.86	
09	E14-03340-002	738437		2.50		2830858		3.06		1514451		3.91	
10	E14-03340-003	726281		2.50		2791747		3.05		1568656		3.86	
11	E14-03340-004	680854		2.50		2750454		3.05		1474396		3.86	
12	E14-03340-005	623538		2.50		2377703		3.05		1247010		3.86	
13	E14-03340-006	756683		2.50		2712097		3.05		1375926		3.86	
14	E14-03340-007	766569		2.50		2544436		3.05		1225004		3.86	
15	E14-03340-008	845446		2.50		2705832		3.05		1273574		3.85	
16	E14-03340-009	726716		2.50		2501348		3.05		1258393		3.86	
17	E14-03340-010	702880		2.50		2597977		3.05		1369039		3.85	
18	E14-03340-011	653839		2.50		2354767		3.05		1233890		3.85	
19	E14-03340-012	823828		2.50		2844774		3.05		1368778		3.85	
20	E14-03340-013	625892		2.50		2335372		3.05		1239541		3.85	
21	E14-03341-001	744043		2.50		2632943		3.05		1311213		3.85	
22	E14-03341-002	713698		2.50		2510781		3.05		1242640		3.85	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5634.D

Date Analyzed: 04/18/2014

Instrument ID: MSDC

Time Analyzed: 08:10

	40 ppm	IS4 AREA #	IS4 RT #	IS5 AREA #	IS5 RT #	IS6 AREA #	IS6 RT #
	12 HOUR STD	2179041	4.67	2010439	6.47	1757357	7.87
	UPPER LIMIT	4358082	5.17	4020878	6.97	3514714	8.37
	LOWER LIMIT	1089521	4.17	1005220	5.97	878679	7.37
	LAB SAMPLE ID						
01	CCV040BNA2	3141695	4.65	2301592	6.44	1991029	7.86
02	E14-03286-002DL	2582383	4.63	2027845	6.42	2096033	7.84
03	E14-03286-007DL	2612504	4.63	2364937	6.42	2472247	7.83
04	BLKS140417-03	2187362	4.67	1879344	6.47	1882975	7.88
05	LCSS140417-03	2146619	4.62	1847641	6.41	1803020	7.82
06	E14-03340-001MS	2205329	4.82	1724540	6.66	1620214	8.11
07	E14-03340-001MSD	2007975	4.70	1800964	6.51	1649288	7.97
08	E14-03340-001	2252139	4.62	2157677	6.40	2159520	7.81
09	E14-03340-002	1971039	4.70	2041146	6.51	2034060	7.92
10	E14-03340-003	2118070	4.63	2268845	6.40	2177762	7.83
11	E14-03340-004	2007714	4.62	2120655	6.40	2059563	7.84
12	E14-03340-005	1801389	4.61	2239388	6.39	2104313	7.84
13	E14-03340-006	2198126	4.61	2649567	6.38	1670995	7.83
14	E14-03340-007	1835566	4.61	2300320	6.39	1407104	7.81
15	E14-03340-008	1978651	4.61	2314521	6.39	1342759	7.82
16	E14-03340-009	1840685	4.61	2118121	6.39	1566873	7.84
17	E14-03340-010	2016912	4.60	2387490	6.37	1730796	7.82
18	E14-03340-011	1928583	4.61	2272273	6.39	1559711	7.81
19	E14-03340-012	2011276	4.61	2366596	6.38	1705809	7.81
20	E14-03340-013	1995593	4.60	2259645	6.37	1416558	7.79
21	E14-03341-001	1928716	4.60	2245623	6.38	1757968	7.80
22	E14-03341-002	1852058	4.61	2201855	6.39	1454458	7.81

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5634.D

Date Analyzed: 04/18/2014

Instrument ID: MSDC

Time Analyzed: 08:10

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	686519		2.50		2681675		3.05		1500575		3.89	
	UPPER LIMIT	1373038		3.00		5363350		3.55		3001150		4.39	
	LOWER LIMIT	343260		2.00		1340838		2.55		750288		3.39	
	LAB SAMPLE ID												
01	E14-03341-003	776427		2.50		2638791		3.05		1288474		3.86	
02	E14-03341-004	673346		2.50		2397189		3.05		1187470		3.85	
03	E14-03341-005	610291		2.50		2271084		3.05		1180018		3.85	
04	E14-03341-006	613664		2.50		2254446		3.05		1174818		3.85	
05	E14-03341-007	645152		2.50		2351849		3.05		1116112		3.85	
06	BLKS140417-04	535121		2.50		1985378		3.05		974915		3.85	
07	LCSS140417-04	512848		2.50		1828034		3.05		911477		3.85	
08	E14-02943-003	514053		2.50		1834665		3.05		877871		3.84	
09	E14-02946-025	462675		2.50		1710990		3.05		863393		3.85	
10	E14-02946-026	594184		2.50		2103118		3.05		1009885		3.85	
11	E14-03052-002	441428		2.50		1614481		3.05		824245		3.85	
12	E14-03052-004	442376		2.50		1583853		3.05		817560		3.85	
13	E14-03328-001	473703		2.50		1604826		3.05		763904		3.85	
14	E14-03021-004	492248		2.50		1812873		3.05		935442		3.85	
15	E14-02925-011	626986		2.50		2039910		3.05		889341		3.85	
16	E14-02925-012	500245		2.50		1803048		3.05		916977		3.85	
17	E14-02925-013	485400		2.50		1734416		3.05		885633		3.85	
18	E14-02925-014	436033		2.50		1628934		3.05		853924		3.85	
19	E14-02925-015	426367		2.50		1589067		3.05		816509		3.85	
20	E14-03328-001DL	780253		2.51		2833129		3.08		1417137		3.98	
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C5634.D

Date Analyzed: 04/18/2014

Instrument ID: MSDC

Time Analyzed: 08:10

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	2179041	4.67	2010439	6.47	1757357	7.87
	UPPER LIMIT	4358082	5.17	4020878	6.97	3514714	8.37
	LOWER LIMIT	1089521	4.17	1005220	5.97	878679	7.37
	LAB SAMPLE ID						
01	E14-03341-003	1870054	4.62	2273184	6.40	1896497	7.82
02	E14-03341-004	1822744	4.61	2139921	6.39	1447756	7.80
03	E14-03341-005	1808919	4.60	2100183	6.38	1456226	7.80
04	E14-03341-006	1919597	4.61	2158153	6.38	1396759	7.80
05	E14-03341-007	1696718	4.60	2005810	6.37	1385701	7.79
06	BLKS140417-04	1504613	4.59	1737104	6.35	1279311	7.80
07	LCSS140417-04	1395646	4.59	1580476	6.36	1168748	7.80
08	E14-02943-003	1353570	4.59	1565986	6.35	1221649	7.78
09	E14-02946-025	1323956	4.60	1509857	6.38	1052661	7.78
10	E14-02946-026	1541902	4.60	1818862	6.37	1406976	7.78
11	E14-03052-002	1340499	4.60	1477354	6.38	946688	7.79
12	E14-03052-004	1329016	4.60	1460823	6.37	932034	7.82
13	E14-03328-001	1171211	4.60	1236673	6.37	901053	7.82
14	E14-03021-004	1521829	4.59	1682388	6.38	944151	7.79
15	E14-02925-011	1309742	4.60	1449353	6.36	988271	7.81
16	E14-02925-012	1428017	4.59	1623024	6.36	1051812	7.80
17	E14-02925-013	1399965	4.59	1557932	6.36	965376	7.78
18	E14-02925-014	1339454	4.59	1518105	6.35	941306	7.80
19	E14-02925-015	1298251	4.60	1430708	6.38	990596	7.79
20	E14-03328-001DL	1968251	4.82	1734533	6.68	1830680	8.12
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : C5672.D
Acq On : 18 Apr 2014 17:24
Operator : JC
Sample : WC-001,E14-03328-001,S,15.19g,12.6,0.5
Misc : 140417-04,04/17/14,04/16/14,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 21 12:16:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

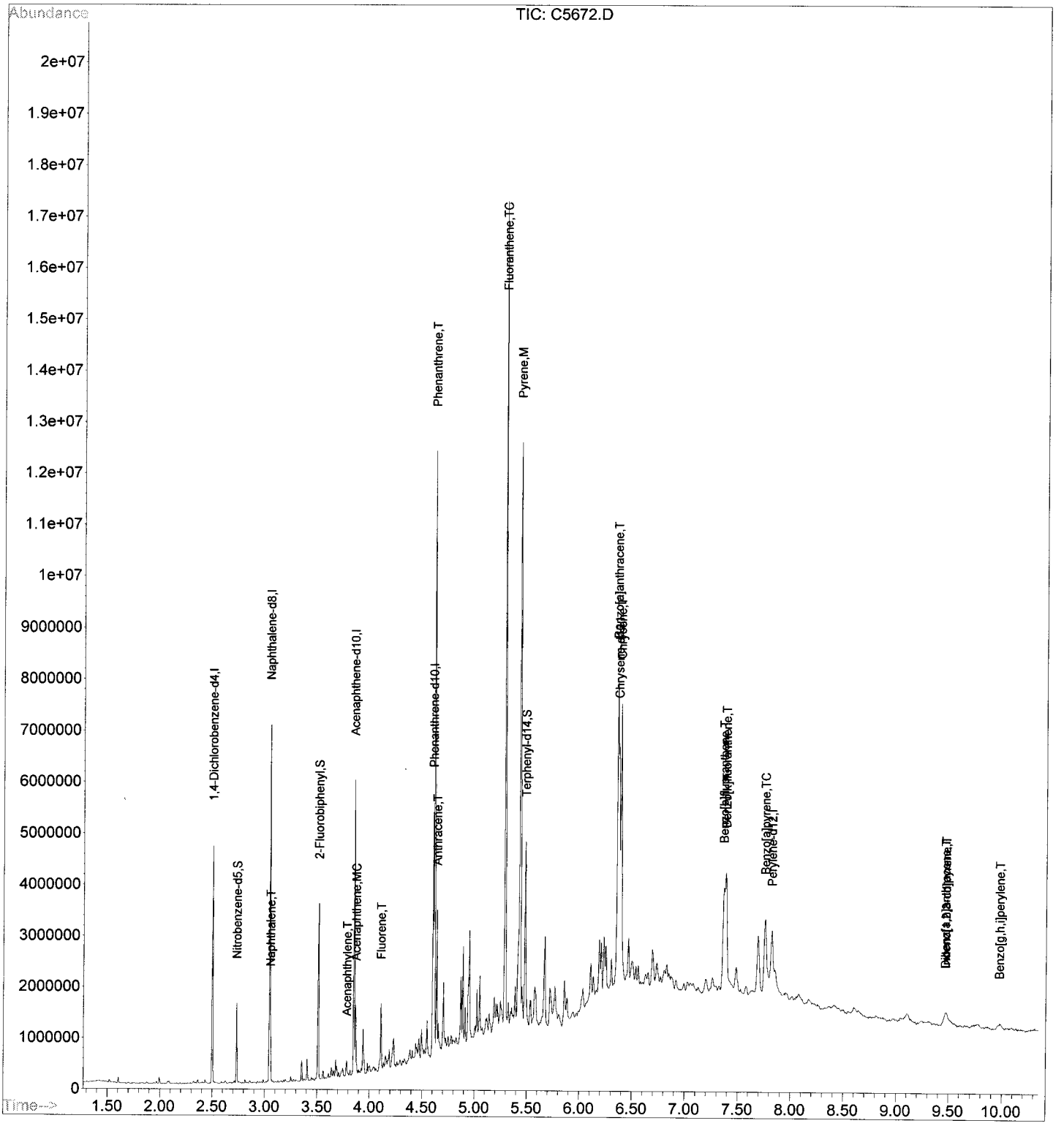
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.50	152	473703	40.00	UG	0.00
23) Naphthalene-d8	3.05	136	1604826	40.00	UG	-0.01
43) Acenaphthene-d10	3.85	164	763904m	40.00	UG	-0.02
66) Phenanthrene-d10	4.60	188	1171211m	40.00	UG	-0.04
82) Chrysene-d12	6.37	240	1236673	40.00	UG	-0.06
92) Perylene-d12	7.82	264	901053m	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 100		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 108		Recovery = 0.00%#			
24) Nitrobenzene-d5	2.73	82	279334	19.33	UG	-0.01
Spiked Amount 50.000	Range 24 - 91		Recovery = 38.66%			
47) 2-Fluorobiphenyl	3.51	172	738824	29.49	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 58.98%			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 37 - 115		Recovery = 0.00%#			
84) Terphenyl-d14	5.48	244	965731	32.04	UG	-0.07
Spiked Amount 50.000	Range 15 - 122		Recovery = 64.08%			
Target Compounds						Qvalue
34) Naphthalene	3.06	128	253802	7.31	UG	# 54
53) Acenaphthylene	3.78	152	74603	2.68	UG	96
55) Acenaphthene	3.87	153	250627	12.68	UG	86
61) Fluorene	4.11	166	230265	10.88	UG	97
75) Phenanthrene	4.62	178	2970530	106.48	UG	98
76) Anthracene	4.64	178	653252m	23.27	UG	
79) Fluoranthene	5.29	202	4085935	157.07	UG	# 85
83) Pyrene	5.44	202	3719910	106.68	UG	# 76
88) Benzo[a]anthracene	6.36	228	2041505m	77.58	UG	
89) Chrysene	6.39	228	1819036	75.85	UG	97
94) Benzo[b]fluoranthene	7.36	252	902474m	35.84	UG	
95) Benzo[k]fluoranthene	7.39	252	1517248m	62.71	UG	
96) Benzo[a]pyrene	7.76	252	921279	40.21	UG	# 95
97) Indeno[1,2,3-cd]pyrene	9.47	276	301379	11.01	UG	# 49
98) Dibenz[a,h]anthracene	9.46	278	101264m	4.63	UG	
99) Benzo[g,h,i]perylene	9.98	276	218325m	9.33	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : C5672.D
Acq On : 18 Apr 2014 17:24
Operator : JC
Sample : WC-001,E14-03328-001,S,15.19g,12.6,0.5
Misc : 140417-04,04/17/14,04/16/14,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 21 12:16:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : C5679.D
Acq On : 18 Apr 2014 19:12
Operator : JC
Sample : WC-001,E14-03328-001DL,S,15.19g,12.6,0.5
Misc : 140417-04,04/17/14,04/16/14,2
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 21 12:16:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

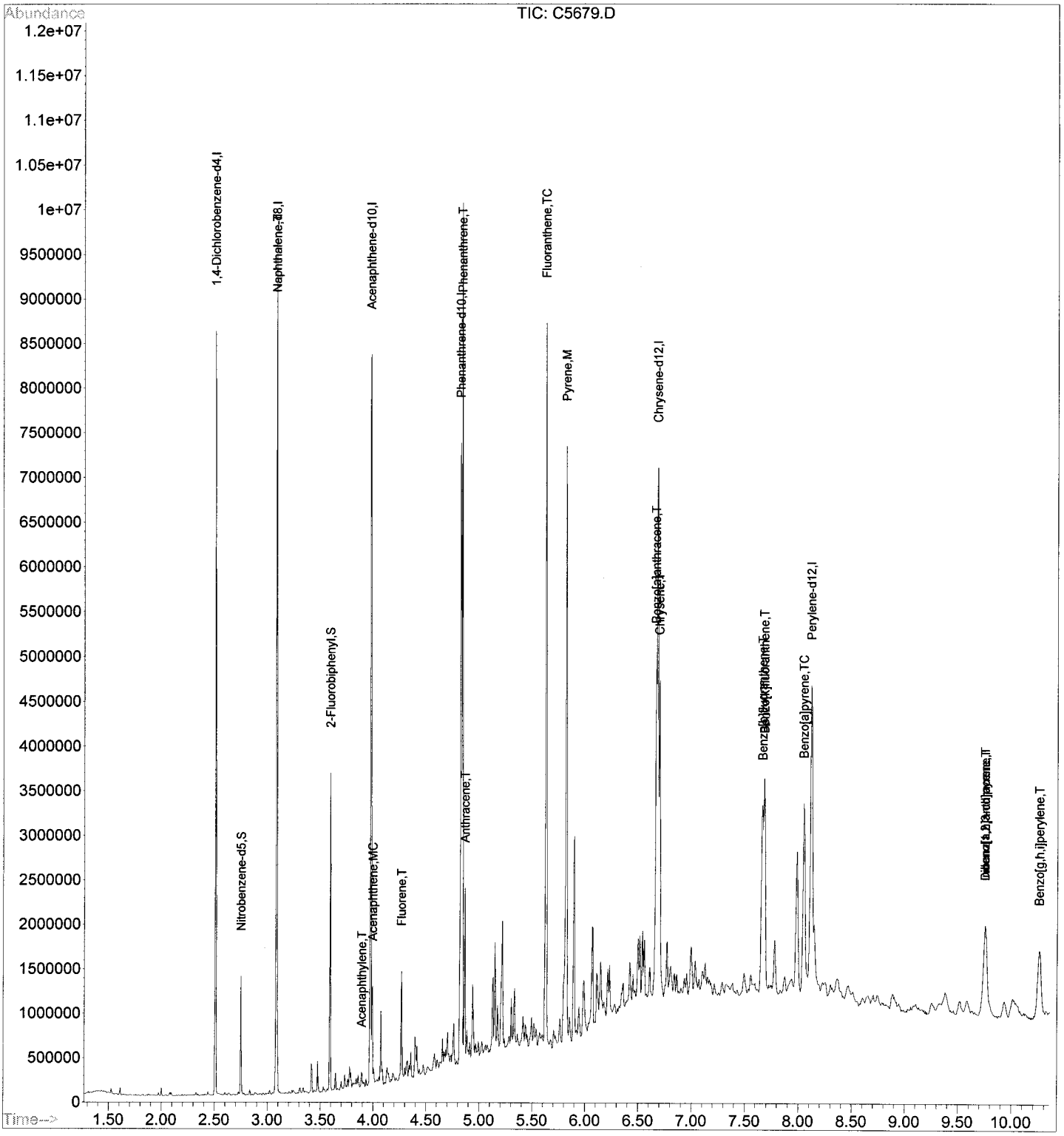
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.51	152	780253	40.00	UG		0.00
23) Naphthalene-d8	3.08	136	2833129	40.00	UG		0.03
43) Acenaphthene-d10	3.98	164	1417137	40.00	UG		0.10
66) Phenanthrene-d10	4.82	188	1968251m	40.00	UG		0.18
82) Chrysene-d12	6.68	240	1734533m	40.00	UG		0.25
92) Perylene-d12	8.12	264	1830680	40.00	UG		0.27
System Monitoring Compounds							
4) 2-Fluorophenol	0.00	112	0d	0.00	UG		
Spiked Amount 100.000	Range 25 - 100		Recovery = 0.00%#				
6) Phenol-d5	0.00	99	0d	0.00	UG		
Spiked Amount 100.000	Range 25 - 108		Recovery = 0.00%#				
24) Nitrobenzene-d5	2.75	82	231798	9.09	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 18.18%#				
47) 2-Fluorobiphenyl	3.59	172	630384	13.56	UG		0.06
Spiked Amount 50.000	Range 33 - 91		Recovery = 27.12%#				
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG		
Spiked Amount 100.000	Range 37 - 115		Recovery = 0.00%#				
84) Terphenyl-d14	5.72	244	854	0.02	UG		0.16
Spiked Amount 50.000	Range 15 - 122		Recovery = 0.04%#				
Target Compounds							Qvalue
34) Naphthalene	3.09	128	205790	3.36	UG	#	55
53) Acenaphthylene	3.90	152	42768	0.83	UG		97
55) Acenaphthene	3.99	153	212150	5.79	UG		89
61) Fluorene	4.27	166	190905	4.86	UG		99
75) Phenanthrene	4.84	178	2333093	49.76	UG		98
76) Anthracene	4.86	178	542175m	11.49	UG		
79) Fluoranthene	5.63	202	2752219m	62.96	UG		
83) Pyrene	5.82	202	2393386m	48.94	UG		
88) Benzo[a]anthracene	6.66	228	1165283m	31.57	UG		
89) Chrysene	6.70	228	1090727	32.43	UG		98
94) Benzo[b]fluoranthene	7.66	252	1038623	20.30	UG	#	60
95) Benzo[k]fluoranthene	7.68	252	1019073	20.73	UG	#	46
96) Benzo[a]pyrene	8.05	252	1142088	24.53	UG	#	94
97) Indeno[1,2,3-cd]pyrene	9.76	276	822031	14.78	UG	#	38
98) Dibenz[a,h]anthracene	9.75	278	309318m	6.96	UG		
99) Benzo[g,h,i]perylene	10.25	276	753620	15.84	UG	#	46

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\04-18-14\
Data File : C5679.D
Acq On : 18 Apr 2014 19:12
Operator : JC
Sample : WC-001,E14-03328-001DL,S,15.19g,12.6,0.5
Misc : 140417-04,04/17/14,04/16/14,2
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 21 12:16:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140415-06
Client ID: .
Date Received: NA
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
Data file: C5550.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.020
Pyridine	ND		0.033	0.020
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.020
Aniline	ND		0.033	0.023
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.031
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.029
Benzyl alcohol	ND		0.033	0.027
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.025
Bis(2-chloroisopropyl) ether	ND		0.033	0.022
4-Methylphenol **	ND		0.033	0.024
N-Nitrosodi-n-propylamine	ND		0.033	0.030
Acetophenone	ND		0.033	0.029
3-Methylphenol	ND		0.033	0.024
Hexachloroethane	ND		0.033	0.029
Nitrobenzene	ND		0.033	0.022
Isophorone	ND		0.033	0.033
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.020
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.025
2,4-Dimethylaniline	ND		0.033	0.020
2,4-Dichlorophenol	ND		0.033	0.025
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
4-Aminotoluene	ND		0.033	0.020
Hexachlorobutadiene	ND		0.033	0.026
Caprolactam	ND		0.033	0.020
2-Aminotoluene	ND		0.033	0.020
4-Chloro-3-methylphenol	ND		0.033	0.021
2-Methylnaphthalene	ND		0.033	0.025
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.022

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140415-06
Client ID: .
Date Received: NA
Date Extracted: 04/15/2014
Date Analyzed: 04/16/2014
Data file: C5550.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.020
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.031
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.031
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.027
Diethyl phthalate	ND		0.033	0.020
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.020
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.020
Benzo[a]anthracene	ND		0.033	0.020
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.020
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.020
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.020
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.020

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

E14-03328 0108

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-16-14\
Data File : C5550.D
Acq On : 16 Apr 2014 8:31
Operator : JC
Sample : .,BLKS140415-06,S,15.00g,0,0.5
Misc : 140415-06,04/15/14,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 11:35:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.50	152	796261	40.00	UG	0.00
23) Naphthalene-d8	3.06	136	3342436m	40.00	UG	0.00
43) Acenaphthene-d10	3.90	164	1828717	40.00	UG	0.02
66) Phenanthrene-d10	4.69	188	2843874	40.00	UG	0.05
82) Chrysene-d12	6.49	240	2146763	40.00	UG	0.06
92) Perylene-d12	7.91	264	1941487	40.00	UG	0.06
System Monitoring Compounds						
4) 2-Fluorophenol	1.98	112	1944623	61.80	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 61.80%			
6) Phenol-d5	2.32	99	2822176	72.79	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 72.79%			
24) Nitrobenzene-d5	2.74	82	1180407	39.22	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 78.44%			
47) 2-Fluorobiphenyl	3.54	172	2702774m	45.07	UG	0.01
Spiked Amount 50.000	Range 33 - 91		Recovery = 90.14%			
70) 2,4,6-Tribromophenol	4.31	330	826538	95.16	UG	0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 95.16%			
84) Terphenyl-d14	5.65	244	3108099m	59.41	UG	0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 118.82%			

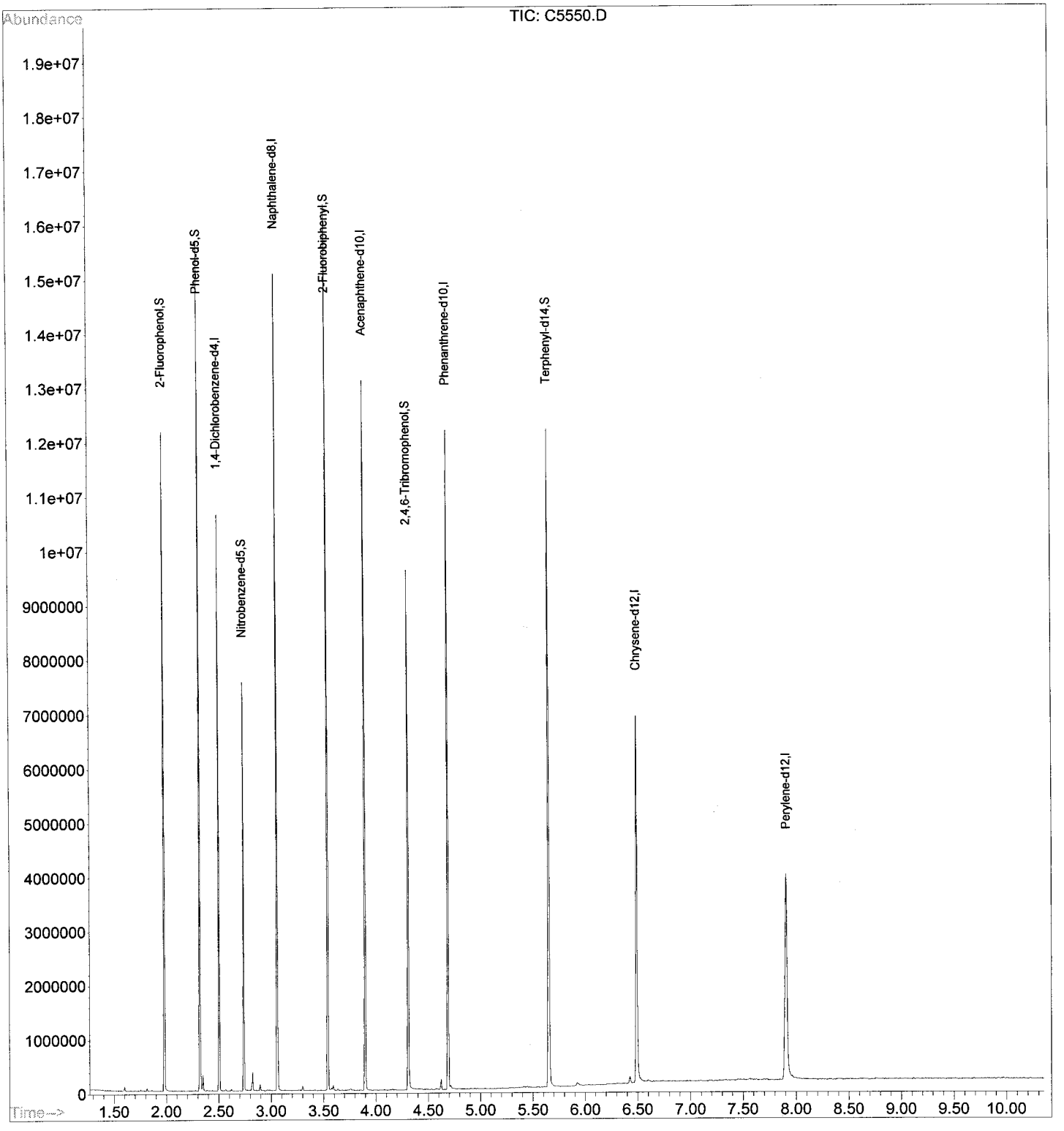
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-16-14\
Data File : C5550.D
Acq On : 16 Apr 2014 8:31
Operator : JC
Sample : .,BLKS140415-06,S,15.00g,0,0.5
Misc : 140415-06,04/15/14,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 11:35:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140417-04
Client ID: .
Date Received: NA
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5665.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.020
Pyridine	ND		0.033	0.020
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.020
Aniline	ND		0.033	0.023
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.031
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.029
Benzyl alcohol	ND		0.033	0.027
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.025
Bis(2-chloroisopropyl) ether	ND		0.033	0.022
4-Methylphenol **	ND		0.033	0.024
N-Nitrosodi-n-propylamine	ND		0.033	0.030
Acetophenone	ND		0.033	0.029
3-Methylphenol	ND		0.033	0.024
Hexachloroethane	ND		0.033	0.029
Nitrobenzene	ND		0.033	0.022
Isophorone	ND		0.033	0.033
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.020
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.025
2,4-Dimethylaniline	ND		0.033	0.020
2,4-Dichlorophenol	ND		0.033	0.025
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
4-Aminotoluene	ND		0.033	0.020
Hexachlorobutadiene	ND		0.033	0.026
Caprolactam	ND		0.033	0.020
2-Aminotoluene	ND		0.033	0.020
4-Chloro-3-methylphenol	ND		0.033	0.021
2-Methylnaphthalene	ND		0.033	0.025
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.022

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140417-04
Client ID: .
Date Received: NA
Date Extracted: 04/17/2014
Date Analyzed: 04/18/2014
Data file: C5665.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.020
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.031
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.031
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.027
Diethyl phthalate	ND		0.033	0.020
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.020
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.020
Benzo[a]anthracene	ND		0.033	0.020
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.020
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.020
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.020
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.020

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

E14-03328 0112

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : C5665.D
Acq On : 18 Apr 2014 15:36
Operator : JC
Sample : .,BLKS140417-04,S,15.00g,0,0.5
Misc : 140417-04,04/17/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 21 10:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.50	152	535121	40.00	UG	0.00
23) Naphthalene-d8	3.05	136	1985378	40.00	UG	-0.01
43) Acenaphthene-d10	3.85	164	974915	40.00	UG	-0.03
66) Phenanthrene-d10	4.59	188	1504613	40.00	UG	-0.06
82) Chrysene-d12	6.35	240	1737104	40.00	UG	-0.08
92) Perylene-d12	7.80	264	1279311	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	1.98	112	1159822	54.84	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 54.84%			
6) Phenol-d5	2.32	99	1422720	54.60	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 54.60%			
24) Nitrobenzene-d5	2.73	82	465245	26.02	UG	-0.01
Spiked Amount 50.000	Range 24 - 91		Recovery = 52.04%			
47) 2-Fluorobiphenyl	3.51	172	1265772	39.59	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 79.18%			
70) 2,4,6-Tribromophenol	4.23	330	346978	75.50	UG	-0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 75.50%			
84) Terphenyl-d14	5.46	244	1349104	31.87	UG	-0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 63.74%			

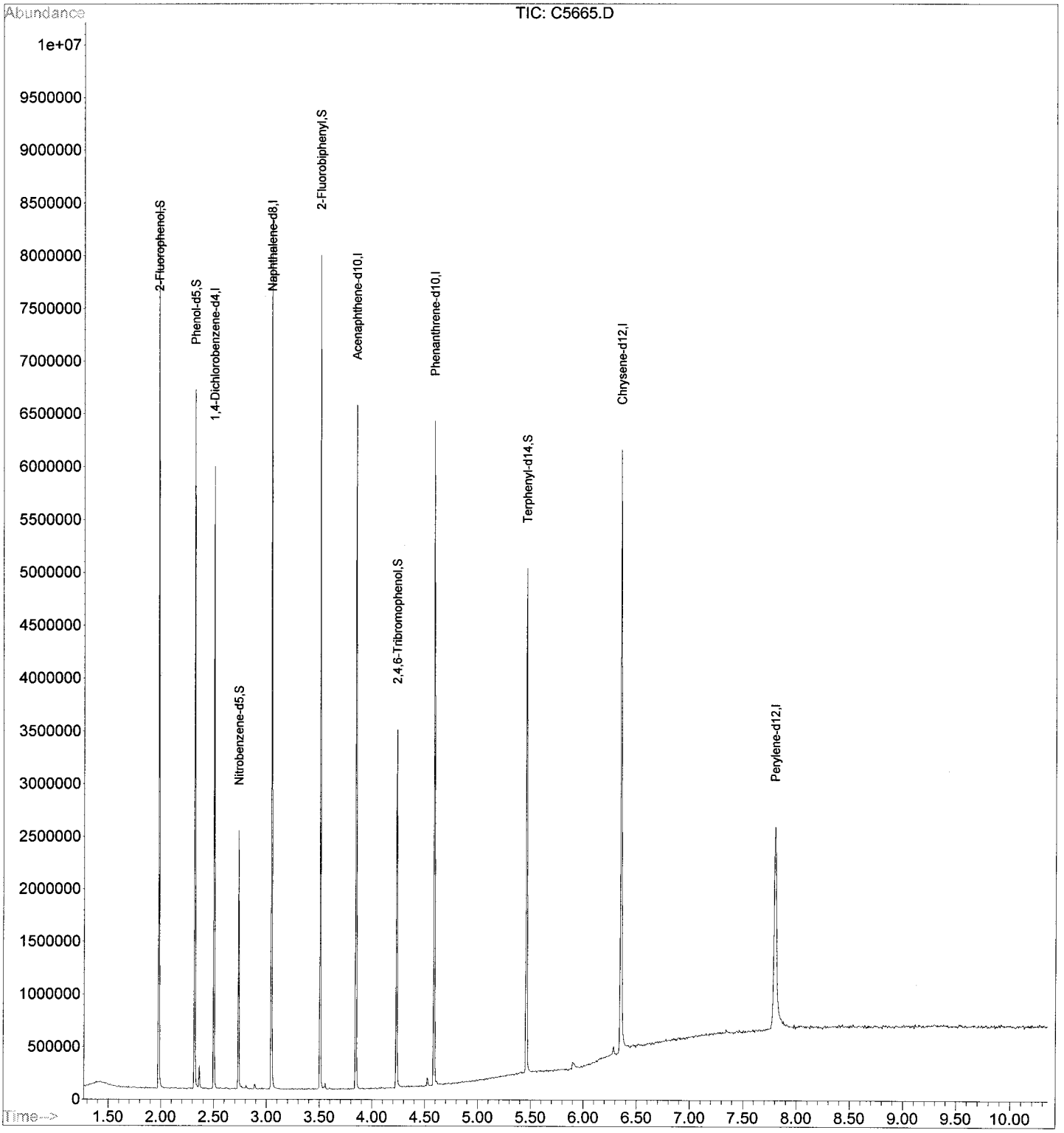
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : C5665.D
Acq On : 18 Apr 2014 15:36
Operator : JC
Sample : .,BLKS140417-04,S,15.00g,0,0.5
Misc : 140417-04,04/17/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 21 10:54:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS0614.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Apr 14 10:16:18 2014
Response via : Initial Calibration



E14-03328 0114

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2014

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS140418-12	SOIL	117		90		110		92	
PCB	LCSS140418-12	SOIL	115		87		109		88	
WASTE-1	E14-03379-001	SOIL	76		90		65		94	
WC-001	E14-03328-001	SOIL	110		85		100		88	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS140418-12
Date Extracted: 04/18/2014
Date Analyzed: 04/18/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	485.6	97	40 - 140
Aroclor-1260	500	0.0	534.6	107	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E14-03208-006
Date Extracted: 04/13/2014
Date Analyzed: 04/15/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 5.0g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	448.6	90	40 - 140
Aroclor-1260	500	0.0	512.3	102	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	449.0	90	0	50	40 - 140
Aroclor-1260	0.0	511.9	102	0	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: R8057.D

Instrument ID: GC-R

Date Extracted: 04/13/2014

Matrix: SOIL

Date Analyzed: 04/14/2014

Time Analyzed: 20:17

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS140413-02	04/14/2014	20:34
SB-14_(0	E14-03118-001	04/14/2014	20:52
SB-15_(1	E14-03118-002	04/14/2014	21:09
C-6	E14-03205-001	04/14/2014	21:27
C-7	E14-03205-002	04/14/2014	22:02
BC-9	E14-03205-003	04/14/2014	22:19
S-1	E14-03208-001	04/14/2014	22:36
S-2	E14-03208-002	04/14/2014	22:54
S-3	E14-03208-003	04/14/2014	23:11
S-4	E14-03208-004	04/14/2014	23:29
S-5	E14-03208-005	04/14/2014	23:46
BS-8	E14-03208-006	04/15/2014	00:03
PCB	03208-006MS	04/15/2014	00:21
PCB	03208-006MSD	04/15/2014	00:38

PCB METHOD BLANK SUMMARY

Lab File ID: R8239.D

Instrument ID: GC-R

Date Extracted: 04/18/2014

Matrix: SOIL

Date Analyzed: 04/18/2014

Time Analyzed: 19:17

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS140418-12	04/18/2014	19:34
WASTE-1	E14-03379-001	04/18/2014	19:52
WC-001	E14-03328-001	04/18/2014	20:09

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R7779.D R7780.D R7777.D R7776.D R7775.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.27	3.27	3.28	3.28	3.28	3.28	3.21	3.35
Aroclor-1016 {2}	4.11	4.11	4.11	4.11	4.11	4.11	4.04	4.18
Aroclor-1016 {3}	4.66	4.66	4.66	4.66	4.66	4.66	4.59	4.73
Aroclor-1016 {4}	5.16	5.16	5.17	5.17	5.16	5.16	5.09	5.23
Aroclor-1016 {5}	5.56	5.56	5.56	5.56	5.56	5.56	5.49	5.63
Aroclor-1221			2.18				2.11	2.25
Aroclor-1221 {2}			3.07				3.00	3.14
Aroclor-1221 {3}			3.20				3.13	3.27
Aroclor-1221 {4}			3.28				3.21	3.35
Aroclor-1221 {5}			3.87				3.80	3.94
Aroclor-1232			3.28				3.21	3.35
Aroclor-1232 {2}			4.11				4.04	4.18
Aroclor-1232 {3}			4.77				4.70	4.84
Aroclor-1232 {4}			5.37				5.30	5.44
Aroclor-1232 {5}			5.56				5.49	5.63
Aroclor-1242			4.11				4.04	4.18
Aroclor-1242 {2}			5.05				4.98	5.12
Aroclor-1242 {3}			5.37				5.30	5.44
Aroclor-1242 {4}			6.06				5.99	6.13
Aroclor-1242 {5}			6.34				6.27	6.41
Aroclor-1248			4.51				4.43	4.59
Aroclor-1248 {2}			5.05				4.97	5.13
Aroclor-1248 {3}			5.37				5.29	5.45
Aroclor-1248 {4}			6.07				5.99	6.15
Aroclor-1248 {5}			6.34				6.26	6.42
Aroclor-1254			6.46				6.38	6.54
Aroclor-1254 {2}			6.90				6.82	6.98
Aroclor-1254 {3}			7.06				6.97	7.15
Aroclor-1254 {4}			7.50				7.41	7.59
Aroclor-1254 {5}			8.35				8.26	8.44
Aroclor-1260	8.35	8.35	8.35	8.35	8.35	8.35	7.45	9.25
Aroclor-1260 {2}	9.03	9.03	9.03	9.03	9.03	9.03	8.13	9.93
Aroclor-1260 {3}	9.51	9.50	9.50	9.51	9.50	9.50	8.60	10.40
Aroclor-1260 {4}	9.99	9.99	9.99	9.99	9.99	9.99	9.09	10.89
Aroclor-1260 {5}	11.06	11.05	11.05	11.05	11.05	11.05	10.15	11.95

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R7779.D R7780.D R7777.D R7776.D R7775.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	351178	335281	350904	305690	306799	329970	6.85
Aroclor-1016 {2}	467099	458867	478784	421927	419428	449221	6.01
Aroclor-1016 {3}	604681	580987	606881	533509	541327	573477	6.03
Aroclor-1016 {4}	275359	300134	298452	259271	256317	277907	7.50
Aroclor-1016 {5}	473226	463744	490438	434255	438778	460088	5.13
Aroclor-1221			123360				
Aroclor-1221 {2}			187466				
Aroclor-1221 {3}			125490				
Aroclor-1221 {4}			441577				
Aroclor-1221 {5}			98279				
Aroclor-1232			305834				
Aroclor-1232 {2}			179985				
Aroclor-1232 {3}			153900				
Aroclor-1232 {4}			168547				
Aroclor-1232 {5}			217710				
Aroclor-1242			353378				
Aroclor-1242 {2}			219838				
Aroclor-1242 {3}			306977				
Aroclor-1242 {4}			479198				
Aroclor-1242 {5}			435250				
Aroclor-1248			686943				
Aroclor-1248 {2}			394777				
Aroclor-1248 {3}			517465				
Aroclor-1248 {4}			841096				
Aroclor-1248 {5}			615891				
Aroclor-1254			879240				
Aroclor-1254 {2}			555660				
Aroclor-1254 {3}			1055201				
Aroclor-1254 {4}			1091208				
Aroclor-1254 {5}			1027983				
Aroclor-1260	1374775	1251192	1384353	1232421	1263903	1301329	5.56
Aroclor-1260 {2}	655137	600514	639806	568913	575991	608072	6.28
Aroclor-1260 {3}	1524797	1398367	1581719	1405247	1431280	1468282	5.52
Aroclor-1260 {4}	862160	742854	813114	723815	741570	776703	7.56
Aroclor-1260 {5}	318858	340770	376643	308821	323011	333621	8.00
					Average %RSD		6.44

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R7779.C R7780.C R7777.C R7776.C R7775.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.83	3.83	3.83	3.83	3.83	3.83	3.76	3.90
Aroclor-1016 {2}	4.44	4.44	4.43	4.43	4.43	4.43	4.36	4.50
Aroclor-1016 {3}	5.19	5.19	5.19	5.19	5.19	5.19	5.12	5.26
Aroclor-1016 {4}	5.40	5.40	5.40	5.40	5.40	5.40	5.33	5.47
Aroclor-1016 {5}	5.58	5.58	5.57	5.57	5.57	5.57	5.50	5.64
Aroclor-1221			2.50				2.43	2.57
Aroclor-1221 {2}			3.51				3.44	3.58
Aroclor-1221 {3}			3.74				3.67	3.81
Aroclor-1221 {4}			3.84				3.77	3.91
Aroclor-1221 {5}			5.19				5.12	5.26
Aroclor-1232			3.83				3.76	3.90
Aroclor-1232 {2}			4.82				4.75	4.89
Aroclor-1232 {3}			5.40				5.33	5.47
Aroclor-1232 {4}			5.57				5.50	5.64
Aroclor-1232 {5}			6.18				6.11	6.25
Aroclor-1242			4.82				4.75	4.89
Aroclor-1242 {2}			5.57				5.50	5.64
Aroclor-1242 {3}			6.18				6.11	6.25
Aroclor-1242 {4}			6.33				6.26	6.40
Aroclor-1242 {5}			6.88				6.81	6.95
Aroclor-1248			5.19				5.11	5.27
Aroclor-1248 {2}			5.77				5.69	5.85
Aroclor-1248 {3}			6.18				6.10	6.26
Aroclor-1248 {4}			6.33				6.25	6.41
Aroclor-1248 {5}			6.68				6.60	6.76
Aroclor-1254			7.18				7.10	7.26
Aroclor-1254 {2}			7.77				7.69	7.85
Aroclor-1254 {3}			8.21				8.12	8.30
Aroclor-1254 {4}			8.39				8.30	8.48
Aroclor-1254 {5}			9.21				9.12	9.30
Aroclor-1260	7.96	7.96	7.95	7.95	7.95	7.96	7.06	8.86
Aroclor-1260 {2}	8.21	8.22	8.21	8.21	8.21	8.21	7.31	9.11
Aroclor-1260 {3}	9.82	9.82	9.81	9.81	9.81	9.81	8.91	10.71
Aroclor-1260 {4}	10.33	10.33	10.32	10.32	10.32	10.32	9.42	11.22
Aroclor-1260 {5}	10.92	10.92	10.91	10.91	10.91	10.92	10.02	11.82

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R7779.C R7780.C R7777.C R7776.C R7775.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1321094	1316548	1175519	1005357	976782	1159060	14.19
Aroclor-1016 {2}	2918680	2580882	2376538	2063749	1994073	2386784	15.94
Aroclor-1016 {3}	6108594	5384756	5271808	4623563	4608769	5199498	11.96
Aroclor-1016 {4}	2606265	2403146	2186524	1893558	1868322	2191563	14.61
Aroclor-1016 {5}	2027354	1799024	1652525	1452759	1449596	1676252	14.62
Aroclor-1221			483858				
Aroclor-1221 {2}			743304				
Aroclor-1221 {3}			451893				
Aroclor-1221 {4}			1598043				
Aroclor-1221 {5}			327770				
Aroclor-1232			1050955				
Aroclor-1232 {2}			411973				
Aroclor-1232 {3}			879563				
Aroclor-1232 {4}			658439				
Aroclor-1232 {5}			982944				
Aroclor-1242			782805				
Aroclor-1242 {2}			1280408				
Aroclor-1242 {3}			1795454				
Aroclor-1242 {4}			1477280				
Aroclor-1242 {5}			2810896				
Aroclor-1248			2547461				
Aroclor-1248 {2}			3752018				
Aroclor-1248 {3}			2738931				
Aroclor-1248 {4}			2439120				
Aroclor-1248 {5}			1284630				
Aroclor-1254			3263720				
Aroclor-1254 {2}			2426788				
Aroclor-1254 {3}			1742578				
Aroclor-1254 {4}			2388405				
Aroclor-1254 {5}			3645867				
Aroclor-1260	2375233	2279188	2046145	1785090	1769208	2050973	13.52
Aroclor-1260 {2}	3504351	3235237	2873995	2529648	2500775	2928801	14.99
Aroclor-1260 {3}	2851845	2678651	2396802	2122114	2132967	2436476	13.36
Aroclor-1260 {4}	5866696	5393176	5026801	4494817	4485752	5053448	11.76
Aroclor-1260 {5}	3581785	4054992	3622775	3171358	3173628	3520908	10.46
					Average %RSD		13.54

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R7779.D R7780.D R7777.D R7776.D R7775.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.64				8.52	8.76
Aroclor-1262 {2}			9.50				9.38	9.62
Aroclor-1262 {3}			10.14				10.02	10.26
Aroclor-1262 {4}			10.23				10.11	10.35
Aroclor-1262 {5}			11.05				10.93	11.17
Aroclor-1268			10.14				10.02	10.26
Aroclor-1268 {2}			10.22				10.10	10.34
Aroclor-1268 {3}			10.69				10.57	10.81
Aroclor-1268 {4}			10.83				10.71	10.95
Aroclor-1268 {5}			11.66				11.54	11.78

GC Column (2nd): DB-1701P

Data File: R7779.C R7780.C R7777.C R7776.C R7775.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.81				9.69	9.93
Aroclor-1262 {2}			10.32				10.20	10.44
Aroclor-1262 {3}			10.82				10.70	10.94
Aroclor-1262 {4}			10.91				10.79	11.03
Aroclor-1262 {5}			11.51				11.39	11.63
Aroclor-1268			10.82				10.70	10.94
Aroclor-1268 {2}			10.90				10.78	11.02
Aroclor-1268 {3}			11.16				11.04	11.28
Aroclor-1268 {4}			11.31				11.19	11.43
Aroclor-1268 {5}			12.39				12.27	12.51

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R7779.D R7780.D R7777.D R7776.D R7775.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1028402				
Aroclor-1262 {2}			1973365				
Aroclor-1262 {3}			738226				
Aroclor-1262 {4}			844630				
Aroclor-1262 {5}			665268				
Aroclor-1268			2300896				
Aroclor-1268 {2}			2439760				
Aroclor-1268 {3}			1963034				
Aroclor-1268 {4}			504295				
Aroclor-1268 {5}			5873906				

GC Column (2nd): DB-1701P

Data File: R7779.C R7780.C R7777.C R7776.C R7775.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3111403				
Aroclor-1262 {2}			6882606				
Aroclor-1262 {3}			2351830				
Aroclor-1262 {4}			4647320				
Aroclor-1262 {5}			945596				
Aroclor-1268			8106925				
Aroclor-1268 {2}			8037099				
Aroclor-1268 {3}			6646921				
Aroclor-1268 {4}			1743596				
Aroclor-1268 {5}			19405719				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/18/2014 **Instrument ID:** GC-R

Data File: R8238.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.29	3.21	3.35	329970	363044	10.02
Aroclor-1016 {2}	4.12	4.04	4.18	449221	488247	8.69
Aroclor-1016 {3}	4.67	4.59	4.73	573477	625610	9.09
Aroclor-1016 {4}	5.18	5.09	5.23	277907	320404	15.29
Aroclor-1016 {5}	5.57	5.49	5.63	460088	492208	6.98
Aroclor-1260	8.37	7.45	9.25	1301329	1402258	7.76
Aroclor-1260 {2}	9.04	8.13	9.93	608072	622841	2.43
Aroclor-1260 {3}	9.51	8.60	10.40	1468282	1560440	6.28
Aroclor-1260 {4}	10.00	9.09	10.89	776703	795843	2.46
Aroclor-1260 {5}	11.06	10.15	11.95	333621	326131	2.24

Data File: R8238.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.83	3.76	3.90	1159060	1205771	4.03
Aroclor-1016 {2}	4.43	4.36	4.50	2386784	2379574	0.30
Aroclor-1016 {3}	5.19	5.12	5.26	5199498	5379461	3.46
Aroclor-1016 {4}	5.40	5.33	5.47	2191563	2191687	0.01
Aroclor-1016 {5}	5.58	5.50	5.64	1676252	1693529	1.03
Aroclor-1260	7.95	7.06	8.86	2050973	2216584	8.07
Aroclor-1260 {2}	8.21	7.31	9.11	2928801	2783037	4.98
Aroclor-1260 {3}	9.81	8.91	10.71	2436476	2317032	4.90
Aroclor-1260 {4}	10.32	9.42	11.22	5053448	4418102	12.57
Aroclor-1260 {5}	10.91	10.02	11.82	3520908	3608000	2.47

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/18/2014 **Instrument ID:** GC-R

Data File: R8243.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.29	3.21	3.35	329970	362948	9.99
Aroclor-1016 {2}	4.12	4.04	4.18	449221	490248	9.13
Aroclor-1016 {3}	4.67	4.59	4.73	573477	628301	9.56
Aroclor-1016 {4}	5.17	5.09	5.23	277907	328365	18.16
Aroclor-1016 {5}	5.57	5.49	5.63	460088	496251	7.86
Aroclor-1260	8.36	7.45	9.25	1301329	1456869	11.95
Aroclor-1260 {2}	9.04	8.13	9.93	608072	656087	7.90
Aroclor-1260 {3}	9.51	8.60	10.40	1468282	1679847	14.41
Aroclor-1260 {4}	10.00	9.09	10.89	776703	863372	11.16
Aroclor-1260 {5}	11.06	10.15	11.95	333621	395377	18.51

Data File: R8243.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.83	3.76	3.90	1159060	1214486	4.78
Aroclor-1016 {2}	4.43	4.36	4.50	2386784	2369762	0.71
Aroclor-1016 {3}	5.19	5.12	5.26	5199498	5377340	3.42
Aroclor-1016 {4}	5.40	5.33	5.47	2191563	2204424	0.59
Aroclor-1016 {5}	5.57	5.50	5.64	1676252	1701283	1.49
Aroclor-1260	7.95	7.06	8.86	2050973	2293219	11.81
Aroclor-1260 {2}	8.21	7.31	9.11	2928801	2874461	1.86
Aroclor-1260 {3}	9.81	8.91	10.71	2436476	2404670	1.31
Aroclor-1260 {4}	10.32	9.42	11.22	5053448	5082749	0.58
Aroclor-1260 {5}	10.91	10.02	11.82	3520908	3853960	9.46

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.82 **DCB 1** 12.15 **TCMX 2** 2.95 **DCB 2** 12.61

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS140418-12	04/18/2014	19:17	2.82		12.15		2.95		12.61	
PCB	LCSS140418-12	04/18/2014	19:34	2.82		12.15		2.95		12.61	
WASTE-1	E14-03379-001	04/18/2014	19:52	2.82		12.16		2.95		12.61	
WC-001	E14-03328-001	04/18/2014	20:09	2.82		12.16		2.95		12.61	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : R8242.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Apr 2014 20:09
Operator : NG
Sample : WC-001,E14-03328-001,S,5.4g,12.6,20
Misc : 140418-12,04/18/14,04/16/14,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Apr 21 09:42:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0404.M
Quant Title :
QLast Update : Fri Apr 04 15:06:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.82	2.95	3700.3E6	12288.2E6	218.961	199.905
Spiked Amount 200.000			Recovery	=	109.48%	99.95%
2) S DCB	12.16	12.61	754.9E6	2544.2E6	169.169	176.852m
Spiked Amount 200.000			Recovery	=	84.58%	88.43%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

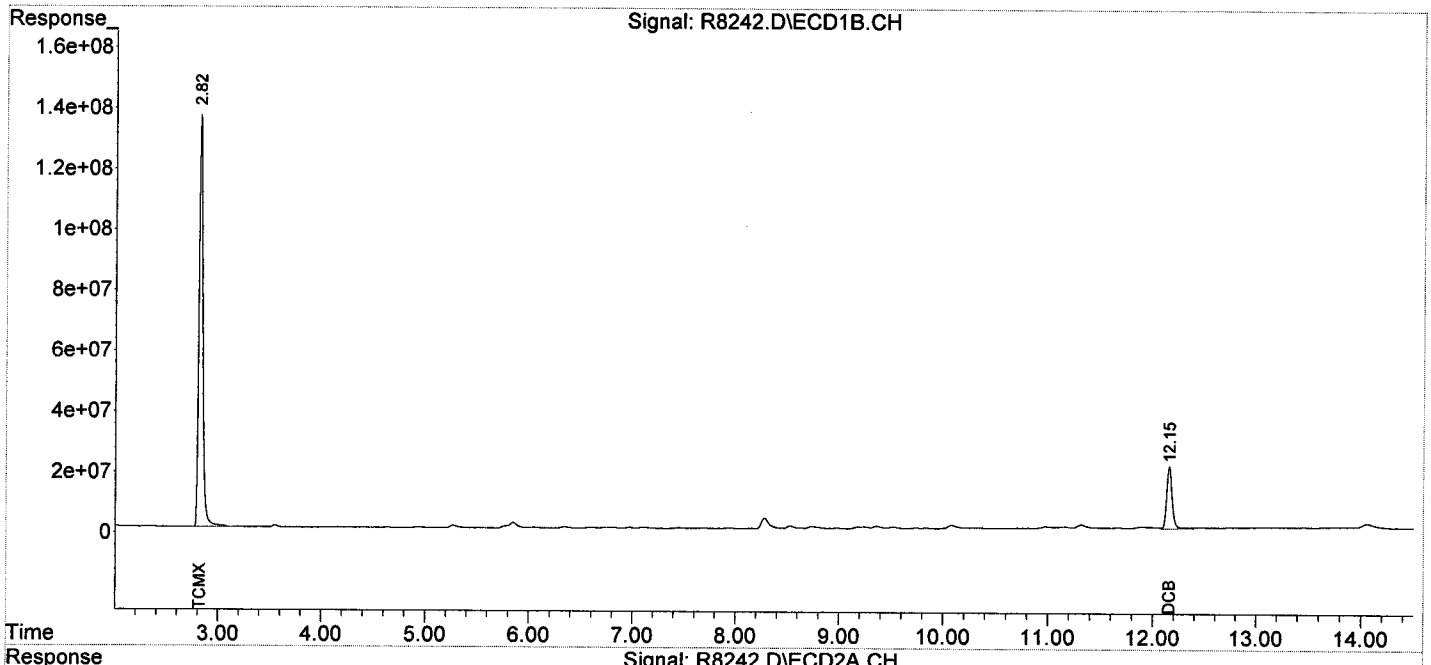
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

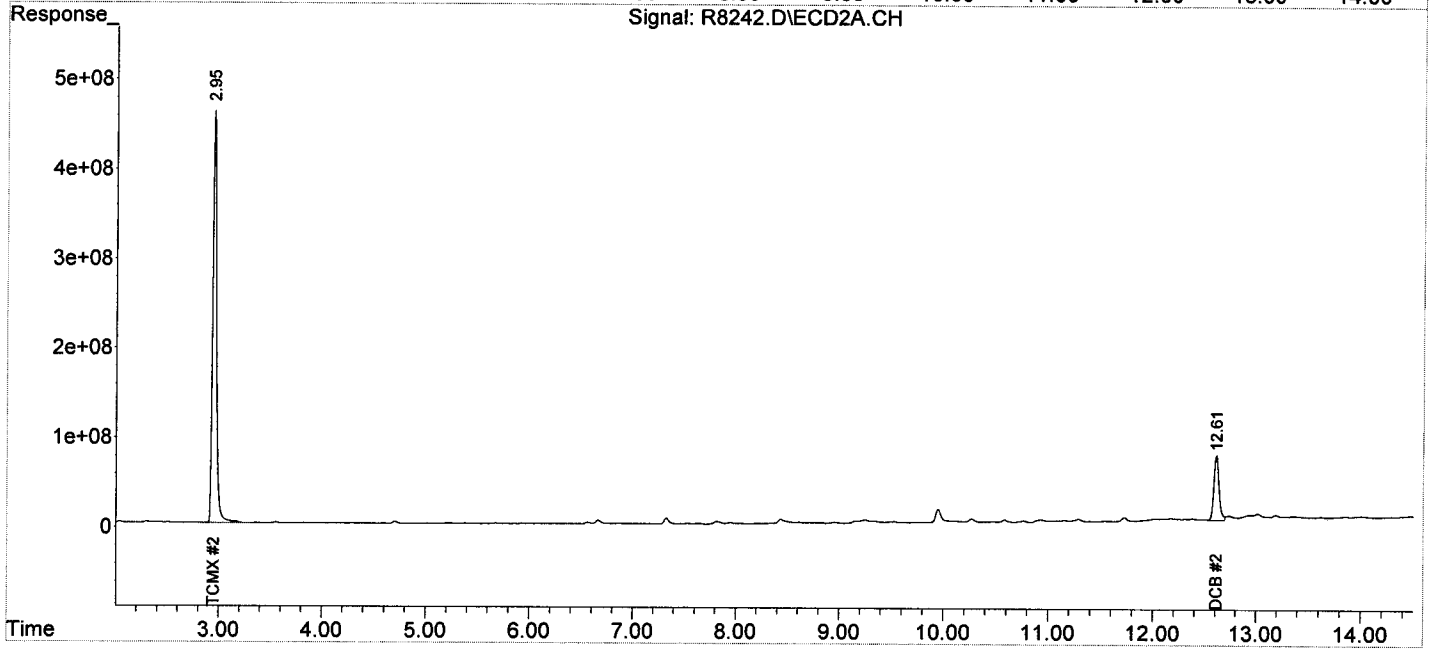
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : R8242.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Apr 2014 20:09
Operator : NG
Sample : WC-001,E14-03328-001,S,5.4g,12.6,20
Misc : 140418-12,04/18/14,04/16/14,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Apr 21 09:42:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0404.M
Quant Title :
QLast Update : Fri Apr 04 15:06:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS140413-02
Client ID: PCB
Date Received: NA
Date Extracted: 04/13/2014
Date Analyzed: 04/14/2014
Data file: R8057.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS140418-12
Client ID: PCB
Date Received: NA
Date Extracted: 04/18/2014
Date Analyzed: 04/18/2014
Data file: R8239.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : R8239.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Apr 2014 19:17
Operator : NG
Sample : PCB,BLKS140418-12,S,5g,0,20
Misc : NA,04/18/14,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Apr 21 09:39:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0404.M
Quant Title :
QLast Update : Fri Apr 04 15:06:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.82	2.95	3943.4E6	13569.4E6	233.343	220.747
Spiked Amount 200.000			Recovery	=	116.67%	110.37%
2) S DCB	12.15	12.61	807.1E6	2656.0E6	180.862	184.619
Spiked Amount 200.000			Recovery	=	90.43%	92.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

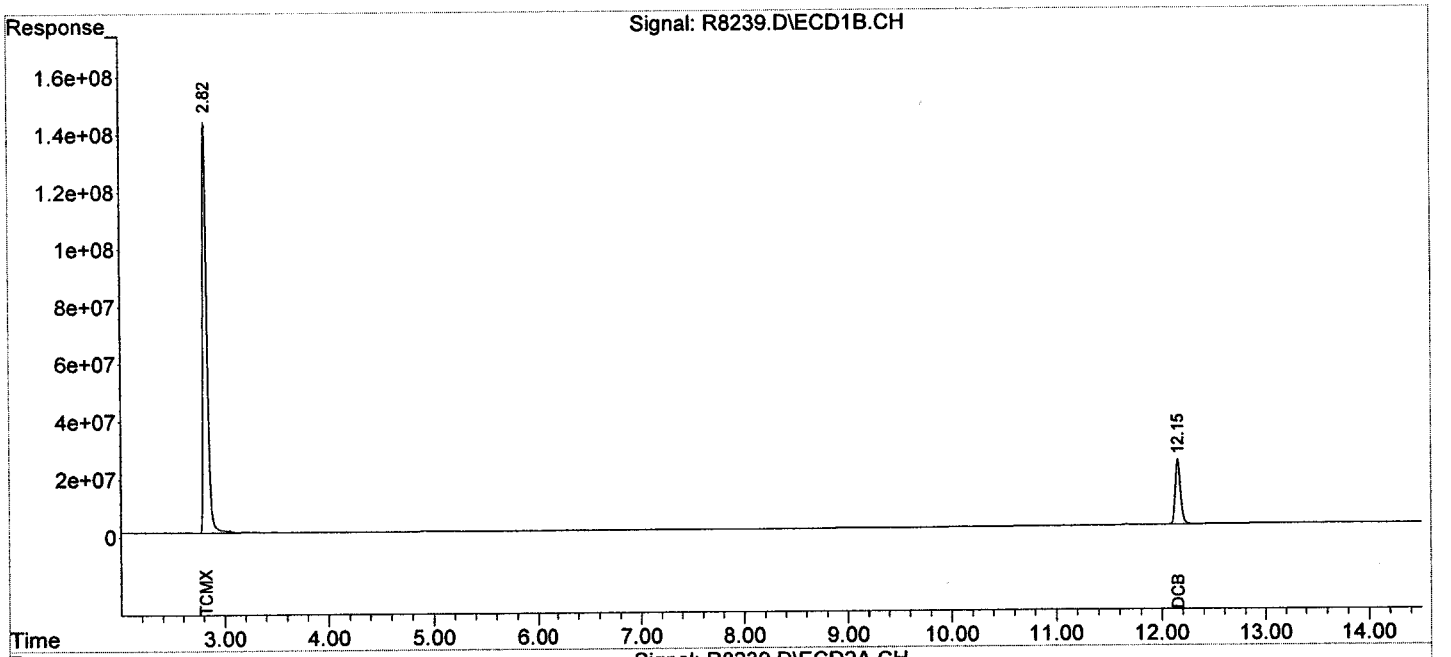
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

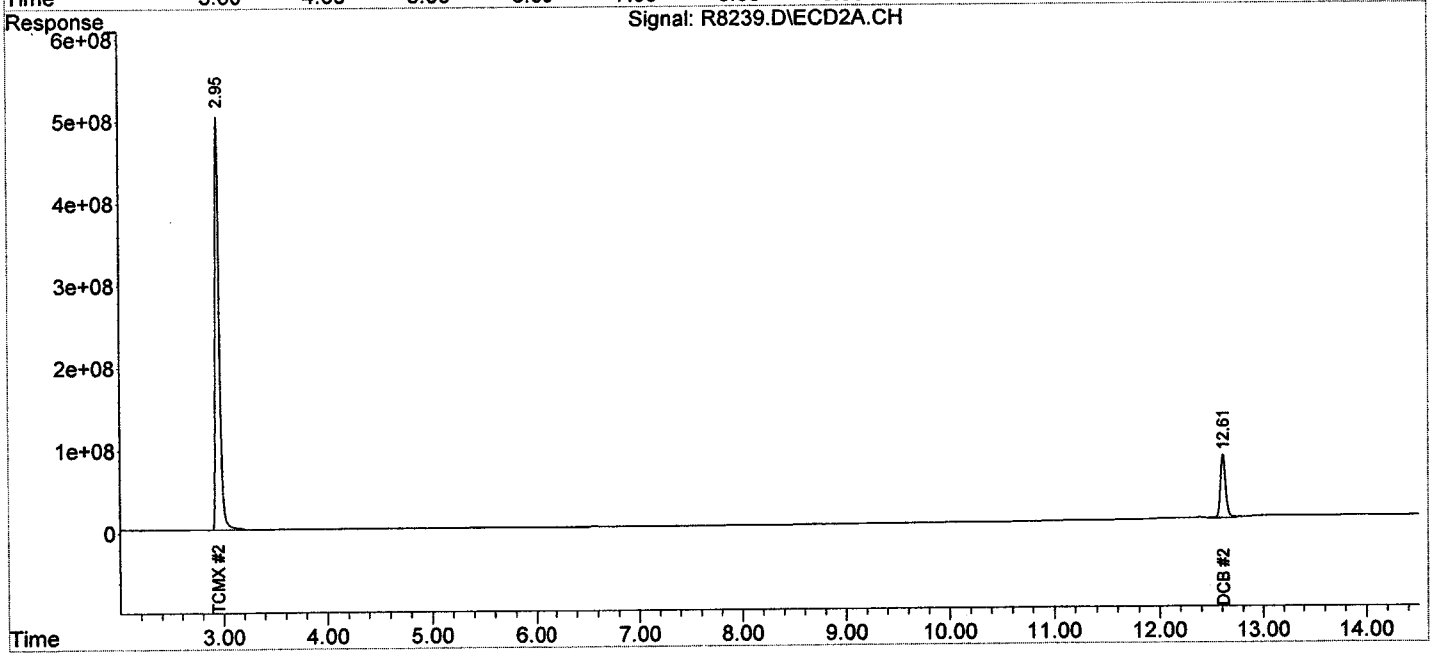
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-18-14\
Data File : R8239.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Apr 2014 19:17
Operator : NG
Sample : PCB,BLKS140418-12,S,5g,0,20
Misc : NA,04/18/14,NA,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Apr 21 09:39:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0404.M
Quant Title :
QLast Update : Fri Apr 04 15:06:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:

DBC 4.93

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
TPH-DRO	BLKS140418-02	SOIL	04/21/2014	18:52	76	4.93	
T1/6.5-7	03360-001	SOIL	04/21/2014	19:34	94	4.92	
T2/6.5-7	03360-002	SOIL	04/21/2014	19:48	90	4.93	
T3/6.5-7	03360-003	SOIL	04/21/2014	20:02	81	4.92	
B-1/7	03361-001	SOIL	04/21/2014	20:16	83	4.92	
B-2/7	03361-002	SOIL	04/21/2014	20:30	87	4.92	
B-3/7	03361-003	SOIL	04/21/2014	20:43	92	4.92	
B-4/7	03361-004	SOIL	04/21/2014	20:57	95	4.92	
WC-001	03328-001	SOIL	04/21/2014	21:11	85	4.92	
STOCKPIL	03354-001	SOIL	04/21/2014	21:39	96	4.92	
TPH-DRO	03361-001MS	SOIL	04/21/2014	22:07	82	4.92	
TPH-DRO	03361-001MSD	SOIL	04/21/2014	22:21	97	4.92	
TPH-DRO	LCSS140418-02	SOIL	04/21/2014	22:35	81	4.92	
B123/85	03357-001	SOIL	04/23/2014	16:37	128	4.92	
B123/7-7	03358-001	SOIL	04/23/2014	16:51	130	4.92	
STOCKPIL	03353-001	SOIL	04/23/2014	17:04	101	4.92	
WASTE-1	03379-001	SOIL	04/23/2014	17:18	107	4.92	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.1 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS140418-02

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	1190	119		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 03361-001MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	1130	113		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	1250	125		10.0		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB2486.D

Instrument ID: GC-Q

Date Extracted: 04/18/2014

Matrix: SOIL

Date Analyzed: 04/21/2014

Time Analyzed: 18:52

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
T1/6.5-7	03360-001	04/21/2014	19:34
T2/6.5-7	03360-002	04/21/2014	19:48
T3/6.5-7	03360-003	04/21/2014	20:02
B-1/7	03361-001	04/21/2014	20:16
B-2/7	03361-002	04/21/2014	20:30
B-3/7	03361-003	04/21/2014	20:43
B-4/7	03361-004	04/21/2014	20:57
WC-001	03328-001	04/21/2014	21:11
STOCKPIL	03354-001	04/21/2014	21:39
TPH-DRO	03361-001MS	04/21/2014	22:07
TPH-DRO	03361-001MSD	04/21/2014	22:21
TPH-DRO	LCSS140418-02	04/21/2014	22:35
B123/85	03357-001	04/23/2014	16:37
B123/7-7	03358-001	04/23/2014	16:51
STOCKPIL	03353-001	04/23/2014	17:04
WASTE-1	03379-001	04/23/2014	17:18

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/21/2014 Instrument ID: GC-Q

Date File: QB2484.D QB2483.D QB2482.D QB2481.D QB2480.D GC Column: RTX-5

COMPOUND	RT OF STANDARDS					MEAN RT	RT WINDOW	
	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM		FROM	TO
TPH-DRO	3.20	3.20	3.20	3.20	3.20	3.20	3.10	3.30

COMPOUND	CALIBRATION FACTORS					MEAN RF	%RSD
	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM		
TPH-DRO	57.8	40.5	49.5	43.3	43.9	47.0	14.6

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/21/2014 17:57

Date File: QB2485.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.20	3.10	3.30		47.0	51.5	9.57

Date Analyzed: 04/22/2014 0:26

Date File: QB2510.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.20	3.10	3.30		47.0	45.4	3.40

Date Analyzed: 04/23/2014 16:09

Date File: QB2553.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.20	3.10	3.30		47.0	52.4	11.5

Date Analyzed: 04/23/2014 17:32

Date File: QB2559.D

COMPOUND	RT WINDOW				Avg CF	CC CF	%D
	RT	FROM	TO				
TPH-DRO	3.20	3.10	3.30		47.0	51.2	8.94

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\04-21-14\
Data File : QB2496.D
Signal(s) : FID2B.ch
Acq On : 21 Apr 14 9:11 pm
Operator : JN
Sample : WC-001,03328-001,S,10g,12.6,04/18/14,15
Misc : 140418-02,04/15/14,04/16/14,1
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 22 17:06:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0421.M
Quant Title :
QLast Update : Mon Apr 21 17:52:00 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.922	26368669	85.105 ng
Spiked Amount 100.000		Recovery =	85.11%
Target Compounds			
3) H TPH-DRO	3.200	40389553	85.929 ng

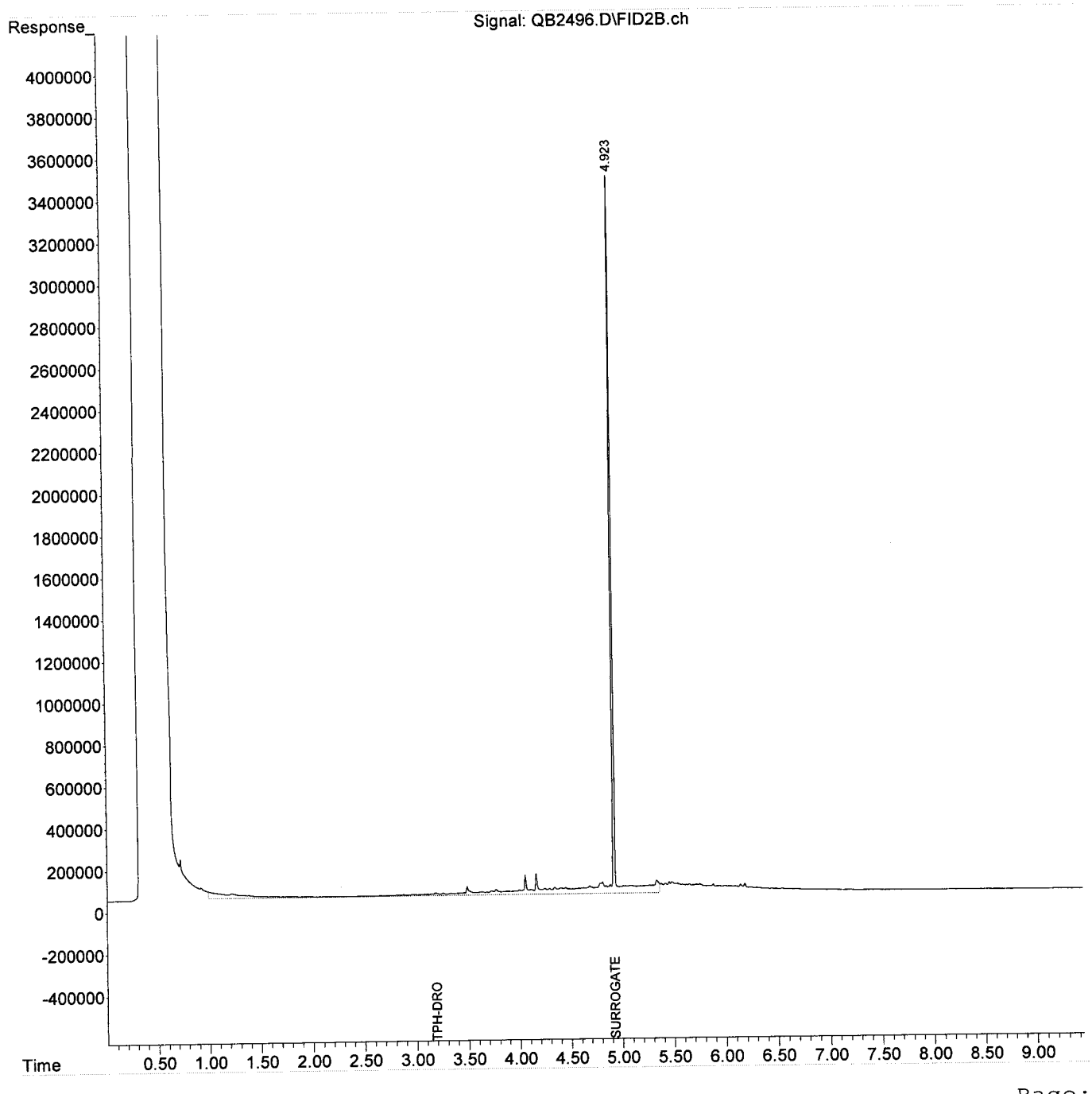
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\04-21-14\
Data File : QB2496.D
Signal(s) : FID2B.ch
Acq On : 21 Apr 14 9:11 pm
Operator : JN
Sample : WC-001,03328-001,S,10g,12.6,04/18/14,15
Misc : 140418-02,04/15/14,04/16/14,1
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 22 17:06:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0421.M
Quant Title :
QLast Update : Mon Apr 21 17:52:00 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS140418-02	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	04/18/2014	Dilution Factor:	1
Date Analyzed:	04/21/2014	% Moisture:	0
Data File:	QB2486.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\04-21-14\
Data File : QB2486.D
Signal(s) : FID2B.ch
Acq On : 21 Apr 14 6:52 pm
Operator : JN
Sample : TPH-DRO,BLKS140418-02,S,10.0g,0,04/18/14,15
Misc : 140418-02,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 22 15:46:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0421.M
Quant Title :
QLast Update : Mon Apr 21 17:52:00 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.935	23606282	76.190	ng	m
Spiked Amount 100.000		Recovery = 76.19%			
Target Compounds					

(f)=RT Delta > 1/2 Window (m)=manual int.

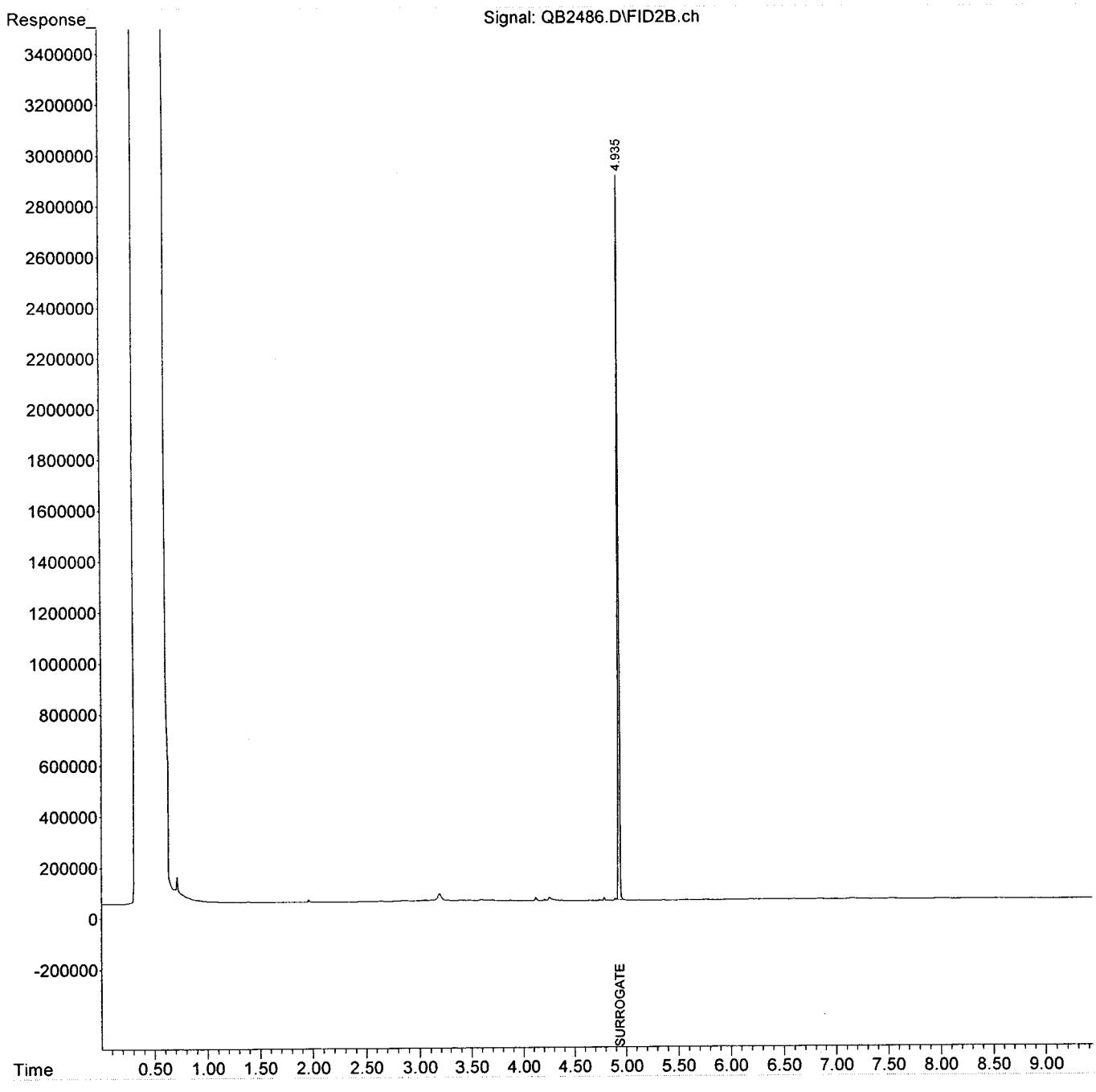
E14-03328 0150

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\04-21-14\
Data File : QB2486.D
Signal(s) : FID2B.ch
Acq On : 21 Apr 14 6:52 pm
Operator : JN
Sample : TPH-DRO,BLKS140418-02,S,10.0g,0,04/18/14,15
Misc : 140418-02,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Apr 22 15:46:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0421.M
Quant Title :
QLast Update : Mon Apr 21 17:52:00 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			4/18/14 09:56		4/18/14 10:53		4/18/14 11:50		4/18/14 12:47	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	23.9	95.6	23.6	94.4	24.5	98.0	24.0	96.0
Antimony	0.250	25.0	24.2	96.8	26.1	104	24.0	96.0	23.7	94.8
Arsenic	0.250	25.0	24.3	97.2	23.4	93.6	24.3	97.2	24.1	96.4
Barium	0.500	25.0	24.1	96.4	25.6	102	24.0	96.0	23.9	95.6
Beryllium	0.200	25.0	23.7	94.8	24.3	97.2	23.2	92.8	22.8	91.2
Cadmium	0.125	25.0	24.7	98.8	25.7	103	25.0	100	24.7	98.8
Calcium	5.00	250	233	93.2	226	90.4	239	95.6	235	94.0
Chromium	0.500	25.0	24.3	97.2	23.0	92.0	23.9	95.6	23.9	95.6
Cobalt	0.500	25.0	24.1	96.4	22.9	91.6	23.8	95.2	23.8	95.2
Copper	0.500	25.0	24.1	96.4	22.7	90.8	23.9	95.6	23.7	94.8
Iron	5.00	250	248	99.2	238	95.2	248	99.2	247	98.8
Lead	0.500	25.0	22.9	91.6	24.5	98.0	22.9	91.6	22.5	90.0
Magnesium	5.00	250	255	102	244	97.6	255	102	256	102
Manganese	0.250	25.0	24.3	97.2	23.3	93.2	24.2	96.8	24.0	96.0
Mercury	0.120	5.00	5.32	106	5.34	107	5.31	106	5.29	106
Nickel	0.500	25.0	24.4	97.6	23.0	92.0	24.4	97.6	24.2	96.8
Potassium	5.00	250	241	96.4	229	91.6	241	96.4	241	96.4
Selenium	0.500	25.0	23.8	95.2	22.7	90.8	23.1	92.4	24.7	98.8
Silver	0.125	5.00	4.98	99.6	4.67	93.4	5.13	103	5.04	101
Sodium	5.00	250	245	98.0	232	92.8	242	96.8	245	98.0
Thallium	0.125	25.0	23.1	92.4	24.8	99.2	23.1	92.4	23.2	92.8
Vanadium	0.500	25.0	24.3	97.2	22.9	91.6	23.9	95.6	23.9	95.6
Zinc	0.500	25.0	24.1	96.4	22.9	91.6	23.9	95.6	24.0	96.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			4/18/14 13:44		4/18/14 14:41		4/18/14 15:39			
	INST.	ICV & CCV	CCV		CCV		CCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	24.9	99.6	25.4	102	23.3	93.2		
Antimony	0.250	25.0	24.0	96.0	23.9	95.6	23.4	93.6		
Arsenic	0.250	25.0	24.1	96.4	24.1	96.4	24.3	97.2		
Barium	0.500	25.0	23.9	95.6	23.4	93.6	23.5	94.0		
Beryllium	0.200	25.0	23.0	92.0	22.9	91.6	23.5	94.0		
Cadmium	0.125	25.0	24.6	98.4	24.7	98.8	24.3	97.2		
Calcium	5.00	250	235	94.0	237	94.8	227	90.8		
Chromium	0.500	25.0	23.6	94.4	23.7	94.8	23.7	94.8		
Cobalt	0.500	25.0	23.4	93.6	23.6	94.4	23.6	94.4		
Copper	0.500	25.0	23.4	93.6	23.5	94.0	24.4	97.6		
Iron	5.00	250	246	98.4	249	99.6	243	97.2		
Lead	0.500	25.0	23.1	92.4	22.6	90.4	24.1	96.4		
Magnesium	5.00	250	254	102	254	102	244	97.6		
Manganese	0.250	25.0	23.7	94.8	23.9	95.6	23.3	93.2		
Mercury	0.120	5.00	5.23	105	5.06	101	5.03	101		
Nickel	0.500	25.0	23.7	94.8	23.7	94.8	24.0	96.0		
Potassium	5.00	250	242	96.8	243	97.2	238	95.2		
Selenium	0.500	25.0	23.9	95.6	23.6	94.4	24.2	96.8		
Silver	0.125	5.00	5.07	101	4.98	99.6	4.97	99.4		
Sodium	5.00	250	242	96.8	241	96.4	246	98.4		
Thallium	0.125	25.0	23.3	93.2	23.1	92.4	22.9	91.6		
Vanadium	0.500	25.0	23.6	94.4	23.7	94.8	23.6	94.4		
Zinc	0.500	25.0	23.4	93.6	23.7	94.8	23.5	94.0		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

		4/18/14 10:05	4/18/14 11:02	4/18/14 11:59	4/18/14 12:56	4/18/14 13:53	4/18/14 14:50
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Aluminum	0.0005	ND	ND	ND	ND	ND	ND
Antimony	0.00025	ND	ND	ND	ND	ND	ND
Arsenic	0.00025	ND	ND	ND	ND	ND	ND
Barium	0.0005	ND	ND	ND	ND	ND	ND
Beryllium	0.0002	ND	ND	ND	ND	ND	ND
Cadmium	0.000125	ND	ND	ND	ND	ND	ND
Calcium	0.005	ND	ND	ND	ND	ND	ND
Chromium	0.0005	ND	ND	ND	ND	ND	ND
Cobalt	0.0005	ND	ND	ND	ND	ND	ND
Copper	0.0005	ND	ND	ND	ND	ND	ND
Iron	0.005	ND	ND	ND	ND	ND	ND
Lead	0.0005	ND	ND	ND	ND	ND	ND
Magnesium	0.005	ND	ND	ND	ND	ND	ND
Manganese	0.00025	ND	ND	ND	ND	ND	ND
Mercury	0.00012	ND	ND	ND	ND	ND	ND
Nickel	0.0005	ND	ND	ND	ND	ND	ND
Potassium	0.005	ND	ND	ND	ND	ND	ND
Selenium	0.0005	ND	ND	ND	ND	ND	ND
Silver	0.000125	ND	ND	ND	ND	ND	ND
Sodium	0.005	ND	ND	ND	ND	ND	ND
Thallium	0.000125	ND	ND	ND	ND	ND	ND
Vanadium	0.0005	ND	ND	ND	ND	ND	ND
Zinc	0.0005	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

4/18/14 15:47

ANALYTE	INST. MDL	CCB					
Aluminum	0.0005	ND					
Antimony	0.00025	ND					
Arsenic	0.00025	ND					
Barium	0.0005	ND					
Beryllium	0.0002	ND					
Cadmium	0.000125	ND					
Calcium	0.005	ND					
Chromium	0.0005	ND					
Cobalt	0.0005	ND					
Copper	0.0005	ND					
Iron	0.005	ND					
Lead	0.0005	ND					
Magnesium	0.005	ND					
Manganese	0.00025	ND					
Mercury	0.00012	ND					
Nickel	0.0005	ND					
Potassium	0.005	ND					
Selenium	0.0005	ND					
Silver	0.000125	ND					
Sodium	0.005	ND					
Thallium	0.000125	ND					
Vanadium	0.0005	ND					
Zinc	0.0005	ND					

METALS QUALITY CONTROL

BLANK 2 RESULTS SUMMARY

04/18/2014 01:05 PM

Batch (Page) #: 168
Associated Lab Case for Blank 2: E14-03286, E14-03295, E14-03305, E14-03308, E14-03328, E14-03339, E14-03351

Matrix: Soil Unit: ppm (mg/kg) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKS140417-02
Aluminum	0.500	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.500	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	5.00	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	5.00	ND
Lead	0.500	ND
Magnesium	5.00	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	5.00	ND
Selenium	0.500	ND
Silver	0.125	ND
Sodium	5.00	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	0.500	ND

Associated Sample for Blank 2:
03286-001~008; 03295-001; 03305-001; 03308-001
03308-002~003; 03328-001; 03339-001~003; 03351-001
03351-002

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305 E14-03339

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL LIMIT %R
	SOL A	SOL B	SOL A	SOL A+B	%R	
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	90500	86300	86.3	NA
Calcium	100000	-	91000	88200	88.2	NA
Iron	100000	-	89600	87000	87.0	NA
Potassium	100000	-	93400	90400	90.4	NA
Magnesium	100000	-	92800	89300	89.3	NA
Sodium	100000	-	94200	91200	91.2	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2020	2000	100	NA
Titanium	2000	-	1860	1790	89.5	NA
Silver	-	20.0	-	17.5	87.5	80-120
Arsenic	-	20.0	-	20.6	103	80-120
Cadmium	-	20.0	-	19.8	99.0	80-120
Cobalt	-	20.0	-	20.0	100	80-120
Chromium	-	20.0	-	19.7	98.5	80-120
Copper	-	20.0	-	18.8	94.0	80-120
Manganese	-	20.0	-	21.2	106	80-120
Nickel	-	20.0	-	19.5	97.5	80-120
Zinc	-	20.0	-	21.7	109	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03295, E14-03305, E14-03308, E14-03328
E14-03339, E14-03351

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS140417-01			LCSS140417-02		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	192	96.0	200	194	97.0
Antimony	40.0	38.1	95.3	40.0	37.7	94.3
Arsenic	40.0	39.1	97.8	40.0	39.1	97.8
Barium	40.0	38.3	95.8	40.0	38.1	95.3
Beryllium	40.0	37.3	93.3	40.0	36.9	92.3
Cadmium	40.0	38.9	97.3	40.0	39.2	98.0
Calcium	200	187	93.5	200	183	91.5
Chromium	40.0	38.4	96.0	40.0	38.2	95.5
Cobalt	40.0	38.3	95.8	40.0	37.9	94.8
Copper	40.0	38.3	95.8	40.0	37.9	94.8
Iron	200	196	98.0	200	196	98.0
Lead	40.0	39.1	97.8	40.0	39.2	98.0
Magnesium	200	200	100	200	203	102
Manganese	40.0	38.5	96.3	40.0	38.5	96.3
Mercury	1.00	0.949	94.9	1.00	0.945	94.5
Nickel	40.0	38.8	97.0	40.0	38.5	96.3
Potassium	200	189	94.5	200	193	96.5
Selenium	40.0	39.3	98.3	40.0	39.9	99.8
Silver	40.0	34.3	85.8	40.0	34.8	87.0
Sodium	200	190	95.0	200	191	95.5
Thallium	40.0	37.3	93.3	40.0	37.0	92.5
Vanadium	40.0	38.6	96.5	40.0	38.5	96.3
Zinc	40.0	38.7	96.8	40.0	38.8	97.0

(1) Control Limits % Recovery = 80-120%

LCSS140417-01 4/18/14 10:27
03340-001~013; 03341-001~007

LCSS140417-02 4/18/14 13:09
03286-001~008; 03295-001; 03305-001; 03308-001
03308-002~003; 03328-001; 03339-001~003; 03351-001
03351-002

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			4/18/14 10:01		4/18/14 10:58		4/18/14 11:55		4/18/14 12:51	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.591	118	0.569	114	0.626	125	0.590	118
Antimony	0.250	0.500	0.618	124	0.620	124	0.560	112	0.558	112
Arsenic	0.250	0.500	0.545	109	0.542	108	0.482	96.4	0.493	98.6
Barium	0.500	0.500	0.493	98.6	0.496	99.2	0.473	94.6	0.453	90.6
Beryllium	0.200	0.500	0.517	103	0.495	99.0	0.465	93.0	0.472	94.4
Cadmium	0.125	0.500	0.596	119	0.533	107	0.528	106	0.545	109
Calcium	5.00	5.00	4.65	93.0	4.89	97.8	5.74	115	6.11	122
Chromium	0.500	0.500	0.427	85.4	0.386	77.2	0.397	79.4	0.381	76.2
Cobalt	0.500	0.500	0.516	103	0.486	97.2	0.505	101	0.521	104
Copper	0.500	0.500	0.498	99.6	0.487	97.4	0.544	109	0.414	82.8
Iron	5.00	5.00	3.68	73.6	3.58	71.6	3.73	74.6	3.68	73.6
Lead	0.500	0.500	0.551	110	0.599	120	0.630	126	0.583	117
Magnesium	5.00	5.00	4.36	87.2	4.37	87.4	4.22	84.4	4.39	87.8
Manganese	0.250	0.500	0.502	100	0.486	97.2	0.483	96.6	0.493	98.6
Nickel	0.500	0.500	0.449	89.8	0.430	86.0	0.439	87.8	0.433	86.6
Potassium	5.00	5.00	5.92	118	5.85	117	5.98	120	5.99	120
Selenium	0.500	0.500	0.642	128	0.543	109	0.634	127	0.542	108
Silver	0.125	0.500	0.502	100	0.453	90.6	0.454	90.8	0.459	91.8
Sodium	5.00	5.00	4.67	93.4	4.52	90.4	4.43	88.6	4.37	87.4
Thallium	0.125	0.500	0.532	106	0.532	106	0.480	96.0	0.473	94.6
Vanadium	0.500	0.500	0.594	119	0.514	103	0.487	97.4	0.538	108
Zinc	0.500	0.500	0.518	104	0.500	100	0.525	105	0.482	96.4

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03328, E14-03351, E14-03295, E14-03308, E14-03305
E14-03339

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			4/18/14 13:48		4/18/14 14:46		4/18/14 15:43			
	INST.	ICV & CCV	LLCCV		LLCCV		LLCCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.565	113	0.572	114	0.618	124		
Antimony	0.250	0.500	0.581	116	0.556	111	0.537	107		
Arsenic	0.250	0.500	0.530	106	0.546	109	0.523	105		
Barium	0.500	0.500	0.483	96.6	0.475	95.0	0.483	96.6		
Beryllium	0.200	0.500	0.482	96.4	0.476	95.2	0.511	102		
Cadmium	0.125	0.500	0.521	104	0.522	104	0.503	101		
Calcium	5.00	5.00	6.24	125	5.74	115	6.06	121		
Chromium	0.500	0.500	0.381	76.2	0.394	78.8	0.368	73.6		
Cobalt	0.500	0.500	0.502	100	0.500	100	0.491	98.2		
Copper	0.500	0.500	0.563	113	0.527	105	0.543	109		
Iron	5.00	5.00	4.16	83.2	4.25	85.0	4.79	95.8		
Lead	0.500	0.500	0.591	118	0.506	101	0.505	101		
Magnesium	5.00	5.00	4.40	88.0	4.40	88.0	5.39	108		
Manganese	0.250	0.500	0.515	103	0.495	99.0	0.435	87.0		
Nickel	0.500	0.500	0.440	88.0	0.439	87.8	0.487	97.4		
Potassium	5.00	5.00	6.05	121	5.95	119	6.27	125		
Selenium	0.500	0.500	0.528	106	0.470	94.0	0.354	70.8		
Silver	0.125	0.500	0.448	89.6	0.438	87.6	0.448	89.6		
Sodium	5.00	5.00	4.53	90.6	4.40	88.0	5.94	119		
Thallium	0.125	0.500	0.498	99.6	0.472	94.4	0.472	94.4		
Vanadium	0.500	0.500	0.480	96.0	0.516	103	0.617	123		
Zinc	0.500	0.500	0.557	111	0.550	110	0.519	104		

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 168

SDG #: E14-03340, E14-03341, E14-03286, E14-03295, E14-03305, E14-03308, E14-03328
E14-03339, E14-03351

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	4/18/14 10:44 SSR1	4/18/14 10:31 SR1	%R1	SA1	4/18/14 13:26 SSR2	4/18/14 13:13 SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	9060	8400	NC	500	1330	1140	84.8	224	75-125
Antimony	96.8	2.89	93.9	100	42.6	ND	95.1	44.8	75-125
Arsenic	114	16.8	97.2	100	44.5	1.09	96.9	44.8	75-125
Barium	159	61.9	97.1	100	61.6	18.0	97.3	44.8	75-125
Beryllium	94.4	0.370	94.0	100	41.6	ND	92.9	44.8	75-125
Cadmium	97.4	1.53	95.9	100	43.8	0.193	97.3	44.8	75-125
Calcium	75000	73700	NC	500	793	587	92.0	224	75-125
Chromium	106	11.6	94.4	100	71.2	28.9	94.4	44.8	75-125
Cobalt	96.7	4.44	92.3	100	43.8	1.26	95.0	44.8	75-125
Copper	143	51.6	91.4	100	52.3	9.78	94.9	44.8	75-125
Iron	11600	11100	100	500	2350	2150	89.3	224	75-125
Lead	2500	2390	110	100	127	83.7	96.7	44.8	75-125
Magnesium	5100	4560	108	500	693	472	98.7	224	75-125
Manganese	278	183	95.0	100	114	73.1	91.3	44.8	75-125
Mercury	1.21	0.210	100	1.00	2.14	1.18	85.7	1.12	75-125
Nickel	103	9.15	93.9	100	45.6	2.48	96.3	44.8	75-125
Potassium	1120	634	97.2	500	419	201	97.3	224	75-125
Selenium	99.3	1.63	97.7	100	43.7	0.677	96.0	44.8	75-125
Silver	86.1	1.19	84.9	100	38.9	0.422	85.9	44.8	75-125
Sodium	836	349	97.4	500	573	353	98.2	224	75-125
Thallium	90.7	0.362	90.3	100	40.8	0.163	90.7	44.8	75-125
Vanadium	112	16.1	95.9	100	46.5	3.43	96.1	44.8	75-125
Zinc	223	128	95.0	100	122	80.2	93.3	44.8	75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-03340-001
% Solids: 100
QC Sample 1 for following samples:
03340-001~013; 03341-001~007

QC Sample 2: E14-03286-004
% Solids: 89.1
QC Sample 2 for following samples:
03286-001~008; 03295-001; 03305-001; 03308-001
03308-002~003; 03328-001; 03339-001~003; 03351-001
03351-002

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 168
SDG #: E14-03340, E14-03341, E14-03286, E14-03295, E14-03305, E14-03308, E14-03328
E14-03339, E14-03351

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	4/18/14 10:31 S1	4/18/14 10:36 D1	RPD1	CONTROL LIMIT 2	4/18/14 13:13 S2	4/18/14 13:18 D2	RPD2
Aluminum	20	8400	8600	2.35	20	1140	1100	3.57
Antimony	20	2.89	2.74	5.33	NA	ND	ND	NC
Arsenic	20	16.8	17.3	2.93	20	1.09	0.917	17.2
Barium	20	61.9	62.8	1.44	20	18.0	18.3	1.65
Beryllium	20	0.370	0.379	2.40	NA	ND	ND	NC
Cadmium	20	1.53	1.53	0	20	0.193	0.185	4.23
Calcium	20	73700	75500	2.41	20	587	568	3.29
Chromium	20	11.6	12.0	3.39	20	28.9	28.1	2.81
Cobalt	20	4.44	4.49	1.12	20	1.26	1.21	4.05
Copper	20	51.6	52.4	1.54	20	9.78	9.33	4.71
Iron	20	11100	11300	1.79	20	2150	2110	1.88
Lead	20	2390	2440	2.07	20	83.7	84.5	0.951
Magnesium	20	4560	4660	2.17	20	472	461	2.36
Manganese	20	183	186	1.63	20	73.1	71.9	1.66
Mercury	20	0.210	0.211	0.475	20	1.18	1.18	0
Nickel	20	9.15	9.49	3.65	20	2.48	2.43	2.04
Potassium	20	634	649	2.34	20	201	193	4.06
Selenium	20	1.63	1.48	9.65	20	0.677	0.658	2.85
Silver	20	1.19	1.22	2.49	20	0.422	0.425	0.708
Sodium	20	349	355	1.70	20	353	346	2.00
Thallium	20	0.362	0.336	7.45	20	0.163	0.150	8.31
Vanadium	20	16.1	16.2	0.619	20	3.43	3.31	3.56
Zinc	20	128	132	3.08	20	80.2	78.8	1.76

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-03340-001
% Solids: 100
QC Sample 1 for following samples:
03340-001~013; 03341-001~007

QC Sample 2: E14-03286-004
% Solids: 89.1
QC Sample 2 for following samples:
03286-001~008; 03295-001; 03305-001; 03308-001
03308-002~003; 03328-001; 03339-001~003; 03351-001
03351-002

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 2

Batch (Page) #: 168
SDG #: E14-03286, E14-03295, E14-03305, E14-03308, E14-03328, E14-03339, E14-03351

Matrix: Soil Concentration/Units: ppm (mg/kg)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	4/18/14 13:13 SR	4/18/14 13:22 SDR	% Difference	4/18/14 13:31 SPR	SA	% Recovery
Aluminum	1140	1130	0.881			
Antimony	ND	ND	NC	39.8	44.8	88.8
Arsenic	1.09	ND	NC	41.5	44.8	90.2
Barium	18.0	17.7	1.68			
Beryllium	ND	ND	NC	38.0	44.8	84.8
Cadmium	0.193	ND	NC	40.0	44.8	88.9
Calcium	587	573	2.41			
Chromium	28.9	28.3	2.10			
Cobalt	1.26	ND	NC	40.4	44.8	87.4
Copper	9.78	8.91	9.31	49.0	44.8	87.5
Iron	2150	2130	0.935			
Lead	83.7	80.6	3.77			
Magnesium	472	473	0.212			
Manganese	73.1	73.6	0.682			
Nickel	2.48	ND	NC	42.8	44.8	90.0
Potassium	201	186	7.75			
Selenium	0.677	ND	NC	41.7	44.8	91.6
Silver	0.422	ND	NC	39.1	44.8	86.3
Sodium	353	335	5.23			
Thallium	0.163	ND	NC	38.8	44.8	86.2
Vanadium	3.43	3.18	7.56	43.6	44.8	89.7
Zinc	80.2	77.2	3.81			

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample2: E14-03286-004
QC Sample 2 for following samples:
03286-001~008; 03295-001; 03305-001; 03308-001
03308-002~003; 03328-001; 03339-001~003; 03351-001
03351-002

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG168
April 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	1276974		95322		712915		4410856		5396850		3192932		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	893882	70	66725	70	499040	70	3087599	70	3777795	70	2235052	70	
	Upper Limit	1532369	120	114386	120	855498	120	5293027	120	6476220	120	3831518	120	
003CALS.d	STD1	1308119	102	96856	102	728419	102	4410806	100	5495080	102	3190405	100	
004CALS.d	STD2	1265556	99	104081	109	698689	98	4260208	97	5262639	98	3084060	97	
005CALS.d	STD3	1256087	98	91949	96	694327	97	4270947	97	5303096	98	3098216	97	
006CALS.d	STD4	1254356	98	91334	96	698059	98	4358581	99	5400216	100	3215928	101	
007CALS.d	STD5	1230666	96	90460	95	693307	97	4226207	96	5439074	101	3168018	99	
009_CCV.d	ICV	1284158	101	88276	93	684108	96	4253181	96	5397391	100	3205210	100	
010LCCV.d	LLICV	1224708	96	86860	91	654904	92	4041926	92	4968939	92	3032628	95	
011_ICB.d	ICB	1269944	99	89810	94	682236	96	4255718	96	5353769	99	3153375	99	
012SMPL.d	E14-03282-001DUP	1193704	93	82955	87	682952	96	3981009	90	5282215	98	2987859	94	
013SMPL.d	E14-03225-002	1282163	100	90729	95	704714	99	4243268	96	5397427	100	3196383	100	
015SMPL.d	BLKS140417-01	1304130	102	87922	92	692001	97	4288231	97	5413228	100	3213629	101	
016SMPL.d	LCSS140417-01	1286465	101	86321	91	677827	95	4206420	95	5330163	99	3155818	99	
017SMPL.d	E14-03340-001	1295198	101	86278	91	681392	96	4129830	94	5351118	99	3178146	100	
018SMPL.d	E14-03340-001DUP	1286345	101	87465	92	681669	96	4120081	93	5371735	100	3160098	99	
019SMPL.d	E14-03340-001SD	1292851	101	88337	93	681559	96	4188144	95	5385169	100	3186412	100	
020SMPL.d	E14-03340-001MS	1297893	102	87632	92	677406	95	4127187	94	5361106	99	3180311	100	
021SMPL.d	E14-03340-001PS	1288317	101	88317	93	679074	95	4132190	94	5367446	99	3156638	99	
022_CCV.d	CCV	1283820	101	93268	98	656273	92	4018201	91	5010441	93	3024050	95	
023LCCV.d	LLCCV	1321091	103	88000	92	677077	95	4209616	95	5309712	98	3181526	100	
024_CCB.d	CCB	1330575	104	87152	91	677704	95	4233070	96	5389490	100	3205993	100	
025SMPL.d	E14-03340-002	1314258	103	86550	91	673726	95	4139988	94	5385282	100	3170002	99	
026SMPL.d	E14-03340-003	1307725	102	88074	92	676904	95	4121481	93	5352547	99	3157496	99	
027SMPL.d	E14-03340-004	1315722	103	87573	92	675995	95	4131569	94	5364939	99	3182810	100	
028SMPL.d	E14-03340-005	1320505	103	87815	92	676887	95	4121329	93	5350712	99	3193812	100	
029SMPL.d	E14-03340-006	1339719	105	86500	91	674710	95	4155969	94	5379478	100	3225949	101	
030SMPL.d	E14-03340-007	1319594	103	86038	90	673294	94	4100427	93	5317061	99	3169816	99	
031SMPL.d	E14-03340-008	1311866	103	85360	90	661856	93	4043095	92	5255705	97	3117766	98	
032SMPL.d	E14-03340-009	1305121	102	90050	94	663377	93	4044281	92	5300696	98	3169070	99	
033SMPL.d	E14-03340-010	1303625	102	85403	90	663423	93	4073926	92	5307896	98	3169007	99	
034SMPL.d	E14-03340-011	1299425	102	84936	89	665252	93	4038237	92	5322377	99	3164789	99	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E14-03328
0166

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG168
April 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	1276974		95322		712915		4410856		5396850		3192932		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	893882	70	66725	70	499040	70	3087599	70	3777795	70	2235052	70	
	Upper Limit	1532369	120	114386	120	855498	120	5293027	120	6476220	120	3831518	120	
035_CCV.d	CCV	1321756	104	86940	91	663333	93	4183529	95	5314041	98	3202314	100	
036LCCV.d	LLCCV	1330824	104	86283	91	660340	93	4163356	94	5294744	98	3178563	100	
037_CCB.d	CCB	1324515	104	84806	89	661421	93	4144285	94	5265156	98	3156213	99	
038SMPL.d	E14-03340-012	1324018	104	84807	89	663053	93	4069492	92	5326715	99	3175535	99	
039SMPL.d	E14-03340-013	1309431	103	85236	89	668784	94	4055272	92	5352826	99	3170851	99	
040SMPL.d	E14-03341-001	1308649	102	84660	89	661593	93	4037636	92	5322005	99	3108751	97	
041SMPL.d	E14-03341-002	1324377	104	85460	90	665218	93	4075062	92	5317889	99	3141163	98	
042SMPL.d	E14-03341-003	1320161	103	85673	90	666623	94	4067392	92	5335627	99	3157980	99	
043SMPL.d	E14-03341-004	1093778	86	85585	90	591275	83	3511527	80	4474499	83	2548649	80	
044SMPL.d	E14-03341-005	1334478	105	84948	89	669572	94	4081498	93	5373791	100	3152479	99	
045SMPL.d	E14-03341-006	1328220	104	85206	89	662770	93	4071684	92	5313110	98	3148461	99	
046SMPL.d	E14-03341-007	1343680	105	85809	90	666163	93	4072413	92	5326078	99	3124173	98	
048_CCV.d	CCV	1368879	107	85726	90	667109	94	4193946	95	5359220	99	3209845	101	
049LCCV.d	LLCCV	1363057	107	86085	90	670047	94	4167259	94	5294439	98	3188855	100	
050_CCB.d	CCB	1382975	108	85968	90	687493	96	4264727	97	5386043	100	3234933	101	
052SMPL.d	BLKS140417-02	1340293	105	83667	88	659358	92	4092838	93	5203791	96	3116095	98	
053SMPL.d	LCSS140417-02	1333876	104	83808	88	658951	92	4076673	92	5223934	97	3099770	97	
054SMPL.d	E14-03286-004	1342113	105	82393	86	657997	92	4115607	93	5311185	98	3182216	100	
055SMPL.d	E14-03286-004DUP	1338248	105	85790	90	658545	92	4117396	93	5264137	98	3139013	98	
056SMPL.d	E14-03286-004SD	1341089	105	84432	89	670928	94	4139921	94	5275903	98	3127363	98	
057SMPL.d	E14-03286-004MS	1321119	103	83830	88	654650	92	4053648	92	5237350	97	3129525	98	
058SMPL.d	E14-03286-004PS	1321054	103	84065	88	665118	93	4062865	92	5248863	97	3111330	97	
059SMPL.d	E14-03286-001	1320980	103	85276	89	667440	94	4113619	93	5273764	98	3166812	99	
060SMPL.d	E14-03286-002	1358228	106	89134	94	696730	98	4212388	96	5375289	100	3205775	100	
061_CCV.d	CCV	1345121	105	90652	95	671702	94	4223230	96	5318014	99	3159742	99	
062LCCV.d	LLCCV	1337071	105	86324	91	665217	93	4188349	95	5270190	98	3169452	99	
063_CCB.d	CCB	1407707	110	87375	92	704988	99	4442692	101	5629935	104	3360903	105	
064SMPL.d	E14-03286-003	1360187	107	89879	94	698310	98	4230127	96	5433075	101	3189081	100	
065SMPL.d	E14-03286-005	1365494	107	90395	95	714386	100	4229768	96	5409390	100	3212433	101	
066SMPL.d	E14-03286-006	1384220	108	91782	96	702319	99	4273985	97	5470105	101	3187934	100	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E14-03328 01677

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG168
April 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	1276974		95322		712915		4410856		5396850		3192932		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	893882	70	66725	70	499040	70	3087599	70	3777795	70	2235052	70	
	Upper Limit	1532369	120	114386	120	855498	120	5293027	120	6476220	120	3831518	120	
067SMPL.d	E14-03286-007	1367215	107	90507	95	703113	99	4226186	96	5386194	100	3260686	102	
068SMPL.d	E14-03286-008	1314092	103	86430	91	675781	95	4118892	93	5389400	100	3231337	101	
069SMPL.d	E14-03328-001	1327590	104	89696	94	703549	99	4223664	96	5417023	100	3266597	102	
070SMPL.d	E14-03351-001	1354431	106	93072	98	710486	100	4308104	98	5424287	101	3168722	99	
071SMPL.d	E14-03351-002	1368560	107	92377	97	712868	100	4310344	98	5446303	101	3169658	99	
072SMPL.d	E14-03295-001	1387922	109	92827	97	713313	100	4259115	97	5430135	101	3170363	99	
073SMPL.d	E14-03308-001	1377304	108	92259	97	711560	100	4310809	98	5464869	101	3183822	100	
074_CCV.d	CCV	1334392	104	91553	96	682773	96	4282013	97	5339881	99	3176959	99	
075LCCV.d	LLCCV	1326539	104	88771	93	683519	96	4280357	97	5350526	99	3179595	100	
076_CCB.d	CCB	1325728	104	91573	96	681606	96	4278911	97	5353973	99	3169299	99	
077SMPL.d	E14-03308-002	1362438	107	90761	95	695417	98	4263284	97	5406245	100	3174415	99	
078SMPL.d	E14-03308-003	1355456	106	91236	96	700389	98	4232816	96	5409871	100	3155397	99	
079SMPL.d	E14-03305-001	1372653	107	91348	96	718277	101	4311887	98	5440224	101	3276904	103	
080SMPL.d	E14-03339-001	1386491	109	90458	95	692385	97	4290353	97	5432213	101	3193080	100	
081SMPL.d	E14-03339-002	1348922	106	90219	95	700847	98	4263810	97	5423208	100	3187116	100	
082SMPL.d	E14-03339-003	1346516	105	90060	94	698618	98	4219468	96	5422616	100	3130714	98	
084ICSA.d	ICSA	1109549	87	85114	89	713638	100	3737517	85	5171506	96	2806250	88	
085ICSB.d	ICSAB	1012701	79	86294	91	715283	100	3764479	85	5210481	97	2825804	89	
087_CCV.d	CCV	1080632	85	86300	91	688740	97	4304743	98	5482380	102	3241456	102	
088LCCV.d	LLCCV	1064558	83	85465	90	687312	96	4252995	96	5380976	100	3202559	100	
089_CCB.d	CCB	1073798	84	85181	89	689604	97	4277902	97	5427118	101	3227689	101	

E14-03328 0168

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			4/22/14 15:52		4/22/14 16:49		4/22/14 17:46		4/22/14 18:42	
ANALYTE	INST. MDL	ICV & CCV TRUE	ICV FOUND	ICV % R	CCV FOUND	CCV % R	CCV FOUND	CCV % R	CCV FOUND	CCV % R
Arsenic	0.500	25.0	25.1	100	24.3	97.2	24.4	97.6	24.3	97.2
Barium	0.500	25.0	24.8	99.2	24.7	98.8	24.6	98.4	24.6	98.4
Cadmium	0.125	25.0	25.2	101	25.2	101	24.7	98.8	25.0	100
Chromium	0.500	25.0	25.2	101	24.5	98.0	24.6	98.4	24.5	98.0
Lead	0.250	25.0	23.9	95.6	23.7	94.8	23.3	93.2	23.1	92.4
Mercury	0.150	5.00	5.22	104	5.26	105	5.24	105	5.22	104
Nickel	0.500	25.0	26.3	105	25.7	103	25.5	102	25.5	102
Selenium	0.500	25.0	24.6	98.4	24.2	96.8	23.3	93.2	25.0	100
Silver	0.125	5.00	4.64	92.8	4.65	93.0	4.64	92.8	4.55	91.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

4/22/14 19:13

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	25.0	24.1	96.4						
Barium	0.500	25.0	24.1	96.4						
Cadmium	0.125	25.0	24.6	98.4						
Chromium	0.500	25.0	24.2	96.8						
Lead	0.250	25.0	23.0	92.0						
Nickel	0.500	25.0	25.2	101						
Selenium	0.500	25.0	23.2	92.8						
Silver	0.125	5.00	4.50	90.0						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: TCLP Method: 6020A Concentration/Units: ppm (mg/L)

		4/22/14 16:01	4/22/14 16:58	4/22/14 17:54	4/22/14 18:51	4/22/14 19:22	
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Arsenic	0.0005	ND	ND	ND	ND	ND	
Barium	0.0005	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Lead	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00015	ND	ND	ND	ND		
Nickel	0.0005	ND	ND	ND	ND	ND	
Selenium	0.0005	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

04/22/2014 04:23 PM

Batch (Page) #: 175
Associated Lab Case for Blank 1: E14-02818, E14-02881, E14-03295, E14-03328, E14-03366, E14-03379, E14-03426 E14-03436, E14-03440, E14-03446

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKT140422-01
Arsenic	0.100	ND
Barium	0.100	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.100	ND
Silver	0.025	ND

Associated Sample for Blank 1:
02818-003,010~011; 02881-005,007; 03295-001
03328-001; 03366-001; 03379-001; 03426-001
03436-001~003; 03440-001; 03446-001~006

METALS QUALITY CONTROL

TUMBLE BLANK RESULTS SUMMARY

Batch (Page) #: 175
Associated Lab 03328
Case:

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	TCLP140417 BLANK
Arsenic	0.1	ND
Barium	0.1	ND
Cadmium	0.025	ND
Chromium	0.1	ND
Lead	0.05	ND
Mercury	0.0003	ND
Nickel	0.1	ND
Selenium	0.1	ND
Silver	0.025	ND

Associated Sample ID:

03328-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL LIMIT %R
	SOL A	SOL B	SOL A	SOL A+B	%R	
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	84200	85400	85.4	NA
Calcium	100000	-	87400	88500	88.5	NA
Iron	100000	-	88700	89300	89.3	NA
Potassium	100000	-	86800	88300	88.3	NA
Magnesium	100000	-	85100	86200	86.2	NA
Sodium	100000	-	90500	91800	91.8	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2100	2150	108	NA
Titanium	2000	-	1880	1900	95.0	NA
Silver	-	20.0	-	18.5	92.5	80-120
Arsenic	-	20.0	-	19.5	97.5	80-120
Cadmium	-	20.0	-	19.0	95.0	80-120
Cobalt	-	20.0	-	19.1	95.5	80-120
Chromium	-	20.0	-	19.1	95.5	80-120
Copper	-	20.0	-	17.7	88.5	80-120
Manganese	-	20.0	-	20.4	102	80-120
Nickel	-	20.0	-	19.0	95.0	80-120
Zinc	-	20.0	-	19.8	99.0	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 175

SDG #: E14-02818, E14-02881, E14-03295, E14-03328, E14-03366, E14-03379, E14-03426
E14-03436, E14-03440, E14-03446

Matrix: TCLP Unit: ppm (mg/L)

ANALYTE	LCST140422-01					
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	4.00	4.45	111			
Barium	4.00	4.52	113			
Cadmium	4.00	4.49	112			
Chromium	4.00	4.47	112			
Lead	4.00	3.88	97.0			
Mercury	0.010	0.00944	94.4			
Nickel	4.00	4.52	113			
Selenium	4.00	4.56	114			
Silver	4.00	4.13	103			

(1) Control Limits % Recovery = 80-120%

LCST140422-01 4/22/14 16:27

02818-003,010~011; 02881-005,007; 03295-001
03328-001; 03366-001; 03379-001; 03426-001
03436-001~003; 03440-001; 03446-001~006

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			4/22/14 15:56		4/22/14 16:53		4/22/14 17:50		4/22/14 18:47	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	0.500	0.526	105	0.479	95.8	0.525	105	0.474	94.8
Barium	0.500	0.500	0.417	83.4	0.403	80.6	0.425	85.0	0.407	81.4
Cadmium	0.125	0.500	0.529	106	0.489	97.8	0.509	102	0.471	94.2
Chromium	0.500	0.500	0.444	88.8	0.414	82.8	0.420	84.0	0.449	89.8
Lead	0.250	0.500	0.431	86.2	0.420	84.0	0.412	82.4	0.400	80.0
Nickel	0.500	0.500	0.404	80.8	0.384	76.8	0.400	80.0	0.367	73.4
Selenium	0.500	0.500	0.636	127	0.413	82.6	0.604	121	0.405	81.0
Silver	0.125	0.500	0.597	119	0.540	108	0.506	101	0.506	101

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 175
SDG #: E14-03446, E14-03379, E14-03295, E14-03366, E14-03426, E14-03440, E14-03436, E14-03328
E14-02818, E14-02881

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

4/22/14 19:17

ANALYTE	INST. MDL	ICV & CCV TRUE	LLCCV FOUND	LLCCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	0.500	0.477	95.4						
Barium	0.500	0.500	0.412	82.4						
Cadmium	0.125	0.500	0.522	104						
Chromium	0.500	0.500	0.373	74.6						
Lead	0.250	0.500	0.404	80.8						
Nickel	0.500	0.500	0.455	91.0						
Selenium	0.500	0.500	0.581	116						
Silver	0.125	0.500	0.491	98.2						

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 175

SDG #: E14-02818, E14-02881, E14-03295, E14-03328, E14-03366, E14-03379, E14-03426
E14-03436, E14-03440, E14-03446

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	4/22/14 16:45 SSR1	4/22/14 16:31 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	3.95	ND	98.8	4.00					75-125
Barium	4.13	ND	103	4.00					75-125
Cadmium	4.10	ND	103	4.00					75-125
Chromium	4.03	ND	101	4.00					75-125
Lead	3.55	0.057	87.3	4.00					75-125
Mercury	0.010	ND	100	0.010					75-125
Nickel	4.14	ND	104	4.00					75-125
Selenium	4.05	ND	101	4.00					75-125
Silver	3.73	0.030	92.5	4.00					75-125

SSR = Spike Sample Result
SR = Sample Result
SA = Spike Added
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-03446-004
% Solids: NA
QC Sample 1 for following samples:
02818-003,010~011; 02881-005,007; 03295-001
03328-001; 03366-001; 03379-001; 03426-001
03436-001~003; 03440-001; 03446-001~006

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 175
SDG #: E14-02818, E14-02881, E14-03295, E14-03328, E14-03366, E14-03379, E14-03426
E14-03436, E14-03440, E14-03446

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	4/22/14 16:31 S1	4/22/14 16:36 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	NA	ND	ND	NC				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Lead	20	0.057	0.054	5.41				
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	20	0.030	0.033	9.52				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-03446-004
% Solids: NA
QC Sample 1 for following samples:
02818-003,010~011; 02881-005,007; 03295-001
03328-001; 03366-001; 03379-001; 03426-001
03436-001~003; 03440-001; 03446-001~006

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 175

SDG #: E14-02818, E14-02881, E14-03295, E14-03328, E14-03366, E14-03379, E14-03426
E14-03436, E14-03440, E14-03446

Matrix: TCLP Concentration/Units: ppm (mg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	4/22/14 16:31 SR	4/22/14 16:40 SDR	% Difference	4/22/14 17:02 SPR	SA	% Recovery
Arsenic	ND	ND	NC	4.08	4.00	102
Barium	ND	ND	NC	4.16	4.00	104
Cadmium	ND	ND	NC	4.15	4.00	104
Chromium	ND	ND	NC	4.11	4.00	103
Lead	0.057	ND	NC	3.61	4.00	88.8
Nickel	ND	ND	NC	4.20	4.00	105
Selenium	ND	ND	NC	4.10	4.00	103
Silver	0.030	ND	NC	3.81	4.00	94.5

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E14-03446-004
QC Sample 1 for following samples:
02818-003,010~011; 02881-005,007; 03295-001
03328-001; 03366-001; 03379-001; 03426-001
03436-001~003; 03440-001; 03446-001~006

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG175
April 22, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	903980		76819		605217		3696046		4493373		2475658		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	632786	70	53773	70	423652	70	2587232	70	3145361	70	1732961	70	
	Upper Limit	1084776	120	92183	120	726260	120	4435255	120	5392048	120	2970790	120	
004CALS.d	STD1	884005	98	74683	97	601533	99	3670803	99	4481551	100	2481001	100	
005CALS.d	STD2	873722	97	75034	98	595298	98	3634771	98	4477170	100	2436236	98	
006CALS.d	STD3	864175	96	74383	97	589003	97	3646458	99	4488220	100	2486215	100	
007CALS.d	STD4	860708	95	73269	95	582269	96	3589939	97	4482716	100	2461614	99	
008CALS.d	STD5	856810	95	73073	95	580639	96	3589848	97	4473019	100	2505820	101	
010_CCV.d	ICV	860908	95	73662	96	586982	97	3671699	99	4528248	101	2523079	102	
011LCCV.d	LLICV	857201	95	74742	97	586317	97	3648808	99	4475226	100	2509336	101	
012_ICB.d	ICB	857965	95	74898	97	592208	98	3663521	99	4505609	100	2548052	103	
013SMPL.d	TCLP140416	847282	94	74733	97	584753	97	3641621	99	4449558	99	2510367	101	
014SMPL.d	TCLP140417	844951	93	74477	97	584756	97	3635190	98	4444466	99	2511523	101	
015SMPL.d	TCLP140418	853539	94	74379	97	592586	98	3663300	99	4548215	101	2562732	104	
016SMPL.d	TCLP140421	850152	94	74244	97	589624	97	3646270	99	4512458	100	2528810	102	
017SMPL.d	BLKT140422-01	844095	93	74104	96	584169	97	3654249	99	4502955	100	2543827	103	
018SMPL.d	LCST140422-01	845119	93	73195	95	586515	97	3644411	99	4555744	101	2548960	103	
019SMPL.d	E14-03446-004	847111	94	73813	96	584144	97	3651868	99	4541559	101	2557573	103	
020SMPL.d	E14-03446-004DUP	841344	93	73599	96	584141	97	3646252	99	4508792	100	2566876	104	
021SMPL.d	E14-03446-004SD	845207	93	75200	98	592215	98	3655527	99	4523766	101	2544474	103	
022SMPL.d	E14-03446-004MS	843592	93	73821	96	584638	97	3642735	99	4538434	101	2544647	103	
023_CCV.d	CCV	846270	94	73982	96	578962	96	3637093	98	4545992	101	2557065	103	
024LCCV.d	LLCCV	845049	93	74572	97	587845	97	3664524	99	4518835	101	2555942	103	
025_CCB.d	CCB	845404	94	73229	95	583984	96	3654808	99	4526627	101	2548842	103	
026SMPL.d	E14-03446-004PS	825449	91	72554	94	574538	95	3580210	97	4456427	99	2492625	101	
027SMPL.d	E14-03446-001	810061	90	72325	94	577844	95	3484782	94	4455593	99	2460957	99	
028SMPL.d	E14-03446-002	834924	92	74343	97	588285	97	3636449	98	4521000	101	2574195	104	
029SMPL.d	E14-03446-003	834774	92	73425	96	588054	97	3657824	99	4550547	101	2556099	103	
030SMPL.d	E14-03446-005	824798	91	73237	95	581766	96	3634449	98	4531276	101	2567851	104	
031SMPL.d	E14-03446-006	830547	92	73142	95	585779	97	3612069	98	4529310	101	2562271	103	
032SMPL.d	E14-03379-001	814863	90	73484	96	579812	96	3592002	97	4460870	99	2536200	102	
033SMPL.d	E14-03295-001	821714	91	74319	97	585591	97	3598391	97	4495043	100	2532010	102	
034SMPL.d	E14-03366-001	814490	90	73737	96	576636	95	3553778	96	4432315	99	2497038	101	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E14-03328 01183

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG175
April 22, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	903980		76819		605217		3696046		4493373		2475658		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	632786	70	53773	70	423652	70	2587232	70	3145361	70	1732961	70	
	Upper Limit	1084776	120	92183	120	726260	120	4435255	120	5392048	120	2970790	120	
035SMPL.d	E14-03426-001	817271	90	73534	96	582003	96	3603942	98	4509985	100	2532998	102	
036_CCV.d	CCV	821985	91	71716	93	574948	95	3595180	97	4477737	100	2551909	103	
037LCCV.d	LLCCV	822060	91	72228	94	569618	94	3587370	97	4468412	99	2539893	103	
038_CCB.d	CCB	817732	90	71694	93	577974	95	3629499	98	4524951	101	2542033	103	
039SMPL.d	E14-03440-001	813309	90	72951	95	579128	96	3581609	97	4500079	100	2543010	103	
040SMPL.d	E14-03436-001	816012	90	72398	94	579671	96	3577847	97	4479235	100	2528470	102	
041SMPL.d	E14-03436-002	821647	91	73822	96	582947	96	3609095	98	4546918	101	2570054	104	
042SMPL.d	E14-03436-003	817720	90	73337	95	584250	97	3614705	98	4485243	100	2550430	103	
043SMPL.d	E14-03328-001	813820	90	72584	94	582487	96	3598399	97	4531628	101	2551540	103	
044SMPL.d	E14-02818-003	820508	91	72075	94	580380	96	3579457	97	4524190	101	2556370	103	
045SMPL.d	E14-02818-010	825534	91	72288	94	590015	97	3642851	99	4574697	102	2578402	104	
046SMPL.d	E14-02818-011	819139	91	72534	94	582831	96	3599660	97	4538145	101	2550118	103	
047SMPL.d	E14-02881-005	822494	91	73265	95	582691	96	3607955	98	4544220	101	2575143	104	
048SMPL.d	E14-02881-007	826023	91	74252	97	586869	97	3631166	98	4543697	101	2582855	104	
049_CCV.d	CCV	820175	91	71915	94	574936	95	3608132	98	4540885	101	2569054	104	
050LCCV.d	LLCCV	826000	91	72667	95	576099	95	3615176	98	4527103	101	2571673	104	
051_CCB.d	CCB	823721	91	71565	93	575970	95	3632934	98	4532482	101	2574384	104	
053ICSA.d	ICSA	798006	88	71521	93	609894	101	3212752	87	4437219	99	2268729	92	
054ICSB.d	ICSAB	729592	81	72303	94	602963	100	3138620	85	4280077	95	2195072	89	
056_CCV.d	FINAL CCV	835320	92	73638	96	583830	96	3691585	100	4569566	102	2563226	104	
057LCCV.d	FINAL LLCCV	829987	92	74913	98	583852	96	3693667	100	4531284	101	2559575	103	
058_CCB.d	FINAL CCB	820237	91	73884	96	578303	96	3655064	99	4510863	100	2550786	103	

E14-03328 01184

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

GENERAL ANALYTICAL CHEMISTRY

E14-03328 0185

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfur as S

Matrix: Soil
Unit: mg/Kg

Batch: AP091-0013
Method: D129

Date: 04/30/2014

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS140430	< 825	NA	NA	NA	NA	NA
LCS	LCSS140430	287000	333000	NA	NA	86.2	80-120
SAMPLE	E14-03328-001	1300	NA	NA	NA	NA	NA
DUP	E14-03328-001DUP	1280	NA	1.55	20	NA	NA

The above blank result applies to the follow samples:

E14-03328-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants Inc
Address: 1 Greenwood Ave Suite 210
Montclair NJ 07042
Telephone #: 973 873 7110
Fax #:
Project Manager: Michael Zukauskas
EMAIL Address: mzukauskas@geiconsultants.com
Sampled by: AA
Project Name: Greenpoint Meserole Ave Decom
Project Location (State): NY
Bottle Order #:
COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

REPORTING INFO

REPORT TO: GEI Consultants.
Address: datagroup@geiconsultants.com
Attn: Michael Zukauskas
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE — TAT for Hydrocarbons
NJ EPH DRO (If other than 2 weeks)_____
NJ EPH - C40
NJ EPH Fractionated DRO-8015

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format: NJ Results Only; NY Cat A; NJ Reduced; NJ Regulatory; NY Cat B; 15% Surcharge applies; Other (describe)

EDDs: NJ SRP format; NYSDEC; lab approved custom EDD; NO EDD/CD REQ'D

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify):
Hard Copy: Std 3 week * Other - call for price

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	TPH 3015 Gas/Diesel	VOCs 8260B	SVOCs 8270C	PCBs 8080	Total metals PAH 6010B	Sulfur 7129	Mercury 7471	TCLP Lead	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
WC-001		04/15/2014	1430	S	2	1	X	X	X	X	X	X	X	X							X	

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req: NJ GWQS; NJ IGW; NJ SRS
NY TOGS; NY CP51; NY Part 375 Restricted; NY Part 375 Unrestricted
Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by: GEI	04/15/14	1500	Received by:	04/15/14	0900
Relinquished by:	4/16/14	11:25	Received by:	4-16-14	11:25
Relinquished by:	4-16	17:30	Received by:	4/6-14	17:30
Relinquished by:			Received by:		
Relinquished by:			Received by:		

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Comments: 20X rules apply.
Please send result to datagroup@geiconsultants.com

Lab Case # 3328

PAGE: 1 of 1

01/2014

Standard TAT

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E14-03328: GREENPOINT PHASE 1 WASTE CLASS

To: Maria Stepanova
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mstepanova@geiconsultants.com;da

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Apr 16, 2014 @ 17:30	NA	May 01, 2014	May 08, 2014 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
03328-001	WC-001	NA	04/15/14@14:30	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TPH-GRO	Analyze	8260C	STD/2 WKS	4/29/2014
	Special VO	Analyze	8260C	STD/2 WKS	4/29/2014
	PP/PAH	Analyze	8270D	STD/2 WKS	4/29/2014
	TPH-DRO	Analyze	8015D	STD/2 WKS	4/29/2014
	PP/PCB	Analyze	8082A	STD/2 WKS	4/29/2014
	TCLP Lead - Pb	Analyze	1311/6020A	STD/2 WKS	10/12/2014
	PP Metals	Analyze	6020A/7471B	STD/2 WKS	5/13/2014
	Sulfur as S	Analyze	D129	STD/2 WKS	5/13/2014

Project Notes:

NOTE 1 taken by Ellen on 04/17/2014 10:16
For VO Analyze & Report PP VO+Acetone, 2-Butanone, Cis-1,2-Dichloroethene, 4-Methyl-2-Pentanone, Styrene, 1,1,1,2-Tetrachloroethane & 1,2,4-Trichlorobenzene

NOTE 4 taken by Ellen on 04/17/2014 10:26
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 14** **03328** CLIENT: GEI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [initials] DATE 4/6/14

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [initials] DATE 4/7/14

Laboratory Custody Chronicle

IAL Case No.
E14-03328

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE 1 WASTE CLASS

Received On 4/16/2014@17:30

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	03328-001	Soil	n/a	n/a	4/18/14	Mei
TPH-GRO	-001	Soil	n/a	n/a	4/18/14	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PAH	-001	Soil	4/17/14	Kou-Liang	4/18/14	JC

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	4/18/14	Archimede	4/18/14	Nicole
TPH-DRO	-001	Soil	4/18/14	Archimede	4/21/14	Jamie

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	4/17/14	Lisa	4/18/14	Danielle
TCLP Lead - Pb	-001	Soil	4/22/14	Lisa	4/22/14	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	4/30/14	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREEN POINT PHASE I WASTE CLASS**
IAL Case Number: **E13-05399**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

Sample Summary

IAL Case No.

E13-05399

Client GEI Consultants Inc. - Montclair

Project GREEN POINT PHASE I WASTE CLASS

Received On 6/ 7/2013@17:05

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
05399-001	GPEC SS-WC-001	8/10	6/ 6/2013@06:45	Soil	6

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on June 18, 2013

* Methodology is included in the IAL Project Information Page

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicated analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument for that specific analysis.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

CONFORMANCE / NON-CONFORMANCE SUMMARIES

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received one (1) soil sample(s) from GEI Consultants Inc. - Montclair (IAL SDG # E13-05399, Project: GREEN POINT PHASE I WASTE CLASS) on June 7, 2013 for the analysis of:

(1) Special VO
(1) TPH-GRO
(1) PP/PAH
(1) PP/PCB
(1) TPH-DRO
(1) PP Metals
(1) Sulfur as S

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

6/17/13
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

Volatiles By 8260B

Batch ID: F130612-02	Matrix: Soil

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.

E13-05399

- All samples were analyzed within holding time.
- 05399-001 was run straight.

Signature 6/13/2013 Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

Volatiles By 8260B

Batch ID: L130612	**Matrix: MEOH**

QC

- Calibration Curve met QC criteria.
- Internal Standards Recovery met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E13-05399

- All samples were analyzed within holding time.
- #001 needed 100x dilution due to matrix interference.

Signature

6/13/2013
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

Semivolatiles By **8270C/625**

Batch ID: 130610-04	**Matrix:** Soil

QC

- Calibration Curve met criteria.
- Internal standard recovery met criteria.
- Surrogate recovery met criteria.
- Method blank met criteria.
- Laboratory control sample recovery met criteria.
- Matrix Spike / Matrix Spike Duplicate recoveries did not meet criteria.
- MS and MSD failed due to high target compounds.

E13-05399

- Extraction holding time met requirement for each sample.
- Analysis holding time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

John

Signature

6/14/2013

Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

PCB By 8082

Batch ID: 130610-11	**Matrix: Soil**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001

E13-05399

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- No dilution was performed for sample 05399 -001.

6/13/2013

Signature Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

DRO/GRO By 8015B M

Batch ID: 130610-10	**Matrix: Soil**

QC

- Calibration Curve met QC criteria.
- Surrogate Percent Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.

E13-05399

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- The sample was run straight.

Signature

6/13/2013
Date

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E13-05399

METAL By Method 6020

Matrix: SOIL	Batch ID: 253A

QC
- Calibration Curve Linearity met criteria.
- Internal Standard Recovery met criteria.
- Laboratory Control Sample Recovery met criteria.
- Matrix Spike Recoveries met criteria.
- Serial Dilution / Post Spike results met criteria.

E13-05399
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.
- All samples were analyzed as a straight run and no further dilutions were required.

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREEN POINT PHASE I WASTE CLASS
Lab Case No.: E13-05399

	Lab ID:	Client ID:	Depth:	Matrix:	Sampled Date
	05399-001	GPEC SS-WC-001	8/10	Soil	6/6/13
PARAMETER(Units)	Conc	Q		MDL	
Volatiles-Special List (Units)		*(mg/Kg-ppm)*			
Chloromethane	ND			0.000354	
Vinyl chloride	ND			0.000476	
Bromomethane	ND			0.000586	
Chloroethane	ND			0.000451	
Trichlorofluoromethane	ND			0.000366	
Acrolein	ND			0.00224	
1,1-Dichloroethene	ND			0.0005	
Acetone	ND			0.000671	
Methylene chloride	ND			0.00242	
Acrylonitrile	ND			0.00148	
trans-1,2-Dichloroethene	ND			0.000415	
1,1-Dichloroethane	ND			0.000366	
cis-1,2-Dichloroethene	ND			0.000342	
2-Butanone (MEK)	ND			0.000354	
Chloroform	ND			0.000329	
1,1,1-Trichloroethane	ND			0.000317	
Carbon tetrachloride	ND			0.000305	
1,2-Dichloroethane (EDC)	ND			0.000268	
Benzene	ND			0.000329	
Trichloroethene	ND			0.000415	
1,2-Dichloropropane	ND			0.000317	
Bromodichloromethane	ND			0.000256	
2-Chloroethyl vinyl ether	ND			0.000305	
cis-1,3-Dichloropropene	ND			0.000256	
4-Methyl-2-pentanone (MIBK)	ND			0.000256	
Toluene	ND			0.000305	
trans-1,3-Dichloropropene	ND			0.000268	
1,1,2-Trichloroethane	ND			0.000256	
Tetrachloroethene	ND			0.000305	
Dibromochloromethane	ND			0.000256	
Chlorobenzene	ND			0.000342	
1,1,1,2-Tetrachloroethane	ND			0.000244	
Ethylbenzene	ND			0.000342	
Total Xylenes	ND			0.00098	
Styrene	ND			0.000268	
Bromoform	ND			0.000293	
1,1,2,2-Tetrachloroethane	ND			0.000281	
1,3-Dichlorobenzene	ND			0.000293	
1,4-Dichlorobenzene	ND			0.000244	
1,2-Dichlorobenzene	ND			0.000342	
1,2,4-Trichlorobenzene	ND			0.000317	
TOTAL VO's:	ND				

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: GEI Consultants Inc. - Montclair
Project: GREEN POINT PHASE I WASTE CLASS
Lab Case No.: E13-05399

Lab ID:	**05399-001**		
Client ID:	**GPEC SS-WC-001**		
Depth:	**8/10**		
Matrix:	**Soil**		
Sampled Date	**6/6/13**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - PAH (Units)		*(mg/Kg-ppm)*	
Naphthalene	ND		0.012
Acenaphthylene	0.029	J	0.029
Acenaphthene	ND		0.033
Fluorene	0.029	J	0.022
Phenanthrene	0.281		0.027
Anthracene	0.094		0.041
Fluoranthene	0.609		0.016
Pyrene	0.410		0.030
Benzo[a]anthracene	0.292		0.039
Chrysene	0.287		0.028
Benzo[b]fluoranthene	0.216		0.025
Benzo[k]fluoranthene	0.278		0.039
Benzo[a]pyrene	0.251		0.014
Indeno[1,2,3-cd]pyrene	0.072		0.027
Dibenz[a,h]anthracene	ND		0.030
Benzo[g,h,i]perylene	0.054		0.037
TPH-GRO (Units)		*(mg/Kg-ppm)*	
TPH-GRO	4.79	J	4.77
PCB's (Units)		*(mg/Kg-ppm)*	
Aroclor-1016	ND		0.018
Aroclor-1221	ND		0.018
Aroclor-1232	ND		0.018
Aroclor-1242	ND		0.018
Aroclor-1248	ND		0.018
Aroclor-1254	ND		0.018
Aroclor-1260	ND		0.018
PCBs	ND		0.018

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREEN POINT PHASE I WASTE CLASS
Lab Case No.: E13-05399

Lab ID:	**05399-001**		
Client ID:	**GPEC SS-WC-001**		
Depth:	**8/10**		
Matrix:	**Soil**		
Sampled Date	**6/6/13**		
PARAMETER(Units)	Conc	Q	MDL
Hydrocarbons (Units)	*(mg/Kg-ppm)*		
TPH-DRO	220		70.9
Metals (Units)	*(mg/Kg-ppm)*		
Antimony	ND		0.340
Arsenic	17.5		0.340
Beryllium	0.328	J	0.272
Cadmium	1.02		0.170
Chromium	21.4		0.680
Copper	227		0.680
Lead	258		0.170
Mercury	2.41		0.00775
Nickel	33.0		0.680
Selenium	ND		1.36
Silver	0.385	J	0.170
Thallium	ND		0.170
Zinc	431		2.72
General Analytical (Units)			
Sulfur as S(mg/Kg-ppm)	ND		1020

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the RL and above the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05399-001
Client ID: GPEC_SS-WC-001
Date Received: 06/07/2013
Date Analyzed: 06/13/2013
Data file: F5283.D

GC/MS Column: DB-624
Sample wt/vol: 5.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.00244	0.000354
Vinyl chloride	ND		0.00244	0.000476
Bromomethane	ND		0.00122	0.000586
Chloroethane	ND		0.00122	0.000451
Trichlorofluoromethane	ND		0.00244	0.000366
Acrolein	ND		0.024	0.00224
1,1-Dichloroethene	ND		0.00244	0.0005
Acetone	ND		0.0061	0.000671
Methylene chloride	ND		0.00244	0.00242
Acrylonitrile	ND		0.024	0.00148
trans-1,2-Dichloroethene	ND		0.00244	0.000415
1,1-Dichloroethane	ND		0.00122	0.000366
cis-1,2-Dichloroethene	ND		0.00122	0.000342
2-Butanone (MEK)	ND		0.00244	0.000354
Chloroform	ND		0.00122	0.000329
1,1,1-Trichloroethane	ND		0.00122	0.000317
Carbon tetrachloride	ND		0.00122	0.000305
1,2-Dichloroethane (EDC)	ND		0.00122	0.000268
Benzene	ND		0.00122	0.000329
Trichloroethene	ND		0.00122	0.000415
1,2-Dichloropropane	ND		0.00122	0.000317
Bromodichloromethane	ND		0.00122	0.000256
2-Chloroethyl vinyl ether	ND		0.00122	0.000305
cis-1,3-Dichloropropene	ND		0.00122	0.000256
4-Methyl-2-pentanone (MIBK)	ND		0.00122	0.000256

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05399-001
Client ID: GPEC_SS-WC-001
Date Received: 06/07/2013
Date Analyzed: 06/13/2013
Data file: F5283.D

GC/MS Column: DB-624
Sample wt/vol: 5.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00122	0.000305
trans-1,3-Dichloropropene	ND		0.00122	0.000268
1,1,2-Trichloroethane	ND		0.00122	0.000256
Tetrachloroethene	ND		0.00122	0.000305
Dibromochloromethane	ND		0.00122	0.000256
Chlorobenzene	ND		0.00122	0.000342
1,1,1,2-Tetrachloroethane	ND		0.00122	0.000244
Ethylbenzene	ND		0.00122	0.000342
Total Xylenes	ND		0.00244	0.00098
Styrene	ND		0.00122	0.000268
Bromoform	ND		0.00122	0.000293
1,1,2,2-Tetrachloroethane	ND		0.00122	0.000281
1,3-Dichlorobenzene	ND		0.00122	0.000293
1,4-Dichlorobenzene	ND		0.00122	0.000244
1,2-Dichlorobenzene	ND		0.00122	0.000342
1,2,4-Trichlorobenzene	ND		0.00122	0.000317

Total Target Compounds (41): 0

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: 05399-001
Client ID: GPEC_SS-WC-001
Date Received: 06/07/2013
Date Analyzed: 06/13/2013
Data file: L7577.D

GC/MS Column: DB-624
Sample wt/vol: 0.052g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	RL	MDL
TPH-GRO	4.79	J	5.97	4.77
Total Target Compounds (1):	4.79	J		

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E13-05399-001
Client ID: GPEC_SS-
Date Received: 06/07/2013
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7281.D

GC/MS Column: DB-5
Sample wt/vol: 15.12g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	RL	MDL
Naphthalene	ND		0.041	0.012
Acenaphthylene	0.029	J	0.041	0.029
Acenaphthene	ND		0.041	0.033
Fluorene	0.029	J	0.041	0.022
Phenanthrene	0.281		0.041	0.027
Anthracene	0.094		0.041	0.041
Fluoranthene	0.609		0.041	0.016
Pyrene	0.410		0.041	0.030
Benzo[a]anthracene	0.292		0.041	0.039
Chrysene	0.287		0.041	0.028
Benzo[b]fluoranthene	0.216		0.041	0.025
Benzo[k]fluoranthene	0.278		0.041	0.039
Benzo[a]pyrene	0.251		0.041	0.014
Indeno[1,2,3-cd]pyrene	0.072		0.041	0.027
Dibenz[a,h]anthracene	ND		0.041	0.030
Benzo[g,h,i]perylene	0.054		0.041	0.037
Total Target Compounds (16):	2.90	J		

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: 05399-001
Client ID: GPEC_SS-WC
Date Received: 06/07/2013
Date Extracted: 06/10/2013
Date Analyzed: 06/12/2013
Data file: Y9303.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.63g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
PCBs	ND		0.044	0.018

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREEN POINT PHASE I WASTE CLASS

Lab ID:	05399-001	GC Column:	RTX-5
Client ID:	GPEC SS-WC-001	Sample wt/vol:	10.50g
Date Received:	06/07/2013	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	06/10/2013	Dilution Factor:	1
Date Analyzed:	06/11/2013	%Moisture:	19.4
Data File:	QB7255.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	220		88.6	70.9

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREEN POINT PHASE I WASTE CLASS

Lab ID: E13-05399-001
Client ID: GPEC SS-WC-001
Date Collected: 06/06/13 06:45
Date Received: 06/07/13 17:05
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 19.4
Batch #: 253

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	ND		1	1.36	0.340	06/12/13 15:50	6020
Arsenic	17.5		1	0.680	0.340	06/12/13 15:50	6020
Beryllium	0.328	J	1	0.476	0.272	06/12/13 15:50	6020
Cadmium	1.02		1	0.680	0.170	06/12/13 15:50	6020
Chromium	21.4		1	2.72	0.680	06/12/13 15:50	6020
Copper	227		1	2.72	0.680	06/12/13 15:50	6020
Lead	258		1	0.680	0.170	06/12/13 15:50	6020
Mercury	2.41		1	0.016	0.00775	06/11/13 17:43	7471A
Nickel	33.0		1	1.36	0.680	06/12/13 15:50	6020
Selenium	ND		1	2.72	1.36	06/12/13 15:50	6020
Silver	0.385	J	1	0.680	0.170	06/12/13 15:50	6020
Thallium	ND		1	0.680	0.170	06/12/13 15:50	6020
Zinc	431		1	2.72	2.72	06/12/13 15:50	6020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREEN POINT PHASE I WASTE CLASS

Date Received: 06/07/13 17:05
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E13-05399-001	GPEC SS-WC-001	ND		1	Soil-mg/Kg	1020	1230	80.6	06/06/13 06:45	06/17/13 14:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/13/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS130611-02	SOIL	F5282.D	138	104	101
05399-001	SOIL	F5283.D	124	101	95
LCSS130612-02	SOIL	F5284.D	109	102	102
LCSDS130612-02	SOIL	F5285.D	104	102	104
05479-004	SOIL	F5286.D	114	97	98
05479-005	SOIL	F5287.D	134	100	97
05479-006	SOIL	F5288.D	137	101	98
05479-010	SOIL	F5289.D	144	101	96
05479-011	SOIL	F5290.D	146	101	97
05479-012	SOIL	F5291.D	152	102	98
05479-016	SOIL	F5292.D	151	103	97
05479-017	SOIL	F5293.D	151	104	97
05479-018	SOIL	F5294.D	151	103	97
05479-020	SOIL	F5295.D	155	106	99
05421-001	SOIL	F5296.D	152	104	100
05421-003	SOIL	F5297.D	137	104	94
05409-013	SOIL	F5298.D	149	105	94

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	55-153	36-162
SMC2 = Toluene-d8	50 ppb	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	67-140	43-151

Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

8260MS/MSD **MS/MSD SPIKE REPORT**

Lab ID: BLKS130611-02
Client ID: BLKS130611-02
Date Received:
Date Analyzed: 06/13/2013
MS Data file: F5284.D
MSD Data file: F5285.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50	0.0	37.1	74		37.2	74		0	
Chloromethane	50	0.0	49.1	98		49.8	100		1	
Vinyl chloride	50	0.0	49.1	98		50.2	100		2	
Bromomethane	50	0.0	58.9	118		59.8	120		2	
Chloroethane	50	0.0	53.1	106		52.9	106		0	
Trichlorofluoromethane	50	0.0	54.0	108		53.1	106		2	
Acrolein	150	0.0	111	74		113	75		2	
1,1-Dichloroethene	50	0.0	53.3	107		53.1	106		0	
Acetone	50	0.0	57.9	116		59.2	118		2	
Carbon disulfide	50	0.0	51.7	103		52.3	105		1	
Vinyl acetate	50	0.0	49.0	98		47.2	94		4	
Methylene chloride	50	0.0	52.8	106		51.6	103		2	
Acrylonitrile	150	0.0	172	115		148	99		15	
tert-Butyl alcohol (TBA)	100	0.0	114.5	115		114.8	115		0	
trans-1,2-Dichloroethene	50	0.0	53.4	107		48.7	97		9	
Methyl tert-butyl ether (MTE	50	0.0	59.3	119		55.2	110		7	
1,1-Dichloroethane	50	0.0	49.6	99		50.9	102		3	
Diisopropyl ether (DIPE)	50	0.0	57.6	115		57.0	114		1	
cis-1,2-Dichloroethene	50	0.0	51.9	104		51.8	104		0	
2,2-Dichloropropane	50	0.0	46.6	93		50.1	100		7	
2-Butanone (MEK)	50	0.0	52.2	104		53.2	106		2	
Bromochloromethane	50	0.0	51.3	103		50.0	100		3	
Chloroform	50	0.0	50.6	101		50.7	101		0	
1,1,1-Trichloroethane	50	0.0	48.2	96		49.1	98		2	
Carbon tetrachloride	50	0.0	48.3	97		49.1	98		2	
1,1-Dichloropropene	50	0.0	47.5	95		47.7	95		0	
1,2-Dichloroethane (EDC)	50	0.0	53.0	106		51.0	102		4	
Benzene	50	0.0	45.5	91		47.3	95		4	
Trichloroethene	50	0.0	47.5	95		49.0	98		3	
1,2-Dichloropropane	50	0.0	48.0	96		49.2	98		2	
Dibromomethane	50	0.0	49.9	100		50.5	101		1	
1,4-Dioxane	1,500	0.0	1261	84		1386	92		9	
Bromodichloromethane	50	0.0	49.9	100		50.1	100		0	
2-Chloroethyl vinyl ether	50	0.0	46.0	92		46.8	94		2	
cis-1,3-Dichloropropene	50	0.0	47.5	95		47.7	95		0	
4-Methyl-2-pentanone (MIBI	50	0.0	48.8	98		50.9	102		4	
Toluene	50	0.0	43.3	87		44.8	90		3	
trans-1,3-Dichloropropene	50	0.0	45.3	91		45.9	92		1	
1,1,2-Trichloroethane	50	0.0	47.9	96		48.4	97		1	
Tetrachloroethene	50	0.0	39.5	79		41.3	83		4	
1,3-Dichloropropane	50	0.0	48.5	97		49.3	99		2	

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: BLKS130611-02
Client ID: BLKS130611-02
Date Received:
Date Analyzed: 06/13/2013
MS Data file: F5284.D
MSD Data file: F5285.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50	0.00	44.6	89		46.1	92		3	
Dibromochloromethane	50	0.00	46.6	93		47.6	95		2	
1,2-Dibromoethane (EDB)	50	0.00	48.7	97		49.1	98		1	
Chlorobenzene	50	0.00	43.3	87		44.1	88		2	
1,1,1,2-Tetrachloroethane	50	0.00	46.2	92		46.9	94		2	
Ethylbenzene	50	0.00	45.8	92		47.2	94		3	
m,p-Xylene	100	0.00	92.4	92		96.4	96		4	
o-Xylene	50	0.00	45.3	91		46.7	93		3	
Styrene	50	0.00	47.0	94		48.4	97		3	
Bromoform	50	0.00	42.5	85		43.3	87		2	
Isopropylbenzene	50	0.00	44.2	88		45.7	91		3	
1,1,2,2-Tetrachloroethane	50	0.00	44.6	89		44.8	90		0	
Bromobenzene	50	0.00	46.1	92		46.6	93		1	
1,2,3-Trichloropropane	50	0.00	46.8	94		47.1	94		1	
n-Propylbenzene	50	0.00	44.8	90		46.0	92		3	
2-Chlorotoluene	50	0.00	46.1	92		47.2	94		2	
1,3,5-Trimethylbenzene	50	0.00	47.4	95		49.1	98		4	
4-Chlorotoluene	50	0.00	45.8	92		47.1	94		3	
tert-Butylbenzene	50	0.00	46.5	93		47.6	95		2	
1,2,4-Trimethylbenzene	50	0.00	47.0	94		48.6	97		3	
sec-Butylbenzene	50	0.00	46.6	93		47.3	95		1	
1,3-Dichlorobenzene	50	0.00	45.5	91		46.2	92		2	
4-Isopropyltoluene	50	0.00	46.6	93		48.4	97		4	
1,4-Dichlorobenzene	50	0.00	45.7	91		46.8	94		2	
n-Butylbenzene	50	0.00	44.7	89		46.3	93		4	
1,2-Dichlorobenzene	50	0.00	50.5	101		51.5	103		2	
1,2-Dibromo-3-chloropropan	50	0.00	52.3	105		54.6	109		4	
1,2,4-Trichlorobenzene	50	0.00	46.6	93		48.1	96		3	
Hexachlorobutadiene	50	0.00	43.9	88		44.6	89		2	
Naphthalene	50	0.00	55.8	112		56.5	113		1	
1,2,3-Trichlorobenzene	50	0.00	51.8	104		52.6	105		2	
1,1,2-Trichloro-1,2,2-trifluor	50	0.00	49.8	100		50.4	101		1	
Methyl acetate	50	0.00	53.4	107		54.1	108		1	
Cyclohexane	50	0.00	45.6	91		46.3	93		2	
Methylcyclohexane	50	0.00	46.0	92		45.6	91		1	

	Aqueous	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F5282.D Instrument ID: MSD_F

Date Analyzed: 06/13/2013 Time Analyzed: 01:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC_SS-WC-001	05399-001	06/13/2013	2:13
LCS-50PPB	LCSS130612-02	06/13/2013	2:43
LCSD-50PPB	LCSDS130612-02	06/13/2013	3:13
GRID_28/18-18.	05479-004	06/13/2013	3:43
GRID_28/23-23.	05479-005	06/13/2013	4:14
GRID_28/28-28.	05479-006	06/13/2013	4:44
GRID_27/18-18.	05479-010	06/13/2013	5:15
GRID_27/23-23.	05479-011	06/13/2013	5:45
GRID_27/28-28.	05479-012	06/13/2013	6:15
GRID_24/18-18.	05479-016	06/13/2013	6:45
GRID_24/23-23.	05479-017	06/13/2013	7:16
GRID_24/28-28.	05479-018	06/13/2013	7:46
GRID_14/13-13.	05479-020	06/13/2013	8:16
AOC-4-1/2-2.5	05421-001	06/13/2013	8:47
AOC-12/2-2.5	05421-003	06/13/2013	9:17
W-60_(4-4.5)/4	05409-013	06/13/2013	9:47

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F5210.D

BFB Injection Date: 06/10/2013

Inst ID: MSD_F

BFB Injection Time: 12:03

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	16.1			
75	30.0 - 60.0% of mass 95	37.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.9			
173	Less than 2.0% of mass 174	1.1	(	1.1	)1
174	Great than 50.0% of mass 95	97.5			
175	5.0 - 9.0% of mass 174	6.0	(	6.2	)1
176	95.0 - 101.0% of mass 174	94.0	(	96.4	)1
177	5.0 - 9.0% of mass 176	5.7	(	6.1	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	F5212.D	06/10/2013	12:59
ICC5	ICC5	F5213.D	06/10/2013	14:06
ICC1	ICC1	F5215.D	06/10/2013	15:32
ICC20	ICC20	F5216.D	06/10/2013	16:08
ICC100	ICC100	F5217.D	06/10/2013	16:38
ICC200	ICC200	F5218.D	06/10/2013	17:09
ICC150	ICC150	F5219.D	06/10/2013	17:39
ICV100	ICV100	F5226.D	06/10/2013	21:09

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F5278.D

BFB Injection Date: 06/13/2013

Inst ID: MSD_F

BFB Injection Time: 23:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.9			
75	30.0 - 60.0% of mass 95	39.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.9			
173	Less than 2.0% of mass 174	0.7	(	0.8	)1
174	Great than 50.0% of mass 95	83.4			
175	5.0 - 9.0% of mass 174	5.8	(	7.0	)1
176	95.0 - 101.0% of mass 174	80.6	(	96.7	)1
177	5.0 - 9.0% of mass 176	5.3	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	F5280.D	06/13/2013	0:42
BLKS130611-02	BLKS130611-02	F5282.D	06/13/2013	1:43
GPEC_SS-WC-001	05399-001	F5283.D	06/13/2013	2:13
LCS-50PPB	LCSS130612-02	F5284.D	06/13/2013	2:43
LCSD-50PPB	LCSDS130612-02	F5285.D	06/13/2013	3:13
GRID_28/18-18.	05479-004	F5286.D	06/13/2013	3:43
GRID_28/23-23.	05479-005	F5287.D	06/13/2013	4:14
GRID_28/28-28.	05479-006	F5288.D	06/13/2013	4:44
GRID_27/18-18.	05479-010	F5289.D	06/13/2013	5:15
GRID_27/23-23.	05479-011	F5290.D	06/13/2013	5:45
GRID_27/28-28.	05479-012	F5291.D	06/13/2013	6:15
GRID_24/18-18.	05479-016	F5292.D	06/13/2013	6:45
GRID_24/23-23.	05479-017	F5293.D	06/13/2013	7:16
GRID_24/28-28.	05479-018	F5294.D	06/13/2013	7:46
GRID_14/13-13.	05479-020	F5295.D	06/13/2013	8:16
AOC-4-1/2-2.5	05421-001	F5296.D	06/13/2013	8:47
AOC-12/2-2.5	05421-003	F5297.D	06/13/2013	9:17
W-60_(4-4.5)/4	05409-013	F5298.D	06/13/2013	9:47

Response Factor Report MSD_F

Method Path : C:\MSDCHEM\1\METHODS\
Method File : FSO0610.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Jun 11 13:49:33 2013
Response Via : Initial Calibration

Calibration Files
1 =F5215.D 2 =F5212.D 5 =F5213.D
20 =F5216.D 100 =F5217.D 200 =F5218.D 150 =F5219.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------	ISTD	----------						
2)	T	Dichlorodifluorom		0.685	0.686	0.669	0.556	0.510	0.693	0.633	12.52
3)	P	Chloromethane		1.500	1.532	1.422	1.258	1.104	1.231	1.341	12.63
4)	C	Vinyl chloride		1.253	1.286	1.198	1.046	0.931	1.108	1.137	11.87
5)	T	Bromomethane	0.678	0.721	0.759	0.682	0.600	0.540	0.582	0.652	12.24
6)	T	Chloroethane	0.664	0.629	0.664	0.687	0.589	0.575	0.547	0.622	8.51
7)	T	Trichlorofluorome		1.596	1.601	1.546	1.273	1.222	1.393	1.439	11.59
8)	T	Acrolein	0.041	0.045	0.045	0.048	0.037	0.034	0.035	0.041	13.32
9)	MC	1,1-Dichloroethen		0.980	0.959	0.946	0.809	0.781	0.832	0.884	9.82
10)	T	Acetone			0.298	0.294	0.282	0.272	0.270	0.283	4.49
11)	T	Carbon disulfide	2.836	2.817	3.068	3.058	2.575	2.270	2.615	2.748	10.37
12)	T	Vinyl acetate	2.645	2.443	2.756	3.221	2.790	2.570	2.441	2.695	10.00
13)	T	Methylene chlorid		1.111	1.207	1.200	0.987	0.974	0.940	1.070	11.10
14)	T	Acrylonitrile	0.290	0.243	0.257	0.280	0.237	0.249	0.266	0.260	7.43
15)	T	tert-Butyl alcoho		0.120	0.117	0.125	0.094	0.091	0.096	0.107	14.19
16)	T	trans-1,2-Dichlor		0.972	1.097	1.007	0.881	0.819	0.906	0.947	10.46
17)	T	Methyl tert-butyl		1.788	1.928	2.070	1.759	1.642	1.895	1.847	8.11
18)	P	1,1-Dichloroethan	1.478	1.407	1.476	1.523	1.291	1.195	1.264	1.376	9.19
19)	T	Diisopropyl ether	2.588	2.370	2.662	3.098	2.646	2.462	2.476	2.615	9.11
20)	T	cis-1,2-Dichloroe	0.952	0.894	0.941	1.000	0.889	0.845	0.879	0.914	5.79
21)	T	2,2-Dichloropropa	0.558	0.547	0.553	0.567	0.512	0.508	0.532	0.540	4.25
22)	T	2-Butanone (MEK)		0.306	0.324	0.351	0.271	0.273	0.262	0.298	11.75
23)	T	Bromochloromethan	0.496	0.456	0.466	0.477	0.410	0.391	0.400	0.442	9.34
25)	C	Chloroform	1.357	1.186	1.297	1.339	1.135	1.068	1.108	1.213	9.66
26)	T	1,1,1-Trichloroet	0.944	0.810	0.875	0.843	0.815	0.780	0.907	0.853	6.83
27)	T	Carbon tetrachlor	0.697	0.668	0.692	0.659	0.716	0.738	0.878	0.721	10.29
28)	T	1,1-Dichloroprope	0.982	0.844	0.926	0.923	0.898	0.859	0.988	0.917	6.05
29)	T	1,2-Dichloroethan	1.100	0.890	0.955	1.020	0.885	0.847	0.821	0.931	10.71
30)	S	1,2-Dichloroethan	0.527	0.466	0.488	0.503	0.435	0.405	0.391	0.459	11.07
31)	I	1,4-Difluorobenzene	----------	ISTD	----------						
32)	M	Benzene	1.584	1.463	1.512	1.612	1.535	1.523	1.594	1.546	3.42
33)	M	Trichloroethene	0.329	0.354	0.338	0.346	0.351	0.353	0.393	0.352	5.73
34)	C	1,2-Dichloropropa	0.359	0.353	0.362	0.382	0.376	0.366	0.377	0.368	2.93
35)	T	Dibromomethane	0.193	0.185	0.197	0.205	0.196	0.194	0.193	0.195	2.93
36)	T	1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.003	11.21
37)	T	Bromodichlorometh	0.312	0.345	0.358	0.377	0.393	0.401	0.404	0.370	9.13
38)	T	2-Chloroethyl vin	0.161	0.144	0.153	0.178	0.180	0.180	0.169	0.166	8.60
39)	T	cis-1,3-Dichlorop	0.432	0.411	0.435	0.490	0.522	0.527	0.530	0.478	10.69
40)	T	4-Methyl-2-pentan	0.307	0.311	0.341	0.347	0.337	0.345	0.319	0.330	5.13
41)	S	Toluene-d8	1.077	1.076	1.107	1.123	1.133	1.144	1.122	1.112	2.37
42)	MC	Toluene	1.087	0.967	0.947	1.003	1.033	1.033	1.073	1.021	5.04
43)	T	trans-1,3-Dichlor	0.355	0.356	0.387	0.406	0.432	0.443	0.432	0.401	9.14
44)	T	1,1,2-Trichloroet	0.241	0.228	0.239	0.248	0.239	0.235	0.230	0.237	2.91
45)	T	Tetrachloroethene	0.502	0.437	0.429	0.390	0.445	0.441	0.502	0.449	8.96
46)	T	1,3-Dichloropropa	0.430	0.430	0.452	0.496	0.502	0.486	0.471	0.467	6.47
47)	T	2-Hexanone	0.256	0.258	0.268	0.300	0.280	0.263	0.247	0.267	6.69
48)	T	Dibromochlorometh	0.285	0.272	0.268	0.286	0.332	0.345	0.341	0.304	11.08
49)	T	1,2-Dibromoethane	0.251	0.261	0.268	0.303	0.300	0.300	0.294	0.282	7.68
50)	I	Chlorobenzene-d5	----------	ISTD	----------						
51)	MP	Chlorobenzene	1.195	1.171	1.183	1.183	1.163	1.103	1.148	1.164	2.66
52)	T	1,1,1,2-Tetrachlo	0.327	0.349	0.374	0.340	0.374	0.360	0.381	0.358	5.36

53)	C	Ethylbenzene	1.447	1.559	1.652	1.791	1.865	1.767	1.901	1.712	9.70
54)	T	m,p-Xylene	0.634	0.655	0.713	0.787	0.806	0.735	0.813	0.735	9.77
55)	T	o-Xylene	0.718	0.730	0.795	0.764	0.816	0.751	0.822	0.771	5.31
56)	T	Styrene	1.076	1.034	1.202	1.282	1.366	1.266	1.312	1.220	10.11
57)	P	Bromoform	0.167	0.163	0.170	0.180	0.196	0.203	0.203	0.183	9.44
58)	T	Isopropylbenzene	1.731	1.550	1.907	1.772	1.978	1.845	2.097	1.840	9.68
59)	S	Bromofluorobenzen	0.544	0.535	0.558	0.570	0.565	0.546	0.552	0.553	2.21
60)	P	1,1,2,2-Tetrachlo	0.497	0.394	0.436	0.450	0.420	0.391	0.400	0.427	8.90
61)	T	Bromobenzene	0.464	0.459	0.483	0.511	0.533	0.485	0.508	0.492	5.44
62)	T	1,2,3-Trichloropr	0.364	0.326	0.339	0.341	0.308	0.292	0.297	0.324	8.07
63)	T	n-Propylbenzene	1.822	1.901	1.932	2.100	2.181	2.082	2.327	2.049	8.58
64)	T	2-Chlorotoluene	1.170	1.109	1.207	1.312	1.332	1.270	1.359	1.251	7.38
65)	T	1,3,5-Trimethylbe	1.356	1.329	1.402	1.575	1.708	1.597	1.801	1.538	11.81
66)	T	4-Chlorotoluene	1.315	1.340	1.439	1.576	1.617	1.555	1.653	1.499	9.01
67)	T	tert-Butylbenzene	1.219	1.107	1.311	1.332	1.478	1.400	1.603	1.350	12.13
68)	T	1,2,4-Trimethylbe	1.317	1.493	1.448	1.641	1.706	1.595	1.745	1.564	9.74
69)	T	sec-Butylbenzene	1.754	1.733	1.985	2.005	2.189	2.074	2.460	2.029	12.38
70)	T	1,3-Dichlorobenze	1.010	0.958	1.021	1.106	1.078	0.972	1.042	1.027	5.21
71)	T	4-Isopropyltoluen	1.438	1.473	1.629	1.753	1.865	1.738	1.996	1.699	11.89
72)	T	1,4-Dichlorobenze	1.015	0.980	1.045	1.154	1.116	0.988	1.054	1.050	6.16
73)	T	n-Butylbenzene	0.795	0.745	0.802	0.865	0.967	0.938	1.082	0.885	13.33
74)	T	1,2-Dichlorobenze	0.935	0.910	0.997	1.094	1.037	0.900	0.989	0.980	7.20
75)	T	1,2-Dibromo-3-chl	0.047	0.038	0.045	0.050	0.046	0.046	0.046	0.045	8.23
76)	T	1,2,4-Trichlorobe	0.572	0.517	0.555	0.632	0.612	0.587	0.652	0.590	7.90
77)	T	Hexachlorobutadie	0.222	0.214	0.225	0.218	0.225	0.229	0.275	0.230	8.92
78)	T	Naphthalene	1.322	1.160	1.345	1.570	1.394	1.365	1.463	1.374	9.21
79)	T	1,2,3-Trichlorobe	0.504	0.512	0.530	0.602	0.524	0.509	0.559	0.534	6.58
80)	T	1,1,2-Trichloro-1		0.415	0.406	0.363	0.320	0.341	0.394	0.373	10.23
81)	T	Methyl acetate		0.362	0.368	0.380	0.300	0.294	0.284	0.331	12.98
82)	T	Cyclohexane		0.608	0.581	0.488	0.487	0.469	0.629	0.543	12.96
83)	T	Methylcyclohexane	0.494	0.453	0.470	0.387	0.414	0.418	0.567	0.458	13.19

(#) = Out of Range ### Number of calibration levels exceeded format ###

FSO0610.M Tue Jun 11 13:49:41 2013 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\06-10-13\
Data File : F5226.D
Acq On : 10 Jun 2013 21:09
Operator : XING
Sample : ICV100,ICV100,S,5g,0
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 11 16:04:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	96	0.00
2	T	Dichlorodifluoromethane	0.633	0.531	16.1	92	0.00
3	P	Chloromethane	1.341	1.280	4.5	98	0.00
4	C	Vinyl chloride	1.137	1.097	3.5	101	0.00
5	T	Bromomethane	0.652	0.645	1.1	103	0.00
6	T	Chloroethane	0.622	0.648	-4.2	106	0.00
7	T	Trichlorofluoromethane	1.439	1.398	2.8	106	0.00
8	T	Acrolein	0.041	0.045	-9.8	117	0.00
9	MC	1,1-Dichloroethene	0.884	0.913	-3.3	108	0.00
10	T	Acetone	0.283	0.312	-10.2	106	0.00
11	T	Carbon disulfide	2.748	2.871	-4.5	107	0.00
12	T	Vinyl acetate	2.695	3.025	-12.2	104	0.00
13	T	Methylene chloride	1.070	0.963	10.0	94	0.00
14	T	Acrylonitrile	0.260	0.291	-11.9	118	0.00
15	T	tert-Butyl alcohol (TBA)	0.107	0.108	-0.9	110	0.00
16	T	trans-1,2-Dichloroethene	0.947	0.935	1.3	102	0.00
17	T	Methyl tert-butyl ether (MT	1.847	1.883	-1.9	103	0.00
18	P	1,1-Dichloroethane	1.376	1.373	0.2	102	0.00
19	T	Diisopropyl ether (DIPE)	2.615	2.885	-10.3	105	0.00
20	T	cis-1,2-Dichloroethene	0.914	0.936	-2.4	101	0.00
21	T	2,2-Dichloropropane	0.540	0.552	-2.2	104	0.00
22	T	2-Butanone (MEK)	0.298	0.307	-3.0	109	0.00
23	T	Bromochloromethane	0.442	0.439	0.7	103	0.00
25	C	Chloroform	1.213	1.205	0.7	102	0.00
26	T	1,1,1-Trichloroethane	0.853	0.870	-2.0	103	0.00
27	T	Carbon tetrachloride	0.721	0.773	-7.2	104	0.00
28	T	1,1-Dichloropropene	0.917	0.923	-0.7	99	0.00
29	T	1,2-Dichloroethane (EDC)	0.931	0.935	-0.4	102	0.00
30	S	1,2-Dichloroethane-d4	0.459	0.440	4.1	97	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
32	M	Benzene	1.546	1.578	-2.1	100	0.00
33	M	Trichloroethene	0.352	0.368	-4.5	102	0.00
34	C	1,2-Dichloropropane	0.368	0.394	-7.1	102	0.00
35	T	Dibromomethane	0.195	0.204	-4.6	101	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	108	0.00
37	T	Bromodichloromethane	0.370	0.417	-12.7	103	0.00
38	T	2-Chloroethyl vinyl ether	0.166	0.198	-19.3	107	0.00
39	T	cis-1,3-Dichloropropene	0.478	0.549	-14.9	102	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.330	0.374	-13.3	108	0.00
41	S	Toluene-d8	1.112	1.158	-4.1	99	0.00
42	MC	Toluene	1.021	1.102	-7.9	104	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.477	-19.0	107	0.00
44	T	1,1,2-Trichloroethane	0.237	0.257	-8.4	105	0.00
45	T	Tetrachloroethene	0.449	0.471	-4.9	103	0.00
46	T	1,3-Dichloropropane	0.467	0.537	-15.0	104	0.00

47	T	2-Hexanone	0.267	0.309	-15.7	107	0.00
48	T	Dibromochloromethane	0.304	0.363	-19.4	106	0.00
49	T	1,2-Dibromoethane (EDB)	0.282	0.331	-17.4	107	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
51	MP	Chlorobenzene	1.164	1.179	-1.3	103	0.00
52	T	1,1,1,2-Tetrachloroethane	0.358	0.381	-6.4	103	0.00
53	C	Ethylbenzene	1.712	1.909	-11.5	104	0.00
54	T	m,p-Xylene	0.735	0.835	-13.6	105	0.00
55	T	o-Xylene	0.771	0.854	-10.8	106	0.00
56	T	Styrene	1.220	1.439	-18.0	107	0.00
57	P	Bromoform	0.183	0.217	-18.6	112	0.00
58	T	Isopropylbenzene	1.840	2.008	-9.1	103	0.00
59	S	Bromofluorobenzene	0.553	0.580	-4.9	104	0.00
60	P	1,1,2,2-Tetrachloroethane	0.427	0.450	-5.4	108	0.00
61	T	Bromobenzene	0.492	0.563	-14.4	107	0.00
62	T	1,2,3-Trichloropropane	0.324	0.330	-1.9	108	0.00
63	T	n-Propylbenzene	2.049	2.311	-12.8	107	0.00
64	T	2-Chlorotoluene	1.251	1.387	-10.9	105	0.00
65	T	1,3,5-Trimethylbenzene	1.538	1.762	-14.6	104	0.00
66	T	4-Chlorotoluene	1.499	1.689	-12.7	106	0.00
67	T	tert-Butylbenzene	1.350	1.524	-12.9	104	0.00
68	T	1,2,4-Trimethylbenzene	1.564	1.778	-13.7	105	0.00
69	T	sec-Butylbenzene	2.029	2.275	-12.1	105	0.00
70	T	1,3-Dichlorobenzene	1.027	1.144	-11.4	107	0.00
71	T	4-Isopropyltoluene	1.699	1.951	-14.8	106	0.00
72	T	1,4-Dichlorobenzene	1.050	1.169	-11.3	106	0.00
73	T	n-Butylbenzene	0.885	1.005	-13.6	105	0.00
74	T	1,2-Dichlorobenzene	0.980	1.072	-9.4	105	0.00
75	T	1,2-Dibromo-3-chloropropane	0.045	0.048	-6.7	107	0.00
76	T	1,2,4-Trichlorobenzene	0.590	0.623	-5.6	103	0.00
77	T	Hexachlorobutadiene	0.230	0.226	1.7	101	0.00
78	T	Naphthalene	1.374	1.413	-2.8	103	0.00
79	T	1,2,3-Trichlorobenzene	0.534	0.518	3.0	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.373	0.332	11.0	105	0.00
81	T	Methyl acetate	0.331	0.313	5.4	105	0.00
82	T	Cyclohexane	0.543	0.469	13.6	98	0.00
83	T	Methylcyclohexane	0.458	0.401	12.4	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FSO0610.M Tue Jun 11 16:04:24 2013 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\06-12-13\
Data File : F5280.D
Acq On : 13 Jun 2013 00:42
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 13 01:17:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	64	0.00
2	T	Dichlorodifluoromethane	0.633	0.543	14.2	62	0.00
3	P	Chloromethane	1.341	1.179	12.1	60	0.00
4	C	Vinyl chloride	1.137	1.080	5.0	66	0.00
5	T	Bromomethane	0.652	0.744	-14.1	79	0.00
6	T	Chloroethane	0.622	0.694	-11.6	75	0.01
7	T	Trichlorofluoromethane	1.439	1.686	-17.2	84	0.00
8	T	Acrolein	0.041	0.043	-4.9	75	-0.01
9	MC	1,1-Dichloroethene	0.884	1.028	-16.3	81	0.00
10	T	Acetone	0.283	0.333	-17.7	75	0.00
11	T	Carbon disulfide	2.748	3.249	-18.2	80	0.00
12	T	Vinyl acetate	2.695	3.233	-20.0	74	0.00
13	T	Methylene chloride	1.070	1.176	-9.9	76	0.00
14	T	Acrylonitrile	0.260	0.301	-15.8	81	0.00
15	T	tert-Butyl alcohol (TBA)	0.107	0.122	-14.0	82	-0.01
16	T	trans-1,2-Dichloroethene	0.947	0.987	-4.2	71	-0.01
17	T	Methyl tert-butyl ether (MT	1.847	2.063	-11.7	75	-0.01
18	P	1,1-Dichloroethane	1.376	1.473	-7.0	73	-0.01
19	T	Diisopropyl ether (DIPE)	2.615	3.069	-17.4	74	0.00
20	T	cis-1,2-Dichloroethene	0.914	1.003	-9.7	72	0.00
21	T	2,2-Dichloropropane	0.540	0.569	-5.4	71	0.00
22	T	2-Butanone (MEK)	0.298	0.349	-17.1	82	0.00
23	T	Bromochloromethane	0.442	0.435	1.6	67	0.00
25	C	Chloroform	1.213	1.320	-8.8	74	0.00
26	T	1,1,1-Trichloroethane	0.853	0.877	-2.8	68	-0.01
27	T	Carbon tetrachloride	0.721	0.800	-11.0	71	0.00
28	T	1,1-Dichloropropene	0.917	1.038	-13.2	73	0.00
29	T	1,2-Dichloroethane (EDC)	0.931	1.110	-19.2	80	0.00
30	S	1,2-Dichloroethane-d4	0.459	0.542	-18.1	79	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	73	0.00
32	M	Benzene	1.546	1.570	-1.6	75	0.00
33	M	Trichloroethene	0.352	0.344	2.3	72	0.00
34	C	1,2-Dichloropropane	0.368	0.401	-9.0	78	0.00
35	T	Dibromomethane	0.195	0.208	-6.7	78	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	69	0.00
37	T	Bromodichloromethane	0.370	0.414	-11.9	77	0.00
38	T	2-Chloroethyl vinyl ether	0.166	0.196	-18.1	80	-0.01
39	T	cis-1,3-Dichloropropene	0.478	0.553	-15.7	77	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.330	0.391	-18.5	85	0.00
41	S	Toluene-d8	1.112	1.251	-12.5	81	0.00
42	MC	Toluene	1.021	1.066	-4.4	75	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.479	-19.5	81	0.00
44	T	1,1,2-Trichloroethane	0.237	0.266	-12.2	81	0.00
45	T	Tetrachloroethene	0.449	0.401	10.7	66	0.00
46	T	1,3-Dichloropropane	0.467	0.552	-18.2	80	0.00

47	T	2-Hexanone	0.267	0.316	-18.4	82	0.00
48	T	Dibromochloromethane	0.304	0.335	-10.2	74	0.00
49	T	1,2-Dibromoethane (EDB)	0.282	0.319	-13.1	78	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
51	MP	Chlorobenzene	1.164	1.078	7.4	74	0.00
52	T	1,1,1,2-Tetrachloroethane	0.358	0.328	8.4	70	0.00
53	C	Ethylbenzene	1.712	1.756	-2.6	75	0.00
54	T	m,p-Xylene	0.735	0.803	-9.3	80	0.00
55	T	o-Xylene	0.771	0.792	-2.7	77	0.00
56	T	Styrene	1.220	1.389	-13.9	81	0.00
57	P	Bromoform	0.183	0.168	8.2	68	0.00
58	T	Isopropylbenzene	1.840	1.785	3.0	72	0.00
59	S	Bromofluorobenzene	0.553	0.605	-9.4	86	0.00
60	P	1,1,2,2-Tetrachloroethane	0.427	0.430	-0.7	82	0.00
61	T	Bromobenzene	0.492	0.485	1.4	73	0.00
62	T	1,2,3-Trichloropropane	0.324	0.323	0.3	84	0.00
63	T	n-Propylbenzene	2.049	2.124	-3.7	78	0.00
64	T	2-Chlorotoluene	1.251	1.279	-2.2	77	0.00
65	T	1,3,5-Trimethylbenzene	1.538	1.690	-9.9	79	0.00
66	T	4-Chlorotoluene	1.499	1.703	-13.6	84	0.00
67	T	tert-Butylbenzene	1.350	1.369	-1.4	74	0.00
68	T	1,2,4-Trimethylbenzene	1.564	1.668	-6.6	78	0.00
69	T	sec-Butylbenzene	2.029	2.107	-3.8	77	0.00
70	T	1,3-Dichlorobenzene	1.027	1.023	0.4	76	0.00
71	T	4-Isopropyltoluene	1.699	1.814	-6.8	78	0.00
72	T	1,4-Dichlorobenzene	1.050	1.088	-3.6	78	0.00
73	T	n-Butylbenzene	0.885	0.982	-11.0	81	0.00
74	T	1,2-Dichlorobenzene	0.980	1.052	-7.3	81	0.00
75	T	1,2-Dibromo-3-chloropropane	0.045	0.046	-2.2	80	0.00
76	T	1,2,4-Trichlorobenzene	0.590	0.531	10.0	69	0.01
77	T	Hexachlorobutadiene	0.230	0.184	20.0	65	0.00
78	T	Naphthalene	1.374	1.291	6.0	74	0.00
79	T	1,2,3-Trichlorobenzene	0.534	0.443	17.0	67	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.373	0.349	6.4	87	0.00
81	T	Methyl acetate	0.331	0.341	-3.0	91	0.00
82	T	Cyclohexane	0.543	0.457	15.8	75	0.00
83	T	Methylcyclohexane	0.458	0.411	10.3	79	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FSO0610.M Thu Jun 13 11:31:11 2013 RP1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F5217.D

Date Analyzed: 06/10/2013

Instrument ID: MSD_F

Time Analyzed: 16:38

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	179138	6.08	364599	6.90	374763	10.24
	UPPER LIMIT	358276	6.58	729198	7.40	749526	10.74
	LOWER LIMIT	89569	5.58	182299.5	6.40	187381.5	9.74
	LAB SAMPLE ID						
01	ICC2	173002	6.08	378317	6.90	362942	10.24
02	ICC5	161945	6.08	362186	6.90	354797	10.24
03	ICC1	124731	6.08	291708	6.90	278367	10.24
04	ICC20	139062	6.08	316861	6.90	317030	10.24
05	ICC200	215419	6.08	423120	6.90	445044	10.24
06	ICC150	233696	6.08	442737	6.90	449468	10.24
07	ICV100	172310	6.08	354751	6.90	379151	10.24
08							
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20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F5280.D

Date Analyzed: 06/13/2013

Instrument ID: MSD_F

Time Analyzed: 0:42

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	113856		6.08		266177		6.90		299100		10.24	
	UPPER LIMIT	227712		6.58		532354		7.40		598200		10.74	
	LOWER LIMIT	56928		5.58		133088.5		6.40		149550		9.74	
	LAB SAMPLE ID												
01	BLKS130611-02	101857		6.08		258182		6.90		264106		10.24	
02	05399-001	120610		6.08		294972		6.90		342621		10.24	
03	LCSS130612-02	156419		6.08		350995		6.90		353115		10.24	
04	LCSDS130612-02	162928		6.08		352544		6.90		356640		10.24	
05	05479-004	160942		6.08		370157		6.90		363847		10.24	
06	05479-005	114225		6.08		287556		6.90		291875		10.24	
07	05479-006	103849		6.08		265689		6.90		272999		10.24	
08	05479-010	88022		6.08		232490		6.90		238262		10.24	
09	05479-011	82137		6.08		213783		6.90		218560		10.24	
10	05479-012	75032		6.08		197872		6.90		199958		10.24	
11	05479-016	76875		6.08		204443		6.90		208291		10.24	
12	05479-017	75845		6.08		200277		6.90		207700		10.24	
13	05479-018	72930		6.08		194727		6.90		200103		10.24	
14	05479-020	75274		6.08		203071		6.90		214309		10.24	
15	05421-001	71189		6.08		189843		6.90		195142		10.24	
16	05421-003	71910		6.08		189118		6.90		191846		10.24	
17	05409-013	69703		6.08		181026		6.90		192457		10.24	
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-12-13\
Data File : F5283.D
Acq On : 13 Jun 2013 2:13
Operator : XING
Sample : GPEC_SS-WC-001,05399-001,S,5.1g,19.4
Misc : GEI-MTCLR/GREEN_PO,06/06/13,06/07/13,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 13 11:35:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.076	168	120610	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.898	114	294972	50.00	UG	0.00
50) Chlorobenzene-d5	10.238	117	342621	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.401	65	68807	62.09	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 124.18%			
41) Toluene-d8	8.563	98	331360	50.52	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.04%			
59) Bromofluorobenzene	11.639	95	179208	47.31	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 94.62%			

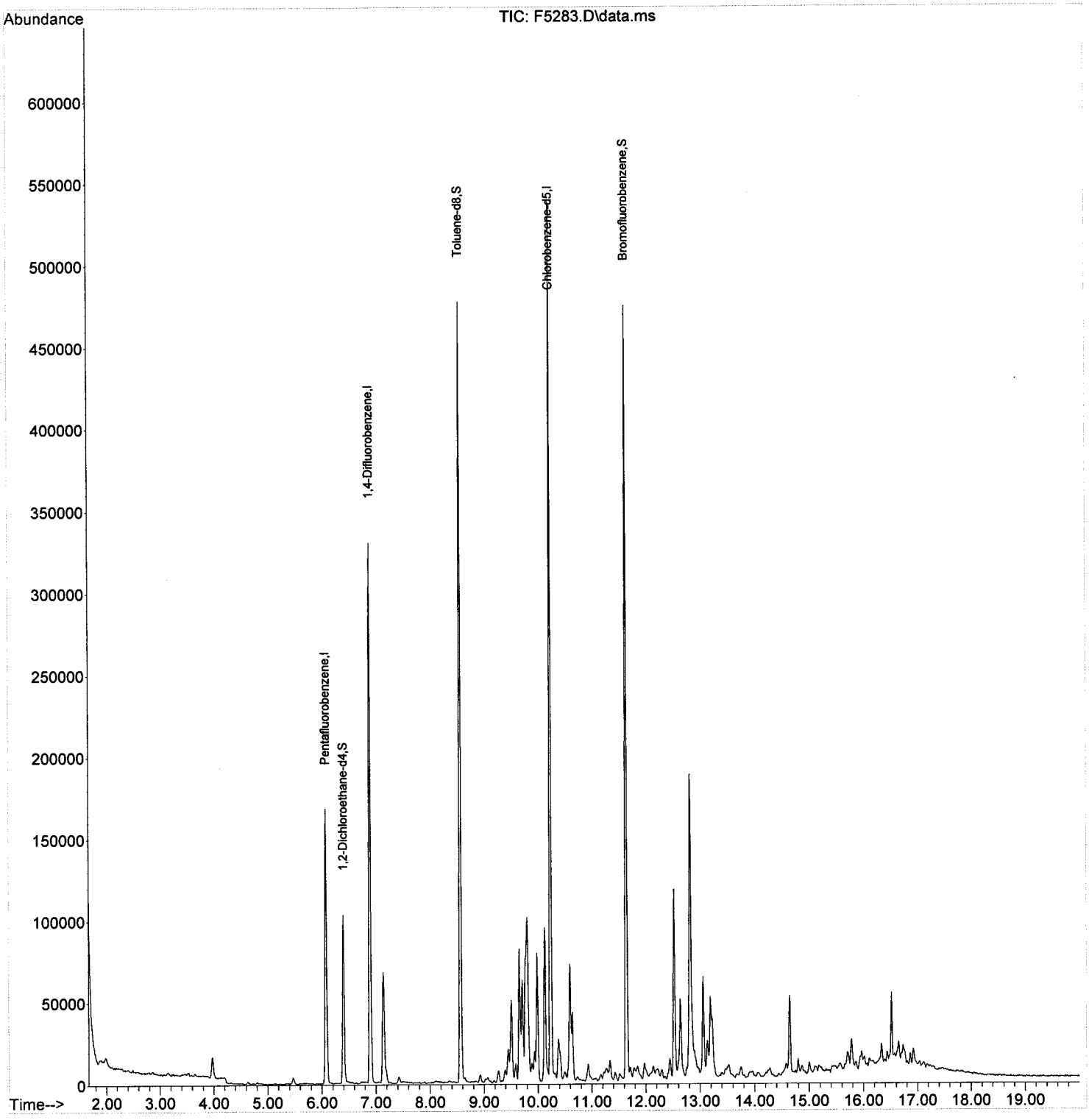
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-12-13\
Data File : F5283.D
Acq On : 13 Jun 2013 2:13
Operator : XING
Sample : GPEC_SS-WC-001,05399-001,S,5.1g,19.4
Misc : GEI-MTCLR/GREEN_PO,06/06/13,06/07/13,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jun 13 11:35:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130612-02
Client ID: BLKS130612-02
Date Received:
Date Analyzed: 06/13/2013
Data file: F5282.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.002	0.00056
Chloromethane	ND		0.002	0.00029
Vinyl chloride	ND		0.002	0.00039
Bromomethane	ND		0.001	0.00048
Chloroethane	ND		0.001	0.00037
Trichlorofluoromethane	ND		0.002	0.0003
1,1-Dichloroethene	ND		0.002	0.00041
Acetone	ND		0.005	0.00055
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.002	0.00034
Methyl tert-butyl ether (MTBE)	ND		0.002	0.00025
1,1-Dichloroethane	ND		0.001	0.0003
cis-1,2-Dichloroethene	ND		0.001	0.00028
2-Butanone (MEK)	ND		0.002	0.00029
Bromochloromethane	ND		0.001	0.00025
Chloroform	ND		0.001	0.00027
1,1,1-Trichloroethane	ND		0.001	0.00026
Carbon tetrachloride	ND		0.001	0.00025
1,2-Dichloroethane (EDC)	ND		0.001	0.00022
Benzene	ND		0.001	0.00027
Trichloroethene	ND		0.001	0.00034
1,2-Dichloropropane	ND		0.001	0.00026
1,4-Dioxane	ND		0.200	0.011
Bromodichloromethane	ND		0.001	0.00021
cis-1,3-Dichloropropene	ND		0.001	0.00021
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.00021

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS130612-02
Client ID: BLKS130612-02
Date Received:
Date Analyzed: 06/13/2013
Data file: F5282.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00025
trans-1,3-Dichloropropene	ND		0.001	0.00022
1,1,2-Trichloroethane	ND		0.001	0.00021
Tetrachloroethene	ND		0.001	0.00025
2-Hexanone	ND		0.001	0.00027
Dibromochloromethane	ND		0.001	0.00021
1,2-Dibromoethane (EDB)	ND		0.001	0.0002
Chlorobenzene	ND		0.001	0.00028
Ethylbenzene	ND		0.001	0.00028
Total Xylenes	ND		0.002	0.0008
Styrene	ND		0.001	0.00022
Bromoform	ND		0.001	0.00024
Isopropylbenzene	ND		0.001	0.00029
1,1,2,2-Tetrachloroethane	ND		0.001	0.00023
1,3-Dichlorobenzene	ND		0.001	0.00024
1,4-Dichlorobenzene	ND		0.001	0.0002
1,2-Dichlorobenzene	ND		0.001	0.00028
1,2-Dibromo-3-chloropropane	ND		0.001	0.0002
1,2,4-Trichlorobenzene	ND		0.001	0.00026
1,2,3-Trichlorobenzene	ND		0.001	0.00032
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.002	0.00037
Methyl acetate	ND		0.002	0.00022
Cyclohexane	ND		0.002	0.00039
Methylcyclohexane	ND		0.001	0.00036
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.00022

Total Target Compounds (52): 0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-12-13\
Data File : F5282.D
Acq On : 13 Jun 2013 1:43
Operator : XING
Sample : BLKS130612-02,BLKS130612-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 13 15:54:12 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.076	168	101857	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.898	114	258182	50.00	UG	0.00
50) Chlorobenzene-d5	10.238	117	264106	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.401	65	64640	69.07	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 138.14%			
41) Toluene-d8	8.563	98	297144	51.76	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 103.52%			
59) Bromofluorobenzene	11.639	95	146811	50.28	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 100.56%			
Target Compounds						Qvalue

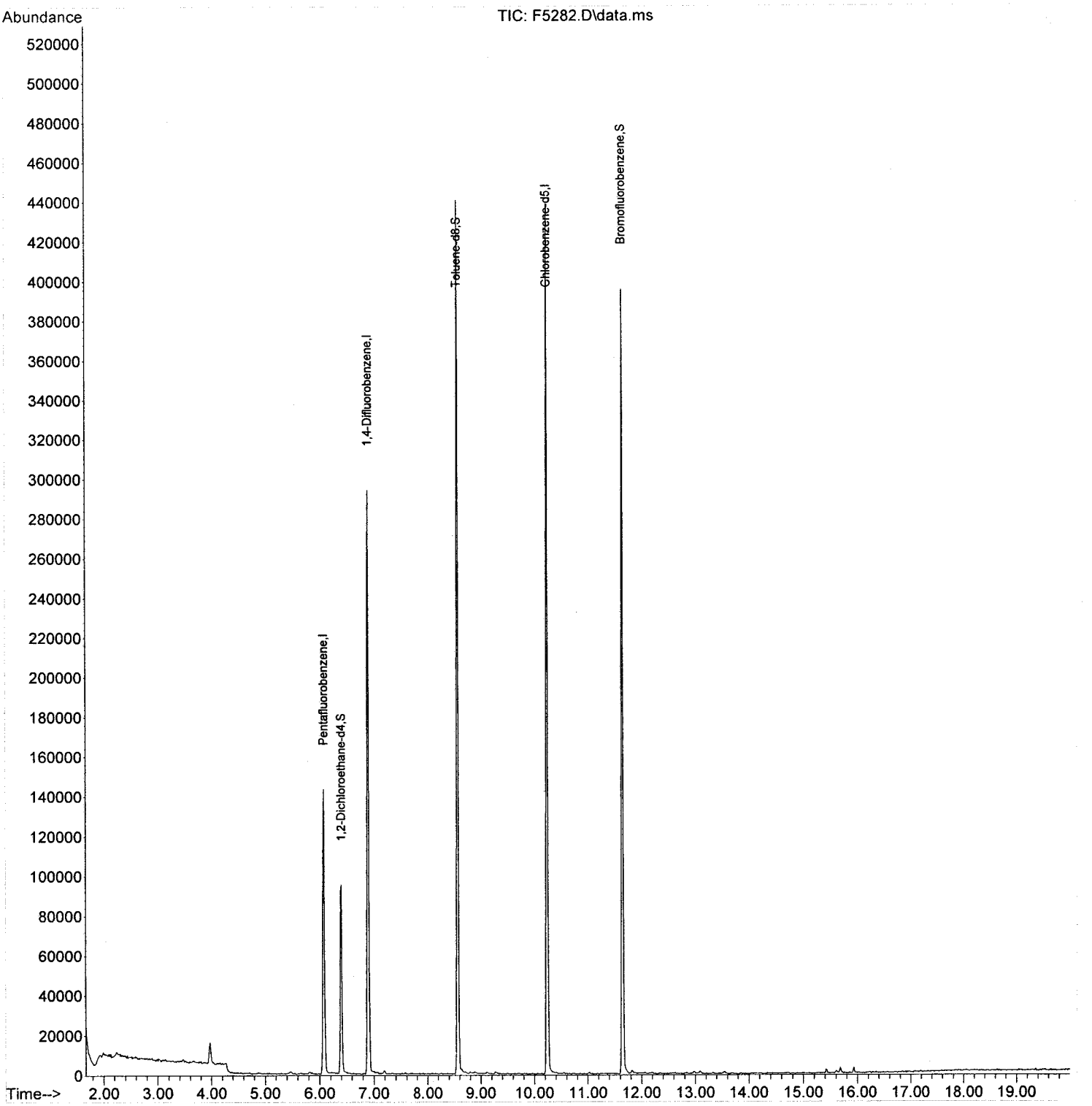
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E13-05399 0044

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-12-13\
Data File : F5282.D
Acq On : 13 Jun 2013 1:43
Operator : XING
Sample : BLKS130612-02,BLKS130612-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 13 15:54:12 2013
Quant Method : C:\MSDCHEM\1\METHODS\FSO0610.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Tue Jun 11 13:49:33 2013
Response via : Initial Calibration



GASOLINE RANGE ORGANICS

GASOLINE RANGE ORGANICS
QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/12/2013

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS130612	SOIL	L7575.D	152	104	107
05343-001	SOLID	L7576.D	152	105	108
05399-001	MEOH	L7577.D	147	101	110
LCSS130612	MEOH	L7578.D	143	107	113
05399-001MS	MEOH	L7579.D	130	106	114
05399-001MSD	MEOH	L7580.D	143	106	113
LCSTS130612	MEOH	L7581.D	146	106	109
05399-001MS	MEOH	L7582.D	147	105	110
05399-001MSD	MEOH	L7583.D	146	105	109
05409-021	MEOH	L7589.D	131	102	110
05406-001	SOIL	L7590.D	127	102	107
05357-001	SOIL	L7592.D	125	101	105
05410-001	SOIL	L7593.D	130	102	108

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	45-154	45-153
SMC2 = Toluene-d8	50 ppb	47-151	48-157
SMC3 = Bromofluorobenzene	50 ppb	48-149	47-154

Column to be used to flag recovery values

FORM 2

8260LCS

LCS ACCURACY REPORT

Lab ID: LCSTS130612
Date Received:
Date Analyzed: 06/13/2013
LCS Data file: L7581.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
TPH-GRO	500.0	0.00	373.9	75

8260MS/MSD

MS/MSD SPIKE REPORT

Lab ID: 05399-001
Client ID: GPEC_SS-WC-001
Date Received: 06/07/2013
Date Analyzed: 06/13/2013
MS Data file: L7582.D
MSD Data file: L7583.D

GC/MS Column: DB-624
Sample wt/vol: 0.052g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 19.4
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
TPH-GRO	500	40.1	485.6	89		487.7	90		0	

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L7575.D Instrument ID: MSD_L

Date Analyzed: 06/12/2013 Time Analyzed: 23:41

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
CARBON_WASTE_C	05343-001	06/13/2013	0:08
GPEC_SS-WC-001	05399-001	06/13/2013	0:35
LCS-50PPB	LCSS130612	06/13/2013	1:02
MS	05399-001MS	06/13/2013	1:29
MSD	05399-001MSD	06/13/2013	1:57
LCS-50PPB	LCSTS130612	06/13/2013	2:24
TPH-MS	05399-001MS	06/13/2013	2:52
TPH-MSD	05399-001MSD	06/13/2013	3:19
W-50_(4.5-5)/4	05409-021	06/13/2013	6:03
DS-1/12-13	05406-001	06/13/2013	6:30
STOCKPILE	05357-001	06/13/2013	7:25
DS-1/7-7.5	05410-001	06/13/2013	7:52

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L7088.D BFB Injection Date: 05/19/2013

Inst ID: MSD_L BFB Injection Time: 11:05

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.9			
75	30.0 - 60.0% of mass 95	44.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.5	(	0.5	)1
174	Great than 50.0% of mass 95	93.4			
175	5.0 - 9.0% of mass 174	6.6	(	7.1	)1
176	95.0 - 101.0% of mass 174	90.2	(	96.6	)1
177	5.0 - 9.0% of mass 176	5.9	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	L7090.D	05/19/2013	11:59
ICC5	ICC5	L7091.D	05/19/2013	12:26
ICC1	ICC1	L7093.D	05/19/2013	13:21
ICC20	ICC20	L7094.D	05/19/2013	13:48
ICC100	ICC100	L7095.D	05/19/2013	14:16
ICC200	ICC200	L7096.D	05/19/2013	14:47
ICC150	ICC150	L7097.D	05/19/2013	15:14
ICV100	ICV100	L7099.D	05/19/2013	16:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L7570.D

BFB Injection Date: 06/12/2013

Inst ID: MSD_L

BFB Injection Time: 21:24

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.8			
75	30.0 - 60.0% of mass 95	53.1			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.5	(	0.7	)1
174	Great than 50.0% of mass 95	76.5			
175	5.0 - 9.0% of mass 174	5.4	(	7.0	)1
176	95.0 - 101.0% of mass 174	74.5	(	97.4	)1
177	5.0 - 9.0% of mass 176	4.8	(	6.4	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L7571.D	06/12/2013	21:51
CCV1000	CCV1000	L7573.D	06/12/2013	22:46
BLKS130612	BLKS130612	L7575.D	06/12/2013	23:41
CARBON_WASTE	05343-001	L7576.D	06/13/2013	0:08
GPEC_SS-WC-001	05399-001	L7577.D	06/13/2013	0:35
LCS-50PPB	LCSS130612	L7578.D	06/13/2013	1:02
MS	05399-001MS	L7579.D	06/13/2013	1:29
MSD	05399-001MSD	L7580.D	06/13/2013	1:57
LCS-50PPB	LCSTS130612	L7581.D	06/13/2013	2:24
TPH-MS	05399-001MS	L7582.D	06/13/2013	2:52
TPH-MSD	05399-001MSD	L7583.D	06/13/2013	3:19
W-50_(4.5-5)/4	05409-021	L7589.D	06/13/2013	6:03
DS-1/12-13	05406-001	L7590.D	06/13/2013	6:30
STOCKPILE	05357-001	L7592.D	06/13/2013	7:25
DS-1/7-7.5	05410-001	L7593.D	06/13/2013	7:52

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LM051913.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon May 20 12:29:28 2013
Response Via : Initial Calibration

Calibration Files
1 =L7093.D 2 =L7090.D 5 =L7091.D
20 =L7094.D 100 =L7095.D 200 =L7096.D 150 =L7097.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.503	0.573	0.493	0.472	0.487	0.392	0.470	0.484	11.05
3)	TP	Chloromethane	0.534	0.522	0.509	0.428	0.457	0.447	0.441	0.477	9.12
4)	C	Vinyl chloride	0.373	0.420	0.397	0.344	0.376	0.339	0.351	0.371	7.99
5)	T	Bromomethane	0.204	0.226	0.267	0.218	0.231	0.233	0.221	0.229	8.54
6)	T	Chloroethane	0.244	0.256	0.246	0.199	0.203	0.204	0.182	0.219	13.15
7)	T	Trichlorofluorome	0.439	0.521	0.472	0.438	0.465	0.377	0.436	0.450	9.78
8)	T	Acrolein	0.057	0.052	0.051	0.053	0.052	0.050	0.049	0.052	5.11
9)	MC	1,1-Dichloroethen	0.376	0.386	0.352	0.297	0.308	0.282	0.297	0.328	12.82
10)	T	Acetone			0.090	0.094	0.089	0.082	0.084	0.088	5.12
11)	T	Carbon disulfide	1.074	1.197	1.154	1.030	1.098	1.036	1.063	1.093	5.66
12)	T	Vinyl acetate	2.107	2.128	2.189	1.993	1.999	1.964	1.990	2.053	4.24
13)	T	Methylene chlorid		0.394	0.404	0.341	0.343	0.329	0.327	0.356	9.43
14)	T	Acrylonitrile	0.130	0.117	0.111	0.119	0.117	0.110	0.111	0.116	5.96
15)	T	tert-Butyl alcoho		0.050	0.053	0.044	0.044	0.043	0.043	0.046	9.52
16)	T	trans-1,2-Dichlor	0.425	0.426	0.396	0.342	0.345	0.327	0.332	0.371	11.87
17)	T	Methyl tert-butyl	1.253	1.240	1.295	1.149	1.144	1.102	1.165	1.193	5.90
18)	TP	1,1-Dichloroethan	1.050	1.039	1.051	0.948	0.976	0.972	0.974	1.001	4.34
19)	T	Diisopropyl ether	2.124	2.080	2.114	1.888	1.887	1.835	1.862	1.970	6.56
20)	T	cis-1,2-Dichloroe	0.617	0.637	0.645	0.573	0.587	0.577	0.581	0.603	4.98
21)	T	2,2-Dichloropropa	0.675	0.718	0.683	0.615	0.602	0.566	0.577	0.634	9.23
22)	T	2-Butanone (MEK)	0.293	0.290	0.313	0.253	0.237	0.222	0.224	0.262	14.05
23)	T	Bromochloromethan	0.302	0.299	0.314	0.277	0.288	0.286	0.285	0.293	4.36
25)	C	Chloroform	0.995	0.966	0.994	0.907	0.921	0.914	0.919	0.945	4.09
26)	T	1,1,1-Trichloroet	0.721	0.819	0.781	0.701	0.748	0.733	0.751	0.750	5.21
27)	T	Carbon tetrachlor	0.561	0.622	0.558	0.530	0.605	0.579	0.616	0.581	5.87
28)	T	1,1-Dichloroprope	0.714	0.756	0.710	0.647	0.684	0.643	0.673	0.690	5.81
29)	T	1,2-Dichloroethan	0.749	0.768	0.792	0.711	0.714	0.702	0.703	0.734	4.86
30)	S	1,2-Dichloroethan	0.517	0.511	0.516	0.517	0.513	0.519	0.515	0.515	0.50
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.509	1.490	1.509	1.350	1.379	1.355	1.380	1.425	5.20
33)	M	Trichloroethene	0.361	0.344	0.352	0.317	0.332	0.321	0.329	0.337	4.81
34)	C	1,2-Dichloropropa	0.361	0.386	0.382	0.346	0.356	0.347	0.357	0.362	4.34
35)	T	Dibromomethane	0.218	0.231	0.230	0.206	0.212	0.208	0.211	0.217	4.60
36)	T	1,4-Dioxane	0.003	0.003	0.004	0.003	0.003	0.004	0.003	0.003	8.48
37)	T	Bromodichlorometh	0.396	0.411	0.414	0.379	0.425	0.433	0.438	0.414	5.05
38)	T	2-Chloroethyl vin	0.226	0.231	0.238	0.216	0.221	0.219	0.224	0.225	3.42
39)	T	cis-1,3-Dichlorop	0.565	0.580	0.591	0.543	0.573	0.574	0.578	0.572	2.62
40)	T	4-Methyl-2-pentan	0.417	0.418	0.417	0.356	0.352	0.340	0.348	0.378	9.76
41)	S	Toluene-d8	1.158	1.152	1.145	1.151	1.153	1.158	1.161	1.154	0.46
42)	MC	Toluene	0.904	0.898	0.896	0.808	0.837	0.818	0.839	0.857	4.77
43)	T	trans-1,3-Dichlor	0.504	0.537	0.539	0.493	0.520	0.516	0.525	0.519	3.20
44)	T	1,1,2-Trichloroet	0.263	0.271	0.267	0.235	0.242	0.241	0.243	0.252	5.79
45)	T	Tetrachloroethene	0.348	0.352	0.341	0.305	0.327	0.307	0.324	0.329	5.71
46)	T	1,3-Dichloropropa	0.535	0.544	0.546	0.488	0.500	0.492	0.503	0.515	4.94
47)	T	2-Hexanone	0.303	0.294	0.294	0.252	0.242	0.233	0.242	0.266	11.32
48)	T	Dibromochlorometh	0.223	0.249	0.252	0.239	0.299	0.319	0.316	0.271	14.55
49)	T	1,2-Dibromoethane	0.312	0.331	0.336	0.298	0.310	0.306	0.309	0.315	4.34
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.202	1.195	1.215	1.082	1.124	1.101	1.122	1.149	4.70
52)	T	1,1,1,2-Tetrachlo	0.337	0.368	0.376	0.350	0.394	0.399	0.404	0.375	6.79

53)	C	Ethylbenzene	1.883	1.892	1.866	1.673	1.749	1.694	1.761	1.788	5.12
54)	T	m,p-Xylene	0.733	0.755	0.736	0.653	0.676	0.636	0.668	0.694	6.71
55)	T	o-Xylene	0.729	0.733	0.741	0.658	0.679	0.641	0.670	0.693	5.85
56)	T	Styrene	1.293	1.319	1.345	1.194	1.228	1.164	1.215	1.251	5.47
57)	TP	Bromoform		0.175	0.178	0.167	0.207	0.193	0.223	0.190	11.22
58)	T	Isopropylbenzene	1.586	1.653	1.598	1.434	1.481	1.424	1.480	1.522	5.86
59)	S	Bromofluorobenzen	0.635	0.636	0.633	0.624	0.623	0.624	0.630	0.629	0.88
60)	TP	1,1,2,2-Tetrachlo	0.535	0.543	0.537	0.466	0.461	0.448	0.458	0.492	8.73
61)	T	Bromobenzene	0.527	0.547	0.546	0.486	0.498	0.475	0.492	0.510	5.78
62)	T	1,2,3-Trichloropr	0.456	0.471	0.472	0.412	0.406	0.395	0.404	0.431	7.86
63)	T	n-Propylbenzene	1.743	1.856	1.712	1.533	1.615	1.519	1.629	1.658	7.26
64)	T	2-Chlorotoluene	1.264	1.256	1.244	1.090	1.120	1.075	1.109	1.165	7.29
65)	T	1,3,5-Trimethylbe	1.331	1.361	1.325	1.174	1.172	1.112	1.174	1.236	8.07
66)	T	4-Chlorotoluene	1.501	1.506	1.497	1.293	1.321	1.253	1.313	1.383	8.13
67)	T	tert-Butylbenzene	1.034	1.055	1.023	0.914	0.915	0.874	0.913	0.961	7.61
68)	T	1,2,4-Trimethylbe	1.394	1.434	1.385	1.223	1.235	1.180	1.227	1.297	7.95
69)	T	sec-Butylbenzene	1.438	1.429	1.348	1.201	1.210	1.144	1.231	1.286	9.18
70)	T	1,3-Dichlorobenze	0.880	0.910	0.895	0.804	0.798	0.771	0.799	0.837	6.75
71)	T	4-Isopropyltoluen	1.195	1.224	1.180	1.043	1.041	0.993	1.054	1.104	8.34
72)	T	1,4-Dichlorobenze	0.931	0.960	0.940	0.834	0.842	0.812	0.839	0.880	6.96
73)	T	n-Butylbenzene	0.573	0.574	0.549	0.491	0.483	0.448	0.485	0.515	9.73
74)	T	1,2-Dichlorobenze	0.910	0.915	0.913	0.817	0.763	0.733	0.753	0.829	9.91
75)	T	1,2-Dibromo-3-chl	0.061	0.075	0.073	0.065	0.057	0.061	0.059	0.064	10.81
76)	T	1,2,4-Trichlorobe		0.371	0.362	0.449	0.361	0.346	0.362	0.375	9.84
77)	T	Hexachlorobutadie		0.155	0.166	0.149	0.134	0.120	0.132	0.143	11.95
78)	T	Naphthalene	1.107	0.992	1.262	1.169	0.982	0.930	0.953	1.056	11.85
79)	T	1,2,3-Trichlorobe		0.288	0.338	0.366	0.308	0.274	0.295	0.312	11.09
80)	T	1,1,2-Trichloro-1	0.188	0.225	0.194	0.183	0.195	0.149	0.181	0.188	11.91
81)	T	Methyl acetate	0.211	0.209	0.189	0.159	0.161	0.150	0.153	0.176	14.89
82)	T	Cyclohexane			0.505	0.475	0.475	0.370	0.458	0.457	11.25
83)	T	Methylcyclohexane			0.324	0.288	0.306	0.238	0.294	0.290	11.09

(#) = Out of Range ### Number of calibration levels exceeded format ###

LM051913.M Fri May 24 13:06:49 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\05-19-13\
Data File : L7099.D
Acq On : 19 May 2013 16:12
Operator : XING
Sample : ICV100,ICV100,A,5mL,100
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 20 12:38:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\LM051913.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Mon May 20 12:29:28 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	0.484	0.506	-4.5	103	0.00
3	TP	Chloromethane	0.477	0.455	4.6	99	0.00
4	C	Vinyl chloride	0.371	0.376	-1.3	99	0.00
5	T	Bromomethane	0.229	0.186	18.8	80	0.00
6	T	Chloroethane	0.219	0.183	16.4	90	0.00
7	T	Trichlorofluoromethane	0.450	0.488	-8.4	104	0.00
8	T	Acrolein	0.052	0.050	3.8	96	0.00
9	MC	1,1-Dichloroethene	0.328	0.318	3.0	102	0.00
10	T	Acetone	0.088	0.071	19.3	79	0.00
11	T	Carbon disulfide	1.093	1.124	-2.8	102	0.00
12	T	Vinyl acetate	2.053	2.052	0.0	102	0.00
13	T	Methylene chloride	0.356	0.345	3.1	100	0.00
14	T	Acrylonitrile	0.116	0.114	1.7	96	0.00
15	T	tert-Butyl alcohol (TBA)	0.046	0.044	4.3	100	0.01
16	T	trans-1,2-Dichloroethene	0.371	0.348	6.2	100	0.00
17	T	Methyl tert-butyl ether (MT	1.193	1.172	1.8	102	0.00
18	TP	1,1-Dichloroethane	1.001	0.993	0.8	101	0.00
19	T	Diisopropyl ether (DIPE)	1.970	1.919	2.6	101	0.00
20	T	cis-1,2-Dichloroethene	0.603	0.595	1.3	101	0.00
21	T	2,2-Dichloropropane	0.634	0.644	-1.6	106	0.00
22	T	2-Butanone (MEK)	0.262	0.222	15.3	93	0.00
23	T	Bromochloromethane	0.293	0.289	1.4	100	0.00
25	C	Chloroform	0.945	0.935	1.1	101	0.00
26	T	1,1,1-Trichloroethane	0.750	0.777	-3.6	103	0.00
27	T	Carbon tetrachloride	0.581	0.634	-9.1	104	0.00
28	T	1,1-Dichloropropene	0.690	0.709	-2.8	103	0.00
29	T	1,2-Dichloroethane (EDC)	0.734	0.723	1.5	101	0.01
30	S	1,2-Dichloroethane-d4	0.515	0.517	-0.4	100	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
32	M	Benzene	1.425	1.415	0.7	102	0.00
33	M	Trichloroethene	0.337	0.337	0.0	101	0.00
34	C	1,2-Dichloropropane	0.362	0.363	-0.3	101	0.00
35	T	Dibromomethane	0.217	0.216	0.5	101	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	98	0.00
37	T	Bromodichloromethane	0.414	0.435	-5.1	101	0.00
38	T	2-Chloroethyl vinyl ether	0.225	0.227	-0.9	101	0.00
39	T	cis-1,3-Dichloropropene	0.572	0.588	-2.8	102	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.378	0.365	3.4	103	0.00
41	S	Toluene-d8	1.154	1.155	-0.1	99	0.00
42	MC	Toluene	0.857	0.861	-0.5	102	0.00
43	T	trans-1,3-Dichloropropene	0.519	0.532	-2.5	101	0.00
44	T	1,1,2-Trichloroethane	0.252	0.248	1.6	101	0.00
45	T	Tetrachloroethene	0.329	0.336	-2.1	102	0.00
46	T	1,3-Dichloropropane	0.515	0.510	1.0	101	0.00

47	T	2-Hexanone	0.266	0.253	4.9	104	0.00
48	T	Dibromochloromethane	0.271	0.307	-13.3	102	0.00
49	T	1,2-Dibromoethane (EDB)	0.315	0.313	0.6	100	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
51	TP	Chlorobenzene	1.149	1.138	1.0	101	0.00
52	T	1,1,1,2-Tetrachloroethane	0.375	0.399	-6.4	101	0.00
53	C	Ethylbenzene	1.788	1.787	0.1	102	0.00
54	T	m,p-Xylene	0.694	0.692	0.3	102	0.00
55	T	o-Xylene	0.693	0.692	0.1	101	0.00
56	T	Styrene	1.251	1.249	0.2	101	0.00
57	TP	Bromoform	0.190	0.222	-16.8	106	0.00
58	T	Isopropylbenzene	1.522	1.511	0.7	102	0.00
59	S	Bromofluorobenzene	0.629	0.626	0.5	100	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.492	0.465	5.5	101	0.00
61	T	Bromobenzene	0.510	0.501	1.8	100	0.00
62	T	1,2,3-Trichloropropane	0.431	0.409	5.1	100	0.00
63	T	n-Propylbenzene	1.658	1.654	0.2	102	0.00
64	T	2-Chlorotoluene	1.165	1.126	3.3	100	0.00
65	T	1,3,5-Trimethylbenzene	1.236	1.204	2.6	102	0.00
66	T	4-Chlorotoluene	1.383	1.343	2.9	101	0.00
67	T	tert-Butylbenzene	0.961	0.933	2.9	101	0.00
68	T	1,2,4-Trimethylbenzene	1.297	1.248	3.8	101	0.00
69	T	sec-Butylbenzene	1.286	1.242	3.4	102	0.01
70	T	1,3-Dichlorobenzene	0.837	0.808	3.5	101	0.00
71	T	4-Isopropyltoluene	1.104	1.064	3.6	102	0.00
72	T	1,4-Dichlorobenzene	0.880	0.851	3.3	101	0.00
73	T	n-Butylbenzene	0.515	0.494	4.1	102	0.00
74	T	1,2-Dichlorobenzene	0.829	0.771	7.0	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.064	0.059	7.8	104	0.00
76	T	1,2,4-Trichlorobenzene	0.375	0.366	2.4	101	0.00
77	T	Hexachlorobutadiene	0.143	0.143	0.0	106	0.00
78	T	Naphthalene	1.056	0.994	5.9	101	0.00
79	T	1,2,3-Trichlorobenzene	0.312	0.312	0.0	101	0.01
80	T	1,1,2-Trichloro-1,2,2-trifl	0.188	0.207	-10.1	106	0.00
81	T	Methyl acetate	0.176	0.161	8.5	100	0.00
82	T	Cyclohexane	0.457	0.498	-9.0	104	0.00
83	T	Methylcyclohexane	0.290	0.322	-11.0	105	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM051913.M Fri May 24 13:07:24 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-12-13\
Data File : L7571.D
Acq On : 12 Jun 2013 21:51
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jun 13 10:39:51 2013
Quant Method : C:\MSDCHEM\1\METHODS\LM051913.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260B
QLast Update : Mon May 20 12:29:28 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	38	0.00
2	T	Dichlorodifluoromethane	0.484	0.469	3.1	36	0.00
3	TP	Chloromethane	0.477	0.449	5.9	37	0.00
4	C	Vinyl chloride	0.371	0.390	-5.1	39	0.00
5	T	Bromomethane	0.229	0.245	-7.0	40	0.01
6	T	Chloroethane	0.219	0.257	-17.4	48	0.01
7	T	Trichlorofluoromethane	0.450	0.507	-12.7	41	0.00
8	T	Acrolein	0.052	0.045	13.5	32	0.00
9	MC	1,1-Dichloroethene	0.328	0.378	-15.2	46	0.00
10	T	Acetone	0.088	0.103	-17.0	44	0.00
11	T	Carbon disulfide	1.093	1.271	-16.3	44	0.00
12	T	Vinyl acetate	2.053	2.230	-8.6	42	0.00
13	T	Methylene chloride	0.356	0.417	-17.1	46	0.00
14	T	Acrylonitrile	0.116	0.129	-11.2	42	0.00
15	T	tert-Butyl alcohol (TBA)	0.046	0.045	2.2	39	0.00
16	T	trans-1,2-Dichloroethene	0.371	0.426	-14.8	47	0.00
17	T	Methyl tert-butyl ether (MT	1.193	1.389	-16.4	46	0.00
18	TP	1,1-Dichloroethane	1.001	1.144	-14.3	44	0.00
19	T	Diisopropyl ether (DIPE)	1.970	2.273	-15.4	46	0.00
20	T	cis-1,2-Dichloroethene	0.603	0.636	-5.5	41	0.00
21	T	2,2-Dichloropropane	0.634	0.659	-3.9	41	0.00
22	T	2-Butanone (MEK)	0.262	0.309	-17.9	49	-0.01
23	T	Bromochloromethane	0.293	0.312	-6.5	41	0.00
25	C	Chloroform	0.945	1.071	-13.3	44	0.00
26	T	1,1,1-Trichloroethane	0.750	0.866	-15.5	44	0.00
27	T	Carbon tetrachloride	0.581	0.687	-18.2	43	0.00
28	T	1,1-Dichloropropene	0.690	0.727	-5.4	40	0.00
29	T	1,2-Dichloroethane (EDC)	0.734	0.865	-17.8	46	0.01
30	S	1,2-Dichloroethane-d4	0.515	0.582	-13.0	43	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	40	0.00
32	M	Benzene	1.425	1.366	4.1	40	0.00
33	M	Trichloroethene	0.337	0.364	-8.0	44	0.00
34	C	1,2-Dichloropropane	0.362	0.375	-3.6	42	0.00
35	T	Dibromomethane	0.217	0.239	-10.1	45	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	36	0.00
37	T	Bromodichloromethane	0.414	0.477	-15.2	45	0.00
38	T	2-Chloroethyl vinyl ether	0.225	0.188	16.4	34	0.00
39	T	cis-1,3-Dichloropropene	0.572	0.580	-1.4	41	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.378	0.394	-4.2	45	0.00
41	S	Toluene-d8	1.154	1.228	-6.4	43	0.00
42	MC	Toluene	0.857	0.813	5.1	39	0.00
43	T	trans-1,3-Dichloropropene	0.519	0.546	-5.2	42	0.01
44	T	1,1,2-Trichloroethane	0.252	0.256	-1.6	43	0.00
45	T	Tetrachloroethene	0.329	0.287	12.8	35	0.00
46	T	1,3-Dichloropropane	0.515	0.540	-4.9	43	0.00

47	T	2-Hexanone	0.266	0.305	-14.7	51	0.00
48	T	Dibromochloromethane	0.271	0.322	-18.8	43	0.00
49	T	1,2-Dibromoethane (EDB)	0.315	0.314	0.3	41	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	45	0.00
51	TP	Chlorobenzene	1.149	0.994	13.5	40	0.00
52	T	1,1,1,2-Tetrachloroethane	0.375	0.412	-9.9	47	0.00
53	C	Ethylbenzene	1.788	1.570	12.2	41	0.00
54	T	m,p-Xylene	0.694	0.561	19.2	38	0.00
55	T	o-Xylene	0.693	0.584	15.7	39	0.00
56	T	Styrene	1.251	1.058	15.4	39	0.00
57	TP	Bromoform	0.190	0.221	-16.3	49	0.00
58	T	Isopropylbenzene	1.522	1.280	15.9	39	0.00
59	S	Bromofluorobenzene	0.629	0.704	-11.9	51	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.492	0.521	-5.9	51	0.00
61	T	Bromobenzene	0.510	0.451	11.6	41	0.00
62	T	1,2,3-Trichloropropane	0.431	0.401	7.0	45	0.00
63	T	n-Propylbenzene	1.658	1.404	15.3	39	0.00
64	T	2-Chlorotoluene	1.165	1.042	10.6	42	0.00
65	T	1,3,5-Trimethylbenzene	1.236	1.064	13.9	41	0.00
66	T	4-Chlorotoluene	1.383	1.257	9.1	43	0.00
67	T	tert-Butylbenzene	0.961	0.795	17.3	39	0.00
68	T	1,2,4-Trimethylbenzene	1.297	1.123	13.4	41	0.00
69	T	sec-Butylbenzene	1.286	1.055	18.0	40	0.00
70	T	1,3-Dichlorobenzene	0.837	0.713	14.8	41	0.00
71	T	4-Isopropyltoluene	1.104	0.895	18.9	39	0.00
72	T	1,4-Dichlorobenzene	0.880	0.758	13.9	41	0.00
73	T	n-Butylbenzene	0.515	0.430	16.5	40	0.00
74	T	1,2-Dichlorobenzene	0.829	0.708	14.6	42	0.00
75	T	1,2-Dibromo-3-chloropropane	0.064	0.067	-4.7	53	0.00
76	T	1,2,4-Trichlorobenzene	0.375	0.335	10.7	42	0.00
77	T	Hexachlorobutadiene	0.143	0.122	14.7	42	0.00
78	T	Naphthalene	1.056	0.913	13.5	42	0.00
79	T	1,2,3-Trichlorobenzene	0.312	0.277	11.2	41	0.01
80	T	1,1,2-Trichloro-1,2,2-trifl	0.188	0.181	3.7	42	0.00
81	T	Methyl acetate	0.176	0.171	2.8	48	0.00
82	T	Cyclohexane	0.457	0.415	9.2	40	0.00
83	T	Methylcyclohexane	0.290	0.276	4.8	41	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LM051913.M Thu Jun 13 10:39:57 2013 RPT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L7095.D

Date Analyzed: 05/19/2013

Instrument ID: MSD_L

Time Analyzed: 14:16

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	423627		5.89		668402		6.71		547375		10.05	
	UPPER LIMIT	847254		6.39		1336804		7.21		1094750		10.55	
	LOWER LIMIT	211813.5		5.39		334201		6.21		273687.5		9.55	
	LAB SAMPLE ID												
01	ICC2	426465		5.89		665133		6.71		547767		10.05	
02	ICC5	420766		5.89		659998		6.71		542000		10.05	
03	ICC1	416384		5.89		647933		6.71		532241		10.05	
04	ICC20	416810		5.89		655012		6.71		537871		10.05	
05	ICC200	422272		5.89		676353		6.71		560414		10.05	
06	ICC150	427535		5.89		675535		6.71		554061		10.05	
07	ICV100	420749		5.89		661358		6.71		544940		10.05	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L7571.D

Date Analyzed: 06/12/2013

Instrument ID: MSD_L

Time Analyzed: 21:51

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	160290	5.89	268975	6.71	248581	10.05
	UPPER LIMIT	320580	6.39	537950	7.21	497162	10.55
	LOWER LIMIT	80145	5.39	134487.5	6.21	124290.5	9.55
	LAB SAMPLE ID						
01	CCV1000	158598	5.89	271291	6.71	246441	10.05
02	BLKS130612	139695	5.89	243546	6.71	220028	10.05
03	05343-001	136598	5.89	234597	6.71	212822	10.05
04	05399-001	133396	5.89	227322	6.70	194368	10.05
05	LCSS130612	152066	5.89	261440	6.71	239358	10.05
06	05399-001MS	154483	5.89	263168	6.71	239699	10.05
07	05399-001MSD	151677	5.89	258981	6.71	235334	10.05
08	LCSTS130612	147145	5.89	251877	6.71	230372	10.05
09	05399-001MS	148482	5.89	255255	6.71	233877	10.05
10	05399-001MSD	146966	5.89	252470	6.71	230708	10.05
11	05409-021	183335	5.89	312882	6.71	284461	10.05
12	05406-001	192950	5.89	321718	6.71	287388	10.05
13	05357-001	194237	5.89	325413	6.71	290751	10.05
14	05410-001	187773	5.89	322688	6.71	292657	10.05
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

GASOLINE RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-12-13\
Data File : L7577.D
Acq On : 13 Jun 2013 00:35
Operator : MEI
Sample : GPEC_SS-WC-001,05399-001,M,0.052g,19.4
Misc : GEI-MTCLR/GREEN_PO,06/06/13,06/07/13,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jun 13 10:47:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\LT052413.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Tue May 28 09:58:59 2013
Response via : Initial Calibration

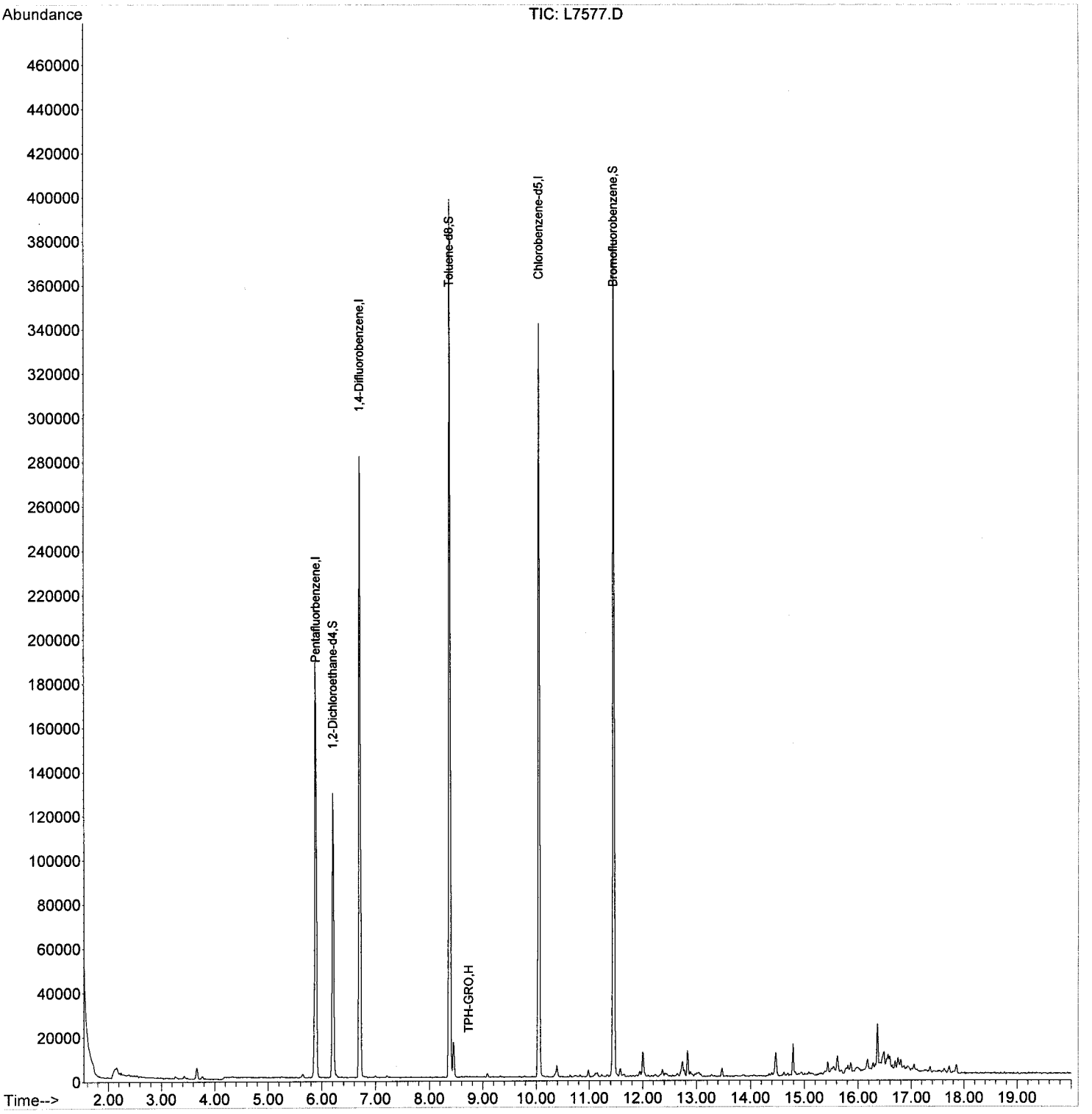
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	5.89	168	133396	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.70	114	227322	50.00	UG	-0.01
5) Chlorobenzene-d5	10.05	117	194368	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.20	65	100966	65.63	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 131.26%#			
4) Toluene-d8	8.38	98	264763	49.56	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.12%			
6) Bromofluorobenzene	11.45	95	133937	54.47	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 108.94%			
Target Compounds						Qvalue
7) TPH-GRO	8.74	TIC	217722m	40.16	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-12-13\
Data File : L7577.D
Acq On : 13 Jun 2013 00:35
Operator : MEI
Sample : GPEC_SS-WC-001,05399-001,M,0.052g,19.4
Misc : GEI-MTCLR/GREEN_PO,06/06/13,06/07/13,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jun 13 10:47:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\LT052413.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Tue May 28 09:58:59 2013
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: BLKS130612
Client ID: BLKS130612
Date Received:
Date Analyzed: 06/12/2013
Data file: L7575.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 50
% Moisture: NA

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		2.50	1.00

Total Target Compounds (1): 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-12-13\
Data File : L7575.D
Acq On : 12 Jun 2013 23:41
Operator : MEI
Sample : BLKS130612,BLKS130612,S,0.1g,0
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jun 13 10:44:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\LT052413.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Tue May 28 09:58:59 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	5.89	168	139695	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.71	114	243546	50.00	UG	0.00
5) Chlorobenzene-d5	10.05	117	220028	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.20	65	109251	67.81	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 135.62%#			
4) Toluene-d8	8.38	98	291320	50.90	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.80%			
6) Bromofluorobenzene	11.45	95	148003	53.17	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 106.34%			

Target Compounds	Qvalue

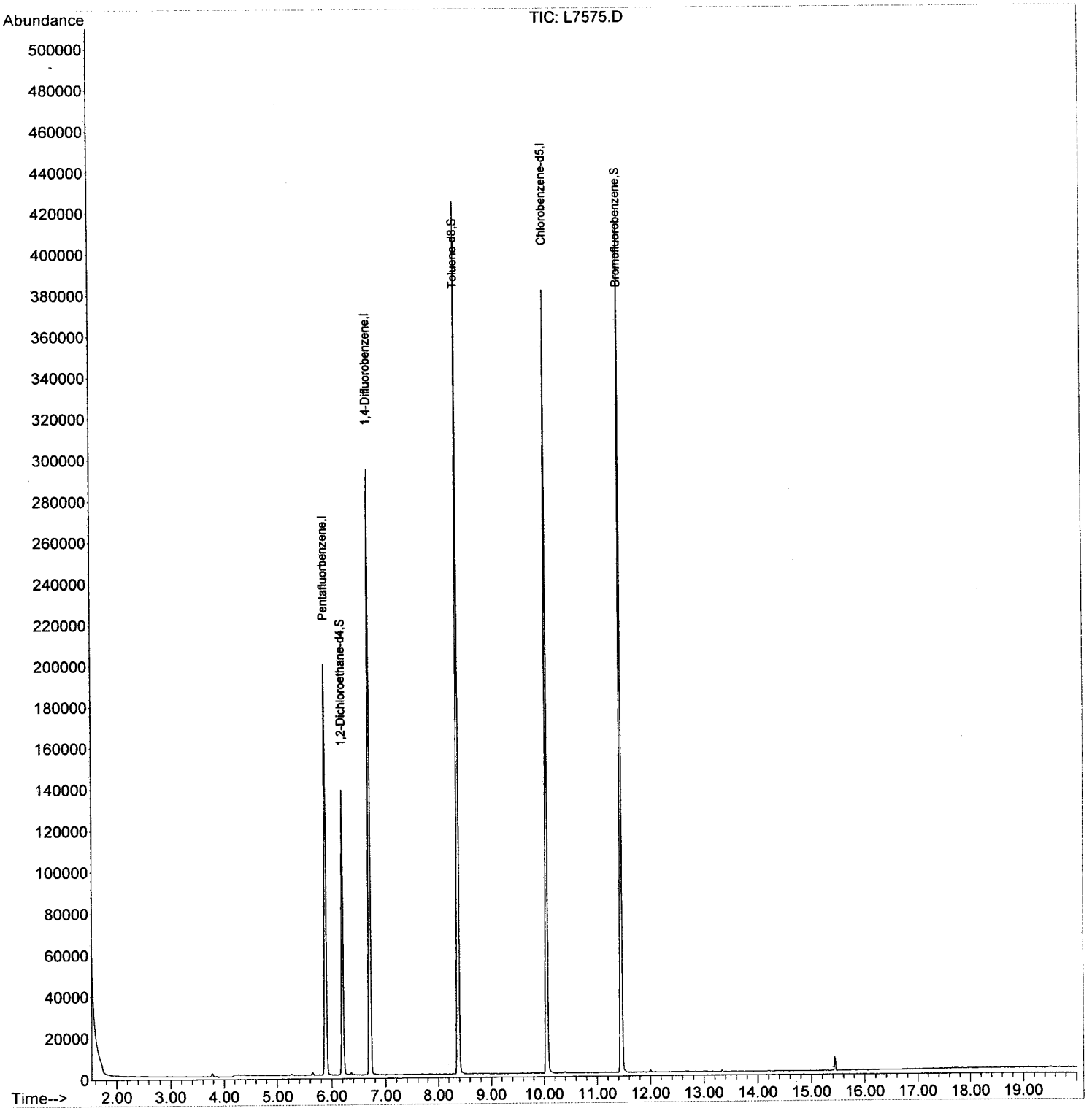
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E13-05399 0066

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-12-13\
Data File : L7575.D
Acq On : 12 Jun 2013 23:41
Operator : MEI
Sample : BLKS130612,BLKS130612,S,0.1g,0
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jun 13 10:44:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\LT052413.M
Quant Title : VOLATILE ORGANICS BY EPA 8260
QLast Update : Tue May 28 09:58:59 2013
Response via : Initial Calibration



E13-05399 0067

SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/13/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
CCV040BNA2	SOIL	C7262.D	N/A	N/A	N/A	N/A	N/A	N/A
BLKS130610-04	SOIL	C7277.D	59	69	66	76	77	108
LCSS130610-04	SOIL	C7278.D	68	79	83	89	102	110
E13-05076-002MS	SOIL	C7279.D	58	63	74	73	69	69
E13-05076-002MSD	SOIL	C7280.D	57	61	81	83	65	78
E13-05399-001	SOIL	C7281.D	N/A	N/A	63	85	N/A	74
E13-05074-010	SOIL	C7282.D	N/A	N/A	50	90	N/A	60
E13-05074-013	SOIL	C7283.D	N/A	N/A	63	84	N/A	68
E13-05076-002	SOIL	C7284.D	N/A	N/A	50	74	N/A	70
E13-05404-001	SOIL	C7285.D	42	54	60	90	40	75
E13-05404-002	SOIL	C7286.D	29	40	51	89	38	74
E13-05404-003	SOIL	C7287.D	25	50	56	91	40	74
E13-05405-001	SOIL	C7288.D	43	51	57	86	55	70
E13-05405-002	SOIL	C7289.D	40	50	75	70	55	80
E13-05405-003	SOIL	C7290.D	30	50	60	70	40	70
BLKS130611-02	SOIL	C7291.D	65	60	49	68	56	60
E13-05421-002	SOIL	C7293.D	N/A	N/A	34	47	N/A	63
E13-05421-005	SOIL	C7294.D	N/A	N/A	39	59	N/A	64
E13-05421-006	SOIL	C7295.D	N/A	N/A	54	69	N/A	66
E13-05421-007	SOIL	C7296.D	N/A	N/A	48	64	N/A	60

	Aqueous	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/13/2013

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
E13-05421-009	SOIL	C7298.D	N/A	N/A	42	61	N/A	67
E13-05421-010	SOIL	C7299.D	N/A	N/A	46	67	N/A	68
E13-05436-001	SOIL	C7300.D	37	43	44	61	44	65
E13-05436-002	SOIL	C7301.D	40	43	40	52	44	55
E13-05436-003	SOIL	C7302.D	36	40	36	47	46	63
E13-05421-003	SOIL	C7303.D	47	53	50	70	65	70
LCSS130611-02	SOIL	C7304.D	57	56	50	59	61	47

	Aqueous	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

* Column to be used to flag recovery values

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130610-04
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7278.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	35.5	71		40 - 140
Pyridine	50.0	27.7	55		20 - 120
Benzaldehyde	50.0	6.0	12		10 - 110
Phenol	50.0	35.8	72		30 - 140
Aniline	50.0	32.2	64		40 - 140
Bis(2-chloroethyl) ether	50.0	32.1	64		40 - 140
2-Chlorophenol	50.0	29.6	59		30 - 140
1,3-Dichlorobenzene	50.0	27.3	55		40 - 140
1,4-Dichlorobenzene	50.0	30.8	62		40 - 140
Benzyl alcohol	50.0	38.0	76		40 - 140
1,2-Dichlorobenzene	50.0	30.0	60		40 - 140
2-Methylphenol	50.0	33.5	67		30 - 140
Bis(2-chloroisopropyl) ether	50.0	32.6	65		40 - 140
4-Methylphenol	50.0	32.5	65		30 - 140
N-Nitrosodi-n-propylamine	50.0	33.7	67		40 - 140
Acetophenone	50.0	35.6	71		40 - 140
3-Methylphenol	50.0	32.5	65		30 - 140
Hexachloroethane	50.0	27.4	55		40 - 140
Nitrobenzene	50.0	31.7	63		40 - 140
Isophorone	50.0	32.4	65		40 - 140
2-Nitrophenol	50.0	31.8	64		30 - 140
2,4-Dimethylphenol	50.0	29.7	59		30 - 140
Bis(2-chloroethoxy) methane	50.0	33.5	67		40 - 140
Benzoic acid	50.0	19.3	39		30 - 140
2,4-Dimethylaniline	50.0	25.3	51		40 - 140
2,4-Dichlorophenol	50.0	33.6	67		30 - 140
1,2,4-Trichlorobenzene	50.0	29.1	58		40 - 140
Naphthalene	50.0	31.0	62		40 - 140
4-Chloroaniline	50.0	31.3	63		40 - 140
Hexachlorobutadiene	50.0	28.8	58		40 - 140
Caprolactam	50.0	46.6	93		40 - 140
4-Chloro-3-methylphenol	50.0	33.8	68		30 - 140
2-Methylnaphthalene	50.0	30.6	61		40 - 140
Hexachlorocyclopentadiene	50.0	34.1	68		5 - 105
2,4,6-Trichlorophenol	50.0	36.7	73		30 - 140
2,4,5-Trichlorophenol	50.0	36.3	73		30 - 140
1,1'-Biphenyl	50.0	35.6	71		40 - 140
2-Chloronaphthalene	50.0	31.7	63		40 - 140
2-Nitroaniline	50.0	39.9	80		40 - 140
Dimethyl phthalate	50.0	37.2	74		40 - 140
2,6-Dinitrotoluene	50.0	36.4	73		40 - 140
Acenaphthylene	50.0	32.8	66		40 - 140
3-Nitroaniline	50.0	42.5	85		40 - 140
Acenaphthene	50.0	33.8	68		40 - 140
2,4-Dinitrophenol	50.0	28.3	57		5 - 105

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS130610-04
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7278.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	38.9	78		30 - 140
2,4-Dinitrotoluene	50.0	41.1	82		40 - 140
Dibenzofuran	50.0	34.9	70		40 - 140
Diethyl phthalate	50.0	37.3	75		40 - 140
Fluorene	50.0	37.7	75		40 - 140
4-Chlorophenyl phenyl ether	50.0	36.6	73		40 - 140
4-Nitroaniline	50.0	44.2	88		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	33.5	67		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	36.1	72		40 - 140
4,6-Dinitro-2-methylphenol	50.0	31.9	64		10 - 110
N-Nitrosodiphenylamine	50.0	36.4	73		40 - 140
1,2-Diphenylhydrazine	50.0	28.7	57		40 - 140
4-Bromophenyl phenyl ether	50.0	36.0	72		40 - 140
Hexachlorobenzene	50.0	35.9	72		40 - 140
Atrazine	50.0	43.6	87		20 - 120
Pentachlorophenol	50.0	34.5	69		30 - 140
Phenanthrene	50.0	36.0	72		40 - 140
Anthracene	50.0	36.5	73		40 - 140
Carbazole	50.0	35.8	72		40 - 140
Di-n-butyl phthalate	50.0	38.6	77		40 - 140
Fluoranthene	50.0	36.0	72		40 - 140
Benzidine	50.0	9.8	20		5 - 105
Pyrene	50.0	38.0	76		40 - 140
3,3'-Dimethylbenzidine	50.0	15.6	31		5 - 105
Butyl benzyl phthalate	50.0	40.2	80		40 - 140
3,3'-Dichlorobenzidine	50.0	41.4	83		40 - 140
Benzo[a]anthracene	50.0	36.3	73		40 - 140
Chrysene	50.0	34.1	68		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	40.8	82		40 - 140
Di-n-octyl phthalate	50.0	46.1	92		40 - 140
Benzo[b]fluoranthene	50.0	41.2	82		40 - 140
Benzo[k]fluoranthene	50.0	49.9	100		40 - 140
Benzo[a]pyrene	50.0	50.3	101		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	54.2	108		40 - 140
Dibenz[a,h]anthracene	50.0	53.7	107		40 - 140
Benzo[g,h,i]perylene	50.0	53.5	107		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

E13-05399 0073

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E13-05076-002
Date Received: 05/31/2013
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
MS Data file: C7279.D
MSD Data file: C7280.D

GC/MS Column: DB-5
Sample wt/vol: 15.11g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 9.60
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
N-Nitrosodimethylamine	50.0	0.00	35.70	71		39.40	79		10		40-140/30
Pyridine	50.0	0.00	27.30	55		25.20	50		8		20-120/30
Benzaldehyde	50.0	0.00	21.40	43		21.60	43		1		10-110/30
Phenol	50.0	0.00	33.40	67		35.50	71		6		30-140/30
Aniline	50.0	0.00	23.50	47		22.80	46		3		40-140/30
Bis(2-chloroethyl) ether	50.0	0.00	31.00	62		32.90	66		6		40-140/30
2-Chlorophenol	50.0	0.00	30.60	61		33.90	68		10		30-140/30
1,3-Dichlorobenzene	50.0	0.00	29.50	59		31.00	62		5		40-140/30
1,4-Dichlorobenzene	50.0	0.00	30.80	62		33.60	67		9		40-140/30
Benzyl alcohol	50.0	0.00	36.60	73		38.80	78		6		40-140/30
1,2-Dichlorobenzene	50.0	0.00	31.90	64		33.50	67		5		40-140/30
2-Methylphenol	50.0	0.00	22.70	45		24.20	48		6		30-140/30
Bis(2-chloroisopropyl) ether	50.0	0.00	34.20	68		36.70	73		7		40-140/30
4-Methylphenol	50.0	0.00	34.30	69		31.40	63		9		30-140/30
N-Nitrosodi-n-propylamine	50.0	0.00	34.30	69		38.40	77		11		40-140/30
Acetophenone	50.0	0.00	37.60	75		39.80	80		6		40-140/30
3-Methylphenol	50.0	0.00	34.30	69		31.40	63		9		30-140/30
Hexachloroethane	50.0	0.00	29.50	59		30.70	61		4		40-140/30
Nitrobenzene	50.0	0.00	34.90	70		37.70	75		8		40-140/30
Isophorone	50.0	0.00	32.20	64		36.50	73		13		40-140/30
2-Nitrophenol	50.0	0.00	30.50	61		34.00	68		11		30-140/30
2,4-Dimethylphenol	50.0	0.00	31.60	63		24.00	48		27		30-140/30
Bis(2-chloroethoxy) methane	50.0	0.00	34.80	70		39.30	79		12		40-140/30
Benzoic acid	50.0	0.00	25.10	50		25.30	51		1		30-140/30
2,4-Dimethylaniline	50.0	0.00	22.00	44		20.00	40		10		40-140/30
2,4-Dichlorophenol	50.0	0.00	33.90	68		36.80	74		8		30-140/30
1,2,4-Trichlorobenzene	50.0	0.00	31.50	63		34.80	70		10		40-140/30
Naphthalene	50.0	0.00	32.20	64		36.10	72		11		40-140/30
4-Chloroaniline	50.0	0.00	29.60	59		31.20	62		5		40-140/30
Hexachlorobutadiene	50.0	0.00	30.40	61		33.30	67		9		40-140/30
Caprolactam	50.0	0.00	50.30	101		47.40	95		6		40-140/30
4-Chloro-3-methylphenol	50.0	0.00	32.10	64		34.70	69		8		30-140/30
2-Methylnaphthalene	50.0	0.00	33.50	67		37.30	75		11		40-140/30
Hexachlorocyclopentadiene	50.0	0.00	26.90	54		31.20	62		15		5-105/30
2,4,6-Trichlorophenol	50.0	0.00	30.50	61		34.70	69		13		30-140/30
2,4,5-Trichlorophenol	50.0	0.00	33.20	66		33.70	67		1		30-140/30
1,1'-Biphenyl	50.0	0.00	34.60	69		38.60	77		11		40-140/30
2-Chloronaphthalene	50.0	0.00	30.60	61		36.20	72		17		40-140/30
2-Nitroaniline	50.0	0.00	33.80	68		37.80	76		11		40-140/30
Dimethyl phthalate	50.0	0.00	32.70	65		37.00	74		12		40-140/30
2,6-Dinitrotoluene	50.0	0.00	30.90	62		34.60	69		11		40-140/30
Acenaphthylene	50.0	0.00	30.00	60		34.00	68		13		40-140/30
3-Nitroaniline	50.0	0.00	32.20	64		36.90	74		14		40-140/30
Acenaphthene	50.0	0.00	32.10	64		35.60	71		10		40-140/30
2,4-Dinitrophenol	50.0	0.00	14.40	29		18.60	37		25		5-105/30

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E13-05076-002
Date Received: 05/31/2013
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
MS Data file: C7279.D
MSD Data file: C7280.D

GC/MS Column: DB-5
Sample wt/vol: 15.11g
Matrix-Units: Soil-µg/Kg (ppb)
% Moisture: 9.60
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
4-Nitrophenol	50.0	0.00	26.70	53		29.50	59		10		30-140/30
2,4-Dinitrotoluene	50.0	0.00	30.30	61		35.30	71		15		40-140/30
Dibenzofuran	50.0	0.00	31.70	63		36.30	73		14		40-140/30
Diethyl phthalate	50.0	0.00	33.60	67		37.90	76		12		40-140/30
Fluorene	50.0	0.00	34.20	68		37.30	75		9		40-140/30
4-Chlorophenyl phenyl ether	50.0	0.00	33.90	68		37.30	75		10		40-140/30
4-Nitroaniline	50.0	0.00	35.80	72		41.10	82		14		40-140/30
1,2,4,5-Tetrachlorobenzene	50.0	0.00	32.10	64		36.20	72		12		40-140/30
2,3,4,6-Tetrachlorophenol	50.0	0.00	30.40	61		31.70	63		4		40-140/30
4,6-Dinitro-2-methylphenol	50.0	0.00	21.30	43		27.20	54		24		10-110/30
N-Nitrosodiphenylamine	50.0	0.00	32.70	65		34.00	68		4		40-140/30
1,2-Diphenylhydrazine	50.0	0.00	26.20	52		28.40	57		8		40-140/30
4-Bromophenyl phenyl ether	50.0	0.00	31.60	63		35.40	71		11		40-140/30
Hexachlorobenzene	50.0	0.00	32.50	65		35.60	71		9		40-140/30
Atrazine	50.0	0.00	31.60	63		28.50	57		10		20-120/30
Pentachlorophenol	50.0	0.00	26.50	53		25.30	51		5		30-140/30
Phenanthrene	50.0	0.00	31.30	63		32.50	65		4		40-140/30
Anthracene	50.0	0.00	32.20	64		33.20	66		3		40-140/30
Carbazole	50.0	0.00	30.80	62		33.80	68		9		40-140/30
Di-n-butyl phthalate	50.0	0.00	37.50	75		44.80	90		18		40-140/30
Fluoranthene	50.0	0.00	35.20	70		37.90	76		7		40-140/30
Benzidine	50.0	0.00	9.20	18		8.00	16		14		5-105/30
Pyrene	50.0	0.00	32.90	66		35.30	71		7		40-140/30
3,3'-Dimethylbenzidine	50.0	0.00	6.20	12		5.80	12		7		5-105/30
Butyl benzyl phthalate	50.0	2036.00	1965.40	-141	*	3322.30	2573	*	51	*	40-140/30
3,3'-Dichlorobenzidine	50.0	0.00	34.70	69		36.60	73		5		40-140/30
Benzo[a]anthracene	50.0	0.00	31.80	64		37.20	74		16		40-140/30
Chrysene	50.0	0.00	31.10	62		38.70	77		22		40-140/30
Bis(2-ethylhexyl) phthalate	50.0	0.00	62.20	124		56.40	113		10		40-140/30
Di-n-octyl phthalate	50.0	710.00	650.10	-120	*	907.40	395	*	33	*	40-140/30
Benzo[b]fluoranthene	50.0	0.00	28.90	58		35.50	71		20		40-140/30
Benzo[k]fluoranthene	50.0	0.00	36.10	72		35.00	70		3		40-140/30
Benzo[a]pyrene	50.0	0.00	33.80	68		37.00	74		9		40-140/30
Indeno[1,2,3-cd]pyrene	50.0	0.00	36.80	74		41.40	83		12		40-140/30
Dibenz[a,h]anthracene	50.0	0.00	35.30	71		38.60	77		9		40-140/30
Benzo[g,h,i]perylene	50.0	0.00	38.40	77		42.70	85		11		40-140/30

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C7277.D

Instrument ID: MSDC

Date Extracted: 06/10/13

Matrix: SOIL

Date Analyzed: 06/13/2013

Time Analyzed: 17:44

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS130610-04	06/13/2013	18:00
.	E13-05076-002MS	06/13/2013	18:16
.	E13-05076-002MSD	06/13/2013	18:33
GPEC_SS-	E13-05399-001	06/13/2013	18:49
B-3	E13-05074-010	06/13/2013	19:05
B-6	E13-05074-013	06/13/2013	19:21
DISP-C-P	E13-05076-002	06/13/2013	19:37
CONCRETE	E13-05404-001	06/13/2013	19:53
CONCRETE	E13-05404-002	06/13/2013	20:10
CONCRETE	E13-05404-003	06/13/2013	20:26
GRID_13/	E13-05405-001	06/13/2013	20:42
GRID_18/	E13-05405-002	06/13/2013	20:58
GRID_23/	E13-05405-003	06/13/2013	21:14

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C7245.D

DFTPP Injection Date : 06/13/2013

Inst ID: MSDC

DFTPP Injection Time: 09:21

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	47.7	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	51.5	
70	Less than 2.0% of mass 69	0.4	(0.8)1
127	40.0 - 60.0% of mass 198	57.0	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	7.2	
275	10.0 - 30.0% of mass 198	26.2	
365	Greater than 1.0% of mass 198	3.0	
441	Present, but less than mass 443	11.43	(76.7)3
442	40.0 - 100.0% of mass 198	74.5	
443	17.0 - 23.0% of mass 442	14.9	(20.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN022.13	ICC001BNA1	C7246.D	06/13/2013	09:32
ABN024.13	ICC010BNA1	C7247.D	06/13/2013	09:48
ABN025.13	ICC020BNA1	C7248.D	06/13/2013	10:04
ABN026.13	ICC040BNA1	C7249.D	06/13/2013	10:20
ABN027.13	ICC080BNA1	C7250.D	06/13/2013	10:36
ABN028.13	ICC120BNA1	C7251.D	06/13/2013	10:52
ABN036.13	ICV040BNA1	C7252.D	06/13/2013	11:08
ABN035.13	ICC120BNA2	C7253.D	06/13/2013	11:25
ABN034.13	ICC080BNA2	C7254.D	06/13/2013	11:41
ABN033.13	ICC040BNA2	C7255.D	06/13/2013	11:57
ABN032.13	ICC020BNA2	C7256.D	06/13/2013	12:13
ABN031.13	ICC010BNA2	C7257.D	06/13/2013	12:29
ABN029.13	ICC001BNA2	C7258.D	06/13/2013	12:45
ABN037.13	ICV040BNA2	C7259.D	06/13/2013	13:02

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C7260.D

DFTPP Injection Date : 06/13/2013

Inst ID: MSDC

DFTPP Injection Time: 13:15

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	54.4	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	55.8	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	40.0 - 60.0% of mass 198	59.4	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.8	
275	10.0 - 30.0% of mass 198	24.3	
365	Greater than 1.0% of mass 198	2.4	
441	Present, but less than mass 443	7.78	(76.0)3
442	40.0 - 100.0% of mass 198	53.9	
443	17.0 - 23.0% of mass 442	10.2	(19.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN036.13	CCV040BNA1	C7261.D	06/13/2013	13:25
ABN037.13	CCV040BNA2	C7262.D	06/13/2013	13:42
.	BLKS130610-04	C7277.D	06/13/2013	17:44
.	LCSS130610-04	C7278.D	06/13/2013	18:00
.	E13-05076-002MS	C7279.D	06/13/2013	18:16
.	E13-05076-002MSD	C7280.D	06/13/2013	18:33
GPEC_SS-	E13-05399-001	C7281.D	06/13/2013	18:49
B-3	E13-05074-010	C7282.D	06/13/2013	19:05
B-6	E13-05074-013	C7283.D	06/13/2013	19:21
DISP-C-P	E13-05076-002	C7284.D	06/13/2013	19:37
CONCRETE	E13-05404-001	C7285.D	06/13/2013	19:53
CONCRETE	E13-05404-002	C7286.D	06/13/2013	20:10
CONCRETE	E13-05404-003	C7287.D	06/13/2013	20:26
GRID_13/	E13-05405-001	C7288.D	06/13/2013	20:42
GRID_18/	E13-05405-002	C7289.D	06/13/2013	20:58
GRID_23/	E13-05405-003	C7290.D	06/13/2013	21:14
.	BLKS130611-02	C7291.D	06/13/2013	21:30
PE-3	E13-05102-003	C7292.D	06/13/2013	21:46
AOC-20-1	E13-05421-002	C7293.D	06/13/2013	22:02
AOC-20-1	E13-05421-005	C7294.D	06/13/2013	22:18
AOC-20-1	E13-05421-006	C7295.D	06/13/2013	22:34
AOC-20-1	E13-05421-007	C7296.D	06/13/2013	22:50
AOC-20-1	E13-05421-008	C7297.D	06/13/2013	23:06

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C7260.D

DFTPP Injection Date : 06/13/2013

Inst ID: MSDC

DFTPP Injection Time: 13:15

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	54.4	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	55.8	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	40.0 - 60.0% of mass 198	59.4	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.8	
275	10.0 - 30.0% of mass 198	24.3	
365	Greater than 1.0% of mass 198	2.4	
441	Present, but less than mass 443	7.78	(76.0)3
442	40.0 - 100.0% of mass 198	53.9	
443	17.0 - 23.0% of mass 442	10.2	(19.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
AOC-20-9	E13-05421-009	C7298.D	06/13/2013	23:22
AOC-20-8	E13-05421-010	C7299.D	06/13/2013	23:38
GRID_33/	E13-05436-001	C7300.D	06/13/2013	23:54
GRID_33/	E13-05436-002	C7301.D	06/14/2013	00:10
GRID_33/	E13-05436-003	C7302.D	06/14/2013	00:26
AOC-12/2	E13-05421-003	C7303.D	06/14/2013	00:42
.	LCSS130611-02	C7304.D	06/14/2013	00:58

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS1613.M
Title : BNA CALIBRATION METHOD
Last Update : Thu Jun 13 12:57:57 2013
Response Via : Initial Calibration

Calibration Files
1 =C7246.D 10 =C7247.D 20 =C7248.D
40 =C7249.D 80 =C7250.D 120 =C7251.D =

		Compound	1	10	20	40	80	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	T	N-Nitrosodimethyl	0.894	0.836	0.856	0.778	0.831	0.744	0.823	6.55
3)	T	Pyridine	1.136	1.103	1.106	1.132	1.100	0.951	1.088	6.33
4)	S	2-Fluorophenol	1.432	1.404	1.408	1.355	1.306	1.265	1.362	4.80
5)	T	Benzaldehyde	0.748	0.561	0.640	0.621	0.562	0.572	0.617	11.63
6)	S	Phenol-d5	1.628	1.771	1.787	1.612	1.660	1.525	1.664	6.01
7)	MC	Phenol	1.490	1.477	1.536	1.772	1.501	1.603	1.563	7.15
8)	T	Aniline	0.805	0.717	0.730	0.746	0.710	0.662	0.728	6.48
9)	T	Bis(2-chloroethyl	0.986	0.950	0.942	0.999	0.960	0.908	0.957	3.40
10)	M	2-Chlorophenol	1.553	1.390	1.441	1.518	1.441	1.360	1.450	5.07
11)	T	1,3-Dichlorobenze	1.597	1.548	1.587	1.739	1.649	1.771	1.648	5.41
12)	MC	1,4-Dichlorobenze	1.641	1.559	1.599	1.465	1.592	1.328	1.531	7.56
13)	T	Benzyl alcohol	0.695	0.675	0.693	0.712	0.673	0.785	0.706	5.86
14)	T	1,2-Dichlorobenze	1.477	1.385	1.413	1.434	1.548	1.473	1.455	3.94
15)	T	2-Methylphenol	0.993	1.221	1.190	1.121	1.189	1.089	1.134	7.46
16)	T	Bis(2-chloroisopr	1.671	1.593	1.546	1.481	1.514	1.482	1.548	4.76
17)	T	4-Methylphenol	1.252	1.244	1.276	1.144	1.183	1.176	1.212	4.29
18)	MP	N-Nitrosodi-n-pro	0.988	0.902	0.964	0.947	0.983	0.830	0.936	6.47
19)	T	Acetophenone	1.933	1.678	1.711	1.775	1.795	1.653	1.757	5.79
20)	T	3-Methylphenol	1.252	1.244	1.276	1.225	1.234	1.173	1.234	2.80
21)	T	Hexachloroethane	0.631	0.581	0.577	0.573	0.594	0.570	0.588	3.91
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	----------ISTD----------							
24)	S	Nitrobenzene-d5	0.324	0.312	0.324	0.340	0.378	0.400	0.346	10.15
25)	T	Nitrobenzene	0.317	0.304	0.329	0.341	0.314	0.340	0.324	4.63
26)	T	Isophorone	0.643	0.602	0.619	0.638	0.623	0.619	0.624	2.39
27)	TC	2-Nitrophenol	0.166	0.156	0.169	0.186	0.184	0.187	0.175	7.41
28)	T	2,4-Dimethylpheno	0.346	0.324	0.352	0.365	0.354	0.360	0.350	4.07
29)	T	Bis(2-chloroethox	0.392	0.356	0.391	0.374	0.387	0.355	0.376	4.53
30)	T	Benzoic acid	0.063	0.071	0.061	0.084	0.075	0.067	0.070	12.06
31)	T	2,4-Dimethylanili	0.415	0.370	0.367	0.427	0.384	0.366	0.388	6.84
32)	TC	2,4-Dichloropheno	0.282	0.245	0.268	0.291	0.275	0.272	0.272	5.80
33)	M	1,2,4-Trichlorobe	0.351	0.314	0.334	0.345	0.350	0.331	0.338	4.22
34)	T	Naphthalene	1.169	1.005	1.103	1.101	1.120	1.040	1.090	5.36
35)	T	4-Chloroaniline	0.562	0.515	0.554	0.576	0.584	0.527	0.553	4.89
36)	T	4-Aminotoluene							0.000	-1.00
37)	TC	Hexachlorobutadie	0.204	0.197	0.207	0.209	0.211	0.203	0.205	2.46
38)	T	Caprolactam	0.115	0.104	0.111	0.109	0.109	0.111	0.110	3.44
39)	T	2-Aminotoluene							0.000	-1.00
40)	MC	4-Chloro-3-methyl	0.265	0.267	0.284	0.293	0.290	0.296	0.282	4.67
41)	T	2-Methylnaphthale	0.732	0.675	0.741	0.722	0.717	0.700	0.714	3.33
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	----------ISTD----------							
44)	TP	Hexachlorocyclope	0.278	0.298	0.318	0.348	0.349	0.343	0.322	9.17
45)	TC	2,4,6-Trichloroph	0.321	0.332	0.358	0.377	0.370	0.365	0.354	6.30
46)	T	2,4,5-Trichloroph	0.321	0.350	0.373	0.377	0.377	0.390	0.365	6.81
47)	S	2-Fluorobiphenyl	1.258	1.384	1.339	1.449	1.346	1.320	1.349	4.73
48)	T	1,1'-Biphenyl	1.524	1.360	1.378	1.516	1.503	1.426	1.451	5.03
49)	T	2-Chloronaphthale	1.110	1.133	1.171	1.160	1.158	1.100	1.138	2.55
50)	T	2-Nitroaniline	0.205	0.210	0.230	0.240	0.262	0.245	0.232	9.48
51)	T	Dimethyl phthalat	1.206	1.149	1.192	1.188	1.207	1.131	1.179	2.50

52)	T	2,6-Dinitrotoluen	0.271	0.210	0.230	0.255	0.277	0.263	0.251	10.37
53)	T	Acenaphthylene	1.655	1.721	1.742	1.718	1.789	1.674	1.716	2.79
54)	T	3-Nitroaniline	0.198	0.219	0.243	0.240	0.250	0.266	0.236	10.20
55)	MC	Acenaphthene	1.169	1.078	1.104	1.096	1.169	1.084	1.117	3.72
56)	TP	2,4-Dinitrophenol	0.075	0.070	0.069	0.077	0.075	0.096	0.077	12.93
57)	MP	4-Nitrophenol	0.176	0.157	0.167	0.165	0.179	0.185	0.171	5.99
58)	M	2,4-Dinitrotoluen	0.282	0.229	0.267	0.277	0.303	0.324	0.280	11.52
59)	T	Dibenzofuran	1.525	1.495	1.535	1.562	1.569	1.532	1.536	1.74
60)	T	Diethyl phthalate	1.110	1.153	1.149	1.137	1.134	1.116	1.133	1.54
61)	T	Fluorene	1.229	1.216	1.220	1.218	1.215	1.215	1.219	0.44
62)	T	4-Chlorophenyl ph	0.621	0.601	0.626	0.639	0.637	0.621	0.624	2.19
63)	T	4-Nitroaniline	0.209	0.214	0.233	0.242	0.263	0.262	0.237	9.71
64)		1,2,4,5-Tetrachlo	0.578	0.578	0.626	0.659	0.639	0.619	0.616	5.33
65)	T	2,3,4,6-Tetrachlo	0.233	0.260	0.271	0.276	0.292	0.284	0.269	7.65
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.070	0.071	0.086	0.084	0.081	0.096	0.081	11.93
68)	TC	N-Nitrosodiphenyl	0.575	0.538	0.559	0.571	0.603	0.614	0.576	4.86
69)	T	1,2-Diphenylhydra	0.841	0.883	0.914	0.954	0.979	0.939	0.919	5.47
70)	S	2,4,6-Tribromophe	0.165	0.169	0.172	0.175	0.177	0.168	0.171	2.65
71)	T	4-Bromophenyl phe	0.257	0.242	0.255	0.264	0.269	0.277	0.261	4.64
72)	T	Hexachlorobenzene	0.303	0.287	0.300	0.312	0.321	0.314	0.306	3.92
73)	T	Atrazine	0.215	0.200	0.211	0.222	0.213	0.215	0.213	3.42
74)	MC	Pentachlorophenol	0.151	0.140	0.149	0.167	0.174	0.184	0.161	10.37
75)	T	Phenanthrene	1.154	1.070	1.110	1.092	1.181	1.188	1.132	4.30
76)	T	Anthracene	1.065	1.060	1.074	1.094	1.148	1.180	1.103	4.47
77)	T	Carbazole	0.986	0.952	0.982	0.971	1.002	1.021	0.986	2.43
78)	T	Di-n-butyl phthal	1.109	1.119	1.142	1.169	1.233	1.180	1.159	3.94
79)	TC	Fluoranthene	1.122	1.079	1.120	1.090	1.134	1.120	1.111	1.91
80)	T	Benzidine	0.496	0.439	0.492	0.550	0.517	0.513	0.501	7.34
81)		4-Aminoaniline							0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.144	1.184	1.220	1.267	1.355	1.332	1.250	6.66
84)	S	Terphenyl-d14	0.948	0.971	0.976	1.089	1.009	0.968	0.993	5.11
85)	T	3,3'-Dimethylbenz	0.534	0.673	0.635	0.691	0.738	0.703	0.662	10.76
86)	T	Butyl benzyl phth	0.397	0.442	0.461	0.511	0.528	0.533	0.479	11.38
87)	T	3,3'-Dichlorobenz	0.377	0.388	0.389	0.399	0.310	0.304	0.361	11.74
88)	T	Benzo[a]anthracen	1.138	1.037	1.075	1.081	1.131	1.095	1.093	3.46
89)	T	Chrysene	1.031	0.981	1.010	0.978	1.022	1.020	1.007	2.23
90)	T	Bis(2-ethylhexyl)	0.505	0.601	0.629	0.688	0.735	0.738	0.649	13.83
91)	T	3,3'-Dimethoxyben							0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	1.005	1.048	1.100	1.300	1.235	1.171	1.143	9.89
94)	T	Benzo[b]fluoranth	1.355	1.269	1.319	1.338	1.347	1.340	1.328	2.34
95)	T	Benzo[k]fluoranth	1.144	1.106	1.122	1.243	1.118	1.045	1.130	5.73
96)	TC	Benzo[a]pyrene	1.060	0.999	1.019	1.117	1.085	1.085	1.061	4.20
97)	T	Indeno[1,2,3-cd]p	1.148	1.129	1.191	1.391	1.508	1.518	1.314	13.70
98)	T	Dibenz[a,h]anthra	0.948	0.941	1.009	1.144	1.280	1.278	1.100	14.23
99)	T	Benzo[g,h,i]peryl	0.999	0.926	1.008	1.192	1.302	1.285	1.119	14.43

(#) = Out of Range

CS1613.M Thu Jun 13 12:58:03 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7252.D
Acq On : 13 Jun 2013 11:08
Operator : EDM
Sample : ABN036.13,ICV040BNA1,S,30.0g,0.0.5
Misc : NA,06/13/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Jun 13 11:21:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 11:20:55 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2	T	N-Nitrosodimethylamine	0.823	0.796	3.3	99	0.00
3	T	Pyridine	1.088	1.034	5.0	89	0.00
4	S	2-Fluorophenol	1.362	1.346	1.2	96	0.00
5	T	Benzaldehyde	0.617	0.613	0.6	73	0.00
6	S	Phenol-d5	1.664	1.548	7.0	93	0.00
7	MC	Phenol	1.563	1.586	-1.5	87	0.00
8	T	Aniline	0.728	0.716	1.6	93	0.00
9	T	Bis(2-chloroethyl) ether	0.957	0.936	2.2	91	0.00
10	M	2-Chlorophenol	1.450	1.490	-2.8	95	0.00
11	T	1,3-Dichlorobenzene	1.648	1.601	2.9	89	0.00
12	MC	1,4-Dichlorobenzene	1.531	1.574	-2.8	104	0.00
13	T	Benzyl alcohol	0.706	0.792	-12.2	108	0.00
14	T	1,2-Dichlorobenzene	1.455	1.415	2.7	96	0.00
15	T	2-Methylphenol	1.134	1.114	1.8	96	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.548	1.480	4.4	97	0.00
17	T	4-Methylphenol	1.212	1.204	0.7	102	-0.01
18	MP	N-Nitrosodi-n-propylamine	0.936	0.904	3.4	93	-0.01
19	T	Acetophenone	1.757	1.719	2.2	94	0.00
20	T	3-Methylphenol	1.234	1.206	2.3	95	-0.01
21	T	Hexachloroethane	0.588	0.563	4.3	95	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	97	0.00
24	S	Nitrobenzene-d5	0.346	0.336	2.9	96	0.00
25	T	Nitrobenzene	0.324	0.334	-3.1	95	0.00
26	T	Isophorone	0.624	0.616	1.3	94	-0.01
27	TC	2-Nitrophenol	0.175	0.177	-1.1	93	0.00
28	T	2,4-Dimethylphenol	0.350	0.357	-2.0	95	-0.01
29	T	Bis(2-chloroethoxy) methane	0.376	0.376	0.0	98	0.00
30	T	Benzoic acid	0.070	0.081	-15.7	95	-0.03
31	T	2,4-Dimethylaniline	0.388	0.400	-3.1	91	-0.01
32	TC	2,4-Dichlorophenol	0.272	0.279	-2.6	93	-0.01
33	M	1,2,4-Trichlorobenzene	0.338	0.345	-2.1	97	0.00
34	T	Naphthalene	1.090	1.054	3.3	93	0.00
35	T	4-Chloroaniline	0.553	0.563	-1.8	95	0.00
36	T	4-Aminotoluene					
37	TC	Hexachlorobutadiene	0.205	0.217	-5.9	101	0.00
38	T	Caprolactam	0.110	0.109	0.9	97	-0.03
39	T	2-Aminotoluene					
40	MC	4-Chloro-3-methylphenol	0.282	0.282	0.0	94	-0.02
41	T	2-Methylnaphthalene	0.714	0.698	2.2	94	-0.01
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	95	-0.02
44	TP	Hexachlorocyclopentadiene	0.322	0.335	-4.0	92	-0.01
45	TC	2,4,6-Trichlorophenol	0.354	0.392	-10.7	99	-0.01

46	T	2,4,5-Trichlorophenol	0.365	0.390	-6.8	98	-0.02
47	S	2-Fluorobiphenyl	1.349	1.430	-6.0	94	-0.01
48	T	1,1'-Biphenyl	1.451	1.462	-0.8	92	-0.02
49	T	2-Chloronaphthalene	1.138	1.140	-0.2	93	-0.02
50	T	2-Nitroaniline	0.232	0.250	-7.8	99	-0.02
51	T	Dimethyl phthalate	1.179	1.218	-3.3	97	-0.02
52	T	2,6-Dinitrotoluene	0.251	0.256	-2.0	95	-0.02
53	T	Acenaphthylene	1.716	1.727	-0.6	96	-0.02
54	T	3-Nitroaniline	0.236	0.260	-10.2	103	-0.02
55	MC	Acenaphthene	1.117	1.092	2.2	95	-0.02
56	TP	2,4-Dinitrophenol	0.077	0.079	-2.6	97	-0.02
57	MP	4-Nitrophenol	0.171	0.178	-4.1	102	-0.02
58	M	2,4-Dinitrotoluene	0.280	0.294	-5.0	101	-0.03
59	T	Dibenzofuran	1.536	1.511	1.6	92	-0.03
60	T	Diethyl phthalate	1.133	1.182	-4.3	99	-0.02
61	T	Fluorene	1.219	1.199	1.6	94	-0.03
62	T	4-Chlorophenyl phenyl ether	0.624	0.640	-2.6	95	-0.03
63	T	4-Nitroaniline	0.237	0.248	-4.6	97	-0.03
64		1,2,4,5-Tetrachlorobenzene	0.616	0.657	-6.7	95	-0.01
65	T	2,3,4,6-Tetrachlorophenol	0.269	0.281	-4.5	97	-0.02
66	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.03
67	T	4,6-Dinitro-2-methylphenol	0.081	0.086	-6.2	101	-0.03
68	TC	N-Nitrosodiphenylamine	0.576	0.546	5.2	94	-0.03
69	T	1,2-Diphenylhydrazine	0.919	0.893	2.8	92	-0.03
70	S	2,4,6-Tribromophenol	0.171	0.178	-4.1	100	-0.02
71	T	4-Bromophenyl phenyl ether	0.261	0.264	-1.1	98	-0.03
72	T	Hexachlorobenzene	0.306	0.308	-0.7	97	-0.03
73	T	Atrazine	0.213	0.215	-0.9	95	-0.04
74	MC	Pentachlorophenol	0.161	0.171	-6.2	101	-0.03
75	T	Phenanthrene	1.132	1.059	6.4	95	-0.04
76	T	Anthracene	1.103	1.076	2.4	97	-0.04
77	T	Carbazole	0.986	0.987	-0.1	100	-0.04
78	T	Di-n-butyl phthalate	1.159	1.181	-1.9	99	-0.04
79	TC	Fluoranthene	1.111	1.072	3.5	97	-0.05
80	T	Benzidine	0.501	0.582	-16.2	94	0.00
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	100	-0.04
83	M	Pyrene	1.250	1.237	1.0	97	-0.06
84	S	Terphenyl-d14	0.993	1.069	-7.7	98	-0.05
85	T	3,3'-Dimethylbenzidine	0.662	0.692	-4.5	103	0.00
86	T	Butyl benzyl phthalate	0.479	0.501	-4.6	98	-0.05
87	T	3,3'-Dichlorobenzidine	0.361	0.392	-8.6	98	-0.04
88	T	Benzo[a]anthracene	1.093	1.060	3.0	98	-0.05
89	T	Chrysene	1.007	0.966	4.1	98	-0.05
90	T	Bis(2-ethylhexyl) phthalate	0.649	0.694	-6.9	100	-0.04
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	101	-0.04
93	TC	Di-n-octyl phthalate	1.143	1.318	-15.3	102	-0.04
94	T	Benzo[b]fluoranthene	1.328	1.282	3.5	96	-0.05
95	T	Benzo[k]fluoranthene	1.130	1.280	-13.3	104	-0.05
96	TC	Benzo[a]pyrene	1.061	1.134	-6.9	102	-0.05
97	T	Indeno[1,2,3-cd]pyrene	1.314	1.407	-7.1	102	-0.09
98	T	Dibenz[a,h]anthracene	1.100	1.181	-7.4	104	-0.07
99	T	Benzo[g,h,i]perylene	1.119	1.205	-7.7	102	-0.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS1613.M Thu Jun 13 14:06:45 2013 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\06-13-13\
Data File : C7261.D
Acq On : 13 Jun 2013 13:25
Operator : EDM
Sample : ABN036.13,CCV040BNA1,S,30.0g,0.0.5
Misc : NA,06/13/13,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Jun 13 14:14:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 12:57:57 2013
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	0.00
2	T	N-Nitrosodimethylamine	0.823	0.834	-1.3	78	0.00
3	T	Pyridine	1.088	1.041	4.3	67	0.00
4	S	2-Fluorophenol	1.362	1.391	-2.1	75	0.00
5	T	Benzaldehyde	0.617	0.599	2.9	99	0.00
6	S	Phenol-d5	1.664	1.574	5.4	71	0.00
7	MC	Phenol	1.563	1.593	-1.9	66	0.00
8	T	Aniline	0.728	0.711	2.3	70	0.00
9	T	Bis(2-chloroethyl) ether	0.957	0.910	4.9	67	0.00
10	M	2-Chlorophenol	1.450	1.479	-2.0	71	0.00
11	T	1,3-Dichlorobenzene	1.648	1.675	-1.6	71	0.00
12	MC	1,4-Dichlorobenzene	1.531	1.488	2.8	74	0.00
13	T	Benzyl alcohol	0.706	0.807	-14.3	83	0.00
14	T	1,2-Dichlorobenzene	1.455	1.386	4.7	71	0.00
15	T	2-Methylphenol	1.134	1.068	5.8	70	0.00
16	T	Bis(2-chloroisopropyl) ethe	1.548	1.439	7.0	71	0.00
17	T	4-Methylphenol	1.212	1.222	-0.8	78	-0.01
18	MP	N-Nitrosodi-n-propylamine	0.936	0.893	4.6	69	-0.01
19	T	Acetophenone	1.757	1.765	-0.5	73	0.00
20	T	3-Methylphenol	1.234	1.222	1.0	73	-0.01
21	T	Hexachloroethane	0.588	0.560	4.8	72	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00
24	S	Nitrobenzene-d5	0.346	0.314	9.2	70	0.00
25	T	Nitrobenzene	0.324	0.317	2.2	71	0.00
26	T	Isophorone	0.624	0.604	3.2	72	-0.01
27	TC	2-Nitrophenol	0.175	0.165	5.7	68	0.00
28	T	2,4-Dimethylphenol	0.350	0.342	2.3	72	-0.01
29	T	Bis(2-chloroethoxy) methane	0.376	0.373	0.8	76	0.00
30	T	Benzoic acid	0.070	0.075	-7.1	69	-0.03
31	T	2,4-Dimethylaniline	0.388	0.408	-5.2	73	0.00
32	TC	2,4-Dichlorophenol	0.272	0.279	-2.6	73	-0.01
33	M	1,2,4-Trichlorobenzene	0.338	0.347	-2.7	77	0.00
34	T	Naphthalene	1.090	1.121	-2.8	78	0.00
35	T	4-Chloroaniline	0.553	0.601	-8.7	80	0.00
36	T	4-Aminotoluene					
37	TC	Hexachlorobutadiene	0.205	0.209	-2.0	76	0.00
38	T	Caprolactam	0.110	0.111	-0.9	78	-0.03
39	T	2-Aminotoluene					
40	MC	4-Chloro-3-methylphenol	0.282	0.296	-5.0	77	-0.01
41	T	2-Methylnaphthalene	0.714	0.748	-4.8	79	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	81	-0.01
44	TP	Hexachlorocyclopentadiene	0.322	0.322	0.0	75	0.00
45	TC	2,4,6-Trichlorophenol	0.354	0.389	-9.9	84	0.01

46	T	2,4,5-Trichlorophenol	0.365	0.378	-3.6	81	-0.01
47	S	2-Fluorobiphenyl	1.349	1.423	-5.5	80	0.00
48	T	1,1'-Biphenyl	1.451	1.468	-1.2	79	-0.01
49	T	2-Chloronaphthalene	1.138	1.113	2.2	78	-0.01
50	T	2-Nitroaniline	0.232	0.229	1.3	77	-0.01
51	T	Dimethyl phthalate	1.179	1.191	-1.0	81	-0.01
52	T	2,6-Dinitrotoluene	0.251	0.258	-2.8	82	-0.01
53	T	Acenaphthylene	1.716	1.666	2.9	79	-0.01
54	T	3-Nitroaniline	0.236	0.248	-5.1	84	-0.02
55	MC	Acenaphthene	1.117	1.086	2.8	80	-0.01
56	TP	2,4-Dinitrophenol	0.077	0.075	2.6	79	-0.02
57	MP	4-Nitrophenol	0.171	0.172	-0.6	84	-0.02
58	M	2,4-Dinitrotoluene	0.280	0.283	-1.1	83	-0.02
59	T	Dibenzofuran	1.536	1.521	1.0	79	-0.02
60	T	Diethyl phthalate	1.133	1.180	-4.1	84	-0.01
61	T	Fluorene	1.219	1.237	-1.5	82	-0.02
62	T	4-Chlorophenyl phenyl ether	0.624	0.634	-1.6	80	-0.02
63	T	4-Nitroaniline	0.237	0.245	-3.4	82	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.616	0.649	-5.4	80	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.269	0.279	-3.7	82	-0.01
66	I	Phenanthrene-d10	1.000	1.000	0.0	85	-0.02
67	T	4,6-Dinitro-2-methylphenol	0.081	0.095	-17.3	97	-0.02
68	TC	N-Nitrosodiphenylamine	0.576	0.569	1.2	85	-0.01
69	T	1,2-Diphenylhydrazine	0.919	0.906	1.4	81	-0.01
70	S	2,4,6-Tribromophenol	0.171	0.179	-4.7	87	-0.01
71	T	4-Bromophenyl phenyl ether	0.261	0.270	-3.4	87	-0.01
72	T	Hexachlorobenzene	0.306	0.322	-5.2	88	-0.01
73	T	Atrazine	0.213	0.225	-5.6	86	-0.02
74	MC	Pentachlorophenol	0.161	0.170	-5.6	87	-0.01
75	T	Phenanthrene	1.132	1.125	0.6	88	-0.02
76	T	Anthracene	1.103	1.122	-1.7	87	-0.02
77	T	Carbazole	0.986	1.031	-4.6	90	-0.02
78	T	Di-n-butyl phthalate	1.159	1.206	-4.1	88	-0.01
79	TC	Fluoranthene	1.111	1.155	-4.0	90	-0.02
80	T	Benzidine	0.501	0.560	-11.8	113	0.00
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	95	-0.02
83	M	Pyrene	1.250	1.198	4.2	90	-0.02
84	S	Terphenyl-d14	0.993	1.043	-5.0	91	-0.02
85	T	3,3'-Dimethylbenzidine	0.662	0.692	-4.5	111	0.00
86	T	Butyl benzyl phthalate	0.479	0.482	-0.6	89	-0.02
87	T	3,3'-Dichlorobenzidine	0.361	0.398	-10.2	94	-0.02
88	T	Benzo[a]anthracene	1.093	1.071	2.0	94	-0.02
89	T	Chrysene	1.007	0.978	2.9	95	-0.02
90	T	Bis(2-ethylhexyl) phthalate	0.649	0.652	-0.5	90	-0.02
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	98	-0.02
93	TC	Di-n-octyl phthalate	1.143	1.185	-3.7	89	-0.02
94	T	Benzo[b]fluoranthene	1.328	1.286	3.2	94	-0.02
95	T	Benzo[k]fluoranthene	1.130	1.257	-11.2	99	-0.03
96	TC	Benzo[a]pyrene	1.061	1.100	-3.7	97	-0.03
97	T	Indeno[1,2,3-cd]pyrene	1.314	1.433	-9.1	101	-0.06
98	T	Dibenz[a,h]anthracene	1.100	1.202	-9.3	103	-0.05
99	T	Benzo[g,h,i]perylene	1.119	1.238	-10.6	102	-0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS1613.M Thu Jun 13 14:14:32 2013 RPT1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7246.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 09:32

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	53110		2.55		198969		3.10		118897		3.94	
	UPPER LIMIT	106220		3.05		397938		3.60		237794		4.44	
	LOWER LIMIT	26555		2.05		99485		2.60		59449		3.44	
	LAB SAMPLE ID												
01	ICC010BNA1	52703		2.55		210200		3.10		115715		3.93	
02	ICC020BNA1	52858		2.55		197323		3.10		114710		3.94	
03	ICC040BNA1	54779		2.55		203156		3.10		115469		3.94	
04	ICC080BNA1	55669		2.55		207341		3.10		120596		3.93	
05	ICC120BNA1	54365		2.55		203200		3.11		117078		3.94	
06	ICV040BNA1	53115		2.55		197579		3.10		109714		3.92	
07	ICC120BNA2	59777		2.55		226885		3.10		126781		3.93	
08	ICC080BNA2	45379		2.55		171659		3.10		104404		3.93	
09	ICC040BNA2	38028		2.55		146008		3.10		89935		3.93	
10	ICC020BNA2	46372		2.55		174454		3.10		110601		3.92	
11	ICC010BNA2	41174		2.55		158126		3.10		98050		3.92	
12	ICC001BNA2	51209		2.55		206895		3.10		121016		3.94	
13	ICV040BNA2	40669		2.55		162768		3.10		97080		3.93	
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7246.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 09:32

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	177588	4.73	176993	6.53	129463	8.01
	UPPER LIMIT	355176	5.23	353986	7.03	258926	8.51
	LOWER LIMIT	88794	4.23	88497	6.03	64732	7.51
	LAB SAMPLE ID						
01	ICC010BNA1	181774	4.71	169014	6.51	131785	7.98
02	ICC020BNA1	175344	4.73	156624	6.53	123206	8.00
03	ICC040BNA1	170794	4.72	144566	6.52	105518	7.99
04	ICC080BNA1	172170	4.71	142334	6.51	118628	7.99
05	ICC120BNA1	165974	4.72	138112	6.52	122489	8.00
06	ICV040BNA1	167672	4.69	143933	6.48	106299	7.96
07	ICC120BNA2	194829	4.71	169339	6.51	102354	7.98
08	ICC080BNA2	171073	4.70	165186	6.50	102224	7.98
09	ICC040BNA2	147568	4.69	145350	6.49	116207	7.96
10	ICC020BNA2	181694	4.68	169498	6.46	103890	7.93
11	ICC010BNA2	164776	4.68	161635	6.48	103442	7.96
12	ICC001BNA2	187471	4.71	162239	6.51	97408	7.98
13	ICV040BNA2	151972	4.71	148704	6.51	120987	7.99
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7261.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 13:25

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	40109	2.55	154892	3.10	93673	3.93
	UPPER LIMIT	80218	3.05	309784	3.60	187346	4.43
	LOWER LIMIT	20055	2.05	77446	2.60	46837	3.43
	LAB SAMPLE ID						
01	CCV040BNA2	56009	2.55	211176	3.10	123771	3.94
02	BLKS130610-04	73829	2.55	297171	3.10	171068	3.91
03	LCSS130610-04	64782	2.55	263286	3.10	154795	3.90
04	E13-05076-002MS	23773	2.55	92297	3.10	58003	3.90
05	E13-05076-002MSD	20135	2.55	77470	3.09	47877	3.90
06	E13-05399-001	63711	2.55	236305	3.10	119803	3.93
07	E13-05074-010	78435	2.55	277068	3.10	110956	3.93
08	E13-05074-013	52558	2.55	183328	3.10	89928	3.93
09	E13-05076-002	21047	2.55	83185	3.10	47828	3.90
10	E13-05404-001	65635	2.55	205975	3.10	87804	3.93
11	E13-05404-002	57873	2.55	195065	3.10	88958	3.93
12	E13-05404-003	74345	2.55	247571	3.10	117698	3.94
13	E13-05405-001	54112	2.55	184547	3.11	88864	3.95
14	E13-05405-002	60071	2.55	225462	3.11	114130	3.94
15	E13-05405-003	75160	2.55	243817	3.11	115276	3.94
16	BLKS130611-02	72110	2.55	274521	3.10	148796	3.90
17	E13-05102-003	65199	2.56	179401	3.11	112399	3.92
18	E13-05421-002	54495	2.55	213089	3.10	118475	3.90
19	E13-05421-005	64196	2.55	236629	3.10	126729	3.91
20	E13-05421-006	60302	2.55	218057	3.10	120397	3.91
21	E13-05421-007	65966	2.55	238242	3.10	119347	3.90
22	E13-05421-008	78534	2.55	267462	3.10	138332	3.91

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7261.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 13:25

	40 ppm	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	145304		4.71		137036		6.51		103531		7.99	
	UPPER LIMIT	290608		5.21		274072		7.01		207062		8.49	
	LOWER LIMIT	72652		4.21		68518		6.01		51766		7.49	
	LAB SAMPLE ID												
01	CCV040BNA2	188881		4.72		160560		6.52		121689		7.98	
02	BLKS130610-04	268864		4.65		215116		6.43		165030		7.91	
03	LCSS130610-04	243252		4.64		204675		6.42		148269		7.89	
04	E13-05076-002MS	88652		4.64		92712		6.42		91178		7.89	
05	E13-05076-002MSD	74517		4.64		75868		6.42		77338		7.89	
06	E13-05399-001	159728		4.70		186435		6.49		171864		7.97	
07	E13-05074-010	135025		4.71		156075		6.51		149171		7.99	
08	E13-05074-013	123486		4.70		149065		6.51		133684		8.02	
09	E13-05076-002	75624		4.64		79852		6.42		80099		7.90	
10	E13-05404-001	117795		4.70		158400		6.51		128977		8.05	
11	E13-05404-002	113431		4.70		134610		6.50		108225		7.99	
12	E13-05404-003	150390		4.71		182376		6.51		149099		8.00	
13	E13-05405-001	131963		4.74		160103		6.54		127871		8.05	
14	E13-05405-002	149629		4.71		168568		6.50		132719		7.99	
15	E13-05405-003	141449		4.71		153731		6.49		111288		7.98	
16	BLKS130611-02	206371		4.64		214622		6.42		164879		7.90	
17	E13-05102-003	2453*		4.69		127*		6.50		132999		7.91	
18	E13-05421-002	166661		4.64		182296		6.43		137060		7.90	
19	E13-05421-005	177615		4.65		184837		6.44		139135		7.92	
20	E13-05421-006	168619		4.66		186944		6.44		140370		7.92	
21	E13-05421-007	177200		4.65		202699		6.43		151326		7.91	
22	E13-05421-008	1440*		4.68		211032		6.43		155802		7.93	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7261.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 13:25

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	40109		2.55		154892		3.10		93673		3.93	
	UPPER LIMIT	80218		3.05		309784		3.60		187346		4.43	
	LOWER LIMIT	20055		2.05		77446		2.60		46837		3.43	
	LAB SAMPLE ID												
01	E13-05421-009	74436		2.55		263787		3.10		133494		3.91	
02	E13-05421-010	60793		2.55		219808		3.1		112163		3.9	
03	E13-05436-001	59665		2.55		218616		3.1		115173		3.9	
04	E13-05436-002	65915		2.55		249108		3.1		132176		3.9	
05	E13-05436-003	63651		2.55		234963		3.1		125222		3.9	
06	E13-05421-003	55169		2.55		210654		3.1		115931		3.9	
07	LCSS130611-02	56959		2.55		213334		3.1		110959		3.9	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
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RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C7261.D

Date Analyzed: 06/13/2013

Instrument ID: MSDC

Time Analyzed: 13:25

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	145304	4.71	137036	6.51	103531	7.99
	UPPER LIMIT	290608	5.21	274072	7.01	207062	8.49
	LOWER LIMIT	72652	4.21	68518	6.01	51766	7.49
	LAB SAMPLE ID						
01	E13-05421-009	168416	4.65	183745	6.43	133551	7.91
02	E13-05421-010	158500	4.64	181297	6.42	130107	7.91
03	E13-05436-001	163365	4.63	182423	6.41	128149	7.89
04	E13-05436-002	186391	4.64	200789	6.42	147015	7.9
05	E13-05436-003	176203	4.64	193492	6.42	142617	7.91
06	E13-05421-003	176686	4.63	183277	6.42	127005	7.91
07	LCSS130611-02	154615	4.63	176130	6.41	126962	7.89
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7281.D
Acq On : 13 Jun 2013 18:49
Operator : EDM
Sample : GPEC_SS-,E13-05399-001,S,15.12g,19.4,0.5
Misc : 130610-04,06/10/13,06/07/13,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 10:53:40 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 12:57:57 2013
Response via : Initial Calibration

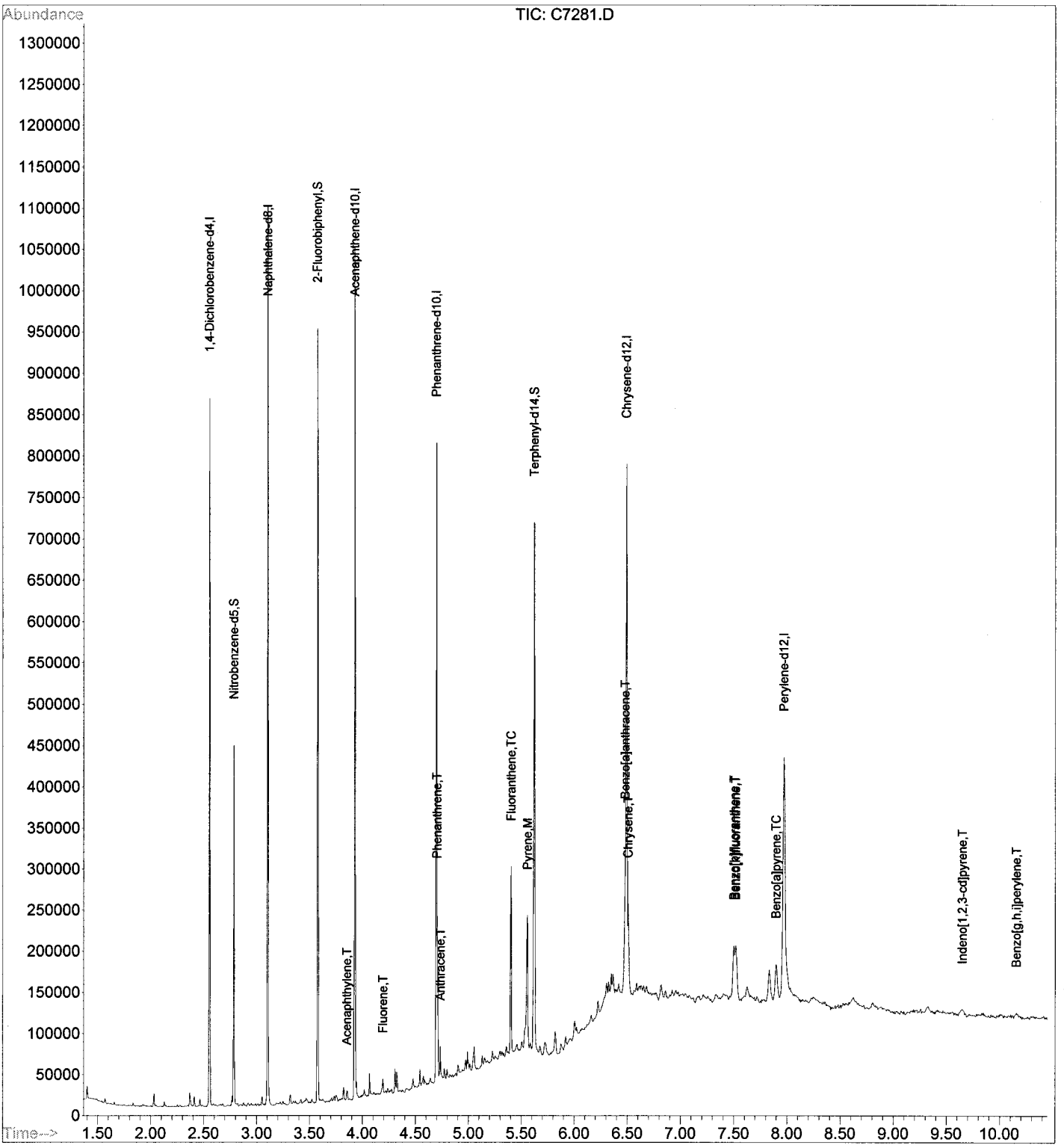
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.55	152	63711	40.00	UG		0.00
23) Naphthalene-d8	3.10	136	236305	40.00	UG		0.00
43) Acenaphthene-d10	3.93	164	119803	40.00	UG		-0.02
66) Phenanthrene-d10	4.70	188	159728	40.00	UG		-0.03
82) Chrysene-d12	6.49	240	186435	40.00	UG		-0.03
92) Perylene-d12	7.97	264	171864	40.00	UG		-0.03
System Monitoring Compounds							
4) 2-Fluorophenol	0.00	112	0d	0.00	UG		
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG		
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.00%#			
24) Nitrobenzene-d5	2.78	82	64160	31.35	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	62.70%			
47) 2-Fluorobiphenyl	3.57	172	170970	42.31	UG		-0.01
Spiked Amount 50.000	Range 33 - 91		Recovery =	84.62%			
70) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG		
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.00%#			
84) Terphenyl-d14	5.62	244	171991	37.15	UG		-0.04
Spiked Amount 50.000	Range 15 - 122		Recovery =	74.30%			
Target Compounds							Qvalue
53) Acenaphthylene	3.86	152	3653	0.71	UG	#	91
61) Fluorene	4.19	166	2563	0.70	UG		96
75) Phenanthrene	4.71	178	30948	6.84	UG		99
76) Anthracene	4.73	178	10095	2.29	UG		97
79) Fluoranthene	5.40	202	65850	14.84	UG	#	95
83) Pyrene	5.56	202	58182	9.98	UG	#	88
88) Benzo[a]anthracene	6.48	228	36218	7.11	UG	#	88
89) Chrysene	6.51	228	32776	6.98	UG		96
94) Benzo[b]fluoranthene	7.50	252	30006m	5.26	UG		
95) Benzo[k]fluoranthene	7.52	252	32834	6.77	UG	#	87
96) Benzo[a]pyrene	7.90	252	27924	6.13	UG		97
97) Indeno[1,2,3-cd]pyrene	9.65	276	9964m	1.76	UG		
99) Benzo[g,h,i]perylene	10.15	276	6349	1.32	UG	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7281.D
Acq On : 13 Jun 2013 18:49
Operator : EDM
Sample : GPEC_SS-,E13-05399-001,S,15.12g,19.4,0.5
Misc : 130610-04,06/10/13,06/07/13,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 14 10:53:40 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 12:57:57 2013
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130610-04
Client ID: .
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7277.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.028
Benzaldehyde	ND		0.033	0.013
Phenol	ND		0.033	0.015
Aniline	ND		0.033	0.026
Bis(2-chloroethyl) ether	ND		0.033	0.023
2-Chlorophenol	ND		0.033	0.014
1,3-Dichlorobenzene	ND		0.033	0.015
1,4-Dichlorobenzene	ND		0.033	0.013
Benzyl alcohol	ND		0.033	0.021
1,2-Dichlorobenzene	ND		0.033	0.013
2-Methylphenol	ND		0.033	0.027
Bis(2-chloroisopropyl) ether	ND		0.033	0.012
4-Methylphenol **	ND		0.033	0.019
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.011
3-Methylphenol	ND		0.033	0.019
Hexachloroethane	ND		0.033	0.00967
Nitrobenzene	ND		0.033	0.033
Isophorone	ND		0.033	0.022
2-Nitrophenol	ND		0.033	0.025
2,4-Dimethylphenol	ND		0.033	0.026
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.016
2,4-Dimethylaniline	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.031
1,2,4-Trichlorobenzene	ND		0.033	0.00967
Naphthalene	ND		0.033	0.00997
4-Chloroaniline	ND		0.033	0.031
Hexachlorobutadiene	ND		0.033	0.017
Caprolactam	ND		0.033	0.011
4-Chloro-3-methylphenol	ND		0.033	0.031
2-Methylnaphthalene	ND		0.033	0.027
Hexachlorocyclopentadiene	ND		0.033	0.022
2,4,6-Trichlorophenol	ND		0.033	0.011
2,4,5-Trichlorophenol	ND		0.033	0.013
1,1'-Biphenyl	ND		0.033	0.010
2-Chloronaphthalene	ND		0.033	0.031
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS130610-04
Client ID: .
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7277.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.019
Acenaphthylene	ND		0.033	0.023
3-Nitroaniline	ND		0.033	0.028
Acenaphthene	ND		0.033	0.027
2,4-Dinitrophenol	ND		0.033	0.019
4-Nitrophenol	ND		0.033	0.025
2,4-Dinitrotoluene	ND		0.033	0.022
Dibenzofuran	ND		0.033	0.011
Diethyl phthalate	ND		0.033	0.025
Fluorene	ND		0.033	0.018
4-Chlorophenyl phenyl ether	ND		0.033	0.015
4-Nitroaniline	ND		0.033	0.027
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.011
2,3,4,6-Tetrachlorophenol	ND		0.033	0.031
4,6-Dinitro-2-methylphenol	ND		0.033	0.026
N-Nitrosodiphenylamine	ND		0.033	0.016
1,2-Diphenylhydrazine	ND		0.033	0.026
4-Bromophenyl phenyl ether	ND		0.033	0.013
Hexachlorobenzene	ND		0.033	0.027
Atrazine	ND		0.033	0.023
Pentachlorophenol	ND		0.033	0.014
Phenanthrene	ND		0.033	0.022
Anthracene	ND		0.033	0.033
Carbazole	ND		0.033	0.019
Di-n-butyl phthalate	ND		0.033	0.030
Fluoranthene	ND		0.033	0.013
Benzidine	ND		0.033	0.00967
Pyrene	ND		0.033	0.025
3,3'-Dimethylbenzidine	ND		0.033	0.011
Butyl benzyl phthalate	ND		0.033	0.021
3,3'-Dichlorobenzidine	ND		0.033	0.023
Benzo[a]anthracene	ND		0.033	0.032
Chrysene	ND		0.033	0.023
Bis(2-ethylhexyl) phthalate	ND		0.033	0.016
Di-n-octyl phthalate	ND		0.033	0.030
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.031
Benzo[a]pyrene	ND		0.033	0.012
Indeno[1,2,3-cd]pyrene	ND		0.033	0.022
Dibenz[a,h]anthracene	ND		0.033	0.024
Benzo[g,h,i]perylene	ND		0.033	0.030

Total Target Compounds (80): 0

** - represents the total of 3+4-Methylphenol

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS130610-04
Client ID: .
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/13/2013
Data file: C7277.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7277.D
Acq On : 13 Jun 2013 17:44
Operator : EDM
Sample : .,BLKS130610-04,S,15.00g,0,0.5
Misc : 130610-04,06/10/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 14 09:02:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 12:57:57 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.55	152	73829	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	297171	40.00	UG	-0.01
43) Acenaphthene-d10	3.91	164	171068	40.00	UG	-0.04
66) Phenanthrene-d10	4.65	188	268864m	40.00	UG	-0.07
82) Chrysene-d12	6.43	240	215116	40.00	UG	-0.10
92) Perylene-d12	7.91	264	165030	40.00	UG	-0.10
System Monitoring Compounds						
4) 2-Fluorophenol	2.03	112	147501	58.69	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 58.69%			
6) Phenol-d5	2.37	99	210437	68.52	UG	-0.01
Spiked Amount 100.000	Range 25 - 108		Recovery = 68.52%			
24) Nitrobenzene-d5	2.78	82	84809	32.95	UG	-0.01
Spiked Amount 50.000	Range 24 - 91		Recovery = 65.90%			
47) 2-Fluorobiphenyl	3.56	172	219457	38.03	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 76.06%			
70) 2,4,6-Tribromophenol	4.29	330	88746	77.21	UG	-0.05
Spiked Amount 100.000	Range 37 - 115		Recovery = 77.21%			
84) Terphenyl-d14	5.54	244	288805	54.06	UG	-0.12
Spiked Amount 50.000	Range 15 - 122		Recovery = 108.12%			

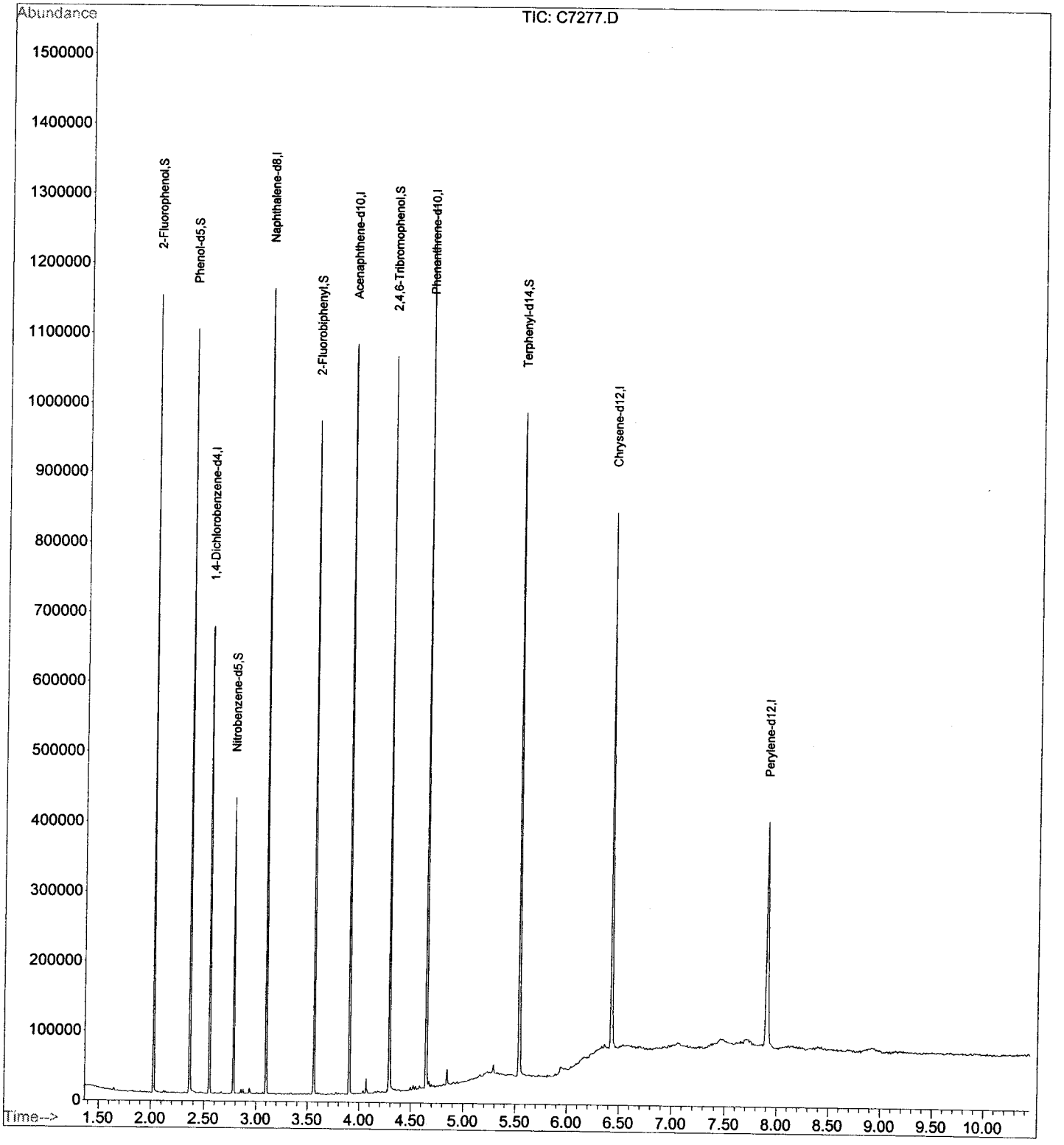
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7277.D
Acq On : 13 Jun 2013 17:44
Operator : EDM
Sample : .,BLKS130610-04,S,15.00g,0,0.5
Misc : 130610-04,06/10/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 14 09:02:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Thu Jun 13 12:57:57 2013
Response via : Initial Calibration



E13-05399 0099

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\06-13-13\
Data File : C7277.D
Acq On : 13 Jun 2013 17:44
Operator : EDM
Sample : .,BLKS130610-04,S,15.00g,0,0.5
Misc : 130610-04,06/10/13,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS1613.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS1613.M Fri Jun 14 09:02:32 2013 RPT1

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/12/2013

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS130610-11	SOIL	96		92		93		96	
PX-4-3	05301-001	SOIL	95		87		91		93	
PCB	05301-001MS	SOIL	93		93		88		93	
PCB	05301-001MSD	SOIL	100		87		95		88	
PCB	LCSS130610-11	SOIL	84		82		80		83	
GPEC_SS-WC	05399-001	SOIL	99		96		96		100	
FP-1	05322-001	SOIL	82		90		81		108	
S-1A	05423-001	SOIL	87		94		85		95	
S-1B	05423-002	SOIL	94		85		91		93	
S-2A	05423-003	SOIL	91		89		89		107	
S-2B	05423-004	SOIL	93		87		90		98	
S-3A	05423-005	SOIL	103		95		99		101	
S-3B	05423-006	SOIL	84		88		81		100	
S-4A	05423-007	SOIL	84		93		81		99	
S-4B	05423-008	SOIL	102		95		100		97	
C-1	05424-001	SOLID	70		91		70		110	
C-2	05424-002	SOLID	64		85		65		98	
C-3	05424-003	SOLID	106		112		103		112	
C-4	05424-004	SOLID	88		104		89		107	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS130610-11

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	278.6	56	40 - 140
Aroclor-1260	500.0	0.0	281.9	56	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: 05301-001

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500.0	0.0	290.1	58	40 - 140
Aroclor-1260	500.0	0.0	293.6	59	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	317.7	64	10	50	40 - 140
Aroclor-1260	0.0	340.4	68	14	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: Y9297.D

Instrument ID: GC-Y

Date Extracted: 06/10/2013

Matrix: SOIL

Date Analyzed: 06/12/2013

Time Analyzed: 09:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PX-4-3	05301-001	06/12/2013	09:55
PCB	05301-001MS	06/12/2013	10:13
PCB	05301-001MSD	06/12/2013	10:30
PCB	LCSS130610-11	06/12/2013	10:48
GPEC_SS-WC	05399-001	06/12/2013	11:22
FP-1	05322-001	06/12/2013	11:40
S-1A	05423-001	06/12/2013	11:57
S-1B	05423-002	06/12/2013	12:15
S-2A	05423-003	06/12/2013	12:32
S-2B	05423-004	06/12/2013	12:49
S-3A	05423-005	06/12/2013	13:07
S-3B	05423-006	06/12/2013	13:24
S-4A	05423-007	06/12/2013	13:42
S-4B	05423-008	06/12/2013	13:59
C-1	05424-001	06/12/2013	14:16
C-2	05424-002	06/12/2013	14:34
C-3	05424-003	06/12/2013	14:51
C-4	05424-004	06/12/2013	15:08

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y8669.D Y8668.D Y8667.D Y8666.D Y8670.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.23	3.23	3.23	3.23	3.22	3.23	3.16	3.30
Aroclor-1016 {2}	4.05	4.05	4.05	4.05	4.05	4.05	3.98	4.12
Aroclor-1016 {3}	4.60	4.60	4.60	4.60	4.59	4.60	4.53	4.67
Aroclor-1016 {4}	5.11	5.10	5.10	5.10	5.10	5.10	5.03	5.17
Aroclor-1016 {5}	5.50	5.49	5.50	5.49	5.49	5.49	5.42	5.56
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.02				2.95	3.09
Aroclor-1221 {3}			3.15				3.08	3.22
Aroclor-1221 {4}			3.22				3.15	3.29
Aroclor-1221 {5}			3.81				3.74	3.88
Aroclor-1232			3.22				3.15	3.29
Aroclor-1232 {2}			4.05				3.98	4.12
Aroclor-1232 {3}			4.71				4.64	4.78
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			5.49				5.42	5.56
Aroclor-1242			4.05				3.98	4.12
Aroclor-1242 {2}			4.98				4.91	5.05
Aroclor-1242 {3}			5.30				5.23	5.37
Aroclor-1242 {4}			5.99				5.92	6.06
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.45				4.37	4.53
Aroclor-1248 {2}			4.98				4.90	5.06
Aroclor-1248 {3}			5.30				5.22	5.38
Aroclor-1248 {4}			6.00				5.92	6.08
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.39				6.31	6.47
Aroclor-1254 {2}			6.82				6.74	6.90
Aroclor-1254 {3}			6.99				6.90	7.08
Aroclor-1254 {4}			7.42				7.33	7.51
Aroclor-1254 {5}			8.26				8.17	8.35
Aroclor-1260	8.26	8.26	8.26	8.26	8.26	8.26	7.36	9.16
Aroclor-1260 {2}	8.93	8.93	8.93	8.94	8.93	8.93	8.03	9.83
Aroclor-1260 {3}	9.40	9.41	9.41	9.41	9.40	9.41	8.51	10.31
Aroclor-1260 {4}	9.88	9.88	9.88	9.89	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.95	10.94	10.94	10.94	10.94	10.94	10.04	11.84

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y8669.D Y8668.D Y8667.D Y8666.D Y8670.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	135493	141625	127541	99267	148603	130506	14.64
Aroclor-1016 {2}	172225	190464	172870	135640	215798	177399	16.52
Aroclor-1016 {3}	245390	253204	227710	179114	270641	235212	14.86
Aroclor-1016 {4}	101084	120660	110558	86360	126368	109006	14.62
Aroclor-1016 {5}	197727	203608	190316	151099	226419	193834	14.15
Aroclor-1221			48969				
Aroclor-1221 {2}			67740				
Aroclor-1221 {3}			49870				
Aroclor-1221 {4}			159141				
Aroclor-1221 {5}			39255				
Aroclor-1232			87707				
Aroclor-1232 {2}			54498				
Aroclor-1232 {3}			49647				
Aroclor-1232 {4}			59073				
Aroclor-1232 {5}			71016				
Aroclor-1242			93240				
Aroclor-1242 {2}			67119				
Aroclor-1242 {3}			90963				
Aroclor-1242 {4}			127122				
Aroclor-1242 {5}			116643				
Aroclor-1248			208006				
Aroclor-1248 {2}			134302				
Aroclor-1248 {3}			168803				
Aroclor-1248 {4}			249402				
Aroclor-1248 {5}			204502				
Aroclor-1254			282137				
Aroclor-1254 {2}			226299				
Aroclor-1254 {3}			401030				
Aroclor-1254 {4}			425003				
Aroclor-1254 {5}			407848				
Aroclor-1260	609511	681201	582993	474040	715826	612714	15.36
Aroclor-1260 {2}	348966	344078	295042	238193	334511	312158	14.89
Aroclor-1260 {3}	803843	771188	683736	569263	849962	735598	15.10
Aroclor-1260 {4}	463145	422862	386538	321688	472002	413247	14.88
Aroclor-1260 {5}	188744	184689	179516	158106	222175	186646	12.38
					Average %RSD		14.74

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y8669.C Y8668.C Y8667.C Y8666.C Y8670.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.79	3.79	3.79	3.79	3.80	3.79	3.72	3.86
Aroclor-1016 {2}	4.39	4.39	4.39	4.39	4.40	4.39	4.32	4.46
Aroclor-1016 {3}	5.14	5.14	5.14	5.14	5.15	5.14	5.07	5.21
Aroclor-1016 {4}	5.35	5.35	5.35	5.35	5.36	5.35	5.28	5.42
Aroclor-1016 {5}	5.52	5.52	5.53	5.53	5.54	5.53	5.46	5.60
Aroclor-1221			2.47				2.40	2.54
Aroclor-1221 {2}			3.47				3.40	3.54
Aroclor-1221 {3}			3.71				3.64	3.78
Aroclor-1221 {4}			3.80				3.73	3.87
Aroclor-1221 {5}			5.15				5.08	5.22
Aroclor-1232			3.80				3.73	3.87
Aroclor-1232 {2}			4.78				4.71	4.85
Aroclor-1232 {3}			5.36				5.29	5.43
Aroclor-1232 {4}			5.53				5.46	5.60
Aroclor-1232 {5}			6.14				6.07	6.21
Aroclor-1242			4.77				4.70	4.84
Aroclor-1242 {2}			5.53				5.46	5.60
Aroclor-1242 {3}			6.13				6.06	6.20
Aroclor-1242 {4}			6.28				6.21	6.35
Aroclor-1242 {5}			6.82				6.75	6.89
Aroclor-1248			5.14				5.06	5.22
Aroclor-1248 {2}			5.73				5.65	5.81
Aroclor-1248 {3}			6.13				6.05	6.21
Aroclor-1248 {4}			6.28				6.20	6.36
Aroclor-1248 {5}			6.63				6.55	6.71
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.32				8.23	8.41
Aroclor-1254 {4}			8.56				8.47	8.65
Aroclor-1254 {5}			9.15				9.06	9.24
Aroclor-1260	7.89	7.89	7.89	7.89	7.90	7.90	7.00	8.80
Aroclor-1260 {2}	8.15	8.15	8.15	8.15	8.15	8.15	7.25	9.05
Aroclor-1260 {3}	9.74	9.74	9.74	9.74	9.75	9.74	8.84	10.64
Aroclor-1260 {4}	10.25	10.25	10.25	10.25	10.25	10.25	9.35	11.15
Aroclor-1260 {5}	10.84	10.84	10.84	10.84	10.84	10.84	9.94	11.74

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y8669.C Y8668.C Y8667.C Y8666.C Y8670.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	227381	243691	251873	201144	313655	247549	16.86
Aroclor-1016 {2}	472553	487500	466080	351454	468124	449142	12.30
Aroclor-1016 {3}	1156077	1149673	1134354	897030	1395381	1146503	15.38
Aroclor-1016 {4}	481289	502628	496883	390955	599317	494214	14.99
Aroclor-1016 {5}	366948	370171	344997	258484	334254	334971	13.53
Aroclor-1221			93567				
Aroclor-1221 {2}			130604				
Aroclor-1221 {3}			88349				
Aroclor-1221 {4}			323940				
Aroclor-1221 {5}			61353				
Aroclor-1232			173557				
Aroclor-1232 {2}			63233				
Aroclor-1232 {3}			146606				
Aroclor-1232 {4}			112446				
Aroclor-1232 {5}			159153				
Aroclor-1242			110682				
Aroclor-1242 {2}			196530				
Aroclor-1242 {3}			261278				
Aroclor-1242 {4}			219774				
Aroclor-1242 {5}			444795				
Aroclor-1248			419626				
Aroclor-1248 {2}			634840				
Aroclor-1248 {3}			458550				
Aroclor-1248 {4}			394253				
Aroclor-1248 {5}			232432				
Aroclor-1254			738724				
Aroclor-1254 {2}			564915				
Aroclor-1254 {3}			594359				
Aroclor-1254 {4}			336673				
Aroclor-1254 {5}			843712				
Aroclor-1260	417289	406272	459440	364570	534603	436435	14.76
Aroclor-1260 {2}	677905	666367	661409	546065	767364	663822	11.86
Aroclor-1260 {3}	577442	575800	567345	431594	537139	537864	11.45
Aroclor-1260 {4}	1420278	1387774	1303432	1109563	1751003	1394410	16.71
Aroclor-1260 {5}	1109753	977067	1028866	881358	1283219	1056052	14.36
					Average %RSD		14.22

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013

Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y8669.D Y8668.D Y8667.D Y8666.D Y8670.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.55				8.43	8.67
Aroclor-1262 {2}			9.41				9.29	9.53
Aroclor-1262 {3}			10.04				9.92	10.16
Aroclor-1262 {4}			10.13				10.01	10.25
Aroclor-1262 {5}			10.95				10.83	11.07
Aroclor-1268			10.04				9.92	10.16
Aroclor-1268 {2}			10.12				10.00	10.24
Aroclor-1268 {3}			10.59				10.47	10.71
Aroclor-1268 {4}			11.55				11.43	11.67
Aroclor-1268 {5}			12.04				11.92	12.16

GC Column (2nd): DB-1701P

Data File: Y8669.C Y8668.C Y8667.C Y8666.C Y8670.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.74				9.62	9.86
Aroclor-1262 {2}			10.25				10.13	10.37
Aroclor-1262 {3}			10.75				10.63	10.87
Aroclor-1262 {4}			10.83				10.71	10.95
Aroclor-1262 {5}			11.44				11.32	11.56
Aroclor-1268			10.75				10.63	10.87
Aroclor-1268 {2}			10.83				10.71	10.95
Aroclor-1268 {3}			11.08				10.96	11.20
Aroclor-1268 {4}			12.30				12.18	12.42
Aroclor-1268 {5}			12.53				12.41	12.65

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/21/2013 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y8669.D Y8668.D Y8667.D Y8666.D Y8670.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			329967				
Aroclor-1262 {2}			628262				
Aroclor-1262 {3}			280393				
Aroclor-1262 {4}			291010				
Aroclor-1262 {5}			248548				
Aroclor-1268			746209				
Aroclor-1268 {2}			709593				
Aroclor-1268 {3}			600970				
Aroclor-1268 {4}			1826500				
Aroclor-1268 {5}			1123316				

GC Column (2nd): DB-1701P

Data File: Y8669.C Y8668.C Y8667.C Y8666.C Y8670.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			578796				
Aroclor-1262 {2}			1312916				
Aroclor-1262 {3}			498677				
Aroclor-1262 {4}			971854				
Aroclor-1262 {5}			217448				
Aroclor-1268			1458226				
Aroclor-1268 {2}			1490445				
Aroclor-1268 {3}			1216779				
Aroclor-1268 {4}			4147723				
Aroclor-1268 {5}			2499956				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/12/2013 **Instrument ID:** GC-Y

Data File: Y9296.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.23	3.16	3.30	130506	119679	8.30
Aroclor-1016 {2}	4.05	3.98	4.12	177399	164884	7.05
Aroclor-1016 {3}	4.60	4.53	4.67	235212	216174	8.09
Aroclor-1016 {4}	5.10	5.03	5.17	109006	102158	6.28
Aroclor-1016 {5}	5.49	5.42	5.56	193834	176878	8.75
Aroclor-1260	8.25	7.36	9.16	612714	533169	12.98
Aroclor-1260 {2}	8.93	8.03	9.83	312158	266791	14.53
Aroclor-1260 {3}	9.40	8.51	10.31	735598	627520	14.69
Aroclor-1260 {4}	9.88	8.98	10.78	413247	352061	14.81
Aroclor-1260 {5}	10.94	10.04	11.84	186646	157831	15.44

Data File: Y9296.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.78	3.72	3.86	247549	214364	13.41
Aroclor-1016 {2}	4.38	4.32	4.46	449142	462490	2.97
Aroclor-1016 {3}	5.13	5.07	5.21	1146503	1062629	7.32
Aroclor-1016 {4}	5.34	5.28	5.42	494214	464950	5.92
Aroclor-1016 {5}	5.52	5.46	5.60	334971	360261	7.55
Aroclor-1260	7.89	7.00	8.80	436435	439308	0.66
Aroclor-1260 {2}	8.14	7.25	9.05	663822	626789	5.58
Aroclor-1260 {3}	9.73	8.84	10.64	537864	562834	4.64
Aroclor-1260 {4}	10.24	9.35	11.15	1394410	1236463	11.33
Aroclor-1260 {5}	10.83	9.94	11.74	1056052	920990	12.79

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/12/2013 **Instrument ID:** GC-Y

Data File: Y9317.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.23	3.16	3.30	130506	113659	12.91
Aroclor-1016 {2}	4.05	3.98	4.12	177399	156218	11.94
Aroclor-1016 {3}	4.60	4.53	4.67	235212	205806	12.50
Aroclor-1016 {4}	5.10	5.03	5.17	109006	99999	8.26
Aroclor-1016 {5}	5.49	5.42	5.56	193834	173328	10.58
Aroclor-1260	8.25	7.36	9.16	612714	528897	13.68
Aroclor-1260 {2}	8.93	8.03	9.83	312158	262960	15.76
Aroclor-1260 {3}	9.40	8.51	10.31	735598	613226	16.64
Aroclor-1260 {4}	9.88	8.98	10.78	413247	342789	17.05
Aroclor-1260 {5}	10.94	10.04	11.84	186646	153957	17.51

Data File: Y9317.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.78	3.72	3.86	247549	206729	16.49
Aroclor-1016 {2}	4.38	4.32	4.46	449142	458096	1.99
Aroclor-1016 {3}	5.13	5.07	5.21	1146503	1050990	8.33
Aroclor-1016 {4}	5.34	5.28	5.42	494214	462273	6.46
Aroclor-1016 {5}	5.52	5.46	5.60	334971	357400	6.70
Aroclor-1260	7.88	7.00	8.80	436435	431906	1.04
Aroclor-1260 {2}	8.14	7.25	9.05	663822	619530	6.67
Aroclor-1260 {3}	9.73	8.84	10.64	537864	559213	3.97
Aroclor-1260 {4}	10.24	9.35	11.15	1394410	1230120	11.78
Aroclor-1260 {5}	10.83	9.94	11.74	1056052	903683	14.43

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.03 **TCMX 2** 2.91 **DCB 2** 12.52

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS130610-11	06/12/2013	09:38	2.77		12.03		2.91		12.52	
PX-4-3	05301-001	06/12/2013	09:55	2.77		12.03		2.91		12.52	
PCB	05301-001MS	06/12/2013	10:13	2.77		12.03		2.91		12.52	
PCB	05301-001MSD	06/12/2013	10:30	2.77		12.03		2.91		12.52	
PCB	LCSS130610-11	06/12/2013	10:48	2.77		12.03		2.90		12.52	
GPEC_SS-WC	05399-001	06/12/2013	11:22	2.77		12.03		2.91		12.52	
FP-1	05322-001	06/12/2013	11:40	2.77		12.03		2.91		12.52	
S-1A	05423-001	06/12/2013	11:57	2.77		12.03		2.91		12.52	
S-1B	05423-002	06/12/2013	12:15	2.77		12.03		2.91		12.52	
S-2A	05423-003	06/12/2013	12:32	2.77		12.03		2.91		12.52	
S-2B	05423-004	06/12/2013	12:49	2.77		12.03		2.91		12.52	
S-3A	05423-005	06/12/2013	13:07	2.77		12.03		2.91		12.52	
S-3B	05423-006	06/12/2013	13:24	2.77		12.03		2.90		12.52	
S-4A	05423-007	06/12/2013	13:42	2.77		12.03		2.91		12.52	
S-4B	05423-008	06/12/2013	13:59	2.77		12.03		2.90		12.52	
C-1	05424-001	06/12/2013	14:16	2.77		12.03		2.91		12.52	
C-2	05424-002	06/12/2013	14:34	2.77		12.03		2.91		12.52	
C-3	05424-003	06/12/2013	14:51	2.77		12.03		2.90		12.52	
C-4	05424-004	06/12/2013	15:08	2.77		12.03		2.90		12.52	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-12-13\
Data File : Y9303.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Jun 2013 11:22
Operator : NG
Sample : GPEC_SS-WC,05399-001,S,5.63g,19.4,06/10/13,4
Misc : 130610-11,06/06/13,06/07/13,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 12 11:54:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0521.M
Quant Title :
QLast Update : Wed May 22 09:01:24 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	847.1E6	1569.0E6	198.205	192.226
Spiked Amount 200.000			Recovery	=	99.10%	96.11%
2) S DCB	12.03	12.52	380.5E6	828.8E6	191.858	199.577
Spiked Amount 200.000			Recovery	=	95.93%	99.79%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

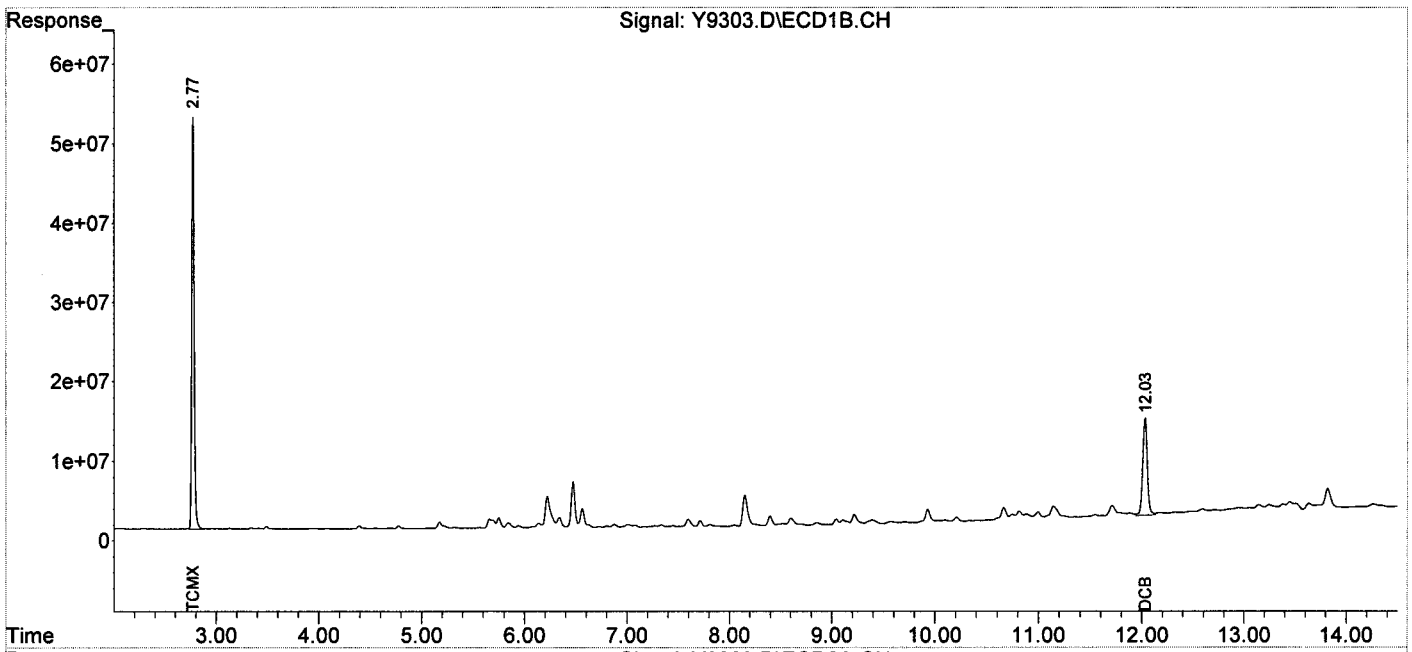
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

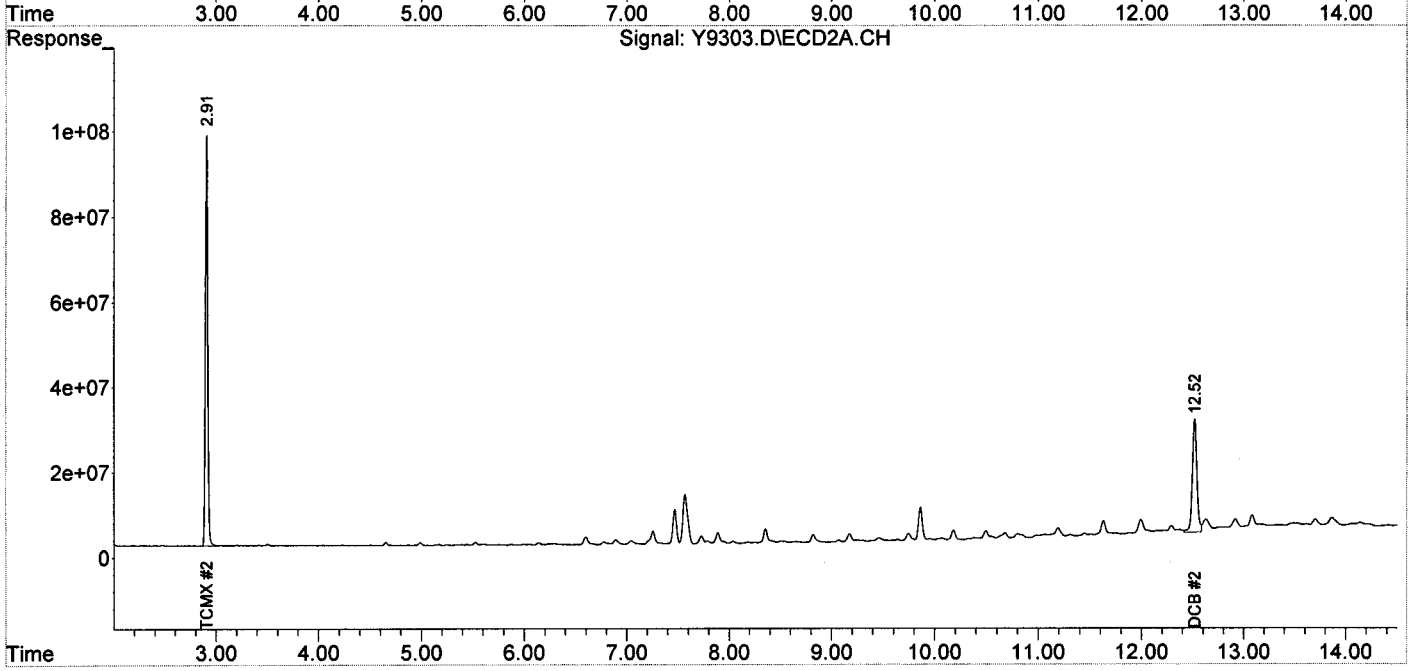
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-12-13\
Data File : Y9303.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Jun 2013 11:22
Operator : NG
Sample : GPEC_SS-WC,05399-001,S,5.63g,19.4,06/10/13,4
Misc : 130610-11,06/06/13,06/07/13,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 12 11:54:04 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0521.M
Quant Title :
QLast Update : Wed May 22 09:01:24 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS130610-11
Client ID: PCB
Date Received: NA
Date Extracted: 06/10/2013
Date Analyzed: 06/12/2013
Data file: Y9297.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg (ppm)
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-12-13\
Data File : Y9297.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Jun 2013 9:38
Operator : NG
Sample : PCB,BLKS130610-11,S,5.00g,0,06/10/13,4
Misc : NA,NA,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 12 09:57:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0521.M
Quant Title :
QLast Update : Wed May 22 09:01:24 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	821.1E6	1509.6E6	192.128	184.951
Spiked Amount 200.000			Recovery	=	96.06%	92.48%
2) S DCB	12.03	12.52	362.9E6	798.4E6	182.985	192.256
Spiked Amount 200.000			Recovery	=	91.49%	96.13%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

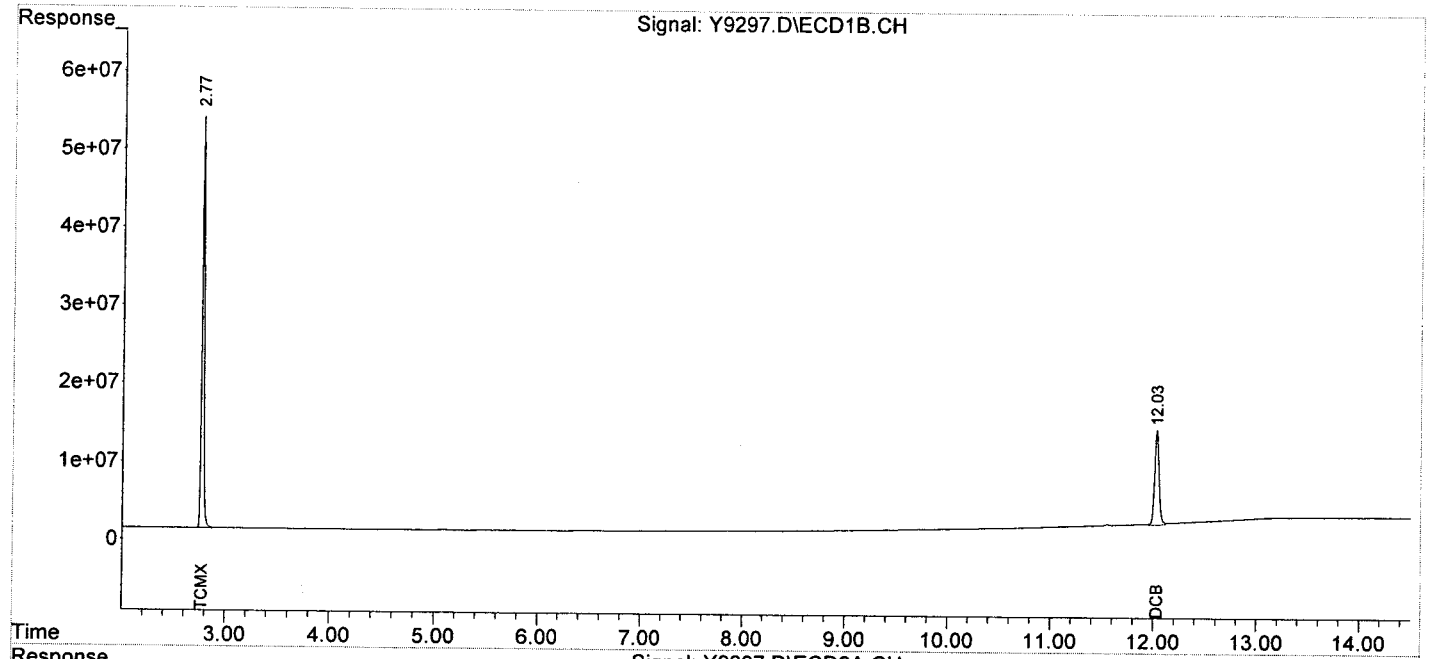
E13-05399 0120

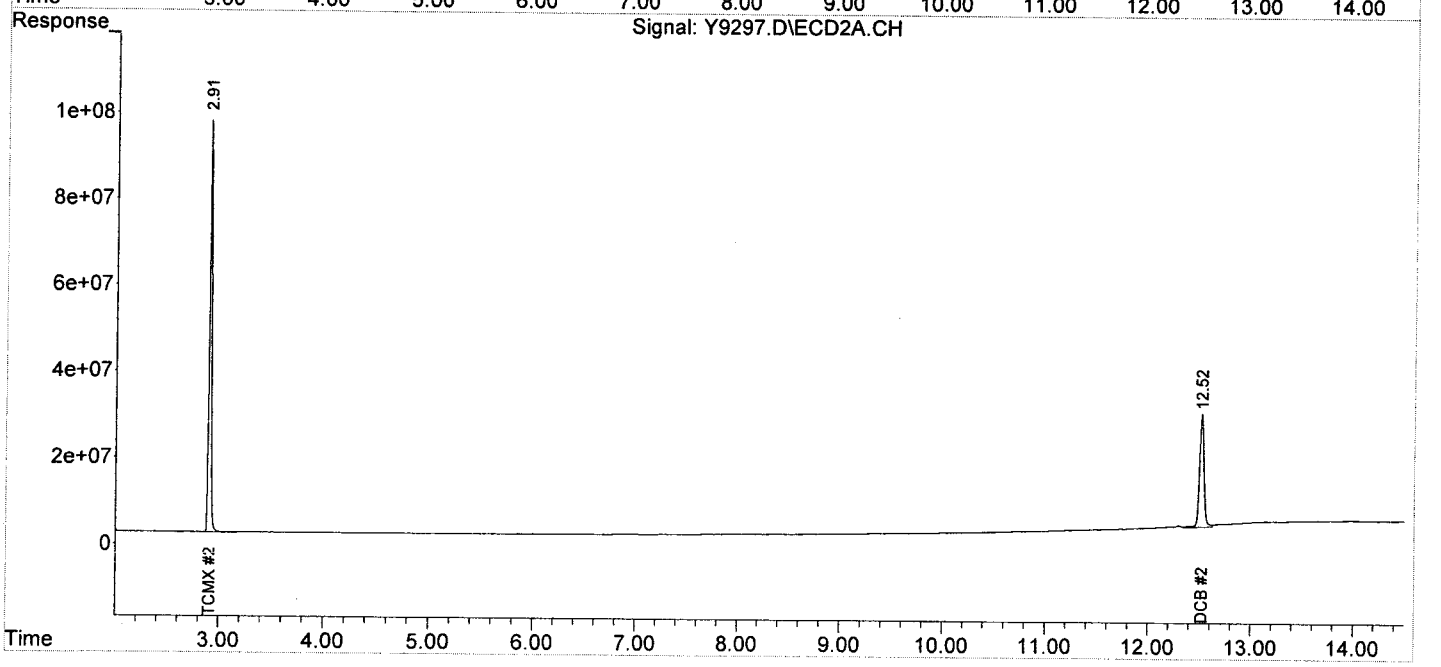
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-12-13\
Data File : Y9297.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 12 Jun 2013 9:38
Operator : NG
Sample : PCB,BLKS130610-11,S,5.00g,0,06/10/13,4
Misc : NA,NA,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 12 09:57:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0521.M
Quant Title :
QLast Update : Wed May 22 09:01:24 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q

Column: RTX-5

Surrogate RT from initial calibration:

DBC 4.85

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
DRO	BLKS130610-10	SOIL	06/11/2013	12:46	49	4.85	
GPEC_SS-STOCKPIL	05399-001	SOIL	06/11/2013	13:23	46	4.87	
DS-1/12-SS-5_8-8	05378-001	SOIL	06/11/2013	13:52	46	4.85	
WASTE_CL	05406-001	SOIL	06/11/2013	14:06	46	4.85	
DRO	05337-012	SOIL	06/11/2013	16:44	45	4.86	
	05336-009	SOIL	06/11/2013	16:58	46	4.85	
	LCSS130610-10	SOIL	06/11/2013	17:13	46	4.85	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.080 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS130610-10

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	582	58.2		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 05117-001MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	838	83.8		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	750	75.0		11.0		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB7192.D

Instrument ID: GC-Q

Date Extracted: 06/04/2013

Matrix: SOIL

Date Analyzed: 06/04/2013

Time Analyzed: 19:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MWASTE-3	05088-001	06/04/2013	19:58
WASTE_CL	04967-001	06/04/2013	20:12
WS-1	05035-001	06/04/2013	20:27
TI-2	05116-001	06/04/2013	20:41
TI-1	05117-001	06/04/2013	20:55
DRO	05117-001MSD	06/04/2013	21:24
DRO	LCSS130604-02	06/04/2013	21:53
DRO	05117-001MS	06/05/2013	12:21

TPH METHOD BLANK SUMMARY

Lab File ID: QB7253.D
Instrument ID: GC-Q
Date Extracted: 06/10/2013
Matrix: SOIL
Date Analyzed: 06/11/2013
Time Analyzed: 12:46

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GPEC_SS-	05399-001	06/11/2013	13:23
STOCKPIL	05378-001	06/11/2013	13:52
DS-1/12-	05406-001	06/11/2013	14:06
SS-5_8-8	05337-012	06/11/2013	16:44
WASTE_CL	05336-009	06/11/2013	16:58
DRO	LCSS130610-10	06/11/2013	17:13

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/06/2013 Instrument ID: GC-Q

Date File: QB7213.D QB7212.D QB7211.D QB7210.D QB7209.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.23	3.37

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	4000 PPM	RF	%RSD
TPH-DRO	77.8	64.2	82.5	64.3	63.0	70.4	12.9

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/11/2013 12:31

Date File: QB7252.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		70.4	64.9	7.81

Date Analyzed: 06/11/2013 17:27

Date File: QB7262.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.23	3.37		70.4	67.2	4.55

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\06-11-13\
Data File : QB7255.D
Signal(s) : FID2B.ch
Acq On : 11 Jun 13 1:23 pm
Operator : JN
Sample : GPEC_SS-,05399-001,S,10.50g,19.4,06/10/13,15
Misc : 130610-10,06/06/13,06/07/13,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jun 11 14:26:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0606.M
Quant Title :
QLast Update : Thu Jun 06 14:28:08 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.869	17045466	45.484	ng	m
Spiked Amount 100.000		Recovery = 45.48%			
Target Compounds					
3) H TPH-DRO	3.300	87717237	124.154	ng	

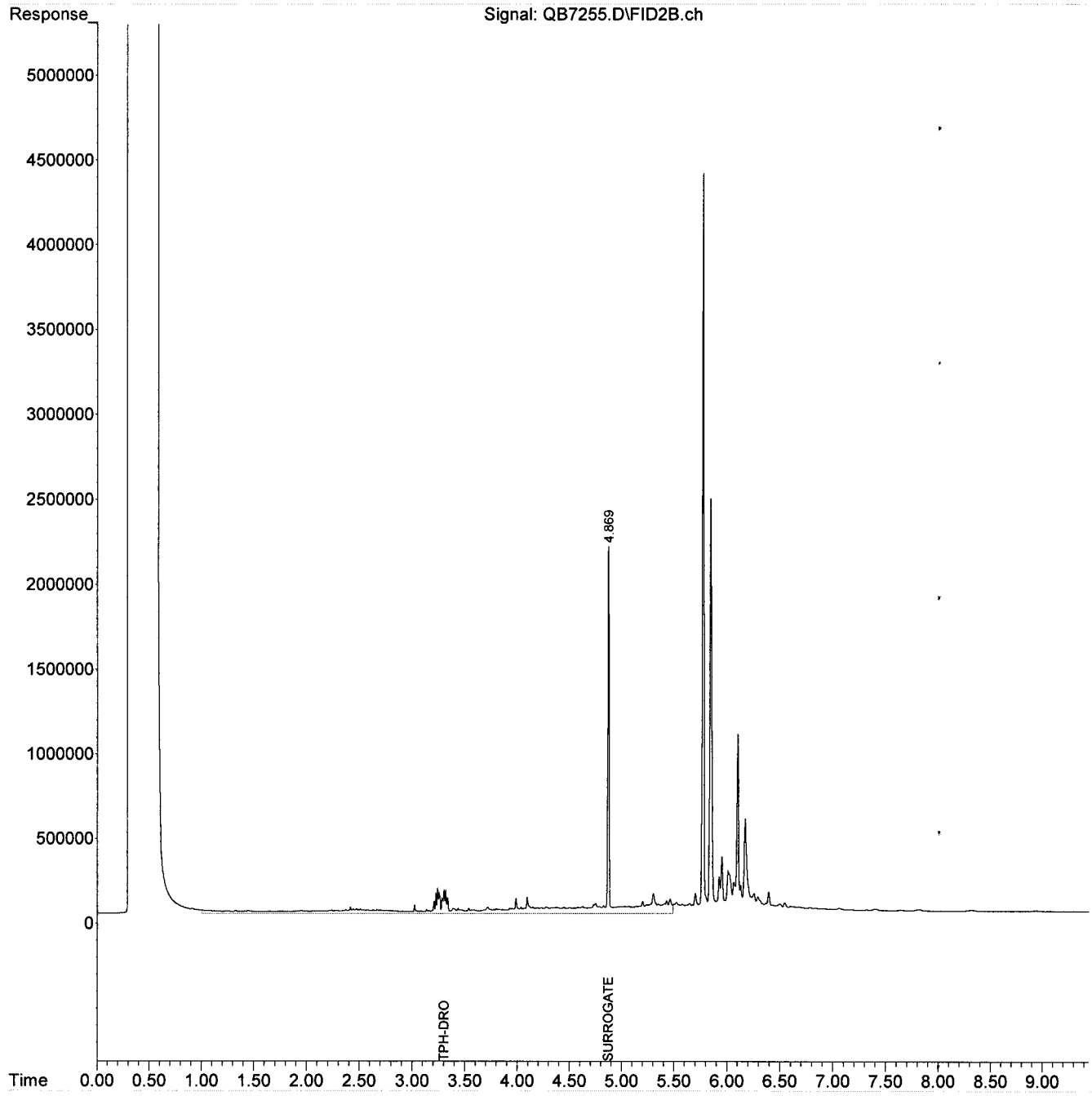
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\06-11-13\
Data File : QB7255.D
Signal(s) : FID2B.ch
Acq On : 11 Jun 13 1:23 pm
Operator : JN
Sample : GPEC_SS-,05399-001,S,10.50g,19.4,06/10/13,15
Misc : 130610-10,06/06/13,06/07/13,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jun 11 14:26:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0606.M
Quant Title :
QLast Update : Thu Jun 06 14:28:08 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS130604-02	GC Column:	RTX-5
Client ID:	DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	06/04/2013	Dilution Factor:	1
Date Analyzed:	06/04/2013	% Moisture:	0
Data File:	QB7192.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS130610-10	GC Column:	RTX-5
Client ID:	DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	06/10/2013	Dilution Factor:	1
Date Analyzed:	06/11/2013	% Moisture:	0
Data File:	QB7253.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\06-11-13\
Data File : QB7253.D
Signal(s) : FID2B.ch
Acq On : 11 Jun 13 12:46 pm
Operator : JN
Sample : DRO,BLKS130610-10,S,10.0g,0,06/10/13,15
Misc : 130610-10,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jun 11 13:17:32 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0606.M
Quant Title :
QLast Update : Tue Jun 11 13:17:03 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.853	18350031	48.965	ng	m
Spiked Amount 100.000		Recovery = 48.97%			
Target Compounds					

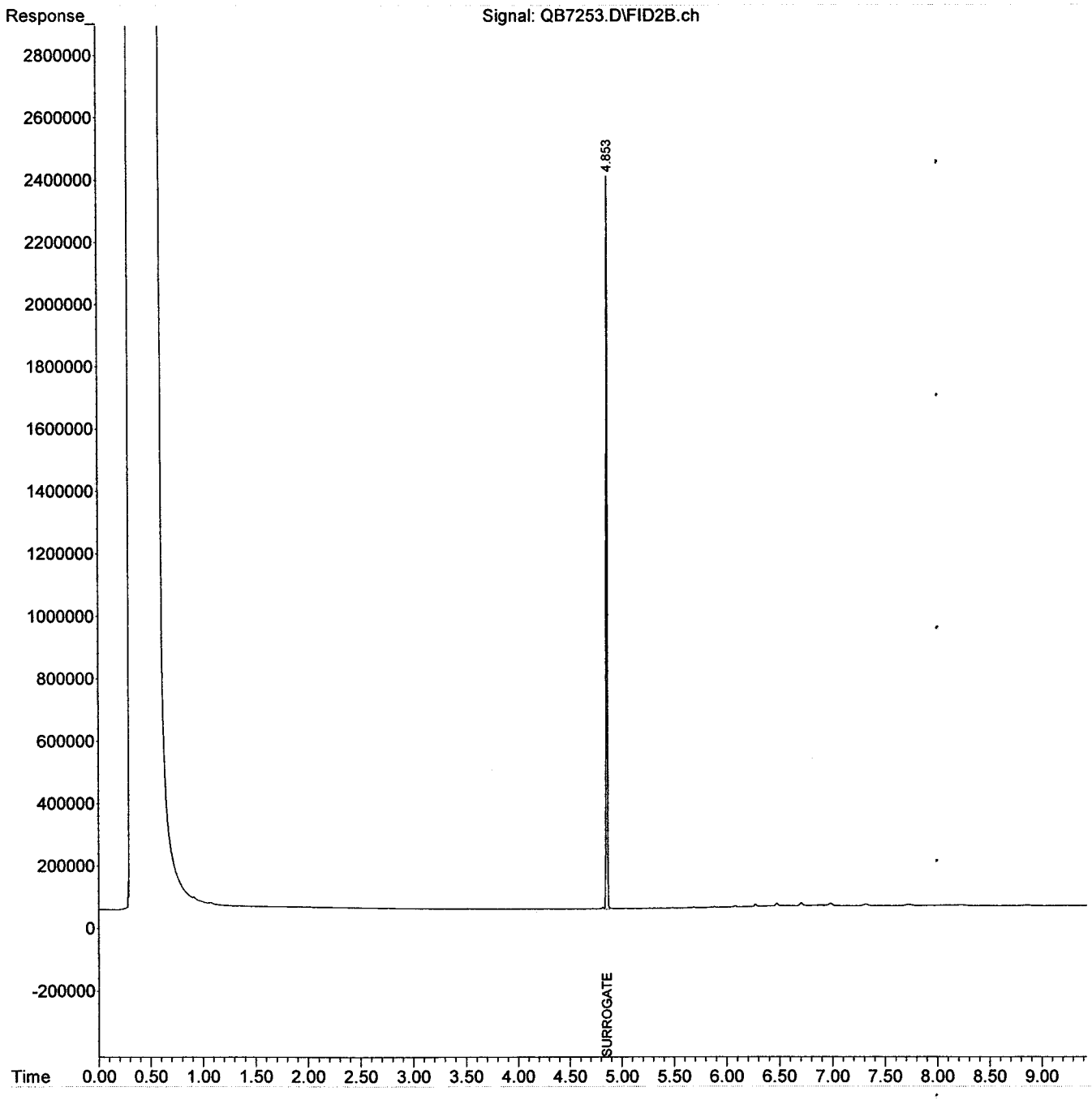
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\06-11-13\
Data File : QB7253.D
Signal(s) : FID2B.ch
Acq On : 11 Jun 13 12:46 pm
Operator : JN
Sample : DRO,BLKS130610-10,S,10.0g,0,06/10/13,15
Misc : 130610-10,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jun 11 13:17:32 2013
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0606.M
Quant Title :
QLast Update : Tue Jun 11 13:17:03 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 253
SDG #: E13-05339, E13-05301, E13-05404, E13-05421, E13-05399, E13-05406, E13-05410, E13-05277
E13-05283

Matrix: Soil Method: 6020 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	5.00	50.0	50.5	101	49.6	99.2	54.2	108	54.1	108
Antimony	0.250	50.0	53.4	107	47.0	94.0	45.2	90.4	46.9	93.8
Arsenic	0.250	50.0	50.5	101	52.2	104	54.3	109	52.1	104
Barium	2.50	50.0	53.4	107	46.9	93.8	45.2	90.4	47.4	94.8
Beryllium	0.200	50.0	51.5	103	46.3	92.6	45.3	90.6	46.0	92.0
Cadmium	0.125	50.0	52.2	104	46.1	92.2	45.6	91.2	46.5	93.0
Calcium	25.0	500	452	90.4	472	94.4	490	98.0	503	101
Chromium	0.500	50.0	49.3	98.6	49.9	99.8	52.5	105	51.6	103
Cobalt	0.500	50.0	48.7	97.4	50.1	100	52.1	104	50.8	102
Copper	0.500	50.0	50.0	100	51.5	103	53.7	107	52.4	105
Iron	12.5	500	493	98.6	518	104	541	108	526	105
Lead	0.125	50.0	53.4	107	46.7	93.4	45.0	90.0	46.8	93.6
Magnesium	12.5	500	473	94.6	479	95.8	490	98.0	505	101
Manganese	0.250	50.0	50.4	101	51.3	103	53.2	106	52.5	105
Mercury	0.120	5.00	5.68	114	4.94	98.8	4.96	99.2		
Nickel	0.500	50.0	50.0	100	51.2	102	53.4	107	51.9	104
Potassium	12.5	500	452	90.4	462	92.4	475	95.0	489	97.8
Selenium	1.00	50.0	50.1	100	49.5	99.0	53.4	107	51.5	103
Silver	0.125	10.0	9.55	95.5	9.56	95.6	9.11	91.1	9.61	96.1
Sodium	25.0	500	455	91.0	474	94.8	483	96.6	516	103
Thallium	0.125	50.0	47.5	95.0	47.9	95.8	45.3	90.6	47.9	95.8
Vanadium	0.500	50.0	49.4	98.8	50.2	100	52.2	104	51.7	103
Zinc	2.00	50.0	49.8	99.6	52.0	104	53.8	108	51.6	103

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 253
SDG #: E13-05339, E13-05301, E13-05404, E13-05421, E13-05399, E13-05406, E13-05410, E13-05277
E13-05283

Matrix: Soil Method: 6020 Concentration/Units: ppm (mg/kg)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB		
Aluminum	0.005	ND	ND	ND	ND		
Antimony	0.00025	ND	ND	ND	ND		
Arsenic	0.00025	ND	ND	ND	ND		
Barium	0.0025	ND	ND	ND	ND		
Beryllium	0.0002	ND	ND	ND	ND		
Cadmium	0.000125	ND	ND	ND	ND		
Calcium	0.025	ND	ND	ND	ND		
Chromium	0.0005	ND	ND	ND	ND		
Cobalt	0.0005	ND	ND	ND	ND		
Copper	0.0005	ND	ND	ND	ND		
Iron	0.013	ND	ND	ND	ND		
Lead	0.000125	ND	ND	ND	ND		
Magnesium	0.013	ND	ND	ND	ND		
Manganese	0.00025	ND	ND	ND	ND		
Mercury	0.00012	ND	ND	ND			
Nickel	0.0005	ND	ND	ND	ND		
Potassium	0.013	ND	ND	ND	ND		
Selenium	0.001	ND	ND	ND	ND		
Silver	0.000125	ND	ND	ND	ND		
Sodium	0.025	ND	ND	ND	ND		
Thallium	0.000125	ND	ND	ND	ND		
Vanadium	0.0005	ND	ND	ND	ND		
Zinc	0.002	ND	ND	ND	ND		

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

Batch (Page) #: 253
Associated Lab Case for Blank 1: E13-05277, E13-05283, E13-05301, E13-05339, E13-05399, E13-05404, E13-05406, E13-05410, E13-05421

Matrix: Soil Unit: ppm (mg/kg) Method: 6020

ANALYTE	SAMPLE MDL	REAGENT BLANK
Aluminum	5.00	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	2.50	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	25.0	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	12.5	ND
Lead	0.125	ND
Magnesium	12.5	ND
Manganese	0.250	ND
Mercury	0.006	ND
Nickel	0.500	ND
Potassium	12.5	ND
Selenium	1.00	ND
Silver	0.125	ND
Sodium	25.0	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	2.00	ND

Associated Sample for Blank 1:
05277-008; 05283-010; 05301-001; 05339-001~003
05399-001; 05404-001~003; 05406-001; 05410-001
05421-002~003,005~010

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7500
Batch (Page) #: 253
SDG #: E13-05339, E13-05301, E13-05404, E13-05421, E13-05399, E13-05406, E13-05410, E13-05
E13-05283

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	82800	84700	84.7	NA
Calcium	100000	-	88700	91600	91.6	NA
Iron	100000	-	77600	78800	78.8	NA
Potassium	100000	-	85100	85400	85.4	NA
Magnesium	100000	-	80900	81800	81.8	NA
Sodium	100000	-	95600	95800	95.8	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	1940	1970	98.5	NA
Titanium	2000	-	1720	1760	88.0	NA
Silver	-	20.0	-	19.0	95.0	80-120
Arsenic	-	20.0	-	19.0	95.0	80-120
Cadmium	-	20.0	-	17.2	86.0	80-120
Cobalt	-	20.0	-	17.5	87.5	80-120
Chromium	-	20.0	-	18.2	91.0	80-120
Copper	-	20.0	-	16.9	84.5	80-120
Manganese	-	20.0	-	22.0	110	80-120
Nickel	-	20.0	-	18.0	90.0	80-120
Zinc	-	20.0	-	17.6	88.0	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 253
SDG #: E13-05277, E13-05283, E13-05301, E13-05339, E13-05399, E13-05404, E13-05406
E13-05410, E13-05421

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS130610-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	203	102			
Antimony	40.0	36.7	91.8			
Arsenic	40.0	38.0	95.0			
Barium	40.0	37.6	94.0			
Beryllium	40.0	37.2	93.0			
Cadmium	40.0	37.7	94.3			
Calcium	200	195	97.5			
Chromium	40.0	36.7	91.8			
Cobalt	40.0	38.9	97.3			
Copper	40.0	38.2	95.5			
Iron	200	209	105			
Lead	40.0	37.5	93.8			
Magnesium	200	194	97.0			
Manganese	40.0	39.9	99.8			
Mercury	0.250	0.262	105			
Nickel	40.0	37.3	93.3			
Potassium	200	199	99.5			
Selenium	40.0	36.9	92.3			
Silver	40.0	34.2	85.5			
Sodium	200	192	96.0			
Thallium	40.0	36.6	91.5			
Vanadium	40.0	39.8	99.5			
Zinc	40.0	37.5	93.8			

(1) Control Limits % Recovery = 85-115%

LCSS130610-01

05277-008; 05283-010; 05301-001; 05339-001~003
05399-001; 05404-001~003; 05406-001; 05410-001
05421-002~003,005~010

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 253

SDG #: E13-05277, E13-05283, E13-05301, E13-05339, E13-05399, E13-05404, E13-05406
E13-05410, E13-05421

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	4950	4530	NC	212					75-125
Antimony	38.1	ND	89.9	42.4					75-125
Arsenic	41.0	0.797	94.8	42.4					75-125
Barium	62.7	24.5	90.1	42.4					75-125
Beryllium	39.4	0.295	92.2	42.4					75-125
Cadmium	37.4	ND	88.2	42.4					75-125
Calcium	1120	840	NC	212					75-125
Chromium	46.9	6.87	94.4	42.4					75-125
Cobalt	45.5	3.09	100	42.4					75-125
Copper	55.4	14.8	95.8	42.4					75-125
Iron	7930	7450	NC	212					75-125
Lead	42.1	3.64	90.7	42.4					75-125
Magnesium	2620	2270	NC	212					75-125
Manganese	224	171	125	42.4					75-125
Mercury	0.301	0.0086	110	0.265					75-125
Nickel	47.4	7.43	94.3	42.4					75-125
Potassium	1370	1070	NC	212					75-125
Selenium	40.6	ND	95.8	42.4					75-125
Silver	34.9	ND	82.3	42.4					75-125
Sodium	468	217	118	212					75-125
Thallium	38.0	ND	89.6	42.4					75-125
Vanadium	52.4	8.21	104	42.4					75-125
Zinc	58.6	19.6	92.0	42.4					75-125

SSR = Spike Sample Result
SR = Sample Result
SA = Spike Added
%R = Percent Recovery
NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1: E13-05339-002
% Solids: 94.7
QC Sample 1 for following samples:
05277-008; 05283-010; 05301-001; 05339-001~003
05399-001; 05404-001~003; 05406-001; 05410-001
05421-002~003,005~010

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 253
SDG #: E13-05277, E13-05283, E13-05301, E13-05339, E13-05399, E13-05404, E13-05406 E13-05410, E13-05421

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	4530	4710	3.90				
Antimony	NA	ND	ND	NC				
Arsenic	20	0.797	0.717	10.6				
Barium	20	24.5	24.6	0.407				
Beryllium	20	0.295	0.277	6.29				
Cadmium	NA	ND	ND	NC				
Calcium	20	840	861	2.47				
Chromium	20	6.87	6.99	1.73				
Cobalt	20	3.09	3.24	4.74				
Copper	20	14.8	15.1	2.01				
Iron	20	7450	7480	0.402				
Lead	20	3.64	3.61	0.828				
Magnesium	20	2270	2380	4.73				
Manganese	20	171	176	2.88				
Mercury	20	0.0086	0.00839	2.47				
Nickel	20	7.43	7.52	1.20				
Potassium	20	1070	1100	2.76				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Sodium	20	217	230	5.82				
Thallium	NA	ND	ND	NC				
Vanadium	20	8.21	8.47	3.12				
Zinc	20	19.6	19.2	2.06				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E13-05339-002
% Solids: 94.7
QC Sample 1 for following samples:
05277-008; 05283-010; 05301-001; 05339-001~003
05399-001; 05404-001~003; 05406-001; 05410-001
05421-002~003,005~010

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 253

SDG #: E13-05277, E13-05283, E13-05301, E13-05339, E13-05399, E13-05404, E13-05406
E13-05410, E13-05421

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	4530	4610	1.75			
Antimony	ND	ND	NC	34.0	42.4	80.2
Arsenic	0.797	ND	NC	34.9	42.4	80.4
Barium	24.5	24.2	1.23	60.4	42.4	84.7
Beryllium	0.295	ND	NC	36.2	42.4	84.7
Cadmium	ND	ND	NC	33.5	42.4	79.0
Calcium	840	828	1.44			
Chromium	6.87	6.91	0.581	40.5	42.4	79.3
Cobalt	3.09	3.25	5.05	36.5	42.4	78.8
Copper	14.8	14.9	0.673			
Iron	7450	7640	2.52			
Lead	3.64	3.82	4.83			
Magnesium	2270	2310	1.75			
Manganese	171	177	3.45			
Nickel	7.43	7.94	6.64	40.5	42.4	78.0
Potassium	1070	1050	1.89			
Selenium	ND	ND	NC	34.9	42.4	82.3
Silver	ND	ND	NC	34.1	42.4	80.4
Sodium	217	227	4.50	1100	848	104.0
Thallium	ND	ND	NC	35.5	42.4	83.7
Vanadium	8.21	8.20	0.122	42.5	42.4	80.9
Zinc	19.6	20.9	6.42	51.6	42.4	75.5

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample1: E13-05339-002
QC Sample 1 for following samples:
05277-008; 05283-010; 05301-001; 05339-001~003
05399-001; 05404-001~003; 05406-001; 05410-001
05421-002~003,005~010

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG253
June 12, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.D	STD BLANK	355943		38986		165641		1154240		1799601		1099388		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		249160	70	27290	70	115949	70	807968	70	1259721	70	769572	70	
QC Lower Limit		284754	80	31189	80	132513	80	923392	80	1439681	80	879510	80	
Sample & QC Upper Limit		427132	120	46783	120	198769	120	1385088	120	2159521	120	1319266	120	
003CALS.D	STD1	364844	103	39038	100	171401	103	1242165	108	1927817	107	1185529	108	
004CALS.D	STD2	346218	97	38681	99	166817	101	1199763	104	1871254	104	1119288	102	
005CALS.D	STD3	366850	103	38363	98	170140	103	1234622	107	1938234	108	1153246	105	
006CALS.D	STD4	352476	99	37688	97	166936	101	1195199	104	1894145	105	1122212	102	
008_ICV.D	ICV	341029	96	38202	98	166084	100	1199087	104	1890973	105	1127092	103	
009_ICB.D	ICB	342989	96	39564	101	165942	100	1196731	104	1874669	104	1139774	104	
010SMPL.D	BLKS130610-01	338905	95	39478	101	165458	100	1217534	105	1888267	105	1147657	104	
011SMPL.D	LCSS130610-01	336179	94	39285	101	165866	100	1174389	102	1879585	104	1129433	103	
012SMPL.D	E13-05339-002	338655	95	40908	105	170848	103	1189689	103	1874583	104	1094195	100	
013SMPL.D	E13-05339-002DUP	345946	97	40654	104	173780	105	1204618	104	1895639	105	1119190	102	
014SMPL.D	E13-05339-002SD	337713	95	40505	104	168115	101	1182285	102	1867932	104	1095869	100	
015SMPL.D	E13-05339-002MS	346586	97	40133	103	171471	104	1196019	104	1892952	105	1109775	101	
016SMPL.D	E13-05339-002PS	343303	96	39671	102	171644	104	1171445	101	1899128	106	1089260	99	
017SMPL.D	E13-05339-001	341272	96	40753	105	172582	104	1149658	100	1841917	102	1085110	99	
0186CCV.D	CCV	341862	96	38403	99	164714	99	1199487	104	1886522	105	1123391	102	
0196CCB.D	CCB	333777	94	37291	96	163988	99	1204663	104	1873200	104	1120353	102	
020SMPL.D	E13-05339-003	329541	93	38806	100	168284	102	1174167	102	1826276	101	1073521	98	
021SMPL.D	E13-05301-001	332197	93	39254	101	172814	104	1234102	107	1885580	105	1088847	99	
022SMPL.D	E13-05404-001	308377	87	37429	96	160502	97	1115058	97	1820890	101	1063893	97	
023SMPL.D	E13-05404-002	290408	82	37150	95	155516	94	1069649	93	1788413	99	1027795	93	
024SMPL.D	E13-05404-003	289472	81	35584	91	157821	95	1101898	95	1788437	99	1040305	95	
025SMPL.D	E13-05421-002	285633	80	38131	98	160590	97	1120979	97	1829043	102	1067827	97	
026SMPL.D	E13-05421-003	285912	80	39384	101	161849	98	1117917	97	1793230	100	1043824	95	
027SMPL.D	E13-05421-005	289418	81	40179	103	160716	97	1149217	100	1784750	99	1051566	96	
028SMPL.D	E13-05421-006	297288	84	39098	100	164320	99	1154500	100	1825740	101	1051380	96	
029SMPL.D	E13-05421-007	293221	82	38563	99	164188	99	1146111	99	1833530	102	1062488	97	
0306CCV.D	CCV	287338	81	35556	91	152937	92	1134928	98	1789304	99	1057605	96	
0316CCB.D	CCB	288777	81	37317	96	157312	95	1144178	99	1775224	99	1064862	97	
032SMPL.D	E13-05421-008	298496	84	38276	98	163780	99	1148453	99	1815946	101	1046758	95	
033SMPL.D	E13-05421-009	301780	85	40460	104	168544	102	1167120	101	1820973	101	1052815	96	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

E13-05396
01147

METALS INTERNAL STANDARD AREA SUMMARY
2013 PG253
June 12, 2013
Method: 6020

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.D	STD BLANK	355943		38986		165641		1154240		1799601		1099388		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
Sample Lower Limit		249160	70	27290	70	115949	70	807968	70	1259721	70	769572	70	
QC Lower Limit		284754	80	31189	80	132513	80	923392	80	1439681	80	879510	80	
Sample & QC Upper Limit		427132	120	46783	120	198769	120	1385088	120	2159521	120	1319266	120	
034SMPL.D	E13-05421-010	297858	84	40009	103	168708	102	1165052	101	1850329	103	1039981	95	
035SMPL.D	E13-05399-001	304658	86	39964	103	167980	101	1174342	102	1843425	102	1055051	96	
036SMPL.D	E13-05406-001	276775	78	43801	112	162116	98	1023808	89	1703770	95	1001530	91	
037SMPL.D	E13-05410-001	284762	80	32501	83	144267	87	1020337	88	1696056	94	1024804	93	
038SMPL.D	E13-05277-008	311827	88	35162	90	150438	91	1001762	87	1684180	94	**3089331**	**281**	**A**
039SMPL.D	E13-05283-010	303929	85	35095	90	152408	92	1055155	91	1769701	98	1024934	93	
040SMPL.D	E13-05277-008	302348	85	34736	89	148958	90	1076943	93	1749171	97	1282571	117	
043ICSA.D	ICSA	353903	99	42044	108	192474	116	1011893	88	1713365	95	936636	85	
044ICSB.D	ICSAB	347209	98	43443	111	190038	115	992985	86	1693372	94	911866	83	
0466CCV.D	FINAL CCV	350627	99	38097	98	166174	100	1194564	103	1921811	107	1141052	104	
0476CCB.D	FINAL CCB	329436	93	37838	97	160493	97	1171829	102	1843726	102	1096328	100	

Note: Internal Standards failed, no affected data was reported from this analysis.

E13-05399 01148

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)
[1] = [He]; [2] = [No Gas]

GENERAL ANALYTICAL CHEMISTRY

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfur as S

Matrix: Soil
Unit: mg/Kg

Batch: AP091-0011
Method: D129

Date: 06/17/2013

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS130617	< 825	NA	NA	NA	NA	NA
LCS	LCSS130617	280000	333000	NA	NA	84.1	80-120
SAMPLE	E13-05399-001	< 1020	NA	NA	NA	NA	NA
DUP	E13-05399-001DUP	< 1020	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E13-05399-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants
Address: 1 Greenwood Ave
Suite 210 Montclair NJ 07042
Telephone #: 973 813 7110
Fax #:
Project Manager: MIKE ZUKAUSKAS
EMAIL Address: MZUKAUSKAS@geiconsultants.com
Sampled by: ALAN AJDEGBAYI

COMPLETED BY IAL:
_____ Field Sampling _____ Equipment Rental

Project Name: Greenpoint Energy Center
Project Location (State): Brooklyn NY
Bottle Order #:

REPORTING INFO

REPORT TO: datagroup @
Address: geiconsultants.com
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE
NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify):
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only / NY Cat A	NJ SRP format
NJ Reduced	NYSDEC
NJ Regulatory / NY Cat B / 15% Surcharge applies	lab approved custom EDD
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	TPH 8015 GRO/DRO or EPH	Total VOCs 8260B	Total SVOCs 8270C	Total PCBs	Total metals TCLP	Sulfur	Mercury	HCL	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPEC SS-WC-001	8-10	06/06/13	0645	S	6	1	X	X	X	X	X	X	X							3	3

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req: NJ GWQS NJ IGW NJ SRS
NY TOGS NY CP51 NY Part 375 Restricted NY Part 375 Unrestricted
Other (specify):

Carrier (check one): _____ IAL Courier _____ Client Courier _____ FedEx/UPS

	Signature/Company	Date	Time		Signature/Company	Date	Time
Relinquished by:		06/06/13		Received by:		6/7/13	0745
Relinquished by:		6-7-13	1705	Received by:		6/7/13	1705
Relinquished by:				Received by:			
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments: Please send results to datagroup @ geiconsultants.com

1 week TAT

Lab Case #
13198

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\COCs\2013 COC

01/2013 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E13-05399: GREEN POINT PHASE I WASTE CLASS

To: Maria Stepanova
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: mstepanova@geiconsultants.com;da

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Maria Stepanova

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Sandra St. Hilaire

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Jun 07, 2013 @ 17:05	Jun 17, 2013	Jun 17, 2013	Jul 01, 2013 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05399-001	GPEC SS-WC-001	8/10	06/06/13@06:45	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	Special VO	Analyze	8260B	RUSH 1 WK	6/20/2013
	TPH-GRO	Analyze	8260B	RUSH 1 WK	6/20/2013
	PP/PAH	Analyze	8270C	RUSH 1 WK	6/20/2013
	PP/PCB	Analyze	8082	RUSH 1 WK	6/20/2013
	TPH-DRO	Analyze	8015B M	RUSH 1 WK	6/20/2013
	PP Metals	Analyze	6020/7471A	RUSH 1 WK	7/4/2013
	Sulfur as S	Analyze	D129	RUSH 1 WK	7/4/2013

Project Notes:

NOTE 1 taken by Ellen on 06/10/2013 10:37
For VO Analyze & Report PP VO+Acetone, 2-Butanone, Cis-1,2-Dichloroethene, 4-Methyl-2-Pentanone, Styrene, 1,1,1,2-Tetrachloroethane & 1,2,4-Trichlorobenzene

NOTE 2 taken by Ellen on 06/10/2013 10:39
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP New Jersey Accredited Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Pennsylvania (68-00773) and West Virginia TO-15 and Method 18.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 13** **05399** CLIENT: QCI

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [initials] DATE 6/7/13

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [initials] DATE 6.10.13

Laboratory Custody Chronicle

IAL Case No.
E13-05399

Client GEI Consultants Inc. - Montclair

Project GREEN POINT PHASE I WASTE CLASS

Received On 6/ 7/2013@17:05

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	05399-001	Soil	n/a	n/a	6/13/13	Xing
TPH-GRO	-001	Soil	n/a	n/a	6/12/13	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PAH	-001	Soil	6/10/13	Kou-Liang	6/13/13	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP/PCB	-001	Soil	6/10/13	Archimede	6/12/13	Justyna
TPH-DRO	-001	Soil	6/10/13	Archimede	6/11/13	Jamie

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	6/10/13	Lisa	6/12/13	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	6/17/13	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

E13-05399 0156

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT PHASE II WC**
IAL Case Number: **E14-07393**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Sample Summary

IAL Case No.
E14-07393

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE II WC

Received On 8/ 7/2014@12:17

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
07393-001	GPECWC080714	0.2/1	8/ 7/2014@09:15	Aqueous	8

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on August 21, 2014

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC

CASE NARRATIVE

IAL SDG No.: E14-07393

Sample Received Date: 8/7/2014@12:17; 8/14/2014

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4°C

Client ID	Sample Date	IAL Lab No.	Analysis/Method
GPECWC080714	8/7/2014	07393-001	PCB(8082A), TPH-DRO(8015D), METALS(6020A), FLASHPOINT(1010), TOX(9020B), TOTAL SOLIDS(2540B)
GPECWC081414	8/14/2014	07393-002	VO (8260C)

Except as noted below, all method specific requirements and QA/QC criteria were met.
Sample delivery group notes are also included in this section.

PCB (8082A):
Samples were cleaned up using method 3665A.
Samples were cleaned up using method 3660B to remove sulfur.
Sample 001 was run at a 5x dilution due to high concentration of target compounds.

Metals (6020A):
Sample(s) used for aqueous metals analyses contained varying levels of sediment. Precautions were taken to use an aqueous representative of the sample. However, our experience has demonstrated that sample of this nature are very difficult to duplicate because the metals numbers are basically tied into the level of sediment present in the original sample. Additionally, as the remainder of the sample is stored under acidic conditions, some of the metals may continue to leach out into the water making any reproduction of the original number impossible. The rough amount of sediment present in the samples is as follows: 07393-001: trace

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE TRACKING

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO

Company: GEI Consultants
Address: 1 Greenwood Ave St. 210
Montclair NJ 07042
Telephone #: 973 873-7110
Fax #: 973-509-9625
Project Manager: Jerry Zak
EMAIL Address: jzak@geiconsultants.com
Sampled by: R. Marshall
Project Name: Greenpoint
Project Location (State): NY
Bottle Order #:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

REPORTING INFO

REPORT TO: Data Group
Address: datagroup@geiconsultants.com
Attn: Jamie Wargo
FAX # 973-509-9625
INVOICE TO: GEIinvoices only@
Address: geiconsultants.com
Attn: Sandra St. Hilaire
PO # 125180-2-1202
Quote #

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

EDC - MUST CHOOSE TAT for Hydrocarbons
NJ EPH-DRO (if other than 2 weeks) ____
NJ EPH - C40
NJ EPH Fractionated DRO-8015

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format: NJ Results Only, NY Cat A; NJ Reduced; NJ Regulatory; NY Cat B; 15% Surcharge applies; Other (describe)

EDDs: NJ SRP format; NYSDEC; lab approved custom EDD; NO EDD/CD REQ'D

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify):
Hard Copy: Std 3 week * Other - call for price

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS: TPH 8015; Flash Point; Total Halogens; Total Solids; PCB; Metals 6010B

BOTTLES & PRESERVATIVES: HCL; HNO3; MeOH; NaOH; H2SO4; Other; None; Encore

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	TPH 8015	Flash Point	Total Halogens	Total Solids	PCB	Metals 6010B	HNO3	H2SO4	None
GPECWC080714	0.2-1.0	8/7/14	9:15	LIQ	8	1	X	X	X	X	X	X	1	1	6

Known Hazard: Yes or No
Describe:
Conc. Expected: Low Med High

MDL Req: NJ GWQS; NJ IGW; NJ SRS; NY TOGS; NY CP51; X NY Part 375 Restricted; NY Part 375 Unrestricted; Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Relinquished by:	Signature/Company	Date	Time	Received by:	Signature/Company	Date	Time
Relinquished by:	Rall Marshall / GEI	8/7/14	10:35	Received by:		8/7/14	1035
Relinquished by:				Received by:			
Relinquished by:		8/7/14	1217	Received by:		8/7/14	12:17
Relinquished by:				Received by:			
Relinquished by:				Received by:			

Comments: Send results to datagroup@geiconsultants.com

Lab Case # 7393FA

PAGE: of

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01/2014

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO	
Company:	GEI Consultants Inc
Address:	1 Greenwood Ave Montclair NJ 07042
Telephone #:	973 873 7110
Fax #:	973 509 9625
Project Manager:	M Zukauskas
EMAIL Address:	mzukauskas@geiconsultants.com
Sampled by:	M Sweet
COMPLETED BY IAL:	____ Field Sampling ____ Equipment Rental
Project Name:	Greenpoint Ops
Project Location (State):	New York
Bottle Order #:	

REPORTING INFO	
REPORT TO:	datagroup@geiconsultants.com
Address:	
Attn:	Jaimie Wargo
FAX #	
INVOICE TO:	geiinvoices only@gmedocs.com
Address:	
Attn:	
PO #	125180-2-1207
Quote #	

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) QAM025

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** 1 wk**
Other** (specify): ____
Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only / NY Cat A	NJ SRP format
NJ Reduced	NYSDEC
NJ Regulatory / NY Cat B	lab approved custom EDD
15% Surcharge applies	
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil
LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

 # BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC 8260	HCl	HNO3	MeOH	NaOH	H2SO4	Other	None	Encore
GPECWC081414		8/14/14	10:15	AQ	2	2	X	2							
				~~AQ~~	~~1~~	2		2							
						PA									

Known Hazard: Yes or No
Describe:

Conc. Expected: Low Med High

MDL Req: NJ GWQS NJ IGW NJ SRS

NY TOGS NY CP51 NY Part 375 Restricted NY Part 375 Unrestricted

Other (specify):

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		8/14/14	1324	Received by:	8-14-14	13:24
Relinquished by:		8-14-14	17:00	Received by:	8/14/14	17:00
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: Send results to Sample #2 datagroup@geiconsultants.com 7393

Lab Case # ~~7684~~ 7393

PAGE: 1 of 1

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I:\COCs\2013 COC

01/2013 rev

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E14-07393: GREENPOINT PHASE II WC

To: Jerry Zak
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: jzak@geiconsultants.com;msweet@

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Jerry Zak

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive
Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category B	:AK125180-2-12(	Aug 07, 2014 @ 12:17	Aug 12, 2014	Aug 19, 2014	Aug 28, 2014 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. No EDD

**** QC Requirement (must meet):** NY Part 375-6.8(b) (RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
07393-001	GPECWC080714	0.2/1	08/07/14@09:15	Aqueous	ug/L (ppb)	
07393-002	GPECWC081414	NA	08/14/14@10:15	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TPH-DRO	Analyze	8015D	RUSH 72 HRS	8/14/2014
	TCL PCB	Analyze	8082A	RUSH 72 HRS	8/14/2014
	Arsenic - As	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Lead - Pb	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Mercury - Hg	Analyze	7470A	RUSH 72 HRS	9/4/2014
	Chromium - Cr	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Silver - Ag	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Cadmium - Cd	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Selenium - Se	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Barium - Ba	Analyze	6020A	RUSH 72 HRS	2/3/2015
	Flash Point	Analyze	1010	RUSH 72 HRS	9/4/2014
	TOX (Total Organic Halides)	Analyze	9020B	RUSH 72 HRS	9/4/2014
	Total Solids	Analyze	2540B	RUSH 72 HRS	8/14/2014
	Sample Pick-Up	Analyze		RUSH 72 HRS	8/7/2014
002	TCL VO	Analyze	8260C	RUSH 72 HRS	8/28/2014

Project Notes:

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

E14-07393 0006

IAL is a NELAP accredited lab (#NJ01254) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E14-07393: GREENPOINT PHASE II WC

NOTE 3 taken by Ellen on 08/07/2014 01:17
FOR WASTE CLASS, CLIENT NEEDS SIGNATURE PAGE.

NOTE 4 taken by kim on 08/08/2014 09:23
PO NUMBER IS 125180-2-1207 PER MATT SWEET.

REV 1 taken by kim on 08/14/2014 11:54
REV 01 DUE 8/19

PER MATT SWEET, ANALYZE SAMPLE 001 FOR Ba, Hg, Ag & Se, 72 HR RUSH.

ORIGINAL RESULTS SENT 8/12

REV 2 taken by kim on 08/15/2014 10:21
REV 02 DUE 8/20

SAMPLE 002 RECEIVED 8/14/14

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab [illegible] in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 14** **07393** CLIENT: GEI Greenpoint

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL FA DATE 8/6/14

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ✓

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KG DATE 8/7/14

E14-07393 0008

REV 03/2013

Laboratory Custody Chronicle

IAL Case No.
E14-07393

Client GEI Consultants Inc. - Montclair

Project GREENPOINT PHASE II WC

Received On 8/ 7/2014@12:17

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	07393-002	Aqueous	n/a	n/a	8/15/14	Barbara

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	-001	Aqueous	8/ 8/14	Archimede	8/11/14	Nicole
TPH-DRO	-001	Aqueous	8/ 7/14	Archimede	8/ 8/14	McKenzie

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Arsenic - As	-001	Aqueous	8/10/14	Lisa	8/11/14	Danielle
Barium - Ba	-001	Aqueous	8/10/14	Lisa	n/a	Rob
Cadmium - Cd	-001	Aqueous	8/10/14	Lisa	8/11/14	Danielle
Chromium - Cr	-001	Aqueous	8/10/14	Lisa	8/11/14	Danielle
Lead - Pb	-001	Aqueous	8/10/14	Lisa	8/11/14	Danielle
Mercury - Hg	-001	Aqueous	8/17/14	Lisa	8/18/14	Danielle
Selenium - Se	-001	Aqueous	8/10/14	Lisa	n/a	Rob
Silver - Ag	-001	Aqueous	8/10/14	Lisa	n/a	Rob

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Flash Point	-001	Aqueous	n/a	n/a	8/12/14	Robert
TOX (Total Organic Halides)	-001	Aqueous	n/a	n/a	8/11/14	Robert
Total Solids	-001	Aqueous	n/a	n/a	8/ 7/14	Lucy

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE II WC
Lab Case No.: E14-07393

	Lab ID:	07393-001			07393-002		
	Client ID:	GPECWC080714			GPECWC081414		
	Depth:	0.2/1					
	Matrix:	Aqueous			Aqueous		
	Sampled Date	8/7/14			8/14/14		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(ug/L)*			*(ug/L)*		
Dichlorodifluoromethane		~		~	ND		0.720
Chloromethane		~		~	ND		0.638
Vinyl chloride		~		~	ND		0.490
Bromomethane		~		~	ND		0.602
Chloroethane		~		~	ND		0.637
Trichlorofluoromethane		~		~	ND		0.730
1,1-Dichloroethene		~		~	ND		0.568
Acetone		~		~	ND		0.854
Carbon disulfide		~		~	ND		0.666
Methylene chloride		~		~	ND		1.99
trans-1,2-Dichloroethene		~		~	ND		0.480
Methyl tert-butyl ether (MTBE)		~		~	ND		0.475
1,1-Dichloroethane		~		~	ND		0.457
cis-1,2-Dichloroethene		~		~	ND		0.447
2-Butanone (MEK)		~		~	ND		0.625
Bromochloromethane		~		~	ND		0.594
Chloroform		~		~	ND		0.736
1,1,1-Trichloroethane		~		~	ND		0.528
Carbon tetrachloride		~		~	ND		0.746
1,2-Dichloroethane (EDC)		~		~	ND		0.393
Benzene		~		~	ND		0.458
Trichloroethene		~		~	ND		0.456
1,2-Dichloropropane		~		~	ND		0.491
1,4-Dioxane		~		~	ND		57.9
Bromodichloromethane		~		~	ND		0.493
cis-1,3-Dichloropropene		~		~	ND		0.465
4-Methyl-2-pentanone (MIBK)		~		~	ND		0.432
Toluene		~		~	ND		0.289
trans-1,3-Dichloropropene		~		~	ND		0.463
1,1,2-Trichloroethane		~		~	ND		0.478
Tetrachloroethene		~		~	ND		0.498
2-Hexanone		~		~	ND		0.463
Dibromochloromethane		~		~	ND		0.409
1,2-Dibromoethane (EDB)		~		~	ND		0.540
Chlorobenzene		~		~	ND		0.546
Ethylbenzene		~		~	ND		0.489
Total Xylenes		~		~	ND		1.20
Styrene		~		~	ND		0.523
Bromoform		~		~	ND		0.526
Isopropylbenzene		~		~	ND		0.441
1,1,2,2-Tetrachloroethane		~		~	ND		0.464
1,3-Dichlorobenzene		~		~	ND		0.471
1,4-Dichlorobenzene		~		~	ND		0.407
1,2-Dichlorobenzene		~		~	ND		0.398

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE II WC
Lab Case No.: E14-07393

	Lab ID:	07393-001			07393-002		
	Client ID:	GPECWC080714			GPECWC081414		
	Depth:	0.2/1					
	Matrix:	Aqueous			Aqueous		
	Sampled Date	8/7/14			8/14/14		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(ug/L)*			*(ug/L)*		
1,2-Dibromo-3-chloropropane		~		~	ND		0.681
1,2,4-Trichlorobenzene		~		~	ND		0.548
1,2,3-Trichlorobenzene		~		~	ND		0.633
1,1,2-Trichloro-1,2,2-trifluoroethane		~		~	ND		0.826
Methyl acetate		~		~	ND		0.802
Cyclohexane		~		~	ND		0.633
Methylcyclohexane		~		~	ND		0.699
1,3-Dichloropropene (cis- and trans-)		~		~	ND		0.465
TOTAL VO's:		~		~	ND		
PCB's (Units)		*(ug/L)*			*(ug/L)*		
Aroclor-1016		ND		0.100	~		~
Aroclor-1221		ND		0.100	~		~
Aroclor-1232		ND		0.100	~		~
Aroclor-1242		ND		0.100	~		~
Aroclor-1248		11.3	D	0.100	~		~
Aroclor-1254		12.3	D	0.100	~		~
Aroclor-1260		ND		0.100	~		~
Aroclor-1262		ND		0.100	~		~
Aroclor-1268		ND		0.100	~		~
PCBs		23.6	D	0.100	~		~
Hydrocarbons (Units)		*(ug/L)*			*(ug/L)*		
TPH-DRO		1380		40.0	~		~
Metals (Units)		*(ug/L)*			*(ug/L)*		
Arsenic		12.0		1.00	~		~
Barium		393		2.00	~		~
Cadmium		ND		0.500	~		~
Chromium		4.08		2.00	~		~
Lead		38.6		0.500	~		~
Mercury		0.369	J	0.300	~		~
Selenium		ND		2.00	~		~
Silver		ND		0.500	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT PHASE II WC
Lab Case No.: E14-07393

Lab ID:	**07393-001**			**07393-002**		
Client ID:	**GPECWC080714**			**GPECWC081414**		
Depth:	**0.2/1**					
Matrix:	**Aqueous**			**Aqueous**		
Sampled Date	**8/7/14**			**8/14/14**		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
General Analytical (Units)						
Total Solids(ug/L)	1290000		4700	~		~
Total Organic Halides (TOX)(ug/L)	ND		NA	~		~
Flash Point(°C)	No Flash @100C		NA	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 07393-002
Client ID: GPECWC081414
Date Received: 08/07/2014
Date Analyzed: 08/15/2014
Data file: K6269.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.720
Chloromethane	ND		1.00	0.638
Vinyl chloride	ND		1.00	0.490
Bromomethane	ND		1.00	0.602
Chloroethane	ND		1.00	0.637
Trichlorofluoromethane	ND		1.00	0.730
1,1-Dichloroethene	ND		1.00	0.568
Acetone	ND		5.00	0.854
Carbon disulfide	ND		1.00	0.666
Methylene chloride	ND		2.00	1.99
trans-1,2-Dichloroethene	ND		1.00	0.480
Methyl tert-butyl ether (MTBE)	ND		1.00	0.475
1,1-Dichloroethane	ND		1.00	0.457
cis-1,2-Dichloroethene	ND		1.00	0.447
2-Butanone (MEK)	ND		1.00	0.625
Bromochloromethane	ND		1.00	0.594
Chloroform	ND		1.00	0.736
1,1,1-Trichloroethane	ND		1.00	0.528
Carbon tetrachloride	ND		1.00	0.746
1,2-Dichloroethane (EDC)	ND		1.00	0.393
Benzene	ND		1.00	0.458
Trichloroethene	ND		1.00	0.456
1,2-Dichloropropane	ND		1.00	0.491
1,4-Dioxane	ND		200	57.9
Bromodichloromethane	ND		1.00	0.493
cis-1,3-Dichloropropene	ND		1.00	0.465
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.432

E14-07393 0015

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 07393-002
Client ID: GPECWC081414
Date Received: 08/07/2014
Date Analyzed: 08/15/2014
Data file: K6269.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.289
trans-1,3-Dichloropropene	ND		1.00	0.463
1,1,2-Trichloroethane	ND		1.00	0.478
Tetrachloroethene	ND		1.00	0.498
2-Hexanone	ND		1.00	0.463
Dibromochloromethane	ND		1.00	0.409
1,2-Dibromoethane (EDB)	ND		1.00	0.540
Chlorobenzene	ND		1.00	0.546
Ethylbenzene	ND		1.00	0.489
Total Xylenes	ND		2.00	1.20
Styrene	ND		1.00	0.523
Bromoform	ND		1.00	0.526
Isopropylbenzene	ND		1.00	0.441
1,1,2,2-Tetrachloroethane	ND		1.00	0.464
1,3-Dichlorobenzene	ND		1.00	0.471
1,4-Dichlorobenzene	ND		1.00	0.407
1,2-Dichlorobenzene	ND		1.00	0.398
1,2-Dibromo-3-chloropropane	ND		1.00	0.681
1,2,4-Trichlorobenzene	ND		1.00	0.548
1,2,3-Trichlorobenzene	ND		1.00	0.633
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.00	0.826
Methyl acetate	ND		1.00	0.802
Cyclohexane	ND		5.00	0.633
Methylcyclohexane	ND		1.00	0.699
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.465

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-07393 0016

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E14-07393-001
Client ID: GPECWC08
Date Received: 08/07/2014
Date Extracted: 08/08/2014
Date Analyzed: 08/11/2014
Data file: Y7746.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.250	0.100
Aroclor-1221	ND		0.250	0.100
Aroclor-1232	ND		0.250	0.100
Aroclor-1242	ND		0.250	0.100
Aroclor-1248	11.3	D	0.250	0.100
Aroclor-1254	12.3	D	0.250	0.100
Aroclor-1260	ND		0.250	0.100
Aroclor-1262	ND		0.250	0.100
Aroclor-1268	ND		0.250	0.100
PCBs	23.6	D	0.250	0.100

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-07393 0017

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

Lab ID:	07393-001	GC Column:	RTX-5
Client ID:	GPECWC080714	Sample wt/vol:	1000ml
Date Received:	08/07/2014	Matrix-Units:	Aqueous-ug/L (ppb)
Date Extracted:	08/07/2014	Dilution Factor:	1
Date Analyzed:	08/08/2014	%Moisture:	100
Data File:	QB5033.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	1,380		50.0	40.0

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

Lab ID: E14-07393-001
Client ID: GPECWC080714
Date Collected: 08/07/14 09:15
Date Received: 08/07/14 12:17
Matrix-Units: Aqueous-ug/L (ppb)
% Moisture: 100
Batch #: 368

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Arsenic	12.0		1	2.00	1.00	08/11/14 11:27	6020A
Barium	393		1	2.00	2.00	08/11/14 11:27	6020A
Cadmium	ND		1	2.00	0.500	08/11/14 11:27	6020A
Chromium	4.08		1	2.00	2.00	08/11/14 11:27	6020A
Lead	38.6		1	2.00	0.500	08/11/14 11:27	6020A
Mercury	0.369	J	1	2.00	0.300	08/18/14 15:03	7470A
Selenium	ND		1	2.00	2.00	08/11/14 11:27	6020A
Silver	ND		1	2.00	0.500	08/11/14 11:27	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Mercury

Client/Project: GEI-MTCLRGREENPOINT PHASE II WC

Batch #: 378
Date Received: 08/07/14 12:17
Method: 7470A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E14-07393-001	GPECWC080714	0.369	J	1	Aqueous-ug/L	2.00	0.300	100	08/07/14 09:15	08/18/14 15:03

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Solids

Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

Date Received: 08/07/14 12:17
Method: 2540B

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E14-07393-001	GPECWC080714	1290000		1	Aqueous-ug/L	4700	25000	08/07/14 09:15	08/07/14 15:30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Total Organic Halides (TOX)

Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

Date Received: 08/07/14 12:17
Method: 9020B

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E14-07393-001	GPECWC080714	ND		1	Aqueous-ug/L	NA	20.0	0	08/07/14 09:15	08/11/14 09:00

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Flash Point

Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

Date Received: 08/07/14 12:17
Method: 1010

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E14-07393-001	GPECWC080714	No Flash @100C		1	Aqueous-°C	NA	20.0	0	08/07/14 09:15	08/12/14 14:30

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 08/15/2014

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA140815a	AQUEOUS	K6261.D	102	98	96
07509-001	AQUEOUS	K6262.D	110	99	101
LCSA140815a	AQUEOUS	K6263.D	98	101	103
07393-002MS	AQUEOUS	K6264.D	100	100	102
07393-002MSD	AQUEOUS	K6265.D	99	99	102
07393-002	AQUEOUS	K6269.D	100	97	98
07458-004	AQUEOUS	K6270.D	97	98	98
07595-007	AQUEOUS	K6271.D	97	98	98
07564-002	AQUEOUS	K6272.D	98	98	98
07650-001	AQUEOUS	K6273.D	96	98	100
07458-001	AQUEOUS	K6276.D	99	99	98
07564-001	AQUEOUS	K6277.D	97	98	98
07603-001	AQUEOUS	K6278.D	98	98	98
07603-002	AQUEOUS	K6279.D	98	99	99

	Concentration	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	59-138	43-133
SMC2 = Toluene-d8	50 ppb	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	42-152	45-145

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA140815a
Date Received: NA
Date Analyzed: 08/15/2014
LCS Data file: K6263.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.0	47.5	95
Chloromethane	50.0	0.0	44.8	90
Vinyl chloride	50.0	0.0	43.5	87
Bromomethane	50.0	0.0	42.4	85
Chloroethane	50.0	0.0	42.6	85
Trichlorofluoromethane	50.0	0.0	41.3	83
Acrolein	150	0.0	112.9	75
1,1-Dichloroethene	50.0	0.0	42.3	85
Acetone	50.0	0.0	42.6	85
Carbon disulfide	50.0	0.0	39.9	80
Vinyl acetate	50.0	0.0	48.6	97
Methylene chloride	50.0	0.0	43.2	86
Acrylonitrile	150.0	0.0	144.6	96
tert-Butyl alcohol (TBA)	100.0	0.0	96.3	96
trans-1,2-Dichloroethene	50.0	0.0	45.9	92
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.0	98
1,1-Dichloroethane	50.0	0.0	47.7	95
Diisopropyl ether (DIPE)	50.0	0.0	50.8	102
cis-1,2-Dichloroethene	50.0	0.0	48.3	97
2,2-Dichloropropane	50.0	0.0	43.8	88
2-Butanone (MEK)	50.0	0.0	51.8	104
Bromochloromethane	50.0	0.0	47.1	94
Chloroform	50.0	0.0	47.5	95
1,1,1-Trichloroethane	50.0	0.0	48.0	96
Carbon tetrachloride	50.0	0.0	44.2	88
1,1-Dichloropropene	50.0	0.0	47.3	95
1,2-Dichloroethane (EDC)	50.0	0.0	48.5	97
Benzene	50.0	0.0	47.5	95
Trichloroethene	50.0	0.0	47.7	95
1,2-Dichloropropane	50.0	0.0	49.3	99
Dibromomethane	50.0	0.0	50.3	101
1,4-Dioxane	1500	0.0	1300	87
Bromodichloromethane	50.0	0.0	48.4	97
2-Chloroethyl vinyl ether	50.0	0.0	58.6	117
cis-1,3-Dichloropropene	50.0	0.0	51.8	104
4-Methyl-2-pentanone (MIBK)	50.0	0.0	57.5	115
Toluene	50.0	0.0	48.5	97
trans-1,3-Dichloropropene	50.0	0.0	52.2	104
1,1,2-Trichloroethane	50.0	0.0	51.4	103
Tetrachloroethene	50.0	0.0	46.3	93
1,3-Dichloropropane	50.0	0.0	53.5	

E14-07393 0027

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA140815a
Date Received: NA
Date Analyzed: 08/15/2014
LCS Data file: K6263.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.0	62.4	125
Dibromochloromethane	50.0	0.0	50.6	101
1,2-Dibromoethane (EDB)	50.0	0.0	54.7	109
Chlorobenzene	50.0	0.0	46.7	93
1,1,1,2-Tetrachloroethane	50.0	0.0	47.1	94
Ethylbenzene	50.0	0.0	48.2	96
m,p-Xylene	100.0	0.0	95.9	96
o-Xylene	50.0	0.0	51.4	103
Styrene	50.0	0.0	52.2	104
Bromoform	50.0	0.0	49.1	98
Isopropylbenzene	50.0	0.0	50.6	101
1,1,2,2-Tetrachloroethane	50.0	0.0	48.3	97
Bromobenzene	50.0	0.0	47.6	95
1,2,3-Trichloropropane	50.0	0.0	50.1	100
n-Propylbenzene	50.0	0.0	46.8	94
2-Chlorotoluene	50.0	0.0	46.6	93
1,3,5-Trimethylbenzene	50.0	0.0	49.0	98
4-Chlorotoluene	50.0	0.0	46.6	93
tert-Butylbenzene	50.0	0.0	51.1	102
1,2,4-Trimethylbenzene	50.0	0.0	49.4	99
sec-Butylbenzene	50.0	0.0	47.7	95
1,3-Dichlorobenzene	50.0	0.0	45.0	90
4-Isopropyltoluene	50.0	0.0	47.9	96
1,4-Dichlorobenzene	50.0	0.0	45.1	90
n-Butylbenzene	50.0	0.0	47.7	95
1,2-Dichlorobenzene	50.0	0.0	45.4	91
1,2-Dibromo-3-chloropropane	50.0	0.0	51.1	102
1,2,4-Trichlorobenzene	50.0	0.0	48.0	96
Hexachlorobutadiene	50.0	0.0	42.2	84
Naphthalene	50.0	0.0	54.6	109
1,2,3-Trichlorobenzene	50.0	0.0	44.9	90
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	39.1	78
Methyl acetate	50.0	0.0	48.0	96
Cyclohexane	50.0	0.0	42.2	84
Methylcyclohexane	50.0	0.0	44.1	88

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

E14-07393 0028

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 07393-002
Client ID: GPECWC081414
Date Received: NA
Date Analyzed: 08/15/2014
MS Data file: K6264.D
MSD Data file: K6265.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
Dichlorodifluoromethane	50.0	0.0	58.6	117		54.0	108	8
Chloromethane	50.0	0.0	44.0	88		42.9	86	3
Vinyl chloride	50.0	0.0	46.0	92		44.5	89	3
Bromomethane	50.0	0.0	44.2	88		42.0	84	5
Chloroethane	50.0	0.0	43.9	88		42.8	86	3
Trichlorofluoromethane	50.0	0.0	52.4	105		51.1	102	3
Acrolein	150	0.0	114	76		105	70	8
1,1-Dichloroethene	50.0	0.0	44.1	88		42.9	86	3
Acetone	50.0	0.0	47.4	95		43.9	88	8
Carbon disulfide	50.0	0.0	43.7	87		42.7	85	2
Vinyl acetate	50.0	0.0	48.2	96		46.0	92	5
Methylene chloride	50.0	0.0	43.4	87		42.0	84	3
Acrylonitrile	150	0.0	149	99		139	93	7
tert-Butyl alcohol (TBA)	100	0.0	106.5	107		98.0	98	8
trans-1,2-Dichloroethene	50.0	0.0	47.0	94		46.5	93	1
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.9	100		48.0	96	4
1,1-Dichloroethane	50.0	0.0	48.5	97		47.6	95	2
Diisopropyl ether (DIPE)	50.0	0.0	50.2	100		49.0	98	2
cis-1,2-Dichloroethene	50.0	0.0	49.2	98		48.5	97	1
2,2-Dichloropropane	50.0	0.0	47.7	95		46.9	94	2
2-Butanone (MEK)	50.0	0.0	53.4	107		48.9	98	9
Bromochloromethane	50.0	0.0	47.8	96		46.1	92	4
Chloroform	50.0	0.0	48.4	97		47.3	95	2
1,1,1-Trichloroethane	50.0	0.0	51.2	102		49.7	99	3
Carbon tetrachloride	50.0	0.0	47.8	96		47.4	95	1
1,1-Dichloropropene	50.0	0.0	49.3	99		48.4	97	2
1,2-Dichloroethane (EDC)	50.0	0.0	47.9	96		46.6	93	3
Benzene	50.0	0.0	47.3	95		46.4	93	2
Trichloroethene	50.0	0.0	48.4	97		47.4	95	2
1,2-Dichloropropane	50.0	0.0	47.8	96		47.6	95	0
Dibromomethane	50.0	0.0	49.6	99		47.6	95	4
1,4-Dioxane	1,500	0.0	1322	88		1286	86	3
Bromodichloromethane	50.0	0.0	47.7	95		47.0	94	1
2-Chloroethyl vinyl ether	50.0	0.0	0.0	0	*	0.0	0	* ##### #
cis-1,3-Dichloropropene	50.0	0.0	50.1	100		49.3	99	2
4-Methyl-2-pentanone (MIBK)	50.0	0.0	56.0	112		52.3	105	7
Toluene	50.0	0.0	47.7	95		47.2	94	1
trans-1,3-Dichloropropene	50.0	0.0	50.4	101		49.0	98	3
1,1,2-Trichloroethane	50.0	0.0	49.4	99		47.4	95	4
Tetrachloroethene	50.0	0.0	46.6	93		46.1	92	1
1,3-Dichloropropane	50.0	0.0	50.9	102		49.4	99	E14-07393 0029

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 07393-002
Client ID: GPECWC081414
Date Received: NA
Date Analyzed: 08/15/2014
MS Data file: K6264.D
MSD Data file: K6265.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	57.3	115		53.1	106		8	
Dibromochloromethane	50.0	0.0	49.5	99		48.1	96		3	
1,2-Dibromoethane (EDB)	50.0	0.0	52.7	105		50.2	100		5	
Chlorobenzene	50.0	0.0	45.4	91		45.4	91		0	
1,1,1,2-Tetrachloroethane	50.0	0.0	47.3	95		46.7	93		1	
Ethylbenzene	50.0	0.0	47.9	96		47.9	96		0	
m,p-Xylene	100	0.0	95.4	95		94.8	95		1	
o-Xylene	50.0	0.0	50.9	102		50.5	101		1	
Styrene	50.0	0.0	50.7	101		50.2	100		1	
Bromoform	50.0	0.0	47.6	95		46.1	92		3	
Isopropylbenzene	50.0	0.0	51.4	103		50.8	102		1	
1,1,2,2-Tetrachloroethane	50.0	0.0	47.6	95		46.3	93		3	
Bromobenzene	50.0	0.0	46.6	93		45.7	91		2	
1,2,3-Trichloropropane	50.0	0.0	49.2	98		46.9	94		5	
n-Propylbenzene	50.0	0.0	47.1	94		47.3	95		0	
2-Chlorotoluene	50.0	0.0	46.5	93		46.4	93		0	
1,3,5-Trimethylbenzene	50.0	0.0	48.7	97		48.8	98		0	
4-Chlorotoluene	50.0	0.0	45.6	91		45.8	92		0	
tert-Butylbenzene	50.0	0.0	51.6	103		51.0	102		1	
1,2,4-Trimethylbenzene	50.0	0.0	48.8	98		48.5	97		1	
sec-Butylbenzene	50.0	0.0	48.6	97		48.3	97		1	
1,3-Dichlorobenzene	50.0	0.0	44.0	88		43.8	88		0	
4-Isopropyltoluene	50.0	0.0	48.4	97		48.7	97		1	
1,4-Dichlorobenzene	50.0	0.0	43.8	88		43.5	87		1	
n-Butylbenzene	50.0	0.0	48.4	97		48.5	97		0	
1,2-Dichlorobenzene	50.0	0.0	44.5	89		43.9	88		1	
1,2-Dibromo-3-chloropropane	50.0	0.0	52.5	105		48.9	98		7	
1,2,4-Trichlorobenzene	50.0	0.0	47.9	96		48.0	96		0	
Hexachlorobutadiene	50.0	0.0	42.7	85		43.8	88		3	
Naphthalene	50.0	0.0	55.1	110		52.7	105		4	
1,2,3-Trichlorobenzene	50.0	0.0	44.8	90		44.6	89		0	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	47.4	95		45.5	91		4	
Methyl acetate	50.0	0.0	47.8	96		45.3	91		5	
Cyclohexane	50.0	0.0	49.2	98		47.4	95		4	
Methylcyclohexane	50.0	0.0	54.4	109		51.9	104		5	

	Leachate Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

E14-07393 0030

Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: K6261.D Instrument ID: MSD_K

Date Analyzed: 08/15/2014 Time Analyzed: 05:02

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TWP-1	07509-001	08/15/2014	5:30
LCSA140815a	LCSA140815a	08/15/2014	5:59
07393-002MS	07393-002MS	08/15/2014	6:27
07393-002MSD	07393-002MSD	08/15/2014	6:55
GPECWC081414	07393-002	08/15/2014	8:47
CKB-TB2	07458-004	08/15/2014	9:15
TB	07595-007	08/15/2014	9:43
TRIP	07564-002	08/15/2014	10:10
WELL_1_170-1	07650-001	08/15/2014	10:38
AOC_8-10GW	07458-001	08/16/2014	12:02
TMP-1/8.10	07564-001	08/16/2014	12:30
MW-1	07603-001	08/16/2014	12:58
MW-1_TRIP	07603-002	08/16/2014	1:26

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: K6153.D

BFB Injection Date: 08/13/2014

Inst ID: MSD_K

BFB Injection Time: 9:47

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	23.9			
75	30.0 - 60.0% of mass 95	53.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	8.3			
173	Less than 2.0% of mass 174	1.0	(	1.4	)1
174	Great than 50.0% of mass 95	72.3			
175	5.0 - 9.0% of mass 174	6.0	(	8.3	)1
176	95.0 - 101.0% of mass 174	70.9	(	98.0	)1
177	5.0 - 9.0% of mass 176	4.7	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC100	ICC100	K6158.D	08/13/2014	12:10
ICC005	ICC005	K6156.D	08/13/2014	11:12
ICC020	ICC020	K6157.D	08/13/2014	11:42
ICC150	ICC150	K6159.D	08/13/2014	12:38
ICC200	ICC200	K6160.D	08/13/2014	1:06
ICC002	ICC002	K6162.D	08/13/2014	2:04
ICC001	ICC001	K6163.D	08/13/2014	2:32
ICV100	ICV100	K6167.D	08/13/2014	4:28

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: K6257.D

BFB Injection Date: 08/15/2014

Inst ID: MSD_K

BFB Injection Time: 3:01

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.9			
75	30.0 - 60.0% of mass 95	53.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.2			
173	Less than 2.0% of mass 174	0.7	(	1.0	)1
174	Great than 50.0% of mass 95	72.5			
175	5.0 - 9.0% of mass 174	5.7	(	7.9	)1
176	95.0 - 101.0% of mass 174	71.7	(	98.9	)1
177	5.0 - 9.0% of mass 176	5.0	(	7.0	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	K6258.D	08/15/2014	3:38
BLKA140815a	BLKA140815a	K6261.D	08/15/2014	5:02
TWP-1	07509-001	K6262.D	08/15/2014	5:30
LCSA140815a	LCSA140815a	K6263.D	08/15/2014	5:59
07393-002MS	07393-002MS	K6264.D	08/15/2014	6:27
07393-002MSD	07393-002MSD	K6265.D	08/15/2014	6:55
GPECWC081414	07393-002	K6269.D	08/15/2014	8:47
CKB-TB2	07458-004	K6270.D	08/15/2014	9:15
TB	07595-007	K6271.D	08/15/2014	9:43
TRIP	07564-002	K6272.D	08/15/2014	10:10
WELL_1_170-1	07650-001	K6273.D	08/15/2014	10:38
AOC_8-10GW	07458-001	K6276.D	08/16/2014	12:02
TMP-1/8.10	07564-001	K6277.D	08/16/2014	12:30
MW-1	07603-001	K6278.D	08/16/2014	12:58
MW-1_TRIP	07603-002	K6279.D	08/16/2014	1:26

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): K6158.D

Date Analyzed: 08/13/2014

Instrument ID: MSD_K

Time Analyzed: 12:10

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	409967	6.11	723612	6.93	674054	10.26
	UPPER LIMIT	819934	6.61	1447224	7.43	1348108	10.76
	LOWER LIMIT	204983.5	5.61	361806	6.43	337027	9.76
	LAB SAMPLE ID						
01	ICC005	359041	6.11	639205	6.93	562114	10.26
02	ICC020	376455	6.11	663123	6.93	600980	10.26
03	ICC150	426553	6.10	750857	6.93	688382	10.27
04	ICC200	443624	6.10	775790	6.93	729274	10.26
05	ICC002	395608	6.11	698343	6.93	618149	10.26
06	ICC001	384384	6.11	691087	6.93	623301	10.26
07	ICV100	421731	6.11	738880	6.93	697748	10.26
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): K6258.D

Date Analyzed: 08/15/2014

Instrument ID: MSD_K

Time Analyzed: 3:38

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	417257		6.10		734275		6.93		705353		10.26	
	UPPER LIMIT	834514		6.60		1468550		7.43		1410706		10.76	
	LOWER LIMIT	208628.5		5.60		367137.5		6.43		352676.5		9.76	
	LAB SAMPLE ID												
01	BLKA140815a	382625		6.10		701427		6.93		636308		10.26	
02	07509-001	352124		6.11		665515		6.93		635509		10.26	
03	LCSA140815a	446338		6.11		788327		6.93		743870		10.26	
04	07393-002MS	422357		6.10		754168		6.93		709211		10.26	
05	07393-002MSD	449433		6.11		798842		6.93		741668		10.26	
06	07393-002	440978		6.11		783665		6.93		706679		10.26	
07	07458-004	459729		6.11		810861		6.93		743269		10.26	
08	07595-007	459320		6.11		808546		6.93		741877		10.26	
09	07564-002	451837		6.11		802882		6.93		729286		10.26	
10	07650-001	460225		6.11		807619		6.93		739441		10.26	
11	07458-001	427479		6.11		761211		6.93		697203		10.26	
12	07564-001	447639		6.11		789462		6.93		728757		10.26	
13	07603-001	441071		6.11		784567		6.93		725882		10.26	
14	07603-002	436966		6.11		775287		6.93		713423		10.26	
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6269.D
Acq On : 15 Aug 2014 8:47 pm
Operator : BARBARA
Sample : GPECWC081414,07393-002,A,5mL,100
Misc : GEI-MTCLR/GREENPOI,08/14/14,08/07/14,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 18:48:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.11	168	440978	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.93	114	783665	50.00	UG	0.00
50) Chlorobenzene-d5	10.26	117	706679	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.44	65	338392	50.07	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.14%			
41) Toluene-d8	8.59	98	935991	48.46	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.92%			
59) Bromofluorobenzene	11.67	95	384565	48.99	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.98%			

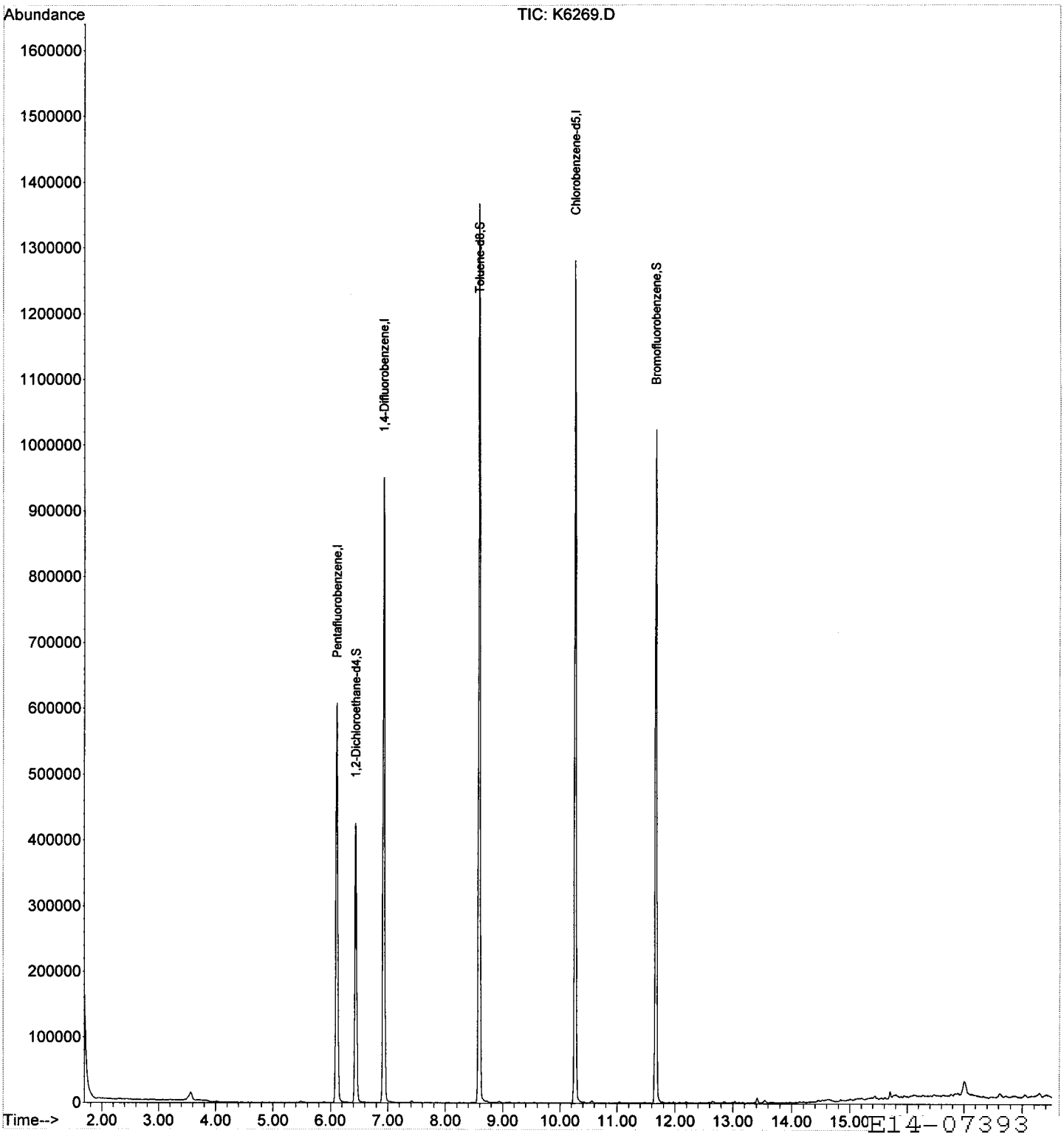
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

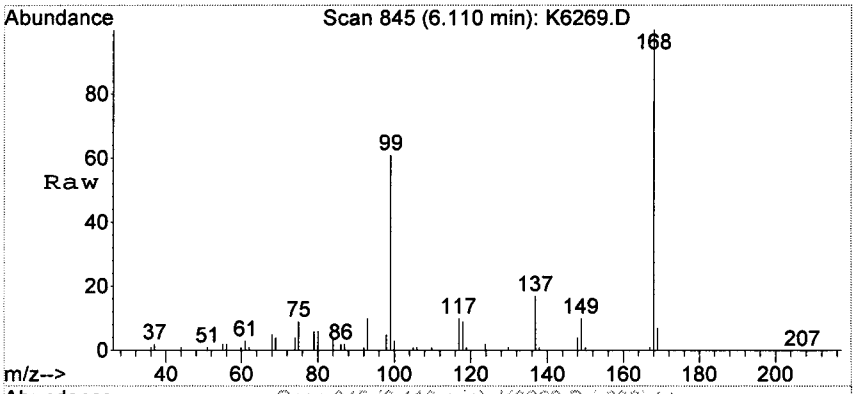
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6269.D
Acq On : 15 Aug 2014 8:47 pm
Operator : BARBARA
Sample : GPECWC081414,07393-002,A,5mL,100
Misc : GEI-MTCLR/GREENPOI,08/14/14,08/07/14,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 18:48:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



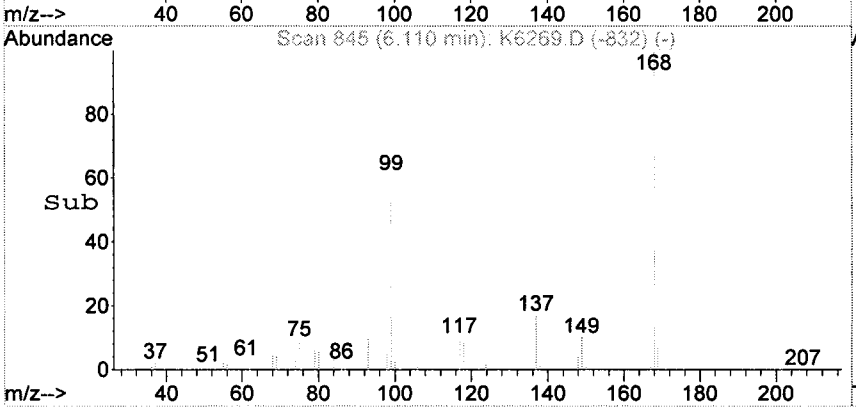
E14-07393 0038

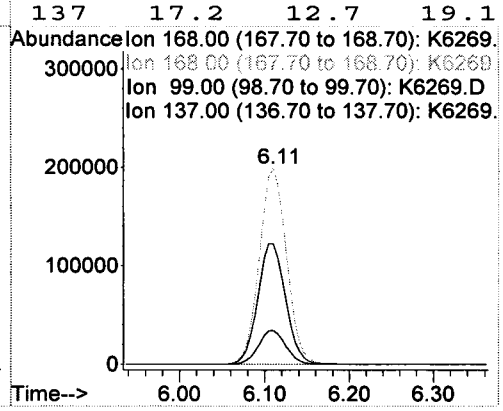


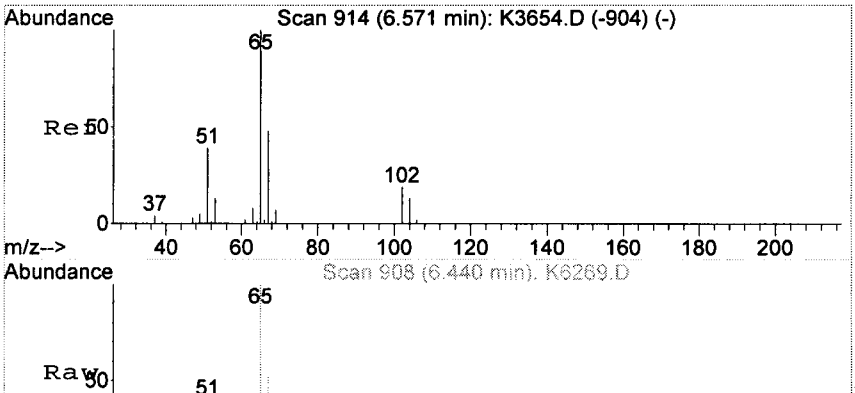
#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.11 min Scan# 845
Delta R.T. 0.00 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

Tgt Ion:168 Resp: 440978

Ion	Ratio	Lower	Upper
168	100		
168	100.0	80.0	120.0
99	62.6	45.9	68.9
137	17.2	12.7	19.1



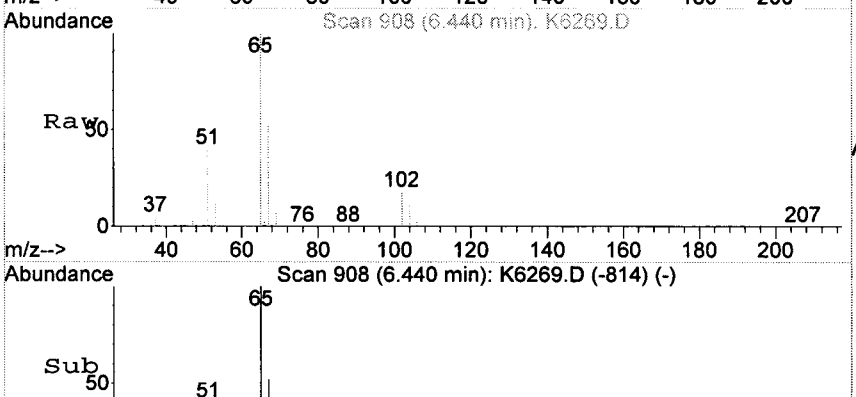


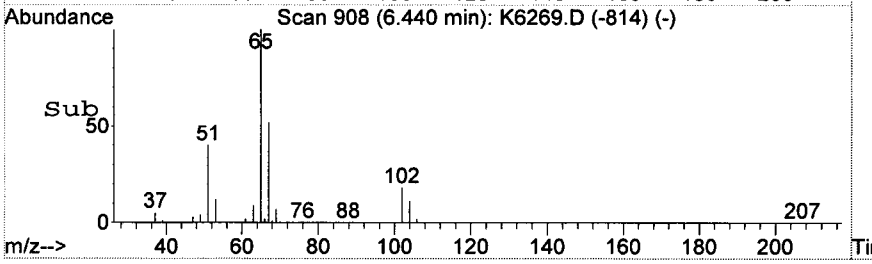


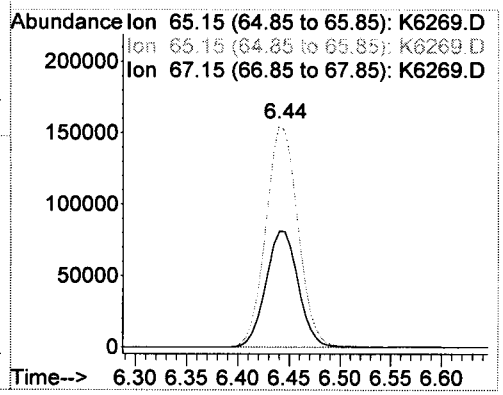
#30
1,2-Dichloroethane-d4
Concen: 50.07 UG
RT: 6.44 min Scan# 908
Delta R.T. -0.01 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

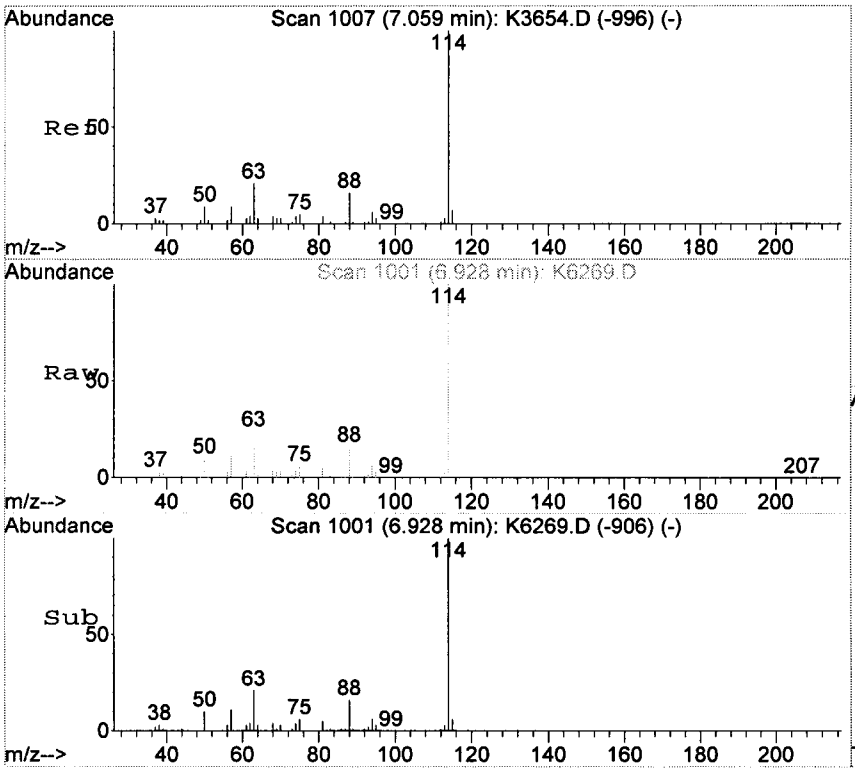
Tgt Ion: 65 Resp: 338392

Ion	Ratio	Lower	Upper
65	100		
65	100.0	80.0	120.0
67	52.6	40.4	60.6





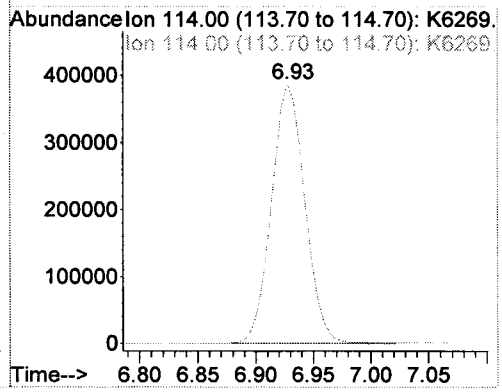


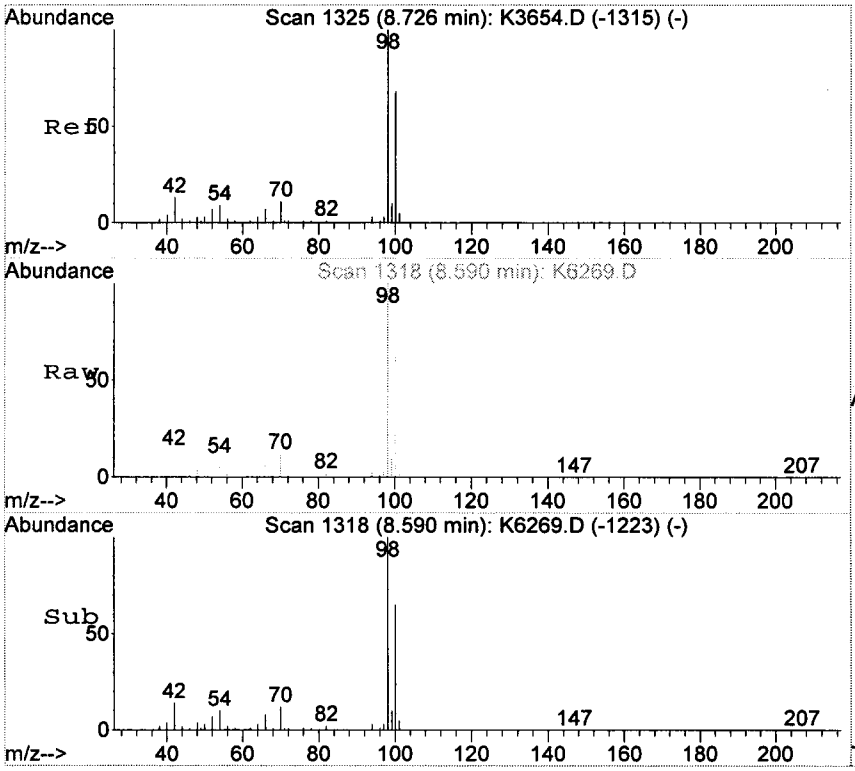


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.93 min Scan# 1001
Delta R.T. 0.00 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

Tgt Ion:114 Resp: 783665

Ion	Ratio	Lower	Upper
114	100		
114	100.0	80.0	120.0

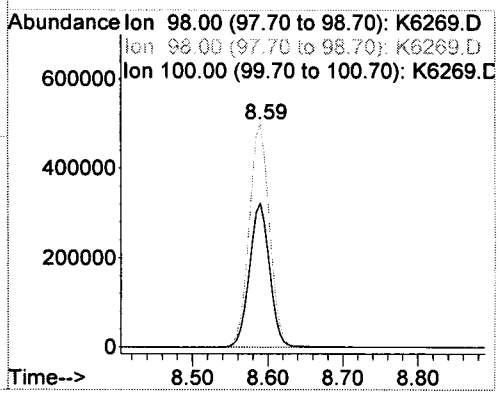


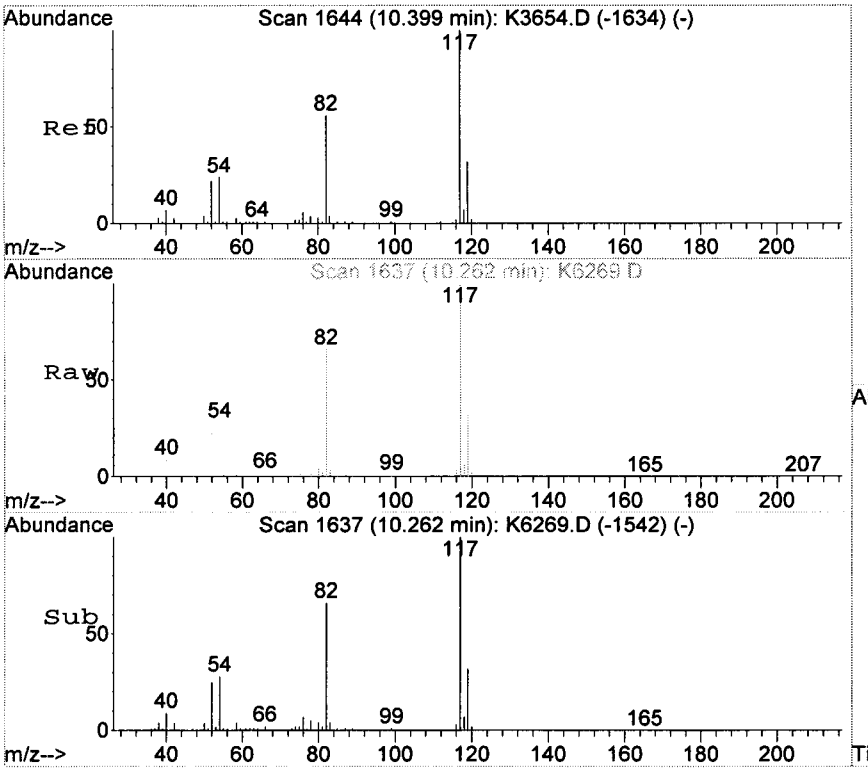


#41
Toluene-d8
Concen: 48.46 UG
RT: 8.59 min Scan# 1318
Delta R.T. 0.00 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

Tgt Ion: 98 Resp: 935991

Ion	Ratio	Lower	Upper
98	100		
98	100.0	80.0	120.0
100	63.8	51.6	77.4

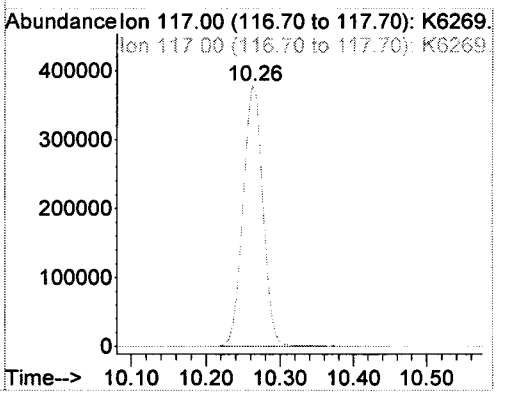


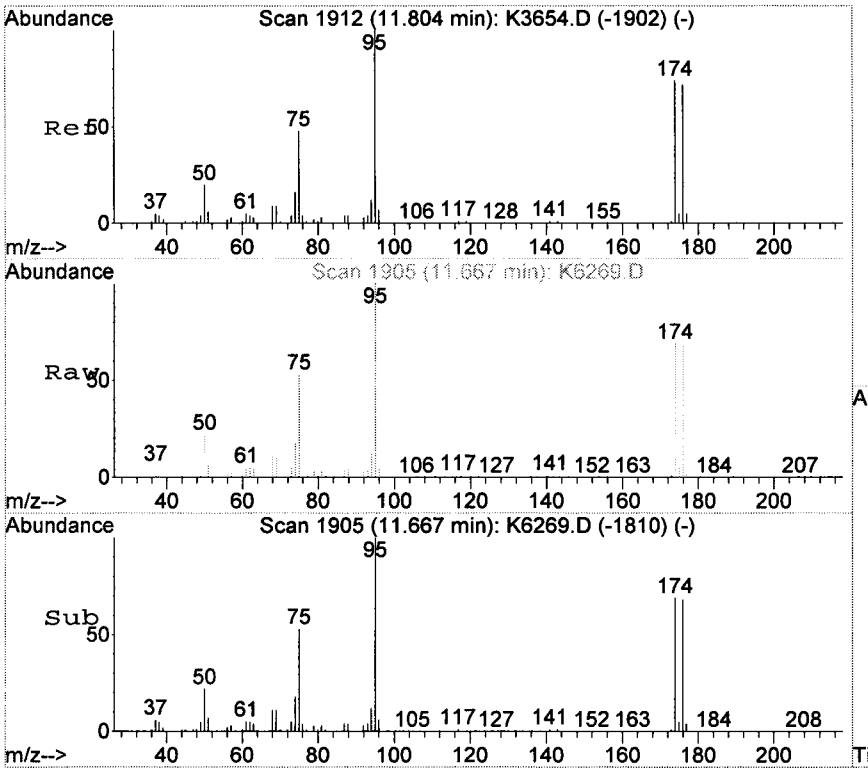


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.26 min Scan# 1637
Delta R.T. 0.00 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

Tgt Ion:117 Resp: 706679

Ion	Ratio	Lower	Upper
117	100		
117	100.0	80.0	120.0

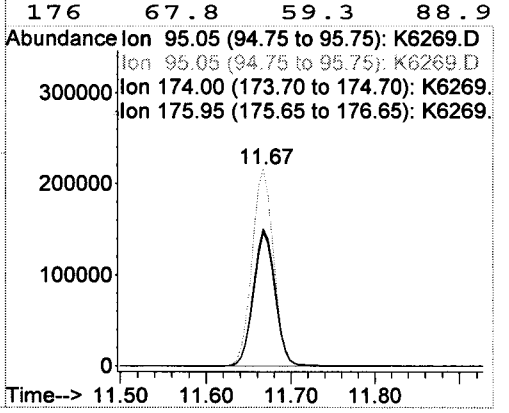




#59
Bromofluorobenzene
Concen: 48.99 UG
RT: 11.67 min Scan# 1905
Delta R.T. 0.00 min
Lab File: K6269.D
Acq: 15 Aug 2014 8:47 pm

Tgt Ion: 95 Resp: 384565

Ion	Ratio	Lower	Upper
95	100		
95	100.0	80.0	120.0
174	70.1	61.4	92.0
176	67.8	59.3	88.9



VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_K

Method Path : C:\MSDCHEM\1\METHODS\
Method File : K8081314.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Wed Aug 13 15:05:57 2014
Response Via : Initial Calibration

Calibration Files
1.00=K6163.D 2.00=K6162.D 5.00=K6156.D
20 =K6157.D 100 =K6158.D 150 =K6159.D 200 =K6160.D

		Compound	1.00	2.00	5.00	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.395	0.425	0.390	0.376	0.436	0.436	0.404	0.409	5.82
3)	P	Chloromethane	0.858	0.832	0.838	0.776	0.826	0.780	0.756	0.810	4.73
4)	C	Vinyl chloride	0.773	0.776	0.807	0.743	0.794	0.774	0.708	0.768	4.32
5)	T	Bromomethane	0.372	0.373	0.391	0.370	0.359	0.312	0.266	0.349	12.58
6)	T	Chloroethane	0.482	0.479	0.527	0.465	0.492	0.462	0.423	0.476	6.61
7)	T	Trichlorofluorome	0.393	0.429	0.453	0.550	0.664	0.669	0.619	0.539	11.37
8)	T	Acrolein	0.048	0.041	0.044	0.040	0.038	0.035	0.034	0.040	12.52
9)	MC	1,1-Dichloroethen	0.552	0.551	0.549	0.511	0.550	0.535	0.478	0.532	5.28
10)	T	Acetone			0.602	0.516	0.480	0.441	0.407	0.489	15.37
11)	T	Carbon disulfide	1.940	1.945	1.958	1.846	1.953	1.874	1.696	1.887	5.02
12)	T	Vinyl acetate	2.227	2.297	2.216	2.417	2.830	2.783	2.673	2.492	10.64
13)	T	Methylene chlorid	0.916	0.767	0.714	0.650	0.684	0.663	0.635	0.718	13.60
14)	T	Acrylonitrile	0.297	0.282	0.305	0.311	0.311	0.307	0.295	0.301	3.53
15)	T	tert-Butyl alcoho	0.074	0.078	0.070	0.070	0.074	0.074	0.073	0.073	3.88
16)	T	trans-1,2-Dichlor	0.583	0.611	0.592	0.573	0.611	0.598	0.566	0.591	2.92
17)	T	Methyl tert-butyl	1.840	1.858	1.875	1.858	2.054	2.022	1.961	1.924	4.54
18)	P	1,1-Dichloroethan	1.152	1.139	1.165	1.126	1.222	1.192	1.144	1.163	2.89
19)	T	Diisopropyl ether	1.904	2.017	1.971	2.194	2.477	2.432	2.345	2.191	10.61
20)	T	cis-1,2-Dichloroe	0.626	0.618	0.604	0.607	0.678	0.666	0.639	0.634	4.53
21)	T	2,2-Dichloropropa	0.485	0.498	0.466	0.458	0.487	0.468	0.412	0.468	6.04
22)	T	2-Butanone (MEK)	0.424	0.436	0.412	0.439	0.469	0.450	0.428	0.437	4.31
23)	T	Bromochloromethan	0.289	0.281	0.273	0.270	0.289	0.281	0.270	0.279	2.89
24)	T	Tetrahydrofuran								0.000	-1.00
25)	C	Chloroform	1.085	1.070	1.098	1.069	1.143	1.115	1.067	1.092	2.61
26)	T	1,1,1-Trichloroet	0.740	0.748	0.749	0.744	0.796	0.773	0.733	0.755	2.91
27)	T	Carbon tetrachlor	0.676	0.695	0.638	0.620	0.719	0.728	0.683	0.680	5.79
28)	T	1,1-Dichloroprope	0.835	0.888	0.774	0.788	0.912	0.909	0.859	0.852	6.54
29)	T	1,2-Dichloroethan	0.955	0.935	0.918	0.890	0.961	0.937	0.911	0.930	2.71
30)	S	1,2-Dichloroethan	0.785	0.777	0.790	0.770	0.754	0.748	0.739	0.766	2.56
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.455	1.397	1.417	1.411	1.539	1.506	1.452	1.454	3.59
33)	M	Trichloroethene	0.339	0.349	0.323	0.320	0.359	0.357	0.344	0.342	4.50
34)	C	1,2-Dichloropropa	0.368	0.359	0.355	0.366	0.404	0.400	0.390	0.377	5.29
35)	T	Dibromomethane	0.204	0.198	0.216	0.208	0.227	0.223	0.220	0.214	5.06
36)	T	1,4-Dioxane	0.004	0.003	0.004	0.004	0.004	0.003		0.004	7.72
37)	T	Bromodichlorometh	0.463	0.435	0.442	0.453	0.508	0.496	0.488	0.469	6.01
39)	T	cis-1,3-Dichlorop	0.467	0.473	0.456	0.520	0.626	0.616	0.618	0.539	14.45
40)	T	4-Methyl-2-pentan	0.296	0.324	0.313	0.373	0.433	0.422	0.413	0.368	15.47
41)	S	Toluene-d8	1.215	1.197	1.214	1.249	1.251	1.247	1.254	1.232	1.88
42)	MC	Toluene	0.831	0.793	0.759	0.785	0.882	0.862	0.842	0.822	5.40
43)	T	trans-1,3-Dichlor	0.445	0.442	0.406	0.468	0.569	0.564	0.569	0.495	14.27
44)	T	1,1,2-Trichloroet	0.269	0.248	0.245	0.258	0.282	0.274	0.273	0.264	5.31
45)	T	Tetrachloroethene	0.328	0.318	0.273	0.274	0.308	0.301	0.291	0.299	7.03
46)	T	1,3-Dichloropropa	0.502	0.496	0.479	0.518	0.577	0.557	0.556	0.527	7.02
47)	T	2-Hexanone	0.240	0.244	0.239	0.295	0.335	0.321	0.322	0.285	15.04
48)	T	Dibromochlorometh	0.267	0.259	0.260	0.279	0.326	0.321	0.320	0.290	10.50
49)	T	1,2-Dibromoethane	0.269	0.259	0.239	0.269	0.306	0.296	0.296	0.276	8.72
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.003	0.983	0.896	0.899	0.968	0.962	0.927	0.948	4.38
52)	T	1,1,1,2-Tetrachlo	0.306	0.298	0.293	0.302	0.334	0.335	0.319	0.313	5.48

53)	C	Ethylbenzene	1.558	1.596	1.494	1.605	1.789	1.773	1.695	1.644	6.75
54)	T	m,p-Xylene	0.562	0.601	0.544	0.600	0.664	0.655	0.613	0.606	7.30
55)	T	o-Xylene	0.472	0.517	0.512	0.601	0.682	0.676	0.636	0.585	14.48
56)	T	Styrene	0.781	0.843	0.858	1.009	1.159	1.137	1.087	0.982	15.69
57)	P	Bromoform	0.174	0.181	0.189	0.202	0.232	0.231	0.227	0.205	12.02
58)	T	Isopropylbenzene	1.127	1.196	1.082	1.323	1.537	1.543	1.452	1.323	14.60
59)	S	Bromofluorobenzen	0.541	0.548	0.548	0.562	0.555	0.565	0.568	0.555	1.79
60)	P	1,1,2,2-Tetrachlo	0.463	0.490	0.496	0.508	0.520	0.517	0.495	0.499	3.83
61)	T	Bromobenzene	0.385	0.365	0.353	0.361	0.390	0.382	0.369	0.372	3.67
62)	T	1,2,3-Trichloropr	0.388	0.379	0.372	0.387	0.399	0.385	0.373	0.383	2.49
63)	T	n-Propylbenzene	1.913	1.959	1.739	1.926	2.155	2.142	2.021	1.979	7.28
64)	T	2-Chlorotoluene	1.257	1.272	1.135	1.199	1.318	1.316	1.250	1.250	5.20
65)	T	1,3,5-Trimethylbe	1.141	1.242	1.158	1.321	1.498	1.488	1.396	1.320	11.15
66)	T	4-Chlorotoluene	1.420	1.486	1.305	1.386	1.527	1.520	1.458	1.443	5.49
67)	T	tert-Butylbenzene	0.869	0.884	0.815	1.008	1.195	1.193	1.109	1.010	15.72
68)	T	1,2,4-Trimethylbe	1.106	1.266	1.165	1.320	1.463	1.459	1.371	1.307	10.54
69)	T	sec-Butylbenzene	1.480	1.590	1.341	1.601	1.848	1.865	1.719	1.635	11.68
70)	T	1,3-Dichlorobenze	0.820	0.831	0.700	0.713	0.766	0.751	0.718	0.757	6.89
71)	T	4-Isopropyltoluen	1.071	1.182	1.077	1.239	1.408	1.409	1.304	1.242	11.36
72)	T	1,4-Dichlorobenze	0.807	0.831	0.703	0.724	0.760	0.750	0.714	0.755	6.34
73)	T	n-Butylbenzene	1.135	1.265	1.038	1.237	1.451	1.464	1.362	1.279	12.43
74)	T	1,2-Dichlorobenze	0.780	0.810	0.714	0.731	0.768	0.747	0.706	0.751	4.99
75)	T	1,2-Dibromo-3-chl	0.087	0.090	0.084	0.087	0.101	0.100	0.097	0.092	7.53
76)	T	1,2,4-Trichlorobe	0.505	0.550	0.375	0.438	0.522	0.520	0.494	0.486	12.30
77)	T	Hexachlorobutadie		0.260	0.164	0.167	0.184	0.189	0.173	0.189	19.02
78)	T	Naphthalene		1.200	0.942	1.284	1.490	1.477	1.378	1.295	15.88
79)	T	1,2,3-Trichlorobe	0.536	0.583	0.429	0.455	0.501	0.493	0.462	0.494	10.62
80)	T	1,1,2-Trichloro-1		0.381	0.332	0.316	0.326	0.321	0.278	0.326	10.19
81)	T	Methyl acetate	0.431	0.411	0.426	0.413	0.424	0.416	0.405	0.418	2.23
82)	T	Cyclohexane			0.829	0.709	0.751	0.771	0.692	0.750	7.21
83)	T	Methylcyclohexane	0.585	0.634	0.489	0.545	0.633	0.648	0.589	0.589	9.65

(#) = Out of Range ### Number of calibration levels exceeded format ###

K8081314.M Thu Aug 14 16:19:11 2014

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6163.D
Acq On : 13 Aug 2014 2:32 pm
Operator : BARBARA
Sample : ICC001,ICC001,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 13 15:05:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 14:34:30 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	384384	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	691087	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	623301	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	301754	50.88	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.76%				
41) Toluene-d8	8.59	98	839667	49.35	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.70%				
59) Bromofluorobenzene	11.67	95	337231	48.82	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.64%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	3037	0.94	UG	#	87
3) Chloromethane	1.95	50	6599	1.05	UG		99
4) Vinyl chloride	2.07	62	5941	0.99	UG	#	96
5) Bromomethane	2.44	94	2863	1.05	UG		95
6) Chloroethane	2.55	64	3705	0.99	UG	#	87
7) Trichlorofluoromethane	2.81	101	3022m	0.70	UG		
8) Acrolein	3.33	56	7453	24.10	UG	#	94
9) 1,1-Dichloroethene	3.45	96	4247m	1.02	UG		
10) Acetone	3.52	43	5317	1.41	UG		99
11) Carbon disulfide	3.70	76	14913	1.00	UG		100
12) Vinyl acetate	4.92	43	17118	0.91	UG	#	1
13) Methylene chloride	4.03	84	7041	1.32	UG		99
14) Acrylonitrile	4.35	53	45668	19.65	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	1137	2.05	UG	#	96
16) trans-1,2-Dichloroethene	4.34	96	4482	0.98	UG	#	96
17) Methyl tert-butyl ether (M	4.35	73	14147	0.97	UG		100
18) 1,1-Dichloroethane	4.85	63	8853	0.99	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	14637	0.88	UG		89
20) cis-1,2-Dichloroethene	5.52	96	4815	1.00	UG	#	97
21) 2,2-Dichloropropane	5.51	77	3725	1.04	UG		99
22) 2-Butanone (MEK)	5.56	43	3256	0.97	UG	#	98
23) Bromochloromethane	5.79	128	2221	1.04	UG	#	38
25) Chloroform	5.88	83	8343	0.99	UG		99
26) 1,1,1-Trichloroethane	6.07	97	5690	0.97	UG	#	100
27) Carbon tetrachloride	6.26	117	5199	0.98	UG		97
28) 1,1-Dichloropropene	6.26	75	6423	0.97	UG	#	94
29) 1,2-Dichloroethane (EDC)	6.53	62	7345	1.04	UG		100
32) Benzene	6.50	78	20106	1.01	UG		100
33) Trichloroethene	7.22	95	4681	0.99	UG	#	100
34) 1,2-Dichloropropane	7.48	63	5081	0.98	UG	#	100
35) Dibromomethane	7.60	93	2814	0.95	UG	#	89
36) 1,4-Dioxane	7.64	88	9835	208.55	UG		96
37) Bromodichloromethane	7.78	83	6393	0.99	UG	#	66
38) 2-Chloroethyl vinyl ether	8.13	63	1494	0.68	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	6452	0.88	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	4085	0.81	UG		100
42) Toluene	8.66	92	11480	1.02	UG		100
43) trans-1,3-Dichloropropene	8.92	75	6148	0.92	UG		100
44) 1,1,2-Trichloroethane	9.14	83	3714	1.03	UG	#	75
45) Tetrachloroethene	9.29	166	4537	1.10	UG		99
46) 1,3-Dichloropropane	9.33	76	6942	0.9			

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6163.D
Acq On : 13 Aug 2014 2:32 pm
Operator : BARBARA
Sample : ICC001,ICC001,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 13 15:05:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 14:34:30 2014
Response via : Initial Calibration

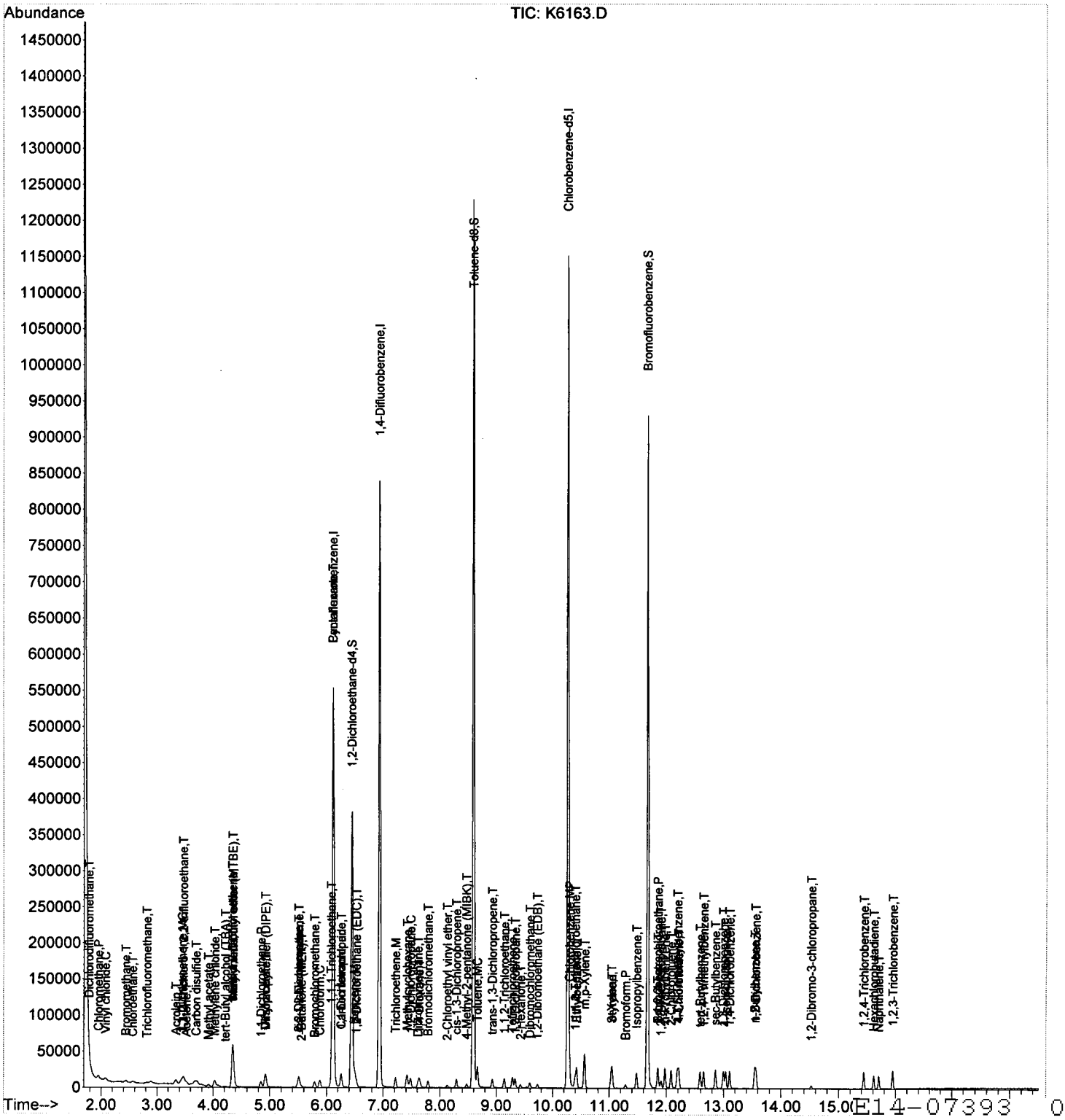
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	3315	0.86	UG		97
48) Dibromochloromethane	9.60	129	3695	0.93	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	3722	0.99	UG		95
51) Chlorobenzene	10.30	112	12502	1.07	UG		99
52) 1,1,1,2-Tetrachloroethane	10.39	131	3816	0.98	UG		95
53) Ethylbenzene	10.42	91	19428	0.96	UG		99
54) m,p-Xylene	10.56	106	14009	1.89	UG		97
55) o-Xylene	11.04	106	5890	0.82	UG		97
56) Styrene	11.05	104	9730	0.82	UG		98
57) Bromoform	11.28	173	2175	0.85	UG	#	100
58) Isopropylbenzene	11.48	105	14045	0.87	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	5778	0.93	UG	#	68
61) Bromobenzene	11.85	156	4800	1.05	UG	#	69
62) 1,2,3-Trichloropropane	11.90	75	4838	1.02	UG		98
63) n-Propylbenzene	11.98	91	23847	0.99	UG		100
64) 2-Chlorotoluene	12.08	91	15676	1.03	UG		98
65) 1,3,5-Trimethylbenzene	12.19	105	14219	0.88	UG		100
66) 4-Chlorotoluene	12.22	91	17705	1.01	UG		100
67) tert-Butylbenzene	12.59	119	10829	0.88	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	13790	0.87	UG		100
69) sec-Butylbenzene	12.86	105	18452	0.93	UG		99
70) 1,3-Dichlorobenzene	13.00	146	10224	1.11	UG		99
71) 4-Isopropyltoluene	13.04	119	13349	0.89	UG		100
72) 1,4-Dichlorobenzene	13.10	146	10055	1.10	UG		99
73) n-Butylbenzene	13.54	91	14144	0.92	UG		100
74) 1,2-Dichlorobenzene	13.57	146	9725	1.07	UG		98
75) 1,2-Dibromo-3-chloropropan	14.52	75	1090	0.95	UG	#	37
76) 1,2,4-Trichlorobenzene	15.44	180	6294	1.08	UG		99
77) Hexachlorobutadiene	15.62	225	3321	1.41	UG		100
78) Naphthalene	15.70	128	12533	0.78	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	6686	1.14	UG		97
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	4781	1.18	UG	#	3
81) Methyl acetate	3.92	43	5374	1.03	UG	#	72
82) Cyclohexane	6.11	56	19089	2.04	UG	#	94
83) Methylcyclohexane	7.42	83	7290	1.01	UG	#	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6163.D
Acq On : 13 Aug 2014 2:32 pm
Operator : BARBARA
Sample : ICC001,ICC001,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 13 15:05:52 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 14:34:30 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6162.D
Acq On : 13 Aug 2014 2:04 pm
Operator : BARBARA
Sample : ICC002,ICC002,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 13 14:22:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:41:11 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	395608	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	698343	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	618149	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	307517	50.14	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.28%				
41) Toluene-d8	8.59	98	835941	48.53	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.06%				
59) Bromofluorobenzene	11.67	95	339001	49.61	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.22%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	6728	2.02	UG		99
3) Chloromethane	1.94	50	13169	2.03	UG		98
4) Vinyl chloride	2.07	62	12286	1.96	UG	#	97
5) Bromomethane	2.44	94	5901	2.10	UG		96
6) Chloroethane	2.55	64	7582	1.94	UG		98
7) Trichlorofluoromethane	2.81	101	6783	1.51	UG	#	76
8) Acrolein	3.33	56	16166	50.07	UG	#	95
9) 1,1-Dichloroethene	3.45	96	8721	2.02	UG	#	12
10) Acetone	3.52	43	10106	2.61	UG		98
11) Carbon disulfide	3.69	76	30783	2.00	UG		100
12) Vinyl acetate	4.92	43	36350	1.90	UG	#	1
13) Methylene chloride	4.02	84	12134	2.24	UG		98
14) Acrylonitrile	4.34	53	111425	46.55	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	2479	4.44	UG	#	93
16) trans-1,2-Dichloroethene	4.34	96	9661	2.08	UG	#	99
17) Methyl tert-butyl ether (M	4.35	73	29400	1.98	UG		100
18) 1,1-Dichloroethane	4.85	63	18021	1.96	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	31922	1.91	UG		91
20) cis-1,2-Dichloroethene	5.51	96	9783	2.00	UG	#	67
21) 2,2-Dichloropropane	5.51	77	7888	2.16	UG		100
22) 2-Butanone (MEK)	5.55	43	6895	2.07	UG	#	100
23) Bromochloromethane	5.79	128	4449	2.03	UG	#	38
25) Chloroform	5.88	83	16926	1.96	UG		99
26) 1,1,1-Trichloroethane	6.08	97	11831	1.96	UG	#	100
27) Carbon tetrachloride	6.26	117	10995	2.02	UG		97
28) 1,1-Dichloropropene	6.25	75	14047	2.08	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	14801	2.04	UG		100
32) Benzene	6.49	78	39014	1.94	UG		100
33) Trichloroethene	7.21	95	9752	2.07	UG	#	100
34) 1,2-Dichloropropane	7.48	63	10037	1.93	UG	#	100
35) Dibromomethane	7.61	93	5531	1.85	UG	#	86
36) 1,4-Dioxane	7.64	88	22387	462.76	UG		94
37) Bromodichloromethane	7.78	83	12150	1.87	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	2695	1.21	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	13219	1.81	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	9056	1.82	UG		100
42) Toluene	8.66	92	22155	1.96	UG		99
43) trans-1,3-Dichloropropene	8.93	75	12336	1.86	UG		100
44) 1,1,2-Trichloroethane	9.14	83	6922	1.90	UG		95
45) Tetrachloroethene	9.29	166	8887	2.18	UG	#	82
46) 1,3-Dichloropropane	9.33	76	13847	1.9			

E14-07393 0048

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6162.D
Acq On : 13 Aug 2014 2:04 pm
Operator : BARBARA
Sample : ICC002,ICC002,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 13 14:22:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:41:11 2014
Response via : Initial Calibration

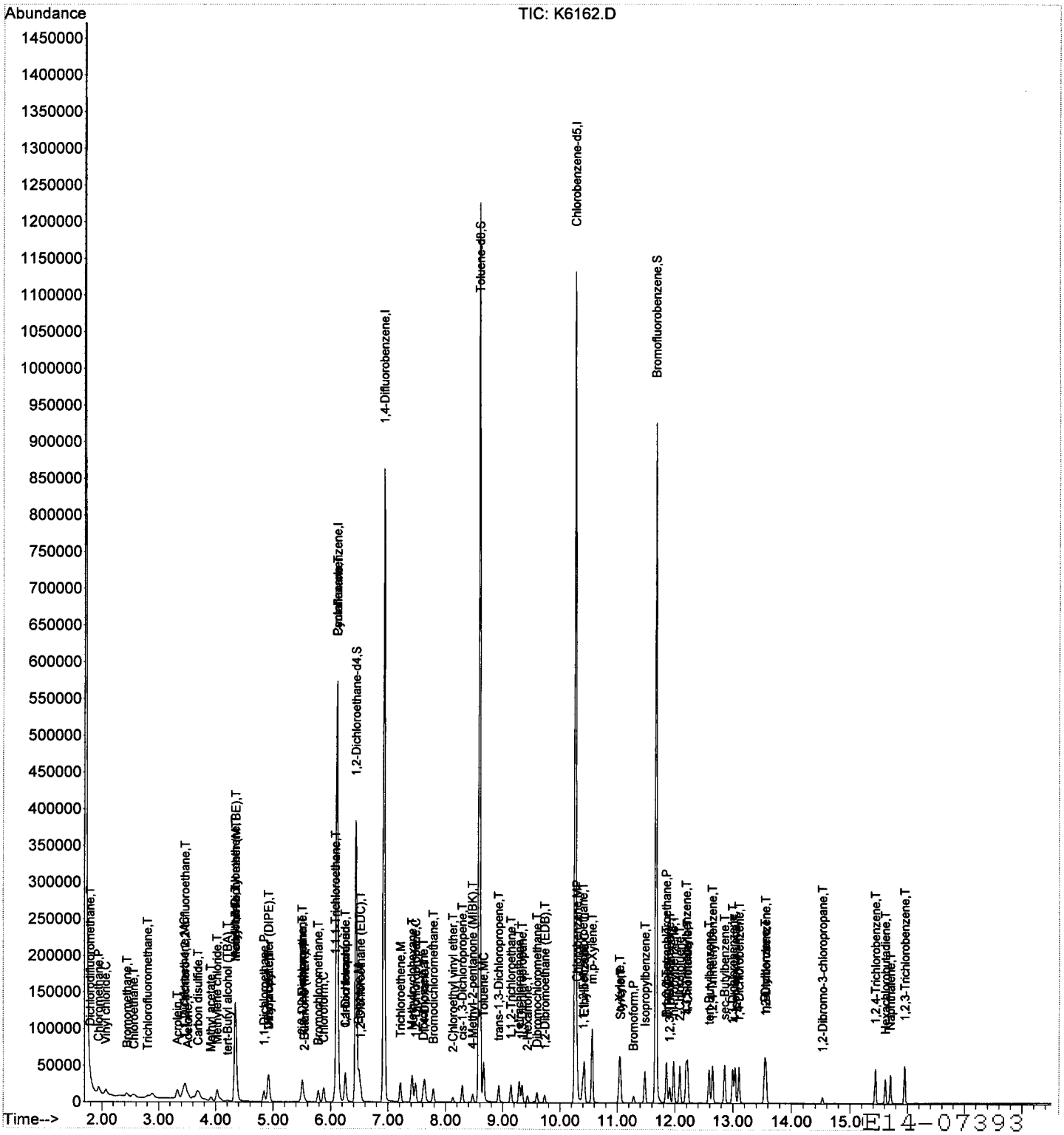
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	6825	1.80	UG	#	81
48) Dibromochloromethane	9.60	129	7244	1.80	UG		96
49) 1,2-Dibromoethane (EDB)	9.73	107	7224	1.93	UG		99
51) Chlorobenzene	10.30	112	24308	2.13	UG		99
52) 1,1,1,2-Tetrachloroethane	10.40	131	7374	1.93	UG	#	70
53) Ethylbenzene	10.42	91	39474	2.01	UG		100
54) m,p-Xylene	10.56	106	29701	4.15	UG		98
55) o-Xylene	11.03	106	12795	1.84	UG		95
56) Styrene	11.06	104	20836	1.81	UG		97
57) Bromoform	11.28	173	4477	1.77	UG	#	100
58) Isopropylbenzene	11.48	105	29577	1.91	UG		100
60) 1,1,2,2-Tetrachloroethane	11.85	83	12116	1.98	UG	#	98
61) Bromobenzene	11.85	156	9021	2.03	UG		93
62) 1,2,3-Trichloropropane	11.91	75	9383	2.02	UG		100
63) n-Propylbenzene	11.98	91	48449	2.08	UG		100
64) 2-Chlorotoluene	12.08	91	31462	2.16	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	30706	1.99	UG		99
66) 4-Chlorotoluene	12.21	91	36745	2.19	UG		100
67) tert-Butylbenzene	12.59	119	21857	1.86	UG	#	68
68) 1,2,4-Trimethylbenzene	12.65	105	31307	2.07	UG		99
69) sec-Butylbenzene	12.86	105	39317	2.09	UG		100
70) 1,3-Dichlorobenzene	13.00	146	20559	2.34	UG		99
71) 4-Isopropyltoluene	13.04	119	29225	2.03	UG		100
72) 1,4-Dichlorobenzene	13.10	146	20536	2.35	UG		99
73) n-Butylbenzene	13.54	91	31271	2.14	UG		100
74) 1,2-Dichlorobenzene	13.57	146	20036	2.29	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	2220	2.01	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	13599	2.50	UG		96
77) Hexachlorobutadiene	15.62	225	6438	2.99	UG		100
78) Naphthalene	15.70	128	29679	1.98	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	14416	2.64	UG		99
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	9432	2.36	UG	#	1
81) Methyl acetate	3.92	43	10161	1.97	UG	#	68
82) Cyclohexane	6.11	56	29749	3.21	UG	#	81
83) Methylcyclohexane	7.42	83	15684	2.25	UG		91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6162.D
Acq On : 13 Aug 2014 2:04 pm
Operator : BARBARA
Sample : ICC002,ICC002,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 13 14:22:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:41:11 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6156.D
Acq On : 13 Aug 2014 11:12 am
Operator : BARBARA
Sample : ICC005,ICC005,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 13 12:58:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:58:09 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	359041	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	639205	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	562114	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.45	65	283764	52.16	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.32%				
41) Toluene-d8	8.59	98	775745	48.58	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.16%				
59) Bromofluorobenzene	11.67	95	308305	48.91	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.80	85	13994	4.69	UG		99
3) Chloromethane	1.95	50	30076	5.27	UG		99
4) Vinyl chloride	2.08	62	28971	5.24	UG		98
5) Bromomethane	2.44	94	14026	5.63	UG		97
6) Chloroethane	2.56	64	18908	5.57	UG		100
7) Trichlorofluoromethane	2.83	101	16274m	3.61	UG		
8) Acrolein	3.34	56	31852	117.71	UG		96
9) 1,1-Dichloroethene	3.45	96	19722	5.16	UG		96
10) Acetone	3.52	43	21620	6.28	UG		98
11) Carbon disulfide	3.69	76	70301	5.18	UG		100
12) Vinyl acetate	4.92	43	79574	4.14	UG	#	1
13) Methylene chloride	4.02	84	25624	5.36	UG		99
14) Acrylonitrile	4.34	53	219280	98.65	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	5029	9.65	UG	#	93
16) trans-1,2-Dichloroethene	4.34	96	21243	4.98	UG	#	98
17) Methyl tert-butyl ether (M	4.36	73	67315	4.74	UG		100
18) 1,1-Dichloroethane	4.85	63	41825	4.94	UG	#	100
19) Diisopropyl ether (DIPE)	4.93	45	70762	4.16	UG		92
20) cis-1,2-Dichloroethene	5.52	96	21695	4.65	UG	#	98
21) 2,2-Dichloropropane	5.51	77	16720	4.94	UG		100
22) 2-Butanone (MEK)	5.55	43	14777	4.54	UG	#	98
23) Bromochloromethane	5.78	128	9810	4.88	UG	#	38
25) Chloroform	5.88	83	39413	4.95	UG		99
26) 1,1,1-Trichloroethane	6.08	97	26909	4.86	UG	#	100
27) Carbon tetrachloride	6.25	117	22920	4.63	UG		97
28) 1,1-Dichloropropene	6.26	75	27776	4.45	UG	#	94
29) 1,2-Dichloroethane (EDC)	6.52	62	32968	4.94	UG		100
32) Benzene	6.50	78	90587	4.77	UG		100
33) Trichloroethene	7.22	95	20621	4.67	UG	#	100
34) 1,2-Dichloropropane	7.48	63	22699	4.56	UG	#	100
35) Dibromomethane	7.61	93	13810	4.92	UG	#	73
36) 1,4-Dioxane	7.64	88	48259	1064.24	UG		96
37) Bromodichloromethane	7.79	83	28243	4.55	UG	#	66
38) 2-Chloroethyl vinyl ether	8.13	63	6230	2.90	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	29142	3.88	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	20011	3.82	UG		100
42) Toluene	8.66	92	48536	4.50	UG		99
43) trans-1,3-Dichloropropene	8.93	75	25958	3.80	UG		100
44) 1,1,2-Trichloroethane	9.14	83	15689	4.52	UG		93
45) Tetrachloroethene	9.29	166	17446	4.63	UG		96
46) 1,3-Dichloropropane	9.33	76	30649	4.3			

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Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6156.D
Acq On : 13 Aug 2014 11:12 am
Operator : BARBARA
Sample : ICC005,ICC005,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 13 12:58:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:58:09 2014
Response via : Initial Calibration

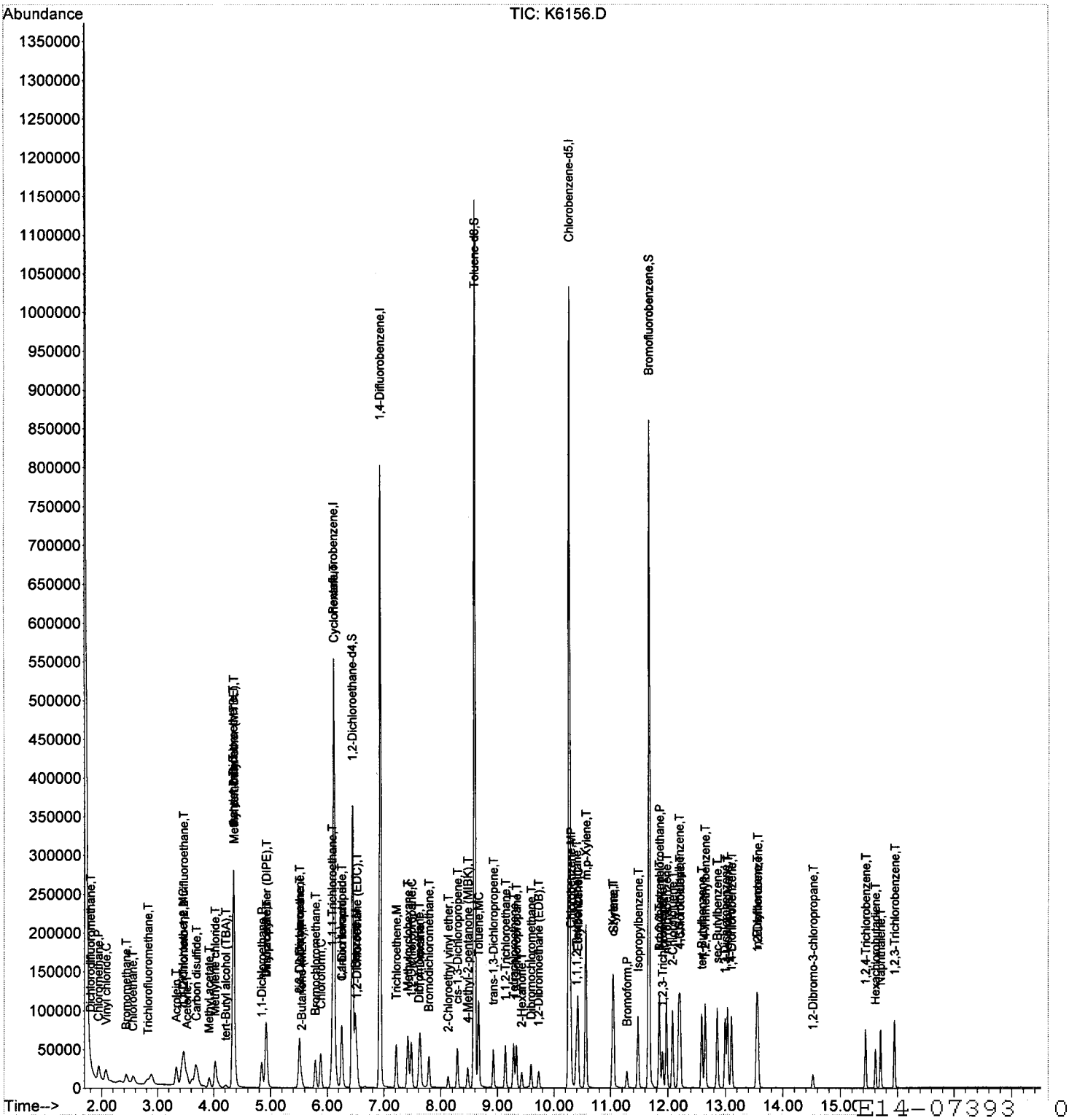
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	15268	3.77	UG		97
48) Dibromochloromethane	9.60	129	16628	4.21	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	15281	4.11	UG		99
51) Chlorobenzene	10.30	112	50383	4.75	UG		99
52) 1,1,1,2-Tetrachloroethane	10.39	131	16477	4.53	UG	#	93
53) Ethylbenzene	10.42	91	83956	4.34	UG		99
54) m,p-Xylene	10.56	106	61122	8.50	UG		95
55) o-Xylene	11.03	106	28771	3.92	UG		99
56) Styrene	11.05	104	48204	3.89	UG		97
57) Bromoform	11.28	173	10642	4.27	UG	#	100
58) Isopropylbenzene	11.48	105	60801	3.68	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	27908	4.82	UG	#	68
61) Bromobenzene	11.85	156	19859	4.68	UG	#	39
62) 1,2,3-Trichloropropane	11.90	75	20895	4.76	UG		100
63) n-Propylbenzene	11.98	91	97733	4.19	UG		100
64) 2-Chlorotoluene	12.08	91	63814	4.44	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	65095	4.03	UG		100
66) 4-Chlorotoluene	12.21	91	73381	4.42	UG		100
67) tert-Butylbenzene	12.59	119	45827	3.60	UG		96
68) 1,2,4-Trimethylbenzene	12.65	105	65464	4.12	UG		99
69) sec-Butylbenzene	12.86	105	75390	3.79	UG		100
70) 1,3-Dichlorobenzene	12.99	146	39358	4.71	UG		99
71) 4-Isopropyltoluene	13.04	119	60565	3.98	UG		100
72) 1,4-Dichlorobenzene	13.11	146	39513	4.72	UG		99
73) n-Butylbenzene	13.54	91	58357	3.75	UG		100
74) 1,2-Dichlorobenzene	13.57	146	40136	4.77	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	4698	4.35	UG	#	70
76) 1,2,4-Trichlorobenzene	15.44	180	21106	3.80	UG		96
77) Hexachlorobutadiene	15.61	225	9195	4.55	UG		100
78) Naphthalene	15.70	128	52969	3.32	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	24108	4.44	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	18651	5.17	UG	#	1
81) Methyl acetate	3.92	43	23928	5.10	UG	#	74
82) Cyclohexane	6.12	56	46601	5.57	UG	#	67
83) Methylcyclohexane	7.42	83	27477	4.02	UG		91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6156.D
Acq On : 13 Aug 2014 11:12 am
Operator : BARBARA
Sample : ICC005,ICC005,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 13 12:58:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:58:09 2014
Response via : Initial Calibration



E14-07393 0053

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6157.D
Acq On : 13 Aug 2014 11:42 am
Operator : BARBARA
Sample : ICC020,ICC020,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 13 12:56:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:44 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	376455	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	663123	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	600980	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	289941	51.06	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.12%				
41) Toluene-d8	8.59	98	828428	49.95	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.90%				
59) Bromofluorobenzene	11.67	95	338022	50.70	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	56560	17.25	UG		99
3) Chloromethane	1.95	50	116866	18.79	UG		98
4) Vinyl chloride	2.08	62	111856	18.70	UG		98
5) Bromomethane	2.43	94	55718	20.60	UG		97
6) Chloroethane	2.56	64	70048	18.92	UG		99
7) Trichlorofluoromethane	2.85	101	82777	16.57	UG		97
8) Acrolein	3.33	56	59585	206.14	UG		96
9) 1,1-Dichloroethene	3.44	96	76942	18.58	UG	#	81
10) Acetone	3.52	43	77735	21.49	UG		98
11) Carbon disulfide	3.69	76	277974	18.91	UG		100
12) Vinyl acetate	4.92	43	363925	17.08	UG	#	1
13) Methylene chloride	4.02	84	97847	19.01	UG		99
14) Acrylonitrile	4.34	53	468388	200.34	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	21081	37.84	UG	#	93
16) trans-1,2-Dichloroethene	4.34	96	86356	18.78	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	279817	18.10	UG		100
18) 1,1-Dichloroethane	4.85	63	169509	18.42	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	330413	17.72	UG		93
20) cis-1,2-Dichloroethene	5.51	96	91344	17.88	UG	#	67
21) 2,2-Dichloropropane	5.51	77	68903	18.79	UG		100
22) 2-Butanone (MEK)	5.55	43	66149	18.72	UG	#	98
23) Bromochloromethane	5.79	128	40689	18.72	UG	#	38
25) Chloroform	5.88	83	160983	18.70	UG		99
26) 1,1,1-Trichloroethane	6.08	97	112070	18.70	UG	#	100
27) Carbon tetrachloride	6.25	117	93382	17.26	UG		95
28) 1,1-Dichloropropene	6.26	75	118717	17.29	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.53	62	133957	18.51	UG		100
32) Benzene	6.49	78	374144	18.34	UG		100
33) Trichloroethene	7.21	95	84980	17.85	UG	#	100
34) 1,2-Dichloropropane	7.48	63	97023	18.13	UG	#	100
35) Dibromomethane	7.61	93	55303	18.34	UG	#	48
36) 1,4-Dioxane	7.64	88	99983	2042.43	UG		95
37) Bromodichloromethane	7.79	83	120275	17.85	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	35111	14.33	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	137968	16.63	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	98866	17.21	UG		99
42) Toluene	8.66	92	208118	17.79	UG		98
43) trans-1,3-Dichloropropene	8.93	75	124012	16.42	UG		100
44) 1,1,2-Trichloroethane	9.14	83	68482	18.28	UG		94
45) Tetrachloroethene	9.29	166	72781	17.82	UG		97
46) 1,3-Dichloropropane	9.33	76	137380	17.9			

E14-07393 0054

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6157.D
Acq On : 13 Aug 2014 11:42 am
Operator : BARBARA
Sample : ICC020,ICC020,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 13 12:56:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:44 2014
Response via : Initial Calibration

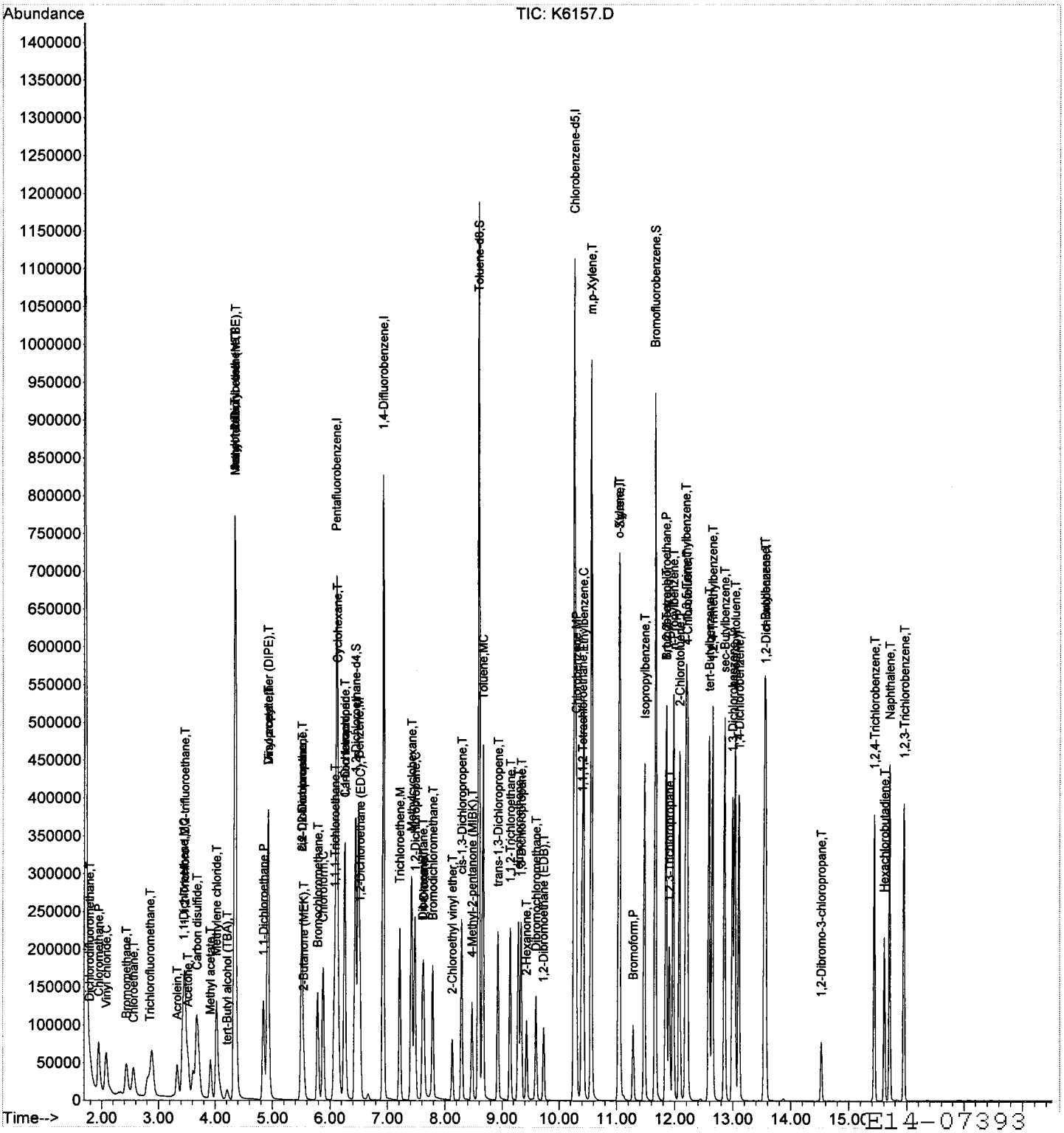
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	78257	17.64	UG	#	96
48) Dibromochloromethane	9.60	129	74125	17.15	UG		96
49) 1,2-Dibromoethane (EDB)	9.73	107	71351	17.57	UG		99
51) Chlorobenzene	10.30	112	216063	18.57	UG		100
52) 1,1,1,2-Tetrachloroethane	10.40	131	72610	18.08	UG	#	70
53) Ethylbenzene	10.42	91	385736	17.94	UG		99
54) m,p-Xylene	10.56	106	288606	36.15	UG		97
55) o-Xylene	11.03	106	144522	17.63	UG		99
56) Styrene	11.05	104	242480	17.41	UG		98
57) Bromoform	11.28	173	48552	17.42	UG	#	100
58) Isopropylbenzene	11.48	105	318011	17.21	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	122087	19.55	UG	#	98
61) Bromobenzene	11.85	156	86870	18.52	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	93079	19.40	UG		99
63) n-Propylbenzene	11.98	91	463028	17.88	UG		100
64) 2-Chlorotoluene	12.08	91	288141	18.19	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	317636	17.65	UG		100
66) 4-Chlorotoluene	12.21	91	333164	18.16	UG		99
67) tert-Butylbenzene	12.59	119	242416	16.87	UG		96
68) 1,2,4-Trimethylbenzene	12.65	105	317333	18.04	UG		99
69) sec-Butylbenzene	12.86	105	384952	17.33	UG		100
70) 1,3-Dichlorobenzene	12.99	146	171392	18.61	UG		99
71) 4-Isopropyltoluene	13.04	119	297962	17.60	UG		100
72) 1,4-Dichlorobenzene	13.10	146	174148	19.06	UG		99
73) n-Butylbenzene	13.54	91	297279	17.05	UG		100
74) 1,2-Dichlorobenzene	13.57	146	175689	19.04	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	21031	17.33	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	105401	16.80	UG		96
77) Hexachlorobutadiene	15.61	225	40245	18.23	UG		100
78) Naphthalene	15.70	128	308731	17.24	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	109494	18.19	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	75846	19.35	UG	#	1
81) Methyl acetate	3.92	43	99204	19.46	UG	#	75
82) Cyclohexane	6.13	56	170353	18.87	UG	#	53
83) Methylcyclohexane	7.42	83	131077	17.23	UG		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6157.D
Acq On : 13 Aug 2014 11:42 am
Operator : BARBARA
Sample : ICC020,ICC020,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 13 12:56:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:44 2014
Response via : Initial Calibration



E14-07393 0056

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6158.D
Acq On : 13 Aug 2014 12:10 pm
Operator : BARBARA
Sample : ICC100,ICC100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 12:56:29 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:22 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	409967	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	723612	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	674054	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	309209	50.00	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%				
41) Toluene-d8	8.59	98	904925	50.00	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%				
59) Bromofluorobenzene	11.67	95	373887	50.00	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	357139	100.00	UG		99
3) Chloromethane	1.95	50	677459	100.00	UG		98
4) Vinyl chloride	2.09	62	651409	100.00	UG		98
5) Bromomethane	2.44	94	294484	100.00	UG		97
6) Chloroethane	2.56	64	403156	100.00	UG		99
7) Trichlorofluoromethane	2.86	101	544185	100.00	UG		97
8) Acrolein	3.33	56	94433	300.00	UG		96
9) 1,1-Dichloroethene	3.46	96	451058	100.00	UG		96
10) Acetone	3.52	43	393918	100.00	UG		99
11) Carbon disulfide	3.68	76	1600928	100.00	UG		100
12) Vinyl acetate	4.92	43	2320060	100.00	UG	#	1
13) Methylene chloride	4.02	84	560483	100.00	UG		99
14) Acrylonitrile	4.34	53	763833	300.00	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	121349	200.00	UG	#	93
16) trans-1,2-Dichloroethene	4.34	96	500736	100.00	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	1683988	100.00	UG		100
18) 1,1-Dichloroethane	4.84	63	1001937	100.00	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	2030822	100.00	UG		91
20) cis-1,2-Dichloroethene	5.51	96	556282	100.00	UG	#	99
21) 2,2-Dichloropropane	5.51	77	399408	100.00	UG		100
22) 2-Butanone (MEK)	5.55	43	384814	100.00	UG	#	100
23) Bromochloromethane	5.78	128	236695	100.00	UG	#	99
25) Chloroform	5.88	83	937313	100.00	UG		98
26) 1,1,1-Trichloroethane	6.07	97	652559	100.00	UG	#	100
27) Carbon tetrachloride	6.25	117	589151	100.00	UG		96
28) 1,1-Dichloropropene	6.26	75	747749	100.00	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.53	62	788025	100.00	UG		100
32) Benzene	6.49	78	2226664	100.00	UG		100
33) Trichloroethene	7.21	95	519398	100.00	UG	#	100
34) 1,2-Dichloropropane	7.48	63	584027	100.00	UG	#	100
35) Dibromomethane	7.61	93	328967	100.00	UG	#	48
36) 1,4-Dioxane	7.64	88	160255	3000.00	UG		94
37) Bromodichloromethane	7.79	83	735134	100.00	UG	#	96
38) 2-Chloroethyl vinyl ether	8.13	63	267451	100.00	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	905454	100.00	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	626809	100.00	UG		99
42) Toluene	8.66	92	1276432	100.00	UG		99
43) trans-1,3-Dichloropropene	8.93	75	823975	100.00	UG		100
44) 1,1,2-Trichloroethane	9.14	83	408810	100.00	UG		94
45) Tetrachloroethene	9.29	166	445768	100.00	UG		96
46) 1,3-Dichloropropane	9.33	76	834964	100.0			

E14-07393 0057

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6158.D
Acq On : 13 Aug 2014 12:10 pm
Operator : BARBARA
Sample : ICC100,ICC100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 12:56:29 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:22 2014
Response via : Initial Calibration

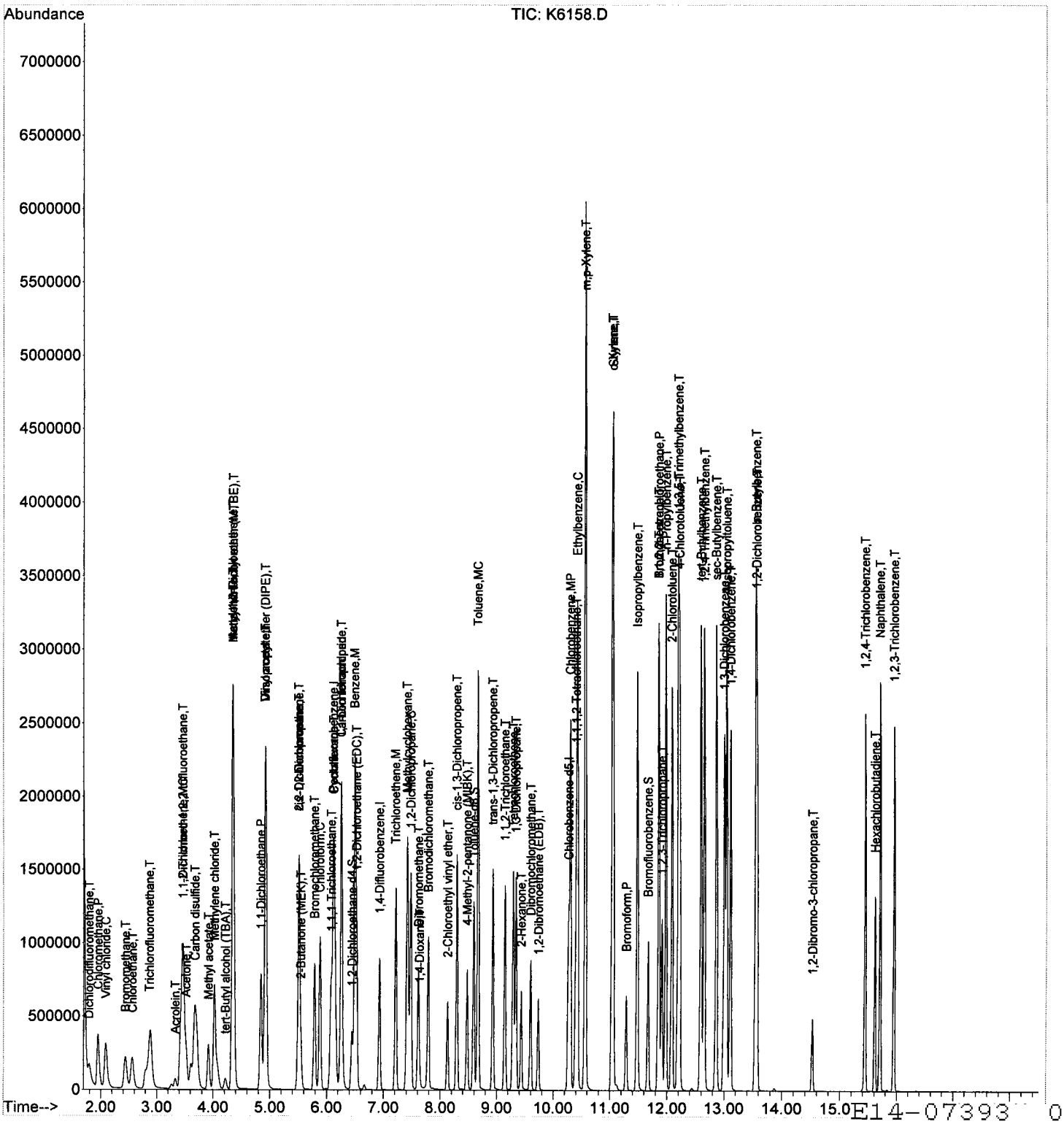
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	484183	100.00	UG	#	94
48) Dibromochloromethane	9.60	129	471778	100.00	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	443194	100.00	UG		98
51) Chlorobenzene	10.30	112	1305139	100.00	UG		100
52) 1,1,1,2-Tetrachloroethane	10.40	131	450511	100.00	UG	#	70
53) Ethylbenzene	10.42	91	2411190	100.00	UG		99
54) m,p-Xylene	10.56	106	1790639	199.99	UG		95
55) o-Xylene	11.04	106	919260	100.00	UG		99
56) Styrene	11.05	104	1561883	100.00	UG		97
57) Bromoform	11.28	173	312591	100.00	UG	#	100
58) Isopropylbenzene	11.48	105	2072541	100.00	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	700495	100.00	UG	#	98
61) Bromobenzene	11.85	156	526127	100.00	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	538024	100.00	UG		99
63) n-Propylbenzene	11.98	91	2905168	100.00	UG		99
64) 2-Chlorotoluene	12.09	91	1776289	100.00	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	2018989	100.00	UG		99
66) 4-Chlorotoluene	12.22	91	2058005	100.00	UG		99
67) tert-Butylbenzene	12.59	119	1611631	100.00	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	1972874	100.00	UG		99
69) sec-Butylbenzene	12.86	105	2490881	100.00	UG		100
70) 1,3-Dichlorobenzene	13.00	146	1032872	100.00	UG		99
71) 4-Isopropyltoluene	13.04	119	1898792	100.00	UG		100
72) 1,4-Dichlorobenzene	13.11	146	1024529	100.00	UG		99
73) n-Butylbenzene	13.54	91	1955978	100.00	UG		100
74) 1,2-Dichlorobenzene	13.57	146	1034913	100.00	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	136116	100.00	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	703540	100.00	UG		96
77) Hexachlorobutadiene	15.62	225	247598	100.00	UG		100
78) Naphthalene	15.70	128	2009032	100.00	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	675001	100.00	UG		99
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	439680	100.00	UG	#	1
81) Methyl acetate	3.92	43	571806	100.00	UG	#	74
82) Cyclohexane	6.13	56	1012464	100.00	UG	#	49
83) Methylcyclohexane	7.42	83	853070	100.00	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6158.D
Acq On : 13 Aug 2014 12:10 pm
Operator : BARBARA
Sample : ICC100,ICC100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 12:56:29 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:56:22 2014
Response via : Initial Calibration



E14-07393 0059

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6159.D
Acq On : 13 Aug 2014 12:38 pm
Operator : BARBARA
Sample : ICC150,ICC150,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 12:57:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:57:22 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.10	168	426553	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	750857	50.00	UG		0.00
50) Chlorobenzene-d5	10.27	117	688382	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	319153	49.08	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%				
41) Toluene-d8	8.59	98	936434	49.89	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.78%				
59) Bromofluorobenzene	11.67	95	388909	50.57	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	557855	161.22	UG		99
3) Chloromethane	1.95	50	997966	146.01	UG		98
4) Vinyl chloride	2.08	62	990669	151.08	UG		98
5) Bromomethane	2.42	94	399843	128.55	UG		97
6) Chloroethane	2.55	64	591341	144.88	UG		99
7) Trichlorofluoromethane	2.85	101	855559	165.30	UG		97
8) Acrolein	3.33	56	119740	360.07	UG		95
9) 1,1-Dichloroethene	3.46	96	684809	151.30	UG		95
10) Acetone	3.52	43	563968	132.66	UG		98
11) Carbon disulfide	3.67	76	2398250	148.02	UG		100
12) Vinyl acetate	4.91	43	3561618	159.15	UG	#	1
13) Methylene chloride	4.02	84	848810	149.24	UG		99
14) Acrylonitrile	4.34	53	1047889	395.23	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	188877	307.50	UG	#	93
16) trans-1,2-Dichloroethene	4.34	96	765194	151.49	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	2586851	155.02	UG		100
18) 1,1-Dichloroethane	4.84	63	1524749	152.26	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	3111848	156.18	UG		91
20) cis-1,2-Dichloroethene	5.51	96	851767	155.39	UG	#	99
21) 2,2-Dichloropropane	5.50	77	598904	148.62	UG		100
22) 2-Butanone (MEK)	5.55	43	575890	148.59	UG	#	98
23) Bromochloromethane	5.78	128	359199	150.67	UG	#	99
25) Chloroform	5.88	83	1427133	151.24	UG		98
26) 1,1,1-Trichloroethane	6.07	97	989387	150.61	UG	#	100
27) Carbon tetrachloride	6.25	117	931115	163.06	UG		97
28) 1,1-Dichloropropene	6.25	75	1163431	160.41	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	1199199	151.91	UG		100
32) Benzene	6.49	78	3391737	153.17	UG		100
33) Trichloroethene	7.21	95	803974	157.63	UG	#	100
34) 1,2-Dichloropropane	7.48	63	900275	155.85	UG	#	100
35) Dibromomethane	7.61	93	503077	153.74	UG	#	92
36) 1,4-Dioxane	7.63	88	191059	3410.70	UG		96
37) Bromodichloromethane	7.79	83	1116725	154.70	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	419888	176.31	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	1386494	161.16	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	950502	157.09	UG		98
42) Toluene	8.66	92	1941597	155.16	UG		99
43) trans-1,3-Dichloropropene	8.93	75	1271567	163.33	UG		100
44) 1,1,2-Trichloroethane	9.14	83	616575	151.88	UG		94
45) Tetrachloroethene	9.29	166	679143	155.30	UG	#	96
46) 1,3-Dichloropropane	9.33	76	1254948	152.6			

E14-07393 0060

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6159.D
Acq On : 13 Aug 2014 12:38 pm
Operator : BARBARA
Sample : ICC150,ICC150,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 12:57:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:57:22 2014
Response via : Initial Calibration

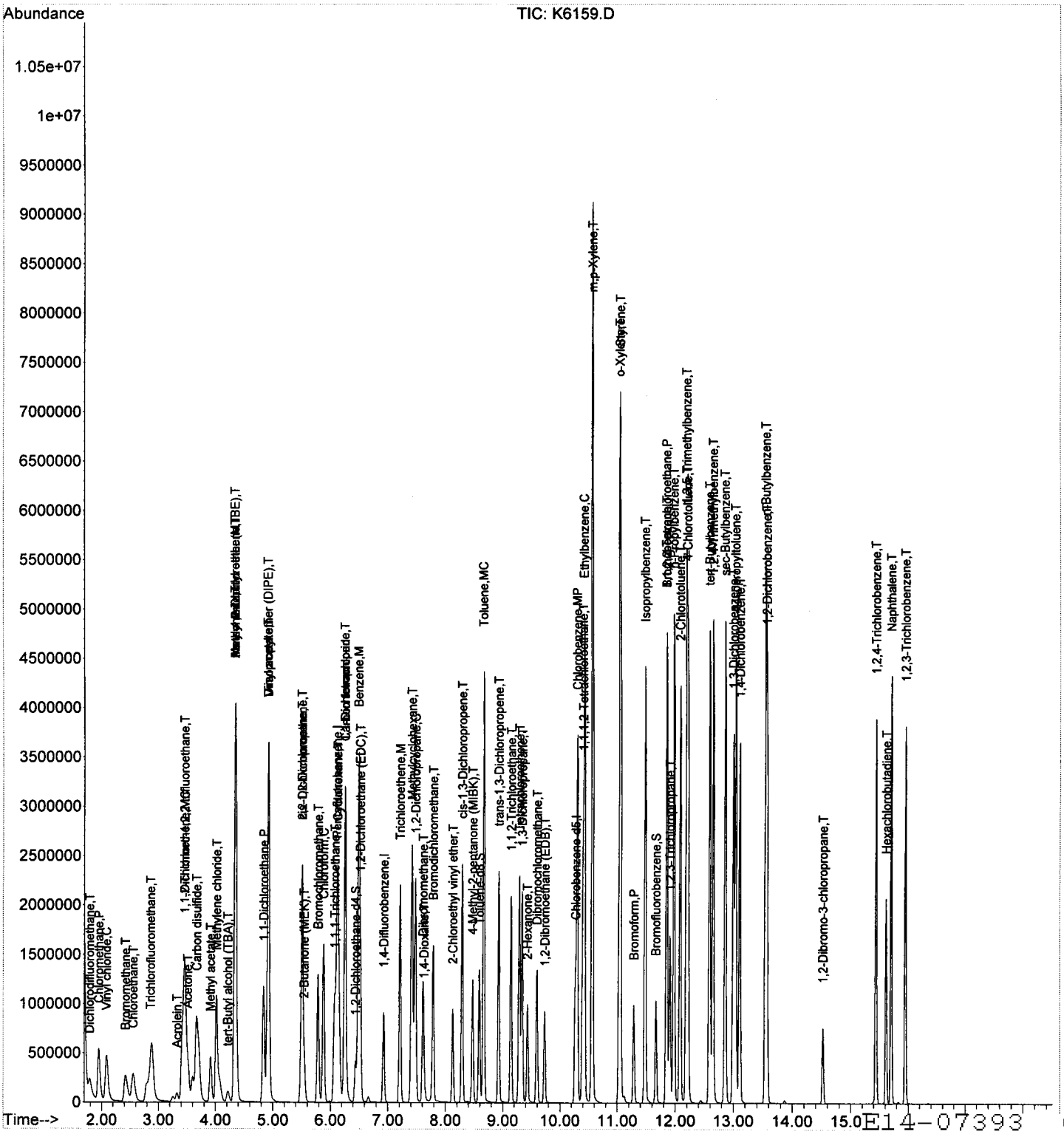
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	723256	152.99	UG	#	94
48) Dibromochloromethane	9.60	129	722232	158.87	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	667539	154.55	UG		99
51) Chlorobenzene	10.30	112	1986447	154.57	UG		100
52) 1,1,1,2-Tetrachloroethane	10.40	131	692238	158.06	UG	#	70
53) Ethylbenzene	10.42	91	3661426	156.75	UG		99
54) m,p-Xylene	10.57	106	2705836	310.87	UG		94
55) o-Xylene	11.04	106	1395730	158.02	UG		98
56) Styrene	11.05	104	2347931	157.38	UG		97
57) Bromoform	11.28	173	477526	159.89	UG	#	100
58) Isopropylbenzene	11.48	105	3186998	161.86	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	1067763	150.96	UG	#	98
61) Bromobenzene	11.85	156	787952	152.29	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	794790	146.84	UG		99
63) n-Propylbenzene	11.98	91	4423295	157.45	UG		99
64) 2-Chlorotoluene	12.09	91	2717958	156.91	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	3072842	158.35	UG		99
66) 4-Chlorotoluene	12.22	91	3139141	156.57	UG		99
67) tert-Butylbenzene	12.59	119	2462727	162.33	UG		94
68) 1,2,4-Trimethylbenzene	12.65	105	3012486	157.22	UG		99
69) sec-Butylbenzene	12.86	105	3852361	162.26	UG		100
70) 1,3-Dichlorobenzene	13.00	146	1551219	152.35	UG		99
71) 4-Isopropyltoluene	13.04	119	2909229	159.60	UG		100
72) 1,4-Dichlorobenzene	13.11	146	1548979	151.59	UG		99
73) n-Butylbenzene	13.54	91	3024055	163.46	UG		100
74) 1,2-Dichlorobenzene	13.57	146	1542805	149.56	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	206471	159.16	UG	#	83
76) 1,2,4-Trichlorobenzene	15.44	180	1074849	162.59	UG		96
77) Hexachlorobutadiene	15.62	225	389473	161.16	UG		100
78) Naphthalene	15.70	128	3049396	159.66	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	1017701	154.61	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	662673	150.03	UG	#	1
81) Methyl acetate	3.91	43	859826	149.26	UG	#	73
82) Cyclohexane	6.12	56	1592288	158.47	UG	#	48
83) Methylcyclohexane	7.42	83	1337737	164.96	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6159.D
Acq On : 13 Aug 2014 12:38 pm
Operator : BARBARA
Sample : ICC150,ICC150,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 12:57:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 12:57:22 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6160.D
Acq On : 13 Aug 2014 1:06 pm
Operator : BARBARA
Sample : ICC200,ICC200,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 13 13:25:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:03:50 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.10	168	443624	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	775790	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	729274	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	327626	47.27	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.54%				
41) Toluene-d8	8.59	98	973139	51.00	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.00%				
59) Bromofluorobenzene	11.67	95	413926	51.57	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	717401	191.01	UG		99
3) Chloromethane	1.95	50	1342296	181.72	UG		98
4) Vinyl chloride	2.09	62	1256033	175.66	UG		98
5) Bromomethane	2.41	94	472512	143.94	UG		97
6) Chloroethane	2.55	64	751260	167.64	UG		99
7) Trichlorofluoromethane	2.86	101	1099177	221.61	UG	#	65
8) Acrolein	3.33	56	151867	408.46	UG		95
9) 1,1-Dichloroethene	3.46	96	848710	171.97	UG		95
10) Acetone	3.52	43	722651	159.74	UG		98
11) Carbon disulfide	3.70	76	3009911	170.30	UG		100
12) Vinyl acetate	4.91	43	4742602	224.53	UG	#	1
13) Methylene chloride	4.01	84	1127087	182.88	UG		99
14) Acrylonitrile	4.34	53	1306908	484.72	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	257802	413.50	UG		99
16) trans-1,2-Dichloroethene	4.33	96	1005164	191.64	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	3479470	210.29	UG		100
18) 1,1-Dichloroethane	4.84	63	2029450	196.01	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	4160785	225.85	UG		91
20) cis-1,2-Dichloroethene	5.51	96	1133870	208.24	UG	#	99
21) 2,2-Dichloropropane	5.50	77	731670	175.44	UG		100
22) 2-Butanone (MEK)	5.55	43	760133	203.81	UG	#	98
23) Bromochloromethane	5.78	128	479239	194.57	UG	#	99
25) Chloroform	5.88	83	1894142	194.63	UG		99
26) 1,1,1-Trichloroethane	6.07	97	1301120	190.90	UG	#	100
27) Carbon tetrachloride	6.25	117	1211962	198.39	UG		97
28) 1,1-Dichloropropene	6.25	75	1524312	201.33	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	1617380	198.45	UG		100
32) Benzene	6.49	78	4504740	202.51	UG		100
33) Trichloroethene	7.21	95	1068173	204.67	UG	#	100
34) 1,2-Dichloropropane	7.48	63	1210171	211.58	UG	#	100
35) Dibromomethane	7.61	93	683449	206.81	UG	#	92
36) 1,4-Dioxane	7.64	88	271935	5059.99	UG		96
37) Bromodichloromethane	7.79	83	1514284	211.58	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	603292	258.77	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	1918642	244.06	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	1282806	239.21	UG		99
42) Toluene	8.66	92	2612079	209.90	UG		99
43) trans-1,3-Dichloropropene	8.93	75	1766870	248.19	UG		100
44) 1,1,2-Trichloroethane	9.14	83	847270	211.52	UG		94
45) Tetrachloroethene	9.29	166	904142	200.10	UG		97
46) 1,3-Dichloropropane	9.33	76	1726511	219.16	UG		97

E14-07393 0063

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6160.D
Acq On : 13 Aug 2014 1:06 pm
Operator : BARBARA
Sample : ICC200,ICC200,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 13 13:25:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:03:50 2014
Response via : Initial Calibration

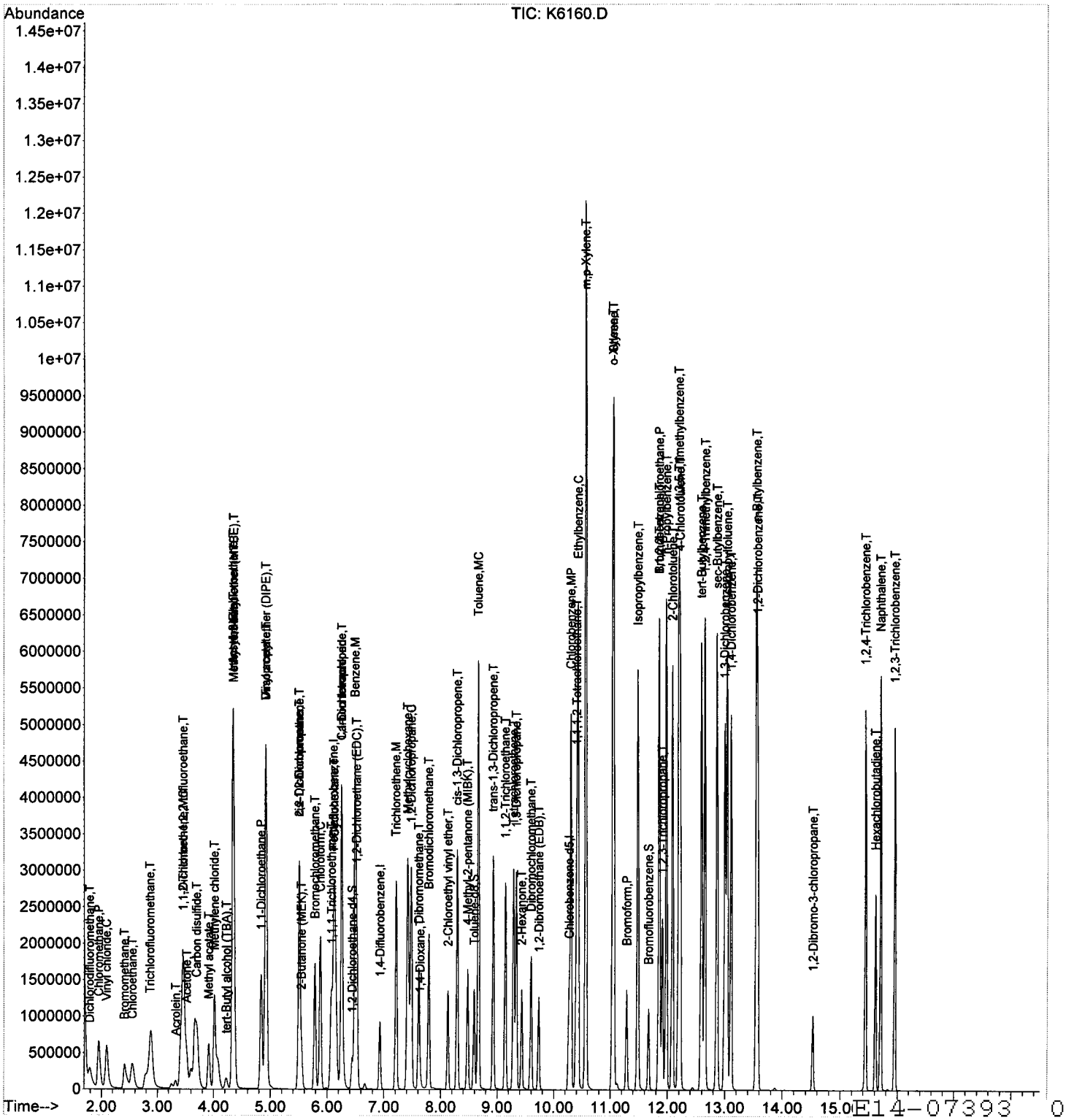
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	998266	245.29	UG	#	95
48) Dibromochloromethane	9.60	129	992095	226.35	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	918225	225.33	UG		99
51) Chlorobenzene	10.30	112	2705150	200.62	UG		100
52) 1,1,1,2-Tetrachloroethane	10.40	131	931833	207.54	UG	#	70
53) Ethylbenzene	10.42	91	4945380	216.42	UG		99
54) m,p-Xylene	10.57	106	3575675	427.58	UG		92
55) o-Xylene	11.04	106	1855999	230.64	UG		97
56) Styrene	11.05	104	3170818	240.60	UG		96
57) Bromoform	11.28	173	662301	226.49	UG	#	100
58) Isopropylbenzene	11.48	105	4234871	238.28	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	1444199	200.05	UG	#	98
61) Bromobenzene	11.85	156	1075630	205.61	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	1087627	198.12	UG		99
63) n-Propylbenzene	11.98	91	5896743	216.70	UG		99
64) 2-Chlorotoluene	12.09	91	3647293	214.08	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	4071919	227.71	UG		99
66) 4-Chlorotoluene	12.22	91	4252324	217.55	UG		99
67) tert-Butylbenzene	12.59	119	3235405	240.10	UG		94
68) 1,2,4-Trimethylbenzene	12.65	105	3998592	228.70	UG		99
69) sec-Butylbenzene	12.86	105	5014210	230.64	UG		100
70) 1,3-Dichlorobenzene	13.00	146	2094515	201.94	UG		99
71) 4-Isopropyltoluene	13.04	119	3802939	228.41	UG		100
72) 1,4-Dichlorobenzene	13.11	146	2081717	202.17	UG		99
73) n-Butylbenzene	13.54	91	3973628	236.36	UG		100
74) 1,2-Dichlorobenzene	13.57	146	2060444	199.27	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	284374	221.32	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	1441729	229.02	UG		96
77) Hexachlorobutadiene	15.62	225	504417	198.54	UG		100
78) Naphthalene	15.70	128	4020390	234.04	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	1347270	210.58	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	812118	167.40	UG	#	1
81) Methyl acetate	3.91	43	1181061	192.61	UG	#	74
82) Cyclohexane	6.13	56	2020005	181.05	UG	#	48
83) Methylcyclohexane	7.42	83	1719521	210.90	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6160.D
Acq On : 13 Aug 2014 1:06 pm
Operator : BARBARA
Sample : ICC200,ICC200,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 13 13:25:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 13:03:50 2014
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\08-13-14\
Data File : K6167.D
Acq On : 13 Aug 2014 4:28 pm
Operator : BARBARA
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 14 16:18:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	103	0.00
2	T	Dichlorodifluoromethane	0.409	0.416	-1.7	98	0.00
3	P	Chloromethane	0.810	0.781	3.6	97	0.00
4	C	Vinyl chloride	0.768	0.759	1.2	98	0.02
5	T	Bromomethane	0.349	0.360	-3.2	103	0.00
6	T	Chloroethane	0.476	0.470	1.3	98	0.00
7	T	Trichlorofluoromethane	0.539	0.575	-6.7	89	0.05
8	T	Acrolein	0.040	0.038	5.0	102	0.00
9	MC	1,1-Dichloroethene	0.532	0.520	2.3	97	0.01
10	T	Acetone	0.489	0.457	6.5	98	0.00
11	T	Carbon disulfide	1.887	1.850	2.0	97	0.00
12	T	Vinyl acetate	2.492	2.742	-10.0	100	-0.01
13	T	Methylene chloride	0.718	0.654	8.9	98	-0.02
14	T	Acrylonitrile	0.301	0.310	-3.0	103	0.00
15	T	tert-Butyl alcohol (TBA)	0.073	0.076	-4.1	106	0.00
16	T	trans-1,2-Dichloroethene	0.591	0.594	-0.5	100	0.00
17	T	Methyl tert-butyl ether (MT	1.924	2.011	-4.5	101	0.00
18	P	1,1-Dichloroethane	1.163	1.181	-1.5	99	0.00
19	T	Diisopropyl ether (DIPE)	2.191	2.382	-8.7	99	0.00
20	T	cis-1,2-Dichloroethene	0.634	0.664	-4.7	101	0.00
21	T	2,2-Dichloropropane	0.468	0.469	-0.2	99	0.00
22	T	2-Butanone (MEK)	0.437	0.464	-6.2	102	-0.02
23	T	Bromochloromethane	0.279	0.280	-0.4	100	-0.01
25	C	Chloroform	1.092	1.109	-1.6	100	0.00
26	T	1,1,1-Trichloroethane	0.755	0.778	-3.0	101	0.00
27	T	Carbon tetrachloride	0.680	0.699	-2.8	100	0.00
28	T	1,1-Dichloropropene	0.852	0.881	-3.4	99	0.00
29	T	1,2-Dichloroethane (EDC)	0.930	0.933	-0.3	100	0.00
30	S	1,2-Dichloroethane-d4	0.766	0.744	2.9	101	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
32	M	Benzene	1.454	1.495	-2.8	99	0.00
33	M	Trichloroethene	0.342	0.352	-2.9	100	0.00
34	C	1,2-Dichloropropane	0.377	0.402	-6.6	102	0.00
35	T	Dibromomethane	0.214	0.225	-5.1	101	0.00
36	T	1,4-Dioxane	0.004	0.004	0.0	99	0.00
37	T	Bromodichloromethane	0.469	0.494	-5.3	99	0.00
38	T	2-Chloroethyl vinyl ether	0.159	0.189	-18.9	104	0.00
39	T	cis-1,3-Dichloropropene	0.539	0.622	-15.4	101	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.368	0.426	-15.8	100	0.00
41	S	Toluene-d8	1.232	1.255	-1.9	102	0.00
42	MC	Toluene	0.822	0.866	-5.4	100	0.00
43	T	trans-1,3-Dichloropropene	0.495	0.573	-15.8	103	0.0
44	T	1,1,2-Trichloroethane	0.264	0.281	-6.4	102	0.00
45	T	Tetrachloroethene	0.299	0.303	-1.3	101	0.00
46	T	1,3-Dichloropropane	0.527	0.577	-9.5	102	0.00

47	T	2-Hexanone	0.285	0.319	-11.9	97	0.00
48	T	Dibromochloromethane	0.290	0.324	-11.7	102	0.00
49	T	1,2-Dibromoethane (EDB)	0.276	0.308	-11.6	103	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
51	MP	Chlorobenzene	0.948	0.951	-0.3	102	0.00
52	T	1,1,1,2-Tetrachloroethane	0.313	0.326	-4.2	101	0.00
53	C	Ethylbenzene	1.644	1.739	-5.8	101	0.00
54	T	m,p-Xylene	0.606	0.645	-6.4	101	0.00
55	T	o-Xylene	0.585	0.657	-12.3	100	0.00
56	T	Styrene	0.982	1.132	-15.3	101	0.00
57	P	Bromoform	0.205	0.228	-11.2	102	0.00
58	T	Isopropylbenzene	1.323	1.495	-13.0	101	0.00
59	S	Bromofluorobenzene	0.555	0.561	-1.1	105	0.00
60	P	1,1,2,2-Tetrachloroethane	0.499	0.508	-1.8	101	0.00
61	T	Bromobenzene	0.372	0.382	-2.7	101	0.00
62	T	1,2,3-Trichloropropane	0.383	0.385	-0.5	100	0.00
63	T	n-Propylbenzene	1.979	2.090	-5.6	100	0.00
64	T	2-Chlorotoluene	1.250	1.284	-2.7	101	0.00
65	T	1,3,5-Trimethylbenzene	1.320	1.452	-10.0	100	0.00
66	T	4-Chlorotoluene	1.443	1.494	-3.5	101	0.00
67	T	tert-Butylbenzene	1.010	1.155	-14.4	100	0.00
68	T	1,2,4-Trimethylbenzene	1.307	1.429	-9.3	101	0.00
69	T	sec-Butylbenzene	1.635	1.793	-9.7	100	0.00
70	T	1,3-Dichlorobenzene	0.757	0.745	1.6	101	0.00
71	T	4-Isopropyltoluene	1.242	1.368	-10.1	101	0.00
72	T	1,4-Dichlorobenzene	0.755	0.748	0.9	102	0.00
73	T	n-Butylbenzene	1.279	1.406	-9.9	100	0.00
74	T	1,2-Dichlorobenzene	0.751	0.742	1.2	100	0.00
75	T	1,2-Dibromo-3-chloropropane	0.092	0.097	-5.4	100	0.00
76	T	1,2,4-Trichlorobenzene	0.486	0.504	-3.7	100	0.00
77	T	Hexachlorobutadiene	0.189	0.181	4.2	102	0.00
78	T	Naphthalene	1.295	1.439	-11.1	100	0.00
79	T	1,2,3-Trichlorobenzene	0.494	0.483	2.2	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.326	0.302	7.4	96	-0.02
81	T	Methyl acetate	0.418	0.402	3.8	98	-0.01
82	T	Cyclohexane	0.750	0.708	5.6	98	0.02
83	T	Methylcyclohexane	0.589	0.598	-1.5	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

K8081314.M Thu Aug 14 16:18:52 2014

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6167.D
Acq On : 13 Aug 2014 4:28 pm
Operator : BARBARA
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 14 16:18:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	421731	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	738880	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	697748	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	313791	48.55	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.10%				
41) Toluene-d8	8.59	98	927300	50.92	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.84%				
59) Bromofluorobenzene	11.67	95	391599	50.53	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	351156	101.85	UG		99
3) Chloromethane	1.95	50	659046	96.52	UG		98
4) Vinyl chloride	2.09	62	640415	98.87	UG		98
5) Bromomethane	2.43	94	303604	103.10	UG		97
6) Chloroethane	2.56	64	396728	98.87	UG		99
7) Trichlorofluoromethane	2.86	101	485177m	106.62	UG		
8) Acrolein	3.33	56	96727	285.70	UG		96
9) 1,1-Dichloroethene	3.46	96	438937	97.73	UG		96
10) Acetone	3.53	43	385198	93.32	UG		98
11) Carbon disulfide	3.70	76	1560630	98.03	UG		100
12) Vinyl acetate	4.91	43	2312703	110.04	UG	#	1
13) Methylene chloride	4.02	84	551687	91.06	UG		99
14) Acrylonitrile	4.34	53	783447	308.54	UG	#	100
15) tert-Butyl alcohol (TBA)	4.22	59	128770	208.42	UG		99
16) trans-1,2-Dichloroethene	4.34	96	500976	100.58	UG	#	72
17) Methyl tert-butyl ether (M	4.35	73	1696371	104.54	UG		100
18) 1,1-Dichloroethane	4.84	63	995772	101.55	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	2009056	108.69	UG		90
20) cis-1,2-Dichloroethene	5.51	96	560118	104.73	UG	#	99
21) 2,2-Dichloropropane	5.50	77	395592	100.28	UG		100
22) 2-Butanone (MEK)	5.55	43	391339	106.21	UG	#	98
23) Bromochloromethane	5.78	128	236351	100.44	UG	#	99
25) Chloroform	5.88	83	935720	101.55	UG		99
26) 1,1,1-Trichloroethane	6.07	97	656602	103.13	UG	#	100
27) Carbon tetrachloride	6.25	117	589334	102.78	UG		97
28) 1,1-Dichloropropene	6.26	75	743357	103.42	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	786911	100.34	UG		100
32) Benzene	6.49	78	2208708	102.82	UG		100
33) Trichloroethene	7.21	95	520871	103.20	UG	#	100
34) 1,2-Dichloropropane	7.48	63	594087	106.55	UG	#	100
35) Dibromomethane	7.61	93	333036	105.38	UG	#	91
36) 1,4-Dioxane	7.63	88	158363m	3035.87	UG		
37) Bromodichloromethane	7.79	83	730069	105.29	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	279179	118.75	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	918884	115.29	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	629919	115.92	UG		98
42) Toluene	8.66	92	1279556	105.35	UG		99
43) trans-1,3-Dichloropropene	8.93	75	846992	115.85	UG		100
44) 1,1,2-Trichloroethane	9.14	83	414984	106.29	UG		94
45) Tetrachloroethene	9.29	166	448027	101.32	UG	#	96
46) 1,3-Dichloropropane	9.33	76	852803	109.60			

E14-07393 0068

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6167.D
Acq On : 13 Aug 2014 4:28 pm
Operator : BARBARA
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 14 16:18:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

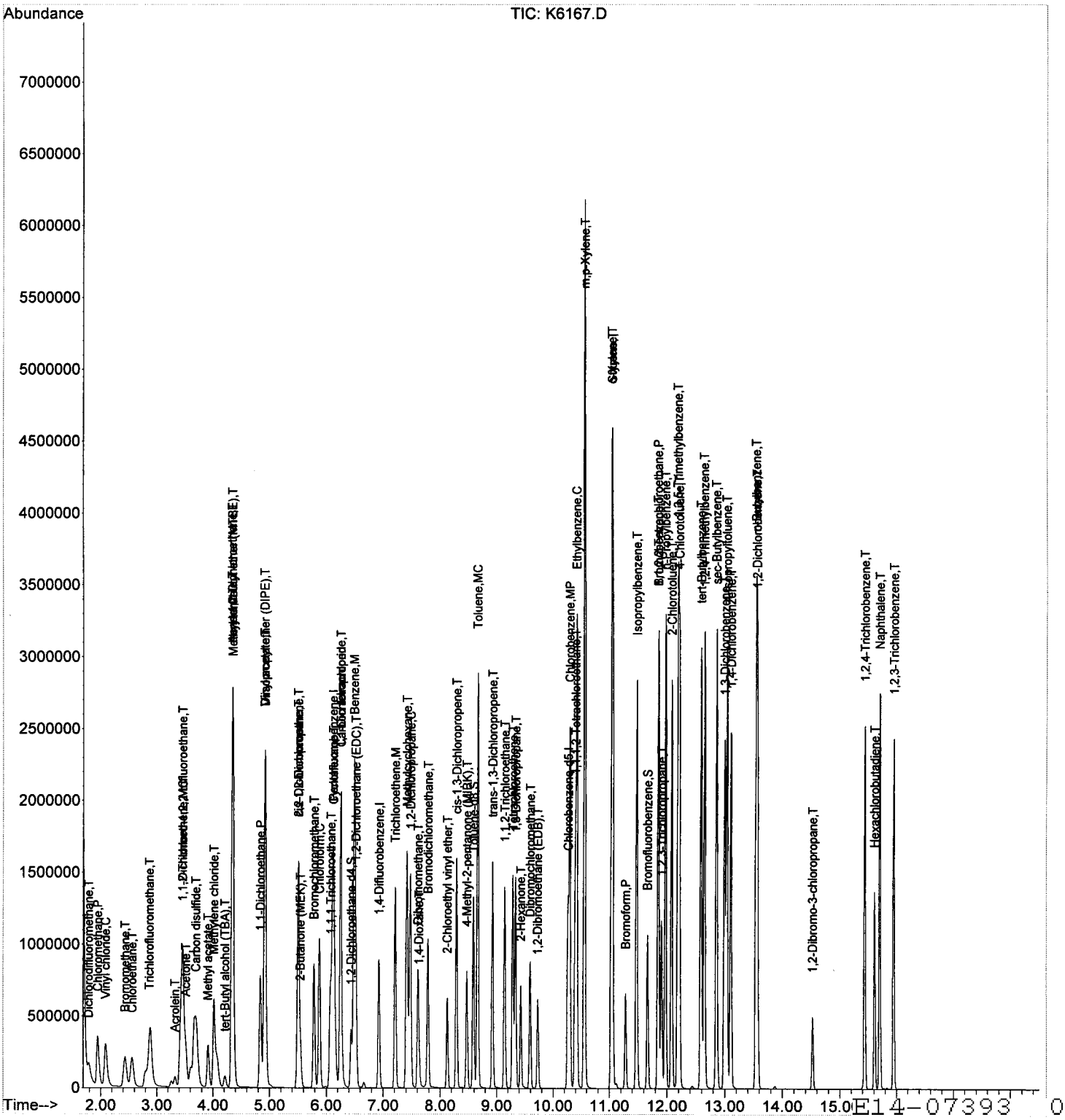
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	471530m	111.94	UG		
48) Dibromochloromethane	9.60	129	479524	111.75	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	455111	111.44	UG		99
51) Chlorobenzene	10.30	112	1327732	100.33	UG		100
52) 1,1,1,2-Tetrachloroethane	10.39	131	455017	104.30	UG	#	70
53) Ethylbenzene	10.42	91	2426207	105.74	UG		99
54) m,p-Xylene	10.56	106	1801479	213.20	UG		95
55) o-Xylene	11.04	106	916681	112.23	UG		98
56) Styrene	11.05	104	1579264	115.28	UG		97
57) Bromoform	11.28	173	317947	110.99	UG	#	100
58) Isopropylbenzene	11.48	105	2085947	113.00	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	708992	101.91	UG	#	98
61) Bromobenzene	11.85	156	533039	102.64	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	537002	100.39	UG		99
63) n-Propylbenzene	11.98	91	2916775	105.60	UG		100
64) 2-Chlorotoluene	12.08	91	1791951	102.75	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	2025947	109.94	UG		99
66) 4-Chlorotoluene	12.22	91	2084285	103.49	UG		99
67) tert-Butylbenzene	12.59	119	1612126	114.32	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	1994169	109.32	UG		99
69) sec-Butylbenzene	12.86	105	2502691	109.69	UG		100
70) 1,3-Dichlorobenzene	13.00	146	1039805	98.41	UG		99
71) 4-Isopropyltoluene	13.04	119	1908350	110.15	UG		100
72) 1,4-Dichlorobenzene	13.11	146	1043923	99.02	UG		99
73) n-Butylbenzene	13.54	91	1961978	109.94	UG		100
74) 1,2-Dichlorobenzene	13.57	146	1035545	98.82	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	135820	105.35	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	703764	103.66	UG		96
77) Hexachlorobutadiene	15.62	225	252450	95.50	UG		100
78) Naphthalene	15.70	128	2008297	111.10	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	674201	97.77	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	421957	92.84	UG	#	1
81) Methyl acetate	3.91	43	560876	96.16	UG	#	74
82) Cyclohexane	6.13	56	988159	94.36	UG	#	49
83) Methylcyclohexane	7.42	83	833853	101.44	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6167.D
Acq On : 13 Aug 2014 4:28 pm
Operator : BARBARA
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 14 16:18:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



E14-07393 0070

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6258.D
Acq On : 15 Aug 2014 3:38 pm
Operator : BARBARA
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 09:40:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.409	0.394	3.7	92	0.00
3	P	Chloromethane	0.810	0.712	12.1	88	0.00
4	C	Vinyl chloride	0.768	0.717	6.6	92	0.02
5	T	Bromomethane	0.349	0.296	15.2	84	-0.01
6	T	Chloroethane	0.476	0.433	9.0	90	0.00
7	T	Trichlorofluoromethane	0.539	0.568	-5.4	87	0.04
8	T	Acrolein	0.040	0.041	-2.5	109	0.00
9	MC	1,1-Dichloroethene	0.532	0.496	6.8	92	0.02
10	T	Acetone	0.489	0.467	4.5	99	0.00
11	T	Carbon disulfide	1.887	1.648	12.7	86	0.00
12	T	Vinyl acetate	2.492	2.570	-3.1	92	-0.01
13	T	Methylene chloride	0.718	0.614	14.5	91	-0.02
14	T	Acrylonitrile	0.301	0.295	2.0	97	0.00
15	T	tert-Butyl alcohol (TBA)	0.073	0.069	5.5	95	-0.01
16	T	trans-1,2-Dichloroethene	0.591	0.546	7.6	91	0.00
17	T	Methyl tert-butyl ether (MT	1.924	1.867	3.0	93	0.00
18	P	1,1-Dichloroethane	1.163	1.101	5.3	92	0.00
19	T	Diisopropyl ether (DIPE)	2.191	2.232	-1.9	92	0.00
20	T	cis-1,2-Dichloroethene	0.634	0.618	2.5	93	0.00
21	T	2,2-Dichloropropane	0.468	0.421	10.0	88	0.00
22	T	2-Butanone (MEK)	0.437	0.470	-7.6	102	-0.02
23	T	Bromochloromethane	0.279	0.262	6.1	92	-0.01
24	T	Tetrahydrofuran	0.000	0.000	0.0	91	0.00
25	C	Chloroform	1.092	1.039	4.9	93	0.00
26	T	1,1,1-Trichloroethane	0.755	0.729	3.4	93	0.00
27	T	Carbon tetrachloride	0.680	0.662	2.6	94	0.00
28	T	1,1-Dichloropropene	0.852	0.834	2.1	93	0.00
29	T	1,2-Dichloroethane (EDC)	0.930	0.901	3.1	95	0.00
30	S	1,2-Dichloroethane-d4	0.766	0.744	2.9	100	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
32	M	Benzene	1.454	1.404	3.4	93	0.00
33	M	Trichloroethene	0.342	0.334	2.3	94	0.00
34	C	1,2-Dichloropropane	0.377	0.383	-1.6	96	0.00
35	T	Dibromomethane	0.214	0.219	-2.3	98	0.00
36	T	1,4-Dioxane	0.004	0.004	0.0	97	0.00
37	T	Bromodichloromethane	0.469	0.467	0.4	93	0.00
38	T	2-Chloroethyl vinyl ether	0.159	0.179	-12.6	98	0.00
39	T	cis-1,3-Dichloropropene	0.539	0.598	-10.9	97	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.368	0.425	-15.5	99	0.00
41	S	Toluene-d8	1.232	1.270	-3.1	103	0.00
42	MC	Toluene	0.822	0.836	-1.7	96	0.00
43	T	trans-1,3-Dichloropropene	0.495	0.564	-13.9	101	0.00
44	T	1,1,2-Trichloroethane	0.264	0.281	-6.4	101	0.00
45	T	Tetrachloroethene	0.299	0.292	2.3	96	0.00

46	T	1,3-Dichloropropane	0.527	0.580	-10.1	102	0.00
47	T	2-Hexanone	0.285	0.333	-16.8	101	0.00
48	T	Dibromochloromethane	0.290	0.310	-6.9	96	0.00
49	T	1,2-Dibromoethane (EDB)	0.276	0.310	-12.3	103	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
51	MP	Chlorobenzene	0.948	0.912	3.8	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.313	0.304	2.9	95	0.00
53	C	Ethylbenzene	1.644	1.676	-1.9	98	0.00
54	T	m,p-Xylene	0.606	0.613	-1.2	97	0.00
55	T	o-Xylene	0.585	0.621	-6.2	95	0.00
56	T	Styrene	0.982	1.079	-9.9	97	0.00
57	P	Bromoform	0.205	0.200	2.4	90	0.00
58	T	Isopropylbenzene	1.323	1.396	-5.5	95	0.00
59	S	Bromofluorobenzene	0.555	0.576	-3.8	109	0.00
60	P	1,1,2,2-Tetrachloroethane	0.499	0.487	2.4	98	0.00
61	T	Bromobenzene	0.372	0.366	1.6	98	0.00
62	T	1,2,3-Trichloropropane	0.383	0.381	0.5	100	0.00
63	T	n-Propylbenzene	1.979	1.986	-0.4	96	0.00
64	T	2-Chlorotoluene	1.250	1.213	3.0	96	0.00
65	T	1,3,5-Trimethylbenzene	1.320	1.347	-2.0	94	0.00
66	T	4-Chlorotoluene	1.443	1.422	1.5	97	0.00
67	T	tert-Butylbenzene	1.010	1.064	-5.3	93	0.00
68	T	1,2,4-Trimethylbenzene	1.307	1.322	-1.1	95	0.00
69	T	sec-Butylbenzene	1.635	1.660	-1.5	94	0.00
70	T	1,3-Dichlorobenzene	0.757	0.709	6.3	97	0.00
71	T	4-Isopropyltoluene	1.242	1.269	-2.2	94	0.00
72	T	1,4-Dichlorobenzene	0.755	0.707	6.4	97	0.00
73	T	n-Butylbenzene	1.279	1.315	-2.8	95	0.00
74	T	1,2-Dichlorobenzene	0.751	0.693	7.7	94	0.00
75	T	1,2-Dibromo-3-chloropropane	0.092	0.090	2.2	93	0.00
76	T	1,2,4-Trichlorobenzene	0.486	0.461	5.1	92	0.00
77	T	Hexachlorobutadiene	0.189	0.168	11.1	96	0.00
78	T	Naphthalene	1.295	1.325	-2.3	93	0.00
79	T	1,2,3-Trichlorobenzene	0.494	0.440	10.9	92	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.326	0.283	13.2	91	-0.01
81	T	Methyl acetate	0.418	0.383	8.4	94	-0.01
82	T	Cyclohexane	0.750	0.666	11.2	93	0.01
83	T	Methylcyclohexane	0.589	0.563	4.4	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

K8081314.M Tue Aug 19 09:40:23 2014

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6258.D
Acq On : 15 Aug 2014 3:38 pm
Operator : BARBARA
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 09:40:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.10	168	417257	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	734275	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	705353	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	310428	48.55	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.10%				
41) Toluene-d8	8.59	98	932871	51.54	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.08%				
59) Bromofluorobenzene	11.67	95	406239	51.85	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.70%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	329015	96.45	UG		99
3) Chloromethane	1.95	50	594287	87.97	UG		98
4) Vinyl chloride	2.09	62	598530	93.40	UG		98
5) Bromomethane	2.43	94	246792	84.71	UG		97
6) Chloroethane	2.56	64	361315	91.01	UG		99
7) Trichlorofluoromethane	2.85	101	474048m	105.29	UG		
8) Acrolein	3.33	56	102719m	306.65	UG		
9) 1,1-Dichloroethene	3.47	96	414247	93.22	UG		97
10) Acetone	3.52	43	390124	95.53	UG		98
11) Carbon disulfide	3.70	76	1375615	87.34	UG		100
12) Vinyl acetate	4.91	43	2145076	103.16	UG	#	1
13) Methylene chloride	4.02	84	512634m	85.52	UG		
14) Acrylonitrile	4.34	53	738771	294.07	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	114709	187.65	UG	#	99
16) trans-1,2-Dichloroethene	4.33	96	455486	92.43	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	1558092	97.05	UG		100
18) 1,1-Dichloroethane	4.84	63	918943	94.72	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	1862776	101.86	UG		90
20) cis-1,2-Dichloroethene	5.51	96	515539	97.43	UG	#	99
21) 2,2-Dichloropropane	5.51	77	351744	90.13	UG		100
22) 2-Butanone (MEK)	5.55	43	392114	107.56	UG	#	98
23) Bromochloromethane	5.78	128	218575	93.88	UG	#	98
25) Chloroform	5.88	83	867144	95.11	UG		99
26) 1,1,1-Trichloroethane	6.07	97	608238	96.56	UG	#	100
27) Carbon tetrachloride	6.25	117	552295	97.35	UG		96
28) 1,1-Dichloropropene	6.26	75	695861	97.85	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	751487	96.86	UG		100
32) Benzene	6.49	78	2061965	96.60	UG		100
33) Trichloroethene	7.21	95	490450	97.78	UG	#	100
34) 1,2-Dichloropropane	7.48	63	561791	101.39	UG	#	100
35) Dibromomethane	7.61	93	321463	102.36	UG	#	92
36) 1,4-Dioxane	7.63	88	155596m	3001.53	UG		
37) Bromodichloromethane	7.79	83	685705	99.51	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	262806m	112.49	UG		
39) cis-1,3-Dichloropropene	8.29	75	877839	110.83	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	623629	115.49	UG		98
42) Toluene	8.66	92	1227743	101.72	UG		99
43) trans-1,3-Dichloropropene	8.93	75	828925	114.09	UG		100
44) 1,1,2-Trichloroethane	9.14	83	413225	106.51	UG		94
45) Tetrachloroethene	9.29	166	428650	97.55	UG	#	96
46) 1,3-Dichloropropane	9.33	76	852219	110.21			

E14-07393 0073

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6258.D
Acq On : 15 Aug 2014 3:38 pm
Operator : BARBARA
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 09:40:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

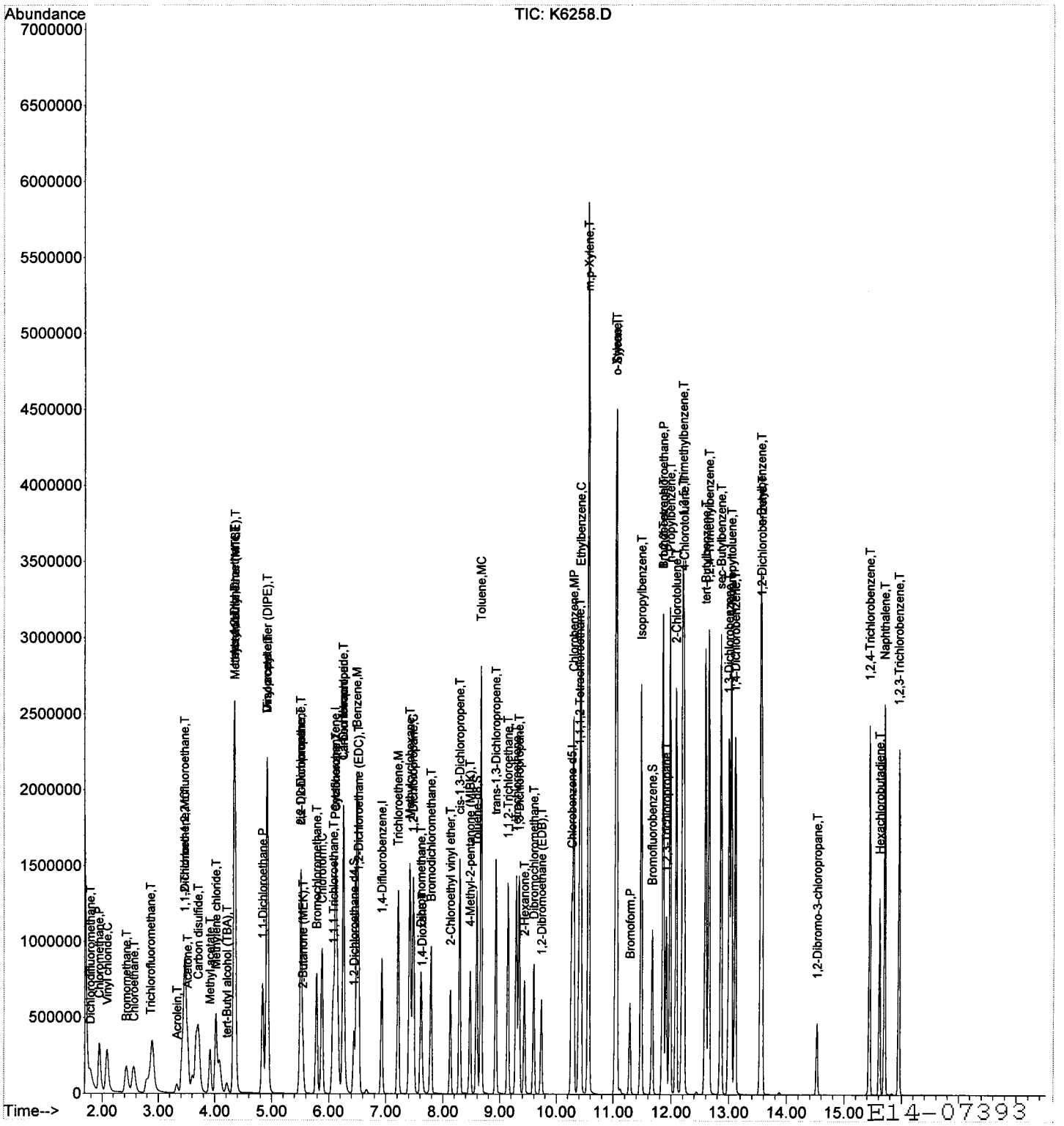
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	489567m	116.95	UG		
48) Dibromochloromethane	9.60	129	454962	106.69	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	455164	112.16	UG		98
51) Chlorobenzene	10.30	112	1285878	96.12	UG		100
52) 1,1,1,2-Tetrachloroethane	10.40	131	428257	97.11	UG	#	60
53) Ethylbenzene	10.42	91	2364656	101.94	UG		99
54) m,p-Xylene	10.56	106	1729955	202.52	UG		94
55) o-Xylene	11.04	106	876236	106.13	UG		99
56) Styrene	11.05	104	1521672	109.88	UG		97
57) Bromoform	11.28	173	282805	97.66	UG	#	100
58) Isopropylbenzene	11.48	105	1968953	105.51	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	686732	97.65	UG	#	98
61) Bromobenzene	11.85	156	515908	98.27	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	537133	99.33	UG		99
63) n-Propylbenzene	11.98	91	2802293	100.36	UG		99
64) 2-Chlorotoluene	12.08	91	1710779	97.04	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	1900912	102.05	UG		99
66) 4-Chlorotoluene	12.22	91	2005938	98.53	UG		99
67) tert-Butylbenzene	12.59	119	1500328	105.25	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	1865131	101.15	UG		99
69) sec-Butylbenzene	12.86	105	2342111	101.55	UG		100
70) 1,3-Dichlorobenzene	13.00	146	1000428	93.66	UG		99
71) 4-Isopropyltoluene	13.04	119	1790149	102.21	UG		100
72) 1,4-Dichlorobenzene	13.11	146	996783	93.53	UG		99
73) n-Butylbenzene	13.54	91	1855584	102.86	UG		100
74) 1,2-Dichlorobenzene	13.57	146	977749	92.30	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	126488	97.05	UG	#	83
76) 1,2,4-Trichlorobenzene	15.44	180	649951	94.71	UG		96
77) Hexachlorobutadiene	15.62	225	236582	88.53	UG		100
78) Naphthalene	15.70	128	1869211	102.29	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	621248	89.12	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	398947	86.83	UG	#	1
81) Methyl acetate	3.91	43	539920	91.57	UG	#	74
82) Cyclohexane	6.12	56	939125	88.71	UG	#	49
83) Methylcyclohexane	7.42	83	794027	95.56	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6258.D
Acq On : 15 Aug 2014 3:38 pm
Operator : BARBARA
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 09:40:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



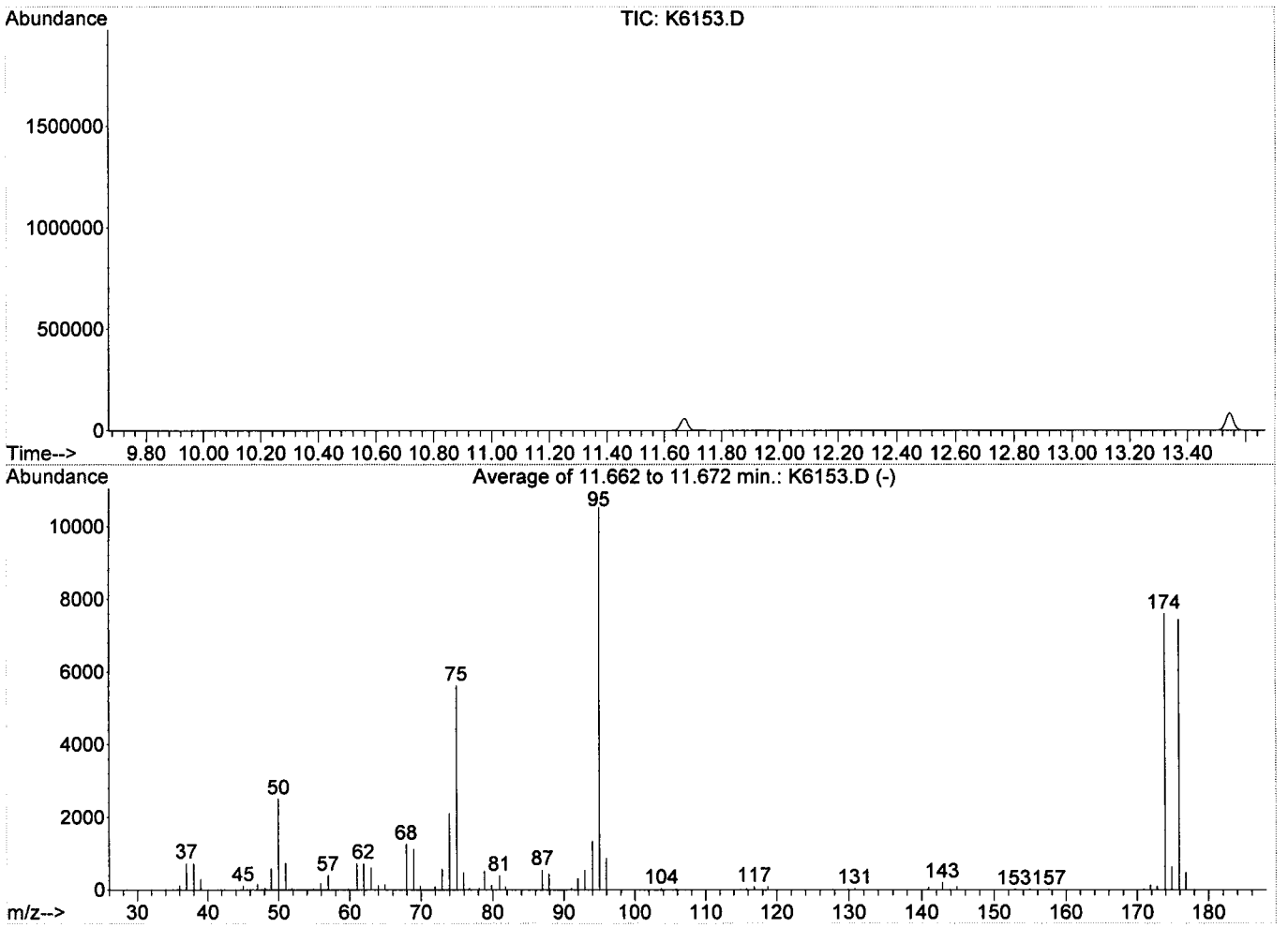
E14-07393 0075

VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\08-13-14\
Data File : K6153.D
Acq On : 13 Aug 2014 9:47 am
Operator : BARBARA
Sample : BFBA140813,BFBA140813,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\K8081314.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Wed Aug 13 15:05:57 2014



Spectrum Information: Average of 11.662 to 11.672 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	2517	PASS
75	95	30	60	53.5	5631	PASS
95	95	100	100	100.0	10534	PASS
96	95	5	9	8.3	872	PASS
173	174	0.00	2	1.4	105	PASS
174	95	50	100	72.3	7616	PASS
175	174	5	9	8.3	634	PASS
176	174	95	101	98.0	7464	PASS
177	176	5	9	6.6	490	PASS

Average of 11.662 to 11.672 min.: K6153.D
BFBA140813,BFBA140813,A,5mL,100
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	121	51.00	749	63.00	613	76.75	51
37.00	736	51.90	60	64.00	124	77.00	19
38.00	734	53.00	26	64.95	151	78.10	47
39.00	304	54.90	41	67.95	1259	78.85	521
45.00	117	55.95	189	69.00	1125	79.85	130
46.00	22	56.95	411	69.90	107	80.95	403
47.00	164	58.10	19	71.95	95	81.80	92
47.80	19	59.80	40	72.95	582	86.95	554
48.10	60	60.10	20	74.00	2113	87.90	449
48.95	596	61.00	724	75.00	5631	91.05	51
50.00	2517	61.95	728	75.95	491	91.95	321

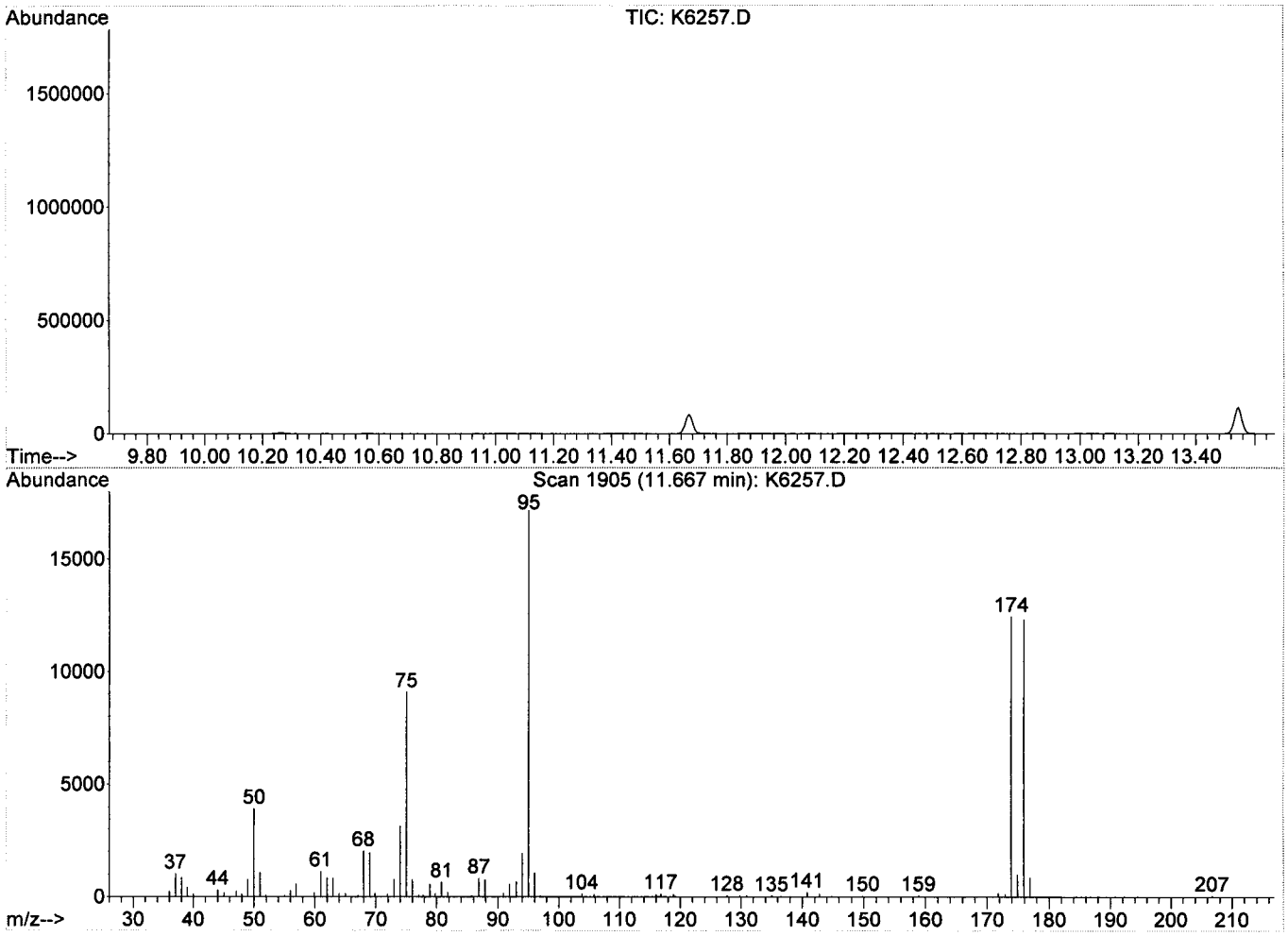
Average of 11.662 to 11.672 min.: K6153.D
BFBA140813,BFBA140813,A,5mL,100
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.95	544	116.85	95	152.80	19	178.00	17
94.00	1344	117.90	20	153.00	18		
95.00	10534	118.75	94	154.90	17		
95.95	872	127.80	18	157.60	20		
103.75	48	129.90	22	170.90	26		
104.00	17	130.80	48	171.85	142		
105.70	18	140.80	30	172.80	105		
105.90	22	140.95	76	173.90	7616		
112.70	18	142.85	212	174.85	634		
114.90	17	143.90	18	175.90	7464		
115.75	40	144.85	91	176.85	490		

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6257.D
Acq On : 15 Aug 2014 3:01 pm
Operator : BARBARA
Sample : BFBA140815a,BFBA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\K8081314.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Wed Aug 13 15:05:57 2014



Spectrum Information: Scan 1905

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.9	3928	PASS
75	95	30	60	53.0	9092	PASS
95	95	100	100	100.0	17168	PASS
96	95	5	9	6.2	1060	PASS
173	174	0.00	2	1.0	123	PASS
174	95	50	100	72.5	12441	PASS
175	174	5	9	7.9	980	PASS
176	174	95	101	98.9	12307	PASS
177	176	5	9	7.0	865	PASS

Scan 1905 (11.667 min): K6257.D
BFBA140815a,BFBA140815a,A,5mL,100

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	261	51.00	1081	67.10	69	78.90	568
37.00	1024	51.90	80	68.00	2039	79.80	142
38.00	878	55.00	73	69.00	1967	80.80	657
39.00	412	56.00	280	69.90	176	81.80	197
40.00	132	56.90	561	71.90	137	85.70	52
44.00	310	59.90	189	73.00	781	86.90	825
45.00	184	61.00	1133	74.00	3151	87.90	753
47.10	254	62.00	841	75.00	9092	90.90	158
48.00	137	63.00	836	76.00	757	91.90	549
49.00	775	64.00	143	77.10	86	93.00	672
50.00	3928	65.00	162	77.80	74	94.00	1943

Scan 1905 (11.667 min): K6257.D
BFBA140815a,BFBA140815a,A,5mL,100

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	17168	135.00	52	176.90	865		
96.00	1060	140.80	214	206.80	67		
96.90	64	142.80	147				
103.80	130	144.80	59				
105.80	119	149.80	56				
116.00	122	158.90	61				
116.80	143	171.80	189				
118.90	125	172.90	123				
127.70	71	173.90	12441				
129.80	68	174.90	980				
130.90	70	175.90	12307				

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA140815a
Client ID: BLKA140815a
Date Received: NA
Date Analyzed: 08/15/2014
Data file: K6261.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.720
Chloromethane	ND		1.00	0.638
Vinyl chloride	ND		1.00	0.490
Bromomethane	ND		1.00	0.602
Chloroethane	ND		1.00	0.637
Trichlorofluoromethane	ND		1.00	0.730
1,1-Dichloroethene	ND		1.00	0.568
Acetone	ND		5.00	0.854
Carbon disulfide	ND		1.00	0.666
Methylene chloride	ND		2.00	1.99
trans-1,2-Dichloroethene	ND		1.00	0.480
Methyl tert-butyl ether (MTBE)	ND		1.00	0.475
1,1-Dichloroethane	ND		1.00	0.457
cis-1,2-Dichloroethene	ND		1.00	0.447
2-Butanone (MEK)	ND		1.00	0.625
Bromochloromethane	ND		1.00	0.594
Chloroform	ND		1.00	0.736
1,1,1-Trichloroethane	ND		1.00	0.528
Carbon tetrachloride	ND		1.00	0.746
1,2-Dichloroethane (EDC)	ND		1.00	0.393
Benzene	ND		1.00	0.458
Trichloroethene	ND		1.00	0.456
1,2-Dichloropropane	ND		1.00	0.491
1,4-Dioxane	ND		200	57.9
Bromodichloromethane	ND		1.00	0.493
cis-1,3-Dichloropropene	ND		1.00	0.465
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.432

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA140815a
Client ID: BLKA140815a
Date Received: NA
Date Analyzed: 08/15/2014
Data file: K6261.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.289
trans-1,3-Dichloropropene	ND		1.00	0.463
1,1,2-Trichloroethane	ND		1.00	0.478
Tetrachloroethene	ND		1.00	0.498
2-Hexanone	ND		1.00	0.463
Dibromochloromethane	ND		1.00	0.409
1,2-Dibromoethane (EDB)	ND		1.00	0.540
Chlorobenzene	ND		1.00	0.546
Ethylbenzene	ND		1.00	0.489
Total Xylenes	ND		2.00	1.20
Styrene	ND		1.00	0.523
Bromoform	ND		1.00	0.526
Isopropylbenzene	ND		1.00	0.441
1,1,2,2-Tetrachloroethane	ND		1.00	0.464
1,3-Dichlorobenzene	ND		1.00	0.471
1,4-Dichlorobenzene	ND		1.00	0.407
1,2-Dichlorobenzene	ND		1.00	0.398
1,2-Dibromo-3-chloropropane	ND		1.00	0.681
1,2,4-Trichlorobenzene	ND		1.00	0.548
1,2,3-Trichlorobenzene	ND		1.00	0.633
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.00	0.826
Methyl acetate	ND		1.00	0.802
Cyclohexane	ND		5.00	0.633
Methylcyclohexane	ND		1.00	0.699
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.465

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-07393 0082

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6261.D
Acq On : 15 Aug 2014 5:02 pm
Operator : BARBARA
Sample : BLKA140815a,BLKA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 18:34:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.10	168	382625	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.93	114	701427	50.00	UG	0.00
50) Chlorobenzene-d5	10.26	117	636308	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.44	65	300403	51.23	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.46%			
41) Toluene-d8	8.58	98	845022	48.88	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.76%			
59) Bromofluorobenzene	11.67	95	338187	47.85	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.70%			

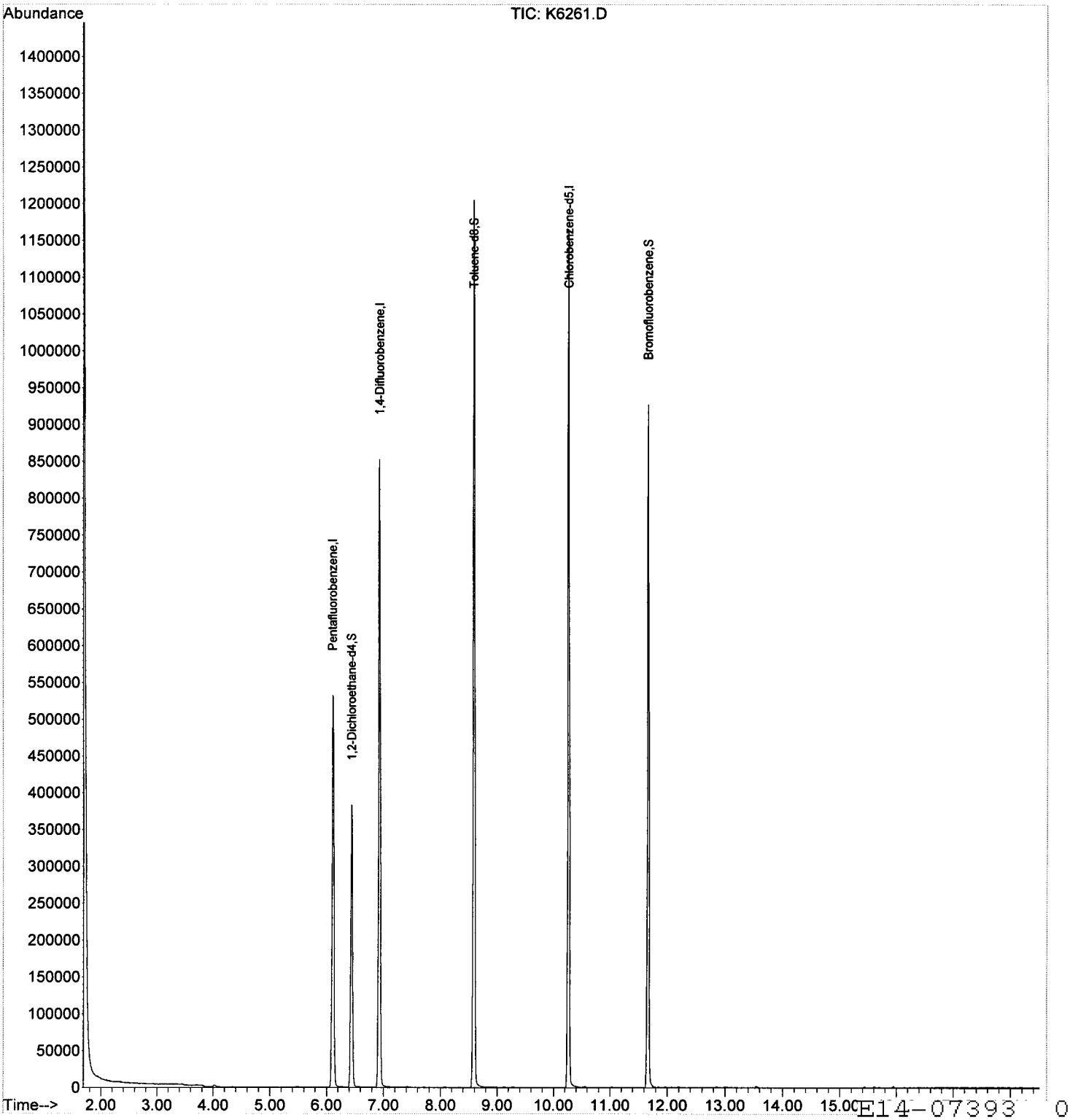
Target Compounds	Qvalue

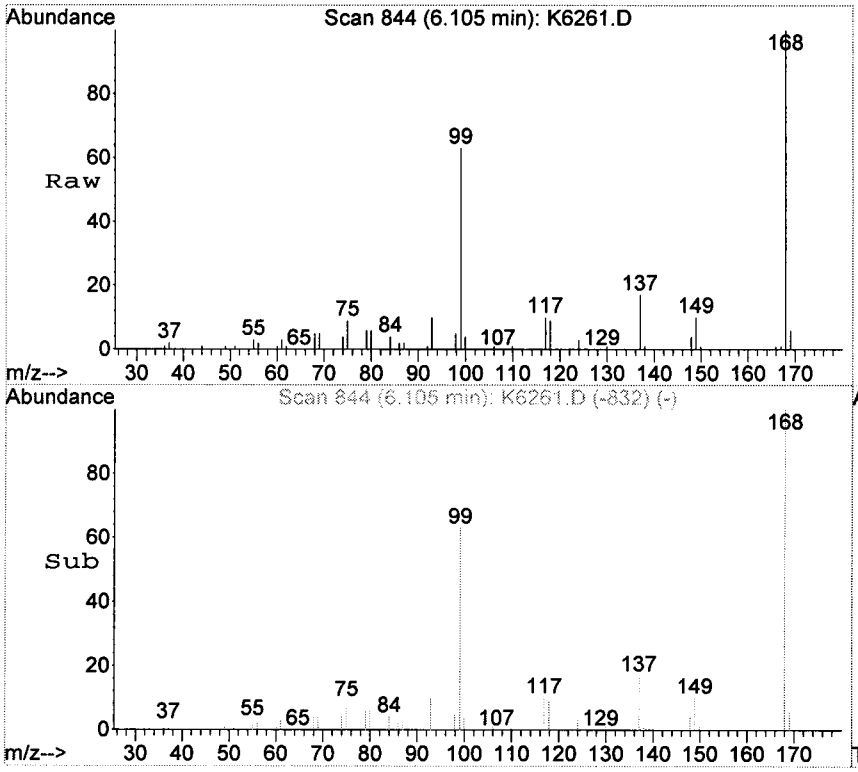
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6261.D
Acq On : 15 Aug 2014 5:02 pm
Operator : BARBARA
Sample : BLKA140815a,BLKA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 18:34:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

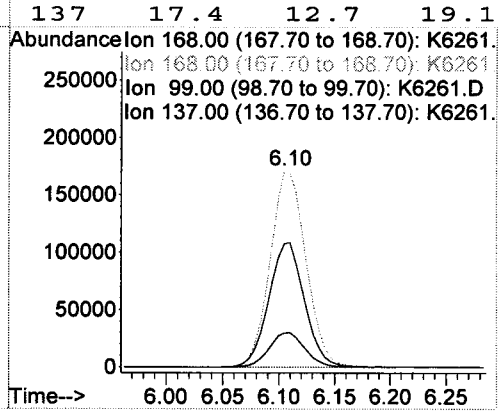


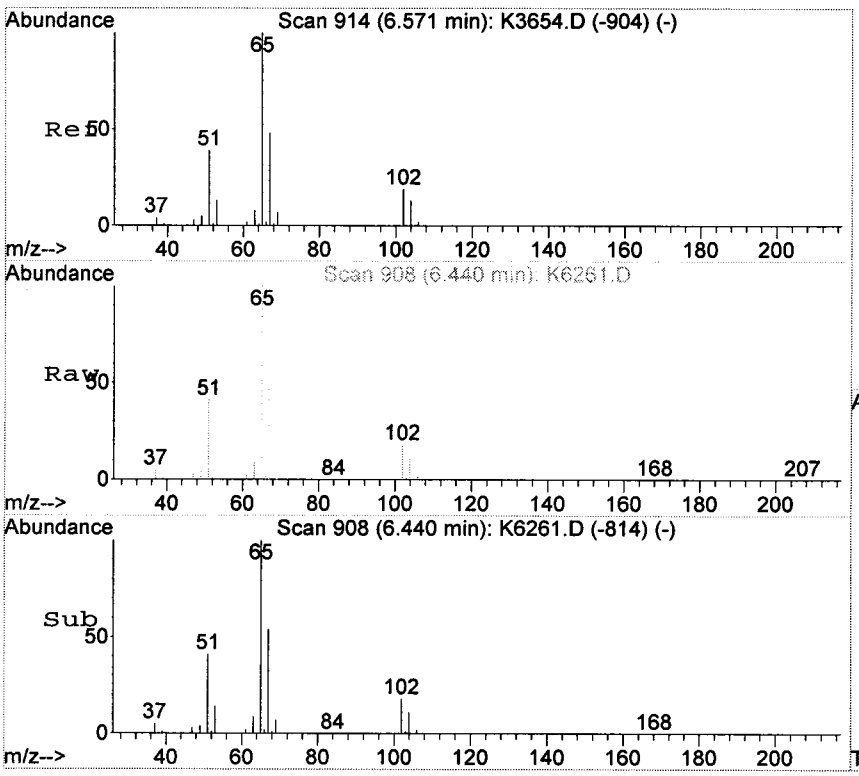


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.10 min Scan# 844
Delta R.T. -0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion:168 Resp: 382625

Ion	Ratio	Lower	Upper
168	100		
168	100.0	80.0	120.0
99	63.0	45.9	68.9
137	17.4	12.7	19.1

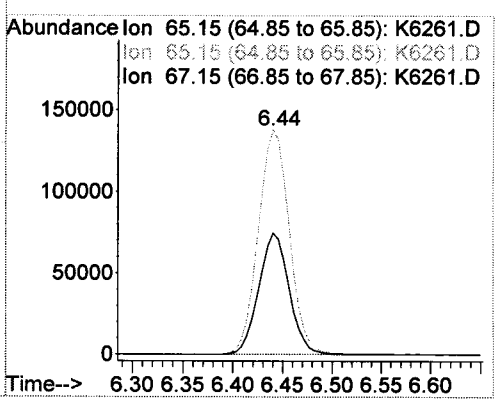


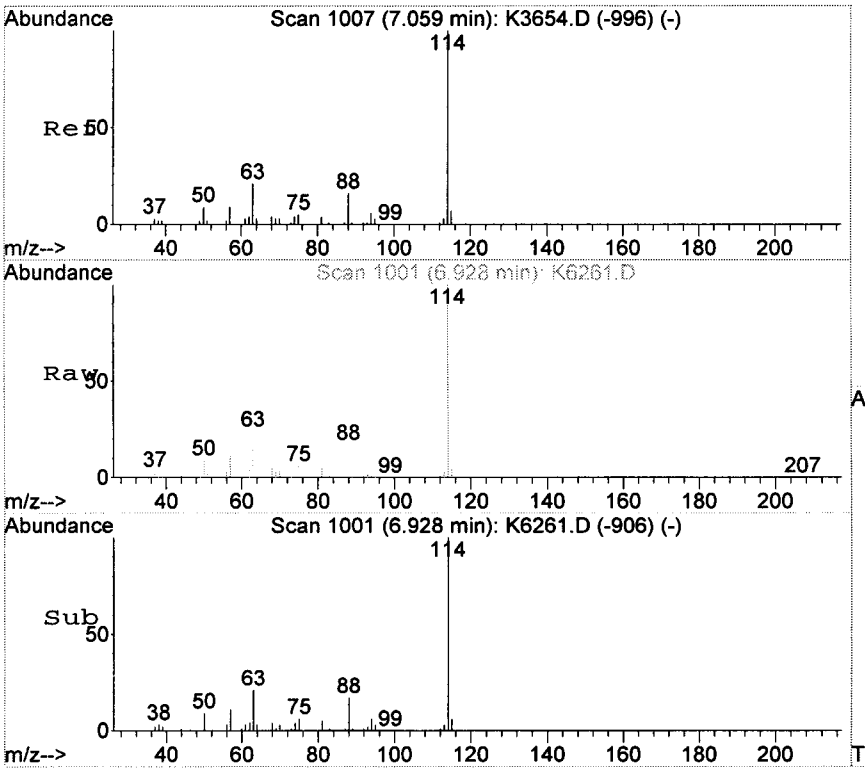


#30
1,2-Dichloroethane-d4
Concen: 51.23 UG
RT: 6.44 min Scan# 908
Delta R.T. -0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion: 65 Resp: 300403

Ion	Ratio	Lower	Upper
65	100		
65	100.0	80.0	120.0
67	52.9	40.4	60.6

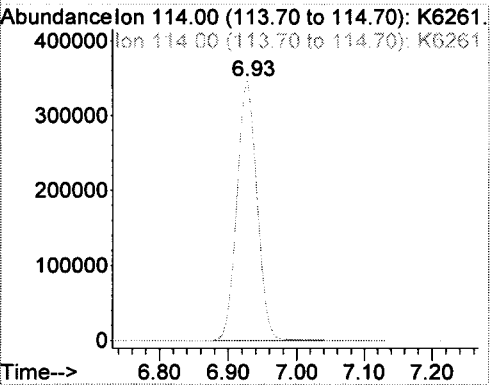


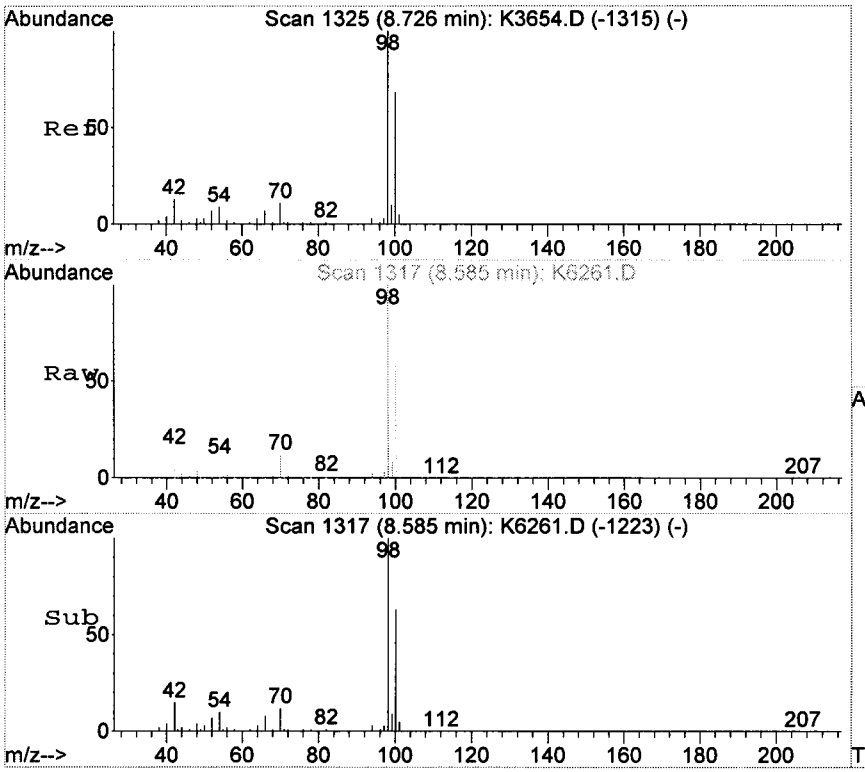


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.93 min Scan# 1001
Delta R.T. 0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion:114 Resp: 701427

Ion	Ratio	Lower	Upper
114	100		
114	100.0	80.0	120.0

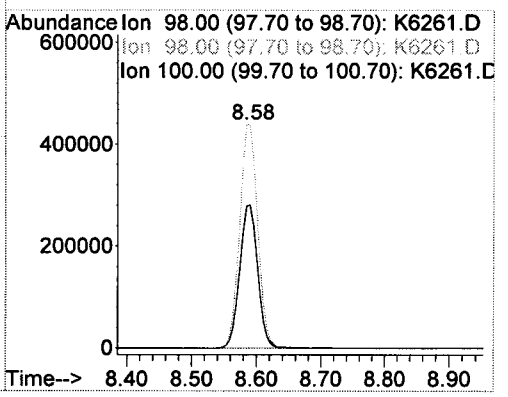


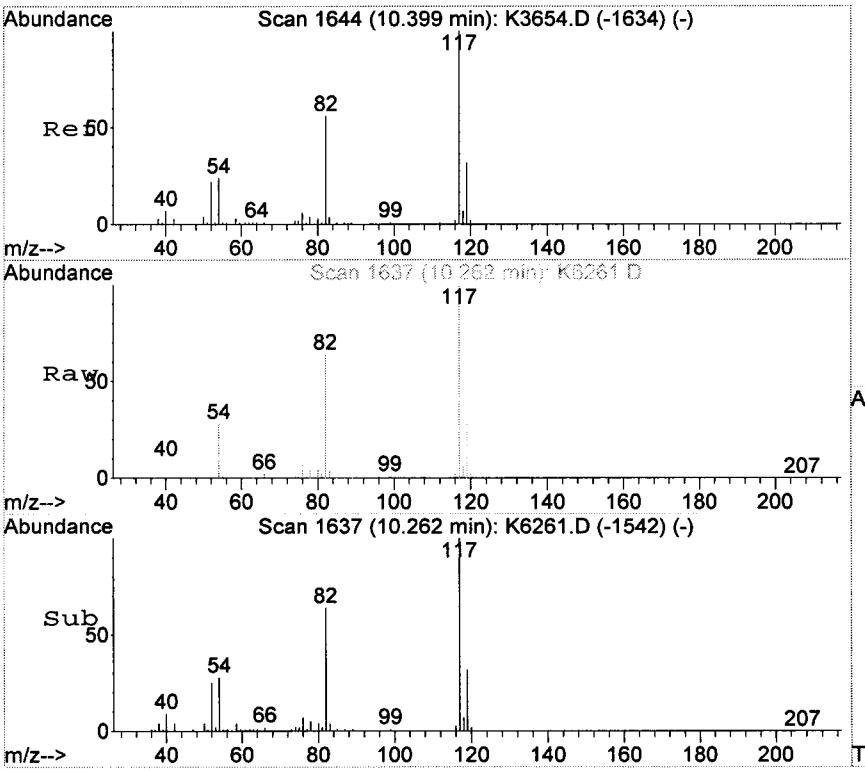


#41
Toluene-d8
Concen: 48.88 UG
RT: 8.58 min Scan# 1317
Delta R.T. -0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion: 98 Resp: 845022

Ion	Ratio	Lower	Upper
98	100		
98	100.0	80.0	120.0
100	63.5	51.6	77.4

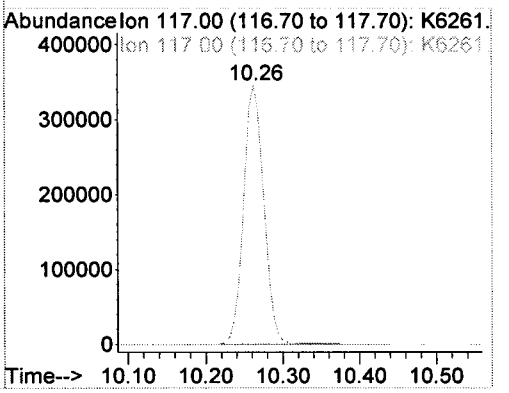


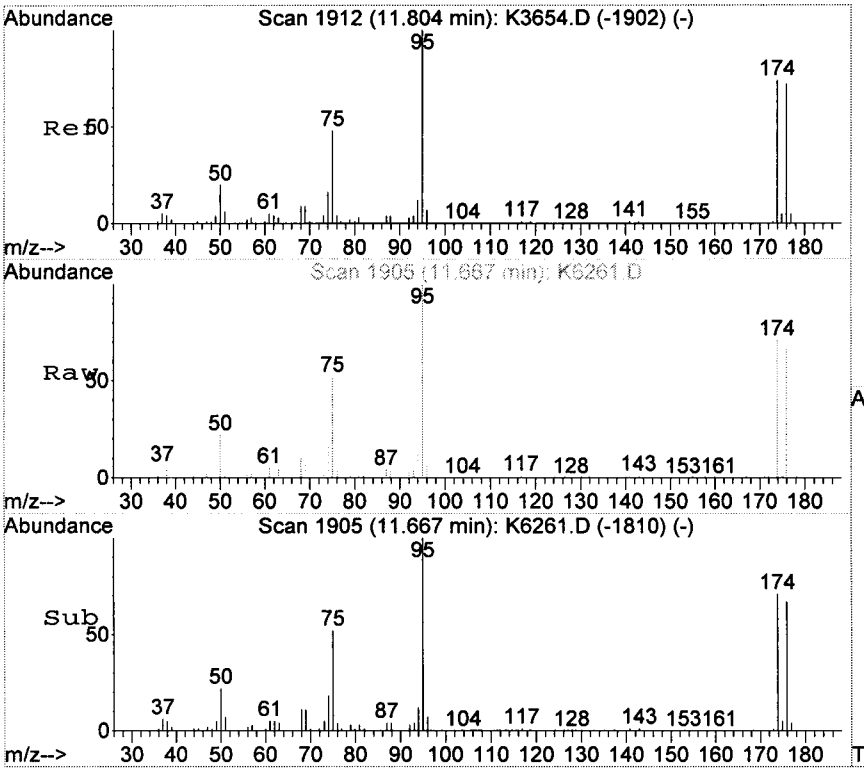


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.26 min Scan# 1637
Delta R.T. 0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion:117 Resp: 636308

Ion	Ratio	Lower	Upper
117	100		
117	100.0	80.0	120.0

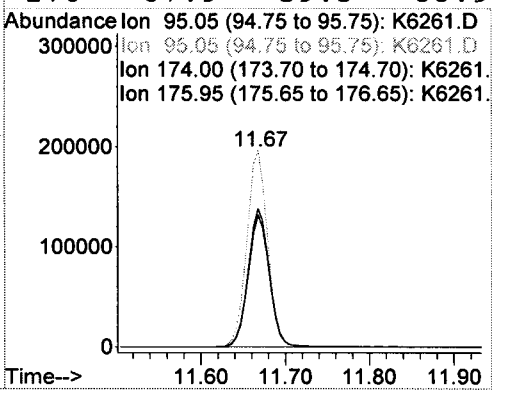




#59
Bromofluorobenzene
Concen: 47.85 UG
RT: 11.67 min Scan# 1905
Delta R.T. 0.00 min
Lab File: K6261.D
Acq: 15 Aug 2014 5:02 pm

Tgt Ion: 95 Resp: 338187

Ion	Ratio	Lower	Upper
95	100		
95	100.0	80.0	120.0
174	71.0	61.4	92.0
176	67.9	59.3	88.9



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6263.D
Acq On : 15 Aug 2014 5:59 pm
Operator : BARBARA
Sample : LCSA140815a,LCSA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 19 09:44:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	446338	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	788327	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	743870	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	336575	49.21	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.42%				
41) Toluene-d8	8.59	98	981501	50.51	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.02%				
59) Bromofluorobenzene	11.67	95	424999	51.44	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	173146	47.45	UG		99
3) Chloromethane	1.95	50	323478	44.76	UG		98
4) Vinyl chloride	2.09	62	297866	43.45	UG		98
5) Bromomethane	2.44	94	132109	42.39	UG		97
6) Chloroethane	2.58	64	180714	42.55	UG		99
7) Trichlorofluoromethane	2.87	101	198675m	41.25	UG		
8) Acrolein	3.33	56	40443	112.87	UG		95
9) 1,1-Dichloroethene	3.47	96	201042	42.30	UG	#	27
10) Acetone	3.52	43	185985	42.58	UG		99
11) Carbon disulfide	3.72	76	671542	39.86	UG		100
12) Vinyl acetate	4.92	43	1081367	48.62	UG	#	1
13) Methylene chloride	4.02	84	277184m	43.23	UG		
14) Acrylonitrile	4.34	53	388625	144.61	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	62951	96.27	UG		99
16) trans-1,2-Dichloroethene	4.34	96	242173	45.94	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	841646	49.01	UG		100
18) 1,1-Dichloroethane	4.84	63	494550	47.65	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	994533	50.84	UG		93
20) cis-1,2-Dichloroethene	5.51	96	273350	48.29	UG	#	99
21) 2,2-Dichloropropane	5.51	77	182908	43.81	UG		100
22) 2-Butanone (MEK)	5.55	43	201799	51.75	UG	#	98
23) Bromochloromethane	5.78	128	117204	47.06	UG	#	99
25) Chloroform	5.88	83	463033	47.48	UG		99
26) 1,1,1-Trichloroethane	6.07	97	323365	47.99	UG	#	100
27) Carbon tetrachloride	6.25	117	267960	44.16	UG		97
28) 1,1-Dichloropropene	6.26	75	360100	47.34	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.53	62	402531	48.50	UG		100
32) Benzene	6.49	78	1087496	47.45	UG		100
33) Trichloroethene	7.21	95	256931	47.71	UG	#	100
34) 1,2-Dichloropropane	7.48	63	293435	49.33	UG	#	100
35) Dibromomethane	7.61	93	169519	50.27	UG	#	92
36) 1,4-Dioxane	7.63	88	72340	1299.80	UG		97
37) Bromodichloromethane	7.79	83	358123	48.41	UG	#	97
38) 2-Chloroethyl vinyl ether	8.13	63	147011	58.61	UG	#	100
39) cis-1,3-Dichloropropene	8.29	75	440540	51.80	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	333094	57.45	UG		98
42) Toluene	8.66	92	627972	48.46	UG		98
43) trans-1,3-Dichloropropene	8.93	75	407258	52.21	UG		100
44) 1,1,2-Trichloroethane	9.14	83	213915	51.35	UG		94
45) Tetrachloroethene	9.29	166	218294	46.27	UG		96
46) 1,3-Dichloropropane	9.33	76	444308	53.52			

E14-07393 0088

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6263.D
Acq On : 15 Aug 2014 5:59 pm
Operator : BARBARA
Sample : LCSA140815a,LCSA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 19 09:44:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

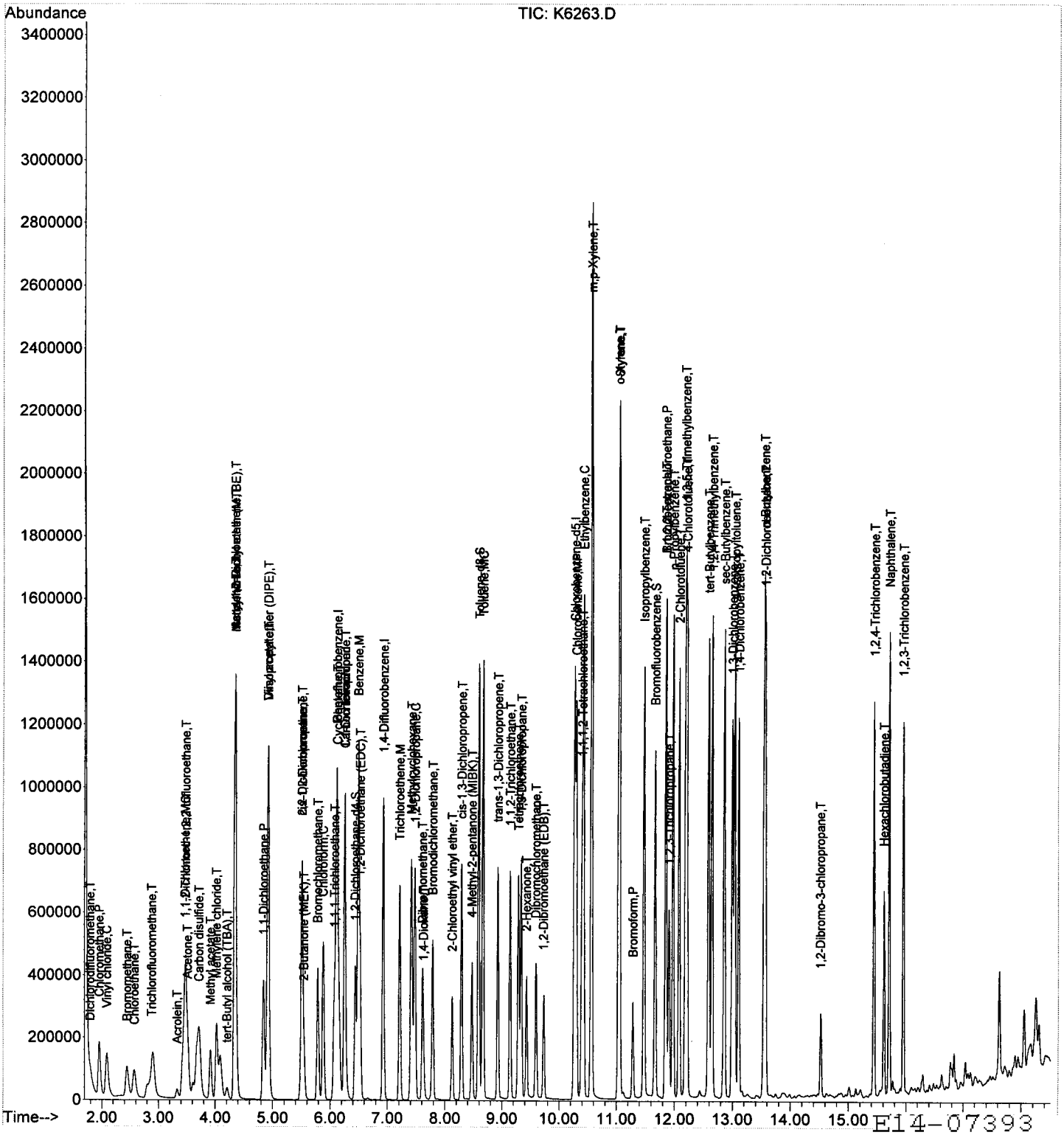
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.43	43	280601	62.43	UG	#	94
48) Dibromochloromethane	9.60	129	231562	50.58	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	238418	54.72	UG		98
51) Chlorobenzene	10.30	112	658486	46.67	UG		100
52) 1,1,1,2-Tetrachloroethane	10.39	131	219106	47.11	UG	#	70
53) Ethylbenzene	10.42	91	1178593	48.18	UG		99
54) m,p-Xylene	10.56	106	864062	95.92	UG		95
55) o-Xylene	11.03	106	447271	51.37	UG		100
56) Styrene	11.05	104	762619	52.22	UG		97
57) Bromoform	11.28	173	149792	49.05	UG	#	100
58) Isopropylbenzene	11.47	105	995782	50.60	UG		99
60) 1,1,2,2-Tetrachloroethane	11.85	83	358345	48.32	UG	#	98
61) Bromobenzene	11.85	156	263475	47.59	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	285620	50.08	UG		99
63) n-Propylbenzene	11.98	91	1378644	46.82	UG		100
64) 2-Chlorotoluene	12.08	91	866236	46.59	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	962920	49.02	UG		99
66) 4-Chlorotoluene	12.21	91	1000578	46.60	UG		99
67) tert-Butylbenzene	12.58	119	767925	51.08	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	960143	49.37	UG		99
69) sec-Butylbenzene	12.86	105	1160426	47.71	UG		100
70) 1,3-Dichlorobenzene	12.99	146	506951	45.00	UG		99
71) 4-Isopropyltoluene	13.04	119	884679	47.90	UG		100
72) 1,4-Dichlorobenzene	13.10	146	506278	45.05	UG		99
73) n-Butylbenzene	13.54	91	907224	47.69	UG		100
74) 1,2-Dichlorobenzene	13.57	146	507302	45.41	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	70238	51.10	UG	#	81
76) 1,2,4-Trichlorobenzene	15.44	180	347240	47.98	UG		97
77) Hexachlorobutadiene	15.61	225	119004	42.23	UG		100
78) Naphthalene	15.70	128	1052320	54.61	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	330382	44.94	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.48	101	189601	39.13	UG	#	1
81) Methyl acetate	3.92	43	298590	48.02	UG	#	73
82) Cyclohexane	6.13	56	471254	42.21	UG	#	51
83) Methylcyclohexane	7.42	83	386332	44.09	UG	#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6263.D
Acq On : 15 Aug 2014 5:59 pm
Operator : BARBARA
Sample : LCSA140815a,LCSA140815a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 19 09:44:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



E14-07393 0090

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6264.D
Acq On : 15 Aug 2014 6:27 pm
Operator : BARBARA
Sample : 07393-002MS,07393-002MS,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 19 09:44:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.10	168	422357	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	754168	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	709211	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	324871	50.19	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.38%				
41) Toluene-d8	8.59	98	932754	50.18	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%				
59) Bromofluorobenzene	11.67	95	401040	50.91	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.82%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	202218	58.56	UG		99
3) Chloromethane	1.94	50	300926	44.01	UG		98
4) Vinyl chloride	2.08	62	298348	45.99	UG		98
5) Bromomethane	2.42	94	130253	44.17	UG		96
6) Chloroethane	2.55	64	176318	43.88	UG		99
7) Trichlorofluoromethane	2.85	101	238658	52.37	UG		97
8) Acrolein	3.33	56	38500	113.55	UG		96
9) 1,1-Dichloroethene	3.45	96	198297	44.09	UG		97
10) Acetone	3.52	43	195747	47.35	UG		99
11) Carbon disulfide	3.68	76	696881	43.71	UG		100
12) Vinyl acetate	4.92	43	1014405	48.19	UG	#	1
13) Methylene chloride	4.02	84	263033	43.35	UG		99
14) Acrylonitrile	4.34	53	379381	149.19	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	65906	106.51	UG		99
16) trans-1,2-Dichloroethene	4.34	96	234331	46.98	UG	#	97
17) Methyl tert-butyl ether (M	4.35	73	811031	49.90	UG		100
18) 1,1-Dichloroethane	4.84	63	476237	48.49	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	929413	50.21	UG		93
20) cis-1,2-Dichloroethene	5.51	96	263517	49.20	UG	#	99
21) 2,2-Dichloropropane	5.50	77	188524	47.72	UG		100
22) 2-Butanone (MEK)	5.55	43	196925	53.37	UG	#	98
23) Bromochloromethane	5.78	128	112701	47.82	UG	#	99
25) Chloroform	5.88	83	446621	48.40	UG		99
26) 1,1,1-Trichloroethane	6.07	97	326220	51.16	UG	#	100
27) Carbon tetrachloride	6.25	117	274215	47.75	UG		96
28) 1,1-Dichloropropene	6.26	75	355157	49.34	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.52	62	375836	47.85	UG		99
32) Benzene	6.49	78	1035924	47.25	UG		100
33) Trichloroethene	7.21	95	249114	48.36	UG	#	100
34) 1,2-Dichloropropane	7.48	63	272079	47.81	UG	#	100
35) Dibromomethane	7.61	93	159944	49.58	UG	#	92
36) 1,4-Dioxane	7.64	88	70399	1322.21	UG		97
37) Bromodichloromethane	7.79	83	337855	47.74	UG	#	97
39) cis-1,3-Dichloropropene	8.29	75	407142	50.05	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	310528	55.99	UG		99
42) Toluene	8.66	92	590885	47.66	UG		99
43) trans-1,3-Dichloropropene	8.93	75	376016	50.39	UG		100
44) 1,1,2-Trichloroethane	9.14	83	196821	49.39	UG		94
45) Tetrachloroethene	9.29	166	210205	46.57	UG		96
46) 1,3-Dichloropropane	9.33	76	404130	50.88	UG		99
47) 2-Hexanone	9.43	43	246397	57.31	UG		99

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6264.D
Acq On : 15 Aug 2014 6:27 pm
Operator : BARBARA
Sample : 07393-002MS,07393-002MS,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 19 09:44:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

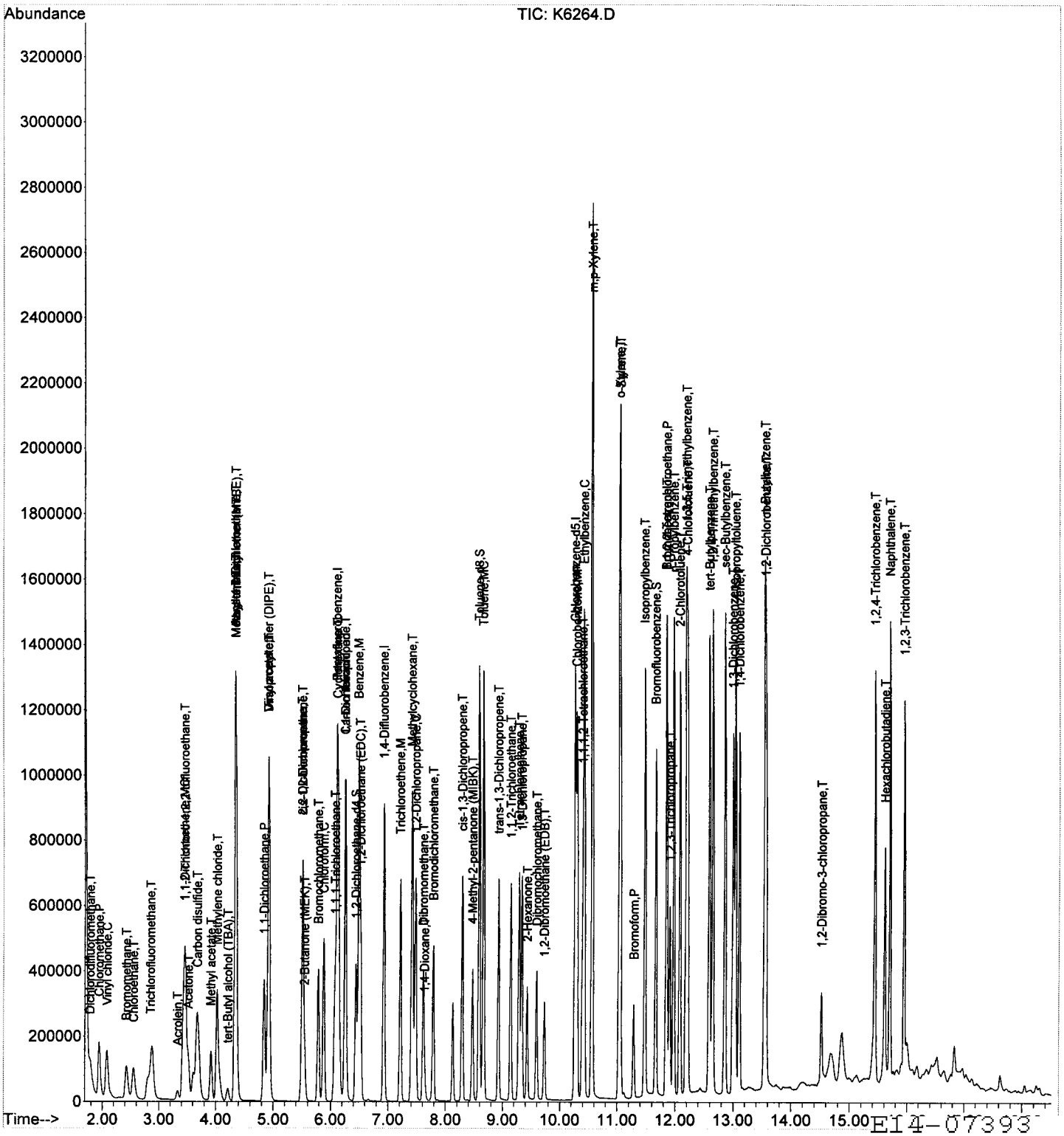
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) Dibromochloromethane	9.60	129	216590	49.45	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	219715	52.71	UG		99
51) Chlorobenzene	10.30	112	610715	45.40	UG		100
52) 1,1,1,2-Tetrachloroethane	10.39	131	209804	47.31	UG	#	70
53) Ethylbenzene	10.42	91	1116340	47.86	UG		99
54) m,p-Xylene	10.56	106	819637	95.43	UG		96
55) o-Xylene	11.03	106	422674	50.91	UG		99
56) Styrene	11.05	104	706107	50.71	UG		97
57) Bromoform	11.28	173	138451	47.55	UG	#	100
58) Isopropylbenzene	11.47	105	963461	51.35	UG		99
60) 1,1,2,2-Tetrachloroethane	11.86	83	336817	47.63	UG	#	98
61) Bromobenzene	11.85	156	246168	46.63	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	267248	49.15	UG		99
63) n-Propylbenzene	11.98	91	1323005	47.12	UG		100
64) 2-Chlorotoluene	12.08	91	824041	46.49	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	912956	48.74	UG		99
66) 4-Chlorotoluene	12.21	91	932540	45.56	UG		99
67) tert-Butylbenzene	12.59	119	739041	51.56	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	904840	48.80	UG		99
69) sec-Butylbenzene	12.86	105	1126501	48.58	UG		100
70) 1,3-Dichlorobenzene	12.99	146	472773	44.02	UG		99
71) 4-Isopropyltoluene	13.04	119	852712	48.42	UG		100
72) 1,4-Dichlorobenzene	13.10	146	469468	43.81	UG		99
73) n-Butylbenzene	13.54	91	877648	48.39	UG		100
74) 1,2-Dichlorobenzene	13.57	146	474187	44.52	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	68741	52.46	UG	#	68
76) 1,2,4-Trichlorobenzene	15.44	180	330254	47.86	UG		96
77) Hexachlorobutadiene	15.61	225	114732	42.70	UG		100
78) Naphthalene	15.70	128	1011993	55.08	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	313982	44.80	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	219046	47.41	UG	#	1
81) Methyl acetate	3.91	43	283422	47.81	UG	#	72
82) Cyclohexane	6.13	56	524159	49.24	UG	#	51
83) Methylcyclohexane	7.42	83	454169	54.36	UG	#	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6264.D
Acq On : 15 Aug 2014 6:27 pm
Operator : BARBARA
Sample : 07393-002MS,07393-002MS,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 19 09:44:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



EI4-07393 0093

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6265.D
Acq On : 15 Aug 2014 6:55 pm
Operator : BARBARA
Sample : 07393-002MSD,07393-002MSD,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 19 09:44:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.11	168	449433	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.93	114	798842	50.00	UG		0.00
50) Chlorobenzene-d5	10.26	117	741668	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.44	65	341895	49.64	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.28%				
41) Toluene-d8	8.59	98	978844	49.71	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.42%				
59) Bromofluorobenzene	11.67	95	419185	50.88	UG		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.76%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.79	85	198476	54.02	UG		99
3) Chloromethane	1.94	50	312287	42.92	UG		98
4) Vinyl chloride	2.08	62	307282	44.52	UG		98
5) Bromomethane	2.43	94	131848	42.01	UG		97
6) Chloroethane	2.55	64	182808	42.75	UG		99
7) Trichlorofluoromethane	2.86	101	247887	51.12	UG		97
8) Acrolein	3.33	56	37856	104.92	UG		95
9) 1,1-Dichloroethene	3.45	96	205474	42.93	UG	#	82
10) Acetone	3.52	43	193184	43.92	UG		98
11) Carbon disulfide	3.68	76	724121	42.68	UG		100
12) Vinyl acetate	4.92	43	1031206	46.04	UG	#	1
13) Methylene chloride	4.02	84	271459	42.04	UG		99
14) Acrylonitrile	4.34	53	377468	139.49	UG	#	100
15) tert-Butyl alcohol (TBA)	4.21	59	64504	97.97	UG		99
16) trans-1,2-Dichloroethene	4.34	96	246551	46.45	UG	#	72
17) Methyl tert-butyl ether (M	4.35	73	830143	48.00	UG		100
18) 1,1-Dichloroethane	4.84	63	497017	47.56	UG	#	100
19) Diisopropyl ether (DIPE)	4.92	45	965250	49.00	UG		94
20) cis-1,2-Dichloroethene	5.51	96	276205	48.46	UG	#	99
21) 2,2-Dichloropropane	5.51	77	197171	46.90	UG		100
22) 2-Butanone (MEK)	5.55	43	192059	48.91	UG	#	98
23) Bromochloromethane	5.78	128	115658	46.12	UG	#	98
25) Chloroform	5.88	83	464842	47.34	UG		99
26) 1,1,1-Trichloroethane	6.07	97	337350	49.72	UG	#	100
27) Carbon tetrachloride	6.25	117	289390	47.36	UG		96
28) 1,1-Dichloropropene	6.26	75	370532	48.37	UG	#	59
29) 1,2-Dichloroethane (EDC)	6.53	62	388992	46.55	UG		100
32) Benzene	6.49	78	1077884	46.41	UG		100
33) Trichloroethene	7.21	95	258548	47.38	UG	#	100
34) 1,2-Dichloropropane	7.48	63	286725	47.57	UG	#	100
35) Dibromomethane	7.61	93	162651	47.60	UG	#	91
36) 1,4-Dioxane	7.64	88	72532	1286.09	UG		97
37) Bromodichloromethane	7.79	83	351972	46.95	UG	#	97
39) cis-1,3-Dichloropropene	8.29	75	424600	49.27	UG		100
40) 4-Methyl-2-pentanone (MIBK	8.47	43	307037	52.26	UG		98
42) Toluene	8.66	92	619650	47.19	UG		99
43) trans-1,3-Dichloropropene	8.93	75	387455	49.02	UG		100
44) 1,1,2-Trichloroethane	9.14	83	200118	47.41	UG		95
45) Tetrachloroethene	9.29	166	220258	46.07	UG		97
46) 1,3-Dichloropropane	9.33	76	415191	49.35	UG		99
47) 2-Hexanone	9.43	43	241644	53.06			

E14-07393 0094

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6265.D
Acq On : 15 Aug 2014 6:55 pm
Operator : BARBARA
Sample : 07393-002MSD,07393-002MSD,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 19 09:44:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration

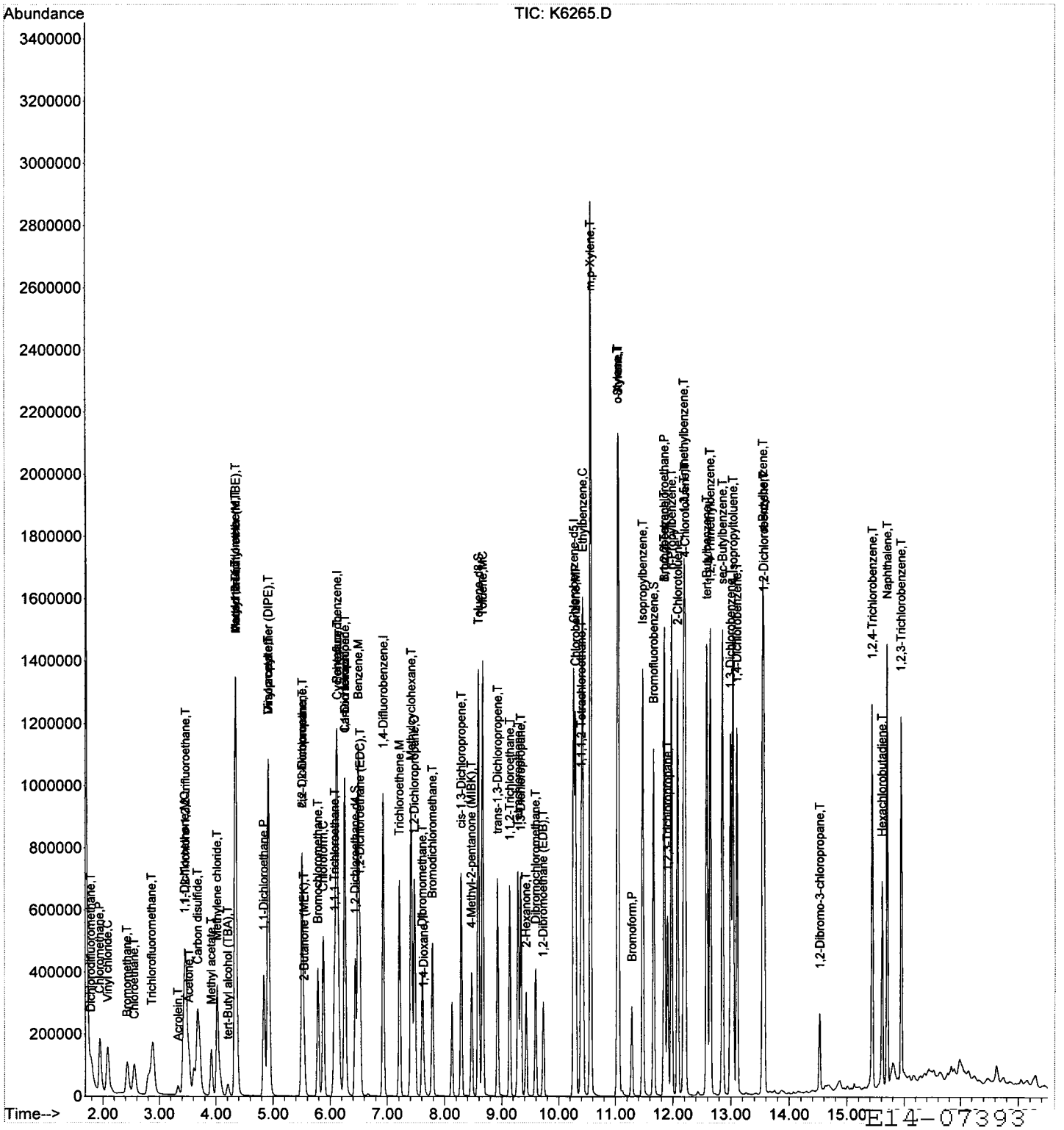
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
48) Dibromochloromethane	9.60	129	223349	48.14	UG		97
49) 1,2-Dibromoethane (EDB)	9.73	107	221409	50.15	UG		99
51) Chlorobenzene	10.30	112	637901	45.35	UG		100
52) 1,1,1,2-Tetrachloroethane	10.39	131	216505	46.69	UG	#	70
53) Ethylbenzene	10.42	91	1167295	47.86	UG		99
54) m,p-Xylene	10.56	106	851370	94.79	UG		95
55) o-Xylene	11.03	106	438318	50.49	UG		100
56) Styrene	11.05	104	731068	50.20	UG		97
57) Bromoform	11.28	173	140469	46.13	UG	#	100
58) Isopropylbenzene	11.47	105	996648	50.79	UG		99
60) 1,1,2,2-Tetrachloroethane	11.85	83	342646	46.34	UG	#	98
61) Bromobenzene	11.85	156	252515	45.74	UG	#	40
62) 1,2,3-Trichloropropane	11.91	75	266759	46.91	UG		99
63) n-Propylbenzene	11.98	91	1388404	47.29	UG		100
64) 2-Chlorotoluene	12.08	91	860544	46.42	UG		99
65) 1,3,5-Trimethylbenzene	12.19	105	954807	48.75	UG		99
66) 4-Chlorotoluene	12.21	91	981154	45.83	UG		99
67) tert-Butylbenzene	12.59	119	764752	51.02	UG		95
68) 1,2,4-Trimethylbenzene	12.65	105	939590	48.46	UG		99
69) sec-Butylbenzene	12.86	105	1171662	48.31	UG		100
70) 1,3-Dichlorobenzene	12.99	146	492150	43.82	UG		99
71) 4-Isopropyltoluene	13.04	119	896831	48.70	UG		100
72) 1,4-Dichlorobenzene	13.10	146	486937	43.45	UG		100
73) n-Butylbenzene	13.54	91	919929	48.50	UG		100
74) 1,2-Dichlorobenzene	13.57	146	488464	43.85	UG		99
75) 1,2-Dibromo-3-chloropropan	14.52	75	66973	48.87	UG	#	82
76) 1,2,4-Trichlorobenzene	15.44	180	346150	47.97	UG		96
77) Hexachlorobutadiene	15.62	225	123142	43.83	UG		100
78) Naphthalene	15.70	128	1011834	52.66	UG		100
79) 1,2,3-Trichlorobenzene	15.95	180	326732	44.57	UG		98
80) 1,1,2-Trichloro-1,2,2-trif	3.47	101	219977	45.53	UG	#	1
81) Methyl acetate	3.91	43	280655	45.27	UG	#	71
82) Cyclohexane	6.13	56	527093	47.35	UG	#	51
83) Methylcyclohexane	7.42	83	453738	51.93	UG	#	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15-14\
Data File : K6265.D
Acq On : 15 Aug 2014 6:55 pm
Operator : BARBARA
Sample : 07393-002MSD,07393-002MSD,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 19 09:44:32 2014
Quant Method : C:\MSDCHEM\1\METHODS\K8081314.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Aug 13 15:05:57 2014
Response via : Initial Calibration



VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

DATE: 8/13/2014

INSTRUMENT: MSD-K

TUNE FILE: BFB_VO-

SEQUENCE FILE:

METHOD/CAL FILE: 8260B

ANALYST: Barbara Berberian

FRACTION:

BATCH: EA ####

STANDARD	LOG #	CONC.
BFB	L2498	25µg/mL
ISTD/SURR	L2493	150 µg/mL
Primary Mix	L2491	40 µg/mL
Primary Ac/Ac	L2490	1000 µg/mL
1,4-DIOXANE	L2497	10,000 µg/mL
Secondary Mix	L2495	40 µg/mL
Secondary Ac/Ac	L2494	1000 µg/mL

Vial #	Data File	Case #	Samp #	Vol (ml)	% Moist	Test	Method	VIAL #	pH<2?	Status
1	K6153	BFBA140813		5	100		8260B			9:47
2	K6154	ICC001		5	100		8260B			RR
3	K6155	ICC002		5	100		8260B			RR
4	K6156	ICC005		5	100		8260B			OK
5	K6157	ICC020		5	100		8260B			OK
6	K6158	ICC100		5	100		8260B			OK
7	K6159	ICC150		5	100		8260B			OK
8	K6160	ICC200		5	100		8260B			OK
9	K6161	RB		5	100		8260B			
10	K6162	ICC002		5	100		8260B			OK
11	K6163	ICC001		5	100		8260B			
12	K6164	RB		5	100		8260B			
13	K6165	RB		5			8260B			
14	K6166	RB		5			8260B			
15	K6167	ICV100		5			8260B			
16	K6168	RB		5			8260B			
17	K6169	BFBA140813a		5			8260B			5:25
1	K6170	CCV100		5			8260B			OK
2	K6171	RB		5			8260B			
3	K6172	RB		5			8260B			
4	K6173	BLKA140813a		5			8260B			OK
5	K6174	7132	4	5	100	TCL VO + 15	8260C	2	YES	OK
6	K6175	LCSA140813a		5			8260B			OK
7	K6176	7510	1MS	5			8260B		YES	OK
8	K6177	7510	1MSD	5			8260B		YES	OK
9	K6178	RB		5			8260B			
10	K6179	7132	6	0.1	100	TCL VO + 15	8260C	2	YES	OK
11	K6180	7132	7	0.1	100	TCL VO + 15	8260C	2	YES	OK
12	K6181	7469	1	0.005	100	TCL VO	8260C	2	YES	OK
13	K6182	7438	1	5	100	TCL VO + 15	8260C	2	YES	OK
14	K6183	7438	2	2.5	100	TCL VO + 15	8260C	2	YES	OK
15	K6184	7438	3	5	100	TCL VO + 15	8260C	2	YES	OK
16	K6185	7504	1	5	100	TCL VO + 15	8260C	2	YES	OK
17	K6186	7304	1	0.5	100	BTEX + MTBE & TBA	8260C	2	YES	OK
18	K6187	7304	2	2.5	100	BTEX + MTBE & TBA	8260C	2	YES	OK
19	K6188	7304	3	5	100	BTEX + MTBE & TBA	8260C	2	YES	OK
20	K6189	7304	4	5	100	BTEX + MTBE & TBA	8260C	2	YES	OK
21	K6190	7304	5	5	100	BTEX + MTBE & TBA	8260C	2	YES	OK

DATE: 8/13/2014

INSTRUMENT: MSD-K

TUNE FILE: BFB_VO-

SEQUENCE FILE:

METHOD/CAL FILE: 8260B

ANALYST: Barbara Berberian

FRACTION:

BATCH: EA ####

STANDARD	LOG #	CONC.
BFB	L2498	25µg/mL
ISTD/SURR	L2493	150 µg/mL
Primary Mix	L2491	40 µg/mL
Primary Ac/Ac	L2490	1000 µg/mL
1,4-DIOXANE	L2497	10,000 µg/mL
Secondary Mix	L2495	40 µg/mL
Secondary Ac/Ac	L2494	1000 µg/mL

Vial #	Data File	Case #	Samp #	Vol (ml)	% Moist	Test	Method	VIAL #	pH<2?	Status
22	K6191	7539	1	5	100	TCL VO + 15	8260C	2	YES	OK
23	K6192	7539	1DL	1	100	TCL VO + 15	8260C	2	YES	OK
24	K6193	7548	1	5	100	TCL VO + 15	8260C	2	YES	OK
25	K6194	7510	1	5	100	TCL VO + 15	8260C	2	YES	OK
26	K6195	7448	1	5	100	Benzene	8260C	2	YES	OK

DATE: 8/15/2014

INSTRUMENT: MSD-K

TUNE FILE: BFB_VO-

SEQUENCE FILE:

METHOD/CAL FILE: 8260B

ANALYST: Barbara Berberian

FRACTION:

BATCH: EA ####

STANDARD	LOG #	CONC.
BFB	L2498	25µg/mL
ISTD/SURR	L2493	150 µg/mL
Primary Mix	L2491	40 µg/mL
Primary Ac/Ac	L2490	1000 µg/mL
1,4-DIOXANE	L2497	10,000 µg/mL
Secondary Mix	L2495	40 µg/mL
Secondary Ac/Ac	L2494	1000 µg/mL

Vial #	Data File	Case #	Samp #	Vol (ml)	% Moist	Test	Method	VIAL #	pH<2?	Status
1	K6257	BFBA140815a		5	100		8260B			3:01
2	K6258	CCV100		5	100		8260B			OK
3	K6259	RB		5	100		8260B			
4	K6260	RB		5	100		8260B			
5	K6261	BLKA140815a		5	100		8260B			OK
6	K6262	7509	1	2.5	100	TCL VO + 15	8260C	2	YES	OK
7	K6263	LCSA140815a		5	100		8260B			OK
8	K6264	7393	2MS	5	100		8260B			OK
9	K6265	7393	2MSD	5	100		8260B			OK
10	K6266	RB		5	100		8260B			
11	K6267	7650	3	5	100	TCL VO + 15	8260C	2	YES	RR Carryover
12	K6268	7650	4	5	100	TCL VO + 15	8260C	2	YES	RR Carryover
13	K6269	7393	2	5	100	TCL VO	8260C	2	YES	OK
14	K6270	7458	4	5	100	TCL VO + 15 + TBA	8260C	2	YES	OK
15	K6271	7595	7	5	100	GEI GP VO (EPA 8260C)	8260C	2	YES	OK
16	K6272	7564	2	5	100	TCL VO + 15	8260C	2	YES	OK
17	K6273	7650	1	1	100	TCL VO + 15	8260C	2	YES	OK
18	K6274	7650	2	1	100	TCL VO + 15	8260C	2	YES	RR 2X
19	K6275	7650	5	1	100	TCL VO + 15	8260C	2	YES	RR 2X
20	K6276	7458	1	1	100	TCL VO + 15 + TBA	8260C	2	YES	OK
21	K6277	7564	1	5	100	TCL VO + 15	8260C	2	YES	OK
22	K6278	7603	1	5	100	TCL VO + 15	8260C	2	YES	OK
23	K6279	7603	2	5	100	TCL VO + 15	8260C	2	YES	OK
24	K6280	7458	2	0.25	100	TCL VO + 15 + TBA	8260C	2	YES	RR 10X
25	K6281	RB		5	100		8260B			
26	K6282	7458	3	0.1	100	TCL VO + 15 + TBA	8260C	2	YES	RR 2X
27	K6283	BFBA140815b		5	100		8260B			3:17
28	K6284	CCV100		5	100		8260B			OK
29	K6285	RB		5	100		8260B			
30	K6286	RB		5	100		8260B			
31	K6287	BLKA140815b		5	100		8260B			OK
32	K6288	7656	3	0.005	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
33	K6289	LCSA140815b		5	100		8260B			OK
34	K6290	7656	4MS	5	100		8260B			OK
35	K6291	MSD	4MSD	5	100		8260B			OK
36	K6292	RB		5	100		8260B			
37	K6293	7656	20	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
38	K6294	7656	21	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK

DATE: 8/15/2014

INSTRUMENT: MSD-K

TUNE FILE: BFB_VO-

SEQUENCE FILE:

METHOD/CAL FILE: 8260B

ANALYST: Barbara Berberian

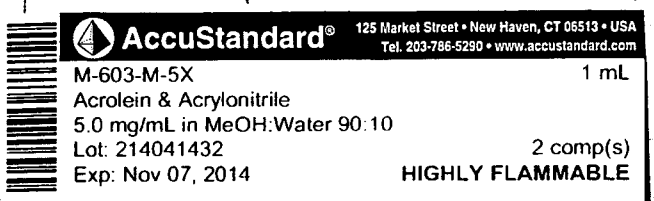
FRACTION:

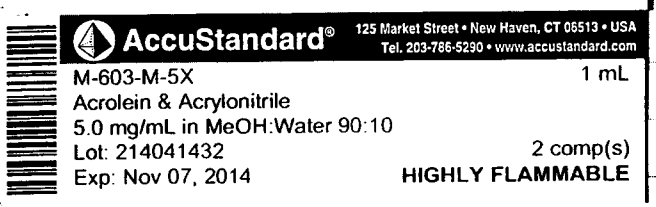
BATCH: EA ####

STANDARD	LOG #	CONC.
BFB	L2498	25µg/mL
ISTD/SURR	L2493	150 µg/mL
Primary Mix	L2491	40 µg/mL
Primary Ac/Ac	L2490	1000 µg/mL
1,4-DIOXANE	L2497	10,000 µg/mL
Secondary Mix	L2495	40 µg/mL
Secondary Ac/Ac	L2494	1000 µg/mL

Vial #	Data File	Case #	Samp #	Vol (ml)	% Moist	Test	Method	VIAL #	pH<2?	Status
39	K6295	7656	22	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
40	K6296	7656	4	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
41	K6297	7656	6	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
42	K6298	7656	7	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
43	K6299	7656	8	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
44	K6300	7656	10	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
45	K6301	7656	11	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
46	K6302	7656	12	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
47	K6303	7656	13	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
48	K6304	7656	14	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
49	K6305	7656	16	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
50	K6306	7656	18	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
51	K6307	7656	17	5	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK
52	K6308	7656	2	0.005	100	Level TCL VO for 8260+8011	8260C/8011	2	YES	OK

1490 Primary Acrolein / Acrylonitrile @ 1000 ppm

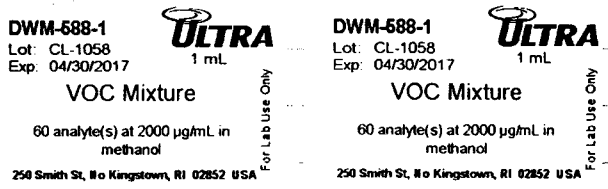

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 214041432 2 comp(s)
Exp: Nov 07, 2014 HIGHLY FLAMMABLE


AccuStandard® 125 Market Street • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 214041432 2 comp(s)
Exp: Nov 07, 2014 HIGHLY FLAMMABLE

2mls of M-603-M-5X received 5/14/14 exp. 11/7/14 into 10mls MeOH exp. 8/18/14

1491 Primary Working Standard @ 40ppm

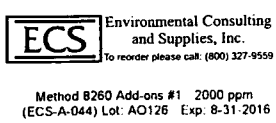
2mls of DWM-588-1 received 5/1/14 opened 5/29/14

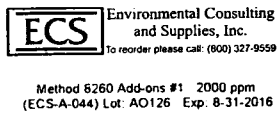

DWM-588-1 ULTRA 1 mL
Lot: CL-1058
Exp: 04/30/2017
VOC Mixture
60 analyte(s) at 2000 µg/mL in methanol
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

DWM-588-1 ULTRA 1 mL
Lot: CL-1058
Exp: 04/30/2017
VOC Mixture
60 analyte(s) at 2000 µg/mL in methanol
250 Smith St, No Kingstown, RI 02852 USA
For Lab Use Only

5/29/14

2mls of 2-Chloroethyl vinyl ether @ 2000 ppm
ECS-A-040 lot CVE020 received 12/24/13 exp 11-14-15
2mls of 8260 Ketones @ 2000 ppm
ECS-A-043 lot KTN01 received 12/24/13 exp 10-14-15
2mls of ECS-A-044 @ 2000 ppm received


ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559
Method 8260 Add-ons #1 2000 ppm
(ECS-A-044) Lot: AO126 Exp: 8-31-2016


ECS Environmental Consulting and Supplies, Inc. To reorder please call: (800) 327-9559
Method 8260 Add-ons #1 2000 ppm
(ECS-A-044) Lot: AO126 Exp: 8-31-2016

continued on next page

L2491 continued

Primary Working Standard continued

SPEX CertiPrep
Calibrate with Confidence™

Cat# VO-IALNJ-1
Lot# C1130926004
Date Opened 5/29/14

Custom

Contains the following in | Methanol (Purge & Trap Grade)

2000 µg/mL	1,1,2-Trichlorotrifluoroethane
2000 µg/mL	Cyclohexane
2000 µg/mL	Methyl acetate
2000 µg/mL	Methylcyclohexane

VO-IALN C113092

SPEX CertiPrep
Calibrate with Confidence™

Cat# VO-IALNJ-1
Lot# C1130926004
Date Opened 5/29/14

Custom

Contains the following in | Methanol (Purge & Trap Grade)

2000 µg/mL	1,1,2-Trichlorotrifluoroethane
2000 µg/mL	Cyclohexane
2000 µg/mL	Methyl acetate
2000 µg/mL	Methylcyclohexane

VO-IALN C113092

2mls of SPEX VO-IALNJ-1 @ 2000 ppm

0.8mls of LS990 TBA @ 10,000 ppm
made 11/12/13 expired 11/12/14

0.8mls of LS982 DIPE @ 10,000 ppm
made 8/13/13 expires 8/13/14

into 100mls MeOH

expires 8/29/14

L2492
prep 6/2/2014
exp 9/1/2014
ytsh

250 ppm screening work solution
1mL (Cat# VO-2ALNJ-2) (Lot# C113060Cnd) at 2000 µg/mL
dilute with 1mL MeOH.

L2493 8260 internal Standard / surr
rec 6/17/14 5ml LS1010 at 2500 ug/ml (exp. 6/9/15)
exp 9/17/14 5ml LS1011 at 2500 ug/ml (exp 6/9/15) } in 50 ml meoh

L2494 624 internal std / surr.
rec 6/17/14 3ml LS1010 at 2500 ug/ml (exp 6/9/15)
exp 9/17/14 3ml LS1011 at 2500 ug/ml (exp 6/9/15) } dilut to 50 ml meoh

L2494 Secondary Acrolein / Acrylonitrile @ 10000 ppm
6/26/14 1ml of ECS-A-038 lot: 040114 exp. 7/1/14
6/26/14 into 10ml of MeOH

L2495 Secondary source of 40 ppm
6/30/14 98 ml of L2478 MTBE/TMA/DIPE @ 5000ppm/10000ppm/5000ppm
6/30/14 made 3/26/14 exp. 03/26/15
2mls of ECS-A-049 Add-Ons Mix #3 2000 ppm
lot: A0309 received 2/24/14 exp. 11/16/2015
2mls of ECS-5242/8260 Main Mix 2000ppm
ECS-A-036 lot: 524MM20, received 10/08/13 exp.
11/24/14
4mls of Volatiles Gases Mix 1000ppm ECS-A-043
lot: VGM022, received 01/24/14 exp. 11/6/2015
2mls of M-8260-ADD-10X received 6/30/14
exp. 10/25/2014 into 100ml of MeOH

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214061477
Exp: Oct 25, 2014
Rec 6/30/14
8 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280
Storage: Freeze (<-10° C)

M-8260-ADD-10X
Lot: 214061477
Exp: Oct 25, 2014

Date Opened:

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C)

AccuStandard®
125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com

M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 214061477
Exp: Oct 25, 2014

1 mL
Rec. 6/30/14
8 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311
H332 H301 P338 P360
P331 P404 P262 P202
P264 P284 P280

Storage: Freeze (<-10° C)

M-8260-ADD-10X
Lot: 214061477
Exp: Oct 25, 2014

Date Opened:

Method 8260 Additions
2.0 mg/mL in MeOH

Storage: Freeze (<-10° C)

L2496 Internal Standard for 624 method 150 ppm
P.07/01/14 3mls of LCS 9744 @ 2500 ug/ml made 6/8/14
E10/01/14 3mls of LCS 1010 1011 @ 2500 ug/ml made 6/8/14
expires 6/9/15 into 50ml 624 mix

L2497 1,4-Dioxane @ 10,000 ppm transferred 1ml of
P.07/01/14 ECS-A-DIOX received 06/07/13 Lot: 111-72
Ex.10/07/14 exp. 11/17/15

L2
one 71
exp 10/
-yar

L2498 BFB tuning .25ppm
R. 07/10/14 .25ml of EES-A017 Lot: BFB018 received
E. 10/10/14 11/28/12 Exp. 10/18/14 into .25ml of MeOH
final volume 1ml

L2499 524.2 Secondary @ 20ppm

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA
Tel. 203-786-5290 • www.accustandard.com
M-502-10X R-3-20-14 1 mL
Method 502.2 - Volatile Organic Compounds
2.0 mg/mL in MeOH
Lot: 213111199 60 comps.
Exp: Dec 12,2016 HIGHLY FLAMMABLE

0.1ml of M-502-10X into 10mls MeOH

opened 7/10/14

expires 10/10/14

L2500 524.2 REV4 Secondary @ 20ppm

AccuStandard® 125 Market St. • New Haven, CT 06513 • US
Tel. 203-786-5290 • www.accustandard.co
M-524R-B 1 mL
Additions to Method 524.2
2.0 mg/mL in MeOH
Lot: 214011198 24 comps.
Exp: Jul 20,2014 HIGHLY FLAMMABLE

1ml of M-524R-S into 10mls MeOH

opened 7/10/14

expires 10/10/14

L2501 50ppm BFB at in to for screen 1ml of "2498" (250 ppm BFB stock) in to 5ml MeOH.
prep 7/18/14
exp 10/18/14

Department: Volatiles - Aqueous RUSH

E 1 4 - 0 7 3 9 3

IAL Case No.: E14-07393
Client Name: GEI Consultants Inc. - Montclair
Client/Project: GEI-MTCLR/GREENPOINT PHASE II WC

QC EDD: NA

Received: 8/7/14 12:17
Logged: 8/7/14 11:18
Reviewed: 8/7/14 14:45 Kim
Status: Reviewed/No Changes

Format: Category B
QC Req.: NY Part 375-6.8(b) (RUSCO)

Test Name	Sample ID	Result Due Date/Time	RTAT	Test Status	Matrix-Unit	QA Method	Client ID/Depth	S. Date	# CTR
TCL VO	07393-002	**8/20 16:00**	R-72	Proc -K	Aqueous-ug/L	8260C	GPECWC081414	8/14	2

* Hold/T = Test on holddependent on TPHC

Client Default Notes **10/15/12 2:45 pm**
As per Jaime Wargo - all pdf files must be bookmarked

REV 2 - taken by kim on 08/15/2014 10:21
REV 02 DUE 8/20

SAMPLE 002 RECEIVED 8/14/14

7690
7192

E14-07393 0107

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15 -14\
Data File : SK06454.D
Signal(s) : FID1A.CH
Acq On : 15 Aug 2014 10:50
Operator :
Sample : 07393-002,A,5ml
Misc : 08/15/14,08/15/14
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 15 11:01:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\STK0812.M
Quant Title :
QLast Update : Tue Aug 12 10:48:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
Internal Standards						
1) I	BFB	5.74	3429306	500.000	ng	
Target Compounds						
13) T	Naphthalene	7.02	24285	2.775	ng	m

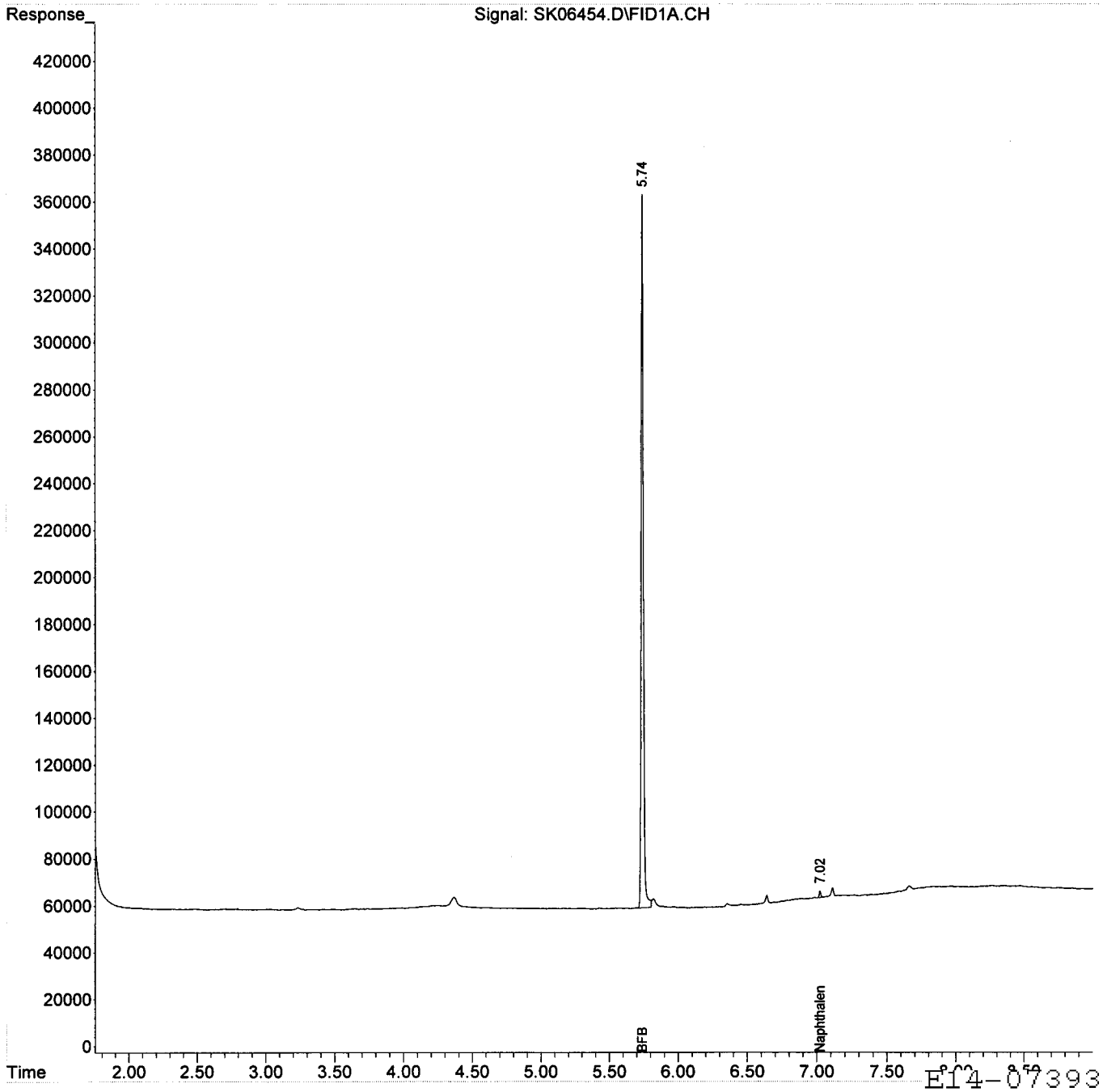
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\08-15 -14\
Data File : SK06454.D
Signal(s) : FID1A.CH
Acq On : 15 Aug 2014 10:50
Operator :
Sample : 07393-002,A,5ml
Misc : 08/15/14,08/15/14
ALS Vial : 4 Sample Multiplier: 1

Integration File: EVENTS.E
Quant Time: Aug 15 11:01:09 2014
Quant Method : C:\MSDCHEM\1\METHODS\STK0812.M
Quant Title :
QLast Update : Tue Aug 12 10:48:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Ef4-07393 0109

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 08/11/2014

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA140808-14	AQUEOUS	98		82		100		83	
PCB	LCSA140808-14	AQUEOUS	100		97		93		92	
PCB	07393-001MS	AQUEOUS	69		87		70		88	
PCB	07393-001MSD	AQUEOUS	67		87		68		89	
FB_08062	E14-07344-011	AQUEOUS	100		92		93		91	
GPECWC08	E14-07393-001	AQUEOUS	77		93		86		104	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSA140808-14
Date Extracted: 08/08/2014
Date Analyzed: 08/11/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	444.5	89	40 - 140
Aroclor-1260	500	0.0	486.4	97	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

AQUEOUS PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E14-07393-001
Date Extracted: 08/08/2014
Date Analyzed: 08/11/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	589.4	118	40 - 140
Aroclor-1260	500	0.0	571.1	114	40 - 140

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	562.0	112	5	50	40 - 140
Aroclor-1260	0.0	514.0	103	10	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: Y7740.D

Instrument ID: GC-Y

Date Extracted: 08/08/2014

Matrix: AQUEOUS

Date Analyzed: 08/11/2014

Time Analyzed: 14:33

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA140808-14	08/11/2014	14:51
PCB	07393-001MS	08/11/2014	15:28
PCB	07393-001MSD	08/11/2014	15:45
FB_08062	E14-07344-011	08/11/2014	16:03
GPECWC08	E14-07393-001	08/11/2014	16:27

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.78 **DCB 1** 12.10 **TCMX 2** 2.84 **DCB 2** 12.41

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA140808-14	08/11/2014	14:33	2.78		12.10		2.84		12.41	
PCB	LCSA140808-14	08/11/2014	14:51	2.78		12.10		2.83		12.41	
PCB	07393-001MS	08/11/2014	15:28	2.78		12.10		2.84		12.41	
PCB	07393-001MSD	08/11/2014	15:45	2.78		12.10		2.83		12.41	
FB_08062	E14-07344-011	08/11/2014	16:03	2.78		12.10		2.84		12.41	
GPECWC08	E14-07393-001	08/11/2014	16:27	2.78		12.10		2.84		12.41	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7746.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 16:27
Operator : JS
Sample : GPECWC08,E14-07393-001,A,1000ml,100,5
Misc : 140808-14,08/08/14,08/07/14,5
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:35:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.84	678.0E6	1538.5E6	30.603	34.276	
Spiked Amount 200.000			Recovery =		15.30%	17.14%	
2) S DCB	12.10	12.41	256.4E6	539.0E6	37.162	41.487	
Spiked Amount 200.000			Recovery =		18.58%	20.74%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
23) L6 Aroclor-1248	4.48	5.05	614.7E6	1289.4E6	654.182	661.001	
24) L6 Aroclor-1248 {2}	5.01	5.64	297.1E6	2134.6E6	580.557	731.727	#
25) L6 Aroclor-1248 {3}	5.34	6.04	194.9E6	805.8E6	295.390	378.227	#
26) L6 Aroclor-1248 {4}	6.04	6.18	621.9E6	580.8E6	508.209	293.977	#
27) L6 Aroclor-1248 {5}	6.33	6.54	185.0E6	237.1E6	223.711	217.363	
Sum Aroclor-1248			1913.6E6	5047.7E6	2262.050	2282.296	
Average Aroclor-1248					452.410	456.459	
28) L7 Aroclor-1254	6.43	7.03	558.2E6	1381.1E6	440.720	519.788	
29) L7 Aroclor-1254 {2}	6.86	7.61	338.0E6	951.5E6	422.140	434.516	
30) L7 Aroclor-1254 {3}	7.03	8.22	714.0E6	1292.6E6	451.094	604.073	#
31) L7 Aroclor-1254 {4}	7.47	8.45	914.7E6	804.6E6	559.725	576.800	
32) L7 Aroclor-1254 {5}	8.32	9.04	917.2E6	2073.3E6	589.172	605.581	
Sum Aroclor-1254			3442.1E6	6503.0E6	2462.851	2740.758	
Average Aroclor-1254					492.570	548.152	
Sum Aroclor-1260			0	0	N.D.	N.D.	
Average Aroclor-1260					0.000	0.000	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

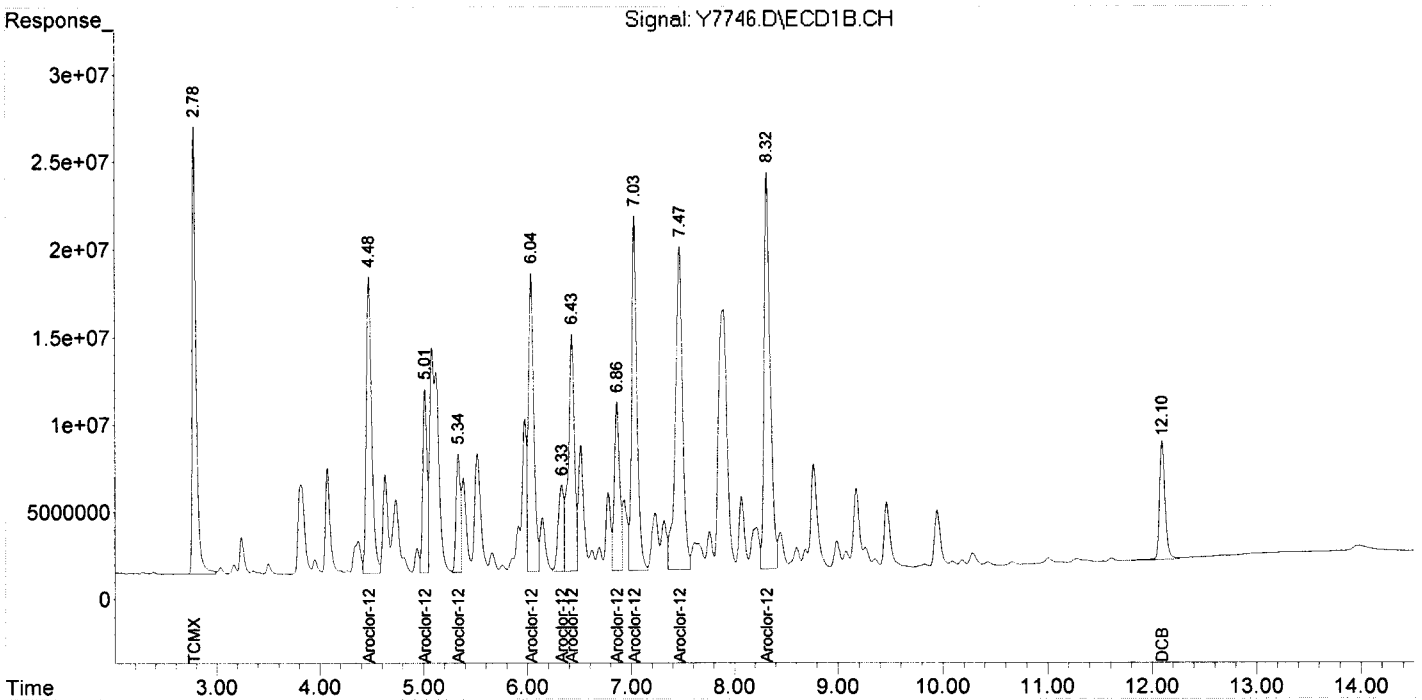
E14-07393 0118

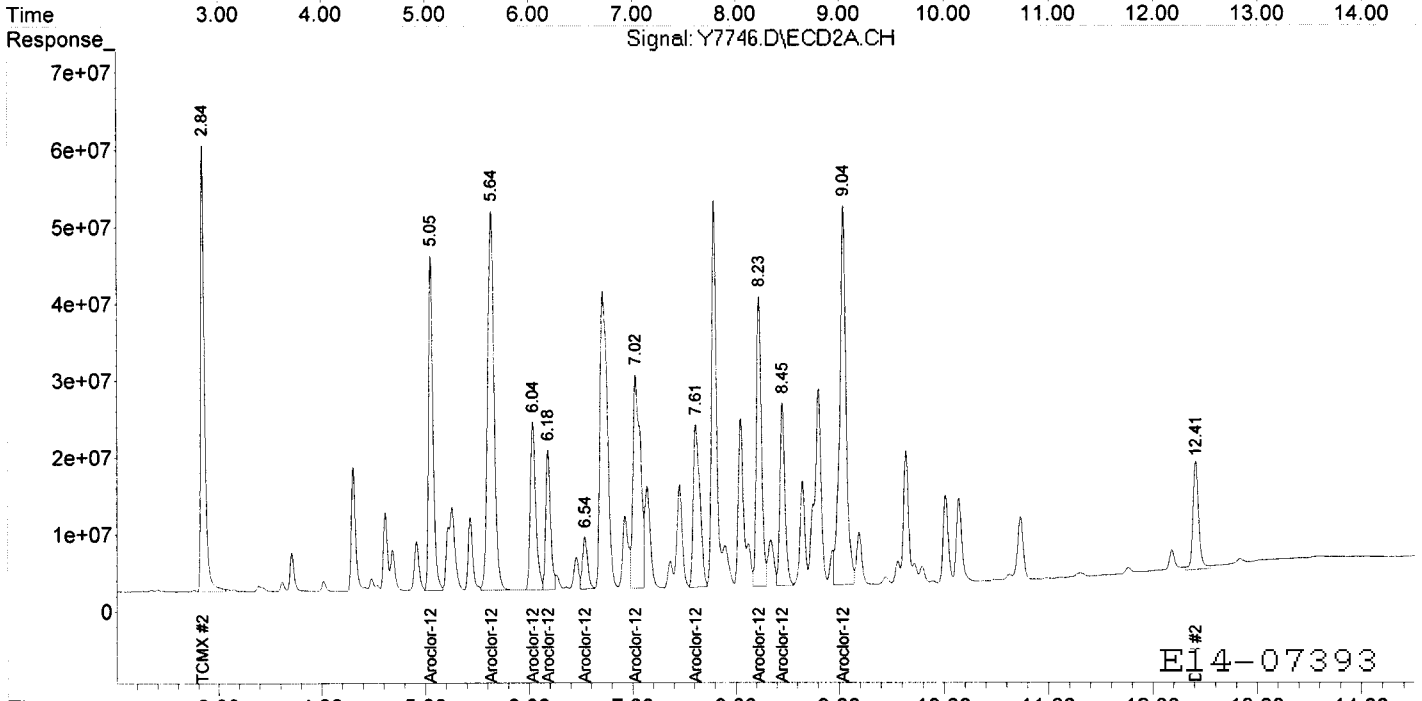
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7746.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 16:27
Operator : JS
Sample : GPECWC08,E14-07393-001,A,1000ml,100,5
Misc : 140808-14,08/08/14,08/07/14,5
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:35:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0119

PCB STANDARDS

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y7706.D Y7705.D Y7704.D Y7703.D Y7702.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.24	3.24	3.24	3.24	3.24	3.24	3.17	3.31
Aroclor-1016 {2}	4.07	4.07	4.07	4.07	4.07	4.07	4.00	4.14
Aroclor-1016 {3}	4.62	4.62	4.62	4.62	4.62	4.62	4.55	4.69
Aroclor-1016 {4}	5.13	5.13	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1016 {5}	5.52	5.52	5.53	5.53	5.53	5.53	5.46	5.60
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.04				2.97	3.11
Aroclor-1221 {3}			3.16				3.09	3.23
Aroclor-1221 {4}			3.24				3.17	3.31
Aroclor-1221 {5}			3.83				3.76	3.90
Aroclor-1232			3.24				3.17	3.31
Aroclor-1232 {2}			4.07				4.00	4.14
Aroclor-1232 {3}			4.74				4.67	4.81
Aroclor-1232 {4}			5.33				5.26	5.40
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.07				4.00	4.14
Aroclor-1242 {2}			5.01				4.94	5.08
Aroclor-1242 {3}			5.33				5.26	5.40
Aroclor-1242 {4}			6.03				5.96	6.10
Aroclor-1242 {5}			6.30				6.23	6.37
Aroclor-1248			4.47				4.39	4.55
Aroclor-1248 {2}			5.01				4.93	5.09
Aroclor-1248 {3}			5.33				5.25	5.41
Aroclor-1248 {4}			6.03				5.95	6.11
Aroclor-1248 {5}			6.30				6.22	6.38
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.86				6.78	6.94
Aroclor-1254 {3}			7.03				6.94	7.12
Aroclor-1254 {4}			7.46				7.37	7.55
Aroclor-1254 {5}			8.31				8.22	8.40
Aroclor-1260	8.31	8.31	8.31	8.31	8.31	8.31	7.41	9.21
Aroclor-1260 {2}	8.98	8.99	8.99	8.99	8.99	8.99	8.09	9.89
Aroclor-1260 {3}	9.46	9.46	9.46	9.46	9.46	9.46	8.56	10.36
Aroclor-1260 {4}	9.95	9.94	9.94	9.94	9.94	9.94	9.04	10.84
Aroclor-1260 {5}	11.00	11.00	11.00	11.00	11.00	11.00	10.10	11.90

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014 Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y7706.D Y7705.D Y7704.D Y7703.D Y7702.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	476672	417496	410326	415769	392588	422570	7.53
Aroclor-1016 {2}	652172	575423	556986	565679	537333	577519	7.62
Aroclor-1016 {3}	864187	723594	725936	738533	703472	751145	8.58
Aroclor-1016 {4}	420437	387436	376436	373282	354230	382364	6.39
Aroclor-1016 {5}	635491	568674	577929	591105	567826	588205	4.77
Aroclor-1221			165521				
Aroclor-1221 {2}			272876				
Aroclor-1221 {3}			166852				
Aroclor-1221 {4}			603938				
Aroclor-1221 {5}			137224				
Aroclor-1232			442662				
Aroclor-1232 {2}			258075				
Aroclor-1232 {3}			224296				
Aroclor-1232 {4}			227835				
Aroclor-1232 {5}			317768				
Aroclor-1242			481114				
Aroclor-1242 {2}			289556				
Aroclor-1242 {3}			386894				
Aroclor-1242 {4}			719028				
Aroclor-1242 {5}			615406				
Aroclor-1248			939657				
Aroclor-1248 {2}			511753				
Aroclor-1248 {3}			659849				
Aroclor-1248 {4}			1223688				
Aroclor-1248 {5}			827070				
Aroclor-1254			1266585				
Aroclor-1254 {2}			800687				
Aroclor-1254 {3}			1582859				
Aroclor-1254 {4}			1634178				
Aroclor-1254 {5}			1556691				
Aroclor-1260	1852494	1527531	1747957	1794742	1727478	1730041	7.11
Aroclor-1260 {2}	896577	716729	795879	817330	793312	803966	8.00
Aroclor-1260 {3}	2140016	1813977	2139555	2188074	2118552	2080035	7.25
Aroclor-1260 {4}	1081246	927563	1087214	1126424	1106980	1065885	7.44
Aroclor-1260 {5}	496699	454783	503449	509312	501932	493235	4.45
					Average %RSD		6.91

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014

Instrument ID: GC-Y

GC Column (2nd): DB-1701P

Data File: Y7706.C Y7705.C Y7704.C Y7703.C Y7702.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.70	3.70	3.70	3.70	3.70	3.70	3.63	3.77
Aroclor-1016 {2}	4.30	4.30	4.30	4.30	4.30	4.30	4.23	4.37
Aroclor-1016 {3}	5.05	5.05	5.05	5.05	5.05	5.05	4.98	5.12
Aroclor-1016 {4}	5.25	5.25	5.25	5.25	5.25	5.25	5.18	5.32
Aroclor-1016 {5}	5.43	5.43	5.43	5.43	5.43	5.43	5.36	5.50
Aroclor-1221			2.39				2.32	2.46
Aroclor-1221 {2}			3.38				3.31	3.45
Aroclor-1221 {3}			3.61				3.54	3.68
Aroclor-1221 {4}			3.71				3.64	3.78
Aroclor-1221 {5}			5.05				4.98	5.12
Aroclor-1232			3.70				3.63	3.77
Aroclor-1232 {2}			4.68				4.61	4.75
Aroclor-1232 {3}			5.25				5.18	5.32
Aroclor-1232 {4}			5.43				5.36	5.50
Aroclor-1232 {5}			6.02				5.95	6.09
Aroclor-1242			4.68				4.61	4.75
Aroclor-1242 {2}			5.43				5.36	5.50
Aroclor-1242 {3}			6.02				5.95	6.09
Aroclor-1242 {4}			6.18				6.11	6.25
Aroclor-1242 {5}			6.72				6.65	6.79
Aroclor-1248			5.04				4.96	5.12
Aroclor-1248 {2}			5.63				5.55	5.71
Aroclor-1248 {3}			6.02				5.94	6.10
Aroclor-1248 {4}			6.18				6.10	6.26
Aroclor-1248 {5}			6.53				6.45	6.61
Aroclor-1254			7.02				6.94	7.10
Aroclor-1254 {2}			7.60				7.52	7.68
Aroclor-1254 {3}			8.22				8.13	8.31
Aroclor-1254 {4}			8.45				8.36	8.54
Aroclor-1254 {5}			9.04				8.95	9.13
Aroclor-1260	7.79	7.79	7.79	7.79	7.79	7.79	6.89	8.69
Aroclor-1260 {2}	8.04	8.04	8.04	8.04	8.04	8.04	7.14	8.94
Aroclor-1260 {3}	9.63	9.63	9.63	9.63	9.63	9.63	8.73	10.53
Aroclor-1260 {4}	10.14	10.14	10.14	10.14	10.14	10.14	9.24	11.04
Aroclor-1260 {5}	10.73	10.73	10.73	10.72	10.73	10.73	9.83	11.63

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y7706.C Y7705.C Y7704.C Y7703.C Y7702.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	972234	856896	837566	837086	781114	856979	8.21
Aroclor-1016 {2}	2036719	1681663	1632392	1623155	1524850	1699756	11.58
Aroclor-1016 {3}	4445046	3616505	3693286	3723747	3538562	3803429	9.62
Aroclor-1016 {4}	2053013	1709924	1591336	1576648	1482967	1682777	13.20
Aroclor-1016 {5}	1551012	1254127	1255239	1255007	1184164	1299910	11.05
Aroclor-1221			352230				
Aroclor-1221 {2}			546827				
Aroclor-1221 {3}			335361				
Aroclor-1221 {4}			1246433				
Aroclor-1221 {5}			231838				
Aroclor-1232			908891				
Aroclor-1232 {2}			348913				
Aroclor-1232 {3}			751480				
Aroclor-1232 {4}			581588				
Aroclor-1232 {5}			812425				
Aroclor-1242			645691				
Aroclor-1242 {2}			1099206				
Aroclor-1242 {3}			1433045				
Aroclor-1242 {4}			1220878				
Aroclor-1242 {5}			2338219				
Aroclor-1248			1950626				
Aroclor-1248 {2}			2917254				
Aroclor-1248 {3}			2130424				
Aroclor-1248 {4}			1975766				
Aroclor-1248 {5}			1090871				
Aroclor-1254			2656972				
Aroclor-1254 {2}			2189811				
Aroclor-1254 {3}			2139814				
Aroclor-1254 {4}			1394885				
Aroclor-1254 {5}			3423656				
Aroclor-1260	1823494	1722021	1645090	1629006	1526954	1669313	6.63
Aroclor-1260 {2}	2814669	2183390	2088062	2056731	1939547	2216480	15.59
Aroclor-1260 {3}	2430464	2023466	1943161	1925658	1835618	2031673	11.45
Aroclor-1260 {4}	5084831	4103790	4238131	4222820	4098994	4349713	9.56
Aroclor-1260 {5}	3598807	3075665	3201016	3127412	3017871	3204154	7.20
					Average %RSD		10.41

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y7706.D Y7705.D Y7704.D Y7703.D Y7702.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.60				8.48	8.72
Aroclor-1262 {2}			9.46				9.34	9.58
Aroclor-1262 {3}			10.09				9.97	10.21
Aroclor-1262 {4}			10.18				10.06	10.30
Aroclor-1262 {5}			11.00				10.88	11.12
Aroclor-1268			10.09				9.97	10.21
Aroclor-1268 {2}			10.18				10.06	10.30
Aroclor-1268 {3}			10.65				10.53	10.77
Aroclor-1268 {4}			11.00				10.88	11.12
Aroclor-1268 {5}			11.61				11.49	11.73

GC Column (2nd): DB-1701P

Data File: Y7706.C Y7705.C Y7704.C Y7703.C Y7702.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.63				9.51	9.75
Aroclor-1262 {2}			10.14				10.02	10.26
Aroclor-1262 {3}			10.63				10.51	10.75
Aroclor-1262 {4}			10.72				10.60	10.84
Aroclor-1262 {5}			11.32				11.20	11.44
Aroclor-1268			10.63				10.51	10.75
Aroclor-1268 {2}			10.71				10.59	10.83
Aroclor-1268 {3}			10.97				10.85	11.09
Aroclor-1268 {4}			11.76				11.64	11.88
Aroclor-1268 {5}			12.19				12.07	12.31

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 08/08/2014

Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y7706.D Y7705.D Y7704.D Y7703.D Y7702.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1373095				
Aroclor-1262 {2}			2813483				
Aroclor-1262 {3}			1021824				
Aroclor-1262 {4}			1257838				
Aroclor-1262 {5}			993149				
Aroclor-1268			2952773				
Aroclor-1268 {2}			3436801				
Aroclor-1268 {3}			2641561				
Aroclor-1268 {4}			1110120				
Aroclor-1268 {5}			8666464				

GC Column (2nd): DB-1701P

Data File: Y7706.C Y7705.C Y7704.C Y7703.C Y7702.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2587448				
Aroclor-1262 {2}			5744897				
Aroclor-1262 {3}			1909966				
Aroclor-1262 {4}			4097530				
Aroclor-1262 {5}			881153				
Aroclor-1268			5722181				
Aroclor-1268 {2}			6111160				
Aroclor-1268 {3}			4827444				
Aroclor-1268 {4}			2177200				
Aroclor-1268 {5}			15056933				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7702.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:12
Operator : NG
Sample : ICC_8082_L5_IAS_4973,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:39:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	18163.3E6	36108.2E6	819.864	804.427
Spiked Amount 200.000			Recovery	=	409.93%	402.21%
2) S DCB	12.10	12.41	5670.4E6	10151.9E6	822.734	774.281
Spiked Amount 200.000			Recovery	=	411.37%	387.14%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	785.2E6	1562.2E6	1858.095	1782.817
4) L2 Aroclor-1016 {2}	4.07	4.30	1074.7E6	3049.7E6	1835.083	1773.465
5) L2 Aroclor-1016 {3}	4.62	5.05	1406.9E6	7077.1E6	1873.068	1860.722
6) L2 Aroclor-1016 {4}	5.13	5.25	708.5E6	2965.9E6	1852.840	1727.465
7) L2 Aroclor-1016 {5}	5.53	5.43	1135.7E6	2368.3E6	1938.817	1821.917
Sum Aroclor-1016			5110.9E6	17023.3E6	9357.903	8966.386
Average Aroclor-1016					1871.581	1793.277
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.79	3455.0E6	3053.9E6	1997.038	1759.668
34) L8 Aroclor-1260 {2}	8.99	8.04	1586.6E6	3879.1E6	1973.499	1748.272
35) L8 Aroclor-1260 {3}	9.46	9.63	4237.1E6	3671.2E6	2045.442	1807.001
36) L8 Aroclor-1260 {4}	9.94	10.14	2214.0E6	8198.0E6	2077.108	1884.719
37) L8 Aroclor-1260 {5}	11.00	10.73	1003.9E6	6035.7E6	2050.928	1883.724
Sum Aroclor-1260			12496.5E6	24838.0E6	10144.015	9083.384
Average Aroclor-1260					2028.803	1816.677
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

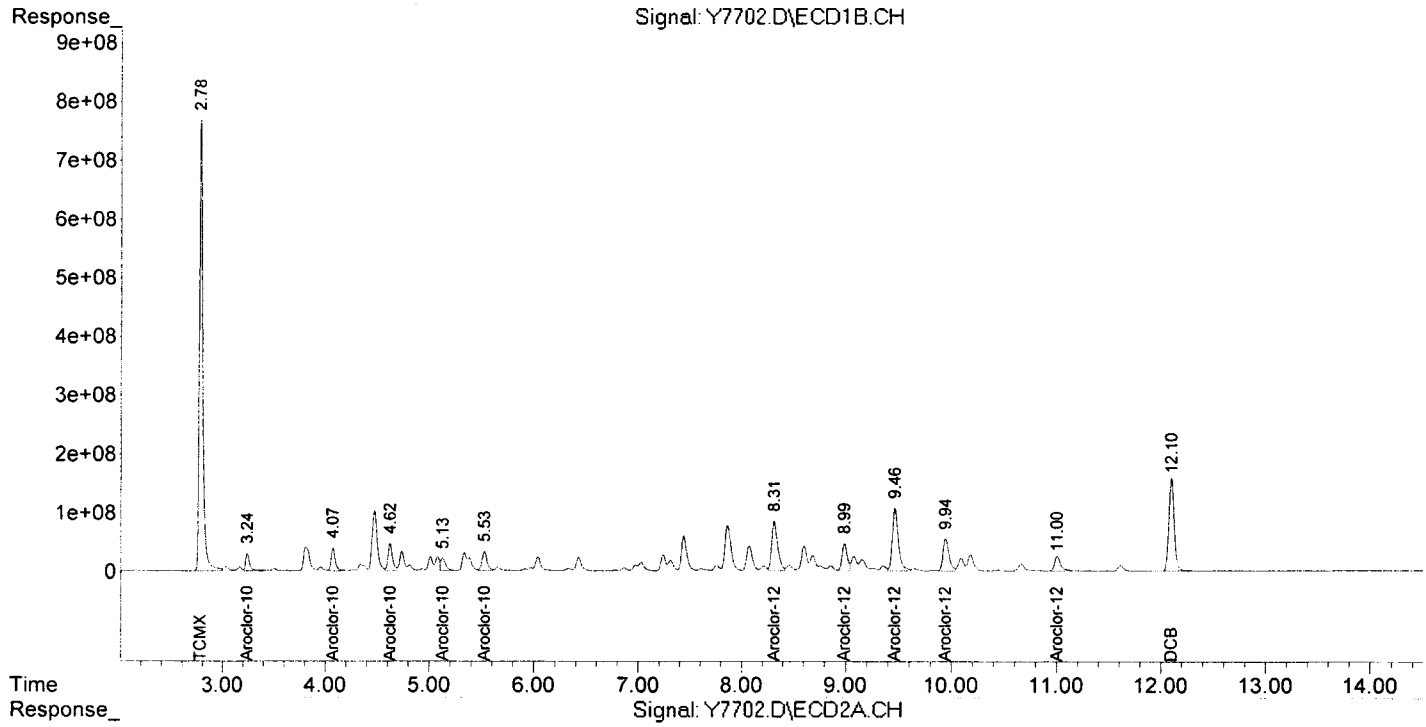
E14-07393 0127

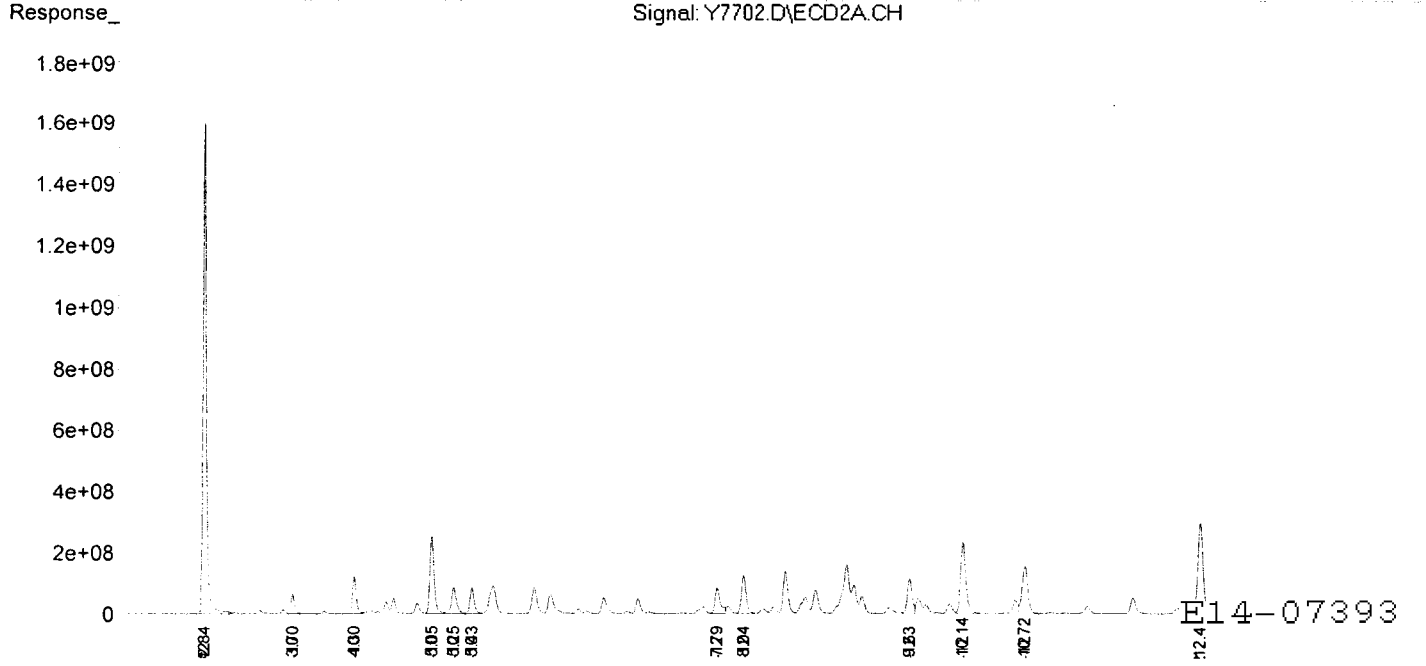
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7702.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:12
Operator : NG
Sample : ICC_8082_L5_IAS_4973.2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:39:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0128

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7703.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:29
Operator : NG
Sample : ICC_8082_L4_IAS_4974.1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:40:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	9487.4E6	17943.2E6	428.246	399.742
Spiked Amount 200.000			Recovery =		214.12%	199.87%
2) S DCB	12.10	12.41	2883.1E6	5132.8E6	418.309	391.478
Spiked Amount 200.000			Recovery =		209.15%	195.74%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	415.8E6	837.1E6	983.905	955.284
4) L2 Aroclor-1016 {2}	4.07	4.30	565.7E6	1623.2E6	965.944	943.899
5) L2 Aroclor-1016 {3}	4.62	5.05	738.5E6	3723.7E6	983.210	979.050
6) L2 Aroclor-1016 {4}	5.13	5.25	373.3E6	1576.6E6	976.248	918.296
7) L2 Aroclor-1016 {5}	5.53	5.43	591.1E6	1255.0E6	1009.152	965.457
Sum Aroclor-1016			2684.4E6	9015.6E6	4918.458	4761.986
Average Aroclor-1016					983.692	952.397
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.79	1794.7E6	1629.0E6	1037.399	938.637
34) L8 Aroclor-1260 {2}	8.99	8.04	817.3E6	2056.7E6	1016.623	926.950
35) L8 Aroclor-1260 {3}	9.46	9.63	2188.1E6	1925.7E6	1056.282	947.819
36) L8 Aroclor-1260 {4}	9.94	10.14	1126.4E6	4222.8E6	1056.797	970.827
37) L8 Aroclor-1260 {5}	11.00	10.72	509.3E6	3127.4E6	1040.541	976.049
Sum Aroclor-1260			6435.9E6	12961.6E6	5207.643	4760.282
Average Aroclor-1260					1041.529	952.056
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

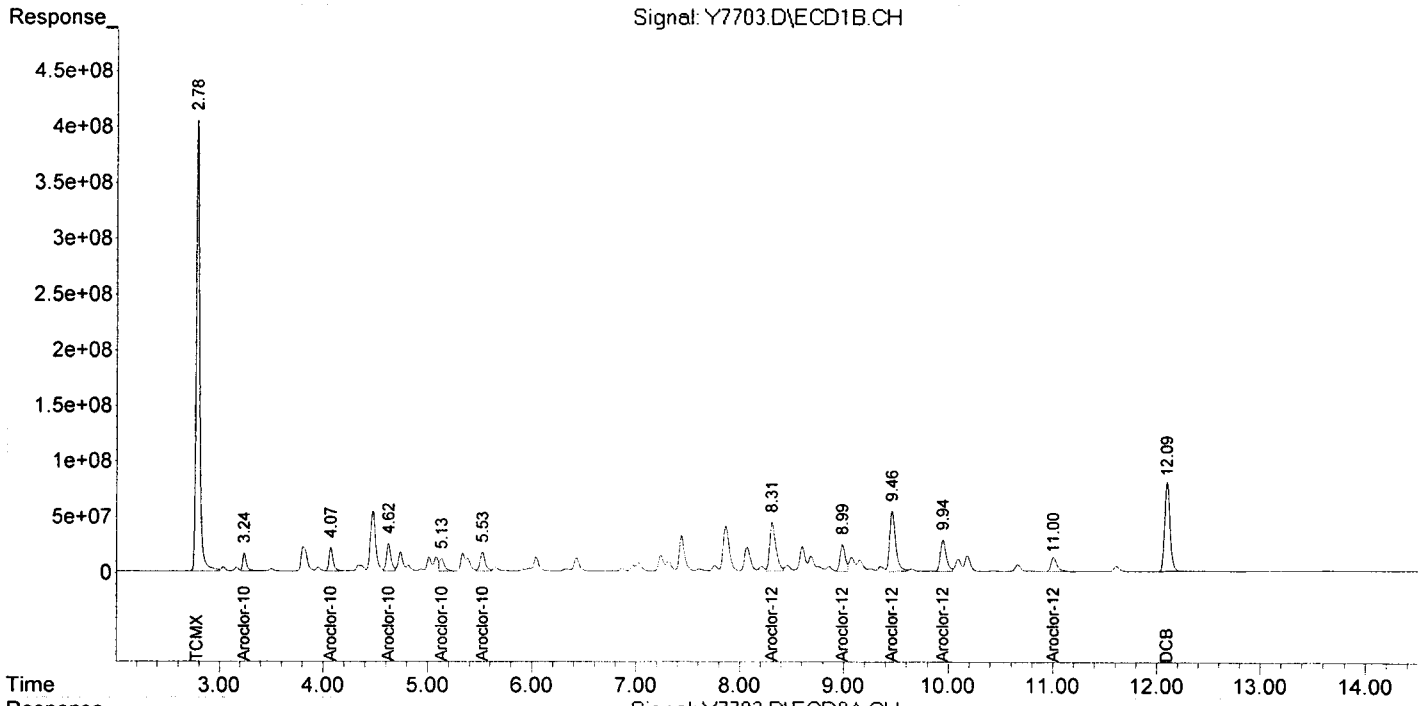
E14-07393 0129

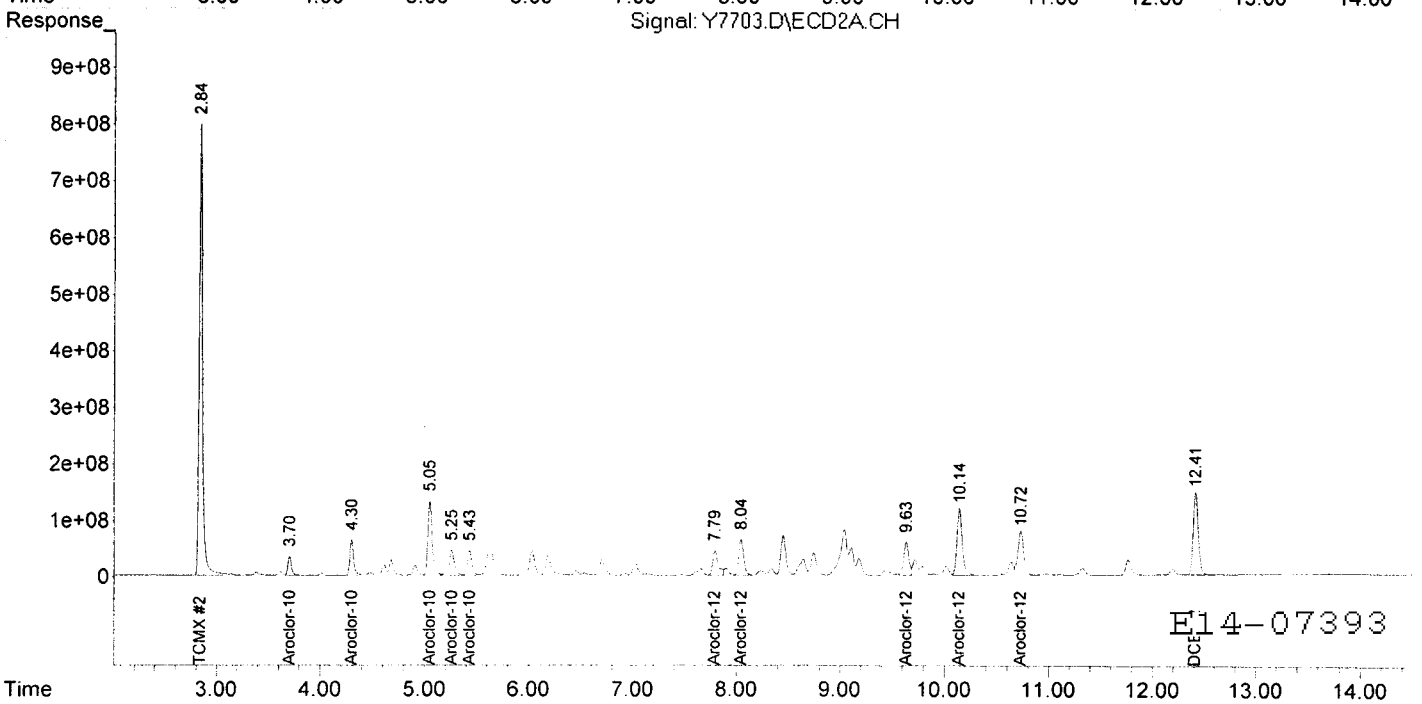
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7703.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:29
Operator : NG
Sample : ICC_8082_L4_IAS_4974.1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:40:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0130

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7704.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:47
Operator : NG
Sample : ICC_8082_L3_IAS_4975,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:41:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	4638.1E6	8597.0E6	209.359	191.526
Spiked Amount 200.000			Recovery	=	104.68%	95.76%
2) S DCB	12.09	12.41	1413.9E6	2555.1E6	205.140	194.874m
Spiked Amount 200.000			Recovery	=	102.57%	97.44%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	205.2E6	418.8E6	485.513	477.916
4) L2 Aroclor-1016 {2}	4.07	4.30	278.5E6	816.2E6	475.550	474.635
5) L2 Aroclor-1016 {3}	4.62	5.05	363.0E6	1846.6E6	483.220	485.521
6) L2 Aroclor-1016 {4}	5.13	5.25	188.2E6	795.7E6	492.248	463.425
7) L2 Aroclor-1016 {5}	5.53	5.43	289.0E6	627.6E6	493.328	482.818
Sum Aroclor-1016			1323.8E6	4504.9E6	2429.860	2384.314
Average Aroclor-1016					485.972	476.863
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.79	874.0E6	822.5E6	505.178	473.952
34) L8 Aroclor-1260 {2}	8.99	8.04	397.9E6	1044.0E6	494.971	470.535
35) L8 Aroclor-1260 {3}	9.46	9.63	1069.8E6	971.6E6	516.430	478.217
36) L8 Aroclor-1260 {4}	9.94	10.14	543.6E6	2119.1E6	510.005	487.174
37) L8 Aroclor-1260 {5}	11.00	10.73	251.7E6	1600.5E6	514.281	499.510
Sum Aroclor-1260			3137.0E6	6557.7E6	2540.865	2409.388
Average Aroclor-1260					508.173	481.878
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

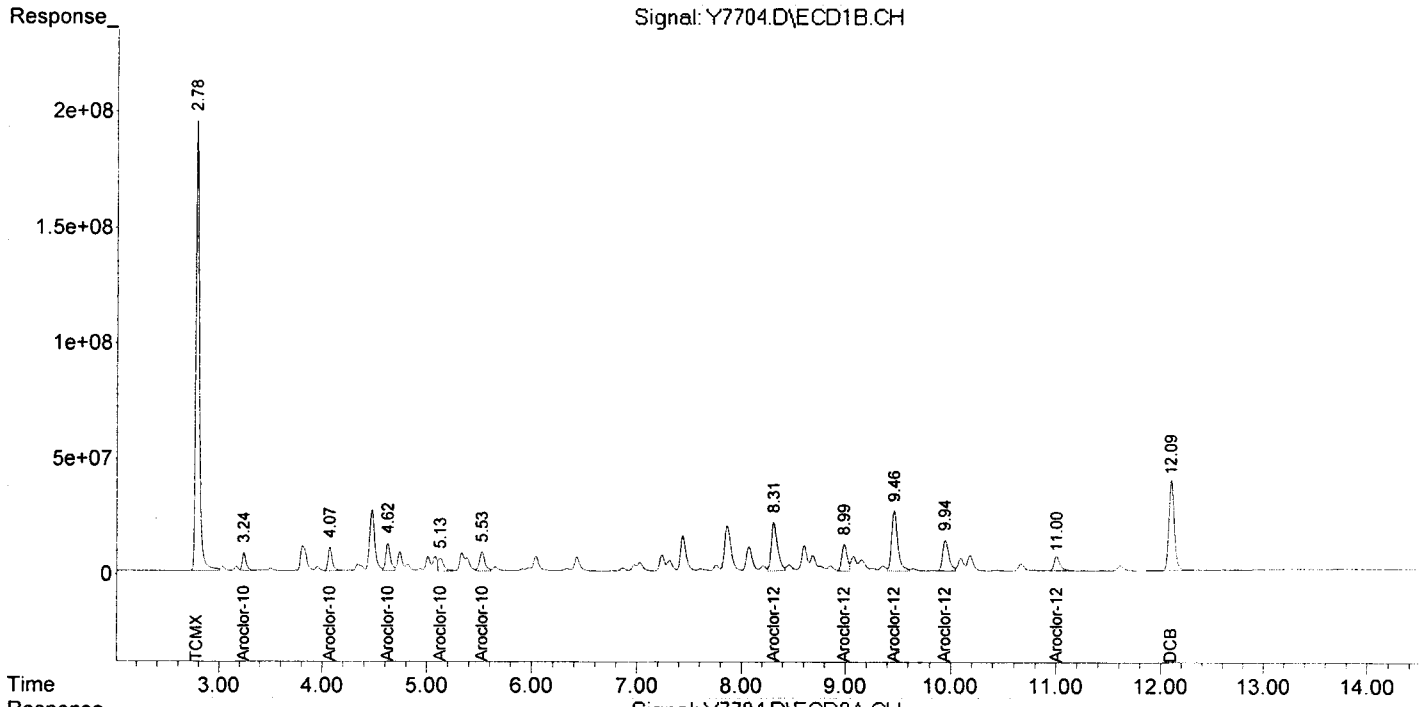
E14-07393 0131

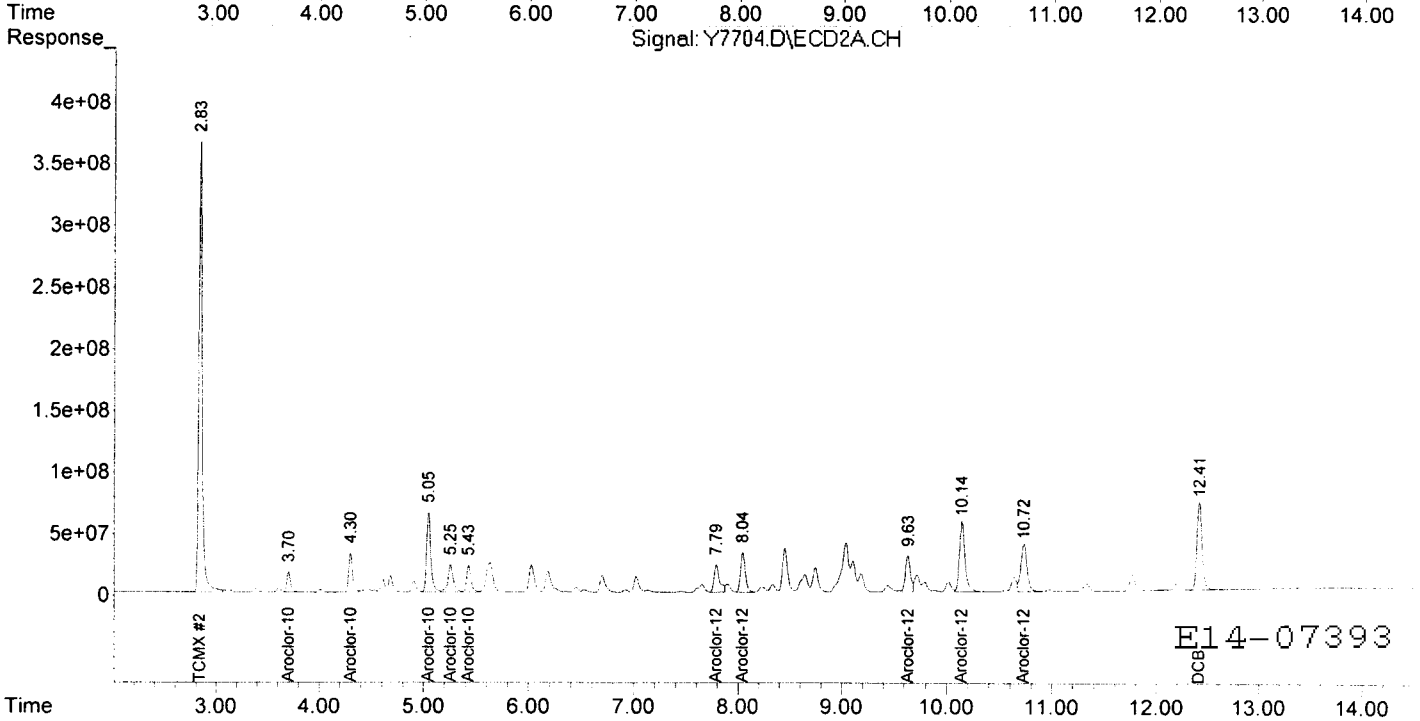
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7704.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 10:47
Operator : NG
Sample : ICC_8082_L3_IAS_4975,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:41:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0132

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7705.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 11:04
Operator : NG
Sample : ICC_8082_L2_IAS_4976,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:41:43 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.83	396.8E6	806.5E6	17.910	17.968
Spiked Amount 200.000			Recovery =		8.96%	8.98%
2) S DCB	12.09	12.41	122.1E6	239.8E6	17.713m	18.287m
Spiked Amount 200.000			Recovery =		8.86%	9.14%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	20874821	42844794	49.400	48.895
4) L2 Aroclor-1016 {2}	4.07	4.30	28771138	84083134	49.129	48.896
5) L2 Aroclor-1016 {3}	4.62	5.05	36179692	180.8E6	48.166	47.543
6) L2 Aroclor-1016 {4}	5.13	5.25	19371786	85496179	50.663	49.796
7) L2 Aroclor-1016 {5}	5.52	5.43	28433698	62706353	48.543	48.239
Sum Aroclor-1016			133.6E6	456.0E6	245.901	243.368
Average Aroclor-1016					49.180	48.674
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.79	76376559	86101051	44.147	49.612
34) L8 Aroclor-1260 {2}	8.99	8.04	35836440	109.2E6	44.575	49.202
35) L8 Aroclor-1260 {3}	9.46	9.63	90698853	101.2E6	43.784	49.798
36) L8 Aroclor-1260 {4}	9.94	10.14	46378141	205.2E6	43.511	47.173
37) L8 Aroclor-1260 {5}	11.00	10.73	22739138	153.8E6	46.457	47.995
Sum Aroclor-1260			272.0E6	655.4E6	222.474	243.779
Average Aroclor-1260					44.495	48.756
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

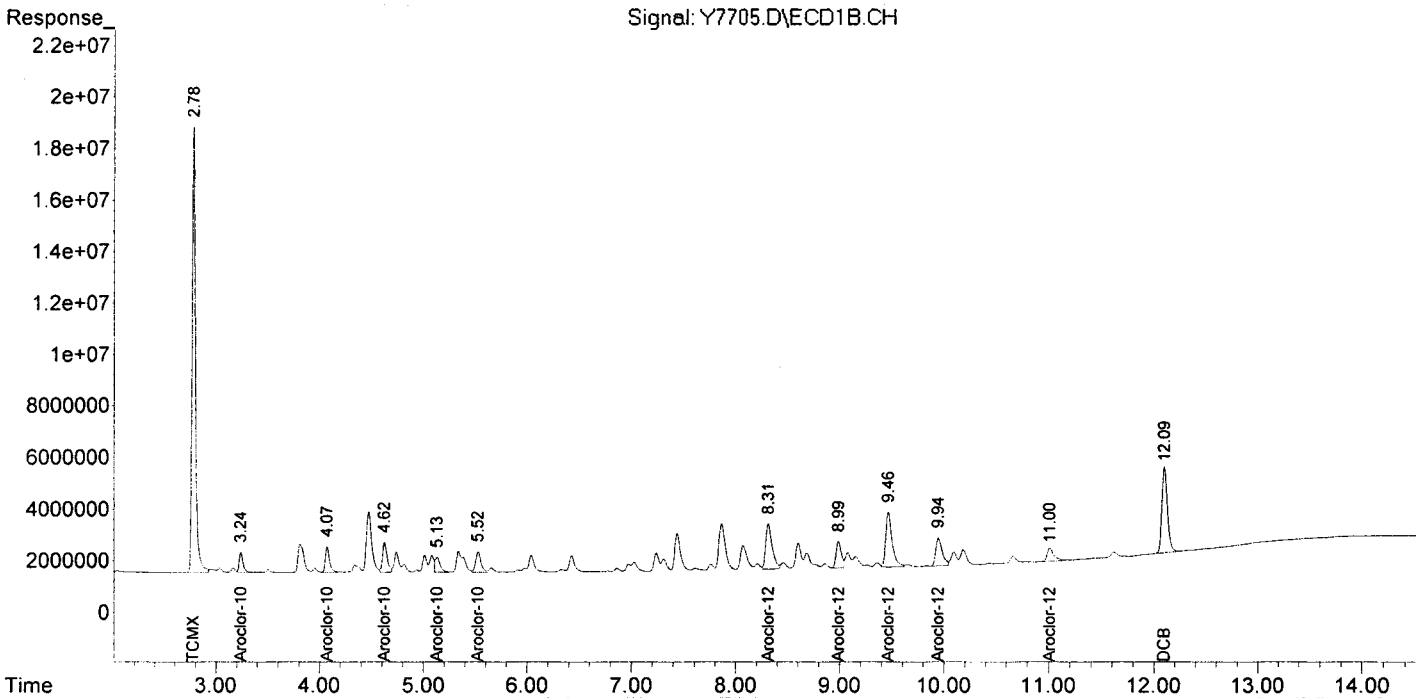
E14-07393 0133

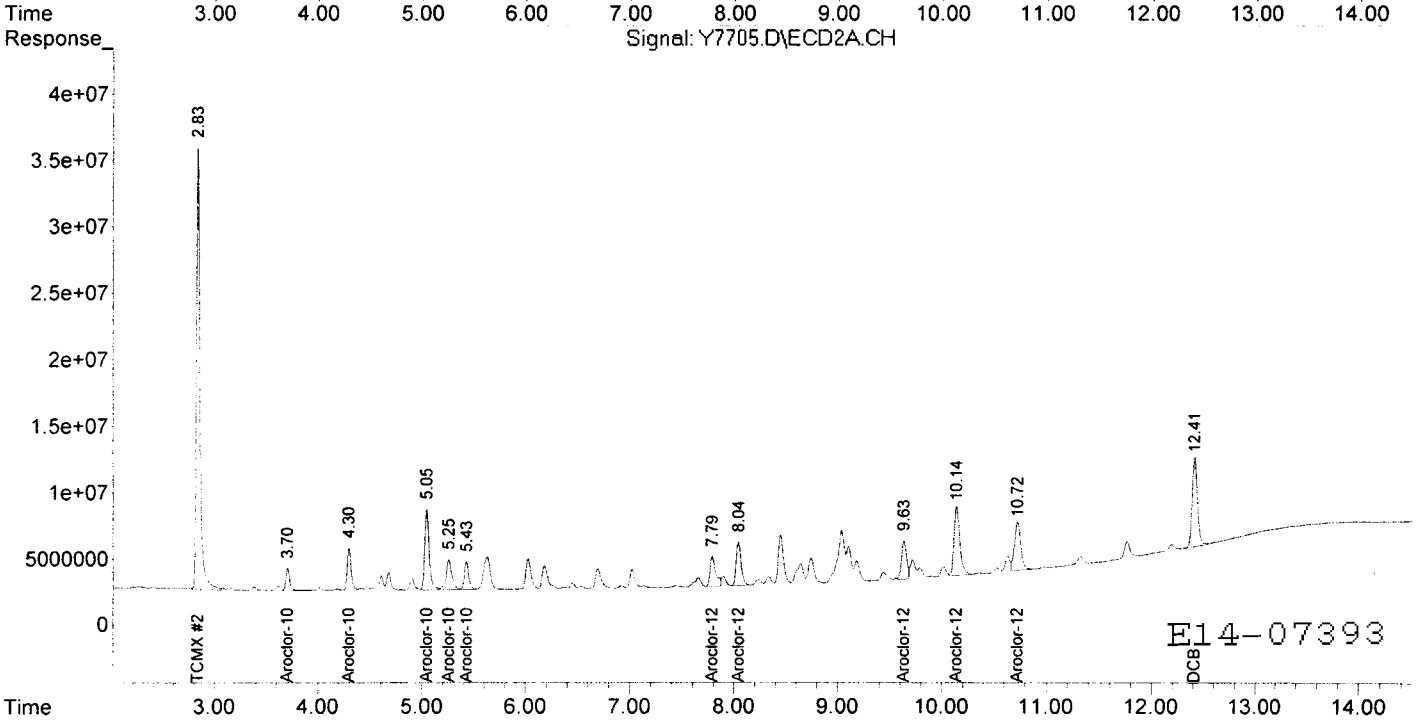
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7705.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 11:04
Operator : NG
Sample : ICC_8082_L2_IAS_4976,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:41:43 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0134

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7706.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 11:21
Operator : NG
Sample : ICC_8082_L1_IAS_4977.0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:44:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.83	85272622	204.5E6	3.849	4.556
Spiked Amount 200.000			Recovery =		1.92%	2.28%
2) S DCB	12.09	12.41	28137490	58677692	4.083m	4.475m
Spiked Amount 200.000			Recovery =		2.04%	2.24%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	4766717	9722339	11.280	11.095m
4) L2 Aroclor-1016 {2}	4.07	4.30	6521721	20367189	11.136m	11.844m
5) L2 Aroclor-1016 {3}	4.62	5.05	8641875	44450460	11.505	11.687
6) L2 Aroclor-1016 {4}	5.13	5.25	4204370	20530131	10.996	11.957m
7) L2 Aroclor-1016 {5}	5.52	5.43	6354914	15510121	10.849m	11.932
Sum Aroclor-1016			30489597	110.6E6	55.767	58.515
Average Aroclor-1016					11.153	11.703
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.31	7.79	18524945	18234936	10.708	10.507m
34) L8 Aroclor-1260 {2}	8.98	8.04	8965771	28146688	11.152	12.685m
35) L8 Aroclor-1260 {3}	9.46	9.63	21400164	24304644	10.331m	11.963
36) L8 Aroclor-1260 {4}	9.95	10.14	10812456	50848314	10.144	11.690
37) L8 Aroclor-1260 {5}	11.00	10.73	4966993	35988072	10.148m	11.232
Sum Aroclor-1260			64670329	157.5E6	52.482	58.077
Average Aroclor-1260					10.496	11.615
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

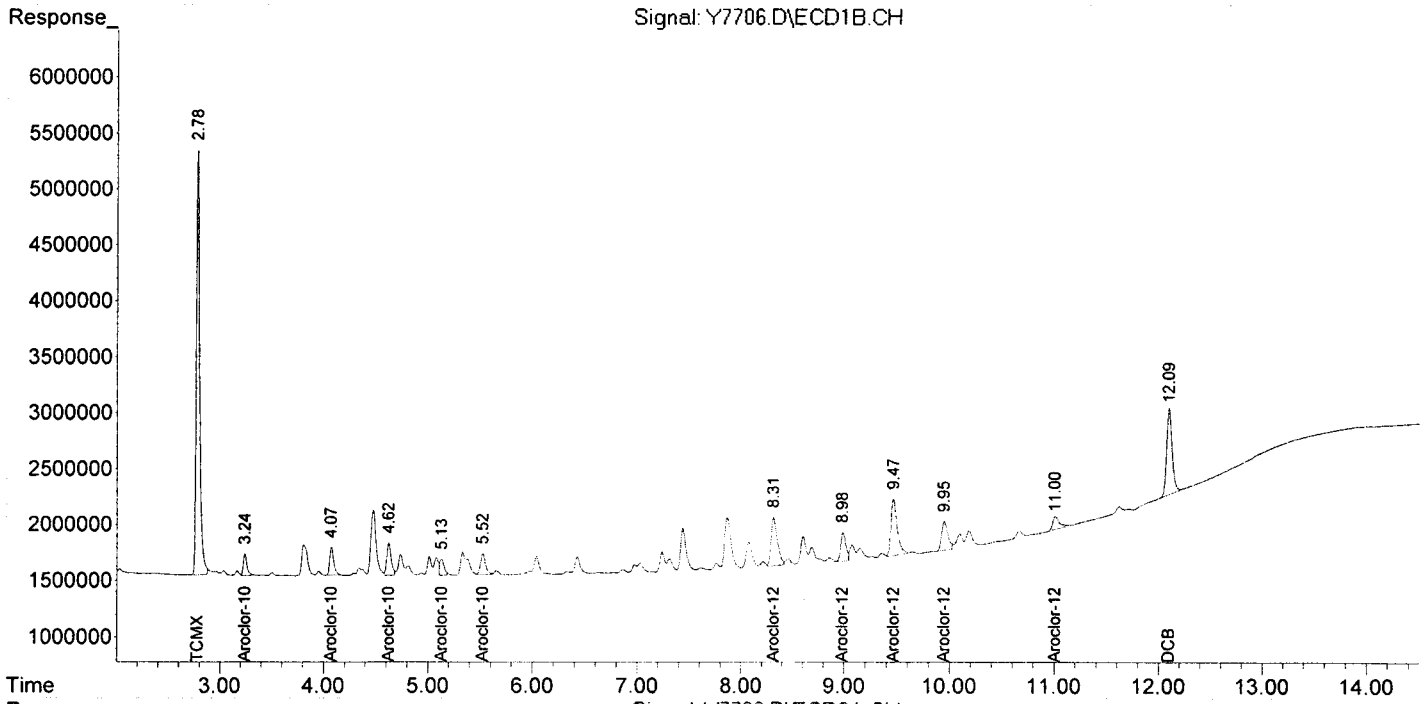
E14-07393 0135

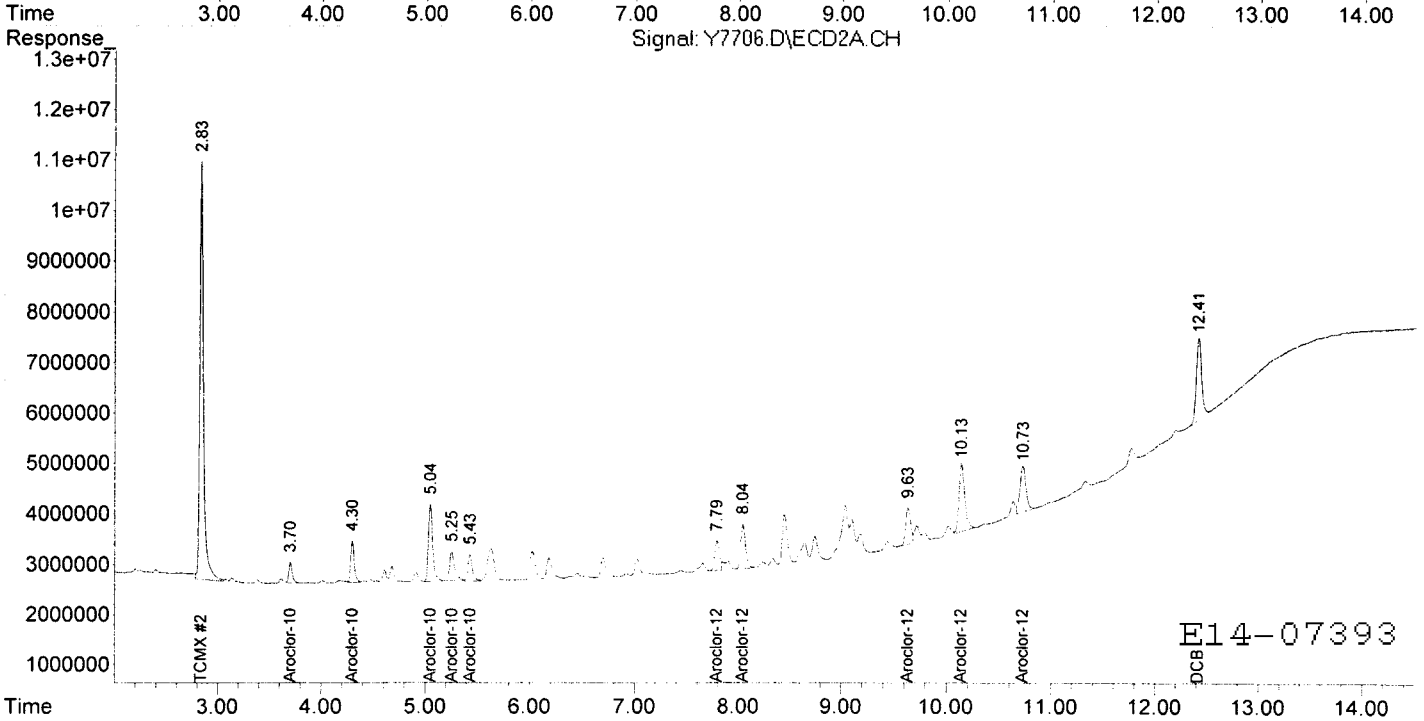
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-08-14\
Data File : Y7706.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Aug 2014 11:21
Operator : NG
Sample : ICC_8082_L1_IAS_4977,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 08 11:44:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 11:37:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0136

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 08/11/2014 **Instrument ID:** GC-Y

Data File: Y7739.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	422570	422399	0.04
Aroclor-1016 {2}	4.07	4.00	4.14	577519	565838	2.02
Aroclor-1016 {3}	4.63	4.55	4.69	751145	746999	0.55
Aroclor-1016 {4}	5.13	5.06	5.20	382364	399396	4.45
Aroclor-1016 {5}	5.53	5.46	5.60	588205	604056	2.69
Aroclor-1260	8.32	7.41	9.21	1730041	1820214	5.21
Aroclor-1260 {2}	8.99	8.09	9.89	803966	804526	0.07
Aroclor-1260 {3}	9.46	8.56	10.36	2080035	2130761	2.44
Aroclor-1260 {4}	9.95	9.04	10.84	1065885	1044668	1.99
Aroclor-1260 {5}	11.01	10.10	11.90	493235	509524	3.30

Data File: Y7739.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.71	3.63	3.77	856979	863586	0.77
Aroclor-1016 {2}	4.30	4.23	4.37	1699756	1677646	1.30
Aroclor-1016 {3}	5.05	4.98	5.12	3803429	3819256	0.42
Aroclor-1016 {4}	5.26	5.18	5.32	1682777	1631409	3.05
Aroclor-1016 {5}	5.43	5.36	5.50	1299910	1301656	0.13
Aroclor-1260	7.79	6.89	8.69	1669313	1713319	2.64
Aroclor-1260 {2}	8.04	7.14	8.94	2216480	2165300	2.31
Aroclor-1260 {3}	9.63	8.73	10.53	2031673	1983226	2.38
Aroclor-1260 {4}	10.14	9.24	11.04	4349713	4238194	2.56
Aroclor-1260 {5}	10.73	9.83	11.63	3204154	3125871	2.44

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 08/11/2014 **Instrument ID:** GC-Y

Data File: Y7758.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	422570	429094	1.54
Aroclor-1016 {2}	4.07	4.00	4.14	577519	583346	1.01
Aroclor-1016 {3}	4.63	4.55	4.69	751145	756890	0.76
Aroclor-1016 {4}	5.13	5.06	5.20	382364	413089	8.04
Aroclor-1016 {5}	5.53	5.46	5.60	588205	610794	3.84
Aroclor-1260	8.32	7.41	9.21	1730041	1846800	6.75
Aroclor-1260 {2}	8.99	8.09	9.89	803966	805967	0.25
Aroclor-1260 {3}	9.47	8.56	10.36	2080035	2158959	3.79
Aroclor-1260 {4}	9.95	9.04	10.84	1065885	1047731	1.70
Aroclor-1260 {5}	11.01	10.10	11.90	493235	465861	5.55

Data File: Y7758.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.70	3.63	3.77	856979	873431	1.92
Aroclor-1016 {2}	4.30	4.23	4.37	1699756	1691038	0.51
Aroclor-1016 {3}	5.05	4.98	5.12	3803429	3863657	1.58
Aroclor-1016 {4}	5.26	5.18	5.32	1682777	1648847	2.02
Aroclor-1016 {5}	5.43	5.36	5.50	1299910	1311587	0.90
Aroclor-1260	7.79	6.89	8.69	1669313	1736707	4.04
Aroclor-1260 {2}	8.04	7.14	8.94	2216480	2200808	0.71
Aroclor-1260 {3}	9.63	8.73	10.53	2031673	2079339	2.35
Aroclor-1260 {4}	10.14	9.24	11.04	4349713	4327281	0.52
Aroclor-1260 {5}	10.73	9.83	11.63	3204154	3165781	1.20

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7739.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:02
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 11 15:06:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	4731.6E6	8816.1E6	213.577	196.408
Spiked Amount 200.000			Recovery	=	106.79%	98.20%
2) S DCB	12.10	12.41	1226.0E6	2149.1E6	177.662	165.428
Spiked Amount 200.000			Recovery	=	88.83%	82.71%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.71	211.2E6	431.8E6	499.797	503.854
4) L2 Aroclor-1016 {2}	4.07	4.30	282.9E6	838.8E6	489.888	493.496
5) L2 Aroclor-1016 {3}	4.63	5.05	373.5E6	1909.6E6	497.240	502.081
6) L2 Aroclor-1016 {4}	5.13	5.26	199.7E6	815.7E6	522.271	484.737
7) L2 Aroclor-1016 {5}	5.53	5.43	302.0E6	650.8E6	513.474	500.672
Sum Aroclor-1016			1369.3E6	4646.8E6	2522.670	2484.840
Average Aroclor-1016					504.534	496.968
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.79	910.1E6	856.7E6	526.061	513.181
34) L8 Aroclor-1260 {2}	8.99	8.04	402.3E6	1082.7E6	500.348	488.455
35) L8 Aroclor-1260 {3}	9.46	9.63	1065.4E6	991.6E6	512.194	488.077
36) L8 Aroclor-1260 {4}	9.95	10.14	522.3E6	2119.1E6	490.047	487.181
37) L8 Aroclor-1260 {5}	11.01	10.73	254.8E6	1562.9E6	516.512	487.784
Sum Aroclor-1260			3154.8E6	6613.0E6	2545.162	2464.677
Average Aroclor-1260					509.032	492.935
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

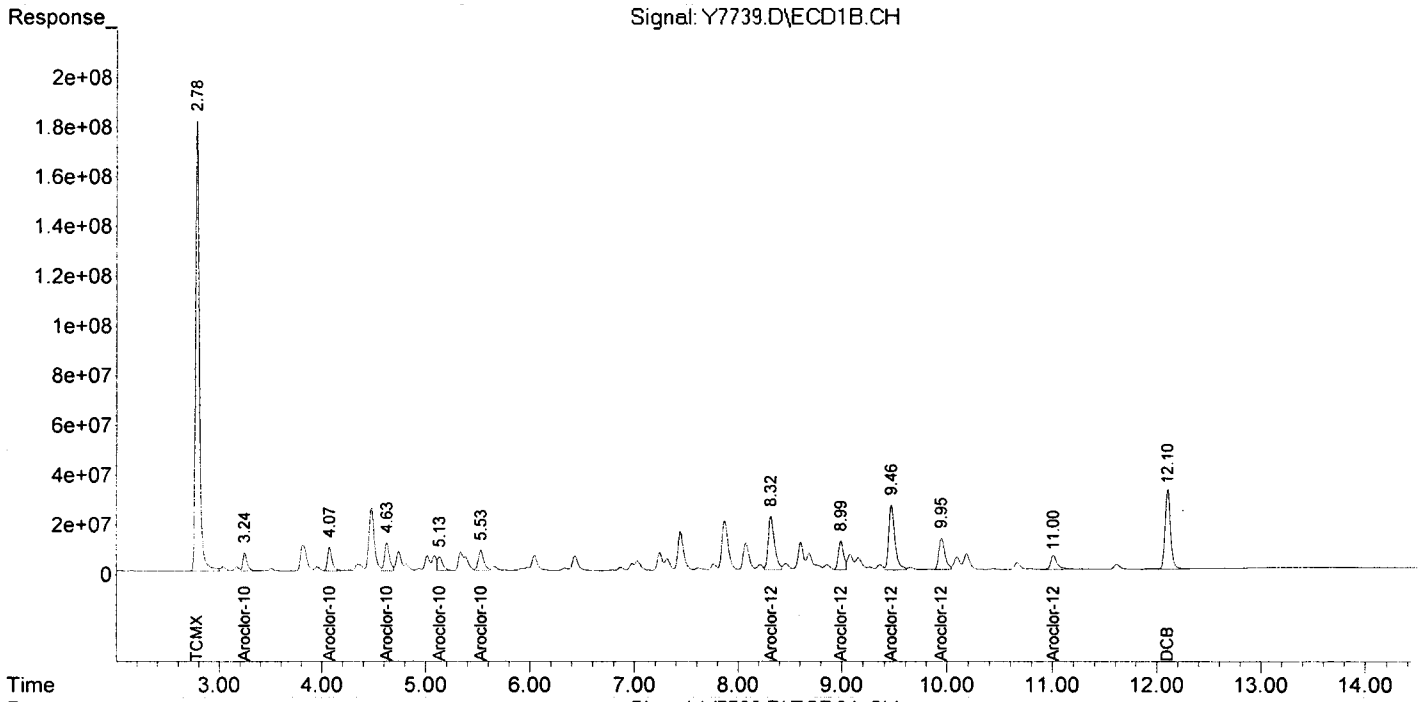
E14-07393 0139

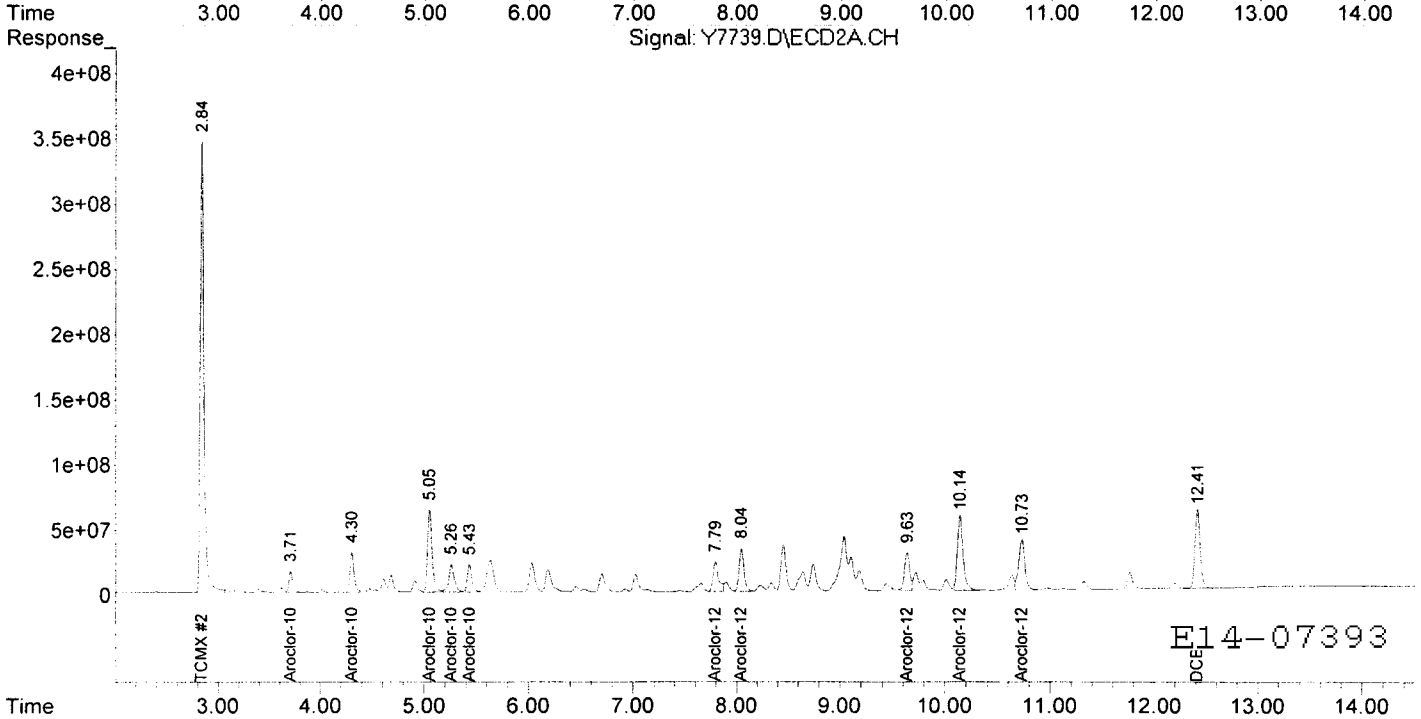
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7739.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:02
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 11 15:06:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0140

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7758.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 21:15
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:38:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	4802.5E6	8901.4E6	216.776	198.307
Spiked Amount 200.000			Recovery	=	108.39%	99.15%
2) S DCB	12.10	12.41	1211.3E6	2264.4E6	175.534	174.304
Spiked Amount 200.000			Recovery	=	87.77%	87.15%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	214.5E6	436.7E6	507.719	509.598
4) L2 Aroclor-1016 {2}	4.07	4.30	291.7E6	845.5E6	505.046	497.436
5) L2 Aroclor-1016 {3}	4.63	5.05	378.4E6	1931.8E6	503.824	507.918
6) L2 Aroclor-1016 {4}	5.13	5.26	206.5E6	824.4E6	540.177	489.918
7) L2 Aroclor-1016 {5}	5.53	5.43	305.4E6	655.8E6	519.202	504.492
Sum Aroclor-1016			1396.6E6	4694.3E6	2575.967	2509.361
Average Aroclor-1016					515.193	501.872
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.79	923.4E6	868.4E6	533.745	520.186
34) L8 Aroclor-1260 {2}	8.99	8.04	403.0E6	1100.4E6	501.245	496.465
35) L8 Aroclor-1260 {3}	9.47	9.63	1079.5E6	1039.7E6	518.972	511.731
36) L8 Aroclor-1260 {4}	9.95	10.14	523.9E6	2163.6E6	491.484	497.421
37) L8 Aroclor-1260 {5}	11.01	10.73	232.9E6	1582.9E6	472.250	494.012
Sum Aroclor-1260			3162.7E6	6755.0E6	2517.695	2519.815
Average Aroclor-1260					503.539	503.963
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

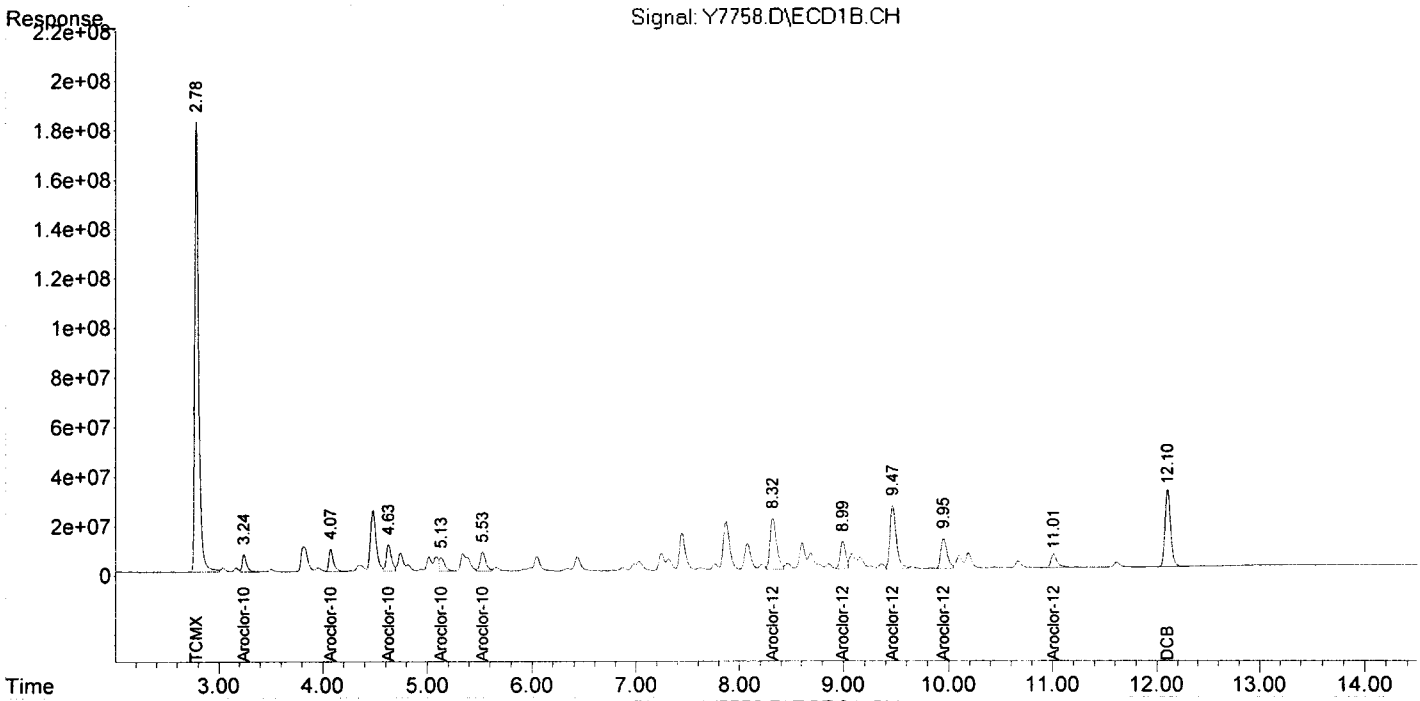
E14-07393 0141

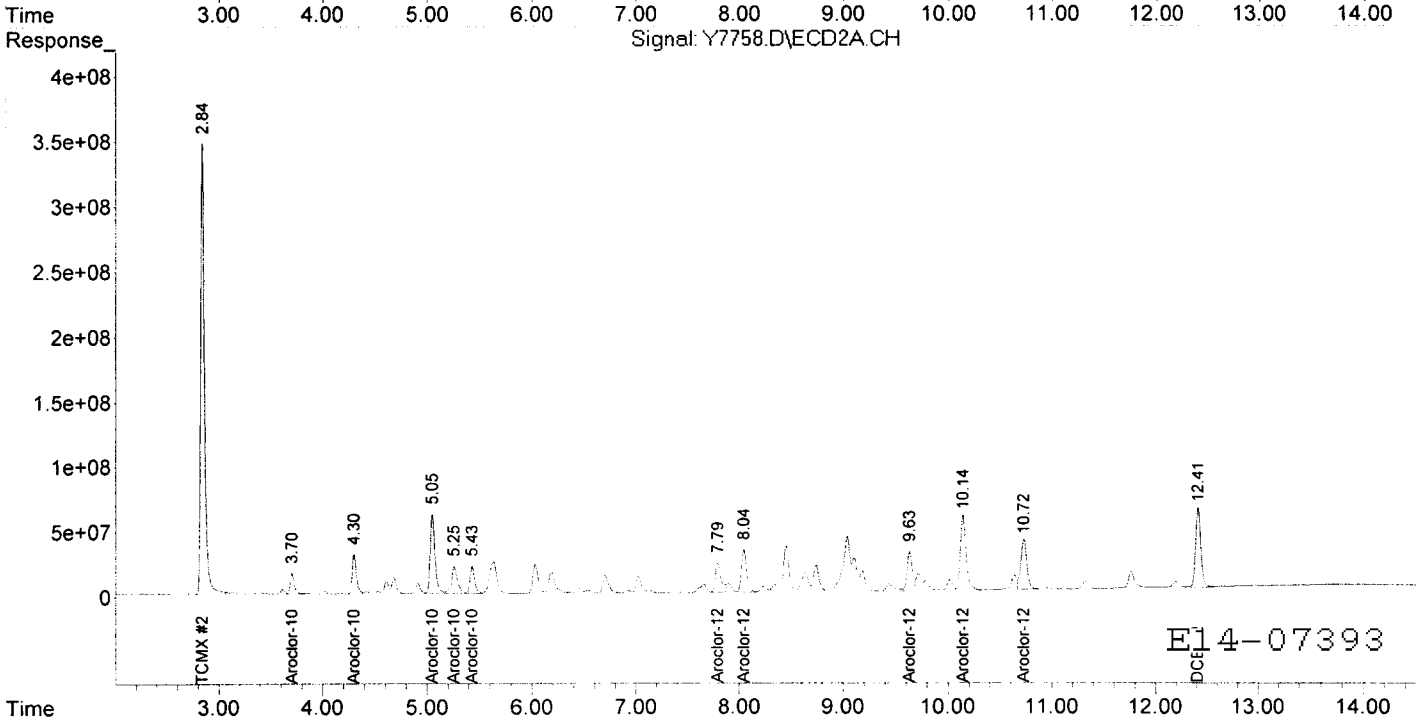
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7758.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 21:15
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:38:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0142

PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA140808-14
Client ID: PCB
Date Received: NA
Date Extracted: 08/08/2014
Date Analyzed: 08/11/2014
Data file: Y7740.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-07393 0144

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7740.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:33
Operator : JS
Sample : PCB,BLKA140808-14.A,1000ml,100.5
Misc : NA,08/08/14,NA,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:30:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.84	4328.8E6	8928.2E6	195.397	198.904
Spiked Amount 200.000			Recovery	=	97.70%	99.45%
2) S DCB	12.10	12.41	1136.7E6	2160.6E6	164.721	166.316
Spiked Amount 200.000			Recovery	=	82.36%	83.16%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

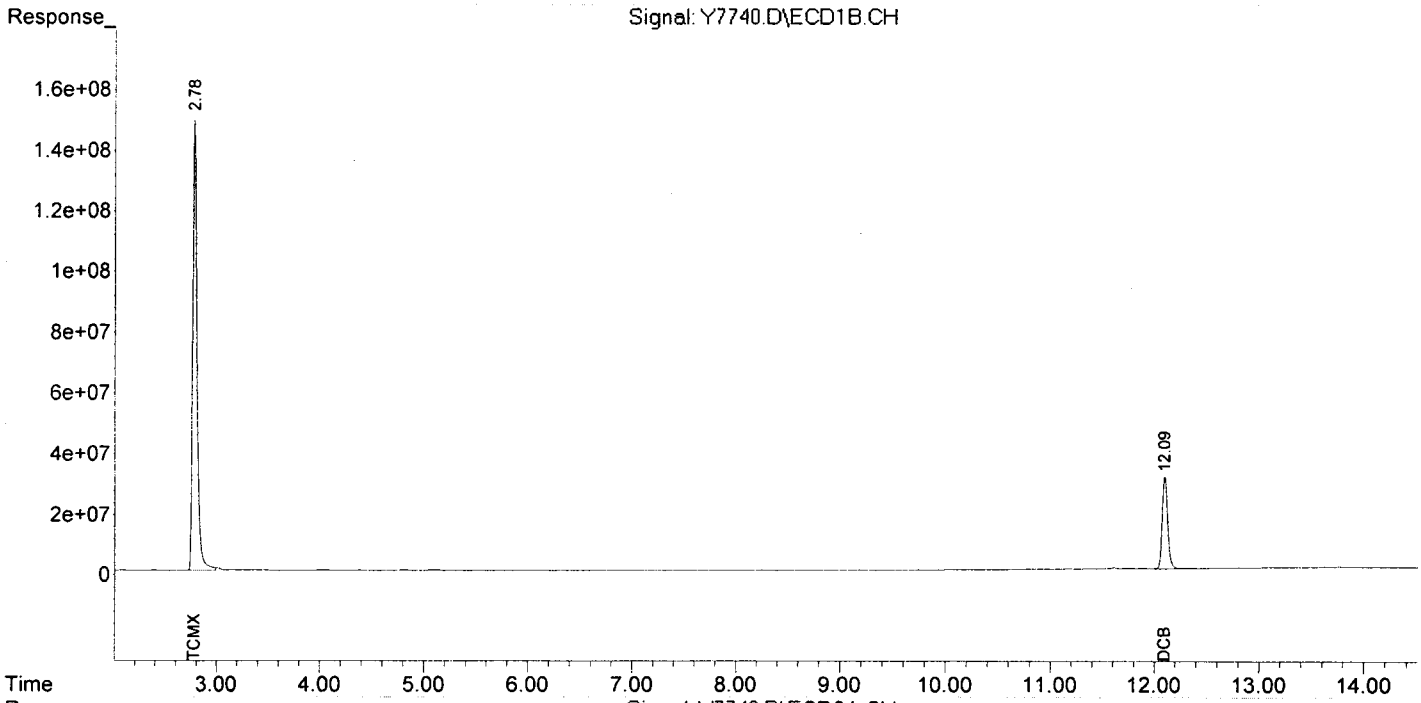
E14-07393 0145

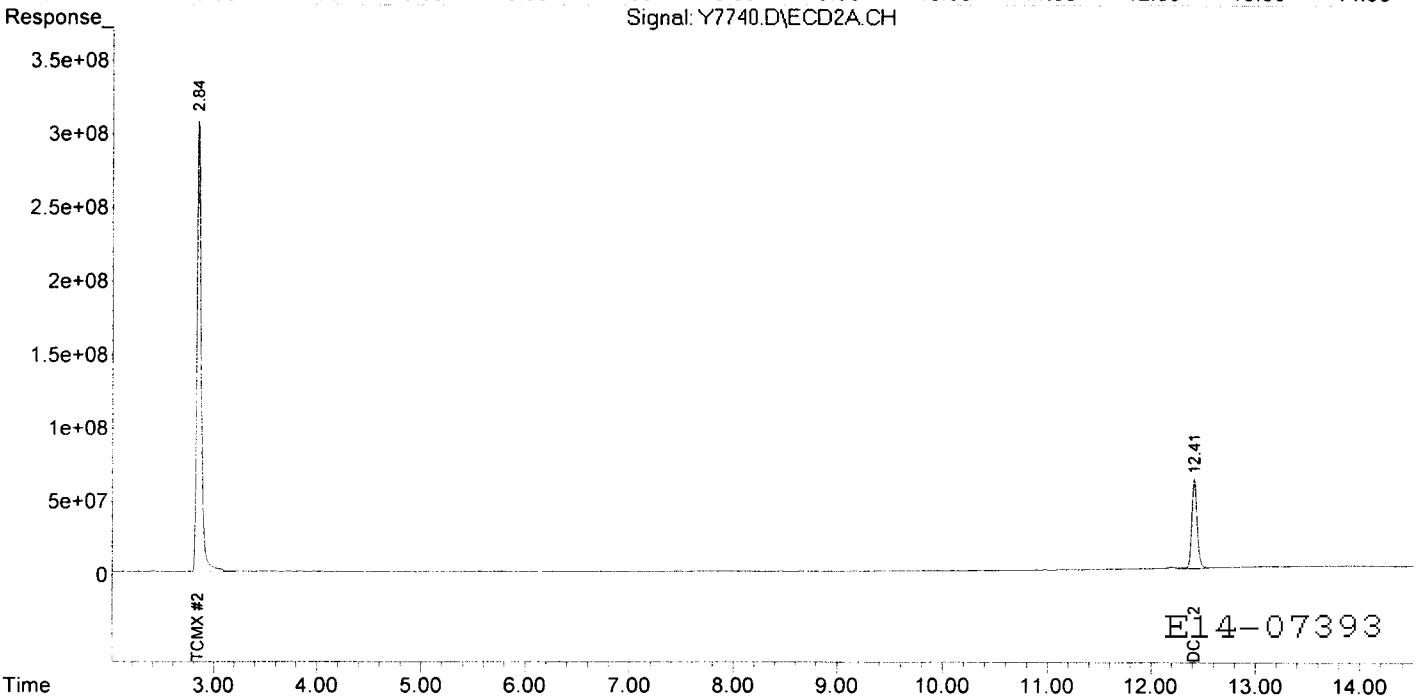
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7740.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:33
Operator : JS
Sample : PCB,BLKA140808-14,A,1000ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:30:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0146

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7741.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:51
Operator : JS
Sample : PCB,LCSA140808-14,A,1000ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:31:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.83	4426.3E6	8311.2E6	199.797	185.159
Spiked Amount 200.000			Recovery	=	99.90%	92.58%
2) S DCB	12.10	12.41	1339.0E6	2393.5E6	194.041	184.243
Spiked Amount 200.000			Recovery	=	97.02%	92.12%
Target Compounds						
3) L2 Aroclor-1016	3.24	3.70	188.5E6	388.8E6	446.082	453.709
4) L2 Aroclor-1016 {2}	4.07	4.30	256.2E6	746.8E6	443.572	439.384
5) L2 Aroclor-1016 {3}	4.63	5.05	320.3E6	1690.7E6	426.365	444.511
6) L2 Aroclor-1016 {4}	5.13	5.25	179.4E6	739.5E6	469.315	439.471
7) L2 Aroclor-1016 {5}	5.53	5.43	272.4E6	579.2E6	463.162	445.555
Sum Aroclor-1016			1216.8E6	4145.0E6	2248.495	2222.631
Average Aroclor-1016					449.699	444.526
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.79	762.2E6	774.0E6	440.577	463.676
34) L8 Aroclor-1260 {2}	8.99	8.04	424.2E6	1007.6E6	527.604	454.594
35) L8 Aroclor-1260 {3}	9.46	9.63	1085.7E6	1031.9E6	521.939	507.901
36) L8 Aroclor-1260 {4}	9.95	10.14	503.8E6	2208.7E6	472.612	507.785
37) L8 Aroclor-1260 {5}	11.01	10.72	290.4E6	1596.3E6	588.845	498.190
Sum Aroclor-1260			3066.2E6	6618.5E6	2551.576	2432.147
Average Aroclor-1260					510.315	486.429
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

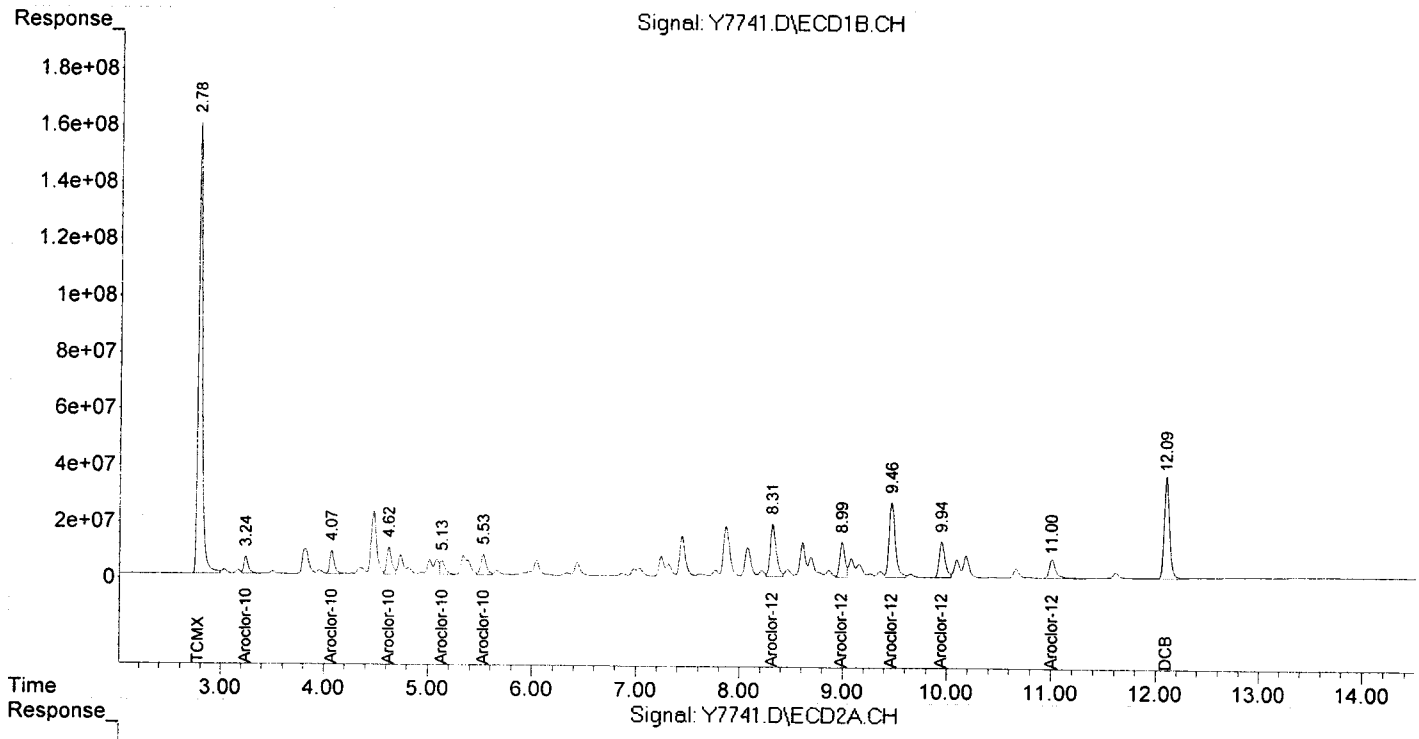
E14-07393 0147

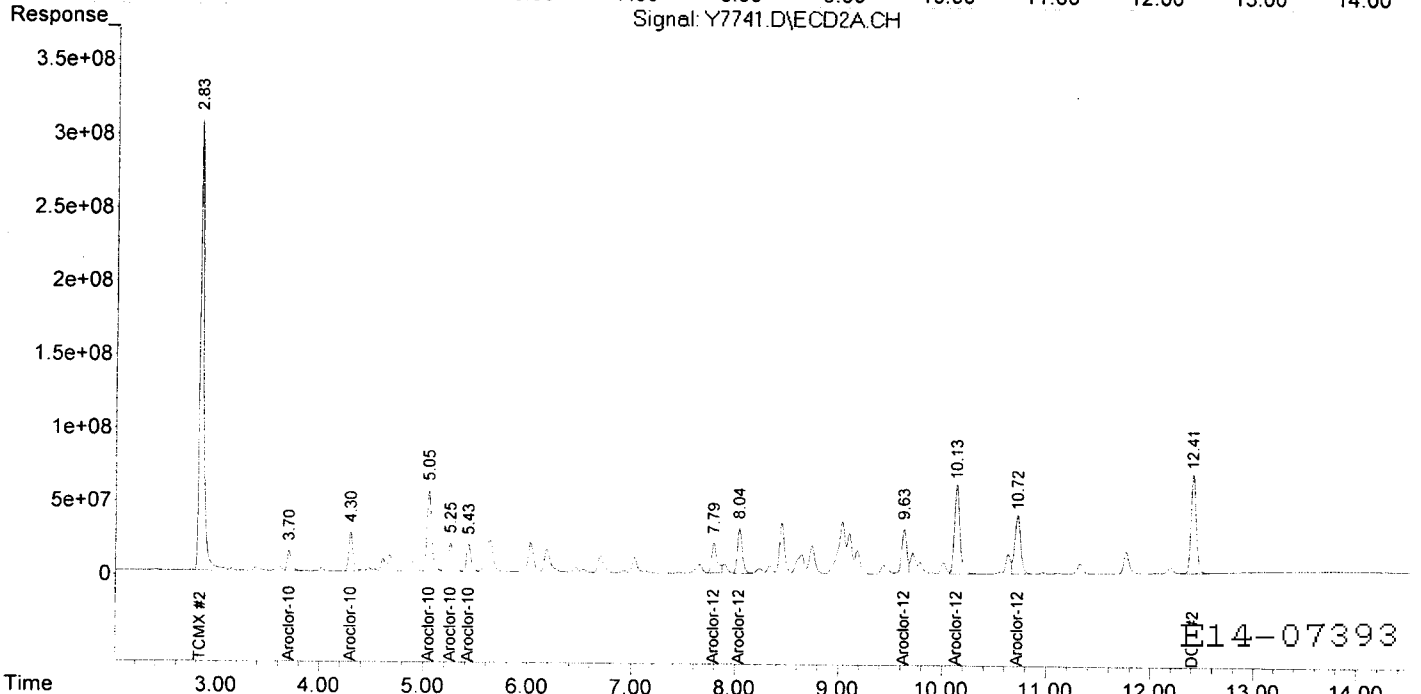
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7741.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 14:51
Operator : JS
Sample : PCB,LCSA140808-14,A,1000ml,100.5
Misc : NA,08/08/14,NA,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:31:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





14-07393 0148

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7743.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:28
Operator : JS
Sample : PCB,07393-001MS,A,200ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.84	3033.9E6	6248.8E6	136.947	139.212	
Spiked Amount 200.000			Recovery	=	68.47%	69.61%	
2) S DCB	12.10	12.41	1204.5E6	2295.9E6	174.543	176.728	
Spiked Amount 200.000			Recovery	=	87.27%	88.36%	
Target Compounds							
3) L2 Aroclor-1016	3.24	3.70	195.3E6	426.2E6	462.186	497.309	
4) L2 Aroclor-1016 {2}	4.07	4.30	370.0E6	997.9E6	640.636	587.091	
5) L2 Aroclor-1016 {3}	4.63	5.05	421.0E6	2586.5E6	560.504	680.048	
6) L2 Aroclor-1016 {4}	5.12	5.25	468.1E6	1066.3E6	1224.295	633.684	#
7) L2 Aroclor-1016 {5}	5.53	5.43	449.6E6	713.6E6	764.362	548.993	#
Sum Aroclor-1016			1904.0E6	5790.6E6	3651.982	2947.125	
Average Aroclor-1016					730.396	589.425	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
23) L6 Aroclor-1248	4.48	5.05	1242.4E6	2586.5E6	1322.204	1325.992	
24) L6 Aroclor-1248 {2}	5.01	5.63	346.5E6	2643.9E6	677.052	906.281	#
25) L6 Aroclor-1248 {3}	5.34	6.03	318.3E6	1235.3E6	482.403	579.818	
26) L6 Aroclor-1248 {4}	6.04	6.18	579.4E6	1044.0E6	473.469	528.382	
27) L6 Aroclor-1248 {5}	6.33	6.53	172.1E6	240.7E6	208.040	220.605	
Sum Aroclor-1248			2658.7E6	7750.2E6	3163.167	3561.077	
Average Aroclor-1248					632.633	712.215	
28) L7 Aroclor-1254	6.43	7.02	434.4E6	1099.0E6	342.950	413.627	
29) L7 Aroclor-1254 {2}	6.86	7.61	191.3E6	342.9E6	238.948	156.593	#
30) L7 Aroclor-1254 {3}	7.03	8.22	588.0E6	840.1E6	371.480	392.599	
31) L7 Aroclor-1254 {4}	7.45	8.45	934.4E6	1471.2E6	571.813	1054.694	#
32) L7 Aroclor-1254 {5}	8.31	9.04	1176.6E6	2716.2E6	755.815	793.371	
Sum Aroclor-1254			3324.7E6	6469.4E6	2281.005	2810.883	
Average Aroclor-1254					456.201	562.177	
33) L8 Aroclor-1260	8.31	7.78	1176.6E6	1484.5E6	680.082	889.266	#
34) L8 Aroclor-1260 {2}	8.99	8.04	414.7E6	1319.2E6	515.874	595.193	
35) L8 Aroclor-1260 {3}	9.46	9.63	1127.1E6	1252.0E6	541.862	616.246	
36) L8 Aroclor-1260 {4}	9.94	10.14	566.9E6	2391.4E6	531.863	549.784	
37) L8 Aroclor-1260 {5}	11.00	10.72	288.9E6	1750.7E6	585.687	546.370	
Sum Aroclor-1260			3574.2E6	8197.8E6	2855.368	3196.859	
Average Aroclor-1260					571.074	639.372	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	

E14-07393 0149

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7743.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:28
Operator : JS
Sample : PCB.07393-001MS.A.200ml.100.5
Misc : NA,08/08/14,NA,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

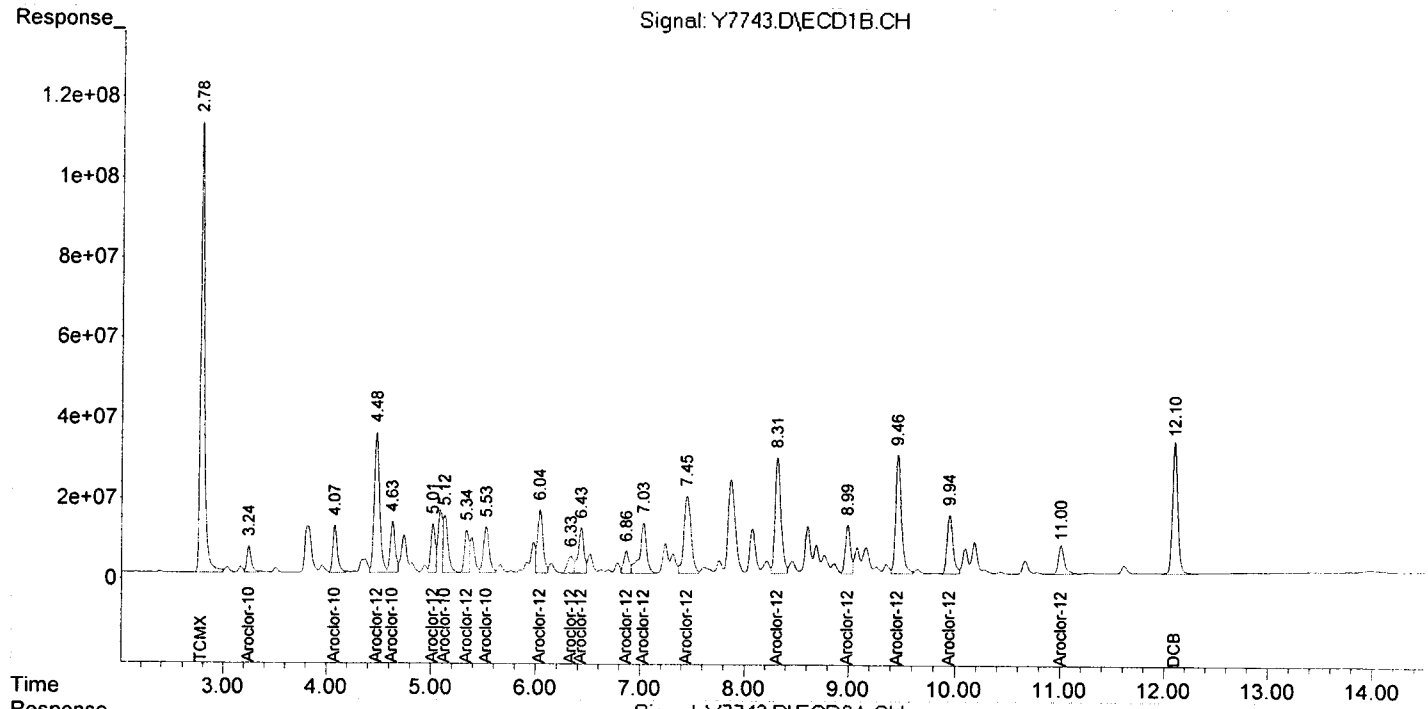
E14-07393 0150

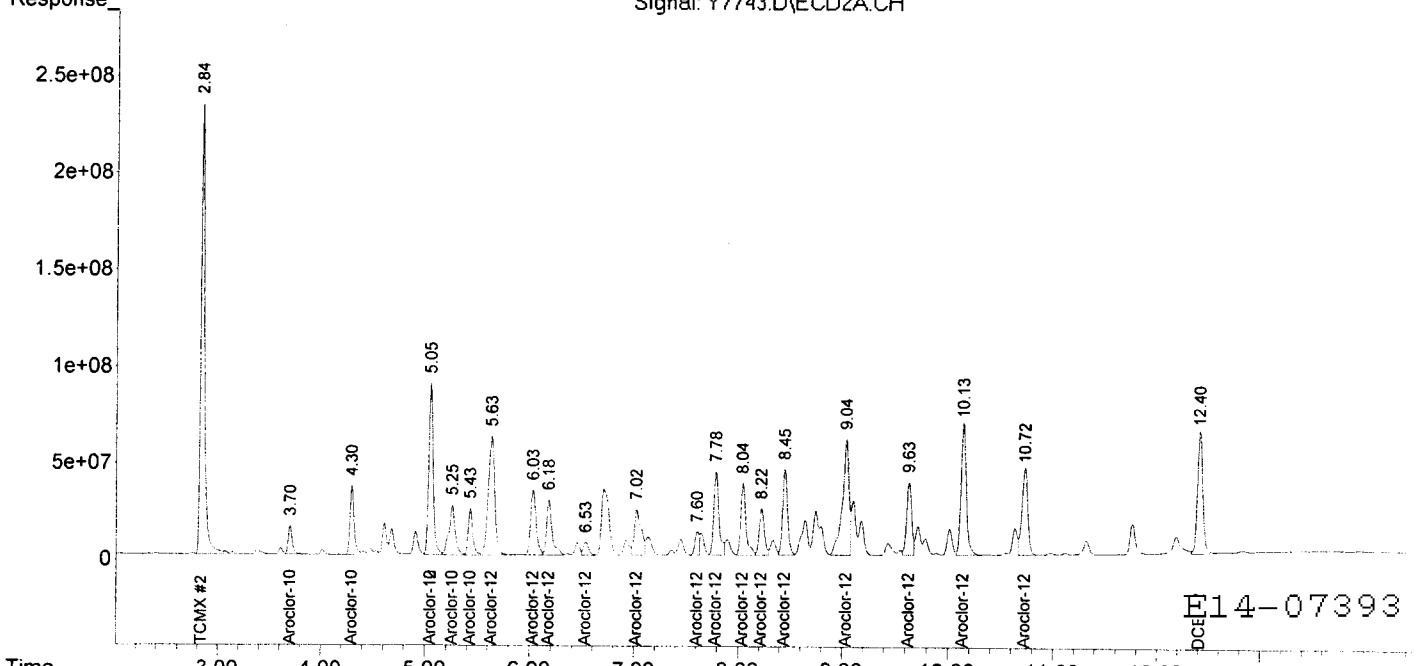
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7743.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:28
Operator : JS
Sample : PCB,07393-001MS,A,200ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0151

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7744.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:45
Operator : JS
Sample : PCB,07393-001MSD,A,200ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.83	2959.1E6	6122.3E6	133.568	136.395	
Spiked Amount 200.000			Recovery	=	66.78%	68.20%	
2) S DCB	12.10	12.41	1197.7E6	2316.1E6	173.558	178.283	
Spiked Amount 200.000			Recovery	=	86.78%	89.14%	
Target Compounds							
3) L2 Aroclor-1016	3.24	3.70	179.1E6	386.9E6	423.745	451.506	
4) L2 Aroclor-1016 {2}	4.07	4.30	356.3E6	948.0E6	616.874	557.740	
5) L2 Aroclor-1016 {3}	4.63	5.05	403.2E6	2515.9E6	536.807	661.479	
6) L2 Aroclor-1016 {4}	5.12	5.25	508.1E6	1044.9E6	1328.869	620.949	#
7) L2 Aroclor-1016 {5}	5.52	5.43	453.0E6	673.5E6	770.148	518.087	#
Sum Aroclor-1016			1899.7E6	5569.2E6	3676.442	2809.761	
Average Aroclor-1016					735.288	561.952	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
23) L6 Aroclor-1248	4.48	5.05	1204.6E6	2515.9E6	1281.950	1289.784	
24) L6 Aroclor-1248 {2}	5.01	5.63	361.1E6	2812.2E6	705.546	963.986	#
25) L6 Aroclor-1248 {3}	5.34	6.03	299.0E6	1241.1E6	453.072	582.553	#
26) L6 Aroclor-1248 {4}	6.04	6.18	610.8E6	953.3E6	499.167	482.498	
27) L6 Aroclor-1248 {5}	6.33	6.53	190.3E6	252.8E6	230.047	231.784	
Sum Aroclor-1248			2665.7E6	7775.3E6	3169.782	3550.605	
Average Aroclor-1248					633.956	710.121	
28) L7 Aroclor-1254	6.43	7.02	454.8E6	1160.2E6	359.088	436.678	
29) L7 Aroclor-1254 {2}	6.86	7.61	207.0E6	376.5E6	258.548	171.954	#
30) L7 Aroclor-1254 {3}	7.03	8.22	504.8E6	914.0E6	318.940	427.128	#
31) L7 Aroclor-1254 {4}	7.45	8.45	939.1E6	1385.2E6	574.688	993.027	#
32) L7 Aroclor-1254 {5}	8.31	9.03	1141.3E6	2655.8E6	733.168	775.734	
Sum Aroclor-1254			3247.1E6	6491.8E6	2244.432	2804.521	
Average Aroclor-1254					448.886	560.904	
33) L8 Aroclor-1260	8.31	7.78	1141.3E6	1499.0E6	659.704	897.953	#
34) L8 Aroclor-1260 {2}	8.99	8.04	366.8E6	1282.1E6	456.203	578.431	#
35) L8 Aroclor-1260 {3}	9.46	9.63	993.2E6	1161.4E6	477.477	571.633	
36) L8 Aroclor-1260 {4}	9.94	10.13	508.4E6	2135.1E6	477.006	490.871	
37) L8 Aroclor-1260 {5}	11.00	10.72	246.4E6	1582.7E6	499.505	493.955	
Sum Aroclor-1260			3256.1E6	7660.3E6	2569.896	3032.843	
Average Aroclor-1260					513.979	606.569	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	

E14-07393 0152

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7744.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:45
Operator : JS
Sample : PCB,07393-001MSD,A,200ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

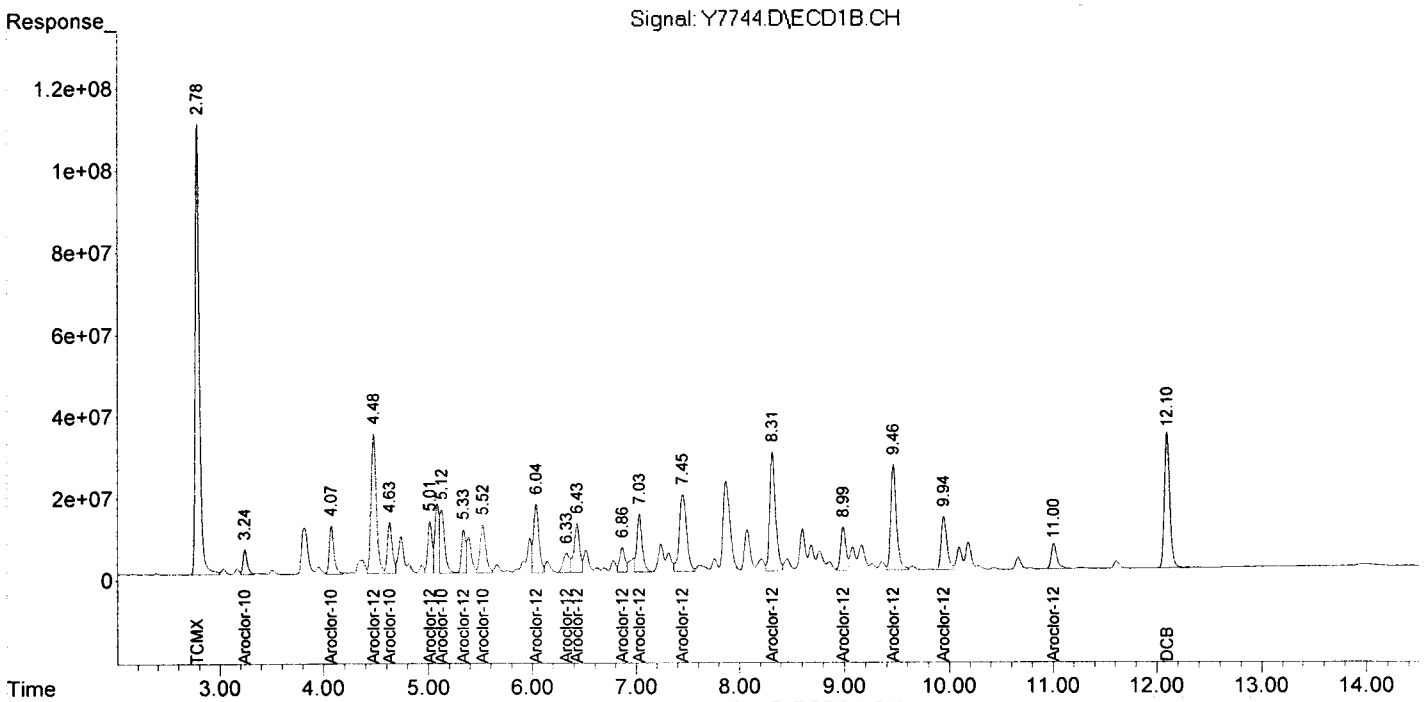
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

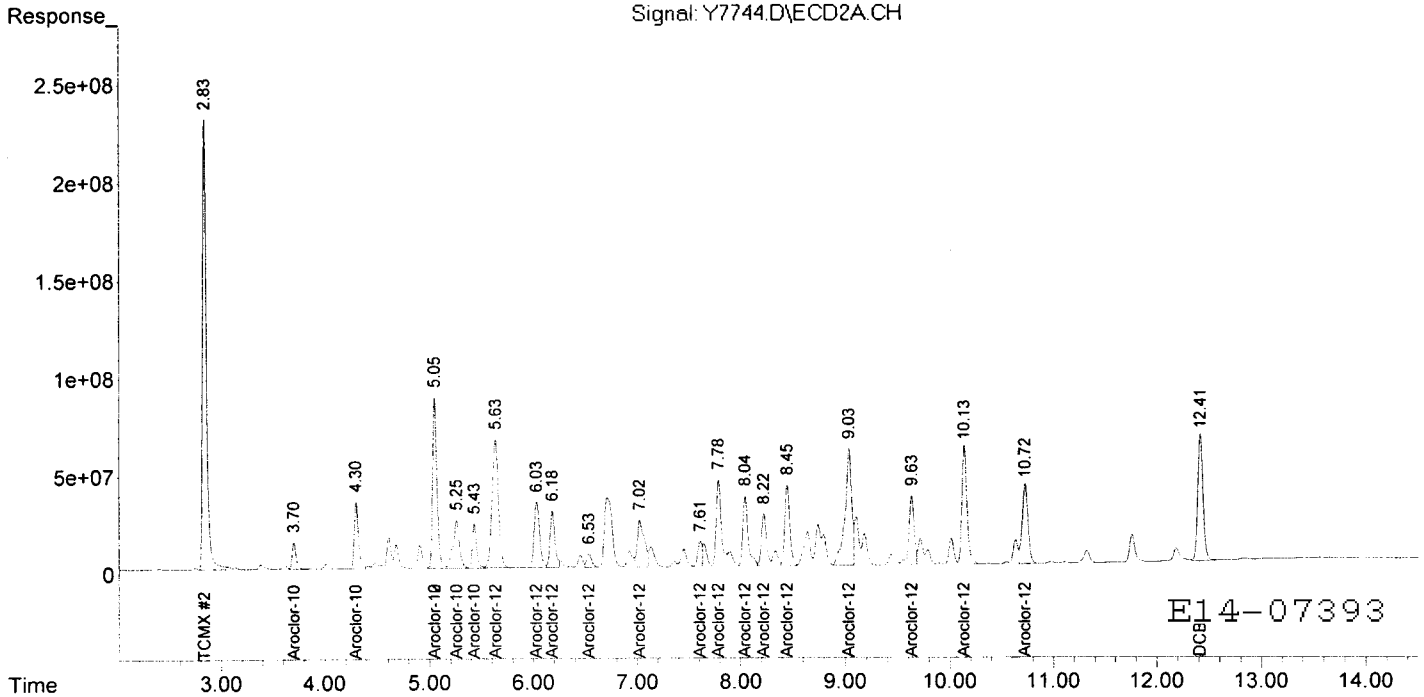
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\08-11-14\
Data File : Y7744.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 11 Aug 2014 15:45
Operator : JS
Sample : PCB,07393-001MSD,A,200ml,100,5
Misc : NA,08/08/14,NA,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Aug 12 09:37:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0808.M
Quant Title :
QLast Update : Fri Aug 08 14:00:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-07393 0154

PCB RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

PCB

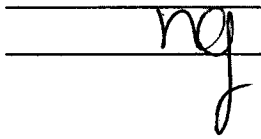
DATE 8/8/2014 10:10 **Extra. Batch** _____

INSTRUMENT Y _____

METHOD YPCB0808 _____

SYS METHOD 8082A (eg. 8015B M, 3810) _____

ANALYST Nicole



Initial

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
100	Y7700		HEXANE									
99	Y7701		ISOOCTANE									
1	Y7702		ICC_8082_L5_IAS_4973,2_PPM									
2	Y7703		ICC_8082_L4_IAS_4974,1_PPM									
3	Y7704		ICC_8082_L3_IAS_4975,0.5_PPM									
4	Y7705		ICC_8082_L2_IAS_4976,0.05_PPM									
5	Y7706		ICC_8082_L1_IAS_4977,0.01_PPM									
6	Y7707		ICC_8082_1221_IAS_4981,0.5_PPM									
7	Y7708		ICC_8082_1232_IAS_4982,0.5_PPM									
8	Y7709		ICC_8082_1242_IAS_4983,0.5_PPM									
9	Y7710		ICC_8082_1248_IAS_4984,0.5_PPM									
10	Y7711		ICC_8082_1254_IAS_4985,0.5_PPM									
11	Y7712		ICC_8082_1262_IAS_4986,0.5_PPM									
12	Y7713		ICC_8082_1268_IAS_4987,0.5_PPM									
13	Y7714		ICV_8082_C_IAS_4980,0.5_PPM									

LABORATORY CHRONICLE - GC

PCB

DATE	8/11/2014 10:09	**Extra. Batch**	**140808-14**	BA	**Aqueous**
INSTRUMENT	**Y**		**140811-06**	BS	Soil
METHOD	**YPCB0808**		**140811-09**	BS	Soil
SYS METHOD	**8082A** (eg. 8015B M, 3810)				
ANALYST	**Nicole**				
	Initial				

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	Y7739		CCV_8082_C_IAS_4980,0.5_PPM		1							
36	Y7740		BLKA140808-14		1	1000	5	A			8/8/14	100
37	Y7741		LCSA140808-14		1	1000	5	A			8/8/14	100
38	Y7742	5x	07393	1	1	1000	5	A	8/7/14	8/7/14	8/8/14	100
39	Y7743		07393-001MS		1	200	5	A			8/8/14	100
40	Y7744		07393-001MSD		1	200	5	A			8/8/14	100
41	Y7745		07344	11	1	1000	5	A	8/6/14	8/6/14	8/8/14	100
38	Y7746	48,54	07393	1	5	1000	5	A	8/7/14	8/7/14	8/8/14	100
42	Y7747		BLKS140811-06		1	5.00	20	S			8/11/14	0
43	Y7748		LCSS140811-06		1	5.00	20	S			8/11/14	0
44	Y7749		07486	1	1	5.67	20	S	8/8/14	8/8/14	8/11/14	21.9
45	Y7750		07486	4	1	5.16	20	S	8/8/14	8/8/14	8/11/14	17.3
46	Y7751		07486	7	1	5.53	20	S	8/8/14	8/8/14	8/11/14	14.1
47	Y7752		07486	10	1	5.04	20	S	8/8/14	8/8/14	8/11/14	5.80
48	Y7753		07486	13	1	5.57	20	S	8/8/14	8/8/14	8/11/14	13.5
49	Y7754		07486	16	1	5.41	20	S	8/8/14	8/8/14	8/11/14	6.70
50	Y7755		07486	19	1	5.66	20	S	8/8/14	8/8/14	8/11/14	8.40
51	Y7756		07486	22	1	5.03	20	S	8/8/14	8/8/14	8/11/14	21.4
52	Y7757		07486	25	1	5.40	20	S	8/8/14	8/8/14	8/11/14	6.40
1	Y7758		CCV_8082_C_IAS_4980,0.5_PPM		1							

STANDARD IAS#	STANDARD NAME:	1016 PCb		
4833				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-8097	LB95199	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1221 PCb		
4834				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-8098	LB98893	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1232 PCb		
4835				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4805	LB78773	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1242 PCb		
4836				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4806	LB88851	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/19 (18)	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

NOTEBOOK INSERT LABEL

Aroclor 1016 **4-8097**

Lot: LB95199 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 3-1-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB98893 EXP: MAY/2016 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 3-1-13

SUPELCO Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1232 **4-4805**

Lot: LB78773 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED: 1-24-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1242 **4-4806**

Lot: LB88851 EXP: NOV/2014 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED: 3-1-13

SUPELCO Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	1248 PCB		
4837				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4807	LB88969	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1254 PCB		
4838				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4808	LB98272	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1260 PCB		
4839				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4809	LB92109	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1262 PCB		
4840				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Restek	32409	A091469	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

NOTEBOOK INSERT LABEL

Aroclor 1248
Lot: LB88969 EXP: JAN/2015 STORAGE: ROOM TEMP. 4-4807 1 x 1.0ml

DATE RECEIVED: 1-23-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1254
Lot: LB98272 EXP: FEB/2016 STORAGE: ROOM TEMP. 4-4808 1 x 1.0ml

DATE RECEIVED: 3-1-13 ng

SUPELCO Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260
Lot: LB92109 EXP: APR/2015 STORAGE: ROOM TEMP. 4-4809 1 x 1.0ml

DATE RECEIVED: 3-1-13 JS

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA
Catalog # 32409
This product contains PCB's
Aroclor® 1262 Standard
1000 ug/mL each in Hexane
Lot# A091469 Exp Date 01/2019 Store 25°C nominal

STANDARD IAS#	STANDARD NAME:	1268 PCb		
4841				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Restek	32410	A087817	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1016 pcb mdl		
4842				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4833	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VS59-10	ng

STANDARD IAS#	STANDARD NAME:	1221 PCb mdl		
4843				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS #4834	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VS59-10	ng

STANDARD IAS#	STANDARD NAME:	1232 PCb mdl		
4844				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4835	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VS59-10	ng

RESTEK
110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog # 32410
This product contains PCB's
Aroclor® 1268 Standard

1000 ug/mL each in Hexane
Lot# A087817 Exp Date 07/2018 Store 25°C nominal

STANDARD IAS#	STANDARD NAME:	1262 PCB mdL		
4849				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4840	—	—	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	mg

STANDARD IAS#	STANDARD NAME:	1268 PCB mdL		
4850				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4841	—	—	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	mg

STANDARD IAS#	STANDARD NAME:	1221 PCB Stock		
4851				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4834	—	—	1000 PPM
STD.EXP.DATE	~~1:100 (1221~~ DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (1221 neat) (100µl IAS#4834) + 1:25 surrog. (400µl IAS#4825) → 10 mL			10 PPM + 4PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB STOCK		
4852				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4835	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4835) + 1:25 (400µl of surrog #4825) → 10ml			10 PPM + 4 PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isochene		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB Stock		
4853				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4836	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/15 (12)	1:100 (100µl of IAS # 4836) + 1:25 (400µl of surrog. 4825) → 10ml			10PPM + 4PPM surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB Stock		
4854				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4837	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4837) + 1:25 (400µl of surrg 4825) → 10mL			10PPM + 4PPM surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB stock		
4855				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4838	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4838) + 1:25 (400µl of surr 4825) → 10ml			10PPM + 4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1262 PCB Stock		
4856				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4840	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4840) + 1:25 (400µl of surrog 4825) → 10ml			10PPM + 4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1268 PCB Stock		
4857				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4841	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4841) + 1:25 (400µl of surrog. 4825) → 10ml			10PPM + 4 PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/25/23	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
4858				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4851	—	—	10PPM + 4PPM Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15 14 JS	1:20			0.5PPM + 0.2PPM Surrg.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
4859				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4852	—	—	10PPM + 4PPM surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15 14 JS	1:20			0.5PPM + 0.2PPM Surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
4860				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4853	—	—	10PPM + 4PPM Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15	1:20			0.5PPM + 0.2PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB /PEST SURROGATE		
4825				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	Chem Service	TCMX: S10542B3 DCB: BZ-209 JS	~~1135800~~ 1814900JS 1464000	500 PPM TCMX 1000 PPM DCB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	10ML(TCMX)+5ML(DCB)→50ml Hexane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/12/23	Hexane		134316	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
4826				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS# 4833 IAS# 4839	48099 (1016) 44809 (1260)	LB95179 LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 (1mL of 1016, 1260 → 10mL of isooctane)			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
4827				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS # 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/07/14	1:10 stock IAS#4826 (1mL)+400µL surrg (IAS#4825)→10mL			10PPM+4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
4828				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS# 4827	—	—	10PPM + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/07/14	1:5			2PPM + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE

O BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone

FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone

FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE

O BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone

FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone

FLAMMABLE-HARMFUL-IRRITANT

,9J4-5ML Exp 4/30/2016

CHEM SERVICE

X 599, WEST CHESTER, PA 19381 800-452-9994

orobiphenyl Solution

CAUTION CONTAINS PCBs

(Polychlorinated Biphenyls)

64000

ml In Hexane

LE-REPRODUCTIVE HAZARD

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

IING!: READ your MSDS before HANDLING chen nical.

BZ-209J4-5ML Exp 4/30/2016

CHEM SERVICE

PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution

Lot: 1464000

1000ug/ml In Hexane

FLAMMABLE-REPRODUCTIVE HAZARD

STANDARD IAS#	STANDARD NAME:	Extraction Surrogate NJ-EPH-DRO		
4952				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5-5-14	IAS 4770 IAS 9769	—	—	100,000
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11-1-14	1:10 (1mL each Surrogate + 8mL Hexane)			10,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4-16-24	Hexane		138465	

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
4953				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/08/14	SpexCertiPrep	ASE-8081-S	T1111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~05/08/15~~ 01/07/15 IB	10ml (SpexCertiPrep) + 200µl (surrogate IAS# 4825) → 10ml (Isooctane)			1000 PPB 2000 PPB (surrogate)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	working Pesticides Stol (2nd source)		
4954				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/08/14	IAS# 4953	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/08/14	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	isooctane		V559-10	

STANDARD IAS#	STANDARD NAME:	PCB Working Standard		
4955				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
RG 5/8/14	IAS #4826	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
RG 11/8/14	1:10 Stock (IAS #4826) + 400uL surrog (IAS #4825) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	Isooctane		V559-10	RG

E14-07393 0169

STANDARD IAS#	STANDARD NAME:	PCB Spike (1016/1260)		
4972				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
06/04/14	Chem Service	1016 S11086JA 1260 S11092JA	1111700 2302000	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	5ml of 1016 + 5ml of 1260			500 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
4973				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:5			2ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L4 (1016/1260)		
4974				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			1ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L3 (1016/1260)		
4975				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:20			0.5ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

S-11092J4-5ML Exp 12/31/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution

Lot: 2302000

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

S-11086J4-5ML Exp 12/31/201

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-999

Arochlor 1016 Solution

Lot: 1111700
1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs
(Polychlorinated Biphenyls)
FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
4976				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			0.05ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
4977				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:50			0.01 ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB STOCK (second source)		
4978				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	ChemService	(1016) S-11086J4 (1260) S-11092J4	2540100 2302000	1,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/30/15	1:10 (1mL of 1016, 1mL 1260 → 10mL)			100ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB Working Standard (second source)		
4979				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4978	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:10 stock (IAS #4978) + 400uL surrog (IAS #4825) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

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STANDARD IAS#	STANDARD NAME:	PCB L3 (second source)		
4980				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4979	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
4981				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4851	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
4982				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4852	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
4983				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4853	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1248 PCB L3		
4984				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4854	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/2014	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1254 PCB L3		
4985				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4855	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1262 PCB L3		
4986				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4856	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1268 PCB L3		
4987				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4857	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Aqueous)

Extraction Date/Time: 08/08/2014 18:07

Batch ID: **140808-14**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)
BLKA140808-14	PCB/Pest	1000	5	10	1		
LCSA140808-14	PCB	1000	5	10	1	5	
07393-001MS	PCB	200	5	10	4	5	
07393-001MSD	PCB	200	5	10	4	5	
LCSA140808-14	Pesticides	1000	5	10	1		10

Standard Info	Surrogate IAS #
Solvent	RA#72-9/RA#72-18
Surrogate	#4825
SPK 1	#4972
SPK 2	#4988

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	07393-001	PCB	1000	5	10	4	100	R-72	**07393-001MS / 140808-14**	
2	07344-011	PCB/Pest	1000	5	10	1	100		**07393-001MS / 140808-14**	**07118-001MS / 140806-10**
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	08/08/2014 18:07
Weighed	Archie	08/11/2014 11:20
Surrogated	Elma	08/11/2014 12:39
Filtered	Elma	08/11/2014 12:39
Transferred	Elma	08/11/2014 12:39
Fractionated		

Comments:

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*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q Column: RTX-5

Surrogate RT from initial calibration:
DBC 4.91

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
TPH-DRO	BLKA140806-18	AQUEOUS	08/08/2014	11:09	81	4.91	
GEFF0730	07064-001	AQUEOUS	08/08/2014	11:23	66	4.91	
GPECWC08	07393-001	AQUEOUS	08/08/2014	11:37	83	4.92	
TPH-DRO	LCSA140806-18	AQUEOUS	08/08/2014	11:51	77	4.91	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.1 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

AQUEOUS - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSA140806-18

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	BS CONC. (ug/L)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	557	55.7		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

AQUEOUS - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 06861-003MSD

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC
TPH-DRO	1000	0	584	58.4	30 - 150

COMPOUND	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	616	61.6	5.29	50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB4744.D

Instrument ID: GC-Q

Date Extracted: 07/28/2014

Matrix: Aqueous

Date Analyzed: 07/30/2014

Time Analyzed: 19:35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TPH-DRO	LCSA140728-16	07/30/2014	17:45
KO1	06776-001	07/30/2014	17:59
KO2	06776-002	07/30/2014	18:13
I-1	06861-001	07/30/2014	18:26
K-01	06861-002	07/30/2014	18:40
K-02	06861-003	07/30/2014	18:54
TPH-DRO	06861-003MS	07/30/2014	19:08
TPH-DRO	06861-003MSD	07/30/2014	19:22

TPH METHOD BLANK SUMMARY

Lab File ID: QB5031.D

Instrument ID: GC-Q

Date Extracted: 08/06/2014

Matrix: Aqueous

Date Analyzed: 08/08/2014

Time Analyzed: 11:09

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
GEFF0730	07064-001	08/08/2014	11:23
GPECWC08	07393-001	08/08/2014	11:37
TPH-DRO	LCSA140806-18	08/08/2014	11:51

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\08-08-14\
Data File : QB5033.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:37 am
Operator : MS
Sample : GPECWC08,07393-001,A,1000ml,100,08/07/14,1
Misc : 140806-18,08/07/14,08/07/14,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:52:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.915	24158120	82.927	ng	m
Spiked Amount 100.000		Recovery = 82.93%			
Target Compounds					
3) H TPH-DRO	3.300	644380565	1380.097	ng	

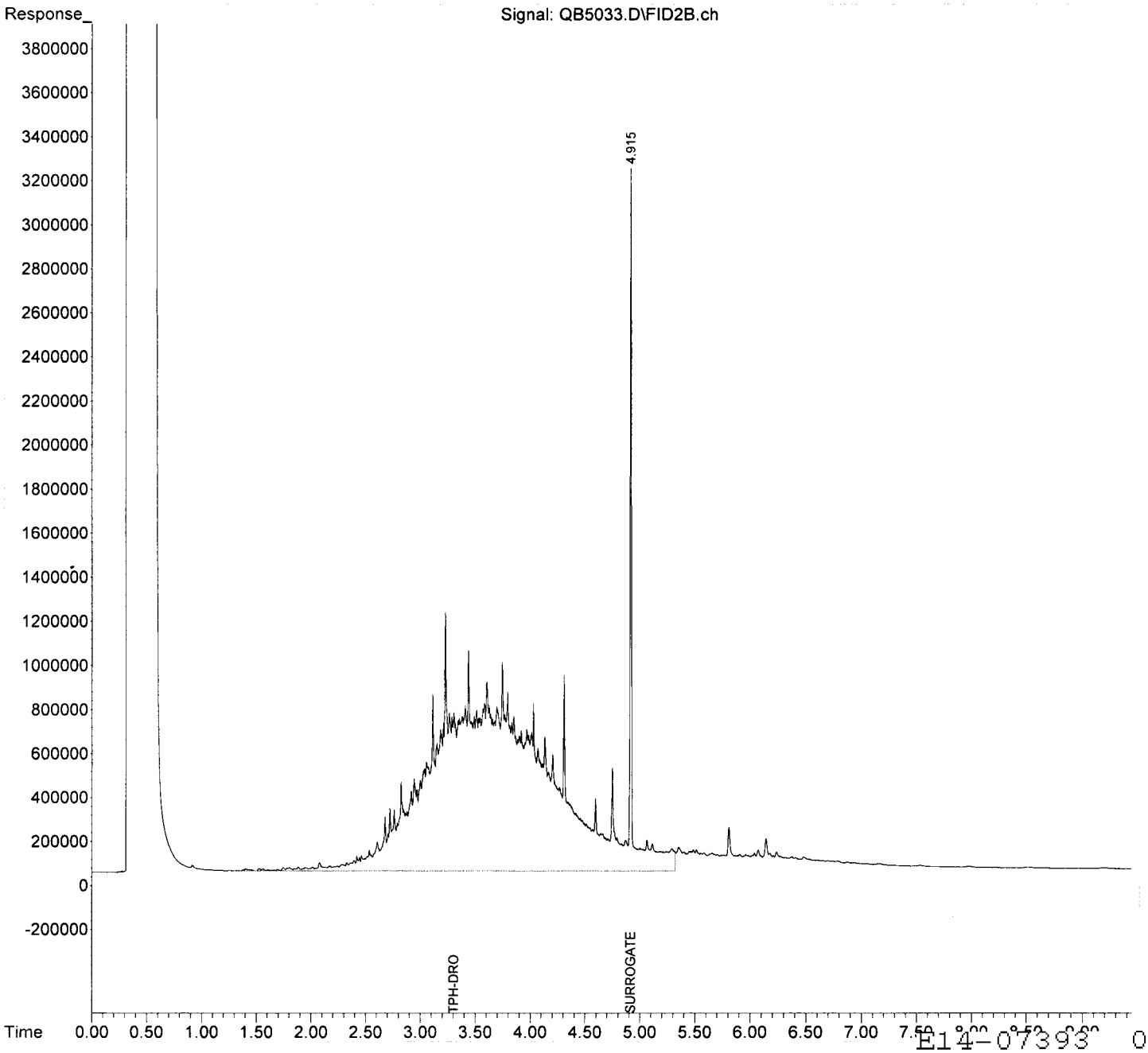
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\08-08-14\
Data File : QB5033.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:37 am
Operator : MS
Sample : GPECWC08,07393-001,A,1000ml,100,08/07/14,1
Misc : 140806-18,08/07/14,08/07/14,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:52:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 07/24/2014 Instrument ID: GC-Q

Date File: QB4559.D QB4558.D QB4557.D QB4556.D QB4555.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RT	FROM	TO
TPH-DRO	3.20	3.20	3.20	3.20	3.20	3.20	3.10	3.30

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RF	%RSD
TPH-DRO	55.0	44.9	49.5	43.5	40.6	46.7	12.1

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 08/08/2014 10:55

Date File: QB5030.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.10	3.30		46.7	47.1	0.857

Date Analyzed: 08/08/2014 12:04

Date File: QB5035.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.10	3.30		46.7	46.3	0.857

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4555.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:10 pm
Operator : MS
Sample : DRO_L5_IAS_4963,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:25:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.915	130722882	448.716 ng
Spiked Amount 100.000		Recovery = 448.72%	
Target Compounds			
3) H TPH-DRO	3.200	2027617292	4329.370 ng

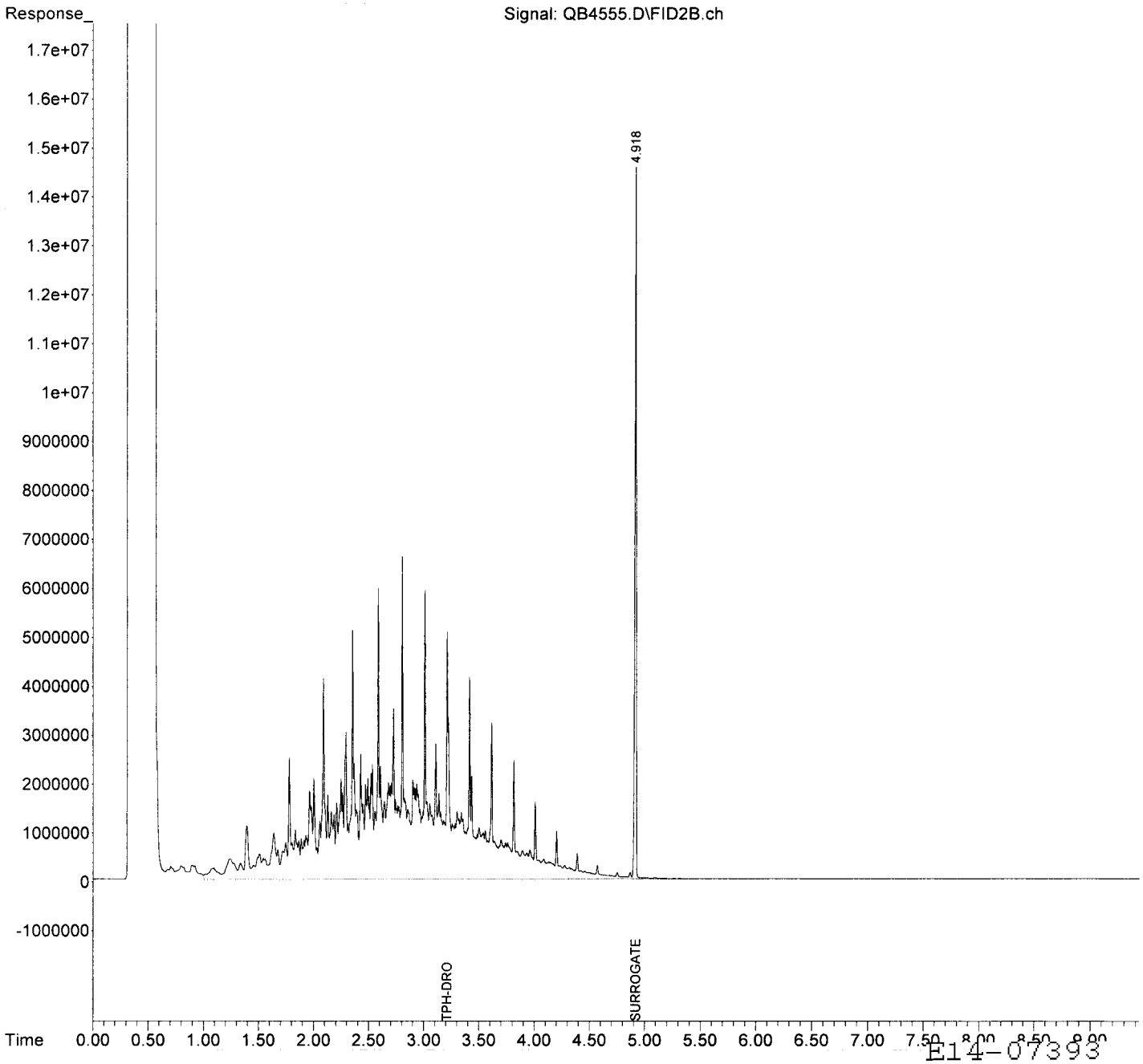
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4555.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:10 pm
Operator : MS
Sample : DRO_L5_IAS_4963,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:25:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4556.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:24 pm
Operator : MS
Sample : DRO_L4_IAS_4964,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:25:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.908	56007833	192.251	ng	m
Spiked Amount 100.000		Recovery = 192.25%			
Target Compounds					
3) H TPH-DRO	3.200	870695712	1859.110	ng	

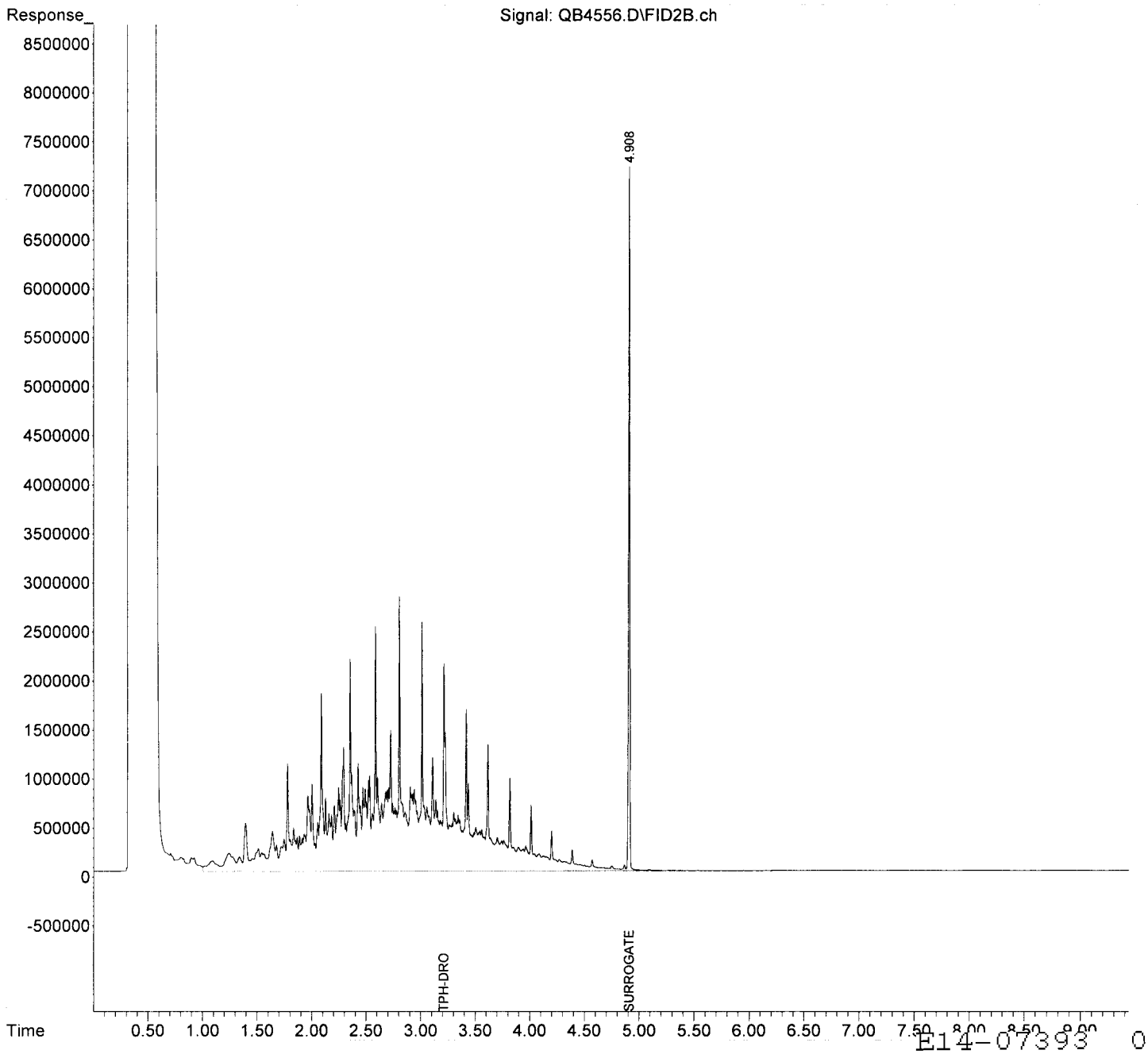
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4556.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:24 pm
Operator : MS
Sample : DRO_L4_IAS_4964,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:25:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-07393 0191

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4557.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:38 pm
Operator : MS
Sample : DRO_L3_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:26:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.898	31869013	109.393 ng
Spiked Amount 100.000		Recovery = 109.39%	
Target Compounds			
3) H TPH-DRO	3.200	495202762	1057.357 ng

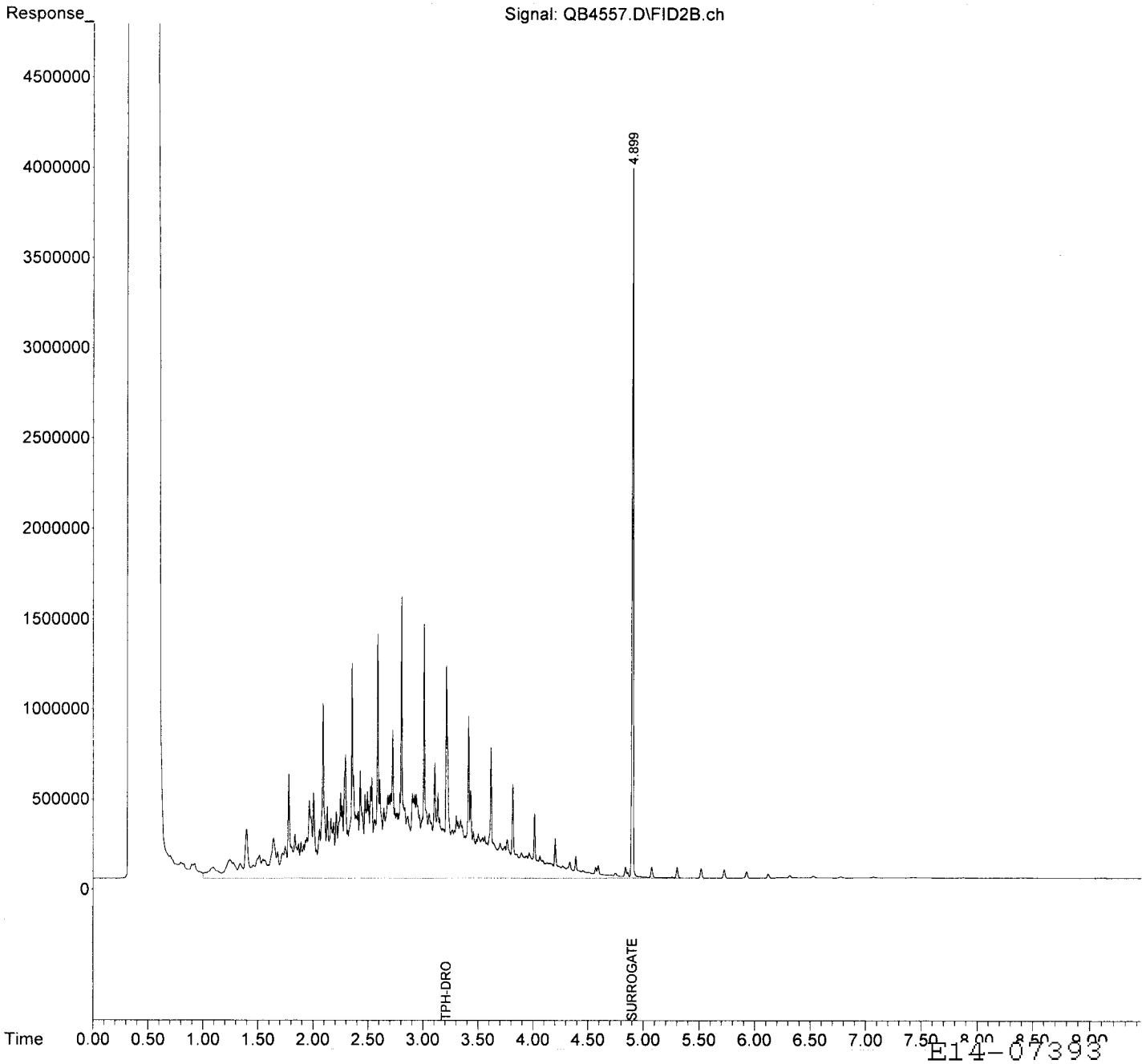
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4557.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:38 pm
Operator : MS
Sample : DRO_L3_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 55 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:26:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4558.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:52 pm
Operator : MS
Sample : DRO_L2_IAS_4966,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:26:38 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.900	14275800	49.003	ng	m
Spiked Amount 100.000		Recovery = 49.00%			
Target Compounds					
3) H TPH-DRO	3.200	224639854	479.651	ng	

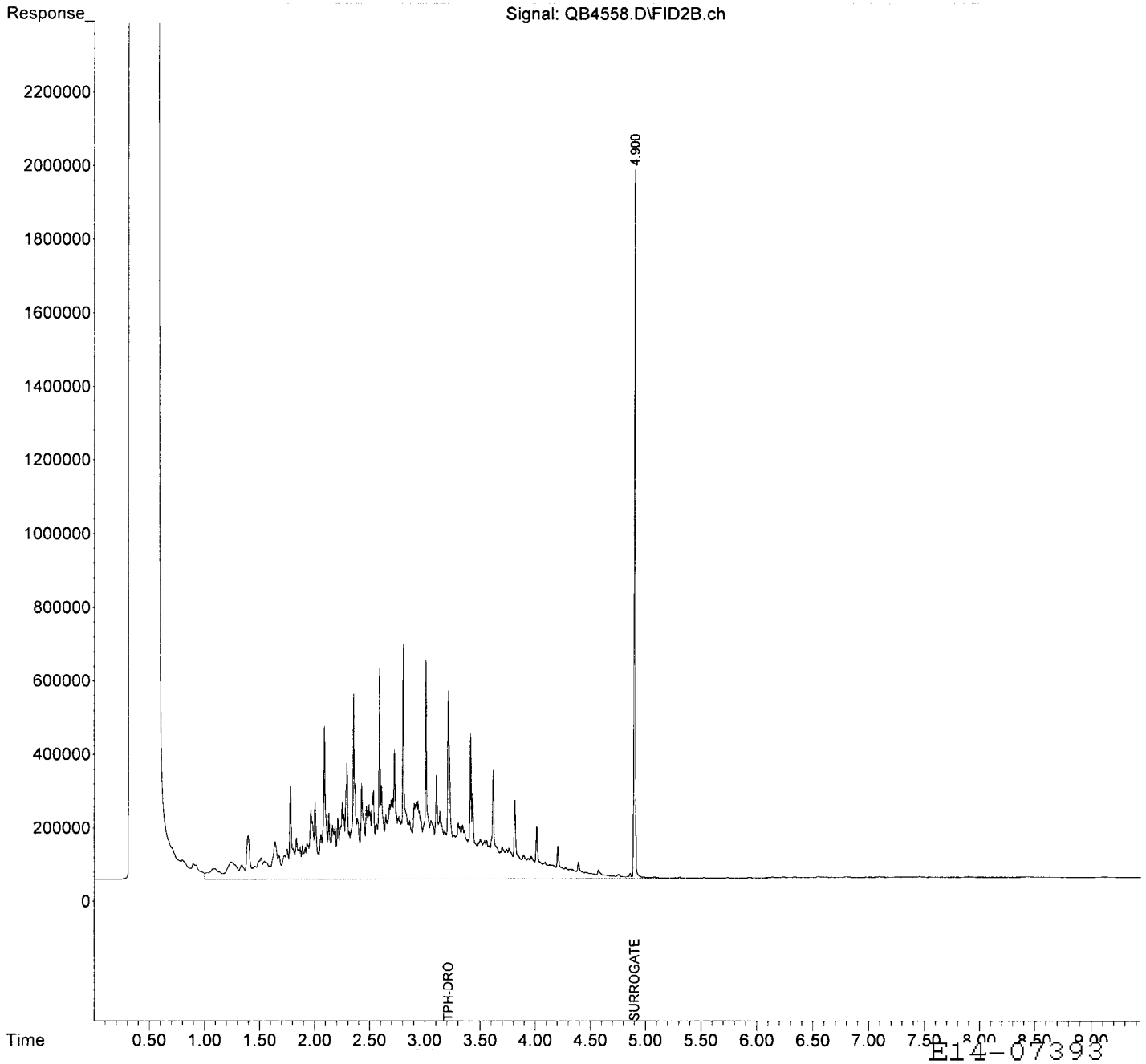
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4558.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 1:52 pm
Operator : MS
Sample : DRO_L2_IAS_4966,500_PPM
Misc : ,NA,NA,1
ALS Vial : 56 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:26:38 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-07393 0195

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4559.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 2:06 pm
Operator : MS
Sample : DRO_L1_IAS_4967,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:27:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.901	1223928	4.201	ng	m
Spiked Amount 100.000		Recovery =	4.20%		
Target Compounds					
3) H TPH-DRO	3.200	22000985	46.977	ng	

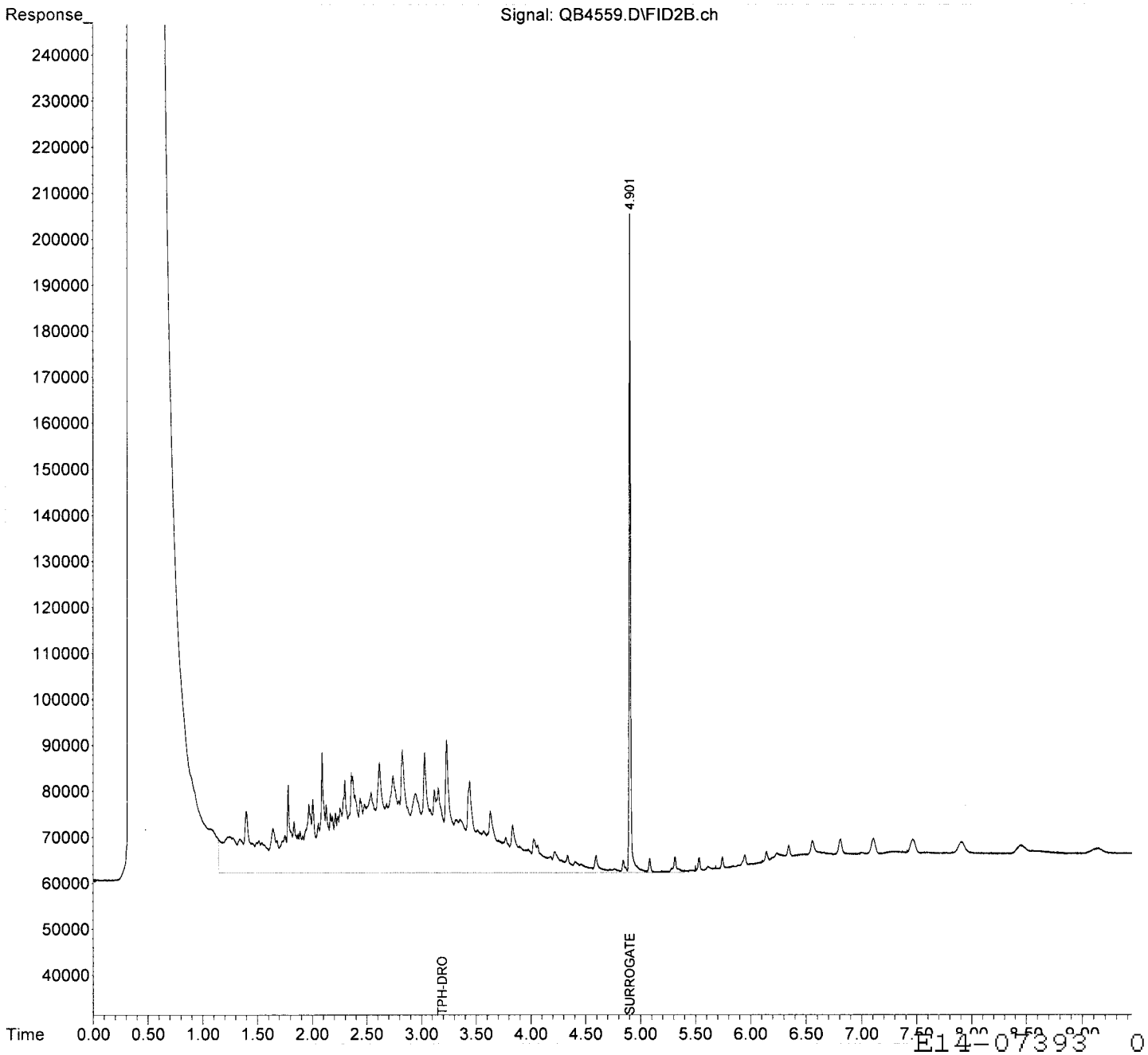
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-24-14\
Data File : QB4559.D
Signal(s) : FID2B.ch
Acq On : 24 Jul 14 2:06 pm
Operator : MS
Sample : DRO_L1_IAS_4967,40_PPM
Misc : ,NA,NA,1
ALS Vial : 57 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 24 14:27:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Thu Jul 24 14:23:19 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-07393 0197

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5030.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 10:55 am
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:06:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.908	29462350	101.135	ng	m
Spiked Amount 100.000		Recovery = 101.13%			
Target Compounds					
3) H TPH-DRO	3.300	471116837	1009.010	ng	

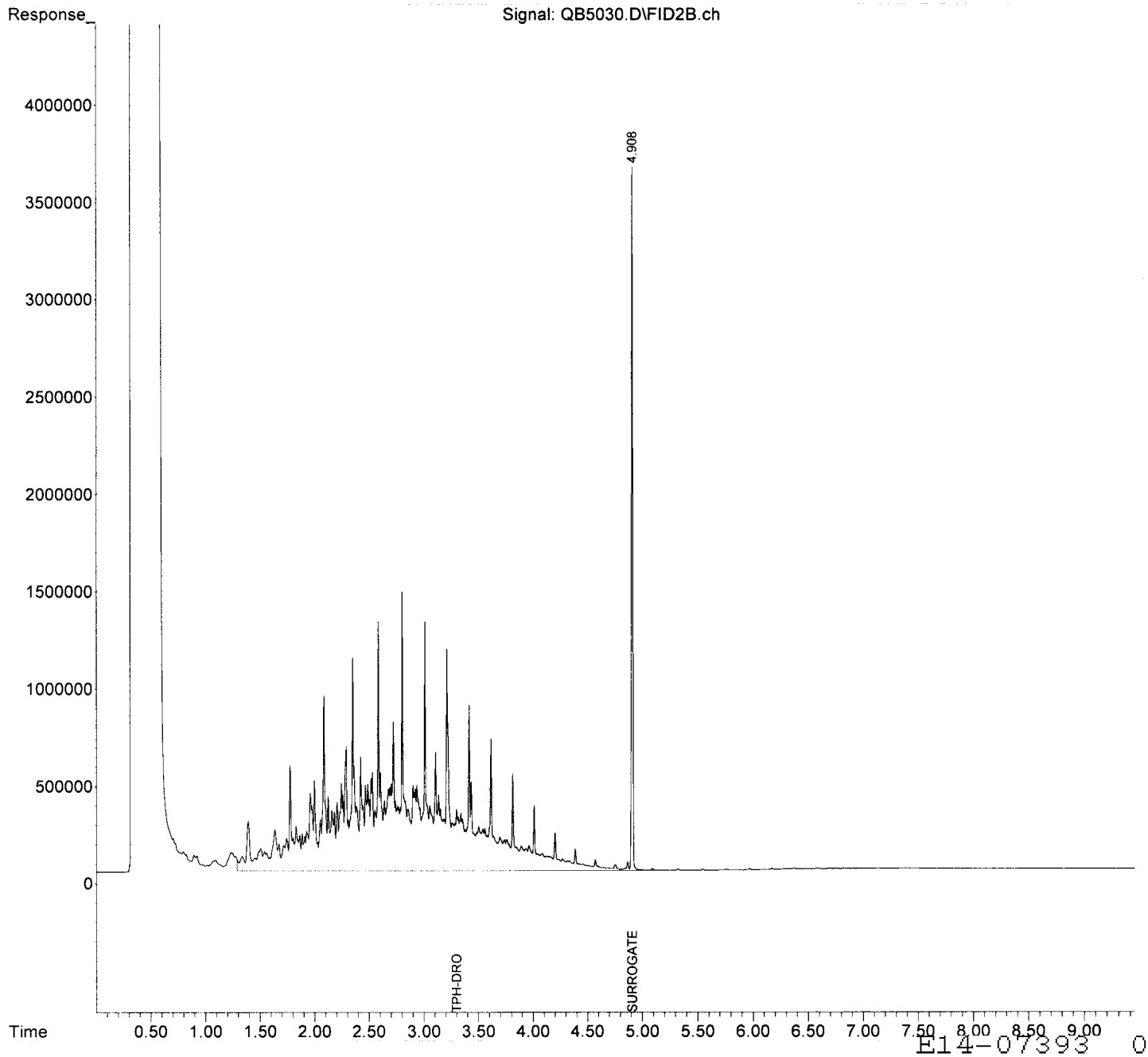
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5030.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 10:55 am
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:06:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5035.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 12:04 pm
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 12:15:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.914	29206016	100.255	ng	m
Spiked Amount 100.000		Recovery = 100.26%			
Target Compounds					
3) H TPH-DRO	3.300	463214654	992.086	ng	

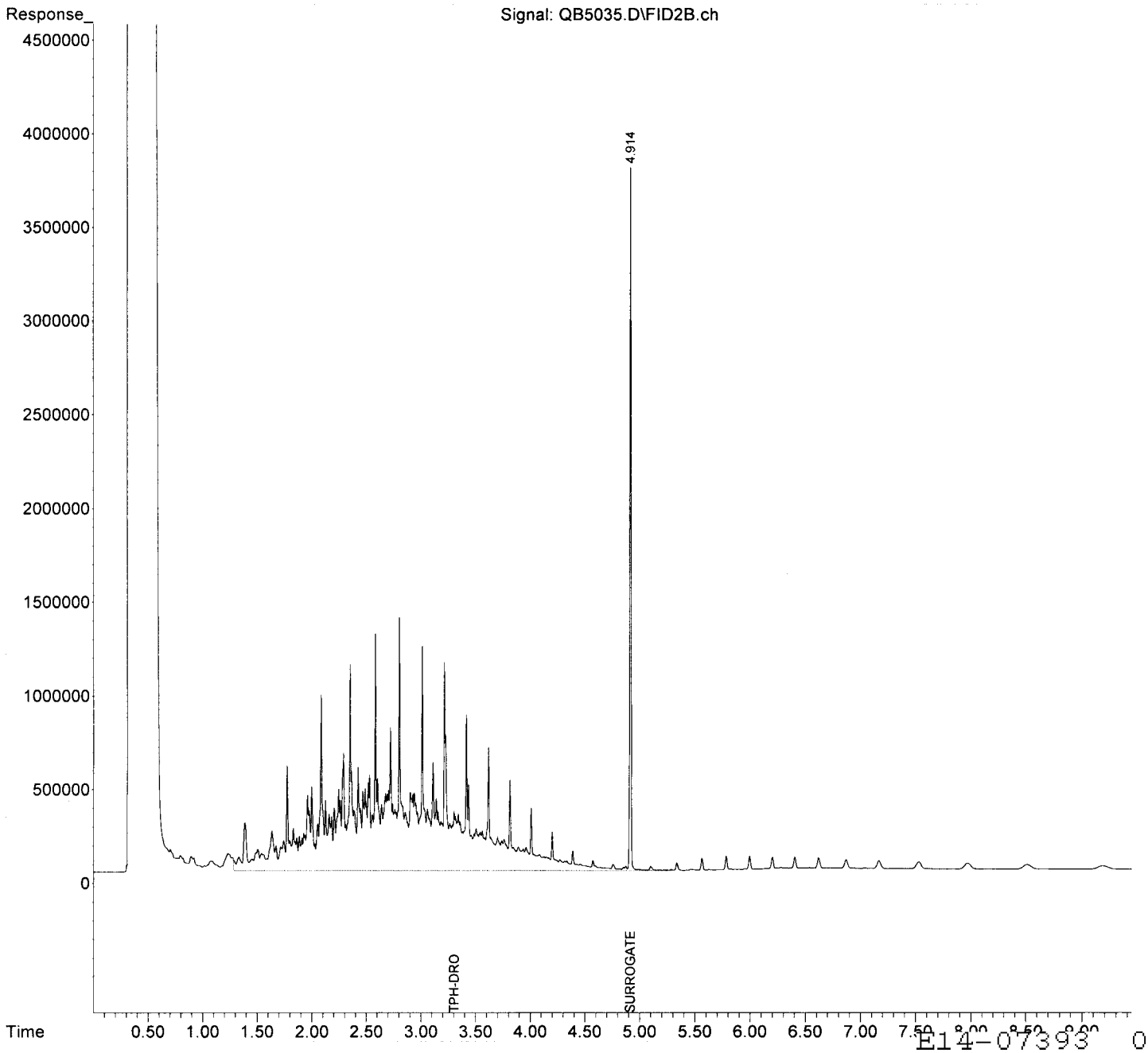
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5035.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 12:04 pm
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 12:15:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-07393 0201

DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKA140728-16	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	1000ml
Date Received:	NA	Matrix-Units:	Aqueous-ug/L (ppb)
Date Extracted:	07/28/2014	Dilution Factor:	1
Date Analyzed:	07/30/2014	% Moisture:	100
Data File:	QB4744.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		50.0	40.0

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKA140806-18	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	1000ml
Date Received:	NA	Matrix-Units:	Aqueous-ug/L (ppb)
Date Extracted:	08/06/2014	Dilution Factor:	1
Date Analyzed:	08/08/2014	% Moisture:	100
Data File:	QB5031.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		50.0	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\08-08-14\
Data File : QB5031.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:09 am
Operator : MS
Sample : TPH-DRO,BLKA140806-18,A,1000ml,100,08/06/14,1
Misc : 140806-18,NA,NA,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:42:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.907	23663564	81.230	ng	m
Spiked Amount 100.000		Recovery = 81.23%			
Target Compounds					

(f)=RT Delta > 1/2 Window (m)=manual int.

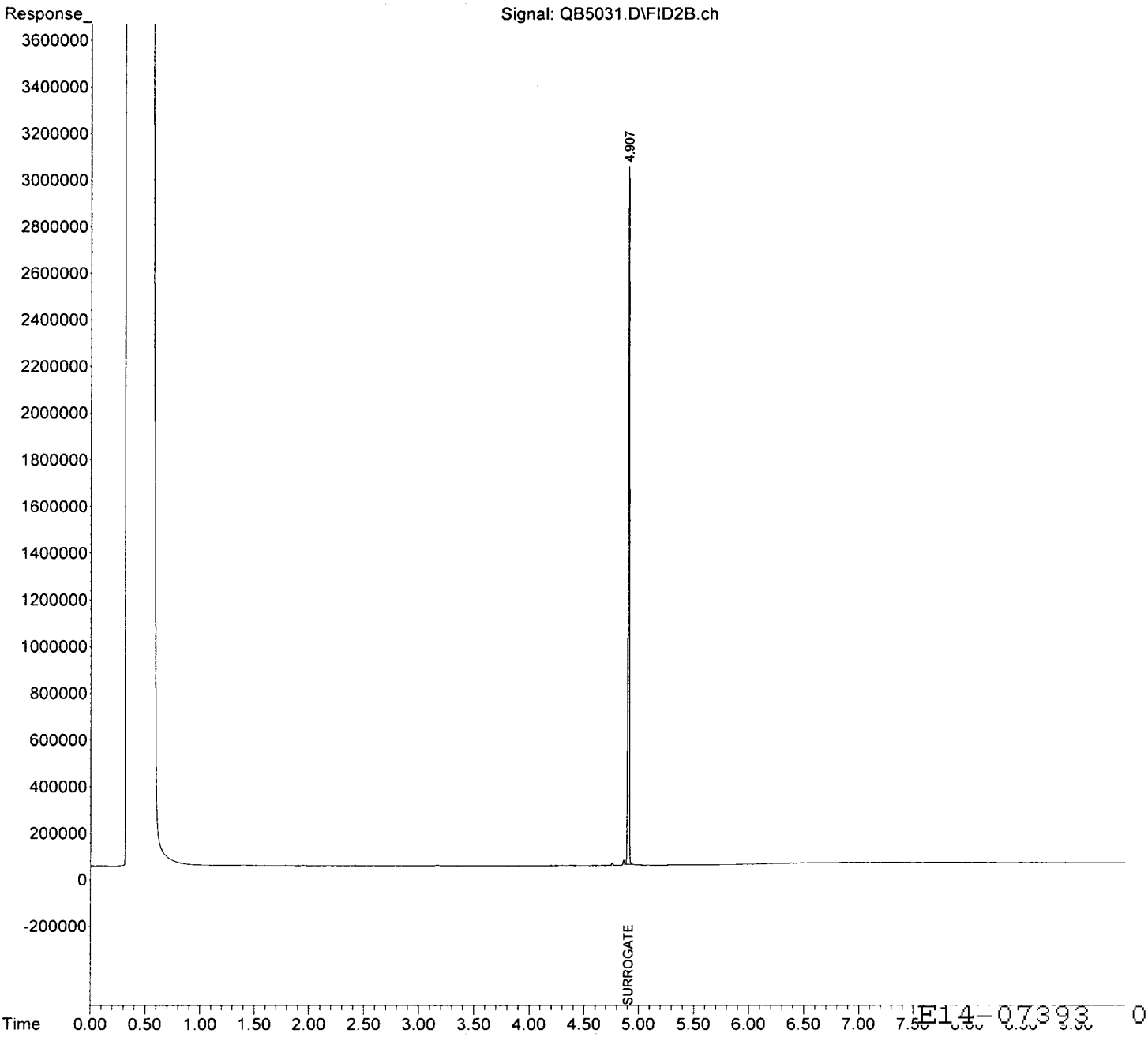
E14-07393 0205

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\08-08-14\
Data File : QB5031.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:09 am
Operator : MS
Sample : TPH-DRO,BLKA140806-18,A,1000ml,100,08/06/14,1
Misc : 140806-18,NA,NA,1
ALS Vial : 58 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 11:42:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-07393 0206

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5034.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:51 am
Operator : MS
Sample : TPH-DRO,LCSA140806-18,A,1000ml,100,08/06/14,1
Misc : 140806-18,NA,NA,1
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 12:04:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURROGATE	4.910	22480488	77.168	ng	m
Spiked Amount 100.000		Recovery = 77.17%			
Target Compounds					
3) H TPH-DRO	3.300	260049349	556.958	ng	

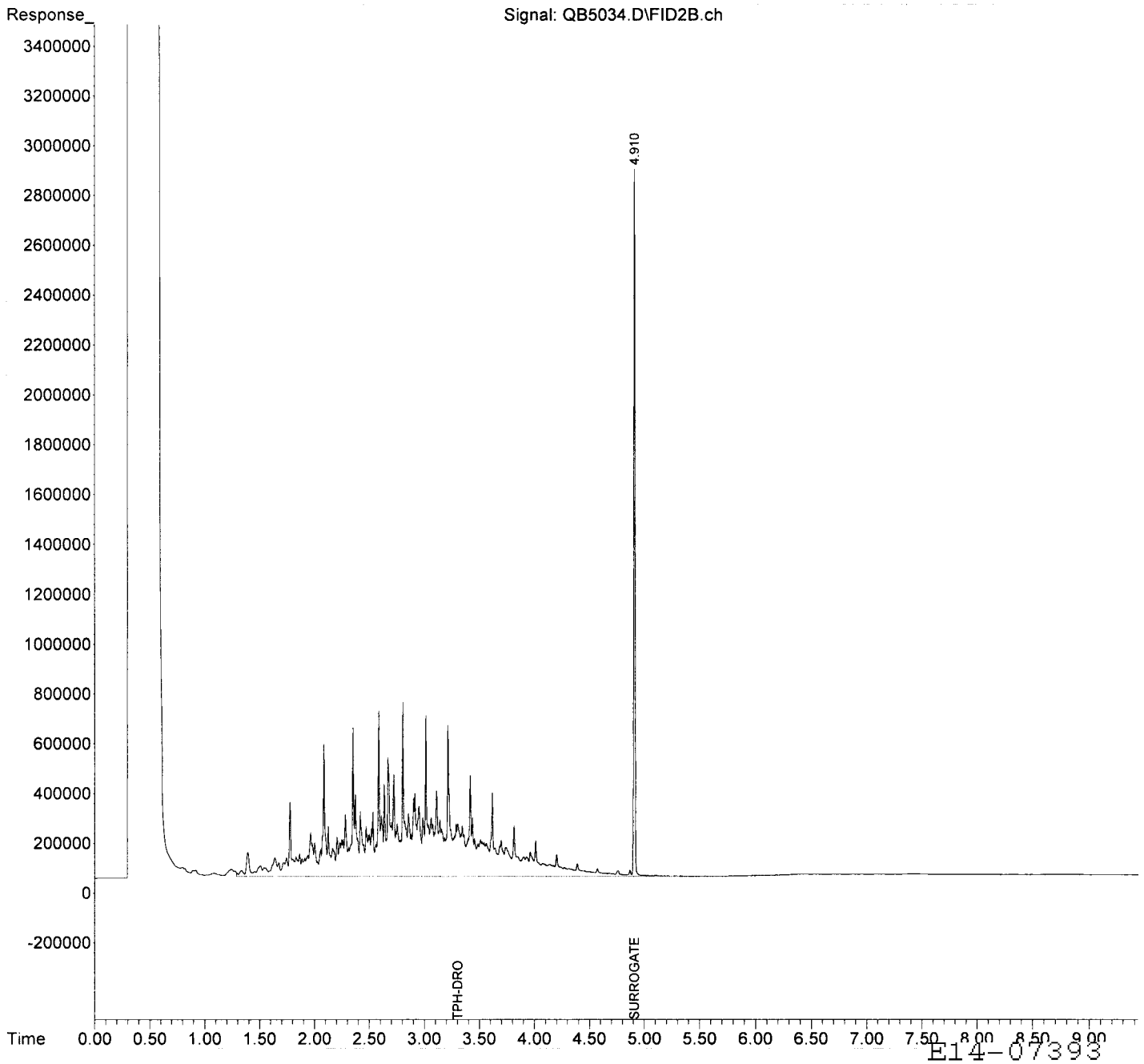
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Aug_14\08-08-14\
Data File : QB5034.D
Signal(s) : FID2B.ch
Acq On : 8 Aug 14 11:51 am
Operator : MS
Sample : TPH-DRO,LCSA140806-18,A,1000ml,100,08/06/14,1
Misc : 140806-18,NA,NA,1
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 08 12:04:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4742.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 7:08 pm
Operator : MS
Sample : TPH-DRO,06861-003MS,A,200ml,100,07/28/14,1
Misc : 140728-16,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:25:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.892	20757621	71.254 ng m
Spiked Amount 100.000		Recovery = 71.25%	
Target Compounds			
3) H TPH-DRO	3.200	272750013	584.160 ng

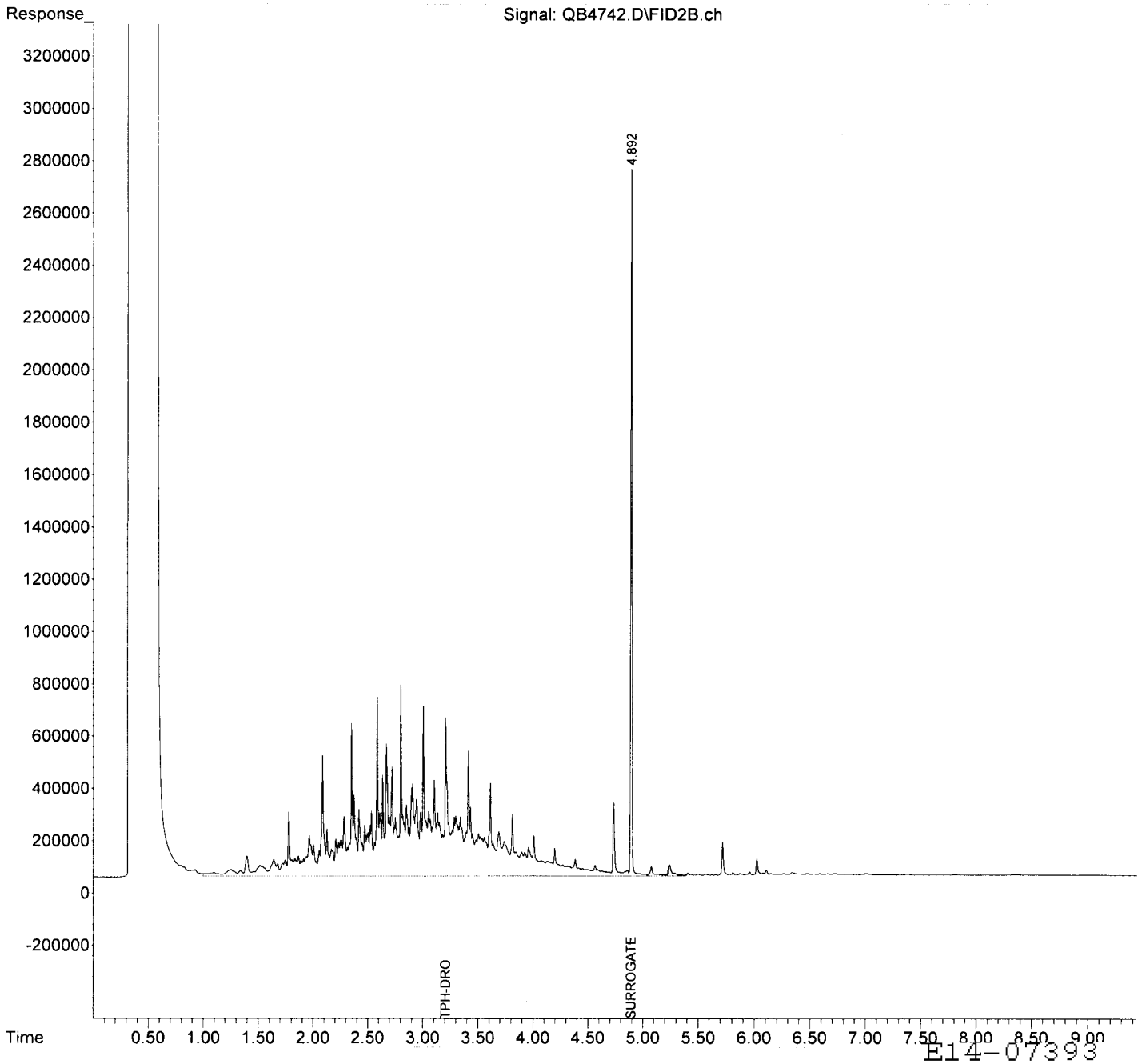
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4742.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 7:08 pm
Operator : MS
Sample : TPH-DRO,06861-003MS,A,200ml,100,07/28/14,1
Misc : 140728-16,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:25:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4743.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 7:22 pm
Operator : MS
Sample : TPH-DRO,06861-003MSD,A,200ml,100,07/28/14,1
Misc : 140728-16,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:25:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.893	22305983	76.569 ng m
Spiked Amount 100.000		Recovery = 76.57%	
Target Compounds			
3) H TPH-DRO	3.200	287579253	615.920 ng

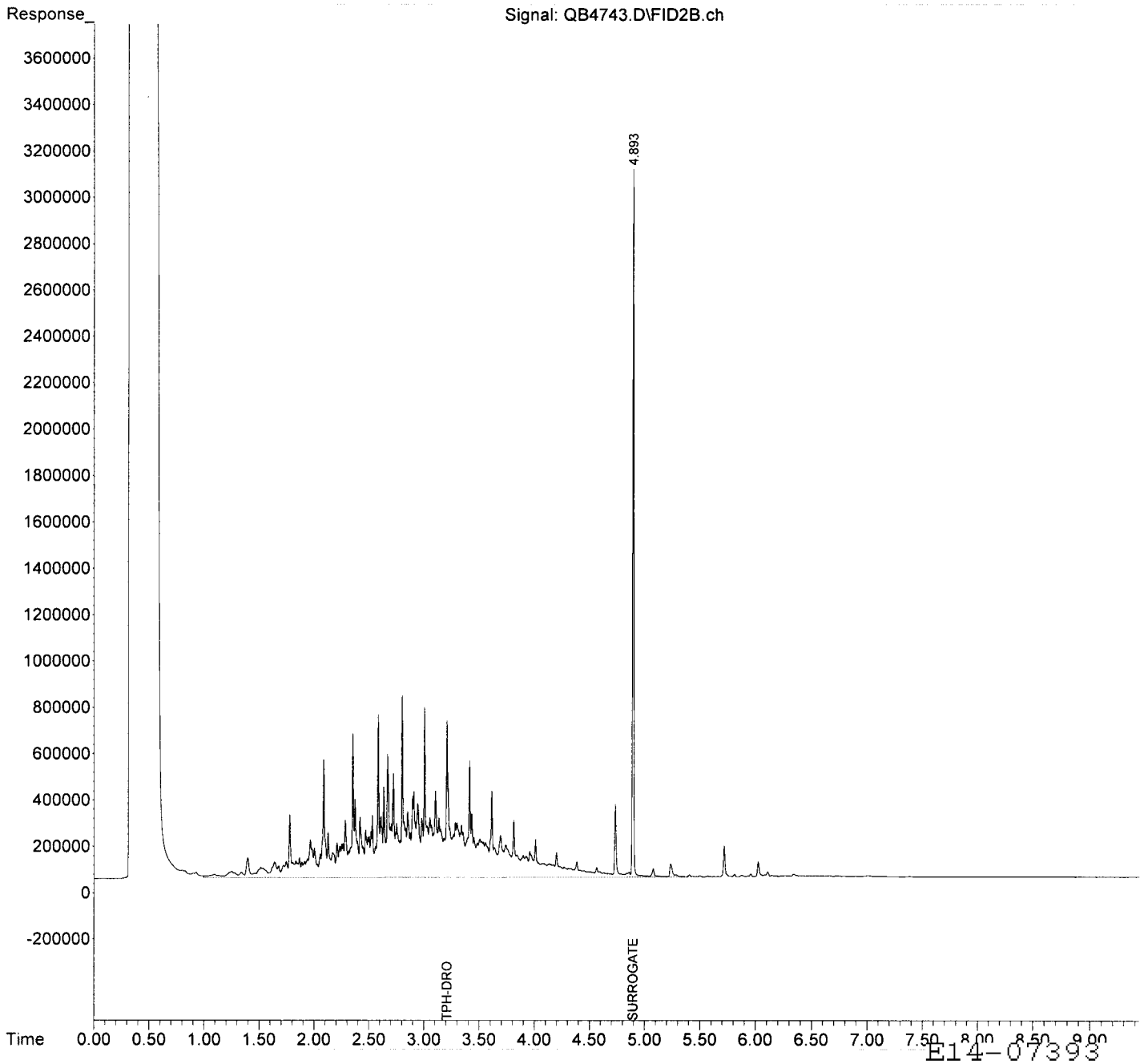
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4743.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 7:22 pm
Operator : MS
Sample : TPH-DRO,06861-003MSD,A,200ml,100,07/28/14,1
Misc : 140728-16,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:25:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4741.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 6:54 pm
Operator : MS
Sample : K-02,06861-003,A,1000ml,100,07/28/14,1
Misc : 140728-16,07/24/14,07/24/14,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:24:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.891	19186279	65.860 ng m
Spiked Amount 100.000		Recovery =	65.86%
Target Compounds			
3) H TPH-DRO	3.200	32154079	68.866 ng

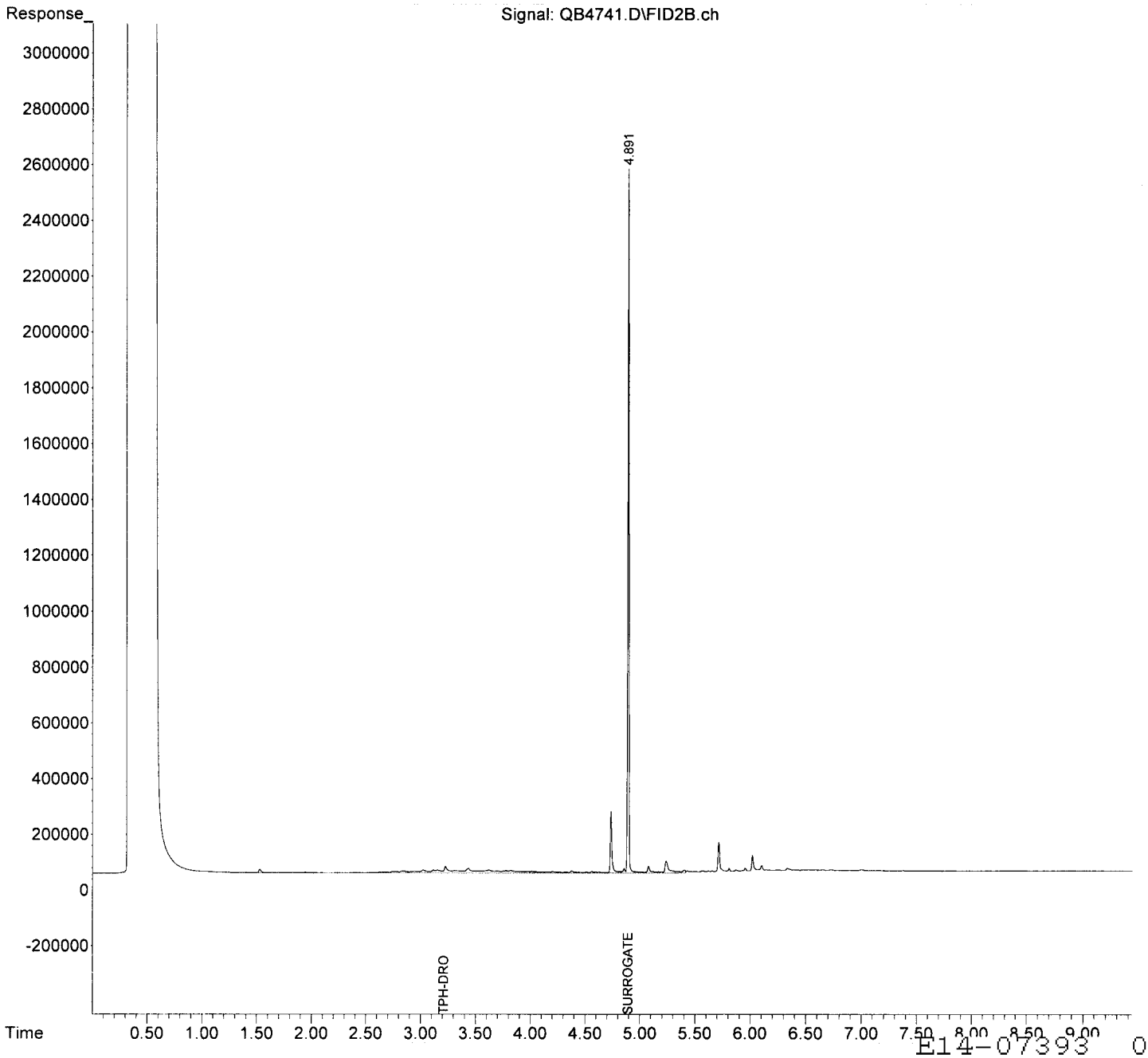
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_2014\QB-Jul-14\07-30-14\
Data File : QB4741.D
Signal(s) : FID2B.ch
Acq On : 30 Jul 14 6:54 pm
Operator : MS
Sample : K-02,06861-003,A,1000ml,100,07/28/14,1
Misc : 140728-16,07/24/14,07/24/14,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 31 12:24:46 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0724.M
Quant Title :
QLast Update : Tue Jul 29 09:05:59 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC

DATE:	7/24/2014 12:18		**CURVE**
INSTRUMENT:	Q	TPH-ITPH-DRO	
TEST GROUP:	TPH-DRO	TPH-DRO	
METHOD	QBDR0724		
System Method:	8015 D	(eg. 8015B M, 3810, QAM-025)	
ANALYST:	McKenzie	DRO/ NJ-EPH-DRO	
	MS	Initial	

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
1	51	QB4553		CH2CL2									
2	52	QB4554		DRO_RT_IAS_5048,100_PPM									
3	53	QB4555		DRO_L5_IAS_4963,5000_PPM									
4	54	QB4556		DRO_L4_IAS_4964,2000_PPM									
5	55	QB4557		DRO_L3_IAS_4965,1000_PPM									
6	56	QB4558		DRO_L2_IAS_4966,500_PPM									
7	57	QB4559		DRO_L1_IAS_4967,40_PPM									
8	55	QB4560		DRO_C_IAS_4965,1000_PPM									

LABORATORY CHRONICLE - GC

DATE:	8/8/2014 9:12		**140807-06**	BS	Soil
INSTRUMENT:	Q	TPH-ITPH-DRO	**140806-18**	BA	Aqueous
TEST GROUP:	TPH-DRO	TPH-DRO			
METHOD	QBDR0724				
System Method:	8015 D	(eg. 8015B M, 3810, QAM-025)			

ANALYST: McKenzie DRO/ NJ-EPH-DRO

MS Initial FM

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
53	QB5030		DRO_C_IAS_4965,1000_PPM									
58	QB5031		BLKA140806-18		1	1000	8/6/14	A	1			100
59	QB5032		07064	1	1	1000	8/6/14	A	1	7/30/14	7/30/14	100
60	QB5033		07393	1	1	1000	8/7/14	A	1	8/7/14	8/7/14	100
61	QB5034		LCSA140806-18		1	1000	8/6/14	A	1			100
53	QB5035		DRO_C_IAS_4965,1000_PPM									

GC Extraction

Integrated Analytical Laboratories, LLC

TPH-DRO (Aqueous)

Extraction Date/Time: 08/06/2014 17:17

Batch ID: **140806-18**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)
BLKA140806-18	TPH-DRO	1000	1	10	1		
LCSA140806-18	TPH-DRO	1000	1	10	1	100	

Standard Info	Surrogate IAS #
Solvent	RA#72-9
Surrogate	#4962
SPK 1	#4960
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	07064-001	TPH-DRO	1000	1	10	2	100		**06861-003MS / 140728-16**	
2	07393-001	TPH-DRO	1000	1	10	4	100	R-72	**06861-003MS / 140728-16**	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	08/06/2014 17:17
Weighed	Archie	08/07/2014 17:13
Surrogated	Archie	08/07/2014 17:13
Filtered	Archie	08/07/2014 17:52
Transferred	Archie	08/07/2014 17:52
Fractionated		

Comments:

E14-07393 0218

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

STANDARD IAS#	STANDARD NAME:	TPH-DRO-C44 RT		
4956				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/09/14	Restek	560559	A089278	2,000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/09/14	Restek (1:100) C4			20ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	Carbon Disulfide			

VOID wp

STANDARD IAS#	STANDARD NAME:	TPH-DRO-C44 RT STOCK		
4957				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/09/14	Restek Aldrich	31482 35874G-1G	A0716690 BCB45069V	200ppm/2,000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/09/14	1mL Mix + 2mg C44			200 ppm/2000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/24/19 wp	Carbon Disulfide wp		08193-2 wp	wp

STANDARD IAS#	STANDARD NAME:	DRO RT Standard		
4958				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/09/14	Restek	31482	A076690	200 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/09/14	1:2			100 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/16/2024	Hexane		138465	JN

STANDARD IAS#	STANDARD NAME:	DRO Spike 1		
4959				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Colson	RA#	(wet chem)	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1g of fuel oil #2 → 10mL			100,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
	Hexane			JN

STANDARD IAS#	STANDARD NAME:	DRO SPIKE 2		
4960				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	SupelCO	47515-4	LC00641	20,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:2			10,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12-15-22	MeOH		G32E79	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 1		
4961				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Chemservice	N-11638-1G	~~A06339~~ 618400	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1g → 10mL of CH_2Cl_2			100,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO SURROGATE 2		
4962				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	IAS # 4961	—	—	100,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:10			10,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO LS		
4963				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Accustandard	DRO-BK-102-LCS-10x-R1	212061335	50,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1ml stock + 500uL surr 2 (#4962) + 8500uL CH_2Cl_2			5,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L4		
4964				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS#4963	—	—	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:2.5			2,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L3		
46 4965				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	#4963	—	—	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:5			1,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L2		
4966				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS#4963	—	—	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:10			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L1		
4967				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS # 4963	—	—	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:125			40 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/11/14 10:52		8/11/14 11:49		8/11/14 12:45		8/11/14 13:42	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.250	25.0	25.0	100	25.8	103	25.7	103	26.2	105
Barium	0.500	25.0	24.9	99.6	25.2	101	25.7	103	25.8	103
Cadmium	0.125	25.0	25.4	102	25.9	104	25.6	102	25.8	103
Chromium	0.500	25.0	24.9	99.6	25.3	101	25.7	103	25.8	103
Copper	0.500	25.0	24.8	99.2	25.9	104	25.9	104	25.9	104
Iron	5.00	250	265	106	272	109	273	109	267	107
Lead	0.125	25.0	24.0	96.0	24.6	98.4	25.2	101	25.5	102
Manganese	0.500	25.0	24.9	99.6	25.5	102	25.6	102	26.1	104
Selenium	0.500	25.0	27.3	109	27.0	108	27.0	108	25.7	103
Silver	0.125	25.0	26.7	107	26.5	106	26.6	106	27.0	108

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/11/14 15:23		8/11/14 16:20					
	INST.	ICV & CCV	CCV		CCV					
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.250	25.0	24.6	98.4	24.6	98.4				
Barium	0.500	25.0	25.2	101	24.5	98.0				
Cadmium	0.125	25.0	25.2	101	24.2	96.8				
Chromium	0.500	25.0	24.6	98.4	25.0	100				
Copper	0.500	25.0	24.6	98.4	25.6	102				
Iron	5.00	250	264	106	269	108				
Lead	0.125	25.0	24.1	96.4	24.1	96.4				
Manganese	0.500	25.0	24.8	99.2	25.1	100				
Selenium	0.500	25.0	25.4	102	25.2	101				
Silver	0.125	25.0	26.7	107	26.7	107				

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/18/14 12:40		8/18/14 13:36		8/18/14 14:33		8/19/14 13:20	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	24.7	98.8	25.1	100	24.0	96.0	26.6	106
Antimony	0.250	25.0	24.9	99.6	25.2	101	25.3	101	23.0	92.0
Arsenic	0.250	25.0	24.7	98.8	24.5	98.0	24.7	98.8	24.9	99.6
Barium	0.500	25.0	25.2	101	24.7	98.8	24.8	99.2	25.3	101
Beryllium	0.250	25.0	24.7	98.8	24.6	98.4	24.9	99.6	24.5	98.0
Cadmium	0.125	25.0	25.2	101	24.7	98.8	24.6	98.4	25.1	100
Calcium	5.00	250	247	98.8	244	97.6	242	96.8	261	104
Chromium	0.500	25.0	24.8	99.2	24.4	97.6	24.6	98.4	24.8	99.2
Cobalt	0.500	25.0	24.8	99.2	24.5	98.0	24.7	98.8	24.5	98.0
Copper	0.500	25.0	25.0	100	24.6	98.4	24.5	98.0	24.5	98.0
Iron	5.00	250	268	107	274	110	273	109	258	103
Lead	0.125	25.0	24.1	96.4	24.0	96.0	24.2	96.8	24.1	96.4
Magnesium	5.00	250	260	104	259	104	256	102	273	109
Manganese	0.500	25.0	24.5	98.0	24.3	97.2	24.0	96.0	25.0	100
Mercury	0.150	5.00	4.88	97.6	5.14	103	5.33	107		
Nickel	0.250	25.0	25.0	100	24.3	97.2	24.6	98.4	24.9	99.6
Potassium	5.00	250	256	102	259	104	259	104	268	107
Selenium	0.500	25.0	24.5	98.0	22.5	90.0	23.7	94.8	23.9	95.6
Silver	0.125	25.0	24.4	97.6	24.3	97.2	24.4	97.6	22.9	91.6
Sodium	5.00	250	254	102	264	106	259	104	270	108
Thallium	0.125	25.0	24.2	96.8	24.2	96.8	24.1	96.4	24.3	97.2
Vanadium	0.500	25.0	25.3	101	25.0	100	25.1	100	25.2	101
Zinc	0.500	25.0	24.7	98.8	23.6	94.4	24.1	96.4	24.7	98.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

8/19/14 14:04

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	26.2	105						
Antimony	0.250	25.0	23.1	92.4						
Arsenic	0.250	25.0	27.3	109						
Barium	0.500	25.0	25.7	103						
Beryllium	0.250	25.0	23.7	94.8						
Cadmium	0.125	25.0	25.8	103						
Calcium	5.00	250	266	106						
Chromium	0.500	25.0	26.4	106						
Cobalt	0.500	25.0	26.1	104						
Copper	0.500	25.0	25.9	104						
Iron	5.00	250	268	107						
Lead	0.125	25.0	24.0	96.0						
Magnesium	5.00	250	267	107						
Manganese	0.500	25.0	27.2	109						
Nickel	0.250	25.0	26.4	106						
Potassium	5.00	250	266	106						
Selenium	0.500	25.0	25.7	103						
Silver	0.125	25.0	23.1	92.4						
Sodium	5.00	250	273	109						
Thallium	0.125	25.0	24.3	97.2						
Vanadium	0.500	25.0	26.9	108						
Zinc	0.500	25.0	26.9	108						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Method: 6020A Concentration/Units: ppb (µg/L)

		8/11/14 11:01	8/11/14 11:57	8/11/14 12:54	8/11/14 13:50	8/11/14 15:32	8/11/14 16:29
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Arsenic	0.250	ND	ND	ND	ND	ND	ND
Barium	0.500	ND	ND	ND	ND	ND	ND
Cadmium	0.125	ND	ND	ND	ND	ND	ND
Chromium	0.500	ND	ND	ND	ND	ND	ND
Copper	0.500	ND	ND	ND	ND	ND	ND
Iron	5.00	ND	ND	ND	ND	ND	ND
Lead	0.125	ND	ND	ND	ND	ND	ND
Manganese	0.500	ND	ND	ND	ND	ND	ND
Selenium	0.500	ND	ND	ND	ND	ND	ND
Silver	0.125	ND	ND	ND	ND	ND	ND

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Method: 6020A Concentration/Units: ppb (µg/L)

		8/18/14 12:48	8/18/14 13:45	8/18/14 14:42	8/19/14 13:29	8/19/14 14:13	
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Aluminum	0.500	ND	ND	ND	ND	ND	
Antimony	0.250	ND	ND	ND	ND	ND	
Arsenic	0.250	ND	ND	ND	ND	ND	
Barium	0.500	ND	ND	ND	ND	ND	
Beryllium	0.250	ND	ND	ND	ND	ND	
Cadmium	0.125	ND	ND	ND	ND	ND	
Calcium	5.00	ND	ND	ND	ND	ND	
Chromium	0.500	ND	ND	ND	ND	ND	
Cobalt	0.500	ND	ND	ND	ND	ND	
Copper	0.500	ND	ND	ND	ND	ND	
Iron	5.00	ND	ND	ND	ND	ND	
Lead	0.125	ND	ND	ND	ND	ND	
Magnesium	5.00	ND	ND	ND	ND	ND	
Manganese	0.500	ND	ND	ND	ND	ND	
Mercury	0.150	ND	ND	ND			
Nickel	0.250	ND	ND	ND	ND	ND	
Potassium	5.00	ND	ND	ND	ND	ND	
Selenium	0.500	ND	ND	ND	ND	ND	
Silver	0.125	ND	ND	ND	ND	ND	
Sodium	5.00	ND	ND	ND	ND	ND	
Thallium	0.125	ND	ND	ND	ND	ND	
Vanadium	0.500	ND	ND	ND	ND	ND	
Zinc	0.500	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

08/11/2014 11:40 AM

Batch (Page) #: 368
Associated Lab Case for Blank 1: E14-07205, E14-07365, E14-07372, E14-07393, E14-07409, E14-07438

Matrix: Aqueous Unit: ppb (µg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKA140810-01
Arsenic	1.00	ND
Barium	2.00	ND
Cadmium	0.500	ND
Chromium	2.00	ND
Copper	2.00	ND
Iron	20.0	ND
Lead	0.500	ND
Manganese	2.00	ND
Selenium	2.00	ND
Silver	0.500	ND

Associated Sample for Blank 1:
07205-001~002; 07365-001~002; 07372-001~002,004
07372-005; 07393-001; 07409-001~005; 07438-001
07438-002~004

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

08/18/2014 12:53 PM

Batch (Page) #: 378
Associated Lab Case for Blank 1: E14-07393, E14-07593, E14-07637, E14-07650, E14-07669, E14-07690

Matrix: Aqueous Unit: ppb (µg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKA140817-01
Aluminum	2.00	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	2.00	ND
Beryllium	1.00	ND
Cadmium	0.500	ND
Calcium	20.0	ND
Chromium	2.00	ND
Cobalt	2.00	ND
Copper	2.00	ND
Iron	20.0	ND
Lead	0.500	ND
Magnesium	20.0	ND
Manganese	2.00	ND
Mercury	0.300	ND
Nickel	1.00	ND
Potassium	20.0	ND
Selenium	2.00	ND
Silver	0.500	ND
Sodium	20.0	ND
Thallium	0.500	ND
Vanadium	2.00	ND
Zinc	2.00	ND

Associated Sample for Blank 1:
07393-001; 07593-001~002; 07637-009~012,014
07650-001~002,004~005; 07669-001~004; 07690-010
07690-013

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL LIMIT %R
	SOL A	SOL B	SOL A	SOL A+B	%R	
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	86100	85500	85.5	NA
Calcium	100000	-	91900	92400	92.4	NA
Iron	100000	-	89100	88500	88.5	NA
Potassium	100000	-	91500	92000	92.0	NA
Magnesium	100000	-	90800	89900	89.9	NA
Sodium	100000	-	92400	91200	91.2	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2060	2040	102	NA
Titanium	2000	-	1770	1760	88.0	NA
Silver	-	20.0	-	21.2	106	80-120
Arsenic	-	20.0	-	19.5	97.5	80-120
Cadmium	-	20.0	-	18.4	92.0	80-120
Cobalt	-	20.0	-	19.3	96.5	80-120
Chromium	-	20.0	-	19.1	95.5	80-120
Copper	-	20.0	-	20.6	103	80-120
Manganese	-	20.0	-	20.5	103	80-120
Nickel	-	20.0	-	18.6	93.0	80-120
Zinc	-	20.0	-	19.0	95.0	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	91800	91000	91.0	NA
Calcium	100000	-	96500	96600	96.6	NA
Iron	100000	-	93800	91900	91.9	NA
Potassium	100000	-	94800	94700	94.7	NA
Magnesium	100000	-	91500	89800	89.8	NA
Sodium	100000	-	92200	90700	90.7	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2250	2240	112	NA
Titanium	2000	-	2000	1980	99.0	NA
Silver	-	20.0	-	20.3	102	80-120
Arsenic	-	20.0	-	22.0	110	80-120
Cadmium	-	20.0	-	21.9	110	80-120
Cobalt	-	20.0	-	20.8	104	80-120
Chromium	-	20.0	-	21.0	105	80-120
Copper	-	20.0	-	18.4	92.0	80-120
Manganese	-	20.0	-	22.7	114	80-120
Nickel	-	20.0	-	20.4	102	80-120
Zinc	-	20.0	-	21.3	107	80-120

%R = Percent Recovery

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 368

SDG #: E14-07205, E14-07365, E14-07372, E14-07393, E14-07409, E14-07438

Matrix: Aqueous Unit: ppb (µg/L)

ANALYTE	LCSA140810-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	400	422	106			
Barium	400	412	103			
Cadmium	400	412	103			
Chromium	400	413	103			
Copper	400	408	102			
Iron	8000	8750	109			
Lead	400	419	105			
Manganese	400	415	104			
Selenium	400	429	107			
Silver	400	355	88.8			

(1) Control Limits % Recovery = 80-120%

LCSA140810-01 8/11/14 11:44

07205-001~002; 07365-001~002; 07372-001~002,004

07372-005; 07393-001; 07409-001~005; 07438-001

07438-002~004

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 378
SDG #: E14-07393, E14-07593, E14-07637, E14-07650, E14-07669, E14-07690

Matrix: Aqueous Unit: ppb (µg/L)

ANALYTE	LCSA140817-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	400	448	112			
Antimony	400	457	114			
Arsenic	400	454	114			
Barium	400	470	118			
Beryllium	400	462	116			
Cadmium	400	458	115			
Calcium	8000	9240	116			
Chromium	400	455	114			
Cobalt	400	454	114			
Copper	400	447	112			
Iron	8000	9040	113			
Lead	400	457	114			
Magnesium	8000	9060	113			
Manganese	400	454	114			
Mercury	10.0	10.1	101			
Nickel	400	456	114			
Potassium	8000	8980	112			
Selenium	400	467	117			
Silver	400	347	86.8			
Sodium	8000	9080	114			
Thallium	400	455	114			
Vanadium	400	457	114			
Zinc	400	451	113			

(1) Control Limits % Recovery = 80-120%

LCSA140817-01 8/18/14 12:57

07393-001; 07593-001~002; 07637-009~012,014
07650-001~002,004~005; 07669-001~004; 07690-010
07690-013

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/11/14 10:57		8/11/14 11:53		8/11/14 12:50		8/11/14 13:46	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.250	0.500	0.592	118	0.539	108	0.592	118	0.610	122
Barium	0.500	0.500	0.519	104	0.553	111	0.537	107	0.558	112
Cadmium	0.125	0.500	0.536	107	0.601	120	0.572	114	0.550	110
Chromium	0.500	0.500	0.606	121	0.557	111	0.576	115	0.625	125
Copper	0.500	0.500	0.619	124	0.512	102	0.551	110	0.577	115
Iron	5.00	5.00	4.18	83.6	3.86	77.2	4.73	94.6	5.87	117
Lead	0.125	0.500	0.521	104	0.534	107	0.531	106	0.529	106
Manganese	0.500	0.500	0.516	103	0.527	105	0.504	101	0.634	127
Selenium	0.500	0.500	0.439	87.8	0.619	124	0.552	110	0.526	105
Silver	0.125	0.500	0.473	94.6	0.467	93.4	0.502	100	0.504	101

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 368
SDG #: E14-07205, E14-07372, E14-07438, E14-07393, E14-07365, E14-07409

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/11/14 15:28		8/11/14 16:25					
ANALYTE	INST. MDL	ICV & CCV TRUE	LLCCV FOUND	LLCCV % R	LLCCV FOUND	LLCCV % R	FOUND	% R	FOUND	% R
Arsenic	0.250	0.500	0.549	110	0.425	85.0				
Barium	0.500	0.500	0.548	110	0.567	113				
Cadmium	0.125	0.500	0.526	105	0.581	116				
Chromium	0.500	0.500	0.520	104	0.567	113				
Copper	0.500	0.500	0.453	90.6	0.442	88.4				
Iron	5.00	5.00	5.30	106	4.55	91.0				
Lead	0.125	0.500	0.539	108	0.528	106				
Manganese	0.500	0.500	0.510	102	0.484	96.8				
Selenium	0.500	0.500	0.591	118	0.560	112				
Silver	0.125	0.500	0.492	98.4	0.442	88.4				

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

			8/18/14 12:44		8/18/14 13:41		8/18/14 14:37		8/19/14 13:24	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.473	94.6	0.494	98.8	0.417	83.4	0.570	114
Antimony	0.250	0.500	0.607	121	0.624	125	0.594	119	0.579	116
Arsenic	0.250	0.500	0.580	116	0.512	102	0.506	101	0.546	109
Barium	0.500	0.500	0.514	103	0.540	108	0.524	105	0.497	99.4
Beryllium	0.250	0.500	0.549	110	0.537	107	0.531	106	0.555	111
Cadmium	0.125	0.500	0.549	110	0.514	103	0.507	101	0.544	109
Calcium	5.00	5.00	4.66	93.2	4.72	94.4	4.41	88.2	4.20	84.0
Chromium	0.500	0.500	0.486	97.2	0.452	90.4	0.448	89.6	0.454	90.8
Cobalt	0.500	0.500	0.531	106	0.534	107	0.519	104	0.496	99.2
Copper	0.500	0.500	0.492	98.4	0.481	96.2	0.445	89.0	0.478	95.6
Iron	5.00	5.00	3.82	76.4	3.84	76.8	3.72	74.4	5.25	105
Lead	0.125	0.500	0.509	102	0.513	103	0.517	103	0.525	105
Magnesium	5.00	5.00	3.91	78.2	3.76	75.2	4.83	96.6	5.22	104
Manganese	0.500	0.500	0.465	93.0	0.499	99.8	0.478	95.6	0.402	80.4
Nickel	0.250	0.500	0.497	99.4	0.418	83.6	0.439	87.8	0.450	90.0
Potassium	5.00	5.00	4.70	94.0	6.29	126	4.65	93.0	6.15	123
Selenium	0.500	0.500	0.450	90.0	0.468	93.6	0.492	98.4	0.626	125
Silver	0.125	0.500	0.434	86.8	0.435	87.0	0.427	85.4	0.413	82.6
Sodium	5.00	5.00	6.19	124	6.28	126	5.90	118	4.29	85.8
Thallium	0.125	0.500	0.538	108	0.526	105	0.517	103	0.512	102
Vanadium	0.500	0.500	0.436	87.2	0.394	78.8	0.476	95.2	0.458	91.6
Zinc	0.500	0.500	0.590	118	0.539	108	0.531	106	0.503	101

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 378
SDG #: E14-07650, E14-07393, E14-07593, E14-07690, E14-07637, E14-07669

Matrix: Aqueous Method: 6020A Units: ppb (ug/L)

8/19/14 14:08

ANALYTE	INST. MDL	ICV & CCV TRUE	LLCCV FOUND	LLCCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.475	95.0						
Antimony	0.250	0.500	0.534	107						
Arsenic	0.250	0.500	0.612	122						
Barium	0.500	0.500	0.508	102						
Beryllium	0.250	0.500	0.488	97.6						
Cadmium	0.125	0.500	0.571	114						
Calcium	5.00	5.00	4.31	86.2						
Chromium	0.500	0.500	0.473	94.6						
Cobalt	0.500	0.500	0.522	104						
Copper	0.500	0.500	0.524	105						
Iron	5.00	5.00	4.16	83.2						
Lead	0.125	0.500	0.530	106						
Magnesium	5.00	5.00	4.14	82.8						
Manganese	0.500	0.500	0.490	98.0						
Nickel	0.250	0.500	0.506	101						
Potassium	5.00	5.00	6.42	128						
Selenium	0.500	0.500	0.397	79.4						
Silver	0.125	0.500	0.404	80.8						
Sodium	5.00	5.00	5.03	101						
Thallium	0.125	0.500	0.483	96.6						
Vanadium	0.500	0.500	0.606	121						
Zinc	0.500	0.500	0.516	103						

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 368
SDG #: E14-07205, E14-07365, E14-07372, E14-07393, E14-07409, E14-07438

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	8/11/14 12:15 SSR1	8/11/14 12:02 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	417	ND	104	400					75-125
Barium	447	22.9	106	400					75-125
Cadmium	407	ND	102	400					75-125
Chromium	410	ND	103	400					75-125
Copper	407	3.98	101	400					75-125
Iron	8650	65.3	107	8000					75-125
Lead	419	ND	105	400					75-125
Manganese	409	ND	102	400					75-125
Selenium	432	ND	108	400					75-125
Silver	359	ND	89.8	400					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-07205-001
% Solids: 0
QC Sample 1 for following samples:
07205-001~002; 07365-001~002; 07372-001~002,004
07372-005; 07393-001; 07409-001~005; 07438-001
07438-002~004

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 378

SDG #: E14-07393, E14-07593, E14-07637, E14-07650, E14-07669, E14-07690

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	8/18/14 13:14 SSR1	8/18/14 13:01 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	413	28.1	96.2	400					75-125
Antimony	406	1.05	101	400					75-125
Arsenic	397	2.41	98.6	400					75-125
Barium	702	284	105	400					75-125
Beryllium	411	ND	103	400					75-125
Cadmium	390	ND	97.5	400					75-125
Calcium	137000	134000	NC	8000					75-125
Chromium	421	30.9	97.5	400					75-125
Cobalt	389	2.98	96.5	400					75-125
Copper	392	16.0	94.0	400					75-125
Iron	11000	3440	94.5	8000					75-125
Lead	406	ND	102	400					75-125
Magnesium	45900	39000	86.3	8000					75-125
Manganese	2470	2160	77.5	400					75-125
Mercury	8.64	ND	86.4	10.0					75-125
Nickel	462	83.5	94.6	400					75-125
Potassium	10300	2620	96.0	8000					75-125
Selenium	390	ND	97.5	400					75-125
Silver	336	29.5	76.6	400					75-125
Sodium	197000	194000	NC	8000					75-125
Thallium	408	ND	102	400					75-125
Vanadium	404	ND	101	400					75-125
Zinc	562	186	94.0	400					75-125

SSR = Spike Sample Result
SA = Spike Added
SR = Sample Result
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-07650-002
% Solids: 0
QC Sample 1 for following samples:
07393-001; 07593-001~002; 07637-009~012,014
07650-001~002,004~005; 07669-001~004; 07690-010
07690-013

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 368
SDG #: E14-07205, E14-07365, E14-07372, E14-07393, E14-07409, E14-07438

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	8/11/14 12:02 S1	8/11/14 12:06 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	20	22.9	22.9	0				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Copper	20	3.98	4.66	15.7				
Iron	20	65.3	63.8	2.32				
Lead	NA	ND	ND	NC				
Manganese	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-07205-001
% Solids: 0
QC Sample 1 for following samples:
07205-001~002; 07365-001~002; 07372-001~002,004
07372-005; 07393-001; 07409-001~005; 07438-001
07438-002~004

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 378
SDG #: E14-07393, E14-07593, E14-07637, E14-07650, E14-07669, E14-07690

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	8/18/14 13:01 S1	8/18/14 13:06 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	28.1	23.5	17.8				
Antimony	20	1.05	1.03	1.92				
Arsenic	20	2.41	2.24	7.31				
Barium	20	284	279	1.78				
Beryllium	NA	ND	ND	NC				
Cadmium	NA	ND	ND	NC				
Calcium	20	134000	133000	0.749				
Chromium	20	30.9	30.2	2.29				
Cobalt	20	2.98	2.85	4.46				
Copper	20	16.0	15.9	0.627				
Iron	20	3440	3370	2.06				
Lead	NA	ND	ND	NC				
Magnesium	20	39000	38500	1.29				
Manganese	20	2160	2110	2.34				
Mercury	NA	ND	ND	NC				
Nickel	20	83.5	82.0	1.81				
Potassium	20	2620	2600	0.766				
Selenium	NA	ND	ND	NC				
Silver	20	29.5	29.6	0.338				
Sodium	20	194000	191000	1.56				
Thallium	NA	ND	ND	NC				
Vanadium	NA	ND	ND	NC				
Zinc	20	186	182	2.17				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-07650-002
% Solids: 0
QC Sample 1 for following samples:
07393-001; 07593-001~002; 07637-009~012,014
07650-001~002,004~005; 07669-001~004; 07690-010
07690-013

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 368
SDG #: E14-07205, E14-07365, E14-07372, E14-07393, E14-07409, E14-07438

Matrix: Aqueous Concentration/Units: ppb (µg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	8/11/14 12:02 SR	8/11/14 12:10 SDR	% Difference	8/11/14 12:19 SPR	SA	% Recovery
Arsenic	ND	ND	NC	422	400	106
Barium	22.9	22.9	0	449	400	107.0
Cadmium	ND	ND	NC	408	400	102
Chromium	ND	ND	NC	409	400	102
Copper	3.98	ND	NC	406	400	101.0
Iron	65.3	ND	NC	8730	8000	108.0
Lead	ND	ND	NC	424	400	106
Manganese	ND	ND	NC	409	400	102
Selenium	ND	ND	NC	437	400	109
Silver	ND	ND	NC	360	400	90.0

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E14-07205-001
QC Sample 1 for following samples:
07205-001~002; 07365-001~002; 07372-001~002,004
07372-005; 07393-001; 07409-001~005; 07438-001
07438-002~004

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 378
SDG #: E14-07393, E14-07593, E14-07637, E14-07650, E14-07669, E14-07690

Matrix: Aqueous Concentration/Units: ppb (µg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	8/18/14 13:01 SR	8/18/14 13:10 SDR	% Difference	8/18/14 13:19 SPR	SA	% Recovery
Aluminum	28.1	28.2	0.355	393	400	91.2
Antimony	1.05	ND	NC	386	400	96.2
Arsenic	2.41	ND	NC	382	400	94.9
Barium	284	286	0.702			
Beryllium	ND	ND	NC	388	400	97.0
Cadmium	ND	ND	NC	371	400	92.8
Calcium	134000	136000	1.48			
Chromium	30.9	32.1	3.81	407	400	94.0
Cobalt	2.98	ND	NC	373	400	92.5
Copper	16.0	17.3	7.81	377	400	90.3
Iron	3440	3470	0.868			
Lead	ND	ND	NC	381	400	95.3
Magnesium	39000	40300	3.28			
Manganese	2160	2190	1.38			
Nickel	83.5	88.7	6.04			
Potassium	2620	2770	5.57			
Selenium	ND	ND	NC	367	400	91.8
Silver	29.5	29.7	0.676			
Sodium	194000	198000	2.04			
Thallium	ND	ND	NC	386	400	96.5
Vanadium	ND	ND	NC	387	400	96.8
Zinc	186	177	4.96			

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E14-07650-002
QC Sample 1 for following samples:
07393-001; 07593-001~002; 07637-009~012,014
07650-001~002,004~005; 07669-001~004; 07690-010
07690-013

E14-07393 0246

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG368
August 11, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]	
003CALB.d	BLANK	513540		35082		282937		1741238		1981764		1052490	
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Re
	Lower Limit	359478	70	24557	70	198056	70	1218867	70	1387235	70	736743	70
	Upper Limit	616248	120	42098	120	339524	120	2089486	120	2378117	120	1262988	120
004CALS.d	STD1	508589	99	34786	99	284002	100	1708883	98	1979316	100	1039727	99
005CALS.d	STD2	512967	100	34661	99	283019	100	1717960	99	1984564	100	1063369	101
006CALS.d	STD3	513721	100	34287	98	285544	101	1733054	100	2003969	101	1070979	102
007CALS.d	STD4	513709	100	34931	100	283605	100	1736424	100	2062854	104	1083499	103
008CALS.d	STD5	503162	98	34486	98	287780	102	1733417	100	2075670	105	1097728	104
010_CCV.d	ICV	497824	97	34924	100	283681	100	1712841	98	1995289	101	1049892	100
011LCCV.d	LLICV	493274	96	34160	97	281721	100	1701439	98	1971282	99	1037611	99
012_ICB.d	ICB	495445	96	34738	99	281267	99	1699045	98	1950748	98	1038109	99
015SMPL.d	E14-07372-002	492961	96	37029	106	285610	101	1695866	97	1903683	96	986331	94
016SMPL.d	E14-07372-005	494560	96	35448	101	282423	100	1696061	97	1934993	98	1011321	96
017SMPL.d	E14-07438-004	495217	96	35785	102	283695	100	1703439	98	1937447	98	1025682	97
018SMPL.d	E14-07393-001	477610	93	33944	97	286441	101	1644230	94	2046960	103	1080074	103
021SMPL.d	BLKA140810-01	468873	91	34840	99	279946	99	1662315	95	1928376	97	1007957	96
022SMPL.d	LCSA140810-01	476440	93	34986	100	275577	97	1647332	95	1924178	97	984501	94
023_CCV.d	CCV	466281	91	35246	100	275199	97	1675754	96	1934832	98	1012669	96
024LCCV.d	LLCCV	470361	92	35270	101	278519	98	1673018	96	1918606	97	1019335	97
025_CCB.d	CCB	464336	90	35441	101	280045	99	1701884	98	1958409	99	1025256	97
026SMPL.d	E14-07205-001	471063	92	34630	99	276780	98	1583301	91	1912193	96	980300	93
027SMPL.d	E14-07205-001DUP	476776	93	35210	100	276957	98	1587177	91	1921896	97	998259	95
028SMPL.d	E14-07205-001SD	487578	95	36197	103	282924	100	1658875	95	1923780	97	1016643	97
029SMPL.d	E14-07205-001MS	473291	92	34627	99	272814	96	1582078	91	1924983	97	983698	93
030SMPL.d	E14-07205-001PS	467667	91	34829	99	271529	96	1563504	90	1905342	96	967074	92
032SMPL.d	E14-07372-004	483477	94	35421	101	278528	98	1652159	95	1914609	97	993265	94
033SMPL.d	E14-07205-002	455779	89	35265	101	274860	97	1569556	90	1862991	94	952886	91
034SMPL.d	E14-07372-001	455186	89	35962	103	278898	99	1633385	94	1864441	94	975069	93
035SMPL.d	E14-07365-001	439998	86	34375	98	269116	95	1533457	88	1829911	92	950641	90
036_CCV.d	CCV	461607	90	36108	103	280224	99	1653487	95	1895827	96	987686	94
037LCCV.d	LLCCV	455722	89	35862	102	278848	99	1649451	95	1873085	95	972481	92
038_CCB.d	CCB	451557	88	35943	102	274665	97	1646973	95	1867141	94	981316	93
039SMPL.d	E14-07365-002	440697	86	34288	98	273851	97	1562342	90	1837542	93	963580	92

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

E14-07393 0247

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG368
August 11, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	513540		35082		282937		1741238		1981764		1052490		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Re	
	Lower Limit	359478	70	24557	70	198056	70	1218867	70	1387235	70	736743	70	
	Upper Limit	616248	120	42098	120	339524	120	2089486	120	2378117	120	1262988	120	
040SMPL.d	E14-07409-001	416085	81	35175	100	275579	97	1560991	90	1872122	94	948845	90	
041SMPL.d	E14-07409-002	396255	77	35502	101	280176	99	1562848	90	1791045	90	914975	87	
042SMPL.d	E14-07409-003	390602	76	35623	102	275364	97	1538953	88	1788399	90	917393	87	
043SMPL.d	E14-07409-004	389661	76	35901	102	279116	99	1562962	90	1821024	92	935299	89	
044SMPL.d	E14-07409-005	381086	74	34770	99	275301	97	1539466	88	1811586	91	941844	89	
045SMPL.d	E14-07438-001	394946	77	35919	102	281260	99	1503406	86	1747477	88	897801	85	
046SMPL.d	E14-07438-002	403983	79	34900	99	279406	99	1551389	89	1840230	93	962200	91	
047SMPL.d	E14-07438-003	412518	80	33808	96	271126	96	1524057	88	1863461	94	952233	90	
049_CCV.d	CCV	430356	84	35873	102	274205	97	1620840	93	1860250	94	954541	91	
050LCCV.d	LLCCV	426041	83	35267	101	278475	98	1640856	94	1833977	93	953217	91	
051_CCB.d	CCB	420155	82	35904	102	272733	96	1619024	93	1813900	92	944278	90	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

E14-07393 0248

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG368
August 11, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	576163		35018		280452		1670542		1896712		997118		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	403314	70	24513	70	196316	70	1169379	70	1327698	70	697983	70	
	Upper Limit	691396	120	42022	120	336542	120	2004650	120	2276054	120	1196542	120	
004CALS.d	STD1	575489	100	35281	101	279516	100	1645792	99	1871262	99	1001438	100	
005CALS.d	STD2	573937	100	34343	98	279594	100	1661329	99	1903538	100	1010876	101	
006CALS.d	STD3	571952	99	34468	98	278748	99	1645322	98	1889561	100	1016401	102	
007CALS.d	STD4	575526	100	34238	98	277271	99	1647355	99	1922337	101	1029753	103	
008CALS.d	STD5	575936	100	33986	97	270742	97	1611630	96	1932691	102	1028704	103	
010_CCV.d	CCV	585302	102	33885	97	268993	96	1619560	97	1920310	101	1037991	104	
011LCCV.d	LLCCV	577571	100	33770	96	271074	97	1614546	97	1921513	101	1043982	105	
012_ICB.d	CCB	583146	101	33897	97	271331	97	1619797	97	1905395	100	1028337	103	
014ICSA.d	ICSA	523329	91	35134	100	305458	109	1407618	84	1814269	96	917054	92	
015ICSB.d	ICSAB	508585	88	35611	102	304935	109	1425945	85	1792391	94	891247	89	
023_CCV.d	CCV	559251	97	34616	99	275149	98	1609473	96	1843042	97	962885	97	
024LCCV.d	LLCCV	555422	96	34002	97	268925	96	1599103	96	1815686	96	966551	97	
025_CCB.d	CCB	552861	96	33913	97	268848	96	1596691	96	1826669	96	964719	97	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG378
August 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	791181		70880		566328		3745233		4706702		2830537		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	553827	70	49616	70	396430	70	2621663	70	3294691	70	1981376	70	
	Upper Limit	949417	120	85056	120	679594	120	4494280	120	5648042	120	3396644	120	
003CALS.d	STD1	804641	102	71924	101	574211	101	3804546	102	4801425	102	2893011	102	
004CALS.d	STD2	807062	102	72848	103	571825	101	3806785	102	4794056	102	2908222	103	
005CALS.d	STD3	801527	101	72216	102	570320	101	3762401	100	4801450	102	2901744	103	
006CALS.d	STD4	803027	101	72070	102	572471	101	3774480	101	4820883	102	2908940	103	
007CALS.d	STD5	797862	101	71943	101	570138	101	3731627	100	4840479	103	2906073	103	
009_CCV.d	ICV	800516	101	72951	103	570484	101	3786383	101	4825934	103	2903857	103	
010LCCV.d	LLICV	806494	102	73071	103	581762	103	3827250	102	4856894	103	2941851	104	
011_ICB.d	ICB	811567	103	73568	104	581961	103	3850130	103	4866833	103	2950916	104	
012SMPL.d	BLKA140817-01	802156	101	73354	103	585003	103	3829630	102	4837024	103	2930872	104	
013SMPL.d	LCSA140817-01	781323	99	73706	104	568574	100	3705045	99	4796326	102	2863842	101	
014SMPL.d	E14-07650-002	772873	98	72451	102	565436	100	3569804	95	4757219	101	2753486	97	
015SMPL.d	E14-07650-002DUP	793951	100	74808	106	583899	103	3681881	98	4885657	104	2783794	98	
016SMPL.d	E14-07650-002SD	843035	107	78222	110	611742	108	3907030	104	5020528	107	2951757	104	
017SMPL.d	E14-07650-002MS	807092	102	76749	108	601560	106	3726782	100	4964581	105	2803137	99	
018SMPL.d	E14-07650-002PS	812062	103	76847	108	607360	107	3763948	100	4966684	106	2802795	99	
019SMPL.d	E14-07650-004	868499	110	82983	117	643214	114	4156611	111	5140890	109	3076453	109	
020SMPL.d	E14-07650-001	801964	101	78267	110	613147	108	3809534	102	5052417	107	2839250	100	
021SMPL.d	E14-07650-005	803634	102	79461	112	629816	111	3890123	104	5117901	109	2883895	102	
022_CCV.d	CCV	852956	108	83276	117	649090	115	4216677	113	5265472	112	3097114	109	
023LCCV.d	LLCCV	850168	107	82698	117	652882	115	4188712	112	5196469	110	3065658	108	
024_CCB.d	CCB	844235	107	82952	117	654184	116	4201968	112	5240887	111	3092735	109	
025SMPL.d	E14-07593-001	777310	98	80066	113	653654	115	4107214	110	5168511	110	3055996	108	
026SMPL.d	E14-07593-002	758398	96	79275	112	646177	114	4090148	109	5138030	109	3028985	107	
027SMPL.d	E14-07690-010	759735	96	80602	114	641172	113	3757309	100	5199484	110	2894894	102	
028SMPL.d	E14-07690-013	735479	93	78995	111	648875	115	3882312	104	5171581	110	2912581	103	
029SMPL.d	E14-07637-009	760941	96	79628	112	637391	113	3858155	103	5049271	107	2849012	101	
030SMPL.d	E14-07637-010	761787	96	83041	117	670047	118	4152158	111	5212157	111	3013594	106	
031SMPL.d	E14-07637-011	767458	97	81843	115	663367	117	4042105	108	5208716	111	2938950	104	
032SMPL.d	E14-07637-012	759047	96	81131	114	653994	115	3959715	106	5151837	109	2892130	102	
033SMPL.d	E14-07637-014	762201	96	82229	116	659488	116	4038232	108	5228509	111	2953227	104	

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Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

E14-07393 0250

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG378
August 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	791181		70880		566328		3745233		4706702		2830537		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	553827	70	49616	70	396430	70	2621663	70	3294691	70	1981376	70	
	Upper Limit	949417	120	85056	120	679594	120	4494280	120	5648042	120	3396644	120	
034SMPL.d	E14-07669-001	736762	93	81793	115	659871	117	4094558	109	5307924	113	3060838	108	
035_CCV.d	CCV	809990	102	83775	118	663208	117	4261003	114	5320148	113	3096275	109	
036LCCV.d	LLCCV	819361	104	84976	120	668201	118	4297203	115	5270288	112	3092598	109	
037_CCB.d	CCB	807988	102	84900	120	670746	118	4280698	114	5296718	113	3091941	109	

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Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

E14-07393 0251

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG378
August 18, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	775585		80629		650177		3974315		4557203		2552854		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% R	
	Lower Limit	542910	70	56440	70	455124	70	2782020	70	3190042	70	1786998	70	
	Upper Limit	930702	120	96755	120	780212	120	4769178	120	5468644	120	3063425	120	
003CALS.d	STD1	754884	97	81045	101	652979	100	3991388	100	4586749	101	2565041	100	
004CALS.d	STD2	750233	97	80884	100	654199	101	4027148	101	4610262	101	2574675	101	
005CALS.d	STD3	749634	97	81036	101	651377	100	4018844	101	4628965	102	2577521	101	
006CALS.d	STD4	749945	97	79676	99	646255	99	3995049	101	4577539	100	2560731	100	
007CALS.d	STD5	816323	105	79204	98	647702	100	3968503	100	4549029	100	2568543	101	
009_CCV.d	CCV	792851	102	77577	96	643338	99	3974455	100	4623048	101	2603785	102	
010LCCV.d	LLCCV	816166	105	83179	103	641310	99	3973334	100	4586424	101	2584177	101	
011_ICB.d	CCB	769892	99	79598	99	650506	100	4006820	101	4599536	101	2606349	102	
012SMPL.d	E14-07669-002	766778	99	76999	95	643857	99	3814543	96	4591228	101	2536679	99	
013SMPL.d	E14-07669-003	777732	100	75949	94	653326	100	3783486	95	4585122	101	2566337	101	
014SMPL.d	E14-07669-004	774908	100	75840	94	649502	100	3839214	97	4632948	102	2564539	100	
016ICSA.d	ICSA	696375	90	77504	96	661560	102	3382197	85	4362966	96	2258766	88	
017ICSB.d	ICSAB	677791	87	80702	100	657996	101	3348700	84	4321452	95	2241165	88	
019_CCV.d	FINAL CCV	739571	95	71487	89	615521	95	3877924	98	4548798	100	2602583	102	
020LCCV.d	FINAL LLCCV	730023	94	77133	96	607449	93	3791464	95	4490300	99	2594516	102	
021_CCB.d	FINAL CCB	727475	94	76440	95	608094	94	3804287	96	4486114	98	2615684	102	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

METALS RAW DATA

Tune Report

Batch Folder D:\Data\6020\pg368.b
Report Comment
Instrument Name G3281A JP12382037

[1]

Mass	Range	Count	RSD%	Background
59		6226		
89		5103		
205		14213		

Integration Time [sec] 0.1

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	-6.0 V	Omega Lens	9.4 V	Deflect	2.8 V
Extract 2	-200.0 V	Cell Entrance	-36 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-68 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7		11876		
89		38667		
205		17244		
59		22815		

Integration Time [sec] 0.1

Mass	Peak Height	Axis	W-50%	W-X%
7	1935.83	7.10	0.65	0.734
89	6745.31	89.00	0.61	0.713
205	3333.90	205.00	0.54	0.679
59	3791.93	59.00	0.64	0.761

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	2.0 V	Omega Lens	6.1 V	Deflect	13.8 V
Extract 2	-90.0 V	Cell Entrance	-32 V	Plate Bias	-45 V
Omega Bias	-40 V	Cell Exit	-58 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	140 V		

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:22:14-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	8925	0.03
Mg	24	1	1	740	1.06
Al	27	1	1	406	4.94
K	39	1	1	54111	0.00
Ca	44	1	1	528	2.04
Ti	47	1	1	7	2598.08
V	51	1	1	3491	0.05
Cr	52	1	1	1774	0.21
Mn	55	1	1	437	2.13
Fe	56	1	1	13456	0.03
Co	59	1	1	86	37.08
Ni	60	1	1	1233	0.36
Cu	63	1	1	15676	0.02
Zn	66	1	1	1390	0.50
As	75	1	1	51	51.55
Se	78	1	1	19	235.13
Be	9	2	2	159	16.59
B	11	2	2	21658	0.01
Mo	95	2	2	559	1.09
Ag	107	2	2	967	0.66
Cd	111	2	2	15	292.31
Sn	118	2	2	1978	0.42
Sb	121	2	2	170	34.52
Ba	137	2	2	278	10.08
Tl	205	2	2	1289	0.20
Pb	208	2	2	474	4.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	35082	1.49
Li	6	2	2	513540	1.35
Ge	72	2	2	282937	1.35
Rh	103	2	2	1741238	1.42
Tb	159	2	2	1981764	1.54
Bi	209	2	2	1052490	0.70

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:26:38-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	12569	0.01
Mg	24	1	1	2916	0.15
Al	27	1	1	309	0.81
K	39	1	1	55278	0.00
Ca	44	1	1	564	0.97
Ti	47	1	1	88	44.40
V	51	1	1	5827	0.02
Cr	52	1	1	4756	0.11
Mn	55	1	1	1826	0.09
Fe	56	1	1	35113	0.00
Co	59	1	1	5256	0.03
Ni	60	1	1	2098	0.19
Cu	63	1	1	19282	0.02
Zn	66	1	1	1388	0.67
As	75	1	1	487	1.12
Se	78	1	1	59	72.15
Be	9	2	2	2856	0.48
B	11	2	2	22693	0.01
Mo	95	2	2	4590	0.16
Ag	107	2	2	10409	0.04
Cd	111	2	2	2108	0.30
Sn	118	2	2	8611	0.05
Sb	121	2	2	10157	0.04
Ba	137	2	2	3620	0.03
Tl	205	2	2	15993	0.03
Pb	208	2	2	10543	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34786	0.97	35082	99.16	70	120	
Li	6	2	2	508589	0.56	513540	99.04	70	120	
Ge	72	2	2	284002	1.39	282937	100.38	70	120	
Rh	103	2	2	1708883	0.43	1741238	98.14	70	120	
Tb	159	2	2	1979316	0.97	1981764	99.88	70	120	
Bi	209	2	2	1039727	0.80	1052490	98.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:30:55-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	51769	0.00
Mg	24	1	1	23516	0.01
Al	27	1	1	1307	0.26
K	39	1	1	72322	0.00
Ca	44	1	1	1511	0.57
Ti	47	1	1	728	0.13
V	51	1	1	28666	0.01
Cr	52	1	1	33181	0.01
Mn	55	1	1	16717	0.01
Fe	56	1	1	256137	0.00
Co	59	1	1	52864	0.00
Ni	60	1	1	15448	0.01
Cu	63	1	1	56043	0.00
Zn	66	1	1	6573	0.04
As	75	1	1	4500	0.08
Se	78	1	1	237	8.64
Be	9	2	2	28592	0.01
B	11	2	2	38422	0.01
Mo	95	2	2	43591	0.00
Ag	107	2	2	100502	0.00
Cd	111	2	2	22505	0.01
Sn	118	2	2	65973	0.00
Sb	121	2	2	97485	0.00
Ba	137	2	2	34966	0.00
Tl	205	2	2	154489	0.00
Pb	208	2	2	109512	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34661	2.55	35082	98.80	70	120	
Li	6	2	2	512967	0.98	513540	99.89	70	120	
Ge	72	2	2	283019	0.87	282937	100.03	70	120	
Rh	103	2	2	1717960	0.99	1741238	98.66	70	120	
Tb	159	2	2	1984564	1.08	1981764	100.14	70	120	
Bi	209	2	2	1063369	1.52	1052490	101.03	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:35:18-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	228270	0.00
Mg	24	1	1	117605	0.00
Al	27	1	1	5515	0.04
K	39	1	1	152642	0.00
Ca	44	1	1	5656	0.05
Ti	47	1	1	3892	0.10
V	51	1	1	128573	0.00
Cr	52	1	1	160250	0.00
Mn	55	1	1	84897	0.00
Fe	56	1	1	1245809	0.00
Co	59	1	1	265940	0.00
Ni	60	1	1	75155	0.00
Cu	63	1	1	221269	0.00
Zn	66	1	1	30331	0.00
As	75	1	1	22131	0.00
Se	78	1	1	1287	0.40
Be	9	2	2	141300	0.00
B	11	2	2	107911	0.00
Mo	95	2	2	225755	0.00
Ag	107	2	2	516756	0.00
Cd	111	2	2	117228	0.00
Sn	118	2	2	333077	0.00
Sb	121	2	2	498819	0.00
Ba	137	2	2	175619	0.00
Tl	205	2	2	785743	0.00
Pb	208	2	2	556455	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34287	1.55	35082	97.73	70	120	
Li	6	2	2	513721	1.14	513540	100.04	70	120	
Ge	72	2	2	285544	1.06	282937	100.92	70	120	
Rh	103	2	2	1733054	1.08	1741238	99.53	70	120	
Tb	159	2	2	2003969	0.06	1981764	101.12	70	120	
Bi	209	2	2	1070979	0.98	1052490	101.76	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:39:37-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	433381	0.00
Mg	24	1	1	225561	0.00
Al	27	1	1	10406	0.01
K	39	1	1	244619	0.00
Ca	44	1	1	10061	0.02
Ti	47	1	1	7565	0.03
V	51	1	1	244803	0.00
Cr	52	1	1	307754	0.00
Mn	55	1	1	159719	0.00
Fe	56	1	1	2448473	0.00
Co	59	1	1	508834	0.00
Ni	60	1	1	145450	0.00
Cu	63	1	1	410293	0.00
Zn	66	1	1	56718	0.00
As	75	1	1	43157	0.00
Se	78	1	1	2494	0.06
Be	9	2	2	277969	0.00
B	11	2	2	188142	0.00
Mo	95	2	2	436305	0.00
Ag	107	2	2	1002382	0.00
Cd	111	2	2	228085	0.00
Sn	118	2	2	657547	0.00
Sb	121	2	2	961483	0.00
Ba	137	2	2	343348	0.00
Tl	205	2	2	1607582	0.00
Pb	208	2	2	1093251	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34931	1.55	35082	99.57	70	120	
Li	6	2	2	513709	1.84	513540	100.03	70	120	
Ge	72	2	2	283605	0.56	282937	100.24	70	120	
Rh	103	2	2	1736424	0.88	1741238	99.72	70	120	
Tb	159	2	2	2062854	0.97	1981764	104.09	70	120	
Bi	209	2	2	1083499	0.74	1052490	102.95	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T10:44:01-04:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	871548	0.00
Mg	24	1	1	455867	0.00
Al	27	1	1	20735	0.01
K	39	1	1	442216	0.00
Ca	44	1	1	20339	0.01
Ti	47	1	1	15503	0.01
V	51	1	1	495224	0.00
Cr	52	1	1	625057	0.00
Mn	55	1	1	324961	0.00
Fe	56	1	1	4948407	0.00
Co	59	1	1	1033903	0.00
Ni	60	1	1	294431	0.00
Cu	63	1	1	811960	0.00
Zn	66	1	1	113811	0.00
As	75	1	1	88241	0.00
Se	78	1	1	4844	0.07
Be	9	2	2	558024	0.00
B	11	2	2	362824	0.00
Mo	95	2	2	905735	0.00
Ag	107	2	2	2082795	0.00
Cd	111	2	2	466691	0.00
Sn	118	2	2	1371805	0.00
Sb	121	2	2	2040580	0.00
Ba	137	2	2	706023	0.00
Tl	205	2	2	3357758	0.00
Pb	208	2	2	2355270	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34487	2.00	35082	98.30	70	120	
Li	6	2	2	503162	1.29	513540	97.98	70	120	
Ge	72	2	2	287780	1.17	282937	101.71	70	120	
Rh	103	2	2	1733417	0.22	1741238	99.55	70	120	
Tb	159	2	2	2075670	0.53	1981764	104.74	70	120	
Bi	209	2	2	1097728	1.05	1052490	104.30	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T10:52:43-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	271.959	ppb	2.018	245489	0.31	250	108.8	90	110	
Mg	24	1	1	265.783	ppb	1.993	127615	0.41	250	106.3	90	110	
Al	27	1	1	27.077	ppb	3.261	6166	1.64	25	108.3	90	110	
Si	28	1	1	-702.098	ppb	-26.809	198158	0.73	250	-280.8	90	110	> +-10%
K	39	1	1	266.636	ppb	2.859	162493	0.15	250	106.7	90	110	
Ca	44	1	1	273.150	ppb	3.861	5969	4.11	250	109.3	90	110	
Ti	47	1	1	25.105	ppb	6.845	3917	5.16	25	100.4	90	110	
V	51	1	1	25.036	ppb	2.355	127570	0.53	25	100.1	90	110	
Cr	52	1	1	24.878	ppb	2.291	158065	0.51	25	99.5	90	110	
Mn	55	1	1	24.919	ppb	2.165	82032	0.68	25	99.7	90	110	
Fe	56	1	1	264.967	ppb	1.716	1382633	0.11	250	106.0	90	110	
Co	59	1	1	24.923	ppb	1.552	260074	0.55	25	99.7	90	110	
Ni	60	1	1	24.498	ppb	1.123	73631	0.84	25	98.0	90	110	
Cu	63	1	1	24.822	ppb	1.855	215426	1.02	25	99.3	90	110	
Zn	66	1	1	25.723	ppb	2.899	30565	1.77	25	102.9	90	110	
As	75	1	1	25.045	ppb	2.770	22278	1.62	25	100.2	90	110	
Se	78	1	1	27.308	ppb	12.316	1358	10.51	25	109.2	90	110	
Be	9	2	2	25.057	ppb	1.649	137750	0.83	25	100.2	90	110	
B	11	2	2	26.532	ppb	1.509	109863	2.14	25	106.1	90	110	
Mo	95	2	2	24.784	ppb	0.820	220511	0.32	25	99.1	90	110	
Ag	107	2	2	26.726	ppb	0.326	546342	1.24	25	106.9	90	110	
Cd	111	2	2	25.396	ppb	2.455	116735	2.77	25	101.6	90	110	
Sn	118	2	2	24.635	ppb	0.465	332020	0.58	25	98.5	90	110	
Sb	121	2	2	25.132	ppb	0.661	488556	1.35	25	100.5	90	110	
Ba	137	2	2	24.869	ppb	1.108	172677	1.08	25	99.5	90	110	
Tl	205	2	2	23.227	ppb	0.502	741029	0.89	25	92.9	90	110	
Pb	208	2	2	24.047	ppb	0.911	535045	1.12	25	96.2	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34924	1.78	35082	99.55	70	120	
Li	6	2	2	497824	0.92	513540	96.94	70	120	
Ge	72	2	2	283681	0.60	282937	100.26	70	120	
Rh	103	2	2	1712841	0.97	1741238	98.37	70	120	
Tb	159	2	2	1995289	0.70	1981764	100.68	70	120	
Bi	209	2	2	1049892	0.87	1052490	99.75	70	120	

E14-07393 0260

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T10:57:01-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	5.077	9.004	13327	1.93	5	101.5	70	130	
Mg	24	1	1	4.964	3.382	3129	2.43	5	99.3	70	130	
Al	27	1	1	0.556	48.436	700	20.28	0.5	111.1	70	130	
K	39	1	1	3.537	10.069	57154	0.44	5	70.7	70	130	
Ca	44	1	1	5.725	3.249	559	2.09	5	114.5	70	130	
Ti	47	1	1	0.901	79.036	143	74.78	0.5	180.2	70	130	> +- 30%
V	51	1	1	0.503	6.739	5126	1.09	0.5	100.6	70	130	
Cr	52	1	1	0.606	2.544	5451	2.97	0.5	121.2	70	130	
Mn	55	1	1	0.516	1.497	2080	1.58	0.5	103.3	70	130	
Fe	56	1	1	4.180	2.479	42352	0.94	5	83.6	70	130	
Co	59	1	1	0.563	1.913	5828	1.14	0.5	112.6	70	130	
Ni	60	1	1	0.386	6.238	2316	2.34	0.5	77.1	70	130	
Cu	63	1	1	0.619	12.639	20136	1.87	0.5	123.7	70	130	
Zn	66	1	1	0.600	1.823	1241	0.68	0.5	120.0	70	130	
As	75	1	1	0.592	15.312	563	13.32	0.5	118.4	70	130	
Se	78	1	1	0.439	44.160	49	28.39	0.5	87.7	70	130	
Be	9	2	2	0.577	13.474	3293	12.23	0.5	115.5	70	130	
B	11	2	2	2.427	6.314	28860	1.40	0.5	485.4	70	130	> +- 30%
Mo	95	2	2	0.769	7.199	7321	6.12	0.5	153.7	70	130	> +- 30%
Ag	107	2	2	0.473	1.479	10895	0.80	0.5	94.5	70	130	
Cd	111	2	2	0.536	5.528	2460	5.90	0.5	107.1	70	130	
Sn	118	2	2	0.540	3.799	12226	3.16	0.5	107.9	70	130	
Sb	121	2	2	0.431	1.889	12036	1.37	0.5	86.2	70	130	
Ba	137	2	2	0.519	5.078	3846	5.26	0.5	103.8	70	130	
Tl	205	2	2	0.525	6.726	17785	5.73	0.5	105.0	70	130	
Pb	208	2	2	0.521	1.486	11918	0.92	0.5	104.2	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34160	1.24	35082	97.37	70	120	
Li	6	2	2	493274	1.08	513540	96.05	70	120	
Ge	72	2	2	281721	0.83	282937	99.57	70	120	
Rh	103	2	2	1701439	0.55	1741238	97.71	70	120	
Tb	159	2	2	1971282	0.64	1981764	99.47	70	120	
Bi	209	2	2	1037611	0.59	1052490	98.59	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T11:01:26-04:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.179	ppb	122.2	8990	1.8	5	
Mg	24	1	1	0.427	ppb	4.6	928	3.1	5	
Al	27	1	1	0.291	ppb	46.8	461	4.9	0.5	
K	39	1	1	3.717	ppb	73.7	55027	0.4	5	
Ca	44	1	1	3.151	ppb	112.5	584	10.0	5	
Ti	47	1	1	0.000	ppb	12873.9	7	100.0	0.5	
V	51	1	1	-0.176	ppb	-23.1	2588	6.2	0.5	
Cr	52	1	1	0.029	ppb	49.1	1935	3.6	0.5	
Mn	55	1	1	0.012	ppb	92.5	472	7.0	0.5	
Fe	56	1	1	0.257	ppb	35.3	14593	2.1	5	
Co	59	1	1	0.003	ppb	93.0	119	26.9	0.5	
Ni	60	1	1	-0.168	ppb	-12.0	730	10.0	0.5	
Cu	63	1	1	0.020	ppb	145.4	15691	2.6	0.5	
Zn	66	1	1	-0.431	ppb	-15.1	889	6.1	0.5	
As	75	1	1	-0.002	ppb	-714.8	49	27.6	0.5	
Se	78	1	1	0.050	ppb	60.3	21	9.1	0.5	
Be	9	2	2	0.020	ppb	101.5	263	42.7	0.5	
B	11	2	2	1.222	ppb	29.5	24964	3.7	0.5	>MDL
Mo	95	2	2	0.100	ppb	11.6	1430	6.6	0.5	
Ag	107	2	2	-0.036	ppb	-10.4	215	34.4	0.5	
Cd	111	2	2	0.009	ppb	27.1	56	20.0	0.5	
Sn	118	2	2	0.232	ppb	2.9	5017	1.3	0.5	
Sb	121	2	2	0.040	ppb	18.9	926	16.3	0.5	
Ba	137	2	2	0.002	ppb	374.3	282	14.9	0.5	
Tl	205	2	2	-0.002	ppb	-215.8	1197	12.1	0.125	
Pb	208	2	2	0.003	ppb	139.1	526	14.4	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34738	2.20	35082	99.02	70	120	
Li	6	2	2	495445	1.47	513540	96.48	70	120	
Ge	72	2	2	281267	0.52	282937	99.41	70	120	
Rh	103	2	2	1699045	0.81	1741238	97.58	70	120	
Tb	159	2	2	1950748	0.93	1981764	98.43	70	120	
Bi	209	2	2	1038109	1.29	1052490	98.63	70	120	

Sample Report

Sample Table

Sample Name	E14-07393-001
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T11:27:32-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;Trace;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	20205.992	80823.969	ppb	1.34	17096337	50000	
Mg	24	72	1	1	3945.885	15783.539	ppb	0.96	1763244	50000	
Al	27	72	1	1	385.433	1541.731	ppb	4.71	77131	20000	
Si	28	72	1	1	10825.344	43301.377	ppb	5.33	424835	100000	
K	39	72	1	1	2702.762	10811.048	ppb	1.24	1082667	50000	
Ca	44	72	1	1	66800.097	267200.387	ppb	1.45	1294087	150000	
Ti	47	72	1	1	20.122	80.488	ppb	12.94	3059	15000	
V	51	72	1	1	1.650	6.599	ppb	7.03	11323	20000	
Cr	52	72	1	1	1.021	4.083	ppb	23.53	7947	20000	
Mn	55	72	1	1	169.912	679.650	ppb	1.47	541231	20000	
Fe	56	72	1	1	685.499	2741.996	ppb	4.82	3326588	50000	
Co	59	72	1	1	0.459	1.836	ppb	3.62	4734	20000	
Ni	60	72	1	1	1.122	4.489	ppb	5.78	4416	20000	
Cu	63	72	1	1	9.129	36.515	ppb	2.38	86592	20000	
Zn	66	72	1	1	18.892	75.567	ppb	1.76	22178	15000	
As	75	72	1	1	3.001	12.005	ppb	4.92	2639	20000	
Se	78	72	1	1	0.016	0.064	ppb	1689.59	19	20000	
Be	9	6	2	2	0.018	0.073	ppb	21.47	244	20000	
B	11	6	2	2	32.860	131.441	ppb	1.48	125723	15000	
Mo	95	103	2	2	0.394	1.577	ppb	8.60	3886	20000	
Ag	107	103	2	2	0.083	0.332	ppb	7.15	2538	1000	
Cd	111	72	2	2	0.061	0.242	ppb	5.17	296	15000	
Sn	118	103	2	2	0.765	3.059	ppb	4.61	11704	15000	
Sb	121	159	2	2	1.114	4.457	ppb	2.27	22391	20000	
Ba	137	103	2	2	98.146	392.585	ppb	0.87	653413	20000	
Tl	205	209	2	2	-0.016	-0.065	ppb	-9.07	793	20000	
Pb	208	209	2	2	9.650	38.598	ppb	0.60	221164	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	33944	1.60	35082	96.76	70	120	
Li	6	2	477610	0.65	513540	93.00	70	120	
Ge	72	2	286441	0.95	282937	101.24	70	120	
Rh	103	2	1644230	0.22	1741238	94.43	70	120	
Tb	159	2	2046960	0.58	1981764	103.29	70	120	
Bi	209	2	1080074	0.42	1052490	102.62	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	BLKA140810-01
Data File Name	021SMPL.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T11:40:31-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	0.110	0.441	ppb	273.43	8960	50000	
Mg	24	72	1	1	0.909	3.635	ppb	15.03	1151	50000	
Al	27	72	1	1	0.261	1.045	ppb	3.70	861	20000	
Si	28	72	1	1	-5841.807	-23367.227	ppb	-2.04	91385	100000	
K	39	72	1	1	3.553	14.214	ppb	7.74	57190	50000	
Ca	44	72	1	1	-2.514	-10.057	ppb	-87.93	474	150000	
Ti	47	72	1	1	-0.014	-0.056	ppb	-349.24	4	15000	
V	51	72	1	1	-0.462	-1.848	ppb	-1.33	1181	20000	
Cr	52	72	1	1	0.073	0.293	ppb	11.29	2220	20000	
Mn	55	72	1	1	-0.041	-0.165	ppb	-7.75	299	20000	
Fe	56	72	1	1	0.493	1.972	ppb	16.05	15807	50000	
Co	59	72	1	1	0.002	0.006	ppb	50.15	101	20000	
Ni	60	72	1	1	-0.163	-0.652	ppb	-11.30	745	20000	
Cu	63	72	1	1	0.486	1.943	ppb	8.48	20528	20000	
Zn	66	72	1	1	0.158	0.630	ppb	7.38	2910	15000	
As	75	72	1	1	-0.028	-0.113	ppb	-52.53	26	20000	
Se	78	72	1	1	0.003	0.013	ppb	4285.75	19	20000	
Be	9	6	2	2	0.008	0.033	ppb	177.22	189	20000	
B	11	6	2	2	1.140	4.562	ppb	1.31	23376	15000	
Mo	95	103	2	2	-0.002	-0.009	ppb	-748.25	515	20000	
Ag	107	103	2	2	-0.027	-0.109	ppb	-8.31	385	1000	
Cd	111	72	2	2	0.003	0.013	ppb	185.42	30	15000	
Sn	118	103	2	2	0.009	0.037	ppb	23.88	2008	15000	
Sb	121	159	2	2	0.004	0.017	ppb	9.99	244	20000	
Ba	137	103	2	2	-0.004	-0.014	ppb	-260.78	241	20000	
Tl	205	209	2	2	-0.023	-0.093	ppb	-4.79	526	20000	
Pb	208	209	2	2	-0.001	-0.006	ppb	-401.01	422	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	34840	1.58	35082	99.31	70	120	
Li	6	2	468873	0.30	513540	91.30	70	120	
Ge	72	2	279946	1.19	282937	98.94	70	120	
Rh	103	2	1662315	0.40	1741238	95.47	70	120	
Tb	159	2	1928376	1.39	1981764	97.31	70	120	
Bi	209	2	1007957	0.39	1052490	95.77	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCSA140810-01
Data File Name	022SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T11:44:54-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	2186.114	8744.455	ppb	1.52	1914354	50000	
Mg	24	72	1	1	2181.861	8727.444	ppb	1.54	1005178	50000	
Al	27	72	1	1	106.147	424.590	ppb	0.55	22195	20000	
Si	28	72	1	1	-6160.820	-24643.281	ppb	-1.80	85145	100000	
K	39	72	1	1	2239.280	8957.122	ppb	1.75	933777	50000	
Ca	44	72	1	1	2184.933	8739.733	ppb	0.90	44144	150000	
Ti	47	72	1	1	0.164	0.657	ppb	83.98	32	15000	
V	51	72	1	1	103.857	415.429	ppb	1.73	519235	20000	
Cr	52	72	1	1	103.191	412.765	ppb	1.56	651305	20000	
Mn	55	72	1	1	103.709	414.837	ppb	1.23	340673	20000	
Fe	56	72	1	1	2188.688	8754.752	ppb	1.35	10921117	50000	
Co	59	72	1	1	103.000	412.000	ppb	1.63	1076475	20000	
Ni	60	72	1	1	103.620	414.480	ppb	0.60	308048	20000	
Cu	63	72	1	1	101.967	407.867	ppb	1.28	837967	20000	
Zn	66	72	1	1	106.121	424.485	ppb	2.14	121993	15000	
As	75	72	1	1	105.383	421.532	ppb	1.67	93754	20000	
Se	78	72	1	1	107.261	429.045	ppb	3.27	5296	20000	
Be	9	6	2	2	106.641	426.565	ppb	1.28	560631	20000	
B	11	6	2	2	1.080	4.321	ppb	32.07	23554	15000	
Mo	95	103	2	2	104.889	419.556	ppb	0.81	895883	20000	
Ag	107	103	2	2	88.729	354.914	ppb	0.27	1742294	1000	
Cd	111	72	2	2	103.069	412.274	ppb	1.73	460147	15000	
Sn	118	103	2	2	0.038	0.152	ppb	35.04	2360	15000	
Sb	121	159	2	2	106.099	424.398	ppb	1.18	1988326	20000	
Ba	137	103	2	2	102.987	411.949	ppb	0.47	686928	20000	
Tl	205	209	2	2	104.033	416.132	ppb	0.69	3108174	20000	
Pb	208	209	2	2	104.731	418.925	ppb	0.10	2183646	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	34986	1.61	35082	99.73	70	120	
Li	6	2	476440	0.93	513540	92.78	70	120	
Ge	72	2	275577	0.66	282937	97.40	70	120	
Rh	103	2	1647332	0.14	1741238	94.61	70	120	
Tb	159	2	1924178	0.78	1981764	97.09	70	120	
Bi	209	2	984501	0.61	1052490	93.54	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T11:49:12-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	261.846	ppb	2.650	257137	0.54	250	104.7	90	110	
Mg	24	1	1	274.192	ppb	2.689	132823	0.96	250	109.7	90	110	
Al	27	1	1	27.425	ppb	1.605	6298	1.04	25	109.7	90	110	
Si	28	1	1	-4905.675	ppb	-3.364	112015	0.84	250	-1962.3	90	110	> +-10%
K	39	1	1	271.355	ppb	3.735	170284	0.77	250	108.5	90	110	
Ca	44	1	1	271.073	ppb	4.971	5978	2.27	250	108.4	90	110	
Ti	47	1	1	25.721	ppb	3.167	4055	5.27	25	102.9	90	110	
V	51	1	1	25.522	ppb	2.076	131174	0.69	25	102.1	90	110	
Cr	52	1	1	25.313	ppb	1.944	162277	0.69	25	101.3	90	110	
Mn	55	1	1	25.520	ppb	2.034	84768	0.26	25	102.1	90	110	
Fe	56	1	1	271.810	ppb	1.833	1430967	0.59	250	108.7	90	110	
Co	59	1	1	25.540	ppb	1.775	268946	0.60	25	102.2	90	110	
Ni	60	1	1	25.398	ppb	2.648	76973	0.33	25	101.6	90	110	
Cu	63	1	1	25.934	ppb	2.796	226393	0.59	25	103.7	90	110	
Zn	66	1	1	26.694	ppb	2.133	31956	0.39	25	106.8	90	110	
As	75	1	1	25.761	ppb	1.616	23126	1.17	25	103.0	90	110	
Se	78	1	1	27.043	ppb	9.868	1358	8.40	25	108.2	90	110	
Be	9	2	2	26.425	ppb	0.574	136073	0.77	25	105.7	90	110	
B	11	2	2	28.101	ppb	2.396	107807	1.30	25	112.4	90	110	> +-10%
Mo	95	2	2	25.429	ppb	1.219	221341	0.71	25	101.7	90	110	
Ag	107	2	2	26.536	ppb	0.587	551191	0.83	25	106.1	90	110	
Cd	111	2	2	25.876	ppb	0.553	115379	1.01	25	103.5	90	110	
Sn	118	2	2	25.166	ppb	1.675	331820	2.48	25	100.7	90	110	
Sb	121	2	2	25.967	ppb	0.867	489456	1.20	25	103.9	90	110	
Ba	137	2	2	25.156	ppb	1.763	170885	1.91	25	100.6	90	110	
Tl	205	2	2	23.732	ppb	0.836	730257	0.65	25	94.9	90	110	
Pb	208	2	2	24.641	ppb	0.395	528813	1.02	25	98.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35246	2.25	35082	100.47	70	120	
Li	6	2	2	466281	0.68	513540	90.80	70	120	
Ge	72	2	2	275199	1.25	282937	97.26	70	120	
Rh	103	2	2	1675754	0.84	1741238	96.24	70	120	
Tb	159	2	2	1934832	1.09	1981764	97.63	70	120	
Bi	209	2	2	1012669	1.25	1052490	96.22	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	024LCCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T11:53:35-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	5.406	5.450	14075	2.03	5	108.1	70	130	
Mg	24	1	1	4.962	2.663	3230	2.40	5	99.2	70	130	
Al	27	1	1	0.468	84.373	506	17.07	0.5	93.6	70	130	
K	39	1	1	3.726	12.509	59261	1.53	5	74.5	70	130	
Ca	44	1	1	5.444	1.362	549	0.93	5	108.9	70	130	
Ti	47	1	1	0.620	22.247	104	21.73	0.5	124.1	70	130	
V	51	1	1	0.462	28.058	3913	2.06	0.5	92.5	70	130	
Cr	52	1	1	0.557	3.397	5317	3.03	0.5	111.3	70	130	
Mn	55	1	1	0.527	10.038	2182	8.19	0.5	105.4	70	130	
Fe	56	1	1	3.859	0.479	41414	0.55	5	77.2	70	130	
Co	59	1	1	0.552	5.154	5904	4.49	0.5	110.4	70	130	
Ni	60	1	1	0.351	10.804	2288	4.95	0.5	70.2	70	130	
Cu	63	1	1	0.512	5.192	23384	0.99	0.5	102.4	70	130	
Zn	66	1	1	0.551	6.339	1177	6.33	0.5	110.1	70	130	
As	75	1	1	0.539	19.280	534	16.90	0.5	107.9	70	130	
Se	78	1	1	0.619	12.862	63	9.12	0.5	123.8	70	130	
Be	9	2	2	0.599	3.477	3253	3.25	0.5	119.7	70	130	
B	11	2	2	2.143	1.836	26622	1.20	0.5	428.5	70	130	> +- 30%
Mo	95	2	2	0.893	3.520	8274	2.85	0.5	178.5	70	130	> +- 30%
Ag	107	2	2	0.467	1.482	10606	1.68	0.5	93.5	70	130	
Cd	111	2	2	0.601	5.633	2727	5.94	0.5	120.2	70	130	
Sn	118	2	2	0.457	3.383	10478	3.20	0.5	91.4	70	130	
Sb	121	2	2	0.477	1.386	12956	1.33	0.5	95.5	70	130	
Ba	137	2	2	0.553	12.619	4009	11.27	0.5	110.6	70	130	
Tl	205	2	2	0.516	5.523	17191	3.83	0.5	103.2	70	130	
Pb	208	2	2	0.534	3.231	11981	4.16	0.5	106.8	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35270	0.86	35082	100.54	70	120	
Li	6	2	2	470361	0.80	513540	91.59	70	120	
Ge	72	2	2	278519	0.49	282937	98.44	70	120	
Rh	103	2	2	1673018	0.52	1741238	96.08	70	120	
Tb	159	2	2	1918606	0.97	1981764	96.81	70	120	
Bi	209	2	2	1019335	1.77	1052490	96.85	70	120	

DK

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T11:57:54-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.279	ppb	16.15	9623	0.4	5	
Mg	24	1	1	0.472	ppb	64.82	967	14.4	5	
Al	27	1	1	0.145	ppb	239.26	440	15.5	0.5	
K	39	1	1	2.179	ppb	50.30	56817	0.9	5	
Ca	44	1	1	-0.148	ppb	-3126.40	530	16.7	5	
Ti	47	1	1	0.035	ppb	91.77	12	41.7	0.5	
V	51	1	1	-0.474	ppb	-1.29	1141	2.3	0.5	
Cr	52	1	1	0.012	ppb	63.66	1866	2.2	0.5	
Mn	55	1	1	0.016	ppb	76.26	493	7.7	0.5	
Fe	56	1	1	0.271	ppb	28.92	14961	2.5	5	
Co	59	1	1	0.001	ppb	229.51	96	22.7	0.5	
Ni	60	1	1	-0.173	ppb	-2.28	728	2.6	0.5	
Cu	63	1	1	0.353	ppb	18.14	18726	1.8	0.5	
Zn	66	1	1	-0.469	ppb	-13.64	865	9.4	0.5	
As	75	1	1	-0.018	ppb	-66.39	36	28.6	0.5	
Se	78	1	1	0.042	ppb	86.11	21	9.1	0.5	
Be	9	2	2	0.025	ppb	60.97	270	28.9	0.5	
B	11	2	2	1.237	ppb	9.91	23450	1.7	0.5	>RL
Mo	95	2	2	0.144	ppb	23.89	1819	17.4	0.5	
Ag	107	2	2	-0.035	ppb	-7.25	237	23.1	0.5	
Cd	111	2	2	0.009	ppb	94.40	56	69.3	0.5	
Sn	118	2	2	0.179	ppb	7.91	4316	3.1	0.5	
Sb	121	2	2	0.060	ppb	32.27	1308	25.6	0.5	
Ba	137	2	2	-0.005	ppb	-123.92	237	17.7	0.5	
Tl	205	2	2	-0.014	ppb	-11.12	826	7.6	0.125	
Pb	208	2	2	0.010	ppb	75.95	667	21.9	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35441	1.01	35082	101.02	70	120	
Li	6	2	2	464336	1.69	513540	90.42	70	120	
Ge	72	2	2	280045	1.97	282937	98.98	70	120	
Rh	103	2	2	1701884	1.33	1741238	97.74	70	120	
Tb	159	2	2	1958409	3.21	1981764	98.82	70	120	
Bi	209	2	2	1025256	2.01	1052490	97.41	70	120	

Sample Report

Sample Table

Sample Name	E14-07205-001
Data File Name	026SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T12:02:17-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	55673.634	222694.536	ppb	2.32	48031538	50000	>LDR
Mg	24	72	1	1	4008.408	16033.631	ppb	2.40	1826866	50000	
Al	27	72	1	1	5.817	23.268	ppb	10.54	1581	20000	
Si	28	72	1	1	292.232	1168.928	ppb	113.20	216872	100000	
K	39	72	1	1	2514.637	10058.548	ppb	2.37	1031151	50000	
Ca	44	72	1	1	9687.526	38750.102	ppb	2.82	191858	150000	
Ti	47	72	1	1	0.015	0.060	ppb	218.55	9	15000	
V	51	72	1	1	-0.347	-1.387	ppb	-3.33	1741	20000	
Cr	52	72	1	1	0.098	0.393	ppb	15.24	2363	20000	
Mn	55	72	1	1	0.240	0.959	ppb	19.19	1211	20000	
Fe	56	72	1	1	16.334	65.334	ppb	4.97	93803	50000	
Co	59	72	1	1	0.013	0.054	ppb	24.93	223	20000	
Ni	60	72	1	1	-0.106	-0.424	ppb	-49.67	910	20000	
Cu	63	72	1	1	0.996	3.983	ppb	8.39	23420	20000	
Zn	66	72	1	1	2.259	9.037	ppb	8.84	3912	15000	
As	75	72	1	1	0.026	0.105	ppb	44.00	73	20000	
Se	78	72	1	1	0.140	0.562	ppb	150.28	26	20000	
Be	9	6	2	2	0.010	0.039	ppb	90.38	196	20000	
B	11	6	2	2	9.468	37.874	ppb	1.32	49881	15000	
Mo	95	103	2	2	0.079	0.315	ppb	16.47	1156	20000	
Ag	107	103	2	2	-0.037	-0.146	ppb	-6.56	189	1000	
Cd	111	72	2	2	0.003	0.010	ppb	59.18	26	15000	
Sn	118	103	2	2	0.022	0.087	ppb	45.07	2067	15000	
Sb	121	159	2	2	0.071	0.284	ppb	12.95	1485	20000	
Ba	137	103	2	2	5.715	22.860	ppb	1.00	36874	20000	
Tl	205	209	2	2	-0.023	-0.094	ppb	-32.45	504	20000	
Pb	208	209	2	2	0.028	0.113	ppb	5.26	1030	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	34630	2.36	35082	98.71	70	120	
Li	6	2	471063	1.59	513540	91.73	70	120	
Ge	72	2	276780	1.37	282937	97.82	70	120	
Rh	103	2	1583301	1.07	1741238	90.93	70	120	
Tb	159	2	1912193	1.74	1981764	96.49	70	120	
Bi	209	2	980300	0.50	1052490	93.14	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-07205-001DUP
Data File Name	027SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T12:06:35-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	54926.056	219704.224	ppb	1.06	48193984	50000	>LDR
Mg	24	72	1	1	3955.993	15823.973	ppb	1.05	1833743	50000	
Al	27	72	1	1	5.668	22.671	ppb	6.49	1578	20000	
Si	28	72	1	1	-77.248	-308.994	ppb	-144.26	212871	100000	
K	39	72	1	1	2464.702	9858.809	ppb	0.95	1028979	50000	
Ca	44	72	1	1	9453.432	37813.729	ppb	1.08	190437	150000	
Ti	47	72	1	1	0.099	0.397	ppb	81.88	22	15000	
V	51	72	1	1	-0.288	-1.151	ppb	-7.06	2066	20000	
Cr	52	72	1	1	0.113	0.453	ppb	20.53	2498	20000	
Mn	55	72	1	1	0.263	1.052	ppb	9.95	1307	20000	
Fe	56	72	1	1	15.949	63.797	ppb	1.80	93500	50000	
Co	59	72	1	1	0.015	0.061	ppb	10.96	246	20000	
Ni	60	72	1	1	-0.092	-0.370	ppb	-24.13	963	20000	
Cu	63	72	1	1	1.166	4.663	ppb	6.55	25197	20000	
Zn	66	72	1	1	2.153	8.612	ppb	5.76	3857	15000	
As	75	72	1	1	0.036	0.144	ppb	12.88	83	20000	
Se	78	72	1	1	0.044	0.177	ppb	575.99	21	20000	
Be	9	6	2	2	0.020	0.079	ppb	33.01	252	20000	
B	11	6	2	2	9.280	37.120	ppb	2.18	49880	15000	
Mo	95	103	2	2	0.054	0.215	ppb	6.24	952	20000	
Ag	107	103	2	2	-0.037	-0.146	ppb	-7.84	189	1000	
Cd	111	72	2	2	0.005	0.020	ppb	102.51	37	15000	
Sn	118	103	2	2	0.009	0.036	ppb	192.72	1915	15000	
Sb	121	159	2	2	0.059	0.234	ppb	14.68	1263	20000	
Ba	137	103	2	2	5.734	22.938	ppb	1.53	37093	20000	
Tl	205	209	2	2	-0.023	-0.094	ppb	-8.65	515	20000	
Pb	208	209	2	2	0.029	0.116	ppb	26.77	1063	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	35210	1.13	35082	100.36	70	120	
Li	6	2	476776	1.14	513540	92.84	70	120	
Ge	72	2	276957	1.01	282937	97.89	70	120	
Rh	103	2	1587177	0.78	1741238	91.15	70	120	
Tb	159	2	1921896	0.89	1981764	96.98	70	120	
Bi	209	2	998259	0.06	1052490	94.85	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-07205-001SD
Data File Name	028SMPL.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T12:10:58-04:00
Sample Type	Sample
Dilution	20
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	11149.690	222993.790	ppb	3.13	10059154	50000	
Mg	24	72	1	1	800.954	16019.075	ppb	3.40	382054	50000	
Al	27	72	1	1	1.212	24.241	ppb	7.19	1001	20000	
Si	28	72	1	1	-5904.107	-118082.142	ppb	-2.24	93578	100000	
K	39	72	1	1	501.562	10031.248	ppb	4.21	259589	50000	
Ca	44	72	1	1	1910.598	38211.960	ppb	2.83	39991	150000	
Ti	47	72	1	1	-0.001	-0.021	ppb	-1901.87	7	15000	
V	51	72	1	1	-0.345	-6.909	ppb	-1.76	1826	20000	
Cr	52	72	1	1	0.072	1.445	ppb	24.77	2300	20000	
Mn	55	72	1	1	0.019	0.381	ppb	132.33	514	20000	
Fe	56	72	1	1	3.477	69.540	ppb	5.59	31794	50000	
Co	59	72	1	1	0.004	0.075	ppb	88.79	128	20000	
Ni	60	72	1	1	-0.152	-3.044	ppb	-8.28	808	20000	
Cu	63	72	1	1	0.488	9.751	ppb	23.55	20229	20000	
Zn	66	72	1	1	0.450	9.010	ppb	6.86	3166	15000	
As	75	72	1	1	0.006	0.116	ppb	278.47	58	20000	
Se	78	72	1	1	-0.075	-1.508	ppb	-56.04	16	20000	
Be	9	6	2	2	0.010	0.195	ppb	45.41	204	20000	
B	11	6	2	2	2.894	57.884	ppb	13.09	30059	15000	
Mo	95	103	2	2	0.032	0.631	ppb	9.69	804	20000	
Ag	107	103	2	2	-0.031	-0.629	ppb	-15.37	300	1000	
Cd	111	72	2	2	0.001	0.016	ppb	345.52	19	15000	
Sn	118	103	2	2	0.009	0.174	ppb	48.15	1997	15000	
Sb	121	159	2	2	0.024	0.483	ppb	15.15	619	20000	
Ba	137	103	2	2	1.147	22.932	ppb	3.78	7963	20000	
Tl	205	209	2	2	-0.025	-0.491	ppb	-7.02	489	20000	
Pb	208	209	2	2	0.000	-0.003	ppb	-6145.97	456	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	36197	3.02	35082	103.18	70	120	
Li	6	2	487578	0.67	513540	94.94	70	120	
Ge	72	2	282924	0.93	282937	100.00	70	120	
Rh	103	2	1658875	0.59	1741238	95.27	70	120	
Tb	159	2	1923780	1.39	1981764	97.07	70	120	
Bi	209	2	1016643	1.17	1052490	96.59	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-07205-001MS
Data File Name	029SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T12:15:16-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	58025.634	232102.534	ppb	1.32	50066094	50000	>LDR
Mg	24	72	1	1	6183.024	24732.096	ppb	1.11	2818016	50000	
Al	27	72	1	1	109.618	438.470	ppb	2.81	22665	20000	
Si	28	72	1	1	-141.317	-565.266	ppb	-108.30	208012	100000	
K	39	72	1	1	4652.028	18608.113	ppb	1.22	1862436	50000	
Ca	44	72	1	1	11870.804	47483.217	ppb	1.15	235028	150000	
Ti	47	72	1	1	0.238	0.953	ppb	10.85	43	15000	
V	51	72	1	1	103.965	415.859	ppb	1.41	514437	20000	
Cr	52	72	1	1	102.501	410.003	ppb	1.13	640336	20000	
Mn	55	72	1	1	102.129	408.518	ppb	1.53	332028	20000	
Fe	56	72	1	1	2162.365	8649.461	ppb	0.91	10679451	50000	
Co	59	72	1	1	100.948	403.792	ppb	1.08	1044243	20000	
Ni	60	72	1	1	100.522	402.087	ppb	1.62	295762	20000	
Cu	63	72	1	1	101.631	406.524	ppb	2.15	826589	20000	
Zn	66	72	1	1	106.385	425.538	ppb	1.57	121045	15000	
As	75	72	1	1	104.210	416.838	ppb	1.54	91759	20000	
Se	78	72	1	1	107.921	431.682	ppb	4.64	5271	20000	
Be	9	6	2	2	107.497	429.989	ppb	0.76	561432	20000	
B	11	6	2	2	8.922	35.688	ppb	0.38	48372	15000	
Mo	95	103	2	2	108.483	433.932	ppb	0.43	889866	20000	
Ag	107	103	2	2	89.743	358.971	ppb	1.09	1692414	1000	
Cd	111	72	2	2	101.684	406.735	ppb	1.29	449403	15000	
Sn	118	103	2	2	0.017	0.068	ppb	44.63	2008	15000	
Sb	121	159	2	2	105.421	421.686	ppb	0.33	1976516	20000	
Ba	137	103	2	2	111.808	447.233	ppb	0.80	716214	20000	
Tl	205	209	2	2	103.940	415.761	ppb	1.43	3102528	20000	
Pb	208	209	2	2	104.737	418.949	ppb	0.49	2181921	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	34627	1.63	35082	98.70	70	120	
Li	6	2	473291	0.59	513540	92.16	70	120	
Ge	72	2	272814	1.09	282937	96.42	70	120	
Rh	103	2	1582078	0.69	1741238	90.86	70	120	
Tb	159	2	1924983	0.29	1981764	97.13	70	120	
Bi	209	2	983698	1.39	1052490	93.46	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-07205-001PS
Data File Name	030SMPL.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T12:19:39-04:00
Sample Type	Sample
Dilution	4
Comment	368;A140810-01;100;25ml;50ml;2;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	57776.933	231107.730	ppb	1.98	50137541	50000	>LDR
Mg	24	72	1	1	6177.708	24710.832	ppb	2.00	2831675	50000	
Al	27	72	1	1	108.617	434.468	ppb	1.78	22595	20000	
Si	28	72	1	1	-243.875	-975.500	ppb	-110.22	207067	100000	
K	39	72	1	1	4654.356	18617.422	ppb	2.01	1874010	50000	
Ca	44	72	1	1	11777.338	47109.351	ppb	1.55	234528	150000	
Ti	47	72	1	1	0.129	0.516	ppb	14.05	27	15000	
V	51	72	1	1	104.037	416.147	ppb	1.68	517770	20000	
Cr	52	72	1	1	102.343	409.373	ppb	1.72	643034	20000	
Mn	55	72	1	1	102.299	409.196	ppb	1.65	334508	20000	
Fe	56	72	1	1	2182.871	8731.484	ppb	1.63	10842448	50000	
Co	59	72	1	1	100.818	403.271	ppb	1.60	1048902	20000	
Ni	60	72	1	1	100.707	402.828	ppb	1.82	298019	20000	
Cu	63	72	1	1	101.455	405.822	ppb	2.13	829976	20000	
Zn	66	72	1	1	107.304	429.217	ppb	1.52	122790	15000	
As	75	72	1	1	105.383	421.534	ppb	1.72	93332	20000	
Se	78	72	1	1	109.265	437.061	ppb	7.85	5367	20000	
Be	9	6	2	2	110.468	441.873	ppb	0.60	570058	20000	
B	11	6	2	2	9.292	37.167	ppb	1.77	48958	15000	
Mo	95	103	2	2	111.215	444.860	ppb	0.44	901554	20000	
Ag	107	103	2	2	90.051	360.203	ppb	0.24	1678261	1000	
Cd	111	72	2	2	101.919	407.678	ppb	0.67	448341	15000	
Sn	118	103	2	2	0.038	0.151	ppb	32.76	2238	15000	
Sb	121	159	2	2	107.697	430.790	ppb	0.40	1998595	20000	
Ba	137	103	2	2	112.172	448.689	ppb	0.84	710096	20000	
Tl	205	209	2	2	104.292	417.170	ppb	0.97	3060644	20000	
Pb	208	209	2	2	105.996	423.982	ppb	0.31	2170846	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	34829	1.95	35082	99.28	70	120	
Li	6	2	467667	1.03	513540	91.07	70	120	
Ge	72	2	271529	1.00	282937	95.97	70	120	
Rh	103	2	1563504	0.22	1741238	89.79	70	120	
Tb	159	2	1905342	0.10	1981764	96.14	70	120	
Bi	209	2	967074	1.10	1052490	91.88	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	036_CCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T12:45:45-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	267.124	ppb	1.928	268620	0.93	250	106.8	90	110	
Mg	24	1	1	272.629	ppb	2.126	135338	1.55	250	109.1	90	110	
Al	27	1	1	26.770	ppb	1.514	6309	1.16	25	107.1	90	110	
Si	28	1	1	-6634.817	ppb	-1.142	77730	1.43	250	-2653.9	90	110	> +-10%
K	39	1	1	272.116	ppb	2.366	174831	0.92	250	108.8	90	110	
Ca	44	1	1	271.857	ppb	2.666	6360	1.63	250	108.7	90	110	
Ti	47	1	1	25.642	ppb	1.973	4140	1.77	25	102.6	90	110	
V	51	1	1	25.579	ppb	1.344	134699	0.39	25	102.3	90	110	
Cr	52	1	1	25.672	ppb	0.935	168614	0.13	25	102.7	90	110	
Mn	55	1	1	25.643	ppb	0.907	87286	1.43	25	102.6	90	110	
Fe	56	1	1	273.271	ppb	0.843	1474088	0.18	250	109.3	90	110	
Co	59	1	1	25.819	ppb	0.153	278600	0.85	25	103.3	90	110	
Ni	60	1	1	25.209	ppb	0.845	78305	0.31	25	100.8	90	110	
Cu	63	1	1	25.879	ppb	1.654	231541	0.61	25	103.5	90	110	
Zn	66	1	1	26.951	ppb	1.083	33046	0.30	25	107.8	90	110	
As	75	1	1	25.707	ppb	2.740	23645	2.33	25	102.8	90	110	
Se	78	1	1	27.001	ppb	4.602	1390	4.16	25	108.0	90	110	
Be	9	2	2	27.209	ppb	0.440	138703	1.45	25	108.8	90	110	
B	11	2	2	29.595	ppb	2.377	111360	0.83	25	118.4	90	110	> +-10%
Mo	95	2	2	25.342	ppb	1.134	217642	0.43	25	101.4	90	110	
Ag	107	2	2	26.622	ppb	0.875	545670	2.08	25	106.5	90	110	
Cd	111	2	2	25.645	ppb	1.246	116441	1.31	25	102.6	90	110	
Sn	118	2	2	25.392	ppb	1.174	330284	0.81	25	101.6	90	110	
Sb	121	2	2	26.364	ppb	1.084	486929	1.01	25	105.5	90	110	
Ba	137	2	2	25.741	ppb	0.639	172524	0.71	25	103.0	90	110	
Tl	205	2	2	24.334	ppb	1.745	730226	0.97	25	97.3	90	110	
Pb	208	2	2	25.173	ppb	0.744	526865	1.07	25	100.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	36108	0.93	35082	102.92	70	120	
Li	6	2	2	461607	1.14	513540	89.89	70	120	
Ge	72	2	2	280224	0.23	282937	99.04	70	120	
Rh	103	2	2	1653487	1.34	1741238	94.96	70	120	
Tb	159	2	2	1895827	0.29	1981764	95.66	70	120	
Bi	209	2	2	987686	1.29	1052490	93.84	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	037LCCV.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T12:50:03-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	4.689	3.193	17530	1.09	5	93.8	70	130	
Mg	24	1	1	4.983	2.652	3295	2.53	5	99.7	70	130	
Al	27	1	1	0.453	110.296	482	14.90	0.5	90.5	70	130	
K	39	1	1	3.644	26.254	60132	0.77	5	72.9	70	130	
Ca	44	1	1	5.220	10.532	534	8.74	5	104.4	70	130	
Ti	47	1	1	0.442	25.695	78	25.11	0.5	88.5	70	130	
V	51	1	1	0.444	47.899	3961	3.25	0.5	88.8	70	130	
Cr	52	1	1	0.576	0.789	5532	1.66	0.5	115.3	70	130	
Mn	55	1	1	0.504	11.150	2139	7.02	0.5	100.8	70	130	
Fe	56	1	1	4.726	26.260	48469	18.64	5	94.5	70	130	
Co	59	1	1	0.562	3.348	6107	2.41	0.5	112.4	70	130	
Ni	60	1	1	0.394	3.990	2459	3.58	0.5	78.9	70	130	
Cu	63	1	1	0.551	4.375	22585	1.59	0.5	110.1	70	130	
Zn	66	1	1	0.511	4.231	1111	4.51	0.5	102.3	70	130	
As	75	1	1	0.592	12.408	591	9.54	0.5	118.4	70	130	
Se	78	1	1	0.552	13.021	39	4.94	0.5	110.5	70	130	
Be	9	2	2	0.556	6.958	2938	5.68	0.5	111.3	70	130	
B	11	2	2	3.001	5.039	28426	2.70	0.5	600.1	70	130	> +- 30%
Mo	95	2	2	0.771	2.236	7121	2.50	0.5	154.2	70	130	> +- 30%
Ag	107	2	2	0.502	2.534	11169	2.14	0.5	100.5	70	130	
Cd	111	2	2	0.572	5.518	2601	5.75	0.5	114.5	70	130	
Sn	118	2	2	0.725	4.250	11228	2.95	0.5	145.0	70	130	> +- 30%
Sb	121	2	2	0.644	5.838	11910	6.23	0.5	128.8	70	130	
Ba	137	2	2	0.537	7.009	3846	6.74	0.5	107.3	70	130	
Tl	205	2	2	0.502	2.618	16001	2.49	0.5	100.4	70	130	
Pb	208	2	2	0.531	4.166	11369	4.09	0.5	106.2	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35862	1.82	35082	102.22	70	120	
Li	6	2	2	455722	1.24	513540	88.74	70	120	
Ge	72	2	2	278848	0.77	282937	98.55	70	120	
Rh	103	2	2	1649451	0.65	1741238	94.73	70	120	
Tb	159	2	2	1873085	0.55	1981764	94.52	70	120	
Bi	209	2	2	972481	0.09	1052490	92.40	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	038_CCB.d
Data Path Name	D:\Data\6020\pg368.b
Acq Date Time	2014-08-11T12:54:27-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	1.436	ppb	6.23	12319	2.0	5	
Mg	24	1	1	0.376	ppb	38.27	935	5.8	5	
Al	27	1	1	0.084	ppb	298.56	434	14.5	0.5	
K	39	1	1	3.877	ppb	62.84	59275	1.0	5	
Ca	44	1	1	-2.875	ppb	-84.59	481	7.4	5	
Ti	47	1	1	-0.008	ppb	-393.50	6	91.6	0.5	
V	51	1	1	-0.489	ppb	-2.13	1082	1.8	0.5	
Cr	52	1	1	0.031	ppb	73.69	2018	7.3	0.5	
Mn	55	1	1	0.033	ppb	59.31	558	9.9	0.5	
Fe	56	1	1	0.377	ppb	27.83	15706	0.6	5	
Co	59	1	1	0.001	ppb	280.72	97	26.0	0.5	
Ni	60	1	1	-0.152	ppb	-16.61	802	12.9	0.5	
Cu	63	1	1	0.175	ppb	49.63	17505	1.2	0.5	
Zn	66	1	1	-0.437	ppb	-18.89	912	9.5	0.5	
As	75	1	1	-0.027	ppb	-37.93	28	36.7	0.5	
Se	78	1	1	0.038	ppb	229.95	21	18.2	0.5	
Be	9	2	2	0.022	ppb	35.85	252	16.7	0.5	
B	11	2	2	2.003	ppb	17.19	25134	4.3	0.5	>RL
Mo	95	2	2	0.076	ppb	36.36	1178	19.6	0.5	
Ag	107	2	2	-0.038	ppb	-12.08	174	51.6	0.5	
Cd	111	2	2	0.018	ppb	39.51	96	33.3	0.5	
Sn	118	2	2	0.186	ppb	14.63	4264	8.7	0.5	
Sb	121	2	2	0.035	ppb	14.12	804	11.6	0.5	
Ba	137	2	2	0.001	ppb	678.49	270	20.7	0.5	
Tl	205	2	2	-0.018	ppb	-16.28	678	13.4	0.125	
Pb	208	2	2	0.004	ppb	156.98	526	24.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35943	3.29	35082	102.45	70	120	
Li	6	2	2	451557	0.93	513540	87.93	70	120	
Ge	72	2	2	274665	0.62	282937	97.08	70	120	
Rh	103	2	2	1646973	0.61	1741238	94.59	70	120	
Tb	159	2	2	1867141	0.31	1981764	94.22	70	120	
Bi	209	2	2	981316	1.39	1052490	93.24	70	120	

Tune Report

Batch Folder D:\Data\6020\pg369.b
Report Comment
Instrument Name G3281A JP12382037

[1]

Mass	Range	Count	RSD%	Background
59		6859		
89		6115		
205		11808		

Integration Time [sec] 0.1

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	-7.0 V	Omega Lens	7.7 V	Deflect	2.6 V
Extract 2	-185.0 V	Cell Entrance	-30 V	Plate Bias	-60 V
Omega Bias	-110 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	200 V		

[2]

Mass	Range	Count	RSD%	Background
7		14040		
89		41505		
205		16699		
59		24401		

Integration Time [sec] 0.1

Mass	Peak Height	Axis	W-50%	W-X%
7	2367.62	7.10	0.63	0.728
89	7607.95	89.00	0.57	0.678
205	3322.89	205.00	0.52	0.677
59	4186.16	59.00	0.62	0.722

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	2.7 V	Omega Lens	6.0 V	Deflect	13.6 V
Extract 2	-105.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-45 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T14:53:11-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	14046	0.01
Mg	24	1	1	1147	0.33
Al	27	1	1	517	0.98
K	39	1	1	66870	0.00
Ca	44	1	1	504	1.91
Ti	47	1	1	6	1248.70
V	51	1	1	6586	0.02
Cr	52	1	1	2095	0.21
Mn	55	1	1	521	1.45
Fe	56	1	1	17008	0.01
Co	59	1	1	90	32.14
Ni	60	1	1	1287	0.15
Cu	63	1	1	21262	0.01
Zn	66	1	1	1128	0.20
As	75	1	1	44	9.73
Se	78	1	1	26	147.36
Be	9	2	2	182	7.02
B	11	2	2	24960	0.01
Mo	95	2	2	1267	0.59
Ag	107	2	2	974	2.67
Cd	111	2	2	15	773.29
Sn	118	2	2	2341	0.28
Sb	121	2	2	207	14.68
Ba	137	2	2	244	12.19
Tl	205	2	2	352	14.51
Pb	208	2	2	474	2.34

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	35018	2.82
Li	6	2	2	576163	1.47
Ge	72	2	2	280452	1.61
Rh	103	2	2	1670542	0.46
Tb	159	2	2	1896712	0.78
Bi	209	2	2	997118	1.11

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Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T14:57:36-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	20246	0.02
Mg	24	1	1	4195	0.15
Al	27	1	1	490	2.23
K	39	1	1	69009	0.00
Ca	44	1	1	539	0.88
Ti	47	1	1	94	39.61
V	51	1	1	9397	0.02
Cr	52	1	1	5479	0.05
Mn	55	1	1	2275	0.07
Fe	56	1	1	48459	0.01
Co	59	1	1	6154	0.04
Ni	60	1	1	2441	0.17
Cu	63	1	1	24422	0.01
Zn	66	1	1	1298	0.99
As	75	1	1	544	0.83
Se	78	1	1	63	21.99
Be	9	2	2	3601	0.32
B	11	2	2	27327	0.00
Mo	95	2	2	5613	0.03
Ag	107	2	2	11013	0.05
Cd	111	2	2	2597	0.46
Sn	118	2	2	8734	0.05
Sb	121	2	2	10602	0.03
Ba	137	2	2	4079	0.19
Tl	205	2	2	16249	0.02
Pb	208	2	2	12356	0.06

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35281	2.63	35018	100.75	70	120	
Li	6	2	2	575489	0.29	576163	99.88	70	120	
Ge	72	2	2	279516	0.28	280452	99.67	70	120	
Rh	103	2	2	1645792	0.51	1670542	98.52	70	120	
Tb	159	2	2	1871262	0.73	1896712	98.66	70	120	
Bi	209	2	2	1001438	1.13	997118	100.43	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:01:56-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	63638	0.00
Mg	24	1	1	27393	0.00
Al	27	1	1	1489	0.52
K	39	1	1	89083	0.00
Ca	44	1	1	1550	0.15
Ti	47	1	1	879	0.22
V	51	1	1	34829	0.00
Cr	52	1	1	38473	0.00
Mn	55	1	1	19076	0.01
Fe	56	1	1	292112	0.00
Co	59	1	1	59279	0.00
Ni	60	1	1	17043	0.01
Cu	63	1	1	65832	0.00
Zn	66	1	1	6880	0.02
As	75	1	1	5023	0.03
Se	78	1	1	290	2.60
Be	9	2	2	32964	0.01
B	11	2	2	44624	0.01
Mo	95	2	2	48423	0.00
Ag	107	2	2	111599	0.00
Cd	111	2	2	24862	0.01
Sn	118	2	2	73585	0.00
Sb	121	2	2	107730	0.00
Ba	137	2	2	38710	0.00
Tl	205	2	2	168165	0.00
Pb	208	2	2	117862	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34343	2.68	35018	98.07	70	120	
Li	6	2	2	573937	0.34	576163	99.61	70	120	
Ge	72	2	2	279594	0.53	280452	99.69	70	120	
Rh	103	2	2	1661329	0.33	1670542	99.45	70	120	
Tb	159	2	2	1903538	0.43	1896712	100.36	70	120	
Bi	209	2	2	1010876	0.95	997118	101.38	70	120	

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Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:06:20-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	267862	0.00
Mg	24	1	1	134053	0.00
Al	27	1	1	6269	0.05
K	39	1	1	183637	0.00
Ca	44	1	1	6453	0.01
Ti	47	1	1	4476	0.03
V	51	1	1	148827	0.00
Cr	52	1	1	181485	0.00
Mn	55	1	1	94655	0.00
Fe	56	1	1	1436720	0.00
Co	59	1	1	296158	0.00
Ni	60	1	1	83394	0.00
Cu	63	1	1	243757	0.00
Zn	66	1	1	33855	0.01
As	75	1	1	25340	0.01
Se	78	1	1	1381	0.19
Be	9	2	2	166725	0.00
B	11	2	2	126772	0.00
Mo	95	2	2	242442	0.00
Ag	107	2	2	553786	0.00
Cd	111	2	2	126727	0.00
Sn	118	2	2	363935	0.00
Sb	121	2	2	534863	0.00
Ba	137	2	2	190583	0.00
Tl	205	2	2	851943	0.00
Pb	208	2	2	600692	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34468	1.24	35018	98.43	70	120	
Li	6	2	2	571952	0.66	576163	99.27	70	120	
Ge	72	2	2	278748	0.67	280452	99.39	70	120	
Rh	103	2	2	1645322	0.35	1670542	98.49	70	120	
Tb	159	2	2	1889561	0.47	1896712	99.62	70	120	
Bi	209	2	2	1016401	1.25	997118	101.93	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:10:41-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	499927	0.00
Mg	24	1	1	255814	0.00
Al	27	1	1	11656	0.01
K	39	1	1	291044	0.00
Ca	44	1	1	11555	0.02
Ti	47	1	1	8638	0.03
V	51	1	1	280224	0.00
Cr	52	1	1	350334	0.00
Mn	55	1	1	181157	0.00
Fe	56	1	1	2757455	0.00
Co	59	1	1	568802	0.00
Ni	60	1	1	160418	0.00
Cu	63	1	1	451861	0.00
Zn	66	1	1	62108	0.00
As	75	1	1	48828	0.00
Se	78	1	1	2764	0.20
Be	9	2	2	323479	0.00
B	11	2	2	220644	0.00
Mo	95	2	2	469158	0.00
Ag	107	2	2	1072222	0.00
Cd	111	2	2	244852	0.00
Sn	118	2	2	708269	0.00
Sb	121	2	2	1039369	0.00
Ba	137	2	2	368632	0.00
Tl	205	2	2	1718610	0.00
Pb	208	2	2	1175126	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34238	1.82	35018	97.77	70	120	
Li	6	2	2	575526	1.33	576163	99.89	70	120	
Ge	72	2	2	277271	0.92	280452	98.87	70	120	
Rh	103	2	2	1647355	0.23	1670542	98.61	70	120	
Tb	159	2	2	1922337	0.90	1896712	101.35	70	120	
Bi	209	2	2	1029753	1.53	997118	103.27	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:15:06-04:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	999718	0.00
Mg	24	1	1	516967	0.00
Al	27	1	1	23148	0.01
K	39	1	1	521850	0.00
Ca	44	1	1	23082	0.01
Ti	47	1	1	17124	0.01
V	51	1	1	558556	0.00
Cr	52	1	1	699463	0.00
Mn	55	1	1	363557	0.00
Fe	56	1	1	5529900	0.00
Co	59	1	1	1141285	0.00
Ni	60	1	1	321533	0.00
Cu	63	1	1	877676	0.00
Zn	66	1	1	124575	0.00
As	75	1	1	97948	0.00
Se	78	1	1	5518	0.05
Be	9	2	2	659269	0.00
B	11	2	2	425671	0.00
Mo	95	2	2	962291	0.00
Ag	107	2	2	2199768	0.00
Cd	111	2	2	491848	0.00
Sn	118	2	2	1467096	0.00
Sb	121	2	2	2178903	0.00
Ba	137	2	2	749364	0.00
Tl	205	2	2	3519913	0.00
Pb	208	2	2	2478556	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	33986	2.09	35018	97.06	70	120	
Li	6	2	2	575936	0.14	576163	99.96	70	120	
Ge	72	2	2	270742	0.71	280452	96.54	70	120	
Rh	103	2	2	1611630	0.30	1670542	96.47	70	120	
Tb	159	2	2	1932691	0.61	1896712	101.90	70	120	
Bi	209	2	2	1028704	1.05	997118	103.17	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg369.b
Acq Date Time	2014-08-11T15:23:48-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	262.493	ppb	0.776	280888	0.53	250	105.0	90	110	
Mg	24	1	1	264.792	ppb	1.800	142202	1.19	250	105.9	90	110	
Al	27	1	1	26.526	ppb	1.904	6698	2.21	25	106.1	90	110	
Si	28	1	1	512.772	ppb	2.947	61940	1.21	250	205.1	90	110	> +-10%
K	39	1	1	253.811	ppb	2.325	189237	0.42	250	101.5	90	110	
Ca	44	1	1	264.762	ppb	4.496	6662	3.03	250	105.9	90	110	
Ti	47	1	1	23.611	ppb	1.323	4043	0.74	25	94.4	90	110	
V	51	1	1	24.687	ppb	1.269	142024	0.51	25	98.7	90	110	
Cr	52	1	1	24.646	ppb	1.338	173296	0.54	25	98.6	90	110	
Mn	55	1	1	24.754	ppb	1.613	90017	0.46	25	99.0	90	110	
Fe	56	1	1	264.062	ppb	1.146	1522136	0.07	250	105.6	90	110	
Co	59	1	1	25.039	ppb	1.095	284794	0.16	25	100.2	90	110	
Ni	60	1	1	24.549	ppb	1.574	79488	0.66	25	98.2	90	110	
Cu	63	1	1	24.570	ppb	1.059	230794	0.52	25	98.3	90	110	
Zn	66	1	1	25.796	ppb	1.046	32811	2.00	25	103.2	90	110	
As	75	1	1	24.572	ppb	2.747	24002	1.68	25	98.3	90	110	
Se	78	1	1	25.349	ppb	9.602	1413	8.28	25	101.8	90	110	
Be	9	2	2	24.434	ppb	1.047	163464	0.79	25	97.8	90	110	
B	11	2	2	26.012	ppb	2.652	130942	1.20	25	104.0	90	110	
Mo	95	2	2	23.861	ppb	1.313	229395	1.09	25	95.4	90	110	
Ag	107	2	2	26.720	ppb	0.762	585679	1.13	25	106.9	90	110	
Cd	111	2	2	25.181	ppb	2.302	122398	1.27	25	100.7	90	110	
Sn	118	2	2	24.598	ppb	1.237	359835	1.23	25	98.4	90	110	
Sb	121	2	2	24.518	ppb	1.310	526923	0.61	25	98.1	90	110	
Ba	137	2	2	25.224	ppb	0.901	188716	0.37	25	100.9	90	110	
Tl	205	2	2	23.572	ppb	0.354	832734	0.41	25	94.3	90	110	
Pb	208	2	2	24.079	ppb	0.226	595930	0.54	25	96.3	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	33885	1.15	35018	96.77	70	120	
Li	6	2	2	585302	1.18	576163	101.59	70	120	
Ge	72	2	2	268993	1.03	280452	95.91	70	120	
Rh	103	2	2	1619560	0.54	1670542	96.95	70	120	
Tb	159	2	2	1920310	0.71	1896712	101.24	70	120	
Bi	209	2	2	1037991	0.59	997118	104.10	70	120	

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Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg369.b
Acq Date Time	2014-08-11T15:28:08-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	3.611	8.213	17074	0.84	5	72.2	70	130	
Mg	24	1	1	5.566	4.484	3953	4.02	5	111.3	70	130	
Al	27	1	1	0.467	60.420	556	7.23	0.5	93.5	70	130	
K	39	1	1	6.271	48.199	67339	0.73	5	125.4	70	130	
Ca	44	1	1	5.028	208.961	521	12.51	5	100.6	70	130	
Ti	47	1	1	0.444	21.182	81	20.28	0.5	88.8	70	130	
V	51	1	1	0.482	31.604	6815	3.41	0.5	96.3	70	130	
Cr	52	1	1	0.520	2.615	5623	1.01	0.5	104.0	70	130	
Mn	55	1	1	0.510	2.448	2341	0.90	0.5	102.1	70	130	
Fe	56	1	1	5.304	4.775	45413	1.69	5	106.1	70	130	
Co	59	1	1	0.553	4.112	6349	2.72	0.5	110.6	70	130	
Ni	60	1	1	0.365	4.075	2403	2.20	0.5	73.1	70	130	
Cu	63	1	1	0.453	40.061	23247	3.45	0.5	90.6	70	130	
Zn	66	1	1	0.600	9.549	1075	8.70	0.5	120.1	70	130	
As	75	1	1	0.549	11.227	577	11.55	0.5	109.7	70	130	
Se	78	1	1	0.591	37.928	57	21.20	0.5	118.2	70	130	
Be	9	2	2	0.565	3.944	3905	4.15	0.5	112.9	70	130	
B	11	2	2	2.161	5.743	33681	1.99	0.5	432.2	70	130	> +- 30%
Mo	95	2	2	0.742	1.634	8296	1.48	0.5	148.4	70	130	> +- 30%
Ag	107	2	2	0.492	3.856	11666	3.42	0.5	98.3	70	130	
Cd	111	2	2	0.526	8.222	2593	9.05	0.5	105.2	70	130	
Sn	118	2	2	0.811	6.076	14013	4.96	0.5	162.2	70	130	> +- 30%
Sb	121	2	2	0.604	1.578	13204	2.32	0.5	120.9	70	130	
Ba	137	2	2	0.548	3.379	4320	3.24	0.5	109.6	70	130	
Tl	205	2	2	0.539	2.288	19502	2.14	0.5	107.7	70	130	
Pb	208	2	2	0.539	0.848	13906	0.65	0.5	107.8	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	33770	1.34	35018	96.44	70	120	
Li	6	2	2	577571	0.56	576163	100.24	70	120	
Ge	72	2	2	271074	0.95	280452	96.66	70	120	
Rh	103	2	2	1614546	0.14	1670542	96.65	70	120	
Tb	159	2	2	1921513	0.78	1896712	101.31	70	120	
Bi	209	2	2	1043982	0.39	997118	104.70	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:32:33-04:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-0.762	ppb	-25.3	12851	0.5	5	
Mg	24	1	1	0.608	ppb	28.7	1422	5.2	5	
Al	27	1	1	-0.177	ppb	-66.8	461	6.1	0.5	
K	39	1	1	0.339	ppb	661.1	64899	0.3	5	
Ca	44	1	1	-0.997	ppb	-126.6	467	5.0	5	
Ti	47	1	1	0.001	ppb	4642.8	6	91.6	0.5	
V	51	1	1	-0.455	ppb	-5.3	3881	4.8	0.5	
Cr	52	1	1	0.002	ppb	623.7	2042	3.7	0.5	
Mn	55	1	1	0.022	ppb	33.4	586	4.0	0.5	
Fe	56	1	1	0.225	ppb	2.0	17710	1.5	5	
Co	59	1	1	0.005	ppb	17.7	148	8.5	0.5	
Ni	60	1	1	-0.139	ppb	-19.2	803	9.5	0.5	
Cu	63	1	1	-0.305	ppb	-16.2	17988	1.4	0.5	
Zn	66	1	1	-0.193	ppb	-21.6	856	7.1	0.5	
As	75	1	1	0.029	ppb	142.7	71	55.9	0.5	
Se	78	1	1	0.237	ppb	162.9	38	56.7	0.5	
Be	9	2	2	0.018	ppb	40.9	304	17.3	0.5	
B	11	2	2	1.064	ppb	18.8	29557	1.5	0.5	>MDL
Mo	95	2	2	0.072	ppb	37.3	1919	13.4	0.5	
Ag	107	2	2	-0.032	ppb	-7.4	241	21.8	0.5	
Cd	111	2	2	0.014	ppb	32.2	85	27.2	0.5	
Sn	118	2	2	0.222	ppb	11.4	5491	6.6	0.5	
Sb	121	2	2	0.053	ppb	40.1	1341	33.2	0.5	
Ba	137	2	2	0.011	ppb	134.4	319	34.2	0.5	
Tl	205	2	2	0.015	ppb	21.4	900	12.9	0.125	
Pb	208	2	2	0.002	ppb	115.2	533	10.4	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	33897	1.37	35018	96.80	70	120	
Li	6	2	2	583146	2.31	576163	101.21	70	120	
Ge	72	2	2	271331	0.58	280452	96.75	70	120	
Rh	103	2	2	1619797	0.22	1670542	96.96	70	120	
Tb	159	2	2	1905395	0.74	1896712	100.46	70	120	
Bi	209	2	2	1028337	0.86	997118	103.13	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	014ICSA.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:41:15-04:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	86122.524	ppb	20083190.7	0.8	5000000	
Ti	47	1	1	1769.102	ppb	313676.6	0.6	50000	
V	51	1	1	-0.781	ppb	2163.6	6.9	5	
Cr	52	1	1	0.907	ppb	8636.1	1.2	5	
Mn	55	1	1	1.908	ppb	7677.8	3.6	5	
Co	59	1	1	1.485	ppb	17604.0	1.4	5	
Ni	60	1	1	1.221	ppb	5326.7	1.4	5	
Cu	63	1	1	0.801	ppb	28458.3	1.9	5	
Zn	66	1	1	1.854	ppb	3496.1	4.1	5	
As	75	1	1	0.217	ppb	264.5	12.8	5	
Se	78	1	1	-0.019	ppb	24.4	34.3	5	
Be	9	2	2	-0.034	ppb	370.4	33.5	5	
B	11	2	2	1.680	ppb	28770.5	1.3	5	
Mo	95	2	2	2058.070	ppb	17105763.2	0.4	50000	
Ag	107	2	2	0.012	ppb	1048.4	15.6	5	
Cd	111	2	2	1.778	ppb	9830.8	6.4	5	
Sn	118	2	2	0.206	ppb	4571.8	3.7	5	
Sb	121	2	2	0.690	ppb	14205.4	1.4	5	
Ba	137	2	2	0.550	ppb	3775.1	4.0	5	
Tl	205	2	2	0.020	ppb	952.1	6.8	1.25	
Pb	208	2	2	0.168	ppb	4093.9	5.1	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35134	0.59	35018	100.33	70	120	
Li	6	2	2	523329	0.56	576163	90.83	70	120	
Ge	72	2	2	305458	0.88	280452	108.92	70	120	
Rh	103	2	2	1407618	0.41	1670542	84.26	70	120	
Tb	159	2	2	1814269	0.36	1896712	95.65	70	120	
Bi	209	2	2	917054	1.17	997118	91.97	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	015ICSB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-08-11T15:45:39-04:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	85497.969	1.131	20208365	0.91	100000	85.5	-1000	1000	
Ti	47	1	1	1759.043	0.978	316139	0.71	5000	35.2	-1000	1000	
V	51	1	1	-0.790	-2.413	2139	5.30	0.5	-158.0	-1000	1000	
Cr	52	1	1	19.134	1.016	141879	0.84	20	95.7	80	120	
Mn	55	1	1	20.497	2.122	78428	1.83	20	102.5	80	120	
Co	59	1	1	19.323	1.145	231007	0.91	20	96.6	80	120	
Ni	60	1	1	18.622	1.033	63687	0.68	20	93.1	80	120	
Cu	63	1	1	20.559	0.369	206506	0.59	20	102.8	80	120	
Zn	66	1	1	18.959	1.373	25647	1.40	20	94.8	80	120	
As	75	1	1	19.491	0.530	20023	0.88	20	97.5	80	120	
Se	78	1	1	0.091	241.472	31	40.56	0.5	18.1	-1000	1000	
Be	9	2	2	0.031	29.551	337	15.23	0.5	6.1	-1000	1000	
B	11	2	2	1.734	7.829	28151	2.30	2	86.7	-1000	1000	
Mo	95	2	2	2037.054	0.525	17151509	0.41	5000	40.7	-1000	1000	
Ag	107	2	2	21.201	0.643	409310	0.30	20	106.0	80	120	
Cd	111	2	2	18.415	2.429	101486	2.16	20	92.1	80	120	
Sn	118	2	2	0.109	19.544	3397	7.70	0.5	21.9	-1000	1000	
Sb	121	2	2	0.693	5.553	14087	5.54	0.5	138.5	-1000	1000	
Ba	137	2	2	0.500	0.728	3497	0.37	0.5	100.0	-1000	1000	
Tl	205	2	2	0.012	36.629	674	18.08	0.125	9.5	-1000	1000	
Pb	208	2	2	0.151	8.250	3627	7.00	0.125	120.7	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	35611	0.37	35018	101.69	70	120	
Li	6	2	2	508585	1.02	576163	88.27	70	120	
Ge	72	2	2	304935	0.59	280452	108.73	70	120	
Rh	103	2	2	1425945	0.35	1670542	85.36	70	120	
Tb	159	2	2	1792391	0.11	1896712	94.50	70	120	
Bi	209	2	2	891247	1.79	997118	89.38	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg369.b
Acq Date Time	2014-08-11T16:20:39-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	271.409	ppb	3.125	296103	0.85	250	108.6	90	110	
Mg	24	1	1	272.607	ppb	2.382	149484	0.16	250	109.0	90	110	
Al	27	1	1	26.937	ppb	4.654	6936	2.05	25	107.7	90	110	
Si	28	1	1	527.851	ppb	6.061	64235	1.30	250	211.1	90	110	> +-10%
K	39	1	1	267.722	ppb	3.204	200248	0.21	250	107.1	90	110	
Ca	44	1	1	263.226	ppb	2.003	6771	2.79	250	105.3	90	110	
Ti	47	1	1	25.029	ppb	2.945	4376	1.07	25	100.1	90	110	
V	51	1	1	24.950	ppb	2.202	146529	0.16	25	99.8	90	110	
Cr	52	1	1	24.978	ppb	2.450	179340	0.22	25	99.9	90	110	
Mn	55	1	1	25.088	ppb	2.094	93174	0.95	25	100.4	90	110	
Fe	56	1	1	268.706	ppb	1.966	1581674	0.44	250	107.5	90	110	
Co	59	1	1	25.222	ppb	2.028	292988	0.37	25	100.9	90	110	
Ni	60	1	1	24.817	ppb	2.147	82056	0.69	25	99.3	90	110	
Cu	63	1	1	25.568	ppb	2.262	244433	0.59	25	102.3	90	110	
Zn	66	1	1	25.937	ppb	2.757	33680	0.53	25	103.7	90	110	
As	75	1	1	24.577	ppb	3.157	24518	1.05	25	98.3	90	110	
Se	78	1	1	25.230	ppb	3.301	1432	2.89	25	100.9	90	110	
Be	9	2	2	25.151	ppb	1.313	160720	1.48	25	100.6	90	110	
B	11	2	2	26.622	ppb	1.575	127499	1.43	25	106.5	90	110	
Mo	95	2	2	24.294	ppb	1.938	232040	0.88	25	97.2	90	110	
Ag	107	2	2	26.685	ppb	0.971	581204	0.81	25	106.7	90	110	
Cd	111	2	2	24.218	ppb	0.843	120424	0.18	25	96.9	90	110	
Sn	118	2	2	24.163	ppb	0.769	351286	1.09	25	96.7	90	110	
Sb	121	2	2	25.147	ppb	0.912	518703	0.92	25	100.6	90	110	
Ba	137	2	2	24.461	ppb	0.962	181861	0.69	25	97.8	90	110	
Tl	205	2	2	23.545	ppb	0.626	771604	0.75	25	94.2	90	110	
Pb	208	2	2	24.085	ppb	1.314	552955	1.67	25	96.3	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34616	2.24	35018	98.85	70	120	
Li	6	2	2	559251	0.25	576163	97.06	70	120	
Ge	72	2	2	275149	0.71	280452	98.11	70	120	
Rh	103	2	2	1609473	1.54	1670542	96.34	70	120	
Tb	159	2	2	1843042	0.77	1896712	97.17	70	120	
Bi	209	2	2	962885	0.47	997118	96.57	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	024LCCV.d
Data Path Name	D:\Data\6020\pg369.b
Acq Date Time	2014-08-11T16:25:02-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	3.598	6.404	20111	0.54	5	72.0	70	130	
Mg	24	1	1	3.610	3.128	4513	1.77	5	72.2	70	130	
Al	27	1	1	0.438	71.576	556	7.21	0.5	87.5	70	130	
K	39	1	1	3.933	15.469	72458	1.33	5	78.7	70	130	
Ca	44	1	1	4.370	9.381	519	7.72	5	87.4	70	130	
Ti	47	1	1	0.679	25.544	122	25.34	0.5	135.8	70	130	> +- 30%
V	51	1	1	0.441	4.037	5814	2.63	0.5	88.3	70	130	
Cr	52	1	1	0.567	4.144	5993	4.36	0.5	113.4	70	130	
Mn	55	1	1	0.484	3.075	2262	0.73	0.5	96.8	70	130	
Fe	56	1	1	4.549	3.039	50454	0.70	5	91.0	70	130	
Co	59	1	1	0.377	2.559	6294	3.60	0.5	75.4	70	130	
Ni	60	1	1	0.434	5.250	2639	2.58	0.5	86.9	70	130	
Cu	63	1	1	0.442	17.936	28735	3.53	0.5	88.4	70	130	
Zn	66	1	1	0.484	7.054	1107	5.43	0.5	96.7	70	130	
As	75	1	1	0.425	10.067	642	10.17	0.5	84.9	70	130	
Se	78	1	1	0.560	57.960	61	33.33	0.5	112.0	70	130	
Be	9	2	2	0.507	2.157	3386	0.95	0.5	101.3	70	130	
B	11	2	2	2.097	0.278	32140	1.21	0.5	419.4	70	130	> +- 30%
Mo	95	2	2	0.782	3.461	8593	3.70	0.5	156.3	70	130	> +- 30%
Ag	107	2	2	0.442	2.273	11243	2.68	0.5	88.4	70	130	
Cd	111	2	2	0.581	4.419	2838	4.64	0.5	116.2	70	130	
Sn	118	2	2	0.740	4.703	12860	4.02	0.5	148.0	70	130	> +- 30%
Sb	121	2	2	0.428	2.719	12687	2.01	0.5	85.7	70	130	
Ba	137	2	2	0.567	1.728	4420	2.47	0.5	113.5	70	130	
Tl	205	2	2	0.535	1.777	17926	2.31	0.5	106.9	70	130	
Pb	208	2	2	0.528	3.584	12604	2.55	0.5	105.5	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	34002	1.70	35018	97.10	70	120	
Li	6	2	2	555422	1.19	576163	96.40	70	120	
Ge	72	2	2	268925	0.24	280452	95.89	70	120	
Rh	103	2	2	1599103	0.98	1670542	95.72	70	120	
Tb	159	2	2	1815686	0.94	1896712	95.73	70	120	
Bi	209	2	2	966551	1.40	997118	96.93	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Data\6020\pg369.b
Acq Date Time	2014-08-11T16:29:23-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	1.002	ppb	24.15	15017	0.7	5	
Mg	24	1	1	1.334	ppb	27.26	1795	8.8	5	
Al	27	1	1	-0.039	ppb	-88.54	426	16.6	0.5	
K	39	1	1	1.269	ppb	35.47	69724	0.9	5	
Ca	44	1	1	-1.251	ppb	-193.76	461	11.2	5	
Ti	47	1	1	0.091	ppb	31.15	21	24.1	0.5	
V	51	1	1	-0.584	ppb	-4.83	3169	3.3	0.5	
Cr	52	1	1	0.023	ppb	53.76	2194	5.4	0.5	
Mn	55	1	1	0.015	ppb	58.81	558	6.9	0.5	
Fe	56	1	1	0.798	ppb	14.99	22046	2.1	5	
Co	59	1	1	0.001	ppb	214.95	99	25.7	0.5	
Ni	60	1	1	-0.073	ppb	-27.66	1013	5.8	0.5	
Cu	63	1	1	0.305	ppb	35.86	23212	2.6	0.5	
Zn	66	1	1	-0.210	ppb	-13.78	835	3.3	0.5	
As	75	1	1	0.020	ppb	57.12	62	17.2	0.5	
Se	78	1	1	-0.103	ppb	-231.87	19	66.8	0.5	
Be	9	2	2	0.007	ppb	90.24	219	17.9	0.5	
B	11	2	2	1.058	ppb	9.86	28010	2.1	0.5	>RL
Mo	95	2	2	0.131	ppb	8.62	2445	3.3	0.5	
Ag	107	2	2	-0.032	ppb	-12.49	237	35.8	0.5	
Cd	111	2	2	0.009	ppb	97.31	56	72.1	0.5	
Sn	118	2	2	0.173	ppb	14.00	4716	8.3	0.5	
Sb	121	2	2	0.021	ppb	21.91	633	15.0	0.5	
Ba	137	2	2	0.013	ppb	140.08	330	40.5	0.5	
Tl	205	2	2	0.016	ppb	5.91	859	2.7	0.125	
Pb	208	2	2	0.005	ppb	77.56	574	15.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	33913	1.63	35018	96.85	70	120	
Li	6	2	2	552861	0.71	576163	95.96	70	120	
Ge	72	2	2	268848	0.47	280452	95.86	70	120	
Rh	103	2	2	1596691	1.20	1670542	95.58	70	120	
Tb	159	2	2	1826669	0.10	1896712	96.31	70	120	
Bi	209	2	2	964719	1.69	997118	96.75	70	120	

	SAMPLE	2101		BLKA140810-01	4
	SAMPLE	2102		LCSA140810-01	4
	SAMPLE	2103		E14-07205-001	4
	SAMPLE	2104		E14-07205-001DUP	4
	SAMPLE	2105		E14-07205-001SD	20
	SAMPLE	2106		E14-07205-001MS	4
	SAMPLE	2107		E14-07205-001PS	4
	SAMPLE	2108		E14-07372-002	4
	SAMPLE	2109		E14-07372-005	4
	SAMPLE	2110		E14-07438-004	4
	SAMPLE	2111		E14-07372-004	4
	SAMPLE	2112		E14-07205-002	4
	SAMPLE	2201		E14-07393-001	4
	SAMPLE	2202		E14-07372-001	4
	SAMPLE	2203		E14-07365-001	4
	SAMPLE	2204		E14-07365-002	4
	SAMPLE	2205		E14-07409-001	4
	SAMPLE	2206		E14-07409-002	4
	SAMPLE	2207		E14-07409-003	4
	SAMPLE	2208		E14-07409-004	4
	SAMPLE	2209		E14-07409-005	4
	SAMPLE	2210		E14-07438-001	4
	SAMPLE	2211		E14-07438-002	4
	SAMPLE	2212		E14-07438-003	4

Analytical Sequence

Method : 7470A Water

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2		ICV
8	1		ICB
9	9		BLKA140817-01-378
10	10		LCSA140817-01-378
11	11		E14-07650-002
12	12		E14-07650-002DUP
13	13		E14-07650-002MS
14	14		E14-07650-004
15	15		E14-07650-001
16	16		E14-07650-005
17	17		E14-07393-001
18	18		E14-07593-001
19	2		CCV
20	1		CCB
21	19		E14-07593-002
22	20		E14-07690-010
23	21		E14-07690-013
24	2		CCV
25	1		CCB

E14-07393 0293

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\378.SIF
Batch ID: 378AQUEOUS
Results Data Set: pg378ahg_14
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 8/18/2014 2:24:23 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0003	0.0003	0.0001	14:25:16	Yes
2		[0.00]	0.0005	0.0005	0.0002	14:25:49	Yes
3		[0.00]	0.0004	0.0004	0.0002	14:26:22	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0001				
%RSD:		0.00	27.28				

Auto-zero performed.

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 8/18/2014 2:26:41 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0164	0.0168	0.0042	14:27:35	Yes
2		[0.25]	0.0162	0.0166	0.0041	14:28:07	Yes
3		[0.25]	0.0161	0.0165	0.0041	14:28:40	Yes
Mean:		[0.25]	0.0162				
SD:		0.00	0.0001				
%RSD:		0.00	0.92				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.06485 Intercept: 0.00000

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 8/18/2014 2:29:00 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1572	0.1576	0.0386	14:29:55	Yes
2		[2.500]	0.1546	0.1550	0.0377	14:30:28	Yes
3		[2.500]	0.1536	0.1541	0.0380	14:31:00	Yes
Mean:		[2.500]	0.1551				
SD:		0.000	0.0018				
%RSD:		0.000	1.17				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999991 Slope: 0.06193 Intercept: 0.00035

Sequence No.: 4
Autosampler Location: 5
Sample ID: Calib Std 3
Date Collected: 8/18/2014 2:31:21 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.3048	0.3052	0.0751	14:32:16	Yes
2		[5.000]	0.3010	0.3014	0.0728	14:32:49	Yes
3		[5.000]	0.3017	0.3021	0.0738	14:33:21	Yes
Mean:		[5.000]	0.3025				
SD:		0.000	0.0020				
%RSD:		0.000	0.66				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999916 Slope: 0.06052 Intercept: 0.00120

==========

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: Calib Std 4 **Date Collected: 8/18/2014 2:33:43 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.4556	0.4560	0.1102	14:34:38	Yes
2		[7.500]	0.4507	0.4511	0.1091	14:35:10	Yes
3		[7.500]	0.4494	0.4499	0.1093	14:35:43	Yes
Mean:		[7.500]	0.4519				
SD:		0.000	0.0033				
%RSD:		0.000	0.72				

Standard number 4 applied. [7.500]
Correlation Coef.: 0.999955 Slope: 0.06017 Intercept: 0.00162

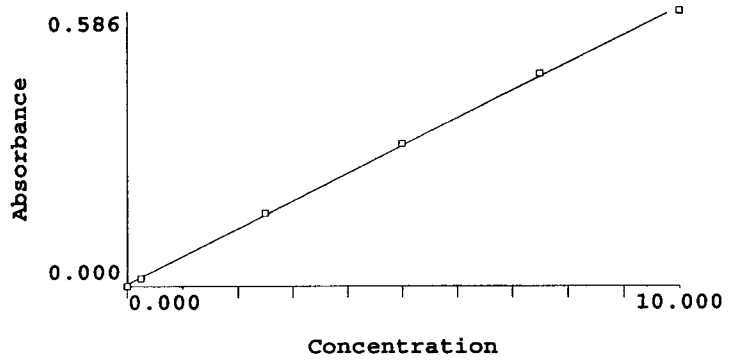
==========

Sequence No.: 6 **Autosampler Location: 7**
Sample ID: Calib Std 5 **Date Collected: 8/18/2014 2:36:05 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.5904	0.5908	0.1442	14:37:00	Yes
2		[10.000]	0.5832	0.5836	0.1391	14:37:33	Yes
3		[10.000]	0.5841	0.5845	0.1405	14:38:06	Yes
Mean:		[10.000]	0.5859				
SD:		0.000	0.0039				
%RSD:		0.000	0.67				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999749 Slope: 0.05893 Intercept: 0.00395



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank 1	0.0000	0	-0.06697	0.00	27.3
Calib Std 1	0.0162	0.25	0.20817	0.00	0.9
Calib Std 2	0.1551	2.500	2.56547	0.00	1.2
Calib Std 3	0.3025	5.000	5.06638	0.00	0.7
Calib Std 4	0.4519	7.500	7.60181	0.00	0.7

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Calib Std 5 0.5859 10.000 9.87513 0.00 0.7
Correlation Coef.: 0.999749 Slope: 0.05893 Intercept: 0.00395

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 8/18/2014 2:38:28 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00490	4.9031	0.2929	0.2933	0.0710	14:39:22	Yes
2	0.00488	4.8764	0.2913	0.2917	0.0702	14:39:55	Yes
3	0.00487	4.8706	0.2910	0.2914	0.0707	14:40:27	Yes
Mean:	0.00488	4.8834	0.2917				
SD:	0.00002	0.01734	0.0010				
%RSD:	0.35499	0.35499	0.35				

QC value within limits for Hg 253.7 Recovery = 97.67%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 8/18/2014 2:40:47 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00009	-0.08664	-0.0012	-0.0007	0.0001	14:41:40	Yes
2	-0.00008	-0.07519	-0.0005	-0.0001	0.0001	14:42:12	Yes
3	-0.00009	-0.08916	-0.0013	-0.0009	0.0001	14:42:45	Yes
Mean:	-0.00008	-0.08366	-0.0010				
SD:	0.00001	0.00745	0.0004				
%RSD:	8.8991	8.8991	44.59				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BLKA140817-01-378 **Date Collected: 8/18/2014 2:43:04 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BLKA140817-01-378

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00015	-0.07542	-0.0005	-0.0001	0.0001	14:43:57	Yes
2	-0.00021	-0.10280	-0.0021	-0.0017	-0.0000	14:44:30	Yes
3	-0.00015	-0.07554	-0.0005	-0.0001	0.0000	14:45:03	Yes
Mean:	-0.00017	-0.08459	-0.0010				
SD:	0.00003	0.01577	0.0009				
%RSD:	18.649	18.649	89.51				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: LCSA140817-01-378 **Date Collected: 8/18/2014 2:45:21 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: LCSA140817-01-378

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01321	6.6062	0.3932	0.3937	0.0977	14:46:15	Yes
2	0.01315	6.5732	0.3913	0.3917	0.0955	14:46:48	Yes
3	0.01311	6.5530	0.3901	0.3905	0.0961	14:47:21	Yes
Mean:	0.01315	6.5774	0.3915				
SD:	0.00005	0.02683	0.0016				
%RSD:	0.40794	0.40794	0.40				

Sequence No.: 11 Autosampler Location: 11
Sample ID: E14-07650-002 Date Collected: 8/18/2014 2:47:40 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07650-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00017	-0.08271	-0.0009	-0.0005	0.0001	14:48:33	Yes
2	-0.00019	-0.09597	-0.0017	-0.0013	0.0000	14:49:05	Yes
3	-0.00018	-0.09076	-0.0014	-0.0010	0.0001	14:49:38	Yes
Mean:	-0.00018	-0.08981	-0.0013				
SD:	0.00001	0.00668	0.0004				
%RSD:	7.4413	7.4413	29.25				

Sequence No.: 12 Autosampler Location: 10
Sample ID: LCSA140817-01-378 Date Collected: 8/18/2014 2:49:57 PM
Analyst: Rob Data Type: Original

Replicate Data: LCSA140817-01-378

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01015	5.0771	0.3031	0.3036	0.0736	14:50:50	Yes
2	0.01017	5.0845	0.3036	0.3040	0.0725	14:51:23	Yes
3	0.01003	5.0170	0.2996	0.3000	0.0728	14:51:56	Yes
Mean:	0.01012	5.0595	0.3021				
SD:	0.00007	0.03703	0.0022				
%RSD:	0.73185	0.73185	0.72				

Sequence No.: 13 Autosampler Location: 12
Sample ID: E14-07650-002DUP Date Collected: 8/18/2014 2:52:15 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07650-002DUP

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00016	-0.07890	-0.0007	-0.0003	0.0001	14:53:08	Yes
2	-0.00016	-0.08029	-0.0008	-0.0004	0.0001	14:53:41	Yes
3	-0.00016	-0.07847	-0.0007	-0.0003	0.0001	14:54:14	Yes
Mean:	-0.00016	-0.07922	-0.0007				
SD:	0.00000	0.00096	0.0001				
%RSD:	1.2060	1.2060	7.80				

Sequence No.: 14 Autosampler Location: 13
Sample ID: E14-07650-002MS Date Collected: 8/18/2014 2:54:34 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07650-002MS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00864	4.3194	0.2585	0.2589	0.0641	14:55:27	Yes
2	0.00861	4.3037	0.2576	0.2580	0.0639	14:56:00	Yes
3	0.00866	4.3312	0.2592	0.2596	0.0647	14:56:33	Yes
Mean:	0.00864	4.3181	0.2584				
SD:	0.00003	0.01378	0.0008				
%RSD:	0.31919	0.31919	0.31				

Sequence No.: 15 Autosampler Location: 14
Sample ID: E14-07650-004 Date Collected: 8/18/2014 2:56:52 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07650-004

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.00019	-0.09348	-0.0016	-0.0011	0.0000	14:57:46	Yes
2	-0.00021	-0.10251	-0.0021	-0.0017	0.0000	14:58:19	Yes
3	-0.00021	-0.10680	-0.0023	-0.0019	0.0000	14:58:51	Yes
Mean:	-0.00020	-0.10093	-0.0020				
SD:	0.00001	0.00680	0.0004				
%RSD:	6.7389	6.7389	20.03				

Sequence No.: 16 **Autosampler Location: 15**
Sample ID: E14-07650-001 **Date Collected: 8/18/2014 2:59:12 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-07650-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00014	-0.06763	-0.0000	0.0004	0.0001	15:00:06	Yes
2	-0.00017	-0.08629	-0.0011	-0.0007	0.0001	15:00:38	Yes
3	-0.00015	-0.07469	-0.0005	-0.0000	0.0001	15:01:11	Yes
Mean:	-0.00015	-0.07620	-0.0005				
SD:	0.00002	0.00942	0.0006				
%RSD:	12.367	12.367	102.04				

Sequence No.: 17 **Autosampler Location: 16**
Sample ID: E14-07650-005 **Date Collected: 8/18/2014 3:01:31 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-07650-005

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00016	-0.08148	-0.0009	-0.0004	0.0001	15:02:26	Yes
2	-0.00014	-0.06998	-0.0002	0.0002	0.0001	15:02:59	Yes
3	-0.00018	-0.09078	-0.0014	-0.0010	0.0001	15:03:32	Yes
Mean:	-0.00016	-0.08075	-0.0008				
SD:	0.00002	0.01042	0.0006				
%RSD:	12.903	12.903	75.59				

Sequence No.: 18 **Autosampler Location: 17**
Sample ID: E14-07393-001 **Date Collected: 8/18/2014 3:03:52 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-07393-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00036	0.18247	0.0147	0.0151	0.0039	15:04:47	Yes
2	0.00038	0.18845	0.0151	0.0155	0.0038	15:05:19	Yes
3	0.00037	0.18309	0.0147	0.0152	0.0039	15:05:52	Yes
Mean:	0.00037	0.18467	0.0148				
SD:	0.00001	0.00329	0.0002				
%RSD:	1.7820	1.7820	1.31				

Sequence No.: 19 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 8/18/2014 3:06:13 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00519	5.1853	0.3095	0.3099	0.0746	15:07:06	Yes
2	0.00514	5.1410	0.3069	0.3073	0.0725	15:07:39	Yes
3	0.00510	5.0969	0.3043	0.3047	0.0724	15:08:12	Yes
Mean:	0.00514	5.1411	0.3069				
SD:	0.00004	0.04420	0.0026				
%RSD:	0.85977	0.85977	0.85				

QC value within limits for Hg 253.7 Recovery = 102.82%
All analyte(s) passed QC.

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Sequence No.: 20 Autosampler Location: 1
Sample ID: CCB Date Collected: 8/18/2014 3:08:32 PM
Analyst: Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00007	-0.06882	-0.0001	0.0003	0.0001	15:09:25	Yes
2	-0.00009	-0.08513	-0.0011	-0.0006	0.0001	15:09:58	Yes
3	-0.00005	-0.05485	0.0007	0.0011	0.0002	15:10:30	Yes
Mean:	-0.00007	-0.06960	-0.0002				
SD:	0.00002	0.01516	0.0009				
%RSD:	21.779	21.779	576.01				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 21 Autosampler Location: 18
Sample ID: E14-07593-001 Date Collected: 8/18/2014 3:10:50 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07593-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00015	-0.07385	-0.0004	0.0000	0.0001	15:11:44	Yes
2	-0.00017	-0.08731	-0.0012	-0.0008	0.0000	15:12:17	Yes
3	-0.00017	-0.08449	-0.0010	-0.0006	0.0000	15:12:50	Yes
Mean:	-0.00016	-0.08188	-0.0009				
SD:	0.00001	0.00710	0.0004				
%RSD:	8.6683	8.6683	47.59				

Sequence No.: 22 Autosampler Location: 19
Sample ID: E14-07593-002 Date Collected: 8/18/2014 3:13:11 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07593-002

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00014	-0.06816	-0.0001	0.0004	0.0001	15:14:06	Yes
2	-0.00016	-0.07766	-0.0006	-0.0002	0.0001	15:14:39	Yes
3	-0.00015	-0.07400	-0.0004	0.0000	0.0001	15:15:11	Yes
Mean:	-0.00015	-0.07327	-0.0004				
SD:	0.00001	0.00479	0.0003				
%RSD:	6.5340	6.5340	75.90				

Sequence No.: 23 Autosampler Location: 20
Sample ID: E14-07690-010 Date Collected: 8/18/2014 3:15:33 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07690-010

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00013	-0.06416	0.0002	0.0006	0.0001	15:16:28	Yes
2	-0.00016	-0.08055	-0.0008	-0.0004	0.0001	15:17:00	Yes
3	-0.00016	-0.07867	-0.0007	-0.0003	0.0001	15:17:33	Yes
Mean:	-0.00015	-0.07446	-0.0004				
SD:	0.00002	0.00897	0.0005				
%RSD:	12.043	12.043	119.70				

Sequence No.: 24 Autosampler Location: 21
Sample ID: E14-07690-013 Date Collected: 8/18/2014 3:17:54 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-07690-013

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00029	0.14607	0.0126	0.0130	0.0032	15:18:50	Yes
2	0.00031	0.15400	0.0130	0.0134	0.0031	15:19:23	Yes
3	0.00031	0.15555	0.0131	0.0135	0.0032	15:19:56	Yes
Mean:	0.00030	0.15187	0.0129				
SD:	0.00001	0.00509	0.0003				
%RSD:	3.3502	3.3502	2.32				

Sequence No.: 25 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 8/18/2014 3:20:17 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00535	5.3506	0.3192	0.3197	0.0742	15:21:11	Yes
2	0.00535	5.3546	0.3195	0.3199	0.0732	15:21:43	Yes
3	0.00530	5.2980	0.3161	0.3166	0.0737	15:22:16	Yes
Mean:	0.00533	5.3344	0.3183				
SD:	0.00003	0.03158	0.0019				
%RSD:	0.59203	0.59203	0.58				

QC value within limits for Hg 253.7 Recovery = 106.69%
All analyte(s) passed QC.

Sequence No.: 26 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 8/18/2014 3:22:36 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00007	-0.07106	-0.0002	0.0002	0.0002	15:23:29	Yes
2	-0.00007	-0.06942	-0.0001	0.0003	0.0001	15:24:02	Yes
3	-0.00007	-0.06696	0.0000	0.0004	0.0001	15:24:34	Yes
Mean:	-0.00007	-0.06915	-0.0001				
SD:	0.00000	0.00206	0.0001				
%RSD:	2.9844	2.9844	94.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

METALS PREP LOGS
STANDARD PREP LOGS

2014 PG: 368

METALS'S DIGESTION LOG

Date: 08/10/14 15:00

MATRIX: AQUEOUS | PREP SOLUTION | DATE | LOT # | ANALYSIS METHOD: 6020A | Hg DIG. DATE:

DIGESTION METHOD: 3005A | NaCl: | 105599 | Hg ANAL. METHOD: 7470A

SPIKES: 0.5ml M482ml M483 | Hydroxylamine: | 125507A | LOT# HNO3: 1112110 | ICPMS ICV: M331

Hg DIGESTION METHOD: 7470A | KMnO4: | 121666 | LOT# H2SO4: 135111 | ICPMS Cal. Stds.: M327,M361

Hg SPIKE: 2.50 PPB M493-1 | K2S2O8: | 117411 | LOT# HCL: 137354

Hg ICV: 2.50 PPB M455-1

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
	BLKA140810-01				25	50					BMW1		
	LCSA140810-01				25	50					BSW1		
Fe	E14-07205-001	*	Y		25	50			N1	8/14			
	E14-07205-001DUP	*	Y		25	50			N1				
	E14-07205-001MS	*	Y		25	50			N1				
Fe Mn	E14-07372-002	*	Y		25	50			N1	8/19	FB		
Fe Mn	E14-07372-005	*	Y		25	50			N1		FILTRATE OF #2; FieldID: FILT; FB; FILT OF #2		
Fe	E14-07438-004	*	Y		25	50			N1	8/15	FB; HOLD		
Fe Mn	E14-07372-004	*	Y		25	50			N1	8/19	FILTRATE OF #1; FieldID: FILT; FILT OF #1		
Fe	E14-07205-002	*	Y		25	50			N1	8/14			
As Cd Cr Pb	E14-07393-001	*	B		25	50			N1	8/12	R-72(8/12 16:00)	Trace	
Fe Mn	E14-07372-001	*	Y		25	50			N1	8/19		Trace	
Cu	E14-07365-001	*	N		25	50			N1	8/18			
Cu	E14-07365-002	*	N		25	50			N1				
Fe	E14-07409-001	*	Y		25	50			N1	8/19		0.5	
Fe	E14-07409-002	*	Y		25	50			N1			0.2	
Fe	E14-07409-003	*	Y		25	50			N1			0.5	
Fe	E14-07409-004	*	Y		25	50			N1			0.75	
Fe	E14-07409-005	*	Y		25	50			N1			0.5	
Fe	E14-07438-001	*	Y		25	50			N1	8/15			
Fe	E14-07438-002	*	Y		25	50			N1			Trace	
Fe	E14-07438-003	*	Y		25	50			N1			0.5	

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	8/11/14 - 0920 -	Received by:	8/11/14 920
Relinquished by:		Received by:	
Disposal:			

E14-07393 0302

2014 PG: 378

METALS'S DIGESTION LOG

Date: 08/17/14 12:00

MATRIX: AQUEOUS

DIGESTION METHOD: 3005A

SPIKES: 0.5ml M482ml M483

Hg DIGESTION METHOD: 7470A

Hg SPIKE: 2.50 PPB M493-1

Hg ICV: 2.50 PPB M455-1

PREP. SOLUTION	DATE	LOT #
NaCl:	7/24/14	134874
Hydroxylamine:	7/24/14	134386
KMnO4:	7/30/14	121666
K2S2O8:	4/17/14	117411

ANALYSIS METHOD: 6020A

Hg ANAL. METHOD: 7470A

LOT# HNO3: 1112110

LOT# H2SO4: 135111

LOT# HCL: 137354

Hg DIG. DATE: 8/17/14

ICPMS ICV: M331

ICPMS Cal. Stds.: M327,M361

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M493-1		
Hg	STD2 2.50 PPB						25	50			M493-1		
Hg	STD3 5.00 PPB						25	50			M493-1		
Hg	STD4 7.50 PPB						25	50			M493-1		
Hg	STD5 10.0 PPB						25	50			M493-1		
Hg	ICV 5.00 PPB						25	50			M455-1		
	BLKA140817-01				25	50	25	50			BMW1		
	LCSA140817-01				25	50	25	50			BSW1		
TAL	E14-07650-002	*	R		25	50	25	50	N1	8/19	R-1WK	Trace	
	E14-07650-002DUP	*	R		25	50	25	50	N1				
	E14-07650-002MS	*	R		25	50	25	50	N1				
TAL	E14-07650-004	*	R		25	50	25	50	N1		R-1WK; FB		
TAL	E14-07650-001	*	R		25	50	25	50	N1		R-1WK	0.2	
TAL	E14-07650-005	*	R		25	50	25	50	N1		R-1WK	Trace	
Hg	E14-07393-001	*	B				25	50	N1	8/19	R-72(8/19 16:00)	Trace	
TAL + Sn Ti	E14-07593-001	*	N		25	50	25	50	N1	8/25			
TAL + Sn Ti	E14-07593-002	*	N		25	50	25	50	N1				
TAL	E14-07690-010	*	Y		25	50	25	50	N1	8/26		1	
TAL	E14-07690-013	*	Y		25	50	25	50	N1			1	
Fe	E14-07637-009	*	Y		25	50			N1	8/25	see Ferrous (II) Iron	Trace	
Fe	E14-07637-010	*	Y		25	50			N1		see Ferrous (II) Iron		
Fe	E14-07637-011	*	Y		25	50			N1		see Ferrous (II) Iron		
Fe	E14-07637-012	*	Y		25	50			N1		see Ferrous (II) Iron		
Fe	E14-07637-014	*	Y		25	50			N1		see Ferrous (II) Iron	Trace	
Fe	E14-07669-001	*	Y		25	50			N1	8/26		1	
Fe	E14-07669-002	*	Y		25	50			N1			0.75	
Fe	E14-07669-003	*	Y		25	50			N1			0.5	
Fe	E14-07669-004	*	Y		25	50			N1			1	

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	8/18/14 - 1730 -	Received by:	8/18/14 1000
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	8/18/14 - 1600 -	Received by:	8/18/14 1000
Relinquished by:		Received by:	
Disposal:			

E14-07393 0303

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 081114

Standard Name	081114-01	081114-02	081114-03	081114-04	081114-05	081114-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	8/11/14	8/11/14	8/11/14	8/11/14	8/11/14	8/11/14
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK				
Date	8/11/14				

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK				
Date	8/11/14				

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK				
Date	8/11/14				

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL10-13YPY	M-480	8/30/2014	
Instrument Check Standard 3	SPEX	CL-ICS-1	CL10-122YPY	M-490	2/28/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S130212011	M-468	7/8/2014	
1000ppm B	SCP	140-050-051	S130110012	M-469	7/8/2014	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-903	S120531006	M-433	12/2014	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-484	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL10-38YPY	M-488	2/28/15	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

DK
INITIAL

8/11/14
DATE

E14-07393 0305

GENERAL ANALYTICAL CHEMISTRY

E14-07393 0306

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Organic Halides (TOX)

Matrix: Aqueous
Unit: mg/L

Batch: AP067-0022
Method: 9020B

Date: 08/11/2014

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKA140811	ND	NA	NA	NA	NA	NA
LCS	LCSA140811	4.84	5	NA	NA	96.8	90-110
SAMPLE	E14-07393-001	ND	NA	NA	NA	NA	NA
DUP	E14-07393-001DUP	ND	NA	NC	NC	NA	NA
MS	E14-07393-001MS	1.02	1	NA	NA	102	75-125

The above blank result applies to the follow samples:

E14-07393-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Flash Point

Matrix: Aqueous
Unit: °C

Batch: AP069-0021
Method: 1010

Date: 08/12/2014

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKA140812	NO FLASH @100C	NA	NA	NA	NA	NA
LCS	LCSA140812	28.0	27	NA	NA	104	90-110
SAMPLE	E14-07393-001	NO FLASH @100C	NA	NA	NA	NA	NA
DUP	E14-07393-001DUP	NO FLASH @100C	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E14-07393-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Total Solids

Matrix: Aqueous
Unit: mg/L

Batch: AP031-0049
Method: 2540B

Date: 08/07/2014

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKA140807	< 4.70	NA	NA	NA	NA	NA
SAMPLE	E14-07393-001	1290	NA	NA	NA	NA	NA
DUP	E14-07393-001DUP	1290	NA	0	10	NA	NA

The above blank result applies to the follow samples:

E14-07393-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

INTEGRATED ANALYTICAL LABORATORIES, LLC.

INITIAL & CONTINUING CALIBRATION VERIFICATION

Total Solids

Batch: AP031-0049	Date & Time: 08/07/2014 15:30
Method: 2540B	Analyst: Lucy Cui

	True Value	Result (mg/L)	% REC
BLKA140807		< 4.70	

	True Value	Result (mg/L)	% REC
ICV.12	250	245	98.0

GENERAL ANALYTICAL CHEMISTRY
RAW DATA
INSTRUMENT LOGS

IAL

AOX log

SW-846 9020B

Wash Blanks (ug) 0.8142 | 0.7768

Cal. Stds. 5.6314 (99%) | 5.7213 (99%)

Blank Stds. <5.1 | <5.1

date/ analyst 8/11/17

Average 0.7955 x 2 = 1.591

((top+bottom)-2(average blank))/sample vol.(L)= AOX ug/L

WCAOXCIS/ 7/12/17

WCAOXS/ 7/10/17

WCAOXWS/ 7/12/17 (7938)

AOXcolumns/ 140,143 exp. 5/A/15

Conc. H2SO4/ RA. 63-5

WCAOXkcl/ 7/11/17

WCAOXkno3/ 7/10/17

methanol/ RA. BOS-51

Sample ID	Sample Vol (ml)	Top (ug)	Bottom (ug)	Result (ug/L)
LL SW	100	2.3624	0.7103	15.7
BLK	100	0.8342	0.6764	<20
7393-001	100	1.0783	0.7212	<20
7393-001D	100	1.0006	0.6842	<20
CCB	—	0.6693		
7393-001S	10	10.9735	0.8424	1020
CCB	—	0.5983		

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/11/14
INITIAL CALIBRATION TIME: 9:00

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
TOX	<0.1							5.0000	4.8359
TOX	<0.1							5.0000	4.9258

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/11/14
INITIAL CALIBRATION TIME: 9:00

PROJECT NO: _____
CONTRACT NO: _____

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
TOX	4.8359						
TOX	4.9258						
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
TOX							
ANALYTE		CCV7	% REC	CCV8	% REC		
TOX							

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/L CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg) 1	2	3	4	PREPARATION BLANK
TOX		0.6693	0.5983			<0.020
TOX		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO:

MATRIX: WATER

CONTRACT NO:

UNITS (circle one): (ug)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
TOX	RESULTS	ADDED	CONC.	% REC				
ICV	<0.020	5.0	4.8359	97	90-110%			

E14-073393 03317

NJDEP FORM G-2 (12/94)

[redacted]

[redacted]

[redacted]

MA 67-13

8/1/14 Flashpoint - 755 mHg 0.033(760 - 755)
Blank - No Flash @ 100°C C = 0.2
AM p-xylene - 27.5°C + 0.2°C ≅ 28.0°C
14:20 p-xylene D - 27.5°C + 0.2°C ≅ 28.0°C
7353-001 - No Flash @ 100°C
7353-001D - No Flash @ 100°C

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/12/14
INITIAL CALIBRATION TIME: 14:30

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
Flashpoint								27.0	28.0

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/12/14
INITIAL CALIBRATION TIME: 14:30

PROJECT NO:
CONTRACT NO:

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
Flashpoint	27.0	28.0	104				
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
Flashpoint							
ANALYTE		CCV7	% REC	CCV8	% REC		
Flashpoint							

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: °C CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)		CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4		PREPA-RATION BLANK
Flashpoint								No Flash @100°C
Flashpoint			5	6	7	8		

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: WATER

CONTRACT NO: _____

UNITS (circle one): (°C)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
Flashpoint	RESULTS	ADDED	CONC.	% REC				
ICV	NA	27.0	28.0	104				

E14-073393 0322

NJDEP FORM G-2 (12/94)

AM63-18

(B-A)*1000000/C= mg/L ~~TDS~~

WCTDScont/ 031814

~~AP033-0~~
AP031-049

Analyst LC

Date in/Time IN 8/7/14 15:30
Date out/Time Out 8/8/14 8:00

Total Solids AQ

Temp begin 105 °C
Temp finish 105 °C

Sample ID	Dish ID	Sample Vol (ml) C	Initial Wt. (g) A	Final Wt.(g)	Final Chk Wt.(g) B	Result (mg/L)
BLK	11	100	82.7419	82.7419	82.7419	ND
ICV-250	4	100	76.4397	76.4644	76.4642	245 98%
RL-25.0	8	100	46.6325	46.6350	46.6349	24
7393-001	15	60	65.5871	65.6645	65.6643	~~TDS~~ 1290
↓ D	16	60	57.4044	57.4818	57.4817	1290 RPD=0
D						RPD=

E14-073

rev. 30426

0074

0323

Wet Chemistry Active List - TDS (Dissolved)

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/7/14
INITIAL CALIBRATION TIME: 15:30

PROJECT NO:
CONTRACT NO:

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
Total Solids								250	245

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 8/7/14
INITIAL CALIBRATION TIME: 15:30

PROJECT NO: _____
CONTRACT NO: _____

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3	% REC
Total Solids	245						
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6	% REC
Total Solids							
ANALYTE		CCV7	% REC	CCV8	% REC		
Total Solids							

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/L CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPARATION BLANK
Total Solids						<4.7
Total Solids		5	6	7	8	

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: WATER

CONTRACT NO: _____

UNITS (circle one): (mg/L)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
Total Solids	RESULTS	ADDED	CONC.	% REC				
ICV	<4.7	250	245	98	90-110%			

E14-07393 0327

NJDEP FORM G-2 (12/94)

GENERAL ANALYTICAL CHEMISTRY
STANDARD PREP LOGS

IAL

AOX Reagents and Standards

Electrolyte Solution- Dissolve 1.35g of Sodium Acetate, EM Science, suprapur, in 850ml glacial acetic acid, Fisher, ACS. Bring to volume in a 1000ml erlenmeyer flask with dist. water

Sodium Acetate RA No.	Glacial Acetic Acid RA No.	date prep
13-1	7-11	9/18/01
13-1	7-11	3/20/02
13-1	7-11	10/28/02
13-1	19-9	7/11/03
13-1	19-9	8/17/04
13-1	28-2	10/12/05
13-1	28-2	9/26/07
13-1	28-2	11/11/08
13-1	28-2	5/13/09
13-1	28-2	9/17/11
13-1	28-2	3/14/12
RA 63-25	RA 63-14	3/23/13

WCEOXelect/ date prep
WCAOXelect/ date prep
Sodium Acetate Glacial Acetic Acid
RA 63-25 / RA 63-14 7/9/13

~~RA 63~~
RA

Trichlorophenol Stock Solution (10000mg/L)- Weigh accurately 1.856g of 2,4,6, trichlorophenol into a 100ml Class A volumetric flask. Bring to volume with methanol

2,4,6, Trichlorophenol RA No.	Methanol RA No.	date prep
12-24	5-16	11/30/01
12-24	5-16	6/4/02
12-24	5-16	12/6/02
12-24	BJ CG834	5/28/03
12-24	BJ CG834	12/4/03
12-24	BJ CE113	6/2/04
12-24	BJ CE113	2/10/05
12-24	CE113	8/22/05
12-24	CE113	4/11/06
12-24	CE113	3/30/07
12-24	BOSES1	11/14/07
12-24	BOSES1	11/12/08
12-24	BOSES1	5/3/09
12-24	BOSES1	5/26/10
12-24	BOSES1	4/7/10
12-24	BOSES1	11/11/10
12-24	BOSES1	5/9/11
12-24	BOSES1	1/20/12
55-11	BOSES1	4/20/12
55-11	BOSES1	11/28/12

WCAOXS/ date prep

2,4,6 Trichlorophenol Methanol

RA 55-11 BOSES1 5/20/13
RA 55-11 BOSES1 12/5/13
RA 55-11 BOSES1 7/16/14

MKBF0398V
MRBF0E14-07393

IAL

Trichlorophenol Standard (500mg/L)-Dilute 5.0ml of the trichlorophenol stock to 100ml with methanol

(1ul = 0.5ug)
(10ul = 5.0ug)

WCAOXWS/ date prep

11/11/10 BOSE51 11/11/10 B
5/A/11 BOSE51 B
4/20/12 BOSE51 B
11/28/12 BOSE51 B
5/05/13 BOSE51 B
12/5/13 BOSE51 B
7/16/14 BOSE51 B

WCAOXS

date prep
4/30/01
11/20/01
12/6/02
5/08/03
12/4/03
6/2/04
2/10/05
8/22/05
4/11/06
3/20/07
11/14/07
11/12/08
5/13/09
4/7/10

Methanol

RA No.	date prep
J-16	11/30/01
J-16	2/15/01
J-16	12/6/02
BBJ CG834	5/08/03
BBJ CG834	12/4/03
BBJ CE113	6/2/04
BBJ CE113	2/10/05 B
CE113	8/22/05 B
CE113	4/11/06 B
CE113	3/20/07
CE BOSE51	11/14/07 B
BOSE51	11/12/08 B
BOSE51	5/13/09 B
BOSE51	4/7/10 B

Conc. Sulfuric Acid- RA. No.

Sodium Chloride Stock (1000mg/L)- Dissolve 0.1648g of sodium chloride, Fisher, ACS, into a 100ml volumetric flask. Bring to volume with distilled water.

WCEOXCIS/ date prep
WCAOXCIS/ date prep

Sodium Chloride

RA No.	date prep
B-4	10/04/01
B-4	12/06/02
WCCIS 4/17/03	4/17/03
WCCIS 10/17/03	10/17/03
WCCIS	2/22/04
WCCIS	8/30/04 HH
WCCIS	11/17/05
WCCIS	11/12/08 B
WCCIS	2/3/09 B
WCCIS	3/23/10 B
35-5	1/6/12 B
35-5	1/10/13 AB
35-5 20	7/16/14 AB

IAL AOX Reagents and Standards

1M KCl- Dissolve 7.4551g into 100ml dist. water.

KCl

WCEOXkcl/date prep
WCAOXkcl/date prep

RA. No.		date prep
14-17		11/30/01
14-17		6/4/02
14-17		12/6/02
25-13		10/29/03
25-16		9/13/04
25-13		4/7/10
25-13		4/8/11
21-22		3/10/12
RA 25-13		3/23/13
RA 25-13		7/16/14

10% KNO3- Dissolve 100g of KNO3 into 1000ml dist. water

KNO3

WCEOXkno3/date prep
WCAOXkno3/date prep

RA. No.		date prep
14-11		11/30/01
14-11		6/4/02
14-11		12/4/02
23-16		6/2/04
23-16		9/24/05
23-16		9/18/08
23-16		4/7/10
23-16		3/30/11
RA 48-4		3/30/12
RA 48-4		3/23/13
RA 48-4		7/16/14

Nitrate wash Solution - 8.2g KNO_3 dissolved in 1L DI water

Fisher RA 48-4 11/10/10 YD

Fisher RA 48-4 11/28/12

RA 55-11
Rec. 4/5/11

Certificate of Analysis

SIGMA-ALDRICH

Product Name	2,4,6-Trichlorophenol, 98%
Product Number	T55301
Product Brand	ALDRICH
CAS Number	88-06-2
Molecular Formula	$Cl_3C_6H_2OH$
Molecular Weight	197.45

TEST	SPECIFICATION	LOT MKBF0398V RESULTS
Appearance (Color)	Conforms to Requirements White to Off-White or Pale Brown	Off-White
Appearance (Form)	Conforms to Requirements Crystalline Solid or Powder	Powder
Infrared spectrum	Conforms to Structure	Conforms
Purity (GC)	≥97.5 %	97.7 %
Solubility (Turbidity)	Clear to Slightly Hazy c = 50 mg/ml; CHCL3	Clear
Solubility (Color)	Colorless to Faint Yellow	Colorless
Specification Date:		AUG 2010
Date of QC Release:		AUG 2010
Print Date:		AUG 23 2010

Barbara Rajzer

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

E14-07393 0332

LA 65-20
Rec. 5/17/13

Certificate of Analysis

EMD

Date of Release: *11/1/2012*

Product: ***Sodium Chloride GR ACS, Crystals*** ***Catalog No.:*** ***SX0420 all size codes***

Grade: ***Meets ACS Specifications, Meets Reagent Specifications for testing USP/NF monographs*** ***CAS #:*** ***7647-14-5***

Country of Origin: ***USA*** ***FW:*** ***58.44***

Lot No.: ***VJ30C***

NaCl

	Requirement			
Characteristic	**Minimum**	**Maximum**	**Results**	**UOM**
Assay (argentometric)	99.0		99.99	%
Barium (Ba)	Passes test (about 0.001%)		Passes	%
Bromide (Br)		0.01	0.01	%
Calcium (Ca)		0.002	0.002	%
Chlorate and nitrate (as NO3)		0.003	0.003	%
Heavy metals (as Pb)		5	2.0	ppm
Insoluble matter		0.005	0.0032	%
Iodide (I)		0.002	0.002	%
Iron (Fe)		2	0.1	ppm
Magnesium (Mg)		0.001	0.0001	%
pH of a 5% solution at 25C	5.0	9.0	5.96	
Phosphate (PO4)		5	5	ppm
Potassium (K)		0.005	0.005	%
Sulfate (SO4)		0.004	0.004	%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Chemicals Inc.
480 South Democrat Road
Gibbstown, NJ 08027

Phone: 856-423-6300
Fax: 856-423-4389
www.emdchemicals.com

E14-07393 0333

RA 67-18
rec 9/6/13

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

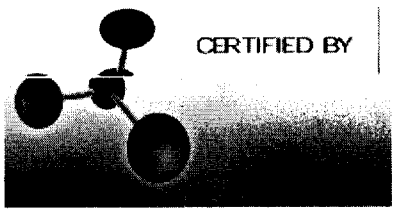
Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by DNV Certificate number CERT-08052-2006-AQ-HOU-ANAB

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**O5082**	**Mfg. Date**	**3/13/2013**
Lot Number	**131175**		
Description	**P-XYLENE, CERTIFIED**		
Country of Origin	**United States**	**Recommended Retest Date**	**Mar-2018**

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR, COLORLESS LIQUID
COLOR	APHA	<= 20	5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
MELTING POINT	DEGREES CELSIUS	Inclusive Between 14 15	14
MOL% PURITY	%	>= 99	99.9



Elyse E. Hess

Lab Manager BPF

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.

Certificate of Analysis

PA 63-13
Rec. 1/22/13

EMD

Date of Release: *12/12/2011*

Product: Sodium Chloride GR ACS, Crystals

Catalog No.: SX0420 all size codes

Grade: Meets ACS Specifications, Meets Reagent Specifications for testing USP/NF monographs

CAS #: 7647-14-5

Country of Origin: USA

FW: 58.44

Lot No.: UK29AZEMS

NaCl

Characteristic	Requirement Minimum	Maximum	Results	UOM
Assay (argentometric)	99.0		99.99	%
Barium (Ba)	Passes test (about 0.001%)		Passes	%
Bromide (Br)		0.01	0.01	%
Calcium (Ca)		0.002	0.0004	%
Chlorate and nitrate (as NO3)		0.003	0.003	%
Heavy metals (as Pb)		5	2.0	ppm
Insoluble matter		0.005	0.0016	%
Iodide (I)		0.002	0.002	%
Iron (Fe)		2	0.1	ppm
Magnesium (Mg)		0.001	0.0003	%
pH of a 5% solution at 25C	5.0	9.0	5.51	
Phosphate (PO4)		5	5	ppm
Potassium (K)		0.005	0.005	%
Sulfate (SO4)		0.004	0.004	%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Chemicals Inc.
480 South Democrat Road
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E14-07393 0335

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746

Project Name: **GPEC - PIPE PAVING**
IAL Case Number: **E15-09809**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on November 05, 2015

* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E15-09809

Client GEI Consultants Inc. - Huntington Station

Project GPEC - PIPE PAVING

Received On 10/28/2015@12:15

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
09809-001	GPEC-PIPE PAVING-01	n/a	10/27/2015@09:45	Soil	2
09809-002	GPEC-PIPE PAVING-02	n/a	10/27/2015@09:48	Soil	2
09809-003	GPEC-PIPE PAVING-03	n/a	10/27/2015@09:52	Soil	2
09809-004	GPEC-PIPE PAVING-04	n/a	10/27/2015@09:55	Soil	2

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-09809

Lab ID:	09809-001			09809-002			09809-003			09809-004		
Client ID:	GPEC-PIPE PAVING-01			GPEC-PIPE PAVING-02			GPEC-PIPE PAVING-03			GPEC-PIPE PAVING-04		
Matrix:	Soil			Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	10/27/15			10/27/15			10/27/15			10/27/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Dichlorodifluoromethane	ND		0.074	ND		0.076	ND		0.074	ND		0.074
Chloromethane	ND		0.054	ND		0.054	ND		0.053	ND		0.053
Vinyl chloride	ND		0.050	ND		0.051	ND		0.050	ND		0.050
Bromomethane	ND		0.074	ND		0.076	ND		0.074	ND		0.073
Chloroethane	ND		0.090	ND		0.092	ND		0.089	ND		0.089
Trichlorofluoromethane	ND		0.088	ND		0.090	ND		0.088	ND		0.087
1,1-Dichloroethene	ND		0.053	ND		0.054	ND		0.053	ND		0.053
Acetone	ND		0.155	ND		0.158	ND		0.154	ND		0.153
Carbon disulfide	ND		0.055	ND		0.056	ND		0.055	ND		0.054
Methylene chloride	ND		0.216	ND		0.220	ND		0.215	ND		0.214
trans-1,2-Dichloroethene	ND		0.059	ND		0.060	ND		0.059	ND		0.058
Methyl tert-butyl ether (MTBE)	ND		0.053	ND		0.054	ND		0.053	ND		0.053
1,1-Dichloroethane	0.049	J	0.039	ND		0.040	ND		0.039	ND		0.038
cis-1,2-Dichloroethene	ND		0.052	ND		0.053	ND		0.052	ND		0.051
2-Butanone (MEK)	ND		0.095	ND		0.096	ND		0.094	ND		0.094
Bromochloromethane	ND		0.069	ND		0.070	ND		0.069	ND		0.068
Chloroform	ND		0.055	ND		0.056	ND		0.055	ND		0.055
1,1,1-Trichloroethane	ND		0.053	ND		0.054	ND		0.052	ND		0.052
Carbon tetrachloride	ND		0.073	ND		0.074	ND		0.072	ND		0.072
1,2-Dichloroethane (EDC)	ND		0.062	ND		0.063	ND		0.062	ND		0.062
Benzene	0.058	J	0.042	0.046	J	0.043	0.055	J	0.042	0.062	J	0.042
Trichloroethene	ND		0.039	ND		0.039	ND		0.039	ND		0.038
1,2-Dichloropropane	ND		0.060	ND		0.061	ND		0.060	ND		0.060
1,4-Dioxane	ND		8.97	ND		9.13	ND		8.92	ND		8.87
Bromodichloromethane	ND		0.057	ND		0.058	ND		0.057	ND		0.056
cis-1,3-Dichloropropene	ND		0.048	ND		0.049	ND		0.048	ND		0.047
4-Methyl-2-pentanone (MIBK)	ND		0.094	ND		0.096	ND		0.094	ND		0.093
Toluene	0.072	J	0.040	0.067	J	0.041	0.065	J	0.040	0.061	J	0.040
trans-1,3-Dichloropropene	ND		0.045	ND		0.046	ND		0.045	ND		0.045
1,1,2-Trichloroethane	ND		0.069	ND		0.070	ND		0.068	ND		0.068
Tetrachloroethene	ND		0.054	ND		0.055	ND		0.053	ND		0.053
2-Hexanone	ND		0.075	ND		0.077	ND		0.075	ND		0.074
Dibromochloromethane	ND		0.056	ND		0.057	ND		0.056	ND		0.055
1,2-Dibromoethane (EDB)	ND		0.073	ND		0.075	ND		0.073	ND		0.073
Chlorobenzene	ND		0.043	ND		0.044	ND		0.043	ND		0.042
Ethylbenzene	0.061	J	0.046	ND		0.046	ND		0.045	0.067	J	0.045
Total Xylenes	ND		0.113	ND		0.115	ND		0.113	ND		0.112
Styrene	ND		0.040	ND		0.041	ND		0.040	ND		0.040

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carrie
*Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-09809

Lab ID:	09809-001		09809-002		09809-003		09809-004	
Client ID:	GPEC-PIPE PAVING-01		GPEC-PIPE PAVING-02		GPEC-PIPE PAVING-03		GPEC-PIPE PAVING-04	
Matrix:	Soil		Soil		Soil		Soil	
TCLP Matrix:	TCLP Leachate		TCLP Leachate		TCLP Leachate		TCLP Leachate	
Sampled Date	10/27/15		10/27/15		10/27/15		10/27/15	
PARAMETER(Units)	Conc Q	MDL	Conc Q	MDL	Conc Q	MDL	Conc Q	MDL
Volatiles (Units)	*(mg/Kg)*		*(mg/Kg)*		*(mg/Kg)*		*(mg/Kg)*	
Bromoform	ND	0.072	ND	0.073	ND	0.072	ND	0.071
Isopropylbenzene	ND	0.063	ND	0.064	ND	0.063	ND	0.062
1,1,2,2-Tetrachloroethane	ND	0.075	ND	0.076	ND	0.075	ND	0.074
1,3-Dichlorobenzene	ND	0.045	ND	0.046	ND	0.045	ND	0.045
1,4-Dichlorobenzene	ND	0.044	ND	0.045	ND	0.044	ND	0.044
1,2-Dichlorobenzene	ND	0.044	ND	0.044	ND	0.043	ND	0.043
1,2-Dibromo-3-chloropropane	ND	0.101	ND	0.103	ND	0.100	ND	0.100
1,2,4-Trichlorobenzene	ND	0.052	ND	0.053	ND	0.052	ND	0.052
1,2,3-Trichlorobenzene	ND	0.049	ND	0.050	ND	0.048	ND	0.048
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.105	ND	0.107	ND	0.105	ND	0.104
Methyl acetate	ND	0.097	ND	0.099	ND	0.097	ND	0.096
Cyclohexane	ND	0.089	ND	0.090	ND	0.088	ND	0.088
Methylcyclohexane	ND	0.084	ND	0.085	ND	0.083	ND	0.083
1,3-Dichloropropene (cis- and trans-)	ND	0.048	ND	0.049	ND	0.048	ND	0.047
TOTAL VO's:	0.239 J		0.113 J		0.120 J		0.190 J	
Semivolatiles - BNA (Units)	*(mg/Kg)*		*(mg/Kg)*		*(mg/Kg)*		*(mg/Kg)*	
Benzaldehyde	ND	0.021	ND	0.022	ND	0.020	ND	0.020
Phenol	ND	0.022	ND	0.023	ND	0.022	ND	0.022
Bis(2-chloroethyl) ether	ND	0.021	ND	0.022	ND	0.020	ND	0.020
2-Chlorophenol	ND	0.021	ND	0.022	ND	0.020	ND	0.020
2-Methylphenol	ND	0.024	ND	0.025	ND	0.024	ND	0.024
Bis(2-chloroisopropyl) ether	ND	0.021	ND	0.022	ND	0.020	ND	0.020
4-Methylphenol **	ND	0.028	ND	0.029	ND	0.027	ND	0.027
N-Nitrosodi-n-propylamine	ND	0.028	ND	0.030	ND	0.028	ND	0.028
Acetophenone	ND	0.028	ND	0.030	ND	0.028	ND	0.028
Hexachloroethane	ND	0.021	ND	0.022	ND	0.020	ND	0.020
Nitrobenzene	ND	0.029	ND	0.031	ND	0.029	ND	0.029
Isophorone	ND	0.031	ND	0.033	ND	0.031	ND	0.031
2-Nitrophenol	ND	0.021	ND	0.022	ND	0.020	ND	0.020
2,4-Dimethylphenol	ND	0.024	ND	0.025	ND	0.024	ND	0.024
Bis(2-chloroethoxy) methane	ND	0.021	ND	0.022	ND	0.020	ND	0.020
2,4-Dichlorophenol	ND	0.021	ND	0.022	ND	0.020	ND	0.020
Naphthalene	0.534	0.021	0.348	0.022	0.316	0.020	0.705	0.020
4-Chloroaniline	ND	0.021	ND	0.022	ND	0.020	ND	0.020
Hexachlorobutadiene	ND	0.021	ND	0.022	ND	0.020	ND	0.020
Caprolactam	ND	0.022	ND	0.023	ND	0.022	ND	0.022

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carrie
*Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-09809

Lab ID:	09809-001			09809-002			09809-003			09809-004		
Client ID:	GPEC-PIPE PAVING-01			GPEC-PIPE PAVING-02			GPEC-PIPE PAVING-03			GPEC-PIPE PAVING-04		
Matrix:	Soil			Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	10/27/15			10/27/15			10/27/15			10/27/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
4-Chloro-3-methylphenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
2-Methylnaphthalene	0.435		0.021	0.283		0.022	0.162		0.020	0.530		0.020
Hexachlorocyclopentadiene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
2,4,6-Trichlorophenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
2,4,5-Trichlorophenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
1,1'-Biphenyl	0.084		0.021	0.057		0.022	0.069		0.020	0.208		0.020
2-Chloronaphthalene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
2-Nitroaniline	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Dimethyl phthalate	ND		0.026	ND		0.028	ND		0.026	ND		0.026
2,6-Dinitrotoluene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Acenaphthylene	0.179		0.024	0.126		0.025	0.429		0.024	0.536		0.024
3-Nitroaniline	ND		0.026	ND		0.028	ND		0.026	ND		0.026
Acenaphthene	0.401		0.026	0.315		0.028	0.367		0.026	0.964		0.026
2,4-Dinitrophenol	ND		0.024	ND		0.026	ND		0.024	ND		0.024
4-Nitrophenol	ND		0.028	ND		0.029	ND		0.027	ND		0.027
2,4-Dinitrotoluene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Dibenzofuran	0.204		0.021	0.154		0.022	0.113		0.020	0.259		0.020
Diethyl phthalate	ND		0.032	ND		0.033	ND		0.031	ND		0.031
Fluorene	0.447		0.021	0.386		0.022	0.462		0.020	1.05		0.020
4-Chlorophenyl phenyl ether	ND		0.021	ND		0.022	ND		0.020	ND		0.020
4-Nitroaniline	ND		0.021	ND		0.022	ND		0.020	ND		0.020
1,2,4,5-Tetrachlorobenzene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
2,3,4,6-Tetrachlorophenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
4,6-Dinitro-2-methylphenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
N-Nitrosodiphenylamine	ND		0.021	ND		0.022	ND		0.020	ND		0.020
4-Bromophenyl phenyl ether	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Hexachlorobenzene	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Atrazine	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Pentachlorophenol	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Phenanthrene	2.29		0.021	1.65		0.022	1.17		0.020	4.35		0.020
Anthracene	0.621		0.021	0.340		0.022	0.491		0.020	0.974		0.020
Carbazole	0.105		0.021	0.068		0.022	0.054		0.020	0.145		0.020
Di-n-butyl phthalate	ND		0.021	ND		0.022	ND		0.020	ND		0.020
Fluoranthene	2.73		0.021	1.53		0.022	1.43		0.020	3.78		0.020
Pyrene	3.23		0.021	1.76		0.022	2.61		0.020	5.09		0.020
Butyl benzyl phthalate	ND		0.021	ND		0.022	ND		0.020	ND		0.020
3,3'-Dichlorobenzidine	ND		0.024	ND		0.025	ND		0.023	ND		0.023

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
*Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-09809

Lab ID:	09809-001			09809-002			09809-003			09809-004		
Client ID:	GPEC-PIPE PAVING-01			GPEC-PIPE PAVING-02			GPEC-PIPE PAVING-03			GPEC-PIPE PAVING-04		
Matrix:	Soil			Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	10/27/15			10/27/15			10/27/15			10/27/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Benzo[a]anthracene	1.70		0.021	0.984		0.022	1.09		0.020	2.09		0.020
Chrysene	1.82		0.021	1.20		0.022	1.37		0.020	2.56		0.020
Bis(2-ethylhexyl) phthalate	0.206		0.021	0.194		0.022	0.045		0.020	0.305		0.020
Di-n-octyl phthalate	ND		0.025	ND		0.027	ND		0.025	ND		0.025
Benzo[b]fluoranthene	1.34		0.021	0.611		0.022	0.870		0.020	1.62		0.020
Benzo[k]fluoranthene	0.953		0.021	0.651		0.022	0.771		0.020	1.51		0.020
Benzo[a]pyrene	1.51		0.021	0.794		0.022	1.04		0.020	1.69		0.020
Indeno[1,2,3-cd]pyrene	0.871		0.030	0.454		0.032	0.480		0.030	0.822		0.030
Dibenz[a,h]anthracene	0.393		0.021	0.164		0.022	0.148		0.020	0.382		0.020
Benzo[g,h,i]perylene	1.01		0.021	0.566		0.022	0.609		0.020	0.822		0.020
Dinitrotoluene (2,4- and 2,6-)	ND		0.021	ND		0.022	ND		0.020	ND		0.020
TOTAL BNA'S:	21.1			12.6			14.1			30.4		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1221	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1232	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1242	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1248	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1254	0.209		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1260	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1262	ND		0.016	ND		0.016	ND		0.015	ND		0.015
Aroclor-1268	ND		0.016	ND		0.016	ND		0.015	ND		0.015
PCBs	0.209		0.016	ND		0.016	ND		0.015	ND		0.015
NJ-EPH-DRO (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
C9-C28	999	D	105	1060	D	107	2150	D	207	2680	D	203
C28-C40	563	D	105	599	D	107	2670	D	207	2190	D	203
C9-C40 Total	1560	D	105	1660	D	107	4820	D	207	4870	D	203

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-09809

Lab ID:	09809-001			09809-002			09809-003			09809-004		
Client ID:	GPEC-PIPE PAVING-01			GPEC-PIPE PAVING-02			GPEC-PIPE PAVING-03			GPEC-PIPE PAVING-04		
Matrix:	Soil			Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	10/27/15			10/27/15			10/27/15			10/27/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Antimony	14.3		0.278	15.9		0.288	2.43		0.285	6.59		0.280
Arsenic	11.9		0.278	12.6		0.288	4.39		0.285	10.3		0.280
Beryllium	0.433	J	0.222	0.422	J	0.230	0.298	J	0.228	0.414	J	0.224
Cadmium	1.03		0.139	0.929		0.144	0.277	J	0.142	0.852		0.140
Chromium	24.4		0.556	28.1		0.575	12.6		0.570	21.8		0.560
Copper	292		0.556	427		0.575	94.8		0.570	215		0.560
Lead	362		0.556	638		0.575	86.5		0.570	310		0.560
Mercury	2.15		0.0032	1.80		0.003	0.901		0.003	1.61		0.003
Nickel	27.5		0.556	24.4		0.575	14.8		0.570	25.0		0.560
Selenium	1.21		0.556	1.14		0.575	0.783		0.570	0.857		0.560
Silver	0.535	J	0.139	0.649		0.144	0.158	J	0.142	0.560	J	0.140
Thallium	0.144	J	0.139	ND		0.144	ND		0.142	ND		0.140
Zinc	294		0.556	328		0.575	77.5		0.570	228		0.560
TCLP Metals (Units)	*(mg/L)*			*(mg/L)*			*(mg/L)*			*(mg/L)*		
TCLP Lead	0.353		0.050	0.920		0.050	0.277		0.050	0.226		0.050
General Analytical (Units)												
Sulfur as S(mg/Kg)	ND		894	ND		910	ND		890	ND		885

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-001
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/30/2015
Data file: J0382.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.108	0.074
Chloromethane	ND		0.108	0.054
Vinyl chloride	ND		0.108	0.050
Bromomethane	ND		0.108	0.074
Chloroethane	ND		0.108	0.090
Trichlorofluoromethane	ND		0.108	0.088
1,1-Dichloroethene	ND		0.108	0.053
Acetone	ND		0.217	0.155
Carbon disulfide	ND		0.108	0.055
Methylene chloride	ND		0.217	0.216
trans-1,2-Dichloroethene	ND		0.108	0.059
Methyl tert-butyl ether (MTBE)	ND		0.108	0.053
1,1-Dichloroethane	0.049	J	0.108	0.039
cis-1,2-Dichloroethene	ND		0.108	0.052
2-Butanone (MEK)	ND		0.108	0.095
Bromochloromethane	ND		0.108	0.069
Chloroform	ND		0.108	0.055
1,1,1-Trichloroethane	ND		0.108	0.053
Carbon tetrachloride	ND		0.108	0.073
1,2-Dichloroethane (EDC)	ND		0.108	0.062
Benzene	0.058	J	0.108	0.042
Trichloroethene	ND		0.108	0.039
1,2-Dichloropropane	ND		0.108	0.060
1,4-Dioxane	ND		21.7	8.97
Bromodichloromethane	ND		0.108	0.057
cis-1,3-Dichloropropene	ND		0.108	0.048
4-Methyl-2-pentanone (MIBK)	ND		0.108	0.094

E15-09809 0010

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-001
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/30/2015
Data file: J0382.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

Compound	Concentration	Q	RL	MDL
Toluene	0.072	J	0.108	0.040
trans-1,3-Dichloropropene	ND		0.108	0.045
1,1,2-Trichloroethane	ND		0.108	0.069
Tetrachloroethene	ND		0.108	0.054
2-Hexanone	ND		0.108	0.075
Dibromochloromethane	ND		0.108	0.056
1,2-Dibromoethane (EDB)	ND		0.108	0.073
Chlorobenzene	ND		0.108	0.043
Ethylbenzene	0.061	J	0.108	0.046
Total Xylenes	ND		0.217	0.113
Styrene	ND		0.108	0.040
Bromoform	ND		0.108	0.072
Isopropylbenzene	ND		0.108	0.063
1,1,2,2-Tetrachloroethane	ND		0.108	0.075
1,3-Dichlorobenzene	ND		0.108	0.045
1,4-Dichlorobenzene	ND		0.108	0.044
1,2-Dichlorobenzene	ND		0.108	0.044
1,2-Dibromo-3-chloropropane	ND		0.108	0.101
1,2,4-Trichlorobenzene	ND		0.108	0.052
1,2,3-Trichlorobenzene	ND		0.108	0.049
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.108	0.105
Methyl acetate	ND		0.108	0.097
Cyclohexane	ND		0.108	0.089
Methylcyclohexane	ND		0.108	0.084
1,3-Dichloropropene (cis- and trans-)	ND		0.108	0.048
Total Target Compounds (52):	0.239	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0011

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-002
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/30/2015
Data file: J0383.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.40

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.110	0.076
Chloromethane	ND		0.110	0.054
Vinyl chloride	ND		0.110	0.051
Bromomethane	ND		0.110	0.076
Chloroethane	ND		0.110	0.092
Trichlorofluoromethane	ND		0.110	0.090
1,1-Dichloroethene	ND		0.110	0.054
Acetone	ND		0.221	0.158
Carbon disulfide	ND		0.110	0.056
Methylene chloride	ND		0.221	0.220
trans-1,2-Dichloroethene	ND		0.110	0.060
Methyl tert-butyl ether (MTBE)	ND		0.110	0.054
1,1-Dichloroethane	ND		0.110	0.040
cis-1,2-Dichloroethene	ND		0.110	0.053
2-Butanone (MEK)	ND		0.110	0.096
Bromochloromethane	ND		0.110	0.070
Chloroform	ND		0.110	0.056
1,1,1-Trichloroethane	ND		0.110	0.054
Carbon tetrachloride	ND		0.110	0.074
1,2-Dichloroethane (EDC)	ND		0.110	0.063
Benzene	0.046	J	0.110	0.043
Trichloroethene	ND		0.110	0.039
1,2-Dichloropropane	ND		0.110	0.061
1,4-Dioxane	ND		22.1	9.13
Bromodichloromethane	ND		0.110	0.058
cis-1,3-Dichloropropene	ND		0.110	0.049
4-Methyl-2-pentanone (MIBK)	ND		0.110	0.096

E15-09809 0012

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-002
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/30/2015
Data file: J0383.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.40

Compound	Concentration	Q	RL	MDL
Toluene	0.067	J	0.110	0.041
trans-1,3-Dichloropropene	ND		0.110	0.046
1,1,2-Trichloroethane	ND		0.110	0.070
Tetrachloroethene	ND		0.110	0.055
2-Hexanone	ND		0.110	0.077
Dibromochloromethane	ND		0.110	0.057
1,2-Dibromoethane (EDB)	ND		0.110	0.075
Chlorobenzene	ND		0.110	0.044
Ethylbenzene	ND		0.110	0.046
Total Xylenes	ND		0.221	0.115
Styrene	ND		0.110	0.041
Bromoform	ND		0.110	0.073
Isopropylbenzene	ND		0.110	0.064
1,1,2,2-Tetrachloroethane	ND		0.110	0.076
1,3-Dichlorobenzene	ND		0.110	0.046
1,4-Dichlorobenzene	ND		0.110	0.045
1,2-Dichlorobenzene	ND		0.110	0.044
1,2-Dibromo-3-chloropropane	ND		0.110	0.103
1,2,4-Trichlorobenzene	ND		0.110	0.053
1,2,3-Trichlorobenzene	ND		0.110	0.050
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.110	0.107
Methyl acetate	ND		0.110	0.099
Cyclohexane	ND		0.110	0.090
Methylcyclohexane	ND		0.110	0.085
1,3-Dichloropropene (cis- and trans-)	ND		0.110	0.049
Total Target Compounds (52):	0.113	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0013

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-003
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/29/2015
Data file: J0362.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.108	0.074
Chloromethane	ND		0.108	0.053
Vinyl chloride	ND		0.108	0.050
Bromomethane	ND		0.108	0.074
Chloroethane	ND		0.108	0.089
Trichlorofluoromethane	ND		0.108	0.088
1,1-Dichloroethene	ND		0.108	0.053
Acetone	ND		0.216	0.154
Carbon disulfide	ND		0.108	0.055
Methylene chloride	ND		0.216	0.215
trans-1,2-Dichloroethene	ND		0.108	0.059
Methyl tert-butyl ether (MTBE)	ND		0.108	0.053
1,1-Dichloroethane	ND		0.108	0.039
cis-1,2-Dichloroethene	ND		0.108	0.052
2-Butanone (MEK)	ND		0.108	0.094
Bromochloromethane	ND		0.108	0.069
Chloroform	ND		0.108	0.055
1,1,1-Trichloroethane	ND		0.108	0.052
Carbon tetrachloride	ND		0.108	0.072
1,2-Dichloroethane (EDC)	ND		0.108	0.062
Benzene	0.055	J	0.108	0.042
Trichloroethene	ND		0.108	0.039
1,2-Dichloropropane	ND		0.108	0.060
1,4-Dioxane	ND		21.6	8.92
Bromodichloromethane	ND		0.108	0.057
cis-1,3-Dichloropropene	ND		0.108	0.048
4-Methyl-2-pentanone (MIBK)	ND		0.108	0.094

E15-09809 0014

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-003
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/29/2015
Data file: J0362.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Toluene	0.065	J	0.108	0.040
trans-1,3-Dichloropropene	ND		0.108	0.045
1,1,2-Trichloroethane	ND		0.108	0.068
Tetrachloroethene	ND		0.108	0.053
2-Hexanone	ND		0.108	0.075
Dibromochloromethane	ND		0.108	0.056
1,2-Dibromoethane (EDB)	ND		0.108	0.073
Chlorobenzene	ND		0.108	0.043
Ethylbenzene	ND		0.108	0.045
Total Xylenes	ND		0.216	0.113
Styrene	ND		0.108	0.040
Bromoform	ND		0.108	0.072
Isopropylbenzene	ND		0.108	0.063
1,1,2,2-Tetrachloroethane	ND		0.108	0.075
1,3-Dichlorobenzene	ND		0.108	0.045
1,4-Dichlorobenzene	ND		0.108	0.044
1,2-Dichlorobenzene	ND		0.108	0.043
1,2-Dibromo-3-chloropropane	ND		0.108	0.100
1,2,4-Trichlorobenzene	ND		0.108	0.052
1,2,3-Trichlorobenzene	ND		0.108	0.048
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.108	0.105
Methyl acetate	ND		0.108	0.097
Cyclohexane	ND		0.108	0.088
Methylcyclohexane	ND		0.108	0.083
1,3-Dichloropropene (cis- and trans-)	ND		0.108	0.048
Total Target Compounds (52):	0.120	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0015

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-004
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/29/2015
Data file: J0363.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.107	0.074
Chloromethane	ND		0.107	0.053
Vinyl chloride	ND		0.107	0.050
Bromomethane	ND		0.107	0.073
Chloroethane	ND		0.107	0.089
Trichlorofluoromethane	ND		0.107	0.087
1,1-Dichloroethene	ND		0.107	0.053
Acetone	ND		0.215	0.153
Carbon disulfide	ND		0.107	0.054
Methylene chloride	ND		0.215	0.214
trans-1,2-Dichloroethene	ND		0.107	0.058
Methyl tert-butyl ether (MTBE)	ND		0.107	0.053
1,1-Dichloroethane	ND		0.107	0.038
cis-1,2-Dichloroethene	ND		0.107	0.051
2-Butanone (MEK)	ND		0.107	0.094
Bromochloromethane	ND		0.107	0.068
Chloroform	ND		0.107	0.055
1,1,1-Trichloroethane	ND		0.107	0.052
Carbon tetrachloride	ND		0.107	0.072
1,2-Dichloroethane (EDC)	ND		0.107	0.062
Benzene	0.062	J	0.107	0.042
Trichloroethene	ND		0.107	0.038
1,2-Dichloropropane	ND		0.107	0.060
1,4-Dioxane	ND		21.5	8.87
Bromodichloromethane	ND		0.107	0.056
cis-1,3-Dichloropropene	ND		0.107	0.047
4-Methyl-2-pentanone (MIBK)	ND		0.107	0.093

E15-09809 0016

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-09809-004
Client ID: GPEC-PIPE_PA
Date Received: 10/28/2015
Date Analyzed: 10/29/2015
Data file: J0363.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
Toluene	0.061	J	0.107	0.040
trans-1,3-Dichloropropene	ND		0.107	0.045
1,1,2-Trichloroethane	ND		0.107	0.068
Tetrachloroethene	ND		0.107	0.053
2-Hexanone	ND		0.107	0.074
Dibromochloromethane	ND		0.107	0.055
1,2-Dibromoethane (EDB)	ND		0.107	0.073
Chlorobenzene	ND		0.107	0.042
Ethylbenzene	0.067	J	0.107	0.045
Total Xylenes	ND		0.215	0.112
Styrene	ND		0.107	0.040
Bromoform	ND		0.107	0.071
Isopropylbenzene	ND		0.107	0.062
1,1,2,2-Tetrachloroethane	ND		0.107	0.074
1,3-Dichlorobenzene	ND		0.107	0.045
1,4-Dichlorobenzene	ND		0.107	0.044
1,2-Dichlorobenzene	ND		0.107	0.043
1,2-Dibromo-3-chloropropane	ND		0.107	0.100
1,2,4-Trichlorobenzene	ND		0.107	0.052
1,2,3-Trichlorobenzene	ND		0.107	0.048
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.107	0.104
Methyl acetate	ND		0.107	0.096
Cyclohexane	ND		0.107	0.088
Methylcyclohexane	ND		0.107	0.083
1,3-Dichloropropene (cis- and trans-)	ND		0.107	0.047
Total Target Compounds (52):	0.190	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0017

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-001
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9552.D

GC/MS Column: DB-5
Sample wt/vol: 15.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.034	0.021
Phenol	ND		0.034	0.022
Bis(2-chloroethyl) ether	ND		0.034	0.021
2-Chlorophenol	ND		0.034	0.021
2-Methylphenol	ND		0.034	0.024
Bis(2-chloroisopropyl) ether	ND		0.034	0.021
4-Methylphenol **	ND		0.034	0.028
N-Nitrosodi-n-propylamine	ND		0.034	0.028
Acetophenone	ND		0.034	0.028
Hexachloroethane	ND		0.034	0.021
Nitrobenzene	ND		0.034	0.029
Isophorone	ND		0.034	0.031
2-Nitrophenol	ND		0.034	0.021
2,4-Dimethylphenol	ND		0.034	0.024
Bis(2-chloroethoxy) methane	ND		0.034	0.021
2,4-Dichlorophenol	ND		0.034	0.021
Naphthalene	0.534		0.034	0.021
4-Chloroaniline	ND		0.034	0.021
Hexachlorobutadiene	ND		0.034	0.021
Caprolactam	ND		0.034	0.022
4-Chloro-3-methylphenol	ND		0.034	0.021
2-Methylnaphthalene	0.435		0.034	0.021
Hexachlorocyclopentadiene	ND		0.034	0.021
2,4,6-Trichlorophenol	ND		0.034	0.021
2,4,5-Trichlorophenol	ND		0.034	0.021
1,1'-Biphenyl	0.084		0.034	0.021
2-Chloronaphthalene	ND		0.034	0.021
2-Nitroaniline	ND		0.034	0.021
Dimethyl phthalate	ND		0.034	0.026

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-001
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9552.D

GC/MS Column: DB-5
Sample wt/vol: 15.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.034	0.021
Acenaphthylene	0.179		0.034	0.024
3-Nitroaniline	ND		0.034	0.026
Acenaphthene	0.401		0.034	0.026
2,4-Dinitrophenol	ND		0.034	0.024
4-Nitrophenol	ND		0.034	0.028
2,4-Dinitrotoluene	ND		0.034	0.021
Dibenzofuran	0.204		0.034	0.021
Diethyl phthalate	ND		0.034	0.032
Fluorene	0.447		0.034	0.021
4-Chlorophenyl phenyl ether	ND		0.034	0.021
4-Nitroaniline	ND		0.034	0.021
1,2,4,5-Tetrachlorobenzene	ND		0.034	0.021
2,3,4,6-Tetrachlorophenol	ND		0.034	0.021
4,6-Dinitro-2-methylphenol	ND		0.034	0.021
N-Nitrosodiphenylamine	ND		0.034	0.021
4-Bromophenyl phenyl ether	ND		0.034	0.021
Hexachlorobenzene	ND		0.034	0.021
Atrazine	ND		0.034	0.021
Pentachlorophenol	ND		0.034	0.021
Phenanthrene	2.29		0.034	0.021
Anthracene	0.621		0.034	0.021
Carbazole	0.105		0.034	0.021
Di-n-butyl phthalate	ND		0.034	0.021
Fluoranthene	2.73		0.034	0.021
Pyrene	3.23		0.034	0.021
Butyl benzyl phthalate	ND		0.034	0.021
3,3'-Dichlorobenzidine	ND		0.034	0.024
Benzo[a]anthracene	1.70		0.034	0.021
Chrysene	1.82		0.034	0.021
Bis(2-ethylhexyl) phthalate	0.206		0.034	0.021
Di-n-octyl phthalate	ND		0.034	0.025
Benzo[b]fluoranthene	1.34		0.034	0.021
Benzo[k]fluoranthene	0.953		0.034	0.021
Benzo[a]pyrene	1.51		0.034	0.021
Indeno[1,2,3-cd]pyrene	0.871		0.034	0.030
Dibenz[a,h]anthracene	0.393		0.034	0.021
Benzo[g,h,i]perylene	1.01		0.034	0.021
Dinitrotoluene (2,4- and 2,6-)	ND		0.034	0.021
Total Target Compounds (68):	21.1			

Represents the total of 3+4-Methylphenol

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-002
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9553.D

GC/MS Column: DB-5
Sample wt/vol: 15.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.40

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.036	0.022
Phenol	ND		0.036	0.023
Bis(2-chloroethyl) ether	ND		0.036	0.022
2-Chlorophenol	ND		0.036	0.022
2-Methylphenol	ND		0.036	0.025
Bis(2-chloroisopropyl) ether	ND		0.036	0.022
4-Methylphenol **	ND		0.036	0.029
N-Nitrosodi-n-propylamine	ND		0.036	0.030
Acetophenone	ND		0.036	0.030
Hexachloroethane	ND		0.036	0.022
Nitrobenzene	ND		0.036	0.031
Isophorone	ND		0.036	0.033
2-Nitrophenol	ND		0.036	0.022
2,4-Dimethylphenol	ND		0.036	0.025
Bis(2-chloroethoxy) methane	ND		0.036	0.022
2,4-Dichlorophenol	ND		0.036	0.022
Naphthalene	0.348		0.036	0.022
4-Chloroaniline	ND		0.036	0.022
Hexachlorobutadiene	ND		0.036	0.022
Caprolactam	ND		0.036	0.023
4-Chloro-3-methylphenol	ND		0.036	0.022
2-Methylnaphthalene	0.283		0.036	0.022
Hexachlorocyclopentadiene	ND		0.036	0.022
2,4,6-Trichlorophenol	ND		0.036	0.022
2,4,5-Trichlorophenol	ND		0.036	0.022
1,1'-Biphenyl	0.057		0.036	0.022
2-Chloronaphthalene	ND		0.036	0.022
2-Nitroaniline	ND		0.036	0.022
Dimethyl phthalate	ND		0.036	0.028

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-002
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9553.D

GC/MS Column: DB-5
Sample wt/vol: 15.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.40

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.036	0.022
Acenaphthylene	0.126		0.036	0.025
3-Nitroaniline	ND		0.036	0.028
Acenaphthene	0.315		0.036	0.028
2,4-Dinitrophenol	ND		0.036	0.026
4-Nitrophenol	ND		0.036	0.029
2,4-Dinitrotoluene	ND		0.036	0.022
Dibenzofuran	0.154		0.036	0.022
Diethyl phthalate	ND		0.036	0.033
Fluorene	0.386		0.036	0.022
4-Chlorophenyl phenyl ether	ND		0.036	0.022
4-Nitroaniline	ND		0.036	0.022
1,2,4,5-Tetrachlorobenzene	ND		0.036	0.022
2,3,4,6-Tetrachlorophenol	ND		0.036	0.022
4,6-Dinitro-2-methylphenol	ND		0.036	0.022
N-Nitrosodiphenylamine	ND		0.036	0.022
4-Bromophenyl phenyl ether	ND		0.036	0.022
Hexachlorobenzene	ND		0.036	0.022
Atrazine	ND		0.036	0.022
Pentachlorophenol	ND		0.036	0.022
Phenanthrene	1.65		0.036	0.022
Anthracene	0.340		0.036	0.022
Carbazole	0.068		0.036	0.022
Di-n-butyl phthalate	ND		0.036	0.022
Fluoranthene	1.53		0.036	0.022
Pyrene	1.76		0.036	0.022
Butyl benzyl phthalate	ND		0.036	0.022
3,3'-Dichlorobenzidine	ND		0.036	0.025
Benzo[a]anthracene	0.984		0.036	0.022
Chrysene	1.20		0.036	0.022
Bis(2-ethylhexyl) phthalate	0.194		0.036	0.022
Di-n-octyl phthalate	ND		0.036	0.027
Benzo[b]fluoranthene	0.611		0.036	0.022
Benzo[k]fluoranthene	0.651		0.036	0.022
Benzo[a]pyrene	0.794		0.036	0.022
Indeno[1,2,3-cd]pyrene	0.454		0.036	0.032
Dibenz[a,h]anthracene	0.164		0.036	0.022
Benzo[g,h,i]perylene	0.566		0.036	0.022
Dinitrotoluene (2,4- and 2,6-)	ND		0.036	0.022
Total Target Compounds (68):	12.6			

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

E15-09809_0021

Represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-003
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9554.D

GC/MS Column: DB-5
Sample wt/vol: 15.86g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.034	0.020
Phenol	ND		0.034	0.022
Bis(2-chloroethyl) ether	ND		0.034	0.020
2-Chlorophenol	ND		0.034	0.020
2-Methylphenol	ND		0.034	0.024
Bis(2-chloroisopropyl) ether	ND		0.034	0.020
4-Methylphenol **	ND		0.034	0.027
N-Nitrosodi-n-propylamine	ND		0.034	0.028
Acetophenone	ND		0.034	0.028
Hexachloroethane	ND		0.034	0.020
Nitrobenzene	ND		0.034	0.029
Isophorone	ND		0.034	0.031
2-Nitrophenol	ND		0.034	0.020
2,4-Dimethylphenol	ND		0.034	0.024
Bis(2-chloroethoxy) methane	ND		0.034	0.020
2,4-Dichlorophenol	ND		0.034	0.020
Naphthalene	0.316		0.034	0.020
4-Chloroaniline	ND		0.034	0.020
Hexachlorobutadiene	ND		0.034	0.020
Caprolactam	ND		0.034	0.022
4-Chloro-3-methylphenol	ND		0.034	0.020
2-Methylnaphthalene	0.162		0.034	0.020
Hexachlorocyclopentadiene	ND		0.034	0.020
2,4,6-Trichlorophenol	ND		0.034	0.020
2,4,5-Trichlorophenol	ND		0.034	0.020
1,1'-Biphenyl	0.069		0.034	0.020
2-Chloronaphthalene	ND		0.034	0.020
2-Nitroaniline	ND		0.034	0.020
Dimethyl phthalate	ND		0.034	0.026

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-003
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9554.D

GC/MS Column: DB-5
Sample wt/vol: 15.86g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.034	0.020
Acenaphthylene	0.429		0.034	0.024
3-Nitroaniline	ND		0.034	0.026
Acenaphthene	0.367		0.034	0.026
2,4-Dinitrophenol	ND		0.034	0.024
4-Nitrophenol	ND		0.034	0.027
2,4-Dinitrotoluene	ND		0.034	0.020
Dibenzofuran	0.113		0.034	0.020
Diethyl phthalate	ND		0.034	0.031
Fluorene	0.462		0.034	0.020
4-Chlorophenyl phenyl ether	ND		0.034	0.020
4-Nitroaniline	ND		0.034	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.034	0.020
2,3,4,6-Tetrachlorophenol	ND		0.034	0.020
4,6-Dinitro-2-methylphenol	ND		0.034	0.020
N-Nitrosodiphenylamine	ND		0.034	0.020
4-Bromophenyl phenyl ether	ND		0.034	0.020
Hexachlorobenzene	ND		0.034	0.020
Atrazine	ND		0.034	0.020
Pentachlorophenol	ND		0.034	0.020
Phenanthrene	1.17		0.034	0.020
Anthracene	0.491		0.034	0.020
Carbazole	0.054		0.034	0.020
Di-n-butyl phthalate	ND		0.034	0.020
Fluoranthene	1.43		0.034	0.020
Pyrene	2.61		0.034	0.020
Butyl benzyl phthalate	ND		0.034	0.020
3,3'-Dichlorobenzidine	ND		0.034	0.023
Benzo[a]anthracene	1.09		0.034	0.020
Chrysene	1.37		0.034	0.020
Bis(2-ethylhexyl) phthalate	0.045		0.034	0.020
Di-n-octyl phthalate	ND		0.034	0.025
Benzo[b]fluoranthene	0.870		0.034	0.020
Benzo[k]fluoranthene	0.771		0.034	0.020
Benzo[a]pyrene	1.04		0.034	0.020
Indeno[1,2,3-cd]pyrene	0.480		0.034	0.030
Dibenz[a,h]anthracene	0.148		0.034	0.020
Benzo[g,h,i]perylene	0.609		0.034	0.020
Dinitrotoluene (2,4- and 2,6-)	ND		0.034	0.020

Total Target Compounds (68): 14.1

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

Represents the sum of 3+4-Methylphenol

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-004
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9555.D

GC/MS Column: DB-5
Sample wt/vol: 15.95g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.034	0.020
Phenol	ND		0.034	0.022
Bis(2-chloroethyl) ether	ND		0.034	0.020
2-Chlorophenol	ND		0.034	0.020
2-Methylphenol	ND		0.034	0.024
Bis(2-chloroisopropyl) ether	ND		0.034	0.020
4-Methylphenol **	ND		0.034	0.027
N-Nitrosodi-n-propylamine	ND		0.034	0.028
Acetophenone	ND		0.034	0.028
Hexachloroethane	ND		0.034	0.020
Nitrobenzene	ND		0.034	0.029
Isophorone	ND		0.034	0.031
2-Nitrophenol	ND		0.034	0.020
2,4-Dimethylphenol	ND		0.034	0.024
Bis(2-chloroethoxy) methane	ND		0.034	0.020
2,4-Dichlorophenol	ND		0.034	0.020
Naphthalene	0.705		0.034	0.020
4-Chloroaniline	ND		0.034	0.020
Hexachlorobutadiene	ND		0.034	0.020
Caprolactam	ND		0.034	0.022
4-Chloro-3-methylphenol	ND		0.034	0.020
2-Methylnaphthalene	0.530		0.034	0.020
Hexachlorocyclopentadiene	ND		0.034	0.020
2,4,6-Trichlorophenol	ND		0.034	0.020
2,4,5-Trichlorophenol	ND		0.034	0.020
1,1'-Biphenyl	0.208		0.034	0.020
2-Chloronaphthalene	ND		0.034	0.020
2-Nitroaniline	ND		0.034	0.020
Dimethyl phthalate	ND		0.034	0.026

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-09809-004
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/28/2015
Date Analyzed: 10/29/2015
Data file: C9555.D

GC/MS Column: DB-5
Sample wt/vol: 15.95g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.034	0.020
Acenaphthylene	0.536		0.034	0.024
3-Nitroaniline	ND		0.034	0.026
Acenaphthene	0.964		0.034	0.026
2,4-Dinitrophenol	ND		0.034	0.024
4-Nitrophenol	ND		0.034	0.027
2,4-Dinitrotoluene	ND		0.034	0.020
Dibenzofuran	0.259		0.034	0.020
Diethyl phthalate	ND		0.034	0.031
Fluorene	1.05		0.034	0.020
4-Chlorophenyl phenyl ether	ND		0.034	0.020
4-Nitroaniline	ND		0.034	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.034	0.020
2,3,4,6-Tetrachlorophenol	ND		0.034	0.020
4,6-Dinitro-2-methylphenol	ND		0.034	0.020
N-Nitrosodiphenylamine	ND		0.034	0.020
4-Bromophenyl phenyl ether	ND		0.034	0.020
Hexachlorobenzene	ND		0.034	0.020
Atrazine	ND		0.034	0.020
Pentachlorophenol	ND		0.034	0.020
Phenanthrene	4.35		0.034	0.020
Anthracene	0.974		0.034	0.020
Carbazole	0.145		0.034	0.020
Di-n-butyl phthalate	ND		0.034	0.020
Fluoranthene	3.78		0.034	0.020
Pyrene	5.09		0.034	0.020
Butyl benzyl phthalate	ND		0.034	0.020
3,3'-Dichlorobenzidine	ND		0.034	0.023
Benzo[a]anthracene	2.09		0.034	0.020
Chrysene	2.56		0.034	0.020
Bis(2-ethylhexyl) phthalate	0.305		0.034	0.020
Di-n-octyl phthalate	ND		0.034	0.025
Benzo[b]fluoranthene	1.62		0.034	0.020
Benzo[k]fluoranthene	1.51		0.034	0.020
Benzo[a]pyrene	1.69		0.034	0.020
Indeno[1,2,3-cd]pyrene	0.822		0.034	0.030
Dibenz[a,h]anthracene	0.382		0.034	0.020
Benzo[g,h,i]perylene	0.822		0.034	0.020
Dinitrotoluene (2,4- and 2,6-)	ND		0.034	0.020

Total Target Compounds (68): 30.4

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-09809-001
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/29/2015
Date Analyzed: 10/30/2015
Data file: R7651.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.57g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	0.209		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.209		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0026

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-09809-002
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/29/2015
Date Analyzed: 10/30/2015
Data file: R7652.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.38g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0027

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-09809-003
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/29/2015
Date Analyzed: 10/30/2015
Data file: R7653.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.72g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	ND		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	ND		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0028

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-09809-004
Client ID: GPEC-PIP
Date Received: 10/28/2015
Date Extracted: 10/29/2015
Date Analyzed: 10/30/2015
Data file: R7654.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.65g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	ND		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	ND		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-09809 0029

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-09809-001	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.31g
Date Received:	10/28/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	10/28/2015	Dilution Factor:	5
Date Analyzed:	10/30/2015	% Moisture:	7.80
Data File:	TB6665.D		

Compound	Concentration	Q	RL	MDL
C9-C28	999	D	263	105
C28-C40	563	D	263	105
C9-C40 Total	1,560	D	263	105

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-09809-002	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.29g
Date Received:	10/28/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	10/28/2015	Dilution Factor:	5
Date Analyzed:	10/30/2015	% Moisture:	9.40
Data File:	TB6666.D		

Compound	Concentration	Q	RL	MDL
C9-C28	1,060	D	268	107
C28-C40	599	D	268	107
C9-C40 Total	1,660	D	268	107

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-09809-003	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.43g
Date Received:	10/28/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	10/28/2015	Dilution Factor:	10
Date Analyzed:	10/30/2015	% Moisture:	7.30
Data File:	TB6667.D		

Compound	Concentration	Q	RL	MDL
C9-C28	2,150	D	517	207
C28-C40	2,670	D	517	207
C9-C40 Total	4,820	D	517	207

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-09809-004	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.59g
Date Received:	10/28/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	10/28/2015	Dilution Factor:	10
Date Analyzed:	10/30/2015	% Moisture:	6.80
Data File:	TB6668.D		

Compound	Concentration	Q	RL	MDL
C9-C28	2,680	D	507	203
C28-C40	2,190	D	507	203
C9-C40 Total	4,870	D	507	203

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-09809-001
Client ID: GPEC-PIPE PAVING-01
Date Collected: 10/27/15 09:45
Date Received: 10/28/15 12:15
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 7.80
Batch #: 569

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	14.3		1	0.556	0.278	10/29/15 21:57	6020A
Arsenic	11.9		1	0.556	0.278	10/29/15 21:57	6020A
Beryllium	0.433	J	1	0.556	0.222	10/29/15 21:57	6020A
Cadmium	1.03		1	0.556	0.139	10/29/15 21:57	6020A
Chromium	24.4		1	0.556	0.556	10/29/15 21:57	6020A
Copper	292		1	0.556	0.556	10/29/15 21:57	6020A
Lead	362		1	0.556	0.556	10/29/15 21:57	6020A
Mercury	2.15		1	0.0066	0.0032	10/29/15 14:02	7471B
Nickel	27.5		1	0.556	0.556	10/29/15 21:57	6020A
Selenium	1.21		1	0.556	0.556	10/29/15 21:57	6020A
Silver	0.535	J	1	0.556	0.139	10/29/15 21:57	6020A
Thallium	0.144	J	1	0.556	0.139	10/29/15 21:57	6020A
Zinc	294		1	0.556	0.556	10/29/15 21:57	6020A

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-09809-002
Client ID: GPEC-PIPE PAVING-02
Date Collected: 10/27/15 09:48
Date Received: 10/28/15 12:15
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 9.40
Batch #: 569

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	15.9		1	0.575	0.288	10/29/15 22:01	6020A
Arsenic	12.6		1	0.575	0.288	10/29/15 22:01	6020A
Beryllium	0.422	J	1	0.575	0.230	10/29/15 22:01	6020A
Cadmium	0.929		1	0.575	0.144	10/29/15 22:01	6020A
Chromium	28.1		1	0.575	0.575	10/29/15 22:01	6020A
Copper	427		1	0.575	0.575	10/29/15 22:01	6020A
Lead	638		1	0.575	0.575	10/29/15 22:01	6020A
Mercury	1.80		1	0.0061	0.0030	10/29/15 14:05	7471B
Nickel	24.4		1	0.575	0.575	10/29/15 22:01	6020A
Selenium	1.14		1	0.575	0.575	10/29/15 22:01	6020A
Silver	0.649		1	0.575	0.144	10/29/15 22:01	6020A
Thallium	ND		1	0.575	0.144	10/29/15 22:01	6020A
Zinc	328		1	0.575	0.575	10/29/15 22:01	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-09809-003
Client ID: GPEC-PIPE PAVING-03
Date Collected: 10/27/15 09:52
Date Received: 10/28/15 12:15
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 7.30
Batch #: 569

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	2.43		1	0.570	0.285	10/29/15 22:05	6020A
Arsenic	4.39		1	0.570	0.285	10/29/15 22:05	6020A
Beryllium	0.298	J	1	0.570	0.228	10/29/15 22:05	6020A
Cadmium	0.277	J	1	0.570	0.142	10/29/15 22:05	6020A
Chromium	12.6		1	0.570	0.570	10/29/15 22:05	6020A
Copper	94.8		1	0.570	0.570	10/29/15 22:05	6020A
Lead	86.5		1	0.570	0.570	10/29/15 22:05	6020A
Mercury	0.901		1	0.0063	0.0030	10/29/15 14:08	7471B
Nickel	14.8		1	0.570	0.570	10/29/15 22:05	6020A
Selenium	0.783		1	0.570	0.570	10/29/15 22:05	6020A
Silver	0.158	J	1	0.570	0.142	10/29/15 22:05	6020A
Thallium	ND		1	0.570	0.142	10/29/15 22:05	6020A
Zinc	77.5		1	0.570	0.570	10/29/15 22:05	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-09809-004
Client ID: GPEC-PIPE PAVING-04
Date Collected: 10/27/15 09:55
Date Received: 10/28/15 12:15
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 6.80
Batch #: 569

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	6.59		1	0.560	0.280	10/29/15 22:09	6020A
Arsenic	10.3		1	0.560	0.280	10/29/15 22:09	6020A
Beryllium	0.414	J	1	0.560	0.224	10/29/15 22:09	6020A
Cadmium	0.852		1	0.560	0.140	10/29/15 22:09	6020A
Chromium	21.8		1	0.560	0.560	10/29/15 22:09	6020A
Copper	215		1	0.560	0.560	10/29/15 22:09	6020A
Lead	310		1	0.560	0.560	10/29/15 22:09	6020A
Mercury	1.61		1	0.0063	0.0030	10/29/15 14:15	7471B
Nickel	25.0		1	0.560	0.560	10/29/15 22:09	6020A
Selenium	0.857		1	0.560	0.560	10/29/15 22:09	6020A
Silver	0.560	J	1	0.560	0.140	10/29/15 22:09	6020A
Thallium	ND		1	0.560	0.140	10/29/15 22:09	6020A
Zinc	228		1	0.560	0.560	10/29/15 22:09	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP Lead

Client/Project: GEI-HSTAGPEC - PIPE PAVING

Batch #: 571
Date Received: 10/28/15 12:15
Method: 1311/6020A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E15-09809-001	GPEC-PIPE PAVING-01	0.353		1	TCLP Leachate mg/L	0.100	0.050	NA	10/27/15 09:45	10/30/15 17:52
E15-09809-002	GPEC-PIPE PAVING-02	0.920		1	TCLP Leachate mg/L	0.100	0.050	NA	10/27/15 09:48	10/30/15 17:56
E15-09809-003	GPEC-PIPE PAVING-03	0.277		1	TCLP Leachate mg/L	0.100	0.050	NA	10/27/15 09:52	10/30/15 18:09
E15-09809-004	GPEC-PIPE PAVING-04	0.226		1	TCLP Leachate mg/L	0.100	0.050	NA	10/27/15 09:55	10/30/15 18:13

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Date Received: 10/28/15 12:15
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-09809-001	GPEC-PIPE PAVING-01	ND		1	Soil-mg/Kg	894	1070	92.2	10/27/15 09:45	11/03/15 10:00
E15-09809-002	GPEC-PIPE PAVING-02	ND		1	Soil-mg/Kg	910	1090	90.6	10/27/15 09:48	11/03/15 10:00
E15-09809-003	GPEC-PIPE PAVING-03	ND		1	Soil-mg/Kg	890	1070	92.7	10/27/15 09:52	11/03/15 10:00
E15-09809-004	GPEC-PIPE PAVING-04	ND		1	Soil-mg/Kg	885	1060	93.2	10/27/15 09:55	11/03/15 10:00

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants, Inc	REPORT TO:	Chris Anastasiou
Address:	110 Walt Whitman Rd	Address:	canastasiou@geiconsultants.com
	Huntington Station, NY 11746		
Telephone #:	631-759-2967	Attn:	
Fax #:		FAX #	
Project Manager:	Chris Morris	INVOICE TO:	GEIpayables@geiconsultants.com
EMAIL Address:	CMorris@geiconsultants.com	Address:	
Sampler:	CAnastasiou		
Project Name:	GPEC-Pipe Paving		
Project Location (State):	NY	Attn:	Sandra St Hilaire
Bottle Order #:		PO #	125180-2-1207
Quote # :			

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) | NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) | QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** 48 hr** 72 hr** 96 hr** (1 wk**)
Other** (specify): 5-DAY

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **	Report Format	EDDs
24 hr - 100%....	Results Only	SRP format
48 hr - 75%....	Reduced	lab approved custom EDD
72 hr - 50%....	Regulatory - 15% Surcharge applies	
96 hr - 35%....		
5 day - 25%....	Other (describe)	NO EDD/CD REQ'D
6-9 day 10%		

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	EPH	TPH Low Level	Metals 6010B	SVOCs 8270C	PCBs 8082	Solids	TCLP Lead	HCL	HNO3	MeOH	Other	None	Encore
GPEC-Pipe Paving-01	Comp	10/27/15	0945	Soil	2	1	X	X	X	X	X	X	X					2	
GPEC-Pipe Paving-02	"	"	0948	"	2	2	X	X	X	X	X	X	X						
GPEC-Pipe Paving-03	"	"	0952	"	2	3	X	X	X	X	X	X	X						
GPEC-Pipe Paving-04	"	"	0955	"	2	4	X	X	X	X	X	X	X						

Know Hazard: Yes or No Describe:

Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): _____ IAL Courier _____ Client Courier _____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		10/28/15		Received by:	10/28/15	10:45
Relinquished by:		10/28/15	12:15	Received by:	10/28/15	12:15
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: BSM Coal/MGP TAR Requested for Disposal

Lab Case # 9817

PAGE: 1 of 1

9809-TA

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2010 REV COC

10/2010 rev

PROJECT INFORMATION

RUSH

E15-09809: GPEC - PIPE PAVING

To: Chris Morris
GEI Consultants Inc. - Huntington Station
Fax:
EMail: cmorris@geiconsultants.com; datag

Report To

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746
Attn: Chris Morris

Bill To

GEI Consultants Inc. - Huntington Station
400 Unicorn Park Drive
Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Result Only	)RRIS-125180-2-	Oct 28, 2015 @ 12:15	Nov 4, 2015	Nov 04, 2015	Nov 18, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
09809-001	GPEC-PIPE PAVING-01	NA	10/27/15@09:45	Soil	mg/Kg (ppm)	
09809-002	GPEC-PIPE PAVING-02	NA	10/27/15@09:48	Soil	mg/Kg (ppm)	
09809-003	GPEC-PIPE PAVING-03	NA	10/27/15@09:52	Soil	mg/Kg (ppm)	
09809-004	GPEC-PIPE PAVING-04	NA	10/27/15@09:55	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	RUSH 1 WK	11/10/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	11/10/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	11/10/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	11/10/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	11/24/2015
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	4/24/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	11/24/2015
002	TCL VO	Analyze	8260C	RUSH 1 WK	11/10/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	11/10/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	11/10/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	11/10/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	11/24/2015
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	4/24/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	11/24/2015
003	TCL VO	Analyze	8260C	RUSH 1 WK	11/10/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	11/10/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	11/10/2015

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E15-09809 0042 TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

PROJECT INFORMATION

RUSH

E15-09809: GPEC - PIPE PAVING

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
003	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	11/10/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	11/24/2015
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	4/24/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	11/24/2015
004	TCL VO	Analyze	8260C	RUSH 1 WK	11/10/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	11/10/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	11/10/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	11/10/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	11/24/2015
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	4/24/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	11/24/2015

Project Notes:

NOTE 2 taken by kim on 10/29/2015 11:18

ALSO EMAIL RESULTS TO CHRIS ANASTASIOU AT canastasiou@geiconsultants.com

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E15-09809 0043 TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **09809** CLIENT: GEI

GPEC - Pipe Paving

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

X = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [PM] DATE 09/18/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [KG] E15-09809 DATE 09/21/15

REV 03/2013

Laboratory Custody Chronicle

IAL Case No.

E15-09809

Client GEI Consultants Inc. - Huntington Station

Project GPEC - PIPE PAVING

Received On 10/28/2015@12:15

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	09809-001	Soil	n/a	n/a	10/30/15	Mei
"	-002	"	n/a	n/a	10/30/15	Mei
"	-003	"	n/a	n/a	10/29/15	Mei
"	-004	"	n/a	n/a	10/29/15	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	10/28/15	Frank L.	10/29/15	Eleanor
"	-002	"	10/28/15	Frank L.	10/29/15	Eleanor
"	-003	"	10/28/15	Frank L.	10/29/15	Eleanor
"	-004	"	10/28/15	Frank L.	10/29/15	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NJ-EPH (DRO) Cat 1	-001	Soil	10/28/15	Archimede	10/30/15	Margaret
"	-002	"	10/28/15	Archimede	10/30/15	Margaret
"	-003	"	10/28/15	Archimede	10/30/15	Margaret
"	-004	"	10/28/15	Archimede	10/30/15	Margaret
TCL PCB	-001	Soil	10/29/15	Archimede	10/30/15	Justyna
"	-002	"	10/29/15	Archimede	10/30/15	Justyna
"	-003	"	10/29/15	Archimede	10/30/15	Justyna
"	-004	"	10/29/15	Archimede	10/30/15	Justyna

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	10/29/15	Frank R.	10/29/15	Danielle
"	-002	"	10/29/15	Frank R.	10/29/15	Danielle
"	-003	"	10/29/15	Frank R.	10/29/15	Danielle
"	-004	"	10/29/15	Frank R.	10/29/15	Danielle
TCLP Lead - Pb	-001	Soil	10/30/15	Frank R.	10/30/15	Danielle
"	-002	"	10/30/15	Frank R.	10/30/15	Danielle
"	-003	"	10/30/15	Frank R.	10/30/15	Danielle
"	-004	"	10/30/15	Frank R.	10/30/15	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	11/ 3/15	Robert
"	-002	"	n/a	n/a	11/ 3/15	Robert
"	-003	"	n/a	n/a	11/ 3/15	Robert
"	-004	"	n/a	n/a	11/ 3/15	Robert

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746

Project Name: **GPEC - PIPE PAVING**
IAL Case Number: **E15-11425**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.

E15-11425

Client GEI Consultants Inc. - Huntington Station

Project GPEC - PIPE PAVING

Received On 12/15/2015@10:30

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
11425-001	GPEC-PIPE PAVING-05	n/a	12/15/2015@07:30	Soil	2
11425-002	GPEC-PIPE PAVING-06	n/a	12/15/2015@07:35	Soil	2
11425-003	GPEC-PIPE PAVING-07	n/a	12/15/2015@07:40	Soil	2

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-11425

Lab ID:	11425-001			11425-002			11425-003		
Client ID:	GPEC-PIPE PAVING-05			GPEC-PIPE PAVING-06			GPEC-PIPE PAVING-07		
Matrix:	Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	12/15/15			12/15/15			12/15/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
TOTAL VO's:	ND			ND			ND		
Semivolatiles - BNA (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Naphthalene	0.148		0.023	0.186		0.022	0.119		0.022
2-Methylnaphthalene	0.078		0.023	0.118		0.022	0.081		0.022
1,1'-Biphenyl	0.036	J	0.023	0.046		0.022	0.033	J	0.022
Acenaphthylene	0.152		0.026	0.108		0.026	0.145		0.025
Acenaphthene	0.171		0.029	0.360		0.028	0.167		0.027
Dibenzofuran	0.191		0.023	0.257		0.022	0.125		0.022
Fluorene	0.291		0.023	0.343		0.022	0.164		0.022
Phenanthrene	2.40		0.023	3.63		0.022	1.21		0.022
Anthracene	0.561		0.023	0.929		0.022	0.356		0.022
Carbazole	0.198		0.023	0.304		0.022	0.100		0.022
Fluoranthene	3.05		0.023	5.78		0.022	1.93		0.022
Pyrene	2.93		0.023	5.54		0.022	2.17		0.022
Benzo[a]anthracene	1.54		0.023	2.91		0.022	1.10		0.022
Chrysene	1.76		0.023	3.18		0.022	1.23		0.022
Bis(2-ethylhexyl) phthalate	0.043		0.023	0.126		0.022	0.407		0.022
Benzo[b]fluoranthene	1.32		0.023	2.13		0.022	0.908		0.022
Benzo[k]fluoranthene	1.07		0.023	2.48		0.022	0.880		0.022
Benzo[a]pyrene	1.38		0.023	2.53		0.022	0.979		0.022
Indeno[1,2,3-cd]pyrene	0.751		0.033	1.41		0.033	0.480		0.032
Dibenz[a,h]anthracene	0.321		0.023	0.521		0.022	0.218		0.022
Benzo[g,h,i]perylene	0.770		0.023	1.47		0.022	0.459		0.022
TOTAL BNA'S:	19.2	J		34.4			13.3	J	
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.016	ND		0.015
Aroclor-1221	ND		0.016	ND		0.016	ND		0.015
Aroclor-1232	ND		0.016	ND		0.016	ND		0.015
Aroclor-1242	ND		0.016	ND		0.016	ND		0.015
Aroclor-1248	ND		0.016	ND		0.016	ND		0.015
Aroclor-1254	ND		0.016	ND		0.016	ND		0.015
Aroclor-1260	ND		0.016	ND		0.016	ND		0.015
Aroclor-1262	ND		0.016	ND		0.016	ND		0.015
Aroclor-1268	ND		0.016	ND		0.016	ND		0.015
PCBs	ND		0.016	ND		0.016	ND		0.015

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC - PIPE PAVING
Lab Case No.: E15-11425

Lab ID:	11425-001			11425-002			11425-003		
Client ID:	GPEC-PIPE PAVING-05			GPEC-PIPE PAVING-06			GPEC-PIPE PAVING-07		
Matrix:	Soil			Soil			Soil		
TCLP Matrix:	TCLP Leachate			TCLP Leachate			TCLP Leachate		
Sampled Date	12/15/15			12/15/15			12/15/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
NJ-EPH-DRO (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
C9-C28	59.0		21.6	310		22.0	435		21.5
C28-C40	50.5	J	21.6	297		22.0	363		21.5
C9-C40 Total	110		21.6	608		22.0	798		21.5
Metals (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Antimony	4.37		0.313	11.3		0.305	8.19		0.302
Arsenic	6.55		0.313	12.4		0.305	7.15		0.302
Beryllium	0.269	J	0.250	0.339	J	0.244	0.349	J	0.241
Cadmium	0.575	J	0.156	0.962		0.152	0.667		0.151
Chromium	19.7		0.625	23.3		0.609	21.3		0.604
Copper	148		0.625	257		0.609	219		0.604
Lead	161		0.625	303		0.609	334		0.604
Mercury	0.596		0.0032	4.62		0.0034	2.51		0.0031
Nickel	16.1		0.625	19.6		0.609	25.6		0.604
Selenium	1.55		0.625	1.24		0.609	1.66		0.604
Silver	ND		0.156	0.475	J	0.152	0.325	J	0.151
Thallium	ND		0.156	ND		0.152	ND		0.151
Zinc	194		0.625	541		0.609	242		0.604
TCLP Metals (Units)	*(mg/L)*			*(mg/L)*			*(mg/L)*		
TCLP Lead	0.187		0.050	0.388		0.050	0.445		0.050
General Analytical (Units)									
Sulfur as S(mg/Kg)	ND		953	ND		945	ND		933

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-001
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1143.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.5

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.116	0.079
Chloromethane	ND		0.116	0.057
Vinyl chloride	ND		0.116	0.054
Bromomethane	ND		0.116	0.079
Chloroethane	ND		0.116	0.096
Trichlorofluoromethane	ND		0.116	0.094
1,1-Dichloroethene	ND		0.116	0.057
Acetone	ND		0.231	0.165
Carbon disulfide	ND		0.116	0.058
Methylene chloride	ND		0.231	0.230
trans-1,2-Dichloroethene	ND		0.116	0.063
Methyl tert-butyl ether (MTBE)	ND		0.116	0.057
1,1-Dichloroethane	ND		0.116	0.041
cis-1,2-Dichloroethene	ND		0.116	0.055
2-Butanone (MEK)	ND		0.116	0.101
Bromochloromethane	ND		0.116	0.074
Chloroform	ND		0.116	0.059
1,1,1-Trichloroethane	ND		0.116	0.056
Carbon tetrachloride	ND		0.116	0.077
1,2-Dichloroethane (EDC)	ND		0.116	0.066
Benzene	ND		0.116	0.045
Trichloroethene	ND		0.116	0.041
1,2-Dichloropropane	ND		0.116	0.064
1,4-Dioxane	ND		23.1	9.56
Bromodichloromethane	ND		0.116	0.061
cis-1,3-Dichloropropene	ND		0.116	0.051
4-Methyl-2-pentanone (MIBK)	ND		0.116	0.100

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-001
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1143.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.5

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.116	0.043
trans-1,3-Dichloropropene	ND		0.116	0.048
1,1,2-Trichloroethane	ND		0.116	0.073
Tetrachloroethene	ND		0.116	0.057
2-Hexanone	ND		0.116	0.080
Dibromochloromethane	ND		0.116	0.060
1,2-Dibromoethane (EDB)	ND		0.116	0.078
Chlorobenzene	ND		0.116	0.046
Ethylbenzene	ND		0.116	0.049
Total Xylenes	ND		0.231	0.121
Styrene	ND		0.116	0.043
Bromoform	ND		0.116	0.077
Isopropylbenzene	ND		0.116	0.067
1,1,2,2-Tetrachloroethane	ND		0.116	0.080
1,3-Dichlorobenzene	ND		0.116	0.048
1,4-Dichlorobenzene	ND		0.116	0.047
1,2-Dichlorobenzene	ND		0.116	0.046
1,2-Dibromo-3-chloropropane	ND		0.116	0.108
1,2,4-Trichlorobenzene	ND		0.116	0.056
1,2,3-Trichlorobenzene	ND		0.116	0.052
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.231	0.112
Methyl acetate	ND		0.116	0.104
Cyclohexane	ND		0.116	0.095
Methylcyclohexane	ND		0.116	0.089
1,3-Dichloropropene (cis- and trans-)	ND		0.116	0.051

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-002
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1144.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.115	0.079
Chloromethane	ND		0.115	0.057
Vinyl chloride	ND		0.115	0.053
Bromomethane	ND		0.115	0.078
Chloroethane	ND		0.115	0.095
Trichlorofluoromethane	ND		0.115	0.093
1,1-Dichloroethene	ND		0.115	0.056
Acetone	ND		0.229	0.164
Carbon disulfide	ND		0.115	0.058
Methylene chloride	ND		0.229	0.228
trans-1,2-Dichloroethene	ND		0.115	0.062
Methyl tert-butyl ether (MTBE)	ND		0.115	0.056
1,1-Dichloroethane	ND		0.115	0.041
cis-1,2-Dichloroethene	ND		0.115	0.055
2-Butanone (MEK)	ND		0.115	0.100
Bromochloromethane	ND		0.115	0.073
Chloroform	ND		0.115	0.059
1,1,1-Trichloroethane	ND		0.115	0.056
Carbon tetrachloride	ND		0.115	0.077
1,2-Dichloroethane (EDC)	ND		0.115	0.066
Benzene	ND		0.115	0.044
Trichloroethene	ND		0.115	0.041
1,2-Dichloropropane	ND		0.115	0.064
1,4-Dioxane	ND		22.9	9.47
Bromodichloromethane	ND		0.115	0.060
cis-1,3-Dichloropropene	ND		0.115	0.051
4-Methyl-2-pentanone (MIBK)	ND		0.115	0.099

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-002
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1144.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.115	0.042
trans-1,3-Dichloropropene	ND		0.115	0.048
1,1,2-Trichloroethane	ND		0.115	0.073
Tetrachloroethene	ND		0.115	0.057
2-Hexanone	ND		0.115	0.079
Dibromochloromethane	ND		0.115	0.059
1,2-Dibromoethane (EDB)	ND		0.115	0.078
Chlorobenzene	ND		0.115	0.045
Ethylbenzene	ND		0.115	0.048
Total Xylenes	ND		0.229	0.119
Styrene	ND		0.115	0.042
Bromoform	ND		0.115	0.076
Isopropylbenzene	ND		0.115	0.067
1,1,2,2-Tetrachloroethane	ND		0.115	0.079
1,3-Dichlorobenzene	ND		0.115	0.048
1,4-Dichlorobenzene	ND		0.115	0.047
1,2-Dichlorobenzene	ND		0.115	0.046
1,2-Dibromo-3-chloropropane	ND		0.115	0.107
1,2,4-Trichlorobenzene	ND		0.115	0.055
1,2,3-Trichlorobenzene	ND		0.115	0.051
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.229	0.111
Methyl acetate	ND		0.115	0.103
Cyclohexane	ND		0.115	0.094
Methylcyclohexane	ND		0.115	0.089
1,3-Dichloropropene (cis- and trans-)	ND		0.115	0.051

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-003
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1145.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.113	0.078
Chloromethane	ND		0.113	0.056
Vinyl chloride	ND		0.113	0.052
Bromomethane	ND		0.113	0.077
Chloroethane	ND		0.113	0.094
Trichlorofluoromethane	ND		0.113	0.092
1,1-Dichloroethene	ND		0.113	0.056
Acetone	ND		0.226	0.162
Carbon disulfide	ND		0.113	0.057
Methylene chloride	ND		0.226	0.225
trans-1,2-Dichloroethene	ND		0.113	0.062
Methyl tert-butyl ether (MTBE)	ND		0.113	0.056
1,1-Dichloroethane	ND		0.113	0.041
cis-1,2-Dichloroethene	ND		0.113	0.054
2-Butanone (MEK)	ND		0.113	0.099
Bromochloromethane	ND		0.113	0.072
Chloroform	ND		0.113	0.058
1,1,1-Trichloroethane	ND		0.113	0.055
Carbon tetrachloride	ND		0.113	0.076
1,2-Dichloroethane (EDC)	ND		0.113	0.065
Benzene	ND		0.113	0.044
Trichloroethene	ND		0.113	0.040
1,2-Dichloropropane	ND		0.113	0.063
1,4-Dioxane	ND		22.6	9.36
Bromodichloromethane	ND		0.113	0.060
cis-1,3-Dichloropropene	ND		0.113	0.050
4-Methyl-2-pentanone (MIBK)	ND		0.113	0.098

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E15-11425-003
Client ID: GPEC-PIPE_PA
Date Received: 12/15/2015
Date Analyzed: 12/16/2015
Data file: J1145.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.113	0.042
trans-1,3-Dichloropropene	ND		0.113	0.047
1,1,2-Trichloroethane	ND		0.113	0.072
Tetrachloroethene	ND		0.113	0.056
2-Hexanone	ND		0.113	0.078
Dibromochloromethane	ND		0.113	0.058
1,2-Dibromoethane (EDB)	ND		0.113	0.077
Chlorobenzene	ND		0.113	0.045
Ethylbenzene	ND		0.113	0.048
Total Xylenes	ND		0.226	0.118
Styrene	ND		0.113	0.042
Bromoform	ND		0.113	0.075
Isopropylbenzene	ND		0.113	0.066
1,1,2,2-Tetrachloroethane	ND		0.113	0.078
1,3-Dichlorobenzene	ND		0.113	0.047
1,4-Dichlorobenzene	ND		0.113	0.046
1,2-Dichlorobenzene	ND		0.113	0.045
1,2-Dibromo-3-chloropropane	ND		0.113	0.105
1,2,4-Trichlorobenzene	ND		0.113	0.055
1,2,3-Trichlorobenzene	ND		0.113	0.051
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.226	0.110
Methyl acetate	ND		0.113	0.101
Cyclohexane	ND		0.113	0.093
Methylcyclohexane	ND		0.113	0.087
1,3-Dichloropropene (cis- and trans-)	ND		0.113	0.050

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-001
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0722.D

GC/MS Column: DB-5
Sample wt/vol: 15.30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.5

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.038	0.023
Phenol	ND		0.038	0.024
Bis(2-chloroethyl) ether	ND		0.038	0.023
2-Chlorophenol	ND		0.038	0.023
2-Methylphenol	ND		0.038	0.026
Bis(2-chloroisopropyl) ether	ND		0.038	0.023
4-Methylphenol **	ND		0.038	0.030
N-Nitrosodi-n-propylamine	ND		0.038	0.031
Acetophenone	ND		0.038	0.031
Hexachloroethane	ND		0.038	0.023
Nitrobenzene	ND		0.038	0.032
Isophorone	ND		0.038	0.034
2-Nitrophenol	ND		0.038	0.023
2,4-Dimethylphenol	ND		0.038	0.026
Bis(2-chloroethoxy) methane	ND		0.038	0.023
2,4-Dichlorophenol	ND		0.038	0.023
Naphthalene	0.148		0.038	0.023
4-Chloroaniline	ND		0.038	0.023
Hexachlorobutadiene	ND		0.038	0.023
Caprolactam	ND		0.038	0.024
4-Chloro-3-methylphenol	ND		0.038	0.023
2-Methylnaphthalene	0.078		0.038	0.023
Hexachlorocyclopentadiene	ND		0.038	0.023
2,4,6-Trichlorophenol	ND		0.038	0.023
2,4,5-Trichlorophenol	ND		0.038	0.023
1,1'-Biphenyl	0.036	J	0.038	0.023
2-Chloronaphthalene	ND		0.038	0.023
2-Nitroaniline	ND		0.038	0.023
Dimethyl phthalate	ND		0.038	0.029

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-001
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0722.D

GC/MS Column: DB-5
Sample wt/vol: 15.30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.5

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.038	0.023
Acenaphthylene	0.152		0.038	0.026
3-Nitroaniline	ND		0.038	0.029
Acenaphthene	0.171		0.038	0.029
2,4-Dinitrophenol	ND		0.038	0.027
4-Nitrophenol	ND		0.038	0.030
2,4-Dinitrotoluene	ND		0.038	0.023
Dibenzofuran	0.191		0.038	0.023
Diethyl phthalate	ND		0.038	0.035
Fluorene	0.291		0.038	0.023
4-Chlorophenyl phenyl ether	ND		0.038	0.023
4-Nitroaniline	ND		0.038	0.023
1,2,4,5-Tetrachlorobenzene	ND		0.038	0.023
2,3,4,6-Tetrachlorophenol	ND		0.038	0.023
4,6-Dinitro-2-methylphenol	ND		0.038	0.023
N-Nitrosodiphenylamine	ND		0.038	0.023
4-Bromophenyl phenyl ether	ND		0.038	0.023
Hexachlorobenzene	ND		0.038	0.023
Atrazine	ND		0.038	0.023
Pentachlorophenol	ND		0.038	0.023
Phenanthrene	2.40		0.038	0.023
Anthracene	0.561		0.038	0.023
Carbazole	0.198		0.038	0.023
Di-n-butyl phthalate	ND		0.038	0.023
Fluoranthene	3.05		0.038	0.023
Pyrene	2.93		0.038	0.023
Butyl benzyl phthalate	ND		0.038	0.023
3,3'-Dichlorobenzidine	ND		0.038	0.026
Benzo[a]anthracene	1.54		0.038	0.023
Chrysene	1.76		0.038	0.023
Bis(2-ethylhexyl) phthalate	0.043		0.038	0.023
Di-n-octyl phthalate	ND		0.038	0.028
Benzo[b]fluoranthene	1.32		0.038	0.023
Benzo[k]fluoranthene	1.07		0.038	0.023
Benzo[a]pyrene	1.38		0.038	0.023
Indeno[1,2,3-cd]pyrene	0.751		0.038	0.033
Dibenz[a,h]anthracene	0.321		0.038	0.023
Benzo[g,h,i]perylene	0.770		0.038	0.023
Dinitrotoluene (2,4- and 2,6-)	ND		0.038	0.023
Total Target Compounds (68):	19.2	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-002
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0723.D

GC/MS Column: DB-5
Sample wt/vol: 15.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.037	0.022
Phenol	ND		0.037	0.024
Bis(2-chloroethyl) ether	ND		0.037	0.022
2-Chlorophenol	ND		0.037	0.022
2-Methylphenol	ND		0.037	0.026
Bis(2-chloroisopropyl) ether	ND		0.037	0.022
4-Methylphenol **	ND		0.037	0.030
N-Nitrosodi-n-propylamine	ND		0.037	0.030
Acetophenone	ND		0.037	0.030
Hexachloroethane	ND		0.037	0.022
Nitrobenzene	ND		0.037	0.032
Isophorone	ND		0.037	0.034
2-Nitrophenol	ND		0.037	0.022
2,4-Dimethylphenol	ND		0.037	0.026
Bis(2-chloroethoxy) methane	ND		0.037	0.022
2,4-Dichlorophenol	ND		0.037	0.022
Naphthalene	0.186		0.037	0.022
4-Chloroaniline	ND		0.037	0.022
Hexachlorobutadiene	ND		0.037	0.022
Caprolactam	ND		0.037	0.024
4-Chloro-3-methylphenol	ND		0.037	0.022
2-Methylnaphthalene	0.118		0.037	0.022
Hexachlorocyclopentadiene	ND		0.037	0.022
2,4,6-Trichlorophenol	ND		0.037	0.022
2,4,5-Trichlorophenol	ND		0.037	0.022
1,1'-Biphenyl	0.046		0.037	0.022
2-Chloronaphthalene	ND		0.037	0.022
2-Nitroaniline	ND		0.037	0.022
Dimethyl phthalate	ND		0.037	0.028

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-002
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0723.D

GC/MS Column: DB-5
Sample wt/vol: 15.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.037	0.022
Acenaphthylene	0.108		0.037	0.026
3-Nitroaniline	ND		0.037	0.028
Acenaphthene	0.360		0.037	0.028
2,4-Dinitrophenol	ND		0.037	0.026
4-Nitrophenol	ND		0.037	0.030
2,4-Dinitrotoluene	ND		0.037	0.022
Dibenzofuran	0.257		0.037	0.022
Diethyl phthalate	ND		0.037	0.034
Fluorene	0.343		0.037	0.022
4-Chlorophenyl phenyl ether	ND		0.037	0.022
4-Nitroaniline	ND		0.037	0.022
1,2,4,5-Tetrachlorobenzene	ND		0.037	0.022
2,3,4,6-Tetrachlorophenol	ND		0.037	0.022
4,6-Dinitro-2-methylphenol	ND		0.037	0.022
N-Nitrosodiphenylamine	ND		0.037	0.022
4-Bromophenyl phenyl ether	ND		0.037	0.022
Hexachlorobenzene	ND		0.037	0.022
Atrazine	ND		0.037	0.022
Pentachlorophenol	ND		0.037	0.022
Phenanthrene	3.63		0.037	0.022
Anthracene	0.929		0.037	0.022
Carbazole	0.304		0.037	0.022
Di-n-butyl phthalate	ND		0.037	0.022
Fluoranthene	5.78		0.037	0.022
Pyrene	5.54		0.037	0.022
Butyl benzyl phthalate	ND		0.037	0.022
3,3'-Dichlorobenzidine	ND		0.037	0.026
Benzo[a]anthracene	2.91		0.037	0.022
Chrysene	3.18		0.037	0.022
Bis(2-ethylhexyl) phthalate	0.126		0.037	0.022
Di-n-octyl phthalate	ND		0.037	0.027
Benzo[b]fluoranthene	2.13		0.037	0.022
Benzo[k]fluoranthene	2.48		0.037	0.022
Benzo[a]pyrene	2.53		0.037	0.022
Indeno[1,2,3-cd]pyrene	1.41		0.037	0.033
Dibenz[a,h]anthracene	0.521		0.037	0.022
Benzo[g,h,i]perylene	1.47		0.037	0.022
Dinitrotoluene (2,4- and 2,6-)	ND		0.037	0.022
Total Target Compounds (68):	34.4			

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-003
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0724.D

GC/MS Column: DB-5
Sample wt/vol: 15.63g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		0.036	0.022
Phenol	ND		0.036	0.023
Bis(2-chloroethyl) ether	ND		0.036	0.022
2-Chlorophenol	ND		0.036	0.022
2-Methylphenol	ND		0.036	0.025
Bis(2-chloroisopropyl) ether	ND		0.036	0.022
4-Methylphenol **	ND		0.036	0.029
N-Nitrosodi-n-propylamine	ND		0.036	0.030
Acetophenone	ND		0.036	0.030
Hexachloroethane	ND		0.036	0.022
Nitrobenzene	ND		0.036	0.031
Isophorone	ND		0.036	0.033
2-Nitrophenol	ND		0.036	0.022
2,4-Dimethylphenol	ND		0.036	0.025
Bis(2-chloroethoxy) methane	ND		0.036	0.022
2,4-Dichlorophenol	ND		0.036	0.022
Naphthalene	0.119		0.036	0.022
4-Chloroaniline	ND		0.036	0.022
Hexachlorobutadiene	ND		0.036	0.022
Caprolactam	ND		0.036	0.023
4-Chloro-3-methylphenol	ND		0.036	0.022
2-Methylnaphthalene	0.081		0.036	0.022
Hexachlorocyclopentadiene	ND		0.036	0.022
2,4,6-Trichlorophenol	ND		0.036	0.022
2,4,5-Trichlorophenol	ND		0.036	0.022
1,1'-Biphenyl	0.033	J	0.036	0.022
2-Chloronaphthalene	ND		0.036	0.022
2-Nitroaniline	ND		0.036	0.022
Dimethyl phthalate	ND		0.036	0.027

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E15-11425-003
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/16/2015
Date Analyzed: 12/16/2015
Data file: C0724.D

GC/MS Column: DB-5
Sample wt/vol: 15.63g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.036	0.022
Acenaphthylene	0.145		0.036	0.025
3-Nitroaniline	ND		0.036	0.027
Acenaphthene	0.167		0.036	0.027
2,4-Dinitrophenol	ND		0.036	0.026
4-Nitrophenol	ND		0.036	0.029
2,4-Dinitrotoluene	ND		0.036	0.022
Dibenzofuran	0.125		0.036	0.022
Diethyl phthalate	ND		0.036	0.033
Fluorene	0.164		0.036	0.022
4-Chlorophenyl phenyl ether	ND		0.036	0.022
4-Nitroaniline	ND		0.036	0.022
1,2,4,5-Tetrachlorobenzene	ND		0.036	0.022
2,3,4,6-Tetrachlorophenol	ND		0.036	0.022
4,6-Dinitro-2-methylphenol	ND		0.036	0.022
N-Nitrosodiphenylamine	ND		0.036	0.022
4-Bromophenyl phenyl ether	ND		0.036	0.022
Hexachlorobenzene	ND		0.036	0.022
Atrazine	ND		0.036	0.022
Pentachlorophenol	ND		0.036	0.022
Phenanthrene	1.21		0.036	0.022
Anthracene	0.356		0.036	0.022
Carbazole	0.100		0.036	0.022
Di-n-butyl phthalate	ND		0.036	0.022
Fluoranthene	1.93		0.036	0.022
Pyrene	2.17		0.036	0.022
Butyl benzyl phthalate	ND		0.036	0.022
3,3'-Dichlorobenzidine	ND		0.036	0.025
Benzo[a]anthracene	1.10		0.036	0.022
Chrysene	1.23		0.036	0.022
Bis(2-ethylhexyl) phthalate	0.407		0.036	0.022
Di-n-octyl phthalate	ND		0.036	0.027
Benzo[b]fluoranthene	0.908		0.036	0.022
Benzo[k]fluoranthene	0.880		0.036	0.022
Benzo[a]pyrene	0.979		0.036	0.022
Indeno[1,2,3-cd]pyrene	0.480		0.036	0.032
Dibenz[a,h]anthracene	0.218		0.036	0.022
Benzo[g,h,i]perylene	0.459		0.036	0.022
Dinitrotoluene (2,4- and 2,6-)	ND		0.036	0.022
Total Target Compounds (68):	13.3	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-11425-001
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/15/2015
Date Analyzed: 12/16/2015
Data file: R8503.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.77g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-11425-002
Client ID: GPEC-P1P
Date Received: 12/15/2015
Date Extracted: 12/15/2015
Date Analyzed: 12/16/2015
Data file: R8504.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.88g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-11425-003
Client ID: GPEC-PIP
Date Received: 12/15/2015
Date Extracted: 12/15/2015
Date Analyzed: 12/16/2015
Data file: R8505.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.95g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	ND		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	ND		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-11425-001	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.68g
Date Received:	12/15/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	12/16/2015	Dilution Factor:	1
Date Analyzed:	12/17/2015	% Moisture:	13.5
Data File:	I4071.D		

Compound	Concentration	Q	RL	MDL
C9-C28	59.0		54.1	21.6
C28-C40	50.5	J	54.1	21.6
C9-C40 Total	110		54.1	21.6

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-11425-002	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.39g
Date Received:	12/15/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	12/16/2015	Dilution Factor:	1
Date Analyzed:	12/17/2015	% Moisture:	12.7
Data File:	I4073.D		

Compound	Concentration	Q	RL	MDL
C9-C28	310		55.1	22.0
C28-C40	297		55.1	22.0
C9-C40 Total	608		55.1	22.0

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E15-11425-003	GC Column:	RTX-5
Client ID:	GPEC-PIP	Sample wt/vol:	10.53g
Date Received:	12/15/2015	Matrix-Units:	Soil-mg/Kg
Date Extracted:	12/16/2015	Dilution Factor:	1
Date Analyzed:	12/17/2015	% Moisture:	11.6
Data File:	I4074.D		

Compound	Concentration	Q	RL	MDL
C9-C28	435		53.7	21.5
C28-C40	363		53.7	21.5
C9-C40 Total	798		53.7	21.5

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-11425-001
Client ID: GPEC-PIPE PAVING-05
Date Collected: 12/15/15 07:30
Date Received: 12/15/15 10:30
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 13.5
Batch #: 665

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	4.37		1	0.625	0.313	12/16/15 18:02	6020A
Arsenic	6.55		1	0.625	0.313	12/16/15 18:02	6020A
Beryllium	0.269	J	1	0.625	0.250	12/16/15 18:02	6020A
Cadmium	0.575	J	1	0.625	0.156	12/16/15 18:02	6020A
Chromium	19.7		1	0.625	0.625	12/16/15 18:02	6020A
Copper	148		1	0.625	0.625	12/16/15 18:02	6020A
Lead	161		1	0.625	0.625	12/16/15 18:02	6020A
Mercury	0.596		1	0.0066	0.0032	12/16/15 13:45	7471B
Nickel	16.1		1	0.625	0.625	12/16/15 18:02	6020A
Selenium	1.55		1	0.625	0.625	12/16/15 18:02	6020A
Silver	ND		1	0.625	0.156	12/16/15 18:02	6020A
Thallium	ND		1	0.625	0.156	12/16/15 18:02	6020A
Zinc	194		1	0.625	0.625	12/16/15 18:02	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-11425-002
Client ID: GPEC-PIPE PAVING-06
Date Collected: 12/15/15 07:35
Date Received: 12/15/15 10:30
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 12.7
Batch #: 665

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	11.3		1	0.609	0.305	12/16/15 18:06	6020A
Arsenic	12.4		1	0.609	0.305	12/16/15 18:06	6020A
Beryllium	0.339	J	1	0.609	0.244	12/16/15 18:06	6020A
Cadmium	0.962		1	0.609	0.152	12/16/15 18:06	6020A
Chromium	23.3		1	0.609	0.609	12/16/15 18:06	6020A
Copper	257		1	0.609	0.609	12/16/15 18:06	6020A
Lead	303		1	0.609	0.609	12/16/15 18:06	6020A
Mercury	4.62		1	0.0071	0.0034	12/16/15 13:48	7471B
Nickel	19.6		1	0.609	0.609	12/16/15 18:06	6020A
Selenium	1.24		1	0.609	0.609	12/16/15 18:06	6020A
Silver	0.475	J	1	0.609	0.152	12/16/15 18:06	6020A
Thallium	ND		1	0.609	0.152	12/16/15 18:06	6020A
Zinc	541		1	0.609	0.609	12/16/15 18:06	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Lab ID: E15-11425-003
Client ID: GPEC-PIPE PAVING-07
Date Collected: 12/15/15 07:40
Date Received: 12/15/15 10:30
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 11.6
Batch #: 665

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	8.19		1	0.604	0.302	12/16/15 18:11	6020A
Arsenic	7.15		1	0.604	0.302	12/16/15 18:11	6020A
Beryllium	0.349	J	1	0.604	0.241	12/16/15 18:11	6020A
Cadmium	0.667		1	0.604	0.151	12/16/15 18:11	6020A
Chromium	21.3		1	0.604	0.604	12/16/15 18:11	6020A
Copper	219		1	0.604	0.604	12/16/15 18:11	6020A
Lead	334		1	0.604	0.604	12/16/15 18:11	6020A
Mercury	2.51		1	0.0064	0.0031	12/16/15 13:51	7471B
Nickel	25.6		1	0.604	0.604	12/16/15 18:11	6020A
Selenium	1.66		1	0.604	0.604	12/16/15 18:11	6020A
Silver	0.325	J	1	0.604	0.151	12/16/15 18:11	6020A
Thallium	ND		1	0.604	0.151	12/16/15 18:11	6020A
Zinc	242		1	0.604	0.604	12/16/15 18:11	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP Lead

Client/Project: GEI-HSTAGPEC - PIPE PAVING

Batch #: 674
Date Received: 12/15/15 10:30
Method: 1311/6020A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E15-11425-001	GPEC-PIPE PAVING-05	0.187		1	TCLP Leachate mg/L	0.100	0.050	NA	12/15/15 07:30	12/18/15 10:37
E15-11425-002	GPEC-PIPE PAVING-06	0.388		1	TCLP Leachate mg/L	0.100	0.050	NA	12/15/15 07:35	12/18/15 10:42
E15-11425-003	GPEC-PIPE PAVING-07	0.445		1	TCLP Leachate mg/L	0.100	0.050	NA	12/15/15 07:40	12/18/15 10:46

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-HSTA/GPEC - PIPE PAVING

Date Received: 12/15/15 10:30
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E15-11425-001	GPEC-PIPE PAVING-05	ND		1	Soil-mg/Kg	953	1140	86.5	12/15/15 07:30	12/21/15 16:00
E15-11425-002	GPEC-PIPE PAVING-06	ND		1	Soil-mg/Kg	945	1130	87.3	12/15/15 07:35	12/21/15 16:00
E15-11425-003	GPEC-PIPE PAVING-07	ND		1	Soil-mg/Kg	933	1120	88.4	12/15/15 07:40	12/21/15 16:00

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Integrated Analytical Laboratories LLC

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants Inc	REPORT TO:	Chris Arnstasow
Address:	110 Walt Whitman Rd	Address:	carnstasow@geiconsultants.com
	Huntington Station, NY 11746		
Telephone #:	631-759-2976	Attn: Cell	631-689-7085
Fax #:		FAX #	
Project Manager:	Chris Morris	INVOICE TO:	GEIpayables@
EMAIL Address:	cmorris@geiconsultants.com	Address:	geiconsultants.com
Sampler:	Chris Arnstasow		
Project Name:	GTEC - Pipe Paving		
Project Location (State):	NY	Attn:	
Bottle Order #:		PO #	
Quote # :			

Turnaround Time (starts the following day if samples rec'd at lab > 5PM)

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE

NJ EPH DRO (5 day TAT) | NJ EPH Fractionated (5 day TAT)
NJ EPH - C40 (5 day TAT)
DRO-8015 (3-5 day TAT) | QAM025 (5 day TAT)

Verbal/Fax: Std 2 wk unless otherwise specified
24 hr** | 48 hr** | 72 hr** | 96 hr** | 1 wk**
Other** (specify): If possible - Call if not

Hard Copy: Std 3 week * | Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
Results Only	SRP format
Reduced	lab approved custom EDD
Regulatory - 15% Surcharge applies	NO EDD/CD REQ'D
Other (describe)	

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix
DW - Drinking Water AQ - Aqueous WW - Waste Water
OI - Oil LIQ - Liquid (Specify) OT - Other (Specify)
S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# container	IAL #	EPH	TCL VOCs + MTBE	Methyl Cetone	SVOCs 8270C	PCBs 8082	Sulfur	TCLP Lead	HCL	HNO3	MeOH	Other	None	Encore
GTEC-Pipe Paving-05	Comp	12/15/15	0730	Soil	2	1	X	X	X	X	X	X	X						
GTEC-Pipe Paving-06	1	1	0735	1	2	2	X	X	X	X	X	X	X						
GTEC-Pipe Paving-07	1	1	0740	1	2	3	X	X	X	X	X	X	X						

BOTTLES & PRESERVATIVES

Known Hazard: Yes or No Describe:

Conc. Expected: Low Med High

MDL Req: GWQS (11/05) - SRS - SRS/IGW - SRS Residential - OTHER (SEE COMMENTS)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Carrier (check one): _____ IAL Courier _____ Client Courier _____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:		12/15/15	0745	Received by:	12/15/15	0745
Relinquished by:		12/15/15	1030	Received by:	12/15/15	1030
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments: BSM Coal Tar/oil Requirements for Disposal

Lab Case #
11425

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

I:\2010 REV COC

10/2010 rev

E1145 Page 31

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E15-11425: GPEC - PIPE PAVING

To: Chris Morris
GEI Consultants Inc. - Huntington Station
Fax:
EMail: cmorris@geiconsultants.com; datag

Report To

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746
Attn: Chris Morris

Bill To

GEI Consultants Inc. - Huntington Station
400 Unicorn Park Drive
Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Result Only	CMORRIS	Dec 15, 2015 @ 10:30	NA	Dec 22, 2015	Jan 07, 2016 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
11425-001	GPEC-PIPE PAVING-05	NA	12/15/15@07:30	Soil	mg/Kg (ppm)	
11425-002	GPEC-PIPE PAVING-06	NA	12/15/15@07:35	Soil	mg/Kg (ppm)	
11425-003	GPEC-PIPE PAVING-07	NA	12/15/15@07:40	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	RUSH 1 WK	12/29/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	12/29/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	12/29/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	12/29/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	1/12/2016
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	6/12/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	1/12/2016
002	TCL VO	Analyze	8260C	RUSH 1 WK	12/29/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	12/29/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	12/29/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	12/29/2015
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	1/12/2016
	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	6/12/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	1/12/2016
003	TCL VO	Analyze	8260C	RUSH 1 WK	12/29/2015
	TCL BNA	Analyze	8270D	RUSH 1 WK	12/29/2015
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	RUSH 1 WK	12/29/2015
	TCL PCB	Analyze	8082A	RUSH 1 WK	12/29/2015

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Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E15-11425: GPEC - PIPE PAVING

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
003	TCLP Lead - Pb	Analyze	1311/6020A	RUSH 1 WK	6/12/2016
	PP Metals	Analyze	6020A/7471B	RUSH 1 WK	1/12/2016
	Sulfur as S	Analyze	D129	RUSH 1 WK	1/12/2016

Project Notes:

NOTE 1 taken by Ellen on 12/15/2015 12:41
ALSO EMAIL RESULTS TO CHRIS ANASTASIOU AT canastasiou@geiconsultants.com

NOTE 3 taken by Mark on 12/15/2015 01:17
PER CHRIS ANASTASIOU, TAT IS 1-WEEK.

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **11425** CLIENT: Et + Consultants

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 12/15/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ✓

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL VMD DATE 12/15

Laboratory Custody Chronicle

IAL Case No.

E15-11425

Client GEI Consultants Inc. - Huntington Station

Project GPEC - PIPE PAVING

Received On 12/15/2015@10:30

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	11425-001	Soil	n/a	n/a	12/16/15	Mei
"	-002	"	n/a	n/a	12/16/15	Mei
"	-003	"	n/a	n/a	12/16/15	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	12/16/15	Frank L.	12/16/15	Eleanor
"	-002	"	12/16/15	Frank L.	12/16/15	Eleanor
"	-003	"	12/16/15	Frank L.	12/16/15	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NJ-EPH (DRO) Cat 1	-001	Soil	12/16/15	Archimede	12/17/15	Bei
"	-002	"	12/16/15	Archimede	12/17/15	Bei
"	-003	"	12/16/15	Archimede	12/17/15	Bei
TCL PCB	-001	Soil	12/15/15	Archimede	12/16/15	Justyna
"	-002	"	12/15/15	Archimede	12/16/15	Justyna
"	-003	"	12/15/15	Archimede	12/16/15	Justyna

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	12/16/15	Frank R.	12/16/15	Danielle
"	-002	"	12/16/15	Frank R.	12/16/15	Danielle
"	-003	"	12/16/15	Frank R.	12/16/15	Danielle
TCLP Lead - Pb	-001	Soil	12/18/15	Frank R.	12/18/15	Danielle
"	-002	"	12/18/15	Frank R.	12/18/15	Danielle
"	-003	"	12/18/15	Frank R.	12/18/15	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	12/21/15	Robert
"	-002	"	n/a	n/a	12/21/15	Robert
"	-003	"	n/a	n/a	12/21/15	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

LAST PAGE OF DOCUMENT

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042

Project Name: **GREENPOINT WC**
IAL Case Number: **E14-09161**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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Sample Summary

IAL Case No.
E14-09161

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 9/24/2014@11:30

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
09161-001	GPEC-WC092314	n/a	9/23/2014@14:20	Soil	3

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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This report was finalized on October 09, 2014

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC

CASE NARRATIVE

IAL SDG No.: E14-09161

Sample Received Date: 9/24/14@11:30

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4°C

Client ID	Sample Date	IAL Lab No.	Analysis/Method
GPEC-WC092314	9/23/2014	09161-001	VO(8260C), GRO(8260C), BN(8270D), PCB(8082A),TPH-DRO(8015D), METALS(6020A/7471B), TCLP Pb(1311/6020A), SULFUR(D129)

Except as noted below, all method specific requirements and QA/QC criteria were met.

Volatile Organic Analysis/TPH-GRO (8260C):
Samples were run straight using methanol preserved sample. This sample preservation technique elevates MDLS and RLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.

PCB (8082A):
Samples were cleaned up using method 3660B to remove sulfur.

E14-09161 0001

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE TRACKING

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.lalonline.com

CUSTOMER INFO		REPORTING INFO	
Company:	GEI Consultants, Inc	REPORT TO:	Datagroup@gei
Address:	1 Greenwood Ave Ste 210	Address:	consultants.com
	Montclair NJ 07042		
Telephone #:	973 873 7110	Attn:	Jaimie Wargo
Fax #:	973 509 9625	FAX #	
Project Manager:	Jerry Zak	INVOICE TO:	GEI Payables@
EMAIL Address:	jzak@geiconsultants.com	Address:	geiconsultants.com
Sampled by:	Andrew White		
Project Name:	Greenpoint	Attn:	Sandra St. Hilaire
Project Location (State):	New York	PO #	125180-2-1207
Bottle Order #:		Quote #	

COMPLETED BY IAL:

____ Field Sampling ____ Equipment Rental

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. Turnaround Time starts the following day if samples rec'd at lab > 5PM

*Lab notification is required for RUSH TAT prior to sample arrival. RUSH TAT IS NOT GUARANTEED WITHOUT LAB APPROVAL. **RUSH SURCHARGES WILL APPLY IF ABLE TO ACCOMMODATE

PHC - MUST CHOOSE — TAT for Hydrocarbons (if other than 2 weeks) _____

NJ EPH DRO

NJ EPH - C40

NJ EPH Fractionated — DRO-8015

Verbal/Fax: Std 2 wk unless otherwise specified

24 hr** 48 hr** 72 hr** 96 hr** 1 wk**

Other** (specify): _____

Hard Copy: Std 3 week * Other - call for price

Rush TAT Charge **
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day 10%

Report Format	EDDs
NJ Results Only	NJ SRP format
NY Cat A	
NJ Reduced	NYSDEC
NJ Regulatory	
NY Cat B	lab approved custom EDD
15% Surcharge applies	
Other (describe)	NO EDD/CD REQ'D

Cooler Temp 4 °C

SAMPLE INFORMATION

Sample Matrix

DW - Drinking Water AQ - Aqueous WW - Waste Water OI - Oil

LIQ - Liquid (Specify) S - Soil SL - Sludge SOL - Solid W - Wipe

ANALYTICAL PARAMETERS

 # BOTTLES & PRESERVATIVES

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	EPH	VOCs	PP Metals	SVOCs	PCBs	Sulfur	TCLP Lead	HCL	HNO3	H2SO4	NaOH	Other	None	Plastic
GPEC-WC092314		9/23/14	14:20	S	3	1	X	X	X	X	X	X	X						3	

Known Hazard: Yes or No

Describe:

Conc. Expected: Low Med High

MDL Req: ____

NJ GWQS

NJ IGW

NJ SRS

NY TOGS

NY CP51

NY Part 375 Restricted

NY Part 375 Unrestricted

Other (specify): _____

Carrier (check one): ✓ IAL Courier ____ Client Courier ____ FedEx/UPS

	Signature/Company	Date	Time	Signature/Company	Date	Time
Relinquished by:	Andrew White/GEI			Received by:	9/24/14	959
Relinquished by:		9/24/14	1130	Received by:	9/24/14	17:30
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		

Comments:

Lab Case # 9161

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

01/2014

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E14-09161: GREENPOINT WC

To: Jerry Zak
GEI Consultants Inc. - Montclair
Fax: 1(973) 509-9625
EMail: jzak@geiconsultants.com;msweet@

Report To

GEI Consultants Inc. - Montclair
1 Greenwood Ave.
Suite 210
Montclair, NJ 07042
Attn: Jerry Zak

Bill To

GEI Consultants Inc. - Montclair
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category B	125180-2-1207	Sep 24, 2014 @ 11:30	NA	Oct 08, 2014	Oct 15, 2014 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Equis GEI

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
09161-001	GPEC-WC092314	NA	09/23/14@14:20	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	STD/2 WKS	10/7/2014
	TPH-GRO	Analyze	8260C	STD/2 WKS	10/7/2014
	TCL BNA	Analyze	8270D	STD/2 WKS	10/7/2014
	TPH-DRO	Analyze	8015D	STD/2 WKS	10/7/2014
	TCL PCB	Analyze	8082A	STD/2 WKS	10/7/2014
	PP Metals	Analyze	6020A/7471B	STD/2 WKS	10/21/2014
	TCLP Lead - Pb	Analyze	1311/6020A	STD/2 WKS	3/22/2015
	Sulfur as S	Analyze	D129	STD/2 WKS	10/21/2014

Project Notes:

NOTE 1 taken by kim on 09/24/2014 04:37
LOGGED IN THE SAME AS PREVIOUS WASTE CLASS JOB E14-03328 WITH VO/BNA/PCB LISTS UPDATED TO TCL.

LOGGED IN TPH AS DRO/GRO.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

E14-09161 0005

IAL is a NELAP accredited lab (11101284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 14** **09161** CLIENT: MET Consultants

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE **Comments**

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL RF DATE 9/29/14

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ✓

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL MMD DATE 9/29

REV 03/2013

Laboratory Custody Chronicle

IAL Case No.
E14-09161

Client GEI Consultants Inc. - Montclair

Project GREENPOINT WC

Received On 9/24/2014@11:30

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	09161-001	Soil	n/a	n/a	9/23/14	Mei
TPH-GRO	-001	Soil	n/a	n/a	9/26/14	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	9/25/14	Kou-Liang	9/29/14	Eleanor

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	-001	Soil	9/29/14	Archimede	9/30/14	Justyna
TPH-DRO	-001	Soil	9/25/14	Archimede	9/26/14	McKenzie

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
PP Metals	-001	Soil	9/25/14	Frank	9/29/14	Danielle
TCLP Lead - Pb	-001	Soil	9/26/14	Frank	9/26/14	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	10/ 7/14	Robert

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E14-09161

Lab ID:	**09161-001**		
Client ID:	**GPEC-WC092314**		
Matrix:	**Soil**		
Sampled Date	**9/23/14**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*	
Dichlorodifluoromethane	ND		0.075
Chloromethane	ND		0.067
Vinyl chloride	ND		0.051
Bromomethane	ND		0.063
Chloroethane	ND		0.066
Trichlorofluoromethane	ND		0.076
1,1-Dichloroethene	ND		0.059
Acetone	ND		0.089
Carbon disulfide	ND		0.069
Methylene chloride	ND		0.207
trans-1,2-Dichloroethene	ND		0.050
Methyl tert-butyl ether (MTBE)	ND		0.050
1,1-Dichloroethane	ND		0.048
cis-1,2-Dichloroethene	ND		0.047
2-Butanone (MEK)	ND		0.065
Bromochloromethane	ND		0.062
Chloroform	ND		0.077
1,1,1-Trichloroethane	ND		0.055
Carbon tetrachloride	ND		0.078
1,2-Dichloroethane (EDC)	ND		0.041
Benzene	0.064	J	0.048
Trichloroethene	ND		0.048
1,2-Dichloropropane	ND		0.051
1,4-Dioxane	ND		6.03
Bromodichloromethane	ND		0.051
cis-1,3-Dichloropropene	ND		0.048
4-Methyl-2-pentanone (MIBK)	ND		0.045
Toluene	ND		0.030
trans-1,3-Dichloropropene	ND		0.048
1,1,2-Trichloroethane	ND		0.050
Tetrachloroethene	ND		0.052
2-Hexanone	ND		0.048
Dibromochloromethane	ND		0.043
1,2-Dibromoethane (EDB)	ND		0.056
Chlorobenzene	ND		0.057
Ethylbenzene	ND		0.051
Total Xylenes	ND		0.130
Styrene	ND		0.055
Bromoform	ND		0.055
Isopropylbenzene	ND		0.046
1,1,2,2-Tetrachloroethane	ND		0.048
1,3-Dichlorobenzene	ND		0.049

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summati

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E14-09161

Lab ID:	**09161-001**		
Client ID:	**GPEC-WC092314**		
Matrix:	**Soil**		
Sampled Date	**9/23/14**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)		***(mg/Kg)***	
1,4-Dichlorobenzene	ND		0.042
1,2-Dichlorobenzene	ND		0.042
1,2-Dibromo-3-chloropropane	ND		0.071
1,2,4-Trichlorobenzene	ND		0.057
1,2,3-Trichlorobenzene	ND		0.066
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.086
Methyl acetate	ND		0.084
Cyclohexane	ND		0.066
Methylcyclohexane	ND		0.073
1,3-Dichloropropene (cis- and trans-)	ND		0.048
TOTAL VO's:	0.064	J	
Semivolatiles - BNA (Units)		***(mg/Kg)***	
N-Nitrosodimethylamine	ND		0.020
Pyridine	ND		0.020
Phenol	ND		0.020
Aniline	ND		0.023
Bis(2-chloroethyl) ether	ND		0.020
2-Chlorophenol	ND		0.031
1,3-Dichlorobenzene	ND		0.020
1,4-Dichlorobenzene	ND		0.029
Benzyl alcohol	ND		0.027
1,2-Dichlorobenzene	ND		0.029
2-Methylphenol	ND		0.024
Bis(2-chloroisopropyl) ether	ND		0.022
4-Methylphenol **	ND		0.024
N-Nitrosodi-n-propylamine	ND		0.030
Hexachloroethane	ND		0.029
Nitrobenzene	ND		0.022
Isophorone	ND		0.033
2-Nitrophenol	ND		0.020
2,4-Dimethylphenol	ND		0.020
Bis(2-chloroethoxy) methane	ND		0.028
Benzoic acid	ND		0.025
2,4-Dichlorophenol	ND		0.025
1,2,4-Trichlorobenzene	ND		0.020
Naphthalene	0.134		0.020
4-Chloroaniline	ND		0.020
Hexachlorobutadiene	ND		0.026
4-Chloro-3-methylphenol	ND		0.021

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summat

Continued on next page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E14-09161

Lab ID:	**09161-001**		
Client ID:	**GPEC-WC092314**		
Matrix:	**Soil**		
Sampled Date	**9/23/14**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
2-Methylnaphthalene	0.053		0.025
Hexachlorocyclopentadiene	ND		0.020
2,4,6-Trichlorophenol	ND		0.020
2,4,5-Trichlorophenol	ND		0.020
2-Chloronaphthalene	ND		0.020
2-Nitroaniline	ND		0.020
Dimethyl phthalate	ND		0.022
2,6-Dinitrotoluene	ND		0.020
Acenaphthylene	0.069		0.020
3-Nitroaniline	ND		0.025
Acenaphthene	0.368		0.031
2,4-Dinitrophenol	ND		0.020
4-Nitrophenol	ND		0.031
2,4-Dinitrotoluene	ND		0.020
Dibenzofuran	0.080		0.027
Diethyl phthalate	ND		0.020
Fluorene	0.178		0.020
4-Chlorophenyl phenyl ether	ND		0.020
4-Nitroaniline	ND		0.020
4,6-Dinitro-2-methylphenol	ND		0.020
N-Nitrosodiphenylamine	ND		0.020
1,2-Diphenylhydrazine	ND		0.020
4-Bromophenyl phenyl ether	ND		0.020
Hexachlorobenzene	ND		0.020
Pentachlorophenol	ND		0.020
Phenanthrene	0.425		0.020
Anthracene	0.263		0.020
Carbazole	ND		0.020
Di-n-butyl phthalate	ND		0.020
Fluoranthene	1.24		0.020
Benzidine	ND		0.020
Pyrene	1.27		0.020
Butyl benzyl phthalate	ND		0.020
3,3'-Dichlorobenzidine	ND		0.020
Benzo[a]anthracene	0.533		0.020
Chrysene	0.617		0.020
Bis(2-ethylhexyl) phthalate	0.294		0.020
Di-n-octyl phthalate	ND		0.020
Benzo[b]fluoranthene	0.507		0.020
Benzo[k]fluoranthene	0.472		0.020
Benzo[a]pyrene	0.557		0.020
Indeno[1,2,3-cd]pyrene	0.244		0.020
Dibenz[a,h]anthracene	0.115		0.020
Benzo[g,h,i]perylene	0.179		0.020
TOTAL BNA'S:	7.60		

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E14-09161

Lab ID:	**09161-001**		
Client ID:	**GPEC-WC092314**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**9/23/14**		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	***(mg/Kg)***		
Aroclor-1016	ND		0.015
Aroclor-1221	ND		0.015
Aroclor-1232	ND		0.015
Aroclor-1242	ND		0.015
Aroclor-1248	ND		0.015
Aroclor-1254	0.100		0.015
Aroclor-1260	ND		0.015
Aroclor-1262	ND		0.015
Aroclor-1268	ND		0.015
PCBs	0.100		0.015
TPH-GRO (Units)	***(mg/Kg)***		
TPH-GRO	21.7		4.17
Hydrocarbons (Units)	***(mg/Kg)***		
TPH-DRO	266		60.6
Metals (Units)	***(mg/Kg)***		
Antimony	ND		0.260
Arsenic	3.25		0.260
Beryllium	ND		0.208
Cadmium	0.444	J	0.130
Chromium	7.39		0.520
Copper	70.0		0.520
Lead	99.0		0.520
Mercury	0.741		0.025
Nickel	7.19		0.520
Selenium	ND		0.520
Silver	ND		0.130
Thallium	0.339	J	0.130
Zinc	156		0.520
TCLP Metals (Units)	***(mg/L)***		
TCLP Lead	0.673		0.050

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Montclair
Project: GREENPOINT WC
Lab Case No.: E14-09161

Lab ID:	**09161-001**		
Client ID:	**GPEC-WC092314**		
Matrix:	**Soil**		
Sampled Date	**9/23/14**		
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Sulfur as S(mg/Kg)	973	J	859

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, PhD
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 09161-001
Client ID: GPEC-WC092314
Date Received: 09/24/2014
Date Analyzed: 09/25/2014
Data file: J4663.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.104	0.075
Chloromethane	ND		0.104	0.067
Vinyl chloride	ND		0.104	0.051
Bromomethane	ND		0.104	0.063
Chloroethane	ND		0.104	0.066
Trichlorofluoromethane	ND		0.104	0.076
1,1-Dichloroethene	ND		0.104	0.059
Acetone	ND		0.208	0.089
Carbon disulfide	ND		0.104	0.069
Methylene chloride	ND		0.208	0.207
trans-1,2-Dichloroethene	ND		0.104	0.050
Methyl tert-butyl ether (MTBE)	ND		0.104	0.050
1,1-Dichloroethane	ND		0.104	0.048
cis-1,2-Dichloroethene	ND		0.104	0.047
2-Butanone (MEK)	ND		0.104	0.065
Bromochloromethane	ND		0.104	0.062
Chloroform	ND		0.104	0.077
1,1,1-Trichloroethane	ND		0.104	0.055
Carbon tetrachloride	ND		0.104	0.078
1,2-Dichloroethane (EDC)	ND		0.104	0.041
Benzene	0.064	J	0.104	0.048
Trichloroethene	ND		0.104	0.048
1,2-Dichloropropane	ND		0.104	0.051
1,4-Dioxane	ND		20.8	6.03
Bromodichloromethane	ND		0.104	0.051
cis-1,3-Dichloropropene	ND		0.104	0.048
4-Methyl-2-pentanone (MIBK)	ND		0.104	0.045

E14-09161 0015

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 09161-001
Client ID: GPEC-WC092314
Date Received: 09/24/2014
Date Analyzed: 09/25/2014
Data file: J4663.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.104	0.030
trans-1,3-Dichloropropene	ND		0.104	0.048
1,1,2-Trichloroethane	ND		0.104	0.050
Tetrachloroethene	ND		0.104	0.052
2-Hexanone	ND		0.104	0.048
Dibromochloromethane	ND		0.104	0.043
1,2-Dibromoethane (EDB)	ND		0.104	0.056
Chlorobenzene	ND		0.104	0.057
Ethylbenzene	ND		0.104	0.051
Total Xylenes	ND		0.208	0.130
Styrene	ND		0.104	0.055
Bromoform	ND		0.104	0.055
Isopropylbenzene	ND		0.104	0.046
1,1,2,2-Tetrachloroethane	ND		0.104	0.048
1,3-Dichlorobenzene	ND		0.104	0.049
1,4-Dichlorobenzene	ND		0.104	0.042
1,2-Dichlorobenzene	ND		0.104	0.042
1,2-Dibromo-3-chloropropane	ND		0.104	0.071
1,2,4-Trichlorobenzene	ND		0.104	0.057
1,2,3-Trichlorobenzene	ND		0.104	0.066
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.104	0.086
Methyl acetate	ND		0.208	0.084
Cyclohexane	ND		0.208	0.066
Methylcyclohexane	ND		0.104	0.073
1,3-Dichloropropene (cis- and trans-)	ND		0.104	0.048
Total Target Compounds (52):	0.064	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0016

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: 09161-001
Client ID: GPEC-WC092314
Date Received: 09/24/2014
Date Analyzed: 09/26/2014
Data file: J4675.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
TPH-GRO	21.7		5.21	4.17

Total Target Compounds (1): 21.7

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E14-09161-001
Client ID: GPEC-WC0
Date Received: 09/24/2014
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0343.D

GC/MS Column: DB-5
Sample wt/vol: 15.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.020
Pyridine	ND		0.033	0.020
Phenol	ND		0.033	0.020
Aniline	ND		0.033	0.023
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.031
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.029
Benzyl alcohol	ND		0.033	0.027
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.024
Bis(2-chloroisopropyl) ether	ND		0.033	0.022
4-Methylphenol **	ND		0.033	0.024
N-Nitrosodi-n-propylamine	ND		0.033	0.030
Hexachloroethane	ND		0.033	0.029
Nitrobenzene	ND		0.033	0.022
Isophorone	ND		0.033	0.033
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.020
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.025
2,4-Dichlorophenol	ND		0.033	0.025
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	0.134		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
Hexachlorobutadiene	ND		0.033	0.026
4-Chloro-3-methylphenol	ND		0.033	0.021
2-Methylnaphthalene	0.053		0.033	0.025
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.022

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E14-09161-001
Client ID: GPEC-WC0
Date Received: 09/24/2014
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0343.D

GC/MS Column: DB-5
Sample wt/vol: 15.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	0.069		0.033	0.020
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	0.368		0.033	0.031
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.031
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	0.080		0.033	0.027
Diethyl phthalate	ND		0.033	0.020
Fluorene	0.178		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	0.425		0.033	0.020
Anthracene	0.263		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	1.24		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	1.27		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.020
Benzo[a]anthracene	0.533		0.033	0.020
Chrysene	0.617		0.033	0.020
Bis(2-ethylhexyl) phthalate	0.294		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.020
Benzo[b]fluoranthene	0.507		0.033	0.020
Benzo[k]fluoranthene	0.472		0.033	0.020
Benzo[a]pyrene	0.557		0.033	0.020
Indeno[1,2,3-cd]pyrene	0.244		0.033	0.020
Dibenz[a,h]anthracene	0.115		0.033	0.020
Benzo[g,h,i]perylene	0.179		0.033	0.020

Total Target Compounds (71): 7.60

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the to[illegible]

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0019

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E14-09161-001
Client ID: GPEC-WC0
Date Received: 09/24/2014
Date Extracted: 09/29/2014
Date Analyzed: 09/30/2014
Data file: R1062.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	0.100		0.038	0.015
Aroclor-1260	ND		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.100		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0020

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID:	09161-001	GC Column:	RTX-5
Client ID:	GPEC-WC092314	Sample wt/vol:	10.32g
Date Received:	09/24/2014	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	09/25/2014	Dilution Factor:	1
Date Analyzed:	09/26/2014	%Moisture:	4.00
Data File:	QB7310.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	266		75.7	60.6

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: GEI-MTCLR/GREENPOINT

Lab ID: E14-09161-001
Client ID: GPEC-WC092314
Date Collected: 09/23/14 14:20
Date Received: 09/24/14 11:30
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 4.00
Batch #: 455

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Antimony	ND		1	0.520	0.260	09/29/14 21:40	6020A
Arsenic	3.25		1	0.520	0.260	09/29/14 21:40	6020A
Beryllium	ND		1	0.520	0.208	09/29/14 21:40	6020A
Cadmium	0.444	J	1	0.520	0.130	09/29/14 21:40	6020A
Chromium	7.39		1	0.520	0.520	09/29/14 21:40	6020A
Copper	70.0		1	0.520	0.520	09/29/14 21:40	6020A
Lead	99.0		1	0.520	0.520	09/29/14 21:40	6020A
Mercury	0.741		1	0.052	0.025	09/26/14 13:27	7471B
Nickel	7.19		1	0.520	0.520	09/29/14 21:40	6020A
Selenium	ND		1	0.520	0.520	09/29/14 21:40	6020A
Silver	ND		1	0.520	0.130	09/29/14 21:40	6020A
Thallium	0.339	J	1	0.520	0.130	09/29/14 21:40	6020A
Zinc	156		1	0.520	0.520	09/29/14 21:40	6020A

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TCLP Lead

Client/Project: GEI-MTCLRGREENPOINT

Batch #: 457
Date Received: 09/24/14 11:30
Method: 1311/6020A

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	RL	MDL	% Moist	Date Collected	Date Analyzed
E14-09161-001	GPEC-WC092314	0.673		1	TCLP Leachate mg/L	0.100	0.050	NA	09/23/14 14:20	09/26/14 18:51

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-MTCLR/GREENPOINT WC

Date Received: 09/24/14 11:30
Method: D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E14-09161-001	GPEC-WC092314	973	J	1	Soil-mg/Kg	859	1030	96.0	09/23/14 14:20	10/07/14 17:00

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 09/25/2014

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKM140925-01	MEOH	J4644.D	101	100	98
09096-005	MEOH	J4645.D	98	100	99
09143-001	MEOH	J4646.D	98	101	101
09156-001	SOLID	J4649.D	99	101	100
09111-001	MEOH	J4651.D	98	101	99
09104-002	MEOH	J4652.D	100	101	100
09104-005	MEOH	J4653.D	102	98	99
09104-006	MEOH	J4654.D	101	99	99
LCSM140925-01	MEOH	J4655.D	98	99	98
09096-005MS	MEOH	J4656.D	99	100	100
09096-005MSD	MEOH	J4657.D	100	98	99
09109-001	MEOH	J4660.D	96	98	98
09160-003	MEOH	J4662.D	101	100	99
09161-001	MEOH	J4663.D	98	98	101
09154-007	MEOH	J4665.D	103	98	99
09176-001	MEOH	J4666.D	101	97	99

	Concentration	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	59-138	43-133
SMC2 = Toluene-d8	50 ppb	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	42-152	45-145

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSM140925-01
Date Received:
Date Analyzed: 09/25/2014
LCS Data file: J4655.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.
Dichlorodifluoromethane	50.0	0.0	62.1	124
Chloromethane	50.0	0.0	52.0	104
Vinyl chloride	50.0	0.0	53.6	107
Bromomethane	50.0	0.0	52.1	104
Chloroethane	50.0	0.0	54.6	109
Trichlorofluoromethane	50.0	0.0	58.3	117
Acrolein	150	0.0	132.6	88
1,1-Dichloroethene	50.0	0.0	60.5	121
Acetone	50.0	0.0	63.4	127
Carbon disulfide	50.0	0.0	57.6	115
Vinyl acetate	50.0	0.0	43.2	86
Methylene chloride	50.0	0.0	53.4	107
Acrylonitrile	150.0	0.0	194.5	130
tert-Butyl alcohol (TBA)	100.0	0.0	115.2	115
trans-1,2-Dichloroethene	50.0	0.0	55.8	112
Methyl tert-butyl ether (MTBE)	50.0	0.0	52.0	104
1,1-Dichloroethane	50.0	0.0	51.7	103
Diisopropyl ether (DIPE)	50.0	0.0	51.2	102
cis-1,2-Dichloroethene	50.0	0.0	52.4	105
2,2-Dichloropropane	50.0	0.0	55.6	111
2-Butanone (MEK)	50.0	0.0	45.6	91
Bromochloromethane	50.0	0.0	53.1	106
Chloroform	50.0	0.0	53.2	106
1,1,1-Trichloroethane	50.0	0.0	55.7	111
Carbon tetrachloride	50.0	0.0	56.5	113
1,1-Dichloropropene	50.0	0.0	54.8	110
1,2-Dichloroethane (EDC)	50.0	0.0	50.8	102
Benzene	50.0	0.0	50.8	102
Trichloroethene	50.0	0.0	52.8	106
1,2-Dichloropropane	50.0	0.0	48.4	97
Dibromomethane	50.0	0.0	48.3	97
1,4-Dioxane	1500	0.0	1851	123
Bromodichloromethane	50.0	0.0	48.8	98
2-Chloroethyl vinyl ether	50.0	0.0	45.8	92
cis-1,3-Dichloropropene	50.0	0.0	47.2	94
4-Methyl-2-pentanone (MIBK)	50.0	0.0	45.3	91
Toluene	50.0	0.0	50.2	100
trans-1,3-Dichloropropene	50.0	0.0	46.0	92
1,1,2-Trichloroethane	50.0	0.0	49.8	100
Tetrachloroethene	50.0	0.0	54.0	108
1,3-Dichloropropane	50.0	0.0	47.1	94

E14-09161 0028

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSM140925-01
Date Received:
Date Analyzed: 09/25/2014
LCS Data file: J4655.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.
2-Hexanone	50.0	0.0	47.0	94
Dibromochloromethane	50.0	0.0	47.5	95
1,2-Dibromoethane (EDB)	50.0	0.0	49.3	99
Chlorobenzene	50.0	0.0	45.7	91
1,1,1,2-Tetrachloroethane	50.0	0.0	47.8	96
Ethylbenzene	50.0	0.0	48.7	97
m,p-Xylene	100.0	0.0	95.6	96
o-Xylene	50.0	0.0	49.6	99
Styrene	50.0	0.0	46.9	94
Bromoform	50.0	0.0	44.2	88
Isopropylbenzene	50.0	0.0	50.8	102
1,1,2,2-Tetrachloroethane	50.0	0.0	45.7	91
Bromobenzene	50.0	0.0	47.6	95
1,2,3-Trichloropropane	50.0	0.0	46.6	93
n-Propylbenzene	50.0	0.0	50.1	100
2-Chlorotoluene	50.0	0.0	47.9	96
1,3,5-Trimethylbenzene	50.0	0.0	49.1	98
4-Chlorotoluene	50.0	0.0	46.3	93
tert-Butylbenzene	50.0	0.0	52.1	104
1,2,4-Trimethylbenzene	50.0	0.0	49.4	99
sec-Butylbenzene	50.0	0.0	50.3	101
1,3-Dichlorobenzene	50.0	0.0	46.7	93
4-Isopropyltoluene	50.0	0.0	50.3	101
1,4-Dichlorobenzene	50.0	0.0	46.3	93
n-Butylbenzene	50.0	0.0	51.5	103
1,2-Dichlorobenzene	50.0	0.0	48.4	97
1,2-Dibromo-3-chloropropane	50.0	0.0	60.6	121
1,2,4-Trichlorobenzene	50.0	0.0	62.1	124
Hexachlorobutadiene	50.0	0.0	61.4	123
Naphthalene	50.0	0.0	64.9	130
1,2,3-Trichlorobenzene	50.0	0.0	64.6	129
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	57.1	114
Methyl acetate	50.0	0.0	58.6	117
Cyclohexane	50.0	0.0	60.2	120
Methylcyclohexane	50.0	0.0	57.7	115

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits
Up to 10% of the compounds may be out , but must be within 40-160%

E14-09161 0029

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 09096-005
Client ID: STOCKPILE_S5
Date Received:
Date Analyzed: 09/25/2014
MS Data file: J4656.D
MSD Data file: J4657.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
Dichlorodifluoromethane	50.0	0.0	58.4	117		59.7	119	2
Chloromethane	50.0	0.0	53.3	107		53.7	107	1
Vinyl chloride	50.0	0.0	53.5	107		54.9	110	3
Bromomethane	50.0	0.0	54.1	108		54.6	109	1
Chloroethane	50.0	0.0	54.9	110		56.2	112	2
Trichlorofluoromethane	50.0	0.0	55.9	112		58.6	117	5
Acrolein	150	0.0	148	99		156	104	5
1,1-Dichloroethene	50.0	0.0	60.8	122		62.5	125	3
Acetone	50.0	0.0	63.4	127		63.0	126	1
Carbon disulfide	50.0	0.0	58.4	117		59.7	119	2
Vinyl acetate	50.0	0.0	43.3	87		42.3	85	2
Methylene chloride	50.0	0.0	57.4	115		57.1	114	1
Acrylonitrile	150	0.0	175	117		183	122	4
tert-Butyl alcohol (TBA)	100	0.0	119.9	120		121.3	121	1
trans-1,2-Dichloroethene	50.0	0.0	56.7	113		57.9	116	2
Methyl tert-butyl ether (MTBE)	50.0	0.0	55.6	111		55.7	111	0
1,1-Dichloroethane	50.0	0.0	54.4	109		54.8	110	1
Diisopropyl ether (DIPE)	50.0	0.0	54.2	108		53.9	108	1
cis-1,2-Dichloroethene	50.0	0.0	55.7	111		54.8	110	2
2,2-Dichloropropane	50.0	0.0	57.1	114		56.6	113	1
2-Butanone (MEK)	50.0	0.0	46.4	93		45.9	92	1
Bromochloromethane	50.0	0.0	55.5	111		54.8	110	1
Chloroform	50.0	0.0	56.4	113		56.4	113	0
1,1,1-Trichloroethane	50.0	0.0	56.6	113		57.3	115	1
Carbon tetrachloride	50.0	0.0	56.3	113		58.2	116	3
1,1-Dichloropropene	50.0	0.0	55.3	111		56.6	113	2
1,2-Dichloroethane (EDC)	50.0	0.0	52.8	106		53.0	106	0
Benzene	50.0	0.0	52.5	105		52.1	104	1
Trichloroethene	50.0	0.0	54.8	110		56.0	112	2
1,2-Dichloropropane	50.0	0.0	49.4	99		48.6	97	2
Dibromomethane	50.0	0.0	51.8	104		50.9	102	2
1,4-Dioxane	1,500	0.0	1871	125		1733	116	8
Bromodichloromethane	50.0	0.0	51.1	102		50.3	101	2
2-Chloroethyl vinyl ether	50.0	0.0	45.3	91		44.9	90	1
cis-1,3-Dichloropropene	50.0	0.0	48.5	97		47.2	94	3
4-Methyl-2-pentanone (MIBK)	50.0	0.0	48.2	96		47.1	94	2
Toluene	50.0	0.0	51.1	102		50.3	101	2
trans-1,3-Dichloropropene	50.0	0.0	46.8	94		46.1	92	2
1,1,2-Trichloroethane	50.0	0.0	50.5	101		49.6	99	2
Tetrachloroethene	50.0	0.0	53.9	108		54.0	108	0
1,3-Dichloropropane	50.0	0.0	47.9	96		47.7	95	0

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INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 09096-005
Client ID: STOCKPILE_S5
Date Received:
Date Analyzed: 09/25/2014
MS Data file: J4656.D
MSD Data file: J4657.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
2-Hexanone	50.0	0.0	45.2	90		45.1	90	0
Dibromochloromethane	50.0	0.0	49.9	100		49.3	99	1
1,2-Dibromoethane (EDB)	50.0	0.0	50.4	101		50.0	100	1
Chlorobenzene	50.0	0.0	46.8	94		46.8	94	0
1,1,1,2-Tetrachloroethane	50.0	0.0	49.5	99		50.4	101	2
Ethylbenzene	50.0	0.0	49.2	98		50.0	100	2
m,p-Xylene	100	0.0	98.4	98		98.3	98	0
o-Xylene	50.0	0.0	51.2	102		50.3	101	2
Styrene	50.0	0.0	48.6	97		48.3	97	1
Bromoform	50.0	0.0	45.4	91		45.6	91	0
Isopropylbenzene	50.0	0.0	52.2	104		52.8	106	1
1,1,2,2-Tetrachloroethane	50.0	0.0	46.6	93		46.2	92	1
Bromobenzene	50.0	0.0	49.0	98		48.9	98	0
1,2,3-Trichloropropane	50.0	0.0	47.4	95		47.1	94	1
n-Propylbenzene	50.0	0.0	50.8	102		52.1	104	3
2-Chlorotoluene	50.0	0.0	49.4	99		49.8	100	1
1,3,5-Trimethylbenzene	50.0	0.0	51.7	103		52.3	105	1
4-Chlorotoluene	50.0	0.0	48.4	97		48.0	96	1
tert-Butylbenzene	50.0	0.0	53.1	106		53.7	107	1
1,2,4-Trimethylbenzene	50.0	0.0	51.7	103		51.6	103	0
sec-Butylbenzene	50.0	0.0	53.1	106		53.6	107	1
1,3-Dichlorobenzene	50.0	0.0	49.3	99		49.2	98	0
4-Isopropyltoluene	50.0	0.0	53.1	106		54.0	108	2
1,4-Dichlorobenzene	50.0	0.0	48.2	96		47.6	95	1
n-Butylbenzene	50.0	0.0	53.3	107		55.0	110	3
1,2-Dichlorobenzene	50.0	0.0	50.4	101		49.8	100	1
1,2-Dibromo-3-chloropropane	50.0	0.0	64.2	128		62.9	126	2
1,2,4-Trichlorobenzene	50.0	0.0	56.6	113		59.4	119	5
Hexachlorobutadiene	50.0	0.0	63.1	126		59.6	119	6
Naphthalene	50.0	0.0	64.5	129		62.6	125	3
1,2,3-Trichlorobenzene	50.0	0.0	64.0	128		64.8	130	1
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	57.0	114		57.5	115	1
Methyl acetate	50.0	0.0	60.1	120		61.8	124	3
Cyclohexane	50.0	0.0	55.9	112		57.1	114	2
Methylcyclohexane	50.0	0.0	57.4	115		59.6	119	4

	Leachate Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION/DKQPs (RPD)	30/20	30/30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of ac

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Up to 10% of the compounds may be out , but must be within 40-160%

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J4644.D Instrument ID: MSD_J

Date Analyzed: 09/25/2014 Time Analyzed: 11:51

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
STOCKPILE_S5	09096-005	09/25/2014	12:18
FWC_FOR_PURE_S	09143-001	09/25/2014	12:45
CARBON_1	09156-001	09/25/2014	14:04
MW7S1/25.5-26	09111-001	09/25/2014	14:58
SB914-2/7.5	09104-002	09/25/2014	15:25
SB914-5/7.5	09104-005	09/25/2014	15:51
SB914-6/7.5	09104-006	09/25/2014	16:17
LCS-50PPB	LCSM140925-01	09/25/2014	16:44
MS	09096-005MS	09/25/2014	17:10
MSD	09096-005MSD	09/25/2014	17:36
PE-1	09109-001	09/25/2014	18:55
GPEC-TP313A/6-	09160-003	09/25/2014	19:48
GPEC-WC092314	09161-001	09/25/2014	20:14
WST40923	09154-007	09/25/2014	21:08
M-WASTE-1	09176-001	09/25/2014	21:34

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J4423.D

BFB Injection Date: 09/08/2014

Inst ID: MSD_J

BFB Injection Time: 9:45

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.4			
75	30.0 - 60.0% of mass 95	46.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	78.8			
175	5.0 - 9.0% of mass 174	5.8	(	7.4	)1
176	95.0 - 101.0% of mass 174	76.0	(	96.5	)1
177	5.0 - 9.0% of mass 176	4.9	(	6.4	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	J4425.D	09/08/2014	10:43
ICC1	ICC1	J4426.D	09/08/2014	11:14
ICC5	ICC5	J4427.D	09/08/2014	11:44
ICC20	ICC20	J4428.D	09/08/2014	12:11
ICC100	ICC100	J4429.D	09/08/2014	12:37
ICC150	ICC150	J4430.D	09/08/2014	13:03
ICC200	ICC200	J4431.D	09/08/2014	13:30
ICV100	ICV100	J4434.D	09/08/2014	14:55

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J4641.D

BFB Injection Date: 09/25/2014

Inst ID: MSD_J

BFB Injection Time: 10:29

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.9			
75	30.0 - 60.0% of mass 95	45.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.6			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	82.3			
175	5.0 - 9.0% of mass 174	6.3	(	7.7	)1
176	95.0 - 101.0% of mass 174	79.3	(	96.3	)1
177	5.0 - 9.0% of mass 176	5.4	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	J4642.D	09/25/2014	10:56
BLKM140925-01	BLKM140925-01	J4644.D	09/25/2014	11:51
STOCKPILE_S5	09096-005	J4645.D	09/25/2014	12:18
FWC_FOR_PURE_	09143-001	J4646.D	09/25/2014	12:45
CARBON_1	09156-001	J4649.D	09/25/2014	14:04
MW7S1/25.5-26	09111-001	J4651.D	09/25/2014	14:58
SB914-2/7.5	09104-002	J4652.D	09/25/2014	15:25
SB914-5/7.5	09104-005	J4653.D	09/25/2014	15:51
SB914-6/7.5	09104-006	J4654.D	09/25/2014	16:17
LCS-50PPB	LCSM140925-01	J4655.D	09/25/2014	16:44
MS	09096-005MS	J4656.D	09/25/2014	17:10
MSD	09096-005MSD	J4657.D	09/25/2014	17:36
PE-1	09109-001	J4660.D	09/25/2014	18:55
GPEC-TP313A/6-	09160-003	J4662.D	09/25/2014	19:48
GPEC-WC092314	09161-001	J4663.D	09/25/2014	20:14
WST40923	09154-007	J4665.D	09/25/2014	21:08
M-WASTE-1	09176-001	J4666.D	09/25/2014	21:34

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J4429.D

Date Analyzed: 09/08/2014

Instrument ID: MSD_J

Time Analyzed: 12:37

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	248774	6.09	369172	6.91	324990	10.25
	UPPER LIMIT	497548	6.59	738344	7.41	649980	10.75
	LOWER LIMIT	124387	5.59	184586	6.41	162495	9.75
	LAB SAMPLE ID						
01	ICC2	262076	6.09	385921	6.91	333449	10.25
02	ICC1	264386	6.09	388124	6.91	335037	10.25
03	ICC5	257334	6.09	380732	6.91	326857	10.25
04	ICC20	249460	6.09	369890	6.91	317299	10.25
05	ICC150	237424	6.09	354121	6.91	312648	10.25
06	ICC200	257361	6.09	378369	6.91	337598	10.25
07	ICV100	248283	6.09	372006	6.91	326198	10.25
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J4642.D

Date Analyzed: 09/25/2014

Instrument ID: MSD_J

Time Analyzed: 10:56

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	235445	6.08	367393	6.90	336034	10.24
	UPPER LIMIT	470890	6.58	734786	7.40	672068	10.74
	LOWER LIMIT	117722.5	5.58	183696.5	6.40	168017	9.74
	LAB SAMPLE ID						
01	BLKM140925-01	235912	6.09	357278	6.91	329410	10.25
02	09096-005	227528	6.08	347039	6.90	320639	10.24
03	09143-001	229374	6.08	346596	6.90	317706	10.24
04	09156-001	218399	6.08	331287	6.90	309357	10.24
05	09111-001	237718	6.08	358726	6.90	328886	10.25
06	09104-002	238085	6.08	359382	6.91	334401	10.25
07	09104-005	231888	6.08	361329	6.90	326335	10.25
08	09104-006	202889	6.08	308592	6.90	276414	10.24
09	LCSM140925-01	231671	6.09	354982	6.91	321419	10.24
10	09096-005MS	220518	6.09	338833	6.91	306637	10.24
11	09096-005MSD	220393	6.09	343273	6.91	307046	10.25
12	09109-001	237511	6.08	358838	6.90	325243	10.24
13	09160-003	217259	6.09	331028	6.91	303121	10.25
14	09161-001	222560	6.08	331212	6.90	299329	10.24
15	09154-007	214396	6.09	330104	6.91	298528	10.25
16	09176-001	204325	6.08	315579	6.90	284729	10.25
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4663.D
Acq On : 25 Sep 2014 20:14
Operator : MEI
Sample : GPEC-WC092314,09161-001,M,0.05g,4.00
Misc : GEI-MTCLR/GREENPOI,09/23/14,09/24/14,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 26 10:52:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.08	168	222560	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.90	114	331212	50.00	UG	-0.01
50) Chlorobenzene-d5	10.24	117	299329	50.00	UG	-0.01
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	112806	48.93	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.86%			
41) Toluene-d8	8.58	98	368468	48.85	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.70%			
59) Bromofluorobenzene	11.65	95	146325	50.25	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.50%			
Target Compounds						Qvalue
32) Benzene	6.48	78	5437	0.62	UG	100

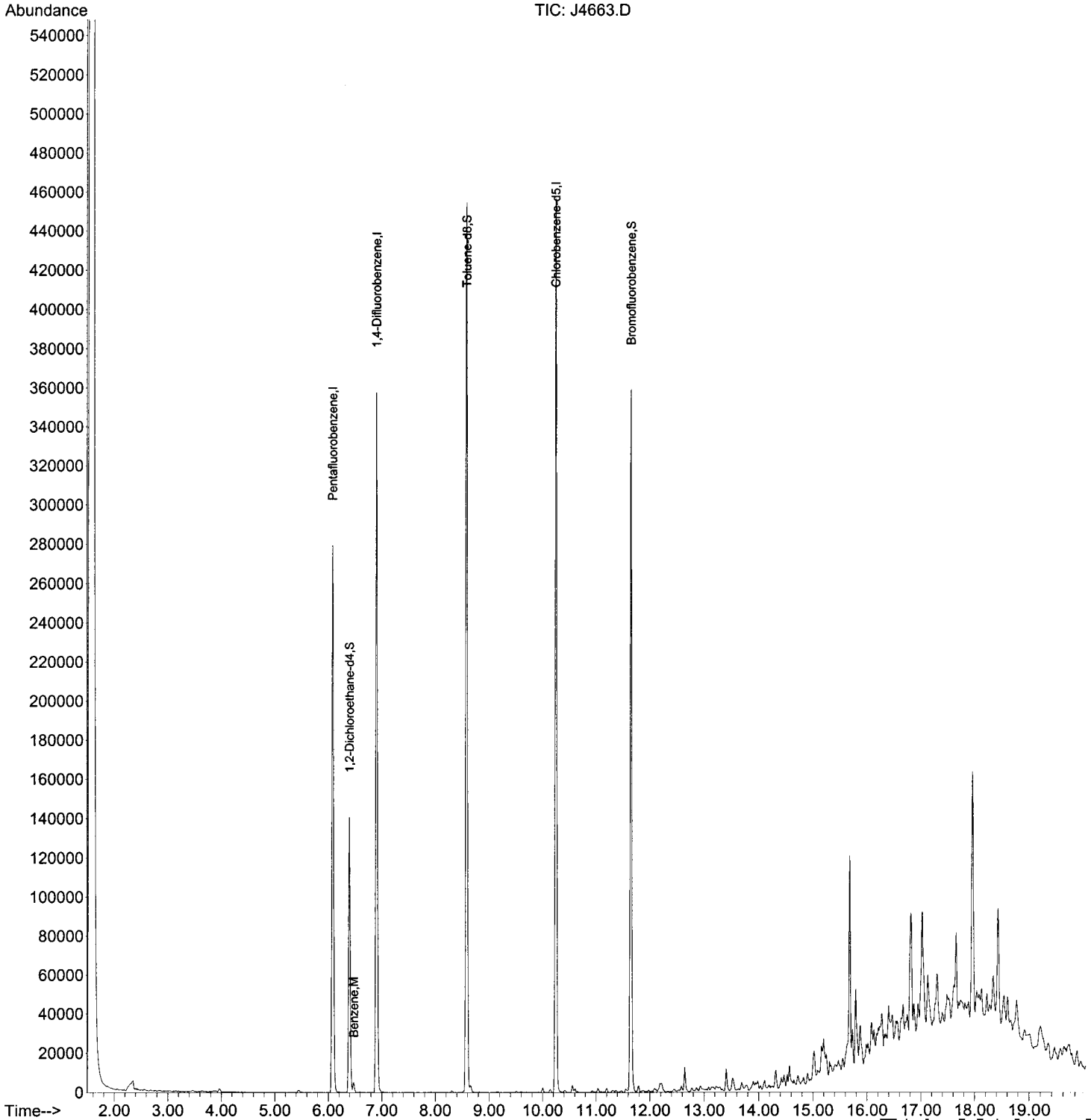
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9/26/14

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4663.D
Acq On : 25 Sep 2014 20:14
Operator : MEI
Sample : GPEC-WC092314,09161-001,M,0.05g,4.00
Misc : GEI-MTCLR/GREENPOI,09/23/14,09/24/14,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 26 10:52:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration



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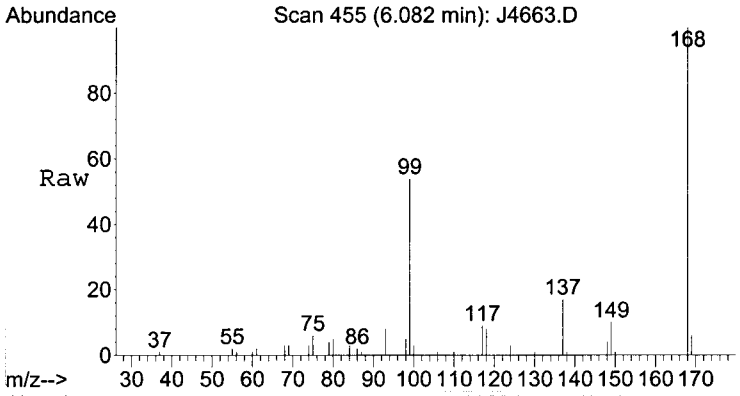
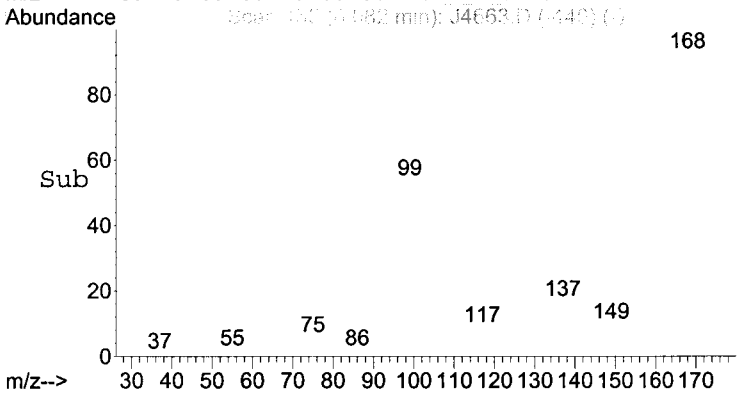
9/26/14

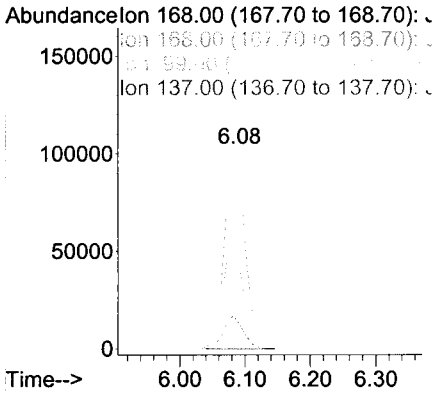


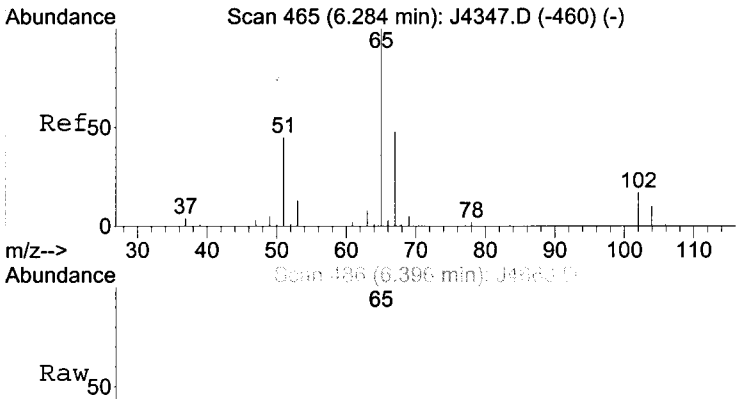
#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.08 min Scan# 455
Delta R.T. -0.01 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

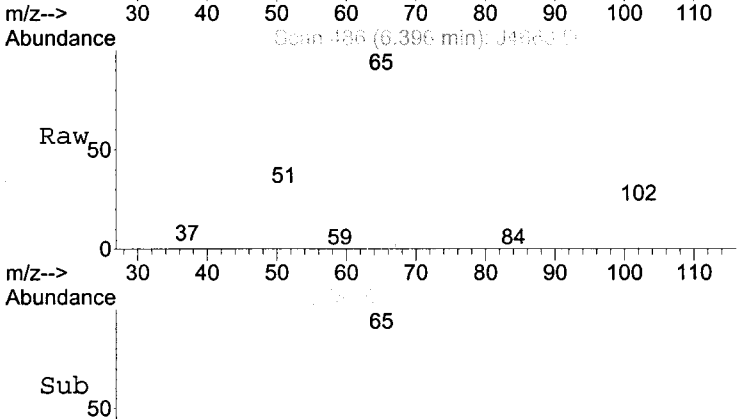
Tgt Ion:168 Resp: 222560

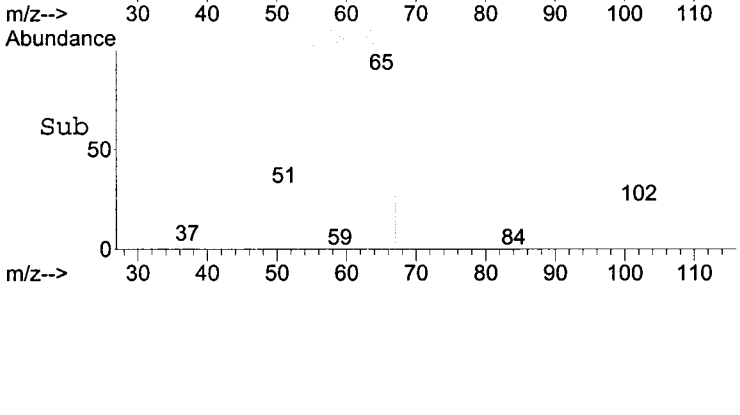
Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	0.0	53.9	100.1#
137	0.0	10.5	19.5#







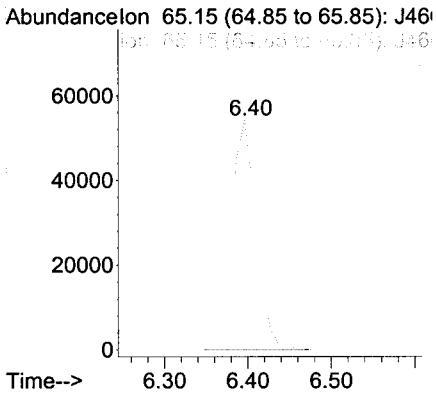


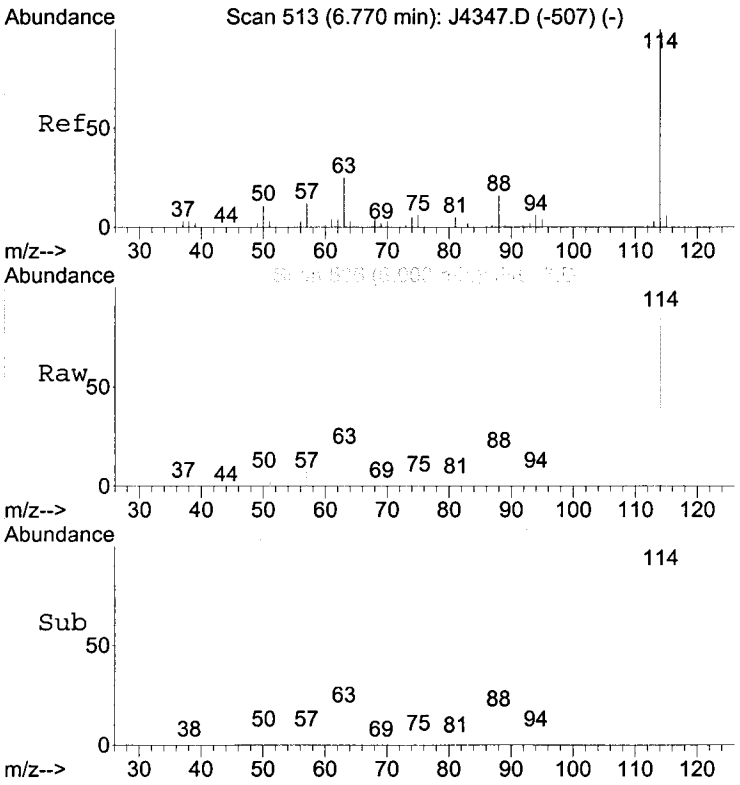


#30
1,2-Dichloroethane-d4
Concen: 48.93 UG
RT: 6.40 min Scan# 486
Delta R.T. -0.01 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion: 65 Resp: 112806

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	49.2	41.7	77.5

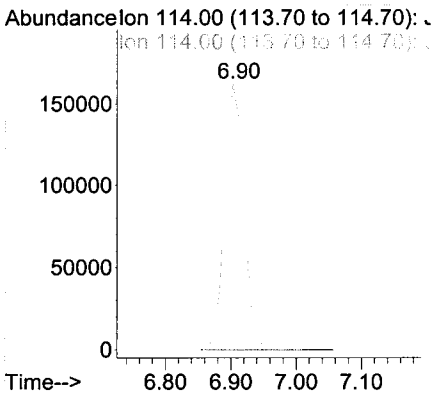


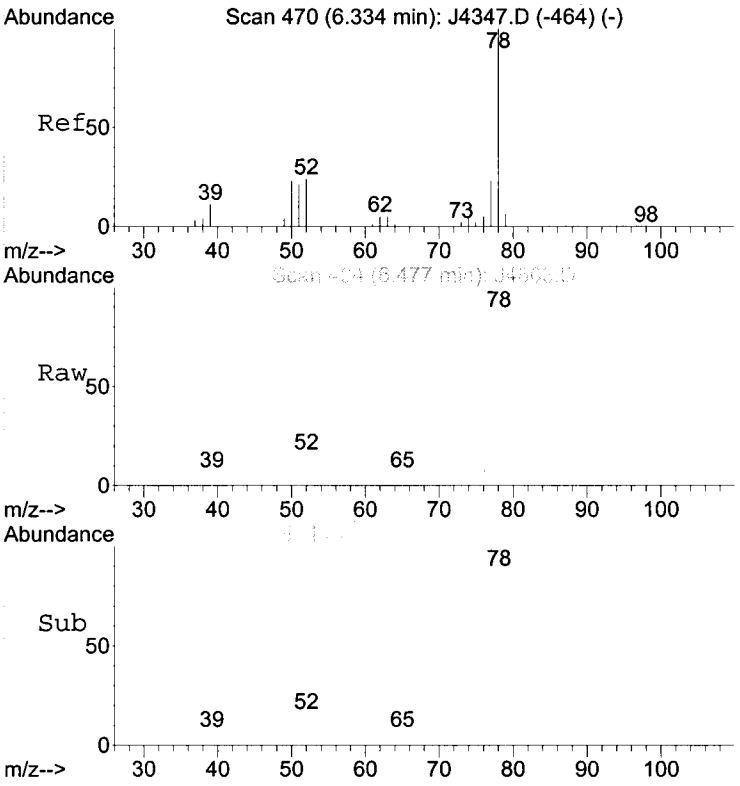


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.90 min Scan# 536
Delta R.T. -0.01 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion:114 Resp: 331212

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

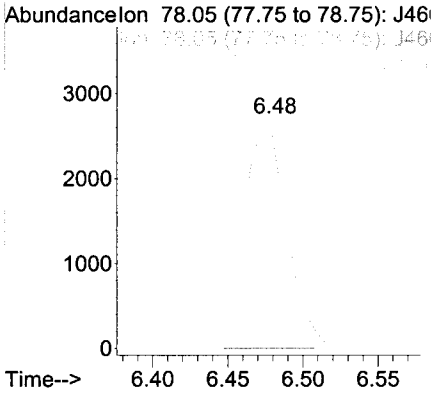


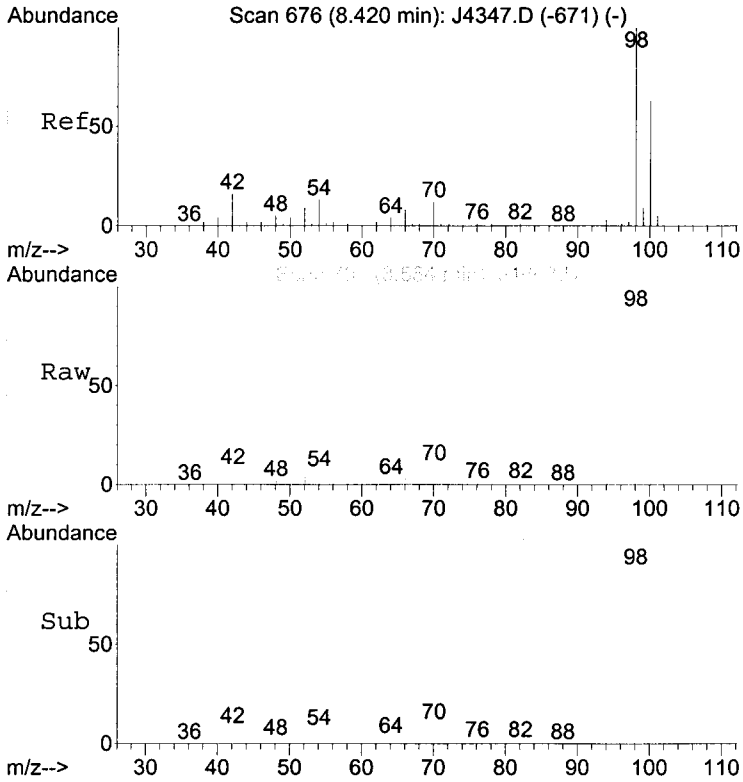


#32
Benzene
Concen: 0.62 UG
RT: 6.48 min Scan# 494
Delta R.T. -0.00 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion: 78 Resp: 5437

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
77	22.3	15.8	29.4

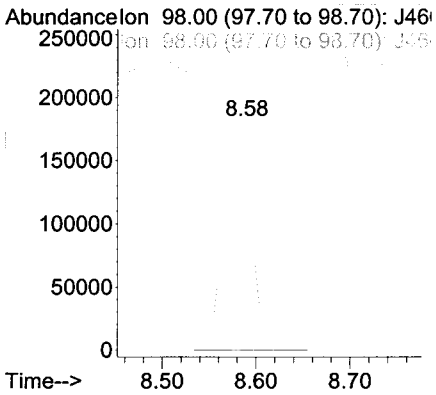


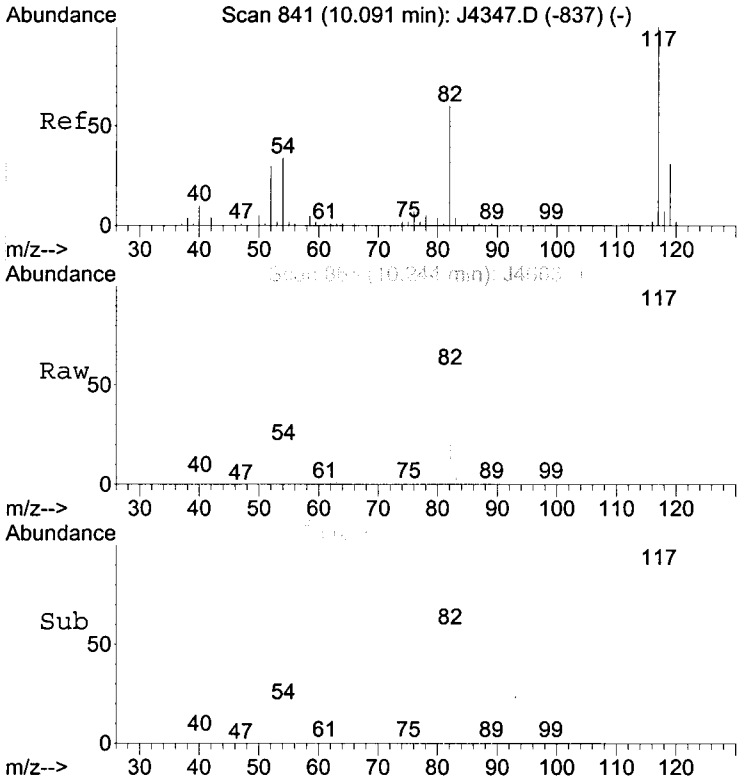


#41
Toluene-d8
Concen: 48.85 UG
RT: 8.58 min Scan# 702
Delta R.T. -0.00 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion: 98 Resp: 368468

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	65.6	48.1	89.3

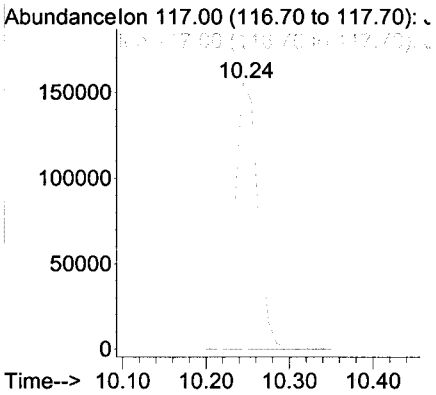


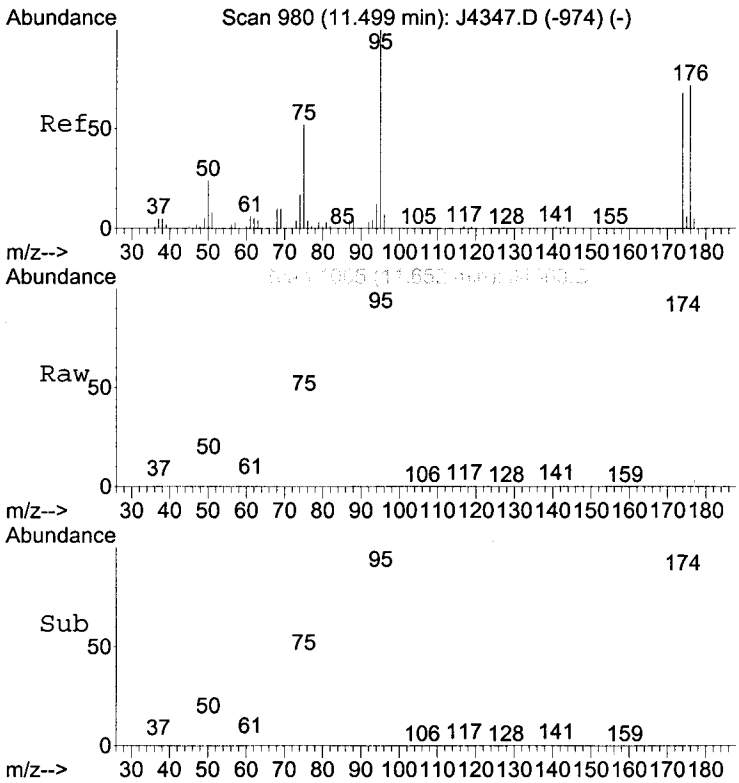


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.24 min Scan# 866
Delta R.T. -0.01 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion:117 Resp: 299329

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

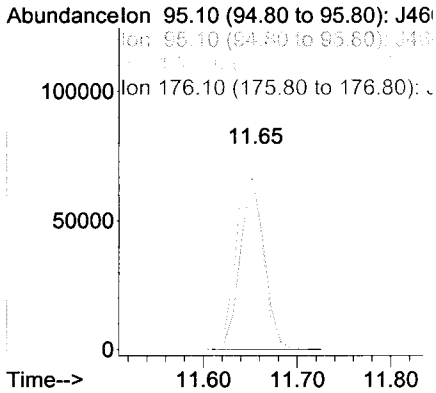




#59
Bromofluorobenzene
Concen: 50.25 UG
RT: 11.65 min Scan# 1005
Delta R.T. -0.00 min
Lab File: J4663.D
Acq: 25 Sep 2014 20:14

Tgt Ion: 95 Resp: 146325

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	81.7	0.0	0.0#
176	81.1	0.0	0.0#



VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_J

Method Path : C:\MSDCHEM\1\METHODS\
Method File : JM090814.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Sep 09 16:59:23 2014
Response Via : Initial Calibration

Calibration Files
1 =J4426.D 2 =J4425.D 5 =J4427.D
20 =J4428.D 100 =J4429.D 200 =J4431.D 150 =J4430.D

		Compound	1	2	5	20	100	200	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.238	0.287	0.196	0.312	0.312	0.303	0.323	0.282	16.72
3)	P	Chloromethane	0.428	0.473	0.433	0.429	0.406	0.413	0.447	0.433	5.11
4)	C	Vinyl chloride	0.349	0.396	0.327	0.373	0.413	0.437	0.470	0.395	12.63
5)	T	Bromomethane	0.273	0.250	0.234	0.248	0.240	0.243	0.281	0.253	6.86
6)	T	Chloroethane	0.198	0.210	0.189	0.214	0.216	0.232	0.251	0.216	9.63
7)	T	Trichlorofluorome	0.414	0.414	0.448	0.467	0.543	0.579	0.628	0.499	16.98
8)	T	Acrolein	0.033	0.052	0.038	0.037	0.036	0.035	0.039	0.039	15.80
9)	MC	1,1-Dichloroethen	0.325	0.350	0.288	0.340	0.370	0.390	0.414	0.354	11.81
10)	T	Acetone		0.156	0.177	0.161	0.151	0.147	0.157	0.158	6.66
11)	T	Carbon disulfide	1.271	1.248	1.058	1.192	1.262	1.301	1.396	1.247	8.32
12)	T	Vinyl acetate	1.589	1.700	1.528	1.350	1.258	1.034	1.213	1.382	17.00
13)	T	Methylene chlorid		0.705	0.535	0.471	0.462	0.464	0.499	0.523	17.94
14)	T	Acrylonitrile	0.141	0.224	0.165	0.152	0.164	0.161	0.173	0.169	15.81
15)	T	tert-Butyl alcoho	0.051	0.076	0.070	0.064	0.067	0.064	0.069	0.066	12.03
16)	T	trans-1,2-Dichlor	0.483	0.538	0.464	0.492	0.488	0.491	0.533	0.498	5.46
17)	T	Methyl tert-butyl	1.797	1.935	1.749	1.644	1.640	1.617	1.744	1.732	6.47
18)	P	1,1-Dichloroethan	0.845	0.960	0.853	0.840	0.845	0.850	0.911	0.872	5.25
19)	T	Diisopropyl ether	1.396	1.506	1.374	1.288	1.283	1.274	1.371	1.356	6.13
20)	T	cis-1,2-Dichloroe	0.595	0.672	0.586	0.552	0.561	0.566	0.609	0.592	6.85
21)	T	2,2-Dichloropropa	0.514	0.586	0.524	0.543	0.556	0.511	0.574	0.544	5.44
22)	T	2-Butanone (MEK)	0.278	0.291	0.235	0.217	0.225	0.219	0.238	0.243	12.04
23)	T	Bromochloromethan	0.299	0.314	0.305	0.285	0.294	0.298	0.316	0.302	3.69
25)	C	Chloroform	0.917	0.958	0.889	0.887	0.889	0.895	0.967	0.915	3.76
26)	T	1,1,1-Trichloroet	0.624	0.691	0.617	0.672	0.716	0.735	0.793	0.692	9.01
27)	T	Carbon tetrachlor	0.440	0.500	0.416	0.510	0.580	0.618	0.662	0.532	17.15
28)	T	1,1-Dichloroprope	0.502	0.549	0.467	0.536	0.588	0.604	0.655	0.557	11.44
29)	T	1,2-Dichloroethan	0.788	0.836	0.791	0.736	0.738	0.731	0.794	0.773	5.09
30)	S	1,2-Dichloroethan	0.529	0.536	0.519	0.513	0.519	0.502	0.509	0.518	2.23
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.351	1.408	1.288	1.255	1.285	1.312	1.395	1.327	4.41
33)	M	Trichloroethene	0.341	0.329	0.307	0.313	0.344	0.373	0.388	0.342	8.64
34)	C	1,2-Dichloropropa	0.338	0.355	0.331	0.312	0.314	0.323	0.343	0.331	4.79
35)	T	Dibromomethane	0.232	0.259	0.226	0.210	0.220	0.220	0.234	0.229	6.85
36)	T	1,4-Dioxane	0.006	0.005	0.005	0.005	0.005	0.004	0.005	0.005	9.67
37)	T	Bromodichlorometh	0.496	0.510	0.477	0.457	0.485	0.499	0.524	0.493	4.43
38)	T	2-Chloroethyl vin	0.252	0.297	0.234	0.222	0.235	0.239	0.253	0.247	9.88
39)	T	cis-1,3-Dichlorop	0.592	0.644	0.578	0.554	0.583	0.596	0.631	0.597	5.23
40)	T	4-Methyl-2-pentan	0.368	0.357	0.310	0.313	0.303	0.305	0.328	0.326	8.02
41)	S	Toluene-d8	1.139	1.128	1.127	1.136	1.150	1.144	1.146	1.139	0.77
42)	MC	Toluene	0.751	0.842	0.750	0.758	0.786	0.810	0.859	0.794	5.60
43)	T	trans-1,3-Dichlor	0.611	0.624	0.555	0.533	0.563	0.573	0.607	0.581	5.77
44)	T	1,1,2-Trichloroet	0.267	0.269	0.257	0.235	0.247	0.251	0.266	0.256	4.81
45)	T	Tetrachloroethene	0.214	0.246	0.207	0.230	0.250	0.267	0.283	0.242	11.40
46)	T	1,3-Dichloropropa	0.556	0.591	0.535	0.510	0.525	0.529	0.559	0.544	4.93
47)	T	2-Hexanone	0.241	0.246	0.218	0.225	0.211	0.213	0.226	0.226	5.93
48)	T	Dibromochlorometh	0.379	0.403	0.366	0.368	0.395	0.403	0.427	0.392	5.60
49)	T	1,2-Dibromoethane	0.358	0.351	0.338	0.324	0.330	0.338	0.363	0.343	4.22
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.074	1.122	1.024	0.976	0.974	0.993	1.051	1.031	5.37
52)	T	1,1,1,2-Tetrachlo	0.381	0.413	0.393	0.375	0.388	0.394	0.421	0.395	4.18

53)	C	Ethylbenzene	1.444	1.467	1.334	1.370	1.386	1.423	1.536	1.423	4.74
54)	T	m,p-Xylene	0.579	0.591	0.527	0.538	0.534	0.542	0.583	0.556	4.79
55)	T	o-Xylene	0.561	0.601	0.538	0.542	0.550	0.552	0.594	0.563	4.46
56)	T	Styrene	1.117	1.129	1.018	1.041	1.036	1.043	1.123	1.072	4.48
57)	P	Bromoform	0.347	0.372	0.276	0.283	0.299	0.303	0.323	0.315	11.07
58)	T	Isopropylbenzene	1.148	1.240	1.015	1.126	1.174	1.220	1.299	1.175	7.83
59)	S	Bromofluorobenzen	0.489	0.488	0.480	0.498	0.482	0.480	0.487	0.486	1.32
60)	P	1,1,2,2-Tetrachlo	0.488	0.513	0.473	0.446	0.429	0.396	0.447	0.456	8.58
61)	T	Bromobenzene	0.421	0.429	0.407	0.400	0.399	0.404	0.429	0.413	3.25
62)	T	1,2,3-Trichloropr	0.470	0.502	0.430	0.410	0.398	0.388	0.426	0.432	9.39
63)	T	n-Propylbenzene	1.254	1.308	1.128	1.204	1.218	1.245	1.342	1.243	5.65
64)	T	2-Chlorotoluene	0.960	1.031	0.877	0.891	0.882	0.888	0.958	0.927	6.26
65)	T	1,3,5-Trimethylbe	1.045	1.082	0.924	0.987	0.990	1.021	1.090	1.020	5.74
66)	T	4-Chlorotoluene	1.182	1.208	1.049	1.030	1.030	1.036	1.116	1.093	6.95
67)	T	tert-Butylbenzene	0.703	0.720	0.623	0.693	0.713	0.759	0.801	0.716	7.77
68)	T	1,2,4-Trimethylbe	1.092	1.166	1.003	1.036	1.040	1.073	1.151	1.080	5.62
69)	T	sec-Butylbenzene	1.101	1.152	0.881	1.003	1.052	1.115	1.191	1.071	9.71
70)	T	1,3-Dichlorobenze	0.661	0.720	0.613	0.609	0.593	0.602	0.644	0.635	7.04
71)	T	4-Isopropyltoluen	1.053	1.068	0.836	0.933	0.958	1.015	1.087	0.993	9.01
72)	T	1,4-Dichlorobenze	0.749	0.748	0.635	0.634	0.615	0.627	0.671	0.668	8.59
73)	T	n-Butylbenzene	0.472	0.490	0.354	0.402	0.414	0.444	0.477	0.436	11.19
74)	T	1,2-Dichlorobenze	0.696	0.696	0.611	0.606	0.596	0.603	0.650	0.637	6.90
75)	T	1,2-Dibromo-3-chl	0.059	0.064	0.056	0.079	0.083	0.084	0.089	0.073	18.26
76)	T	1,2,4-Trichlorobe	0.296	0.284	0.273	0.301	0.305	0.327	0.346	0.305	8.12
77)	T	Hexachlorobutadie	0.151	0.162	0.126	0.160	0.159	0.154	0.167	0.154	8.74
78)	T	Naphthalene	0.733	0.618	0.683	0.796	0.833	0.859	0.913	0.776	13.41
79)	T	1,2,3-Trichlorobe	0.234	0.218	0.216	0.213	0.186	0.208	0.209	0.212	6.85
80)	T	1,1,2-Trichloro-1	0.167	0.172	0.161	0.169	0.191	0.201	0.214	0.182	11.08
81)	T	Methyl acetate		0.236	0.242	0.227	0.228	0.230	0.242	0.234	2.80
82)	T	Cyclohexane		0.245	0.190	0.285	0.296	0.308	0.334	0.276	18.65
83)	T	Methylcyclohexane	0.187	0.208	0.136	0.190	0.212	0.224	0.237	0.199	16.63

(#) = Out of Range ### Number of calibration levels exceeded format ###

JM090814.M Tue Sep 09 16:59:28 2014 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4425.D
Acq On : 8 Sep 2014 10:43
Operator : MEI
Sample : ICC2,ICC2,W,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 16:22:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	262076	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	385921	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	333449	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	140413	51.72	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 103.44%				
41) Toluene-d8	8.58	98	435365	49.54	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.08%				
59) Bromofluorobenzene	11.65	95	162803	50.19	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.74	85	3010	1.85	UG		98
3) Chloromethane	1.90	50	4957	2.19	UG		99
4) Vinyl chloride	2.03	62	4150	2.01	UG		100
5) Bromomethane	2.40	94	2626	1.98	UG		97
6) Chloroethane	2.51	64	2201	1.95	UG		97
7) Trichlorofluoromethane	2.81	101	4337	1.76	UG		97
8) Acrolein	3.27	56	10871	53.71	UG		96
9) 1,1-Dichloroethene	3.41	96	3673	1.98	UG		89
10) Acetone	3.47	43	1632m	1.51	UG		
11) Carbon disulfide	3.66	76	13080	2.00	UG		100
12) Vinyl acetate	4.89	43	17823	3.94	UG		100
13) Methylene chloride	3.98	84	7392	2.52	UG		99
14) Acrylonitrile	4.26	53	47067	53.25	UG		99
15) tert-Butyl alcohol (TBA)	4.15	59	1600	4.07	UG	#	91
16) trans-1,2-Dichloroethene	4.32	96	5644	2.16	UG		87
17) Methyl tert-butyl ether (M	4.34	73	20280	2.23	UG		100
18) 1,1-Dichloroethane	4.82	63	10060	2.20	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	15791	2.22	UG		97
20) cis-1,2-Dichloroethene	5.47	96	7041	2.27	UG		93
21) 2,2-Dichloropropane	5.48	77	6146	2.16	UG		97
22) 2-Butanone (MEK)	5.51	43	3046	2.39	UG		98
23) Bromochloromethane	5.75	128	3296	2.08	UG		93
25) Chloroform	5.85	83	10040	2.09	UG		100
26) 1,1,1-Trichloroethane	6.06	97	7241	2.00	UG	#	80
27) Carbon tetrachloride	6.25	117	5239	1.88	UG		100
28) 1,1-Dichloropropene	6.24	75	5756	1.97	UG		93
29) 1,2-Dichloroethane (EDC)	6.49	62	8764	2.16	UG		100
32) Benzene	6.48	78	21732	2.12	UG		100
33) Trichloroethene	7.21	95	5076	1.92	UG		95
34) 1,2-Dichloropropane	7.45	63	5476	2.15	UG	#	100
35) Dibromomethane	7.57	93	3996	2.26	UG		98
36) 1,4-Dioxane	7.60	88	17865	461.49	UG		98
37) Bromodichloromethane	7.75	83	7871	2.07	UG		98
38) 2-Chloroethyl vinyl ether	8.10	63	4589	2.40	UG		100
39) cis-1,3-Dichloropropene	8.27	75	9948	2.16	UG		96
40) 4-Methyl-2-pentanone (MIBK	8.44	43	5513	2.19	UG	#	94
42) Toluene	8.66	92	12994	2.12	UG		98
43) trans-1,3-Dichloropropene	8.90	75	9629	2.15	UG		99
44) 1,1,2-Trichloroethane	9.10	83	4154	2.10	UG		94

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4425.D
Acq On : 8 Sep 2014 10:43
Operator : MEI
Sample : ICC2,ICC2,W,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 16:22:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

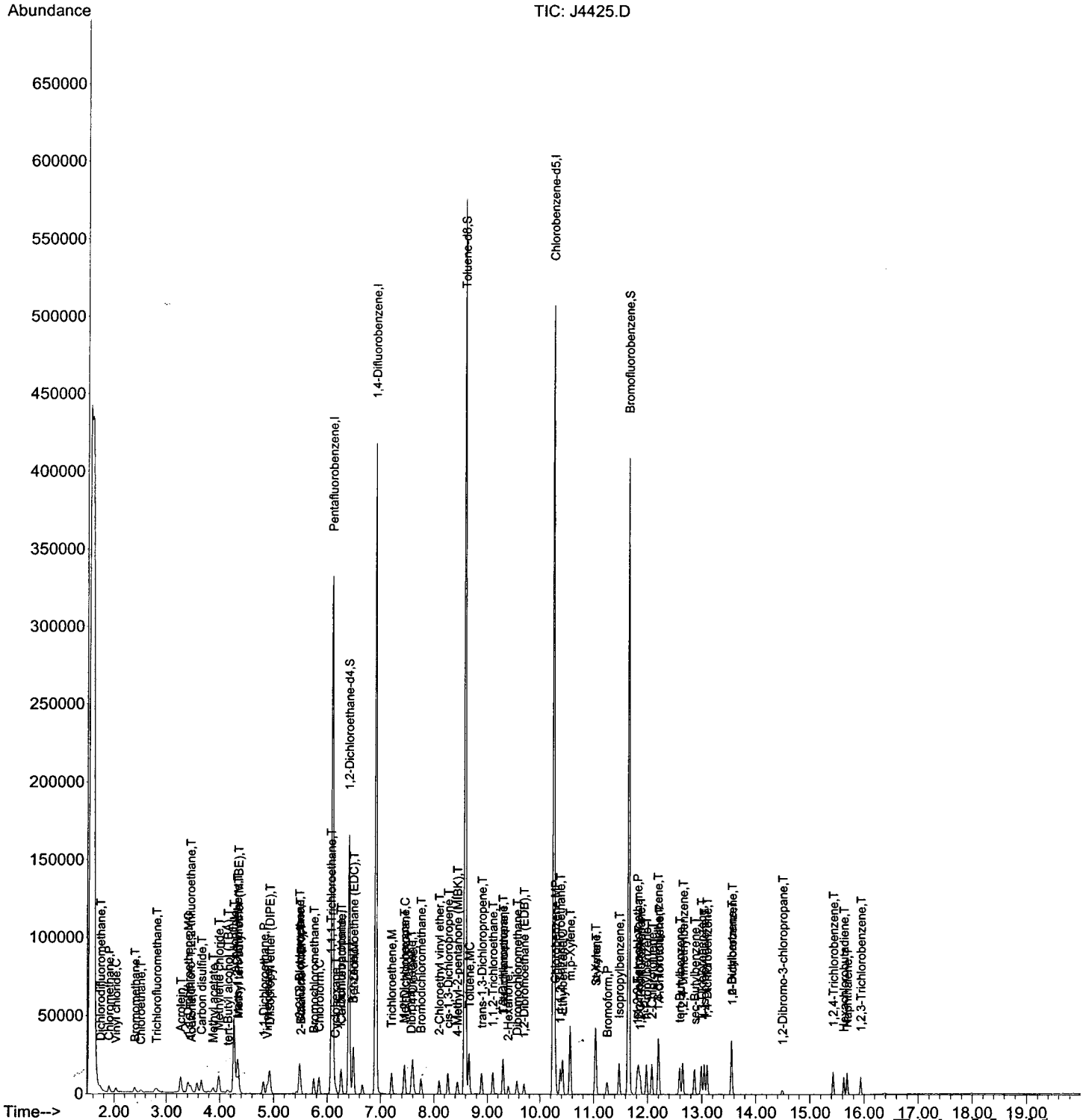
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Tetrachloroethene	9.30	166	3798	2.03 UG	98
46) 1,3-Dichloropropane	9.29	76	9116	2.17 UG	100
47) 2-Hexanone	9.39	43	3804	2.18 UG	95
48) Dibromochloromethane	9.57	129	6221	2.06 UG	98
49) 1,2-Dibromoethane (EDB)	9.70	107	5415	2.05 UG	99
51) Chlorobenzene	10.28	112	14967	2.18 UG	100
52) 1,1,1,2-Tetrachloroethane	10.38	131	5504	2.09 UG	99
53) Ethylbenzene	10.42	91	19572	2.06 UG	100
54) m,p-Xylene	10.56	106	15754	4.25 UG	96
55) o-Xylene	11.03	106	8019	2.14 UG	94
56) Styrene	11.04	104	15058	2.11 UG	97
57) Bromoform	11.26	173	4965	2.36 UG	99
58) Isopropylbenzene	11.48	105	16545	2.11 UG	98
60) 1,1,2,2-Tetrachloroethane	11.81	83	6849	2.25 UG	98
61) Bromobenzene	11.83	156	5721	2.08 UG	95
62) 1,2,3-Trichloropropane	11.86	75	6693	2.32 UG	99
63) n-Propylbenzene	11.98	91	17442	2.10 UG	99
64) 2-Chlorotoluene	12.08	91	13756	2.23 UG	84
65) 1,3,5-Trimethylbenzene	12.19	105	14426	2.12 UG	97
66) 4-Chlorotoluene	12.21	91	16114	2.21 UG	99
67) tert-Butylbenzene	12.59	119	9610	2.01 UG	99
68) 1,2,4-Trimethylbenzene	12.65	105	15555	2.16 UG	98
69) sec-Butylbenzene	12.87	105	15366	2.15 UG	99
70) 1,3-Dichlorobenzene	12.99	146	9602	2.27 UG	98
71) 4-Isopropyltoluene	13.04	119	14239	2.15 UG	98
72) 1,4-Dichlorobenzene	13.09	146	9983	2.24 UG	98
73) n-Butylbenzene	13.55	92	6530	2.25 UG	99
74) 1,2-Dichlorobenzene	13.56	146	9279	2.18 UG	99
75) 1,2-Dibromo-3-chloropropan	14.49	75	858m	1.57 UG	
76) 1,2,4-Trichlorobenzene	15.43	180	3794m	1.64 UG	
77) Hexachlorobutadiene	15.62	225	2163m	1.80 UG	
78) Naphthalene	15.68	128	8237m	1.43 UG	
79) 1,2,3-Trichlorobenzene	15.94	180	2914m	1.63 UG	
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	2295	1.98 UG	96
81) Methyl acetate	3.87	43	3146m	1.62 UG	
82) Cyclohexane	6.14	56	3271m	2.27 UG	
83) Methylcyclohexane	7.44	55	2774	2.09 UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4425.D
Acq On : 8 Sep 2014 10:43
Operator : MEI
Sample : ICC2,ICC2,W,5mL,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 16:22:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4426.D
Acq On : 8 Sep 2014 11:14
Operator : MEI
Sample : ICC1,ICC1,W,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 16:22:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	264386	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	388124	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	335037	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.41	65	139790	51.04	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 102.08%				
41) Toluene-d8	8.58	98	442223	50.03	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.06%				
59) Bromofluorobenzene	11.65	95	163739	50.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.74	85	1259	0.77	UG		96
3) Chloromethane	1.90	50	2261	0.99	UG		98
4) Vinyl chloride	2.03	62	1845	0.88	UG		100
5) Bromomethane	2.40	94	1445	1.08	UG		98
6) Chloroethane	2.52	64	1045	0.92	UG		98
7) Trichlorofluoromethane	2.80	101	2187m	0.88	UG		
8) Acrolein	3.28	56	3539	17.33	UG		95
9) 1,1-Dichloroethene	3.41	96	1721	0.92	UG		86
11) Carbon disulfide	3.66	76	6720	1.02	UG		100
12) Vinyl acetate	4.89	43	8401	1.84	UG		100
14) Acrylonitrile	4.26	53	14909	16.72	UG		99
15) tert-Butyl alcohol (TBA)	4.15	59	535m	1.35	UG		
16) trans-1,2-Dichloroethene	4.32	96	2552	0.97	UG		91
17) Methyl tert-butyl ether (M	4.34	73	9501	1.04	UG		100
18) 1,1-Dichloroethane	4.81	63	4468	0.97	UG		99
19) Diisopropyl ether (DIPE)	4.93	45	7382	1.03	UG	#	96
20) cis-1,2-Dichloroethene	5.48	96	3145	1.01	UG		93
21) 2,2-Dichloropropane	5.48	77	2716	0.94	UG		98
22) 2-Butanone (MEK)	5.50	43	1470	1.14	UG	#	91
23) Bromochloromethane	5.75	128	1579	0.99	UG		92
25) Chloroform	5.85	83	4850	1.00	UG		100
26) 1,1,1-Trichloroethane	6.06	97	3297	0.90	UG	#	80
27) Carbon tetrachloride	6.26	117	2325	0.83	UG		100
28) 1,1-Dichloropropene	6.25	75	2655	0.90	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	4168	1.02	UG		98
32) Benzene	6.49	78	10487	1.02	UG		99
33) Trichloroethene	7.21	95	2645	1.00	UG		93
34) 1,2-Dichloropropane	7.45	63	2621	1.02	UG	#	99
35) Dibromomethane	7.57	93	1803	1.02	UG		95
36) 1,4-Dioxane	7.60	88	8922	229.16	UG		97
37) Bromodichloromethane	7.75	83	3853	1.01	UG		95
38) 2-Chloroethyl vinyl ether	8.11	63	1957	1.02	UG		97
39) cis-1,3-Dichloropropene	8.27	75	4594	0.99	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	2855	1.13	UG		99
42) Toluene	8.66	92	5832	0.95	UG		96
43) trans-1,3-Dichloropropene	8.90	75	4742	1.05	UG		98
44) 1,1,2-Trichloroethane	9.10	83	2070	1.04	UG		98
45) Tetrachloroethene	9.30	166	1665	0.88	UG		99
46) 1,3-Dichloropropane	9.30	76	4318	1.02	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4426.D
Acq On : 8 Sep 2014 11:14
Operator : MEI
Sample : ICC1,ICC1,W,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 16:22:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

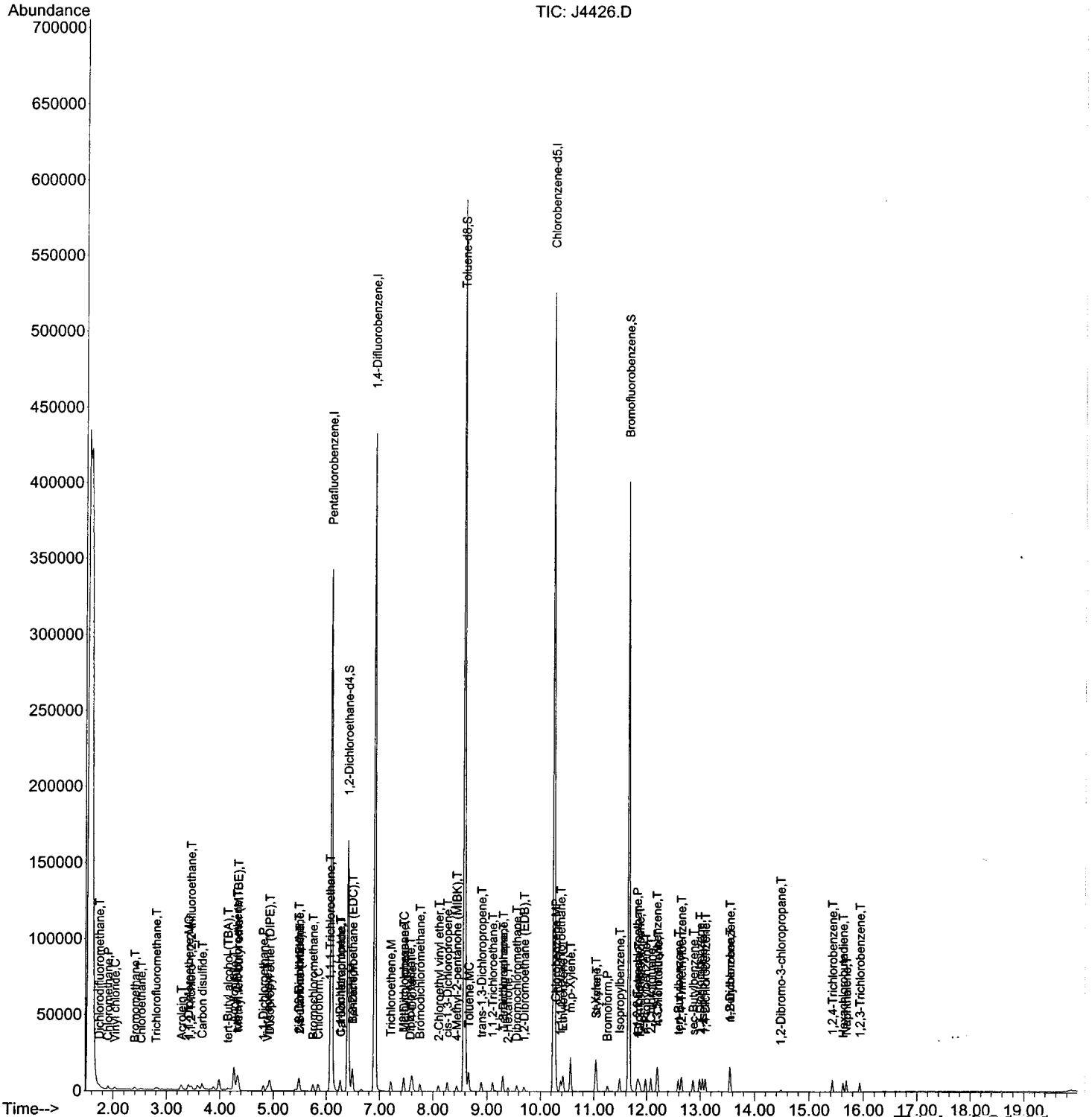
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
47) 2-Hexanone	9.39	43	1867	1.07	UG		98
48) Dibromochloromethane	9.56	129	2944	0.97	UG		99
49) 1,2-Dibromoethane (EDB)	9.70	107	2776	1.04	UG		99
51) Chlorobenzene	10.28	112	7196	1.04	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	2551	0.96	UG		99
53) Ethylbenzene	10.42	91	9675	1.01	UG		100
54) m,p-Xylene	10.56	106	7753	2.08	UG		95
55) o-Xylene	11.03	106	3761	1.00	UG		91
56) Styrene	11.04	104	7484	1.04	UG		98
57) Bromoform	11.25	173	2324	1.10	UG		99
58) Isopropylbenzene	11.48	105	7690	0.98	UG		98
60) 1,1,2,2-Tetrachloroethane	11.81	83	3273	1.07	UG	#	96
61) Bromobenzene	11.83	156	2820	1.02	UG		100
62) 1,2,3-Trichloropropane	11.86	75	3147	1.09	UG		96
63) n-Propylbenzene	11.98	91	8403	1.01	UG		100
64) 2-Chlorotoluene	12.08	91	6433	1.04	UG		86
65) 1,3,5-Trimethylbenzene	12.19	105	7005	1.03	UG		98
66) 4-Chlorotoluene	12.21	91	7919	1.08	UG		98
67) tert-Butylbenzene	12.59	119	4712	0.98	UG		98
68) 1,2,4-Trimethylbenzene	12.64	105	7315	1.01	UG		98
69) sec-Butylbenzene	12.87	105	7376	1.03	UG		99
70) 1,3-Dichlorobenzene	12.99	146	4428	1.04	UG		98
71) 4-Isopropyltoluene	13.04	119	7055	1.06	UG		99
72) 1,4-Dichlorobenzene	13.09	146	5019	1.12	UG		100
73) n-Butylbenzene	13.55	92	3160	1.08	UG		100
74) 1,2-Dichlorobenzene	13.55	146	4665	1.09	UG		99
75) 1,2-Dibromo-3-chloropropan	14.48	75	396m	0.72	UG		
76) 1,2,4-Trichlorobenzene	15.43	180	1981m	0.85	UG		
77) Hexachlorobutadiene	15.62	225	1015m	0.84	UG		
78) Naphthalene	15.68	128	4910m	0.85	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	1568m	0.87	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	1117	0.96	UG	#	57
83) Methylcyclohexane	7.45	55	1250	0.94	UG	#	72

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4426.D
Acq On : 8 Sep 2014 11:14
Operator : MEI
Sample : ICC1,ICC1,W,5mL,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 16:22:00 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4427.D
Acq On : 8 Sep 2014 11:44
Operator : MEI
Sample : ICC5,ICC5,W,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 16:21:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	257334	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	380732	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	326857	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	133495	50.08	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.16%				
41) Toluene-d8	8.58	98	429192	49.50	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.00%				
59) Bromofluorobenzene	11.65	95	156888	49.34	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.68%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	5040	3.15	UG		100
3) Chloromethane	1.90	50	11136	5.00	UG		99
4) Vinyl chloride	2.03	62	8412	4.14	UG		100
5) Bromomethane	2.40	94	6034	4.63	UG		96
6) Chloroethane	2.51	64	4860	4.38	UG		98
7) Trichlorofluoromethane	2.80	101	11524m	4.75	UG		
8) Acrolein	3.28	56	19468	97.96	UG		99
9) 1,1-Dichloroethene	3.41	96	7415	4.07	UG		90
10) Acetone	3.46	43	4557	4.28	UG		99
11) Carbon disulfide	3.66	76	27226	4.24	UG		100
12) Vinyl acetate	4.89	43	39325	8.85	UG		100
13) Methylene chloride	3.98	84	13765	4.79	UG		99
14) Acrylonitrile	4.26	53	84860	97.77	UG		99
15) tert-Butyl alcohol (TBA)	4.15	59	3592	9.31	UG		98
16) trans-1,2-Dichloroethene	4.32	96	11946	4.66	UG		87
17) Methyl tert-butyl ether (M	4.34	73	45016	5.05	UG		100
18) 1,1-Dichloroethane	4.81	63	21939	4.89	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	35360	5.07	UG	#	96
20) cis-1,2-Dichloroethene	5.49	96	15076	4.95	UG		95
21) 2,2-Dichloropropane	5.49	77	13473	4.81	UG		96
22) 2-Butanone (MEK)	5.51	43	6051	4.83	UG		97
23) Bromochloromethane	5.75	128	7859	5.06	UG		98
25) Chloroform	5.85	83	22867	4.86	UG		100
26) 1,1,1-Trichloroethane	6.06	97	15888	4.46	UG	#	80
27) Carbon tetrachloride	6.26	117	10713	3.91	UG		100
28) 1,1-Dichloropropene	6.25	75	12009	4.19	UG		92
29) 1,2-Dichloroethane (EDC)	6.49	62	20352	5.11	UG		99
32) Benzene	6.48	78	49030	4.85	UG		100
33) Trichloroethene	7.21	95	11707	4.49	UG		94
34) 1,2-Dichloropropane	7.45	63	12598	5.00	UG		100
35) Dibromomethane	7.57	93	8615	4.95	UG		97
36) 1,4-Dioxane	7.60	88	40888	1070.61	UG		96
37) Bromodichloromethane	7.75	83	18170	4.84	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	8892	4.72	UG		99
39) cis-1,3-Dichloropropene	8.27	75	22003	4.84	UG		97
40) 4-Methyl-2-pentanone (MIBK	8.44	43	11813	4.75	UG		96
42) Toluene	8.66	92	28561	4.72	UG		99
43) trans-1,3-Dichloropropene	8.90	75	21120	4.77	UG		99
44) 1,1,2-Trichloroethane	9.10	83	9788	5.02	UG		99

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4427.D
Acq On : 8 Sep 2014 11:44
Operator : MEI
Sample : ICC5,ICC5,W,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 16:21:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

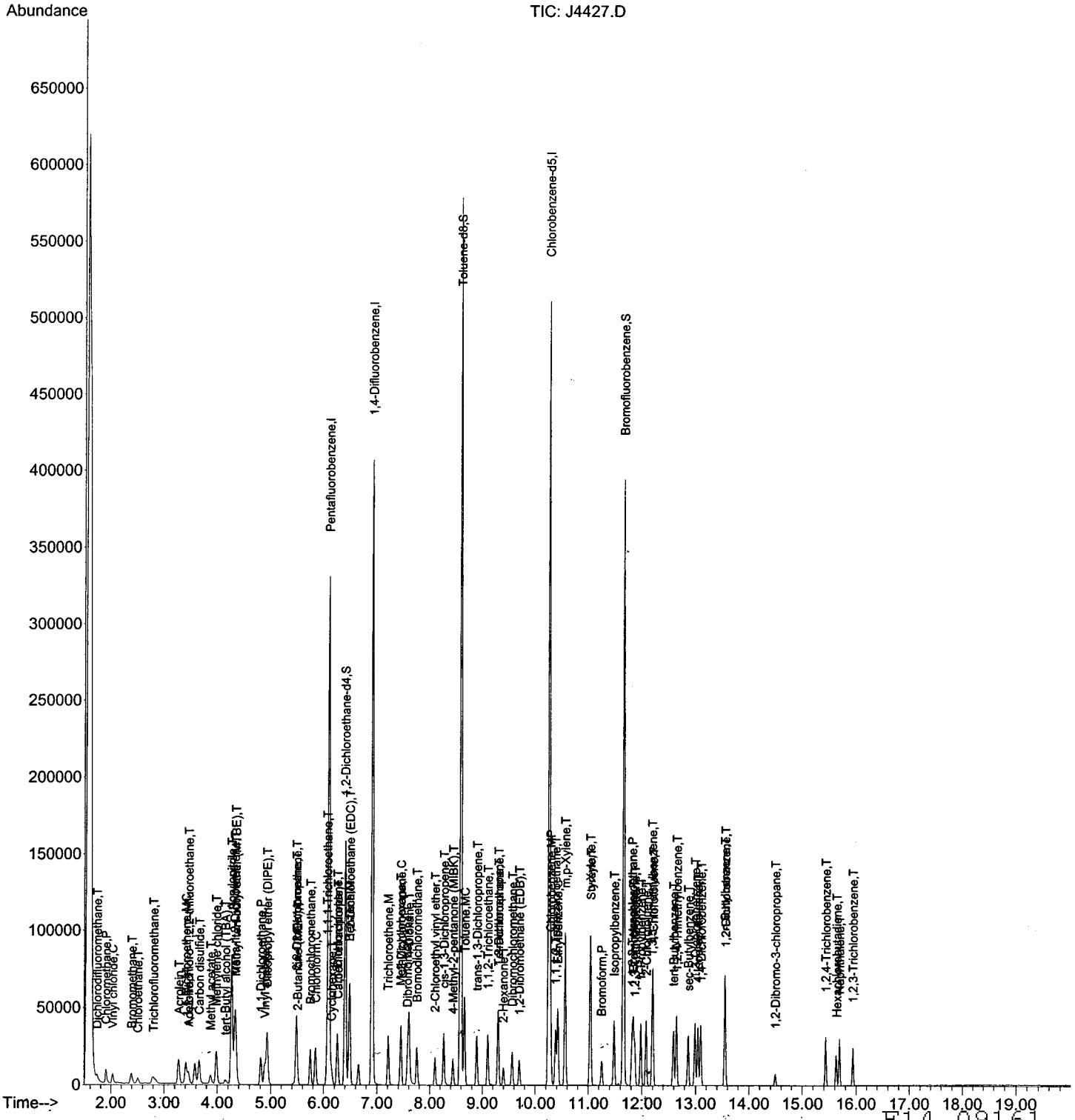
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	7870	4.26	UG		100
46) 1,3-Dichloropropane	9.30	76	20367	4.92	UG		100
47) 2-Hexanone	9.39	43	8289	4.82	UG		94
48) Dibromochloromethane	9.57	129	13930	4.67	UG		98
49) 1,2-Dibromoethane (EDB)	9.70	107	12865	4.93	UG		100
51) Chlorobenzene	10.28	112	33478	4.97	UG		98
52) 1,1,1,2-Tetrachloroethane	10.38	131	12841	4.97	UG		99
53) Ethylbenzene	10.42	91	43598	4.69	UG		100
54) m,p-Xylene	10.56	106	34455	9.47	UG		96
55) o-Xylene	11.03	106	17574	4.78	UG		94
56) Styrene	11.04	104	33281	4.75	UG		97
57) Bromoform	11.25	173	9031	4.39	UG		100
58) Isopropylbenzene	11.48	105	33161	4.32	UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	15455	5.18	UG	#	97
61) Bromobenzene	11.83	156	13303	4.93	UG		99
62) 1,2,3-Trichloropropane	11.86	75	14050	4.98	UG		98
63) n-Propylbenzene	11.98	91	36857	4.54	UG		99
64) 2-Chlorotoluene	12.08	91	28678	4.73	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	30202	4.53	UG		98
66) 4-Chlorotoluene	12.21	91	34299	4.80	UG		98
67) tert-Butylbenzene	12.59	119	20351	4.35	UG		99
68) 1,2,4-Trimethylbenzene	12.65	105	32781	4.64	UG		99
69) sec-Butylbenzene	12.87	105	28805	4.12	UG		99
70) 1,3-Dichlorobenzene	12.99	146	20030	4.83	UG		99
71) 4-Isopropyltoluene	13.04	119	27323	4.21	UG		99
72) 1,4-Dichlorobenzene	13.10	146	20755	4.75	UG		99
73) n-Butylbenzene	13.55	92	11558	4.06	UG		99
74) 1,2-Dichlorobenzene	13.56	146	19965	4.79	UG		99
75) 1,2-Dibromo-3-chloropropan	14.49	75	1818m	3.39	UG		
76) 1,2,4-Trichlorobenzene	15.43	180	8936m	3.94	UG		
77) Hexachlorobutadiene	15.63	225	4110m	3.48	UG		
78) Naphthalene	15.68	128	22328m	3.96	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	7059m	4.02	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	5260m	4.62	UG		
81) Methyl acetate	3.87	43	7899	4.15	UG	#	96
82) Cyclohexane	6.14	56	6205m	4.39	UG		
83) Methylcyclohexane	7.44	55	4433	3.41	UG		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4427.D
Acq On : 8 Sep 2014 11:44
Operator : MEI
Sample : ICC5,ICC5,W,5mL,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 16:21:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4428.D
Acq On : 8 Sep 2014 12:11
Operator : MEI
Sample : ICC20,ICC20,W,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 16:25:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	249460	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	369890	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	317299	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.41	65	127860	49.48	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.96%				
41) Toluene-d8	8.58	98	420212	49.88	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.76%				
59) Bromofluorobenzene	11.65	95	158167	51.24	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 102.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.74	85	31141	20.06	UG		100
3) Chloromethane	1.91	50	42833	19.84	UG		99
4) Vinyl chloride	2.03	62	37209	18.89	UG		100
5) Bromomethane	2.40	94	24781	19.63	UG		100
6) Chloroethane	2.52	64	21361	19.86	UG	#	97
7) Trichlorofluoromethane	2.81	101	46579	19.81	UG		100
8) Acrolein	3.28	56	37391	194.09	UG		99
9) 1,1-Dichloroethene	3.41	96	33964	19.23	UG		90
10) Acetone	3.46	43	16048	15.55	UG		98
11) Carbon disulfide	3.66	76	118961	19.12	UG		100
12) Vinyl acetate	4.89	43	134663m	31.26	UG		
13) Methylene chloride	3.99	84	46954	16.85	UG		100
14) Acrylonitrile	4.27	53	152078	180.74	UG		99
15) tert-Butyl alcohol (TBA)	4.15	59	12795	34.22	UG		100
16) trans-1,2-Dichloroethene	4.32	96	49044	19.72	UG		88
17) Methyl tert-butyl ether (M	4.34	73	164021	18.98	UG		100
18) 1,1-Dichloroethane	4.82	63	83823	19.27	UG	#	97
19) Diisopropyl ether (DIPE)	4.93	45	128552	19.00	UG	#	96
20) cis-1,2-Dichloroethene	5.48	96	55126	18.68	UG		96
21) 2,2-Dichloropropane	5.48	77	54155	19.96	UG		91
22) 2-Butanone (MEK)	5.51	43	21611	17.80	UG	#	96
23) Bromochloromethane	5.75	128	28459	18.91	UG		94
25) Chloroform	5.85	83	88545	19.41	UG		98
26) 1,1,1-Trichloroethane	6.06	97	67008	19.40	UG		99
27) Carbon tetrachloride	6.26	117	50856	19.16	UG		99
28) 1,1-Dichloropropene	6.25	75	53442	19.23	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	73408	19.02	UG		100
32) Benzene	6.49	78	185613	18.90	UG		100
33) Trichloroethene	7.21	95	46333	18.31	UG		96
34) 1,2-Dichloropropane	7.45	63	46107	18.85	UG		100
35) Dibromomethane	7.58	93	31009	18.33	UG	#	70
36) 1,4-Dioxane	7.60	88	72300	1948.59	UG		98
37) Bromodichloromethane	7.75	83	67676	18.57	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	32893	17.97	UG		99
39) cis-1,3-Dichloropropene	8.27	75	81945	18.56	UG		97
40) 4-Methyl-2-pentanone (MIBK	8.44	43	46341	19.19	UG		96
42) Toluene	8.66	92	112196	19.10	UG		99
43) trans-1,3-Dichloropropene	8.90	75	78930	18.37	UG		99
44) 1,1,2-Trichloroethane	9.10	83	34842	18.39	UG		97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4428.D
Acq On : 8 Sep 2014 12:11
Operator : MEI
Sample : ICC20,ICC20,W,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 16:25:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

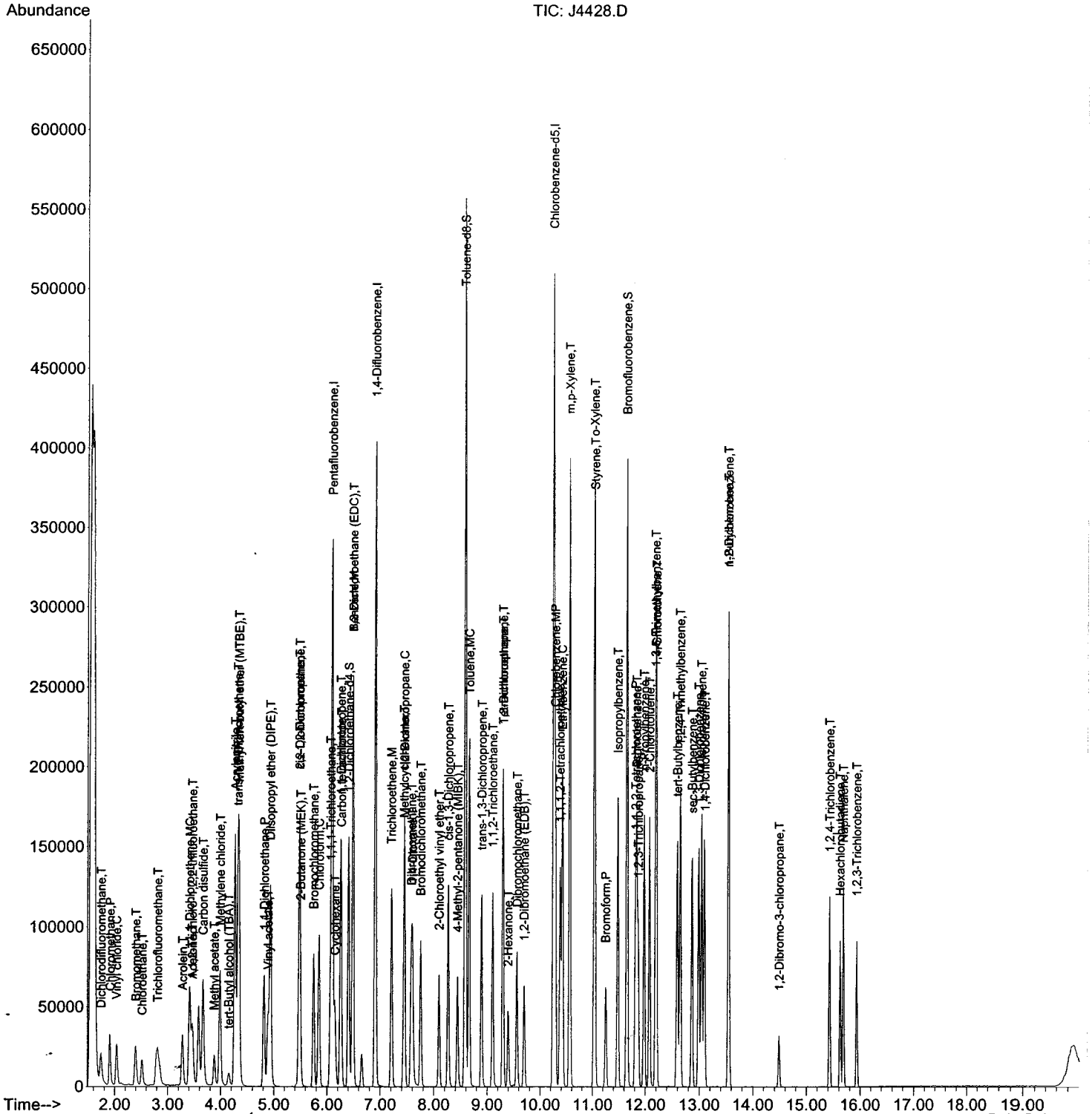
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	34000	18.95	UG		99
46) 1,3-Dichloropropane	9.30	76	75530	18.78	UG		100
47) 2-Hexanone	9.39	43	33274	19.92	UG		94
48) Dibromochloromethane	9.57	129	54443	18.79	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	47949	18.89	UG		99
51) Chlorobenzene	10.28	112	123861	18.94	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	47615	19.00	UG		99
53) Ethylbenzene	10.42	91	173876	19.26	UG		99
54) m,p-Xylene	10.56	106	136601	38.69	UG		96
55) o-Xylene	11.03	106	68774	19.27	UG		92
56) Styrene	11.04	104	132100	19.41	UG		97
57) Bromoform	11.25	173	35874	17.96	UG		100
58) Isopropylbenzene	11.48	105	142877	19.17	UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	56632	19.57	UG		100
61) Bromobenzene	11.83	156	50720	19.37	UG		99
62) 1,2,3-Trichloropropane	11.86	75	52063	18.99	UG		99
63) n-Propylbenzene	11.98	91	152809	19.38	UG		99
64) 2-Chlorotoluene	12.08	91	113128	19.23	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	125318	19.36	UG		97
66) 4-Chlorotoluene	12.21	91	130732	18.85	UG		99
67) tert-Butylbenzene	12.59	119	87932	19.35	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	131529	19.19	UG		98
69) sec-Butylbenzene	12.87	105	127265	18.73	UG		99
70) 1,3-Dichlorobenzene	12.99	146	77274	19.19	UG		100
71) 4-Isopropyltoluene	13.04	119	118429	18.80	UG		99
72) 1,4-Dichlorobenzene	13.10	146	80405	18.95	UG		99
73) n-Butylbenzene	13.55	92	51072	18.46	UG		99
74) 1,2-Dichlorobenzene	13.55	146	76975	19.04	UG		100
75) 1,2-Dibromo-3-chloropropan	14.49	75	10072	19.37	UG		91
76) 1,2,4-Trichlorobenzene	15.43	180	38201	17.33	UG		99
77) Hexachlorobutadiene	15.62	225	20254	17.67	UG		100
78) Naphthalene	15.68	128	101042	18.47	UG		100
79) 1,2,3-Trichlorobenzene	15.94	180	27090m	15.90	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.46	101	21391	19.36	UG		99
81) Methyl acetate	3.87	43	28826	15.59	UG	#	97
82) Cyclohexane	6.14	56	36212	26.38	UG		88
83) Methylcyclohexane	7.44	55	24105	19.09	UG		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4428.D
Acq On : 8 Sep 2014 12:11
Operator : MEI
Sample : ICC20,ICC20,W,5mL,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 16:25:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4429.D
Acq On : 8 Sep 2014 12:37
Operator : MEI
Sample : ICC100,ICC100,W,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 16:25:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	248774	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	369172	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	324990	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.41	65	129048	50.08	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.16%				
41) Toluene-d8	8.58	98	424544	50.50	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.00%				
59) Bromofluorobenzene	11.65	95	156737	49.58	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 99.16%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	155253m	100.30	UG		
3) Chloromethane	1.90	50	201937	93.81	UG		99
4) Vinyl chloride	2.03	62	205290	104.50	UG		100
5) Bromomethane	2.38	94	119656	95.05	UG		99
6) Chloroethane	2.51	64	107338	100.07	UG	#	90
7) Trichlorofluoromethane	2.80	101	270085	115.17	UG		100
8) Acrolein	3.27	56	53393	277.91	UG		99
9) 1,1-Dichloroethene	3.40	96	184235	104.59	UG		90
10) Acetone	3.46	43	74903	72.78	UG		98
11) Carbon disulfide	3.66	76	628007	101.23	UG		100
12) Vinyl acetate	4.89	43	626019m	145.72	UG		
13) Methylene chloride	3.98	84	229697	82.65	UG		99
14) Acrylonitrile	4.27	53	244820	291.77	UG		100
15) tert-Butyl alcohol (TBA)	4.16	59	66250	177.67	UG		98
16) trans-1,2-Dichloroethene	4.32	96	242763	97.89	UG		89
17) Methyl tert-butyl ether (M	4.34	73	815988	94.68	UG		100
18) 1,1-Dichloroethane	4.81	63	420504	96.93	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	638468	94.63	UG	#	96
20) cis-1,2-Dichloroethene	5.49	96	279244	94.88	UG		96
21) 2,2-Dichloropropane	5.49	77	276429	102.18	UG		90
22) 2-Butanone (MEK)	5.51	43	112081	92.59	UG	#	96
23) Bromochloromethane	5.75	128	146309	97.47	UG		96
25) Chloroform	5.85	83	442072	97.15	UG		99
26) 1,1,1-Trichloroethane	6.06	97	356142	103.37	UG		99
27) Carbon tetrachloride	6.25	117	288397	108.93	UG		100
28) 1,1-Dichloropropene	6.25	75	292618	105.56	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	367306	95.45	UG		100
32) Benzene	6.48	78	948442	96.77	UG		100
33) Trichloroethene	7.21	95	253713	100.46	UG		94
34) 1,2-Dichloropropane	7.45	63	231557	94.84	UG		100
35) Dibromomethane	7.57	93	162572	96.29	UG		97
36) 1,4-Dioxane	7.60	88	118487	3199.61	UG		97
37) Bromodichloromethane	7.75	83	357828	98.39	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	173374	94.91	UG		99
39) cis-1,3-Dichloropropene	8.27	75	430427	97.69	UG		97
40) 4-Methyl-2-pentanone (MIBK	8.44	43	223799	92.88	UG		95
42) Toluene	8.66	92	580665	99.06	UG		99
43) trans-1,3-Dichloropropene	8.90	75	415758	96.94	UG		99
44) 1,1,2-Trichloroethane	9.10	83	182703	96.63	UG		97

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4429.D
Acq On : 8 Sep 2014 12:37
Operator : MEI
Sample : ICC100,ICC100,W,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 16:25:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

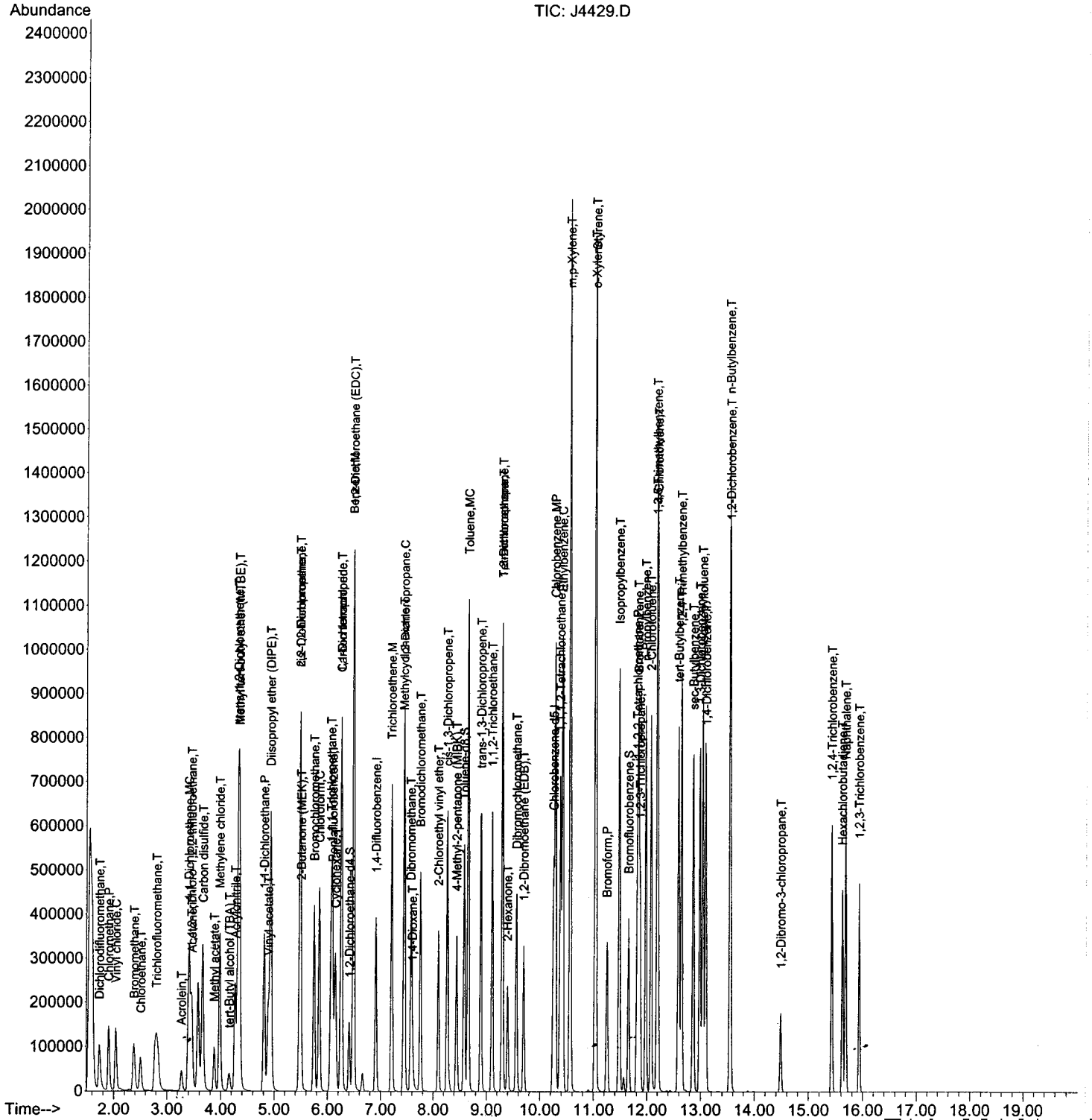
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	184226	102.90	UG		98
46) 1,3-Dichloropropane	9.30	76	387847	96.62	UG		100
47) 2-Hexanone	9.39	43	156061	93.61	UG		93
48) Dibromochloromethane	9.57	129	291874	100.94	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	243473	96.13	UG		100
51) Chlorobenzene	10.28	112	632902	94.49	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	252447	98.34	UG		99
53) Ethylbenzene	10.42	91	900748	97.39	UG		99
54) m,p-Xylene	10.56	106	694806	192.15	UG		94
55) o-Xylene	11.03	106	357424	97.75	UG		94
56) Styrene	11.04	104	673134	96.57	UG		97
57) Bromoform	11.25	173	194589	95.09	UG		100
58) Isopropylbenzene	11.48	105	763076	99.95	UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	279088	94.14	UG		99
61) Bromobenzene	11.83	156	259068	96.60	UG		99
62) 1,2,3-Trichloropropane	11.86	75	258686	92.13	UG		100
63) n-Propylbenzene	11.98	91	791732	98.02	UG		100
64) 2-Chlorotoluene	12.08	91	573514	95.19	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	643200	97.04	UG		98
66) 4-Chlorotoluene	12.21	91	669660	94.25	UG		98
67) tert-Butylbenzene	12.59	119	463546	99.59	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	675928	96.28	UG		98
69) sec-Butylbenzene	12.87	105	683991	98.28	UG		99
70) 1,3-Dichlorobenzene	12.99	146	385700	93.51	UG		100
71) 4-Isopropyltoluene	13.04	119	622369	96.45	UG		99
72) 1,4-Dichlorobenzene	13.10	146	399902	92.04	UG		100
73) n-Butylbenzene	13.55	92	268805	94.87	UG		99
74) 1,2-Dichlorobenzene	13.56	146	387594	93.62	UG		100
75) 1,2-Dibromo-3-chloropropan	14.49	75	53902	101.19	UG		89
76) 1,2,4-Trichlorobenzene	15.43	180	198472	87.91	UG		100
77) Hexachlorobutadiene	15.62	225	103252	87.96	UG		100
78) Naphthalene	15.68	128	541401	96.63	UG		100
79) 1,2,3-Trichlorobenzene	15.94	180	120686m	69.18	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	123978	109.53	UG		99
81) Methyl acetate	3.87	43	148397	78.37	UG	#	96
82) Cyclohexane	6.14	56	192259	136.72	UG		97
83) Methylcyclohexane	7.44	55	137665	106.44	UG		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4429.D
Acq On : 8 Sep 2014 12:37
Operator : MEI
Sample : ICC100,ICC100,W,5mL,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 16:25:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4430.D
Acq On : 8 Sep 2014 13:03
Operator : MEI
Sample : ICC150,ICC150,W,5mL,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 16:57:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	237424	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	354121	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	312648	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.41	65	120905	49.16	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.32%				
41) Toluene-d8	8.58	98	405975	50.34	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.68%				
59) Bromofluorobenzene	11.65	95	152169	50.03	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	230007m	155.70	UG		
3) Chloromethane	1.91	50	318164	154.87	UG		99
4) Vinyl chloride	2.04	62	334815	178.58	UG		100
5) Bromomethane	2.37	94	199985	166.46	UG		99
6) Chloroethane	2.51	64	178741	174.60	UG		97
7) Trichlorofluoromethane	2.80	101	447033	199.74	UG		100
8) Acrolein	3.28	56	73517	400.95	UG		99
9) 1,1-Dichloroethene	3.40	96	294974	175.46	UG		91
10) Acetone	3.47	43	111746	113.76	UG		98
11) Carbon disulfide	3.66	76	994161	167.92	UG		100
12) Vinyl acetate	4.93	43	864288m	210.80	UG		
13) Methylene chloride	3.98	84	355672	134.10	UG		100
14) Acrylonitrile	4.27	53	328702	410.46	UG		99
15) tert-Butyl alcohol (TBA)	4.16	59	98147	275.80	UG		98
16) trans-1,2-Dichloroethene	4.32	96	379856	160.49	UG		89
17) Methyl tert-butyl ether (M	4.34	73	1242124	151.02	UG		100
18) 1,1-Dichloroethane	4.81	63	649141	156.79	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	976313	151.62	UG	#	96
20) cis-1,2-Dichloroethene	5.48	96	433513	154.34	UG		96
21) 2,2-Dichloropropane	5.48	77	408623	158.26	UG		93
22) 2-Butanone (MEK)	5.51	43	169710	146.90	UG	#	96
23) Bromochloromethane	5.75	128	225308	157.27	UG		96
25) Chloroform	5.85	83	688862	158.62	UG		99
26) 1,1,1-Trichloroethane	6.06	97	564990	171.83	UG		98
27) Carbon tetrachloride	6.26	117	471537	186.62	UG		100
28) 1,1-Dichloropropene	6.25	75	466208	176.22	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	565388	153.95	UG		100
32) Benzene	6.48	78	1481735	157.61	UG		100
33) Trichloroethene	7.21	95	411819	170.00	UG		94
34) 1,2-Dichloropropane	7.45	63	364893	155.80	UG		100
35) Dibromomethane	7.57	93	248276	153.30	UG		97
36) 1,4-Dioxane	7.60	88	134444	3784.81	UG		98
37) Bromodichloromethane	7.75	83	556431	159.50	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	268561	153.26	UG		99
39) cis-1,3-Dichloropropene	8.27	75	670062	158.54	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	348778	150.90	UG		95
42) Toluene	8.66	92	912949	162.37	UG		99
43) trans-1,3-Dichloropropene	8.90	75	645008	156.78	UG		99
44) 1,1,2-Trichloroethane	9.10	83	282730	155.88	UG		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4430.D
Acq On : 8 Sep 2014 13:03
Operator : MEI
Sample : ICC150,ICC150,W,5mL,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 16:57:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

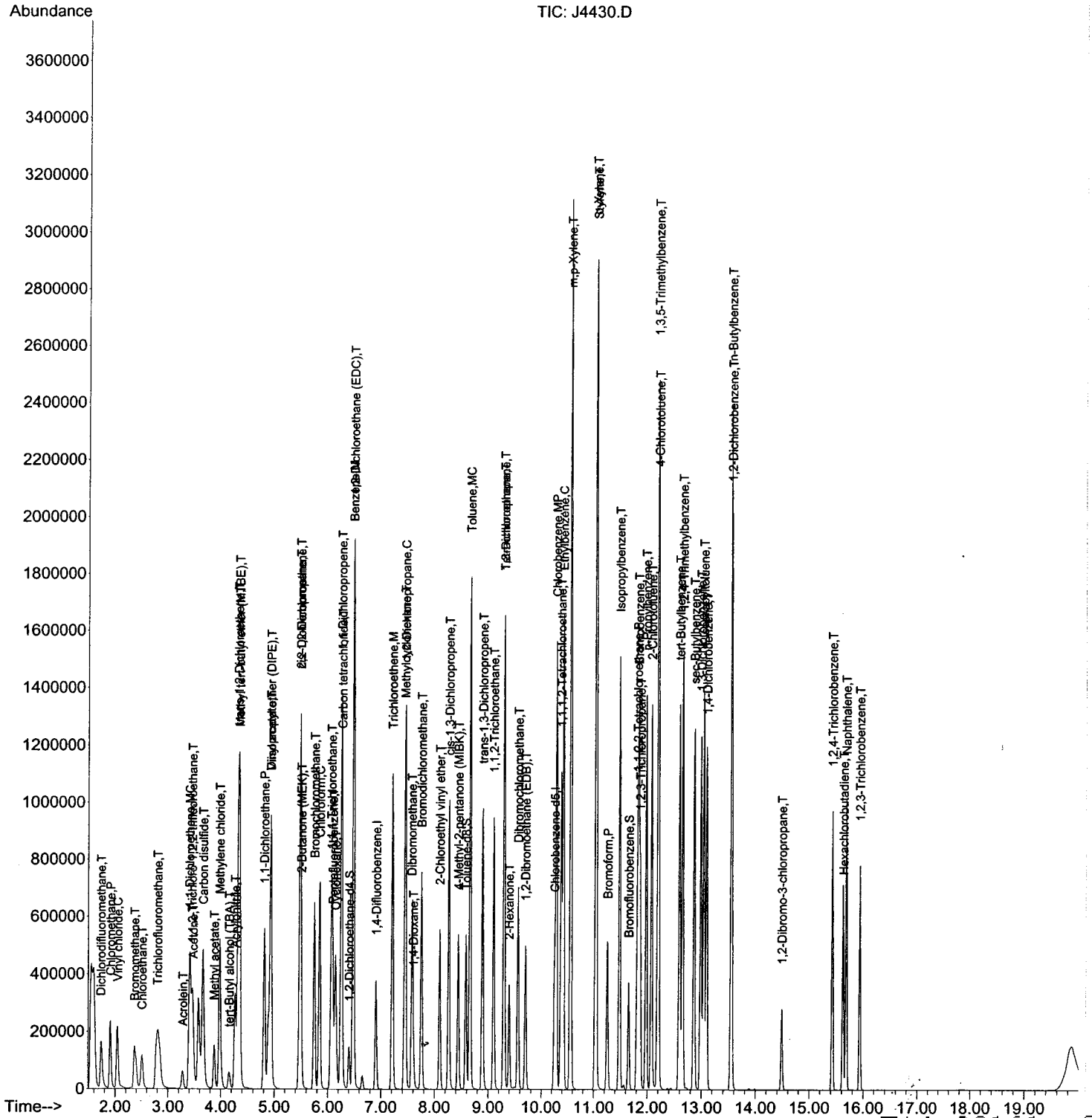
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	301030	175.29	UG		98
46) 1,3-Dichloropropane	9.30	76	593809	154.22	UG		100
47) 2-Hexanone	9.39	43	240605	150.46	UG	#	92
48) Dibromochloromethane	9.57	129	453349	163.44	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	385582	158.71	UG		100
51) Chlorobenzene	10.28	112	985599	152.95	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	394863	159.89	UG		100
53) Ethylbenzene	10.42	91	1440750	161.93	UG		99
54) m,p-Xylene	10.56	106	1094310	314.58	UG		94
55) o-Xylene	11.03	106	556831	158.30	UG		93
56) Styrene	11.04	104	1053097	157.05	UG		97
57) Bromoform	11.26	173	303245	154.04	UG		100
58) Isopropylbenzene	11.48	105	1218749	165.94	UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	418983	146.91	UG		99
61) Bromobenzene	11.83	156	402571	156.04	UG		100
62) 1,2,3-Trichloropropane	11.86	75	399476	147.89	UG		100
63) n-Propylbenzene	11.98	91	1258979	162.03	UG		99
64) 2-Chlorotoluene	12.08	91	898961	155.09	UG		85
65) 1,3,5-Trimethylbenzene	12.20	105	1022324	160.32	UG		98
66) 4-Chlorotoluene	12.21	91	1046748	153.14	UG		98
67) tert-Butylbenzene	12.59	119	751553	167.85	UG		99
68) 1,2,4-Trimethylbenzene	12.65	105	1079514	159.84	UG		98
69) sec-Butylbenzene	12.87	105	1117203	166.87	UG		99
70) 1,3-Dichlorobenzene	12.99	146	604361	152.31	UG		100
71) 4-Isopropyltoluene	13.04	119	1019803	164.29	UG		99
72) 1,4-Dichlorobenzene	13.10	146	629282	150.54	UG		100
73) n-Butylbenzene	13.55	92	447205	164.06	UG		99
74) 1,2-Dichlorobenzene	13.56	146	610094	153.18	UG		100
75) 1,2-Dibromo-3-chloropropan	14.49	75	83252	162.46	UG		88
76) 1,2,4-Trichlorobenzene	15.43	180	324255	149.29	UG		99
77) Hexachlorobutadiene	15.63	225	156360m	138.46	UG		
78) Naphthalene	15.68	128	856497	158.90	UG		100
79) 1,2,3-Trichlorobenzene	15.94	180	195853m	116.69	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	201034	184.62	UG		99
81) Methyl acetate	3.87	43	226662	124.43	UG	#	97
82) Cyclohexane	6.14	56	313474	231.73	UG		100
83) Methylcyclohexane	7.44	55	222544	178.86	UG		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4430.D
Acq On : 8 Sep 2014 13:03
Operator : MEI
Sample : ICC150,ICC150,W,5mL,100
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 09 16:57:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4431.D
Acq On : 8 Sep 2014 13:30
Operator : MEI
Sample : ICC200,ICC200,W,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 16:57:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	257361	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	378369	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	337598	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	129175	48.45	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.90%				
41) Toluene-d8	8.58	98	432727	50.22	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.44%				
59) Bromofluorobenzene	11.65	95	162192	49.39	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.78%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	311926m	194.80	UG		
3) Chloromethane	1.91	50	425670	191.15	UG		99
4) Vinyl chloride	2.03	62	449526	221.18	UG		100
5) Bromomethane	2.36	94	250323	192.22	UG		100
6) Chloroethane	2.50	64	238709	215.12	UG		97
7) Trichlorofluoromethane	2.80	101	595643	245.53	UG		100
8) Acrolein	3.27	56	90609	455.89	UG		100
9) 1,1-Dichloroethene	3.40	96	401020	220.05	UG		89
10) Acetone	3.46	43	151408	142.20	UG		98
11) Carbon disulfide	3.65	76	1339220	208.68	UG		100
12) Vinyl acetate	4.93	43	1064753m	239.57	UG		
13) Methylene chloride	3.98	84	477187	165.97	UG		100
14) Acrylonitrile	4.27	53	413565	476.42	UG		100
15) tert-Butyl alcohol (TBA)	4.16	59	131223	340.18	UG		97
16) trans-1,2-Dichloroethene	4.31	96	505572	197.06	UG		89
17) Methyl tert-butyl ether (M	4.34	73	1664129	186.65	UG		100
18) 1,1-Dichloroethane	4.81	63	874577	194.88	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	1311171	187.85	UG	#	96
20) cis-1,2-Dichloroethene	5.49	96	582639	191.37	UG		96
21) 2,2-Dichloropropane	5.49	77	525751	187.85	UG		95
22) 2-Butanone (MEK)	5.51	43	225635	180.18	UG	#	96
23) Bromochloromethane	5.75	128	306647	197.47	UG		96
25) Chloroform	5.84	83	921644	195.79	UG		99
26) 1,1,1-Trichloroethane	6.06	97	756693	212.30	UG		98
27) Carbon tetrachloride	6.25	117	635983	232.20	UG		100
28) 1,1-Dichloropropene	6.25	75	621612	216.76	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	752648	189.06	UG		100
32) Benzene	6.48	78	1985248	197.63	UG		100
33) Trichloroethene	7.21	95	564282	218.01	UG		94
34) 1,2-Dichloropropane	7.45	63	488638	195.26	UG		100
35) Dibromomethane	7.57	93	332696	192.26	UG		96
36) 1,4-Dioxane	7.60	88	165778	4367.83	UG		98
37) Bromodichloromethane	7.75	83	754622	202.45	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	361787	193.23	UG		99
39) cis-1,3-Dichloropropene	8.27	75	901363	199.60	UG		97
40) 4-Methyl-2-pentanone (MIBK	8.44	43	461108	186.71	UG		95
42) Toluene	8.66	92	1225568	204.01	UG		100
43) trans-1,3-Dichloropropene	8.90	75	867337	197.31	UG		99
44) 1,1,2-Trichloroethane	9.10	83	379414	195.79	UG		97

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4431.D
Acq On : 8 Sep 2014 13:30
Operator : MEI
Sample : ICC200,ICC200,W,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 16:57:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration

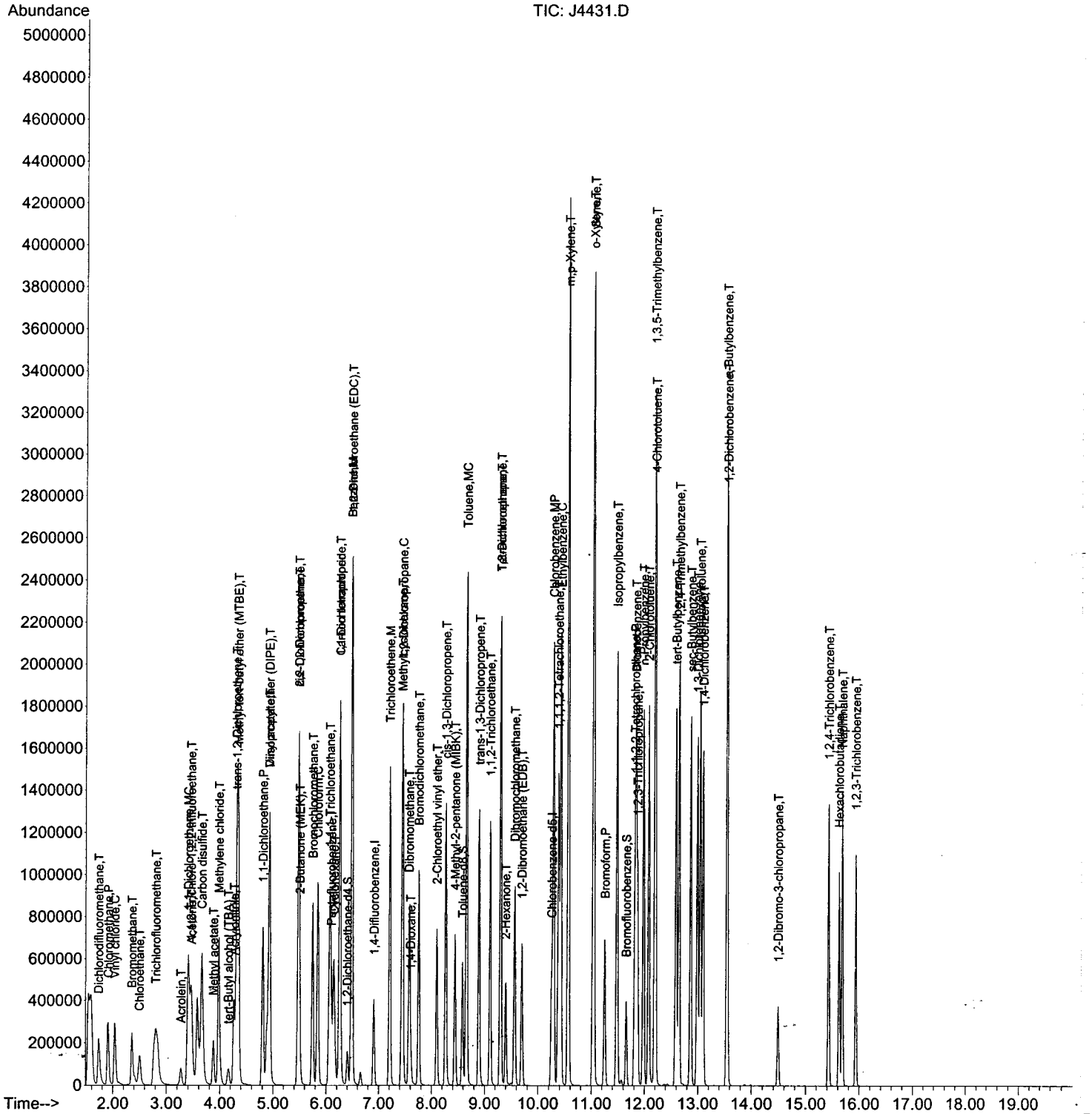
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
45) Tetrachloroethene	9.30	166	404815	220.61 UG		98
46) 1,3-Dichloropropane	9.30	76	800667	194.62 UG		100
47) 2-Hexanone	9.39	43	322578	188.79 UG	#	75
48) Dibromochloromethane	9.57	129	610487	205.99 UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	511830	197.17 UG		100
51) Chlorobenzene	10.28	112	1340993	192.72 UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	531966	199.48 UG		99
53) Ethylbenzene	10.43	91	1921965	200.05 UG		99
54) m,p-Xylene	10.56	106	1464099	389.78 UG		94
55) o-Xylene	11.03	106	745580	196.30 UG		94
56) Styrene	11.04	104	1409029	194.60 UG		97
57) Bromoform	11.26	173	409258	192.53 UG		100
58) Isopropylbenzene	11.48	105	1647585	207.75 UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	534220	173.47 UG		100
61) Bromobenzene	11.83	156	545623	195.85 UG		100
62) 1,2,3-Trichloropropane	11.86	75	524481	179.82 UG		100
63) n-Propylbenzene	11.98	91	1681027	200.35 UG		100
64) 2-Chlorotoluene	12.08	91	1198839	191.55 UG		85
65) 1,3,5-Trimethylbenzene	12.20	105	1378377	200.18 UG		98
66) 4-Chlorotoluene	12.21	91	1399604	189.62 UG		98
67) tert-Butylbenzene	12.59	119	1024817	211.96 UG		99
68) 1,2,4-Trimethylbenzene	12.65	105	1448720	198.65 UG		98
69) sec-Butylbenzene	12.87	105	1505432	208.23 UG		99
70) 1,3-Dichlorobenzene	12.99	146	812781	189.70 UG		100
71) 4-Isopropyltoluene	13.04	119	1370320	204.44 UG		99
72) 1,4-Dichlorobenzene	13.10	146	847131	187.68 UG		100
73) n-Butylbenzene	13.55	92	599646	203.72 UG		99
74) 1,2-Dichlorobenzene	13.56	146	813889	189.25 UG		100
75) 1,2-Dibromo-3-chloropropan	14.49	75	113572	205.24 UG		90
76) 1,2,4-Trichlorobenzene	15.43	180	441718	188.34 UG		100
77) Hexachlorobutadiene	15.62	225	208604m	171.07 UG		
78) Naphthalene	15.68	128	1160370	199.37 UG		100
79) 1,2,3-Trichlorobenzene	15.94	180	280621m	154.84 UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	271501	230.90 UG		99
81) Methyl acetate	3.88	43	310750	157.98 UG	#	96
82) Cyclohexane	6.14	56	416573	285.18 UG		99
83) Methylcyclohexane	7.44	55	302097	224.86 UG		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4431.D
Acq On : 8 Sep 2014 13:30
Operator : MEI
Sample : ICC200,ICC200,W,5mL,100
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 09 16:57:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Sep 08 13:54:31 2014
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4434.D
Acq On : 8 Sep 2014 14:55
Operator : MEI
Sample : ICV100,ICV100,W,5mL,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 17:01:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Sep 09 16:59:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.282	0.334	-18.4	107	0.00
3	P	Chloromethane	0.433	0.420	3.0	103	0.00
4	C	Vinyl chloride	0.395	0.446	-12.9	108	0.00
5	T	Bromomethane	0.253	0.255	-0.8	106	0.00
6	T	Chloroethane	0.216	0.232	-7.4	107	0.00
7	T	Trichlorofluoromethane	0.499	0.592	-18.6	109	0.00
8	T	Acrolein	0.039	0.036	7.7	101	0.00
9	MC	1,1-Dichloroethene	0.354	0.399	-12.7	107	0.00
10	T	Acetone	0.158	0.148	6.3	98	0.00
11	T	Carbon disulfide	1.247	1.343	-7.7	106	0.00
12	T	Vinyl acetate	1.382	1.481	-7.2	117	-0.01
13	T	Methylene chloride	0.523	0.481	8.0	104	0.00
14	T	Acrylonitrile	0.169	0.161	4.7	98	-0.01
15	T	tert-Butyl alcohol (TBA)	0.066	0.065	1.5	98	0.00
16	T	trans-1,2-Dichloroethene	0.498	0.511	-2.6	104	0.00
17	T	Methyl tert-butyl ether (MT	1.732	1.653	4.6	101	0.00
18	P	1,1-Dichloroethane	0.872	0.871	0.1	103	0.00
19	T	Diisopropyl ether (DIPE)	1.356	1.309	3.5	102	0.00
20	T	cis-1,2-Dichloroethene	0.592	0.578	2.4	103	0.00
21	T	2,2-Dichloropropane	0.544	0.573	-5.3	103	0.00
22	T	2-Butanone (MEK)	0.243	0.224	7.8	99	0.00
23	T	Bromochloromethane	0.302	0.304	-0.7	103	0.00
25	C	Chloroform	0.915	0.917	-0.2	103	-0.01
26	T	1,1,1-Trichloroethane	0.692	0.753	-8.8	105	0.00
27	T	Carbon tetrachloride	0.532	0.626	-17.7	108	0.00
28	T	1,1-Dichloropropene	0.557	0.622	-11.7	106	0.00
29	T	1,2-Dichloroethane (EDC)	0.773	0.744	3.8	101	0.00
30	S	1,2-Dichloroethane-d4	0.518	0.512	1.2	98	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
32	M	Benzene	1.327	1.332	-0.4	104	0.00
33	M	Trichloroethene	0.342	0.338	1.2	99	0.00
34	C	1,2-Dichloropropane	0.331	0.324	2.1	104	0.00
35	T	Dibromomethane	0.229	0.220	3.9	101	0.00
36	T	1,4-Dioxane	0.005	0.006	-20.0	104	0.00
37	T	Bromodichloromethane	0.493	0.491	0.4	102	0.00
38	T	2-Chloroethyl vinyl ether	0.247	0.235	4.9	101	0.00
39	T	cis-1,3-Dichloropropene	0.597	0.596	0.2	103	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.326	0.307	5.8	102	0.00
41	S	Toluene-d8	1.139	1.149	-0.9	101	0.00
42	MC	Toluene	0.794	0.807	-1.6	103	0.00
43	T	trans-1,3-Dichloropropene	0.581	0.568	2.2	102	-0
44	T	1,1,2-Trichloroethane	0.256	0.253	1.2	103	0.00
45	T	Tetrachloroethene	0.242	0.266	-9.9	107	0.00
46	T	1,3-Dichloropropane	0.544	0.529	2.8	102	0.00

E14-09161 0068

47	T	2-Hexanone	0.226	0.220	2.7	105	0.00
48	T	Dibromochloromethane	0.392	0.396	-1.0	101	0.00
49	T	1,2-Dibromoethane (EDB)	0.343	0.339	1.2	104	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
51	MP	Chlorobenzene	1.031	0.998	3.2	103	0.00
52	T	1,1,1,2-Tetrachloroethane	0.395	0.390	1.3	101	0.00
53	C	Ethylbenzene	1.423	1.449	-1.8	105	0.00
54	T	m,p-Xylene	0.556	0.558	-0.4	105	0.00
55	T	o-Xylene	0.563	0.567	-0.7	104	0.00
56	T	Styrene	1.072	1.068	0.4	103	0.00
57	P	Bromoform	0.315	0.301	4.4	101	0.01
58	T	Isopropylbenzene	1.175	1.226	-4.3	105	0.00
59	S	Bromofluorobenzene	0.486	0.487	-0.2	101	0.00
60	P	1,1,2,2-Tetrachloroethane	0.456	0.458	-0.4	107	0.00
61	T	Bromobenzene	0.413	0.404	2.2	102	0.00
62	T	1,2,3-Trichloropropane	0.432	0.404	6.5	102	0.00
63	T	n-Propylbenzene	1.243	1.267	-1.9	104	0.00
64	T	2-Chlorotoluene	0.927	0.909	1.9	103	0.00
65	T	1,3,5-Trimethylbenzene	1.020	1.035	-1.5	105	0.00
66	T	4-Chlorotoluene	1.093	1.057	3.3	103	0.00
67	T	tert-Butylbenzene	0.716	0.748	-4.5	105	0.00
68	T	1,2,4-Trimethylbenzene	1.080	1.082	-0.2	104	0.00
69	T	sec-Butylbenzene	1.071	1.110	-3.6	106	0.00
70	T	1,3-Dichlorobenzene	0.635	0.611	3.8	103	0.00
71	T	4-Isopropyltoluene	0.993	1.013	-2.0	106	0.00
72	T	1,4-Dichlorobenzene	0.668	0.634	5.1	103	-0.01
73	T	n-Butylbenzene	0.436	0.444	-1.8	108	0.00
74	T	1,2-Dichlorobenzene	0.637	0.618	3.0	104	0.00
75	T	1,2-Dibromo-3-chloropropane	0.073	0.084	-15.1	102	0.00
76	T	1,2,4-Trichlorobenzene	0.305	0.317	-3.9	104	0.00
77	T	Hexachlorobutadiene	0.154	0.184	-19.5	116	0.00
78	T	Naphthalene	0.776	0.828	-6.7	100	0.00
79	T	1,2,3-Trichlorobenzene	0.212	0.231	-9.0	125	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.182	0.202	-11.0	106	0.00
81	T	Methyl acetate	0.234	0.224	4.3	99	0.00
82	T	Cyclohexane	0.276	0.321	-16.3	109	0.00
83	T	Methylcyclohexane	0.199	0.229	-15.1	109	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM090814.M Tue Sep 09 17:01:05 2014 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4434.D
Acq On : 8 Sep 2014 14:55
Operator : MEI
Sample : ICV100,ICV100,W,5mL,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 17:01:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Sep 09 16:59:23 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	248283	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	372006	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	326198	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	127072	49.41	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.82%				
41) Toluene-d8	8.58	98	427483	50.46	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.92%				
59) Bromofluorobenzene	11.65	95	158972	50.10	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 100.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	166039m	118.75	UG		
3) Chloromethane	1.90	50	208667	97.13	UG		99
4) Vinyl chloride	2.03	62	221660	113.05	UG		100
5) Bromomethane	2.38	94	126534	100.72	UG		100
6) Chloroethane	2.51	64	115139	107.56	UG		97
7) Trichlorofluoromethane	2.80	101	294123	118.77	UG		100
8) Acrolein	3.27	56	54070	281.99	UG		100
9) 1,1-Dichloroethene	3.40	96	197883	112.56	UG		89
10) Acetone	3.46	43	73545	93.73	UG		97
11) Carbon disulfide	3.66	76	667069	107.74	UG		100
12) Vinyl acetate	4.88	43	735176m	107.14	UG		
13) Methylene chloride	3.98	84	238643	91.97	UG		100
14) Acrylonitrile	4.26	53	240359	287.02	UG		100
15) tert-Butyl alcohol (TBA)	4.16	59	64674	198.19	UG		98
16) trans-1,2-Dichloroethene	4.32	96	253502	102.42	UG		89
17) Methyl tert-butyl ether (M	4.34	73	820756	95.42	UG		100
18) 1,1-Dichloroethane	4.81	63	432334	99.86	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	649861	96.51	UG	#	96
20) cis-1,2-Dichloroethene	5.49	96	287109	97.75	UG		96
21) 2,2-Dichloropropane	5.49	77	284592	105.40	UG		90
22) 2-Butanone (MEK)	5.51	43	111205	92.05	UG	#	96
23) Bromochloromethane	5.75	128	151184	100.91	UG		96
25) Chloroform	5.84	83	455427	100.28	UG		99
26) 1,1,1-Trichloroethane	6.06	97	373898	108.74	UG		99
27) Carbon tetrachloride	6.25	117	310752	117.60	UG		99
28) 1,1-Dichloropropene	6.25	75	308867	111.64	UG		91
29) 1,2-Dichloroethane (EDC)	6.49	62	369589	96.23	UG		100
32) Benzene	6.48	78	990753	100.32	UG		100
33) Trichloroethene	7.21	95	251459	98.81	UG		95
34) 1,2-Dichloropropane	7.45	63	241238	98.05	UG		100
35) Dibromomethane	7.57	93	163623	96.17	UG		96
36) 1,4-Dioxane	7.60	88	123535	3310.51	UG		96
37) Bromodichloromethane	7.75	83	365673	99.78	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	174891	95.01	UG		98
39) cis-1,3-Dichloropropene	8.27	75	443404	99.87	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	228691	94.18	UG		95
42) Toluene	8.66	92	600603	101.69	UG		99
43) trans-1,3-Dichloropropene	8.89	75	422833	97.84	UG		99
44) 1,1,2-Trichloroethane	9.10	83	188222	98.79	UG		98

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4434.D
Acq On : 8 Sep 2014 14:55
Operator : MEI
Sample : ICV100,ICV100,W,5mL,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 17:01:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Sep 09 16:59:23 2014
Response via : Initial Calibration

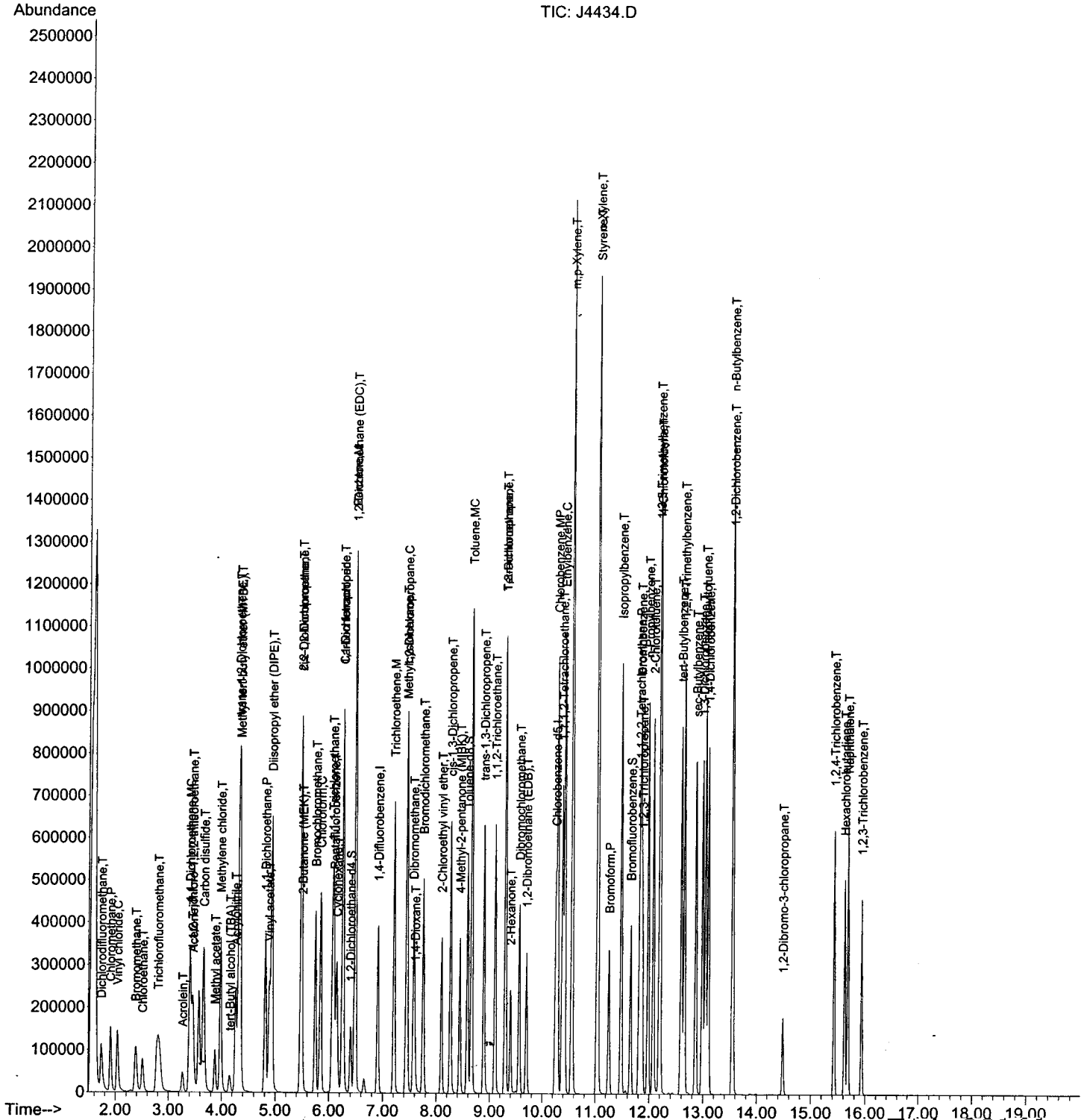
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	197708	109.59	UG		99
46) 1,3-Dichloropropane	9.30	76	393705	97.34	UG		100
47) 2-Hexanone	9.39	43	163808	97.51	UG		93
48) Dibromochloromethane	9.57	129	294352	101.02	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	252077	98.77	UG		100
51) Chlorobenzene	10.28	112	651261	96.87	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	254234	98.67	UG		99
53) Ethylbenzene	10.42	91	945463	101.85	UG		99
54) m,p-Xylene	10.56	106	728048	200.60	UG		95
55) o-Xylene	11.03	106	370101	100.85	UG		94
56) Styrene	11.04	104	696634	99.57	UG		97
57) Bromoform	11.26	173	196580	95.71	UG		99
58) Isopropylbenzene	11.48	105	799978	104.40	UG		99
60) 1,1,2,2-Tetrachloroethane	11.81	83	298514	100.32	UG		99
61) Bromobenzene	11.83	156	263348	97.83	UG		100
62) 1,2,3-Trichloropropane	11.86	75	263375	93.46	UG		100
63) n-Propylbenzene	11.98	91	826720	101.98	UG		100
64) 2-Chlorotoluene	12.08	91	593272	98.10	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	675021	101.46	UG		98
66) 4-Chlorotoluene	12.21	91	689392	96.67	UG		99
67) tert-Butylbenzene	12.59	119	488120	104.49	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	705994	100.19	UG		98
69) sec-Butylbenzene	12.87	105	724074	103.66	UG		99
70) 1,3-Dichlorobenzene	12.99	146	398448	96.25	UG		100
71) 4-Isopropyltoluene	13.04	119	661082	102.07	UG		99
72) 1,4-Dichlorobenzene	13.09	146	413851	94.89	UG		100
73) n-Butylbenzene	13.55	92	289976	101.96	UG		99
74) 1,2-Dichlorobenzene	13.56	146	403023	96.99	UG		100
75) 1,2-Dibromo-3-chloropropan	14.49	75	54847	114.45	UG		90
76) 1,2,4-Trichlorobenzene	15.43	180	207098	104.20	UG		100
77) Hexachlorobutadiene	15.62	225	120146	119.47	UG		100
78) Naphthalene	15.68	128	540364	106.68	UG		100
79) 1,2,3-Trichlorobenzene	15.94	180	150715	108.96	UG		99
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	131801	110.97	UG		100
81) Methyl acetate	3.87	43	146247	95.75	UG	#	97
82) Cyclohexane	6.14	56	209669	116.24	UG		99
83) Methylcyclohexane	7.44	55	149434	115.11	UG		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4434.D
Acq On : 8 Sep 2014 14:55
Operator : MEI
Sample : ICV100,ICV100,W,5mL,100
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 09 17:01:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Sep 09 16:59:23 2014
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4642.D
Acq On : 25 Sep 2014 10:56
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:02:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	95	0.00
2	T	Dichlorodifluoromethane	0.282	0.337	-19.5	102	0.00
3	P	Chloromethane	0.433	0.443	-2.3	103	0.00
4	C	Vinyl chloride	0.395	0.441	-11.6	101	0.00
5	T	Bromomethane	0.253	0.281	-11.1	110	0.00
6	T	Chloroethane	0.216	0.250	-15.7	110	0.00
7	T	Trichlorofluoromethane	0.499	0.585	-17.2	102	0.00
8	T	Acrolein	0.039	0.042	-7.7	112	0.00
9	MC	1,1-Dichloroethene	0.354	0.421	-18.9	108	0.00
10	T	Acetone	0.158	0.180	-13.9	113	0.00
11	T	Carbon disulfide	1.247	1.458	-16.9	109	-0.01
12	T	Vinyl acetate	1.382	1.310	5.2	99	-0.01
13	T	Methylene chloride	0.523	0.541	-3.4	111	0.00
14	T	Acrylonitrile	0.169	0.190	-12.4	110	-0.01
15	T	tert-Butyl alcohol (TBA)	0.066	0.071	-7.6	101	-0.01
16	T	trans-1,2-Dichloroethene	0.498	0.551	-10.6	107	-0.01
17	T	Methyl tert-butyl ether (MT	1.732	1.803	-4.1	104	0.00
18	P	1,1-Dichloroethane	0.872	0.922	-5.7	103	0.00
19	T	Diisopropyl ether (DIPE)	1.356	1.424	-5.0	105	0.00
20	T	cis-1,2-Dichloroethene	0.592	0.631	-6.6	106	-0.01
21	T	2,2-Dichloropropane	0.544	0.580	-6.6	99	0.00
22	T	2-Butanone (MEK)	0.243	0.230	5.3	97	-0.01
23	T	Bromochloromethane	0.302	0.322	-6.6	104	0.00
25	C	Chloroform	0.915	0.988	-8.0	105	-0.01
26	T	1,1,1-Trichloroethane	0.692	0.793	-14.6	105	0.00
27	T	Carbon tetrachloride	0.532	0.637	-19.7	104	0.00
28	T	1,1-Dichloropropene	0.557	0.639	-14.7	103	-0.01
29	T	1,2-Dichloroethane (EDC)	0.773	0.785	-1.6	101	0.00
30	S	1,2-Dichloroethane-d4	0.518	0.520	-0.4	95	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	-0.01
32	M	Benzene	1.327	1.351	-1.8	105	0.00
33	M	Trichloroethene	0.342	0.356	-4.1	103	0.00
34	C	1,2-Dichloropropane	0.331	0.318	3.9	101	0.00
35	T	Dibromomethane	0.229	0.227	0.9	102	0.00
36	T	1,4-Dioxane	0.005	0.006	-20.0	108	0.00
37	T	Bromodichloromethane	0.493	0.496	-0.6	102	0.00
38	T	2-Chloroethyl vinyl ether	0.247	0.227	8.1	96	0.00
39	T	cis-1,3-Dichloropropene	0.597	0.577	3.4	98	-0.01
40	T	4-Methyl-2-pentanone (MIBK)	0.326	0.298	8.6	98	0.00
41	S	Toluene-d8	1.139	1.126	1.1	97	0.00
42	MC	Toluene	0.794	0.803	-1.1	102	-0.01
43	T	trans-1,3-Dichloropropene	0.581	0.547	5.9	97	-0.01
44	T	1,1,2-Trichloroethane	0.256	0.253	1.2	102	0.00
45	T	Tetrachloroethene	0.242	0.263	-8.7	105	0.00
46	T	1,3-Dichloropropane	0.544	0.512	5.9	97	-0.01

47	T	2-Hexanone	0.226	0.193	14.6	91	0.00
48	T	Dibromochloromethane	0.392	0.388	1.0	98	-0.01
49	T	1,2-Dibromoethane (EDB)	0.343	0.338	1.5	102	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	103	-0.01
51	MP	Chlorobenzene	1.031	0.934	9.4	99	0.00
52	T	1,1,1,2-Tetrachloroethane	0.395	0.376	4.8	100	0.00
53	C	Ethylbenzene	1.423	1.373	3.5	102	0.00
54	T	m,p-Xylene	0.556	0.525	5.6	101	0.00
55	T	o-Xylene	0.563	0.536	4.8	101	0.00
56	T	Styrene	1.072	0.990	7.6	99	0.00
57	P	Bromoform	0.315	0.284	9.8	98	0.00
58	T	Isopropylbenzene	1.175	1.166	0.8	103	0.00
59	S	Bromofluorobenzene	0.486	0.471	3.1	101	0.00
60	P	1,1,2,2-Tetrachloroethane	0.456	0.416	8.8	100	-0.01
61	T	Bromobenzene	0.413	0.380	8.0	99	0.00
62	T	1,2,3-Trichloropropane	0.432	0.381	11.8	99	0.00
63	T	n-Propylbenzene	1.243	1.200	3.5	102	0.00
64	T	2-Chlorotoluene	0.927	0.864	6.8	101	0.00
65	T	1,3,5-Trimethylbenzene	1.020	0.990	2.9	103	0.00
66	T	4-Chlorotoluene	1.093	1.007	7.9	101	-0.01
67	T	tert-Butylbenzene	0.716	0.722	-0.8	105	0.00
68	T	1,2,4-Trimethylbenzene	1.080	1.025	5.1	102	0.00
69	T	sec-Butylbenzene	1.071	1.065	0.6	105	-0.01
70	T	1,3-Dichlorobenzene	0.635	0.571	10.1	99	0.00
71	T	4-Isopropyltoluene	0.993	0.962	3.1	104	0.00
72	T	1,4-Dichlorobenzene	0.668	0.593	11.2	100	-0.01
73	T	n-Butylbenzene	0.436	0.424	2.8	106	0.00
74	T	1,2-Dichlorobenzene	0.637	0.583	8.5	101	-0.01
75	T	1,2-Dibromo-3-chloropropane	0.073	0.085	-16.4	106	-0.01
76	T	1,2,4-Trichlorobenzene	0.305	0.358	-17.4	121	0.00
77	T	Hexachlorobutadiene	0.154	0.182	-18.2	119	0.00
78	T	Naphthalene	0.776	0.928	-19.6	115	0.00
79	T	1,2,3-Trichlorobenzene	0.212	0.250	-17.9	139	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.182	0.213	-17.0	115	0.00
81	T	Methyl acetate	0.234	0.265	-13.2	120	0.00
82	T	Cyclohexane	0.276	0.322	-16.7	112	-0.01
83	T	Methylcyclohexane	0.199	0.230	-15.6	112	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM090814.M Thu Sep 25 15:02:07 2014 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4642.D
Acq On : 25 Sep 2014 10:56
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:02:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.08	168	235445	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.90	114	367393	50.00	UG		-0.01
50) Chlorobenzene-d5	10.24	117	336034	50.00	UG		-0.01
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	122547	50.24	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.48%				
41) Toluene-d8	8.58	98	413840	49.46	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.92%				
59) Bromofluorobenzene	11.65	95	158342	48.44	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	158586m	119.60	UG		
3) Chloromethane	1.90	50	208702	102.44	UG		100
4) Vinyl chloride	2.03	62	207789	111.76	UG		100
5) Bromomethane	2.38	94	132135	110.91	UG		99
6) Chloroethane	2.51	64	117931	116.17	UG		97
7) Trichlorofluoromethane	2.80	101	275651m	117.38	UG		
8) Acrolein	3.27	56	59740	328.55	UG		100
9) 1,1-Dichloroethene	3.40	96	198212m	118.89	UG		
10) Acetone	3.46	43	84955m	114.17	UG		
11) Carbon disulfide	3.65	76	686474	116.92	UG		100
12) Vinyl acetate	4.88	43	616726m	94.78	UG		
13) Methylene chloride	3.98	84	254945	103.61	UG		100
14) Acrylonitrile	4.26	53	268430m	338.01	UG		
15) tert-Butyl alcohol (TBA)	4.15	59	67034	216.62	UG		98
16) trans-1,2-Dichloroethene	4.31	96	259673	110.64	UG		87
17) Methyl tert-butyl ether (M	4.34	73	848913	104.08	UG		100
18) 1,1-Dichloroethane	4.81	63	434252	105.77	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	670603	105.02	UG	#	96
20) cis-1,2-Dichloroethene	5.47	96	297056	106.65	UG		94
21) 2,2-Dichloropropane	5.48	77	272944	106.60	UG		94
22) 2-Butanone (MEK)	5.49	43	108183	94.43	UG	#	97
23) Bromochloromethane	5.75	128	151501	106.64	UG		96
25) Chloroform	5.84	83	465010	107.98	UG		99
26) 1,1,1-Trichloroethane	6.06	97	373480	114.54	UG		98
27) Carbon tetrachloride	6.25	117	300154	119.79	UG		100
28) 1,1-Dichloropropene	6.24	75	300813	114.66	UG		92
29) 1,2-Dichloroethane (EDC)	6.49	62	369612	101.49	UG		100
32) Benzene	6.48	78	992472	101.75	UG		100
33) Trichloroethene	7.21	95	261888	104.20	UG		93
34) 1,2-Dichloropropane	7.45	63	233898	96.26	UG		100
35) Dibromomethane	7.57	93	166502	99.09	UG		97
36) 1,4-Dioxane	7.60	88	127676	3464.44	UG		95
37) Bromodichloromethane	7.75	83	364561	100.73	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	167004	91.86	UG		99
39) cis-1,3-Dichloropropene	8.26	75	423733	96.64	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	218777	91.23	UG		95
42) Toluene	8.65	92	589821	101.11	UG		100
43) trans-1,3-Dichloropropene	8.89	75	402063	94.20	UG		99
44) 1,1,2-Trichloroethane	9.10	83	186248	98.98	UG		98

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4642.D
Acq On : 25 Sep 2014 10:56
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:02:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

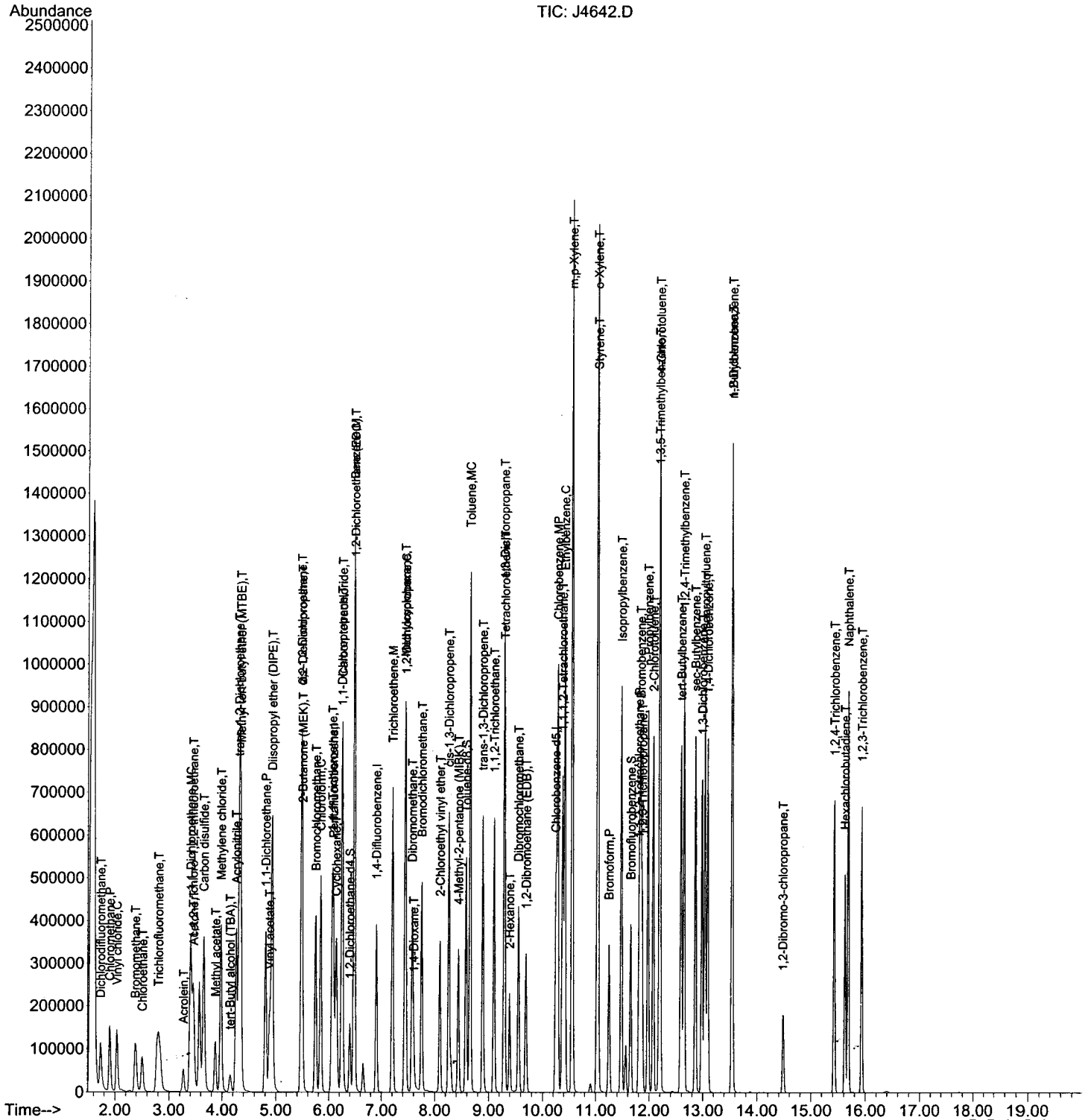
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	193449	108.57	UG		99
46) 1,3-Dichloropropane	9.29	76	376102	94.15	UG		100
47) 2-Hexanone	9.39	43	141893	85.53	UG	#	92
48) Dibromochloromethane	9.56	129	285255	99.12	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	248638	98.64	UG		100
51) Chlorobenzene	10.28	112	627912	90.66	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	252976	95.31	UG		100
53) Ethylbenzene	10.42	91	922948	96.51	UG		99
54) m,p-Xylene	10.56	106	705062	188.58	UG		94
55) o-Xylene	11.03	106	359998	95.22	UG		94
56) Styrene	11.04	104	665279	92.31	UG		97
57) Bromoform	11.25	173	190679	90.12	UG		100
58) Isopropylbenzene	11.48	105	783454	99.25	UG		99
60) 1,1,2,2-Tetrachloroethane	11.80	83	279350	91.13	UG		99
61) Bromobenzene	11.83	156	255244	92.05	UG		100
62) 1,2,3-Trichloropropane	11.86	75	256091	88.21	UG		100
63) n-Propylbenzene	11.98	91	806165	96.53	UG		100
64) 2-Chlorotoluene	12.08	91	580398	93.17	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	665283	97.07	UG		97
66) 4-Chlorotoluene	12.20	91	677082	92.16	UG		98
67) tert-Butylbenzene	12.59	119	485291	100.84	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	689032	94.92	UG		98
69) sec-Butylbenzene	12.86	105	715843	99.48	UG		99
70) 1,3-Dichlorobenzene	12.99	146	383526	89.93	UG		100
71) 4-Isopropyltoluene	13.04	119	646593	96.92	UG		99
72) 1,4-Dichlorobenzene	13.09	146	398409	88.68	UG		100
73) n-Butylbenzene	13.55	92	285065	97.30	UG		98
74) 1,2-Dichlorobenzene	13.55	146	391665	91.49	UG		100
75) 1,2-Dibromo-3-chloropropan	14.48	75	57382	116.23	UG		89
76) 1,2,4-Trichlorobenzene	15.43	180	240437	117.43	UG		99
77) Hexachlorobutadiene	15.62	225	122556	118.30	UG		100
78) Naphthalene	15.68	128	623660m	119.52	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	167835m	117.78	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	143190	117.03	UG		99
81) Methyl acetate	3.87	43	177860	113.04	UG	#	96
82) Cyclohexane	6.13	56	216113	116.31	UG		98
83) Methylcyclohexane	7.44	55	154456m	115.50	UG		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4642.D
Acq On : 25 Sep 2014 10:56
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 15:02:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

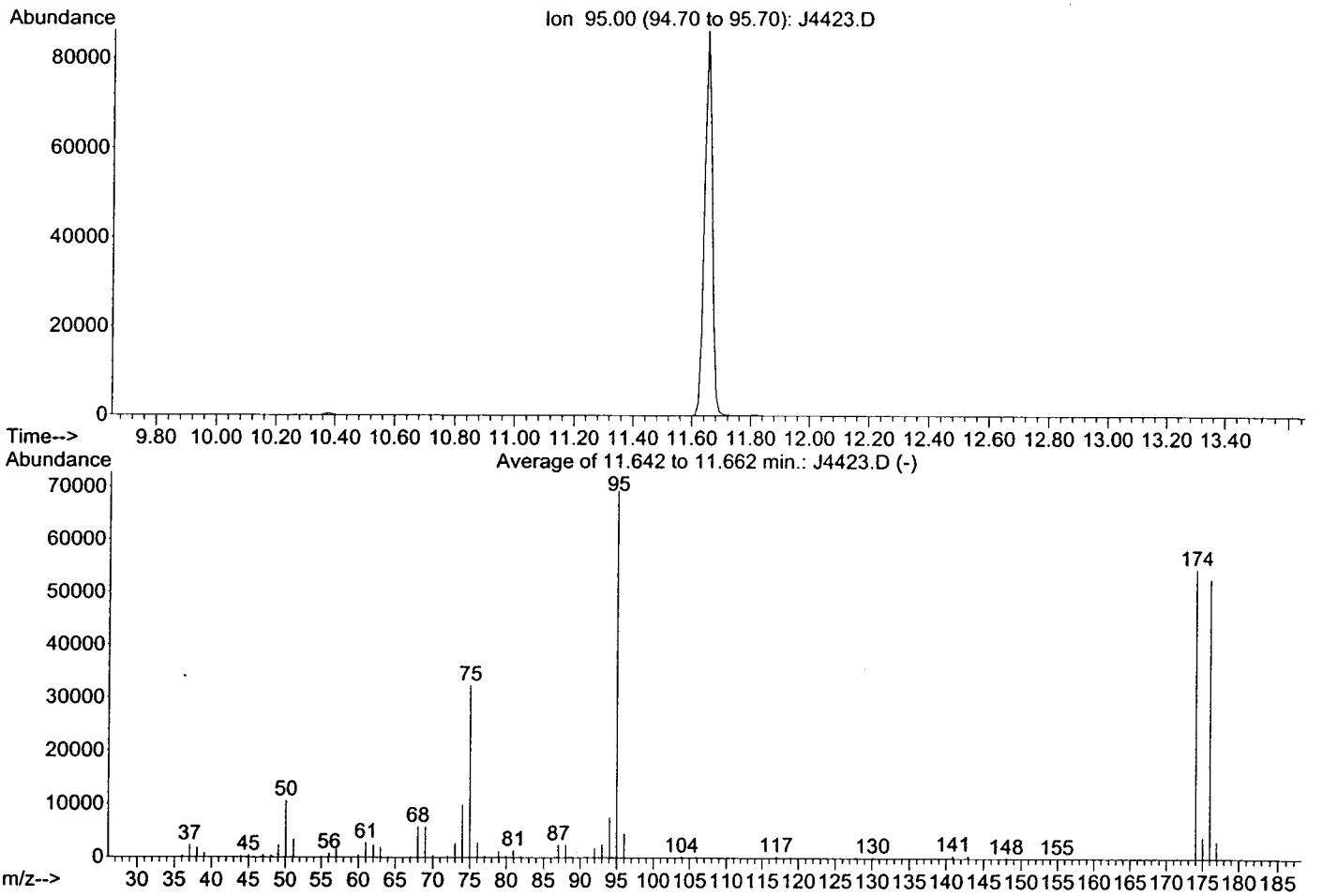


VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDChem\1\DATA\09-08-14\
Data File : J4423.D
Acq On : 8 Sep 2014 9:45
Operator : MEI
Sample : BFB140908
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\JM090814.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Sep 09 16:59:23 2014



AutoFind: Scans 1004, 1005, 1006; Background Corrected with Scan 998

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	10697	PASS
75	95	30	60	46.8	32440	PASS
95	95	100	100	100.0	69344	PASS
96	95	5	9	6.6	4563	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.8	54674	PASS
175	174	5	9	7.4	4057	PASS
176	174	95	101	96.5	52776	PASS
177	176	5	9	6.4	3380	PASS

Average of 11.642 to 11.662 min.: J4423.D
BFB140908
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	403	51.95	114	69.00	5757	79.95	394
37.05	2358	55.05	200	70.00	458	80.95	1419
38.05	1874	56.05	848	72.00	323	81.90	285
39.05	876	57.05	1510	73.00	2683	87.00	2452
44.00	286	60.00	552	74.00	9930	88.00	2435
45.00	428	61.00	2809	75.00	32440	91.00	154
47.00	590	62.05	2374	76.05	2830	92.00	1809
48.05	429	63.00	1974	77.05	384	93.00	2560
49.05	2355	64.10	175	77.85	123	94.05	7606
50.05	10697	67.05	194	78.15	135	95.00	69344
51.10	3432	68.00	5829	78.95	1187	96.00	4563

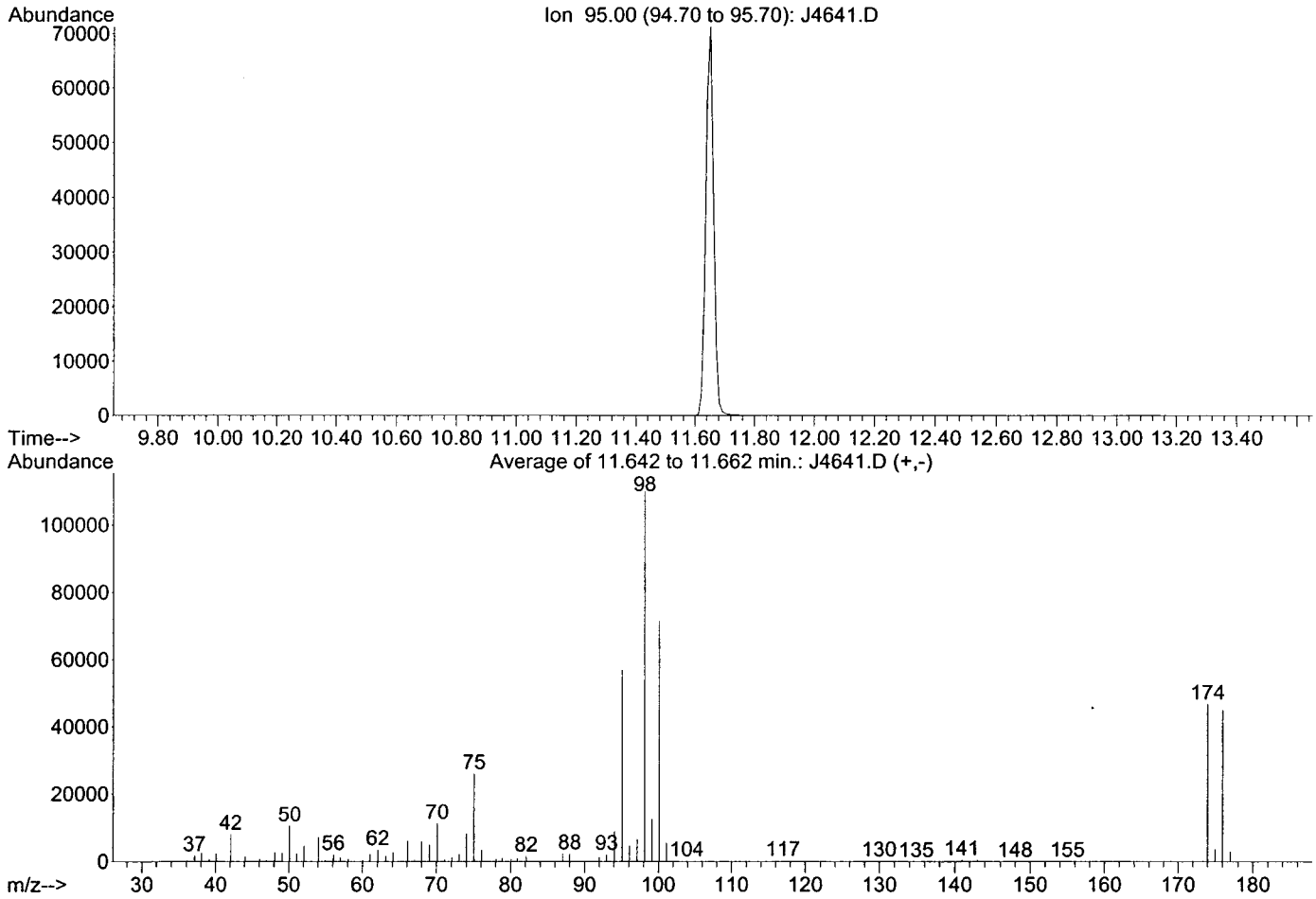
Average of 11.642 to 11.662 min.: J4423.D
BFB140908
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.05	118	136.95	89	177.90	50		
103.90	232	140.90	616				
105.00	57	141.90	59				
105.85	209	142.95	551				
115.95	188	148.00	187				
116.95	349	154.90	113				
117.95	198	157.00	106				
119.00	330	174.00	54674				
127.90	214	175.00	4057				
128.90	45	176.00	52776				
130.05	242	176.95	3380				

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4641.D
Acq On : 25 Sep 2014 10:29
Operator : MEI
Sample : BFB140925
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\JM090814.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Thu Sep 11 10:23:10 2014



Spectrum Information: Average of 11.642 to 11.662 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	10589	PASS
75	95	30	60	45.7	26042	PASS
95	95	100	100	100.0	56996	PASS
96	95	5	9	8.4	4777	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.2	46840	PASS
175	174	5	9	7.7	3604	PASS
176	174	95	101	96.3	45085	PASS
177	176	5	9	6.8	3046	PASS

Average of 11.642 to 11.662 min.: J4641.D
BFB140925
Modified:added subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	342	47.00	529	58.10	790	70.10	11252
37.10	1750	48.10	2790	60.05	430	71.10	591
38.05	2626	49.10	2495	61.00	2228	72.10	1229
39.10	738	50.10	10589	62.05	3532	73.00	2139
40.10	2413	51.10	2509	63.10	1684	74.00	8252
41.10	291	52.10	4681	64.10	2826	75.05	26042
42.10	8058	53.10	351	65.20	306	76.05	3496
43.00	295	54.10	7277	66.10	6134	77.05	251
44.10	1545	55.00	481	67.05	518	78.05	783
45.10	330	56.10	2098	68.00	5941	78.90	1005
46.10	811	57.00	1221	69.05	5007	80.05	757

Average of 11.642 to 11.662 min.: J4641.D
BFB140925
Modified:added subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.90	975	95.10	56996	115.95	205	148.00	89
82.10	1662	96.05	4777	117.00	305	155.00	135
86.00	259	96.90	52	117.95	188	156.80	44
87.00	2213	97.10	6589	118.95	256	172.00	49
88.00	2294	98.10	110088	127.95	192	174.00	46840
90.00	247	99.10	12583	129.00	45	175.00	3604
90.90	122	100.10	71648	129.95	218	176.00	45085
91.10	63	101.10	5476	130.90	49	177.00	3046
92.00	1394	102.10	254	134.90	47	178.00	48
93.00	2142	103.90	249	140.95	580		
94.05	8958	106.00	175	142.95	518		

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM140925-01
Client ID: BLKM140925-01
Date Received:
Date Analyzed: 09/25/2014
Data file: J4644.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.050	0.036
Chloromethane	ND		0.050	0.032
Vinyl chloride	ND		0.050	0.025
Bromomethane	ND		0.050	0.030
Chloroethane	ND		0.050	0.032
Trichlorofluoromethane	ND		0.050	0.037
1,1-Dichloroethene	ND		0.050	0.028
Acetone	ND		0.100	0.043
Carbon disulfide	ND		0.050	0.033
Methylene chloride	ND		0.100	0.100
trans-1,2-Dichloroethene	ND		0.050	0.024
Methyl tert-butyl ether (MTBE)	ND		0.050	0.024
1,1-Dichloroethane	ND		0.050	0.023
cis-1,2-Dichloroethene	ND		0.050	0.022
2-Butanone (MEK)	ND		0.050	0.031
Bromochloromethane	ND		0.050	0.030
Chloroform	ND		0.050	0.037
1,1,1-Trichloroethane	ND		0.050	0.026
Carbon tetrachloride	ND		0.050	0.037
1,2-Dichloroethane (EDC)	ND		0.050	0.020
Benzene	ND		0.050	0.023
Trichloroethene	ND		0.050	0.023
1,2-Dichloropropane	ND		0.050	0.025
1,4-Dioxane	ND		10.0	2.90
Bromodichloromethane	ND		0.050	0.025
cis-1,3-Dichloropropene	ND		0.050	0.023
4-Methyl-2-pentanone (MIBK)	ND		0.050	0.022

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM140925-01
Client ID: BLKM140925-01
Date Received:
Date Analyzed: 09/25/2014
Data file: J4644.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.015
trans-1,3-Dichloropropene	ND		0.050	0.023
1,1,2-Trichloroethane	ND		0.050	0.024
Tetrachloroethene	ND		0.050	0.025
2-Hexanone	ND		0.050	0.023
Dibromochloromethane	ND		0.050	0.021
1,2-Dibromoethane (EDB)	ND		0.050	0.027
Chlorobenzene	ND		0.050	0.027
Ethylbenzene	ND		0.050	0.025
Total Xylenes	ND		0.100	0.060
Styrene	ND		0.050	0.026
Bromoform	ND		0.050	0.026
Isopropylbenzene	ND		0.050	0.022
1,1,2,2-Tetrachloroethane	ND		0.050	0.023
1,3-Dichlorobenzene	ND		0.050	0.024
1,4-Dichlorobenzene	ND		0.050	0.020
1,2-Dichlorobenzene	ND		0.050	0.020
1,2-Dibromo-3-chloropropane	ND		0.050	0.034
1,2,4-Trichlorobenzene	ND		0.050	0.027
1,2,3-Trichlorobenzene	ND		0.050	0.032
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.041
Methyl acetate	ND		0.100	0.040
Cyclohexane	ND		0.100	0.032
Methylcyclohexane	ND		0.050	0.035
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.023

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0084

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM140925-01
Client ID: BLKM140925-01
Date Received:
Date Analyzed: 09/25/2014
Data file: J4644.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4644.D
Acq On : 25 Sep 2014 11:51
Operator : MEI
Sample : BLKM140925-01,BLKM140925-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 15:02:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	235912	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	357278	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	329410	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	123197	50.41	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.82%			
41) Toluene-d8	8.58	98	408434	50.20	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.40%			
59) Bromofluorobenzene	11.65	95	156411	48.81	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 97.62%			

Target Compounds Qvalue

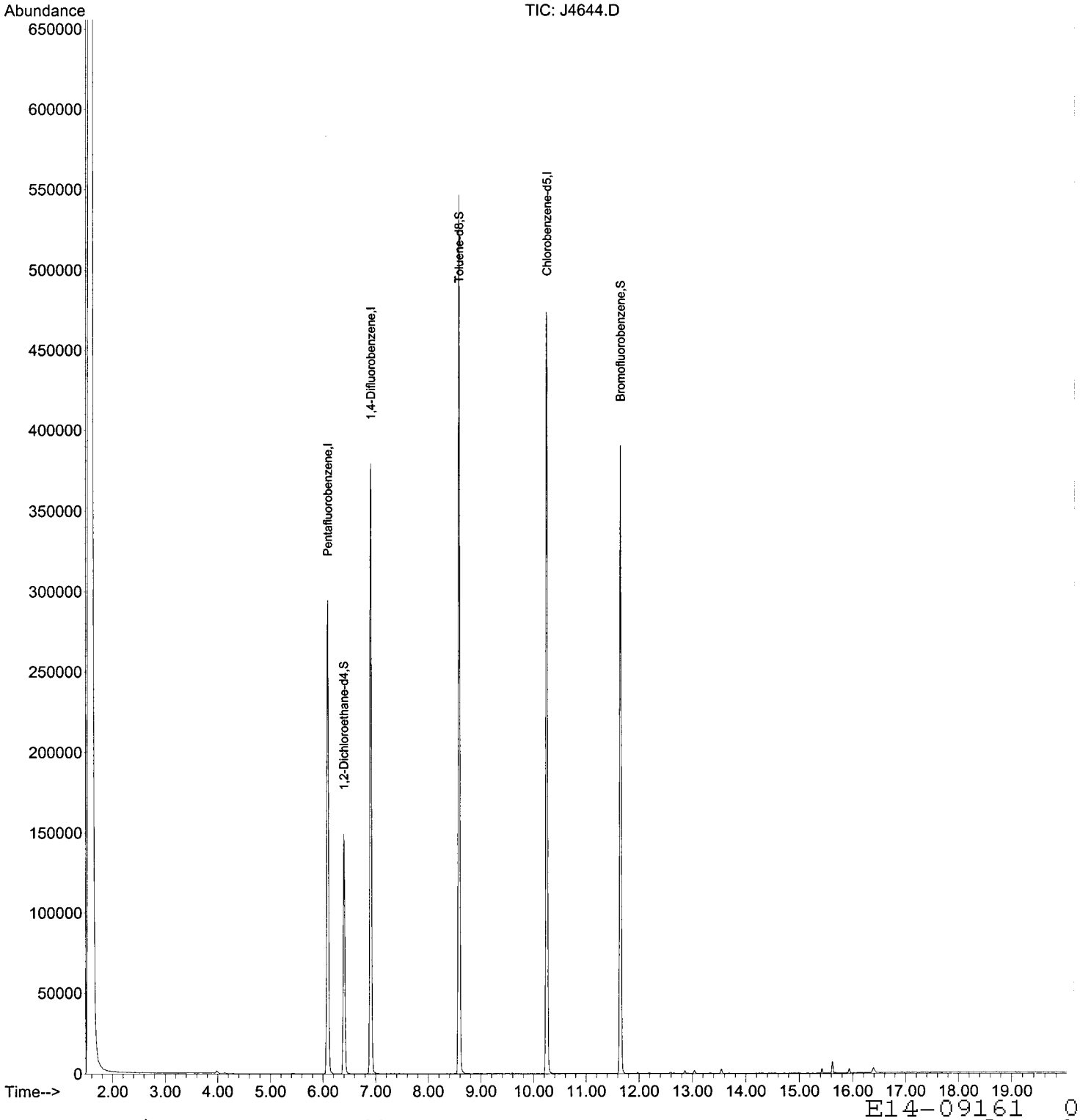
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9/26/14

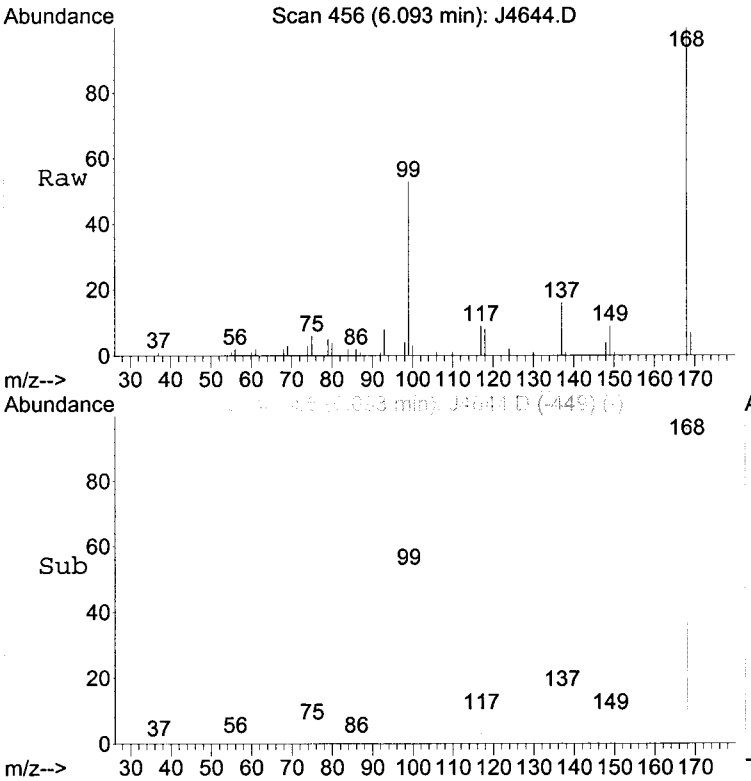
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4644.D
Acq On : 25 Sep 2014 11:51
Operator : MEI
Sample : BLKM140925-01,BLKM140925-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 15:02:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration



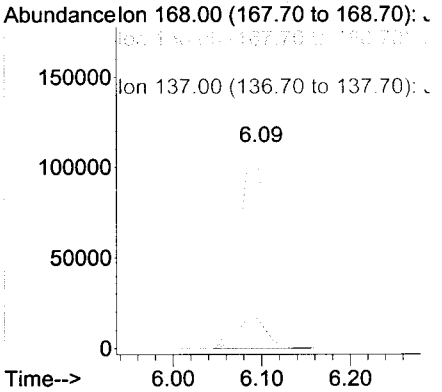
9/26/14

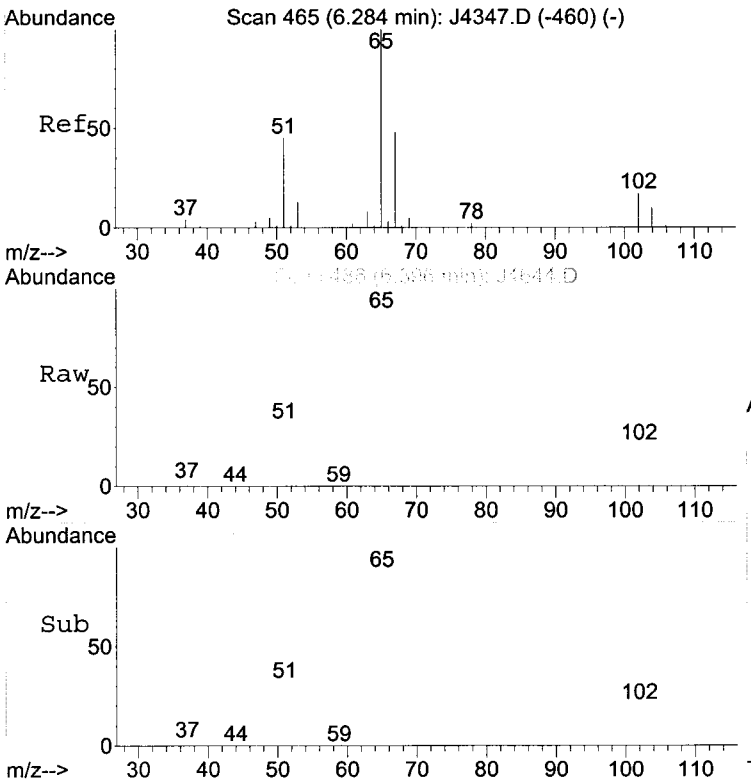


#1
Pentafluorobenzene
Concen: 50.00 UG
RT: 6.09 min Scan# 456
Delta R.T. 0.00 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion:168 Resp: 235912

Ion	Ratio	Lower	Upper
168	100		
168	100.0	70.0	130.0
99	55.0	53.9	100.1
137	16.2	10.5	19.5

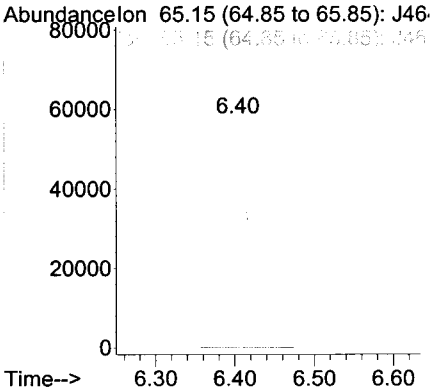


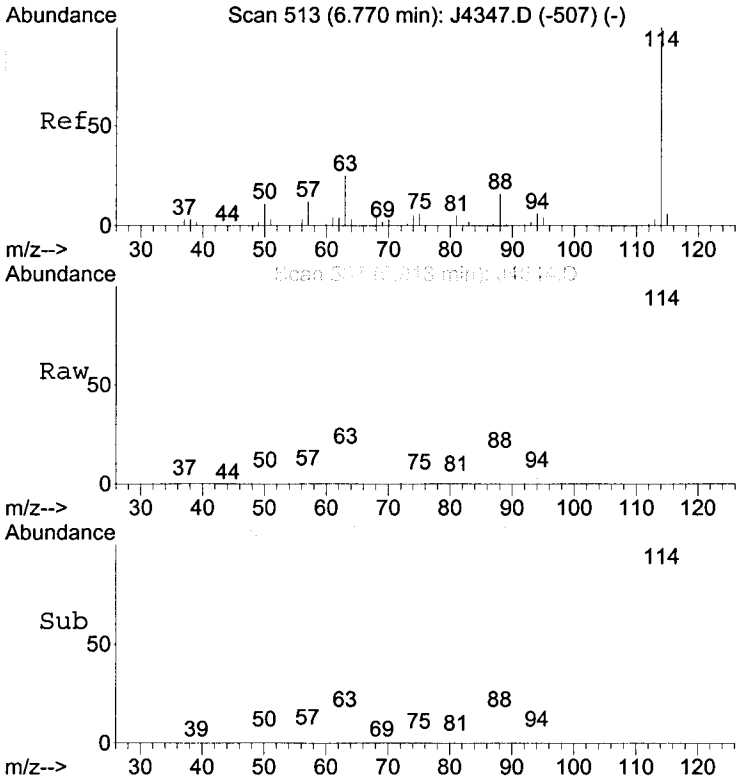


#30
1,2-Dichloroethane-d4
Concen: 50.41 UG
RT: 6.40 min Scan# 486
Delta R.T. -0.01 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion: 65 Resp: 123197

Ion	Ratio	Lower	Upper
65	100		
65	100.0	70.0	130.0
67	49.5	41.7	77.5

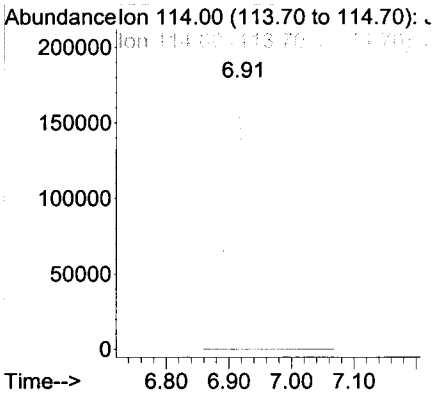


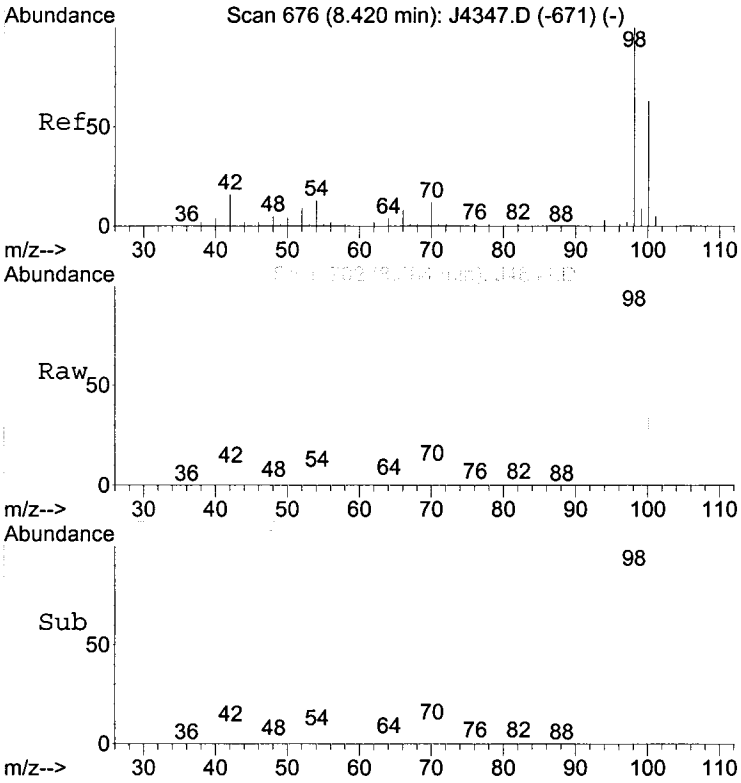


#31
1,4-Difluorobenzene
Concen: 50.00 UG
RT: 6.91 min Scan# 537
Delta R.T. 0.00 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion:114 Resp: 357278

Ion	Ratio	Lower	Upper
114	100		
114	100.0	70.0	130.0

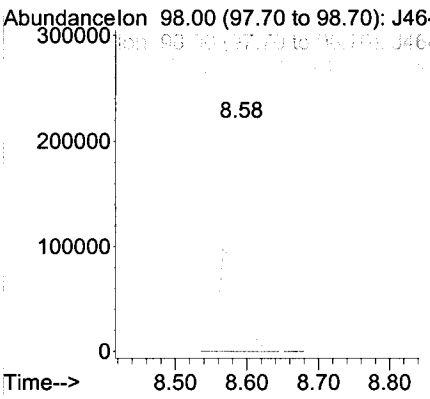


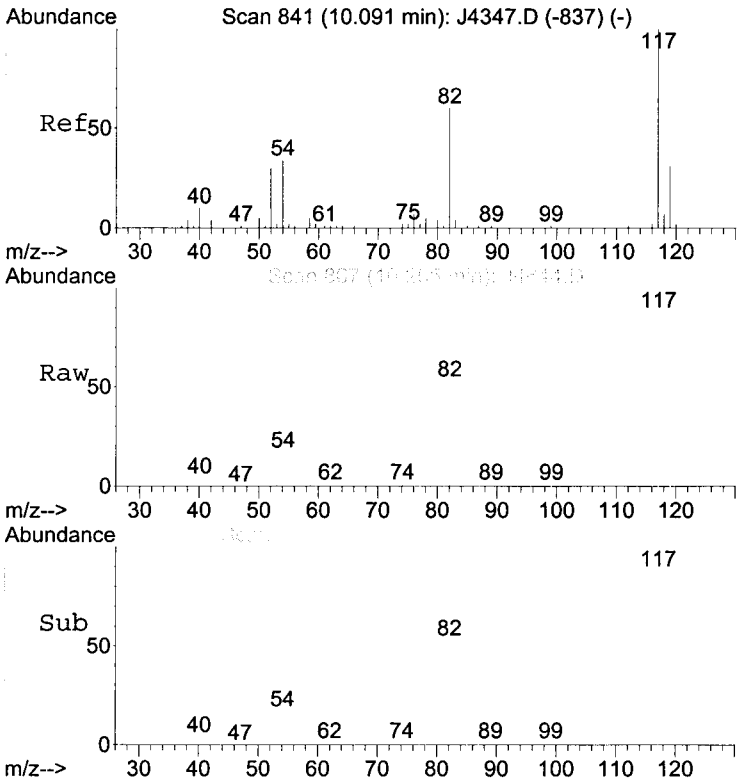


#41
Toluene-d8
Concen: 50.20 UG
RT: 8.58 min Scan# 702
Delta R.T. 0.00 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion: 98 Resp: 408434

Ion	Ratio	Lower	Upper
98	100		
98	100.0	70.0	130.0
100	65.1	48.1	89.3

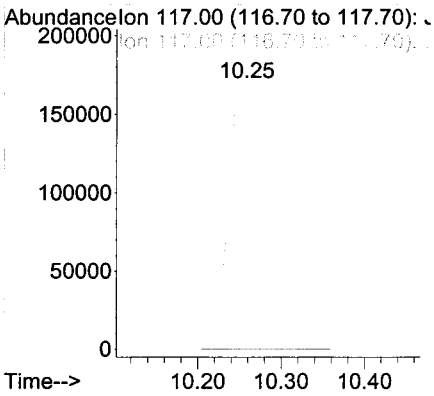


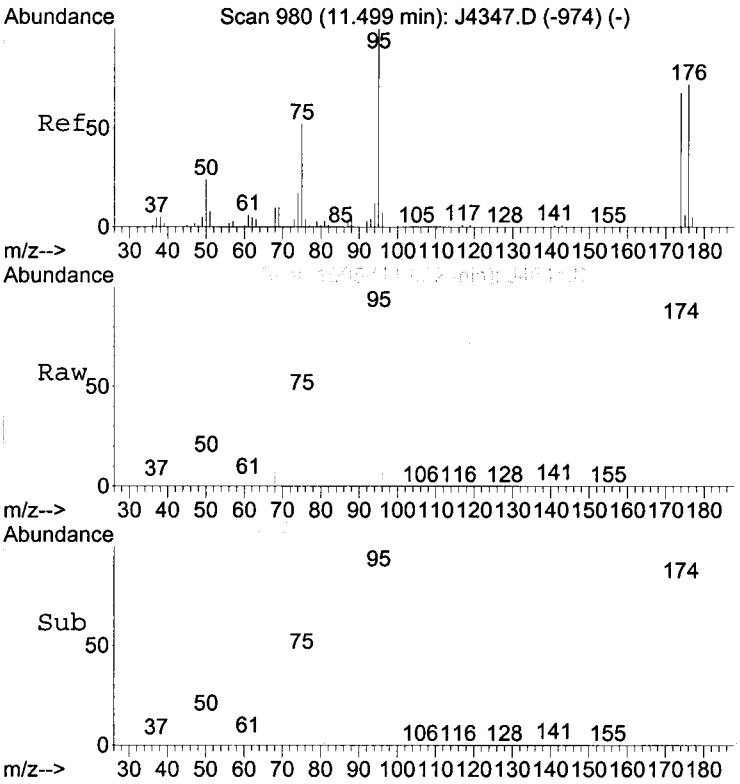


#50
Chlorobenzene-d5
Concen: 50.00 UG
RT: 10.25 min Scan# 867
Delta R.T. 0.00 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion:117 Resp: 329410

Ion	Ratio	Lower	Upper
117	100		
117	100.0	70.0	130.0

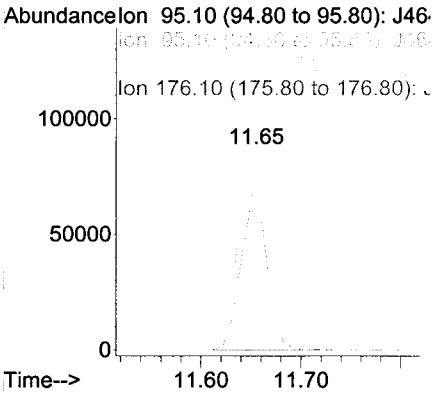




#59
Bromofluorobenzene
Concen: 48.81 UG
RT: 11.65 min Scan# 1005
Delta R.T. 0.00 min
Lab File: J4644.D
Acq: 25 Sep 2014 11:51

Tgt Ion: 95 Resp: 156411

Ion	Ratio	Lower	Upper
95	100		
95	100.0	70.0	130.0
174	81.8	0.0	0.0#
176	79.1	0.0	0.0#



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4644.D
Acq On : 25 Sep 2014 11:51
Operator : MEI
Sample : BLKM140925-01,BLKM140925-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM090814.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.093	446	456	470	rBB	294570	643102	62.18%	14.498%
2	6.396	482	486	495	rBB	149386	319395	30.88%	7.200%
3	6.913	529	537	548	rBB	379064	779033	75.32%	17.562%
4	8.584	696	702	720	rBB	546580	1034259	100.00%	23.316%
5	10.244	858	866	882	rBB	473646	947190	91.58%	21.353%
6	11.652	997	1005	1017	rBB	390602	701778	67.85%	15.821%
7	15.621	1391	1397	1400	rBB	7391	11077	1.07%	0.250%

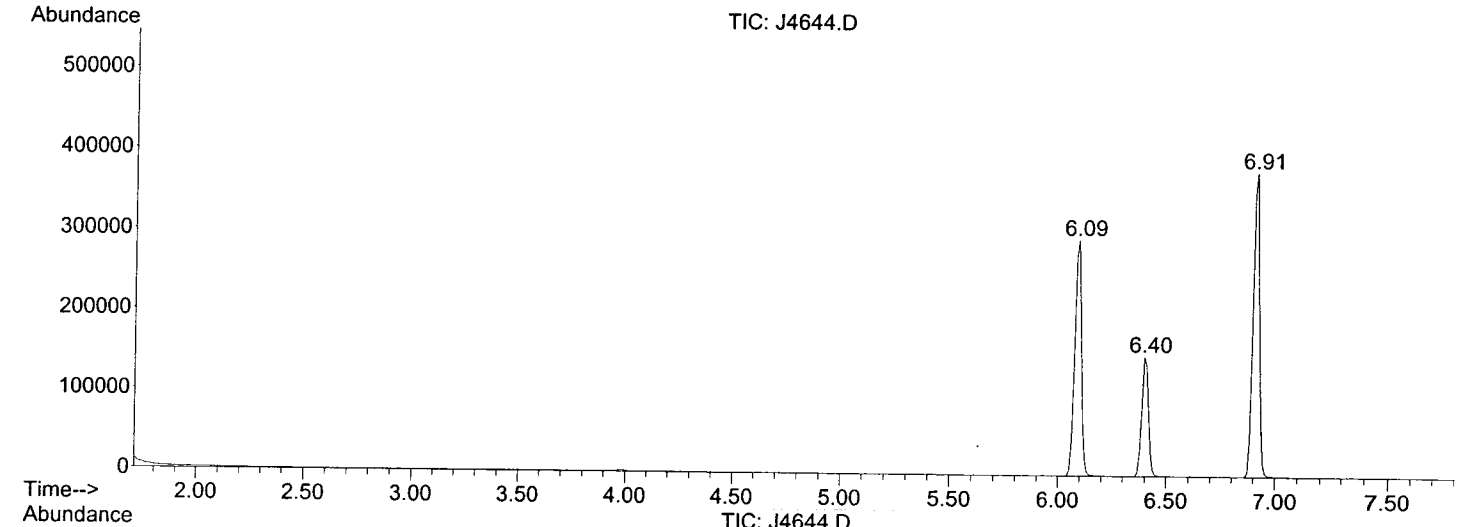
Sum of corrected areas: 4435834

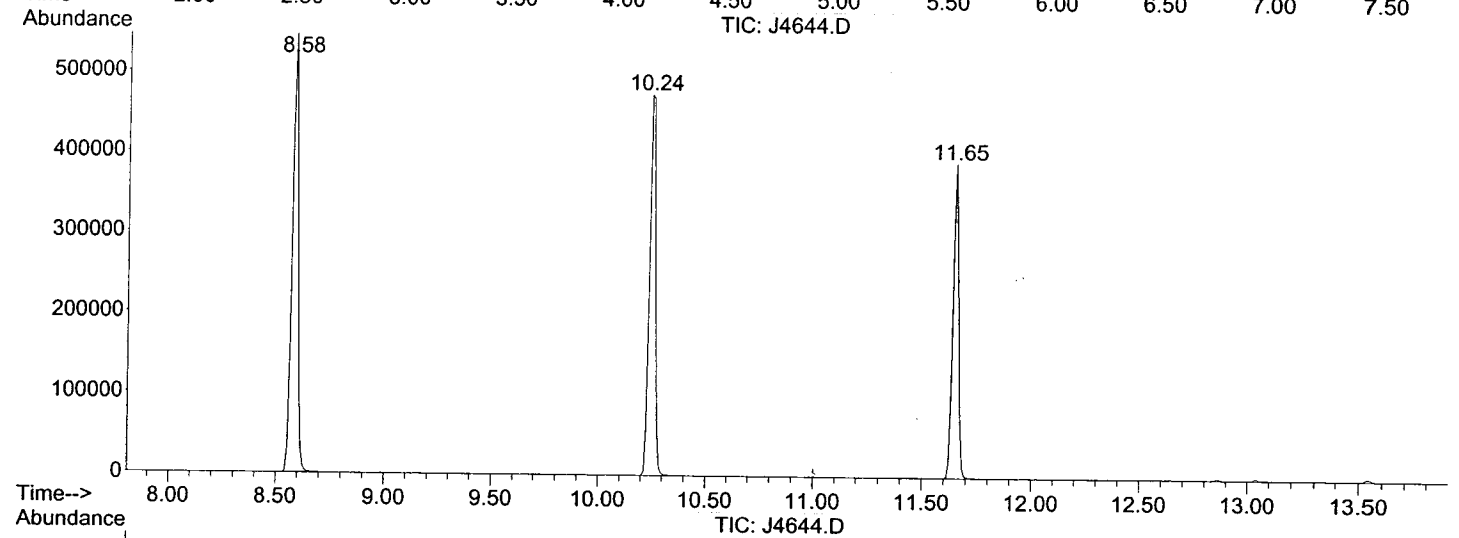
LSC Report - Integrated Chromatogram

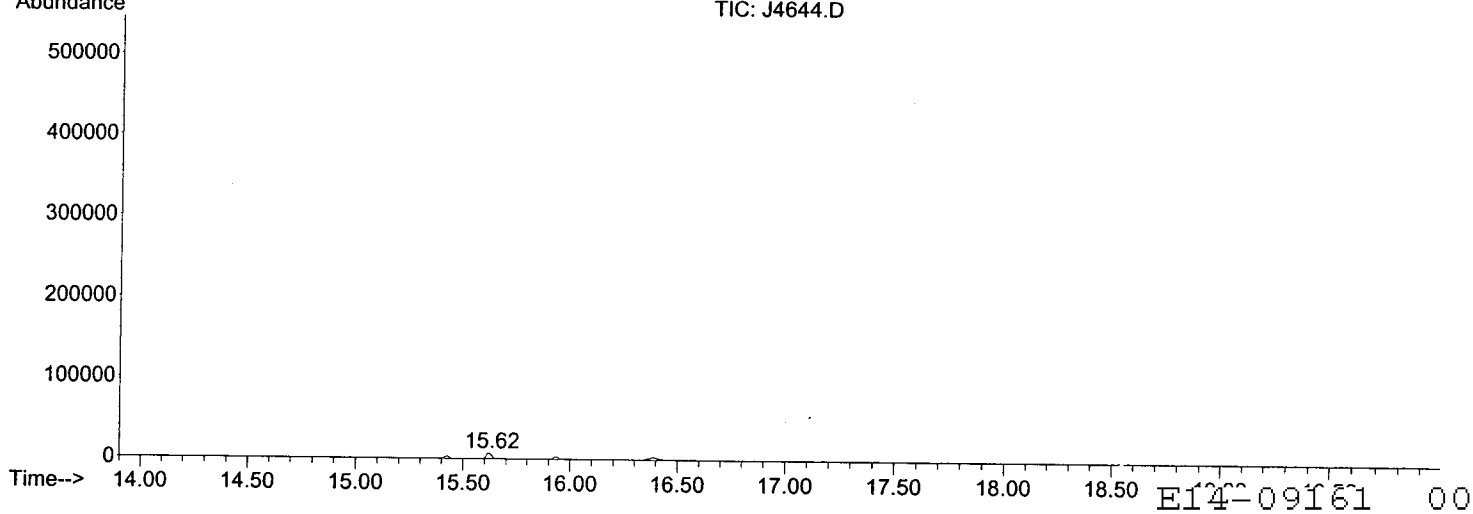
Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4644.D
Acq On : 25 Sep 2014 11:51
Operator : MEI
Sample : BLKM140925-01,BLKM140925-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







E14-09161 0092

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4655.D
Acq On : 25 Sep 2014 16:44
Operator : MEI
Sample : LCS-50PPB,LCSM140925-01,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 26 11:00:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	231671	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	354982	50.00	UG		0.00
50) Chlorobenzene-d5	10.24	117	321419	50.00	UG		-0.01
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	117604	49.00	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.00%				
41) Toluene-d8	8.58	98	400626	49.56	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.12%				
59) Bromofluorobenzene	11.65	95	153722	49.16	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 98.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	81064	62.13	UG		100
3) Chloromethane	1.90	50	104260	52.01	UG		100
4) Vinyl chloride	2.03	62	98106	53.62	UG		100
5) Bromomethane	2.39	94	61087	52.11	UG		99
6) Chloroethane	2.51	64	54549	54.61	UG	#	97
7) Trichlorofluoromethane	2.79	101	134617	58.26	UG		100
8) Acrolein	3.27	56	23727	132.62	UG		100
9) 1,1-Dichloroethene	3.41	96	99275	60.52	UG		87
10) Acetone	3.46	43	46447	63.44	UG		98
11) Carbon disulfide	3.66	76	332598	57.57	UG		100
12) Vinyl acetate	4.93	43	276427m	43.18	UG		
13) Methylene chloride	3.98	84	129166	53.35	UG		100
14) Acrylonitrile	4.26	53	152009	194.53	UG		100
15) tert-Butyl alcohol (TBA)	4.15	59	35076	115.19	UG		98
16) trans-1,2-Dichloroethene	4.32	96	128757	55.75	UG		86
17) Methyl tert-butyl ether (M	4.34	73	417075	51.97	UG		100
18) 1,1-Dichloroethane	4.81	63	208941	51.72	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	321523	51.17	UG	#	96
20) cis-1,2-Dichloroethene	5.47	96	143508	52.36	UG		95
21) 2,2-Dichloropropane	5.49	77	140069	55.60	UG		91
22) 2-Butanone (MEK)	5.50	43	51412	45.61	UG	#	96
23) Bromochloromethane	5.75	128	74185	53.07	UG		97
25) Chloroform	5.84	83	225540	53.22	UG		99
26) 1,1,1-Trichloroethane	6.06	97	178536	55.64	UG		99
27) Carbon tetrachloride	6.25	117	139246	56.48	UG		100
28) 1,1-Dichloropropene	6.25	75	141327	54.75	UG		92
29) 1,2-Dichloroethane (EDC)	6.49	62	182202	50.84	UG		100
32) Benzene	6.48	78	478744	50.80	UG		100
33) Trichloroethene	7.21	95	128217	52.80	UG		94
34) 1,2-Dichloropropane	7.45	63	113623	48.40	UG		100
35) Dibromomethane	7.57	93	78342	48.26	UG		95
36) 1,4-Dioxane	7.60	88	65926m	1851.42	UG		
37) Bromodichloromethane	7.75	83	170526	48.76	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	80434	45.79	UG		99
39) cis-1,3-Dichloropropene	8.26	75	199961	47.20	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	105012	45.32	UG		95
42) Toluene	8.65	92	282812	50.18	UG		100
43) trans-1,3-Dichloropropene	8.89	75	189683	45.99	UG		99
44) 1,1,2-Trichloroethane	9.10	83	90566	49.81	UG		98

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4655.D
Acq On : 25 Sep 2014 16:44
Operator : MEI
Sample : LCS-50PPB,LCSM140925-01,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 26 11:00:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

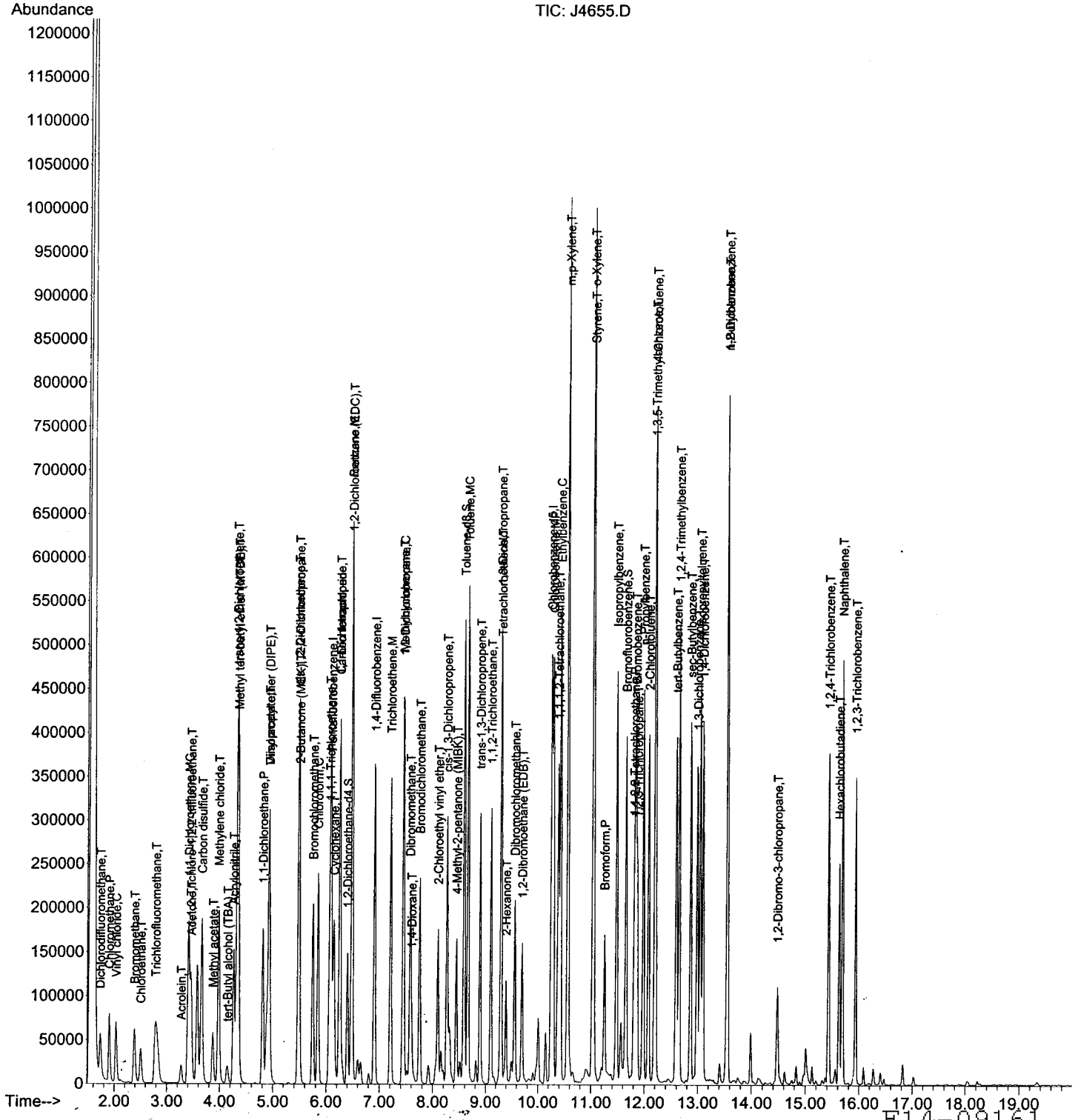
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	92933	53.98	UG		99
46) 1,3-Dichloropropane	9.29	76	181903	47.13	UG		100
47) 2-Hexanone	9.39	43	75374	47.02	UG		95
48) Dibromochloromethane	9.56	129	132190	47.54	UG		99
49) 1,2-Dibromoethane (EDB)	9.70	107	120031	49.29	UG		100
51) Chlorobenzene	10.28	112	302436	45.65	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	121288	47.77	UG		99
53) Ethylbenzene	10.42	91	445020	48.65	UG		99
54) m,p-Xylene	10.56	106	342041	95.64	UG		94
55) o-Xylene	11.03	106	179452	49.62	UG		95
56) Styrene	11.04	104	323071	46.86	UG		97
57) Bromoform	11.25	173	89346	44.15	UG		100
58) Isopropylbenzene	11.48	105	383881	50.84	UG		99
60) 1,1,2,2-Tetrachloroethane	11.80	83	134104	45.74	UG		99
61) Bromobenzene	11.83	156	126279	47.61	UG		100
62) 1,2,3-Trichloropropane	11.86	75	129486	46.63	UG		100
63) n-Propylbenzene	11.98	91	399813	50.05	UG		100
64) 2-Chlorotoluene	12.08	91	285312	47.88	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	321935	49.11	UG		98
66) 4-Chlorotoluene	12.20	91	325558	46.33	UG		99
67) tert-Butylbenzene	12.59	119	239905	52.12	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	342987	49.40	UG		98
69) sec-Butylbenzene	12.86	105	345973	50.26	UG		100
70) 1,3-Dichlorobenzene	12.99	146	190449	46.69	UG		100
71) 4-Isopropyltoluene	13.04	119	320649	50.25	UG		99
72) 1,4-Dichlorobenzene	13.09	146	199076	46.33	UG		100
73) n-Butylbenzene	13.55	92	144409	51.53	UG		100
74) 1,2-Dichlorobenzene	13.55	146	198148	48.39	UG		100
75) 1,2-Dibromo-3-chloropropan	14.48	75	28612	60.59	UG		88
76) 1,2,4-Trichlorobenzene	15.43	180	121528	62.05	UG		100
77) Hexachlorobutadiene	15.62	225	60881	61.44	UG		99
78) Naphthalene	15.68	128	323909m	64.90	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	87974m	64.55	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	66804	57.08	UG		98
81) Methyl acetate	3.88	43	88222	58.62	UG	#	96
82) Cyclohexane	6.14	56	106954	60.18	UG		98
83) Methylcyclohexane	7.44	55	73846	57.73	UG		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4655.D
Acq On : 25 Sep 2014 16:44
Operator : MEI
Sample : LCS-50PPB,LCSM140925-01,M,0.05g,0
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 26 11:00:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4656.D
Acq On : 25 Sep 2014 17:10
Operator : MEI
Sample : MS,09096-005MS,M,0.05g,0
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 26 10:44:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	220518	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	338833	50.00	UG		0.00
50) Chlorobenzene-d5	10.24	117	306637	50.00	UG		-0.01
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	113211	49.56	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 99.12%				
41) Toluene-d8	8.58	98	384345	49.81	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.62%				
59) Bromofluorobenzene	11.65	95	148981	49.94	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 99.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.73	85	72566	58.43	UG		99
3) Chloromethane	1.90	50	101700	53.30	UG		99
4) Vinyl chloride	2.03	62	93146	53.49	UG		100
5) Bromomethane	2.39	94	60324	54.06	UG		99
6) Chloroethane	2.51	64	52182	54.88	UG		97
7) Trichlorofluoromethane	2.79	101	123000	55.92	UG		99
8) Acrolein	3.27	56	25214	148.06	UG		100
9) 1,1-Dichloroethene	3.41	96	94893	60.77	UG		87
10) Acetone	3.46	43	44168	63.38	UG		97
11) Carbon disulfide	3.66	76	321298	58.43	UG		100
12) Vinyl acetate	4.93	43	264027m	43.32	UG		
13) Methylene chloride	3.98	84	132159	57.35	UG		99
14) Acrylonitrile	4.26	53	129792m	174.50	UG		
15) tert-Butyl alcohol (TBA)	4.15	59	34744	119.88	UG		98
16) trans-1,2-Dichloroethene	4.32	96	124647	56.70	UG		87
17) Methyl tert-butyl ether (M	4.34	73	424486	55.57	UG		100
18) 1,1-Dichloroethane	4.81	63	209183	54.40	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	324235	54.21	UG	#	96
20) cis-1,2-Dichloroethene	5.48	96	145342	55.71	UG		94
21) 2,2-Dichloropropane	5.48	77	136821	57.05	UG		93
22) 2-Butanone (MEK)	5.50	43	49748	46.36	UG	#	96
23) Bromochloromethane	5.75	128	73868	55.51	UG		96
25) Chloroform	5.84	83	227583	56.42	UG		99
26) 1,1,1-Trichloroethane	6.06	97	172936	56.63	UG		99
27) Carbon tetrachloride	6.25	117	132002	56.25	UG		100
28) 1,1-Dichloropropene	6.25	75	135745	55.24	UG		92
29) 1,2-Dichloroethane (EDC)	6.49	62	180126	52.81	UG		100
32) Benzene	6.48	78	472223	52.49	UG		100
33) Trichloroethene	7.21	95	126979	54.78	UG		93
34) 1,2-Dichloropropane	7.45	63	110711	49.40	UG		100
35) Dibromomethane	7.57	93	80322	51.83	UG		96
36) 1,4-Dioxane	7.60	88	63589	1870.90	UG		97
37) Bromodichloromethane	7.75	83	170444	51.06	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	75934	45.29	UG		98
39) cis-1,3-Dichloropropene	8.26	75	195955	48.46	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	106492	48.15	UG		95
42) Toluene	8.65	92	275125	51.14	UG		100
43) trans-1,3-Dichloropropene	8.89	75	184308	46.82	UG		99
44) 1,1,2-Trichloroethane	9.10	83	87618	50.49	UG		99

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4656.D
Acq On : 25 Sep 2014 17:10
Operator : MEI
Sample : MS,09096-005MS,M,0.05g,0
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 26 10:44:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

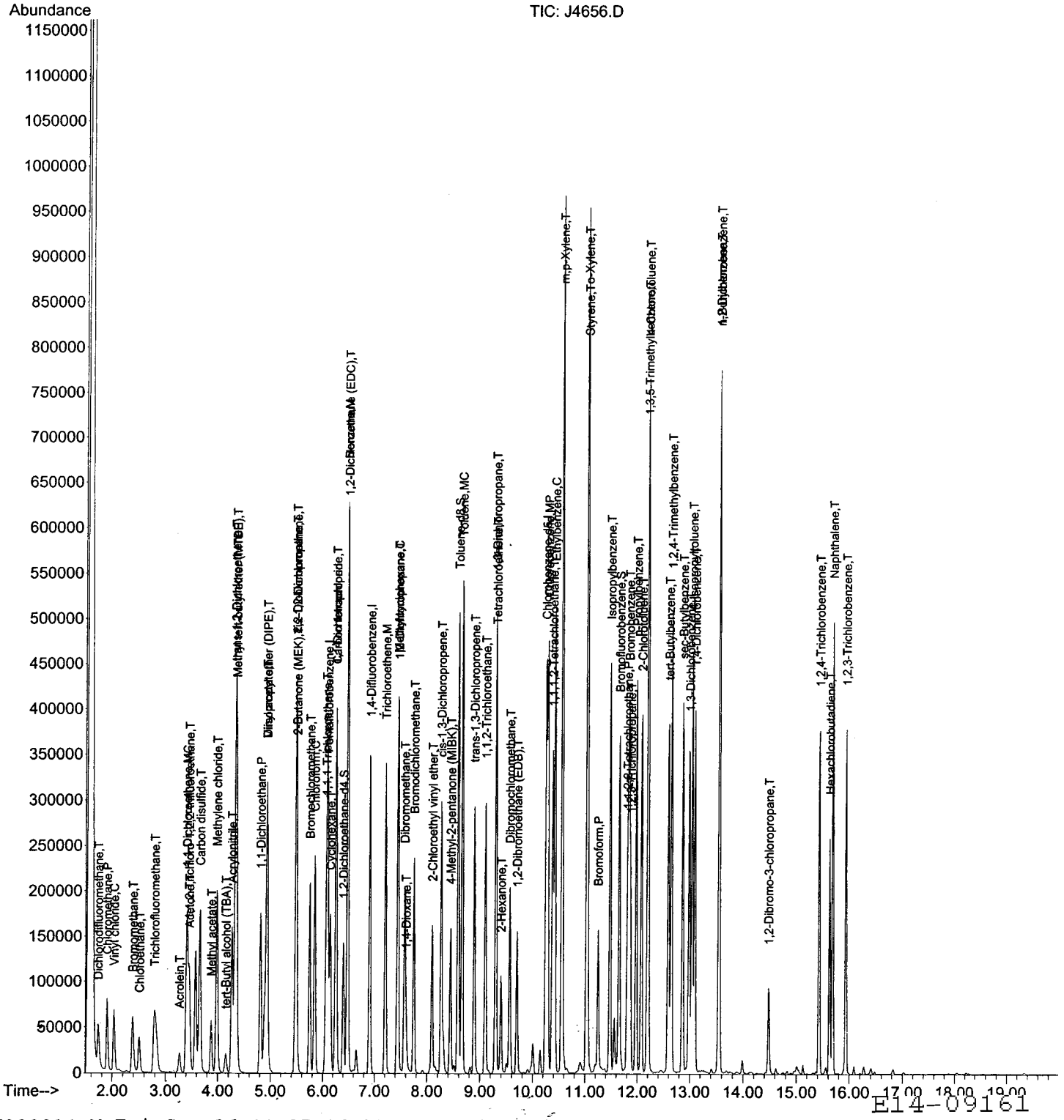
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	88598	53.92	UG		98
46) 1,3-Dichloropropane	9.29	76	176580	47.93	UG		100
47) 2-Hexanone	9.39	43	69110	45.17	UG		94
48) Dibromochloromethane	9.56	129	132502	49.92	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	117123	50.38	UG		100
51) Chlorobenzene	10.28	112	295701	46.79	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	119933	49.51	UG		98
53) Ethylbenzene	10.42	91	429026	49.17	UG		99
54) m,p-Xylene	10.56	106	335563	98.35	UG		95
55) o-Xylene	11.03	106	176620	51.20	UG		94
56) Styrene	11.04	104	319310	48.55	UG		97
57) Bromoform	11.25	173	87550	45.35	UG		100
58) Isopropylbenzene	11.48	105	376062	52.21	UG		99
60) 1,1,2,2-Tetrachloroethane	11.80	83	130221	46.56	UG		99
61) Bromobenzene	11.83	156	124060	49.03	UG		100
62) 1,2,3-Trichloropropane	11.86	75	125649	47.43	UG		100
63) n-Propylbenzene	11.98	91	387327	50.82	UG		99
64) 2-Chlorotoluene	12.08	91	280972	49.43	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	323216	51.68	UG		98
66) 4-Chlorotoluene	12.20	91	324142	48.35	UG		98
67) tert-Butylbenzene	12.59	119	233072	53.07	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	342288	51.67	UG		98
69) sec-Butylbenzene	12.86	105	348342	53.05	UG		99
70) 1,3-Dichlorobenzene	12.99	146	191754	49.27	UG		100
71) 4-Isopropyltoluene	13.04	119	323160	53.08	UG		99
72) 1,4-Dichlorobenzene	13.09	146	197395	48.15	UG		100
73) n-Butylbenzene	13.55	92	142531	53.31	UG		99
74) 1,2-Dichlorobenzene	13.55	146	196971	50.42	UG		100
75) 1,2-Dibromo-3-chloropropan	14.48	75	28912	64.18	UG		89
76) 1,2,4-Trichlorobenzene	15.43	180	105731m	56.59	UG		
77) Hexachlorobutadiene	15.62	225	59681	63.13	UG		100
78) Naphthalene	15.68	128	307123m	64.50	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	83221m	64.00	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	63659	57.02	UG		100
81) Methyl acetate	3.87	43	86251	60.07	UG	#	97
82) Cyclohexane	6.14	56	94779	55.90	UG		96
83) Methylcyclohexane	7.44	55	70006	57.37	UG		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4656.D
Acq On : 25 Sep 2014 17:10
Operator : MEI
Sample : MS,09096-005MS,M,0.05g,0
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 26 10:44:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4657.D
Acq On : 25 Sep 2014 17:36
Operator : MEI
Sample : MSD,09096-005MSD,M,0.05g,0
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 26 11:00:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.09	168	220393	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.91	114	343273	50.00	UG		0.00
50) Chlorobenzene-d5	10.25	117	307046	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.40	65	113709	49.80	UG		-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 99.60%				
41) Toluene-d8	8.58	98	384447	49.18	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.36%				
59) Bromofluorobenzene	11.65	95	148477	49.71	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 99.42%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.74	85	74041	59.65	UG		100
3) Chloromethane	1.90	50	102394	53.69	UG		99
4) Vinyl chloride	2.03	62	95546	54.90	UG		100
5) Bromomethane	2.39	94	60896	54.61	UG		100
6) Chloroethane	2.51	64	53409	56.20	UG	#	96
7) Trichlorofluoromethane	2.80	101	128802	58.59	UG		99
8) Acrolein	3.28	56	26590	156.22	UG		99
9) 1,1-Dichloroethene	3.41	96	97495	62.47	UG		87
10) Acetone	3.46	43	43891m	63.02	UG		
11) Carbon disulfide	3.66	76	328234	59.72	UG		100
12) Vinyl acetate	4.93	43	257836m	42.33	UG		
13) Methylene chloride	3.99	84	131386	57.04	UG		100
14) Acrylonitrile	4.26	53	135800m	182.68	UG		
15) tert-Butyl alcohol (TBA)	4.15	59	35130	121.28	UG		98
16) trans-1,2-Dichloroethene	4.32	96	127240	57.91	UG		87
17) Methyl tert-butyl ether (M	4.34	73	424973	55.66	UG		100
18) 1,1-Dichloroethane	4.81	63	210464	54.76	UG		100
19) Diisopropyl ether (DIPE)	4.93	45	322044	53.88	UG	#	96
20) cis-1,2-Dichloroethene	5.48	96	142952	54.83	UG		95
21) 2,2-Dichloropropane	5.48	77	135681	56.61	UG		92
22) 2-Butanone (MEK)	5.50	43	49257	45.93	UG	#	96
23) Bromochloromethane	5.75	128	72832	54.77	UG		94
25) Chloroform	5.85	83	227348	56.40	UG		99
26) 1,1,1-Trichloroethane	6.06	97	175002	57.33	UG		99
27) Carbon tetrachloride	6.25	117	136417	58.16	UG		99
28) 1,1-Dichloropropene	6.25	75	139061	56.63	UG		92
29) 1,2-Dichloroethane (EDC)	6.49	62	180772	53.03	UG		100
32) Benzene	6.48	78	474477	52.06	UG		100
33) Trichloroethene	7.21	95	131415	55.96	UG		93
34) 1,2-Dichloropropane	7.45	63	110408	48.63	UG		100
35) Dibromomethane	7.57	93	79872	50.88	UG		96
36) 1,4-Dioxane	7.60	88	59679m	1733.15	UG		
37) Bromodichloromethane	7.75	83	170062	50.29	UG		99
38) 2-Chloroethyl vinyl ether	8.10	63	76187	44.85	UG		98
39) cis-1,3-Dichloropropene	8.26	75	193523	47.24	UG		98
40) 4-Methyl-2-pentanone (MIBK	8.44	43	105615	47.14	UG		96
42) Toluene	8.65	92	274340	50.33	UG		99
43) trans-1,3-Dichloropropene	8.89	75	183885	46.11	UG		99
44) 1,1,2-Trichloroethane	9.10	83	87203	49.60	UG		97

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4657.D
Acq On : 25 Sep 2014 17:36
Operator : MEI
Sample : MSD,09096-005MSD,M,0.05g,0
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 26 11:00:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration

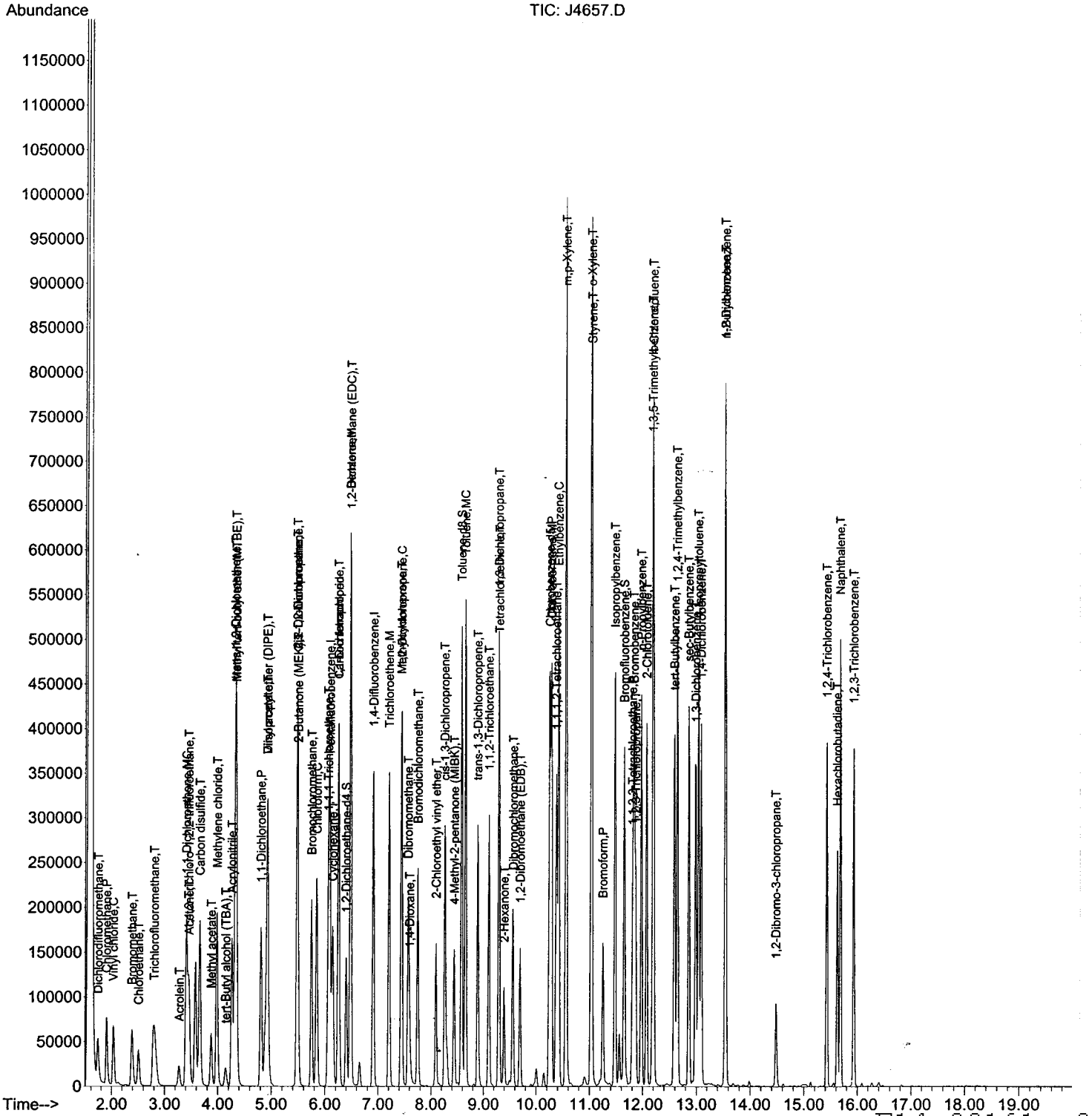
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Tetrachloroethene	9.30	166	89938	54.02	UG		98
46) 1,3-Dichloropropane	9.29	76	178078	47.71	UG		100
47) 2-Hexanone	9.39	43	69977	45.14	UG		94
48) Dibromochloromethane	9.57	129	132533	49.29	UG		100
49) 1,2-Dibromoethane (EDB)	9.70	107	117830	50.03	UG		100
51) Chlorobenzene	10.28	112	296298	46.82	UG		99
52) 1,1,1,2-Tetrachloroethane	10.38	131	122220	50.39	UG		100
53) Ethylbenzene	10.42	91	436488	49.95	UG		99
54) m,p-Xylene	10.56	106	335779	98.29	UG		95
55) o-Xylene	11.03	106	173583	50.25	UG		92
56) Styrene	11.04	104	318355	48.34	UG		97
57) Bromoform	11.25	173	88080	45.56	UG		100
58) Isopropylbenzene	11.48	105	380816	52.80	UG		99
60) 1,1,2,2-Tetrachloroethane	11.80	83	129481	46.23	UG		99
61) Bromobenzene	11.83	156	123956	48.92	UG		100
62) 1,2,3-Trichloropropane	11.86	75	124890	47.08	UG		100
63) n-Propylbenzene	11.98	91	397699	52.12	UG		99
64) 2-Chlorotoluene	12.08	91	283410	49.79	UG		85
65) 1,3,5-Trimethylbenzene	12.19	105	327442	52.29	UG		98
66) 4-Chlorotoluene	12.20	91	322337	48.02	UG		99
67) tert-Butylbenzene	12.59	119	236168	53.71	UG		100
68) 1,2,4-Trimethylbenzene	12.64	105	342354	51.61	UG		98
69) sec-Butylbenzene	12.86	105	352104	53.55	UG		99
70) 1,3-Dichlorobenzene	12.99	146	191612	49.17	UG		100
71) 4-Isopropyltoluene	13.04	119	329369	54.03	UG		99
72) 1,4-Dichlorobenzene	13.09	146	195381	47.59	UG		99
73) n-Butylbenzene	13.55	92	147169	54.97	UG		98
74) 1,2-Dichlorobenzene	13.55	146	194953	49.84	UG		100
75) 1,2-Dibromo-3-chloropropan	14.48	75	28374	62.90	UG		88
76) 1,2,4-Trichlorobenzene	15.43	180	111099m	59.38	UG		
77) Hexachlorobutadiene	15.62	225	56445m	59.63	UG		
78) Naphthalene	15.68	128	298355m	62.58	UG		
79) 1,2,3-Trichlorobenzene	15.94	180	84358m	64.79	UG		
80) 1,1,2-Trichloro-1,2,2-trif	3.45	101	64299	57.51	UG		99
81) Methyl acetate	3.87	43	88841	61.79	UG	#	97
82) Cyclohexane	6.14	56	96960	57.11	UG		96
83) Methylcyclohexane	7.44	55	72794	59.57	UG		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-25-14\
Data File : J4657.D
Acq On : 25 Sep 2014 17:36
Operator : MEI
Sample : MSD,09096-005MSD,M,0.05g,0
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 26 11:00:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\JM090814.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Thu Sep 11 10:23:10 2014
Response via : Initial Calibration



VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 9/8/2014 15:45

INSTRUMENT: MSD-J

TUNE FILE: TUNE J

SEQUENCE FILE: 09-08-14

METHOD: JM090814

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1018	1	1	50 ng
ISTD/SURR	LS1012	1	1	250 ug/mL
PRIMARY 8260 STD	LS1017	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1019	1.5	12	1000 ug/mL
1,4-Dioxane	LS1015	1.5	12	10000ug/mL
TPH-GRO	LS1014	10	80	500ug/mL
SECONDARY 8260 STD	L2495	6.25	50	40 ug/mL
SECONDARY AC/AC	L2494	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	J4423	BFB140908										OK
2	2	J4424	ICC1	ICC1		5		W				100	-
3	3	J4425	ICC2	ICC2		5		W				100	OK
4	4	J4426	ICC1	ICC1		5		W				100	OK
5	5	J4427	ICC5	ICC5		5		W				100	OK
6	6	J4428	ICC20	ICC20		5		W				100	OK
7	7	J4429	ICC100	ICC100		5		W				100	OK
8	8	J4430	ICC150	ICC150		5		W				100	OK
9	9	J4431	ICC200	ICC200		5		W				100	OK
10	10	J4432	RB										-
11	11	J4433	RB										-
12	12	J4434	ICV100	ICV100		5		W				100	OK

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 9/25/2014 16:31

INSTRUMENT: MSD-J

TUNE FILE: TUNE J

SEQUENCE FILE: 09-25-14

METHOD: JM091814

ANALYST: Mei Chen

CXM Initial

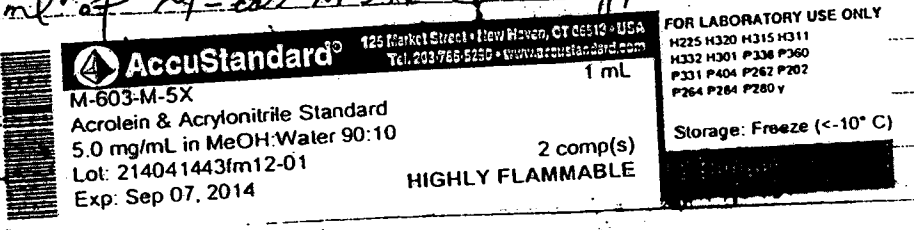
STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1018	1	1	50 ng
ISTD/SURR	LS1021	1	1	250 ug/mL
PRIMARY 8260 STD	LS1022	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1019	1.5	12	1000 ug/mL
1,4-Dioxane	LS1015	1.5	12	10000ug/mL
TPH-GRO	LS1020	10	80	500ug/mL
SECONDARY 8260 STD	L2495	6.25	50	40 ug/mL
SECONDARY AC/AC	L2494	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	J4641	BFB140925										ok
2	2	J4642	CCV100	CCV100		5		A				100	ok
3	3	J4643	RB			5		A				100	/
4	4	J4644	BLKM140925-01	LKM140925-01		0.1		M				0	ok
5	5	J4645	9096	5	1	0.05		M	STOCKPILE_S5	09/22/14	09/23/14	11.1	ok
6	6	J4646	9143	1	1	0.05		M	FWC_FOR_PURE_S	09/24/14	09/24/14	17.8	ok
7	7	J4647	9109	1	1	0.05		M	PE-1	09/22/14	09/23/14	33.3	Resub
8	8	J4648		1	1	0.05		M	PE-1	09/22/14	09/23/14	33.3	↓
9	9	J4649	9156	1	1	0.05		Xs	CARBON_1	09/23/14	09/23/14	0	ok
10	10	J4650	9111	1	2	0.03		M	MW7S1/25.5-26	09/22/14	09/23/14	13.2	Resub
11	11	J4651		1	1	0.06		M	MW7S1/25.5-26	09/22/14	09/23/14	13.2	ok
12	12	J4652	9104	2	5	0.012		M	SB914-2/7.5	09/22/14	09/23/14	11.4	ok
13	13	J4653		5	2	0.029		M	SB914-5/7.5	09/22/14	09/23/14	11.9	ok
14	14	J4654		6	2	0.036		M	SB914-6/7.5	09/22/14	09/23/14	10.2	ok
15	15	J4655	LCS-50PPB	CSM140925-	1	0.05		M				0	ok
16	16	J4656	MS	09096-005MS	1	0.05		M				0	ok
17	17	J4657	MSD	9096-005MS	1	0.05		M				0	ok
18	18	J4658	RB										/
19	19	J4659	RB										/
20	20	J4660	9109	1	1	0.05		M	PE-1	09/22/14	09/23/14	33.3	ok
21	21	J4661	9160	3	20	0.0025		M	GPEC-TP313A/6-	09/23/14	09/24/14	22.0	/
22	22	J4662		3	10	0.005		M	GPEC-TP313A/6-	09/23/14	09/24/14	22.0	ok
23	23	J4663	9161	1	1	0.05		M	GPEC-WC092314	09/23/14	09/24/14	4.00	ok
24	24	J4664	RB										/
25	25	J4665	9154	7	50	0.001		M	WST40923	09/23/14	09/24/14	22.3	ok
26	26	J4666	9176	1	2	0.025		M	M-WASTE-1	09/23/14	09/24/14		ok
27	27	J4667	RB										/

LS1011 — 8260 SURR from neat @ 2500 µg/ml
wxf 6/9/14 — 0.25g of 1,2-Dichloroethene-d4
exp. 6/9/15 — 0.25g of Toluene-d8
0.25g of ~~Fluoro~~ Bromofluoro benzene
} into 100ml MEOH

LS1012 — I.S./SURR working soln @ 250 µg/ml
wxf 6/9/14 — 1ml of LS1010 @ 2,500 µg/ml (exp. 6/9/15) and 1ml
exp. 9/9/14 — of LS 1011 @ 2500 µg/ml (exp. 6/9/15) diluted into
10ml MEOH

LS1013 — Primary Acrolein/Acrylnitrile working std @ 1,000 µg/ml
pre. 7/9/14 — 1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH
Exp. 9/9/14
CAM



LS1014 — TPH-GRO working std @ 500 µg/ml
wxf 7/9/14 — 125 µl of Spex CertPrep GAS-20 (Lot # C1130911008) @ 20 mg/ml
exp. 10/9/14 — (exp. 1/13/17) diluted into 50ml MEOH

LS1015 — 1,4-Dioxane working std @ 1,000 ppm
wxf 7/28/14 — Transfer 1,4-Dioxane @ 10,000ppm (8-8615-A-R(-X) Lot # 111712
exp 10/28/14 — (exp. 11/17/2015) into 1ml ~~MeOH~~

LS1016 — DIPE stock std @ 5,000 µg/ml
wxf 7/24/14 — 34.48 µl of DIPE neat (Recd 6/19/13, Lot # SHBB6268V)
exp. 8/24/15 — int 5ml MEOH.

LS1017
Prep: 9/24/14
Exp: 10/24/14

8260 primary std soln @ 40ppm
1ml PWM-588 @2,000ppm Lot# CL-0102 (Recd 3/20/14, exp. 2/28/17)
1ml ECS-A40 2-Chloroethyl vinyl ether Lot# CVE02 (Recd. 4/7/13, exp. 11/17/15)
0.4ml of TBA @ 10,000 ppm (LS1004, exp. 4/24/15)
0.4ml of DIPE @ 5,000ppm (LS1016, exp. 7/24/15)
1ml of ECS-A43 Ketones @ 2,000 ppm (Recd 12/27/13, exp. 10/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000ppm (Recd 12/27/13, exp. 8/31/2016)
1ml of VO-IALMJ-1 @2,000 ppm Lot# C112121913 (Recd 5/1/14, exp. 4/29/2017)
diluted into 50ml MeOH.

LS1018
Prep: 7/25/14
Exp. 10/19/14

BFB @25µg/ml for Tuning
1ml of ECS-A-017 @50 ppm Lot# BFB019 (Recd 11/28/12, exp. 10/15/14) into 1ml MeOH. Final volume: 2ml.

LS1019
Prep: 8/6/14
Exp: 11/6/14
CFM

Primary Acrolein/Acrynitrile working std @ 1,000 µg/ml
1ml of M-603-M-5X @5.0 mg/ml diluted into 5ml MeOH

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA Tel. 203-786-5290 • www.accustandard.com
M-603-M-5X 2-25-14 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214071226
Exp: Nov 16, 2014
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (<-10° C)

LS1020
Prep: 9/9/14
Exp: 12/9/14
CFM

TPH-GRO working std @ 500 µg/ml
125µl of Spex CertPrep GAS-20 (Lot# C113091008) @20mg/ml (exp: 1/13/17) diluted into 5ml MeOH

LS1021
Prep: 9/9/14
Exp: 12/9/14
CFM

Int/Surr Working solution @250ng/ml
1ml of LS1010 @2500 µg/ml (exp: 6/9/15) and 1ml of LS1011 @2500 µg/ml (exp: 6/9/15) diluted into 10ml MeOH

LS1022 8260 primary std solution @ 40ppm

pre: 9/10/14 1 ml DWM-588 @2,000ppm Lot # CL-0102 (Recd 3/20/14, exp 2/28/17)

Exp: 12/10/14 1 ml ECS-A40 2-Chloroethyl vinyl ether Lot # CVE02 (Recd 6/7/13, exp: 11/01/15)

WXF 0.4 ml of TBA @10,000ppm (LS1004, exp 4/24/15)

0.4 ml of DIPE @5,000ppm (LS1016, exp 7/24/15)

1 ml of ECS-A43 Ketones @2,000ppm (Recd 12/27/13, exp: 10/11/2015)

1 ml of ECS-A44 8260 Adds on @2,000ppm (Recd 12/27/13, exp 8/31/2016)

1 ml of VO-IALNJ-1 @2,000ppm Lot # C112121903 (Recd 5/1/14, exp 4/28/2017

diluted into 50 ml MeOH

L2493 8260 internal Standard / surr
Pre 6/17/14 5ml LS1010 at 2500 ug/ml (exp 6/9/15) } in to 50 ml meoh.
exp 9/17/14 5ml LS1011 at 2500 ug/ml (exp 6/9/15)

L2494 624 internal std / surr.
Pre 6/17/14 3ml LS1010 at 2000 ug/ml (exp 6/9/15) } dilute to 5 ml meoh.
exp 9/17/14 3ml LS1011 at 2500 ug/ml (exp 6/9/15)

L2494 Secondary Acrolein / Acrylonitrile @ 10000 ppm
6/26/14 1ml of ECS-A-033 lot: exp.
9/26/14 into 10 ml of MeOH

L2495 Secondary source of 40 ppm
6/30/14 98 ml of L2493 MTBE/TMA/DIPE @ 5000ppm/5000ppm/5000ppm
09/30/14 made 3/26/14 exp. 09/26/15
2mls of ECS-A-048 Add-Ons-Mix #3 2000 ppm
lot: A0309 received 01/24/14 exp. 11/16/2015
2mls of ECS-5242/8260 Main Mix 2000ppm
ECS-A-033 lot: 524MA20, received 10/08/13 exp.
11/24/14
4mls of Volatiles Gases Mix 1000ppm ECS-A-013
lot: VGM022, received 01/24/14 exp. 11/6/2015
2mls of M-8260-ADD-10X, received 6/30/14
exp. into 100 ml of MeOH

GASOLINE RANGE ORGANICS

GASOLINE RANGE ORGANICS
QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 09/26/2014

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKTM140926-01	MEOH	J4671.D	98	100	98
09096-005	MEOH	J4672.D	99	99	97
09143-001	MEOH	J4673.D	94	99	100
09161-001	MEOH	J4675.D	95	100	99
LCSTM140926-01	MEOH	J4676.D	98	99	100
09096-005MS	MEOH	J4677.D	97	99	97
09096-005MSD	MEOH	J4678.D	97	100	99

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	59-138	43-133
SMC2 = Toluene-d8	50 ppb	70-130	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	70-130	42-152	45-145

Column to be used to flag recovery values
* Values outside of IAL QC limits
$ Values outside of NJ DKQP/DQO limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSTM140926-01
Date Received:
Date Analyzed: 09/26/2014
LCS Data file: J4676.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	0.0	MS Conc.	%Rec.
TPH-GRO	500	0.0	467	93

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

* Values outside of QC limits

8260

MS/MSD SPIKE REPORT

Lab ID: 09096-005
Client ID: STOCKPILE_S5
Date Received: 09/23/2014
Date Analyzed: 09/26/2014
MS Data file: J4677.D
MSD Data file: J4678.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-µg/Kg
% Moisture: 11.1
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	0	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
TPH-GRO	500	0.0	543	109		550	110		1	

	Aqueous/Meoh	Soil
MS/MSD ACCURACY (%REC)	70-130	70-130
MS/MSD PRECISION (RPD)	30	30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Not calculable

RPD

30

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J4671.D Instrument ID: MSD_J

Date Analyzed: 09/26/2014 Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
STOCKPILE_S5	09096-005	09/26/2014	11:48
FWC_FOR_PURE_S	09143-001	09/26/2014	12:14
GPEC-WC092314	09161-001	09/26/2014	13:07
LCS-500PPB	LCSTM140926-01	09/26/2014	13:45
MS	09096-005MS	09/26/2014	14:11
MSD	09096-005MSD	09/26/2014	14:38

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J4435.D BFB Injection Date: 09/09/2014

Inst ID: MSD_J BFB Injection Time: 10:10

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.4			
75	30.0 - 60.0% of mass 95	46.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	79.4			
175	5.0 - 9.0% of mass 174	6.0	(	7.5	)1
176	95.0 - 101.0% of mass 174	77.5	(	97.6	)1
177	5.0 - 9.0% of mass 176	5.4	(	7.0	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC50	ICC50	J4436.D	09/09/2014	10:40
ICC100	ICC100	J4437.D	09/09/2014	11:09
ICC200	ICC200	J4438.D	09/09/2014	11:36
ICC1000	ICC1000	J4439.D	09/09/2014	12:23
ICC2000	ICC2000	J4440.D	09/09/2014	12:49
ICC5000	ICC5000	J4441.D	09/09/2014	13:16
ICV1000	ICV1000	J4444.D	09/09/2014	15:05

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J4668.D

BFB Injection Date: 09/26/2014

Inst ID: MSD_J

BFB Injection Time: 9:59

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.6			
75	30.0 - 60.0% of mass 95	45.6			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	8.9			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	83.5			
175	5.0 - 9.0% of mass 174	6.0	(	7.2	)1
176	95.0 - 101.0% of mass 174	80.5	(	96.4	)1
177	5.0 - 9.0% of mass 176	5.2	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV1000	CCV1000	J4669.D	09/26/2014	10:26
BLKTM140926-01	BLKTM140926-01	J4671.D	09/26/2014	11:21
STOCKPILE_S5	09096-005	J4672.D	09/26/2014	11:48
FWC_FOR_PURE_	09143-001	J4673.D	09/26/2014	12:14
GPEC-WC092314	09161-001	J4675.D	09/26/2014	13:07
LCS-500PPB	LCSTM140926-01	J4676.D	09/26/2014	13:45
MS	09096-005MS	J4677.D	09/26/2014	14:11
MSD	09096-005MSD	J4678.D	09/26/2014	14:38

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J4439.D

Date Analyzed: 09/09/2014

Instrument ID: MSD_J

Time Analyzed: 12:23

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	249326	6.09	370765	6.91	322942	10.25
	UPPER LIMIT	498652	6.59	741530	7.41	645884	10.75
	LOWER LIMIT	124663	5.59	185382.5	6.41	161471	9.75
	LAB SAMPLE ID						
01	ICC50	260143	6.09	383581	6.91	333321	10.25
02	ICC100	245848	6.09	368889	6.91	317224	10.25
03	ICC200	256259	6.09	383244	6.91	328718	10.25
04	ICC2000	248737	6.09	370027	6.91	322870	10.25
05	ICC5000	239770	6.08	356408	6.90	311232	10.25
06	ICV1000	241308	6.09	358044	6.91	310415	10.25
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J4669.D

Date Analyzed: 09/26/2014

Instrument ID: MSD_J

Time Analyzed: 10:26

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	233056		6.09		352847		6.90		321572		10.24	
	UPPER LIMIT	466112		6.59		705694		7.40		643144		10.74	
	LOWER LIMIT	116528		5.59		176423.5		6.40		160786		9.74	
	LAB SAMPLE ID												
01	BLKTM140926-01	224232		6.09		338404		6.91		309641		10.25	
02	09096-005	222113		6.09		341053		6.91		306215		10.25	
03	09143-001	230326		6.08		349555		6.90		319067		10.24	
04	09161-001	213633		6.08		322441		6.90		296488		10.24	
05	LCSTM140926-01	222971		6.09		338233		6.90		309127		10.25	
06	09096-005MS	203769		6.09		307840		6.91		281763		10.25	
07	09096-005MSD	201803		6.09		305359		6.91		286480		10.25	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

GASOLINE RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4675.D
Acq On : 26 Sep 2014 13:07
Operator : MEI
Sample : GPEC-WC092314,09161-001,M,0.05g,4.00
Misc : GEI-MTCLR/GREENPOI,09/23/14,09/24/14,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 29 10:16:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.08	168	213633	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.90	114	322441	50.00	UG	-0.01
5) Chlorobenzene-d5	10.24	117	296488	50.00	UG	-0.01
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	106312	47.37	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 94.74%			
4) Toluene-d8	8.58	98	366481	49.83	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.66%			
6) Bromofluorobenzene	11.65	95	143775	49.47	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.94%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	1463878m	208.57	UG	

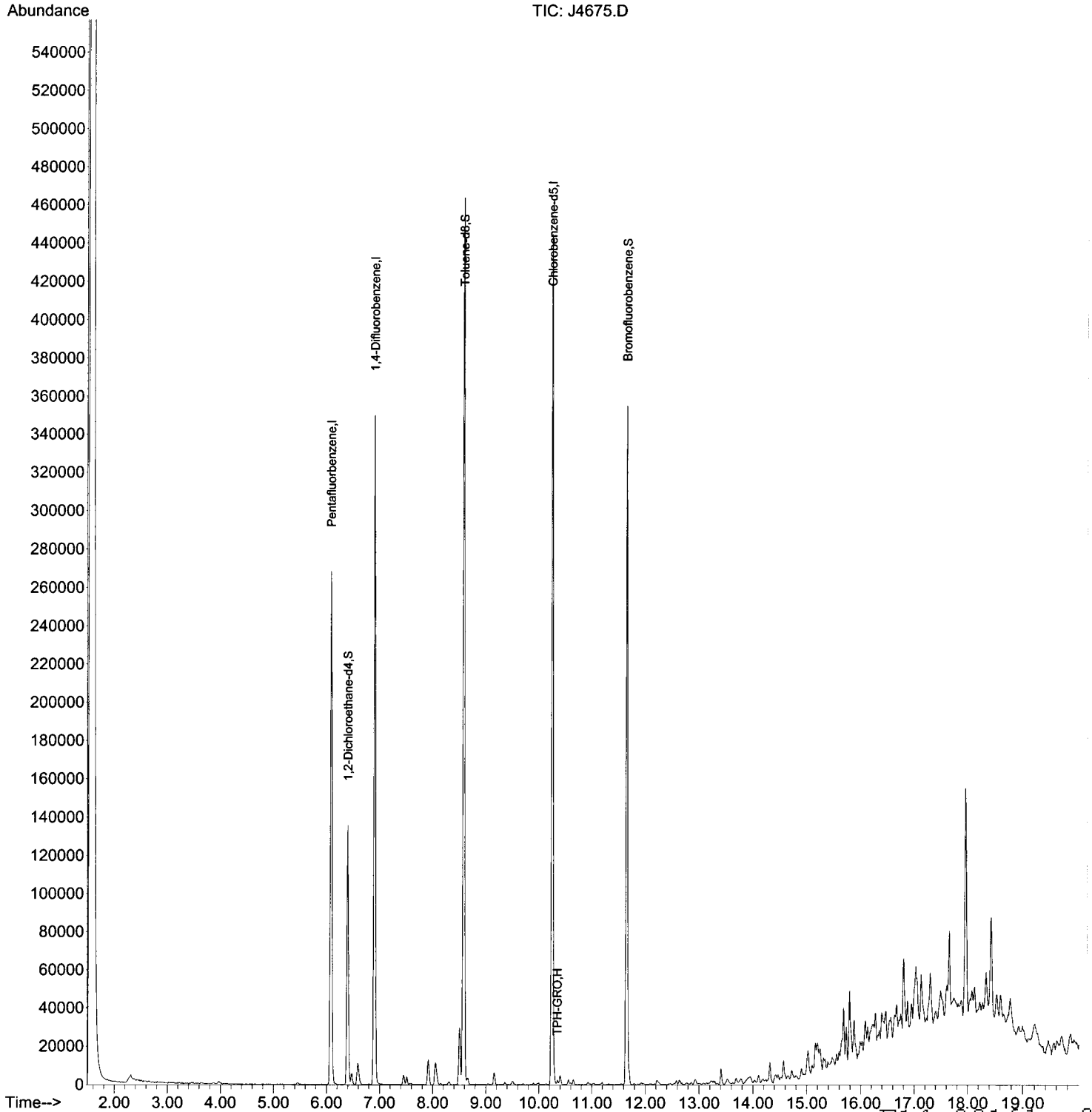
(#) = qualifier out of range (m) = manual integration (+) = signals summed

CD
9/29/14

Quantitation Report (QT Reviewed)

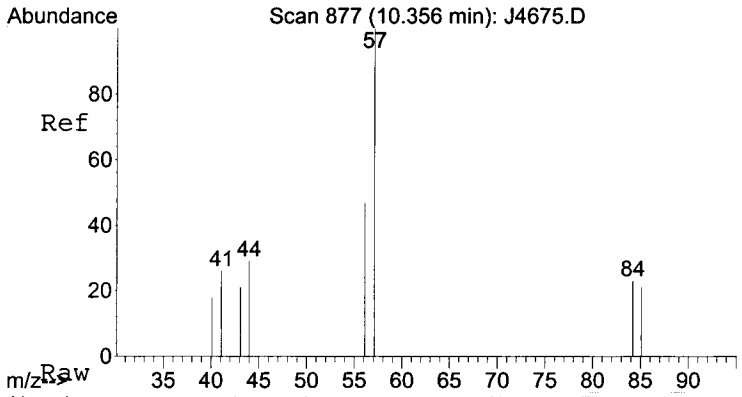
Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4675.D
Acq On : 26 Sep 2014 13:07
Operator : MEI
Sample : GPEC-WC092314,09161-001,M,0.05g,4.00
Misc : GEI-MTCLR/GREENPOI,09/23/14,09/24/14,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 29 10:16:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



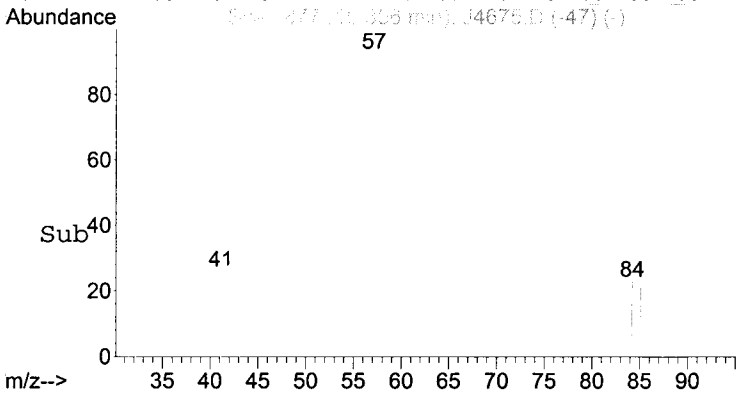
E14-09161 0121

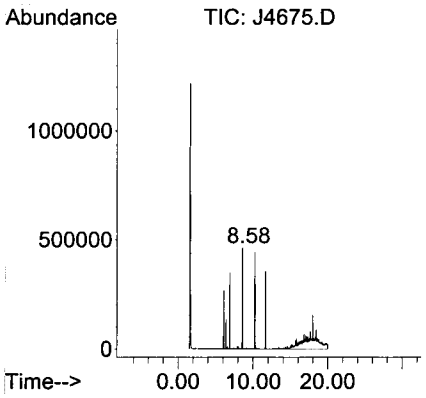
9/29/14



#7
TPH-GRO
Concen: 208.57 UG m
RT: 10.35 min Scan# 877
Delta R.T. 0.00 min
Lab File: J4675.D
Acq: 26 Sep 2014 13:07

Tgt Ion:TIC Resp: 1463878





VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_J

Method Path : C:\MSDCHEM\1\METHODS\
Method File : JT090914.M
Title : VOLATILE ORGANICS BY EPA 8260C
Last Update : Tue Sep 09 16:07:31 2014
Response Via : Initial Calibration

Calibration Files
50 =J4436.D 100 =J4437.D 200 =J4438.D
1000=J4439.D 2000=J4440.D 5000=J4441.D =

		Compound	50	100	200	1000	2000	5000	Avg	%RSD
1)	I	Pentafluorbenzene	----------ISTD----------							
2)	S	1,2-Dichloroethan	0.522	0.532	0.525	0.526	0.523	0.522	0.525	0.73
3)	I	1,4-Difluorobenzene	----------ISTD----------							
4)	S	Toluene-d8	1.136	1.139	1.128	1.148	1.137	1.156	1.141	0.89
5)	I	Chlorobenzene-d5	----------ISTD----------							
6)	S	Bromofluorobenzen	0.489	0.496	0.494	0.486	0.488	0.489	0.490	0.79
7)	H	TPH-GRO	1.137	1.024	0.997	1.297	1.179	1.468	1.184	14.96

(#) = Out of Range

JT090914.M Tue Sep 09 16:07:37 2014 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4436.D
Acq On : 9 Sep 2014 10:40
Operator : MEI
Sample : ICC50,ICC50,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 16:05:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

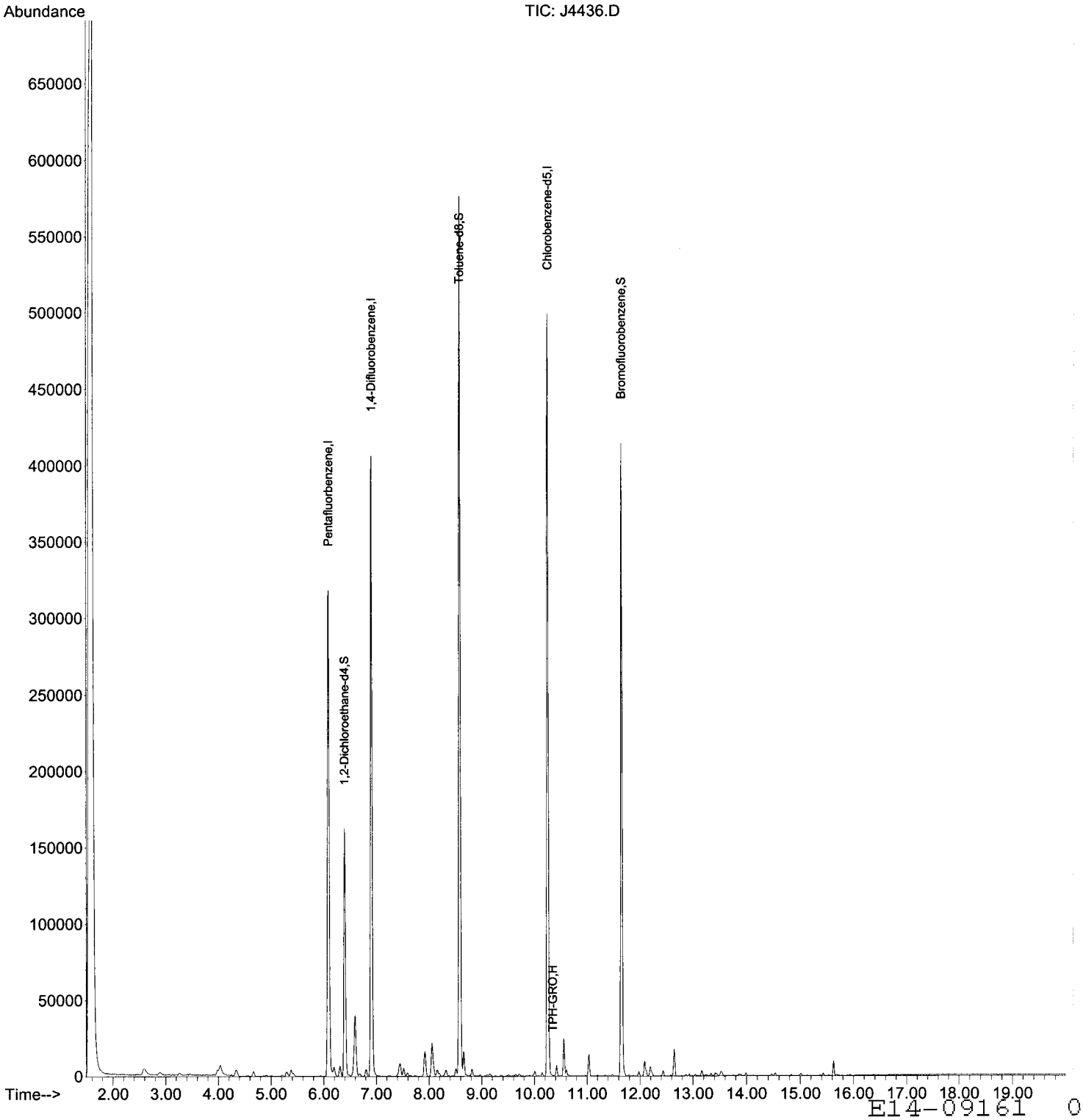
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	260143	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	383581	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	333321	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	135784	49.69	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 99.38%			
4) Toluene-d8	8.58	98	435644	49.79	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.58%			
6) Bromofluorobenzene	11.65	95	163076	49.91	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.82%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	379015m	48.03	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4436.D
Acq On : 9 Sep 2014 10:40
Operator : MEI
Sample : ICC50,ICC50,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 09 16:05:36 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4437.D
Acq On : 9 Sep 2014 11:09
Operator : MEI
Sample : ICC100,ICC100,A,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 16:05:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

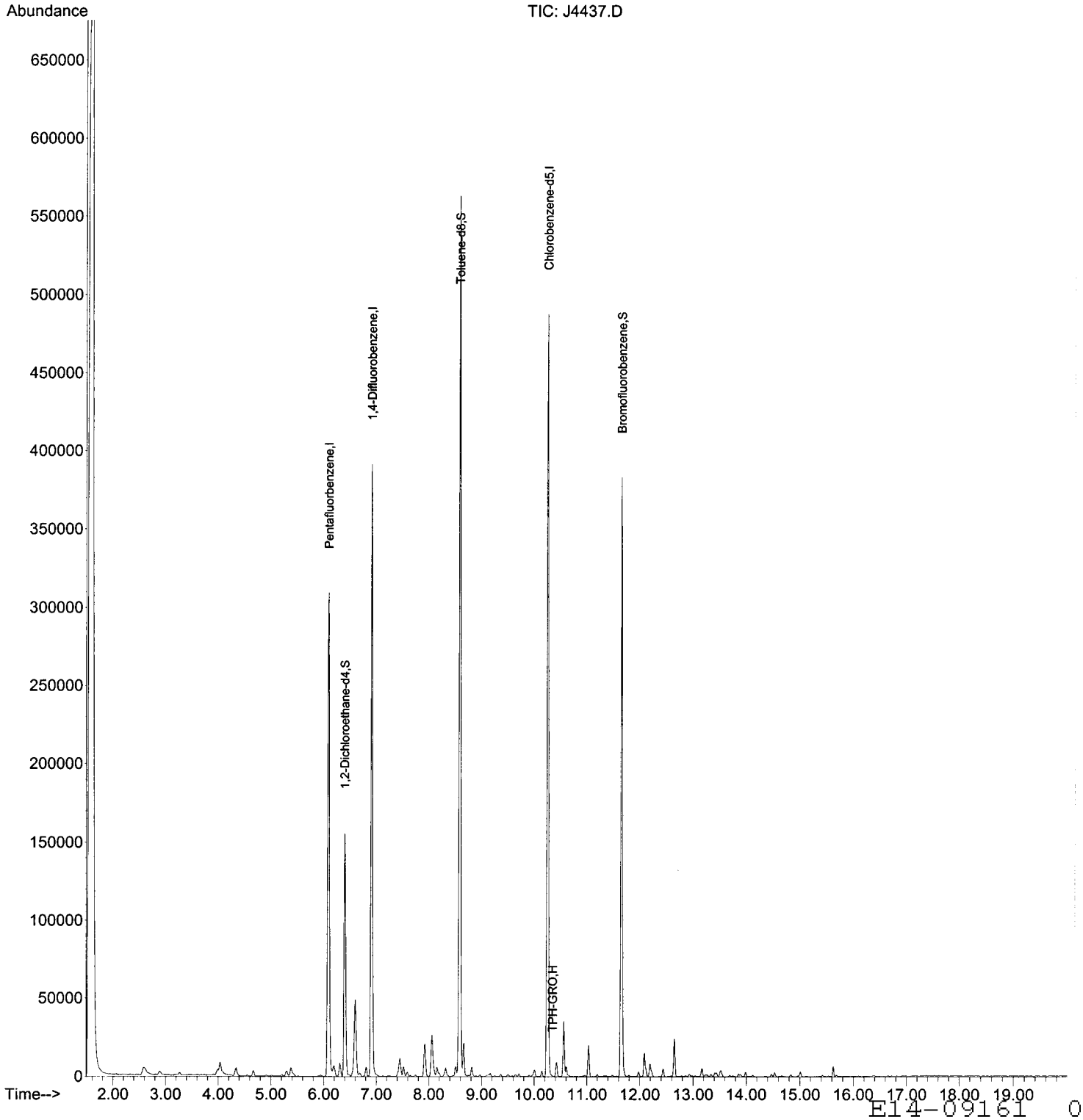
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	245848	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	368889	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	317224	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	130872	50.68	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 101.36%			
4) Toluene-d8	8.58	98	420061	49.92	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.84%			
6) Bromofluorobenzene	11.65	95	157299	50.59	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 101.18%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	649428m	86.48	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4437.D
Acq On : 9 Sep 2014 11:09
Operator : MEI
Sample : ICC100,ICC100,A,5ml,100
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 09 16:05:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4438.D
Acq On : 9 Sep 2014 11:36
Operator : MEI
Sample : ICC200,ICC200,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 16:05:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

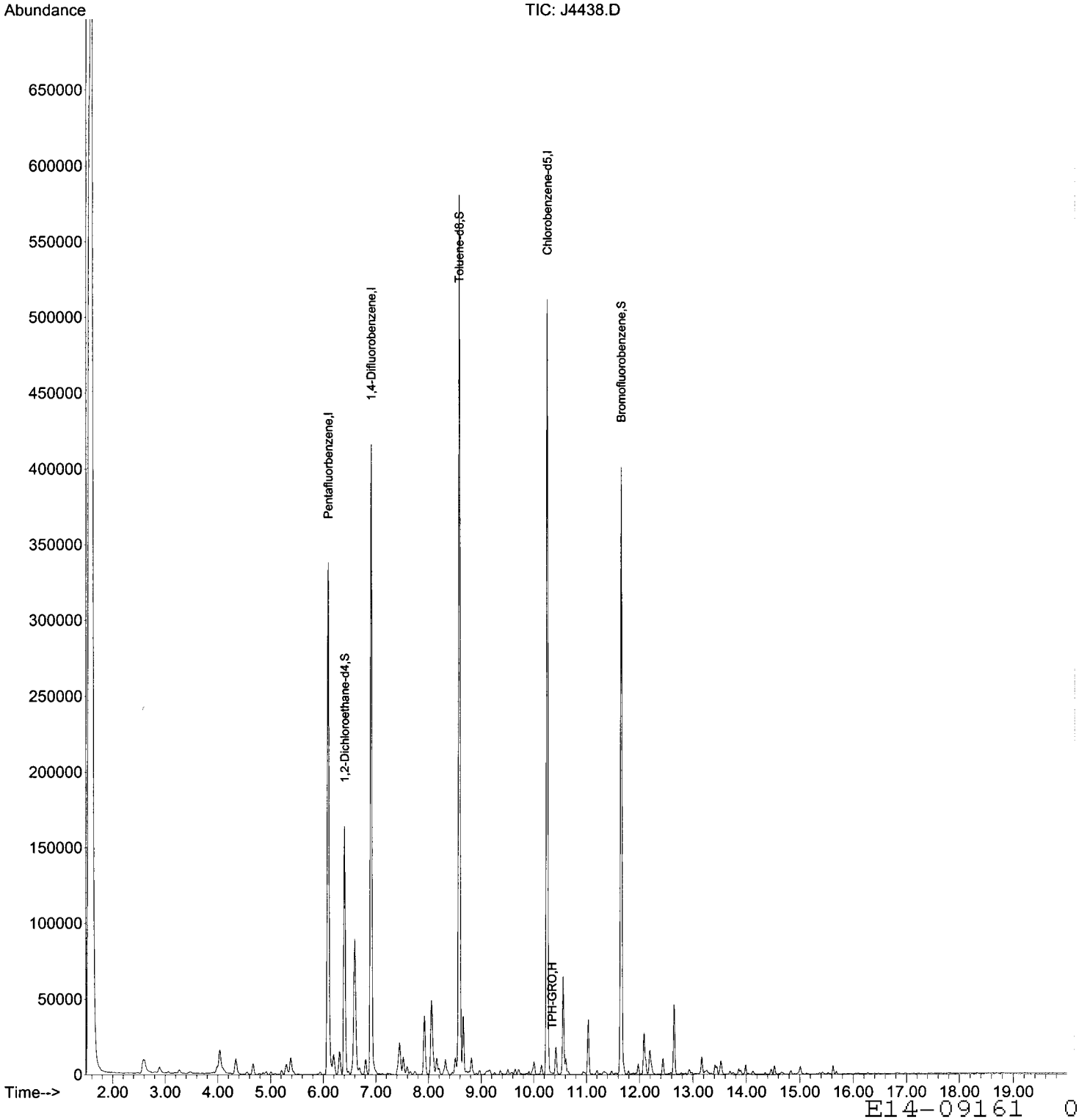
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	256259	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	383244	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	328718	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.41	65	134655	50.02	UG	0.01
Spiked Amount 50.000	Range 76 - 114		Recovery = 100.04%			
4) Toluene-d8	8.58	98	432177	49.44	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 98.88%			
6) Bromofluorobenzene	11.65	95	162290	50.37	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.74%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	1310361m	168.39	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4438.D
Acq On : 9 Sep 2014 11:36
Operator : MEI
Sample : ICC200,ICC200,A,5ml,100
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 09 16:05:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4439.D
Acq On : 9 Sep 2014 12:23
Operator : MEI
Sample : ICC1000,ICC1000,A,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 16:05:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

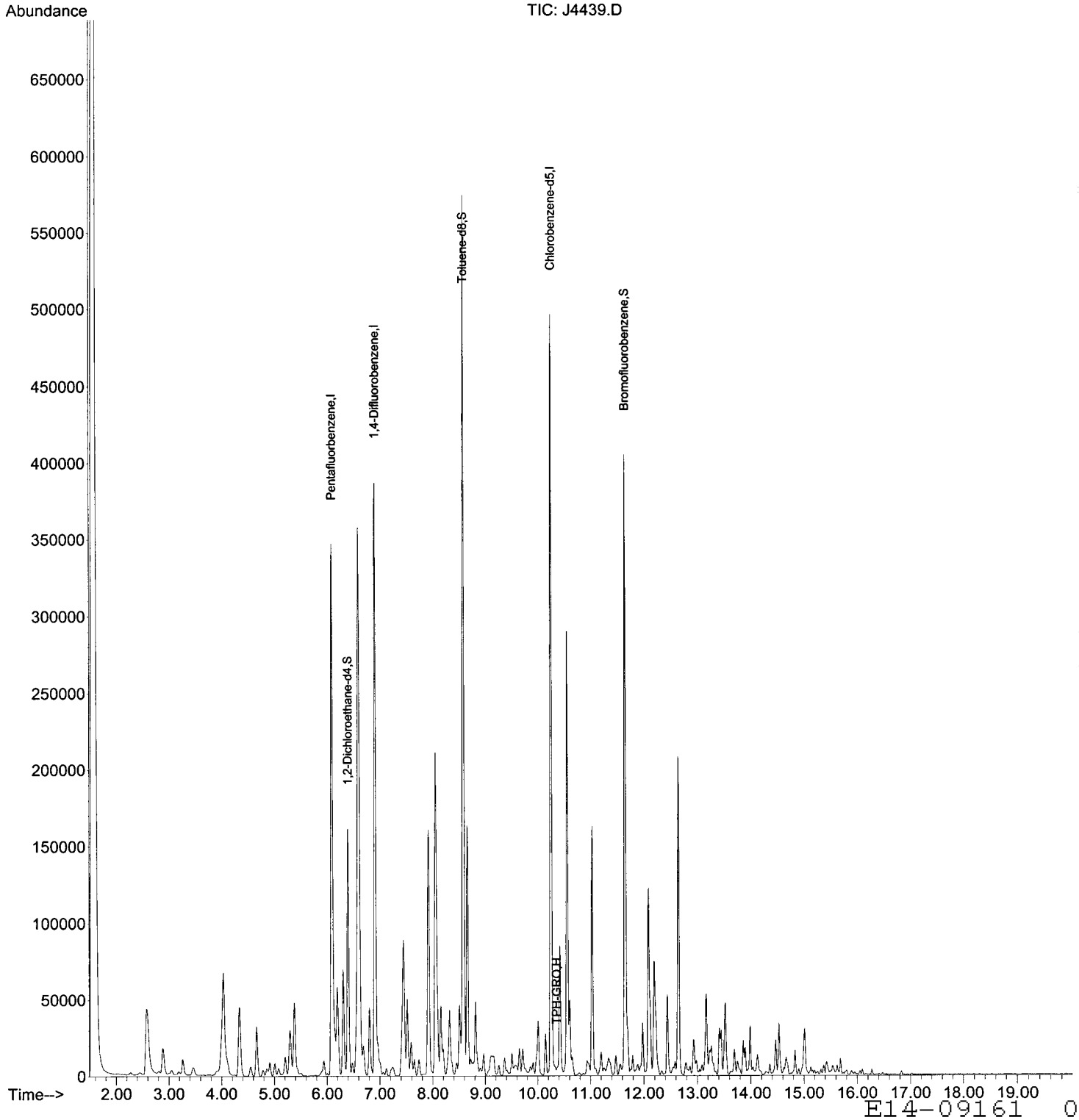
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	249326	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	370765	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	322942	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	131148	50.07	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 100.14%			
4) Toluene-d8	8.58	98	425660	50.33	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 100.66%			
6) Bromofluorobenzene	11.65	95	156851	49.55	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.10%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	8377464m	1095.82	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4439.D
Acq On : 9 Sep 2014 12:23
Operator : MEI
Sample : ICC1000,ICC1000,A,5ml,100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 09 16:05:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4440.D
Acq On : 9 Sep 2014 12:49
Operator : MEI
Sample : ICC2000,ICC2000,A,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 16:05:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

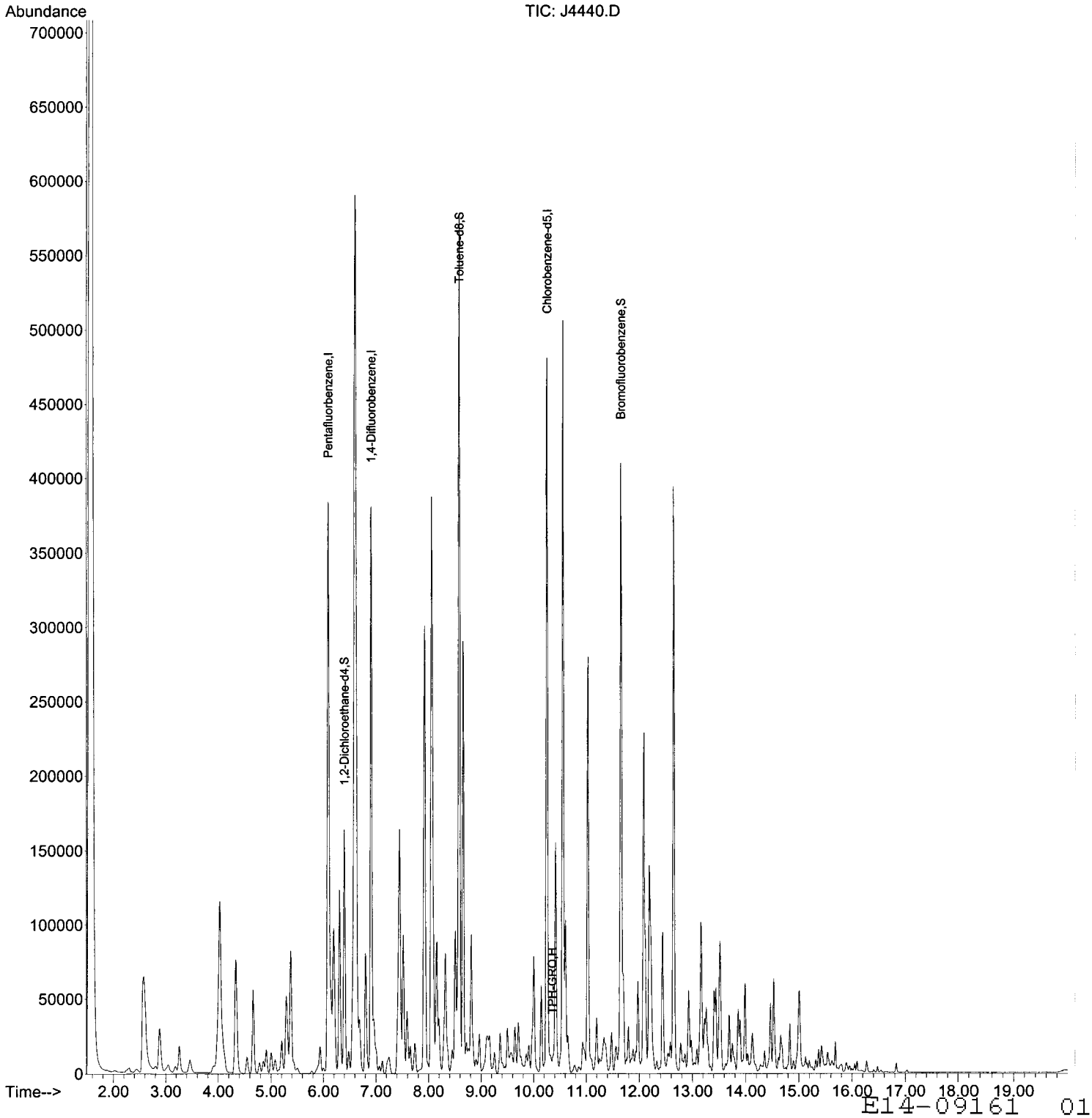
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	248737	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	370027	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	322870	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	130186	49.82	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 99.64%			
4) Toluene-d8	8.58	98	420590	49.83	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.66%			
6) Bromofluorobenzene	11.65	95	157461	49.75	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.50%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	15228574m	1992.43	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4440.D
Acq On : 9 Sep 2014 12:49
Operator : MEI
Sample : ICC2000,ICC2000,A,5ml,100
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 09 16:05:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4441.D
Acq On : 9 Sep 2014 13:16
Operator : MEI
Sample : ICC5000,ICC5000,A,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 16:05:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration

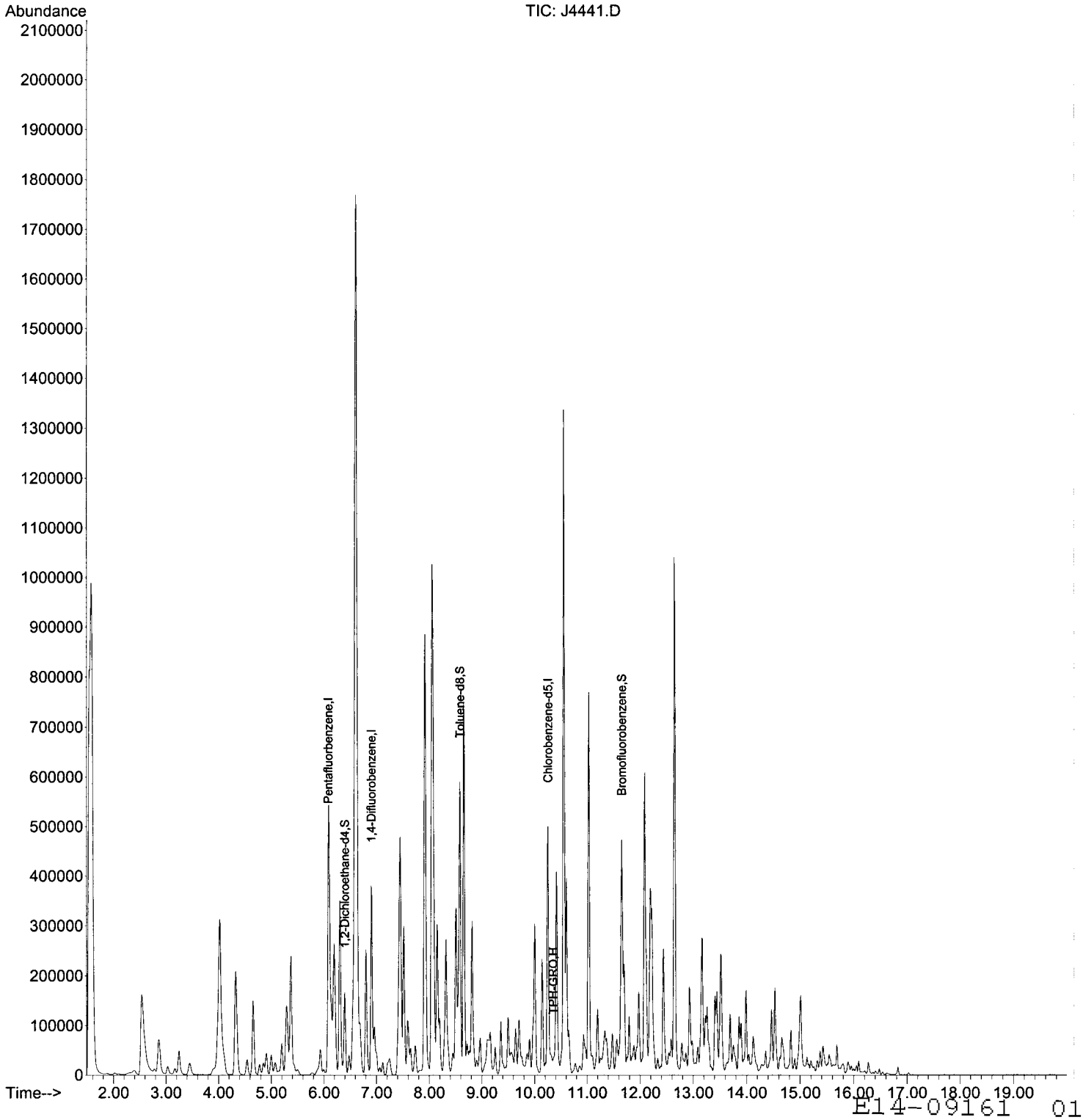
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.08	168	239770	50.00	UG	-0.01
3) 1,4-Difluorobenzene	6.90	114	356408	50.00	UG	-0.01
5) Chlorobenzene-d5	10.25	117	311232	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	125222	49.72	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 99.44%			
4) Toluene-d8	8.58	98	412096	50.69	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 101.38%			
6) Bromofluorobenzene	11.65	95	152037	49.84	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.68%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	45699583m	6202.68	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4441.D
Acq On : 9 Sep 2014 13:16
Operator : MEI
Sample : ICC5000,ICC5000,A,5ml,100
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 09 16:05:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 15:56:15 2014
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4444.D
Acq On : 9 Sep 2014 15:05
Operator : MEI
Sample : ICV1000,ICV1000,A,5ml,100
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 16:08:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

Min. RRF : 0.300 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorbenzene	1.000	1.000	0.0	97	0.00
2	S	1,2-Dichloroethane-d4	0.525	0.524	0.2	96	0.00
3	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
4	S	Toluene-d8	1.141	1.137	0.4	96	0.00
5	I	Chlorobenzene-d5	1.000	1.000	0.0	96	0.00
6	S	Bromofluorobenzene	0.490	0.492	-0.4	97	0.00
7	H	TPH-GRO	1.184	1.321	-11.6	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JT090914.M Tue Sep 09 16:08:14 2014 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4444.D
Acq On : 9 Sep 2014 15:05
Operator : MEI
Sample : ICV1000,ICV1000,A,5ml,100
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 16:08:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

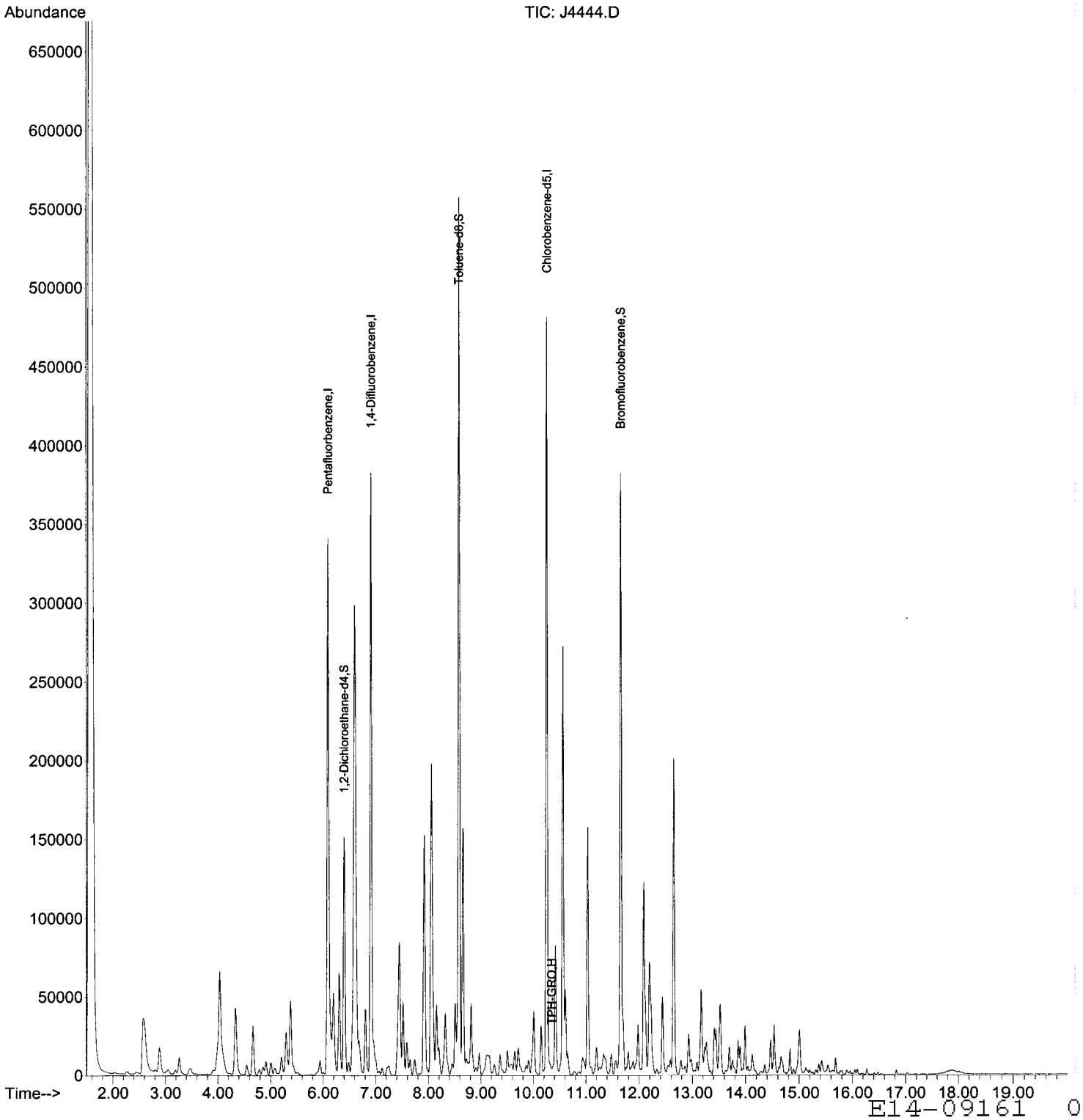
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	241308	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	358044	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	310415	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	126468	49.89	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 99.78%			
4) Toluene-d8	8.58	98	407211	49.86	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.72%			
6) Bromofluorobenzene	11.65	95	152596	50.15	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 100.30%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	8203655m	1116.39	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-09-14\
Data File : J4444.D
Acq On : 9 Sep 2014 15:05
Operator : MEI
Sample : ICV1000,ICV1000,A,5ml,100
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 09 16:08:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4669.D
Acq On : 26 Sep 2014 10:26
Operator : MEI
Sample : CCV1000,CCV1000,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 29 10:13:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

Min. RRF : 0.300 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorbenzene	1.000	1.000	0.0	93	0.00
2	S	1,2-Dichloroethane-d4	0.525	0.509	3.0	91	0.00
3	I	1,4-Difluorobenzene	1.000	1.000	0.0	95	-0.01
4	S	Toluene-d8	1.141	1.139	0.2	94	0.00
5	I	Chlorobenzene-d5	1.000	1.000	0.0	100	-0.01
6	S	Bromofluorobenzene	0.490	0.481	1.8	99	0.00
7	H	TPH-GRO	1.184	1.180	0.3	91	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JT090914.M Mon Sep 29 10:13:45 2014 RT1

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-26-14\
Data File : J4669.D
Acq On : 26 Sep 2014 10:26
Operator : MEI
Sample : CCV1000,CCV1000,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 29 10:13:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

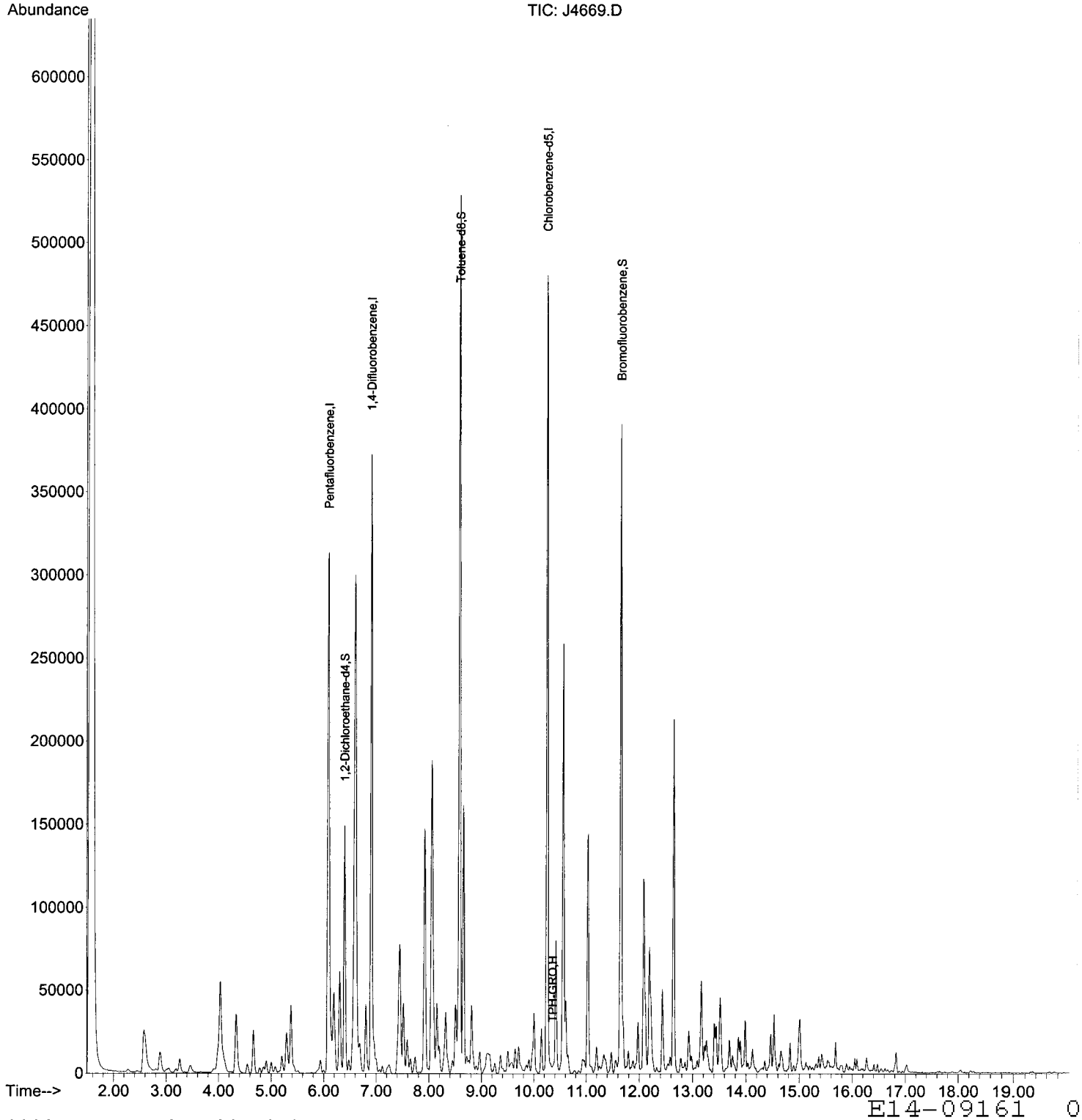
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	233056	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.90	114	352847	50.00	UG	-0.01
5) Chlorobenzene-d5	10.24	117	321572	50.00	UG	-0.01
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	118726	48.50	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.00%			
4) Toluene-d8	8.58	98	401981	49.94	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.88%			
6) Bromofluorobenzene	11.65	95	154704	49.08	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 98.16%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	7586007m	996.52	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-26-14\
Data File : J4669.D
Acq On : 26 Sep 2014 10:26
Operator : MEI
Sample : CCV1000,CCV1000,A,5ml,100
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 29 10:13:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

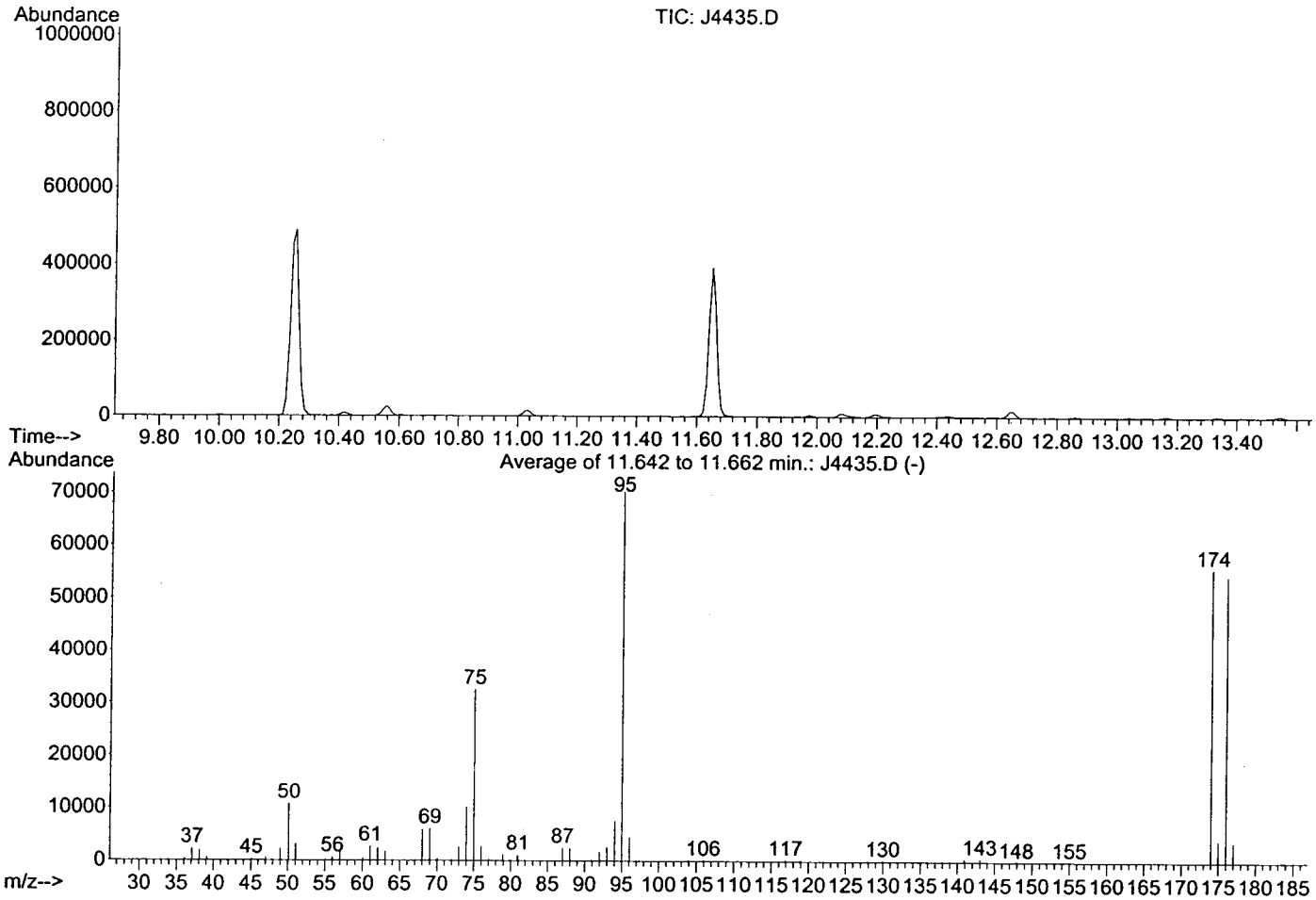


VOLATILE ORGANICS RAW QC DATA

Data Path : C:\MSDCHEM\1\DATA\09-09-14\
Data File : J4435.D
Acq On : 9 Sep 2014 10:10
Operator : MEI
Sample : BFB140909
Misc : 50NG
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\JT090914.M
Title : VOLATILE ORGANICS BY EPA 8260C
Last Update : Tue Sep 09 16:07:56 2014



AutoFind: Scans 1004, 1005, 1006; Background Corrected with Scan 998

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	10848	PASS
75	95	30	60	46.5	32693	PASS
95	95	100	100	100.0	70269	PASS
96	95	5	9	6.5	4591	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	79.4	55805	PASS
175	174	5	9	7.5	4164	PASS
176	174	95	101	97.6	54472	PASS
177	176	5	9	7.0	3810	PASS

Average of 11.642 to 11.662 min.: J4435.D
BFB140909
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	443	50.10	10848	67.10	122	78.95	1283
37.10	2335	51.05	3256	68.00	6001	79.80	111
38.10	2098	52.05	182	69.00	6116	80.00	268
39.10	794	55.10	225	70.05	504	80.95	1234
43.00	56	56.00	771	72.00	330	81.95	230
44.05	158	57.00	1619	73.00	2734	87.00	2538
45.05	382	60.05	582	74.00	10270	88.00	2537
47.00	697	61.00	2822	75.00	32693	90.90	242
47.80	111	62.00	2558	76.00	2800	92.00	1840
47.95	208	63.00	1894	77.05	405	93.00	2645
49.00	2305	64.05	220	77.95	252	94.05	7601

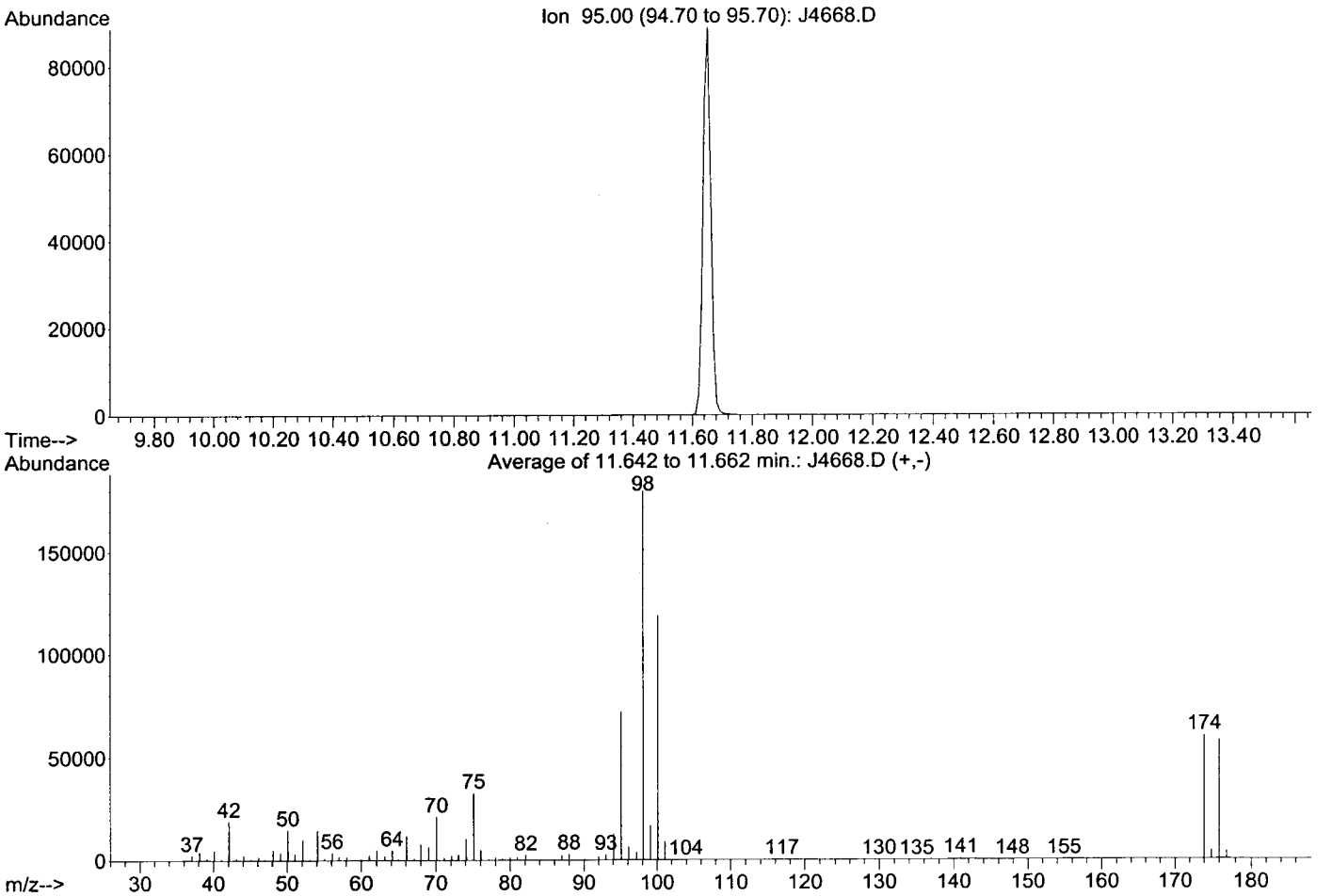
Average of 11.642 to 11.662 min.: J4435.D
BFB140909
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	70269	128.85	92	175.00	4164		
96.05	4591	129.95	275	176.00	54472		
97.00	106	131.00	46	177.00	3810		
103.90	207	140.95	638				
104.90	44	143.00	690				
105.95	276	146.00	46				
116.00	202	147.90	103				
116.95	380	148.10	55				
117.90	182	155.00	136				
118.95	333	156.90	70				
127.95	236	174.00	55805				

Data Path : C:\MSDCHEM\1\DATA\09-26-14\
Data File : J4668.D
Acq On : 26 Sep 2014 9:59
Operator : MEI
Sample : BFB140926
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\JT090914.M
Title : VOLATILE ORGANICS BY EPA 8260C
Last Update : Tue Sep 09 16:07:56 2014



Spectrum Information: Average of 11.642 to 11.662 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	14862	PASS
75	95	30	60	45.6	32842	PASS
95	95	100	100	100.0	72080	PASS
96	95	5	9	8.9	6440	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.5	60213	PASS
175	174	5	9	7.2	4365	PASS
176	174	95	101	96.4	58056	PASS
177	176	5	9	6.5	3779	PASS

Average of 11.642 to 11.662 min.: J4668.D
BFB140926
Modified:added subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	597	46.10	1761	56.10	3727	68.00	7853
37.10	2459	47.00	566	57.05	1885	69.05	6345
38.10	4303	47.30	240	58.10	1518	70.10	21180
39.10	1035	48.10	5115	60.00	778	71.10	1286
40.10	5133	49.10	3627	61.05	2631	72.10	2255
41.10	614	50.10	14862	62.05	4912	73.05	2684
42.10	19094	51.05	3245	63.10	2273	74.10	10453
43.00	70	52.10	10223	64.10	4927	75.10	32842
43.10	942	53.10	749	65.00	497	76.05	5012
44.10	2634	54.10	14712	66.10	12050	77.05	356
45.05	724	55.05	898	67.10	805	78.00	1402

Average of 11.642 to 11.662 min.: J4668.D
BFB140926
Modified:added subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.95	1108	90.10	392	100.10	118824	127.95	201
80.00	1165	91.00	242	101.10	9164	128.90	52
80.95	1285	92.00	1805	102.20	298	129.95	219
81.90	237	93.00	2728	103.95	236	130.90	46
82.10	2650	93.30	134	104.90	44	135.00	50
83.10	220	94.05	12887	105.95	213	140.95	684
84.00	288	95.10	72080	114.90	46	142.00	56
85.00	44	96.10	6440	116.00	189	142.95	647
86.00	447	97.20	3839	116.90	329	145.90	45
87.00	2468	98.10	179804	117.95	232	147.90	186
88.00	3028	99.10	17008	118.95	294	154.90	171

Average of 11.642 to 11.662 min.: J4668.D
BFB140926
Modified:added subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
156.95	162						
174.00	60213						
175.00	4365						
176.00	58056						
177.00	3779						
178.00	50						

INTEGRATED ANALYTICAL LABORATORIES

TPH-GRO

Lab ID: BLKTM140926-01
Client ID: BLKTM140926-01
Date Received:
Date Analyzed: 09/26/2014
Data file: J4671.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
TPH-GRO	ND		2.50	2.00

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4671.D
Acq On : 26 Sep 2014 11:21
Operator : MEI
Sample : BLKTM140926-01,BLKTM140926-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 29 10:14:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	224232	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	338404	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	309641	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	115188	48.90	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.80%			
4) Toluene-d8	8.58	98	385165	49.90	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.80%			
6) Bromofluorobenzene	11.65	95	148671	48.98	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 97.96%			

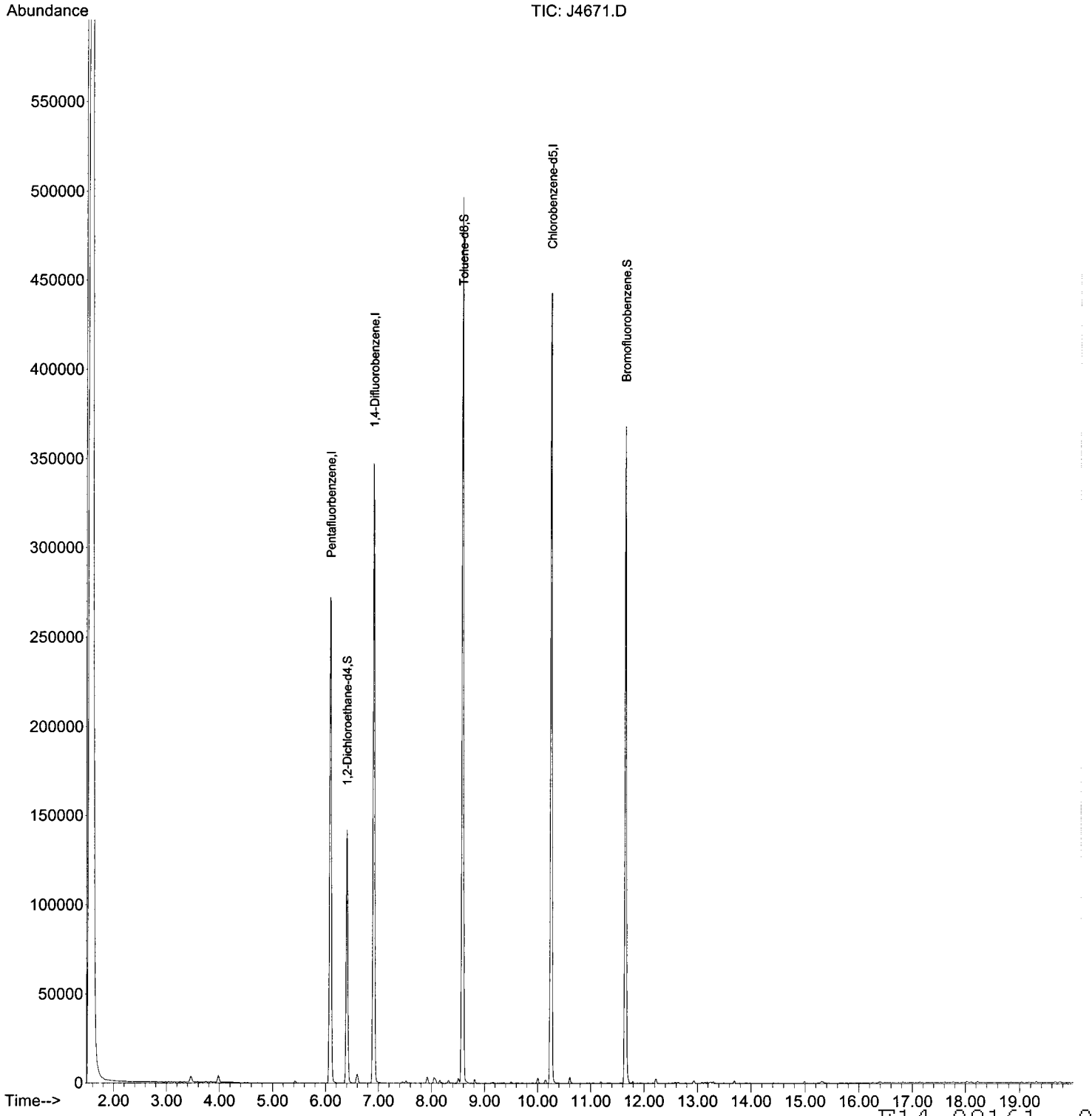
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4671.D
Acq On : 26 Sep 2014 11:21
Operator : MEI
Sample : BLKTM140926-01,BLKTM140926-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 29 10:14:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



9/29/14

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4671.D
Acq On : 26 Sep 2014 11:21
Operator : MEI
Sample : BLKTM140926-01,BLKTM140926-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 29 10:14:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	224232	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	338404	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	309641	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	115188	48.90	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.80%			
4) Toluene-d8	8.58	98	385165	49.90	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.80%			
6) Bromofluorobenzene	11.65	95	148671	48.98	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 97.96%			

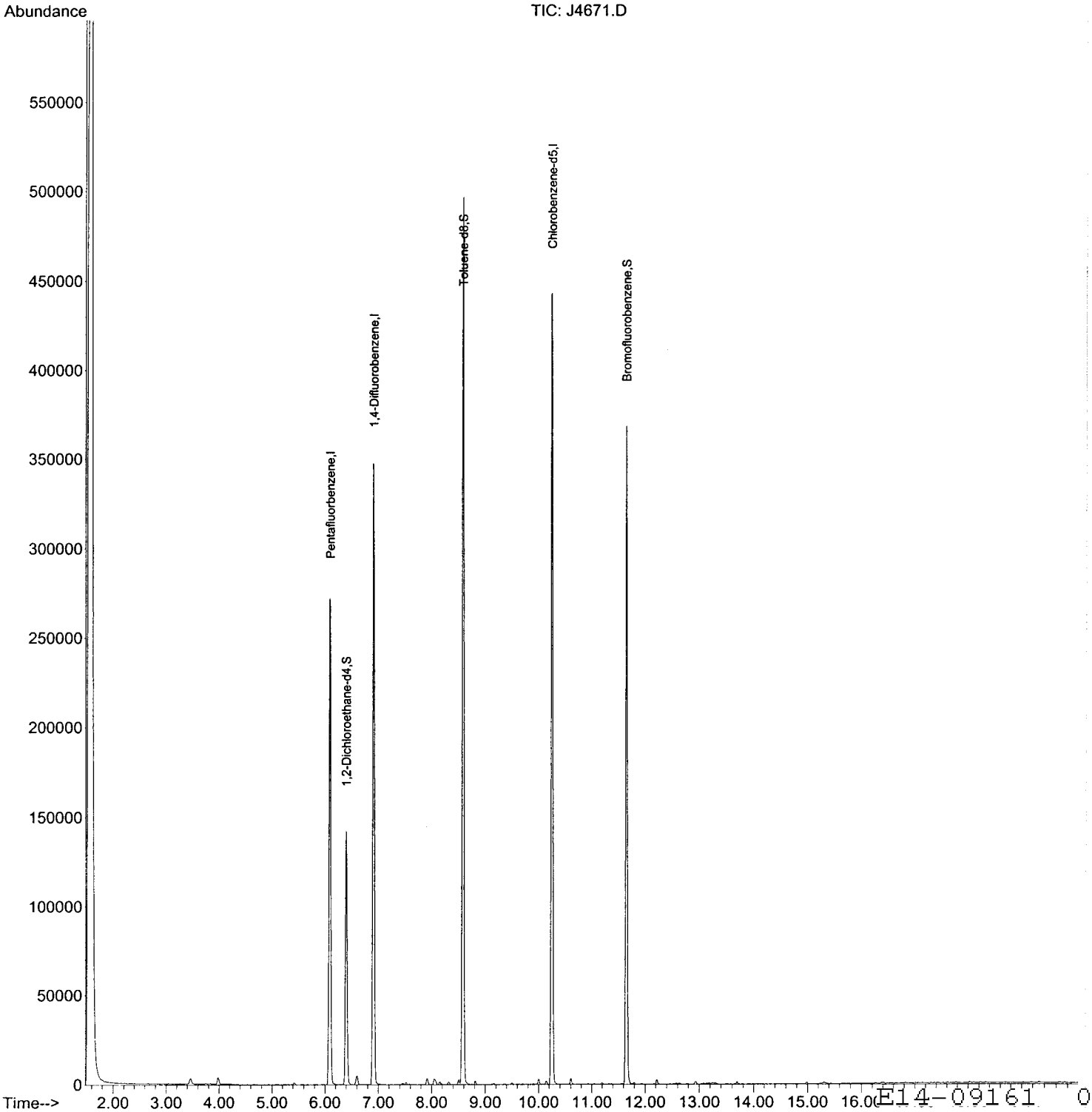
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4671.D
Acq On : 26 Sep 2014 11:21
Operator : MEI
Sample : BLKTM140926-01,BLKTM140926-01,M,0.1g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 29 10:14:44 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



E14-09161 0152

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4676.D
Acq On : 26 Sep 2014 13:45
Operator : MEI
Sample : LCS-500PPB,LCSTM140926-01,M,0.05g,0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 29 10:17:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

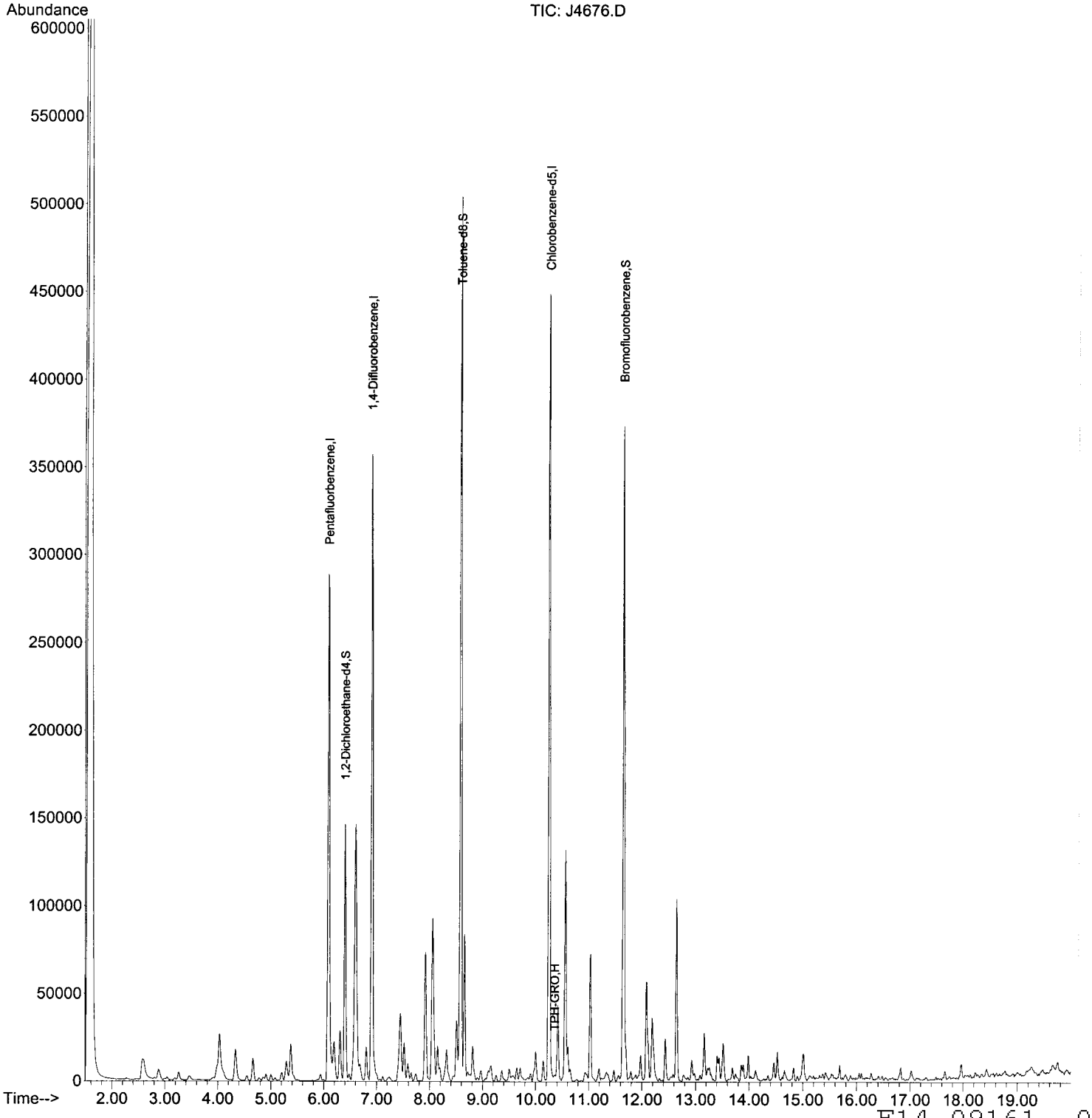
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	222971	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.90	114	338233	50.00	UG	-0.01
5) Chlorobenzene-d5	10.25	117	309127	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	115160	49.17	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 98.34%			
4) Toluene-d8	8.58	98	383436	49.70	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.40%			
6) Bromofluorobenzene	11.65	95	151139	49.88	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.76%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	3415978m	466.80	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4676.D
Acq On : 26 Sep 2014 13:45
Operator : MEI
Sample : LCS-500PPB,LCSTM140926-01,M,0.05g,0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 29 10:17:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4677.D
Acq On : 26 Sep 2014 14:11
Operator : MEI
Sample : MS,09096-005MS,M,0.05g,0
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 29 10:18:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

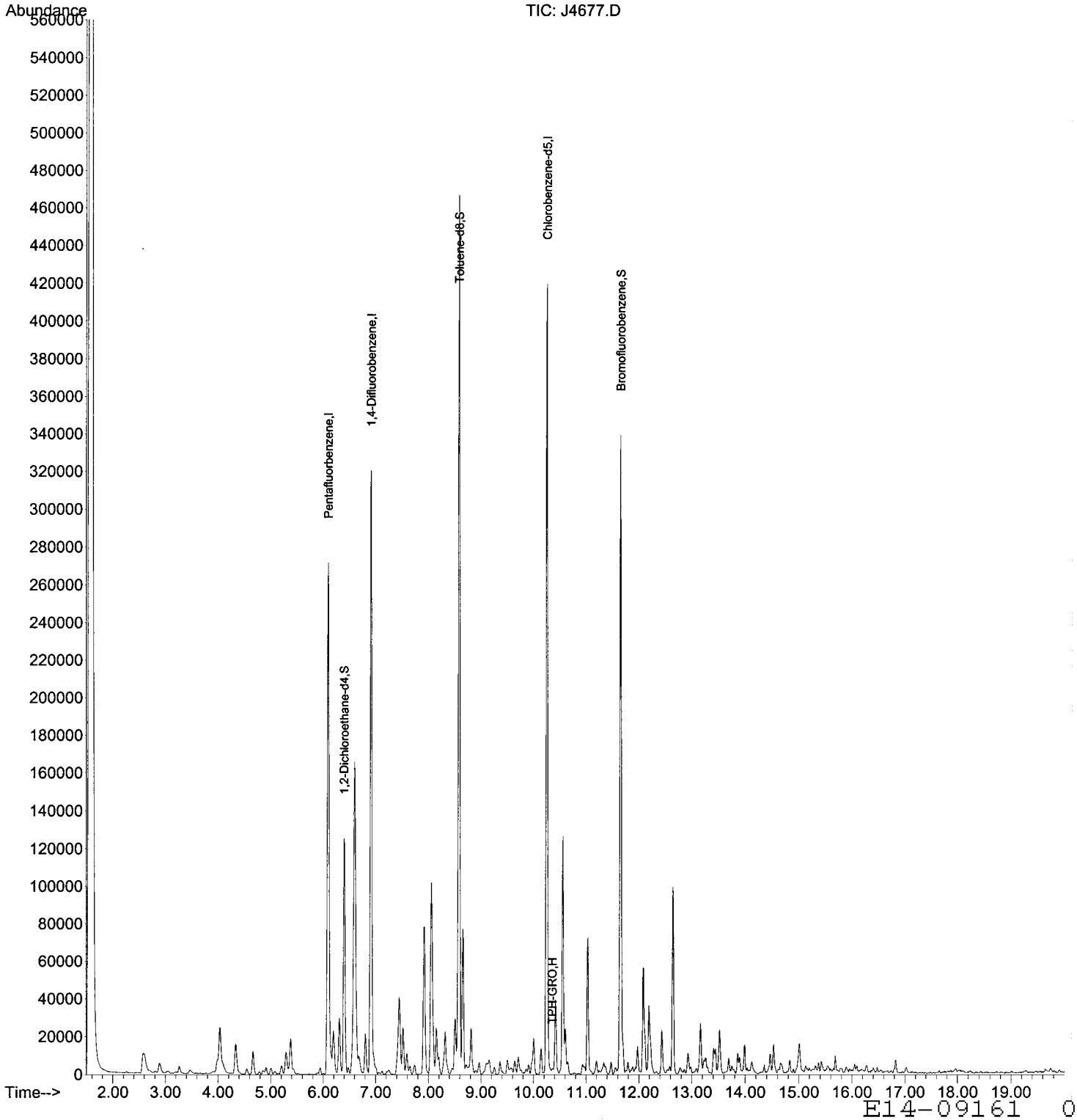
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	203769	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	307840	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	281763	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	104187	48.67	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.34%			
4) Toluene-d8	8.58	98	348276	49.60	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.20%			
6) Bromofluorobenzene	11.65	95	133738	48.42	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 96.84%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	3618984m	542.57	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4677.D
Acq On : 26 Sep 2014 14:11
Operator : MEI
Sample : MS,09096-005MS,M,0.05g,0
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 29 10:18:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4678.D
Acq On : 26 Sep 2014 14:38
Operator : MEI
Sample : MSD,09096-005MSD,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 29 10:18:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration

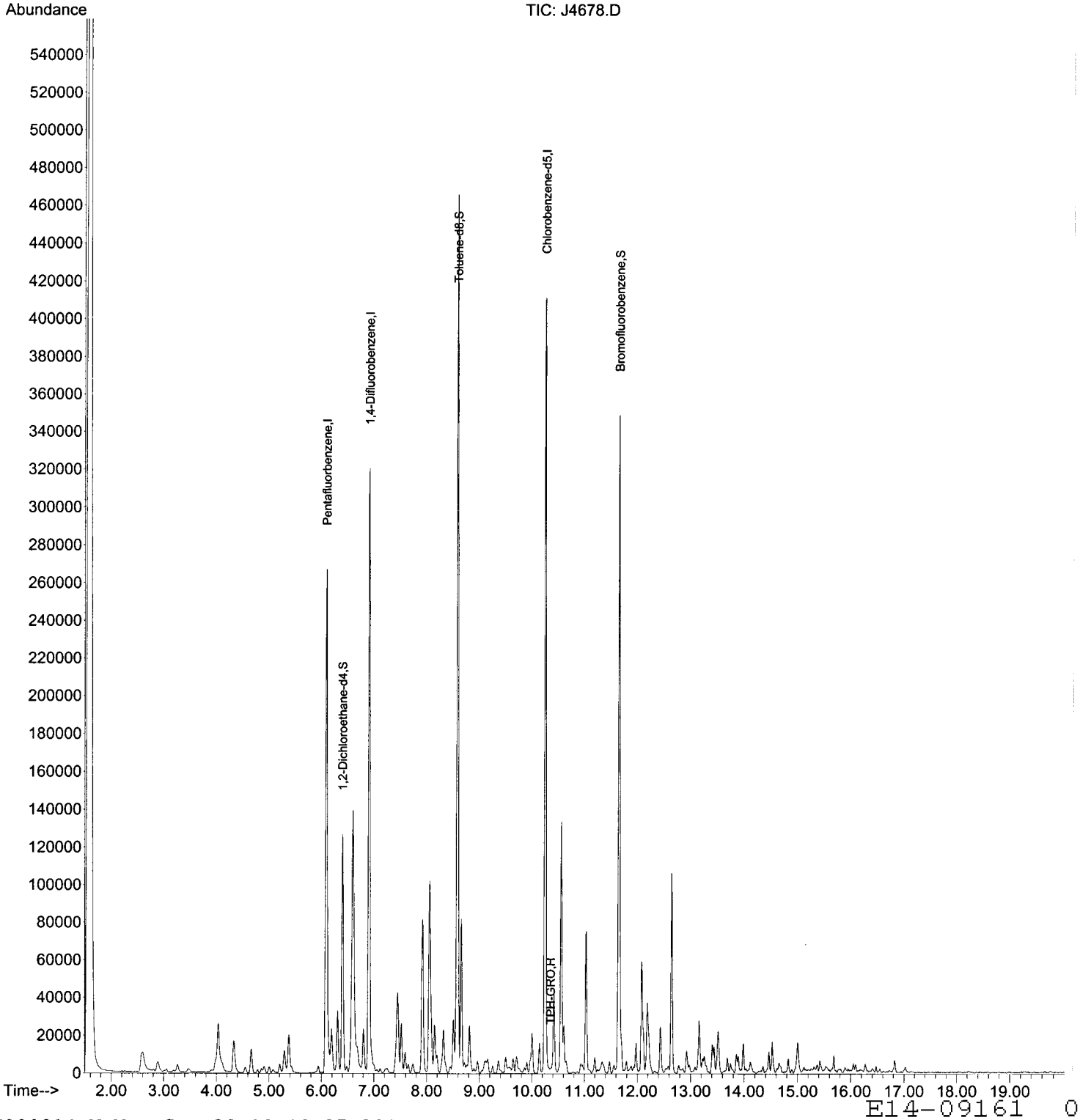
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorbenzene	6.09	168	201803	50.00	UG	0.00
3) 1,4-Difluorobenzene	6.91	114	305359	50.00	UG	0.00
5) Chlorobenzene-d5	10.25	117	286480	50.00	UG	0.00
System Monitoring Compounds						
2) 1,2-Dichloroethane-d4	6.40	65	103143	48.66	UG	0.00
Spiked Amount 50.000	Range 76 - 114		Recovery = 97.32%			
4) Toluene-d8	8.58	98	347477	49.89	UG	0.00
Spiked Amount 50.000	Range 88 - 110		Recovery = 99.78%			
6) Bromofluorobenzene	11.65	95	139329	49.62	UG	0.00
Spiked Amount 50.000	Range 86 - 115		Recovery = 99.24%			
Target Compounds						Qvalue
7) TPH-GRO	10.35	TIC	3730026m	550.01	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-26-14\
Data File : J4678.D
Acq On : 26 Sep 2014 14:38
Operator : MEI
Sample : MSD,09096-005MSD,M,0.05g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 29 10:18:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\JT090914.M
Quant Title : VOLATILE ORGANICS BY EPA 8260C
QLast Update : Tue Sep 09 16:07:56 2014
Response via : Initial Calibration



VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 9/9/14 15:51

INSTRUMENT: MSD-J

TUNE FILE: TUNE J

SEQUENCE FILE: 09-09-14

METHOD: JT090914

ANALYST: Mei Chen

CXM Initial

STANDARD	#	#	(ul)	CONC.
BFB	LS1018	1	1	50 ng
ISTD/SURR	LS1012	1	1	250 ug/mL
PRIMARY 8260 STD	LS1017	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1019	1.5	12	1000 ug/mL
1,4-Dioxane	LS1015	1.5	12	10000ug/mL
TPH-GRO	LS1020	10	80	500ug/mL
SECONDARY 8260 STD	L2495	6.25	50	40 ug/mL
SECONDARY AC/AC	L2494	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX	Client ID	Samp Date	Recd Date	% Moist	Comments
1	1	J4435	BFB140909										OK
2	2	J4436	ICC50	ICC50		5		W				100	OK
3	3	J4437	ICC100	ICC100		5		W				100	OK
4	4	J4438	ICC200	ICC200		5		W				100	OK
5	5	J4439	ICC1000	ICC1000		5		W				100	OK
6	6	J4440	ICC2000	ICC2000		5		W				100	OK
7	7	J4441	ICC5000	ICC5000		5		W				100	OK
8	8	J4442	RB										-
9	9	J4443	RB										-
10	10	J4444	ICV1000	ICV1000		5		W				100	OK

LABORATORY CHRONICLE - GC/MS VOA (Soil)

DATE: 9/26/2014 11:08

INSTRUMENT: MSD-J

TUNE FILE: TUNE J

SEQUENCE FILE: 09-26-14

METHOD: JM090814

ANALYST: Mei Chen

CXM Initial

STANDARD	#	S(ul)	A(ul)	CONC.
BFB	LS1018	1	1	50 ng
ISTD/SURR	LS1021	1	1	250 ug/mL
PRIMARY 8260 STD	LS1022	12.5	100	40 ug/mL
PRIMARY AC/AC	LS1019	1.5	12	1000 ug/mL
1,4-Dioxane	LS1015	1.5	12	10000ug/mL
TPH-GRO	LS1020	10	80	500ug/mL
SECONDARY 8260 STD	L2495	6.25	50	40 ug/mL
SECONDARY AC/AC	L2494	0.75	6	1000 ug/mL

	Vial #	Data File	Case #	Samp #	DF	Wt /Vol	Jar #	MX		Samp Date	Recd Date	% Moist	Comments
1	1	J4668	BFB140926										ok
2	2	J4669	CCV1000	CCV1000		5.00		A				100	ok
3	3	J4670	RB			5.00		A				100	/
4	4	J4671	BLKTM140926-0	KTM140926-01		0.10		M				0	ok
5	5	J4672	9096	5	1	0.05		M	STOCKPILE_S5	09/22/14	09/23/14	11.1	ok
6	6	J4673	9143	1	1	0.05		M	FWC_FOR_PURE_S	09/24/14	09/24/14	17.8	ok
7	7	J4674	RB										/
8	8	J4675	9161	1	1	0.05		M	GPEC-WC092314	09/23/14	09/24/14	4.00	ok
9	9	J4676	LCS-500PPB	STM140926	1	0.05		M				0	ok
10	10	J4677	TPH-MS	09096-005MS	1	0.05		M				0	ok
11	11	J4678	TPH-MSD	9096-005MS	1	0.05		M				0	ok

LS1011
wxf 6/9/14
exp. 6/9/15

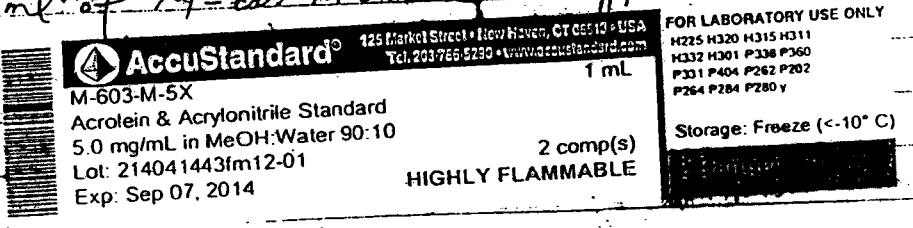
8260 SURR from neat @ 2500 µg/ml
0.25g of 1,2-Dichloroethene-d4
0.25g of Toluene-d8
0.25g of ~~Fluoro~~ Bromofluorobenzene
} into 100ml MEOH

LS1012
wxf 6/9/14
exp. 9/9/14

I.S./SURR working soln @ 250 µg/ml
1ml of LS1010 @ 2,500 µg/ml (exp. 9/9/15) and 1ml of LS1011 @ 2500 µg/ml (exp. 6/9/15) diluted into 10ml MEOH

LS1013
prep. 7/9/14
Exp. 9/9/14
CAM

Primary Acrolein/Acrylnitrile working std @ 1,000 µg/ml
1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MEOH



LS1014
wxf 7/9/14
exp. 10/9/14

TPH-GRO working std @ 500 µg/ml
125 µl of Spex Certprep GAS-20 (Lot # C1130911008) @ 20 mg/ml (exp. 1/13/17) diluted into 50ml MEOH

LS1015
wxf 7/29/14
exp. 10/29/14

1,4-Dioxane working std @ 1,000 ppm
Transfer 1,4-Dioxane @ 10,000ppm (8-8260-A-Dio-X) Lot # 111712 (exp. 11/17/2015) into 1ml x MeOH

LS1016
wxf 7/24/14
exp 7/24/15

DIPE stock std @ 5,000 µg/ml
34.48 µl of DIPE neat (Recd 6/19/13, Lot # SHBB6268V) int 5ml MEOH.

LS1017
F 9/24/14
10/24/14

8260 primary std soln @ 40ppm
1ml DWM-588 @ 2,000 ppm Lot # CL-0102 (Recd 3/20/14, exp. 2/28/17)
1ml ECS-A40 2-Chloroethyl vinyl ether Lot# CVE02 (Recd. 6/7/13, exp. 11/17/15)
0.4ml of TBA @ 10,000 ppm (LS1004, exp. 4/24/15)
0.4ml of DIPE @ 5,000 ppm (LS1016, exp. 7/24/15)
1ml of ECS-A43 Ketones @ 2,000 ppm (Recd 12/27/13, exp. 10/11/2015)
1ml of ECS-A44 8260 Adds on @ 2,000 ppm (Recd 12/27/13, exp. 8/31/2016)
1ml of VO-IALMJ-1 @ 2,000 ppm Lot# C112121913 (Recd 5/1/14, exp. 4/29/2017)
diluted into 50ml MeOH.

LS1018
F 7/25/14
9/19/14

BFB @ 25µg/ml for Tuning
1ml of ECS-A-017 @ 50 ppm Lot # BFB019 (Recd 11/28/12, exp. 10/19/14) into 1ml MeOH. Final volume: 2ml.

LS1019
prep: 8/6/14
Exp: 11/6/14
CMM

Primary Acrolein/Acrynitrile working std @ 1,000 µg/ml
1ml of M-603-M-5X @ 5.0 mg/ml diluted into 5ml MeOH

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA Tel. 203-766-5290 • www.accustandard.com
M-603-M-5X R 1-29-14 1 mL
Acrolein & Acrylonitrile Standard
5.0 mg/mL in MeOH:Water 90:10
Lot: 214071226
Exp: Nov 16, 2014
2 comp(s)
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280
Storage: Freeze (<-10° C)

LS1020
prep: 8/9/14
Exp: 12/9/14
CMM

TPH-GRO working std @ 500 µg/ml
125µl of Spex Certiprep GAS-20 (Lot# C113091008) @ 20mg/ml (exp: 1/13/17) diluted into 5ml MeOH

LS1021
prep: 9/9/14
Exp: 12/9/14
CMM

Int/Surr Working solution @ 250 µg/ml
1ml of LS1010 @ 2500 µg/ml (exp: 6/9/15) and 1ml of LS1011 @ 2500 µg/ml (exp: 6/9/15) diluted into 10ml MeOH

SEMI-VOLATILE ORGANICS

SEMI-VOLATILE ORGANICS QC SUMMARY

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 09/29/2014

Lab Sample ID	Matrix	File ID	S1	#	S2	#	S3	#	S4	#	S5	#	S6	#
BLKS140925-04	SOIL	C0323.D	63		64		68		72		69		73	
LCSS140925-04	SOIL	C0324.D	43		53		55		65		70		77	
E14-08869-003MS	SOIL	C0325.D	46		51		57		52		51		60	
E14-08869-003MSD	SOIL	C0326.D	41		45		46		49		50		61	
E14-08869-003	SOIL	C0327.D	N/A		N/A		45		50		N/A		65	
E14-08869-005	SOIL	C0328.D	N/A		N/A		48		54		N/A		66	
E14-09160-003	SOIL	C0329.D	30		40		40		50		50		50	
E14-09160-004	SOIL	C0330.D	40		45		45		50		50		55	
E14-09160-005	SOIL	C0331.D	26		28		57		65		37		69	
E14-09134-001	SOIL	C0332.D	47		52		54		58		57		67	
E14-09217-001	SOIL	C0333.D	N/A		N/A		60		60		N/A		70	
E14-09219-001	SOIL	C0334.D	N/A		N/A		49		54		N/A		55	
E14-08772-002	SOIL	C0335.D	N/A		N/A		60		65		N/A		60	
E14-08807-002	SOIL	C0336.D	N/A		N/A		60		60		N/A		50	
E14-09159-003	SOIL	C0337.D	N/A		N/A		65		68		N/A		63	
E14-09160-001	SOIL	C0341.D	45		49		57		65		64		61	
E14-09160-002	SOIL	C0342.D	40		42		46		48		40		60	
E14-09161-001	SOIL	C0343.D	42		43		50		56		50		56	
E14-09160-003DL	SOIL	C0344.D	N/A		N/A		D		D		N/A		D	

	Aqueous/Leachate	Soil
S1 (2FP) = 2-Fluorophenol	45-104	25-100
S2 (PHL) = Phenol-d5	52-106	25-108
S3 (NBZ) = Nitrobenzene-d5	57-107	24-91
S4 (FBP) = 2-Fluorobiphenyl	57-126	33-91
S5 (TBP) = 2,4,6-Tribromophenol	30-147	37-115
S6 (TPH) = Terphenyl-d14	68-133	15-122

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate dilut
M Matrix interfere
N/A Not applicable

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140925-04
Date Received: NA
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0324.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
N-Nitrosodimethylamine	50.0	28.0	56		40 - 140
Pyridine	50.0	19.5	39		20 - 120
Benzaldehyde	50.0	43.4	87		10 - 110
Phenol	50.0	30.0	60		30 - 140
Aniline	50.0	28.7	57		40 - 140
Bis(2-chloroethyl) ether	50.0	29.1	58		40 - 140
2-Chlorophenol	50.0	27.5	55		30 - 140
1,3-Dichlorobenzene	50.0	25.2	50		40 - 140
1,4-Dichlorobenzene	50.0	26.3	53		40 - 140
Benzyl alcohol	50.0	31.7	63		40 - 140
1,2-Dichlorobenzene	50.0	25.9	52		40 - 140
2-Methylphenol	50.0	30.1	60		30 - 140
Bis(2-chloroisopropyl) ether	50.0	30.6	61		40 - 140
4-Methylphenol	50.0	33.5	67		30 - 140
N-Nitrosodi-n-propylamine	50.0	35.4	71		40 - 140
Acetophenone	50.0	34.8	70		40 - 140
3-Methylphenol	50.0	33.5	67		30 - 140
Hexachloroethane	50.0	24.0	48		40 - 140
Nitrobenzene	50.0	31.1	62		40 - 140
Isophorone	50.0	35.9	72		40 - 140
2-Nitrophenol	50.0	31.4	63		30 - 140
2,4-Dimethylphenol	50.0	29.6	59		30 - 140
Bis(2-chloroethoxy) methane	50.0	35.5	71		40 - 140
Benzoic acid	50.0	39.4	79		30 - 140
2,4-Dimethylaniline	50.0	27.3	55		40 - 140
2,4-Dichlorophenol	50.0	35.6	71		30 - 140
1,2,4-Trichlorobenzene	50.0	28.4	57		40 - 140
Naphthalene	50.0	29.2	58		40 - 140
4-Chloroaniline	50.0	34.6	69		40 - 140
Hexachlorobutadiene	50.0	28.1	56		40 - 140
Caprolactam	50.0	41.3	83		40 - 140
4-Chloro-3-methylphenol	50.0	38.2	76		30 - 140
2-Methylnaphthalene	50.0	35.8	72		40 - 140
Hexachlorocyclopentadiene	50.0	39.9	80		5 - 105
2,4,6-Trichlorophenol	50.0	37.3	75		30 - 140
2,4,5-Trichlorophenol	50.0	41.2	82		30 - 140
1,1'-Biphenyl	50.0	38.9	78		40 - 140
2-Chloronaphthalene	50.0	35.0	70		40 - 140
2-Nitroaniline	50.0	39.6	79		40 - 140
Dimethyl phthalate	50.0	40.6	81		40 - 140
2,6-Dinitrotoluene	50.0	37.0	74		40 - 140
Acenaphthylene	50.0	36.9	74		40 - 140
3-Nitroaniline	50.0	43.3	87		40 - 140
Acenaphthene	50.0	36.7	73		40 - 140
2,4-Dinitrophenol	50.0	51.3	103		5 - 105

E14-09161 0167

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS140925-04
Date Received: NA
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0324.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits Rec
4-Nitrophenol	50.0	44.1	88		30 - 140
2,4-Dinitrotoluene	50.0	39.9	80		40 - 140
Dibenzofuran	50.0	38.7	77		40 - 140
Diethyl phthalate	50.0	40.3	81		40 - 140
Fluorene	50.0	38.1	76		40 - 140
4-Chlorophenyl phenyl ether	50.0	40.7	81		40 - 140
4-Nitroaniline	50.0	40.8	82		40 - 140
1,2,4,5-Tetrachlorobenzene	50.0	33.8	68		40 - 140
2,3,4,6-Tetrachlorophenol	50.0	43.8	88		40 - 140
4,6-Dinitro-2-methylphenol	50.0	45.5	91		10 - 110
N-Nitrosodiphenylamine	50.0	41.4	83		40 - 140
1,2-Diphenylhydrazine	50.0	34.7	69		40 - 140
4-Bromophenyl phenyl ether	50.0	40.1	80		40 - 140
Hexachlorobenzene	50.0	38.1	76		40 - 140
Atrazine	50.0	42.2	84		20 - 120
Pentachlorophenol	50.0	41.3	83		30 - 140
Phenanthrene	50.0	39.4	79		40 - 140
Anthracene	50.0	41.5	83		40 - 140
Carbazole	50.0	39.6	79		40 - 140
Di-n-butyl phthalate	50.0	43.3	87		40 - 140
Fluoranthene	50.0	38.7	77		40 - 140
Benzidine	50.0	26.3	53		5 - 105
Pyrene	50.0	41.6	83		40 - 140
3,3'-Dimethylbenzidine	50.0	31.7	63		5 - 105
Butyl benzyl phthalate	50.0	46.2	92		40 - 140
3,3'-Dichlorobenzidine	50.0	41.1	82		40 - 140
Benzo[a]anthracene	50.0	39.0	78		40 - 140
Chrysene	50.0	39.3	79		40 - 140
Bis(2-ethylhexyl) phthalate	50.0	43.5	87		40 - 140
Di-n-octyl phthalate	50.0	51.9	104		40 - 140
Benzo[b]fluoranthene	50.0	44.3	89		40 - 140
Benzo[k]fluoranthene	50.0	44.1	88		40 - 140
Benzo[a]pyrene	50.0	44.8	90		40 - 140
Indeno[1,2,3-cd]pyrene	50.0	44.5	89		40 - 140
Dibenz[a,h]anthracene	50.0	44.9	90		40 - 140
Benzo[g,h,i]perylene	50.0	44.3	89		40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

E14-09161 0168

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E14-08869-003
Date Received: 09/17/2014
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
MS Data file: C0325.D
MSD Data file: C0326.D

GC/MS Column: DB-5
Sample wt/vol: 15.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 20.7
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
N-Nitrosodimethylamine	50.0	0.0	23.8	48		21.1	42		12		40-140/30
Pyridine	50.0	0.0	16.6	33		16.8	34		1		20-120/30
Benzaldehyde	50.0	0.0	5.6	11		5.2	10		7		10-110/30
Phenol	50.0	0.0	25.6	51		23.4	47		9		30-140/30
Aniline	50.0	0.0	27.1	54		24.5	49		10		40-140/30
Bis(2-chloroethyl) ether	50.0	0.0	26.7	53		24.2	48		10		40-140/30
2-Chlorophenol	50.0	0.0	24.0	48		21.8	44		10		30-140/30
1,3-Dichlorobenzene	50.0	0.0	24.1	48		21.8	44		10		40-140/30
1,4-Dichlorobenzene	50.0	0.0	20.3	41		19.8	40		2		40-140/30
Benzyl alcohol	50.0	0.0	24.1	48		22.0	44		9		40-140/30
1,2-Dichlorobenzene	50.0	0.0	23.3	47		20.8	42		11		40-140/30
2-Methylphenol	50.0	0.0	27.5	55		24.8	50		10		30-140/30
Bis(2-chloroisopropyl) ether	50.0	0.0	26.0	52		23.7	47		9		40-140/30
4-Methylphenol	50.0	0.0	28.6	57		26.3	53		8		30-140/30
N-Nitrosodi-n-propylamine	50.0	0.0	26.4	53		23.8	48		10		40-140/30
Acetophenone	50.0	0.0	29.1	58		25.3	51		14		40-140/30
3-Methylphenol	50.0	0.0	28.6	57		26.3	53		8		30-140/30
Hexachloroethane	50.0	0.0	20.3	41		20.8	42		2		40-140/30
Nitrobenzene	50.0	0.0	28.0	56		23.3	47		18		40-140/30
Isophorone	50.0	0.0	29.0	58		23.7	47		20		40-140/30
2-Nitrophenol	50.0	0.0	28.7	57		23.5	47		20		30-140/30
2,4-Dimethylphenol	50.0	0.0	28.6	57		23.4	47		20		30-140/30
Bis(2-chloroethoxy) methane	50.0	0.0	28.5	57		23.7	47		18		40-140/30
Benzoic acid	50.0	0.0	23.2	46		18.7	37		21		30-140/30
2,4-Dimethylaniline	50.0	0.0	26.5	53		22.1	44		18		40-140/30
2,4-Dichlorophenol	50.0	0.0	30.3	61		24.5	49		21		30-140/30
1,2,4-Trichlorobenzene	50.0	0.0	25.7	51		21.4	43		18		40-140/30
Naphthalene	50.0	0.0	26.6	53		21.3	43		22		40-140/30
4-Chloroaniline	50.0	0.0	29.8	60		24.7	49		19		40-140/30
Hexachlorobutadiene	50.0	0.0	25.0	50		20.9	42		18		40-140/30
Caprolactam	50.0	0.0	34.8	70		26.4	53		27		40-140/30
4-Chloro-3-methylphenol	50.0	0.0	32.3	65		25.8	52		22		30-140/30
2-Methylnaphthalene	50.0	0.0	30.7	61		25.4	51		19		40-140/30
Hexachlorocyclopentadiene	50.0	0.0	21.9	44		22.5	45		3		5-105/30
2,4,6-Trichlorophenol	50.0	0.0	25.7	51		24.5	49		5		30-140/30
2,4,5-Trichlorophenol	50.0	0.0	28.4	57		26.6	53		7		30-140/30
1,1'-Biphenyl	50.0	0.0	29.0	58		26.1	52		11		40-140/30
2-Chloronaphthalene	50.0	0.0	24.6	49		22.6	45		8		40-140/30
2-Nitroaniline	50.0	0.0	29.2	58		26.6	53		9		40-140/30
Dimethyl phthalate	50.0	0.0	26.9	54		24.9	50		8		40-140/30
2,6-Dinitrotoluene	50.0	0.0	26.8	54		23.6	47		13		40-140/30
Acenaphthylene	50.0	0.0	26.8	54		24.2	48		10		40-140/30
3-Nitroaniline	50.0	0.0	30.0	60		27.1	54		10		40-140/30
Acenaphthene	50.0	0.0	26.2	52		24.4	49		7		40-140/30
2,4-Dinitrophenol	50.0	0.0	15.1	30		13.6	27		10		5-105/30

E14-09161 0169

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E14-08869-003
Date Received: 09/17/2014
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
MS Data file: C0325.D
MSD Data file: C0326.D

GC/MS Column: DB-5
Sample wt/vol: 15.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 20.7
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	Limits Rec/RPD
4-Nitrophenol	50.0	0.0	27.6	55		23.7	47		15		30-140/30
2,4-Dinitrotoluene	50.0	0.0	26.5	53		23.3	47		13		40-140/30
Dibenzofuran	50.0	0.0	27.8	56		25.2	50		10		40-140/30
Diethyl phthalate	50.0	0.0	26.8	54		24.4	49		9		40-140/30
Fluorene	50.0	0.0	26.5	53		23.4	47		12		40-140/30
4-Chlorophenyl phenyl ether	50.0	0.0	27.5	55		25.7	51		7		40-140/30
4-Nitroaniline	50.0	0.0	27.8	56		24.1	48		14		40-140/30
1,2,4,5-Tetrachlorobenzene	50.0	0.0	24.1	48		22.8	46		6		40-140/30
2,3,4,6-Tetrachlorophenol	50.0	0.0	29.0	58		25.2	50		14		40-140/30
4,6-Dinitro-2-methylphenol	50.0	0.0	20.8	42		20.5	41		1		10-110/30
N-Nitrosodiphenylamine	50.0	0.0	27.2	54		27.3	55		0		40-140/30
1,2-Diphenylhydrazine	50.0	0.0	22.5	45		23.2	46		3		40-140/30
4-Bromophenyl phenyl ether	50.0	0.0	26.4	53		26.1	52		1		40-140/30
Hexachlorobenzene	50.0	0.0	25.5	51		24.9	50		2		40-140/30
Atrazine	50.0	0.0	30.0	60		28.5	57		5		20-120/30
Pentachlorophenol	50.0	0.0	21.3	43		20.5	41		4		30-140/30
Phenanthrene	50.0	0.0	26.0	52		25.4	51		2		40-140/30
Anthracene	50.0	0.0	26.5	53		25.7	51		3		40-140/30
Carbazole	50.0	0.0	24.4	49		23.0	46		6		40-140/30
Di-n-butyl phthalate	50.0	0.0	26.6	53		26.0	52		2		40-140/30
Fluoranthene	50.0	1.4	21.4	40		21.4	40		0		40-140/30
Benzidine	50.0	0.0	3.8	8		4.1	8		8		5-105/30
Pyrene	50.0	1.5	29.0	55		29.8	57		3		40-140/30
3,3'-Dimethylbenzidine	50.0	0.0	12.9	26		12.2	24		6		5-105/30
Butyl benzyl phthalate	50.0	0.0	30.6	61		30.6	61		0		40-140/30
3,3'-Dichlorobenzidine	50.0	0.0	27.3	55		26.1	52		4		40-140/30
Benzo[a]anthracene	50.0	0.0	25.4	51		24.8	50		2		40-140/30
Chrysene	50.0	0.0	24.9	50		24.8	50		0		40-140/30
Bis(2-ethylhexyl) phthalate	50.0	0.0	28.6	57		28.5	57		0		40-140/30
Di-n-octyl phthalate	50.0	0.0	30.9	62		30.6	61		1		40-140/30
Benzo[b]fluoranthene	50.0	0.0	27.7	55		26.3	53		5		40-140/30
Benzo[k]fluoranthene	50.0	0.0	26.1	52		26.4	53		1		40-140/30
Benzo[a]pyrene	50.0	0.0	28.7	57		27.5	55		4		40-140/30
Indeno[1,2,3-cd]pyrene	50.0	0.0	28.8	58		28.1	56		2		40-140/30
Dibenz[a,h]anthracene	50.0	0.0	29.5	59		28.7	57		3		40-140/30
Benzo[g,h,i]perylene	50.0	0.0	28.7	57		27.9	56		3		40-140/30

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Not calculable

E14-09161 0170

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C0323.D

Instrument ID: MSDC

Date Extracted: 09/25/14

Matrix: SOIL

Date Analyzed: 09/29/2014

Time Analyzed: 18:34

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	LCSS140925-04	09/29/2014	18:50
.	E14-08869-003MS	09/29/2014	19:06
.	E14-08869-003MSD	09/29/2014	19:22
S-3	E14-08869-003	09/29/2014	19:38
S-5	E14-08869-005	09/29/2014	19:54
GPEC-TP3	E14-09160-003	09/29/2014	20:10
GPEC-TP3	E14-09160-004	09/29/2014	20:26
GPEC-TP3	E14-09160-005	09/29/2014	20:42
F-1	E14-09134-001	09/29/2014	20:57
BG-1	E14-09217-001	09/29/2014	21:13
BG-1	E14-09219-001	09/29/2014	21:29
PE-W	E14-08772-002	09/29/2014	21:45
UST-E	E14-08807-002	09/29/2014	22:01
SS-9	E14-09159-003	09/29/2014	22:17
SED-1	E14-08963-001	09/29/2014	22:33
SED-5	E14-08963-005	09/29/2014	22:49
REP09191	E14-08963-006	09/29/2014	23:05
GPEC-TP3	E14-09160-001	09/29/2014	23:21
GPEC-TP3	E14-09160-002	09/29/2014	23:37
GPEC-WC0	E14-09161-001	09/29/2014	23:52
GPEC-TP3	E14-09160-003DL	09/30/2014	00:08

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C0308.D

DFTPP Injection Date : 09/29/2014

Inst ID: MSDC

DFTPP Injection Time: 14:09

m/z	Ion Abudance Criteria	%Relative Abundance		
51	30.0 - 60.0% of mass 198	38.5		
68	Less than 2.0% of mass 69	0.0	(0.0	)1
69	Mass 69 relative abundance	41.9		
70	Less than 2.0% of mass 69	0.3	(0.7	)1
127	40.0 - 60.0% of mass 198	49.3		
197	Less than 1.0% of mass 198	0.0		
198	Base peak, 100% relative abundance	100.0		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	22.2		
365	Greater than 1.0% of mass 198	1.4		
441	Present, but less than mass 443	8.86	(86.7	)3
442	40.0 - 100.0% of mass 198	51.1		
443	17.0 - 23.0% of mass 442	10.2	(20.0	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ABN054-14	ICC001BNA1	C0309.D	09/29/2014	14:20
ABN055-14	ICC010BNA1	C0310.D	09/29/2014	14:54
ABN056-14	ICC020BNA1	C0311.D	09/29/2014	15:10
ABN057-14	ICC040BNA1	C0312.D	09/29/2014	15:25
ABN058-14	ICC080BNA1	C0313.D	09/29/2014	15:41
ABN059-14	ICC120BNA1	C0314.D	09/29/2014	15:57
ABN066-14	ICV040BNA1	C0315.D	09/29/2014	16:13
ABN065-14	ICC120BNA2	C0316.D	09/29/2014	16:29
ABN064-14	ICC080BNA2	C0317.D	09/29/2014	16:45
ABN063-14	ICC040BNA2	C0318.D	09/29/2014	17:14
ABN062-14	ICC020BNA2	C0319.D	09/29/2014	17:30
ABN061-14	ICC010BNA2	C0320.D	09/29/2014	17:46
ABN060-14	ICC001BNA2	C0321.D	09/29/2014	18:02
ABN067-14	ICV040BNA2	C0322.D	09/29/2014	18:18
.	BLKS140925-04	C0323.D	09/29/2014	18:34
.	LCSS140925-04	C0324.D	09/29/2014	18:50
.	E14-08869-003MS	C0325.D	09/29/2014	19:06
.	E14-08869-003MSD	C0326.D	09/29/2014	19:22
S-3	E14-08869-003	C0327.D	09/29/2014	19:38
S-5	E14-08869-005	C0328.D	09/29/2014	19:54
GPEC-TP3	E14-09160-003	C0329.D	09/29/2014	20:10
GPEC-TP3	E14-09160-004	C0330.D	09/29/2014	20:26
GPEC-TP3	E14-09160-005	C0331.D	09/29/2014	20:42

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C0308.D

DFTPP Injection Date : 09/29/2014

Inst ID: MSDC

DFTPP Injection Time: 14:09

m/z	Ion Abudance Criteria	%Relative Abundance	
51	30.0 - 60.0% of mass 198	38.5	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.9	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	40.0 - 60.0% of mass 198	49.3	
197	Less than 1.0% of mass 198	0.0	
198	Base peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	6.5	
275	10.0 - 30.0% of mass 198	22.2	
365	Greater than 1.0% of mass 198	1.4	
441	Present, but less than mass 443	8.86	(86.7)3
442	40.0 - 100.0% of mass 198	51.1	
443	17.0 - 23.0% of mass 442	10.2	(20.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
F-1	E14-09134-001	C0332.D	09/29/2014	20:57
BG-1	E14-09217-001	C0333.D	09/29/2014	21:13
BG-1	E14-09219-001	C0334.D	09/29/2014	21:29
PE-W	E14-08772-002	C0335.D	09/29/2014	21:45
UST-E	E14-08807-002	C0336.D	09/29/2014	22:01
SS-9	E14-09159-003	C0337.D	09/29/2014	22:17
SED-1	E14-08963-001	C0338.D	09/29/2014	22:33
SED-5	E14-08963-005	C0339.D	09/29/2014	22:49
REP09191	E14-08963-006	C0340.D	09/29/2014	23:05
GPEC-TP3	E14-09160-001	C0341.D	09/29/2014	23:21
GPEC-TP3	E14-09160-002	C0342.D	09/29/2014	23:37
GPEC-WC0	E14-09161-001	C0343.D	09/29/2014	23:52
GPEC-TP3	E14-09160-003DL	C0344.D	09/30/2014	00:08

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0310.D

Date Analyzed: 09/29/2014

Instrument ID: MSDC

Time Analyzed: 14:54

	40 ppm	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	150013		2.54		564023		3.10		384138		3.96	
	UPPER LIMIT	300026		3.04		1128046		3.60		768276		4.46	
	LOWER LIMIT	75007		2.04		282012		2.60		192069		3.46	
	LAB SAMPLE ID												
01	ICC001BNA1	121946		2.54		478309		3.09		323956		3.94	
02	ICC020BNA1	135431		2.54		518236		3.10		350191		3.95	
03	ICC040BNA1	123231		2.54		462694		3.10		312357		3.94	
04	ICC080BNA1	107802		2.54		422114		3.10		291177		3.94	
05	ICC120BNA1	118293		2.54		456665		3.10		316243		3.93	
06	ICV040BNA1	125800		2.54		489340		3.09		341846		3.93	
07	ICC120BNA2	192112		2.54		758115		3.09		515255		3.92	
08	ICC080BNA2	189279		2.54		732029		3.09		508640		3.92	
09	ICC040BNA2	159277		2.54		620369		3.09		414702		3.92	
10	ICC020BNA2	156310		2.54		623987		3.09		418319		3.92	
11	ICC010BNA2	207682		2.54		784089		3.09		527524		3.91	
12	ICC001BNA2	195051		2.54		738513		3.09		491666		3.90	
13	ICV040BNA2	230937		2.54		816203		3.10		496122		3.97	
14	BLKS140925-04	97889		2.54		375599		3.09		250091		3.91	
15	LCSS140925-04	136920		2.54		528577		3.09		359665		3.92	
16	E14-08869-003MS	268914		2.54		956143		3.10		752307		3.96	
17	E14-08869-003MSD	289002		2.54		1123113		3.10		765333		3.96	
18	E14-08869-003	134790		2.54		503542		3.09		359402		3.92	
19	E14-08869-005	106793		2.54		415645		3.09		291194		3.92	
20	E14-09160-003	149457		2.54		572619		3.09		388775		3.91	
21	E14-09160-004	208039		2.54		821096		3.09		574613		3.92	
22	E14-09160-005	124260		2.54		475153		3.09		322180		3.91	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0310.D

Date Analyzed: 09/29/2014

Instrument ID: MSDC

Time Analyzed: 14:54

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	709092	4.78	815077	6.60	421077	8.04
	UPPER LIMIT	1418184	5.28	1630154	7.10	842154	8.54
	LOWER LIMIT	354546	4.28	407539	6.10	210539	7.54
	LAB SAMPLE ID						
01	ICC001BNA1	584553	4.73	722694	6.54	421173	7.99
02	ICC020BNA1	630481	4.76	728014	6.58	383067	8.03
03	ICC040BNA1	552097	4.73	676478	6.54	382181	8.00
04	ICC080BNA1	531154	4.74	588022	6.56	337641	8.01
05	ICC120BNA1	574435	4.72	542204	6.53	328812	7.98
06	ICV040BNA1	609724	4.71	633761	6.51	329944	7.96
07	ICC120BNA2	968475	4.70	891925	6.49	401370	7.97
08	ICC080BNA2	904827	4.70	884739	6.50	410826	7.94
09	ICC040BNA2	744423	4.70	767681	6.50	417765	7.95
10	ICC020BNA2	756173	4.70	794256	6.50	447457	7.95
11	ICC010BNA2	975201	4.68	1011286	6.48	514722	7.93
12	ICC001BNA2	911813	4.67	935218	6.46	498170	7.92
13	ICV040BNA2	697318	4.79	661032	6.61	420751	8.09
14	BLKS140925-04	483842	4.68	583777	6.47	310268	7.93
15	LCSS140925-04	662855	4.69	705367	6.49	331187	7.94
16	E14-08869-003MS	1367020	4.77	932811	6.60	475999	8.07
17	E14-08869-003MSD	1259162	4.77	990027	6.60	511715	8.06
18	E14-08869-003	656230	4.68	596658	6.48	310667	7.93
19	E14-08869-005	540265	4.68	562658	6.48	293884	7.94
20	E14-09160-003	714243	4.68	696840	6.47	374257	7.93
21	E14-09160-004	1010939	4.68	985578	6.48	636252	7.94
22	E14-09160-005	565059	4.67	564000	6.47	363997	7.93

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0310.D

Date Analyzed: 09/29/2014

Instrument ID: MSDC

Time Analyzed: 14:54

	40 ppm	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	150013	2.54	564023	3.10	384138	3.96
	UPPER LIMIT	300026	3.04	1128046	3.60	768276	4.46
	LOWER LIMIT	75007	2.04	282012	2.60	192069	3.46
	LAB SAMPLE ID						
01	E14-09134-001	130822	2.54	497734	3.09	331231	3.9
02	E14-09217-001	150941	2.54	569421	3.09	397009	3.91
03	E14-09219-001	146055	2.54	574605	3.09	402434	3.9
04	E14-08772-002	241044	2.54	917387	3.09	586694	3.92
05	E14-08807-002	221521	2.54	832675	3.09	543586	3.91
06	E14-09159-003	157707	2.54	520001	3.09	319503	3.9
07	E14-08963-001	242115	2.54	957926	3.09	635773	3.9
08	E14-08963-005	262002	2.54	986351	3.09	644329	3.9
09	E14-08963-006	223689	2.54	805621	3.09	510324	3.9
10	E14-09160-001	173139	2.54	637837	3.09	401047	3.9
11	E14-09160-002	265757	2.54	1017817	3.1	686005	3.96
12	E14-09161-001	181854	2.54	660050	3.09	427182	3.91
13	E14-09160-003DL	239721	2.54	885241	3.09	543281	3.91
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FOIE14-09161 0176

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C0310.D

Date Analyzed: 09/29/2014

Instrument ID: MSDC

Time Analyzed: 14:54

	40 ppm	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	709092	4.78	815077	6.60	421077	8.04
	UPPER LIMIT	1418184	5.28	1630154	7.10	842154	8.54
	LOWER LIMIT	354546	4.28	407539	6.10	210539	7.54
	LAB SAMPLE ID						
01	E14-09134-001	591394	4.66	586676	6.46	351034	7.91
02	E14-09217-001	693861	4.67	666094	6.47	407098	7.93
03	E14-09219-001	648575	4.66	629508	6.46	396727	7.94
04	E14-08772-002	912910	4.68	819602	6.46	537924	7.92
05	E14-08807-002	859064	4.67	932811	6.46	613432	7.93
06	E14-09159-003	519320	4.66	650500	6.51	307858	8.08
07	E14-08963-001	958987	4.66	953216	6.46	608031	7.94
08	E14-08963-005	1010771	4.67	989901	6.46	650828	7.94
09	E14-08963-006	840667	4.67	934513	6.47	603694	7.95
10	E14-09160-001	634248	4.66	710655	6.45	481055	7.94
11	E14-09160-002	1062021	4.76	768786	6.60	488450	8.07
12	E14-09161-001	647989	4.67	699855	6.46	438912	7.96
13	E14-09160-003DL	895714	4.68	965005	6.47	631155	7.94
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMI-VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0343.D
Acq On : 29 Sep 2014 23:52
Operator : EDM
Sample : GPEC-WC0,E14-09161-001,S,15.66g,4.00,0.5
Misc : 140925-04,09/25/14,09/24/14,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 30 12:03:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	181854	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	660050	40.00	UG	0.00
43) Acenaphthene-d10	3.91	164	427182	40.00	UG	-0.02
66) Phenanthrene-d10	4.67	188	647989	40.00	UG	-0.04
82) Chrysene-d12	6.46	240	699855	40.00	UG	-0.07
92) Perylene-d12	7.96	264	438912	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	212052	41.62	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 41.62%			
6) Phenol-d5	2.36	99	265221	42.95	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 42.95%			
24) Nitrobenzene-d5	2.77	82	131039	25.06	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 50.12%			
47) 2-Fluorobiphenyl	3.56	172	431235	27.85	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 55.70%			
70) 2,4,6-Tribromophenol	4.31	330	155677	50.42	UG	-0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 50.42%			
84) Terphenyl-d14	5.58	244	542225	27.78	UG	-0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 55.56%			
Target Compounds						Qvalue
34) Naphthalene	3.10	128	72491	4.03	UG	# 65
41) 2-Methylnaphthalene	3.40	142	19323	1.59	UG	95
53) Acenaphthylene	3.84	152	38504	2.08	UG	# 1
55) Acenaphthene	3.93	153	131979	11.06	UG	96
59) Dibenzofuran	4.00	168	41246	2.39	UG	# 70
61) Fluorene	4.17	166	77928	5.35	UG	# 81
75) Phenanthrene	4.68	178	230259	12.77	UG	# 87
76) Anthracene	4.71	178	142662	7.90	UG	# 82
79) Fluoranthene	5.38	202	790700	37.40	UG	97
83) Pyrene	5.52	202	794375m	38.15	UG	
88) Benzo[a]anthracene	6.44	228	315612	16.02	UG	# 91
89) Chrysene	6.47	228	339479	18.55	UG	97
90) Bis(2-ethylhexyl) phthalat	6.38	149	94788m	8.84	UG	
94) Benzo[b]fluoranthene	7.48	252	322754m	15.24	UG	
95) Benzo[k]fluoranthene	7.50	252	264260	14.18	UG	# 97
96) Benzo[a]pyrene	7.88	252	299569	16.75	UG	99
97) Indeno[1,2,3-cd]pyrene	9.70	276	157790	7.34	UG	# 84
98) Dibenz[a,h]anthracene	9.68	278	61447	3.45	UG	# 90
99) Benzo[g,h,i]perylene	10.24	276	95772m	5.37	UG	

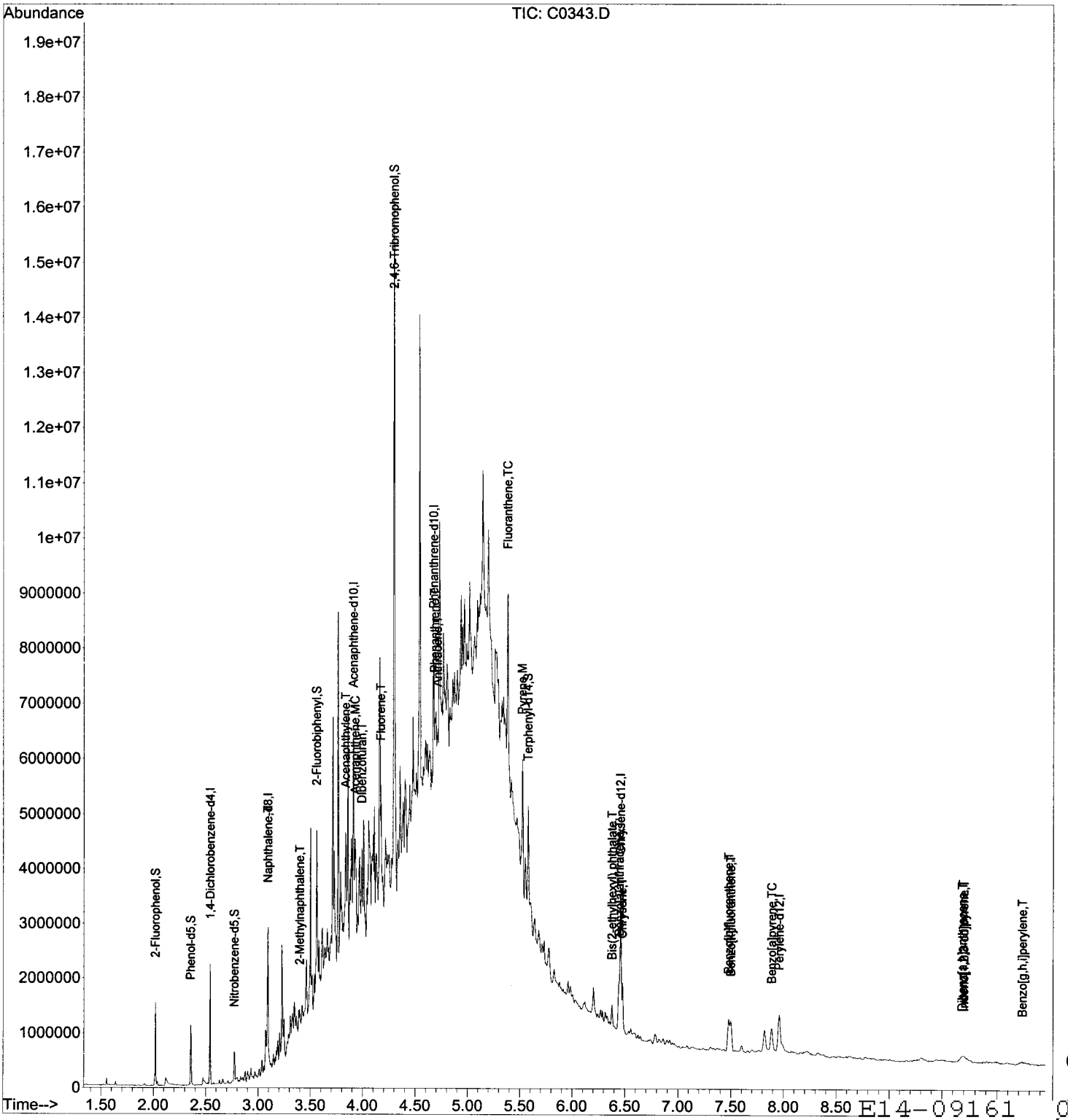
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E14-09161 0179

Quantitation Report (QT Reviewed)

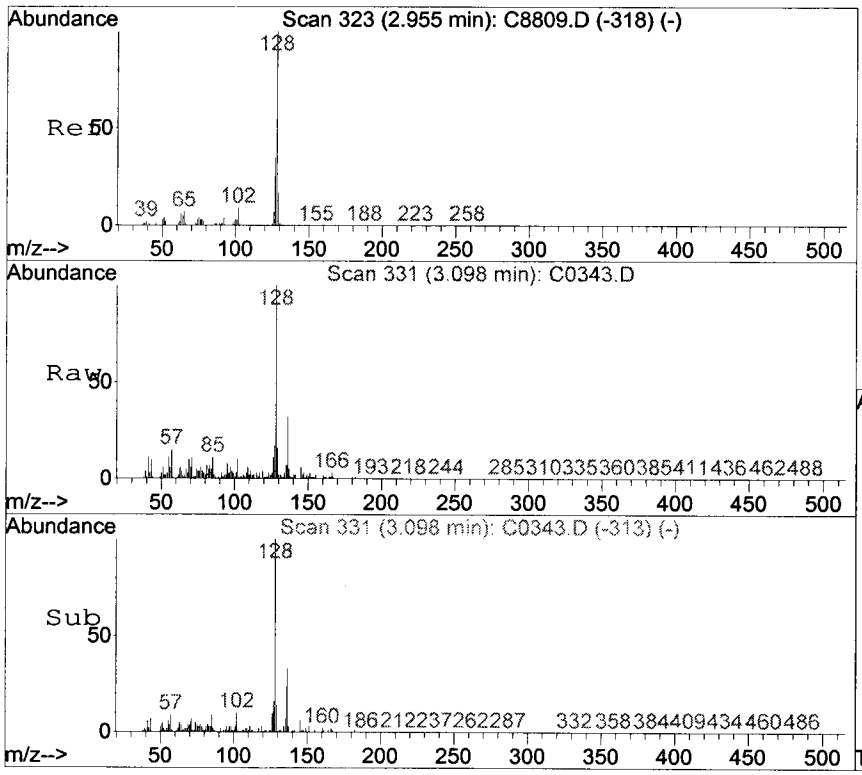
Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0343.D
Acq On : 29 Sep 2014 23:52
Operator : EDM
Sample : GPEC-WC0,E14-09161-001,S,15.66g,4.00,0.5
Misc : 140925-04,09/25/14,09/24/14,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 30 12:03:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0180

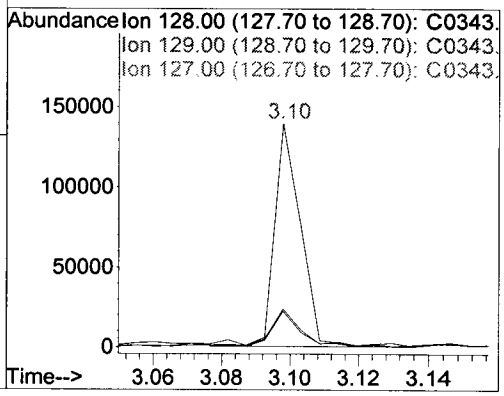
CS1814.M Tue Sep 30 12:03:42 2014 Page: 2

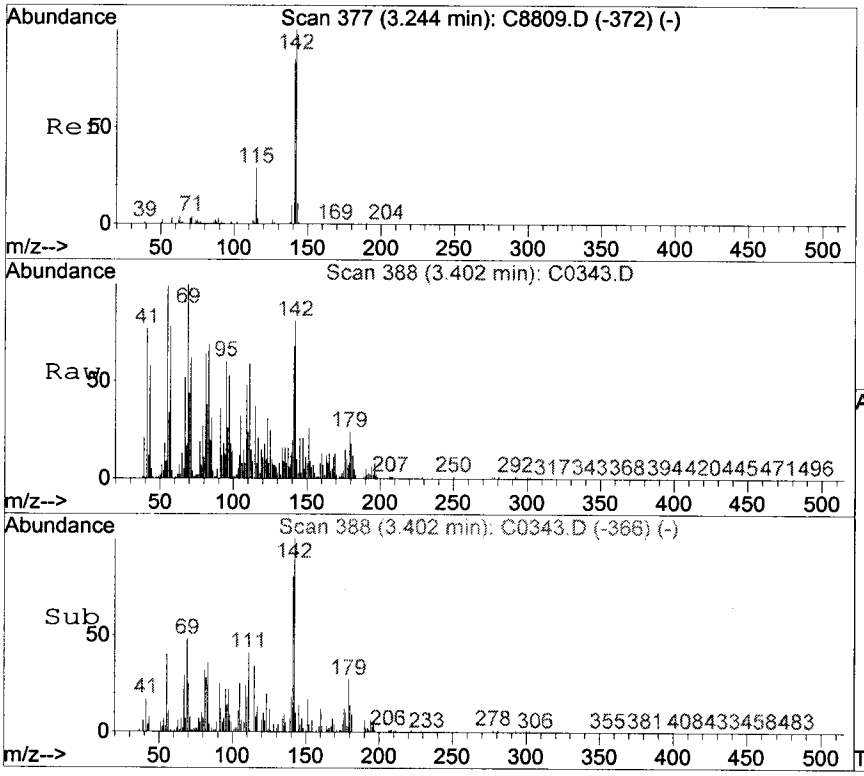


#34
Naphthalene
Concen: 4.03 UG
RT: 3.10 min Scan# 331
Delta R.T. -0.01 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:128 Resp: 72491

Ion	Ratio	Lower	Upper
128	100		
129	19.6	19.6	29.4
127	18.7	41.3	61.9#

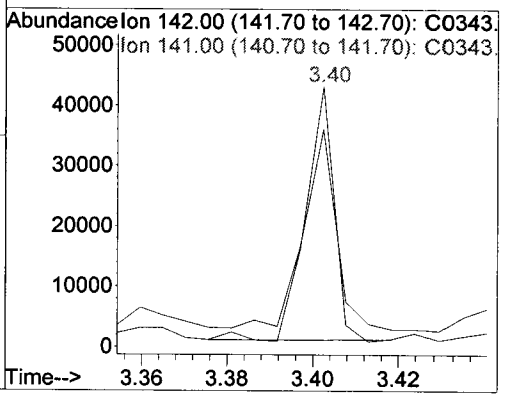


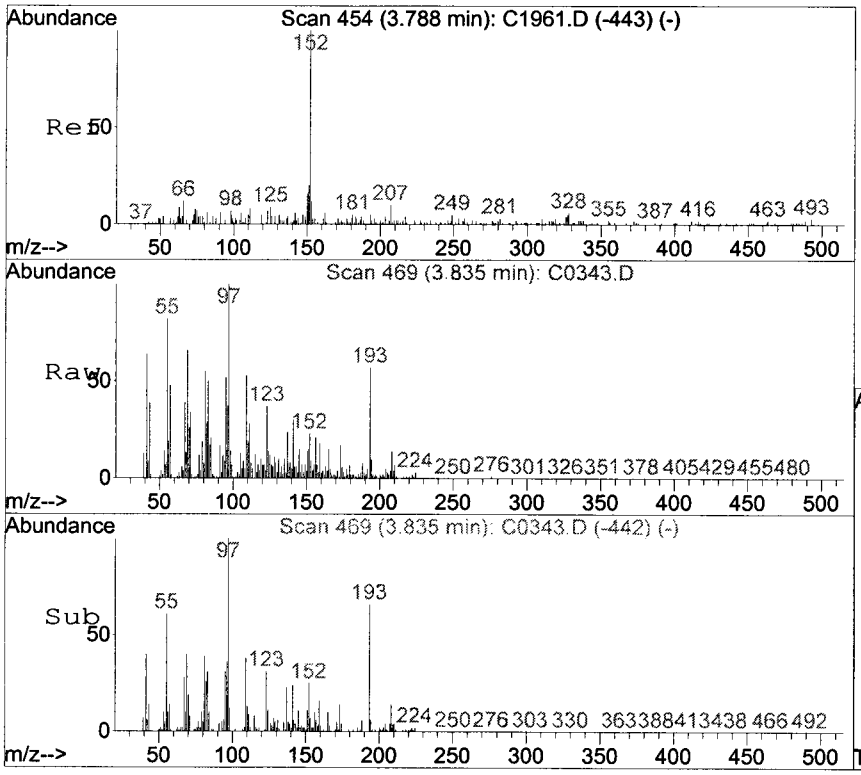


#41
2-Methylnaphthalene
Concen: 1.59 UG
RT: 3.40 min Scan# 388
Delta R.T. -0.01 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:142 Resp: 19323

Ion	Ratio	Lower	Upper
142	100		
141	90.1	68.6	102.8

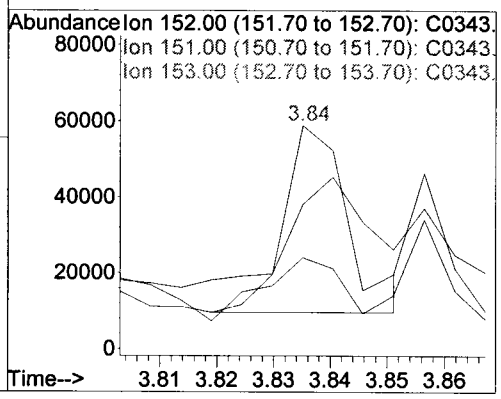


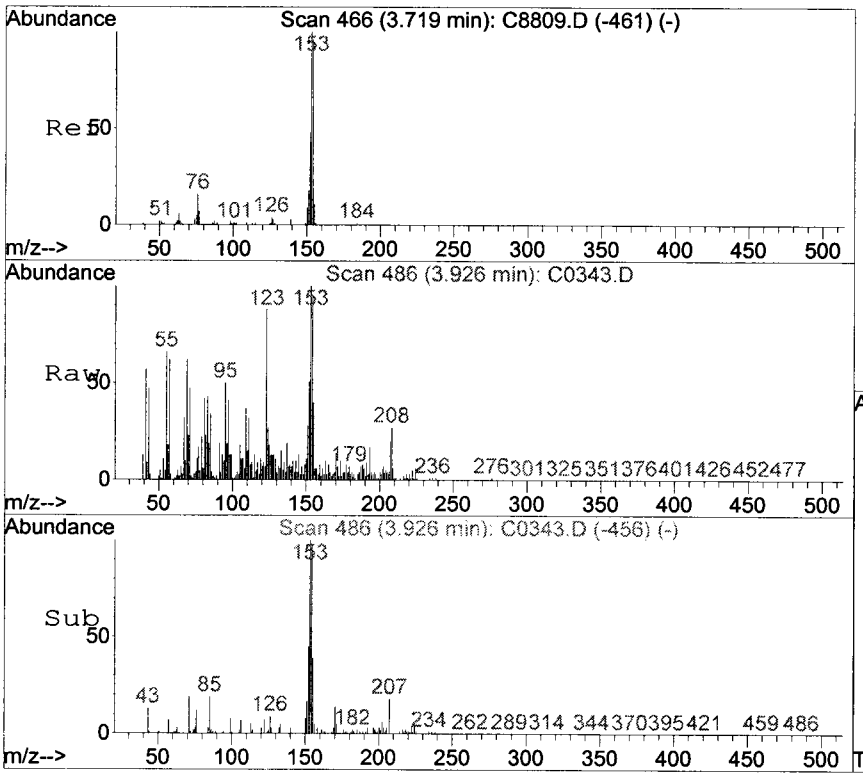


#53
Acenaphthylene
Concen: 2.08 UG
RT: 3.84 min Scan# 469
Delta R.T. -0.03 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:152 Resp: 38504

Ion	Ratio	Lower	Upper
152	100		
151	100.4	15.8	23.6#
153	41.2	11.2	16.8#

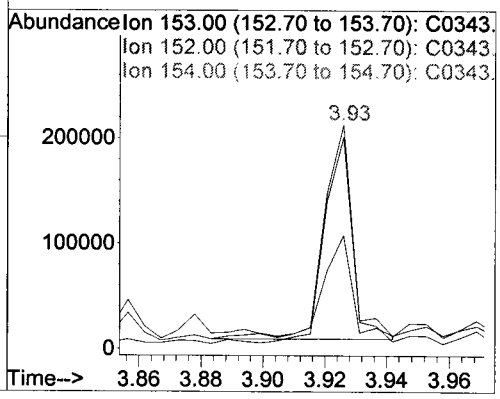


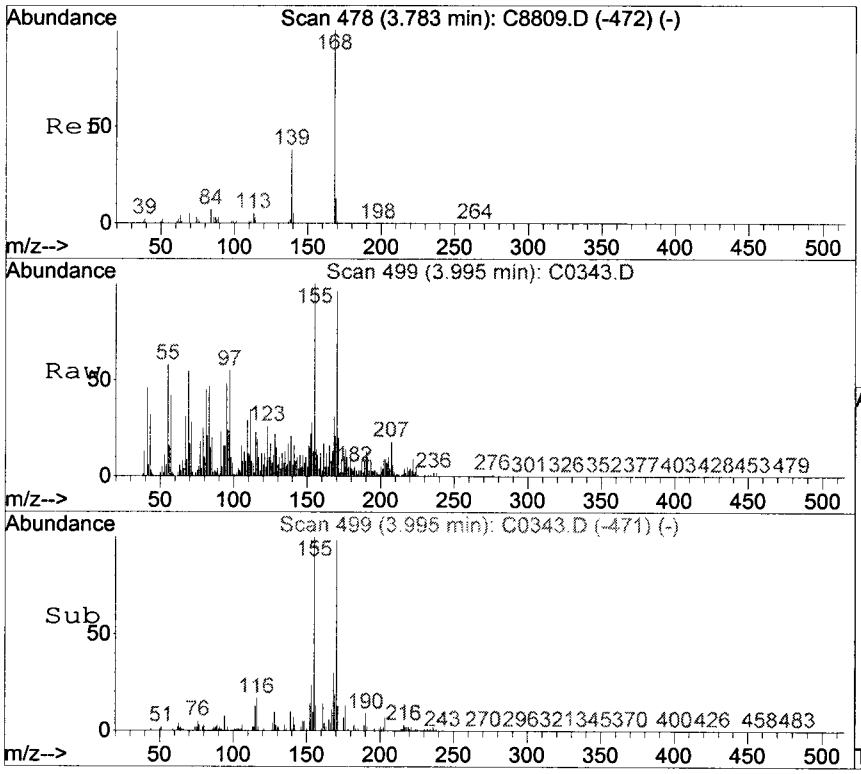


#55
Acenaphthene
Concen: 11.06 UG
RT: 3.93 min Scan# 486
Delta R.T. -0.03 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:153 Resp: 131979

Ion	Ratio	Lower	Upper
153	100		
152	45.5	37.7	56.5
154	97.8	82.6	124.0

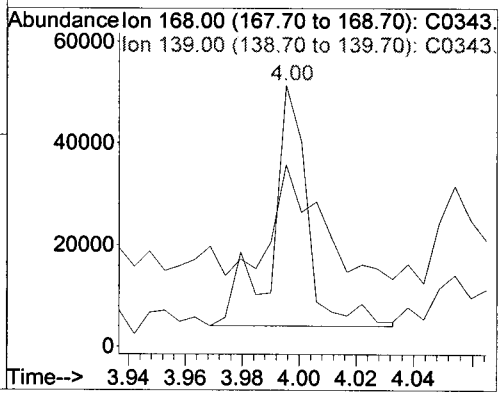


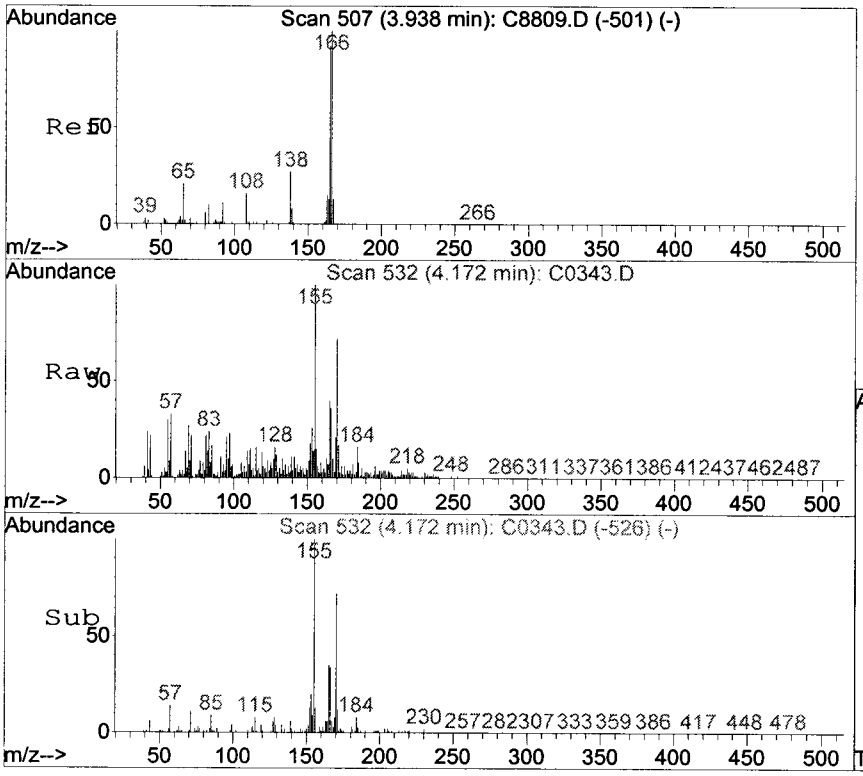


#59
Dibenzofuran
Concen: 2.39 UG
RT: 4.00 min Scan# 499
Delta R.T. -0.03 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:168 Resp: 41246

Ion	Ratio	Lower	Upper
168	100		
139	60.4	33.3	49.9#

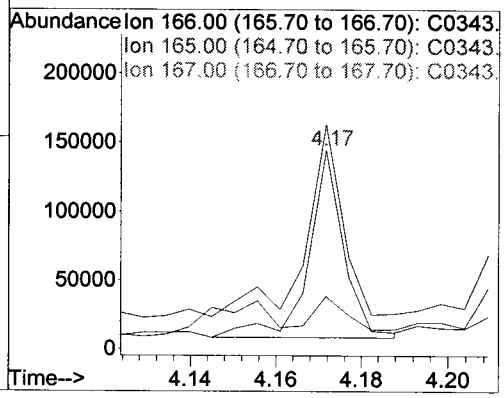


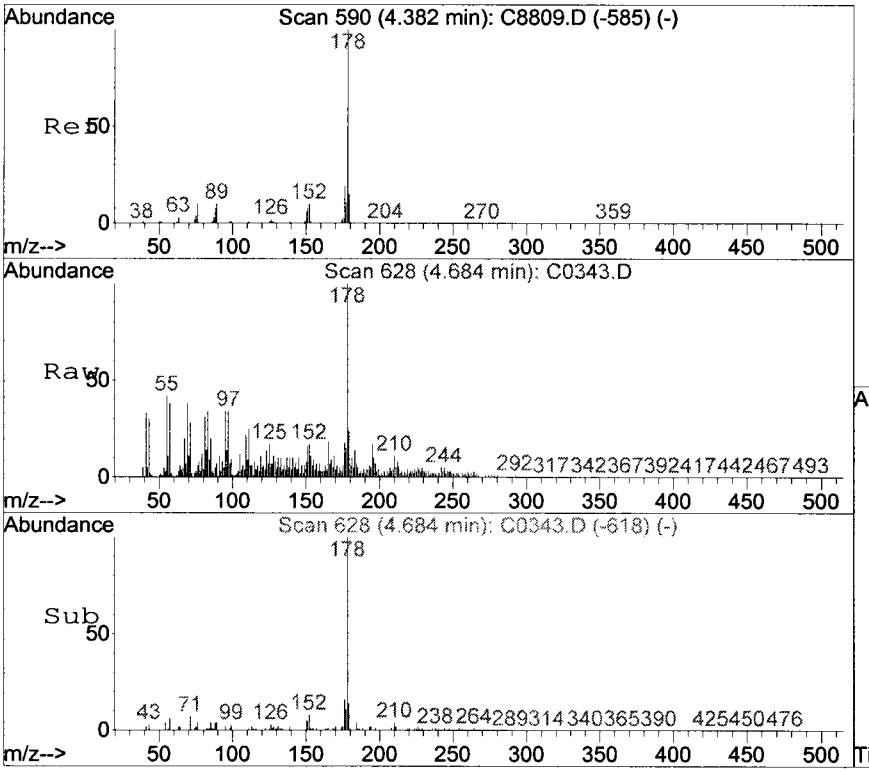


#61
Fluorene
Concen: 5.35 UG
RT: 4.17 min Scan# 532
Delta R.T. -0.04 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:166 Resp: 77928

Ion	Ratio	Lower	Upper
166	100		
165	113.3	74.6	112.0#
167	17.3	11.8	17.8

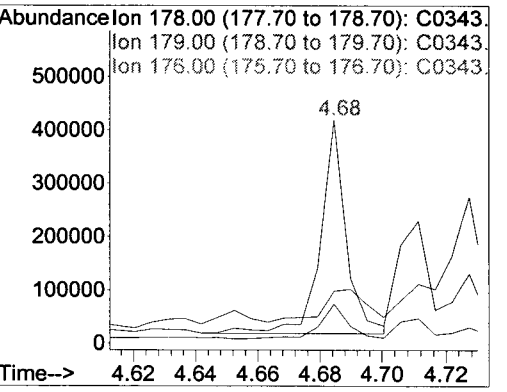


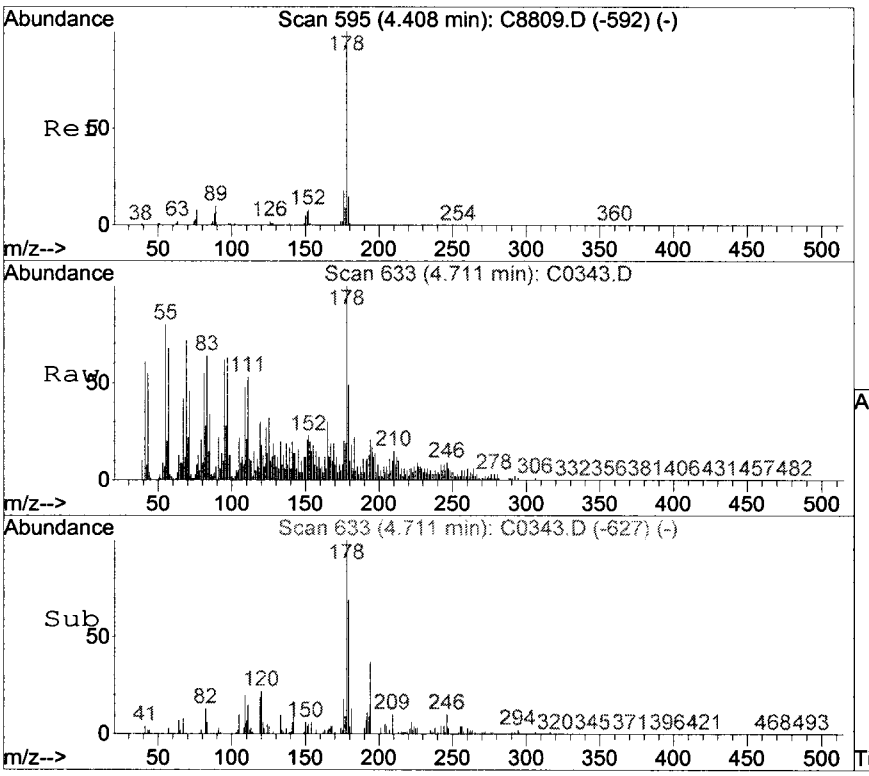


#75
Phenanthrene
Concen: 12.77 UG
RT: 4.68 min Scan# 628
Delta R.T. -0.05 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:178 Resp: 230259

Ion	Ratio	Lower	Upper
178	100		
179	26.5	12.6	18.8#
176	18.1	15.5	23.3

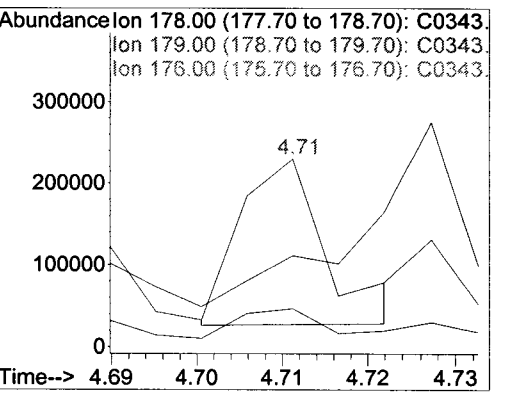


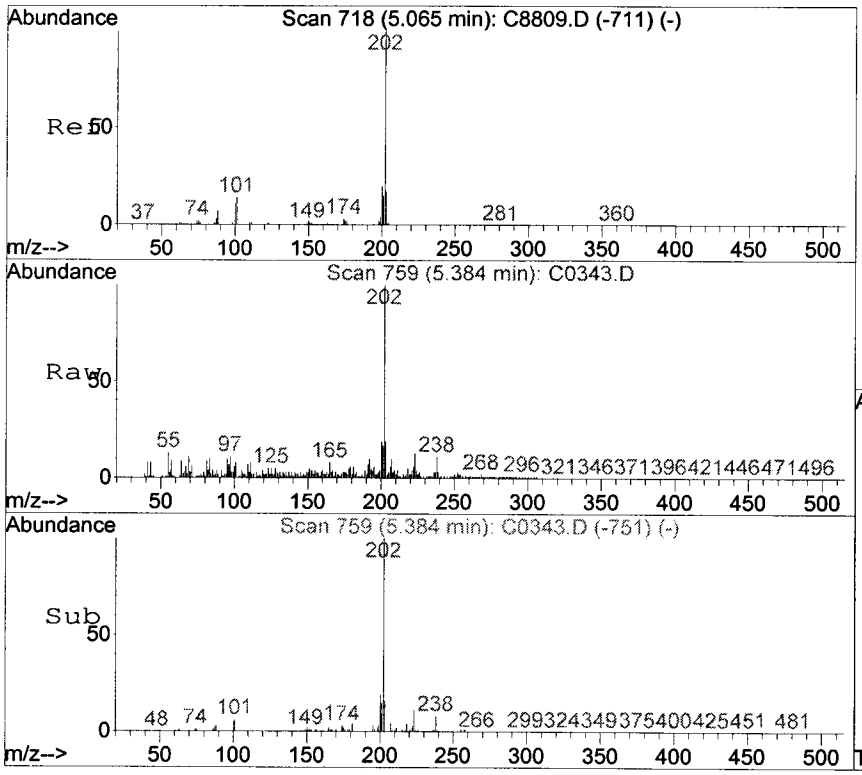


#76
Anthracene
Concen: 7.90 UG
RT: 4.71 min Scan# 633
Delta R.T. -0.05 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:178 Resp: 142662

Ion	Ratio	Lower	Upper
178	100		
179	0.0	12.5	18.7#
176	18.5	14.5	21.7

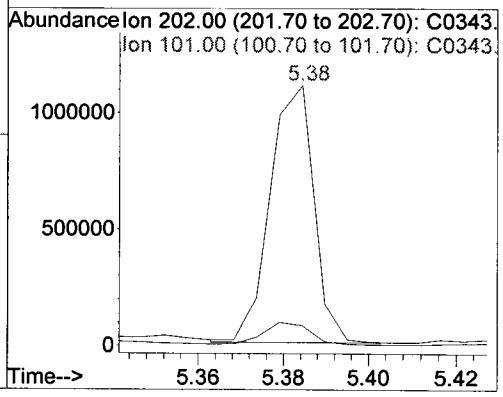


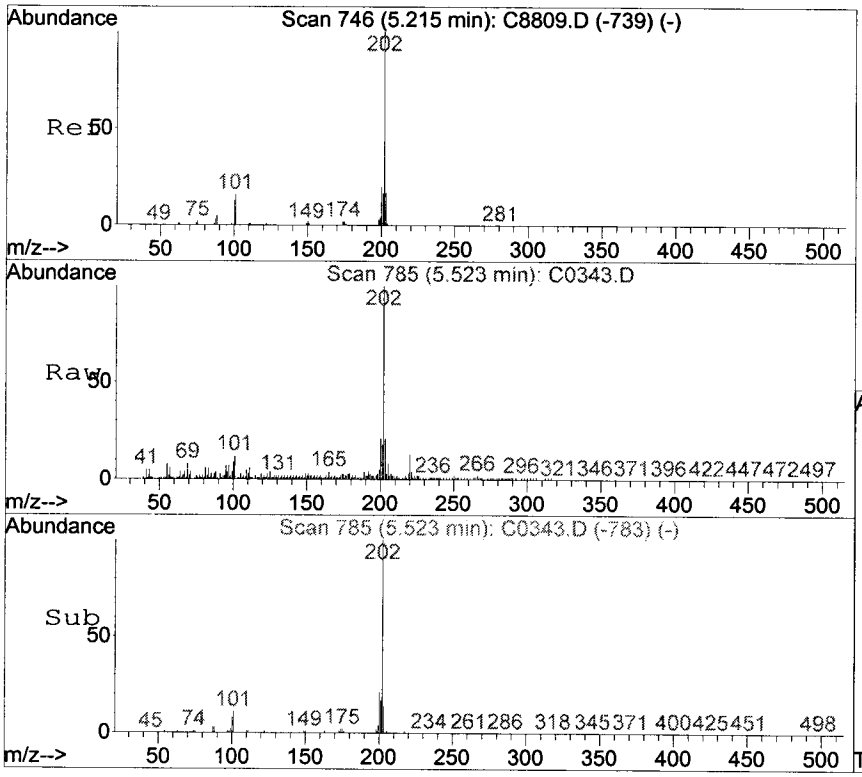


#79
Fluoranthene
Concen: 37.40 UG
RT: 5.38 min Scan# 759
Delta R.T. -0.06 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:202 Resp: 790700

Ion	Ratio	Lower	Upper
202	100		
101	9.3	6.5	9.7

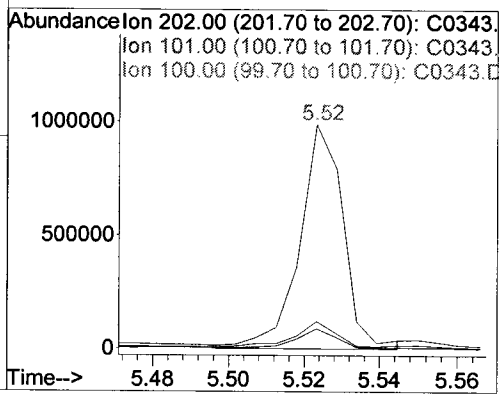


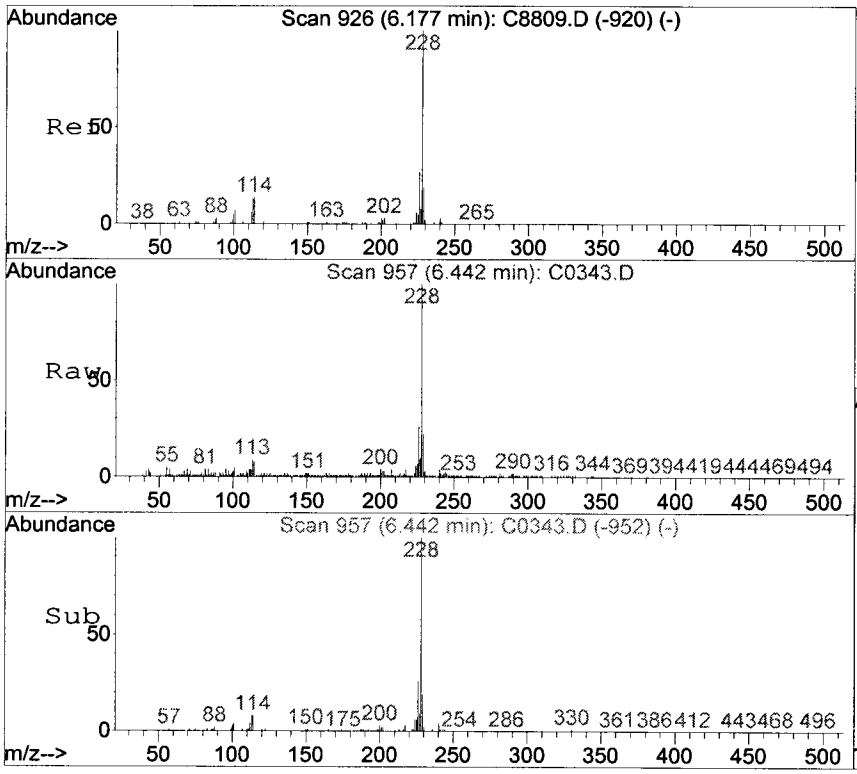


#83
Pyrene
Concen: 38.15 UG m
RT: 5.52 min Scan# 785
Delta R.T. -0.09 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:202 Resp: 794375

Ion	Ratio	Lower	Upper
202	100		
101	0.8	6.2	9.4#
100	0.4	5.2	7.8#

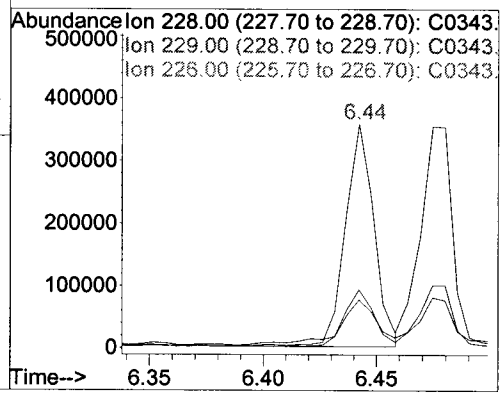


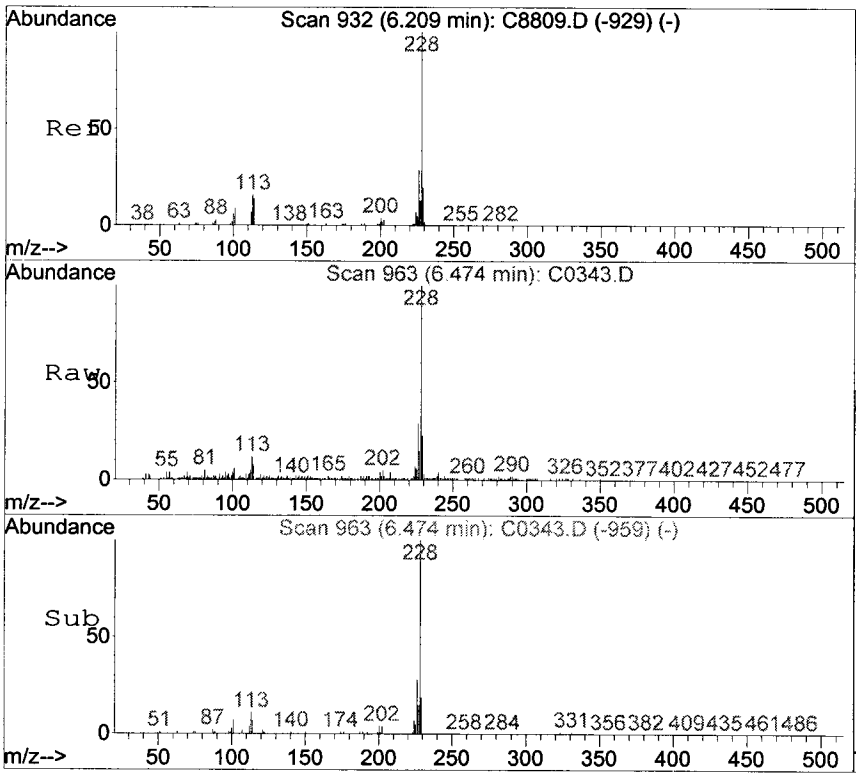


#88
Benzo[a]anthracene
Concen: 16.02 UG
RT: 6.44 min Scan# 957
Delta R.T. -0.07 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:228 Resp: 315612

Ion	Ratio	Lower	Upper
228	100		
229	27.1	15.7	23.5#
226	26.8	20.0	30.0

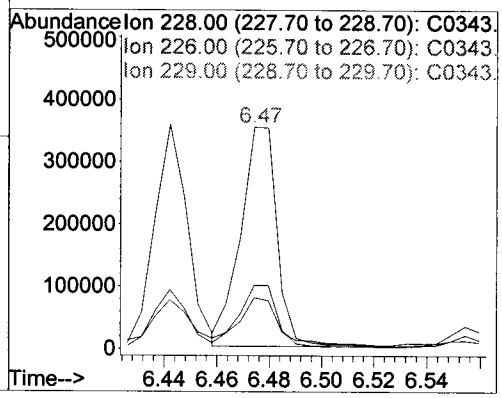


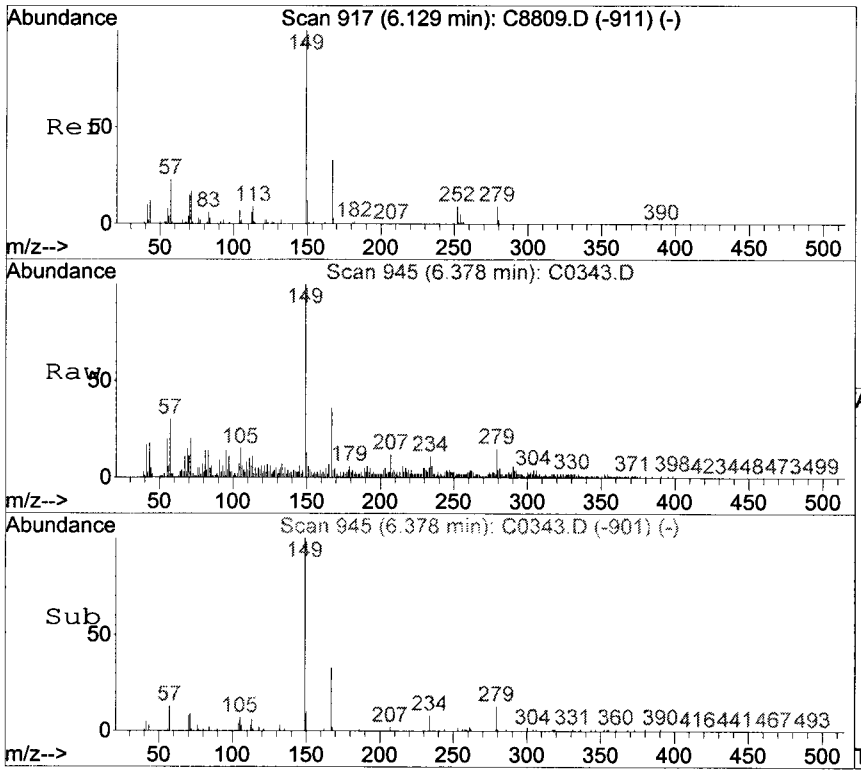


#89
Chrysene
Concen: 18.55 UG
RT: 6.47 min Scan# 963
Delta R.T. -0.08 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:228 Resp: 339479

Ion	Ratio	Lower	Upper
228	100		
226	29.0	23.7	35.5
229	24.1	16.9	25.3

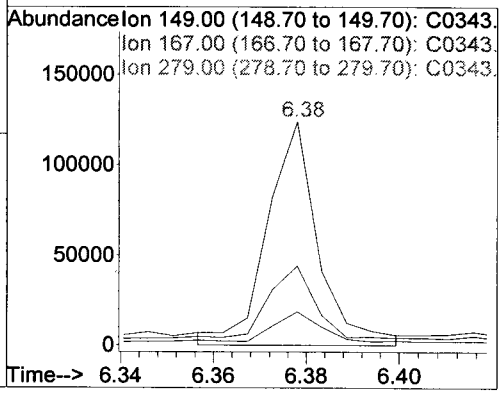


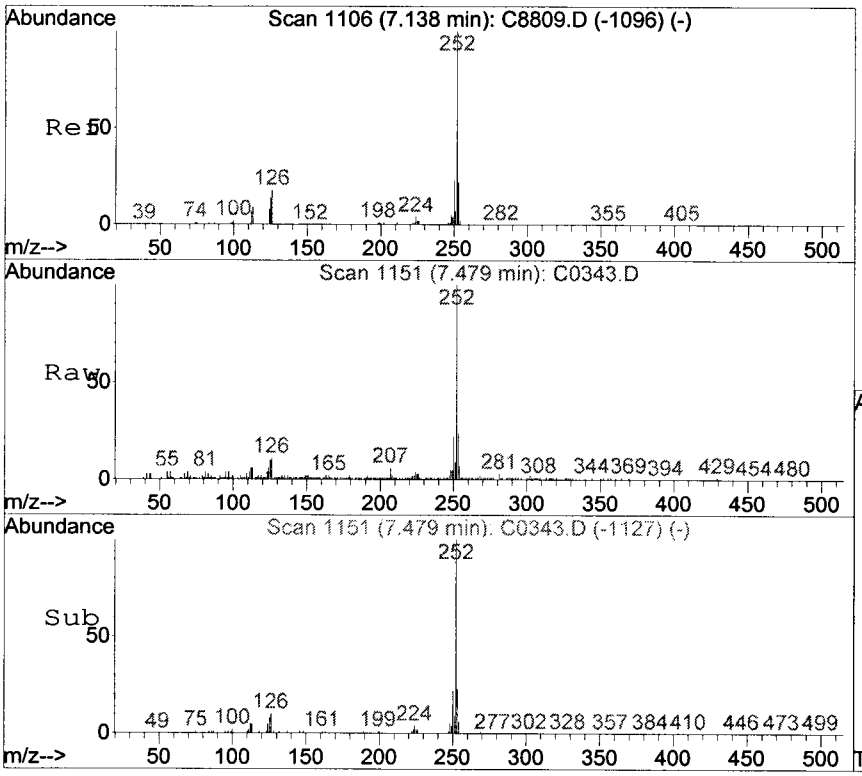


#90
Bis(2-ethylhexyl) phthalate
Concen: 8.84 UG m
RT: 6.38 min Scan# 945
Delta R.T. -0.08 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:149 Resp: 94788

Ion	Ratio	Lower	Upper
149	100		
167	1.1	25.5	38.3#
279	0.4	9.0	13.4#

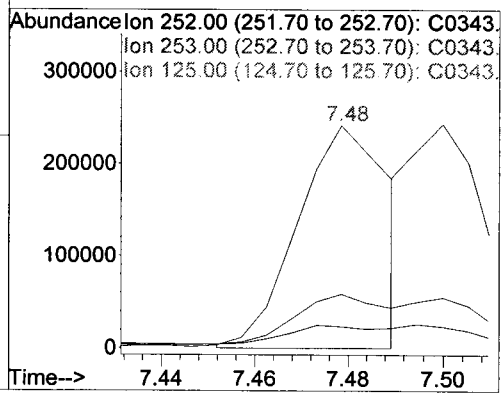


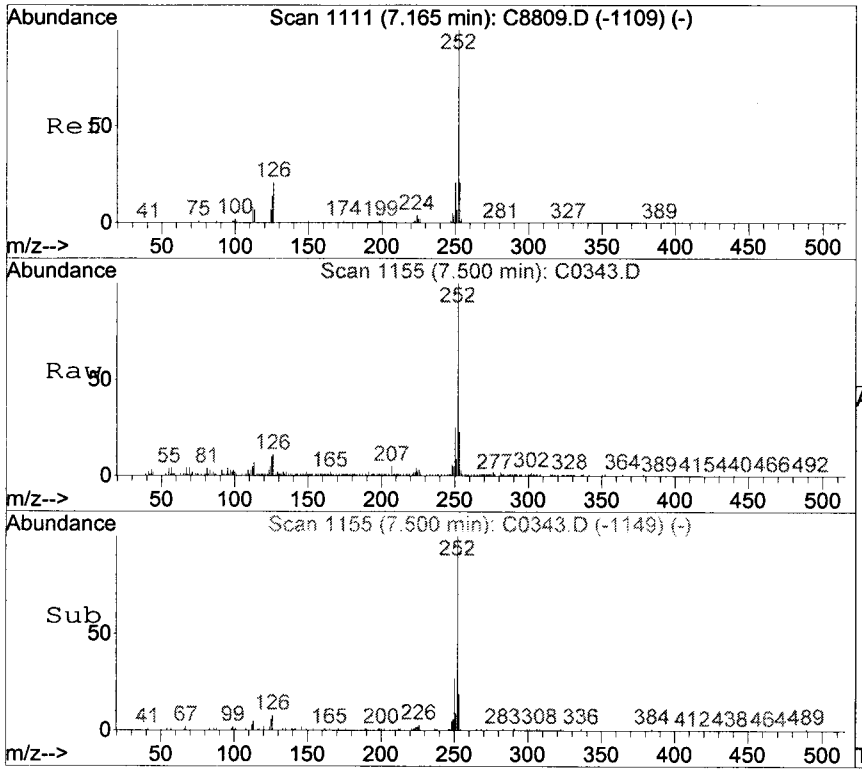


#94
Benzo[b]fluoranthene
Concen: 15.24 UG m
RT: 7.48 min Scan# 1151
Delta R.T. -0.04 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:252 Resp: 322754

Ion	Ratio	Lower	Upper
252	100		
253	17.7	17.4	26.0
125	8.7	7.1	10.7

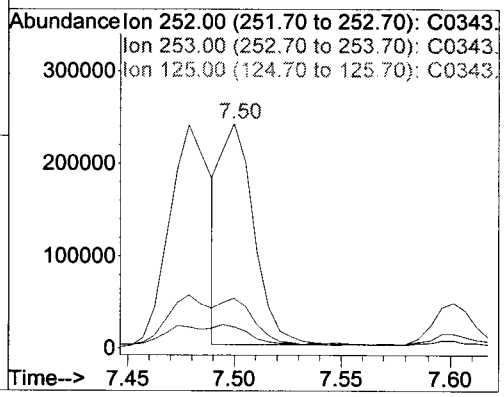


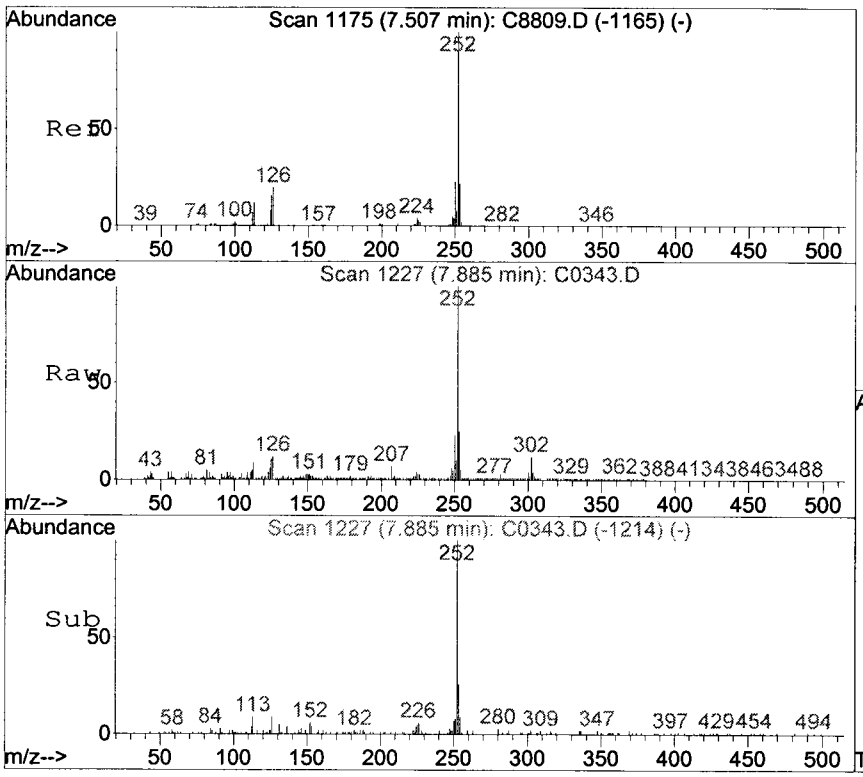


#95
Benzo[k]fluoranthene
Concen: 14.18 UG
RT: 7.50 min Scan# 1155
Delta R.T. -0.05 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:252 Resp: 264260

Ion	Ratio	Lower	Upper
252	100		
253	21.5	16.7	25.1
125	10.5	6.5	9.7#

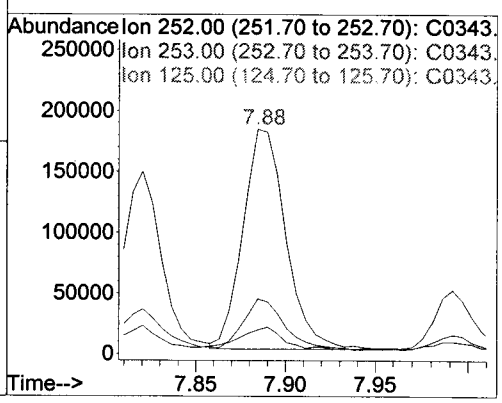


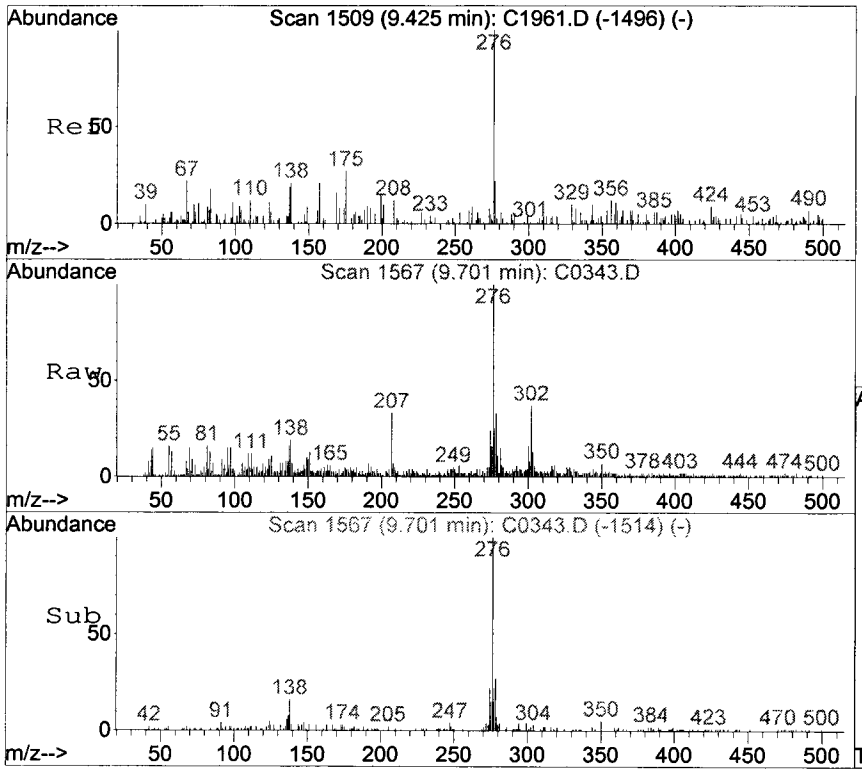


#96
Benzo[a]pyrene
Concen: 16.75 UG
RT: 7.88 min Scan# 1227
Delta R.T. -0.03 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:252 Resp: 299569

Ion	Ratio	Lower	Upper
252	100		
253	22.1	18.0	27.0
125	10.5	7.5	11.3

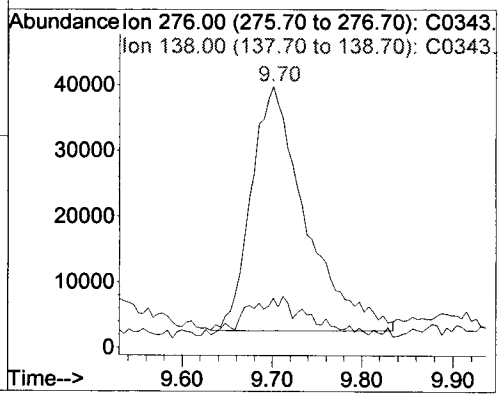


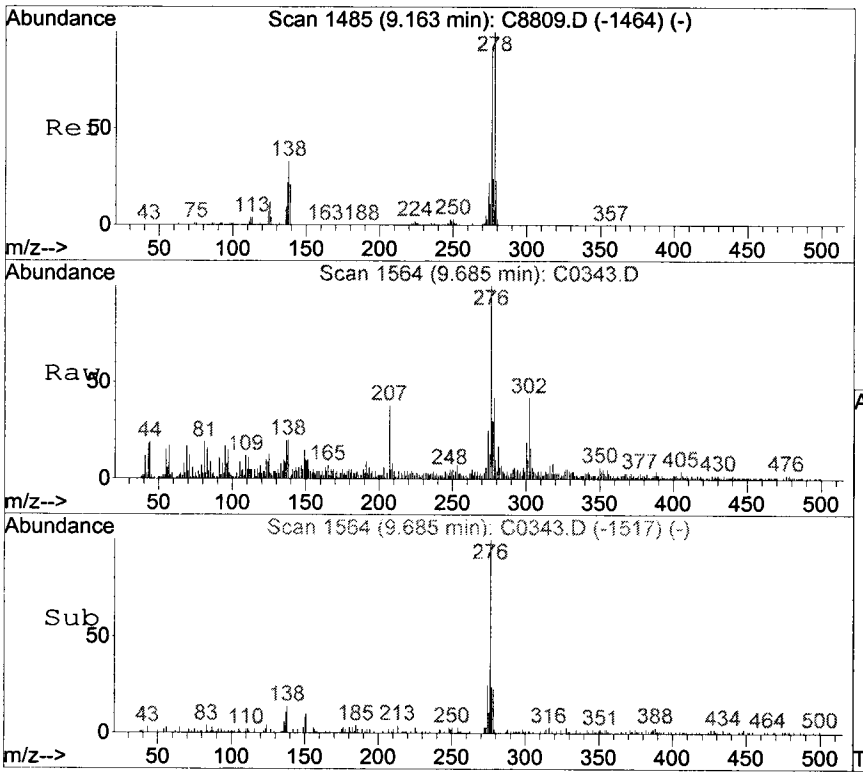


#97
Indeno[1,2,3-cd]pyrene
Concen: 7.34 UG
RT: 9.70 min Scan# 1567
Delta R.T. 0.02 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:276 Resp: 157790

Ion	Ratio	Lower	Upper
276	100		
138	8.0	0.8	1.2#

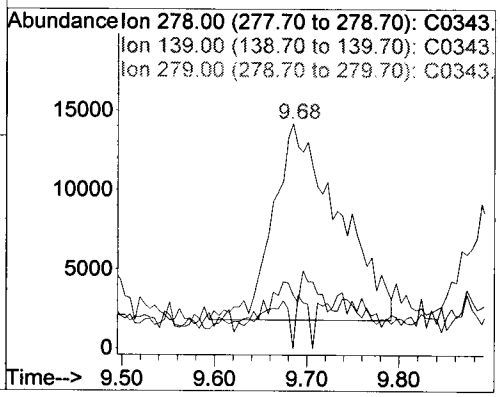


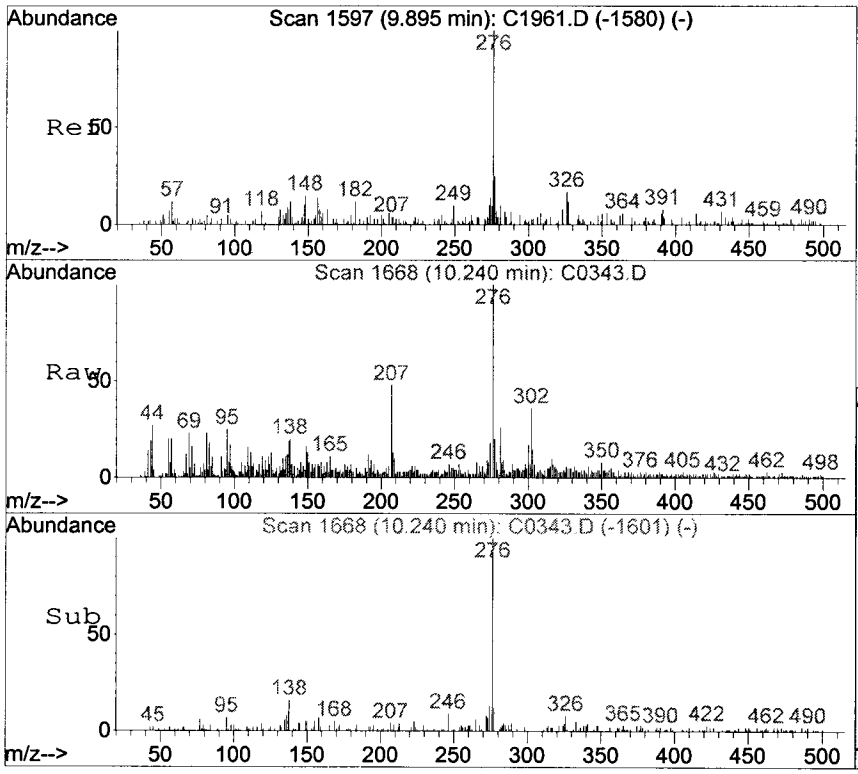


#98
Dibenz[a,h]anthracene
Concen: 3.45 UG
RT: 9.68 min Scan# 1564
Delta R.T. 0.01 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:278 Resp: 61447

Ion	Ratio	Lower	Upper
278	100		
139	4.7	0.6	0.8#
279	7.4	0.6	0.8#

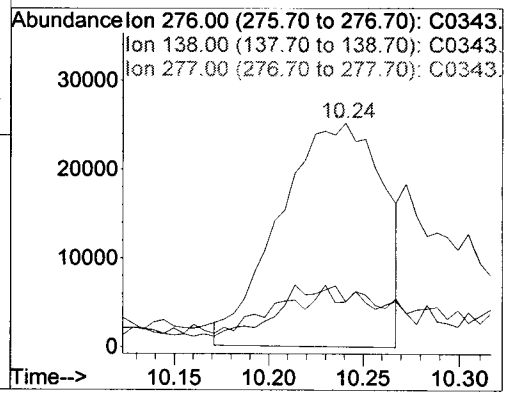




#99
Benzo[g,h,i]perylene
Concen: 5.37 UG m
RT: 10.24 min Scan# 1668
Delta R.T. 0.06 min
Lab File: C0343.D
Acq: 29 Sep 2014 23:52

Tgt Ion:276 Resp: 95772

Ion	Ratio	Lower	Upper
276	100		
138	0.7	0.7	1.1#
277	0.0	0.0	0.0



SEMI-VOLATILE ORGANICS STANDARDS

Response Factor Report MSD_C

Method Path : C:\MSDCHEM\1\METHODS\
Method File : CS1814.M
Title : BNA CALIBRATION METHOD
Last Update : Tue Sep 30 09:02:06 2014
Response Via : Initial Calibration

Calibration Files
1 =C0309.D 10 =C0310.D 20 =C0311.D
40 =C0312.D 80 =C0313.D 120 =C0314.D

		Compound	1	10	20	40	80	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	N-Nitrosodimethyl	0.592	0.517	0.543	0.509	0.545	0.519	0.537	5.71
3)	T	Pyridine	0.636	0.740	0.678	0.768	0.616	0.606	0.674	10.00
4)	S	2-Fluorophenol	1.154	1.104	1.128	1.113	1.132	1.092	1.121	1.97
5)	T	Benzaldehyde	0.514	0.424	0.532	0.583	0.644	0.411	0.518	17.34
6)	S	Phenol-d5	1.447	1.285	1.390	1.329	1.353	1.344	1.358	4.07
7)	MC	Phenol	1.324	1.435	1.282	1.351	1.250	1.348	1.332	4.80
8)	T	Aniline	0.622	0.529	0.547	0.509	0.528	0.512	0.541	7.71
9)	T	Bis(2-chloroethyl	0.640	0.591	0.588	0.580	0.615	0.607	0.604	3.66
10)	M	2-Chlorophenol	1.524	1.254	1.229	1.287	1.342	1.340	1.329	7.93
11)	T	1,3-Dichlorobenze	1.709	1.510	1.519	1.534	1.576	1.560	1.568	4.67
12)	MC	1,4-Dichlorobenze	1.614	1.581	1.589	1.639	1.620	1.549	1.599	2.01
13)	T	Benzyl alcohol	0.858	0.774	0.728	0.744	0.804	0.731	0.773	6.58
14)	T	1,2-Dichlorobenze	1.691	1.420	1.467	1.432	1.462	1.431	1.484	6.96
15)	T	2-Methylphenol	1.261	1.017	1.031	1.035	1.059	1.050	1.076	8.56
16)	T	Bis(2-chloroisopr	1.067	0.867	0.872	0.883	0.882	0.867	0.906	8.74
17)	T	4-Methylphenol	1.131	1.060	1.031	1.005	1.117	1.128	1.079	5.02
18)	MP	N-Nitrosodi-n-pro	0.733	0.752	0.747	0.738	0.792	0.723	0.747	3.21
19)	T	Acetophenone	1.764	1.554	1.517	1.591	1.600	1.632	1.610	5.31
20)	T	3-Methylphenol	1.153	1.060	1.032	1.010	1.115	1.128	1.083	5.29
21)	T	Hexachloroethane	0.522	0.498	0.524	0.506	0.502	0.480	0.506	3.26
22)	T	2,6-Dimethylpheno							0.000	-1.00
23)	I	Naphthalene-d8	ISTD							
24)	S	Nitrobenzene-d5	0.288	0.300	0.316	0.317	0.330	0.350	0.317	6.91
25)	T	Nitrobenzene	0.343	0.270	0.267	0.275	0.262	0.270	0.281	10.92
26)	T	Isophorone	0.613	0.529	0.504	0.509	0.538	0.522	0.536	7.42
27)	TC	2-Nitrophenol	0.222	0.202	0.197	0.210	0.203	0.196	0.205	4.73
28)	T	2,4-Dimethylpheno	0.337	0.314	0.307	0.340	0.341	0.345	0.331	4.87
29)	T	Bis(2-chloroethox	0.349	0.301	0.295	0.295	0.312	0.315	0.311	6.58
30)	T	Benzoic acid	0.104	0.130	0.140	0.137	0.153	0.159	0.137	14.27
31)	T	2,4-Dimethylanili	0.527	0.447	0.410	0.388	0.379	0.366	0.420	14.24
32)	TC	2,4-Dichloropheno	0.308	0.304	0.302	0.306	0.320	0.315	0.309	2.24
33)	M	1,2,4-Trichlorobe	0.433	0.389	0.377	0.379	0.384	0.378	0.390	5.50
34)	T	Naphthalene	1.217	1.055	1.065	1.051	1.093	1.058	1.090	5.89
35)	T	4-Chloroaniline	0.568	0.541	0.517	0.528	0.545	0.533	0.539	3.24
36)	T	4-Aminotoluene	0.580	0.608	0.597	0.567	0.553	0.517	0.570	5.77
37)	TC	Hexachlorobutadie	0.278	0.231	0.226	0.225	0.232	0.219	0.235	9.10
38)	T	Caprolactam	0.114	0.093	0.089	0.089	0.089	0.086	0.093	10.98
39)	T	2-Aminotoluene	0.580	0.608	0.597	0.567	0.553	0.517	0.570	5.77
40)	MC	4-Chloro-3-methyl	0.315	0.282	0.275	0.284	0.298	0.283	0.290	5.05
41)	T	2-Methylnaphthale	0.835	0.724	0.689	0.712	0.738	0.714	0.735	7.00
42)	T	2,5-Dimethylpheno							0.000	-1.00
43)	I	Acenaphthene-d10	ISTD							
44)	TP	Hexachlorocyclope	0.269	0.292	0.297	0.312	0.329	0.313	0.302	6.85
45)	TC	2,4,6-Trichloroph	0.439	0.390	0.389	0.402	0.387	0.396	0.401	4.90
46)	T	2,4,5-Trichloroph	0.477	0.417	0.406	0.398	0.415	0.393	0.418	7.37
47)	S	2-Fluorobiphenyl	1.437	1.430	1.474	1.457	1.467	1.433	1.450	1.31
48)	T	1,1'-Biphenyl	1.470	1.357	1.382	1.409	1.437	1.440	1.416	2.94
49)	T	2-Chloronaphthale	1.254	1.123	1.106	1.113	1.107	1.076	1.130	5.55
50)	T	2-Nitroaniline	0.250	0.207	0.203	0.199	0.204	0.206	0.211	9.11
51)	T	Dimethyl phthalat	1.349	1.293	1.246	1.258	1.265	1.293	1.284	2.89

52)	T	2,6-Dinitrotoluen	0.363	0.309	0.306	0.311	0.334	0.312	0.323	6.85
53)	T	Acenaphthylene	1.731	1.696	1.710	1.718	1.756	1.791	1.734	2.01
54)	T	3-Nitroaniline	0.309	0.290	0.282	0.285	0.286	0.302	0.292	3.63
55)	MC	Acenaphthene	1.122	1.095	1.104	1.093	1.149	1.142	1.118	2.15
56)	TP	2,4-Dinitrophenol	0.133	0.108	0.124	0.147	0.165	0.166	0.141	16.38
57)	MP	4-Nitrophenol	0.200	0.173	0.171	0.177	0.179	0.183	0.180	5.81
58)	M	2,4-Dinitrotoluen	0.416	0.409	0.414	0.416	0.456	0.449	0.427	4.73
59)	T	Dibenzofuran	1.833	1.565	1.559	1.564	1.562	1.592	1.613	6.74
60)	T	Diethyl phthalate	1.210	1.238	1.207	1.191	1.245	1.238	1.222	1.79
61)	T	Fluorene	1.461	1.363	1.316	1.326	1.357	1.362	1.364	3.78
62)	T	4-Chlorophenyl ph	0.723	0.707	0.694	0.703	0.737	0.700	0.711	2.30
63)	T	4-Nitroaniline	0.335	0.306	0.288	0.289	0.313	0.311	0.307	5.79
64)		1,2,4,5-Tetrachlo	0.759	0.709	0.712	0.674	0.604	0.596	0.676	9.59
65)	T	2,3,4,6-Tetrachlo	0.439	0.380	0.378	0.379	0.381	0.396	0.392	6.06
66)	I	Phenanthrene-d10	----------ISTD----------							
67)	T	4,6-Dinitro-2-met	0.149	0.119	0.139	0.158	0.163	0.168	0.149	12.01
68)	TC	N-Nitrosodiphenyl	0.616	0.524	0.521	0.538	0.546	0.533	0.546	6.45
69)	T	1,2-Diphenylhydra	0.546	0.543	0.549	0.554	0.551	0.546	0.548	0.72
70)	S	2,4,6-Tribromophe	0.190	0.188	0.191	0.192	0.194	0.190	0.191	1.05
71)	T	4-Bromophenyl phe	0.272	0.259	0.258	0.267	0.275	0.260	0.265	2.74
72)	T	Hexachlorobenzene	0.371	0.314	0.312	0.321	0.316	0.305	0.323	7.46
73)	T	Atrazine	0.250	0.235	0.229	0.217	0.241	0.215	0.231	6.03
74)	MC	Pentachlorophenol	0.189	0.195	0.201	0.214	0.219	0.213	0.205	5.88
75)	T	Phenanthrene	1.162	1.109	1.081	1.102	1.153	1.073	1.113	3.31
76)	T	Anthracene	1.162	1.111	1.081	1.102	1.153	1.077	1.114	3.21
77)	T	Carbazole	1.053	1.030	1.018	1.040	1.081	1.035	1.043	2.11
78)	T	Di-n-butyl phthal	1.174	1.125	1.122	1.155	1.196	1.130	1.150	2.61
79)	TC	Fluoranthene	1.379	1.282	1.271	1.308	1.346	1.246	1.305	3.81
80)	T	Benzidine	0.547	0.599	0.569	0.506	0.566	0.543	0.555	5.61
81)		4-Aminoaniline							0.000	-1.00
82)	I	Chrysene-d12	----------ISTD----------							
83)	M	Pyrene	1.176	1.169	1.125	1.103	1.251	1.317	1.190	6.73
84)	S	Terphenyl-d14	1.065	1.102	1.128	1.047	1.151	1.202	1.116	5.13
85)	T	3,3'-Dimethylbenz	0.560	0.707	0.639	0.608	0.683	0.705	0.650	9.07
86)	T	Butyl benzyl phth	0.419	0.408	0.416	0.406	0.441	0.462	0.425	5.15
87)	T	3,3'-Dichlorobenz	0.418	0.402	0.406	0.409	0.382	0.328	0.391	8.44
88)	T	Benzo[a]anthracen	1.277	1.106	1.089	1.047	1.113	1.124	1.126	6.98
89)	T	Chrysene	1.200	1.031	1.036	0.988	1.018	1.003	1.046	7.40
90)	T	Bis(2-ethylhexyl)	0.680	0.563	0.579	0.569	0.635	0.652	0.613	8.03
91)	T	3,3'-Dimethoxyben							0.000	-1.00
92)	I	Perylene-d12	----------ISTD----------							
93)	TC	Di-n-octyl phthal	1.537	1.639	1.696	1.597	1.662	1.581	1.619	3.58
94)	T	Benzo[b]fluoranth	1.862	1.994	1.854	1.958	1.939	1.977	1.931	3.07
95)	T	Benzo[k]fluoranth	1.880	1.726	1.774	1.599	1.734	1.476	1.698	8.33
96)	TC	Benzo[a]pyrene	1.732	1.607	1.608	1.613	1.622	1.600	1.630	3.09
97)	T	Indeno[1,2,3-cd]p	1.882	1.806	1.847	2.055	2.087	2.078	1.959	6.52
98)	T	Dibenz[a,h]anthra	1.492	1.489	1.558	1.722	1.780	1.707	1.625	7.82
99)	T	Benzo[g,h,i]peryl	1.640	1.456	1.516	1.660	1.744	1.740	1.626	7.23

(#) = Out of Range

CS1814.M Tue Sep 30 10:34:58 2014

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0315.D
Acq On : 29 Sep 2014 16:13
Operator : EDM
Sample : ABN066-14,ICV040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 29 16:36:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:34:18 2014
Response via : Initial Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
2	T	N-Nitrosodimethylamine	0.537	0.538	-0.2	108	0.00
3	T	Pyridine	0.674	0.556	17.5	74	0.00
4	S	2-Fluorophenol	1.121	1.101	1.8	101	0.00
5	T	Benzaldehyde	0.518	0.436	15.8	140	0.00
6	S	Phenol-d5	1.358	1.341	1.3	103	0.00
7	MC	Phenol	1.332	1.367	-2.6	103	0.00
8	T	Aniline	0.541	0.497	8.1	100	0.00
9	T	Bis(2-chloroethyl) ether	0.604	0.587	2.8	103	0.00
10	M	2-Chlorophenol	1.329	1.285	3.3	102	0.00
11	T	1,3-Dichlorobenzene	1.568	1.549	1.2	103	0.00
12	MC	1,4-Dichlorobenzene	1.599	1.642	-2.7	102	0.00
13	T	Benzyl alcohol	0.773	0.777	-0.5	107	0.00
14	T	1,2-Dichlorobenzene	1.484	1.466	1.2	104	0.00
15	T	2-Methylphenol	1.076	1.053	2.1	104	0.00
16	T	Bis(2-chloroisopropyl) ethe	0.906	0.906	0.0	105	0.00
17	T	4-Methylphenol	1.079	1.094	-1.4	111	0.00
18	MP	N-Nitrosodi-n-propylamine	0.747	0.768	-2.8	106	0.00
19	T	Acetophenone	1.610	1.667	-3.5	107	0.00
20	T	3-Methylphenol	1.083	1.094	-1.0	111	0.00
21	T	Hexachloroethane	0.506	0.484	4.3	98	0.00
22	T	2,6-Dimethylphenol					
23	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00
24	S	Nitrobenzene-d5	0.317	0.306	3.5	102	0.00
25	T	Nitrobenzene	0.281	0.277	1.4	107	0.00
26	T	Isophorone	0.536	0.536	0.0	111	0.00
27	TC	2-Nitrophenol	0.205	0.202	1.5	101	0.00
28	T	2,4-Dimethylphenol	0.331	0.339	-2.4	105	0.00
29	T	Bis(2-chloroethoxy) methane	0.311	0.318	-2.3	114	0.00
30	T	Benzoic acid	0.137	0.148	-8.0	115	-0.02
31	T	2,4-Dimethylaniline	0.420	0.355	15.5	97	0.00
32	TC	2,4-Dichlorophenol	0.309	0.321	-3.9	111	0.00
33	M	1,2,4-Trichlorobenzene	0.390	0.374	4.1	104	0.00
34	T	Naphthalene	1.090	1.086	0.4	109	0.00
35	T	4-Chloroaniline	0.539	0.529	1.9	106	0.00
36	T	4-Aminotoluene	0.570	0.511	10.4	95	0.00
37	TC	Hexachlorobutadiene	0.235	0.230	2.1	108	0.00
38	T	Caprolactam	0.093	0.092	1.1	110	-0.02
39	T	2-Aminotoluene	0.570	0.511	10.4	95	0.00
40	MC	4-Chloro-3-methylphenol	0.290	0.296	-2.1	110	0.00
41	T	2-Methylnaphthalene	0.735	0.720	2.0	107	0.00
42	T	2,5-Dimethylphenol					
43	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00
44	TP	Hexachlorocyclopentadiene	0.302	0.293	3.0	103	0.00
45	TC	2,4,6-Trichlorophenol	0.401	0.384	4.2	105	0.00
46	T	2,4,5-Trichlorophenol	0.418	0.405	3.1	112	0.00

47	S	2-Fluorobiphenyl	1.450	1.356	6.5	102	0.00
48	T	1,1'-Biphenyl	1.416	1.379	2.6	107	0.00
49	T	2-Chloronaphthalene	1.130	1.112	1.6	109	0.00
50	T	2-Nitroaniline	0.211	0.210	0.5	115	-0.01
51	T	Dimethyl phthalate	1.284	1.256	2.2	109	-0.01
52	T	2,6-Dinitrotoluene	0.323	0.318	1.5	112	-0.01
53	T	Acenaphthylene	1.734	1.732	0.1	110	-0.01
54	T	3-Nitroaniline	0.292	0.304	-4.1	116	-0.01
55	MC	Acenaphthene	1.118	1.115	0.3	112	-0.01
56	TP	2,4-Dinitrophenol	0.141	0.138	2.1	103	-0.01
57	MP	4-Nitrophenol	0.180	0.182	-1.1	112	-0.01
58	M	2,4-Dinitrotoluene	0.427	0.440	-3.0	116	-0.01
59	T	Dibenzofuran	1.613	1.551	3.8	109	-0.01
60	T	Diethyl phthalate	1.222	1.248	-2.1	115	-0.01
61	T	Fluorene	1.364	1.370	-0.4	113	-0.01
62	T	4-Chlorophenyl phenyl ether	0.711	0.718	-1.0	112	-0.01
63	T	4-Nitroaniline	0.307	0.303	1.3	115	-0.02
64		1,2,4,5-Tetrachlorobenzene	0.676	0.601	11.1	97	0.00
65	T	2,3,4,6-Tetrachlorophenol	0.392	0.385	1.8	111	-0.01
66	I	Phenanthrene-d10	1.000	1.000	0.0	110	-0.01
67	T	4,6-Dinitro-2-methylphenol	0.149	0.160	-7.4	112	-0.02
68	TC	N-Nitrosodiphenylamine	0.546	0.552	-1.1	113	-0.01
69	T	1,2-Diphenylhydrazine	0.548	0.565	-3.1	113	-0.01
70	S	2,4,6-Tribromophenol	0.191	0.197	-3.1	113	-0.01
71	T	4-Bromophenyl phenyl ether	0.265	0.270	-1.9	112	-0.01
72	T	Hexachlorobenzene	0.323	0.325	-0.6	112	-0.01
73	T	Atrazine	0.231	0.223	3.5	114	-0.02
74	MC	Pentachlorophenol	0.205	0.218	-6.3	112	-0.01
75	T	Phenanthrene	1.113	1.138	-2.2	114	-0.01
76	T	Anthracene	1.114	1.152	-3.4	115	-0.01
77	T	Carbazole	1.043	1.050	-0.7	112	-0.02
78	T	Di-n-butyl phthalate	1.150	1.181	-2.7	113	-0.01
79	TC	Fluoranthene	1.305	1.309	-0.3	111	-0.02
80	T	Benzidine	0.555	0.417	24.9	104	0.15
81		4-Aminoaniline					
82	I	Chrysene-d12	1.000	1.000	0.0	94	-0.02
83	M	Pyrene	1.190	1.280	-7.6	109	-0.03
84	S	Terphenyl-d14	1.116	1.166	-4.5	104	-0.02
85	T	3,3'-Dimethylbenzidine	0.650	0.545	16.2	88	0.14
86	T	Butyl benzyl phthalate	0.425	0.466	-9.6	108	-0.02
87	T	3,3'-Dichlorobenzidine	0.391	0.415	-6.1	95	-0.02
88	T	Benzo[a]anthracene	1.126	1.125	0.1	101	-0.02
89	T	Chrysene	1.046	1.041	0.5	99	-0.02
90	T	Bis(2-ethylhexyl) phthalate	0.613	0.649	-5.9	107	-0.02
91	T	3,3'-Dimethoxybenzidine					
92	I	Perylene-d12	1.000	1.000	0.0	86	-0.01
93	TC	Di-n-octyl phthalate	1.619	1.815	-12.1	98	-0.01
94	T	Benzo[b]fluoranthene	1.931	2.037	-5.5	90	-0.02
95	T	Benzo[k]fluoranthene	1.698	1.639	3.5	88	-0.02
96	TC	Benzo[a]pyrene	1.630	1.678	-2.9	90	-0.02
97	T	Indeno[1,2,3-cd]pyrene	1.959	2.048	-4.5	86	-0.03
98	T	Dibenz[a,h]anthracene	1.625	1.747	-7.5	88	-0.03
99	T	Benzo[g,h,i]perylene	1.626	1.739	-6.9	90	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CS1814.M Tue Sep 30 11:35:34 2014

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0309.D
Acq On : 29 Sep 2014 14:20
Operator : EDM
Sample : ABN054-14,ICC001BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 29 16:40:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Sep 17 15:17:13 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	121946	40.00	UG		0.07
23) Naphthalene-d8	3.09	136	478309	40.00	UG		0.07
43) Acenaphthene-d10	3.94	164	323956	40.00	UG		0.08
66) Phenanthrene-d10	4.73	188	584553	40.00	UG		0.07
82) Chrysene-d12	6.54	240	722694	40.00	UG		0.11
92) Perylene-d12	7.99	264	421173	40.00	UG		0.21
System Monitoring Compounds							
4) 2-Fluorophenol	2.01	112	351885	103.23	UG		0.06
Spiked Amount 100.000	Range 25 - 100		Recovery = 103.23%#				
6) Phenol-d5	2.36	99	441214	109.63	UG		0.06
Spiked Amount 100.000	Range 25 - 108		Recovery = 109.63%#				
24) Nitrobenzene-d5	2.77	82	171964	43.34	UG		0.07
Spiked Amount 50.000	Range 24 - 91		Recovery = 86.68%				
47) 2-Fluorobiphenyl	3.57	172	582108	47.87	UG		0.07
Spiked Amount 50.000	Range 33 - 91		Recovery = 95.74%#				
70) 2,4,6-Tribromophenol	4.35	330	277396	105.51	UG		0.08
Spiked Amount 100.000	Range 37 - 115		Recovery = 105.51%				
84) Terphenyl-d14	5.70	244	962061	43.04	UG		0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 86.08%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.51	74	1806m	1.13	UG		
3) Pyridine	1.55	52	1938m	0.93	UG		
7) Phenol	2.36	94	4035	1.08	UG	#	1
8) Aniline	2.41	66	1896	1.10	UG		98
9) Bis(2-chloroethyl) ether	2.41	63	1952	1.03	UG	#	63
10) 2-Chlorophenol	2.46	128	4646	1.16	UG		93
11) 1,3-Dichlorobenzene	2.53	146	5209	1.00	UG	#	86
12) 1,4-Dichlorobenzene	2.55	146	4919	1.07	UG	#	49
13) Benzyl alcohol	2.57	108	2617m	1.09	UG		
14) 1,2-Dichlorobenzene	2.63	146	5156	1.13	UG		95
15) 2-Methylphenol	2.61	108	3845	1.23	UG		97
16) Bis(2-chloroisopropyl) eth	2.64	45	3254	1.16	UG		95
17) 4-Methylphenol	2.67	108	3448	1.08	UG		85
18) N-Nitrosodi-n-propylamine	2.69	70	2234m	0.97	UG		
19) Acetophenone	2.70	105	5379	1.09	UG	#	1
20) 3-Methylphenol	2.67	108	3515	1.10	UG		87
21) Hexachloroethane	2.77	117	1592	1.02	UG	#	79
25) Nitrobenzene	2.78	77	4104	1.22	UG	#	88
26) Isophorone	2.87	82	7325m	1.17	UG		
27) 2-Nitrophenol	2.92	139	2656	1.09	UG	#	67
28) 2,4-Dimethylphenol	2.90	107	4031	0.98	UG		87
29) Bis(2-chloroethoxy) methan	2.94	93	4175	1.18	UG	#	89
30) Benzoic acid	2.90	122	1240m	0.67	UG		
31) 2,4-Dimethylaniline	3.00	121	6298	1.28	UG	#	100
32) 2,4-Dichlorophenol	3.02	162	3678	0.98	UG		91
33) 1,2,4-Trichlorobenzene	3.07	180	5178	1.14	UG		86
34) Naphthalene	3.10	128	14557	1.13	UG	#	79
35) 4-Chloroaniline	3.10	127	6791	1.06	UG	#	12
36) 4-Aminotoluene	2.72	106	6935m	0.99	UG		
37) Hexachlorobutadiene	3.17	225	3321	1.15	UG		95
38) Caprolactam	3.24	55	1361m	1.45	UG		
39) 2-Aminotoluene	2.72	106	6935m	0.99			

E14-09161 0196

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0309.D
Acq On : 29 Sep 2014 14:20
Operator : EDM
Sample : ABN054-14,ICC001BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 29 16:40:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Sep 17 15:17:13 2014
Response via : Initial Calibration

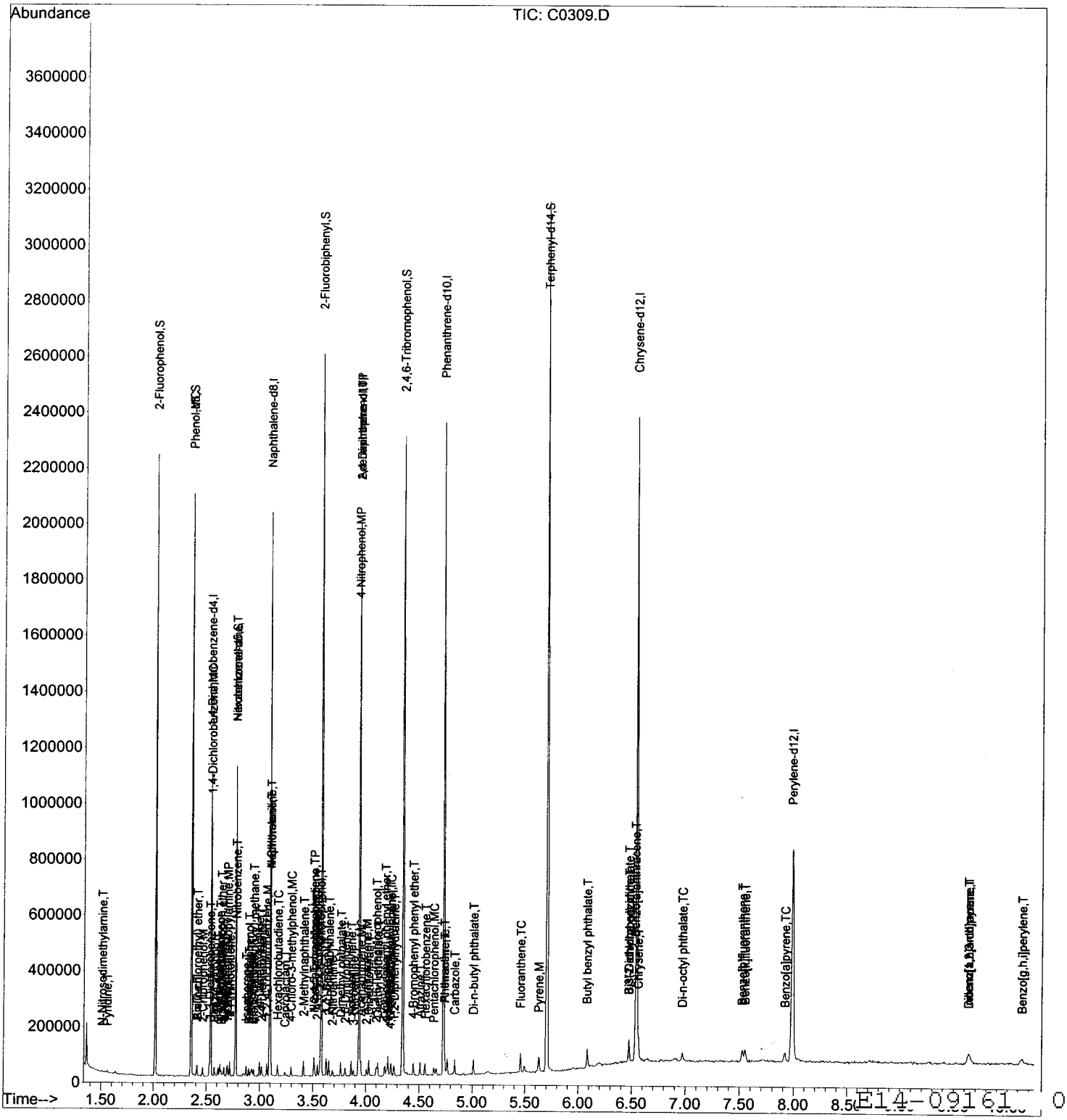
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.30	107	3772	1.10 UG	#	80
41) 2-Methylnaphthalene	3.41	142	9986	1.16 UG		96
44) Hexachlorocyclopentadiene	3.51	237	2182	0.80 UG		97
45) 2,4,6-Trichlorophenol	3.54	196	3558	1.10 UG		91
46) 2,4,5-Trichlorophenol	3.56	196	3867	1.14 UG		93
48) 1,1'-Biphenyl	3.62	154	11908	1.00 UG		93
49) 2-Chloronaphthalene	3.65	162	10155	1.09 UG		94
50) 2-Nitroaniline	3.68	65	2028	1.22 UG	#	79
51) Dimethyl phthalate	3.76	163	10926	1.08 UG	#	94
52) 2,6-Dinitrotoluene	3.80	165	2939	1.13 UG	#	83
53) Acenaphthylene	3.86	152	14019	0.98 UG		94
54) 3-Nitroaniline	3.88	138	2500	1.05 UG	#	89
55) Acenaphthene	3.95	153	9089	0.98 UG		94
56) 2,4-Dinitrophenol	3.94	184	1074m	1.01 UG		
57) 4-Nitrophenol	3.93	65	1618	1.16 UG	#	50
58) 2,4-Dinitrotoluene	4.01	165	3369	1.05 UG	#	73
59) Dibenzofuran	4.03	168	14849	1.15 UG	#	78
60) Diethyl phthalate	4.11	149	9801m	1.01 UG		
61) Fluorene	4.21	166	11836	1.11 UG		94
62) 4-Chlorophenyl phenyl ethe	4.18	204	5859	1.09 UG	#	87
63) 4-Nitroaniline	4.20	138	2717	1.17 UG	#	78
64) 1,2,4,5-Tetrachlorobenzene	3.51	216	6148	1.12 UG		93
65) 2,3,4,6-Tetrachlorophenol	4.10	232	3553	1.26 UG	#	92
67) 4,6-Dinitro-2-methylphenol	4.23	198	2173m	0.99 UG		
68) N-Nitrosodiphenylamine	4.24	169	8995	1.07 UG		98
69) 1,2-Diphenylhydrazine	4.27	77	7980	0.86 UG	#	81
71) 4-Bromophenyl phenyl ether	4.44	248	3972	1.00 UG	#	83
72) Hexachlorobenzene	4.56	284	5424	1.21 UG		95
73) Atrazine	4.51	200	3656	1.05 UG		97
74) Pentachlorophenol	4.64	266	2768m	0.96 UG		
75) Phenanthrene	4.74	178	16983	1.01 UG		96
76) Anthracene	4.74	178	16978	1.02 UG		97
77) Carbazole	4.83	167	15390	1.05 UG		98
78) Di-n-butyl phthalate	5.01	149	17150	1.02 UG	#	96
79) Fluoranthene	5.46	202	20156	1.17 UG		98
83) Pyrene	5.64	202	21252	0.85 UG	#	94
86) Butyl benzyl phthalate	6.08	149	7562	0.84 UG		95
87) 3,3'-Dichlorobenzidine	6.47	252	7550	1.10 UG		88
88) Benzo[a]anthracene	6.53	228	23073	1.14 UG		98
89) Chrysene	6.57	228	21678	1.13 UG		95
90) Bis(2-ethylhexyl) phthalat	6.47	149	12291	1.02 UG	#	87
93) Di-n-octyl phthalate	6.97	149	16185m	0.88 UG		
94) Benzo[b]fluoranthene	7.53	252	19608m	0.97 UG		
95) Benzo[k]fluoranthene	7.55	252	19795m	1.11 UG		
96) Benzo[a]pyrene	7.92	252	18238	1.03 UG	#	74
97) Indeno[1,2,3-cd]pyrene	9.64	276	19815	0.93 UG	#	66
98) Dibenz[a,h]anthracene	9.64	278	15711	0.90 UG	#	68
99) Benzo[g,h,i]perylene	10.14	276	17272	0.99 UG	#	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0309.D
Acq On : 29 Sep 2014 14:20
Operator : EDM
Sample : ABN054-14,ICC001BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 29 16:40:07 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Wed Sep 17 15:17:13 2014
Response via : Initial Calibration



E14-09161 0198

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0310.D
Acq On : 29 Sep 2014 14:54
Operator : EDM
Sample : ABN055-14,ICC010BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 29 16:01:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 14:49:51 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	150013	40.00	UG		0.00
23) Naphthalene-d8	3.10	136	564023	40.00	UG		0.00
43) Acenaphthene-d10	3.96	164	384138	40.00	UG		0.02
66) Phenanthrene-d10	4.78	188	709092	40.00	UG		0.04
82) Chrysene-d12	6.60	240	815077	40.00	UG		0.05
92) Perylene-d12	8.04	264	421077	40.00	UG		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.02	112	413852	94.37	UG		0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 94.37%				
6) Phenol-d5	2.36	99	482018	92.50	UG		0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 92.50%				
24) Nitrobenzene-d5	2.78	82	211796	50.65	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 101.30%#				
47) 2-Fluorobiphenyl	3.59	172	686440	49.75	UG		0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 99.50%#				
70) 2,4,6-Tribromophenol	4.39	330	332985	98.48	UG		0.03
Spiked Amount 100.000	Range 37 - 115		Recovery = 98.48%				
84) Terphenyl-d14	5.79	244	1122595	49.80	UG		0.07
Spiked Amount 50.000	Range 15 - 122		Recovery = 99.60%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.50	74	19379	8.50	UG	#	40
3) Pyridine	1.53	52	27746	11.75	UG	#	83
7) Phenol	2.36	94	53800	10.44	UG	#	44
8) Aniline	2.41	66	19857	9.00	UG		93
9) Bis(2-chloroethyl) ether	2.41	63	22183	9.26	UG	#	77
10) 2-Chlorophenol	2.46	128	47031	8.85	UG	#	91
11) 1,3-Dichlorobenzene	2.53	146	56642	9.17	UG	#	93
12) 1,4-Dichlorobenzene	2.55	146	59295	9.71	UG	#	84
13) Benzyl alcohol	2.58	108	29015	9.47	UG	#	77
14) 1,2-Dichlorobenzene	2.63	146	53254	8.91	UG		95
15) 2-Methylphenol	2.61	108	38143m	8.65	UG		
16) Bis(2-chloroisopropyl) eth	2.64	45	32509	8.85	UG	#	95
17) 4-Methylphenol	2.67	108	39753	9.71	UG		96
18) N-Nitrosodi-n-propylamine	2.70	70	28199	8.96	UG	#	84
19) Acetophenone	2.70	105	58270	9.38	UG	#	1
20) 3-Methylphenol	2.67	108	39753	9.61	UG		95
21) Hexachloroethane	2.77	117	18679	9.74	UG	#	77
25) Nitrobenzene	2.79	77	38088	8.71	UG	#	84
26) Isophorone	2.88	82	74597m	6.67	UG		
27) 2-Nitrophenol	2.93	139	28538	9.63	UG	#	58
28) 2,4-Dimethylphenol	2.91	107	44321	9.53	UG		97
29) Bis(2-chloroethoxy) methan	2.95	93	42383	9.12	UG		97
30) Benzoic acid	2.93	122	18312m	13.78	UG		
31) 2,4-Dimethylaniline	3.01	121	63086	9.21	UG	#	100
32) 2,4-Dichlorophenol	3.03	162	42932	9.85	UG		98
33) 1,2,4-Trichlorobenzene	3.08	180	54897	9.59	UG		96
34) Naphthalene	3.11	128	148694	9.23	UG		99
35) 4-Chloroaniline	3.11	127	76311	9.86	UG		97
36) 4-Aminotoluene	2.72	106	85759	8.97	UG		99
37) Hexachlorobutadiene	3.18	225	32559	9.06	UG		100
38) Caprolactam	3.25	55	13064	9.36	UG	#	75
39) 2-Aminotoluene	2.72	106	85759	8.97			

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0310.D
Acq On : 29 Sep 2014 14:54
Operator : EDM
Sample : ABN055-14,ICC010BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 29 16:01:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 14:49:51 2014
Response via : Initial Calibration

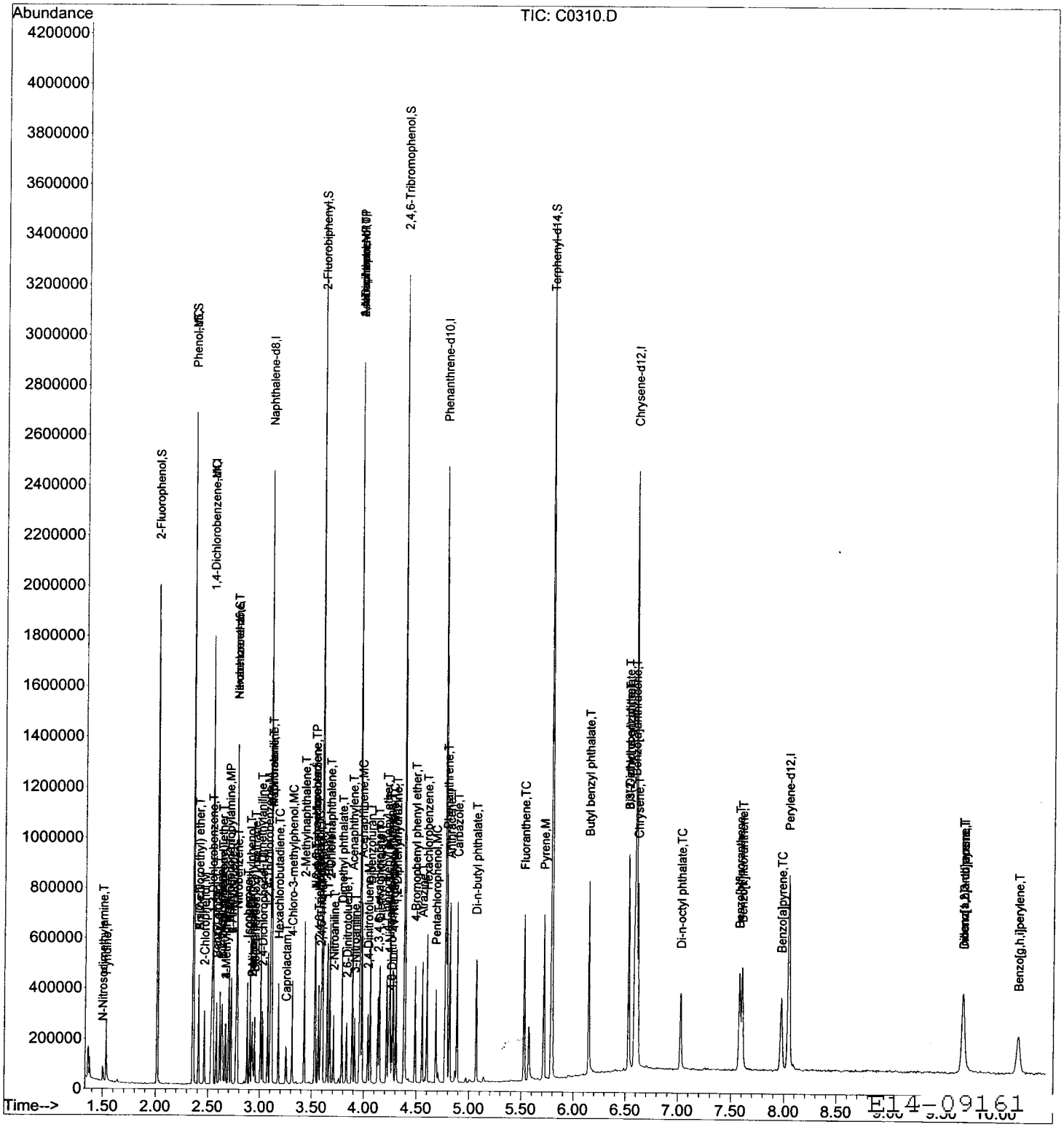
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.31	107	39800	9.46	UG		90
41) 2-Methylnaphthalene	3.43	142	102061	9.42	UG		97
44) Hexachlorocyclopentadiene	3.54	237	28023	10.46	UG	#	92
45) 2,4,6-Trichlorophenol	3.56	196	37458	9.39	UG		98
46) 2,4,5-Trichlorophenol	3.58	196	40062	9.66	UG		98
48) 1,1'-Biphenyl	3.65	154	130308	9.62	UG		96
49) 2-Chloronaphthalene	3.67	162	107842	9.58	UG		96
50) 2-Nitroaniline	3.71	65	19875	9.22	UG	#	70
51) Dimethyl phthalate	3.79	163	124184	9.89	UG		97
52) 2,6-Dinitrotoluene	3.84	165	29711	9.17	UG	#	85
53) Acenaphthylene	3.89	152	162827	9.85	UG		97
54) 3-Nitroaniline	3.91	138	27828	9.83	UG	#	90
55) Acenaphthene	3.98	153	105144	10.03	UG		96
56) 2,4-Dinitrophenol	3.96	184	10387	11.89	UG	#	1
57) 4-Nitrophenol	3.96	65	16577	9.54	UG	#	72
58) 2,4-Dinitrotoluene	4.04	165	39259	10.03	UG	#	70
59) Dibenzofuran	4.06	168	150318	9.25	UG	#	87
60) Diethyl phthalate	4.15	149	118928	19.48	UG		95
61) Fluorene	4.25	166	130913	9.76	UG		96
62) 4-Chlorophenyl phenyl ethe	4.22	204	67897	9.81	UG	#	89
63) 4-Nitroaniline	4.24	138	29353	9.49	UG	#	70
64) 1,2,4,5-Tetrachlorobenzene	3.53	216	68113	9.69	UG		96
65) 2,3,4,6-Tetrachlorophenol	4.13	232	36446	9.29	UG		91
67) 4,6-Dinitro-2-methylphenol	4.26	198	21129	11.65	UG	#	70
68) N-Nitrosodiphenylamine	4.28	169	92844	9.04	UG		96
69) 1,2-Diphenylhydrazine	4.31	77	96227	9.98	UG	#	76
71) 4-Bromophenyl phenyl ether	4.49	248	45867	9.57	UG	#	86
72) Hexachlorobenzene	4.60	284	55678	9.12	UG	#	90
73) Atrazine	4.56	200	41681	9.64	UG		95
74) Pentachlorophenol	4.68	266	34513	8.52	UG		94
75) Phenanthrene	4.79	178	196551	9.85	UG		98
76) Anthracene	4.82	178	197018	9.78	UG		99
77) Carbazole	4.89	167	182515	9.96	UG		98
78) Di-n-butyl phthalate	5.06	149	199402	9.71	UG	#	96
79) Fluoranthene	5.53	202	227230	9.72	UG		100
83) Pyrene	5.72	202	238141	9.83	UG		98
86) Butyl benzyl phthalate	6.15	149	83121	9.63	UG	#	85
87) 3,3'-Dichlorobenzidine	6.53	252	81983	9.68	UG		96
88) Benzo[a]anthracene	6.59	228	225395	9.30	UG		99
89) Chrysene	6.62	228	210086	9.21	UG		96
90) Bis(2-ethylhexyl) phthalat	6.53	149	114770	9.01	UG	#	90
93) Di-n-octyl phthalate	7.03	149	172540	10.36	UG		99
94) Benzo[b]fluoranthene	7.58	252	209898m	10.81	UG		
95) Benzo[k]fluoranthene	7.61	252	181680	9.05	UG		99
96) Benzo[a]pyrene	7.98	252	169168	9.56	UG		97
97) Indeno[1,2,3-cd]pyrene	9.70	276	190107	10.10	UG	#	62
98) Dibenz[a,h]anthracene	9.70	278	156762	10.12	UG	#	67
99) Benzo[g,h,i]perylene	10.20	276	153299	10.76	UG	#	65

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0310.D
Acq On : 29 Sep 2014 14:54
Operator : EDM
Sample : ABN055-14,ICC010BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 29 16:01:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 14:49:51 2014
Response via : Initial Calibration



E14-09161 0201

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0311.D
Acq On : 29 Sep 2014 15:10
Operator : EDM
Sample : ABN056-14,ICC020BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 29 15:59:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:19:12 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	135431	40.00	UG		0.00
23) Naphthalene-d8	3.10	136	518236	40.00	UG		0.00
43) Acenaphthene-d10	3.95	164	350191	40.00	UG		0.02
66) Phenanthrene-d10	4.76	188	630481	40.00	UG		0.03
82) Chrysene-d12	6.58	240	728014	40.00	UG		0.03
92) Perylene-d12	8.03	264	383067	40.00	UG		0.04
System Monitoring Compounds							
4) 2-Fluorophenol	2.01	112	382014	99.95	UG		0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 99.95%				
6) Phenol-d5	2.36	99	470492	101.71	UG		0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 101.71%				
24) Nitrobenzene-d5	2.78	82	204505	53.69	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 107.38%#				
47) 2-Fluorobiphenyl	3.59	172	645415	51.43	UG		0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 102.86%#				
70) 2,4,6-Tribromophenol	4.37	330	301114	101.17	UG		0.02
Spiked Amount 100.000	Range 37 - 115		Recovery = 101.17%				
84) Terphenyl-d14	5.75	244	1026562	52.06	UG		0.05
Spiked Amount 50.000	Range 15 - 122		Recovery = 104.12%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.50	74	36764	18.55	UG	#	36
3) Pyridine	1.53	52	45921m	19.72	UG		
7) Phenol	2.36	94	86832	18.60	UG	#	39
8) Aniline	2.41	66	37046	19.01	UG		94
9) Bis(2-chloroethyl) ether	2.41	63	39847	19.11	UG	#	73
10) 2-Chlorophenol	2.46	128	83239	17.70	UG	#	91
11) 1,3-Dichlorobenzene	2.53	146	102839	18.87	UG	#	92
12) 1,4-Dichlorobenzene	2.55	146	107577	19.89	UG	#	81
13) Benzyl alcohol	2.57	108	49274	17.83	UG		82
14) 1,2-Dichlorobenzene	2.63	146	99311	18.86	UG		95
15) 2-Methylphenol	2.61	108	69816m	18.10	UG		
16) Bis(2-chloroisopropyl) eth	2.64	45	59067	18.04	UG		95
17) 4-Methylphenol	2.67	108	69811	18.82	UG		99
18) N-Nitrosodi-n-propylamine	2.70	70	50569	17.31	UG	#	85
19) Acetophenone	2.70	105	102728	18.29	UG	#	1
20) 3-Methylphenol	2.67	108	69885	18.65	UG		98
21) Hexachloroethane	2.77	117	35515	20.56	UG		85
25) Nitrobenzene	2.78	77	69108	17.39	UG	#	85
26) Isophorone	2.88	82	130574m	12.70	UG		
27) 2-Nitrophenol	2.92	139	51106	18.58	UG	#	61
28) 2,4-Dimethylphenol	2.90	107	79428	18.82	UG		94
29) Bis(2-chloroethoxy) methan	2.95	93	76328	18.14	UG		98
30) Benzoic acid	2.92	122	36315	32.73	UG		96
31) 2,4-Dimethylaniline	3.00	121	106295	16.85	UG	#	100
32) 2,4-Dichlorophenol	3.02	162	78254	19.74	UG		97
33) 1,2,4-Trichlorobenzene	3.07	180	97799	18.36	UG		97
34) Naphthalene	3.11	128	275925	18.75	UG		96
35) 4-Chloroaniline	3.11	127	133966	18.65	UG		99
36) 4-Aminotoluene	2.72	106	154809	17.77	UG		99
37) Hexachlorobutadiene	3.17	225	58690	17.81	UG		97
38) Caprolactam	3.25	55	23168	17.32	UG	#	66
39) 2-Aminotoluene	2.72	106	154809	17.77	UG		99

E14-09161 0202

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0311.D
Acq On : 29 Sep 2014 15:10
Operator : EDM
Sample : ABN056-14,ICC020BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 29 15:59:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:19:12 2014
Response via : Initial Calibration

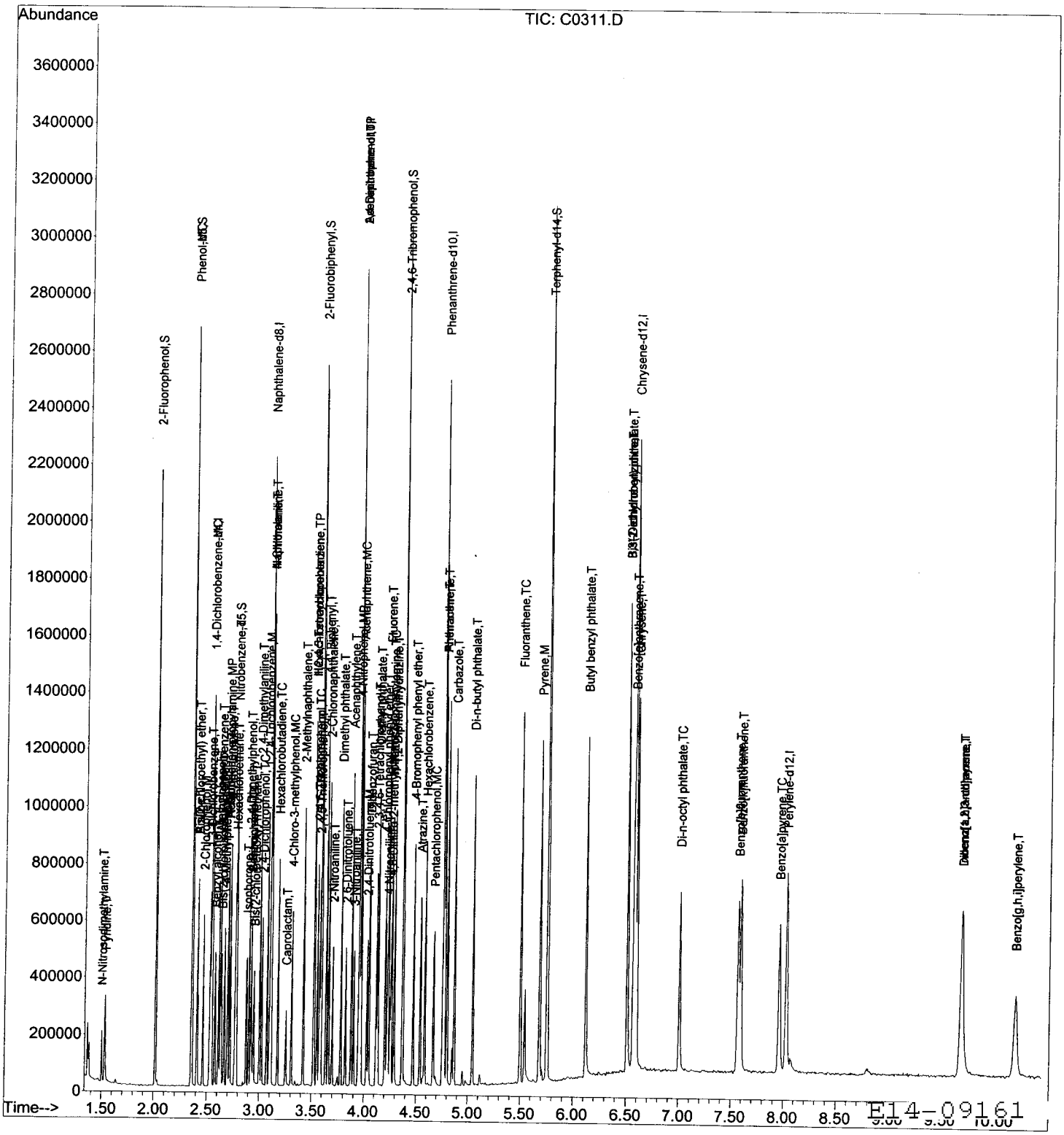
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.31	107	71252	18.40	UG	#	92
41) 2-Methylnaphthalene	3.42	142	178454	17.67	UG		99
44) Hexachlorocyclopentadiene	3.53	237	51929	21.14	UG		98
45) 2,4,6-Trichlorophenol	3.55	196	68192	18.78	UG		99
46) 2,4,5-Trichlorophenol	3.57	196	71051	18.14	UG		98
48) 1,1'-Biphenyl	3.64	154	241983	19.55	UG		100
49) 2-Chloronaphthalene	3.66	162	193733	18.62	UG		95
50) 2-Nitroaniline	3.70	65	35467	17.72	UG	#	75
51) Dimethyl phthalate	3.78	163	218201	18.87	UG	#	96
52) 2,6-Dinitrotoluene	3.82	165	53569	18.20	UG	#	81
53) Acenaphthylene	3.88	152	299453	19.96	UG		97
54) 3-Nitroaniline	3.90	138	49382	18.85	UG		89
55) Acenaphthene	3.97	153	193330	19.92	UG		94
56) 2,4-Dinitrophenol	3.95	184	21796	26.96	UG	#	1
57) 4-Nitrophenol	3.94	65	29888	18.33	UG	#	72
58) 2,4-Dinitrotoluene	4.03	165	72550	20.09	UG	#	71
59) Dibenzofuran	4.05	168	273056	18.35	UG	#	85
60) Diethyl phthalate	4.13	149	211404	19.72	UG		96
61) Fluorene	4.23	166	230425	18.64	UG		99
62) 4-Chlorophenyl phenyl ethe	4.20	204	121594	19.42	UG	#	86
63) 4-Nitroaniline	4.22	138	50343	17.94	UG	#	68
64) 1,2,4,5-Tetrachlorobenzene	3.52	216	124721	19.40	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.12	232	66196	18.48	UG		93
67) 4,6-Dinitro-2-methylphenol	4.25	198	43751	29.30	UG	#	60
68) N-Nitrosodiphenylamine	4.26	169	164168	18.28	UG		96
69) 1,2-Diphenylhydrazine	4.29	77	172961	20.16	UG	#	81
71) 4-Bromophenyl phenyl ether	4.47	248	81356	19.46	UG	#	86
72) Hexachlorobenzene	4.58	284	98452	18.23	UG	#	91
73) Atrazine	4.54	200	72123	18.86	UG		98
74) Pentachlorophenol	4.67	266	63308	17.59	UG		93
75) Phenanthrene	4.77	178	340684	19.04	UG		98
76) Anthracene	4.77	178	340684	19.02	UG		100
77) Carbazole	4.87	167	320772	19.54	UG		99
78) Di-n-butyl phthalate	5.04	149	353785	19.53	UG	#	97
79) Fluoranthene	5.50	202	400617	19.10	UG		99
83) Pyrene	5.68	202	409662	19.20	UG		97
86) Butyl benzyl phthalate	6.12	149	151499	20.14	UG	#	85
87) 3,3'-Dichlorobenzidine	6.51	252	147776	19.80	UG		97
88) Benzo[a]anthracene	6.57	228	396558	18.29	UG		100
89) Chrysene	6.60	228	377085	18.57	UG		96
90) Bis(2-ethylhexyl) phthalat	6.51	149	210831	18.63	UG	#	92
93) Di-n-octyl phthalate	7.01	149	324767	21.35	UG		99
94) Benzo[b]fluoranthene	7.57	252	355014	19.23	UG		98
95) Benzo[k]fluoranthene	7.60	252	339776	19.68	UG		97
96) Benzo[a]pyrene	7.96	252	308003	19.26	UG		99
97) Indeno[1,2,3-cd]pyrene	9.70	276	353857	20.04	UG	#	59
98) Dibenz[a,h]anthracene	9.70	278	298316	20.90	UG	#	68
99) Benzo[g,h,i]perylene	10.20	276	290452	19.59	UG	#	69

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0311.D
Acq On : 29 Sep 2014 15:10
Operator : EDM
Sample : ABN056-14,ICC020BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 29 15:59:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:19:12 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0312.D
Acq On : 29 Sep 2014 15:25
Operator : EDM
Sample : ABN057-14,ICC040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 29 15:59:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:22:50 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	123231	40.00	UG		0.00
23) Naphthalene-d8	3.10	136	462694	40.00	UG		0.00
43) Acenaphthene-d10	3.94	164	312357	40.00	UG		-0.02
66) Phenanthrene-d10	4.73	188	552097	40.00	UG		-0.03
82) Chrysene-d12	6.54	240	676478	40.00	UG		-0.03
92) Perylene-d12	8.00	264	382181	40.00	UG		-0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.01	112	343010	98.65	UG		0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 98.65%				
6) Phenol-d5	2.36	99	409471	96.73	UG		0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 96.73%				
24) Nitrobenzene-d5	2.78	82	183608	52.69	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 105.38%#				
47) 2-Fluorobiphenyl	3.58	172	568986	50.35	UG		-0.01
Spiked Amount 50.000	Range 33 - 91		Recovery = 100.70%#				
70) 2,4,6-Tribromophenol	4.35	330	264738	101.18	UG		-0.02
Spiked Amount 100.000	Range 37 - 115		Recovery = 101.18%				
84) Terphenyl-d14	5.70	244	884983	47.65	UG		-0.05
Spiked Amount 50.000	Range 15 - 122		Recovery = 95.30%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.50	74	62671	35.62	UG	#	40
3) Pyridine	1.53	52	94672m	66.55	UG		
7) Phenol	2.36	94	166515	40.13	UG	#	32
8) Aniline	2.41	66	62770	35.99	UG		87
9) Bis(2-chloroethyl) ether	2.41	63	71443	38.22	UG	#	75
10) 2-Chlorophenol	2.46	128	158640	38.55	UG	#	89
11) 1,3-Dichlorobenzene	2.53	146	189016	38.85	UG	#	94
12) 1,4-Dichlorobenzene	2.55	146	201938	41.11	UG	#	84
13) Benzyl alcohol	2.58	108	91634	37.81	UG	#	80
14) 1,2-Dichlorobenzene	2.63	146	176496	37.54	UG		95
15) 2-Methylphenol	2.61	108	127556	37.53	UG		88
16) Bis(2-chloroisopropyl) eth	2.64	45	108802	37.75	UG		94
17) 4-Methylphenol	2.67	108	123856	37.43	UG		94
18) N-Nitrosodi-n-propylamine	2.70	70	90901	35.80	UG	#	87
19) Acetophenone	2.70	105	196086	39.49	UG	#	1
20) 3-Methylphenol	2.67	108	124428	37.34	UG		94
21) Hexachloroethane	2.77	117	62377	39.32	UG	#	80
25) Nitrobenzene	2.78	77	127199	37.49	UG	#	85
26) Isophorone	2.87	82	235344m	37.31	UG		
27) 2-Nitrophenol	2.92	139	97344	40.61	UG	#	63
28) 2,4-Dimethylphenol	2.90	107	157363	42.60	UG		95
29) Bis(2-chloroethoxy) methan	2.94	93	136690	37.54	UG		99
30) Benzoic acid	2.93	122	63300m	52.72	UG		
31) 2,4-Dimethylaniline	3.00	121	179435	33.62	UG	#	100
32) 2,4-Dichlorophenol	3.02	162	141379	40.11	UG		97
33) 1,2,4-Trichlorobenzene	3.07	180	175431	37.92	UG		97
34) Naphthalene	3.10	128	486461	37.81	UG		98
35) 4-Chloroaniline	3.11	127	244211	38.95	UG		99
36) 4-Aminotoluene	2.72	106	262559	35.06	UG		100
37) Hexachlorobutadiene	3.17	225	103997	36.69	UG		97
38) Caprolactam	3.25	55	41266	36.17	UG	#	71
39) 2-Aminotoluene	2.72	106	262559	35.06	UG		100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0312.D
Acq On : 29 Sep 2014 15:25
Operator : EDM
Sample : ABN057-14,ICC040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 29 15:59:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:22:50 2014
Response via : Initial Calibration

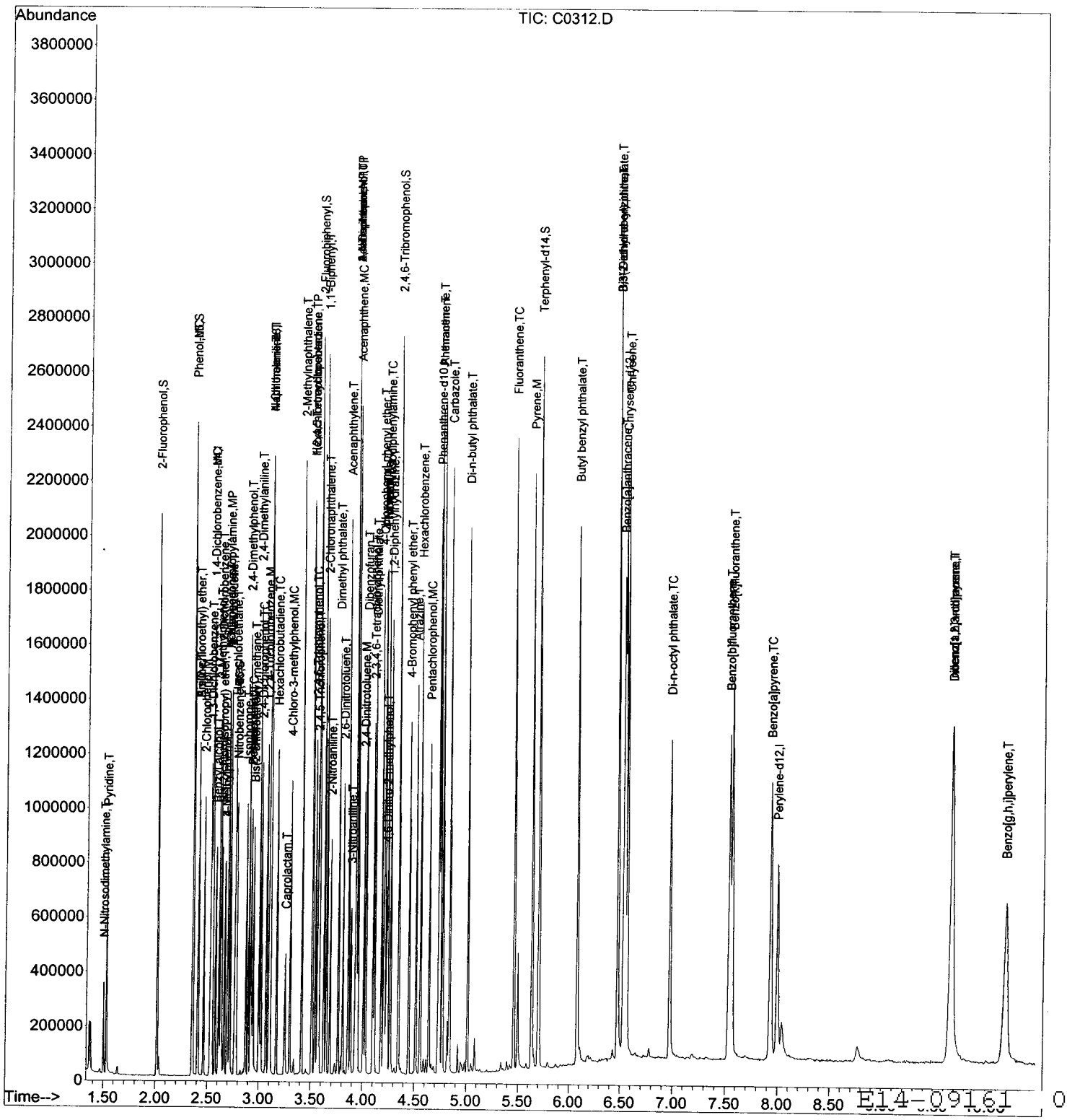
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.30	107	131451	39.07	UG		91
41) 2-Methylnaphthalene	3.41	142	329630	38.04	UG		99
44) Hexachlorocyclopentadiene	3.51	237	97367	43.61	UG		95
45) 2,4,6-Trichlorophenol	3.54	196	125536	39.57	UG		98
46) 2,4,5-Trichlorophenol	3.56	196	124310	36.72	UG		98
48) 1,1'-Biphenyl	3.63	154	440256	40.18	UG		97
49) 2-Chloronaphthalene	3.65	162	347786	38.36	UG		95
50) 2-Nitroaniline	3.69	65	62301	36.27	UG	#	71
51) Dimethyl phthalate	3.77	163	392817	38.81	UG	#	97
52) 2,6-Dinitrotoluene	3.81	165	97078	38.13	UG	#	83
53) Acenaphthylene	3.86	152	536773	40.15	UG		98
54) 3-Nitroaniline	3.89	138	89156	38.90	UG		91
55) Acenaphthene	3.95	153	341478	39.50	UG		95
56) 2,4-Dinitrophenol	3.94	184	45951	57.09	UG	#	1
57) 4-Nitrophenol	3.93	65	55255	39.09	UG	#	70
58) 2,4-Dinitrotoluene	4.01	165	129822	40.25	UG	#	73
59) Dibenzofuran	4.03	168	488664	37.86	UG	#	85
60) Diethyl phthalate	4.12	149	371904	39.08	UG		95
61) Fluorene	4.21	166	414134	38.42	UG		99
62) 4-Chlorophenyl phenyl ethe	4.18	204	219453	39.68	UG	#	87
63) 4-Nitroaniline	4.20	138	90131	37.29	UG	#	69
64) 1,2,4,5-Tetrachlorobenzene	3.51	216	210588	37.10	UG		99
65) 2,3,4,6-Tetrachlorophenol	4.10	232	118454	38.04	UG		92
67) 4,6-Dinitro-2-methylphenol	4.23	198	87000	57.61	UG	#	55
68) N-Nitrosodiphenylamine	4.24	169	296830	38.87	UG		96
69) 1,2-Diphenylhydrazine	4.27	77	305687	40.57	UG	#	79
71) 4-Bromophenyl phenyl ether	4.45	248	147168	40.56	UG	#	86
72) Hexachlorobenzene	4.56	284	177265	38.62	UG	#	91
73) Atrazine	4.51	200	119581	36.40	UG		96
74) Pentachlorophenol	4.64	266	118275	39.09	UG		92
75) Phenanthrene	4.74	178	608284	39.45	UG		98
76) Anthracene	4.74	178	608284	39.42	UG		99
77) Carbazole	4.84	167	574089	40.25	UG		99
78) Di-n-butyl phthalate	5.01	149	637499	40.51	UG	#	97
79) Fluoranthene	5.46	202	722058	39.92	UG		98
83) Pyrene	5.64	202	746104	38.14	UG		98
86) Butyl benzyl phthalate	6.08	149	274536	39.19	UG	#	83
87) 3,3'-Dichlorobenzidine	6.47	252	276927	40.06	UG	#	96
88) Benzo[a]anthracene	6.53	228	708377	36.19	UG		98
89) Chrysene	6.57	228	668640	36.31	UG		97
90) Bis(2-ethylhexyl) phthalat	6.47	149	384626	37.43	UG	#	91
93) Di-n-octyl phthalate	6.98	149	610402	39.34	UG		99
94) Benzo[b]fluoranthene	7.54	252	748273m	41.15	UG		
95) Benzo[k]fluoranthene	7.56	252	610942	35.66	UG		94
96) Benzo[a]pyrene	7.93	252	616349	39.12	UG		97
97) Indeno[1,2,3-cd]pyrene	9.68	276	785283	44.54	UG	#	61
98) Dibenz[a,h]anthracene	9.68	278	658119	45.53	UG	#	68
99) Benzo[g,h,i]perylene	10.18	276	634471	43.18	UG	#	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0312.D
Acq On : 29 Sep 2014 15:25
Operator : EDM
Sample : ABN057-14,ICC040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 29 15:59:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:22:50 2014
Response via : Initial Calibration



E14-09161 0207

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0313.D
Acq On : 29 Sep 2014 15:41
Operator : EDM
Sample : ABN058-14,ICC080BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 29 15:56:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:49:07 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	107802	40.00	UG		0.00
23) Naphthalene-d8	3.10	136	422114	40.00	UG		0.00
43) Acenaphthene-d10	3.94	164	291177	40.00	UG		0.00
66) Phenanthrene-d10	4.74	188	531154	40.00	UG		0.01
82) Chrysene-d12	6.56	240	588022	40.00	UG		0.02
92) Perylene-d12	8.01	264	337641	40.00	UG		0.02
System Monitoring Compounds							
4) 2-Fluorophenol	2.01	112	304980	100.60	UG		0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 100.60%#				
6) Phenol-d5	2.36	99	364751	99.31	UG		0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 99.31%				
24) Nitrobenzene-d5	2.78	82	174023	54.02	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 108.04%#				
47) 2-Fluorobiphenyl	3.58	172	533811	50.58	UG		0.00
Spiked Amount 50.000	Range 33 - 91		Recovery = 101.16%#				
70) 2,4,6-Tribromophenol	4.36	330	257083	101.83	UG		0.01
Spiked Amount 100.000	Range 37 - 115		Recovery = 101.83%				
84) Terphenyl-d14	5.73	244	845899	53.02	UG		0.02
Spiked Amount 50.000	Range 15 - 122		Recovery = 106.04%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.50	74	117496	78.48	UG	#	43
3) Pyridine	1.53	52	132804	91.52	UG	#	82
7) Phenol	2.36	94	269500	74.19	UG	#	29
8) Aniline	2.41	66	113866	76.55	UG		83
9) Bis(2-chloroethyl) ether	2.41	63	132669	82.05	UG	#	73
10) 2-Chlorophenol	2.46	128	289353	81.11	UG	#	88
11) 1,3-Dichlorobenzene	2.53	146	339859	80.43	UG	#	94
12) 1,4-Dichlorobenzene	2.55	146	349307	80.73	UG	#	81
13) Benzyl alcohol	2.58	108	173402	82.93	UG	#	82
14) 1,2-Dichlorobenzene	2.63	146	315222	77.85	UG		95
15) 2-Methylphenol	2.61	108	228272	77.99	UG		84
16) Bis(2-chloroisopropyl) eth	2.64	45	190071	76.46	UG	#	94
17) 4-Methylphenol	2.67	108	240743	84.53	UG		95
18) N-Nitrosodi-n-propylamine	2.70	70	170708	78.92	UG	#	85
19) Acetophenone	2.70	105	345009	79.68	UG	#	1
20) 3-Methylphenol	2.67	108	240456	83.88	UG		94
21) Hexachloroethane	2.77	117	108326	78.39	UG	#	77
25) Nitrobenzene	2.78	77	221098	72.56	UG	#	83
26) Isophorone	2.88	82	453899m	80.22	UG		
27) 2-Nitrophenol	2.92	139	171445	78.10	UG	#	73
28) 2,4-Dimethylphenol	2.91	107	288110	84.13	UG		96
29) Bis(2-chloroethoxy) methan	2.95	93	263685	80.62	UG	#	95
30) Benzoic acid	2.94	122	129574m	98.16	UG		
31) 2,4-Dimethylaniline	3.01	121	319803	68.40	UG	#	100
32) 2,4-Dichlorophenol	3.02	162	269889	83.88	UG		97
33) 1,2,4-Trichlorobenzene	3.07	180	323874	77.75	UG		97
34) Naphthalene	3.11	128	922616	79.70	UG		97
35) 4-Chloroaniline	3.11	127	460496	81.04	UG		97
36) 4-Aminotoluene	2.72	106	466567	70.47	UG		99
37) Hexachlorobutadiene	3.17	225	196178	77.47	UG		99
38) Caprolactam	3.26	55	75387	74.21	UG	#	64
39) 2-Aminotoluene	2.72	106	466567	70.47	UG		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0313.D
Acq On : 29 Sep 2014 15:41
Operator : EDM
Sample : ABN058-14,ICC080BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 29 15:56:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:49:07 2014
Response via : Initial Calibration

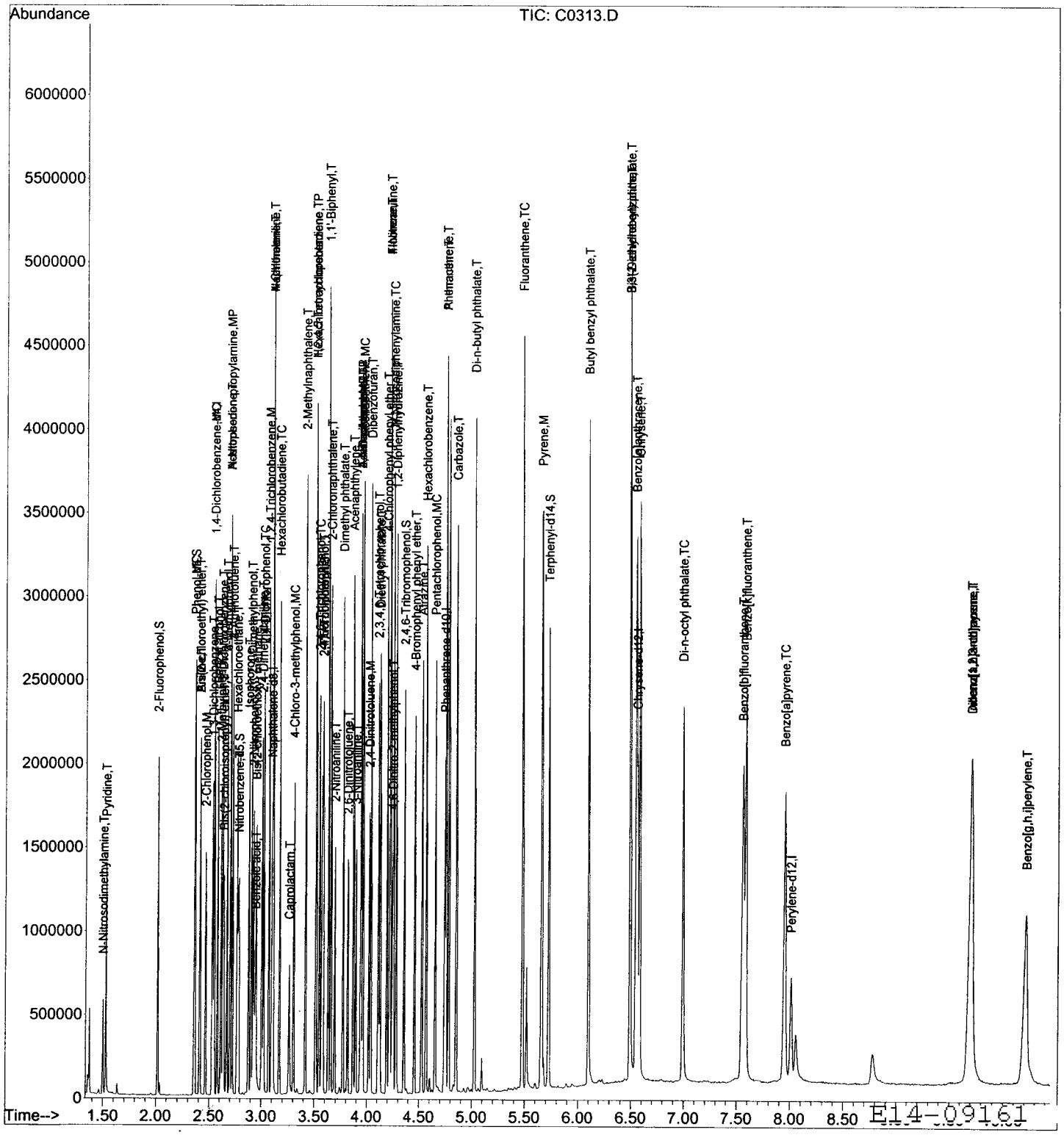
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.31	107	251319	82.35	UG		91
41) 2-Methylnaphthalene	3.42	142	622832	79.76	UG		99
44) Hexachlorocyclopentadiene	3.52	237	191644	90.04	UG		94
45) 2,4,6-Trichlorophenol	3.55	196	225662	76.51	UG		97
46) 2,4,5-Trichlorophenol	3.57	196	241501	78.13	UG		98
48) 1,1'-Biphenyl	3.63	154	837072	81.86	UG		99
49) 2-Chloronaphthalene	3.65	162	644592	77.06	UG		97
50) 2-Nitroaniline	3.69	65	118569	75.81	UG	#	70
51) Dimethyl phthalate	3.77	163	736864	78.68	UG		97
52) 2,6-Dinitrotoluene	3.82	165	194255	82.81	UG	#	80
53) Acenaphthylene	3.87	152	1022515	81.96	UG		98
54) 3-Nitroaniline	3.89	138	166458	78.45	UG		91
55) Acenaphthene	3.96	153	669120	83.29	UG		96
56) 2,4-Dinitrophenol	3.95	184	96159	115.80	UG	#	1
57) 4-Nitrophenol	3.94	65	104443	79.71	UG	#	68
58) 2,4-Dinitrotoluene	4.02	165	265418	88.14	UG	#	75
59) Dibenzofuran	4.04	168	909903	76.65	UG	#	85
60) Diethyl phthalate	4.12	149	725183	82.22	UG		95
61) Fluorene	4.22	166	790021	79.41	UG		98
62) 4-Chlorophenyl phenyl ethe	4.19	204	429336	83.44	UG	#	87
63) 4-Nitroaniline	4.22	138	182037	82.18	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.51	216	351497	67.65	UG		96
65) 2,3,4,6-Tetrachlorophenol	4.11	232	222109	77.47	UG		93
67) 4,6-Dinitro-2-methylphenol	4.24	198	173120	107.34	UG	#	57
68) N-Nitrosodiphenylamine	4.25	169	580319	79.54	UG		97
69) 1,2-Diphenylhydrazine	4.28	77	585650	80.51	UG	#	80
71) 4-Bromophenyl phenyl ether	4.46	248	292092m	83.39	UG		
72) Hexachlorobenzene	4.57	284	335279	76.59	UG	#	91
73) Atrazine	4.53	200	256498	83.02	UG		100
74) Pentachlorophenol	4.65	266	233116	80.55	UG		94
75) Phenanthrene	4.76	178	1224339	82.82	UG		98
76) Anthracene	4.76	178	1224339	82.77	UG		99
77) Carbazole	4.86	167	1147950	83.52	UG		99
78) Di-n-butyl phthalate	5.03	149	1270452	83.64	UG	#	97
79) Fluoranthene	5.48	202	1429362	82.17	UG		99
83) Pyrene	5.66	202	1470763	87.51	UG		98
86) Butyl benzyl phthalate	6.10	149	519198	85.70	UG	#	85
87) 3,3'-Dichlorobenzidine	6.49	252	449200	74.73	UG	#	98
88) Benzo[a]anthracene	6.55	228	1309504	78.83	UG		100
89) Chrysene	6.58	228	1197223	76.56	UG		97
90) Bis(2-ethylhexyl) phthalat	6.49	149	747118m	85.01	UG		
93) Di-n-octyl phthalate	6.99	149	1122149	82.20	UG		99
94) Benzo[b]fluoranthene	7.56	252	1309171	80.91	UG		97
95) Benzo[k]fluoranthene	7.59	252	1171121	79.53	UG		98
96) Benzo[a]pyrene	7.95	252	1095255	79.12	UG		98
97) Indeno[1,2,3-cd]pyrene	9.71	276	1409511	88.00	UG	#	59
98) Dibenz[a,h]anthracene	9.71	278	1201802	90.96	UG	#	68
99) Benzo[g,h,i]perylene	10.22	276	1177520	88.95	UG	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0313.D
Acq On : 29 Sep 2014 15:41
Operator : EDM
Sample : ABN058-14,ICC080BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 29 15:56:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 15:49:07 2014
Response via : Initial Calibration



E14-09161 0210

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0314.D
Acq On : 29 Sep 2014 15:57
Operator : EDM
Sample : ABN059-14,ICC120BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 29 16:15:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:02:01 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	118293	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	456665	40.00	UG	0.00
43) Acenaphthene-d10	3.93	164	316243	40.00	UG	-0.03
66) Phenanthrene-d10	4.72	188	574435	40.00	UG	-0.06
82) Chrysene-d12	6.53	240	542204	40.00	UG	-0.07
92) Perylene-d12	7.98	264	328812	40.00	UG	-0.07
System Monitoring Compounds						
4) 2-Fluorophenol	2.01	112	323085	97.01	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 97.01%			
6) Phenol-d5	2.36	99	397594	98.79	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 98.79%			
24) Nitrobenzene-d5	2.78	82	199804	56.42	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 112.84%#			
47) 2-Fluorobiphenyl	3.57	172	566373	49.30	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 98.60%#			
70) 2,4,6-Tribromophenol	4.34	330	272245	99.35	UG	-0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 99.35%			
84) Terphenyl-d14	5.67	244	814651m	54.71	UG	-0.12
Spiked Amount 50.000	Range 15 - 122		Recovery = 109.42%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.51	74	184227	115.12	UG	# 41
3) Pyridine	1.53	52	215046m	105.76	UG	
7) Phenol	2.37	94	478417	121.79	UG	# 27
8) Aniline	2.41	66	181831	112.36	UG	82
9) Bis(2-chloroethyl) ether	2.41	63	215523	120.85	UG	# 75
10) 2-Chlorophenol	2.47	128	475645	121.17	UG	# 88
11) 1,3-Dichlorobenzene	2.53	146	553523	119.25	UG	# 95
12) 1,4-Dichlorobenzene	2.55	146	549782	115.58	UG	# 83
13) Benzyl alcohol	2.58	108	259518	112.29	UG	# 82
14) 1,2-Dichlorobenzene	2.63	146	508004	114.95	UG	94
15) 2-Methylphenol	2.62	108	372747	116.64	UG	83
16) Bis(2-chloroisopropyl) eth	2.64	45	307709	113.82	UG	97
17) 4-Methylphenol	2.68	108	400271	126.65	UG	99
18) N-Nitrosodi-n-propylamine	2.70	70	256664	115.38	UG	# 86
19) Acetophenone	2.71	105	579225	122.01	UG	# 1
20) 3-Methylphenol	2.68	108	400227	126.01	UG	99
21) Hexachloroethane	2.77	117	170320	112.78	UG	# 79
25) Nitrobenzene	2.79	77	370092	114.40	UG	# 81
26) Isophorone	2.88	82	714658m	116.27	UG	
27) 2-Nitrophenol	2.92	139	268707	113.68	UG	# 72
28) 2,4-Dimethylphenol	2.91	107	472689	126.28	UG	96
29) Bis(2-chloroethoxy) methan	2.95	93	431858	121.86	UG	# 96
30) Benzoic acid	2.94	122	217530m	143.48	UG	
31) 2,4-Dimethylaniline	3.01	121	501711	102.16	UG	# 100
32) 2,4-Dichlorophenol	3.02	162	432178	122.96	UG	97
33) 1,2,4-Trichlorobenzene	3.07	180	518273	115.66	UG	96
34) Naphthalene	3.11	128	1449772	115.84	UG	98
35) 4-Chloroaniline	3.11	127	730348	118.49	UG	97
36) 4-Aminotoluene	2.72	106	708425	101.32	UG	100
37) Hexachlorobutadiene	3.17	225	299752	110.11	UG	98
38) Caprolactam	3.27	55	117573m	108.55	UG	
39) 2-Aminotoluene	2.72	106	708425	101.32		

E14-09161_0211

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0314.D
Acq On : 29 Sep 2014 15:57
Operator : EDM
Sample : ABN059-14,ICC120BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 29 16:15:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:02:01 2014
Response via : Initial Calibration

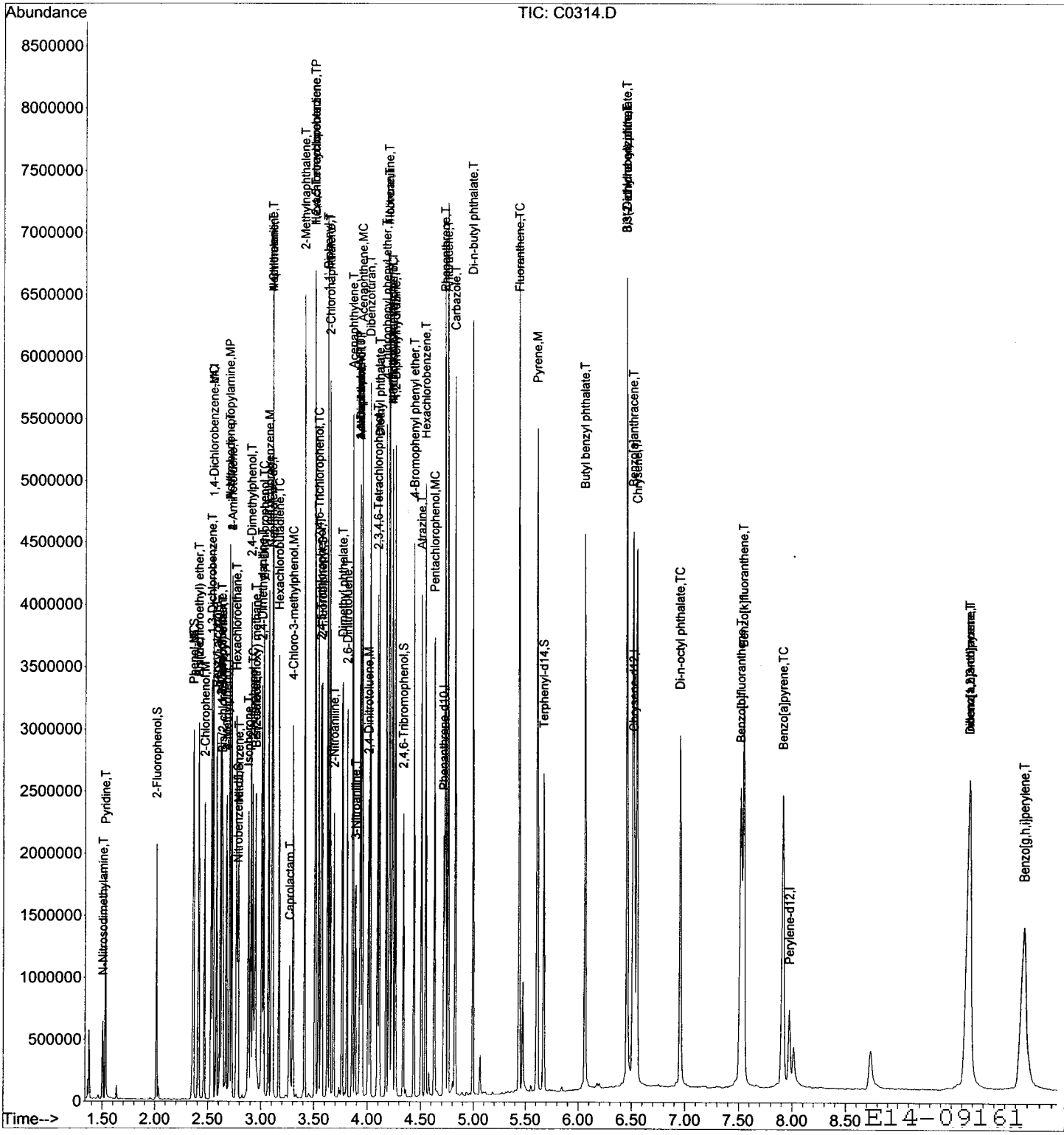
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.30	107	388335	116.93	UG		89
41) 2-Methylnaphthalene	3.41	142	978309	115.87	UG		100
44) Hexachlorocyclopentadiene	3.51	237	296694	125.21	UG		95
45) 2,4,6-Trichlorophenol	3.54	196	375503	118.25	UG		99
46) 2,4,5-Trichlorophenol	3.56	196	372657	111.53	UG		98
48) 1,1'-Biphenyl	3.63	154	1366385	122.47	UG		100
49) 2-Chloronaphthalene	3.65	162	1020895	113.20	UG		96
50) 2-Nitroaniline	3.69	65	195208	116.14	UG	#	72
51) Dimethyl phthalate	3.77	163	1226463	120.98	UG		98
52) 2,6-Dinitrotoluene	3.81	165	296431	115.54	UG	#	83
53) Acenaphthylene	3.86	152	1699468	124.82	UG		98
54) 3-Nitroaniline	3.89	138	286566	124.84	UG		88
55) Acenaphthene	3.95	153	1083460	123.16	UG		96
56) 2,4-Dinitrophenol	3.94	184	157222	146.77	UG	#	1
57) 4-Nitrophenol	3.93	65	173376	121.92	UG	#	70
58) 2,4-Dinitrotoluene	4.01	165	425628	127.54	UG	#	85
59) Dibenzofuran	4.03	168	1510123	118.12	UG	#	85
60) Diethyl phthalate	4.11	149	1174561	121.94	UG		95
61) Fluorene	4.21	166	1291806	119.74	UG		99
62) 4-Chlorophenyl phenyl ethe	4.18	204	663767	117.76	UG	#	88
63) 4-Nitroaniline	4.20	138	294818	121.88	UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.51	216	565451	103.40	UG		98
65) 2,3,4,6-Tetrachlorophenol	4.10	232	375370	121.31	UG		95
67) 4,6-Dinitro-2-methylphenol	4.23	198	288694	138.22	UG	#	52
68) N-Nitrosodiphenylamine	4.24	169	917943	116.47	UG		97
69) 1,2-Diphenylhydrazine	4.26	77	941407	119.51	UG	#	81
71) 4-Bromophenyl phenyl ether	4.44	248	447345m	117.09	UG		
72) Hexachlorobenzene	4.55	284	525153	111.88	UG	#	90
73) Atrazine	4.51	200	369987	109.90	UG		96
74) Pentachlorophenol	4.63	266	367453	125.60	UG		92
75) Phenanthrene	4.73	178	1848858	114.83	UG		98
76) Anthracene	4.76	178	1856351	115.25	UG		98
77) Carbazole	4.83	167	1783987	118.97	UG		98
78) Di-n-butyl phthalate	4.99	149	1946801	117.45	UG	#	97
79) Fluoranthene	5.44	202	2146910	113.51	UG		99
83) Pyrene	5.61	202	2141666	135.65	UG		98
86) Butyl benzyl phthalate	6.06	149	751129	132.57	UG	#	84
87) 3,3'-Dichlorobenzidine	6.46	252	533849	97.60	UG		98
88) Benzo[a]anthracene	6.52	228	1827576	119.67	UG		100
89) Chrysene	6.55	228	1630991	114.09	UG		96
90) Bis(2-ethylhexyl) phthalat	6.46	149	1060101m	129.20	UG		
93) Di-n-octyl phthalate	6.96	149	1559257	116.65	UG		99
94) Benzo[b]fluoranthene	7.52	252	1950537m	123.50	UG		
95) Benzo[k]fluoranthene	7.55	252	1456293	101.67	UG		98
96) Benzo[a]pyrene	7.92	252	1578671	117.36	UG		97
97) Indeno[1,2,3-cd]pyrene	9.68	276	2049731	128.83	UG	#	61
98) Dibenz[a,h]anthracene	9.67	278	1684142	127.40	UG	#	68
99) Benzo[g,h,i]perylene	10.18	276	1716733m	130.25	UG		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0314.D
Acq On : 29 Sep 2014 15:57
Operator : EDM
Sample : ABN059-14,ICC120BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 29 16:15:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:02:01 2014
Response via : Initial Calibration



E14-09161 0213

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0315.D
Acq On : 29 Sep 2014 16:13
Operator : EDM
Sample : ABN066-14,ICV040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 29 16:36:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:34:18 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	125800	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	489340	40.00	UG	0.00
43) Acenaphthene-d10	3.93	164	341846	40.00	UG	0.00
66) Phenanthrene-d10	4.71	188	609724	40.00	UG	-0.01
82) Chrysene-d12	6.51	240	633761	40.00	UG	-0.02
92) Perylene-d12	7.96	264	329944	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	2.01	112	346405	98.29	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 98.29%			
6) Phenol-d5	2.36	99	421651	98.71	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 98.71%			
24) Nitrobenzene-d5	2.77	82	187358	48.34	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 96.68%#			
47) 2-Fluorobiphenyl	3.57	172	579285	46.76	UG	0.00
Spiked Amount 50.000	Range 33 - 91		Recovery = 93.52%#			
70) 2,4,6-Tribromophenol	4.33	330	299614	103.12	UG	-0.01
Spiked Amount 100.000	Range 37 - 115		Recovery = 103.12%			
84) Terphenyl-d14	5.65	244	923625	52.25	UG	-0.02
Spiked Amount 50.000	Range 15 - 122		Recovery = 104.50%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.50	74	67644	40.02	UG	# 39
3) Pyridine	1.53	52	69978m	33.01	UG	
7) Phenol	2.36	94	171962	41.06	UG	# 32
8) Aniline	2.41	66	62463	36.69	UG	83
9) Bis(2-chloroethyl) ether	2.41	63	73791	38.86	UG	# 75
10) 2-Chlorophenol	2.46	128	161698	38.67	UG	# 89
11) 1,3-Dichlorobenzene	2.53	146	194804	39.51	UG	# 97
12) 1,4-Dichlorobenzene	2.55	146	206567	41.09	UG	# 82
13) Benzyl alcohol	2.58	108	97807	40.22	UG	# 80
14) 1,2-Dichlorobenzene	2.63	146	184435	39.52	UG	94
15) 2-Methylphenol	2.61	108	132508	39.17	UG	84
16) Bis(2-chloroisopropyl) eth	2.64	45	113950	39.98	UG	# 95
17) 4-Methylphenol	2.67	108	137665	40.58	UG	98
18) N-Nitrosodi-n-propylamine	2.70	70	96597	41.10	UG	# 88
19) Acetophenone	2.70	105	209716	41.42	UG	# 1
20) 3-Methylphenol	2.67	108	137647	40.41	UG	97
21) Hexachloroethane	2.77	117	60876	38.29	UG	# 75
25) Nitrobenzene	2.78	77	135561	39.41	UG	# 84
26) Isophorone	2.87	82	262267m	40.03	UG	
27) 2-Nitrophenol	2.92	139	98622	39.28	UG	# 62
28) 2,4-Dimethylphenol	2.90	107	165903	41.00	UG	97
29) Bis(2-chloroethoxy) methan	2.94	93	155715	40.90	UG	# 96
30) Benzoic acid	2.93	122	72624m	43.29	UG	
31) 2,4-Dimethylaniline	3.00	121	173551	33.82	UG	# 100
32) 2,4-Dichlorophenol	3.02	162	157127	41.55	UG	96
33) 1,2,4-Trichlorobenzene	3.07	180	183048	38.35	UG	97
34) Naphthalene	3.10	128	531320	39.85	UG	96
35) 4-Chloroaniline	3.10	127	258938	39.29	UG	100
36) 4-Aminotoluene	2.72	106	249906	34.24	UG	100
37) Hexachlorobutadiene	3.17	225	112668	39.16	UG	96
38) Caprolactam	3.25	55	45230m	39.60	UG	
39) 2-Aminotoluene	2.72	106	249906	34.24	UG	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0315.D
Acq On : 29 Sep 2014 16:13
Operator : EDM
Sample : ABN066-14,ICV040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 29 16:36:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:34:18 2014
Response via : Initial Calibration

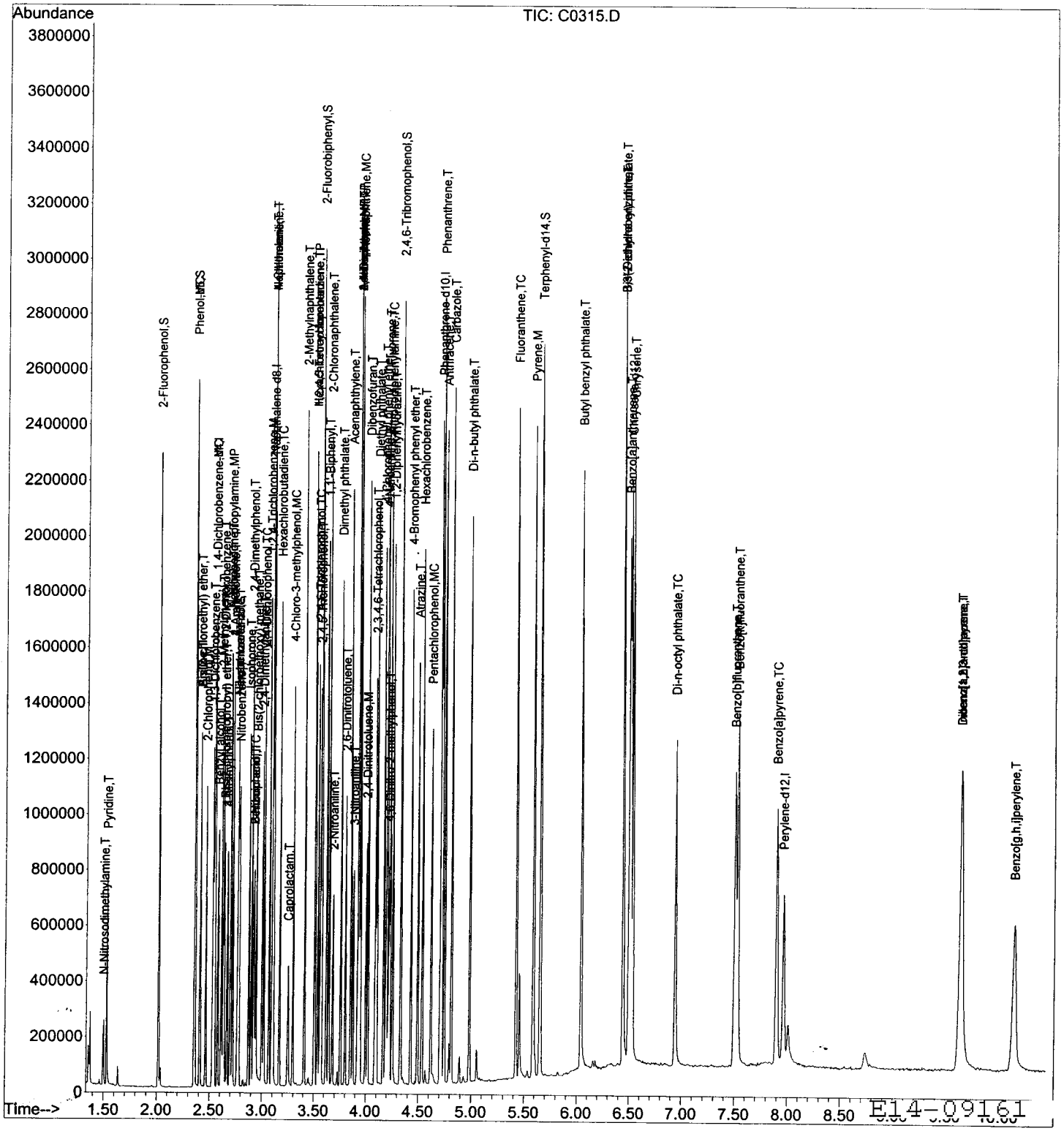
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
40) 4-Chloro-3-methylphenol	3.30	107	144730	40.84 UG		93
41) 2-Methylnaphthalene	3.41	142	352290	39.16 UG		99
44) Hexachlorocyclopentadiene	3.51	237	100111	38.80 UG	#	95
45) 2,4,6-Trichlorophenol	3.54	196	131222	38.32 UG		99
46) 2,4,5-Trichlorophenol	3.56	196	138610	38.83 UG		98
48) 1,1'-Biphenyl	3.62	154	471265	38.94 UG		98
49) 2-Chloronaphthalene	3.64	162	380288	39.38 UG		96
50) 2-Nitroaniline	3.67	65	71836	39.75 UG	#	73
51) Dimethyl phthalate	3.76	163	429279	39.12 UG	#	96
52) 2,6-Dinitrotoluene	3.80	165	108709	39.44 UG	#	81
53) Acenaphthylene	3.85	152	592133	39.96 UG		98
54) 3-Nitroaniline	3.88	138	103765	41.54 UG		88
55) Acenaphthene	3.94	153	381248	39.92 UG		97
56) 2,4-Dinitrophenol	3.93	184	47187	39.29 UG	#	1
57) 4-Nitrophenol	3.92	65	62153	40.33 UG	#	70
58) 2,4-Dinitrotoluene	4.00	165	150470	41.28 UG	#	72
59) Dibenzofuran	4.02	168	530255	38.47 UG	#	86
60) Diethyl phthalate	4.10	149	426477	40.85 UG		96
61) Fluorene	4.20	166	468430	40.18 UG		99
62) 4-Chlorophenyl phenyl ethe	4.17	204	245506	40.42 UG	#	87
63) 4-Nitroaniline	4.19	138	103431	39.45 UG	#	70
64) 1,2,4,5-Tetrachlorobenzene	3.50	216	205290	35.55 UG		97
65) 2,3,4,6-Tetrachlorophenol	4.09	232	131733	39.31 UG		92
67) 4,6-Dinitro-2-methylphenol	4.21	198	97494	42.89 UG	#	58
68) N-Nitrosodiphenylamine	4.23	169	336271	40.40 UG		96
69) 1,2-Diphenylhydrazine	4.25	77	344228	41.20 UG	#	80
71) 4-Bromophenyl phenyl ether	4.43	248	164661m	40.77 UG		
72) Hexachlorobenzene	4.54	284	198056	40.21 UG	#	90
73) Atrazine	4.49	200	135755	38.53 UG		97
74) Pentachlorophenol	4.62	266	132677	42.40 UG		94
75) Phenanthrene	4.72	178	693815	40.89 UG		99
76) Anthracene	4.75	178	702406	41.36 UG		99
77) Carbazole	4.81	167	640424	40.30 UG		98
78) Di-n-butyl phthalate	4.98	149	720010	41.07 UG	#	97
79) Fluoranthene	5.42	202	798233	40.12 UG		99
83) Pyrene	5.59	202	811370	43.03 UG		97
86) Butyl benzyl phthalate	6.04	149	295427	43.84 UG	#	85
87) 3,3'-Dichlorobenzidine	6.44	252	263031	42.46 UG		98
88) Benzo[a]anthracene	6.50	228	713250	39.97 UG		99
89) Chrysene	6.53	228	659843	39.82 UG		97
90) Bis(2-ethylhexyl) phthalat	6.44	149	411133	42.33 UG	#	92
93) Di-n-octyl phthalate	6.94	149	598705	44.84 UG		100
94) Benzo[b]fluoranthene	7.51	252	672037m	42.20 UG		
95) Benzo[k]fluoranthene	7.53	252	540682m	38.60 UG		
96) Benzo[a]pyrene	7.90	252	553811	41.18 UG		98
97) Indeno[1,2,3-cd]pyrene	9.65	276	675744	41.81 UG	#	59
98) Dibenz[a,h]anthracene	9.65	278	576543	43.02 UG	#	69
99) Benzo[g,h,i]perylene	10.15	276	573622	42.76 UG	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0315.D
Acq On : 29 Sep 2014 16:13
Operator : EDM
Sample : ABN066-14,ICV040BNA1
Misc : NA,09/29/14,NA,1
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 29 16:36:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:34:18 2014
Response via : Initial Calibration



E14-09161 0216

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0316.D
Acq On : 29 Sep 2014 16:29
Operator : EDM
Sample : ABN065-14,ICC120BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 29 16:48:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:47:33 2014
Response via : Initial Calibration

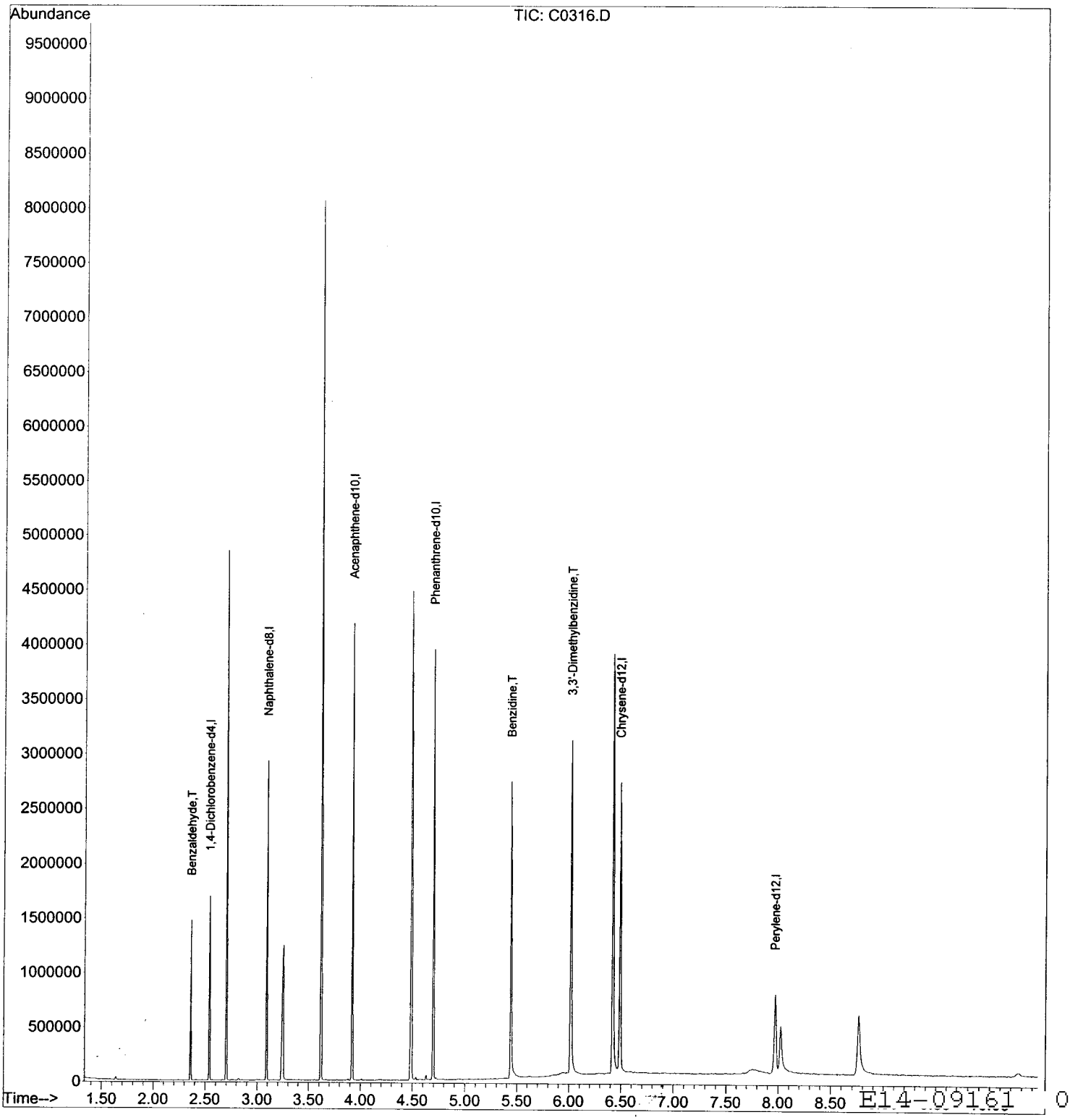
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	192112	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	758115	40.00	UG	0.00
43) Acenaphthene-d10	3.92	164	515255	40.00	UG	-0.01
66) Phenanthrene-d10	4.70	188	968475	40.00	UG	-0.02
82) Chrysene-d12	6.49	240	891925	40.00	UG	-0.04
92) Perylene-d12	7.97	264	401370	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	120	0.02	UG	0.01
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.02%#		
6) Phenol-d5	2.35	99	119	0.02	UG	-0.01
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.02%#		
24) Nitrobenzene-d5	2.77	82	350	0.06	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.32	330	334	0.07	UG	-0.02
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.07%#		
84) Terphenyl-d14	5.62	244	1108	0.04	UG	-0.05
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.08%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	145931	443.34	UG	92
80) Benzidine	5.44	184	935513	427.06	UG	99
85) 3,3'-Dimethylbenzidine	6.02	212	1145165	437.19	UG #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0316.D
Acq On : 29 Sep 2014 16:29
Operator : EDM
Sample : ABN065-14,ICC120BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 29 16:48:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:47:33 2014
Response via : Initial Calibration



E14-09161 0218

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0317.D
Acq On : 29 Sep 2014 16:45
Operator : EDM
Sample : ABN064-14,ICC080BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 29 16:58:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:47:33 2014
Response via : Initial Calibration

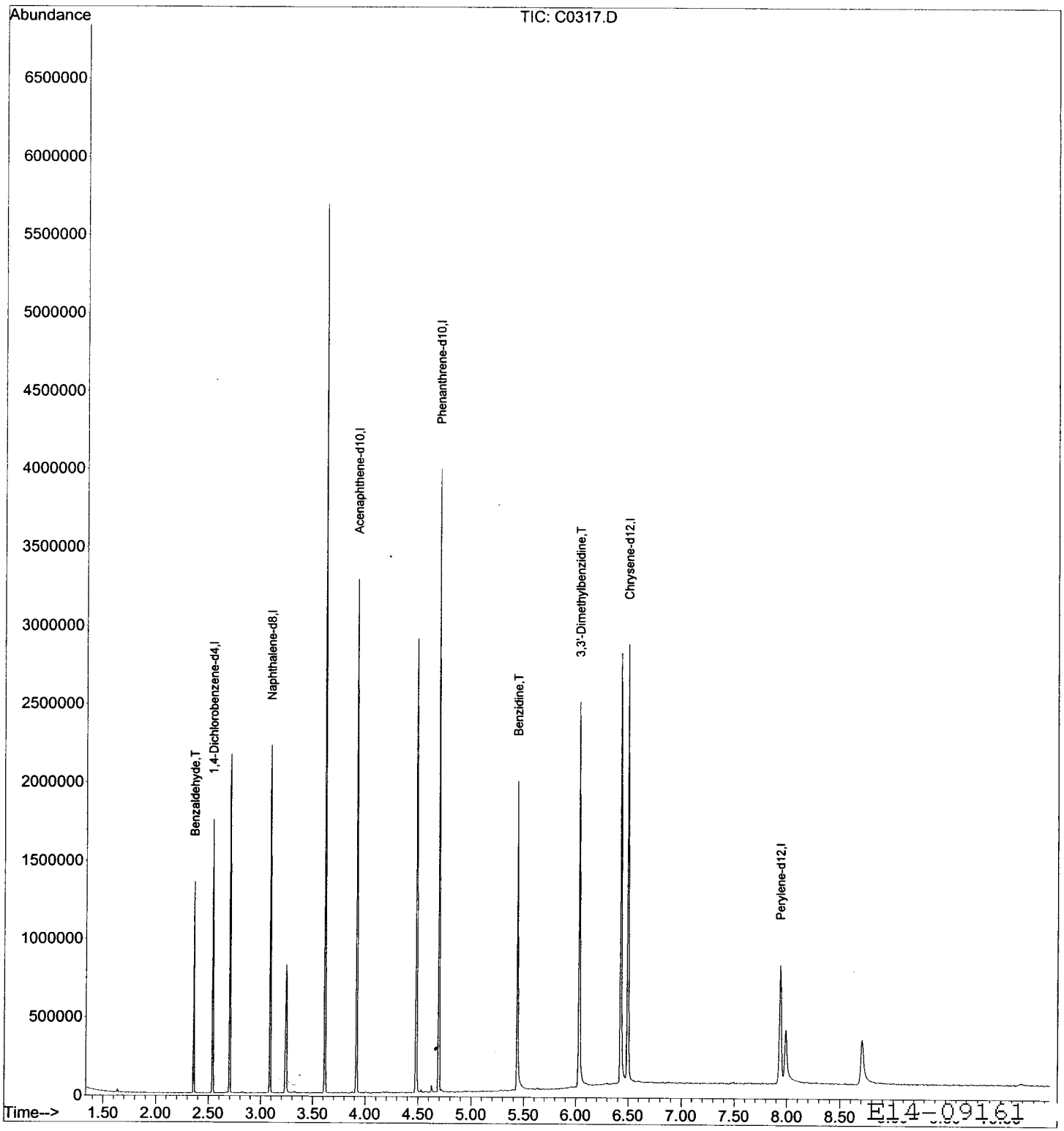
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	189279	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	732029	40.00	UG	0.00
43) Acenaphthene-d10	3.92	164	508640	40.00	UG	-0.01
66) Phenanthrene-d10	4.70	188	904827	40.00	UG	-0.02
82) Chrysene-d12	6.50	240	884739	40.00	UG	-0.03
92) Perylene-d12	7.94	264	410826	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.01	112	147	0.03	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.03%#		
6) Phenol-d5	2.37	99	160	0.02	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.02%#		
24) Nitrobenzene-d5	2.77	82	420	0.07	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.14%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.32	330	234	0.05	UG	-0.02
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.05%#		
84) Terphenyl-d14	5.62	244	1316	0.05	UG	-0.05
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.10%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	138745	427.82	UG	96
80) Benzidine	5.44	184	601219	293.76	UG	99
85) 3,3'-Dimethylbenzidine	6.03	212	803309m	309.17	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0317.D
Acq On : 29 Sep 2014 16:45
Operator : EDM
Sample : ABN064-14,ICC080BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 29 16:58:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:47:33 2014
Response via : Initial Calibration



E14-09161 0220

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0318.D
Acq On : 29 Sep 2014 17:14
Operator : EDM
Sample : ABN063-14,ICC040BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 29 17:25:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:59:37 2014
Response via : Initial Calibration

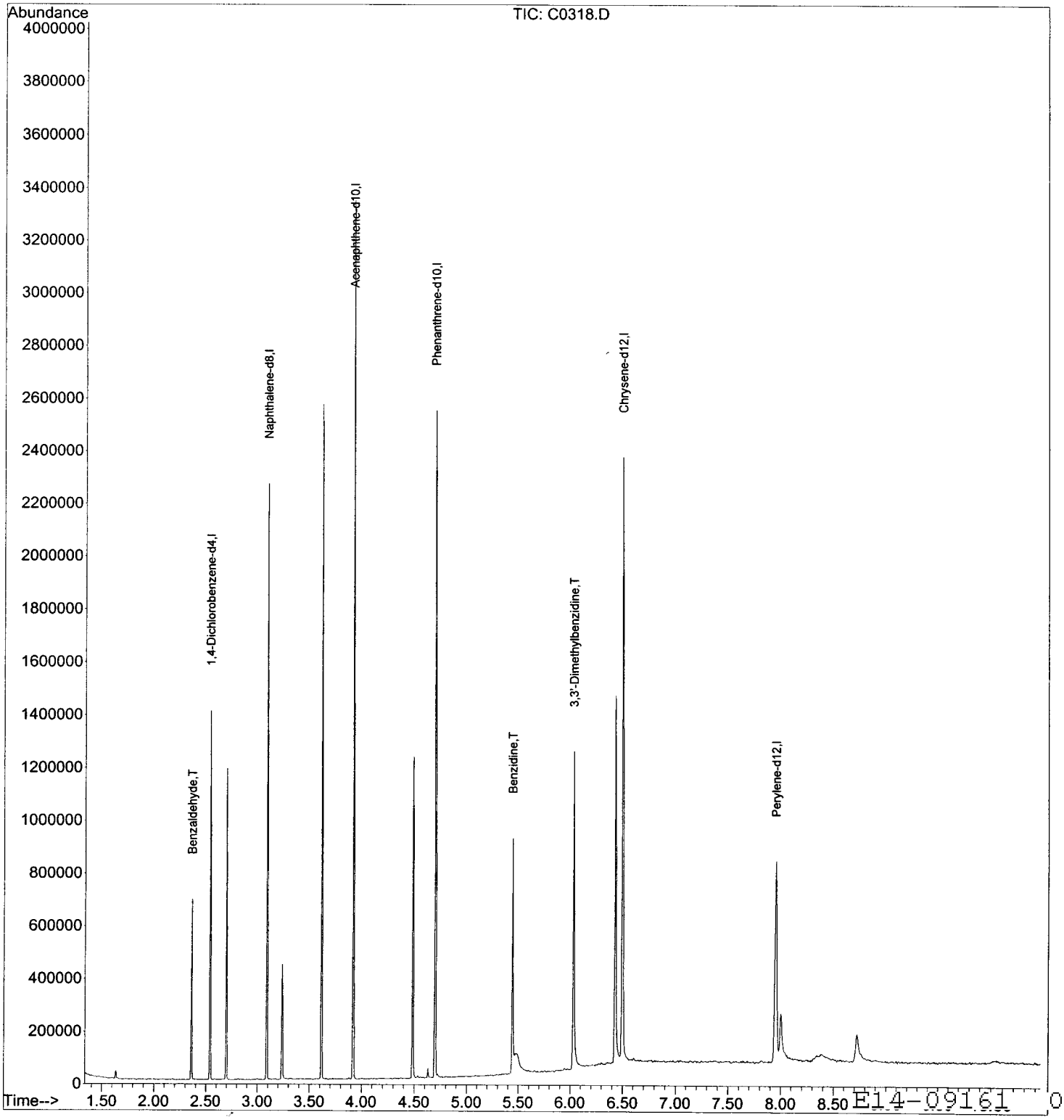
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	159277	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	620369	40.00	UG	0.00
43) Acenaphthene-d10	3.92	164	414702	40.00	UG	-0.01
66) Phenanthrene-d10	4.70	188	744423	40.00	UG	-0.02
82) Chrysene-d12	6.50	240	767681	40.00	UG	-0.03
92) Perylene-d12	7.95	264	417765	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	158	0.04	UG	0.01
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.04%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.00%#		
24) Nitrobenzene-d5	2.81	82	587	0.12	UG	0.04
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.24%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.00%#		
84) Terphenyl-d14	5.64	244	525	0.02	UG	-0.04
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.04%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	71807	102.58	UG	99
80) Benzidine	5.44	184	279429	81.25	UG	99
85) 3,3'-Dimethylbenzidine	6.03	212	410967	92.57	UG	# 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0318.D
Acq On : 29 Sep 2014 17:14
Operator : EDM
Sample : ABN063-14,ICC040BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 29 17:25:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 16:59:37 2014
Response via : Initial Calibration



E14-09161 0222

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0319.D
Acq On : 29 Sep 2014 17:30
Operator : EDM
Sample : ABN062-14,ICC020BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 30 09:01:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

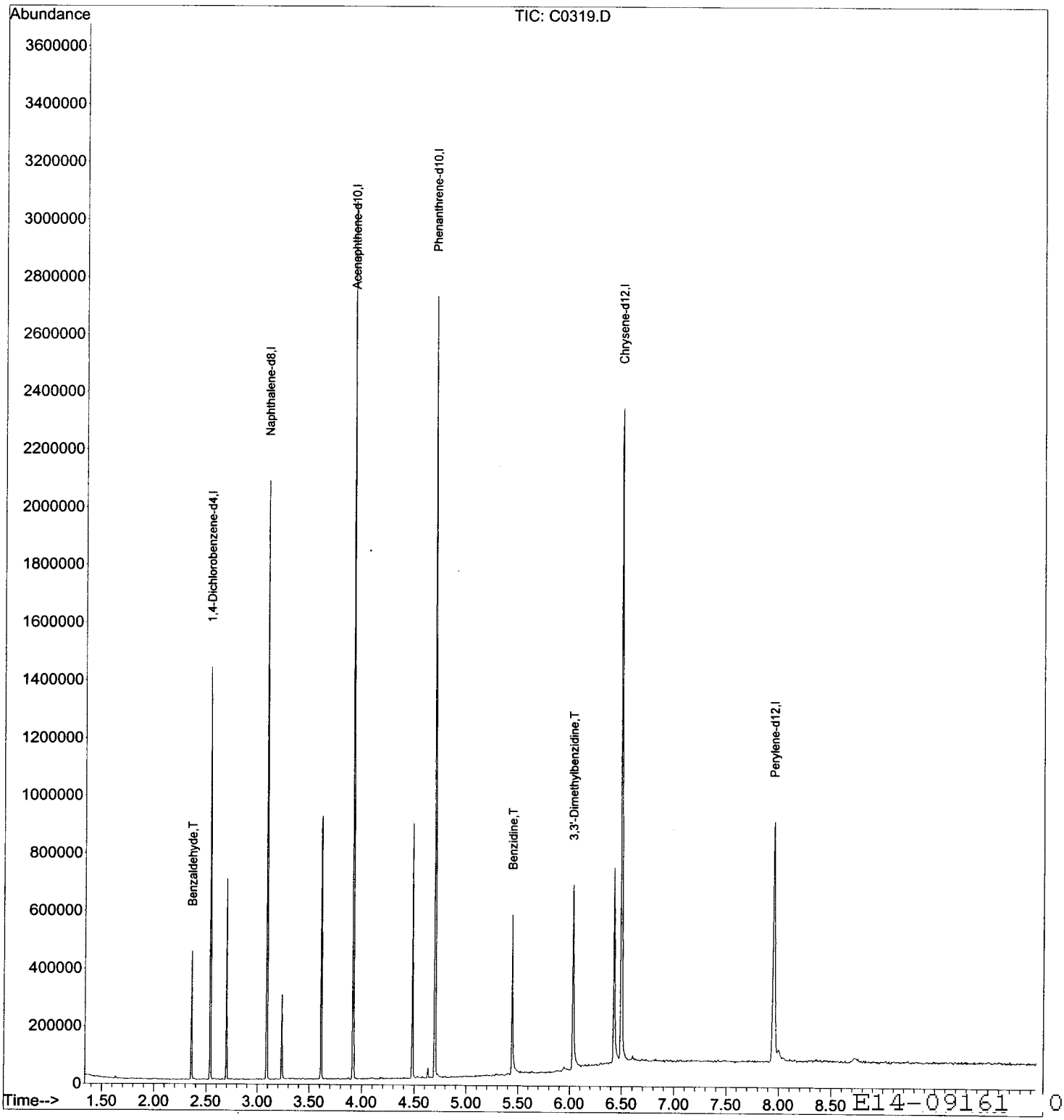
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	156310	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	623987	40.00	UG	0.00
43) Acenaphthene-d10	3.92	164	418319	40.00	UG	-0.01
66) Phenanthrene-d10	4.70	188	756173	40.00	UG	-0.02
82) Chrysene-d12	6.50	240	794256	40.00	UG	-0.03
92) Perylene-d12	7.95	264	447457	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.89	112	188	0.04	UG	-0.13
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.04%#		
6) Phenol-d5	2.35	99	165	0.03	UG	-0.01
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.77	82	291	0.06	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.00%#		
70) 2,4,6-Tribromophenol	4.32	330	287	0.08	UG	-0.02
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.08%#		
84) Terphenyl-d14	5.64	244	823	0.04	UG	-0.04
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.08%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	36017m	33.77	UG	
80) Benzidine	5.44	184	179249	35.23	UG	99
85) 3,3'-Dimethylbenzidine	6.03	212	232781	35.25	UG	# 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0319.D
Acq On : 29 Sep 2014 17:30
Operator : EDM
Sample : ABN062-14,ICC020BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Sep 30 09:01:35 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0224

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0320.D
Acq On : 29 Sep 2014 17:46
Operator : EDM
Sample : ABN061-14,ICC010BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 30 09:01:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

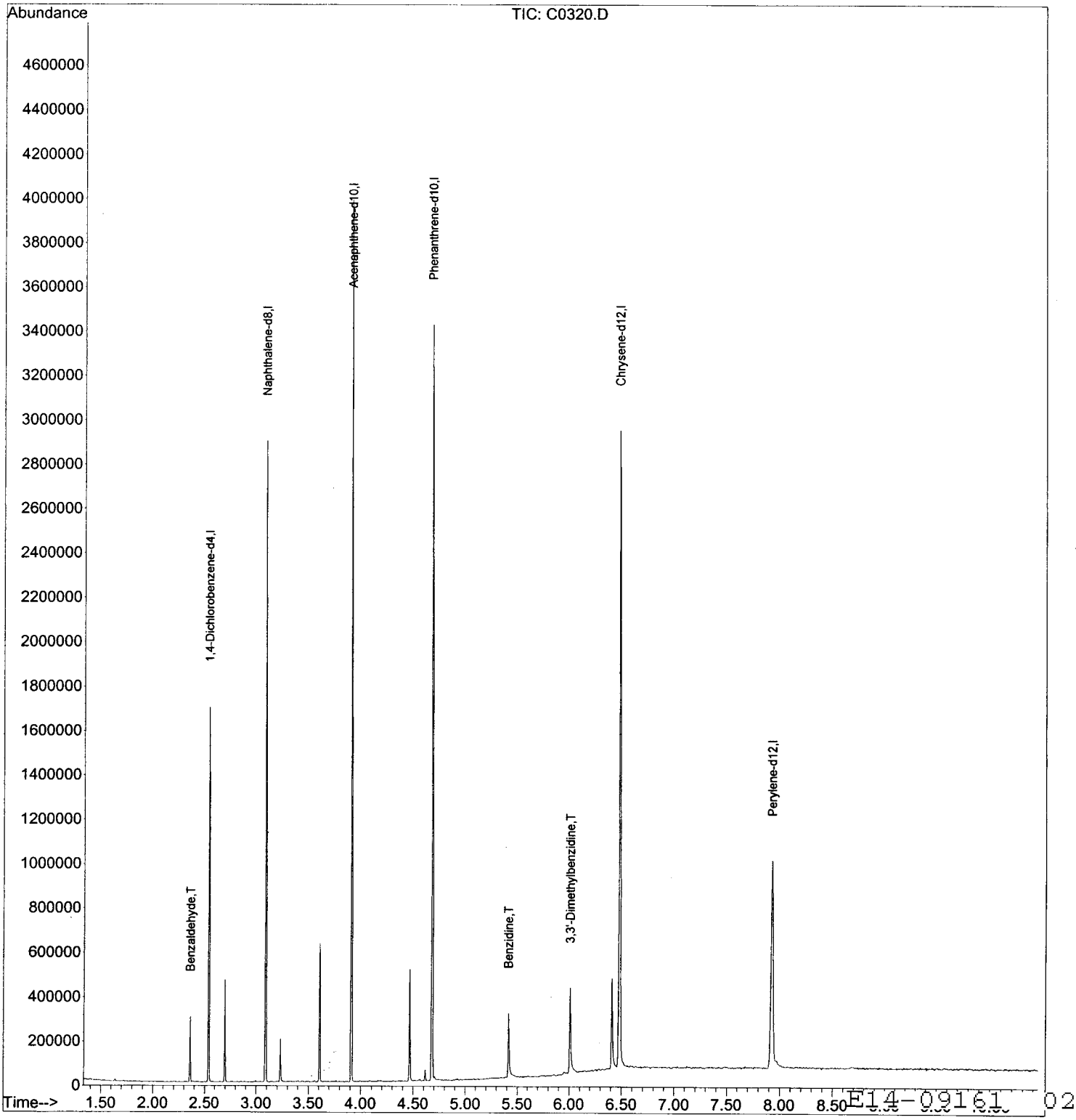
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	207682	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	784089	40.00	UG	-0.01
43) Acenaphthene-d10	3.91	164	527524	40.00	UG	-0.02
66) Phenanthrene-d10	4.68	188	975201	40.00	UG	-0.04
82) Chrysene-d12	6.48	240	1011286	40.00	UG	-0.05
92) Perylene-d12	7.93	264	514722	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	208	0.04	UG	0.01
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.04%#		
6) Phenol-d5	2.35	99	212	0.03	UG	-0.01
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.03%#		
24) Nitrobenzene-d5	2.78	82	398	0.06	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.12%#		
47) 2-Fluorobiphenyl	3.56	172	467	0.02	UG	-0.02
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.04%#		
70) 2,4,6-Tribromophenol	4.31	330	131	0.03	UG	-0.04
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.03%#		
84) Terphenyl-d14	5.60	244	1005	0.04	UG	-0.07
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.08%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	15917m	11.23	UG	
80) Benzidine	5.42	184	106173	16.18	UG	97
85) 3,3'-Dimethylbenzidine	6.01	212	143975	17.12	UG	# 100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0320.D
Acq On : 29 Sep 2014 17:46
Operator : EDM
Sample : ABN061-14,ICC010BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Sep 30 09:01:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0226

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0321.D
Acq On : 29 Sep 2014 18:02
Operator : EDM
Sample : ABN060-14,ICC001BNA2
Misc : NA,09/17/14,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 30 09:00:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

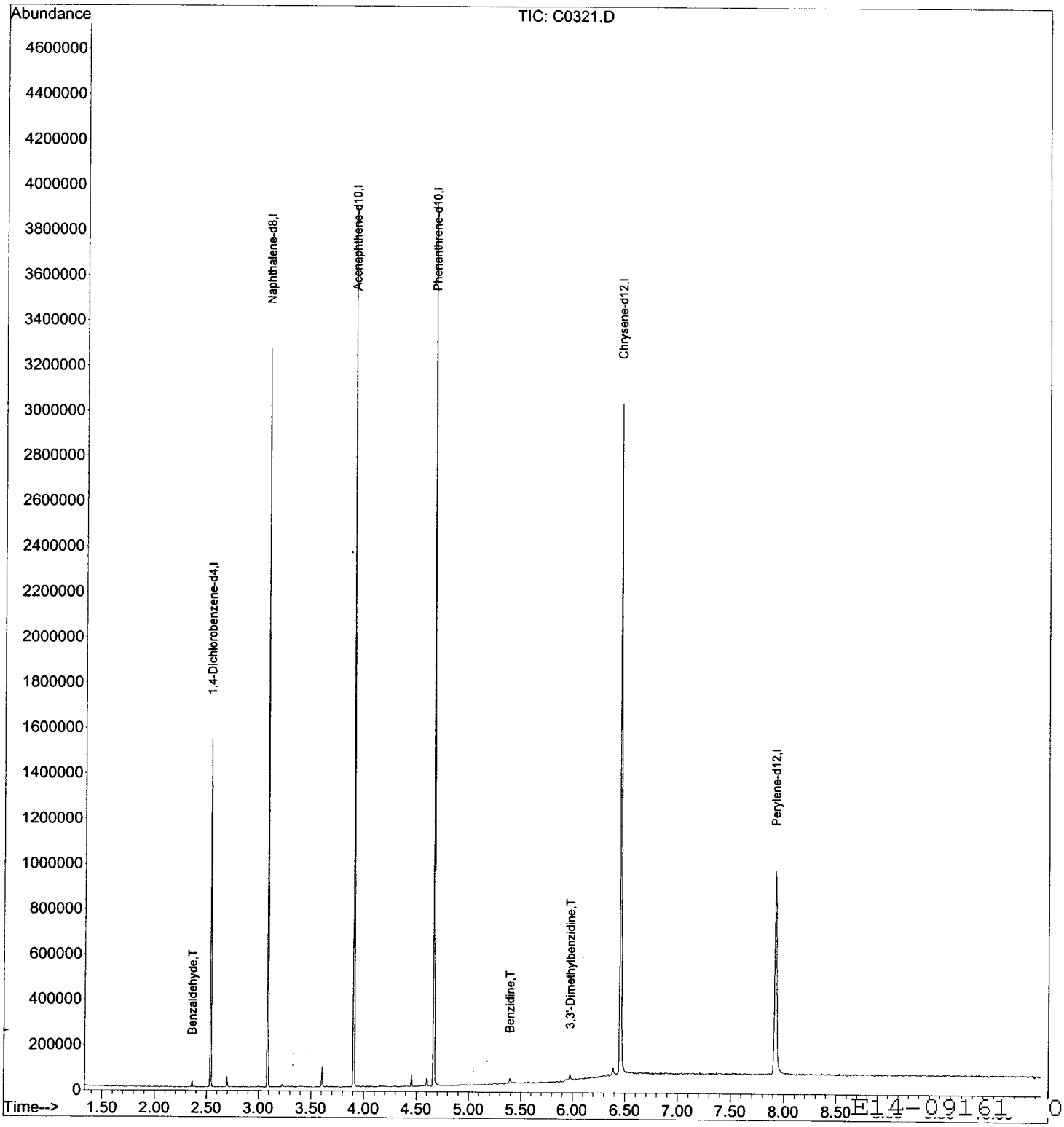
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	195051	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	738513	40.00	UG	-0.01
43) Acenaphthene-d10	3.90	164	491666	40.00	UG	-0.03
66) Phenanthrene-d10	4.67	188	911813	40.00	UG	-0.05
82) Chrysene-d12	6.46	240	935218	40.00	UG	-0.07
92) Perylene-d12	7.92	264	498170	40.00	UG	-0.05
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	109	0.02	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 0.02%#			
6) Phenol-d5	2.35	99	282	0.04	UG	-0.01
Spiked Amount 100.000	Range 25 - 108		Recovery = 0.04%#			
24) Nitrobenzene-d5	2.77	82	467	0.08	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 0.16%#			
47) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG	
Spiked Amount 50.000	Range 33 - 91		Recovery = 0.00%#			
70) 2,4,6-Tribromophenol	4.30	330	172	0.04	UG	-0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 0.04%#			
84) Terphenyl-d14	5.57	244	990	0.04	UG	-0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 0.08%#			
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	1567m	1.18	UG	
80) Benzidine	5.40	184	7991	1.30	UG	# 88
85) 3,3'-Dimethylbenzidine	5.98	212	10112m	1.30	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0321.D
Acq On : 29 Sep 2014 18:02
Operator : EDM
Sample : ABN060-14,ICC001BNA2
Misc : NA,09/17/14,NA,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Sep 30 09:00:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0228

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0322.D
Acq On : 29 Sep 2014 18:18
Operator : EDM
Sample : ABN067-14,ICV040BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 30 10:34:40 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration

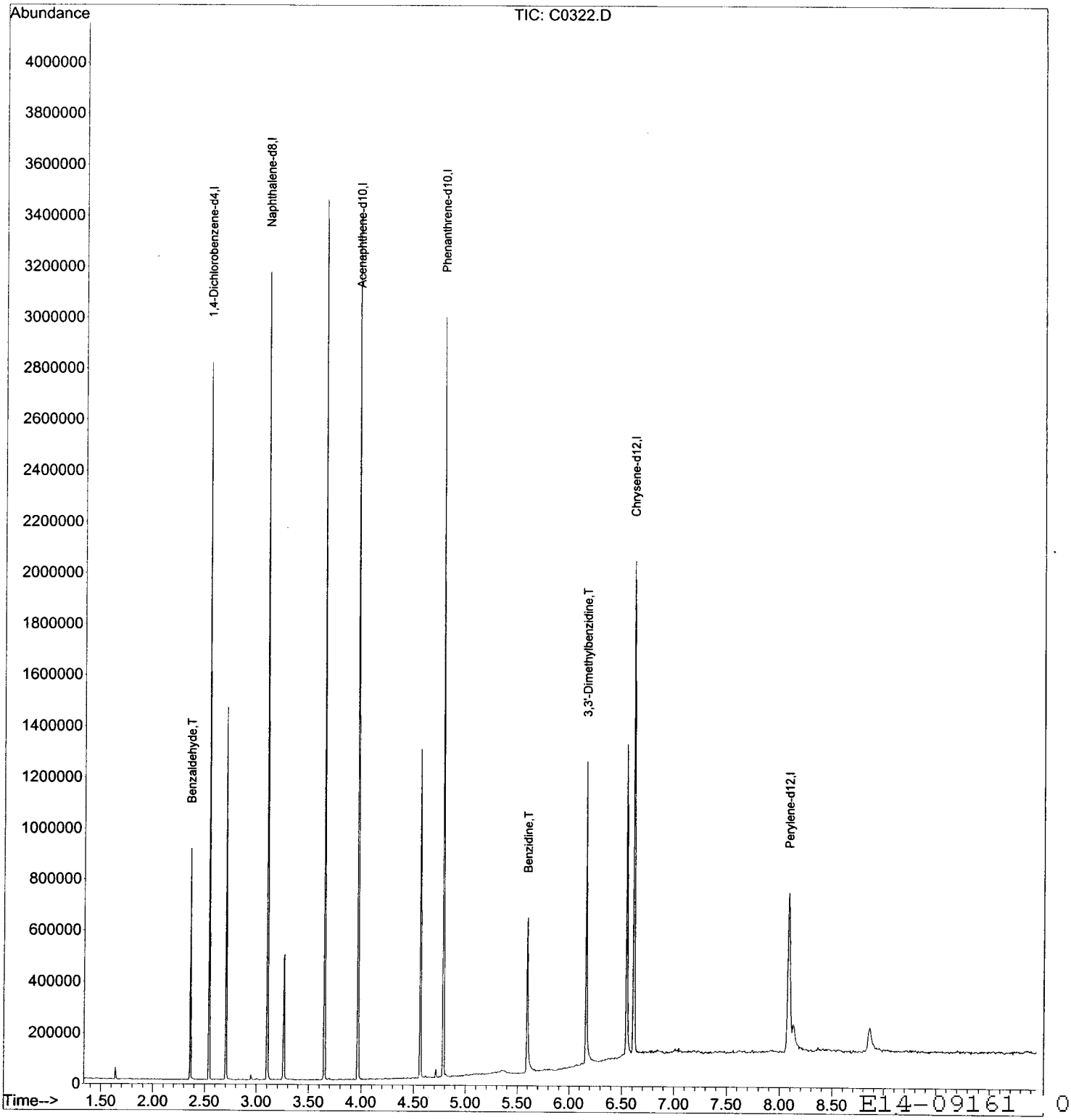
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	230937	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	816203	40.00	UG	0.00
43) Acenaphthene-d10	3.97	164	496122	40.00	UG	0.04
66) Phenanthrene-d10	4.79	188	697318	40.00	UG	0.07
82) Chrysene-d12	6.61	240	661032	40.00	UG	0.09
92) Perylene-d12	8.09	264	420751	40.00	UG	0.11
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	345	0.05	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery =	0.05%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 25 - 108		Recovery =	0.00%#		
24) Nitrobenzene-d5	2.78	82	312	0.05	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery =	0.10%#		
47) 2-Fluorobiphenyl	3.59	172	316	0.02	UG	0.02
Spiked Amount 50.000	Range 33 - 91		Recovery =	0.04%#		
70) 2,4,6-Tribromophenol	4.39	330	138	0.04	UG	0.05
Spiked Amount 100.000	Range 37 - 115		Recovery =	0.04%#		
84) Terphenyl-d14	5.73	244	143	0.01	UG	0.06
Spiked Amount 50.000	Range 15 - 122		Recovery =	0.02%#		
Target Compounds						Qvalue
5) Benzaldehyde	2.36	106	100784	33.70	UG	94
80) Benzidine	5.60	184	291127m	30.10	UG	
85) 3,3'-Dimethylbenzidine	6.16	212	360537m	33.55	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0322.D
Acq On : 29 Sep 2014 18:18
Operator : EDM
Sample : ABN067-14,ICV040BNA2
Misc : NA,09/29/14,NA,1
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 30 10:34:40 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration



E14-09161 0230

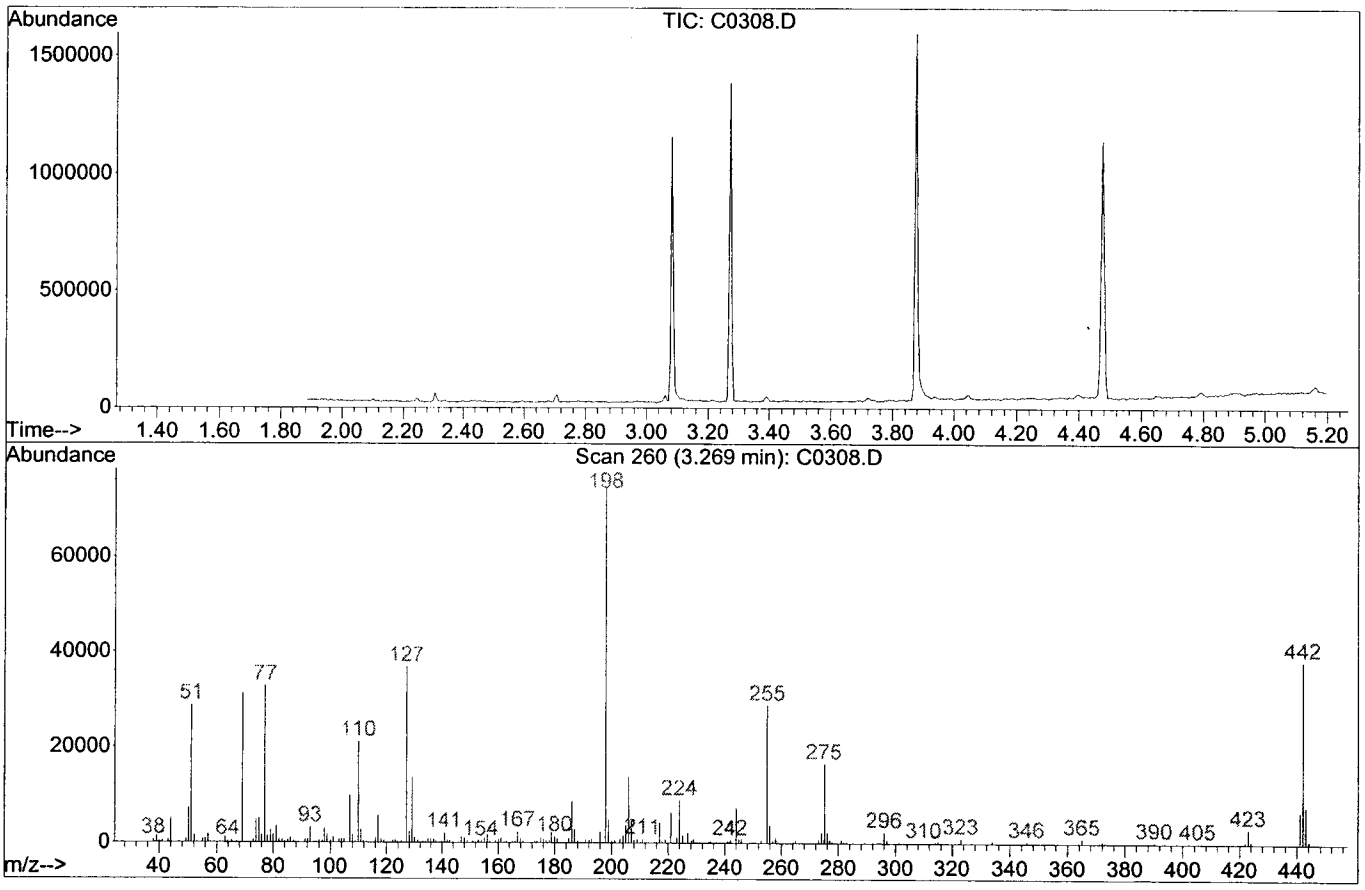
SEMI-VOLATILE ORGANICS RAW QC DATA

DFTPP

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0308.D
Acq On : 29 Sep 2014 14:09
Operator : EDM
Sample : ABN052-14,DFTPP140929
Misc : NA,NA,NA,1
ALS Vial : 96 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2.M
Title :
Last Update : Mon Jul 25 11:08:53 2011



Spectrum Information: Scan 260

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.5	28752	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.9	31256	PASS
70	69	0.00	2	0.7	206	PASS
127	198	40	60	49.3	36808	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	74672	PASS
199	198	5	9	6.5	4859	PASS
275	198	10	30	22.2	16544	PASS
365	198	1	100	1.4	1017	PASS
441	443	0.01	100	86.7	6626	PASS
442	198	40	100	51.1	38152	PASS
443	442	17	23	20.0	7641	PASS

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	652	53.00	281	65.20	467	80.00	1717
39.10	1371	55.00	733	67.00	264	81.00	3410
40.00	334	56.00	972	69.00	31256	82.00	781
41.00	576	56.90	1814	70.00	206	83.10	747
43.10	577	57.90	223	73.00	668	83.90	364
44.00	5055	59.00	235	74.00	4839	85.00	627
46.90	231	59.70	148	75.00	5098	86.00	1130
49.20	756	61.00	385	76.00	1610	87.10	474
50.10	7261	62.10	224	77.00	32832	87.90	233
51.00	28752	62.90	1249	77.90	1443	88.80	194
52.10	1465	63.90	404	79.00	2746	91.10	680

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.10	856	104.00	833	117.00	5654	130.00	1128
92.90	3195	105.00	886	118.00	772	131.10	573
94.10	212	107.00	9899	119.00	553	133.00	444
95.10	279	108.00	1724	122.10	652	134.00	335
96.00	484	108.90	408	122.90	642	134.90	850
97.10	413	110.00	21080	123.70	289	136.00	749
98.00	2984	111.00	2717	125.00	433	137.00	652
98.90	1769	111.80	388	125.70	204	137.80	413
100.00	469	112.90	267	127.00	36808	139.20	175
101.10	1158	115.30	225	128.00	2290	139.90	288
103.10	745	116.10	1134	129.00	13537	140.90	2014

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.00	617	153.10	509	165.70	291	177.00	590
142.80	587	153.90	394	166.10	409	178.10	522
143.90	192	155.10	999	166.90	2280	178.80	2246
145.70	169	156.10	1648	167.90	936	180.00	1289
146.90	1227	157.10	396	168.80	321	180.90	911
148.00	1139	159.00	384	170.00	174	182.70	147
149.00	497	160.10	742	172.90	340	184.90	979
150.80	346	161.00	1013	173.60	389	186.00	8588
151.10	320	162.10	228	173.90	324	186.90	2857
152.00	285	162.90	340	175.10	1003	188.00	414
152.80	576	165.00	319	176.10	716	188.90	232

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
190.10	165	205.00	3678	215.80	175	229.50	360
190.90	605	206.00	13728	216.90	4270	230.10	218
192.10	597	207.00	4588	217.90	350	231.00	269
192.90	825	208.00	686	219.00	770	234.20	202
196.00	2344	209.10	785	221.00	6346	234.80	354
197.90	74672	210.30	206	223.00	1152	235.90	146
199.00	4859	211.10	817	224.00	8889	236.90	268
200.10	410	211.70	176	225.10	1607	239.20	241
201.20	579	212.30	314	226.90	2166	241.00	450
203.00	814	213.00	236	228.20	622	241.90	670
204.10	1579	215.20	309	228.90	806	242.40	226

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
244.00	7335	258.80	357	276.00	2251	293.60	144
244.90	894	261.00	140	276.90	787	294.20	241
245.90	885	263.90	238	277.70	308	295.10	195
248.80	187	264.20	259	277.90	313	296.00	2327
249.90	156	264.90	723	279.40	217	297.00	669
250.80	163	266.00	183	281.00	741	301.10	227
252.90	611	267.20	216	281.80	343	302.00	222
255.00	28864	271.00	229	283.00	285	309.10	172

255.90	3673	272.90	736	285.00	233	310.00	220
256.90	480	274.00	2274	289.20	216	314.00	294
258.00	1207	275.00	16544	292.10	177	315.00	473

Scan 260 (3.269 min): C0308.D
ABN052-14,DFTPP140929

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
316.10	147	355.00	261	406.40	151		
323.00	1041	363.80	145	421.90	491		
326.80	196	365.00	1017	423.00	3019		
333.90	593	371.10	152	424.00	560		
338.30	193	372.00	470	441.00	6626		
339.30	165	372.90	231	442.00	38152		
343.20	143	390.10	280	443.00	7641		
345.80	442	397.90	153	444.00	650		
352.10	233	401.90	228	444.20	671		
352.70	257	404.30	153				
354.00	285	405.20	172				

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140925-04
Client ID: .
Date Received: NA
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0323.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.020
Pyridine	ND		0.033	0.020
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.020
Aniline	ND		0.033	0.023
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.031
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.029
Benzyl alcohol	ND		0.033	0.027
1,2-Dichlorobenzene	ND		0.033	0.029
2-Methylphenol	ND		0.033	0.025
Bis(2-chloroisopropyl) ether	ND		0.033	0.022
4-Methylphenol **	ND		0.033	0.024
N-Nitrosodi-n-propylamine	ND		0.033	0.030
Acetophenone	ND		0.033	0.029
3-Methylphenol	ND		0.033	0.024
Hexachloroethane	ND		0.033	0.029
Nitrobenzene	ND		0.033	0.022
Isophorone	ND		0.033	0.033
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.020
Bis(2-chloroethoxy) methane	ND		0.033	0.028
Benzoic acid	ND		0.033	0.025
2,4-Dimethylaniline	ND		0.033	0.020
2,4-Dichlorophenol	ND		0.033	0.025
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	ND		0.033	0.020
4-Chloroaniline	ND		0.033	0.020
4-Aminotoluene	ND		0.033	0.020
Hexachlorobutadiene	ND		0.033	0.026
Caprolactam	ND		0.033	0.020
2-Aminotoluene	ND		0.033	0.020
4-Chloro-3-methylphenol	ND		0.033	0.021
2-Methylnaphthalene	ND		0.033	0.025
Hexachlorocyclopentadiene	ND		0.033	0.020
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.020
Dimethyl phthalate	ND		0.033	0.022

E14-09161 0235

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS140925-04
Client ID: .
Date Received: NA
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0323.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.020
Acenaphthylene	ND		0.033	0.020
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.031
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.031
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.027
Diethyl phthalate	ND		0.033	0.020
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.020
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.020
1,2-Diphenylhydrazine	ND		0.033	0.020
4-Bromophenyl phenyl ether	ND		0.033	0.020
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.020
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.020
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.020
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.020
3,3'-Dichlorobenzidine	ND		0.033	0.020
Benzo[a]anthracene	ND		0.033	0.020
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.020
Di-n-octyl phthalate	ND		0.033	0.020
Benzo[b]fluoranthene	ND		0.033	0.020
Benzo[k]fluoranthene	ND		0.033	0.020
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.020
Dibenz[a,h]anthracene	ND		0.033	0.020
Benzo[g,h,i]perylene	ND		0.033	0.020

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0236

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS140925-04
Client ID: .
Date Received: NA
Date Extracted: 09/25/2014
Date Analyzed: 09/29/2014
Data file: C0323.D

GC/MS Column: DB-5
Sample wt/vol: 15.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0323.D
Acq On : 29 Sep 2014 18:34
Operator : EDM
Sample : .,BLKS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 30 09:03:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	97889	40.00	UG	0.00
23) Naphthalene-d8	3.09	136	375599	40.00	UG	-0.01
43) Acenaphthene-d10	3.91	164	250091	40.00	UG	-0.02
66) Phenanthrene-d10	4.68	188	483842	40.00	UG	-0.04
82) Chrysene-d12	6.47	240	583777	40.00	UG	-0.05
92) Perylene-d12	7.93	264	310268	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	2.01	112	174061	63.47	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 63.47%			
6) Phenol-d5	2.36	99	214368	64.50	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 64.50%			
24) Nitrobenzene-d5	2.77	82	101107	33.98	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 67.96%			
47) 2-Fluorobiphenyl	3.56	172	326964	36.07	UG	-0.01
Spiked Amount 50.000	Range 33 - 91		Recovery = 72.14%			
70) 2,4,6-Tribromophenol	4.31	330	159794	69.31	UG	-0.03
Spiked Amount 100.000	Range 37 - 115		Recovery = 69.31%			
84) Terphenyl-d14	5.60	244	593022	36.42	UG	-0.07
Spiked Amount 50.000	Range 15 - 122		Recovery = 72.84%			

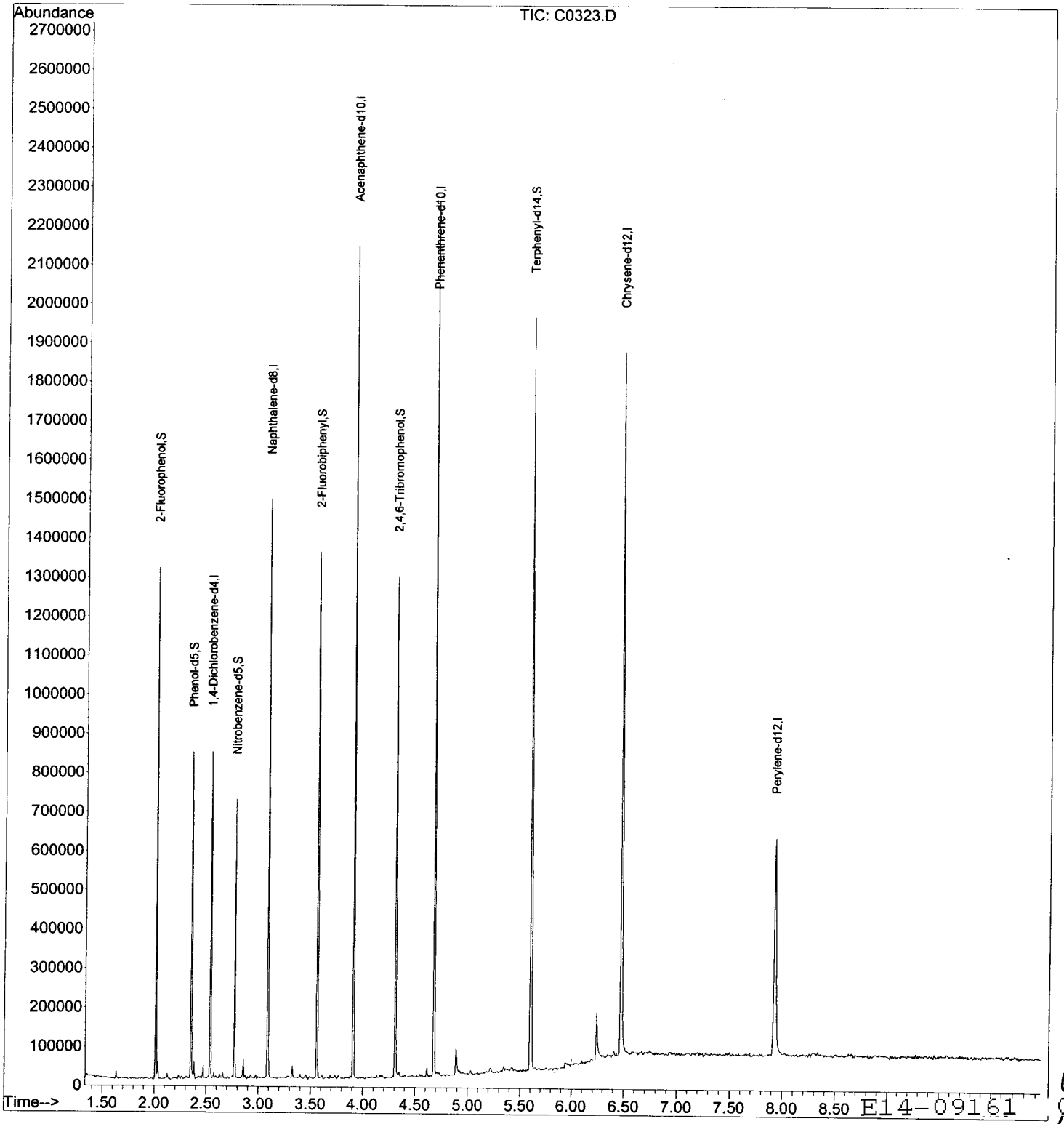
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0323.D
Acq On : 29 Sep 2014 18:34
Operator : EDM
Sample : .,BLKS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 30 09:03:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0239

CS1814.M Tue Sep 30 11:43:19 2014 Page: 2

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0323.D
Acq On : 29 Sep 2014 18:34
Operator : EDM
Sample : .,BLKS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

CS1814.M Tue Sep 30 11:43:33 2014

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0324.D
Acq On : 29 Sep 2014 18:50
Operator : EDM
Sample : .,LCSS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 30 11:52:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	136920	40.00	UG		0.00
23) Naphthalene-d8	3.09	136	528577	40.00	UG		0.00
43) Acenaphthene-d10	3.92	164	359665	40.00	UG		-0.02
66) Phenanthrene-d10	4.69	188	662855	40.00	UG		-0.03
82) Chrysene-d12	6.49	240	705367	40.00	UG		-0.04
92) Perylene-d12	7.94	264	331187	40.00	UG		-0.03
System Monitoring Compounds							
4) 2-Fluorophenol	2.01	112	166059	43.29	UG		0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 43.29%				
6) Phenol-d5	2.36	99	244518	52.60	UG		0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 52.60%				
24) Nitrobenzene-d5	2.77	82	116121	27.73	UG		0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 55.46%				
47) 2-Fluorobiphenyl	3.56	172	420791	32.28	UG		-0.01
Spiked Amount 50.000	Range 33 - 91		Recovery = 64.56%				
70) 2,4,6-Tribromophenol	4.32	330	221349	70.08	UG		-0.03
Spiked Amount 100.000	Range 37 - 115		Recovery = 70.08%				
84) Terphenyl-d14	5.61	244	760438	38.65	UG		-0.06
Spiked Amount 50.000	Range 15 - 122		Recovery = 77.30%				
Target Compounds							Qvalue
2) N-Nitrosodimethylamine	1.50	74	51582	28.04	UG	#	41
3) Pyridine	1.53	52	45004	19.51	UG	#	80
5) Benzaldehyde	2.36	106	40522	43.38	UG		86
7) Phenol	2.36	94	136840	30.02	UG	#	31
8) Aniline	2.40	66	53261	28.74	UG		85
9) Bis(2-chloroethyl) ether	2.41	63	60121	29.09	UG	#	70
10) 2-Chlorophenol	2.46	128	125321	27.54	UG		91
11) 1,3-Dichlorobenzene	2.53	146	135120	25.18	UG	#	96
12) 1,4-Dichlorobenzene	2.55	146	143640	26.25	UG	#	83
13) Benzyl alcohol	2.57	108	83798	31.66	UG	#	82
14) 1,2-Dichlorobenzene	2.63	146	131317	25.85	UG		97
15) 2-Methylphenol	2.61	108	110782	30.09	UG		85
16) Bis(2-chloroisopropyl) eth	2.64	45	94980	30.62	UG		95
17) 4-Methylphenol	2.67	108	123831	33.54	UG		95
18) N-Nitrosodi-n-propylamine	2.70	70	90561	35.40	UG	#	87
19) Acetophenone	2.70	105	191847	34.82	UG	#	1
20) 3-Methylphenol	2.67	108	123831	33.40	UG		94
21) Hexachloroethane	2.77	117	41505	23.98	UG	#	72
25) Nitrobenzene	2.78	77	115373	31.05	UG	#	87
26) Isophorone	2.87	82	254426m	35.95	UG		
27) 2-Nitrophenol	2.92	139	85106	31.38	UG	#	63
28) 2,4-Dimethylphenol	2.90	107	129434	29.62	UG		96
29) Bis(2-chloroethoxy) methan	2.94	93	145971	35.49	UG		99
30) Benzoic acid	2.92	122	71309	39.35	UG		94
31) 2,4-Dimethylaniline	3.00	121	151589	27.34	UG	#	100
32) 2,4-Dichlorophenol	3.02	162	145454	35.61	UG		96
33) 1,2,4-Trichlorobenzene	3.07	180	146246	28.37	UG		99
34) Naphthalene	3.10	128	419886	29.15	UG		92
35) 4-Chloroaniline	3.10	127	246054	34.56	UG		97
36) 4-Aminotoluene	2.72	106	224372	29.76	UG		100
37) Hexachlorobutadiene	3.16	225	87251	28.08	UG		98
38) Caprolactam	3.25	55	51005	41.34	UG		97

E14-09161 0241

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0324.D
Acq On : 29 Sep 2014 18:50
Operator : EDM
Sample : .,LCSS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 30 11:52:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration

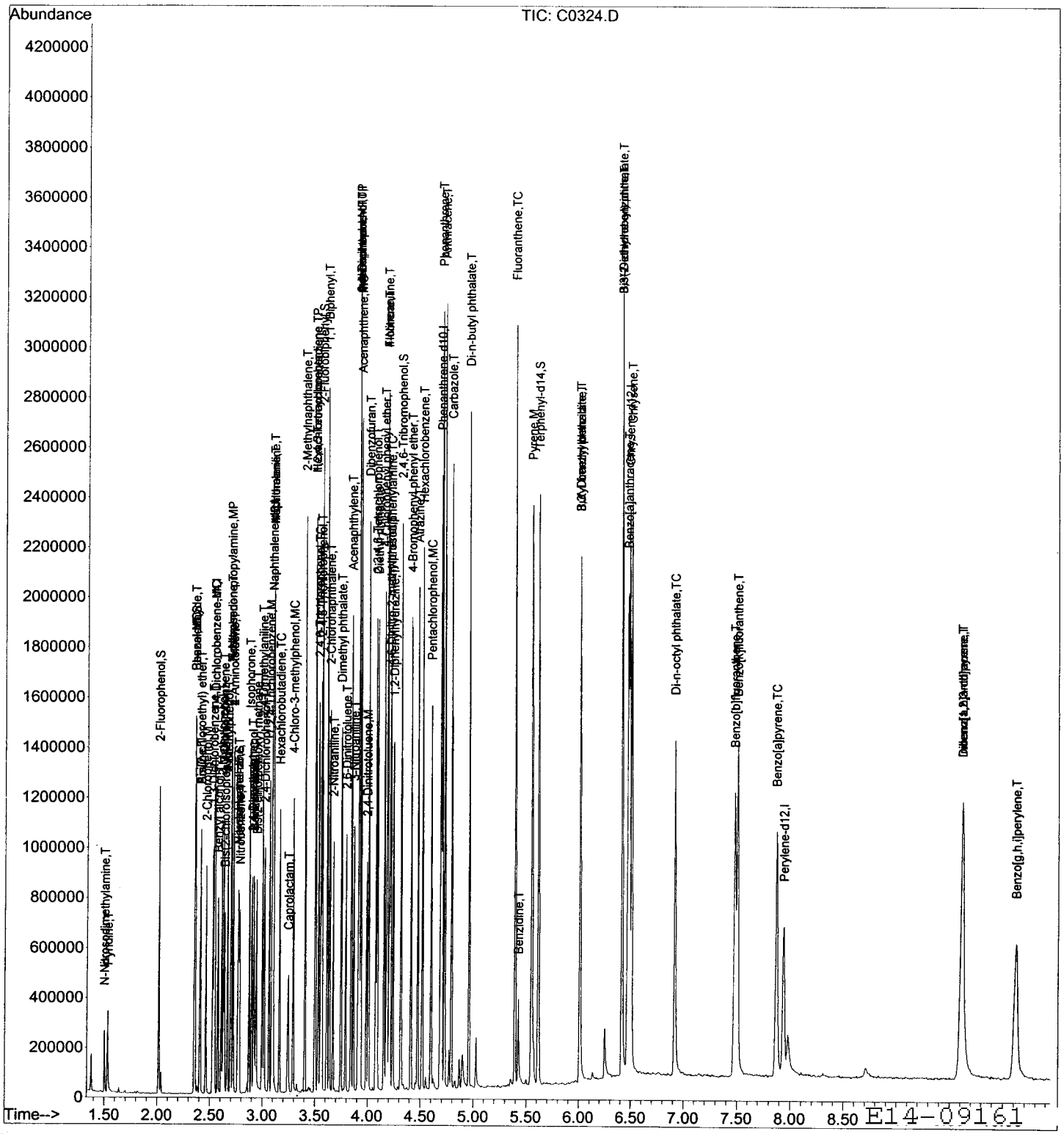
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.72	106	224372	29.76	UG		100
40) 4-Chloro-3-methylphenol	3.29	107	146345	38.23	UG		92
41) 2-Methylnaphthalene	3.40	142	348090	35.82	UG		99
44) Hexachlorocyclopentadiene	3.50	237	108375	39.93	UG		93
45) 2,4,6-Trichlorophenol	3.53	196	134334	37.29	UG		98
46) 2,4,5-Trichlorophenol	3.55	196	154724	41.20	UG		99
48) 1,1'-Biphenyl	3.61	154	495185	38.89	UG		99
49) 2-Chloronaphthalene	3.64	162	355508	34.99	UG		96
50) 2-Nitroaniline	3.67	65	75366	39.64	UG	#	76
51) Dimethyl phthalate	3.75	163	468271	40.56	UG	#	97
52) 2,6-Dinitrotoluene	3.79	165	107180	36.96	UG	#	84
53) Acenaphthylene	3.85	152	574751	36.87	UG		98
54) 3-Nitroaniline	3.87	138	113893	43.33	UG		89
55) Acenaphthene	3.93	153	368608	36.68	UG		97
56) 2,4-Dinitrophenol	3.92	184	64763	51.25	UG	#	1
57) 4-Nitrophenol	3.91	65	71586m	44.15	UG		
58) 2,4-Dinitrotoluene	3.99	165	152971	39.89	UG	#	74
59) Dibenzofuran	4.01	168	560749	38.67	UG	#	86
60) Diethyl phthalate	4.09	149	442940	40.32	UG		95
61) Fluorene	4.18	166	467593	38.12	UG		99
62) 4-Chlorophenyl phenyl ethe	4.16	204	260176	40.71	UG	#	88
63) 4-Nitroaniline	4.18	138	112451	40.77	UG	#	73
64) 1,2,4,5-Tetrachlorobenzene	3.50	216	205296	33.79	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.08	232	154477	43.82	UG		96
67) 4,6-Dinitro-2-methylphenol	4.20	198	112460	45.51	UG	#	55
68) N-Nitrosodiphenylamine	4.21	169	374367	41.37	UG		96
69) 1,2-Diphenylhydrazine	4.24	77	314963	34.67	UG	#	79
71) 4-Bromophenyl phenyl ether	4.41	248	176182	40.13	UG	#	87
72) Hexachlorobenzene	4.52	284	203812	38.06	UG	#	91
73) Atrazine	4.48	200	161782	42.24	UG		98
74) Pentachlorophenol	4.60	266	140406	41.27	UG		91
75) Phenanthrene	4.70	178	726240	39.37	UG		98
76) Anthracene	4.73	178	766419	41.51	UG		99
77) Carbazole	4.79	167	683800	39.58	UG		98
78) Di-n-butyl phthalate	4.96	149	825651	43.32	UG	#	98
79) Fluoranthene	5.40	202	836462	38.67	UG		98
80) Benzidine	5.43	184	117199	26.28	UG		98
83) Pyrene	5.55	202	872331	41.57	UG		97
85) 3,3'-Dimethylbenzidine	6.01	212	185738m	31.67	UG		
86) Butyl benzyl phthalate	6.01	149	346441m	46.19	UG		
87) 3,3'-Dichlorobenzidine	6.42	252	283429	41.11	UG		98
88) Benzo[a]anthracene	6.47	228	775251	39.04	UG		99
89) Chrysene	6.51	228	725659	39.34	UG		97
90) Bis(2-ethylhexyl) phthalat	6.42	149	470587	43.53	UG	#	92
93) Di-n-octyl phthalate	6.92	149	695292	51.88	UG		100
94) Benzo[b]fluoranthene	7.48	252	708137	44.30	UG		95
95) Benzo[k]fluoranthene	7.51	252	620175m	44.11	UG		
96) Benzo[a]pyrene	7.87	252	605347	44.84	UG		97
97) Indeno[1,2,3-cd]pyrene	9.62	276	721208	44.46	UG	#	63
98) Dibenz[a,h]anthracene	9.62	278	603868	44.89	UG	#	68
99) Benzo[g,h,i]perylene	10.12	276	595863	44.25	UG	#	68

(#) = qualifier out of range (m) = manual integration (+) = E14-09161 0242

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0324.D
Acq On : 29 Sep 2014 18:50
Operator : EDM
Sample : .,LCSS140925-04,S,15.00g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 30 11:52:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Mon Sep 29 17:26:39 2014
Response via : Initial Calibration



E14-09161 0243

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-29-14\
Data File : C0325.D
Acq On : 29 Sep 2014 19:06
Operator : EDM
Sample : .,E14-08869-003MS,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 13:25:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	268914m	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	956143m	40.00	UG	0.00
43) Acenaphthene-d10	3.96	164	752307m	40.00	UG	0.03
66) Phenanthrene-d10	4.77	188	1367020m	40.00	UG	0.05
82) Chrysene-d12	6.60	240	932811	40.00	UG	0.07
92) Perylene-d12	8.07	264	475999	40.00	UG	0.09
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	344691	45.75	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 45.75%			
6) Phenol-d5	2.36	99	465818	51.02	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 51.02%			
24) Nitrobenzene-d5	2.78	82	214747	28.36	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 56.72%			
47) 2-Fluorobiphenyl	3.59	172	708824	26.00	UG	0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 52.00%			
70) 2,4,6-Tribromophenol	4.38	330	332416	51.03	UG	0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 51.03%			
84) Terphenyl-d14	5.77	244	778300	29.91	UG	0.10
Spiked Amount 50.000	Range 15 - 122		Recovery = 59.82%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.51	74	85975	23.79	UG	# 40
3) Pyridine	1.54	52	75073	16.57	UG	# 83
5) Benzaldehyde	2.36	106	19326m	5.55	UG	
7) Phenol	2.37	94	229247	25.61	UG	# 30
8) Aniline	2.41	66	98806	27.15	UG	87
9) Bis(2-chloroethyl) ether	2.41	63	108304	26.68	UG	# 68
10) 2-Chlorophenol	2.47	128	214139	23.96	UG	# 90
11) 1,3-Dichlorobenzene	2.53	146	253920	24.09	UG	# 97
12) 1,4-Dichlorobenzene	2.55	146	218326	20.32	UG	# 83
13) Benzyl alcohol	2.58	108	125037	24.06	UG	# 83
14) 1,2-Dichlorobenzene	2.63	146	232769	23.33	UG	94
15) 2-Methylphenol	2.62	108	198748	27.49	UG	84
16) Bis(2-chloroisopropyl) eth	2.64	45	158399	26.00	UG	97
17) 4-Methylphenol	2.68	108	207125	28.56	UG	97
18) N-Nitrosodi-n-propylamine	2.70	70	132842	26.44	UG	# 86
19) Acetophenone	2.71	105	315234	29.13	UG	# 1
20) 3-Methylphenol	2.68	108	207114	28.45	UG	94
21) Hexachloroethane	2.77	117	68941	20.28	UG	# 73
25) Nitrobenzene	2.79	77	187851	27.95	UG	# 85
26) Isophorone	2.88	82	370657m	28.95	UG	
27) 2-Nitrophenol	2.93	139	140642	28.67	UG	# 62
28) 2,4-Dimethylphenol	2.91	107	226443	28.64	UG	93
29) Bis(2-chloroethoxy) methan	2.95	93	212231	28.53	UG	99
30) Benzoic acid	3.01	122	76106m	23.22	UG	
31) 2,4-Dimethylaniline	3.01	121	265592	26.48	UG	# 100
32) 2,4-Dichlorophenol	3.03	162	224107	30.33	UG	97
33) 1,2,4-Trichlorobenzene	3.08	180	240078	25.74	UG	99
34) Naphthalene	3.11	128	692019	26.56	UG	96
35) 4-Chloroaniline	3.11	127	383779	29.80	UG	96
36) 4-Aminotoluene	2.72	106	379638	27.84	UG	100
37) Hexachlorobutadiene	3.18	225	140804	25.05	UG	98
38) Caprolactam	3.27	55	77583	34.76		

E14-09161 0244

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-29-14\
Data File : C0325.D
Acq On : 29 Sep 2014 19:06
Operator : EDM
Sample : .,E14-08869-003MS,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 13:25:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration

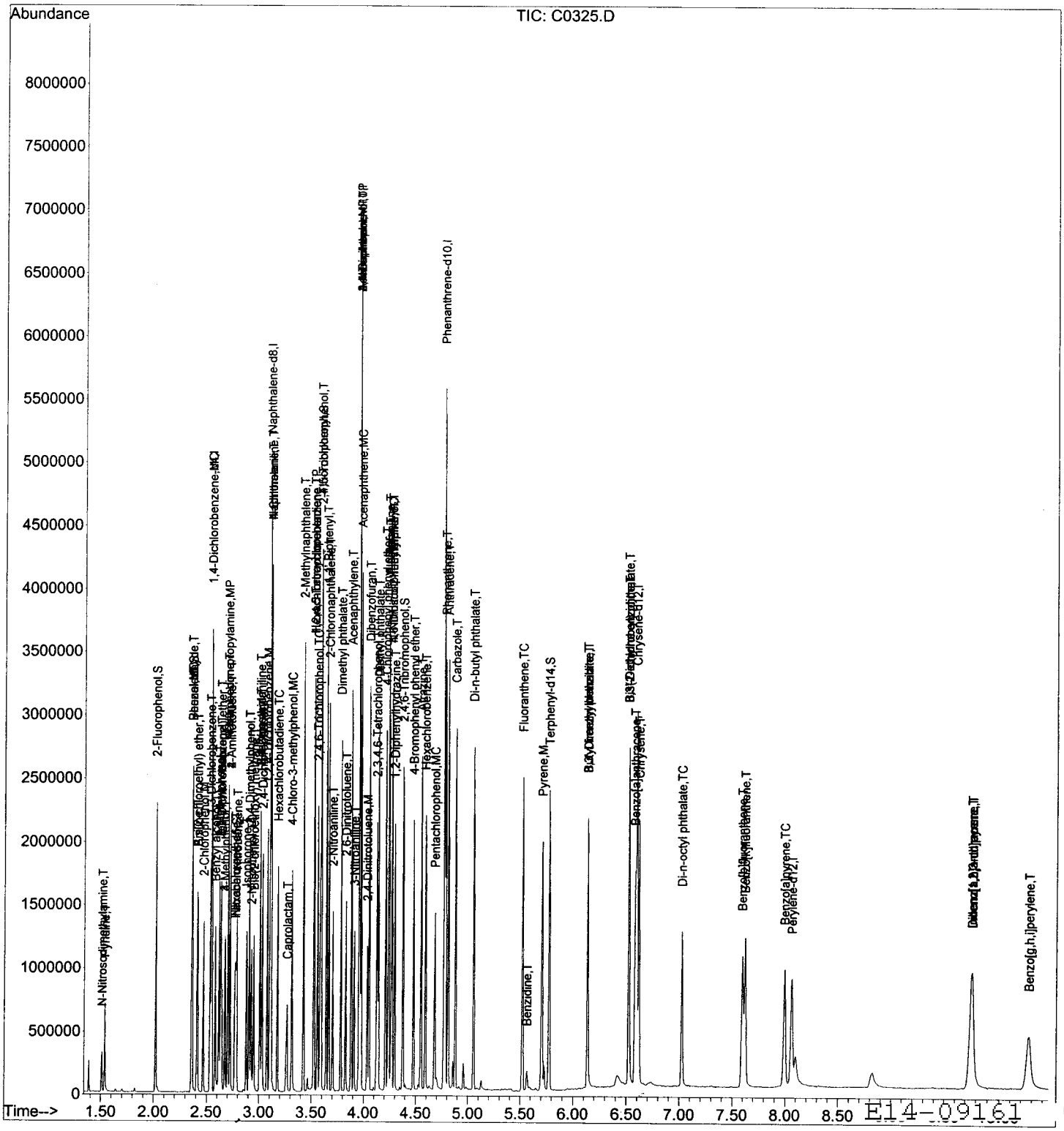
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) 2-Aminotoluene	2.72	106	379638	27.84	UG		100
40) 4-Chloro-3-methylphenol	3.31	107	223935	32.34	UG		90
41) 2-Methylnaphthalene	3.42	142	539724	30.71	UG		99
44) Hexachlorocyclopentadiene	3.53	237	124165	21.87	UG		93
45) 2,4,6-Trichlorophenol	3.56	196	193953	25.74	UG		98
46) 2,4,5-Trichlorophenol	3.58	196	223134	28.41	UG		99
48) 1,1'-Biphenyl	3.64	154	772189	28.99	UG		99
49) 2-Chloronaphthalene	3.66	162	521766	24.55	UG		96
50) 2-Nitroaniline	3.70	65	116016	29.17	UG	#	74
51) Dimethyl phthalate	3.78	163	650532	26.94	UG		98
52) 2,6-Dinitrotoluene	3.83	165	162629	26.81	UG	#	81
53) Acenaphthylene	3.88	152	872402	26.75	UG		98
54) 3-Nitroaniline	3.91	138	164863	29.99	UG		92
55) Acenaphthene	3.97	153	550465	26.19	UG		94
56) 2,4-Dinitrophenol	3.96	184	39992	15.13	UG	#	1
57) 4-Nitrophenol	3.96	65	93604	27.60	UG	#	67
58) 2,4-Dinitrotoluene	4.04	165	212458	26.48	UG	#	72
59) Dibenzofuran	4.05	168	842118	27.76	UG	#	85
60) Diethyl phthalate	4.14	149	615443	26.79	UG		96
61) Fluorene	4.24	166	679353	26.48	UG		98
62) 4-Chlorophenyl phenyl ethe	4.21	204	367865m	27.52	UG		
63) 4-Nitroaniline	4.24	138	160562	27.83	UG	#	70
64) 1,2,4,5-Tetrachlorobenzene	3.53	216	306775	24.14	UG		97
65) 2,3,4,6-Tetrachlorophenol	4.12	232	213679	28.98	UG		95
67) 4,6-Dinitro-2-methylphenol	4.26	198	105910	20.78	UG	#	66
68) N-Nitrosodiphenylamine	4.27	169	507235	27.18	UG		96
69) 1,2-Diphenylhydrazine	4.29	77	421266	22.49	UG	#	80
71) 4-Bromophenyl phenyl ether	4.48	248	239459	26.45	UG	#	87
72) Hexachlorobenzene	4.59	284	281083	25.45	UG	#	90
73) Atrazine	4.55	200	236811	29.98	UG		97
74) Pentachlorophenol	4.68	266	149723	21.34	UG		91
75) Phenanthrene	4.78	178	990137	26.03	UG		97
76) Anthracene	4.81	178	1010909	26.55	UG		99
77) Carbazole	4.88	167	870216	24.42	UG		98
78) Di-n-butyl phthalate	5.05	149	1044602	26.58	UG	#	97
79) Fluoranthene	5.52	202	954140m	21.39	UG		
80) Benzidine	5.57	184	72817	3.84	UG		98
83) Pyrene	5.71	202	804398	28.98	UG		97
85) 3,3'-Dimethylbenzidine	6.14	212	195489m	12.89	UG		
86) Butyl benzyl phthalate	6.14	149	303158	30.57	UG	#	84
87) 3,3'-Dichlorobenzidine	6.53	252	248709	27.28	UG		97
88) Benzo[a]anthracene	6.58	228	665984	25.36	UG		100
89) Chrysene	6.62	228	608433	24.94	UG		97
90) Bis(2-ethylhexyl) phthalat	6.52	149	409546	28.65	UG	#	91
93) Di-n-octyl phthalate	7.02	149	594301	30.86	UG		99
94) Benzo[b]fluoranthene	7.60	252	635421m	27.66	UG		
95) Benzo[k]fluoranthene	7.62	252	527145	26.09	UG		99
96) Benzo[a]pyrene	8.00	252	556558	28.69	UG		99
97) Indeno[1,2,3-cd]pyrene	9.77	276	671730	28.81	UG	#	59
98) Dibenz[a,h]anthracene	9.76	278	569612	29.46	UG	#	68
99) Benzo[g,h,i]perylene	10.27	276	555814	28.72	UG	#	67

(#) = qualifier out of range (m) = manual integration (+) = E14-09161 0245

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-29-14\
Data File : C0325.D
Acq On : 29 Sep 2014 19:06
Operator : EDM
Sample : .,E14-08869-003MS,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 30 13:25:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration



E14-09161 0246

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0326.D
Acq On : 29 Sep 2014 19:22
Operator : EDM
Sample : .,E14-08869-003MSD,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 13:26:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.54	152	289002m	40.00	UG	0.00
23) Naphthalene-d8	3.10	136	1123113m	40.00	UG	0.00
43) Acenaphthene-d10	3.96	164	765333	40.00	UG	0.03
66) Phenanthrene-d10	4.77	188	1259162	40.00	UG	0.05
82) Chrysene-d12	6.60	240	990027	40.00	UG	0.07
92) Perylene-d12	8.06	264	511715	40.00	UG	0.08
System Monitoring Compounds						
4) 2-Fluorophenol	2.02	112	335776	41.47	UG	0.00
Spiked Amount 100.000	Range 25 - 100		Recovery = 41.47%			
6) Phenol-d5	2.36	99	440947	44.94	UG	0.00
Spiked Amount 100.000	Range 25 - 108		Recovery = 44.94%			
24) Nitrobenzene-d5	2.78	82	203289	22.85	UG	0.00
Spiked Amount 50.000	Range 24 - 91		Recovery = 45.70%			
47) 2-Fluorobiphenyl	3.59	172	675234	24.34	UG	0.02
Spiked Amount 50.000	Range 33 - 91		Recovery = 48.68%			
70) 2,4,6-Tribromophenol	4.38	330	301515	50.25	UG	0.04
Spiked Amount 100.000	Range 37 - 115		Recovery = 50.25%			
84) Terphenyl-d14	5.78	244	842654	30.51	UG	0.11
Spiked Amount 50.000	Range 15 - 122		Recovery = 61.02%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	1.51	74	82060	21.13	UG	# 41
3) Pyridine	1.54	52	81855	16.81	UG	# 83
5) Benzaldehyde	2.36	106	19325m	5.16	UG	
7) Phenol	2.37	94	224779	23.36	UG	# 29
8) Aniline	2.41	66	96011	24.55	UG	87
9) Bis(2-chloroethyl) ether	2.41	63	105496	24.18	UG	# 69
10) 2-Chlorophenol	2.47	128	209135	21.77	UG	# 87
11) 1,3-Dichlorobenzene	2.53	146	247076	21.81	UG	# 96
12) 1,4-Dichlorobenzene	2.55	146	228437m	19.78	UG	
13) Benzyl alcohol	2.58	108	122940	22.01	UG	# 82
14) 1,2-Dichlorobenzene	2.63	146	222593	20.76	UG	96
15) 2-Methylphenol	2.62	108	192530	24.78	UG	87
16) Bis(2-chloroisopropyl) eth	2.64	45	155288	23.71	UG	98
17) 4-Methylphenol	2.68	108	205230	26.34	UG	98
18) N-Nitrosodi-n-propylamine	2.70	70	128404	23.78	UG	# 85
19) Acetophenone	2.70	105	294505	25.32	UG	# 1
20) 3-Methylphenol	2.68	108	205171	26.22	UG	98
21) Hexachloroethane	2.77	117	76103m	20.84	UG	
25) Nitrobenzene	2.79	77	183838	23.29	UG	# 86
26) Isophorone	2.88	82	356386m	23.70	UG	
27) 2-Nitrophenol	2.93	139	135194	23.46	UG	# 70
28) 2,4-Dimethylphenol	2.91	107	216966	23.36	UG	93
29) Bis(2-chloroethoxy) methan	2.95	93	206786	23.66	UG	97
30) Benzoic acid	3.01	122	71918m	18.68	UG	
31) 2,4-Dimethylaniline	3.01	121	260486	22.11	UG	# 100
32) 2,4-Dichlorophenol	3.03	162	212232	24.45	UG	97
33) 1,2,4-Trichlorobenzene	3.08	180	234925	21.45	UG	95
34) Naphthalene	3.11	128	651896	21.30	UG	94
35) 4-Chloroaniline	3.11	127	373876	24.72	UG	95
36) 4-Aminotoluene	2.72	106	360002	22.48	UG	100
37) Hexachlorobutadiene	3.18	225	137944	20.89	UG	99
38) Caprolactam	3.27	55	69084	26.35	UG	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0326.D
Acq On : 29 Sep 2014 19:22
Operator : EDM
Sample : .,E14-08869-003MSD,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 13:26:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration

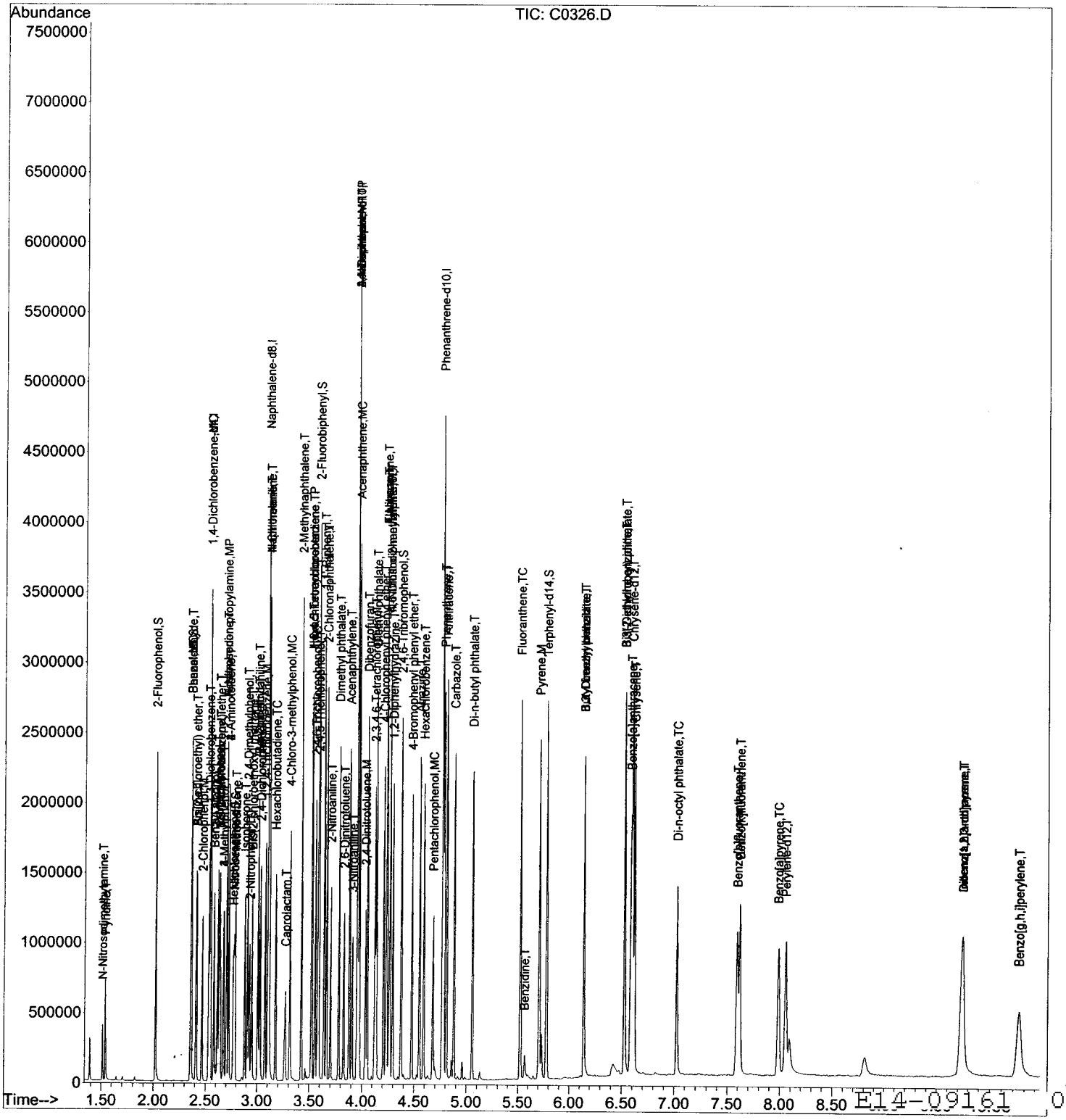
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
39) 2-Aminotoluene	2.72	106	360002	22.48 UG		100
40) 4-Chloro-3-methylphenol	3.31	107	209887	25.81 UG		92
41) 2-Methylnaphthalene	3.42	142	523448	25.35 UG		98
44) Hexachlorocyclopentadiene	3.53	237	129754	22.46 UG		95
45) 2,4,6-Trichlorophenol	3.56	196	188118	24.54 UG		100
46) 2,4,5-Trichlorophenol	3.58	196	212643	26.61 UG		99
48) 1,1'-Biphenyl	3.64	154	707247	26.10 UG		98
49) 2-Chloronaphthalene	3.66	162	489162	22.63 UG		96
50) 2-Nitroaniline	3.70	65	107420m	26.55 UG		
51) Dimethyl phthalate	3.78	163	611964	24.91 UG		97
52) 2,6-Dinitrotoluene	3.83	165	145625	23.60 UG	#	83
53) Acenaphthylene	3.88	152	801472	24.16 UG		98
54) 3-Nitroaniline	3.91	138	151837	27.15 UG		89
55) Acenaphthene	3.97	153	521235	24.38 UG		94
56) 2,4-Dinitrophenol	3.96	184	36681	13.64 UG	#	1
57) 4-Nitrophenol	3.95	65	81895	23.73 UG	#	66
58) 2,4-Dinitrotoluene	4.03	165	189786	23.26 UG	#	72
59) Dibenzofuran	4.05	168	776560	25.17 UG	#	85
60) Diethyl phthalate	4.14	149	569418	24.36 UG		94
61) Fluorene	4.24	166	610235	23.38 UG		100
62) 4-Chlorophenyl phenyl ethe	4.21	204	349377	25.69 UG	#	87
63) 4-Nitroaniline	4.24	138	141520	24.11 UG	#	67
64) 1,2,4,5-Tetrachlorobenzene	3.52	216	294144	22.75 UG		98
65) 2,3,4,6-Tetrachlorophenol	4.12	232	189399	25.25 UG		96
67) 4,6-Dinitro-2-methylphenol	4.26	198	96115	20.47 UG	#	68
68) N-Nitrosodiphenylamine	4.27	169	469293	27.30 UG		98
69) 1,2-Diphenylhydrazine	4.29	77	399983	23.18 UG	#	81
71) 4-Bromophenyl phenyl ether	4.48	248	217994	26.14 UG	#	86
72) Hexachlorobenzene	4.59	284	252901	24.86 UG	#	92
73) Atrazine	4.55	200	207040	28.46 UG		99
74) Pentachlorophenol	4.68	266	132743	20.54 UG		91
75) Phenanthrene	4.79	178	888833	25.37 UG		98
76) Anthracene	4.81	178	902730	25.74 UG		99
77) Carbazole	4.88	167	755564	23.02 UG		98
78) Di-n-butyl phthalate	5.06	149	939720	25.95 UG	#	98
79) Fluoranthene	5.52	202	878394	21.38 UG		99
80) Benzidine	5.57	184	72078	4.13 UG		98
83) Pyrene	5.71	202	878375	29.82 UG		96
85) 3,3'-Dimethylbenzidine	6.14	212	196800m	12.23 UG		
86) Butyl benzyl phthalate	6.14	149	322185	30.61 UG	#	86
87) 3,3'-Dichlorobenzidine	6.53	252	252443	26.09 UG		100
88) Benzo[a]anthracene	6.59	228	692175	24.83 UG		100
89) Chrysene	6.62	228	642284	24.81 UG		97
90) Bis(2-ethylhexyl) phthalat	6.52	149	432569	28.51 UG	#	92
93) Di-n-octyl phthalate	7.02	149	632938	30.57 UG		100
94) Benzo[b]fluoranthene	7.60	252	649318	26.29 UG		99
95) Benzo[k]fluoranthene	7.62	252	572475	26.35 UG		99
96) Benzo[a]pyrene	7.99	252	574019	27.52 UG		99
97) Indeno[1,2,3-cd]pyrene	9.75	276	705467	28.15 UG	#	58
98) Dibenz[a,h]anthracene	9.74	278	596927	28.72 UG	#	67
99) Benzo[g,h,i]perylene	10.25	276	579683	27.86 UG	#	66

(#) = qualifier out of range (m) = manual integration (+) = sE14-09161 0248

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : C0326.D
Acq On : 29 Sep 2014 19:22
Operator : EDM
Sample : .,E14-08869-003MSD,S,15.15g,0,0.5
Misc : 140925-04,09/25/14,NA,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 30 13:26:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\CS1814.M
Quant Title : BNA CALIBRATION METHOD
QLast Update : Tue Sep 30 09:02:06 2014
Response via : Initial Calibration



E14-09161 0249

SEMI-VOLATILE ORGANICS RUN LOGS
STANDARD PREP LOGS

INTEGRATED ANALYTICAL LABORATORIES, LLC

EXTRACTION LOG - SEMIVOLATILES
(BN/AE/BNA)

Extraction Date/Time: 9/25/2014 12:07:00 PM **Tray ID:** **Batch ID: 140925-04**

Technician: Kimberly **Matrix: Soil**

Sample ID #	*V /C	*F	Test	% Moist	Initial (g)	Final (ml)	Surrogate (# : ul) BN	Acid	Spike (# : ul) BNA	Color	% SED	Comments	Due
BLKS140925-04	BLK		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25		1			
LCSS140925-04	LCS		BNA	-	15.00	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	3			
08869-003MS	MS		BNA	-	15.15	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	4			
08869-003MSD	MSD		BNA	-	15.15	0.500	BNS025 : 25	AES026 : 25	BNA Matrix 87.5	4			
08869-003	2	2	PAH	20.7	15.17	0.500	BNS025 : 25			3			
08869-005	3	3	PAH	14.2	15.11	0.500	BNS025 : 25			2			
09160-003	4	4	BNA	22.0	15.10	0.500	BNS025 : 25	AES026 : 25		4			
09160-004	5	5	BNA	31.3	15.49	0.500	BNS025 : 25	AES026 : 25		4			
09160-005	6	6	BNA	21.1	15.53	0.500	BNS025 : 25	AES026 : 25		4			
09134-001	7	1	BNA	6.10	15.64	0.500	BNS025 : 25	AES026 : 25		2			
09217-001	8	2	PAH	6.90	15.06	0.500	BNS025 : 25			4			
09219-001	9	3	PAH	?	15.58	0.500	BNS025 : 25			4			
08772-002	10	4	Naphthalene	15.4	15.29	0.500	BNS025 : 25			4			
08807-002	11	5	Naphthalene	18.5	15.38	0.500	BNS025 : 25			4			
09159-003	12	6	Naphthalene	11.8	15.29	0.500	BNS025 : 25			3			
08963-001	1	1	BNA	63.0	15.27	0.500	BNS025 : 25	AES026 : 25		5		RE-EXTRACT	
08963-005	2	2	BNA	56.4	15.00	0.500	BNS025 : 25	AES026 : 25		5		RE-EXTRACT	
08963-006	3	3	BNA	53.3	15.78	0.500	BNS025 : 25	AES026 : 25		5		RE-EXTRACT	
09160-001	4	4	BNA	21.8	15.33	0.500	BNS025 : 25	AES026 : 25		5			
09160-002	5	5	BNA	20.9	15.06	0.500	BNS025 : 25	AES026 : 25		5			
09161-001	6	6	BNA	4.00	15.66	0.500	BNS025 : 25	AES026 : 25		5			

Custody Transfer

-	Date	Time	Signature	Comments
Dropped Off to Organic				
Receipt at Organic				

*V/C=Vap/Cell
*F=Funnel

Color: 1 = Clear; 2 = Light Yellow
3 = Yellow-Gold; 4 = Brown; 5 = Black

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 9/29/2014 **BATCH ID:** *New column

INSTRUMENT: C 140925-04

140925-02

TUNE FILE: DFTPP.U

METHOD 1 CS1814 ISTD.Lot ECS SVI028

METHOD 2 P (limit:2) = 1.32

METHOD 3 B (limit:2) = 0.97

ANALYST: Eleanor D(limit=20%)=

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
96	C0308	ABN052-14	DFTPP140929									14:09		
26	C0309	ABN054-14	ICC001BNA1											
27	C0310	ABN055-14	ICC010BNA1											
28	C0311	ABN056-14	ICC020BNA1											
29	C0312	ABN057-14	ICC040BNA1											
30	C0313	ABN058-14	ICC080BNA1											
31	C0314	ABN059-14	ICC120BNA1											
97	C0315	ABN066-14	ICV040BNA1											
32	C0316	ABN065-14	ICC120BNA2											
33	C0317	ABN064-14	ICC080BNA2											
34	C0318	ABN063-14	ICC040BNA2											
35	C0319	ABN062-14	ICC020BNA2											
36	C0320	ABN061-14	ICC010BNA2											
37	C0321	ABN060-14	ICC001BNA2											
98	C0322	ABN067-14	ICV040BNA2											
1	C0323	BLKS140925-04		1	15.00	0.5	S			9/25/14	0			.
2	C0324	LCSS140925-04		1	15.00	0.5	S			9/25/14	0			.
3	C0325	14-08869-003MS		1	15.15	0.5	S			9/25/14	0			.
4	C0326	14-08869-003MSD		1	15.15	0.5	S			9/25/14	0			.
5	C0327	08869	3	1	15.17	0.5	S	9/17/14	9/17/14	9/25/14	20.7			S-3
6	C0328	08869	5	1	15.11	0.5	S	9/17/14	9/17/14	9/25/14	14.2			S-5
7	C0329	09160	3	10	15.10	0.5	S	9/23/14	9/24/14	9/25/14	22.0			GPEC-TP3
8	C0330	09160	4	5	15.49	0.5	S	9/23/14	9/24/14	9/25/14	31.3			GPEC-TP3
9	C0331	09160	5	1	15.53	0.5	S	9/23/14	9/24/14	9/25/14	21.1			GPEC-TP3
10	C0332	09134	1	1	15.64	0.5	S	9/23/14	9/24/14	9/25/14	6.10			F-1
11	C0333	09217	1	5	15.06	0.5	S	9/24/14	9/25/14	9/25/14	6.90			BG-1
12	C0334	09219	1	1	15.58	0.5	S	9/24/14	9/25/14	9/25/14				BG-1
13	C0335	08772	2	5	15.29	0.5	S	9/15/14	9/16/14	9/25/14	15.4			PE-W
14	C0336	08807	2	10	15.38	0.5	S	9/16/14	9/16/14	9/25/14	18.5			UST-E
15	C0337	09159	3	1	15.29	0.5	S	9/24/14	9/24/14	9/25/14	11.8			SS-9
16	C0338	08963	1	1	15.27	0.5	S	9/19/14	9/19/14	9/25/14	63.0			SED-1
17	C0339	08963	5	1	15.00	0.5	S	9/19/14	9/19/14	9/25/14	56.4			SED-5
18	C0340	08963	6	1	15.78	0.5	S	9/19/14	9/19/14	9/25/14	53.3			REP09191
19	C0341	09160	1	1	15.33	0.5	S	9/22/14	9/24/14	9/25/14	21.8			GPEC-TP3
20	C0342	09160	2	2	15.06	0.5	S	9/22/14	9/24/14	9/25/14	20.9			GPEC-TP3
21	C0343	09161	1	1	15.66	0.5	S	9/23/14	9/24/14	9/25/14	4.00			GPEC-WC0
96	C0344	09160	3DL	50	15.10	0.5	S	9/23/14	9/24/14	9/25/14	22.0		ok	GPEC-TP3

LABORATORY CHRONICLE - GC/MS SEMI-VOA

DATE: 9/29/2014 **BATCH ID:** *New column

INSTRUMENT: C 140925-04

140925-02

TUNE FILE: DFTPP.U

METHOD 1 CS1814 ISTD.Lot ECS SVI028

METHOD 2 P (limit:2) = 1.32

METHOD 3 B (limit:2) = 0.97

ANALYST: Eleanor D(limit=20%)=

Initial

#	Data File	Case #	Samp #	DF	Wt/ Vol	F. Vol	MX	Samp Date	Recd Date	Ext Date	% Moist	Time	Comments	Client ID
22	C0345	9080	1DL	4	15.25	0.5	S	9/19/14	9/22/14	9/25/14	8.00		ok	BG-1
23	C0346	09088	1DL	6	15.62	0.5	S	9/19/14	9/22/14	9/25/14	10.3		ok	BG-1
24	C0347	09085	1DL	5	15.57	0.5	S	9/20/14	9/22/14	9/25/14	3.60		ok	BG-1
25	C0348	09076	1DL	6	15.23	0.5	S	9/19/14	9/24/14	9/25/14	25.4		ok	BG-1

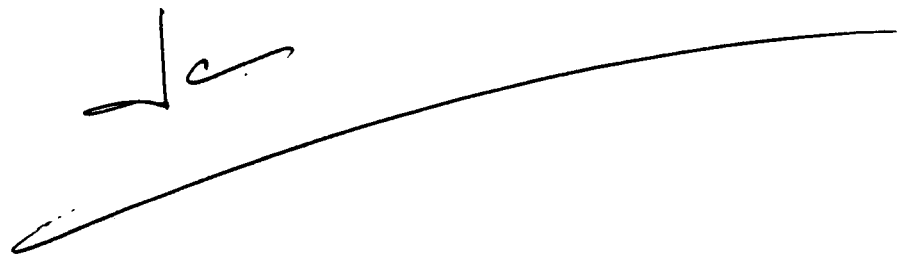
ABN052-14

DATE:06/23/14

DFTPP

		Rec. Date	EXP.Date	
Dftpp 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	1.25ml of each/250ml CH2CL2
Pentachlorophenol 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	
Benzidine 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	**final conc: 50ug/ml**
DDT 1000ug/ml	ECS-KTUNE011	11/28/2012	12/12/2014	

EXP:12/14



E14-09161 0254

DATE: 08/06/14	Conc :	Rec/Prep		ABN054-14	ABN055-14	ABN056-14	ABN057-14	ABN058-14	ABN059-14
BNAMIX1 STD		**Date**	**Exp Date**	**1**	**10**	**20**	**40**	**80**	**120**
ISTD (ECS-SVI028)	4000ug/ml	Dec-13	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul	50ul	50ul	50ul	50ul	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul	50ul	50ul	50ul	50ul	50ul
DIOXANE-d8(ABN-013-14)	1000ug/ml	Feb-14	Aug-14	20ul	20ul	20ul	20ul	20ul	20ul
PAH mix (CPI-198998)	2000ug/ml	Apr-13	Nov-15	0.5ul	5ul	10ul	20ul	40ul	60ul
PHENOL mix(CPI-219586)	2000ug/ml	Dec-14	Dec-14	0.5ul	5ul	10ul	20ul	40ul	60ul
BN mix (CPI-199335)	2000ug/ml	Apr-13	Nov-14	0.5ul	5ul	10ul	20ul	40ul	60ul
ADD ON #1 mix(CPI-199002)	2000ug/ml	Apr-13	Nov-14	0.5ul	5ul	10ul	20ul	40ul	60ul
OLMO4 mix(CPI- 219588)	2000ug/ml	Dec-14	Nov-14	0.5ul	5ul	10ul	20ul	40ul	60ul
BENZIDINES mix (CPI-214076)	2000ug/ml	Dec-14	Aug-14	0.5ul	5ul	10ul	20ul	40ul	60ul
EXTRA (ABN011-14)	2000ug/ml	Feb-14	Feb-15	0.5ul	5ul	10ul	20ul	40ul	60ul
DIOXANE (SUPELCO-LB914570)	2000ug/ml	Dec-14	Dec-14	0.5ul	5ul	10ul	20ul	40ul	60ul
2,3,4,6-Tetrachlorophenol(RESTEKA08785(	1000ug/ml	Dec-13	Apr-20	1ul	10ul	20ul	40ul	80ul	120ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:02/15									

DATE: 08/06/14	Conc :	Rec/Prep		ABN060-14	ABN061-14	ABN062-14	ABN063-14	ABN064-14	ABN065-14
BNAMIX2 STD		Date	Exp Date	**1**	**10**	**20**	**40**	**80**	**120**
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul	10ul	10ul	10ul	10ul	10ul
OLMO4 mix(CPI- 199016)	2000ug/ml	Apr-13	Nov-14	0.5ul	5ul	10ul	20ul	40ul	60ul
BENZIDINES mix (CPI-207522)	2000ug/ml	Apr-13	Apr-15	0.5ul	5ul	10ul	20ul	40ul	60ul
Final Volume				1mL	1mL	1mL	1mL	1mL	1mL
EXP:02/15									

ABN066-14

DATE: 08/06/14

40ng BNA CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI028)	4000ug/ml	Dec-14	Oct-16	10ul
BN surrogates (ECS-BNS025)	1000ug/ml	May-12	May-15	50ul
ACID surrogates (ECS-AES025)	2000ug/ml	Jan-13	Jan-15	50ul
DIOXANE-d8(ABN-013-14)	1000ug/ml	Feb-14	Aug-14	20ul
ABN033-14	287ug/ml	Jan-14	Jun-14	140ul
1,4-Dioxane (abn014-14)	1000ug/ml	Jul-13	Aug-14	40ul
Final Volume				1ml
EXP:02/15				

ABN067-14

DATE: 08/06/14

40ng OLMO4 CHECK STD	Conc :	Rec/Prep Date	Exp Date	
ISTD (ECS-SVI027)	4000ug/ml	May-12	May-15	10ul
ADD ON #2 mix(ECS-8270A202)	2000ug/ml	Jun-13	Dec-14	20ul
BENZIDINES mix (SUPELCO-LB79050)	2000ug/ml	Jan-13	Mar-15	20ul
Final Volume				1ml
EXP:02/15				

E14-091161 0255

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 09/30/2014

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS140929-16	SOIL	117		97		97		101	
PCB	LCSS140929-16	SOIL	117		104		97		126	
SED-1	E14-09338-001	SOIL	128		131		112		133	
SED-2	E14-09338-002	SOIL	125		122		104		128	
GPEC-WC0	E14-09161-001	SOIL	97		105		78		115	
S-4	E14-09218-004	SOIL	121		117		101		124	
S-5	E14-09218-005	SOIL	107		100		85		108	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS140929-16
Date Extracted: 09/29/2014
Date Analyzed: 09/30/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	478.7	96	40 - 140
Aroclor-1260	500	0.0	584.4	117	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E14-09303-001
Date Extracted: 09/29/2014
Date Analyzed: 09/29/2014

GC Column: DB-5/DB1701P
Sample wt/vol: 5.18g
Matrix-Units: Soil-mg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	464.7	93	40 - 140
Aroclor-1260	500	14.8	562.7	110	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	477.3	95	2	50	40 - 140
Aroclor-1260	14.8	568.6	111	1	50	40 - 140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

PCB METHOD BLANK SUMMARY

Lab File ID: R1008.D

Instrument ID: GC-R

Date Extracted: 09/29/2014

Matrix: SOIL

Date Analyzed: 09/29/2014

Time Analyzed: 19:05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS140929-07	09/29/2014	19:23
PCB	09303-001MS	09/29/2014	19:40
PCB	09303-001MSD	09/29/2014	19:58
PX-18/7-	E14-09303-001	09/29/2014	20:15
PX-19/2-	E14-09303-002	09/29/2014	20:33
PX-20/0-	E14-09303-003	09/29/2014	20:50
PX-21/4-	E14-09303-004	09/29/2014	21:08
PX-22/0-	E14-09303-005	09/29/2014	21:25
PX-23/4-	E14-09303-006	09/29/2014	21:42

PCB METHOD BLANK SUMMARY

Lab File ID:	R1058.D	Instrument ID:	GC-R
Date Extracted:	09/29/2014	Matrix:	SOIL
Date Analyzed:	09/30/2014	Time Analyzed:	12:23

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS140929-16	09/30/2014	12:40
SED-1	E14-09338-001	09/30/2014	12:58
SED-2	E14-09338-002	09/30/2014	13:15
GPEC-WC0	E14-09161-001	09/30/2014	13:33
S-4	E14-09218-004	09/30/2014	13:50
S-5	E14-09218-005	09/30/2014	14:07

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 12.01 **TCMX 2** 3.01 **DCB 2** 12.75

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS140929-16	09/30/2014	12:23	2.71		12.01		3.01		12.75	
PCB	LCSS140929-16	09/30/2014	12:40	2.71		12.01		3.01		12.75	
SED-1	E14-09338-001	09/30/2014	12:58	2.71		12.01		3.01		12.75	
SED-2	E14-09338-002	09/30/2014	13:15	2.71		12.01		3.01		12.75	
GPEC-WC0	E14-09161-001	09/30/2014	13:33	2.71		12.01		3.01		12.75	
S-4	E14-09218-004	09/30/2014	13:50	2.71		12.01		3.01		12.75	
S-5	E14-09218-005	09/30/2014	14:07	2.71		12.01		3.01		12.75	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1062.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 13:33
Operator : JS
Sample : GPEC-WC0,E14-09161-001,S,5.44g,4.00,20
Misc : 140929-16,09/29/14,09/24/14,1
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:35:22 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	2882.8E6	7873.3E6	193.896	155.690
Spiked Amount 200.000			Recovery =		96.95%	77.84%
2) S DCB	12.01	12.75	917.3E6	2798.3E6	209.412	230.833
Spiked Amount 200.000			Recovery =		104.71%	115.42%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.33	7.30	18531349	44019752	23.209	14.158 #
29) L7 Aroclor-1254 {2}	6.77	7.93	9220067	86938526	18.320	43.830 #
30) L7 Aroclor-1254 {3}	6.93	8.33	33019724	41352564	34.315	29.617m
31) L7 Aroclor-1254 {4}	7.37	8.53	23114890	53469033	22.930	27.109m
32) L7 Aroclor-1254 {5}	8.21	9.34	29718582	91790842	31.234	31.961m
Sum Aroclor-1254			113.6E6	317.6E6	130.008	146.674
Average Aroclor-1254					26.002	29.335
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

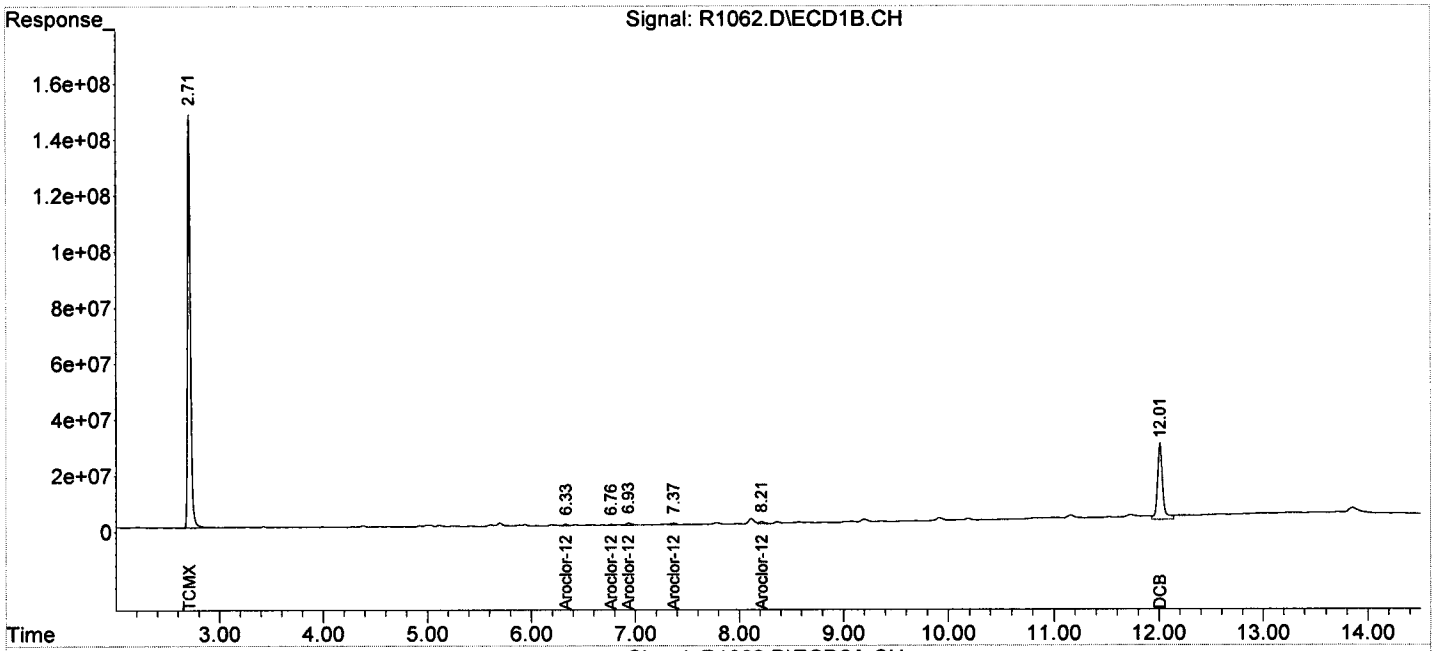
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

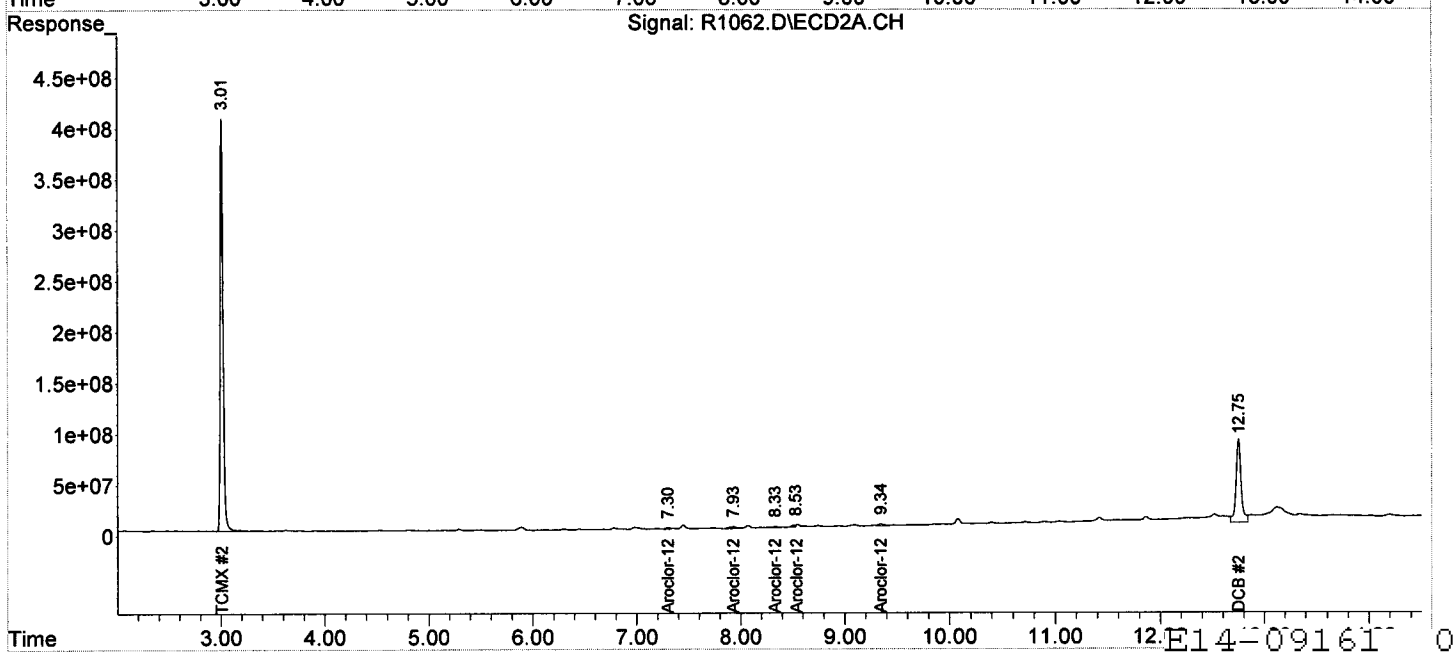
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1062.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 13:33
Operator : JS
Sample : GPEC-WC0,E14-09161-001,S,5.44g,4.00,20
Misc : 140929-16,09/29/14,09/24/14,1
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:35:22 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB STANDARDS

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.16	3.16	3.16	3.16	3.16	3.16	3.09	3.23
Aroclor-1016 {2}	3.98	3.98	3.98	3.98	3.98	3.98	3.91	4.05
Aroclor-1016 {3}	4.52	4.52	4.52	4.52	4.52	4.52	4.45	4.59
Aroclor-1016 {4}	5.02	5.03	5.03	5.03	5.03	5.02	4.95	5.09
Aroclor-1016 {5}	5.42	5.42	5.42	5.42	5.42	5.42	5.35	5.49
Aroclor-1221			2.09				2.02	2.16
Aroclor-1221 {2}			2.96				2.89	3.03
Aroclor-1221 {3}			3.08				3.01	3.15
Aroclor-1221 {4}			3.16				3.09	3.23
Aroclor-1221 {5}			3.74				3.67	3.81
Aroclor-1232			3.16				3.09	3.23
Aroclor-1232 {2}			3.98				3.91	4.05
Aroclor-1232 {3}			4.63				4.56	4.70
Aroclor-1232 {4}			5.28				5.21	5.35
Aroclor-1232 {5}			5.42				5.35	5.49
Aroclor-1242			3.98				3.91	4.05
Aroclor-1242 {2}			4.91				4.84	4.98
Aroclor-1242 {3}			5.23				5.16	5.30
Aroclor-1242 {4}			5.92				5.85	5.99
Aroclor-1242 {5}			6.19				6.12	6.26
Aroclor-1248			4.37				4.29	4.45
Aroclor-1248 {2}			4.91				4.83	4.99
Aroclor-1248 {3}			5.23				5.15	5.31
Aroclor-1248 {4}			5.92				5.84	6.00
Aroclor-1248 {5}			6.19				6.11	6.27
Aroclor-1254			6.31				6.23	6.39
Aroclor-1254 {2}			6.75				6.67	6.83
Aroclor-1254 {3}			6.91				6.82	7.00
Aroclor-1254 {4}			7.35				7.26	7.44
Aroclor-1254 {5}			8.20				8.11	8.29
Aroclor-1260	8.20	8.20	8.20	8.20	8.20	8.20	7.30	9.10
Aroclor-1260 {2}	8.87	8.87	8.87	8.87	8.87	8.87	7.97	9.77
Aroclor-1260 {3}	9.35	9.35	9.35	9.35	9.35	9.35	8.45	10.25
Aroclor-1260 {4}	9.83	9.83	9.83	9.83	9.83	9.83	8.93	10.73
Aroclor-1260 {5}	10.89	10.89	10.89	10.89	10.89	10.89	9.99	11.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	293974	273117	247902	237484	233683	257232	9.98
Aroclor-1016 {2}	394478	377037	342772	328867	327041	354039	8.54
Aroclor-1016 {3}	536194	485142	442632	430054	429485	464701	9.89
Aroclor-1016 {4}	237901	217263	195796	185972	182976	203981	11.39
Aroclor-1016 {5}	405883	375372	353445	342584	343049	364066	7.39
Aroclor-1221			104340				
Aroclor-1221 {2}			156068				
Aroclor-1221 {3}			111912				
Aroclor-1221 {4}			375549				
Aroclor-1221 {5}			88073				
Aroclor-1232			269145				
Aroclor-1232 {2}			161972				
Aroclor-1232 {3}			141454				
Aroclor-1232 {4}			110309				
Aroclor-1232 {5}			195515				
Aroclor-1242			308026				
Aroclor-1242 {2}			205313				
Aroclor-1242 {3}			289437				
Aroclor-1242 {4}			384576				
Aroclor-1242 {5}			366351				
Aroclor-1248			608099				
Aroclor-1248 {2}			365133				
Aroclor-1248 {3}			477594				
Aroclor-1248 {4}			671440				
Aroclor-1248 {5}			563533				
Aroclor-1254			798455				
Aroclor-1254 {2}			503273				
Aroclor-1254 {3}			962260				
Aroclor-1254 {4}			1008073				
Aroclor-1254 {5}			951470				
Aroclor-1260	1204804	1065709	1076115	1056481	1037605	1088143	6.13
Aroclor-1260 {2}	607254	538869	519280	506148	494601	533230	8.35
Aroclor-1260 {3}	1317493	1178430	1254441	1251953	1213080	1243079	4.18
Aroclor-1260 {4}	674711	631837	664631	672270	645252	657740	2.82
Aroclor-1260 {5}	324092	285955	280634	284279	266051	288202	7.48
					Average %RSD		7.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.91	3.91	3.91	3.91	3.91	3.91	3.84	3.98
Aroclor-1016 {2}	4.52	4.52	4.52	4.52	4.52	4.52	4.45	4.59
Aroclor-1016 {3}	5.28	5.28	5.29	5.29	5.29	5.29	5.22	5.36
Aroclor-1016 {4}	5.50	5.50	5.50	5.50	5.50	5.50	5.43	5.57
Aroclor-1016 {5}	5.68	5.68	5.68	5.68	5.68	5.68	5.61	5.75
Aroclor-1221			2.54				2.47	2.61
Aroclor-1221 {2}			3.57				3.50	3.64
Aroclor-1221 {3}			3.81				3.74	3.88
Aroclor-1221 {4}			3.91				3.84	3.98
Aroclor-1221 {5}			5.29				5.22	5.36
Aroclor-1232			3.91				3.84	3.98
Aroclor-1232 {2}			4.91				4.84	4.98
Aroclor-1232 {3}			5.50				5.43	5.57
Aroclor-1232 {4}			5.68				5.61	5.75
Aroclor-1232 {5}			6.28				6.21	6.35
Aroclor-1242			4.91				4.84	4.98
Aroclor-1242 {2}			5.68				5.61	5.75
Aroclor-1242 {3}			6.28				6.21	6.35
Aroclor-1242 {4}			6.44				6.37	6.51
Aroclor-1242 {5}			6.98				6.91	7.05
Aroclor-1248			5.28				5.20	5.36
Aroclor-1248 {2}			5.88				5.80	5.96
Aroclor-1248 {3}			6.28				6.20	6.36
Aroclor-1248 {4}			6.44				6.36	6.52
Aroclor-1248 {5}			6.79				6.71	6.87
Aroclor-1254			7.29				7.21	7.37
Aroclor-1254 {2}			7.88				7.80	7.96
Aroclor-1254 {3}			8.33				8.24	8.42
Aroclor-1254 {4}			8.50				8.41	8.59
Aroclor-1254 {5}			9.33				9.24	9.42
Aroclor-1260	8.07	8.07	8.07	8.07	8.07	8.07	7.17	8.97
Aroclor-1260 {2}	8.33	8.33	8.33	8.33	8.33	8.33	7.43	9.23
Aroclor-1260 {3}	9.93	9.93	9.93	9.93	9.93	9.93	9.03	10.83
Aroclor-1260 {4}	10.44	10.44	10.44	10.44	10.44	10.44	9.54	11.34
Aroclor-1260 {5}	11.04	11.04	11.04	11.04	11.04	11.04	10.14	11.94

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	989165	909134	889136	828139	793628	881840	8.60
Aroclor-1016 {2}	1915906	1853542	1728757	1621456	1552488	1734430	8.79
Aroclor-1016 {3}	4300307	4081473	4025833	3920882	3855502	4036799	4.25
Aroclor-1016 {4}	1916658	1729364	1745421	1663599	1620427	1735094	6.53
Aroclor-1016 {5}	1335872	1319240	1331081	1280606	1253382	1304036	2.74
Aroclor-1221			450337				
Aroclor-1221 {2}			597977				
Aroclor-1221 {3}			402531				
Aroclor-1221 {4}			1449169				
Aroclor-1221 {5}			311809				
Aroclor-1232			1042079				
Aroclor-1232 {2}			411921				
Aroclor-1232 {3}			890197				
Aroclor-1232 {4}			639395				
Aroclor-1232 {5}			929989				
Aroclor-1242			741334				
Aroclor-1242 {2}			1169389				
Aroclor-1242 {3}			1606656				
Aroclor-1242 {4}			1336823				
Aroclor-1242 {5}			2586318				
Aroclor-1248			2206682				
Aroclor-1248 {2}			3415387				
Aroclor-1248 {3}			2362519				
Aroclor-1248 {4}			2021274				
Aroclor-1248 {5}			1064041				
Aroclor-1254			3109226				
Aroclor-1254 {2}			1983545				
Aroclor-1254 {3}			1396231				
Aroclor-1254 {4}			1972405				
Aroclor-1254 {5}			2872003				
Aroclor-1260	1601221	1422257	1405976	1278680	1352745	1412176	8.47
Aroclor-1260 {2}	2271907	2037470	1956930	1809274	1859626	1987041	9.16
Aroclor-1260 {3}	1629553	1652848	1650588	1638266	1586849	1631621	1.64
Aroclor-1260 {4}	3502245	3432308	3571569	3580732	3492475	3515866	1.74
Aroclor-1260 {5}	2510689	2428920	2541589	2586509	2485276	2510597	2.36
					Average %RSD		5.43

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.49				8.37	8.61
Aroclor-1262 {2}			9.35				9.23	9.47
Aroclor-1262 {3}			9.98				9.86	10.10
Aroclor-1262 {4}			10.07				9.95	10.19
Aroclor-1262 {5}			10.89				10.77	11.01
Aroclor-1268			9.98				9.86	10.10
Aroclor-1268 {2}			10.07				9.95	10.19
Aroclor-1268 {3}			10.54				10.42	10.66
Aroclor-1268 {4}			10.67				10.55	10.79
Aroclor-1268 {5}			11.50				11.38	11.62

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.93				9.81	10.05
Aroclor-1262 {2}			10.44				10.32	10.56
Aroclor-1262 {3}			10.94				10.82	11.06
Aroclor-1262 {4}			11.03				10.91	11.15
Aroclor-1262 {5}			11.64				11.52	11.76
Aroclor-1268			10.94				10.82	11.06
Aroclor-1268 {2}			11.03				10.91	11.15
Aroclor-1268 {3}			11.28				11.16	11.40
Aroclor-1268 {4}			11.43				11.31	11.55
Aroclor-1268 {5}			12.52				12.40	12.64

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			899265				
Aroclor-1262 {2}			1685302				
Aroclor-1262 {3}			664755				
Aroclor-1262 {4}			680869				
Aroclor-1262 {5}			550821				
Aroclor-1268			1941766				
Aroclor-1268 {2}			1781364				
Aroclor-1268 {3}			1561622				
Aroclor-1268 {4}			390698				
Aroclor-1268 {5}			5042002				

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2187823				
Aroclor-1262 {2}			5101253				
Aroclor-1262 {3}			1801035				
Aroclor-1262 {4}			3547113				
Aroclor-1262 {5}			743819				
Aroclor-1268			5398448				
Aroclor-1268 {2}			5276786				
Aroclor-1268 {3}			4431185				
Aroclor-1268 {4}			1123109				
Aroclor-1268 {5}			14169003				

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.16	3.16	3.16	3.16	3.16	3.16	3.09	3.23
Aroclor-1016 {2}	3.98	3.98	3.98	3.98	3.98	3.98	3.91	4.05
Aroclor-1016 {3}	4.52	4.52	4.52	4.52	4.52	4.52	4.45	4.59
Aroclor-1016 {4}	5.02	5.03	5.03	5.03	5.03	5.02	4.95	5.09
Aroclor-1016 {5}	5.42	5.42	5.42	5.42	5.42	5.42	5.35	5.49
Aroclor-1221			2.09				2.02	2.16
Aroclor-1221 {2}			2.96				2.89	3.03
Aroclor-1221 {3}			3.08				3.01	3.15
Aroclor-1221 {4}			3.16				3.09	3.23
Aroclor-1221 {5}			3.74				3.67	3.81
Aroclor-1232			3.16				3.09	3.23
Aroclor-1232 {2}			3.98				3.91	4.05
Aroclor-1232 {3}			4.63				4.56	4.70
Aroclor-1232 {4}			5.28				5.21	5.35
Aroclor-1232 {5}			5.42				5.35	5.49
Aroclor-1242			3.98				3.91	4.05
Aroclor-1242 {2}			4.91				4.84	4.98
Aroclor-1242 {3}			5.23				5.16	5.30
Aroclor-1242 {4}			5.92				5.85	5.99
Aroclor-1242 {5}			6.19				6.12	6.26
Aroclor-1248			4.37				4.29	4.45
Aroclor-1248 {2}			4.91				4.83	4.99
Aroclor-1248 {3}			5.23				5.15	5.31
Aroclor-1248 {4}			5.92				5.84	6.00
Aroclor-1248 {5}			6.19				6.11	6.27
Aroclor-1254			6.31				6.23	6.39
Aroclor-1254 {2}			6.75				6.67	6.83
Aroclor-1254 {3}			6.91				6.82	7.00
Aroclor-1254 {4}			7.35				7.26	7.44
Aroclor-1254 {5}			8.20				8.11	8.29
Aroclor-1260	8.20	8.20	8.20	8.20	8.20	8.20	7.30	9.10
Aroclor-1260 {2}	8.87	8.87	8.87	8.87	8.87	8.87	7.97	9.77
Aroclor-1260 {3}	9.35	9.35	9.35	9.35	9.35	9.35	8.45	10.25
Aroclor-1260 {4}	9.83	9.83	9.83	9.83	9.83	9.83	8.93	10.73
Aroclor-1260 {5}	10.89	10.89	10.89	10.89	10.89	10.89	9.99	11.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	293974	273117	247902	237484	233683	257232	9.98
Aroclor-1016 {2}	394478	377037	342772	328867	327041	354039	8.54
Aroclor-1016 {3}	536194	485142	442632	430054	429485	464701	9.89
Aroclor-1016 {4}	237901	217263	195796	185972	182976	203981	11.39
Aroclor-1016 {5}	405883	375372	353445	342584	343049	364066	7.39
Aroclor-1221			104340				
Aroclor-1221 {2}			156068				
Aroclor-1221 {3}			111912				
Aroclor-1221 {4}			375549				
Aroclor-1221 {5}			88073				
Aroclor-1232			269145				
Aroclor-1232 {2}			161972				
Aroclor-1232 {3}			141454				
Aroclor-1232 {4}			110309				
Aroclor-1232 {5}			195515				
Aroclor-1242			308026				
Aroclor-1242 {2}			205313				
Aroclor-1242 {3}			289437				
Aroclor-1242 {4}			384576				
Aroclor-1242 {5}			366351				
Aroclor-1248			608099				
Aroclor-1248 {2}			365133				
Aroclor-1248 {3}			477594				
Aroclor-1248 {4}			671440				
Aroclor-1248 {5}			563533				
Aroclor-1254			798455				
Aroclor-1254 {2}			503273				
Aroclor-1254 {3}			962260				
Aroclor-1254 {4}			1008073				
Aroclor-1254 {5}			951470				
Aroclor-1260	1204804	1065709	1076115	1056481	1037605	1088143	6.13
Aroclor-1260 {2}	607254	538869	519280	506148	494601	533230	8.35
Aroclor-1260 {3}	1317493	1178430	1254441	1251953	1213080	1243079	4.18
Aroclor-1260 {4}	674711	631837	664631	672270	645252	657740	2.82
Aroclor-1260 {5}	324092	285955	280634	284279	266051	288202	7.48
					Average %RSD		7.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.91	3.91	3.91	3.91	3.91	3.91	3.84	3.98
Aroclor-1016 {2}	4.52	4.52	4.52	4.52	4.52	4.52	4.45	4.59
Aroclor-1016 {3}	5.28	5.28	5.29	5.29	5.29	5.29	5.22	5.36
Aroclor-1016 {4}	5.50	5.50	5.50	5.50	5.50	5.50	5.43	5.57
Aroclor-1016 {5}	5.68	5.68	5.68	5.68	5.68	5.68	5.61	5.75
Aroclor-1221			2.54				2.47	2.61
Aroclor-1221 {2}			3.57				3.50	3.64
Aroclor-1221 {3}			3.81				3.74	3.88
Aroclor-1221 {4}			3.91				3.84	3.98
Aroclor-1221 {5}			5.29				5.22	5.36
Aroclor-1232			3.91				3.84	3.98
Aroclor-1232 {2}			4.91				4.84	4.98
Aroclor-1232 {3}			5.50				5.43	5.57
Aroclor-1232 {4}			5.68				5.61	5.75
Aroclor-1232 {5}			6.28				6.21	6.35
Aroclor-1242			4.91				4.84	4.98
Aroclor-1242 {2}			5.68				5.61	5.75
Aroclor-1242 {3}			6.28				6.21	6.35
Aroclor-1242 {4}			6.44				6.37	6.51
Aroclor-1242 {5}			6.98				6.91	7.05
Aroclor-1248			5.28				5.20	5.36
Aroclor-1248 {2}			5.88				5.80	5.96
Aroclor-1248 {3}			6.28				6.20	6.36
Aroclor-1248 {4}			6.44				6.36	6.52
Aroclor-1248 {5}			6.79				6.71	6.87
Aroclor-1254			7.29				7.21	7.37
Aroclor-1254 {2}			7.88				7.80	7.96
Aroclor-1254 {3}			8.33				8.24	8.42
Aroclor-1254 {4}			8.50				8.41	8.59
Aroclor-1254 {5}			9.33				9.24	9.42
Aroclor-1260	8.07	8.07	8.07	8.07	8.07	8.07	7.17	8.97
Aroclor-1260 {2}	8.33	8.33	8.33	8.33	8.33	8.33	7.43	9.23
Aroclor-1260 {3}	9.93	9.93	9.93	9.93	9.93	9.93	9.03	10.83
Aroclor-1260 {4}	10.44	10.44	10.44	10.44	10.44	10.44	9.54	11.34
Aroclor-1260 {5}	11.04	11.04	11.04	11.04	11.04	11.04	10.14	11.94

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	989165	909134	889136	828139	793628	881840	8.60
Aroclor-1016 {2}	1915906	1853542	1728757	1621456	1552488	1734430	8.79
Aroclor-1016 {3}	4300307	4081473	4025833	3920882	3855502	4036799	4.25
Aroclor-1016 {4}	1916658	1729364	1745421	1663599	1620427	1735094	6.53
Aroclor-1016 {5}	1335872	1319240	1331081	1280606	1253382	1304036	2.74
Aroclor-1221			450337				
Aroclor-1221 {2}			597977				
Aroclor-1221 {3}			402531				
Aroclor-1221 {4}			1449169				
Aroclor-1221 {5}			311809				
Aroclor-1232			1042079				
Aroclor-1232 {2}			411921				
Aroclor-1232 {3}			890197				
Aroclor-1232 {4}			639395				
Aroclor-1232 {5}			929989				
Aroclor-1242			741334				
Aroclor-1242 {2}			1169389				
Aroclor-1242 {3}			1606656				
Aroclor-1242 {4}			1336823				
Aroclor-1242 {5}			2586318				
Aroclor-1248			2206682				
Aroclor-1248 {2}			3415387				
Aroclor-1248 {3}			2362519				
Aroclor-1248 {4}			2021274				
Aroclor-1248 {5}			1064041				
Aroclor-1254			3109226				
Aroclor-1254 {2}			1983545				
Aroclor-1254 {3}			1396231				
Aroclor-1254 {4}			1972405				
Aroclor-1254 {5}			2872003				
Aroclor-1260	1601221	1422257	1405976	1278680	1352745	1412176	8.47
Aroclor-1260 {2}	2271907	2037470	1956930	1809274	1859626	1987041	9.16
Aroclor-1260 {3}	1629553	1652848	1650588	1638266	1586849	1631621	1.64
Aroclor-1260 {4}	3502245	3432308	3571569	3580732	3492475	3515866	1.74
Aroclor-1260 {5}	2510689	2428920	2541589	2586509	2485276	2510597	2.36
					Average %RSD		5.43

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.49				8.37	8.61
Aroclor-1262 {2}			9.35				9.23	9.47
Aroclor-1262 {3}			9.98				9.86	10.10
Aroclor-1262 {4}			10.07				9.95	10.19
Aroclor-1262 {5}			10.89				10.77	11.01
Aroclor-1268			9.98				9.86	10.10
Aroclor-1268 {2}			10.07				9.95	10.19
Aroclor-1268 {3}			10.54				10.42	10.66
Aroclor-1268 {4}			10.67				10.55	10.79
Aroclor-1268 {5}			11.50				11.38	11.62

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.93				9.81	10.05
Aroclor-1262 {2}			10.44				10.32	10.56
Aroclor-1262 {3}			10.94				10.82	11.06
Aroclor-1262 {4}			11.03				10.91	11.15
Aroclor-1262 {5}			11.64				11.52	11.76
Aroclor-1268			10.94				10.82	11.06
Aroclor-1268 {2}			11.03				10.91	11.15
Aroclor-1268 {3}			11.28				11.16	11.40
Aroclor-1268 {4}			11.43				11.31	11.55
Aroclor-1268 {5}			12.52				12.40	12.64

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/08/2014 Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R0624.D R0623.D R0622.D R0621.D R0620.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			899265				
Aroclor-1262 {2}			1685302				
Aroclor-1262 {3}			664755				
Aroclor-1262 {4}			680869				
Aroclor-1262 {5}			550821				
Aroclor-1268			1941766				
Aroclor-1268 {2}			1781364				
Aroclor-1268 {3}			1561622				
Aroclor-1268 {4}			390698				
Aroclor-1268 {5}			5042002				

GC Column (2nd): DB-1701P

Data File: R0624.C R0623.C R0622.C R0621.C R0620.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2187823				
Aroclor-1262 {2}			5101253				
Aroclor-1262 {3}			1801035				
Aroclor-1262 {4}			3547113				
Aroclor-1262 {5}			743819				
Aroclor-1268			5398448				
Aroclor-1268 {2}			5276786				
Aroclor-1268 {3}			4431185				
Aroclor-1268 {4}			1123109				
Aroclor-1268 {5}			14169003				

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0620.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 15:28
Operator : JS
Sample : ICC_8082_L5_IAS_4973,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:37 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	12680.8E6	40382.9E6	852.891	798.549
Spiked Amount 200.000			Recovery	=	426.45%	399.27%
2) S DCB	11.99	12.74	3426.4E6	9541.9E6	767.353	782.359
Spiked Amount 200.000			Recovery	=	383.68%	391.18%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	467.4E6	1587.3E6	1799.415	1802.690
4) L2 Aroclor-1016 {2}	3.98	4.52	654.1E6	3105.0E6	1837.384	1798.065
5) L2 Aroclor-1016 {3}	4.52	5.29	859.0E6	7711.0E6	1848.434	1923.154
6) L2 Aroclor-1016 {4}	5.03	5.50	366.0E6	3240.9E6	1790.085	1898.089
7) L2 Aroclor-1016 {5}	5.42	5.68	686.1E6	2506.8E6	1865.953	1936.659
Sum Aroclor-1016			3032.5E6	18150.9E6	9141.271	9358.657
Average Aroclor-1016					1828.254	1871.731
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	2075.2E6	2705.5E6	1907.113	1915.831
34) L8 Aroclor-1260 {2}	8.87	8.33	989.2E6	3719.3E6	1855.111	1871.754
35) L8 Aroclor-1260 {3}	9.35	9.93	2426.2E6	3173.7E6	1951.734	1945.120
36) L8 Aroclor-1260 {4}	9.83	10.44	1290.5E6	6985.0E6	1941.210	1986.694
37) L8 Aroclor-1260 {5}	10.89	11.04	532.1E6	4970.6E6	1838.945	2011.250
Sum Aroclor-1260			7313.2E6	21553.9E6	9494.113	9730.649
Average Aroclor-1260					1898.823	1946.130
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0620.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 15:28
Operator : JS
Sample : ICC_8082_L5_IAS_4973,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:37 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

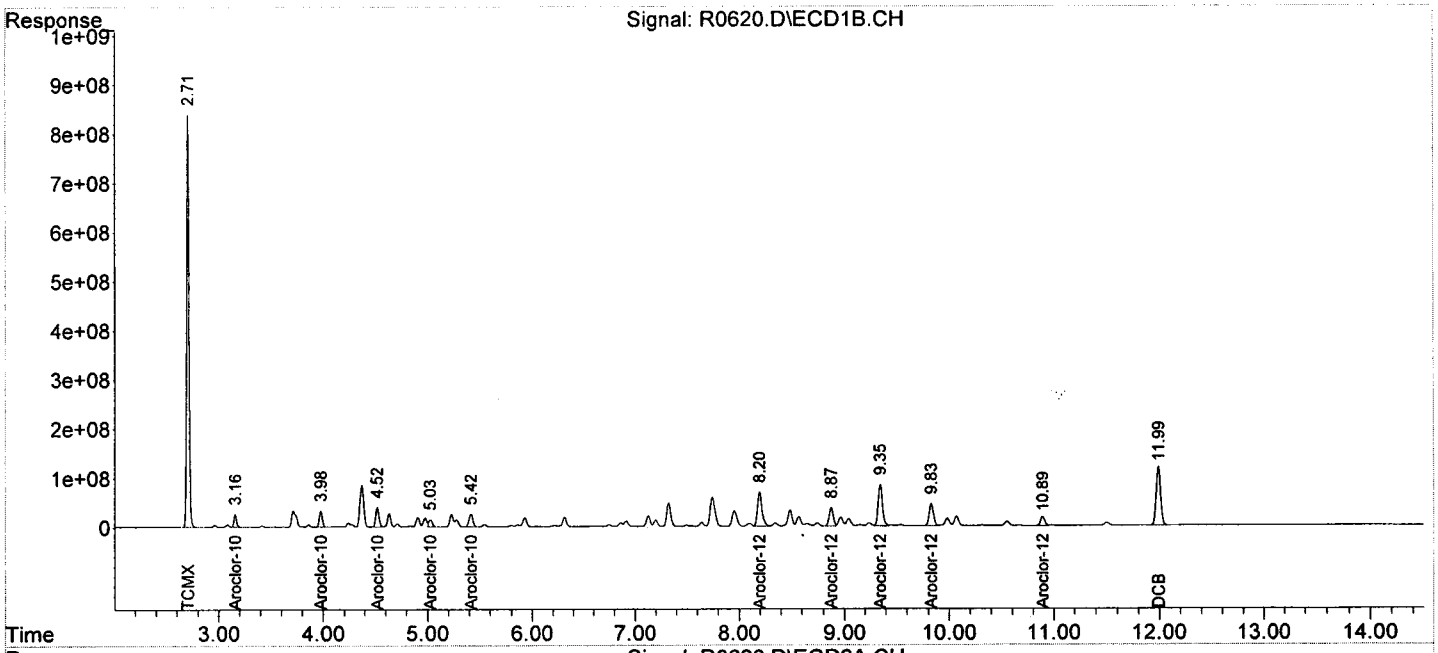
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

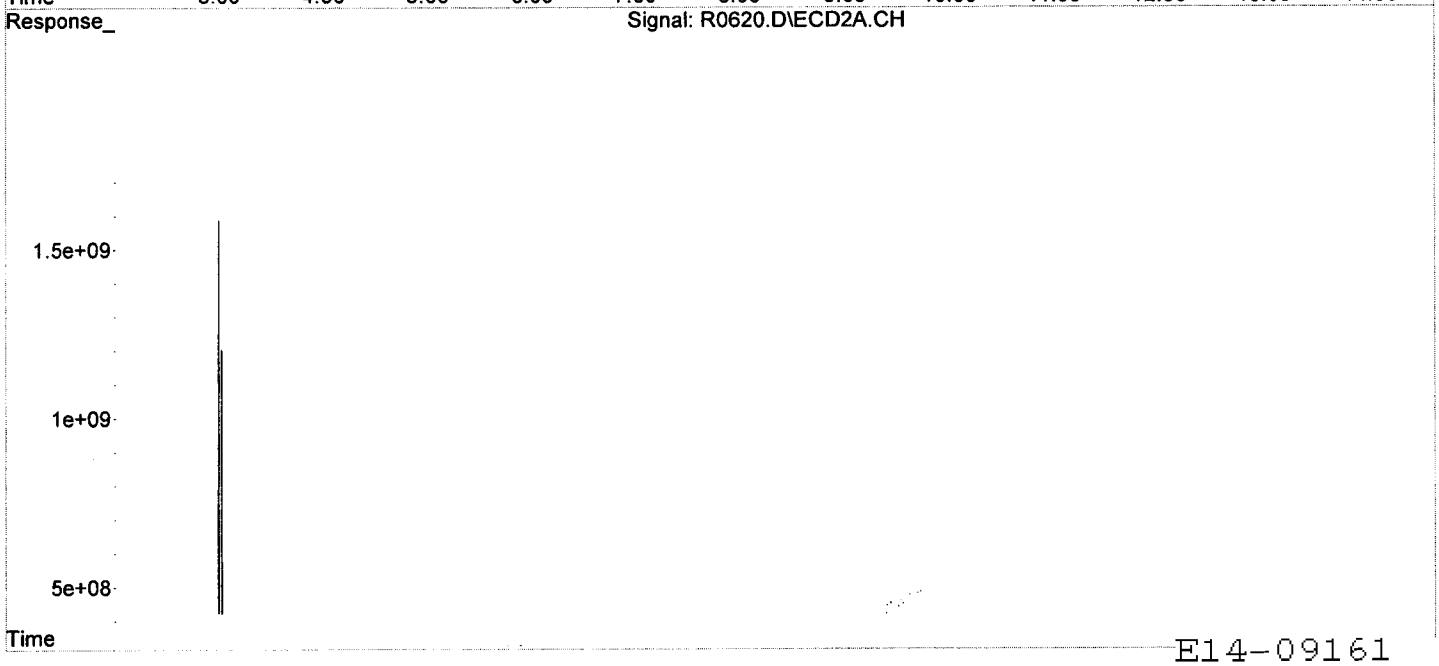
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0620.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 15:28
Operator : JS
Sample : ICC_8082_L5_IAS_4973,2_PPM
Misc : NA,NA,NA,1
ALS Vial : 1 Sample Multiplier: 1

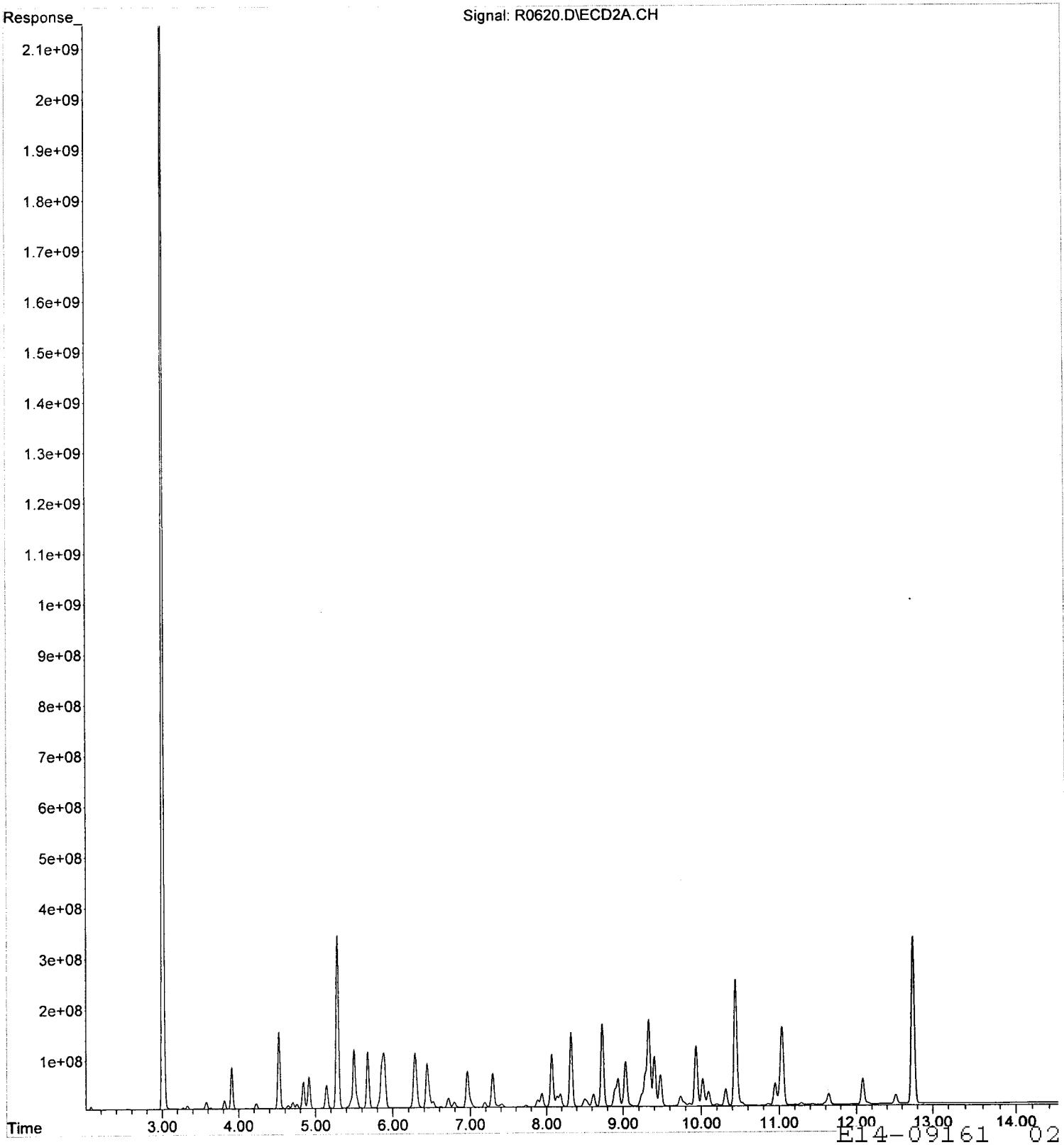
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:37 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





File :C:\MSDCHEM\1\DATA\09-08-14\R0620.D
Operator : JS
Acquired : 08 Sep 2014 15:28 using AcqMethod RPCB0908.M
Instrument : GC_R
Sample Name: ICC_8082_L5_IAS_4973,2_PPM
Misc Info : NA,NA,NA,1
Vial Number: 1



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0621.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:20
Operator : JS
Sample : ICC_8082_L4_IAS_4974,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	6210.8E6	20729.2E6	417.732	409.910
Spiked Amount 200.000			Recovery	=	208.87%	204.95%
2) S DCB	11.99	12.74	1821.3E6	5065.6E6	407.878	415.342
Spiked Amount 200.000			Recovery	=	203.94%	207.67%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	237.5E6	828.1E6	914.345	940.541
4) L2 Aroclor-1016 {2}	3.98	4.52	328.9E6	1621.5E6	923.822	938.972
5) L2 Aroclor-1016 {3}	4.52	5.29	430.1E6	3920.9E6	925.442	977.883
6) L2 Aroclor-1016 {4}	5.03	5.50	186.0E6	1663.6E6	909.699	974.329
7) L2 Aroclor-1016 {5}	5.42	5.68	342.6E6	1280.6E6	931.710	989.361
Sum Aroclor-1016			1525.0E6	9314.7E6	4605.018	4821.085
Average Aroclor-1016					921.004	964.217
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	1056.5E6	1278.7E6	970.903	905.468
34) L8 Aroclor-1260 {2}	8.87	8.33	506.1E6	1809.3E6	949.210	910.536
35) L8 Aroclor-1260 {3}	9.35	9.93	1252.0E6	1638.3E6	1007.138	1004.073
36) L8 Aroclor-1260 {4}	9.83	10.44	672.3E6	3580.7E6	1011.246	1018.450
37) L8 Aroclor-1260 {5}	10.89	11.04	284.3E6	2586.5E6	982.471	1046.587
Sum Aroclor-1260			3771.1E6	10893.5E6	4920.968	4885.114
Average Aroclor-1260					984.194	977.023
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0621.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:20
Operator : JS
Sample : ICC_8082_L4_IAS_4974,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

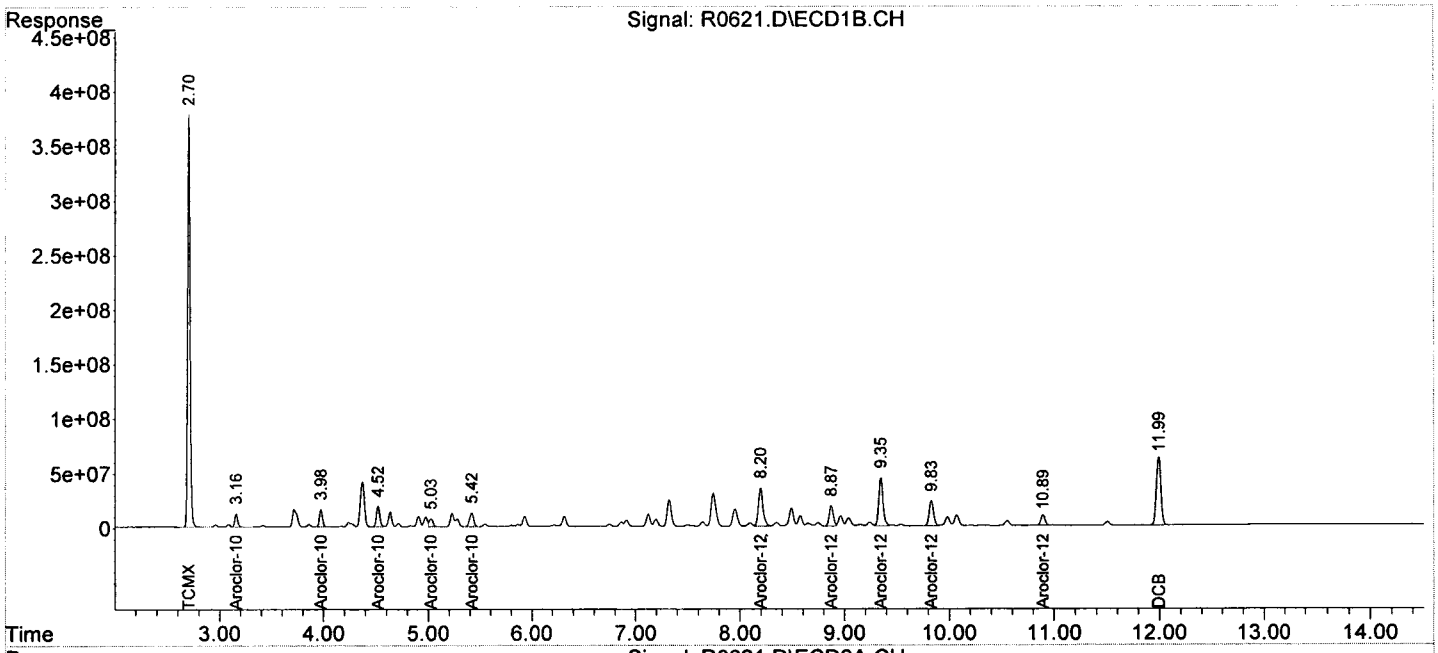
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

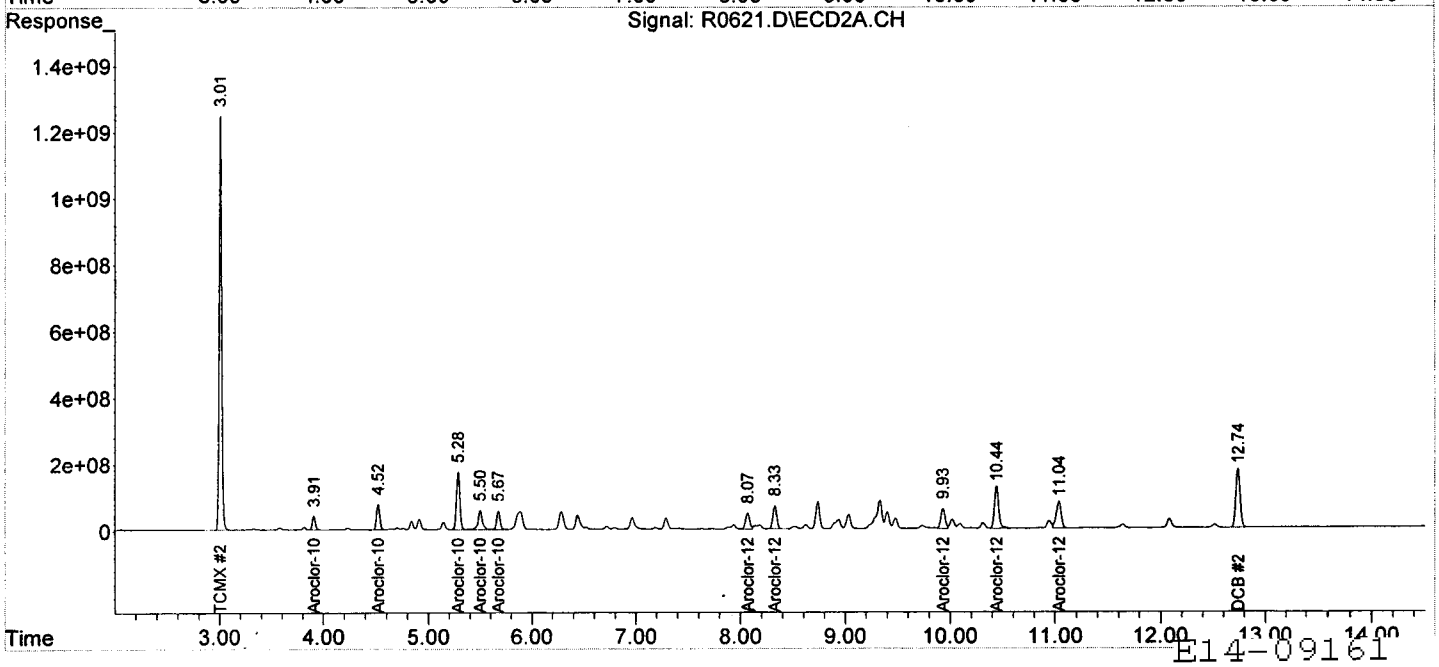
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0621.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:20
Operator : JS
Sample : ICC_8082_L4_IAS_4974,1_PPM
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:37:57 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0622.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:38
Operator : JS
Sample : ICC_8082_L3_IAS_4975,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:38:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3172.6E6	10378.1E6	213.387	205.220
Spiked Amount 200.000			Recovery =		106.69%	102.61%
2) S DCB	11.99	12.74	898.4E6	2455.2E6	201.206	201.304
Spiked Amount 200.000			Recovery =		100.60%	100.65%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	124.0E6	444.6E6	477.228	504.908
4) L2 Aroclor-1016 {2}	3.98	4.52	171.4E6	864.4E6	481.441	500.554
5) L2 Aroclor-1016 {3}	4.52	5.29	221.3E6	2012.9E6	476.254	502.029
6) L2 Aroclor-1016 {4}	5.03	5.50	97897913	872.7E6	478.877	511.125
7) L2 Aroclor-1016 {5}	5.42	5.68	176.7E6	665.5E6	480.624	514.179
Sum Aroclor-1016			791.3E6	4860.1E6	2394.424	2532.796
Average Aroclor-1016					478.885	506.559
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	538.1E6	703.0E6	494.473	497.805
34) L8 Aroclor-1260 {2}	8.87	8.33	259.6E6	978.5E6	486.919	492.423
35) L8 Aroclor-1260 {3}	9.35	9.93	627.2E6	825.3E6	504.570	505.813
36) L8 Aroclor-1260 {4}	9.83	10.44	332.3E6	1785.8E6	499.877	507.922
37) L8 Aroclor-1260 {5}	10.89	11.04	140.3E6	1270.8E6	484.937	514.206
Sum Aroclor-1260			1897.6E6	5563.3E6	2470.776	2518.168
Average Aroclor-1260					494.155	503.634
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0622.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:38
Operator : JS
Sample : ICC_8082_L3_IAS_4975,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:38:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

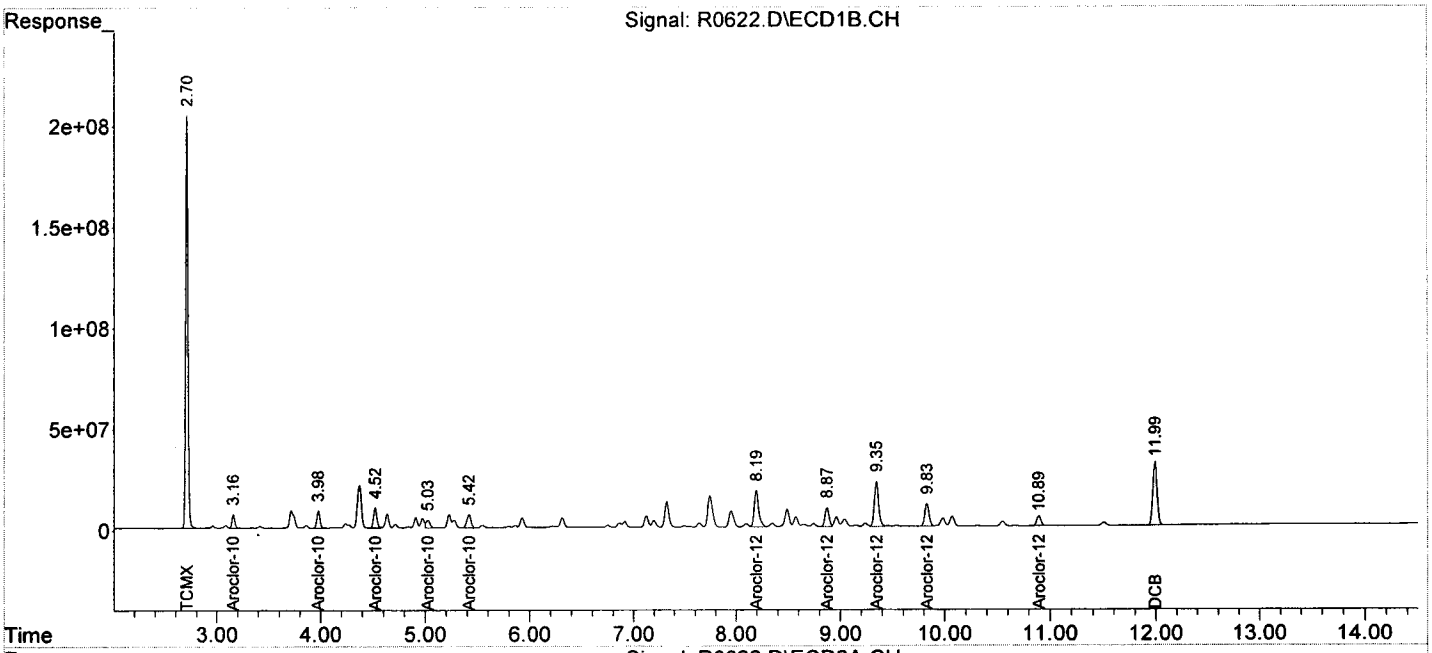
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

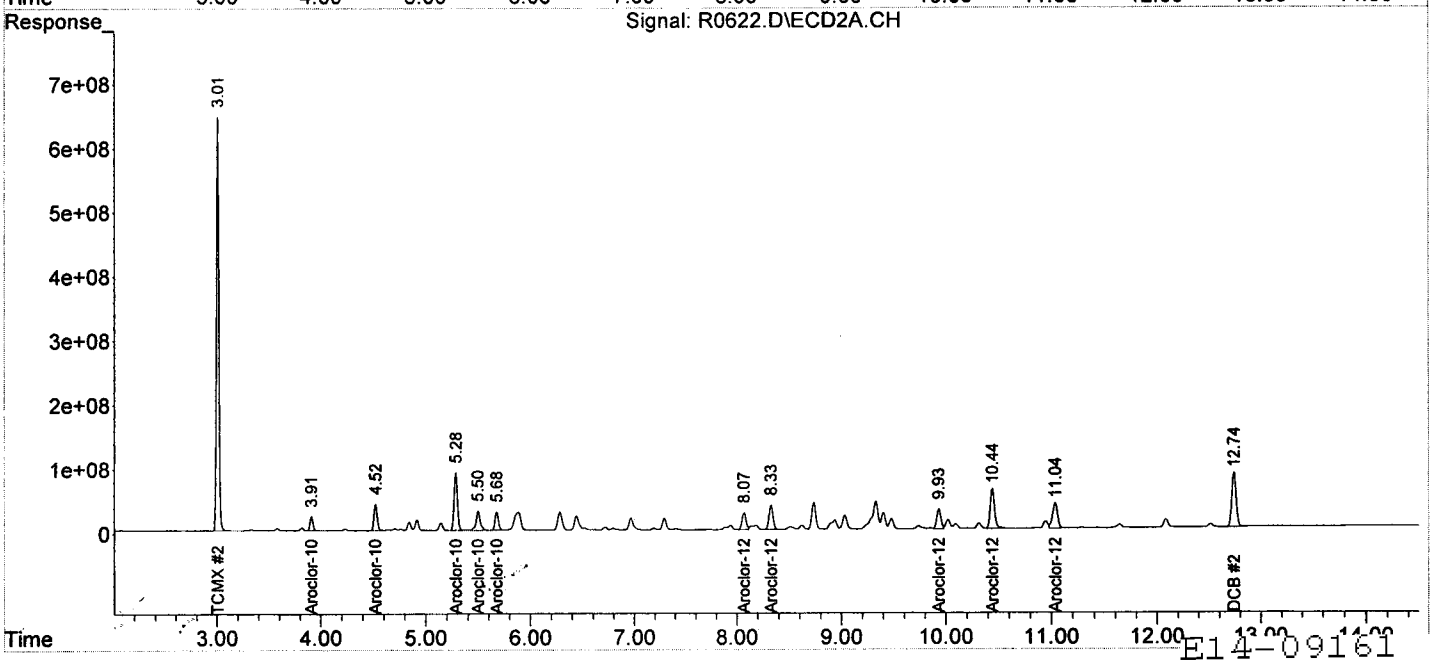
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0622.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:38
Operator : JS
Sample : ICC_8082_L3_IAS_4975,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:38:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0623.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:55
Operator : JS
Sample : ICC_8082_L2_IAS_4976,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	281.5E6	970.2E6	18.934	19.185
Spiked Amount 200.000			Recovery	=	9.47%	9.59%
2) S DCB	11.99	12.74	81400855	227.8E6	18.230m	18.681m
Spiked Amount 200.000			Recovery	=	9.12%	9.34%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	13655857	45456704	52.577m	51.626m
4) L2 Aroclor-1016 {2}	3.98	4.52	18851842	92677081	52.957m	53.669m
5) L2 Aroclor-1016 {3}	4.52	5.28	24257107	204.1E6	52.199	50.897m
6) L2 Aroclor-1016 {4}	5.03	5.50	10863128	86468196	53.138m	50.642m
7) L2 Aroclor-1016 {5}	5.42	5.68	18768580	65962002	51.044m	50.960m
Sum Aroclor-1016			86396514	494.6E6	261.915	257.794
Average Aroclor-1016					52.383	51.559
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	53285431	71112836	48.969	50.357
34) L8 Aroclor-1260 {2}	8.87	8.33	26943465	101.9E6	50.529	51.269
35) L8 Aroclor-1260 {3}	9.35	9.93	58921477	82642382	47.400	50.650
36) L8 Aroclor-1260 {4}	9.83	10.44	31591839	171.6E6	47.521	48.812
37) L8 Aroclor-1260 {5}	10.89	11.04	14297739	121.4E6	49.413m	49.141m
Sum Aroclor-1260			185.0E6	548.7E6	243.832	250.229
Average Aroclor-1260					48.766	50.046
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0623.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:55
Operator : JS
Sample : ICC_8082_L2_IAS_4976,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

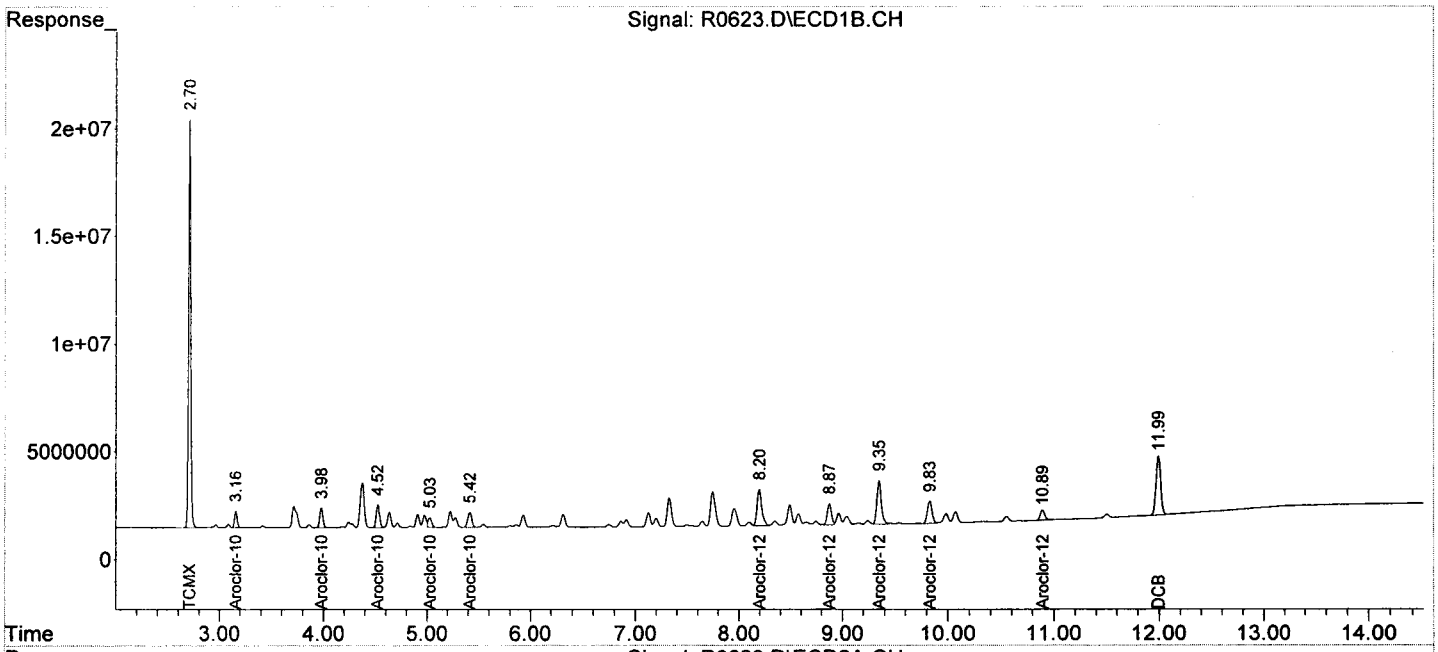
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

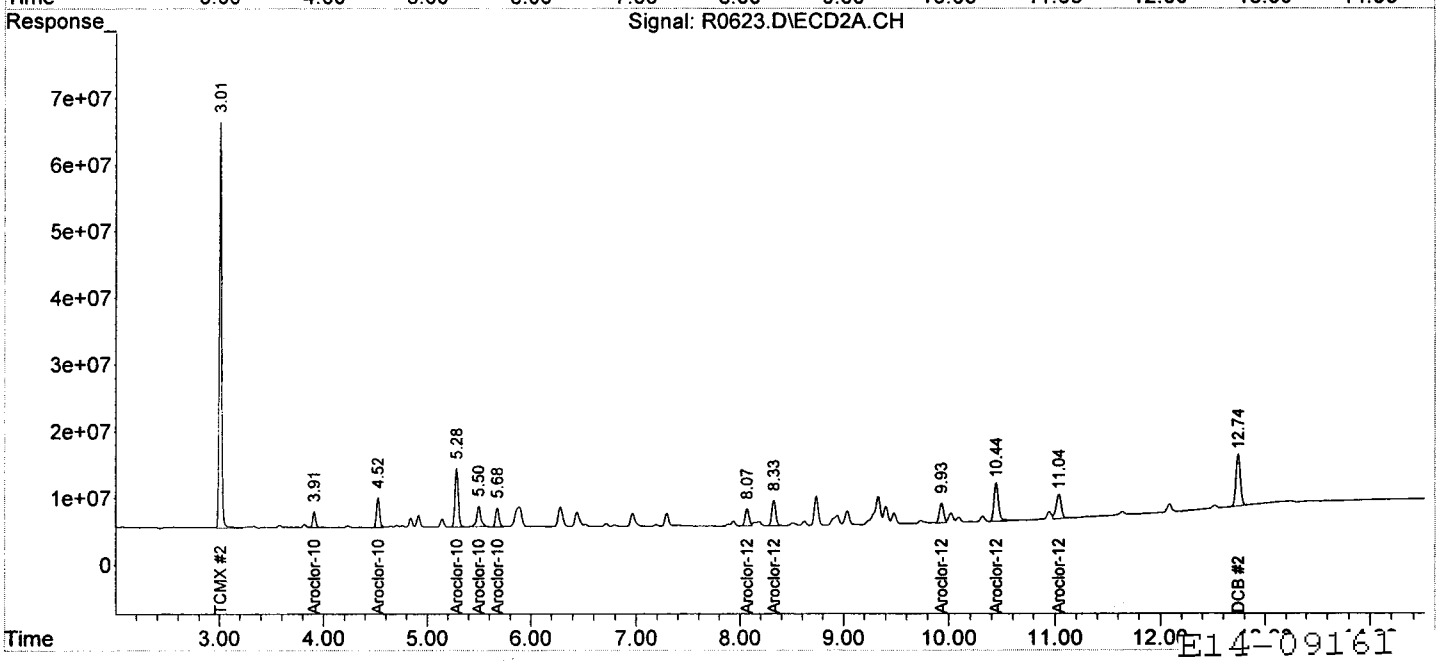
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0623.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 16:55
Operator : JS
Sample : ICC_8082_L2_IAS_4976,0.05_PPM
Misc : NA,NA,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0292

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0624.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 17:13
Operator : JS
Sample : ICC_8082_L1_IAS_4977,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	52091933	200.6E6	3.504	3.967
Spiked Amount 200.000			Recovery =		1.75%	1.98%
2) S DCB	11.99	12.74	18014296	49411199	4.034m	4.051m
Spiked Amount 200.000			Recovery =		2.02%	2.03%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	2939739	9891648	11.318m	11.234m
4) L2 Aroclor-1016 {2}	3.98	4.52	3944776	19159061	11.081m	11.095m
5) L2 Aroclor-1016 {3}	4.52	5.28	5361936	43003068	11.538	10.725m
6) L2 Aroclor-1016 {4}	5.02	5.50	2379014	19166582	11.637m	11.225m
7) L2 Aroclor-1016 {5}	5.42	5.68	4058825	13358718	11.039m	10.321m
Sum Aroclor-1016			18684291	104.6E6	56.614	54.600
Average Aroclor-1016					11.323	10.920
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	12048039	16012212	11.072	11.339
34) L8 Aroclor-1260 {2}	8.87	8.33	6072535	22719068	11.388	11.434
35) L8 Aroclor-1260 {3}	9.35	9.93	13174933	16295528	10.599	9.987
36) L8 Aroclor-1260 {4}	9.83	10.44	6747109	35022452	10.149m	9.961
37) L8 Aroclor-1260 {5}	10.89	11.04	3240919	25106887	11.201m	10.159m
Sum Aroclor-1260			41283535	115.2E6	54.409	52.880
Average Aroclor-1260					10.882	10.576
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0624.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 17:13
Operator : JS
Sample : ICC_8082_L1_IAS_4977,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

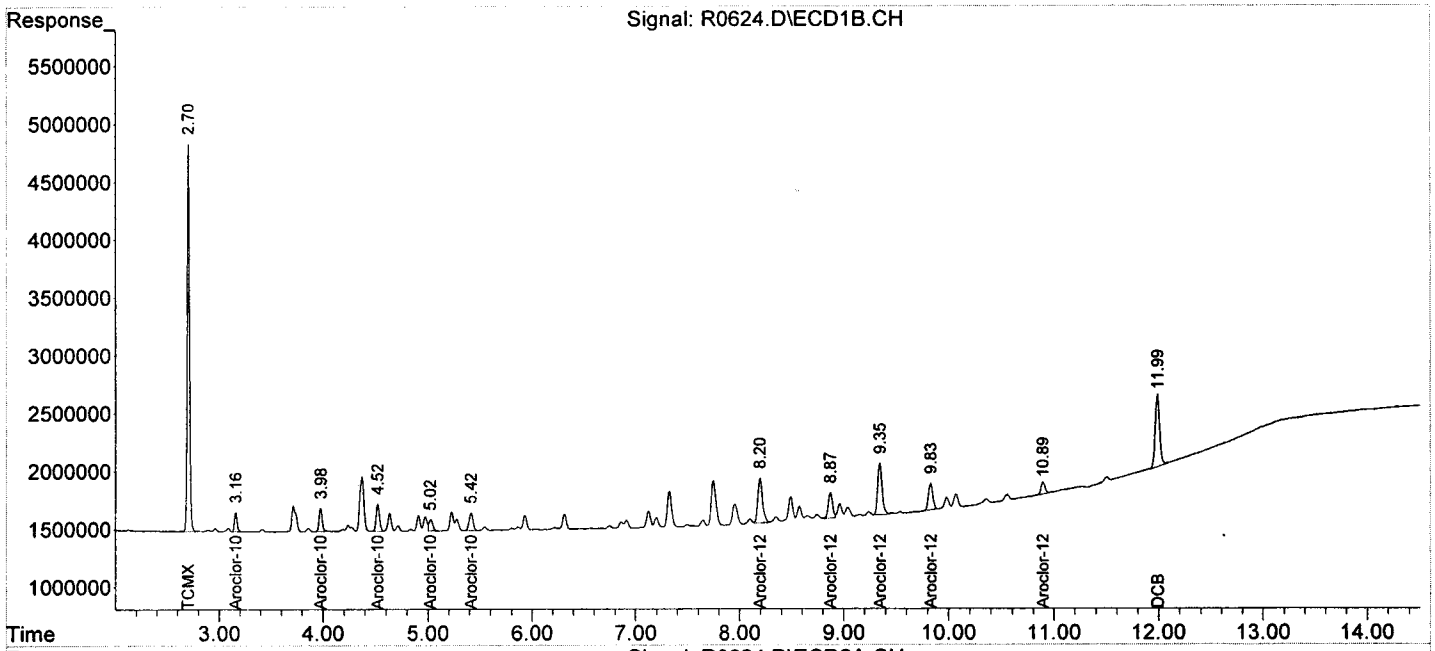
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

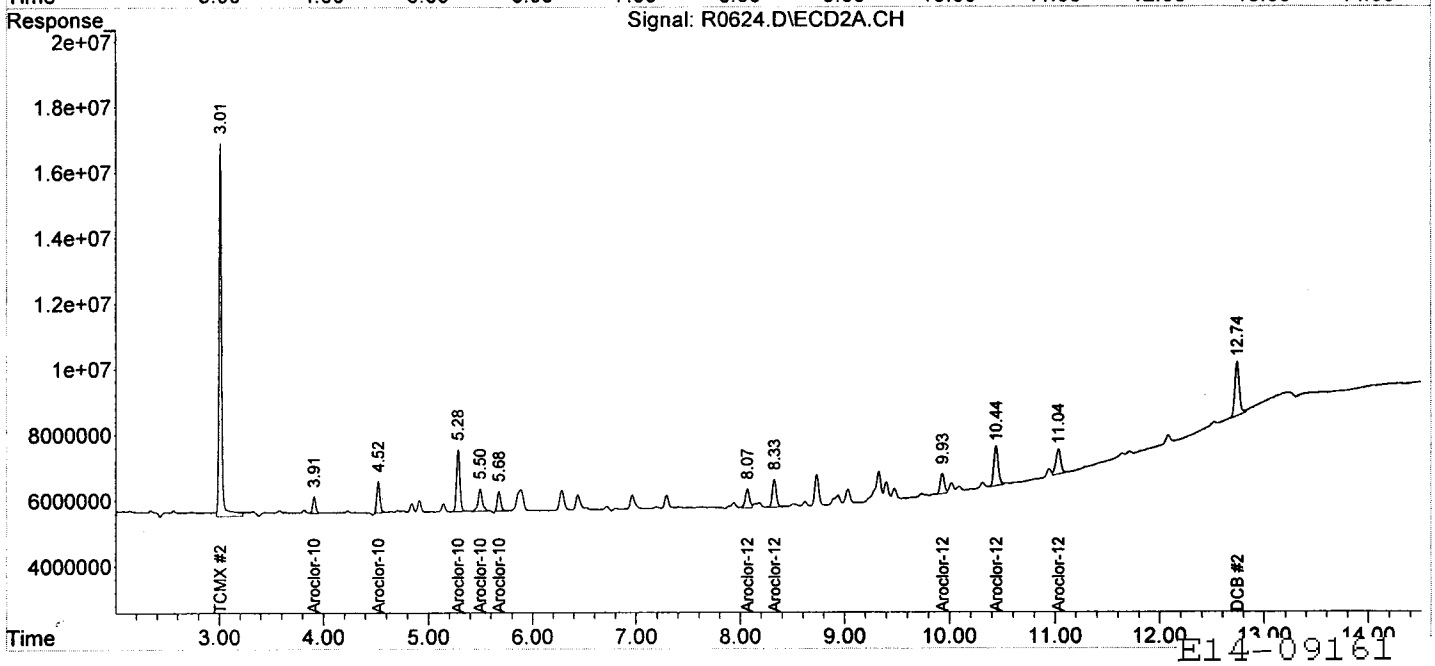
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0624.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 17:13
Operator : JS
Sample : ICC_8082_L1_IAS_4977,0.01_PPM
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:48:45 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:36:06 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0625.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 17:48
Operator : JS
Sample : ICC_8082_1221_IAS_4981,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:51:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:51:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3606.3E6	11541.5E6	242.558	228.226
Spiked Amount 200.000			Recovery	=	121.28%	114.11%
2) S DCB	11.99	12.74	1052.5E6	2881.3E6	240.282	237.686
Spiked Amount 200.000			Recovery	=	120.14%	118.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
8) L3 Aroclor-1221	2.09	2.54	52170058	225.2E6	500.000	500.000
9) L3 Aroclor-1221 {2}	2.96	3.57	78034057	299.0E6	500.000	500.000
10) L3 Aroclor-1221 {3}	3.08	3.81	55956026	201.3E6	500.000	500.000
11) L3 Aroclor-1221 {4}	3.16	3.91	187.8E6	724.6E6	500.000	500.000
12) L3 Aroclor-1221 {5}	3.74	5.29	44036729	155.9E6	500.000	500.000
Sum Aroclor-1221			418.0E6	1605.9E6	2500.000	2500.000
Average Aroclor-1221					500.000	500.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

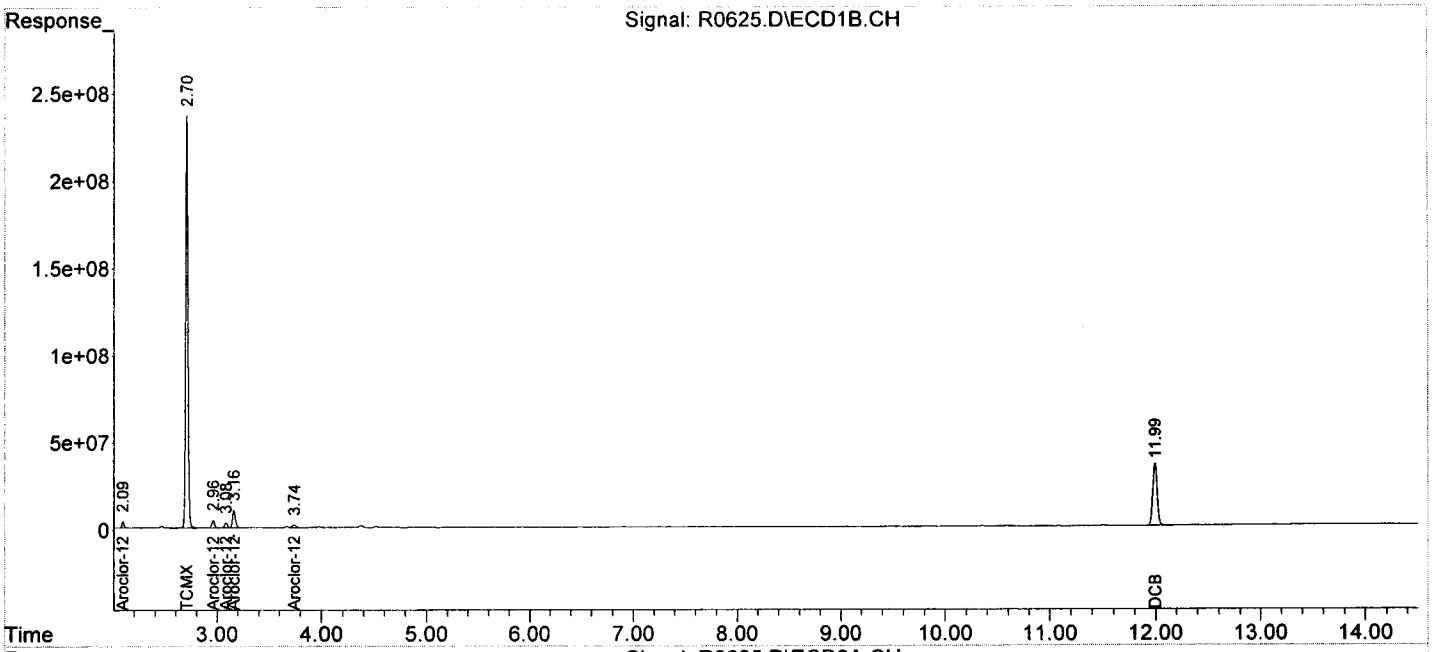
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

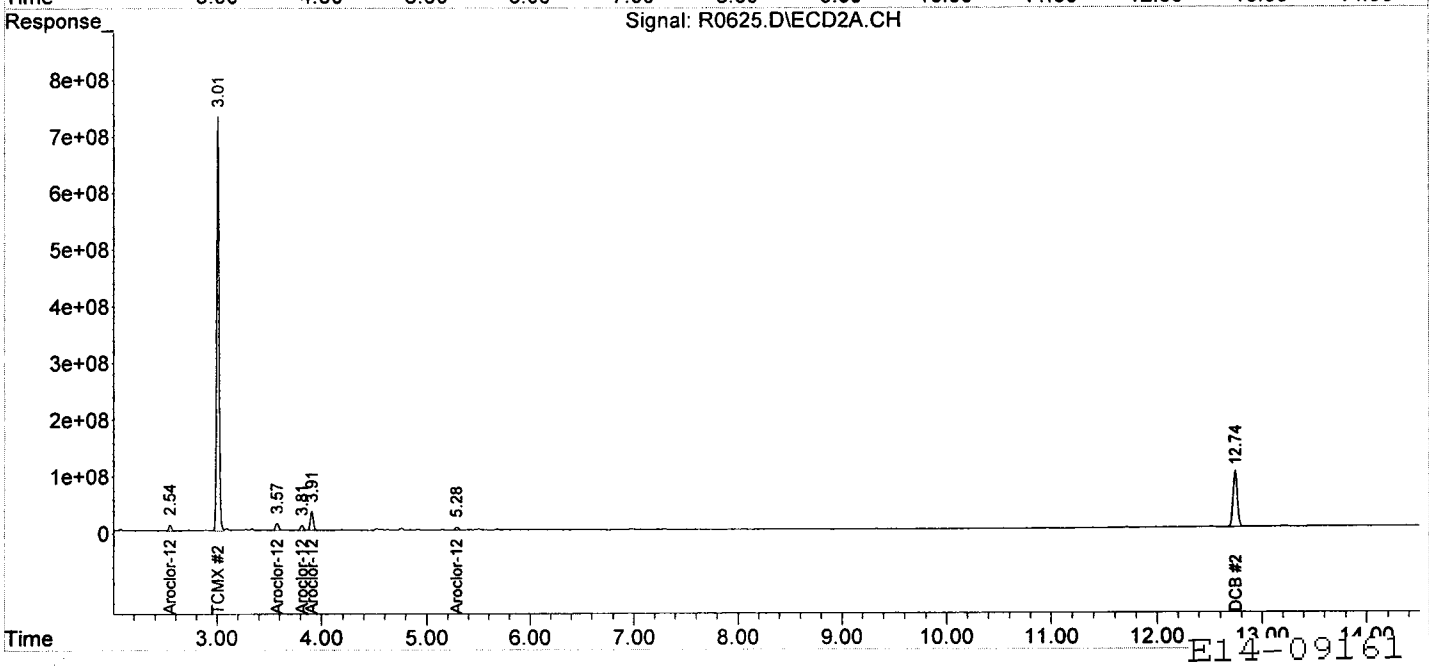
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0625.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 17:48
Operator : JS
Sample : ICC_8082_1221_IAS_4981,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:51:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:51:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0626.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:05
Operator : JS
Sample : ICC_8082_1232_IAS_4982,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:53:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:52:42 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3074.7E6	10008.5E6	206.802	197.913
Spiked Amount 200.000			Recovery	=	103.40%	98.96%
2) S DCB	11.99	12.74	983.0E6	2711.6E6	224.404	223.687
Spiked Amount 200.000			Recovery	=	112.20%	111.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
13) L4 Aroclor-1232	3.16	3.91	134.6E6	521.0E6	500.000	500.000
14) L4 Aroclor-1232 {2}	3.98	4.91	80985952	206.0E6	500.000	500.000
15) L4 Aroclor-1232 {3}	4.63	5.50	70727125	445.1E6	500.000	500.000
16) L4 Aroclor-1232 {4}	5.28	5.68	55154501	319.7E6	500.000	500.000
17) L4 Aroclor-1232 {5}	5.42	6.28	97757573	465.0E6	500.000	500.000
Sum Aroclor-1232			439.2E6	1956.8E6	2500.000	2500.000
Average Aroclor-1232					500.000	500.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

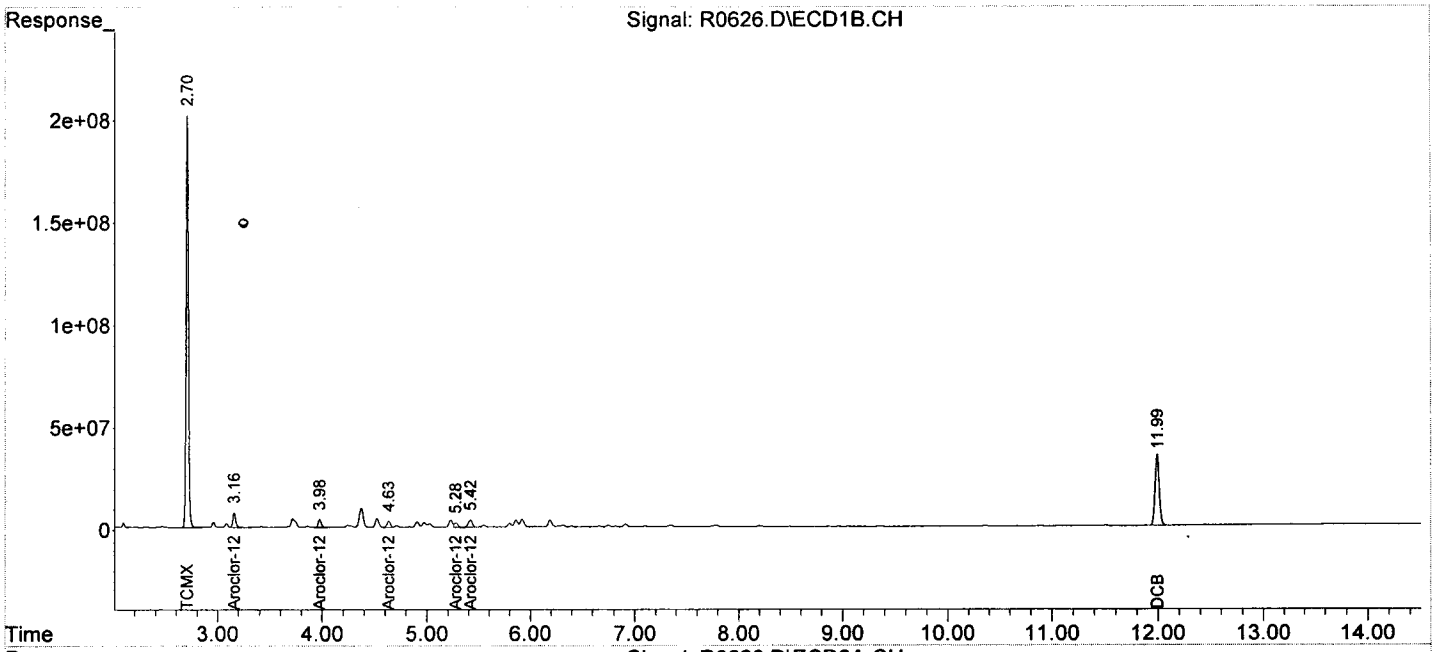
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

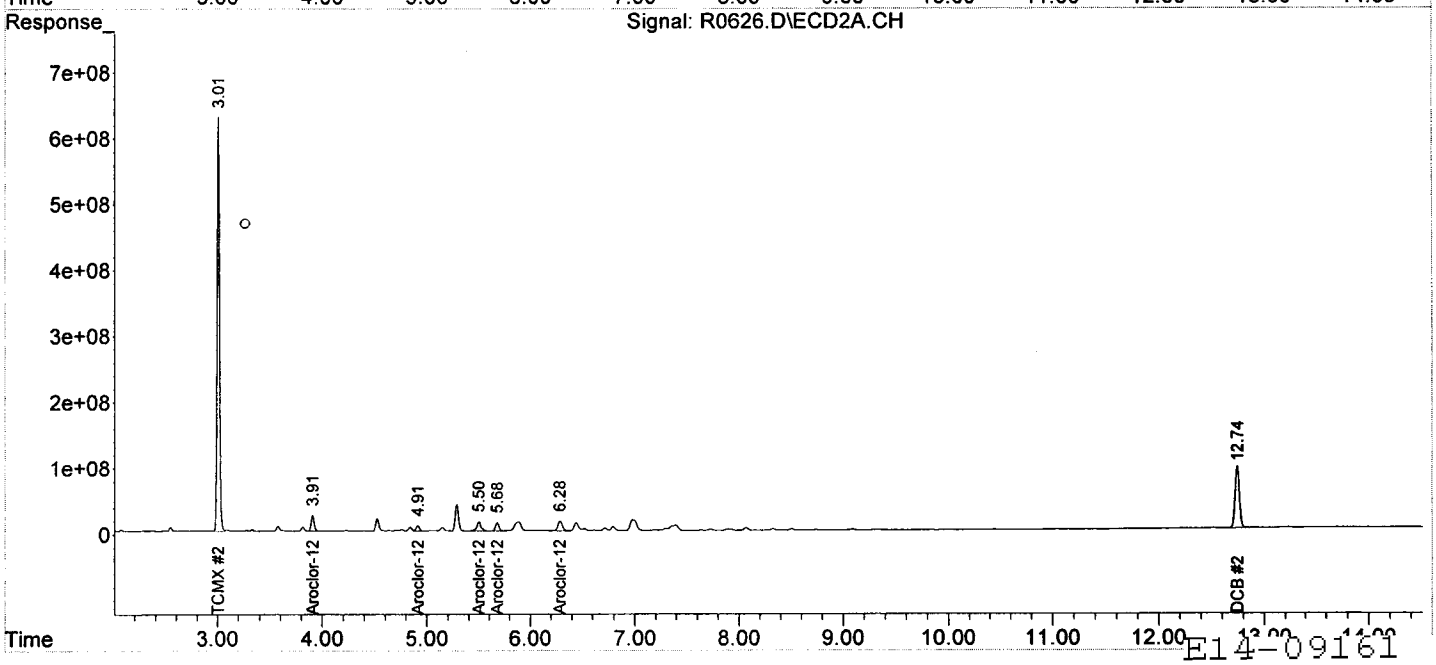
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0626.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:05
Operator : JS
Sample : ICC_8082_1232_IAS_4982,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:53:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:52:42 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0627.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:23
Operator : JS
Sample : ICC_8082_1242_IAS_4983,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:55:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:55:07 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	4125.4E6	13349.3E6	277.469	263.974
Spiked Amount 200.000			Recovery	=	138.73%	131.99%
2) S DCB	11.99	12.74	1213.1E6	3399.0E6	276.946	280.392
Spiked Amount 200.000			Recovery	=	138.47%	140.20%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
18) L5 Aroclor-1242	3.98	4.91	154.0E6	370.7E6	500.000	500.000
19) L5 Aroclor-1242 {2}	4.91	5.68	102.7E6	584.7E6	500.000	500.000
20) L5 Aroclor-1242 {3}	5.23	6.28	144.7E6	803.3E6	500.000	500.000
21) L5 Aroclor-1242 {4}	5.92	6.44	192.3E6	668.4E6	500.000	500.000
22) L5 Aroclor-1242 {5}	6.19	6.98	183.2E6	1293.2E6	500.000	500.000
Sum Aroclor-1242			776.9E6	3720.3E6	2500.000	2500.000
Average Aroclor-1242					500.000	500.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

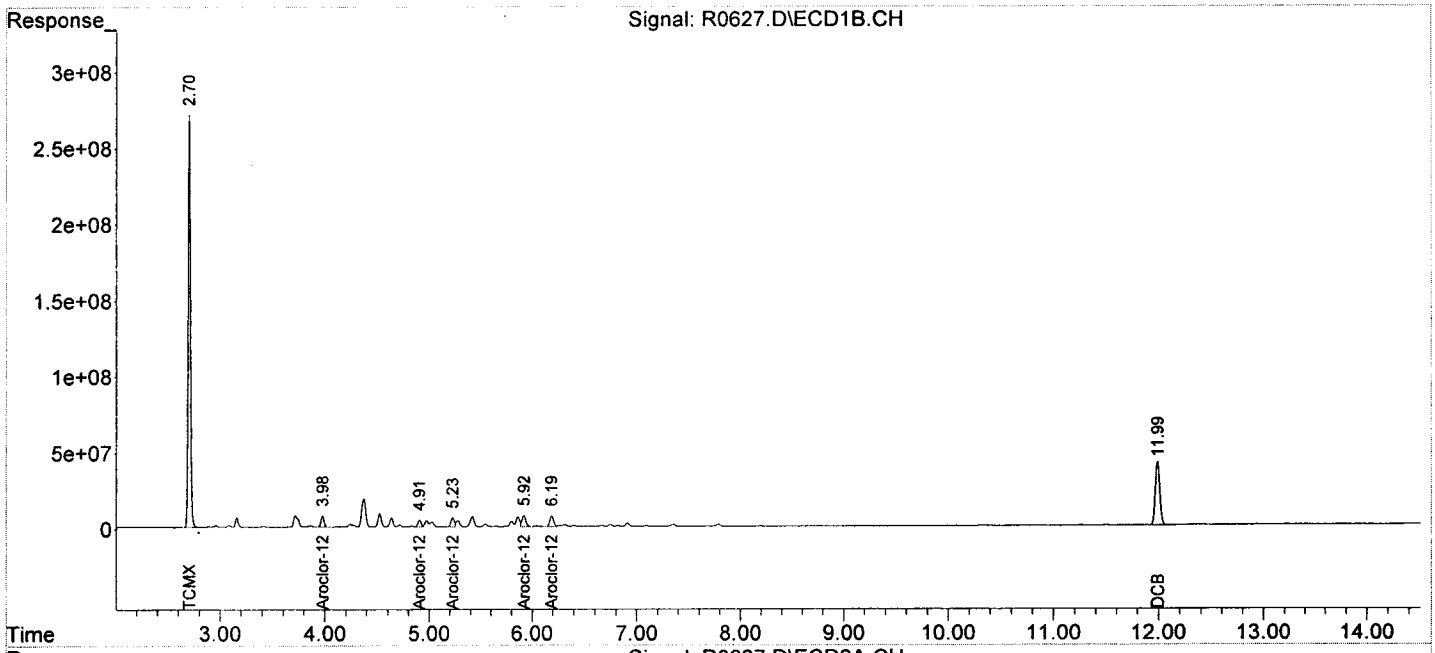
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

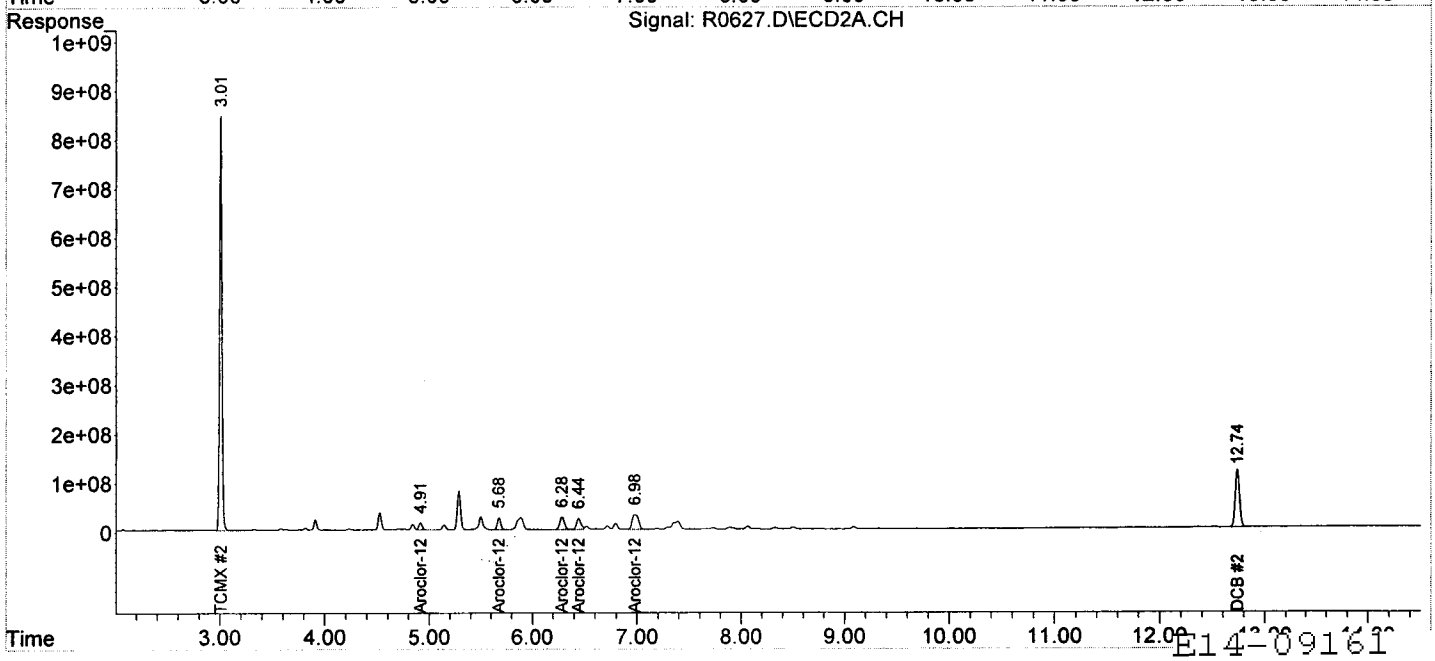
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0627.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:23
Operator : JS
Sample : ICC_8082_1242_IAS_4983,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:55:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:55:07 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0301

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0628.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:40
Operator : JS
Sample : ICC_8082_1248_IAS_4984,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:57:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:57:04 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3057.2E6	10035.0E6	205.620	198.436
Spiked Amount 200.000			Recovery	=	102.81%	99.22%
2) S DCB	11.99	12.74	1025.9E6	3067.2E6	234.192	253.018
Spiked Amount 200.000			Recovery	=	117.10%	126.51%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
23) L6 Aroclor-1248	4.37	5.28	304.0E6	1103.3E6	500.000	500.000
24) L6 Aroclor-1248 {2}	4.91	5.88	182.6E6	1707.7E6	500.000	500.000
25) L6 Aroclor-1248 {3}	5.23	6.28	238.8E6	1181.3E6	500.000	500.000
26) L6 Aroclor-1248 {4}	5.92	6.44	335.7E6	1010.6E6	500.000	500.000
27) L6 Aroclor-1248 {5}	6.19	6.79	281.8E6	532.0E6	500.000	500.000
Sum Aroclor-1248			1342.9E6	5535.0E6	2500.000	2500.000
Average Aroclor-1248					500.000	500.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

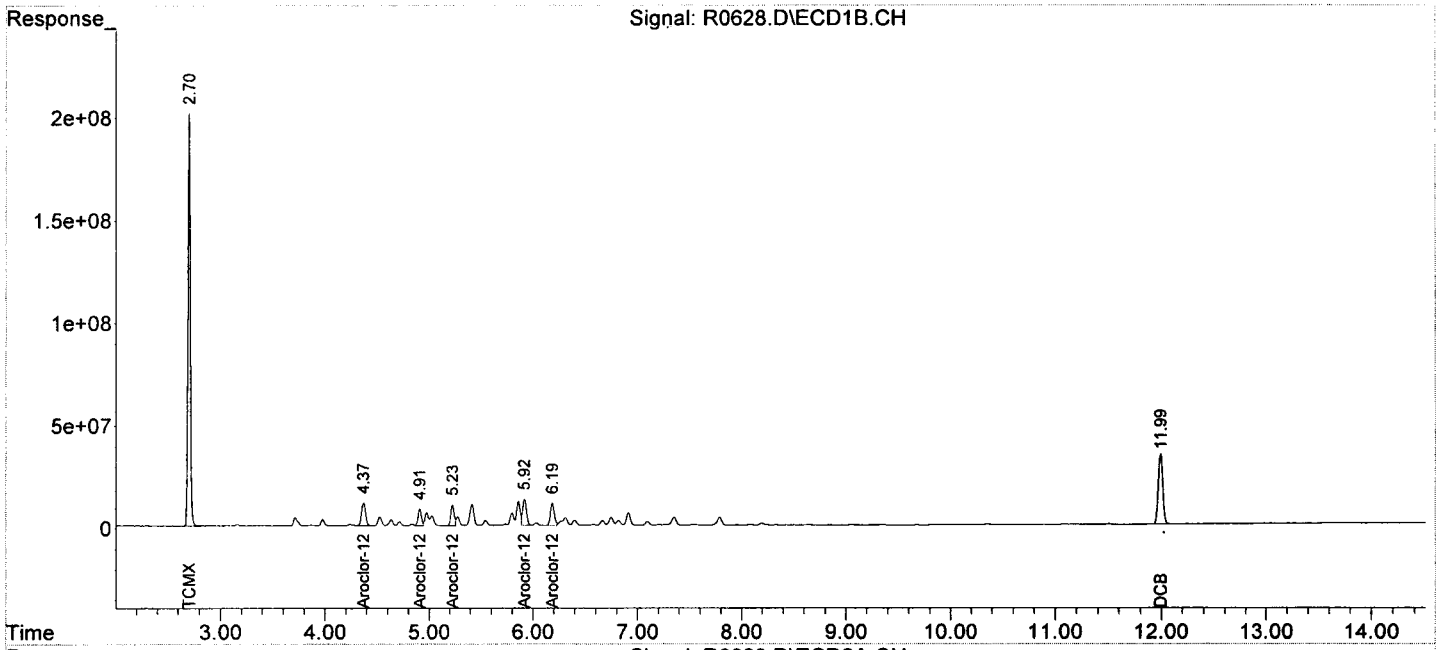
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

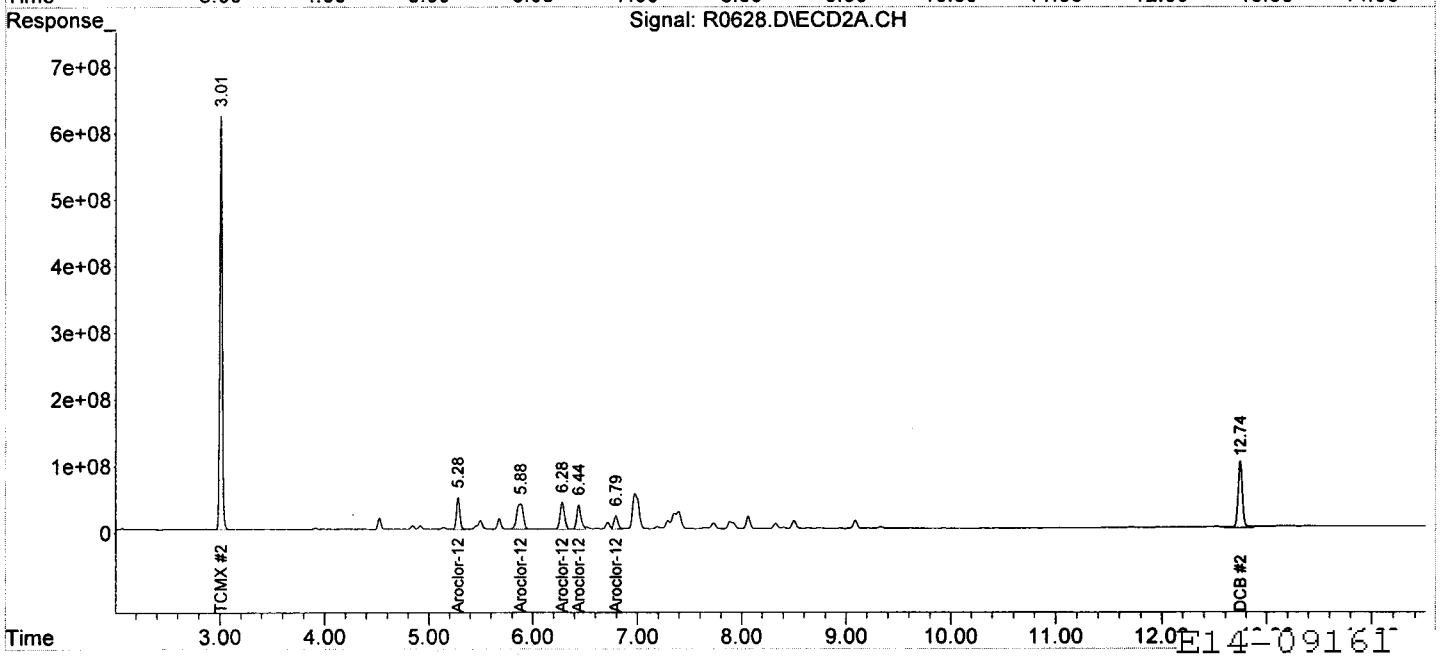
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0628.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:40
Operator : JS
Sample : ICC_8082_1248_IAS_4984,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:57:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:57:04 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0303

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0629.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:57
Operator : JS
Sample : ICC_8082_1254_IAS_4985,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:59:29 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:59:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3566.3E6	12052.5E6	239.862	238.331
Spiked Amount 200.000			Recovery	=	119.93%	119.17%
2) S DCB	11.99	12.74	1029.2E6	3089.6E6	234.951	254.864
Spiked Amount 200.000			Recovery	=	117.48%	127.43%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.31	7.29	399.2E6	1554.6E6	500.000	500.000
29) L7 Aroclor-1254 {2}	6.75	7.88	251.6E6	991.8E6	500.000	500.000
30) L7 Aroclor-1254 {3}	6.91	8.33	481.1E6	698.1E6	500.000	500.000
31) L7 Aroclor-1254 {4}	7.35	8.50	504.0E6	986.2E6	500.000	500.000
32) L7 Aroclor-1254 {5}	8.20	9.33	475.7E6	1436.0E6	500.000	500.000
Sum Aroclor-1254			2111.8E6	5666.7E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

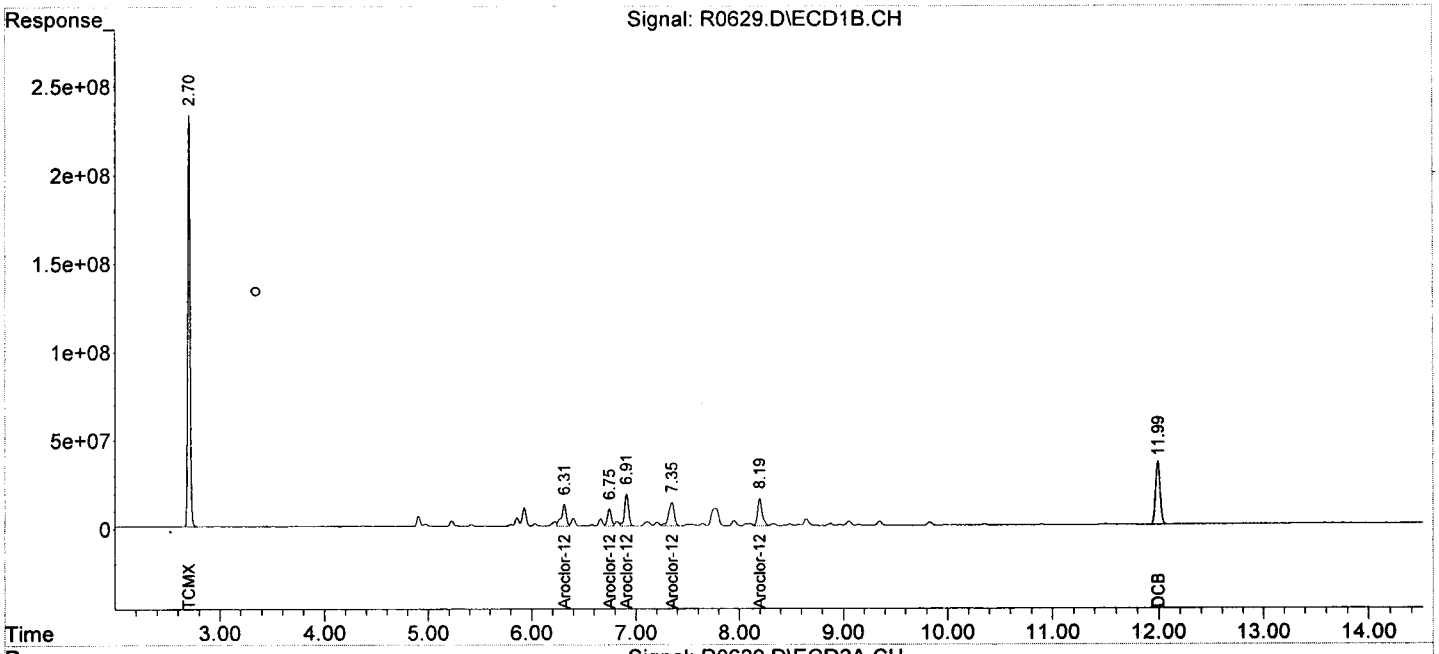
E14-09161 0304

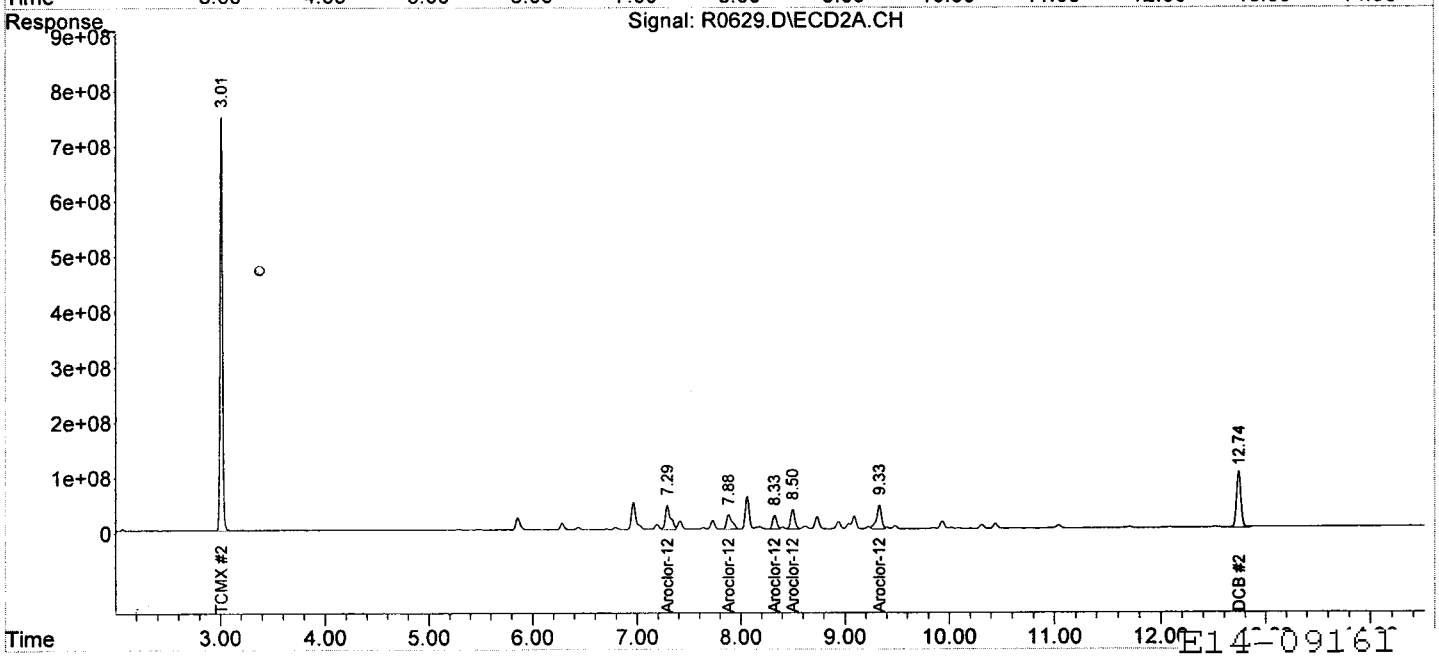
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0629.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 18:57
Operator : JS
Sample : ICC_8082_1254_IAS_4985,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 09:59:29 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 09:59:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0305

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0630.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:15
Operator : JS
Sample : ICC_8082_1262_IAS_4986,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:01:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:01:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3019.7E6	10257.3E6	203.099	202.832
Spiked Amount 200.000			Recovery =		101.55%	101.42%
2) S DCB	11.99	12.74	997.9E6	3085.1E6	227.799	254.497
Spiked Amount 200.000			Recovery =		113.90%	127.25%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
38) L9 Aroclor-1262	8.49	9.93	449.6E6	1093.9E6	500.000	500.000
39) L9 Aroclor-1262 {2}	9.35	10.44	842.7E6	2550.6E6	500.000	500.000
40) L9 Aroclor-1262 {3}	9.98	10.94	332.4E6	900.5E6	500.000	500.000
41) L9 Aroclor-1262 {4}	10.07	11.03	340.4E6	1773.6E6	500.000	500.000
42) L9 Aroclor-1262 {5}	10.89	11.64	275.4E6	371.9E6	500.000	500.000
Sum Aroclor-1262			2240.5E6	6690.5E6	2500.000	2500.000
Average Aroclor-1262					500.000	500.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

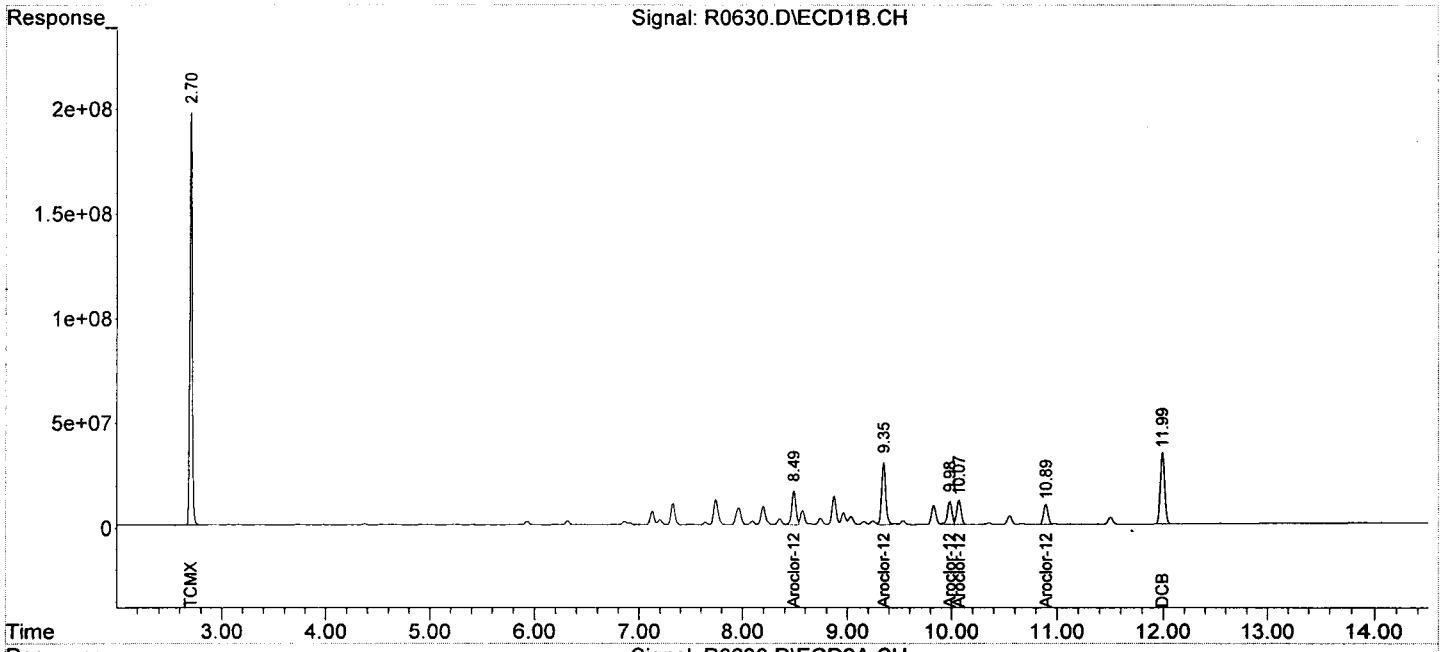
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

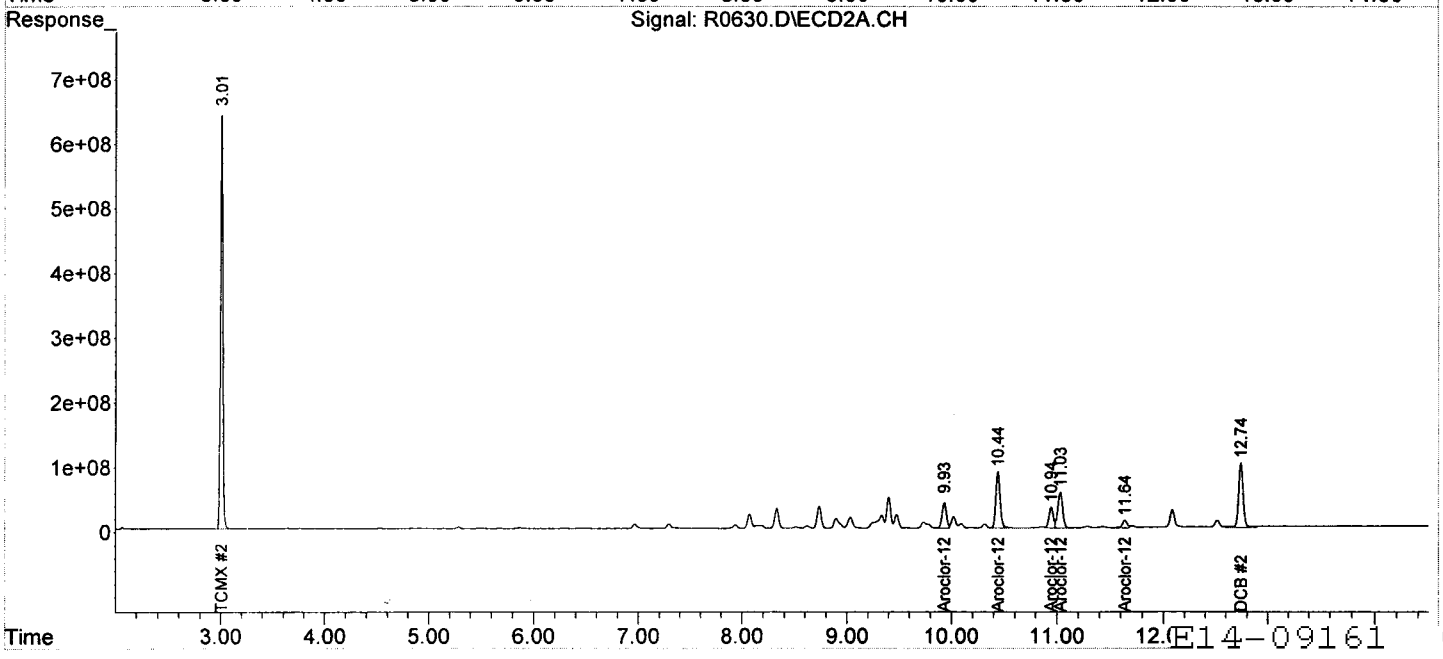
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0630.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:15
Operator : JS
Sample : ICC_8082_1262_IAS_4986,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:01:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:01:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0307

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0631.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:32
Operator : JS
Sample : ICC_8082_1268_IAS_4987,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:04:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:03:34 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3039.3E6	10000.7E6	204.417	197.759
Spiked Amount 200.000			Recovery	=	102.21%	98.88%
2) S DCB	11.99	12.74	1556.2E6	4392.4E6	355.268	362.338
Spiked Amount 200.000			Recovery	=	177.63%	181.17%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221°					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
43) L10 Aroclor-1268	9.98	10.94	970.9E6	2699.2E6	500.000	500.000
44) L10 Aroclor-1268 {2}	10.07	11.03	890.7E6	2638.4E6	500.000	500.000
45) L10 Aroclor-1268 {3}	10.54	11.28	780.8E6	2215.6E6	500.000	500.000
46) L10 Aroclor-1268 {4}	10.67	11.43	195.3E6	561.6E6	500.000	500.000
47) L10 Aroclor-1268 {5}	11.50	12.52	2521.0E6	7084.5E6	500.000	500.000
Sum Aroclor-1268			5358.7E6	15199.3E6	2500.000	2500.000
Average Aroclor-1268					500.000	500.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

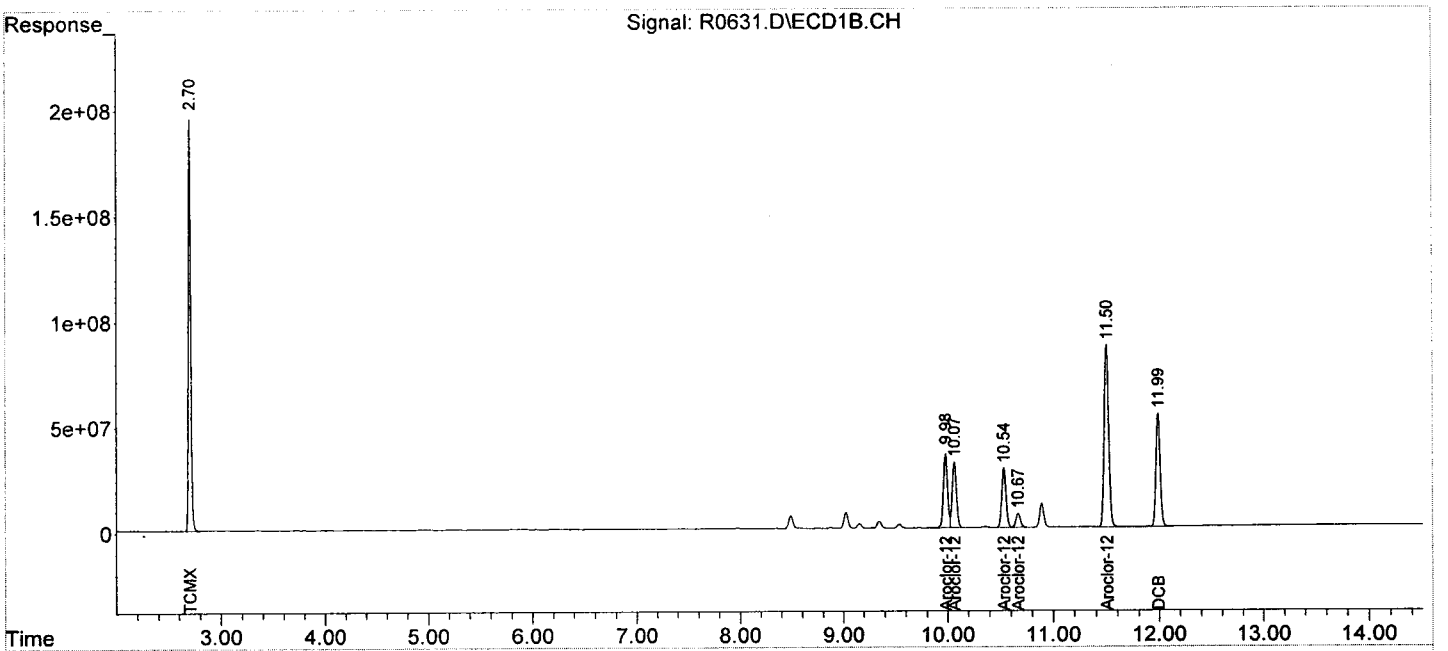
E14-09161 0308

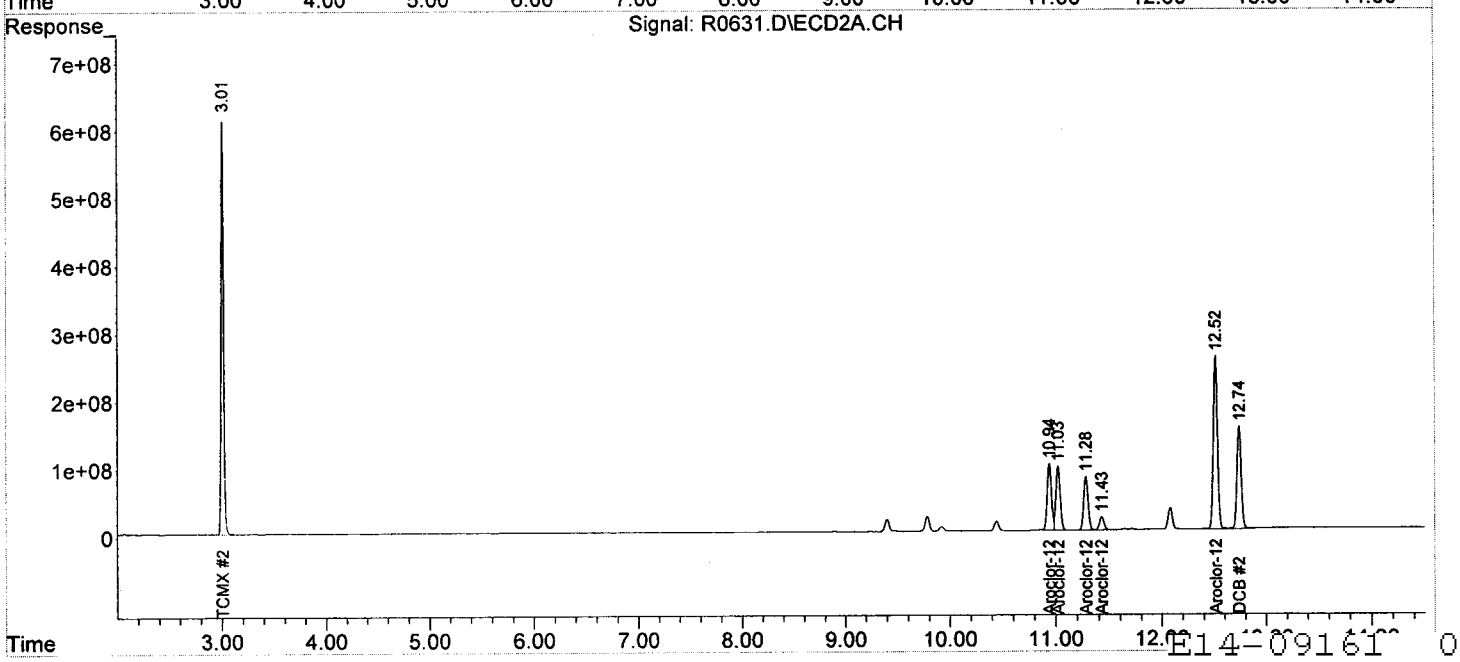
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0631.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:32
Operator : JS
Sample : ICC_8082_1268_IAS_4987,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:04:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:03:34 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0309

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0632.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:50
Operator : JS
Sample : ICV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:05:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	3.01	3229.5E6	10577.7E6	217.210	209.167
Spiked Amount 200.000			Recovery	=	108.60%	104.58%
2) S DCB	11.99	12.74	965.5E6	2693.9E6	220.423	222.227
Spiked Amount 200.000			Recovery	=	110.21%	111.11%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	127.4E6	469.6E6	495.208	532.500
4) L2 Aroclor-1016 {2}	3.98	4.52	175.1E6	885.4E6	494.582	510.462
5) L2 Aroclor-1016 {3}	4.52	5.28	226.1E6	2068.3E6	486.577	512.354
6) L2 Aroclor-1016 {4}	5.03	5.50	100.9E6	907.0E6	494.466	522.720
7) L2 Aroclor-1016 {5}	5.42	5.67	180.2E6	686.6E6	495.015	526.521
Sum Aroclor-1016			809.7E6	5016.8E6	2465.848	2604.558
Average Aroclor-1016					493.170	520.912
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.20	8.07	548.4E6	704.0E6	503.963	498.515
34) L8 Aroclor-1260 {2}	8.87	8.33	264.9E6	999.0E6	496.861	502.776
35) L8 Aroclor-1260 {3}	9.35	9.93	645.2E6	874.4E6	519.046	535.916
36) L8 Aroclor-1260 {4}	9.83	10.44	343.9E6	1934.5E6	522.785	550.219
37) L8 Aroclor-1260 {5}	10.89	11.04	150.5E6	1386.2E6	522.343	552.143
Sum Aroclor-1260			1952.9E6	5898.1E6	2564.998	2639.570
Average Aroclor-1260					513.000	527.914
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 09/08/2014 **Instrument ID:** GC-R

Data File: R0632.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.16	3.09	3.23	257232	254767	0.96
Aroclor-1016 {2}	3.98	3.91	4.05	354039	350203	1.08
Aroclor-1016 {3}	4.52	4.45	4.59	464701	452226	2.68
Aroclor-1016 {4}	5.03	4.95	5.09	203981	201724	1.11
Aroclor-1016 {5}	5.42	5.35	5.49	364066	360437	1.00
Aroclor-1260	8.20	7.30	9.10	1088143	1096767	0.79
Aroclor-1260 {2}	8.87	7.97	9.77	533230	529883	0.63
Aroclor-1260 {3}	9.35	8.45	10.25	1243079	1290432	3.81
Aroclor-1260 {4}	9.83	8.93	10.73	657740	687714	4.56
Aroclor-1260 {5}	10.89	9.99	11.79	288202	301081	4.47

Data File: R0632.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.91	3.84	3.98	881840	939161	6.50
Aroclor-1016 {2}	4.52	4.45	4.59	1734430	1770720	2.09
Aroclor-1016 {3}	5.28	5.22	5.36	4036799	4136538	2.47
Aroclor-1016 {4}	5.50	5.43	5.57	1735094	1813938	4.54
Aroclor-1016 {5}	5.67	5.61	5.75	1304036	1373206	5.30
Aroclor-1260	8.07	7.17	8.97	1412176	1407982	0.30
Aroclor-1260 {2}	8.33	7.43	9.23	1987041	1998073	0.56
Aroclor-1260 {3}	9.93	9.03	10.83	1631621	1748825	7.18
Aroclor-1260 {4}	10.44	9.54	11.34	3515866	3868994	10.04
Aroclor-1260 {5}	11.04	10.14	11.94	2510597	2772418	10.43

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 09/30/2014 **Instrument ID:** GC-R

Data File: R1050.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.17	3.09	3.23	257232	277242	7.78
Aroclor-1016 {2}	3.99	3.91	4.05	354039	371873	5.04
Aroclor-1016 {3}	4.53	4.45	4.59	464701	479961	3.28
Aroclor-1016 {4}	5.04	4.95	5.09	203981	226168	10.88
Aroclor-1016 {5}	5.43	5.35	5.49	364066	391222	7.46
Aroclor-1260	8.21	7.30	9.10	1088143	1205037	10.74
Aroclor-1260 {2}	8.89	7.97	9.77	533230	532736	0.09
Aroclor-1260 {3}	9.37	8.45	10.25	1243079	1398632	12.51
Aroclor-1260 {4}	9.85	8.93	10.73	657740	737315	12.10
Aroclor-1260 {5}	10.91	9.99	11.79	288202	293712	1.91

Data File: R1050.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.91	3.84	3.98	881840	1031832	17.01
Aroclor-1016 {2}	4.53	4.45	4.59	1734430	1667198	3.88
Aroclor-1016 {3}	5.29	5.22	5.36	4036799	3904152	3.29
Aroclor-1016 {4}	5.50	5.43	5.57	1735094	1808985	4.26
Aroclor-1016 {5}	5.68	5.61	5.75	1304036	1341612	2.88
Aroclor-1260	8.08	7.17	8.97	1412176	1536097	8.78
Aroclor-1260 {2}	8.33	7.43	9.23	1987041	2236750	12.57
Aroclor-1260 {3}	9.94	9.03	10.83	1631621	1759354	7.83
Aroclor-1260 {4}	10.45	9.54	11.34	3515866	4170708	18.63
Aroclor-1260 {5}	11.04	10.14	11.94	2510597	2880464	14.73

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 09/30/2014 **Instrument ID:** GC-R

Data File: R1065.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.17	3.09	3.23	257232	276253	7.39
Aroclor-1016 {2}	3.99	3.91	4.05	354039	367195	3.72
Aroclor-1016 {3}	4.53	4.45	4.59	464701	471651	1.50
Aroclor-1016 {4}	5.04	4.95	5.09	203981	220303	8.00
Aroclor-1016 {5}	5.43	5.35	5.49	364066	380447	4.50
Aroclor-1260	8.21	7.30	9.10	1088143	1138171	4.60
Aroclor-1260 {2}	8.89	7.97	9.77	533230	488673	8.36
Aroclor-1260 {3}	9.37	8.45	10.25	1243079	1289368	3.72
Aroclor-1260 {4}	9.85	8.93	10.73	657740	679182	3.26
Aroclor-1260 {5}	10.92	9.99	11.79	288202	273858	4.98

Data File: R1065.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.91	3.84	3.98	881840	877042	0.54
Aroclor-1016 {2}	4.53	4.45	4.59	1734430	1630257	6.01
Aroclor-1016 {3}	5.29	5.22	5.36	4036799	3810702	5.60
Aroclor-1016 {4}	5.50	5.43	5.57	1735094	1757059	1.27
Aroclor-1016 {5}	5.68	5.61	5.75	1304036	1279220	1.90
Aroclor-1260	8.08	7.17	8.97	1412176	1430262	1.28
Aroclor-1260 {2}	8.33	7.43	9.23	1987041	2090355	5.20
Aroclor-1260 {3}	9.94	9.03	10.83	1631621	1602335	1.79
Aroclor-1260 {4}	10.45	9.54	11.34	3515866	3728529	6.05
Aroclor-1260 {5}	11.05	10.14	11.94	2510597	2676883	6.62

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0632.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:50
Operator : JS
Sample : ICV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:05:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

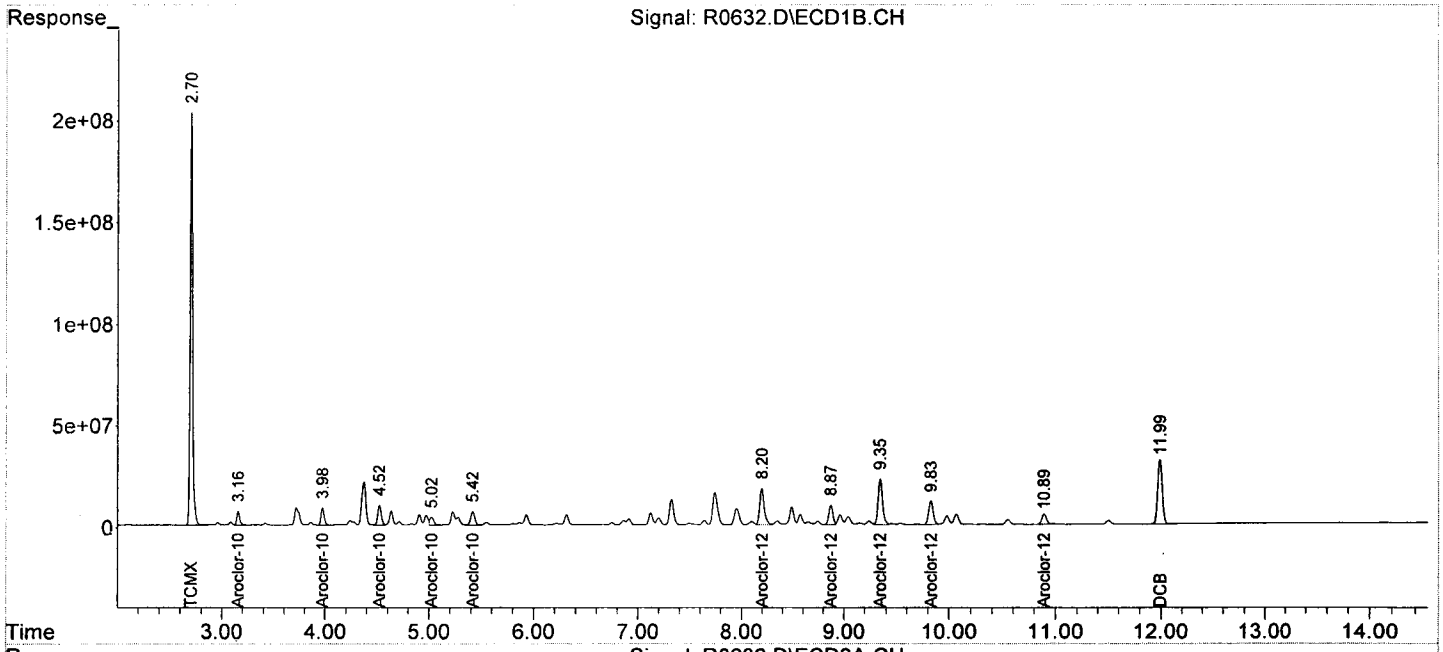
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

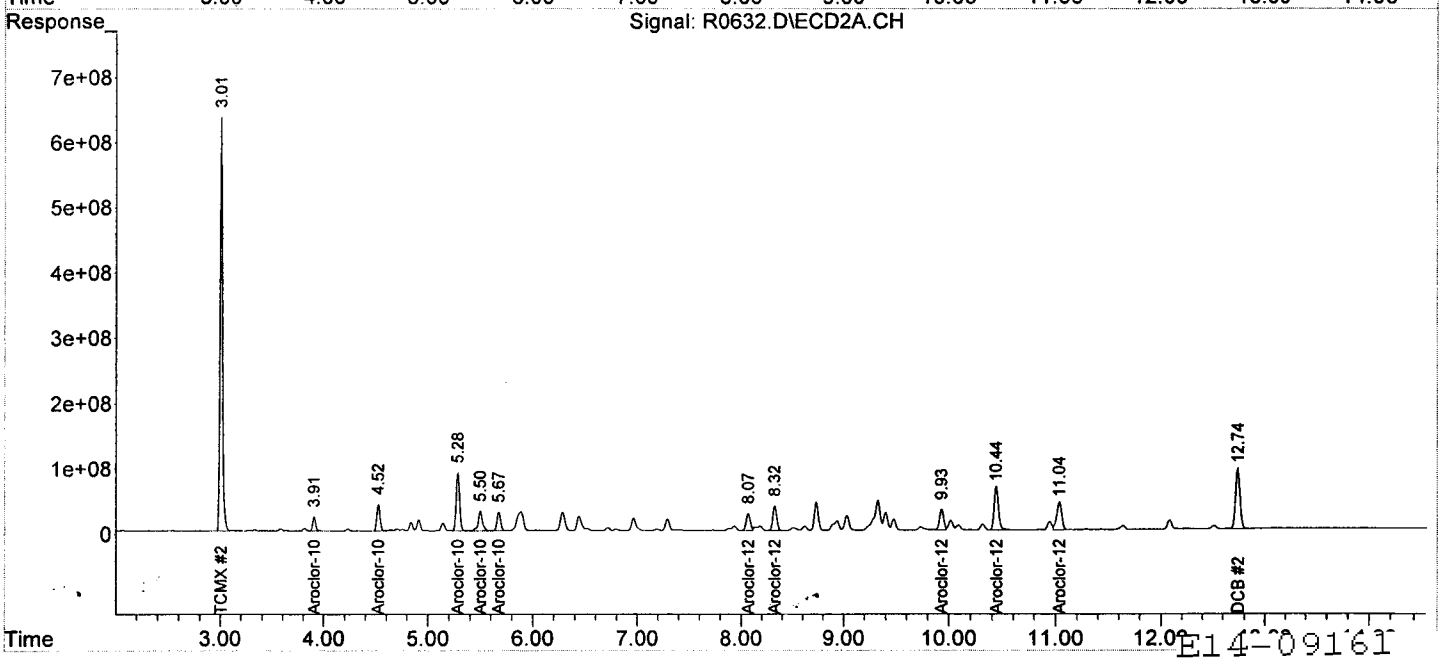
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-08-14\
Data File : R0632.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 08 Sep 2014 19:50
Operator : JS
Sample : ICV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 09 10:05:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0315

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1050.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 9:21
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 09:40:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3430.2E6	9818.7E6	230.711	194.160
Spiked Amount 200.000			Recovery	=	115.36%	97.08%
2) S DCB	12.01	12.75	891.9E6	2788.8E6	203.608	230.053
Spiked Amount 200.000			Recovery	=	101.80%	115.03%
Target Compounds						
3) L2 Aroclor-1016	3.17	3.91	138.6E6	515.9E6	538.894	585.045
4) L2 Aroclor-1016 {2}	3.99	4.53	185.9E6	833.6E6	525.187	480.618
5) L2 Aroclor-1016 {3}	4.53	5.29	240.0E6	1952.1E6	516.419	483.570
6) L2 Aroclor-1016 {4}	5.04	5.50	113.1E6	904.5E6	554.383	521.293
7) L2 Aroclor-1016 {5}	5.43	5.68	195.6E6	670.8E6	537.295	514.408
Sum Aroclor-1016			873.2E6	4876.9E6	2672.179	2584.934
Average Aroclor-1016					534.436	516.987
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.21	8.08	602.5E6	768.0E6	553.713	543.876
34) L8 Aroclor-1260 {2}	8.89	8.33	266.4E6	1118.4E6	499.536	562.834
35) L8 Aroclor-1260 {3}	9.37	9.94	699.3E6	879.7E6	562.567	539.143
36) L8 Aroclor-1260 {4}	9.85	10.45	368.7E6	2085.4E6	560.491	593.127
37) L8 Aroclor-1260 {5}	10.91	11.04	146.9E6	1440.2E6	509.558	573.661m
Sum Aroclor-1260			2083.7E6	6291.7E6	2685.865	2812.641
Average Aroclor-1260					537.173	562.528
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1050.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 9:21
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 09:40:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

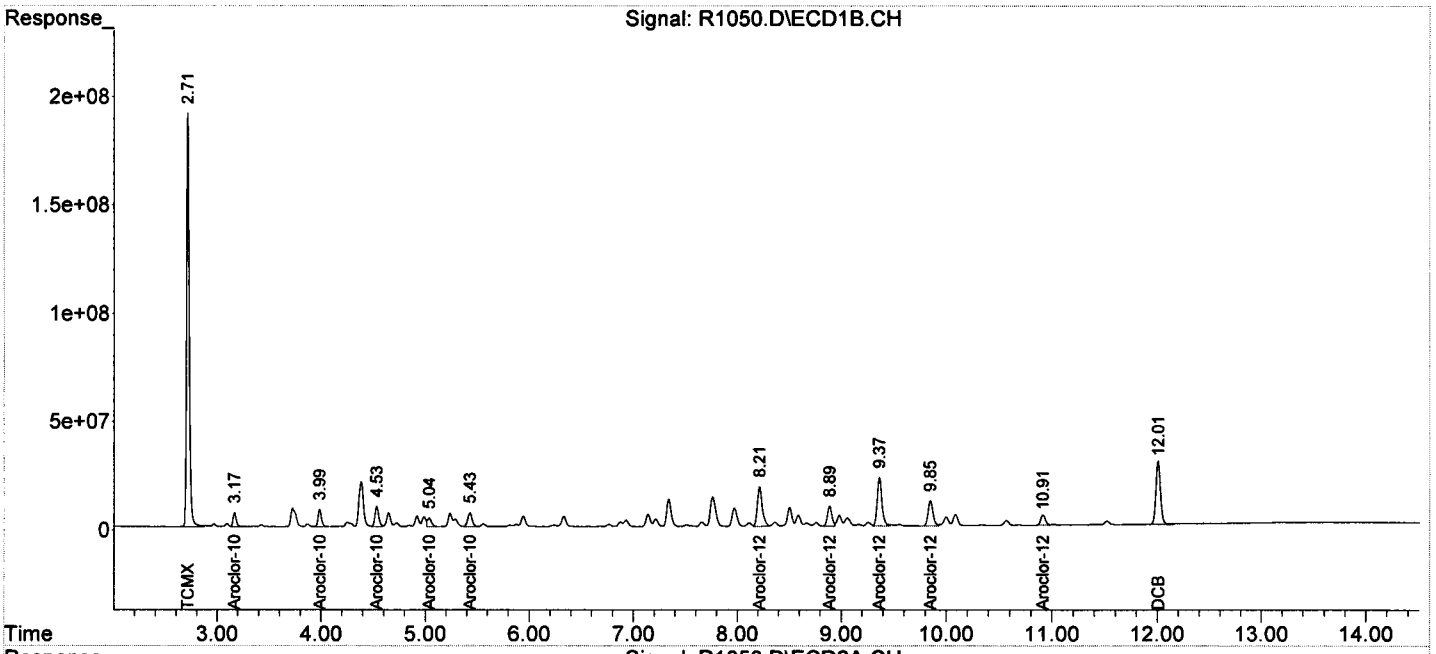
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

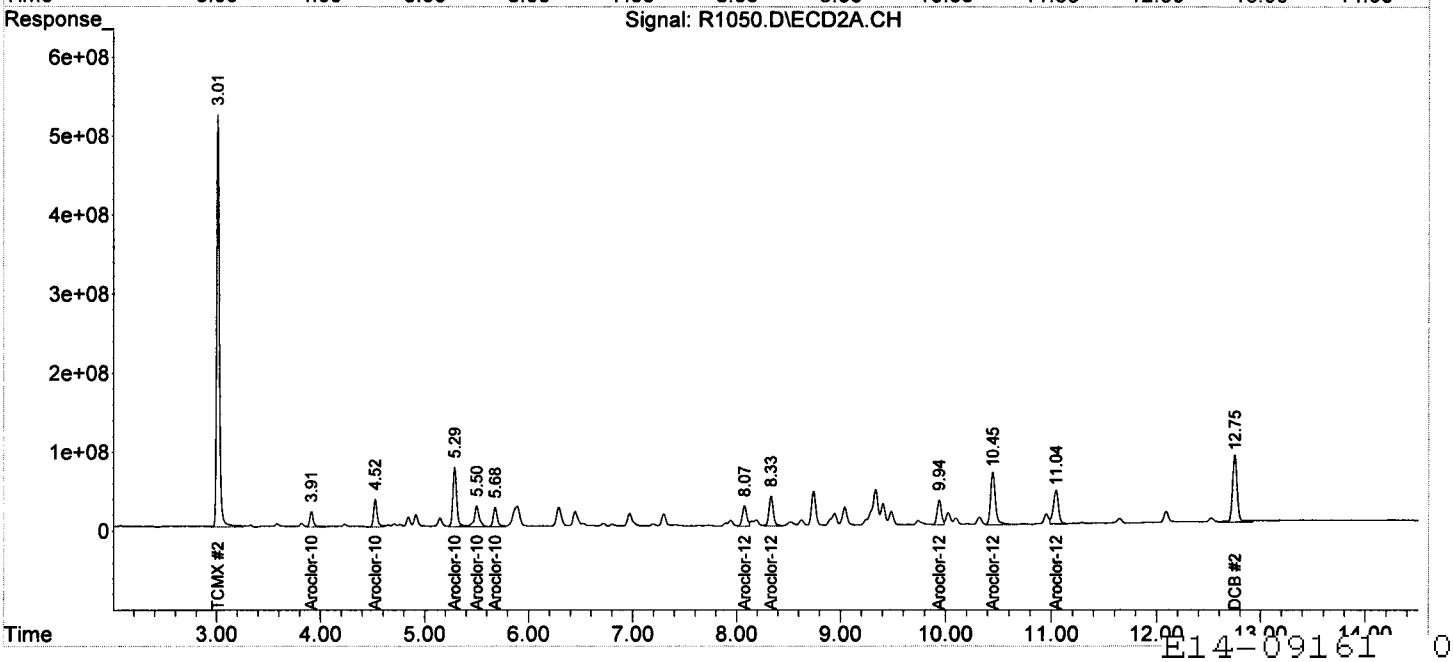
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1050.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 9:21
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 09:40:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1065.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 14:25
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:40:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3447.7E6	9850.1E6	231.889	194.780
Spiked Amount 200.000			Recovery	=	115.94%	97.39%
2) S DCB	12.01	12.75	829.4E6	2503.3E6	189.351	206.504
Spiked Amount 200.000			Recovery	=	94.68%	103.25%
Target Compounds						
3) L2 Aroclor-1016	3.17	3.91	138.1E6	438.5E6	536.972	497.280m
4) L2 Aroclor-1016 {2}	3.99	4.53	183.6E6	815.1E6	518.580	469.969
5) L2 Aroclor-1016 {3}	4.53	5.29	235.8E6	1905.4E6	507.477	471.996
6) L2 Aroclor-1016 {4}	5.04	5.50	110.2E6	878.5E6	540.007	506.330
7) L2 Aroclor-1016 {5}	5.43	5.68	190.2E6	639.6E6	522.496	490.485
Sum Aroclor-1016			857.9E6	4677.1E6	2625.532	2436.059
Average Aroclor-1016					525.106	487.212
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.21	8.08	569.1E6	715.1E6	522.988	506.403
34) L8 Aroclor-1260 {2}	8.89	8.33	244.3E6	1045.2E6	458.220	525.997
35) L8 Aroclor-1260 {3}	9.37	9.94	644.7E6	801.2E6	518.619	491.025
36) L8 Aroclor-1260 {4}	9.85	10.45	339.6E6	1864.3E6	516.300	530.243
37) L8 Aroclor-1260 {5}	10.92	11.05	136.9E6	1338.4E6	475.115	533.117
Sum Aroclor-1260			1934.6E6	5764.2E6	2491.241	2586.786
Average Aroclor-1260					498.248	517.357
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1065.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 14:25
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:40:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

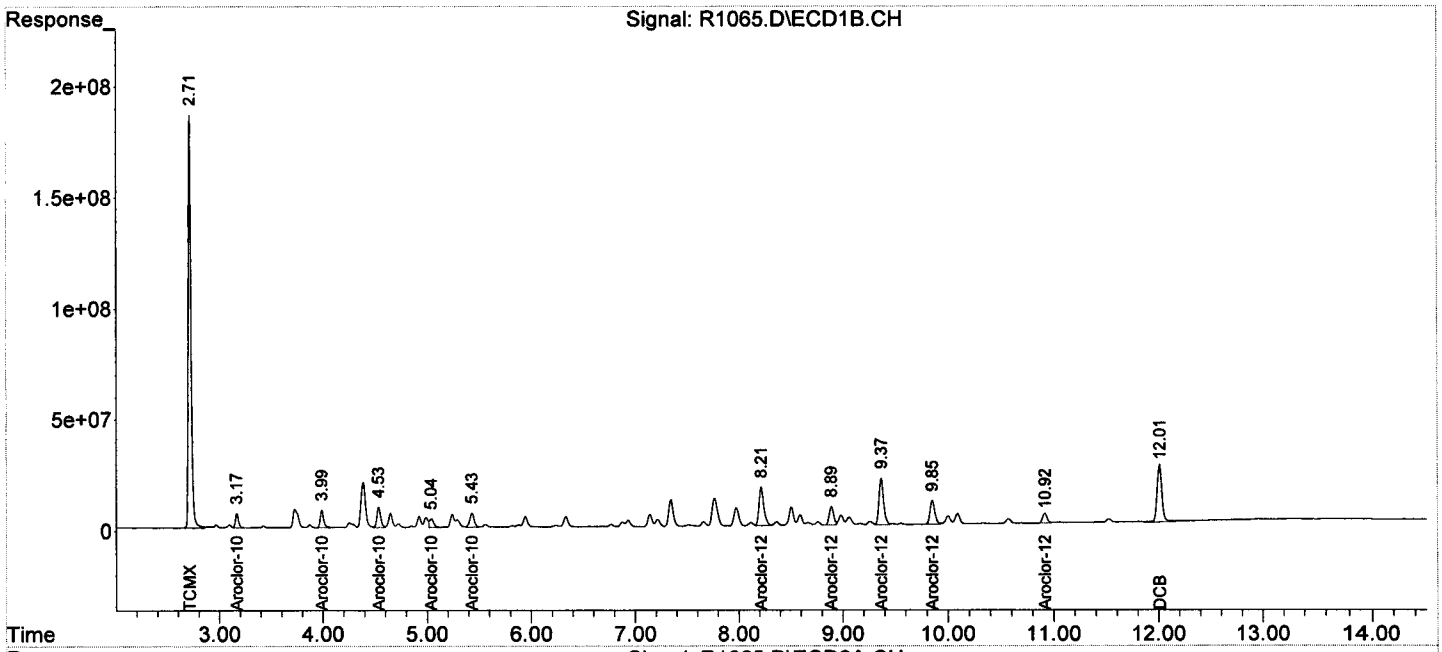
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

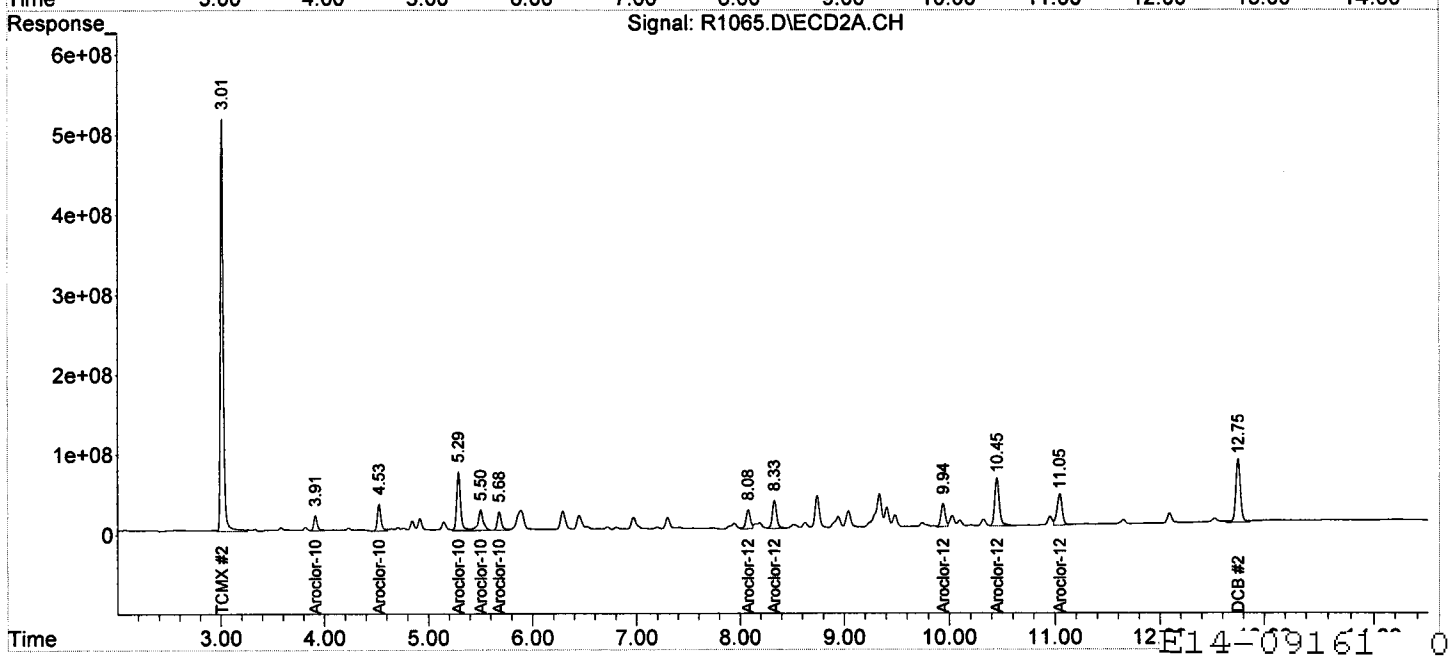
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1065.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 14:25
Operator : JS
Sample : CCV_8082_C_IAS_4980,0.5_PPM
Misc : NA,NA,NA,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:40:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





E14-09161 0321

PCB RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS140929-16
Client ID: PCB
Date Received: NA
Date Extracted: 09/29/2014
Date Analyzed: 09/30/2014
Data file: R1058.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E14-09161 0323

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-30-14\
Data File : R1058.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 12:23
Operator : JS
Sample : PCB,BLKS140929-16,S,5.00g,0,20
Misc : NA,09/29/14,NA,1
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:07:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3489.1E6	9791.4E6	234.671	193.620
Spiked Amount 200.000			Recovery	=	117.34%	96.81%
2) S DCB	12.01	12.75	852.5E6	2439.1E6	194.624	201.203
Spiked Amount 200.000			Recovery	=	97.31%	100.60%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

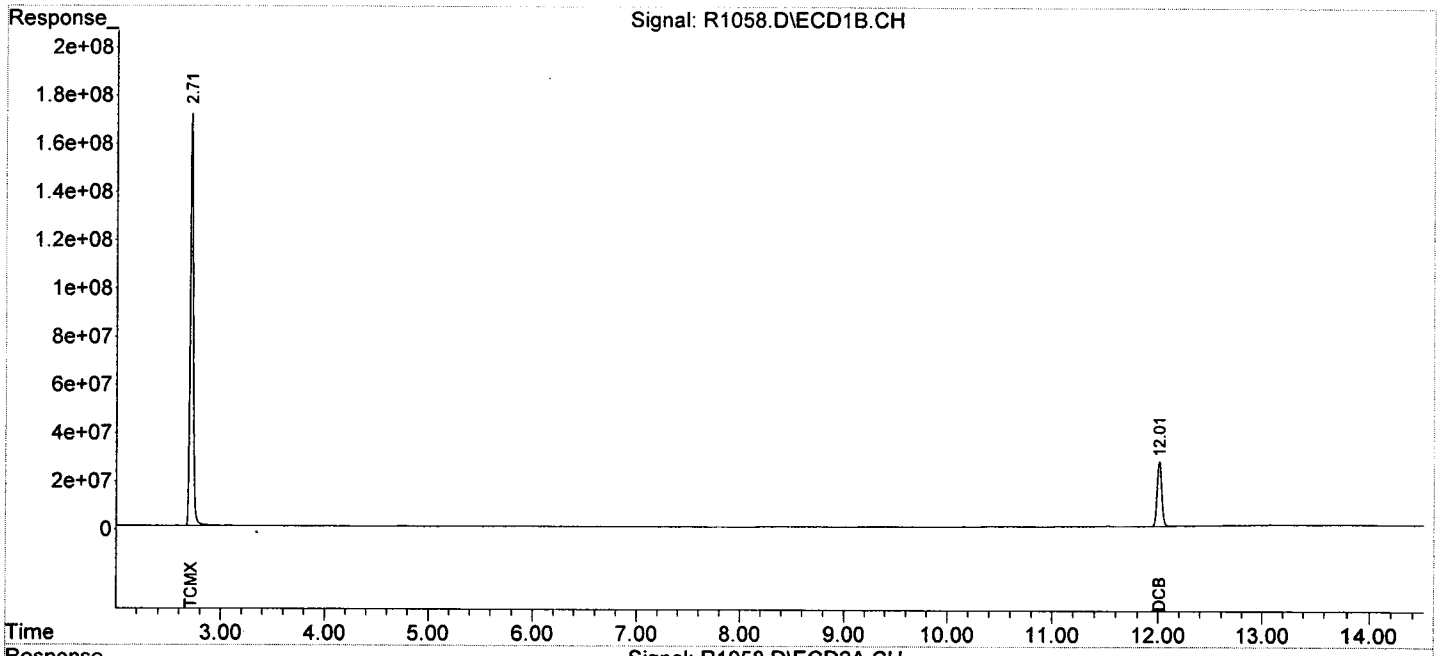
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

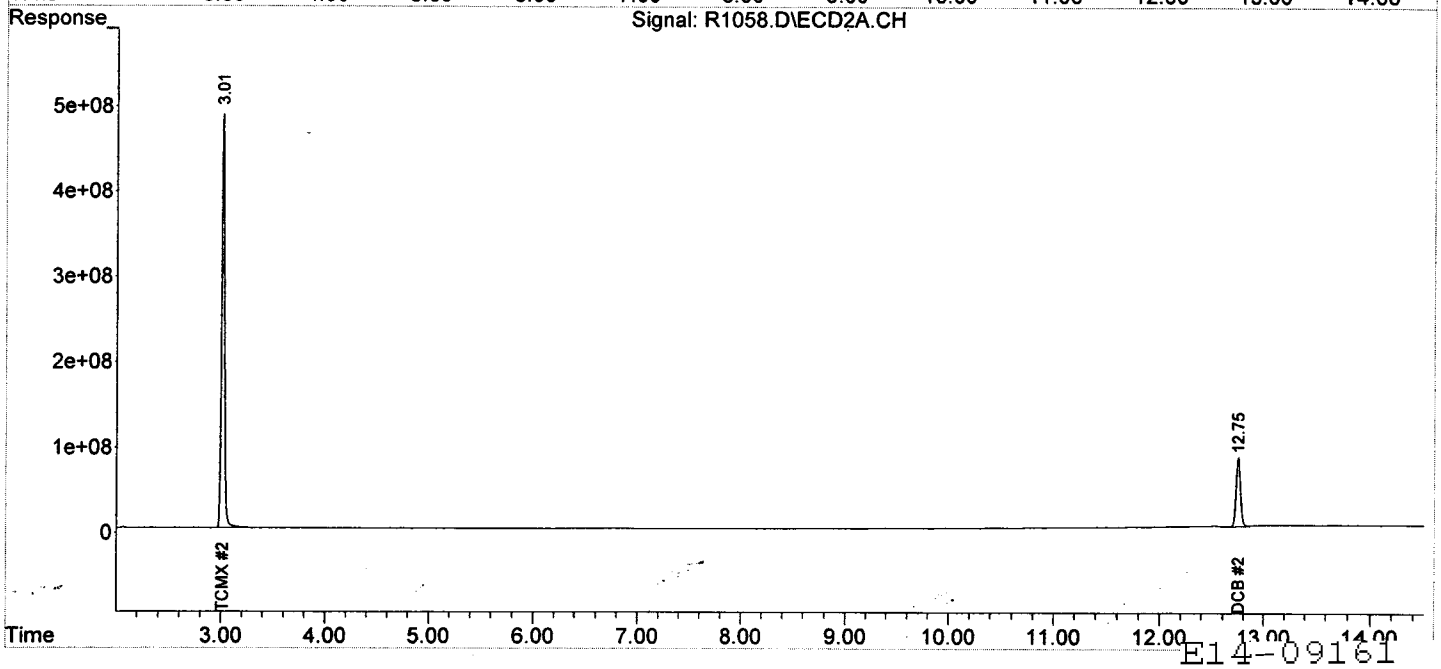
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\09-30-14\
Data File : R1058.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 12:23
Operator : JS
Sample : PCB,BLKS140929-16,S,5.00g,0,20
Misc : NA,09/29/14,NA,1
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:07:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1059.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 12:40
Operator : JS
Sample : PCB,LCSS140929-16,S,5.00g,0,20
Misc : NA,09/29/14,NA,1
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:25:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3487.9E6	9777.6E6	234.591	193.347
Spiked Amount 200.000			Recovery	=	117.30%	96.67%
2) S DCB	12.01	12.75	907.4E6	3058.2E6	207.157	252.279
Spiked Amount 200.000			Recovery	=	103.58%	126.14%
Target Compounds						
3) L2 Aroclor-1016	3.17	3.91	139.9E6	432.1E6	543.912	490.007
4) L2 Aroclor-1016 {2}	3.99	4.53	186.9E6	815.0E6	528.012	469.911
5) L2 Aroclor-1016 {3}	4.53	5.29	243.4E6	1876.5E6	523.779	464.859
6) L2 Aroclor-1016 {4}	5.04	5.50	114.3E6	834.5E6	560.363	480.949
7) L2 Aroclor-1016 {5}	5.43	5.68	193.5E6	635.9E6	531.554	487.651
Sum Aroclor-1016			878.1E6	4594.1E6	2687.620	2393.378
Average Aroclor-1016					537.524	478.676
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.22	8.08	552.5E6	694.9E6	507.778	492.045
34) L8 Aroclor-1260 {2}	8.89	8.33	317.6E6	1045.6E6	595.647	526.216
35) L8 Aroclor-1260 {3}	9.37	9.94	782.7E6	995.7E6	629.659	610.230
36) L8 Aroclor-1260 {4}	9.85	10.45	373.0E6	2260.6E6	567.056	642.964
37) L8 Aroclor-1260 {5}	10.92	11.04	202.7E6	1633.2E6	703.216	650.523
Sum Aroclor-1260			2228.5E6	6629.9E6	3003.356	2921.979
Average Aroclor-1260					600.671	584.396
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1059.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 12:40
Operator : JS
Sample : PCB,LCSS140929-16,S,5.00g,0,20
Misc : NA,09/29/14,NA,1
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:25:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

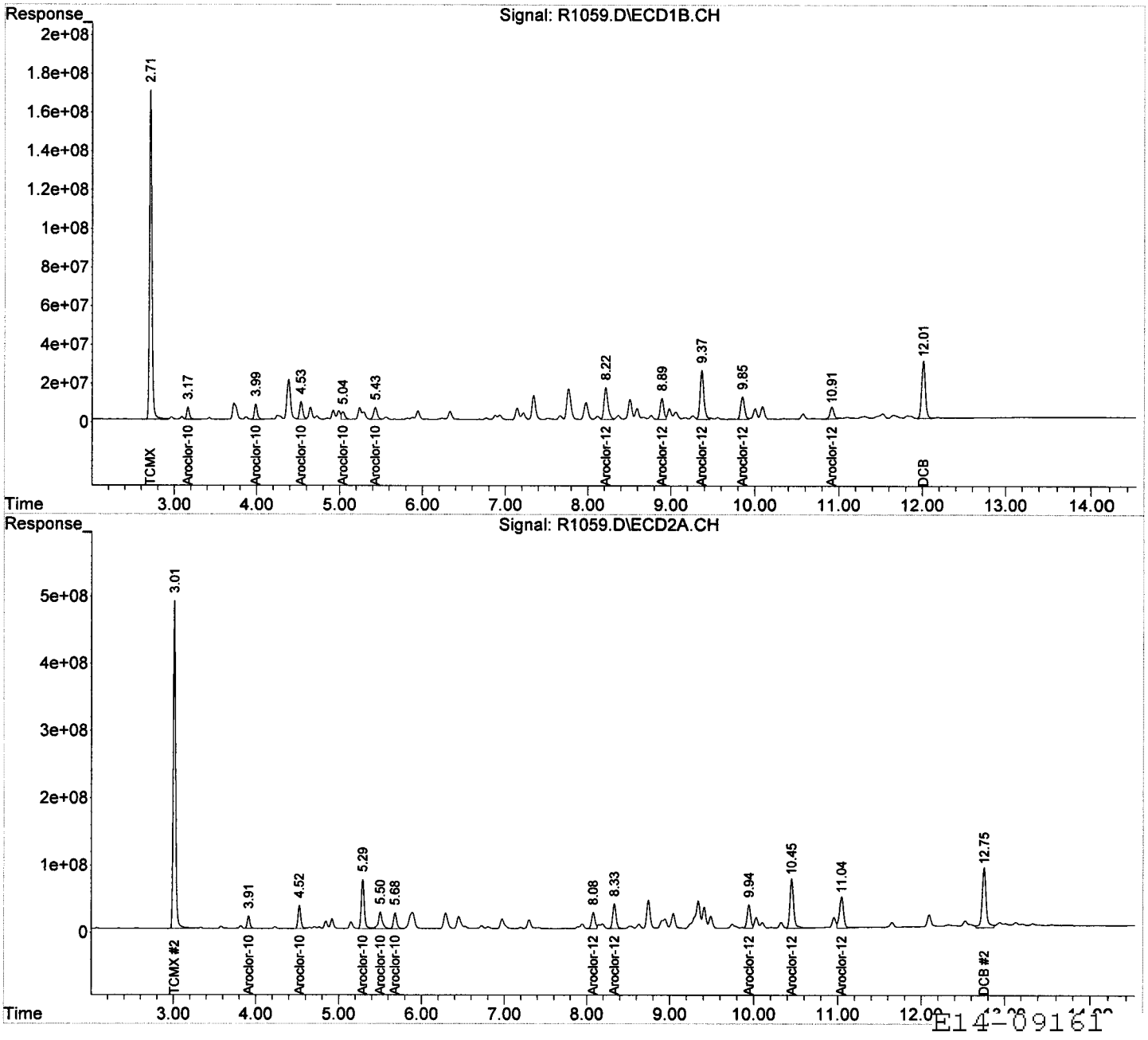
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-30-14\
Data File : R1059.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Sep 2014 12:40
Operator : JS
Sample : PCB,LCSS140929-16,S,5.00g,0,20
Misc : NA,09/29/14,NA,1
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 01 10:25:21 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



E14-09161 0328

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1010.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:40
Operator : JS
Sample : PCB,09303-001MS,S,5.14g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:35:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3206.5E6	8858.4E6	215.662	175.170
Spiked Amount 200.000			Recovery	=	107.83%	87.58%
2) S DCB	12.01	12.75	918.1E6	2308.2E6	209.583	190.409
Spiked Amount 200.000			Recovery	=	104.79%	95.20%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	135.4E6	422.8E6	526.229	479.494
4) L2 Aroclor-1016 {2}	3.99	4.52	183.8E6	787.9E6	519.197	454.264
5) L2 Aroclor-1016 {3}	4.53	5.29	239.1E6	1827.4E6	514.610	452.693
6) L2 Aroclor-1016 {4}	5.04	5.50	110.2E6	806.0E6	540.055	464.531
7) L2 Aroclor-1016 {5}	5.43	5.68	190.5E6	616.3E6	523.333	472.575
Sum Aroclor-1016			859.0E6	4460.4E6	2623.425	2323.558
Average Aroclor-1016					524.685	464.712
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.21	8.08	550.2E6	701.4E6	505.651	496.697
34) L8 Aroclor-1260 {2}	8.89	8.33	311.0E6	1030.2E6	583.243	518.456
35) L8 Aroclor-1260 {3}	9.37	9.94	768.9E6	971.3E6	618.518	595.302
36) L8 Aroclor-1260 {4}	9.85	10.45	367.5E6	2159.9E6	558.746	614.339
37) L8 Aroclor-1260 {5}	10.92	11.05	196.3E6	1478.1E6	681.003	588.751
Sum Aroclor-1260			2193.9E6	6341.0E6	2947.162	2813.544
Average Aroclor-1260					589.432	562.709
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1010.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:40
Operator : JS
Sample : PCB,09303-001MS,S,5.14g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:35:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

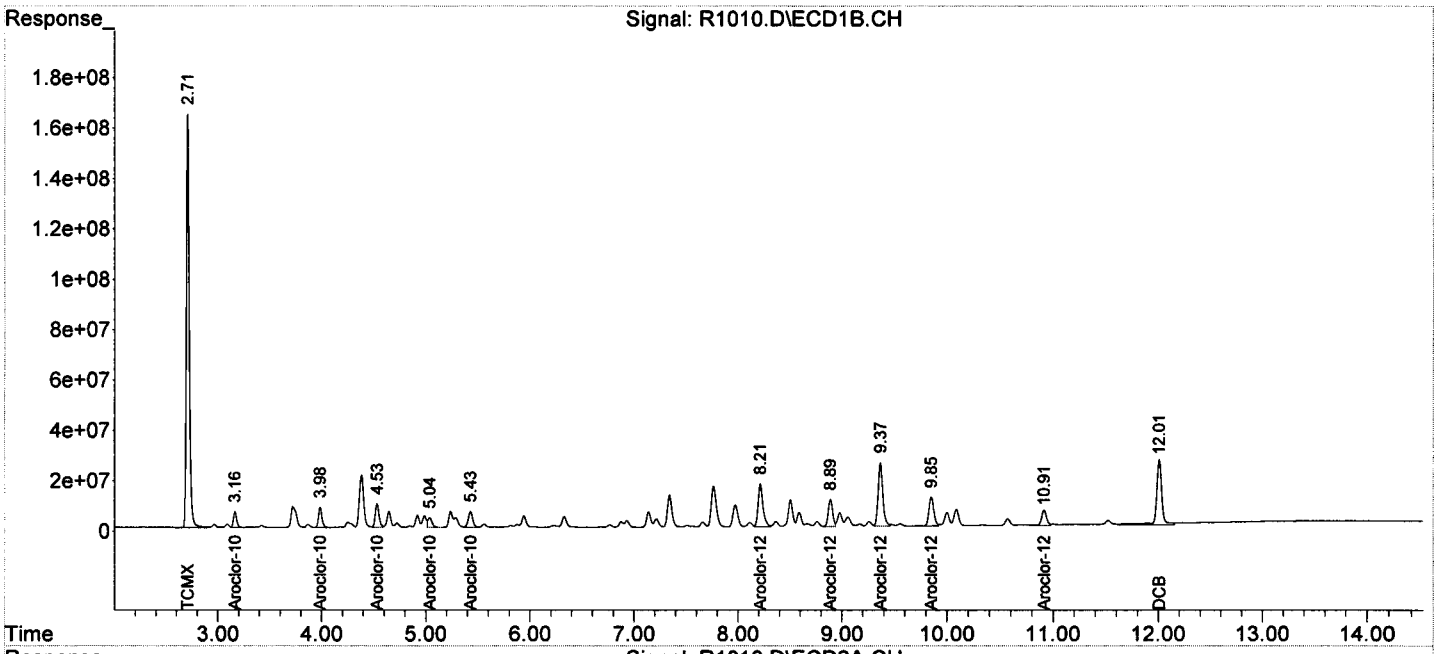
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

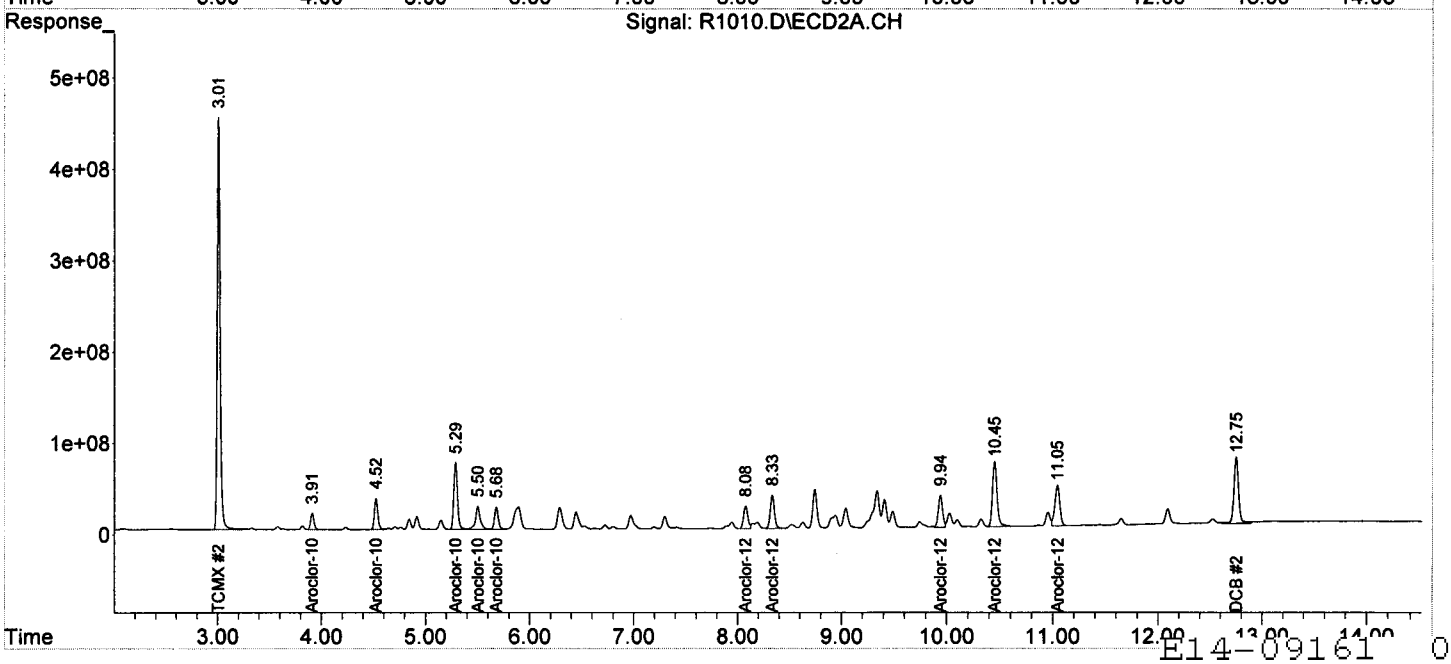
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1010.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:40
Operator : JS
Sample : PCB,09303-001MS,S,5.14g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:35:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1011.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:58
Operator : JS
Sample : PCB,09303-001MSD,S,5.18g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:34:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	3.01	3208.8E6	8902.4E6	215.819	176.040
Spiked Amount 200.000			Recovery	=	107.91%	88.02%
2) S DCB	12.01	12.75	808.3E6	2308.0E6	184.524	190.392
Spiked Amount 200.000			Recovery	=	92.26%	95.20%
Target Compounds						
3) L2 Aroclor-1016	3.16	3.91	136.6E6	448.4E6	531.232	508.483
4) L2 Aroclor-1016 {2}	3.99	4.53	185.2E6	807.3E6	523.017	465.441
5) L2 Aroclor-1016 {3}	4.53	5.29	240.3E6	1847.0E6	517.185	457.532
6) L2 Aroclor-1016 {4}	5.04	5.50	110.4E6	822.8E6	541.055	474.207
7) L2 Aroclor-1016 {5}	5.43	5.68	191.3E6	627.0E6	525.374	480.843
Sum Aroclor-1016			863.8E6	4552.5E6	2637.863	2386.506
Average Aroclor-1016					527.573	477.301
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.22	8.08	556.2E6	708.6E6	511.154	501.806
34) L8 Aroclor-1260 {2}	8.89	8.33	314.2E6	1040.0E6	589.215	523.385
35) L8 Aroclor-1260 {3}	9.37	9.94	779.6E6	976.4E6	627.178	598.402
36) L8 Aroclor-1260 {4}	9.85	10.45	371.9E6	2188.6E6	565.483	622.501
37) L8 Aroclor-1260 {5}	10.92	11.05	184.9E6	1498.8E6	641.566	596.999
Sum Aroclor-1260			2206.9E6	6412.4E6	2934.596	2843.094
Average Aroclor-1260					586.919	568.619
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1011.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:58
Operator : JS
Sample : PCB,09303-001MSD,S,5.18g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:34:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

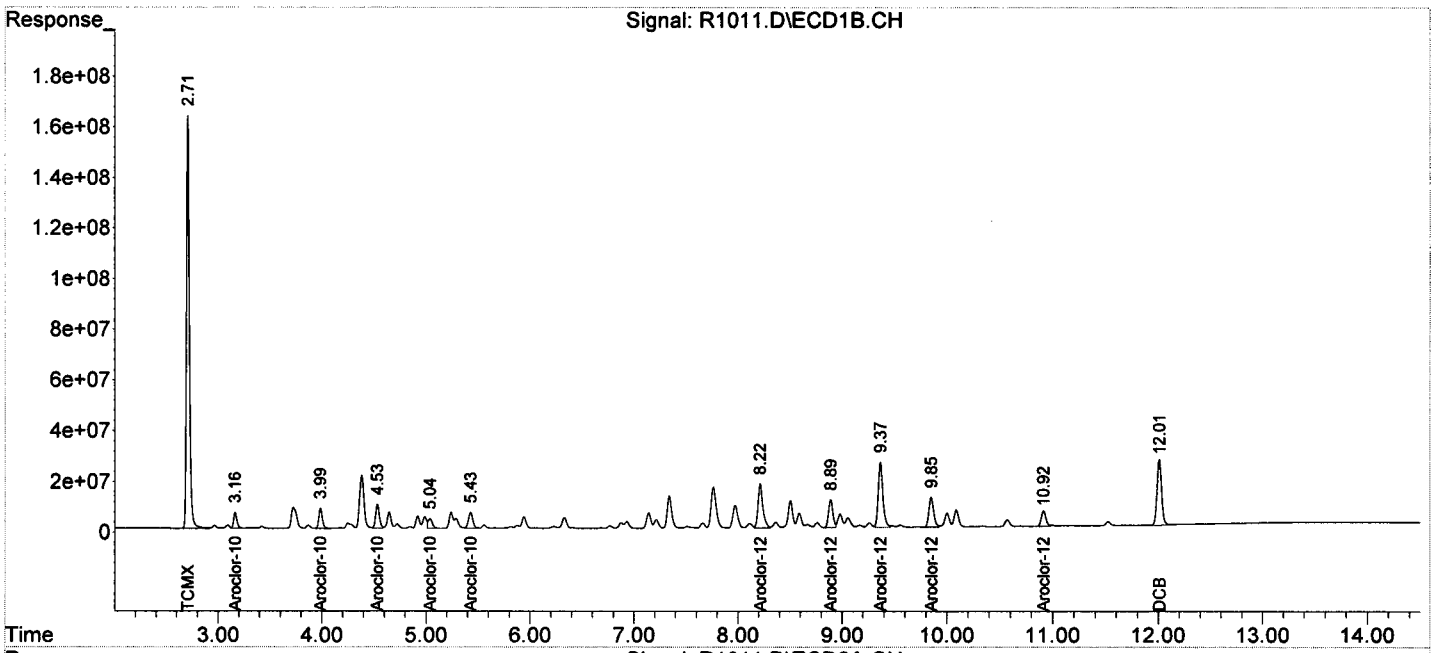
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

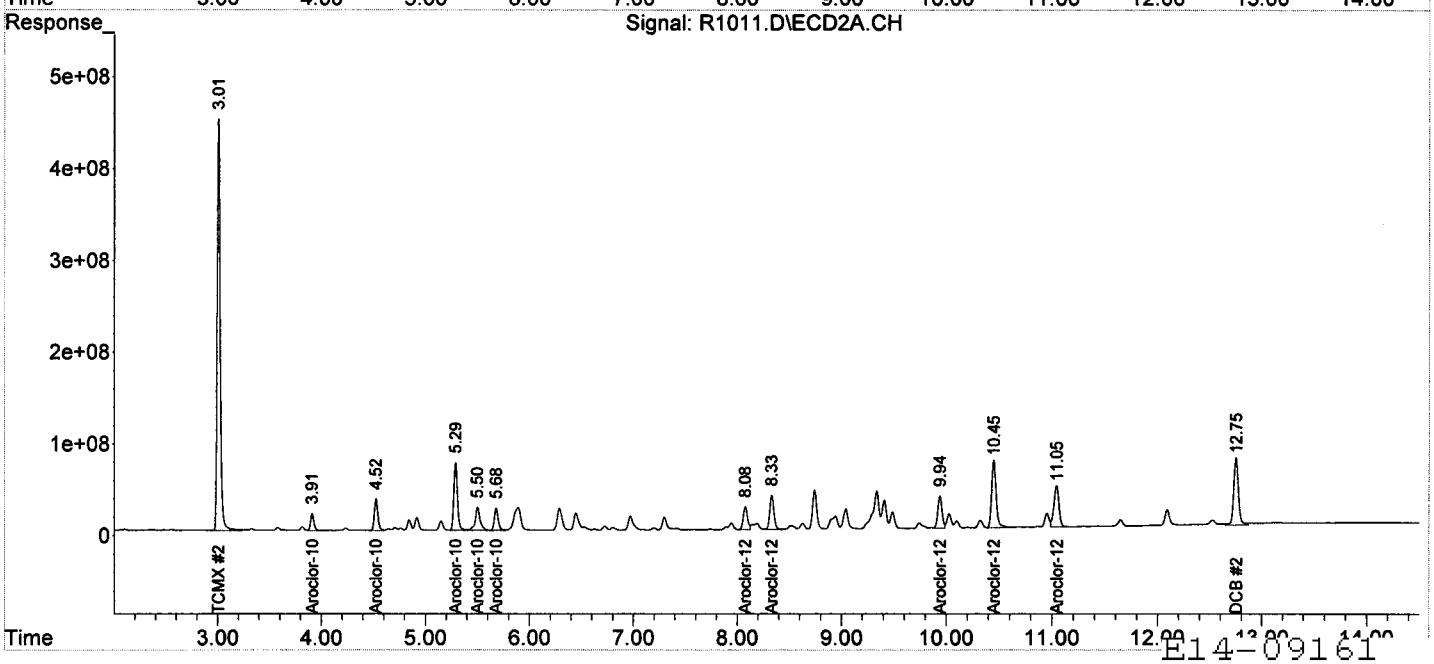
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\09-29-14\
Data File : R1011.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 29 Sep 2014 19:58
Operator : JS
Sample : PCB,09303-001MSD,S,5.18g,5.60,20
Misc : NA,09/29/14,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Sep 30 09:34:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0908.M
Quant Title :
QLast Update : Tue Sep 09 10:04:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PCB RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

PCB/Pest (Soil)

Extraction Date/Time: 09/29/2014 15:56

Batch ID: **140929-16**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)
BLKS140929-16	PCB/Pest	5.00	20	40	1		
LCSS140929-16	PCB	5.00	20	40	1	100	
LCSS140929-16	Pesticides	5.00	20	40	1		100

Standard Info	Surrogate IAS #
Solvent	RA#73-16//RA#67-4
Surrogate	#5078
SPK 1	#5083(100PPM)
SPK 2	#5081(20PPM)

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	08792-001	Pesticides	5.22	20	40	3	10.3	R-72		**08986-001MS / 140929-14**
2	09338-001 2x	PCB	5.43	20	40	5	35.8		**09303-001MS / 140929-07**	
3	09338-002 2x	PCB	5.31	20	40	5	26.1		**09303-001MS / 140929-07**	
4	09161-001	PCB	5.44	20	40	4	4.00		**09303-001MS / 140929-07**	
5	09218-004	PCB	5.09	20	40	4	17.8		**09303-001MS / 140929-07**	
6	09218-005	PCB	5.22	20	40	2	5.20		**09303-001MS / 140929-07**	
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Archie	09/29/2014 15:56
Weighed	Archie	09/29/2014 16:20
Surrogated	Archie	09/29/2014 16:21
Filtered	Archie	09/29/2014 17:22
Transferred	Archie	09/29/2014 17:22
Fractionated		

Comments:

E14-09161 0336

*V/C=Vap/Cell, *F=Funnel

Color: 1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

PCB

DATE 9/8/2014 0:00 **Extra. Batch** _____

INSTRUMENT R _____

METHOD RPCB0908 _____

SYS METHOD 8082A (eg. 8015B M, 3810) _____

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	100	R0618		HEXANE									
2	99	R0619		ISOOCTANE									
3	1	R0620	ICC_8082_L5_IAS_4973,2_PPM										
4	2	R0621	ICC_8082_L4_IAS_4974,1_PPM										
5	3	R0622	ICC_8082_L3_IAS_4975,0.5_PPM										
6	4	R0623	ICC_8082_L2_IAS_4976,0.05_PPM										
7	5	R0624	ICC_8082_L1_IAS_4977,0.01_PPM										
8	6	R0625	ICC_8082_1221_IAS_4981,0.5_PPM										
9	7	R0626	ICC_8082_1232_IAS_4982,0.5_PPM										
10	8	R0627	ICC_8082_1242_IAS_4983,0.5_PPM										
11	9	R0628	ICC_8082_1248_IAS_4984,0.5_PPM										
12	10	R0629	ICC_8082_1254_IAS_4985,0.5_PPM										
13	11	R0630	ICC_8082_1262_IAS_4986,0.5_PPM										
14	12	R0631	ICC_8082_1268_IAS_4987,0.5_PPM										
15	13	R0632	ICV_8082_C_IAS_4980,0.5_PPM										

LABORATORY CHRONICLE - GC

PCB

DATE 9/30/2014 9:42 **Extra. Batch** 140929-13 BS oil (Sonic)

INSTRUMENT R 140929-16 BS Soil

METHOD RPCB0908

SYS METHOD 8082A (eg. 8015B M, 3810)

ANALYST Justyna

Initial

	#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Final Vol	MX	Samp Date	Recd Date	Ext Date	% Moist
1	50	R1050	CCV_8082_C_IAS_4980,0.5_PPM			1							
2	51	R1051		BLKS140929-13		1	30	5	S			9/29/14	0
3	52	R1052		LCSS140929-13		1	30	5	S			9/29/14	0
4	53	R1053		09178	1	2	30.12	5	S	9/24/14	9/24/14	9/29/14	8.80
5	54	R1054		09036	1	1	30.48	5	S	9/22/14	9/22/14	9/29/14	12.3
6	55	R1055		09037	1	1	30.47	5	S	9/22/14	9/23/14	9/29/14	13.9
7	56	R1056		09038	1	1	30.22	5	S	9/22/14	9/22/14	9/29/14	12.7
8	57	R1057		09134	1	1	30.44	5	S	9/23/14	9/24/14	9/29/14	6.10
9	58	R1058		BLKS140929-16		1	5.00	20	S			9/29/14	0
10	59	R1059		LCSS140929-16		1	5.00	20	S			9/29/14	0
11	60	R1060		09338	1	2	5.43	20	S	9/26/14	9/26/14	9/29/14	35.8
12	61	R1061		09338	2	2	5.31	20	S	9/26/14	9/26/14	9/29/14	26.1
13	62	R1062	54	09161	1	1	5.44	20	S	9/23/14	9/24/14	9/29/14	4.00
14	63	R1063		09218	4	1	5.09	20	S	9/24/14	9/25/14	9/29/14	17.8
15	64	R1064		09218	5	1	5.22	20	S	9/24/14	9/25/14	9/29/14	5.20
16	50	R1065	CCV_8082_C_IAS_4980,0.5_PPM			1							

STANDARD IAS#	STANDARD NAME:	1016 PCB		
4833				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-8097	LB95199	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1221 PCB		
4834				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-8098	LB98893	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1232 PCB		
4835				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4805	LB78773	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1242 PCB		
4836				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4806	LB88851	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/19 (R)	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

NOTEBOOK INSERT LABEL

Aroclor 1016 **4-8097**

Lot: LB95199 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 3-1-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1221 **4-8098**

Lot: LB98893 EXP: MAY/2016 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: 3-1-13 mg

SUPELCO
Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1232 **4-4805**

Lot: LB78773 EXP: SEP/2015 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED: 1-24-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1242 **4-4806**

Lot: LB88851 EXP: NOV/2014 STORAGE: ROOM TEMP. 1 x 1.0ml

DATE RECEIVED: 3-1-13

SUPELCO
Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD IAS#	STANDARD NAME:	1248 PCb		
4837				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4807	LB88969	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	–			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	ng

STANDARD IAS#	STANDARD NAME:	1254 PCb		
4838				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4808	LB98272	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	–			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	ng

STANDARD IAS#	STANDARD NAME:	1260 PCb		
4839				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Supelco	4-4809	LB92109	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	–			1000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	ng

STANDARD IAS#	STANDARD NAME:	1262 PCb		
4840				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Restek	32409	A0914169	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	–			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	ng

NOTEBOOK INSERT LABEL

Aroclor 1248
Lot: LB88969 EXP: JAN/2015 STORAGE: ROOM TEMP. 4-4807 1 x 1.0ml

DATE RECEIVED: 1-23-13

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1254
Lot: LB98272 EXP: FEB/2016 STORAGE: ROOM TEMP. 4-4808 1 x 1.0ml

DATE RECEIVED: 3-1-13 ng

SUPELCO Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

NOTEBOOK INSERT LABEL

Aroclor 1260
Lot: LB92109 EXP: APR/2015 STORAGE: ROOM TEMP. 4-4809 1 x 1.0ml

DATE RECEIVED: 3-1-13 ng

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

RESTEK
110 Benner Circle
Bellefonte, PA 16823
Made in USA
Catalog # 32409
This product contains PCBs
Aroclor® 1262 Standard
1000 ug/mL each in Hexane
Lot# A091469 Exp Date. 01/2019 Store: 25°C nominal

STANDARD IAS#	STANDARD NAME:	1268 PCb		
4841				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	Restek	32410	A087817	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	—			1000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	ng

STANDARD IAS#	STANDARD NAME:	1016 pcb MdL		
4842				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4833	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1221 PCb MdL		
4843				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS #4834	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1232 PCb MdL		
4844				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4835	—	—	1000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		VSS9-10	ng

RESTEK
110 Benner Circle
Bellefonte, PA 16823

Made in USA

Catalog # 32410
This product contains PCB's

Aroclor® 1268 Standard

1000 ug/mL each in Hexane
Lot# A067817 Exp. Date: 07/2018 Store: 25°C nominal

STANDARD IAS#	STANDARD NAME:	1262 PCB mdL		
4849				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4840	—	—	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VS59-10	ng

STANDARD IAS#	STANDARD NAME:	1268 PCB mdL		
4850				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4841	—	—	1000ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100			10ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VS59-10	ng

STANDARD IAS#	STANDARD NAME:	1221 PCB Stock		
4851				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4834	—	—	1000 PPM
STD.EXP.DATE	~~1:100 (1221~~ DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (1221 neat) (100µl IAS# 4834) + 1:25 surrog. IAS #4825 (400µl) → 10 mL			10 PPM + 4PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		VS59-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB STOCK		
4852				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4835	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4835) + 1:25 (400µl of surrog #4825) → 10ml			10 PPM + 4 PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VS59-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB Stock		
4853				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS# 4836	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/15 (9)	1:100 (100µl of IAS # 4836) + 1:25 (400µl of surrog. 4825) → 10mL			10PPM + 4PPM surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1248 PCB Stock		
4854				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4837	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4837) + 1:25 (400µl of surrg 4825) → 10 mL			10PPM + 4PPM surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1254 PCB stock		
4855				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4838	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4838) + 1:25 (400µl of surr 4825) → 10mL			10PPM + 4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1262 PCB Stock		
4856				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4840	–	–	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4840) + 1:25 (400µl of surrog 4825) → 10mL			10 PPM + 4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1268 PCB Stock		
4857				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4841	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1/7/15	1:100 (100µl of 4841) + 1:25 (400µl of surrog. 4825) → 10ml			10PPM + 4 PPM Surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/25/23	Isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
4858				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4851	—	—	10PPM + 4PPM Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15 14 JS	1:20			0.5PPM + 0.2PPM Surrg.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
4859				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4852	—	—	10PPM + 4PPM surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15 14 JS	1:20			0.5PPM + 0.2PPM Surrog.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
4860				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
1/7/14	IAS # 4853	—	—	10PPM + 4PPM Surrog.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
7/7/15	1:20			0.5PPM + 0.2PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB /PEST SURROGATE		
4825				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	Chem Service	TCMX: S10542B3 DCB: BZ-209 JS	~~136800~~ 1814900JS 1464000	500 PPM TCMX 1000 PPM DCB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	10ML(TCMX)+5ML(DCB)→50ml Hexane			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
8/12/23	Hexane		134316	JS

STANDARD IAS#	STANDARD NAME:	PCB STOCK		
4826				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS# 4833 IAS# 4839	48099 (1016) 44809 (1260)	LB95199 LB92109	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
01/07/15	1:10 (1mL of 1016, 1260 → 10mL of isooctane)			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB WORKING STANDARD		
4827				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS# 4826	—	—	100 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/07/14	1:10 stock IAS#4826 (1ML)+400µl surrg (IAS#4825)→10mL			10PPM+4PPM surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
4828				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
01/07/14	IAS# 4827	—	—	10PPM + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
07/07/14	1:5			2PPM + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		V559-10	JS

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
O BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
O BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

/9J4-5ML Exp 4/30/2016

CHEM SERVICE
X 599, WEST CHESTER, PA 19381 800-452-9994

orobiphenyl Solution

CAUTION PCBs

64000

ml In Hexane

LE-REPRODUCTIVE HAZARD

FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

IING!: READ your MSDS before HANDLING chemical.

BZ-209J4-5ML Exp 4/30/2016

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution

Lot: 1464000

1000ug/ml In Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

STANDARD IAS#	STANDARD NAME:	Extraction Surrogate NJ-EPH-DRO		
4952				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5-5-14	IAS 4770 IAS 4769	—	—	100,000
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11-1-14	1:10 (1mL each Surrogate + 8mL Hexane)			10,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4-16-24	Hexane		138465	MP

STANDARD IAS#	STANDARD NAME:	Pesticides Stock Std (2nd source)		
4953				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/08/14	SpexCertiPrep	ACE-8081-S	T1111006012	1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
~~05/08/15~~ 01/07/15 RB	10µl (SpexCertiPrep) + 200µl (surrogate IAS# 4825) → 10ml (Isooctane)			1000 PPB 2000 PPB (surrogate)
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	isooctane		V559-10	RB

STANDARD IAS#	STANDARD NAME:	Pesticides working Stol (2nd source)		
4954				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/08/14	IAS# 4953	—	—	1000PPB
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/08/14	1:10			100PPB
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	isooctane		V559-10	RB

STANDARD IAS#	STANDARD NAME:	PCB working Standard		
4955				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
RG 5/6/8/14	IAS # 4826	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
RG 11/12/8/14	1:10 Stock (IAS # 4826) + 400uL surrog (IAS # 4825) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04/09/24	Isooctane		V559-10	RG

STANDARD IAS#	STANDARD NAME:	PCB Spike (1016/1260)		
4972				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
06/04/14	Chem Service	1016 S11086JA 1260 S11092JA	1111700 2302000	1000 µg/ml
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/31/14	5ml of 1016 + 5ml of 1260			500 µg/ml
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
—	—		—	JS

STANDARD IAS#	STANDARD NAME:	PCB L5 (1016/1260)		
4973				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:5			2ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L4 (1016/1260)		
4974				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			1ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L3 (1016/1260)		
4975				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4955	—	—	10ppm + surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:20			0.5ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		V559-10	ng

S-11092J4-5ML Exp 12/31/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Arochlor 1260 Solution

Lot: 2302000

1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

S-11086J4-5ML Exp 12/31/201

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-999

Arochlor 1016 Solution

Lot: 1111700
1000ug/ml in Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

CAUTION CONTAINS PCBs
(Polychlorinated Biphenyls)
FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

WARNING!: READ your MSDS before HANDLING chemical.

STANDARD IAS#	STANDARD NAME:	PCB L2 (1016/1260)		
4976				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:10			0.05ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L1 (1016/1260)		
4977				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4975	—	—	0.5ppm + Surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/8/14	1:50			0.01 ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB STOCK (second source)		
4978				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	ChemService	(1016) S-11086J4 (1260) S-11092J4	254 0100 2302.000	1,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
6/30/15	1:10 (1mL of 1016, 1mL 1260 → 10mL)			100ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB Working Standard (second source)		
4979				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS #4978	—	—	100ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:10 stock (IAS #4978) + 400ul surrog (IAS #4825) → 10mL			10ppm + 4ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	ISOOctane		V559-10	ng

STANDARD IAS#	STANDARD NAME:	PCB L3 (second source)		
4980				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4979	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1221 PCB L3		
4981				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4851	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1232 PCB L3		
4982				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4852	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1242 PCB L3		
4983				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS#4853	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/30/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1248 PCB L3		
4984				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4854	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/2014	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1254 PCB L3		
4985				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4855	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1262 PCB L3		
4986				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4856	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	1268 PCB L3		
4987				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
6/12/14	IAS # 4857	—	—	10ppm + 4ppm surrog
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/12/14	1:20			0.5ppm + 0.2ppm surrog
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	Isooctane		VSS9-10	ng

STANDARD IAS#	STANDARD NAME:	Acid Mix SPIKE		
5077				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/15/14	–	–	–	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
03/15/15	see			10 000 / 100 000 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	0.05 N OXALIC Acid		–	MJ

STANDARD IAS#	STANDARD NAME:	PCB / PEST SURROGATE		
5078				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/16/14	CHEM SERVICE	TCMX S-10542 B3 DCB BZ-2094	TCMX 1814900 DCB 21888 00	TCMX 500 PPM DCB 1000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
02/28/15	10 ML (TCMX) + 5ML (DCB) → 50ML HEXANE			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4/16/24	HEXANE		B8465	JS

STANDARD IAS#	STANDARD NAME:	Mix 3 Gas "Stock"		
5079				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/17/14	AIR LIQUIDE SUPELCO	P442003/2546L	090PLL45PC0LL	Mix 1/.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/17/15	–			Mix 1/.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	

STANDARD IAS#	STANDARD NAME:	Mix 3 Gas "2nd source"		
5080				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
09/17/14	SUPELCO	2546L	090PLL45PC0LL "second cylinder"	Mix 1/.
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
09/17/15	–			Mix 1/.
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
–	–		–	MJ

COMPOUND	10 000/100 000ppm
ACETIC ACID	95.3uL/10mL
PROPIONIC ACID	100.7
BUTYRIC ACID	103.7
PYRUVIC ACID	789.3
LACTIC ACID	827.1

BZ-209J4-5ML Exp 11/30/2016

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Decachlorobiphenyl Solution

Lot: 2188800

1000ug/ml In Hexane
FLAMMABLE-REPRODUCTIVE HAZARD

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

S-10542B3-5ML Exp 2/28/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

2,4,5,6-Tetrachloro-m-xylene Solution

Lot: 1814900

500ug/ml in Acetone
FLAMMABLE-HARMFUL-IRRITANT

DIESEL RANGE ORGANICS

DIESEL RANGE ORGANICS
QC SUMMARY

TPH SURROGATE RECOVERY AND RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Q Column: RTX-5

Surrogate RT from initial calibration:
DBC 4.9

Client ID	Lab Sample ID	Matrix	Date Analyzed	Time Analyzed	DBC % rec	DBC RT	#
TPH-DRO	BLKS140925-02	SOIL	09/26/2014	11:15	84	4.90	
B123/70	09125-001	SOIL	09/26/2014	11:28	94	4.90	
B123/80	09173-001	SOIL	09/26/2014	11:56	104	4.90	
B123/84	09174-001	SOIL	09/26/2014	12:10	90	4.90	
B-1/2/3/	09199-001	SOIL	09/26/2014	12:24	92	4.90	
GPEC-WC0	09161-001	SOIL	09/26/2014	12:37	81	4.91	
M-WASTE-	09176-001	SOIL	09/26/2014	12:51	87	4.91	
B1	09185-001	SOIL	09/26/2014	13:19	87	4.91	
B2	09185-002	SOIL	09/26/2014	13:33	89	4.91	
B1/2/3/6	09186-001	SOIL	09/26/2014	13:47	85	4.91	
TPH-DRO	09125-001MS	SOIL	09/26/2014	14:28	95	4.90	
TPH-DRO	09125-001MSD	SOIL	09/26/2014	14:42	94	4.90	
TPH-DRO	LCSS140925-02	SOIL	09/26/2014	14:56	79	4.90	
WST40923	09154-007	SOIL	09/26/2014	15:10	97	4.90	
J_WASTE-	09271-001	SOIL	09/26/2014	15:24	89	4.90	
A-WASTE-	09270-001	SOIL	09/26/2014	15:38	101	4.90	
B-WASTE-	09272-001	SOIL	09/26/2014	15:52	103	4.90	

Surrogate QC Limits	Recovery	RT
DBC = Dibutylchlorendate	30 - 150	± 0.1 Minutes

Column to be used to flag recovery values
* = Values outside of QC Limits
D = Surrogate diluted out
M = Matrix interference

SOIL - TPH BLANK SPIKE RECOVERY

Blank Spike Lab Sample ID: LCSS140925-02

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	BS CONC. (mg/Kg)	BS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	1170	117		40 - 140

Column to be used to flag recovery values with an asterisk

* = Values outside of QC Limits

Spike Recovery: 0 out of 1 outside limits

SOIL - TPH MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix Spike Lab Sample ID 09125-001MSD

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS CONC. (mg/Kg)	MS % REC	#	QC LIMITS REC
TPH-DRO	1000	0	1360	136		30 - 150

COMPOUND	SAMPLE CONC. (mg/Kg)	MSD CONC. (mg/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC
TPH-DRO	0	1360	136		0.392		50	30 - 150

Column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC Limits

NC = Non calculable

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

TPH METHOD BLANK SUMMARY

Lab File ID: QB7304.D

Instrument ID: GC-Q

Date Extracted: 09/25/2014

Matrix: SOIL

Date Analyzed: 09/26/2014

Time Analyzed: 11:15

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B123/70	09125-001	09/26/2014	11:28
B123/80	09173-001	09/26/2014	11:56
B123/84	09174-001	09/26/2014	12:10
B-1/2/3/	09199-001	09/26/2014	12:24
GPEC-WC0	09161-001	09/26/2014	12:37
M-WASTE-	09176-001	09/26/2014	12:51
B1	09185-001	09/26/2014	13:19
B2	09185-002	09/26/2014	13:33
B1/2/3/6	09186-001	09/26/2014	13:47
TPH-DRO	09125-001MS	09/26/2014	14:28
TPH-DRO	09125-001MSD	09/26/2014	14:42
TPH-DRO	LCSS140925-02	09/26/2014	14:56
WST40923	09154-007	09/26/2014	15:10
J_WASTE-	09271-001	09/26/2014	15:24
A-WASTE-	09270-001	09/26/2014	15:38
B-WASTE-	09272-001	09/26/2014	15:52

DIESEL RANGE ORGANICS
SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7310.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 12:37 pm
Operator : MS
Sample : GPEC-WC0,09161-001,S,10.32g,4.00,09/25/14,15
Misc : 140925-02,09/23/14,09/24/14,1
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 12:47:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.906	21619845	80.676 ng
Spiked Amount 100.000		Recovery =	80.68%
Target Compounds			
3) H TPH-DRO	3.300	73852122	175.678 ng

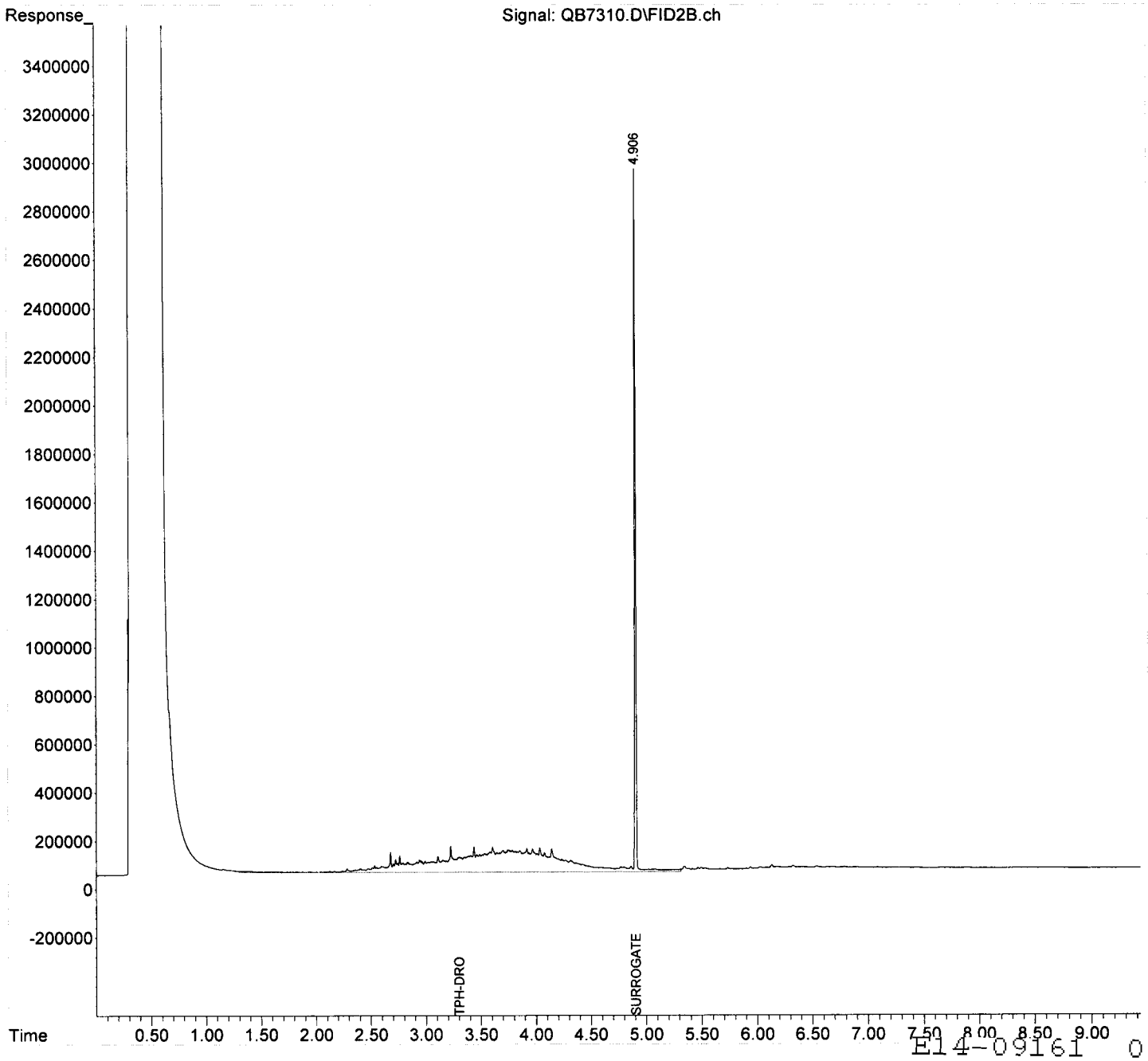
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7310.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 12:37 pm
Operator : MS
Sample : GPEC-WC0,09161-001,S,10.32g,4.00,09/25/14,15
Misc : 140925-02,09/23/14,09/24/14,1
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 12:47:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
STANDARDS

TPH INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/18/2014 Instrument ID: GC-Q

Date File: QB7030.D QB7029.D QB7028.D QB7027.D QB7026.D GC Column: RTX-5

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RT	FROM	TO
TPH-DRO	3.30	3.30	3.30	3.30	3.30	3.30	3.20	3.40

	CALIBRATION FACTORS					MEAN	
COMPOUND	40 PPM	500 PPM	1000 PPM	2000 PPM	5000 PPM	RF	%RSD
TPH-DRO	43.1	39.4	46.1	41.2	40.4	42.0	6.29

TPH CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 09/26/2014 11:01

Date File: QB7303.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		42.0	47.5	13.1

Date Analyzed: 09/26/2014 16:06

Date File: QB7325.D

	RT WINDOW						
COMPOUND	RT	FROM	TO		Avg CF	CC CF	%D
TPH-DRO	3.30	3.20	3.40		42.0	44.0	4.76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7026.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 11:38 am
Operator : MS
Sample : DRO_L5_IAS_4963,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 11:49:37 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.927	128809969	481.752 ng
Spiked Amount 100.000		Recovery =	481.75%
Target Compounds			
3) H TPH-DRO	3.300	2021929775	4372.906 ng

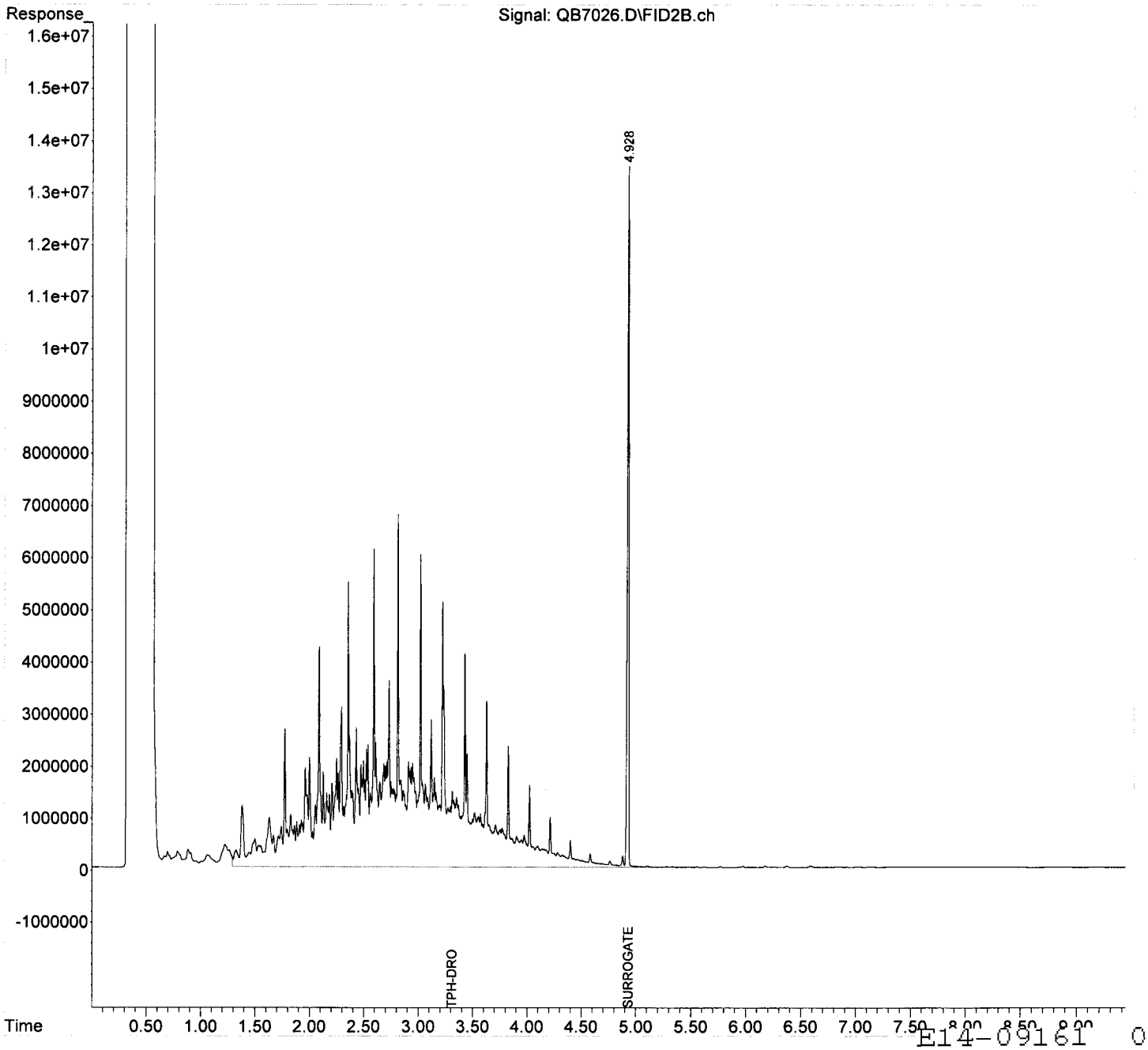
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7026.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 11:38 am
Operator : MS
Sample : DRO_L5_IAS_4963,5000_PPM
Misc : ,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 11:49:37 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7027.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 11:52 am
Operator : MS
Sample : DRO_L4_IAS_4964,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:19:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.918	52062500	194.715 ng
Spiked Amount 100.000		Recovery =	194.72%
Target Compounds			
3) H TPH-DRO	3.300	823454532	1780.917 ng

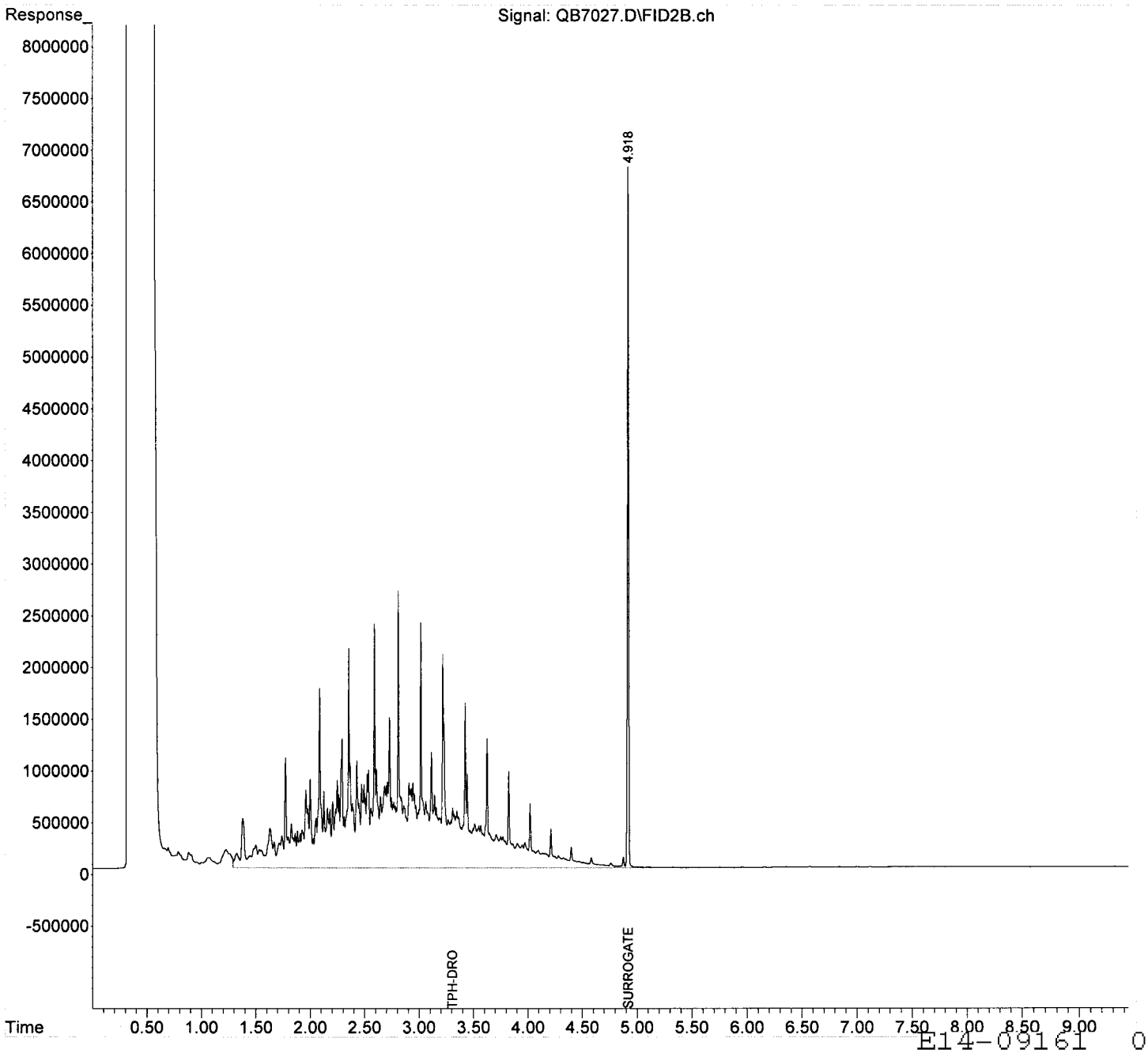
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7027.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 11:52 am
Operator : MS
Sample : DRO_L4_IAS_4964,2000_PPM
Misc : ,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:19:26 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7028.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:05 pm
Operator : MS
Sample : DRO_L3_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:19:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.913	28874961	107.993 ng
Spiked Amount 100.000		Recovery = 107.99%	
Target Compounds			
3) H TPH-DRO	3.300	460899113	996.804 ng

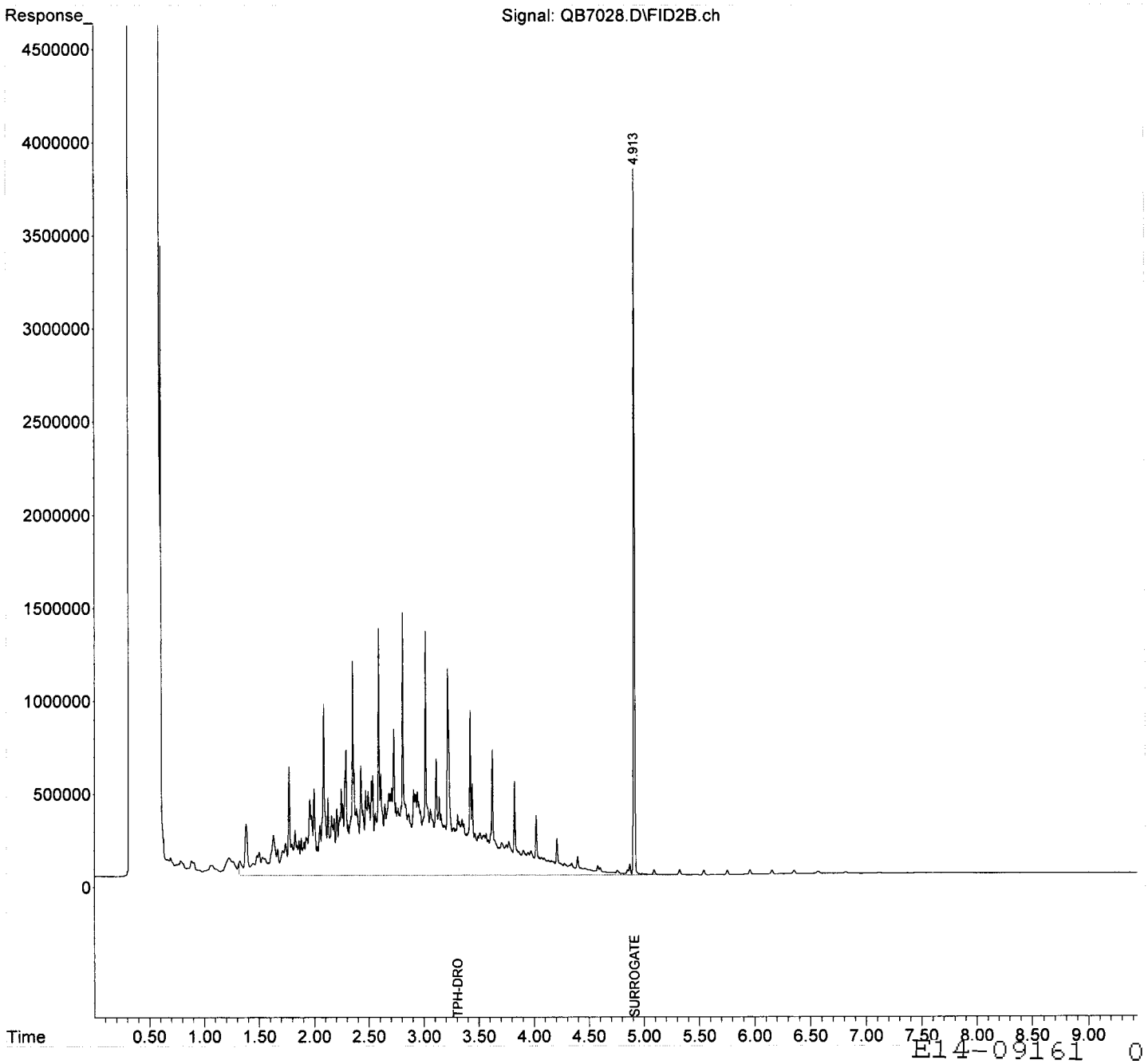
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7028.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:05 pm
Operator : MS
Sample : DRO_L3_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:19:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7029.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:19 pm
Operator : MS
Sample : DRO_L2_IAS_4966,500_PPM
Misc : ,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:30:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.911	12474462	46.655 ng
Spiked Amount 100.000		Recovery =	46.66%
Target Compounds			
3) H TPH-DRO	3.300	196902223	425.848 ng

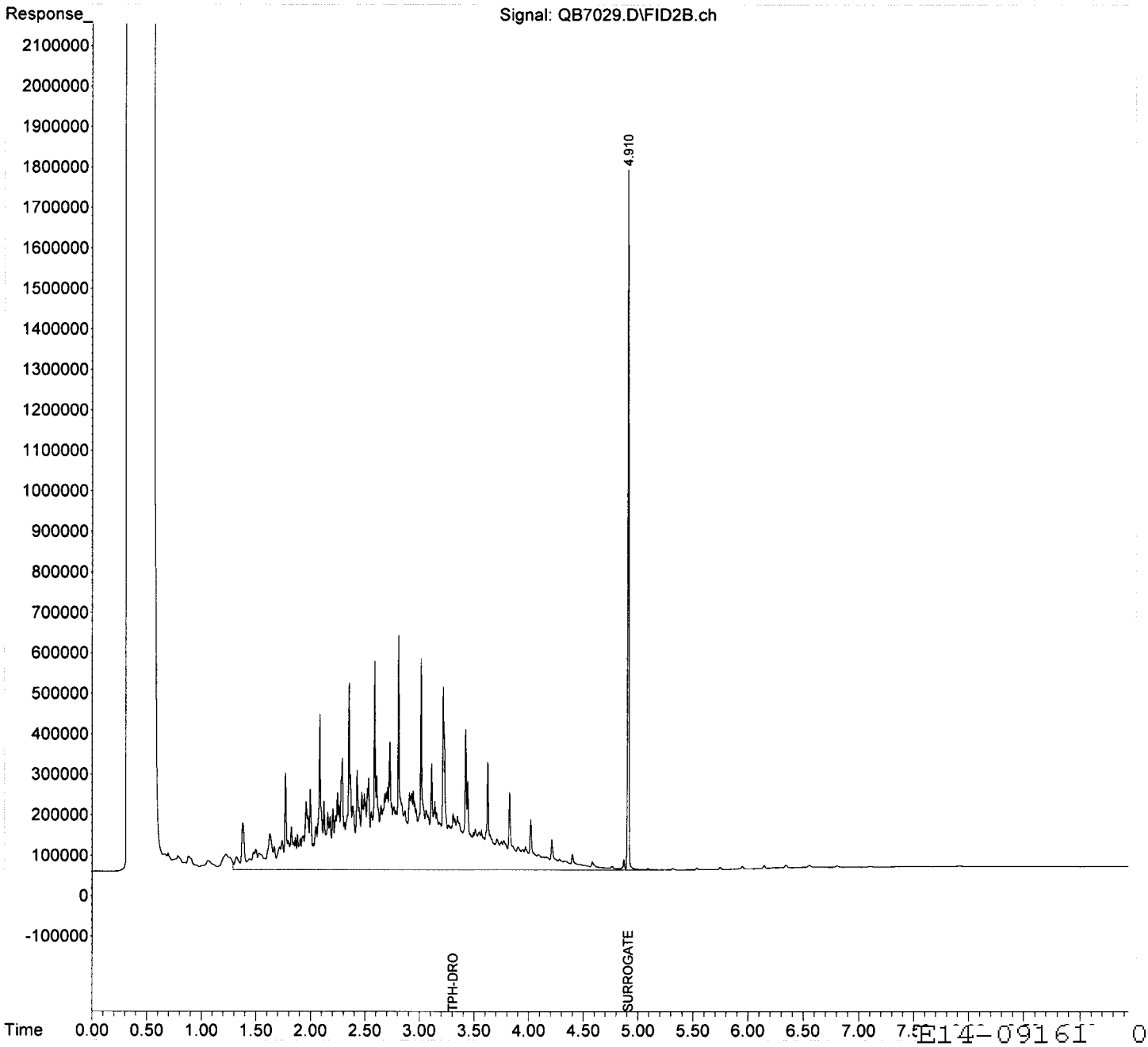
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7029.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:19 pm
Operator : MS
Sample : DRO_L2_IAS_4966,500_PPM
Misc : ,NA,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:30:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-09161 0376

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7030.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:33 pm
Operator : MS
Sample : DRO_L1_IAS_4967,40_PPM
Misc : ,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 14:05:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.912	1135006	4.245 ng
Spiked Amount 100.000		Recovery =	4.25%
Target Compounds			
3) H TPH-DRO	3.300	17243922	37.294 ng

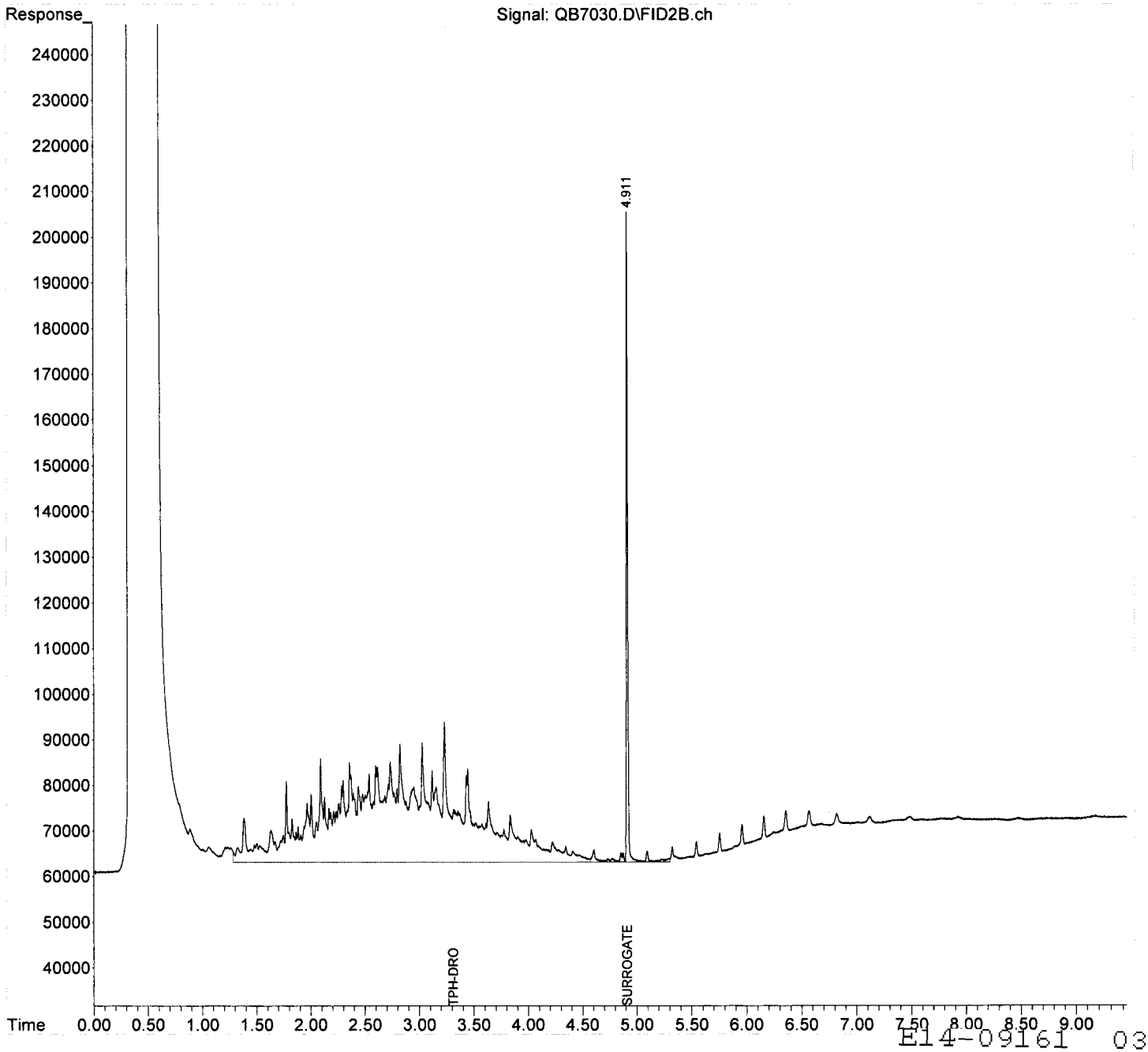
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\QB_Sep_14\09-18-14\
Data File : QB7030.D
Signal(s) : FID2B.ch
Acq On : 18 Sep 14 12:33 pm
Operator : MS
Sample : DRO_L1_IAS_4967,40_PPM
Misc : ,NA,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 14:05:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Wed Aug 20 11:49:22 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7303.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:01 am
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 11:11:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.902	29540823	110.233 ng
Spiked Amount 100.000		Recovery =	110.23%
Target Compounds			
3) H TPH-DRO	3.300	474605703	1128.984 ng

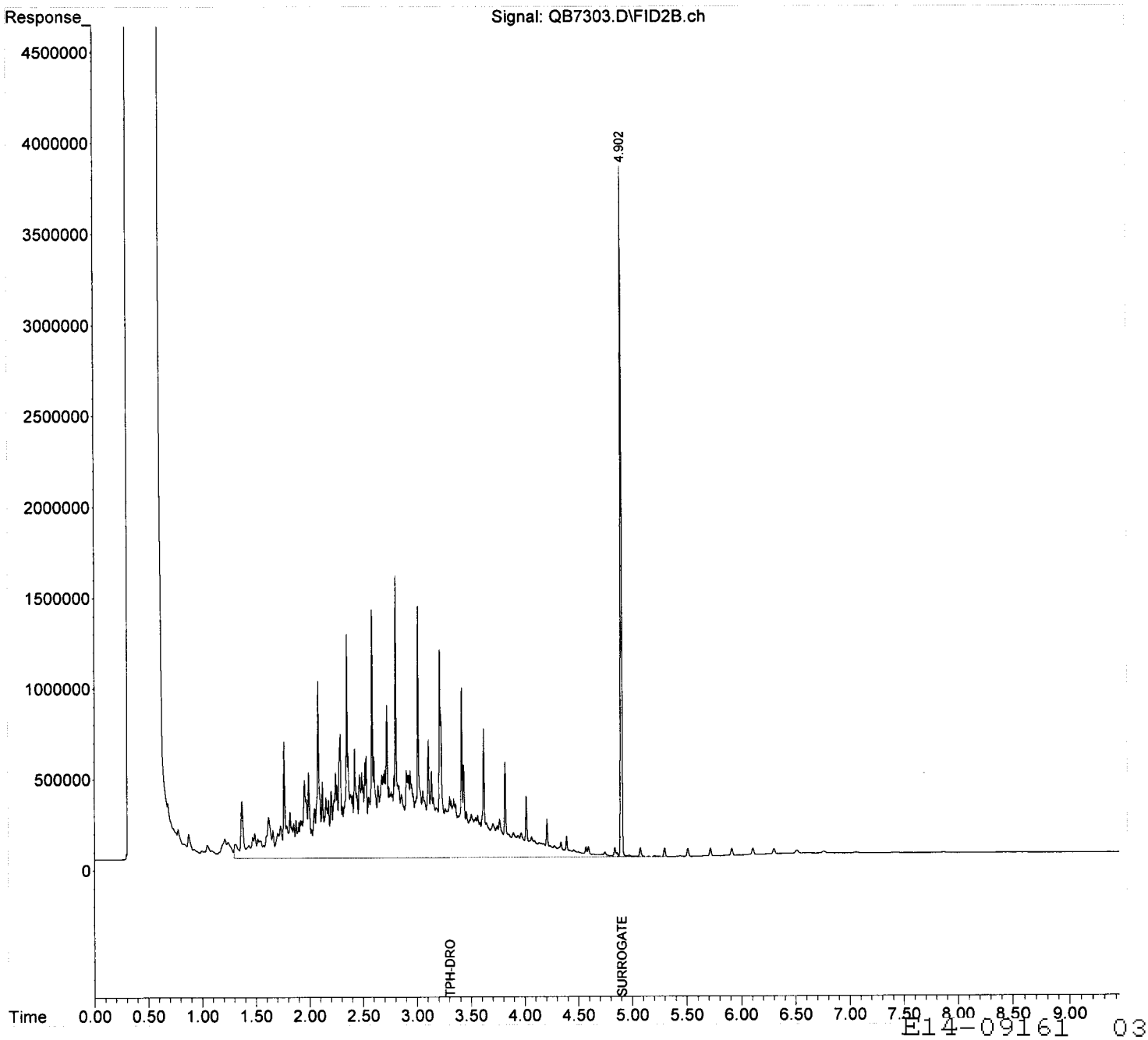
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7303.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:01 am
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 11:11:28 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7325.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 4:06 pm
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 16:24:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.902	28070658	104.747 ng
Spiked Amount 100.000		Recovery = 104.75%	
Target Compounds			
3) H TPH-DRO	3.300	440314887	1047.414 ng

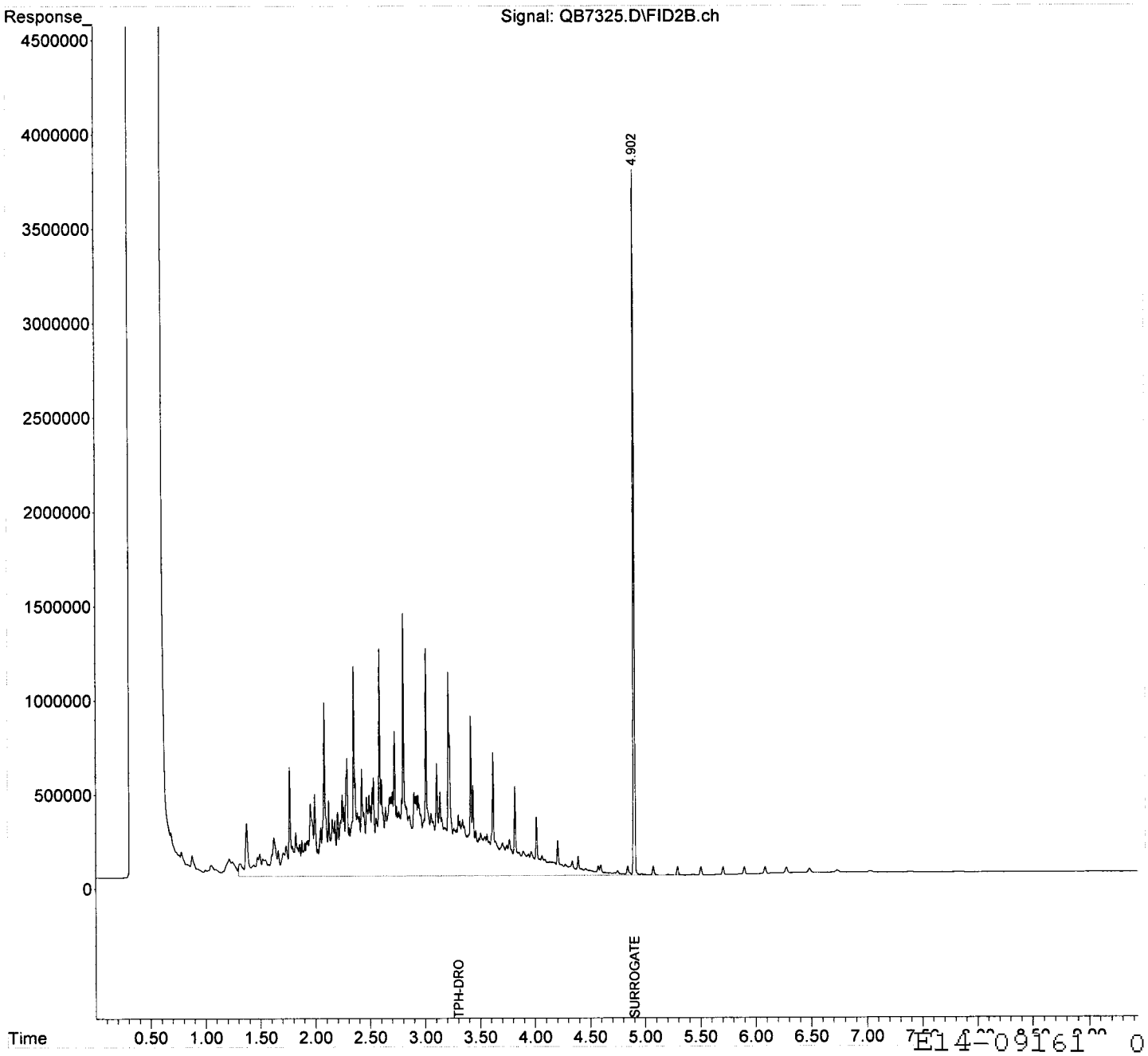
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7325.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 4:06 pm
Operator : MS
Sample : DRO_C_IAS_4965,1000_PPM
Misc : ,NA,NA,1
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 16:24:17 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-09161 0382

DIESEL RANGE ORGANICS
RAW QC DATA

INTEGRATED ANALYTICAL LABORATORIES

TPH-DRO

Lab ID:	BLKS140925-02	GC Column:	RTX-5
Client ID:	TPH-DRO	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg (ppm)
Date Extracted:	09/25/2014	Dilution Factor:	1
Date Analyzed:	09/26/2014	% Moisture:	0
Data File:	QB7304.D		

Compound	Concentration	Q	RL	MDL
TPH-DRO	ND		75.0	60.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7304.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:15 am
Operator : MS
Sample : TPH-DRO,BLKS140925-02,S,10.0g,0,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 12:19:30 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.904	22581258	84.263 ng
Spiked Amount 100.000		Recovery =	84.26%
Target Compounds			

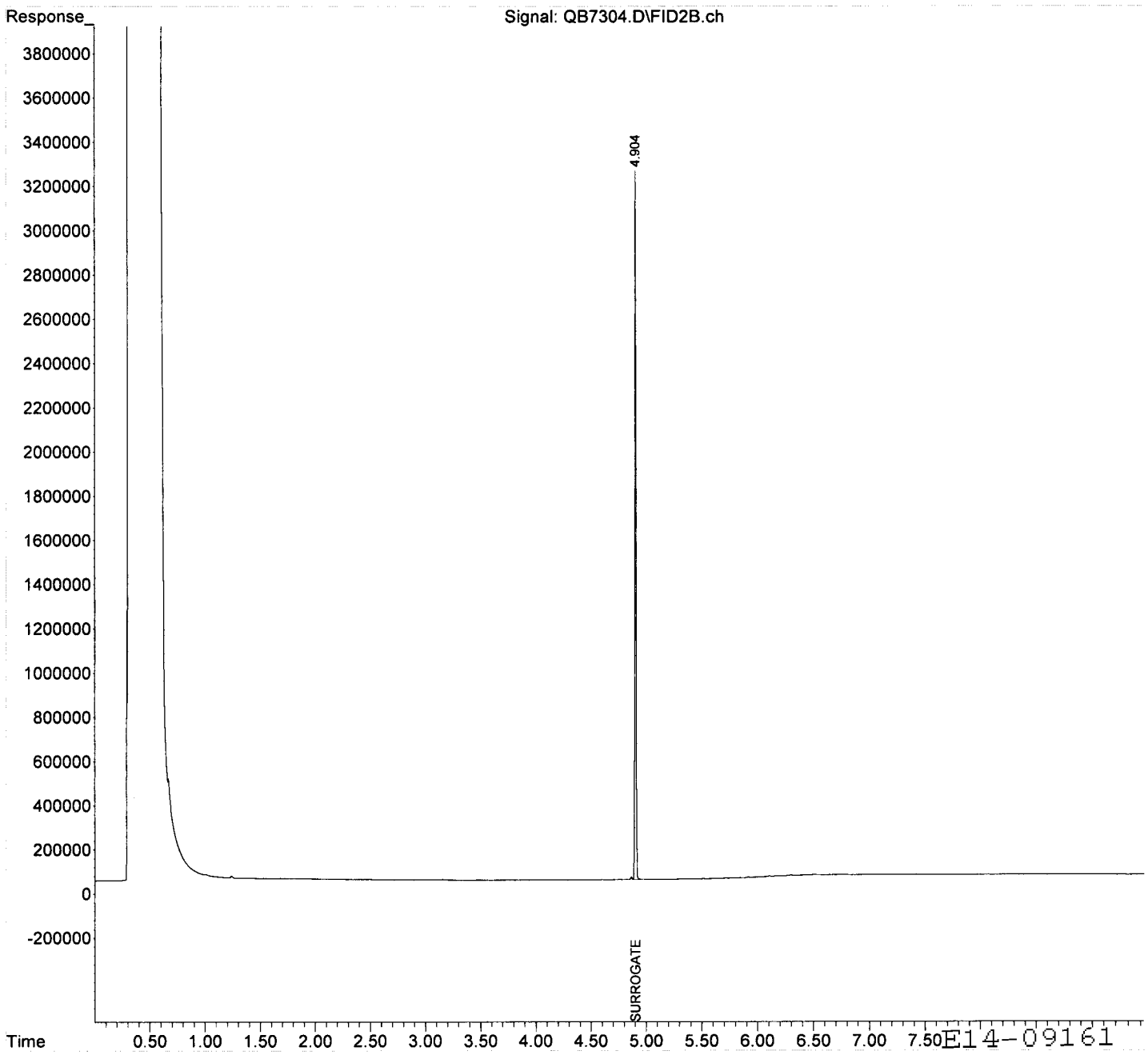
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7304.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:15 am
Operator : MS
Sample : TPH-DRO,BLKS140925-02,S,10.0g,0,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 59 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 12:19:30 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-09161 0386

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7320.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:56 pm
Operator : MS
Sample : TPH-DRO,LCSS140925-02,S,10.0g,0,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 15:42:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.905	21031742	78.481 ng
Spiked Amount 100.000		Recovery =	78.48%
Target Compounds			
3) H TPH-DRO	3.300	489955115	1165.497 ng

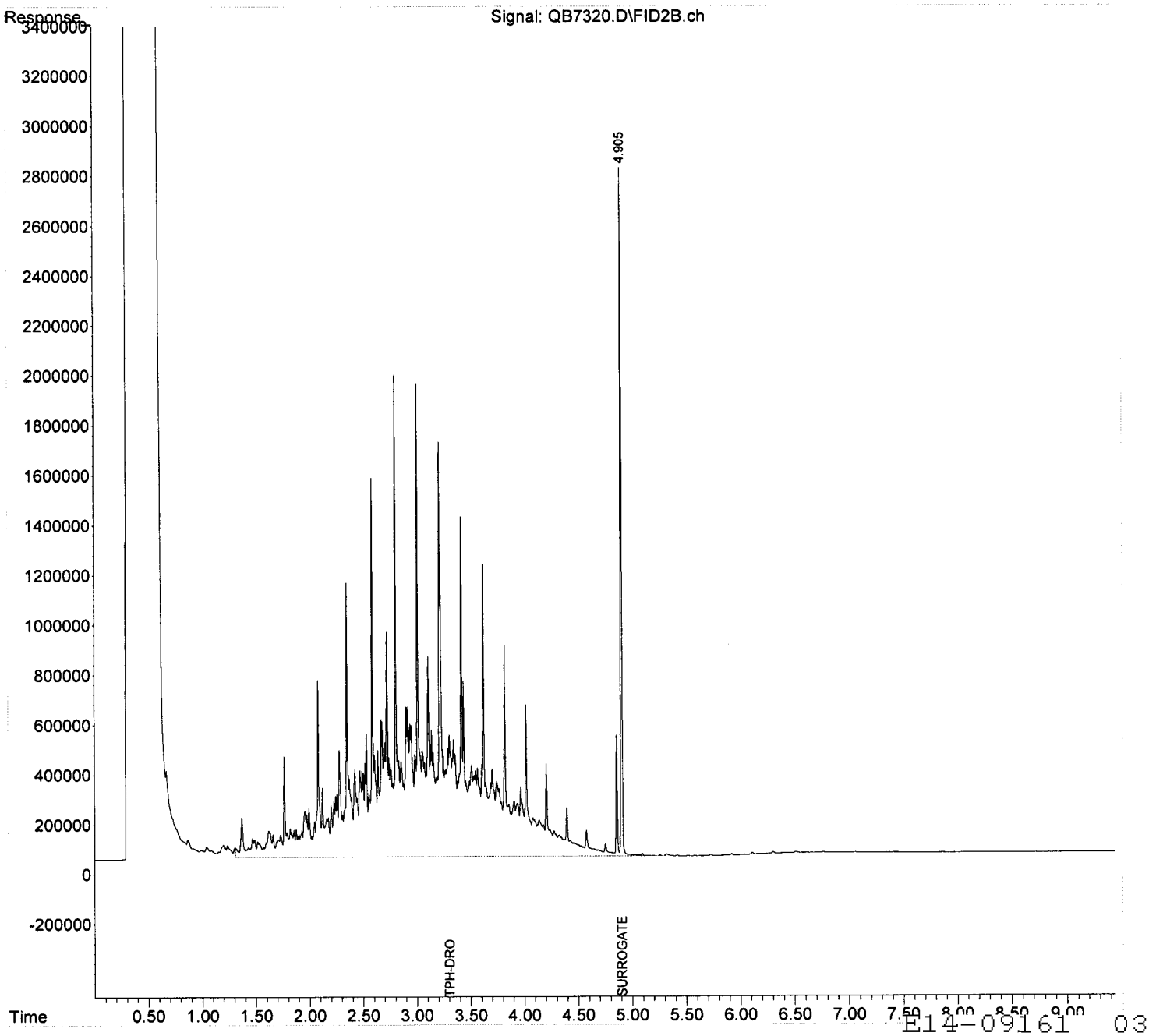
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7320.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:56 pm
Operator : MS
Sample : TPH-DRO,LCSS140925-02,S,10.0g,0,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 15:42:06 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7305.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:28 am
Operator : MS
Sample : B123/70,09125-001,S,10.25g,14.2,09/25/14,15
Misc : 140925-02,09/22/14,09/23/14,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:45:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.900	25141467	93.817 ng
Spiked Amount 100.000		Recovery =	93.82%
Target Compounds			

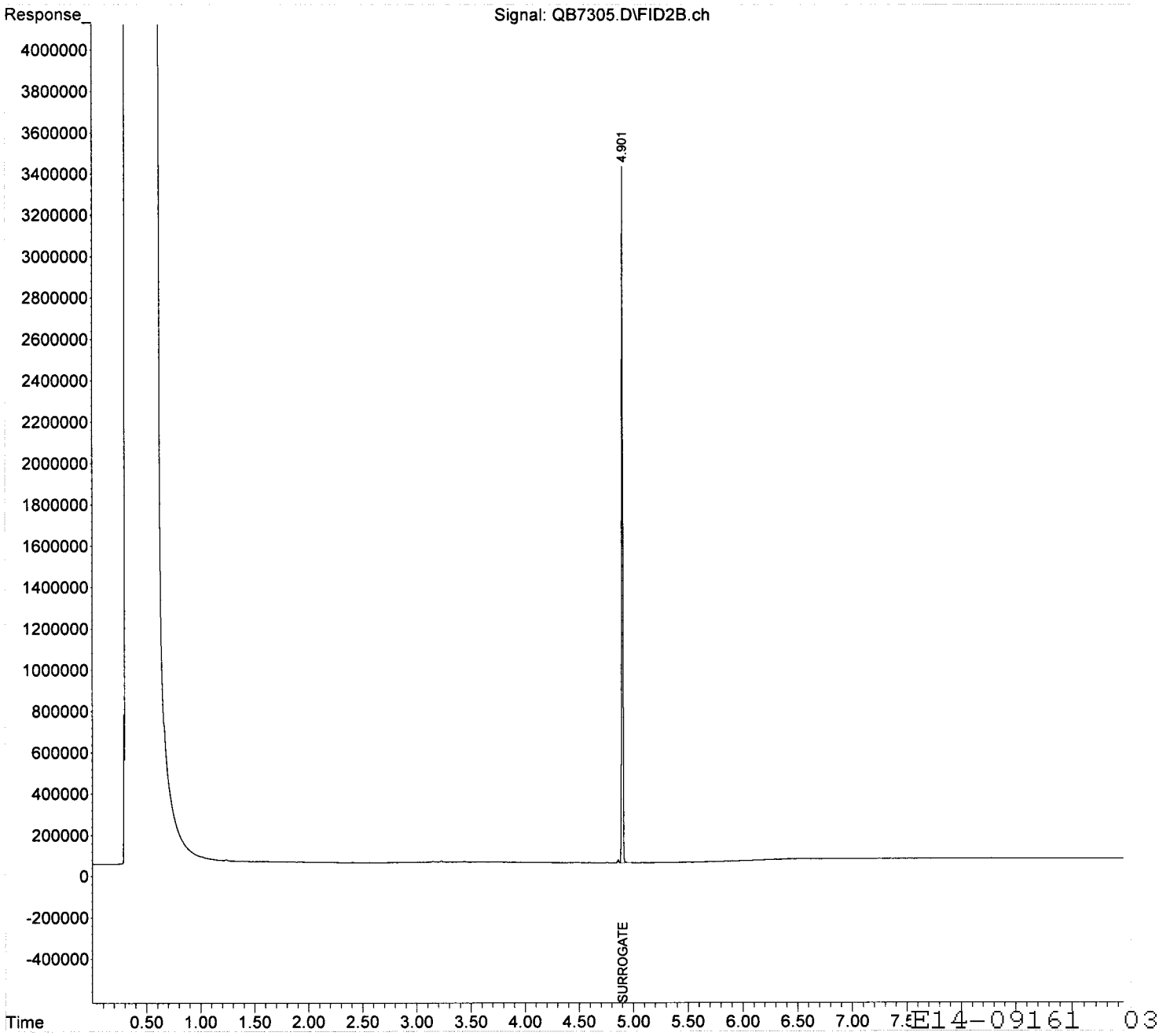
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7305.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 11:28 am
Operator : MS
Sample : B123/70,09125-001,S,10.25g,14.2,09/25/14,15
Misc : 140925-02,09/22/14,09/23/14,1
ALS Vial : 60 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:45:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-09161 0390

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7318.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:28 pm
Operator : MS
Sample : TPH-DRO,09125-001MS,S,10.07g,14.2,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:46:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.902	25333744	94.534 ng
Spiked Amount 100.000		Recovery =	94.53%
Target Compounds			
3) H TPH-DRO	3.300	571132417	1358.600 ng

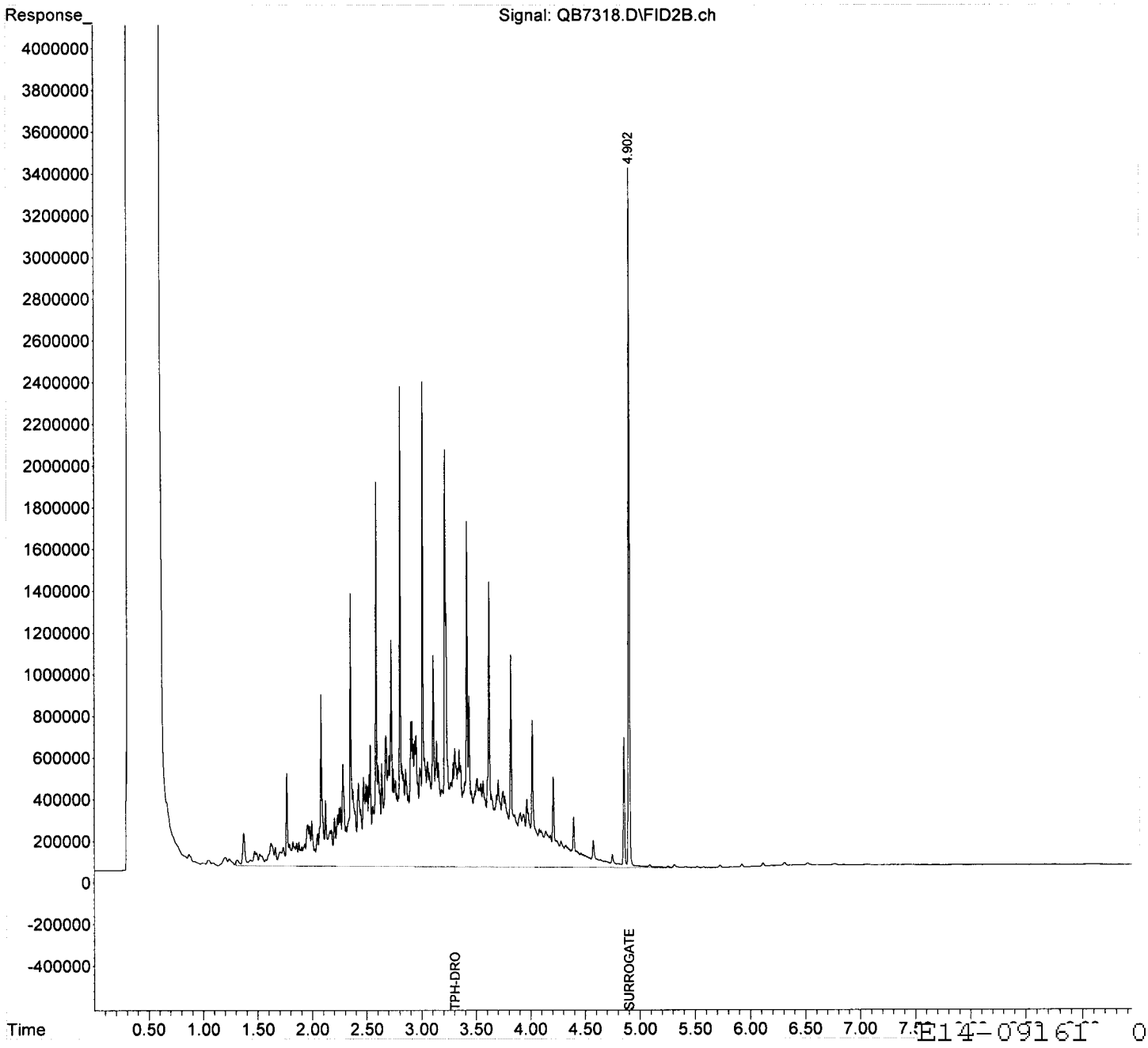
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7318.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:28 pm
Operator : MS
Sample : TPH-DRO,09125-001MS,S,10.07g,14.2,09/25/14,15
Misc : 140925-02,NA,NA,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:46:31 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



E14-09161 0392

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7319.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:42 pm
Operator : MS
Sample : TPH-DRO,09125-001MSD,S,10.07g,14.2,09/25/14,1
Misc : 140925-02,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:52:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURROGATE	4.904	25296472	94.395 ng
Spiked Amount 100.000		Recovery =	94.39%
Target Compounds			
3) H TPH-DRO	3.300	573378582	1363.943 ng

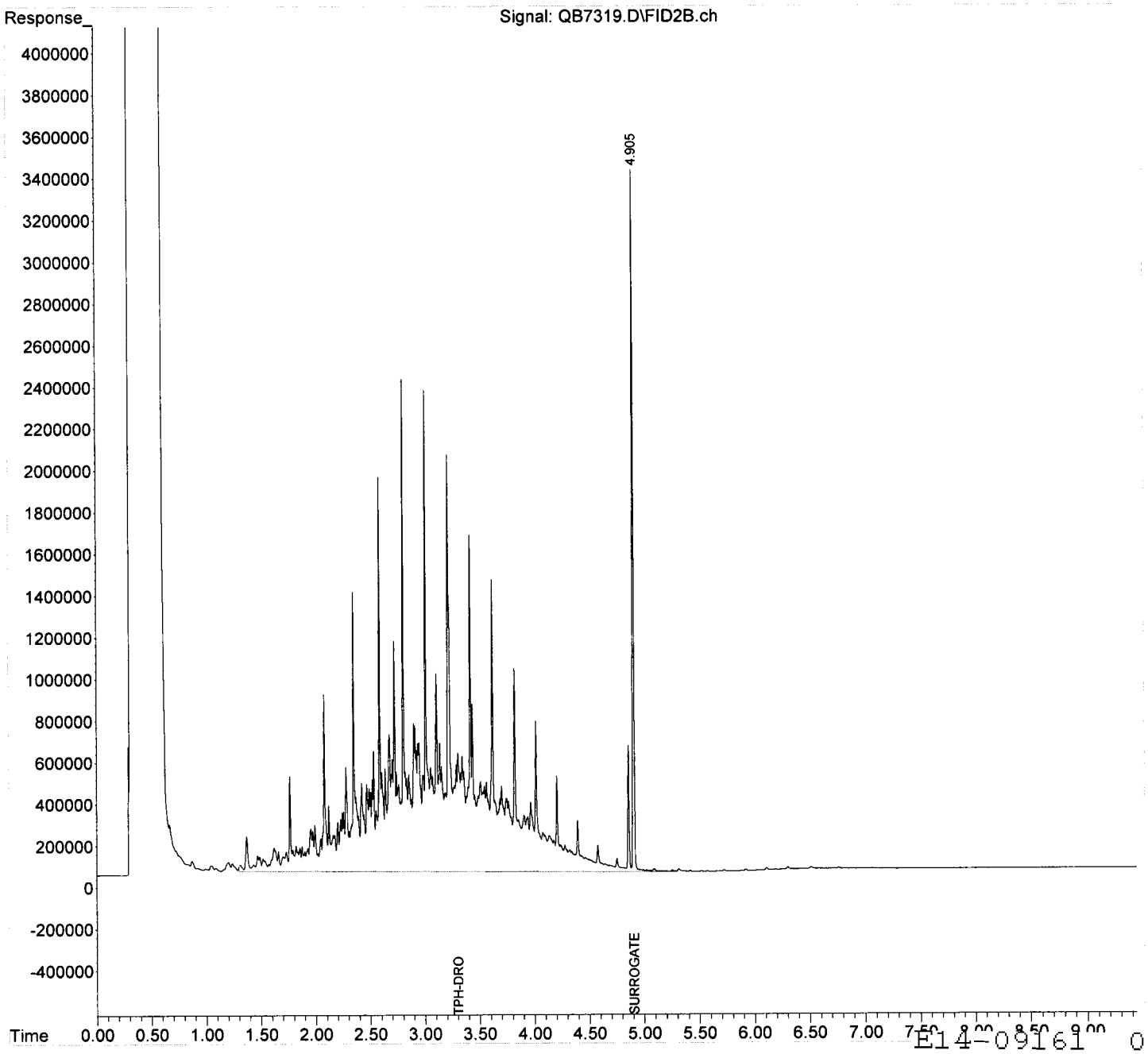
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA_2\09-26-14\
Data File : QB7319.D
Signal(s) : FID2B.ch
Acq On : 26 Sep 14 2:42 pm
Operator : MS
Sample : TPH-DRO,09125-001MSD,S,10.07g,14.2,09/25/14,1
Misc : 140925-02,NA,NA,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 26 14:52:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\QBDR0918.M
Quant Title :
QLast Update : Thu Sep 18 14:44:23 2014
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



DIESEL RANGE ORGANICS
RUN LOGS
STANDARD PREP LOGS

GC Extraction

Integrated Analytical Laboratories, LLC

TPH-DRO (Soil)

Extraction Date/Time: 09/25/2014 08:39

Batch ID: **140925-02**

Tray:

QC Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Spk1 (ul)	Spk2 (ul)
BLKS140925-02	TPH-DRO	10	15	10	1		
LCSS140925-02	TPH-DRO	10	15	10	1	150	
09125-001MS	TPH-DRO	10.07	15	10	1	150	
09125-001MSD	TPH-DRO	10.07	15	10	1	150	

Standard Info	Surrogate IAS #
Solvent	71-18/72-18
Surrogate	5064
SPK 1	5065
SPK 2	

No	Sample_ID	Test	Initial (g/ml)	Final (ml)	Surrogate (ul)	Color	Moist	Comments	QC 1	QC 2
1	09125-001	TPH-DRO	10.25	15	10	1	14.2		**09125-001MS / 140925-02**	
2	09154-007	TPH-DRO	10.21	15	10	4	22.3		**09125-001MS / 140925-02**	
3	09173-001	TPH-DRO	10.06	15	10	1	21.9		**09125-001MS / 140925-02**	
4	09174-001	TPH-DRO	10.01	15	10	1	9.30		**09125-001MS / 140925-02**	
5	09199-001	TPH-DRO	10.02	15	10	1	9.60		**09125-001MS / 140925-02**	
6	09161-001	TPH-DRO	10.32	15	10	2	4.00		**09125-001MS / 140925-02**	
7	09176-001	TPH-DRO	10.26	15	10	1	9.80		**09125-001MS / 140925-02**	
8	09271-001	TPH-DRO	10.27	15	10	2	11.8	R-72	**09125-001MS / 140925-02**	
9	09185-001	TPH-DRO	10.29	15	10	1	8.60		**09125-001MS / 140925-02**	
10	09185-002	TPH-DRO	10.35	15	10	1	9.90		**09125-001MS / 140925-02**	
11	09186-001	TPH-DRO	10.37	15	10	1	14.6		**09125-001MS / 140925-02**	
12	09270-001	TPH-DRO	10.06	15	10	2	17.3		**09125-001MS / 140925-02**	
13	09272-001	TPH-DRO	10.29	15	10	2	25.9		**09125-001MS / 140925-02**	
14										
15										
16										
17										
18										
19										
20										

	By	Date/Time
Batched	Jun	09/25/2014 08:39
Weighed	Jun	09/25/2014 08:59
Surrogated	Jun	09/25/2014 09:00
Filtered	Jun	09/25/2014 14:24
Transferred	Jun	09/25/2014 14:24
Fractionated		

Comments:

E14-09161 0396

*V/C=Vap/Cell, *F=Funnel

Color:1=Clear 2=Light Yellow 3=Yellow 4=Brown 5=Black

LABORATORY CHRONICLE - GC

DATE:	9/18/2014 9:30		**CURVE**
INSTRUMENT:	Q	TPH-ITPH-DRO	
TEST GROUP:	TPH-DRO	TPH-DRO	
METHOD	QBDR0918		
System Method:	8015 D	(eg. 8015B M, 3810, QAM-025)	
ANALYST:	McKenzie	DRO/ NJ-EPH-DRO	
	MS	Initial	

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
51	QB7024		CH2CL2									
52	QB7025		DRO_RT_IAS_5048,100_PPM									
53	QB7026		DRO_L5_IAS_4963,5000_PPM									
54	QB7027		DRO_L4_IAS_4964,2000_PPM									
55	QB7028		DRO_L3_IAS_4965,1000_PPM									
56	QB7029		DRO_L2_IAS_4966,500_PPM									
57	QB7030		DRO_L1_IAS_4967,40_PPM									
55	QB7031		DRO_C_IAS_4965,1000_PPM									

LABORATORY CHRONICLE - GC

DATE: 9/26/2014 15:35 — **140924-18** BA — Aqueous
INSTRUMENT: Q TPH-ITPH-DRO — **140925-02** BS — Soil

TEST GROUP: TPH-DRO TPH-DRO
METHOD QBDR0918
System Method: 8015 D (eg. 8015B M, 3810, QAM-025)

ANALYST: McKenzie DRO/ NJ-EPH-DRO
MS Initial

#	Data File	Comments	Case #	Samp #	DF	Wt/Vol	Ext Date	MX	Factor	Samp Date	Recd Date	% Moist
53	QB7303		DRO_C_IAS_4965,1000_PPM									
59	QB7304		BLKS140925-02		1	10.0	9/25/14	S	15			0
60	QB7305		09125	1	1	10.25	9/25/14	S	15	9/22/14	9/23/14	14.2
61	QB7306	RR	09154	7	1	10.21	9/25/14	S	15	9/23/14	9/24/14	22.3
62	QB7307		09173	1	1	10.06	9/25/14	S	15	9/23/14	9/24/14	21.9
63	QB7308		09174	1	1	10.01	9/25/14	S	15	9/23/14	9/24/14	9.30
64	QB7309		09199	1	1	10.02	9/25/14	S	15	9/23/14	9/24/14	9.60
65	QB7310		09161	1	1	10.32	9/25/14	S	15	9/23/14	9/24/14	4.00
66	QB7311		09176	1	1	10.26	9/25/14	S	15	9/23/14	9/24/14	9.80
67	QB7312	RR	09271	1	1	10.27	9/26/14	S	15	9/24/14	9/25/14	11.8
68	QB7313		09185	1	1	10.29	9/26/14	S	15	9/24/14	9/25/14	8.60
69	QB7314		09185	2	1	10.35	9/26/14	S	15	9/24/14	9/25/14	9.90
70	QB7315		09186	1	1	10.37	9/26/14	S	15	9/24/14	9/25/14	14.6
71	QB7316	RR	09270	1	1	10.06	9/26/14	S	15	9/25/14	9/25/14	17.3
72	QB7317	RR	09272	1	1	10.29	9/26/14	S	15	9/25/14	9/25/14	25.9
73	QB7318		09125-001MS		1	10.07	9/25/14	S	15			14.2
74	QB7319		09125-001MSD		1	10.07	9/25/14	S	15			14.2
75	QB7320		LCSS140925-02		1	10.0	9/25/14	S	15			0
76	QB7321		09154	7	10	10.21	9/25/14	S	15	9/23/14	9/24/14	22.3
77	QB7322		09271	1	2	10.27	9/26/14	S	15	9/24/14	9/25/14	11.8
78	QB7323		09270	1	2	10.06	9/26/14	S	15	9/25/14	9/25/14	17.3
79	QB7324		09272	1	2	10.29	9/26/14	S	15	9/25/14	9/25/14	25.9
53	QB7325		DRO_C_IAS_4965,1000_PPM									

STANDARD IAS#	STANDARD NAME:	8011 L-3		
5061				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
08/01/14	IAS#5058	—	—	2PPM EDB/DBCP 4PPM 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/14	5µl (IAS# 5058) → 10ml isooctane			1PPb EDB/DBCP 2PPb 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		VS59-10	

STANDARD IAS#	STANDARD NAME:	8011 L-2		
5062				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
08/01/14	IAS#5058	—	—	2PPM EDB/DBCP 4PPM 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/14	2,5µl (IAS# 5058) → 10ml (isooctane)			0.5 PPb EDB/DBCP 1PPb 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		VS59-10	

STANDARD IAS#	STANDARD NAME:	8011 L-1		
5063				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
08/01/14	IAS# 5058	—	—	2PPM EDB/DBCP 4PPM 1,2,3-TCP
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
12/14	1,25µl (IAS# 5058) → 10ml isooctane			0,25PPb EDB/DBCP 0,5PPb 1,2,3-TCP
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
11/15/23	isooctane		VS59-10	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 1		
5064				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
8/6/14	Chem Service	N-11638-1G	28843-00	Neat. 99.5%
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
2/6/15	1g → 10mL of CH_2Cl_2			100,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
7/22/24	CH_2Cl_2		PA# 72-9	MS

STANDARD IAS#	STANDARD NAME:			
5045		NJ-EPH-DRO L3		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
7-21-14	IAS 5042	—	—	2,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1-21-15	1:8			250 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4-16-2024	Hexane		138465	BM

STANDARD IAS#	STANDARD NAME:			
5046		NJ-EPH-DRO L2		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
7-21-14	IAS 5042	—	—	2,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1-21-15	1:20			100 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04-16-2024	Hexane		138465	BM

STANDARD IAS#	STANDARD NAME:			
5047		NJ-EPH-DRO L1		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
7-21-14	IAS 5042	—	—	2,000 PPM
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1-21-15	1:100			20 PPM
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
04-16-2024	Hexane		138465	BM

STANDARD IAS#	STANDARD NAME:			
5048		DRO RT Standard		
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
7-22-14	Restek	31482	A076690	200ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
1-22-15	1:2			100ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
4-16-2024	Hexane		138465	MS

STANDARD IAS#	STANDARD NAME:	DRO SPIKE 2		
4960				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Supelco	47515-4	LC00641	20,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:2			10,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
12-15-22	MeOH		G32E79	

STANDARD IAS#	STANDARD NAME:	DRO Surrogate 1		
4961				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Chemservice	N-11638-1G	~~A06334~~ 618400	Neat
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1g → 10mL of CH_2Cl_2			100,000ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO SURROGATE 2		
4962				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	IAS# 4961	—	—	100,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:10			10,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO LS		
4963				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
5/12/14	Accustandard	DRO-BK-102-LCS-10x-R1	212061335	50,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1ml STOCK + 500uL SURR 2 (#4962) + 8500uL CH_2Cl_2			5,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L4		
4964				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS#4963	–	–	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:2.5			2,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L3		
46 4965				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	#4963	–	–	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:5			1,000 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L2		
4966				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS#4963	–	–	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:10			500 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

STANDARD IAS#	STANDARD NAME:	DRO L1		
4967				
STD.PREP.DATE	Co.NAME	CAT. No.	LOT No.	INITIAL CONCENTRATION
05/12/14	IAS # 4963	–	–	5,000 ppm
STD.EXP.DATE	DILUTION			FINAL CONCENTRATION
11/12/14	1:125			40 ppm
SOLVENT EXP.DATE	SOLVENT USED:		SOLVENT LOT#	ANALYST:
05/12/14	CH_2Cl_2		143029	

METALS

METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 455

SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			9/29/14 21:09		9/29/14 22:06		9/29/14 23:03		9/30/14 00:00	
	INST.	ICV & CCV	ICV		CCV		CCV		CCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	23.1	92.4	25.9	104	23.6	94.4	24.6	98.4
Antimony	0.250	25.0	24.3	97.2	24.5	98.0	24.1	96.4	24.2	96.8
Arsenic	0.250	25.0	23.2	92.8	24.8	99.2	22.9	91.6	22.7	90.8
Barium	0.500	25.0	24.3	97.2	23.9	95.6	23.8	95.2	23.8	95.2
Beryllium	0.200	25.0	24.6	98.4	24.8	99.2	24.7	98.8	24.2	96.8
Cadmium	0.125	25.0	25.2	101	24.8	99.2	24.7	98.8	24.6	98.4
Calcium	5.00	250	229	91.6	244	97.6	233	93.2	234	93.6
Chromium	0.500	25.0	22.7	90.8	24.5	98.0	22.5	90.0	22.8	91.2
Cobalt	0.500	25.0	22.5	90.0	24.3	97.2	23.2	92.8	22.6	90.4
Copper	0.500	25.0	22.9	91.6	24.4	97.6	23.2	92.8	24.3	97.2
Iron	5.00	250	237	94.8	255	102	234	93.6	240	96.0
Lead	0.500	25.0	24.1	96.4	24.0	96.0	24.3	97.2	24.3	97.2
Magnesium	5.00	250	239	95.6	260	104	238	95.2	241	96.4
Manganese	0.250	25.0	23.3	93.2	24.9	99.6	23.0	92.0	22.6	90.4
Mercury	0.120	5.00	5.38	108	5.33	107	5.18	104	6.01	120
Molybdenum	0.500	25.0	23.9	95.6	24.0	96.0	23.7	94.8	26.3	105
Nickel	0.500	25.0	22.6	90.4	24.2	96.8	23.2	92.8	23.2	92.8
Potassium	5.00	250	236	94.4	258	103	232	92.8	246	98.4
Selenium	0.500	25.0	23.2	92.8	25.6	102	22.7	90.8	23.7	94.8
Silver	0.125	25.0	22.7	90.8	22.5	90.0	24.9	99.6	24.7	98.8
Sodium	5.00	250	241	96.4	261	104	237	94.8	258	103
Thallium	0.125	25.0	25.8	103	25.7	103	25.4	102	25.4	102
Vanadium	0.500	25.0	22.9	91.6	24.9	99.6	22.6	90.4	23.2	92.8
Zinc	0.500	25.0	22.5	90.0	24.0	96.0	22.9	91.6	23.3	93.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 455

SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Soil Method: 6020A Units: ppb (ug/L)

9/30/14 00:22

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV FOUND	CCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	25.0	23.8	95.2						
Antimony	0.250	25.0	24.0	96.0						
Arsenic	0.250	25.0	23.1	92.4						
Barium	0.500	25.0	23.9	95.6						
Beryllium	0.200	25.0	24.7	98.8						
Cadmium	0.125	25.0	24.3	97.2						
Calcium	5.00	250	242	96.8						
Chromium	0.500	25.0	22.6	90.4						
Cobalt	0.500	25.0	23.1	92.4						
Copper	0.500	25.0	24.1	96.4						
Iron	5.00	250	237	94.8						
Lead	0.500	25.0	24.2	96.8						
Magnesium	5.00	250	237	94.8						
Manganese	0.250	25.0	23.3	93.2						
Molybdenum	0.500	25.0	24.9	99.6						
Nickel	0.500	25.0	23.1	92.4						
Potassium	5.00	250	239	95.6						
Selenium	0.500	25.0	23.0	92.0						
Silver	0.125	25.0	24.5	98.0						
Sodium	5.00	250	244	97.6						
Thallium	0.125	25.0	25.3	101						
Vanadium	0.500	25.0	22.9	91.6						
Zinc	0.500	25.0	23.0	92.0						

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 455
SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Soil Method: 6020A Concentration/Units: ppm (mg/kg)

		9/29/14 21:18	9/29/14 22:15	9/29/14 23:12	9/30/14 00:09	9/30/14 00:31	
ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	
Aluminum	0.0005	ND	ND	ND	ND	ND	
Antimony	0.00025	ND	ND	ND	ND	ND	
Arsenic	0.00025	ND	ND	ND	ND	ND	
Barium	0.0005	ND	ND	ND	ND	ND	
Beryllium	0.0002	ND	ND	ND	ND	ND	
Cadmium	0.000125	ND	ND	ND	ND	ND	
Calcium	0.005	ND	ND	ND	ND	ND	
Chromium	0.0005	ND	ND	ND	ND	ND	
Cobalt	0.0005	ND	ND	ND	ND	ND	
Copper	0.0005	ND	ND	ND	ND	ND	
Iron	0.005	ND	ND	ND	ND	ND	
Lead	0.0005	ND	ND	ND	ND	ND	
Magnesium	0.005	ND	ND	ND	ND	ND	
Manganese	0.00025	ND	ND	ND	ND	ND	
Mercury	0.00012	ND	ND	ND	ND		
Molybdenum	0.0005	ND	ND	ND	ND	ND	
Nickel	0.0005	ND	ND	ND	ND	ND	
Potassium	0.005	ND	ND	ND	ND	ND	
Selenium	0.0005	ND	ND	ND	ND	ND	
Silver	0.000125	ND	ND	ND	ND	ND	
Sodium	0.005	ND	ND	ND	ND	ND	
Thallium	0.000125	ND	ND	ND	ND	ND	
Vanadium	0.0005	ND	ND	ND	ND	ND	
Zinc	0.0005	ND	ND	ND	ND	ND	

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

09/29/2014 09:31 PM

Batch (Page) #: 455

Associated Lab Case for Blank 1: E14-09139, E14-09144, E14-09145, E14-09146, E14-09147, E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09160, E14-09161, E14-09167, E14-09178

Matrix: Soil Unit: ppm (mg/kg) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKS140925-01
Aluminum	0.500	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.500	ND
Beryllium	0.200	ND
Cadmium	0.125	ND
Calcium	5.00	ND
Chromium	0.500	ND
Cobalt	0.500	ND
Copper	0.500	ND
Iron	5.00	ND
Lead	0.500	ND
Magnesium	5.00	ND
Manganese	0.250	ND
Mercury	0.006	ND
Molybdenum	0.500	ND
Nickel	0.500	ND
Potassium	5.00	ND
Selenium	0.500	ND
Silver	0.125	ND
Sodium	5.00	ND
Thallium	0.125	ND
Vanadium	0.500	ND
Zinc	0.500	ND

Associated Sample for Blank 1:

09139-006; 09144-001; 09145-001; 09146-001
09147-001; 09148-001; 09149-001; 09150-001
09151-001; 09152-001; 09153-001; 09160-001~005
09161-001; 09167-001~002; 09178-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 455
SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	82500	78600	78.6	NA
Calcium	100000	-	85200	81000	81.0	NA
Iron	100000	-	84700	80000	80.0	NA
Potassium	100000	-	85000	81200	81.2	NA
Magnesium	100000	-	83700	79500	79.5	NA
Sodium	100000	-	86100	81900	81.9	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2180	2120	106	NA
Titanium	2000	-	1810	1700	85.0	NA
Silver	-	20.0	-	22.1	111	80-120
Arsenic	-	20.0	-	17.0	85.0	80-120
Cadmium	-	20.0	-	18.9	94.5	80-120
Cobalt	-	20.0	-	17.1	85.5	80-120
Chromium	-	20.0	-	17.0	85.0	80-120
Copper	-	20.0	-	17.8	89.0	80-120
Manganese	-	20.0	-	18.1	90.5	80-120
Nickel	-	20.0	-	16.4	82.0	80-120
Zinc	-	20.0	-	16.4	82.0	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 455

SDG #: E14-09139, E14-09144, E14-09145, E14-09146, E14-09147, E14-09148, E14-09149
E14-09150, E14-09151, E14-09152, E14-09153, E14-09160, E14-09161, E14-09167
E14-09178

Matrix: Soil Unit: ppm (mg/kg)

ANALYTE	LCSS140925-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Aluminum	200	238	119			
Antimony	40.0	42.7	107			
Arsenic	40.0	38.8	97.0			
Barium	40.0	43.3	108			
Beryllium	40.0	42.8	107			
Cadmium	40.0	43.6	109			
Calcium	200	217	109			
Chromium	40.0	39.1	97.8			
Cobalt	40.0	39.6	99.0			
Copper	40.0	40.3	101			
Iron	200	238	119			
Lead	40.0	45.5	114			
Magnesium	200	228	114			
Manganese	40.0	41.2	103			
Mercury	1.00	1.06	106			
Molybdenum	40.0	42.5	106			
Nickel	40.0	39.4	98.5			
Potassium	200	204	102			
Selenium	40.0	38.3	95.8			
Silver	40.0	32.6	81.5			
Sodium	200	208	104			
Thallium	40.0	44.8	112			
Vanadium	40.0	39.6	99.0			
Zinc	40.0	42.2	106			

(1) Control Limits % Recovery = 80-120%

LCSS140925-01 9/29/14 21:36

09139-006; 09144-001; 09145-001; 09146-001
09147-001; 09148-001; 09149-001; 09150-001
09151-001; 09152-001; 09153-001; 09160-001~005
09161-001; 09167-001~002; 09178-001

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 455

SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Soil Method: 6020A Units: ppb (ug/L)

			9/29/14 21:14		9/29/14 22:11		9/29/14 23:08		9/30/14 00:05	
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV		LLCCV	
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.586	117	0.511	102	0.630	126	0.522	104
Antimony	0.250	0.500	0.516	103	0.523	105	0.518	104	0.508	102
Arsenic	0.250	0.500	0.444	88.8	0.450	90.0	0.443	88.6	0.457	91.4
Barium	0.500	0.500	0.518	104	0.506	101	0.520	104	0.496	99.2
Beryllium	0.200	0.500	0.463	92.6	0.557	111	0.506	101	0.472	94.4
Cadmium	0.125	0.500	0.536	107	0.511	102	0.507	101	0.509	102
Calcium	5.00	5.00	5.37	107	4.23	84.6	5.05	101	4.73	94.6
Chromium	0.500	0.500	0.412	82.4	0.443	88.6	0.446	89.2	0.481	96.2
Cobalt	0.500	0.500	0.508	102	0.482	96.4	0.475	95.0	0.469	93.8
Copper	0.500	0.500	0.505	101	0.534	107	0.515	103	0.460	92.0
Iron	5.00	5.00	4.11	82.2	4.53	90.6	4.43	88.6	5.33	107
Lead	0.500	0.500	0.501	100	0.503	101	0.505	101	0.513	103
Magnesium	5.00	5.00	4.56	91.2	4.17	83.4	4.04	80.8	4.71	94.2
Manganese	0.250	0.500	0.514	103	0.444	88.8	0.454	90.8	0.485	97.0
Molybdenum	0.500	0.500	0.483	96.6	0.452	90.4	0.401	80.2	0.582	116
Nickel	0.500	0.500	0.402	80.4	0.364	72.8	0.373	74.6	0.420	84.0
Potassium	5.00	5.00	5.00	100	5.09	102	5.14	103	6.16	123
Selenium	0.500	0.500	0.565	113	0.443	88.6	0.430	86.0	0.389	77.8
Silver	0.125	0.500	0.441	88.2	0.430	86.0	0.440	88.0	0.431	86.2
Sodium	5.00	5.00	3.61	72.2	5.89	118	4.10	82.0	5.25	105
Thallium	0.125	0.500	0.514	103	0.415	83.0	0.361	72.2	0.502	100
Vanadium	0.500	0.500	0.456	91.2	0.393	78.6	0.447	89.4	0.445	89.0
Zinc	0.500	0.500	0.460	92.0	0.436	87.2	0.478	95.6	0.478	95.6

(1) Control Limits: 70-130

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 455
SDG #: E14-09161, E14-09160, E14-09178, E14-09167, E14-09144, E14-09145, E14-09146, E14-09147
E14-09148, E14-09149, E14-09150, E14-09151, E14-09152, E14-09153, E14-09139

Matrix: Soil Method: 6020A Units: ppb (ug/L)

9/30/14 00:27

ANALYTE	INST. MDL	ICV & CCV TRUE	LLCCV FOUND	LLCCV % R						
					FOUND	% R	FOUND	% R	FOUND	% R
Aluminum	0.500	0.500	0.588	118						
Antimony	0.250	0.500	0.513	103						
Arsenic	0.250	0.500	0.446	89.2						
Barium	0.500	0.500	0.514	103						
Beryllium	0.200	0.500	0.483	96.6						
Cadmium	0.125	0.500	0.467	93.4						
Calcium	5.00	5.00	6.30	126						
Chromium	0.500	0.500	0.517	103						
Cobalt	0.500	0.500	0.468	93.6						
Copper	0.500	0.500	0.354	70.8						
Iron	5.00	5.00	5.55	111						
Lead	0.500	0.500	0.503	101						
Magnesium	5.00	5.00	4.98	99.6						
Manganese	0.250	0.500	0.451	90.2						
Molybdenum	0.500	0.500	0.366	73.2						
Nickel	0.500	0.500	0.413	82.6						
Potassium	5.00	5.00	5.83	117						
Selenium	0.500	0.500	0.455	91.0						
Silver	0.125	0.500	0.417	83.4						
Sodium	5.00	5.00	4.84	96.8						
Thallium	0.125	0.500	0.499	99.8						
Vanadium	0.500	0.500	0.485	97.0						
Zinc	0.500	0.500	0.446	89.2						

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 455

SDG #: E14-09139, E14-09144, E14-09145, E14-09146, E14-09147, E14-09148, E14-09149
E14-09150, E14-09151, E14-09152, E14-09153, E14-09160, E14-09161, E14-09167
E14-09178

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	9/29/14 21:53 SSR1	9/29/14 21:40 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	2420	2340	NC	208					75-125
Antimony	42.1	ND	101	41.6					75-125
Arsenic	39.6	3.25	87.4	41.6					75-125
Barium	99.6	57.7	101	41.6					75-125
Beryllium	42.3	ND	102	41.6					75-125
Cadmium	41.7	0.444	99.2	41.6					75-125
Calcium	1650	1550	NC	208					75-125
Chromium	43.9	7.39	87.8	41.6					75-125
Cobalt	39.4	3.06	87.4	41.6					75-125
Copper	102	70.0	76.9	41.6					75-125
Iron	6580	6720	NC	208					75-125
Lead	140	99.0	98.6	41.6					75-125
Magnesium	1010	864	NC	208					75-125
Manganese	156	114	101	41.6					75-125
Mercury	1.68	0.741	90.3	1.04					75-125
Molybdenum	42.1	ND	101	41.6					75-125
Nickel	43.1	7.19	86.3	41.6					75-125
Potassium	472	297	84.1	208					75-125
Selenium	36.2	ND	87.0	41.6					75-125
Silver	33.2	ND	79.8	41.6					75-125
Sodium	245	59.7	89.1	208					75-125
Thallium	42.6	0.339	102	41.6					75-125
Vanadium	50.3	14.0	87.3	41.6					75-125
Zinc	191	156	84.1	41.6					75-125

SSR = Spike Sample Result
SR = Sample Result
SA = Spike Added
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-09161-001
% Solids: 96
QC Sample 1 for following samples:
09139-006; 09144-001; 09145-001; 09146-001
09147-001; 09148-001; 09149-001; 09150-001
09151-001; 09152-001; 09153-001; 09160-001~005
09161-001; 09167-001~002; 09178-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 455

SDG #: E14-09139, E14-09144, E14-09145, E14-09146, E14-09147, E14-09148, E14-09149
E14-09150, E14-09151, E14-09152, E14-09153, E14-09160, E14-09161, E14-09167
E14-09178

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	9/29/14 21:40 S1	9/29/14 21:44 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	2340	2270	3.04				
Antimony	NA	ND	ND	NC				
Arsenic	20	3.25	3.11	4.40				
Barium	20	57.7	57.3	0.696				
Beryllium	NA	ND	ND	NC				
Cadmium	20	0.444	0.458	3.10				
Calcium	20	1550	1480	4.62				
Chromium	20	7.39	7.09	4.14				
Cobalt	20	3.06	2.98	2.65				
Copper	20	70.0	67.1	4.23				
Iron	20	6720	6480	3.64				
Lead	20	99.0	98.1	0.913				
Magnesium	20	864	835	3.41				
Manganese	20	114	110	3.57				
Mercury	20	0.741	0.740	0.135				
Molybdenum	NA	ND	ND	NC				
Nickel	20	7.19	6.96	3.25				
Potassium	20	297	286	3.77				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Sodium	20	59.7	51.9	14.0				
Thallium	20	0.339	0.337	0.592				
Vanadium	20	14.0	13.3	5.13				
Zinc	20	156	151	3.26				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-09161-001
% Solids: 96
QC Sample 1 for following samples:
09139-006; 09144-001; 09145-001; 09146-001
09147-001; 09148-001; 09149-001; 09150-001
09151-001; 09152-001; 09153-001; 09160-001~005
09161-001; 09167-001~002; 09178-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 455

SDG #: E14-09139, E14-09144, E14-09145, E14-09146, E14-09147, E14-09148, E14-09149
E14-09150, E14-09151, E14-09152, E14-09153, E14-09160, E14-09161, E14-09167
E14-09178

Matrix: Soil Concentration/Units: ppm (mg/kg)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	9/29/14 21:40 SR	9/29/14 21:49 SDR	% Difference	9/29/14 21:57 SPR	SA	% Recovery
Aluminum	2340	2450	4.59			
Antimony	ND	ND	NC	43.1	41.6	104
Arsenic	3.25	3.34	2.73	43.4	41.6	96.5
Barium	57.7	60.2	4.24			
Beryllium	ND	ND	NC	43.9	41.6	106
Cadmium	0.444	ND	NC	42.5	41.6	101.0
Calcium	1550	1650	6.25			
Chromium	7.39	7.22	2.33	49.3	41.6	101.0
Cobalt	3.06	3.10	1.30	43.3	41.6	96.7
Copper	70.0	70.3	0.428			
Iron	6720	6960	3.51			
Lead	99.0	102	2.99			
Magnesium	864	908	4.97			
Manganese	114	121	5.96			
Molybdenum	ND	ND	NC	43.6	41.6	105
Nickel	7.19	6.92	3.83	49.1	41.6	101.0
Potassium	297	301	1.34			
Selenium	ND	ND	NC	40.1	41.6	96.4
Silver	ND	ND	NC	35.9	41.6	86.3
Sodium	59.7	64.2	7.26	932	832	105.0
Thallium	0.339	ND	NC	43.8	41.6	104.0
Vanadium	14.0	14.2	1.42			
Zinc	156	165	5.61			

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E14-09161-001

QC Sample 1 for following samples:

09139-006; 09144-001; 09145-001; 09146-001
09147-001; 09148-001; 09149-001; 09150-001
09151-001; 09152-001; 09153-001; 09160-001~005
09161-001; 09167-001~002; 09178-001

Tune Report

Batch Folder D:\Data\6020\pg455a.b
Report Comment
Instrument Name G3281A JP12382037

[1]

Mass	Range	Count	RSD%	Background
59		11732		
89		8240		
205		22994		

Integration Time [sec] 0.1

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	-5.0 V	Omega Lens	8.3 V	Deflect	2.6 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	190 V		

[2]

Mass	Range	Count	RSD%	Background
7		13939		
89		67406		
205		41349		
59		39922		

Integration Time [sec] 0.1

Mass	Peak Height	Axis	W-50%	W-X%
7	2249.84	7.00	0.64	0.734
89	12016.36	88.95	0.61	0.690
205	8165.81	204.95	0.54	0.678
59	6563.16	58.95	0.66	0.737

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	2.1 V	Omega Lens	7.1 V	Deflect	14.0 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-45 V
Omega Bias	-65 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG455
September 29, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	743687		74021		669033		4386442		5953966		3592313		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	520581	70	51815	70	468323	70	3070509	70	4167776	70	2514619	70	
	Upper Limit	892424	120	88825	120	802840	120	5263730	120	7144759	120	4310776	120	
003CALS.d	STD1	737689	99	68731	93	657870	98	4327875	99	5846863	98	3548002	99	
004CALS.d	STD2	732441	98	69639	94	653586	98	4324862	99	5894917	99	3565849	99	
005CALS.d	STD3	724508	97	69811	94	642647	96	4259708	97	5821112	98	3528792	98	
006CALS.d	STD4	716833	96	67150	91	638538	95	4220292	96	5816368	98	3518544	98	
007CALS.d	STD5	716591	96	68260	92	626791	94	4158169	95	5752974	97	3460312	96	
009_CCV.d	ICV	701914	94	69887	94	627779	94	4191935	96	5809152	98	3540911	99	
010LCCV.d	LLICV	705585	95	68544	93	630471	94	4194131	96	5785374	97	3536809	98	
011_ICB.d	ICB	712093	96	66259	90	637810	95	4232338	96	5813660	98	3547728	99	
014SMPL.d	BLKS140925-01	732837	99	69146	93	641156	96	4292323	98	5928891	100	3601815	100	
015SMPL.d	LCSS140925-01	712132	96	68499	93	628354	94	4179286	95	5800781	97	3510642	98	
016SMPL.d	E14-09161-001	727062	98	69616	94	639919	96	4241449	97	5849108	98	3576535	100	
017SMPL.d	E14-09161-001DUP	740125	100	73316	99	645892	97	4264125	97	5894681	99	3583963	100	
018SMPL.d	E14-09161-001SD	747000	100	72483	98	646771	97	4283483	98	5917782	99	3586267	100	
019SMPL.d	E14-09161-001MS	741607	100	72671	98	650864	97	4264647	97	5886113	99	3567968	99	
020SMPL.d	E14-09161-001PS	741782	100	69786	94	645891	97	4202435	96	5861010	98	3525578	98	
021SMPL.d	E14-09160-001	777444	105	74990	101	666447	100	4294506	98	5967920	100	3595568	100	
022_CCV.d	CCV	750361	101	68814	93	647073	97	4298855	98	5850427	98	3533147	98	
023LCCV.d	LLCCV	741463	100	73093	99	646636	97	4294073	98	5843953	98	3548826	99	
024_CCB.d	CCB	737353	99	68012	92	644356	96	4279184	98	5835411	98	3539313	99	
025SMPL.d	E14-09160-002	760614	102	75429	102	664665	99	4271593	97	5919197	99	3575467	100	
026SMPL.d	E14-09160-003	771519	104	78158	106	660695	99	4313332	98	5936126	100	3541736	99	
027SMPL.d	E14-09160-004	773596	104	75808	102	663829	99	4332835	99	5934603	100	3580993	100	
028SMPL.d	E14-09160-005	765224	103	73427	99	664802	99	4304594	98	5914287	99	3573072	99	
029SMPL.d	E14-09178-001	772511	104	72414	98	660337	99	4266073	97	5961949	100	3499143	97	
030SMPL.d	E14-09167-001	765844	103	74337	100	662708	99	4347578	99	5929519	100	3584843	100	
031SMPL.d	E14-09167-002	767039	103	75490	102	669944	100	4296373	98	5961199	100	3531336	98	
032SMPL.d	E14-09144-001	720615	97	73090	99	642951	96	4158800	95	5907519	99	3456810	96	
033SMPL.d	E14-09145-001	707459	95	71878	97	636924	95	4099586	93	5921514	99	3436038	96	
034SMPL.d	E14-09146-001	714257	96	73780	100	647977	97	4168067	95	5944637	100	3476181	97	
035CCV.d	CCV	718930	97	69735	94	651139	97	4346038	99	5980490	100	3589185	100	

A* in st column indicates the analysis has failed QC criteria

Sam[illegible] Limits = 70-120% of reference Standard (CAL BLANK L1)

QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]

Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se

Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG455
September 29, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
002CALB.d	BLANK	743687		74021		669033		4386442		5953966		3592313		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	520581	70	51815	70	468323	70	3070509	70	4167776	70	2514619	70	
	Upper Limit	892424	120	88825	120	802840	120	5263730	120	7144759	120	4310776	120	
036LCCV.d	LLCCV	722895	97	70605	95	651249	97	4351578	99	5925196	100	3595243	100	
037_CCB.d	CCB	721730	97	68293	92	653808	98	4363981	99	5940306	100	3576251	100	
038SMPL.d	E14-09147-001	733512	99	72887	98	653566	98	4218800	96	5978085	100	3497031	97	
039SMPL.d	E14-09148-001	727411	98	72859	98	658378	98	4210529	96	5965801	100	3486873	97	
040SMPL.d	E14-09149-001	716394	96	72544	98	644026	96	4182328	95	5942478	100	3482500	97	
041SMPL.d	E14-09150-001	711623	96	73084	99	641115	96	4133913	94	5937386	100	3461439	96	
042SMPL.d	E14-09151-001	728760	98	71330	96	660146	99	4254880	97	6006024	101	3506288	98	
043SMPL.d	E14-09152-001	752147	101	77519	105	676752	101	4327926	99	6049858	102	3541517	99	
044SMPL.d	E14-09153-001	712935	96	71530	97	642413	96	4153928	95	5972669	100	3462867	96	
045SMPL.d	E14-09139-006	707981	95	75770	102	646985	97	4345509	99	5945031	100	4083248	114	
047ICSA.d	ICSA	717541	96	73725	100	686570	103	3818737	87	5720718	96	3131145	87	
048_CCV.d	CCV	753930	101	73262	99	667688	100	4423500	101	5988903	101	3576337	100	
049LCCV.d	LLCCV	732593	99	75176	102	665355	99	4410463	101	5953784	100	3580421	100	
050_CCB.d	CCB	725964	98	72953	99	666390	100	4426126	101	5962765	100	3580746	100	
051ICSB.d	ICSAB	712267	96	76202	103	683141	102	3827096	87	5700208	96	3117225	87	
053_CCV.d	FINAL CCV	722185	97	74202	100	663681	99	4391553	100	5975128	100	3568188	99	
054LCCV.d	FINAL LLCCV	720614	97	71009	96	660340	99	4379875	100	5911929	99	3559583	99	
055_CCB.d	FINAL CCB	745800	100	74900	101	668804	100	4408775	101	5968267	100	3595059	100	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

E14-09161 0418

METALS RAW DATA

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	002CALB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T20:39:21-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	25143	0.00
Mg	24	1	1	1549	0.14
Al	27	1	1	698	0.82
K	39	1	1	40223	0.01
Ca	44	1	1	592	1.11
Ti	47	1	1	16	442.94
V	51	1	1	2397	0.12
Cr	52	1	1	5017	0.24
Mn	55	1	1	529	1.21
Fe	56	1	1	28272	0.02
Co	59	1	1	151	20.51
Ni	60	1	1	2345	0.53
Cu	63	1	1	25981	0.00
Zn	66	1	1	959	1.94
As	75	1	1	63	38.08
Se	78	1	1	50	58.11
Be	9	2	2	41	77.27
B	11	2	2	23847	0.01
Mo	95	2	2	3886	0.07
Ag	107	2	2	848	1.84
Cd	111	2	2	59	131.73
Sn	118	2	2	3990	0.12
Sb	121	2	2	256	16.40
Ba	137	2	2	519	1.95
Tl	205	2	2	1834	0.61
Pb	208	2	2	1408	0.13

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	74021	8.71
Li	6	2	2	743687	1.18
Ge	72	2	2	669033	0.71
Rh	103	2	2	4386442	0.38
Tb	159	2	2	5953966	0.67
Bi	209	2	2	3592313	0.88

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	003CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T20:43:41-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	31563	0.00
Mg	24	1	1	5196	0.03
Al	27	1	1	870	1.62
K	39	1	1	43359	0.00
Ca	44	1	1	816	1.61
Ti	47	1	1	130	0.00
V	51	1	1	6619	0.04
Cr	52	1	1	12980	0.02
Mn	55	1	1	3210	0.10
Fe	56	1	1	85540	0.00
Co	59	1	1	9622	0.01
Ni	60	1	1	5682	0.01
Cu	63	1	1	32302	0.01
Zn	66	1	1	1816	0.22
As	75	1	1	650	1.68
Se	78	1	1	72	29.51
Be	9	2	2	2708	0.37
B	11	2	2	24719	0.00
Mo	95	2	2	11781	0.04
Ag	107	2	2	8860	0.05
Cd	111	2	2	4375	0.07
Sn	118	2	2	18244	0.02
Sb	121	2	2	19193	0.02
Ba	137	2	2	7966	0.06
Tl	205	2	2	39837	0.01
Pb	208	2	2	29343	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68731	18.21	74021	92.85	70	120	
Li	6	2	2	737689	0.56	743687	99.19	70	120	
Ge	72	2	2	657870	0.73	669033	98.33	70	120	
Rh	103	2	2	4327875	0.54	4386442	98.66	70	120	
Tb	159	2	2	5846863	0.47	5953966	98.20	70	120	
Bi	209	2	2	3548002	0.51	3592313	98.77	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T20:48:04-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	92915	0.00
Mg	24	1	1	35099	0.01
Al	27	1	1	2026	0.33
K	39	1	1	69347	0.00
Ca	44	1	1	2080	0.13
Ti	47	1	1	1196	0.91
V	51	1	1	42692	0.00
Cr	52	1	1	57173	0.00
Mn	55	1	1	27029	0.00
Fe	56	1	1	443809	0.00
Co	59	1	1	92511	0.00
Ni	60	1	1	28220	0.01
Cu	63	1	1	94629	0.00
Zn	66	1	1	9798	0.03
As	75	1	1	6346	0.05
Se	78	1	1	420	1.96
Be	9	2	2	26908	0.00
B	11	2	2	40174	0.01
Mo	95	2	2	87776	0.00
Ag	107	2	2	92879	0.00
Cd	111	2	2	46345	0.00
Sn	118	2	2	143118	0.00
Sb	121	2	2	190553	0.00
Ba	137	2	2	72481	0.00
Tl	205	2	2	392446	0.00
Pb	208	2	2	294244	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	69639	25.19	74021	94.08	70	120	
Li	6	2	2	732441	0.75	743687	98.49	70	120	
Ge	72	2	2	653586	1.10	669033	97.69	70	120	
Rh	103	2	2	4324862	0.71	4386442	98.60	70	120	
Tb	159	2	2	5894917	0.61	5953966	99.01	70	120	
Bi	209	2	2	3565849	0.78	3592313	99.26	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T20:52:24-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	347006	0.00
Mg	24	1	1	171759	0.00
Al	27	1	1	7844	0.04
K	39	1	1	186778	0.00
Ca	44	1	1	8470	0.10
Ti	47	1	1	5758	0.08
V	51	1	1	208576	0.00
Cr	52	1	1	264254	0.00
Mn	55	1	1	133783	0.01
Fe	56	1	1	2129035	0.00
Co	59	1	1	460570	0.00
Ni	60	1	1	131322	0.01
Cu	63	1	1	372144	0.00
Zn	66	1	1	45745	0.02
As	75	1	1	30800	0.03
Se	78	1	1	1814	0.65
Be	9	2	2	132949	0.00
B	11	2	2	108563	0.00
Mo	95	2	2	437344	0.00
Ag	107	2	2	459964	0.00
Cd	111	2	2	231484	0.00
Sn	118	2	2	686329	0.00
Sb	121	2	2	958950	0.00
Ba	137	2	2	360580	0.00
Tl	205	2	2	1967047	0.00
Pb	208	2	2	1495076	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	69811	16.70	74021	94.31	70	120	
Li	6	2	2	724508	1.45	743687	97.42	70	120	
Ge	72	2	2	642647	0.27	669033	96.06	70	120	
Rh	103	2	2	4259708	0.21	4386442	97.11	70	120	
Tb	159	2	2	5821112	0.41	5953966	97.77	70	120	
Bi	209	2	2	3528792	0.35	3592313	98.23	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T20:56:49-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	656343	0.00
Mg	24	1	1	333023	0.00
Al	27	1	1	14076	0.03
K	39	1	1	325204	0.00
Ca	44	1	1	16261	0.02
Ti	47	1	1	10886	0.02
V	51	1	1	400178	0.00
Cr	52	1	1	507123	0.00
Mn	55	1	1	258512	0.00
Fe	56	1	1	4135311	0.00
Co	59	1	1	897836	0.00
Ni	60	1	1	251792	0.00
Cu	63	1	1	694930	0.00
Zn	66	1	1	90245	0.00
As	75	1	1	59537	0.01
Se	78	1	1	3421	0.16
Be	9	2	2	257283	0.00
B	11	2	2	183842	0.00
Mo	95	2	2	833591	0.00
Ag	107	2	2	876223	0.00
Cd	111	2	2	448899	0.00
Sn	118	2	2	1349344	0.00
Sb	121	2	2	1889667	0.00
Ba	137	2	2	694822	0.00
Tl	205	2	2	3835585	0.00
Pb	208	2	2	2871862	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	67150	14.33	74021	90.72	70	120	
Li	6	2	2	716833	0.66	743687	96.39	70	120	
Ge	72	2	2	638538	0.53	669033	95.44	70	120	
Rh	103	2	2	4220292	0.70	4386442	96.21	70	120	
Tb	159	2	2	5816368	0.38	5953966	97.69	70	120	
Bi	209	2	2	3518544	0.39	3592313	97.95	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T21:01:09-04:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	1247181	0.00
Mg	24	1	1	660319	0.00
Al	27	1	1	27235	0.02
K	39	1	1	606851	0.00
Ca	44	1	1	31041	0.03
Ti	47	1	1	22214	0.03
V	51	1	1	795405	0.00
Cr	52	1	1	1009903	0.00
Mn	55	1	1	515096	0.00
Fe	56	1	1	8215028	0.00
Co	59	1	1	1798839	0.00
Ni	60	1	1	497947	0.00
Cu	63	1	1	1357779	0.00
Zn	66	1	1	176368	0.00
As	75	1	1	120311	0.01
Se	78	1	1	7210	0.10
Be	9	2	2	521457	0.00
B	11	2	2	346404	0.00
Mo	95	2	2	1688241	0.00
Ag	107	2	2	1796186	0.00
Cd	111	2	2	894259	0.00
Sn	118	2	2	2704070	0.00
Sb	121	2	2	3786715	0.00
Ba	137	2	2	1411679	0.00
Tl	205	2	2	7687623	0.00
Pb	208	2	2	5725366	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68260	21.49	74021	92.22	70	120	
Li	6	2	2	716591	1.99	743687	96.36	70	120	
Ge	72	2	2	626791	1.00	669033	93.69	70	120	
Rh	103	2	2	4158169	0.71	4386442	94.80	70	120	
Tb	159	2	2	5752974	1.54	5953966	96.62	70	120	
Bi	209	2	2	3460312	0.80	3592313	96.33	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	009_CCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:09:52-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	240.555	ppb	5.223	338638	8.02	250	96.2	90	110	
Mg	24	1	1	238.818	ppb	4.153	168688	8.49	250	95.5	90	110	
Al	27	1	1	23.074	ppb	4.674	7200	8.43	25	92.3	90	110	
Si	28	1	1	487.528	ppb	10.617	51151	4.94	250	195.0	90	110	> +-10%
K	39	1	1	235.840	ppb	7.466	181061	6.90	250	94.3	90	110	
Ca	44	1	1	228.830	ppb	6.897	8031	10.86	250	91.5	90	110	
Ti	47	1	1	23.777	ppb	9.278	5562	5.06	25	95.1	90	110	
V	51	1	1	22.903	ppb	5.503	194993	7.67	25	91.6	90	110	
Cr	52	1	1	22.738	ppb	5.138	247061	7.67	25	91.0	90	110	
Mn	55	1	1	23.290	ppb	5.129	123000	7.63	25	93.2	90	110	
Fe	56	1	1	236.928	ppb	4.886	2085876	8.05	250	94.8	90	110	
Co	59	1	1	22.515	ppb	5.417	429223	7.65	25	90.1	90	110	
Ni	60	1	1	22.615	ppb	5.602	121324	7.57	25	90.5	90	110	
Cu	63	1	1	22.853	ppb	5.771	348576	7.64	25	91.4	90	110	
Zn	66	1	1	22.519	ppb	4.791	42939	8.87	25	90.1	90	110	
As	75	1	1	23.189	ppb	5.489	28484	7.75	25	92.8	90	110	
Se	78	1	1	23.217	ppb	9.840	1661	3.96	25	92.9	90	110	
Be	9	2	2	24.585	ppb	1.462	125339	1.58	25	98.3	90	110	
B	11	2	2	26.279	ppb	2.521	105848	1.54	25	105.1	90	110	
Mo	95	2	2	23.935	ppb	0.719	407979	0.45	25	95.7	90	110	
Ag	107	2	2	22.744	ppb	0.648	1057192	0.46	25	91.0	90	110	
Cd	111	2	2	25.153	ppb	1.013	224807	0.67	25	100.6	90	110	
Sn	118	2	2	25.048	ppb	1.563	682833	1.01	25	100.2	90	110	
Sb	121	2	2	24.287	ppb	0.538	926652	0.17	25	97.1	90	110	
Ba	137	2	2	24.333	ppb	1.547	344565	1.04	25	97.3	90	110	
Tl	205	2	2	25.770	ppb	0.069	2021574	0.71	25	103.1	90	110	
Pb	208	2	2	24.094	ppb	2.196	1410663	2.43	25	96.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	69887	12.23	74021	94.41	70	120	
Li	6	2	2	701914	0.47	743687	94.38	70	120	
Ge	72	2	2	627779	0.42	669033	93.83	70	120	
Rh	103	2	2	4191935	1.02	4386442	95.57	70	120	
Tb	159	2	2	5809152	0.60	5953966	97.57	70	120	
Bi	209	2	2	3540911	0.65	3592313	98.57	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	010LCCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:14:16-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	3.605	36.672	27995	1.48	5	72.1	70	130	
Mg	24	1	1	4.565	13.685	4571	4.40	5	91.3	70	130	
Al	27	1	1	0.586	82.627	836	12.23	0.5	117.1	70	130	
K	39	1	1	5.003	73.988	40396	1.00	5	100.1	70	130	
Ca	44	1	1	5.365	30.750	717	5.24	5	107.3	70	130	
Ti	47	1	1	0.347	8.793	94	8.88	0.5	69.4	70	130	> +- 30%
V	51	1	1	0.456	16.031	5997	7.09	0.5	91.2	70	130	
Cr	52	1	1	0.412	14.134	8994	3.44	0.5	82.4	70	130	
Mn	55	1	1	0.514	12.212	3144	5.14	0.5	102.8	70	130	
Fe	56	1	1	4.113	15.469	61370	4.63	5	82.3	70	130	
Co	59	1	1	0.508	11.660	9295	8.13	0.5	101.7	70	130	
Ni	60	1	1	0.402	18.156	4191	2.75	0.5	80.4	70	130	
Cu	63	1	1	0.505	52.744	27877	0.99	0.5	101.1	70	130	
Zn	66	1	1	0.460	33.294	1701	9.26	0.5	91.9	70	130	
As	75	1	1	0.444	10.569	598	15.62	0.5	88.9	70	130	
Se	78	1	1	0.565	16.579	86	13.68	0.5	113.0	70	130	
Be	9	2	2	0.463	7.173	2412	6.04	0.5	92.7	70	130	
B	11	2	2	1.007	14.144	25836	0.75	0.5	201.4	70	130	> +- 30%
Mo	95	2	2	0.483	7.043	11877	5.33	0.5	96.6	70	130	
Ag	107	2	2	0.441	12.582	8823	12.03	0.5	88.1	70	130	
Cd	111	2	2	0.536	8.221	4868	8.34	0.5	107.2	70	130	
Sn	118	2	2	0.511	3.430	17687	2.29	0.5	102.3	70	130	
Sb	121	2	2	0.516	3.842	19857	3.53	0.5	103.2	70	130	
Ba	137	2	2	0.518	1.400	7829	1.71	0.5	103.7	70	130	
Tl	205	2	2	0.514	0.777	59687	0.41	0.5	102.7	70	130	
Pb	208	2	2	0.501	1.599	30642	1.73	0.5	100.2	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68544	6.28	74021	92.60	70	120	
Li	6	2	2	705585	1.04	743687	94.88	70	120	
Ge	72	2	2	630471	0.53	669033	94.24	70	120	
Rh	103	2	2	4194131	0.60	4386442	95.62	70	120	
Tb	159	2	2	5785374	0.46	5953966	97.17	70	120	
Bi	209	2	2	3536809	0.57	3592313	98.45	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	011_ICB.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:18:35-04:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-1.165	ppb	-158.9	21024	1.1	5	
Mg	24	1	1	-0.296	ppb	-110.8	1181	7.7	5	
Al	27	1	1	0.356	ppb	75.3	858	15.6	0.5	
K	39	1	1	2.497	ppb	317.5	37367	0.8	5	
Ca	44	1	1	3.758	ppb	102.3	642	7.0	5	
Ti	47	1	1	-0.026	ppb	-107.5	8	65.5	0.5	
V	51	1	1	0.006	ppb	338.7	2197	3.9	0.5	
Cr	52	1	1	-0.132	ppb	-35.9	3167	4.6	0.5	
Mn	55	1	1	0.019	ppb	62.7	572	4.8	0.5	
Fe	56	1	1	-0.746	ppb	-39.3	19153	1.3	5	
Co	59	1	1	0.001	ppb	138.8	153	11.5	0.5	
Ni	60	1	1	-0.107	ppb	-47.5	1572	5.3	0.5	
Cu	63	1	1	-0.198	ppb	-57.9	20586	4.4	0.5	
Zn	66	1	1	0.191	ppb	30.6	1203	6.5	0.5	
As	75	1	1	0.012	ppb	186.3	72	42.9	0.5	
Se	78	1	1	-0.106	ppb	-90.2	38	27.0	0.5	
Be	9	2	2	0.004	ppb	191.0	59	65.9	0.5	
B	11	2	2	0.075	ppb	201.3	23079	2.1	0.5	
Mo	95	2	2	-0.088	ppb	-6.2	2252	4.3	0.5	
Ag	107	2	2	0.001	ppb	220.3	848	7.7	0.5	
Cd	111	2	2	-0.001	ppb	-274.8	48	48.0	0.5	
Sn	118	2	2	0.066	ppb	15.3	5665	5.1	0.5	
Sb	121	2	2	0.005	ppb	46.0	422	19.0	0.5	
Ba	137	2	2	-0.001	ppb	-600.2	485	18.5	0.5	
Tl	205	2	2	0.070	ppb	3.7	15355	3.6	0.125	
Pb	208	2	2	0.006	ppb	63.0	1715	11.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	66259	10.65	74021	89.51	70	120	
Li	6	2	2	712093	0.64	743687	95.75	70	120	
Ge	72	2	2	637810	0.83	669033	95.33	70	120	
Rh	103	2	2	4232338	0.19	4386442	96.49	70	120	
Tb	159	2	2	5813660	0.17	5953966	97.64	70	120	
Bi	209	2	2	3547728	0.54	3592313	98.76	70	120	

Sample Report

Sample Table

Sample Name	BLKS140925-01
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:31:44-04:00
Sample Type	Sample
Dilution	1000
Comment	455;S140925-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	-1.138	-1137.687	ppb	-127.54	22044	50000	
Mg	24	72	1	1	4.546	4545.660	ppb	2.56	9183	50000	
Al	27	72	1	1	0.285	284.651	ppb	3.33	8714	20000	
Si	28	72	1	1	-6.194	-6193.646	ppb	-215.65	13077	100000	
K	39	72	1	1	2.052	2052.365	ppb	252.46	38897	50000	
Ca	44	72	1	1	1.917	1917.410	ppb	20.06	1086	150000	
Ti	47	72	1	1	0.933	933.392	ppb	4.54	231	15000	
V	51	72	1	1	0.176	176.230	ppb	16.09	3715	20000	
Cr	52	72	1	1	-0.082	-82.022	ppb	-33.53	3851	20000	
Mn	55	72	1	1	0.173	173.330	ppb	2.03	8578	20000	
Fe	56	72	1	1	3.864	3863.890	ppb	2.84	690503	50000	
Co	59	72	1	1	0.062	62.358	ppb	12.49	1319	20000	
Ni	60	72	1	1	-0.082	-81.696	ppb	-30.03	1784	20000	
Cu	63	72	1	1	0.337	337.450	ppb	25.32	29075	20000	
Zn	66	72	1	1	0.216	216.025	ppb	2.32	4342	15000	
As	75	72	1	1	0.081	80.649	ppb	12.40	162	20000	
Se	78	72	1	1	-0.160	-160.214	ppb	-79.28	34	20000	
Be	9	6	2	2	0.044	44.103	ppb	29.83	274	20000	
B	11	6	2	2	0.276	275.640	ppb	87.29	24407	15000	
Mo	95	103	2	2	-0.119	-119.297	ppb	-4.02	1741	20000	
Ag	107	103	2	2	0.005	5.157	ppb	4.26	1115	1000	
Cd	111	72	2	2	0.034	34.435	ppb	13.72	370	15000	
Sn	118	103	2	2	0.043	43.260	ppb	24.15	5102	15000	
Sb	121	159	2	2	0.034	33.781	ppb	12.31	1567	20000	
Ba	137	103	2	2	0.339	339.227	ppb	7.09	12541	20000	
Tl	205	209	2	2	0.111	111.260	ppb	7.88	10706	20000	
Pb	208	209	2	2	0.152	151.739	ppb	3.55	78911	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	69146	8.15	74021	93.41	70	120	
Li	6	2	732837	2.05	743687	98.54	70	120	
Ge	72	2	641156	3.33	669033	95.83	70	120	
Rh	103	2	4292323	2.41	4386442	97.85	70	120	
Tb	159	2	5928891	2.42	5953966	99.58	70	120	
Bi	209	2	3601815	1.98	3592313	100.26	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCSS140925-01
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:36:04-04:00
Sample Type	Sample
Dilution	1000
Comment	455;S140925-01;1.00;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	208.467	208467.233	ppb	9.70	292104	50000	
Mg	24	72	1	1	228.468	228468.087	ppb	10.15	158919	50000	
Al	27	72	1	1	237.581	237580.910	ppb	9.31	66909	20000	
Si	28	72	1	1	8.128	8127.953	ppb	315.53	14061	100000	
K	39	72	1	1	204.360	204359.558	ppb	11.49	159562	50000	
Ca	44	72	1	1	217.255	217254.563	ppb	11.00	7527	150000	
Ti	47	72	1	1	41.629	41628.968	ppb	8.08	9612	15000	
V	51	72	1	1	39.561	39561.056	ppb	10.38	330130	20000	
Cr	52	72	1	1	39.105	39105.043	ppb	10.82	415111	20000	
Mn	55	72	1	1	41.202	41201.683	ppb	10.41	222150	20000	
Fe	56	72	1	1	238.258	238258.150	ppb	10.38	2595784	50000	
Co	59	72	1	1	39.595	39594.728	ppb	9.97	743565	20000	
Ni	60	72	1	1	39.407	39406.595	ppb	10.22	206686	20000	
Cu	63	72	1	1	40.330	40329.588	ppb	10.45	587436	20000	
Zn	66	72	1	1	42.208	42207.974	ppb	10.48	91439	15000	
As	75	72	1	1	38.757	38757.336	ppb	10.61	48662	20000	
Se	78	72	1	1	38.299	38299.224	ppb	12.12	2883	20000	
Be	9	6	2	2	42.844	42844.318	ppb	2.16	221543	20000	
B	11	6	2	2	0.161	161.191	ppb	319.27	23346	15000	
Mo	95	103	2	2	42.505	42504.756	ppb	0.60	719466	20000	
Ag	107	103	2	2	32.565	32565.482	ppb	2.37	1750595	1000	
Cd	111	72	2	2	43.640	43639.640	ppb	1.20	390337	15000	
Sn	118	103	2	2	0.167	167.115	ppb	13.41	8322	15000	
Sb	121	159	2	2	42.703	42703.166	ppb	0.38	1626782	20000	
Ba	137	103	2	2	43.277	43277.373	ppb	0.97	610618	20000	
Tl	205	209	2	2	44.798	44798.445	ppb	0.40	3482883	20000	
Pb	208	209	2	2	45.547	45547.493	ppb	0.42	2642595	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	68499	4.93	74021	92.54	70	120	
Li	6	2	712132	1.23	743687	95.76	70	120	
Ge	72	2	628354	0.58	669033	93.92	70	120	
Rh	103	2	4179286	0.75	4386442	95.28	70	120	
Tb	159	2	5800781	0.59	5953966	97.43	70	120	
Bi	209	2	3510642	0.67	3592313	97.73	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T21:40:30-04:00
Sample Type	Sample
Dilution	1040
Comment	455;S140925-01;1.04;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	57.446	59744.147	ppb	21.34	97984	50000	
Mg	24	72	1	1	830.676	863903.158	ppb	18.61	576260	50000	
Al	27	72	1	1	2249.516	2339496.885	ppb	19.05	630423	20000	
Si	28	72	1	1	337.228	350717.074	ppb	21.99	39349	100000	
K	39	72	1	1	285.961	297399.947	ppb	21.64	209343	50000	
Ca	44	72	1	1	1494.040	1553801.698	ppb	18.95	48721	150000	
Ti	47	72	1	1	79.313	82485.411	ppb	19.58	18356	15000	
V	51	72	1	1	13.475	14013.485	ppb	18.35	114431	20000	
Cr	52	72	1	1	7.107	7391.275	ppb	19.51	79622	20000	
Mn	55	72	1	1	110.021	114422.200	ppb	19.00	594622	20000	
Fe	56	72	1	1	6464.775	6723366.303	ppb	18.83	55567585	50000	
Co	59	72	1	1	2.942	3059.377	ppb	18.82	55582	20000	
Ni	60	72	1	1	6.915	7191.576	ppb	20.15	38224	20000	
Cu	63	72	1	1	67.282	69973.064	ppb	18.56	968054	20000	
Zn	66	72	1	1	149.877	155872.010	ppb	18.68	277267	15000	
As	75	72	1	1	3.122	3246.708	ppb	15.97	3996	20000	
Se	78	72	1	1	0.350	363.879	ppb	76.90	72	20000	
Be	9	6	2	2	0.167	173.990	ppb	17.84	922	20000	
B	11	6	2	2	1.353	1406.836	ppb	14.43	27761	15000	
Mo	95	103	2	2	0.404	420.502	ppb	5.37	10668	20000	
Ag	107	103	2	2	0.085	88.502	ppb	9.90	5461	1000	
Cd	111	72	2	2	0.427	444.433	ppb	1.24	3949	15000	
Sn	118	103	2	2	3.780	3930.802	ppb	0.82	107540	15000	
Sb	121	159	2	2	0.176	182.657	ppb	5.42	6995	20000	
Ba	137	103	2	2	55.495	57714.377	ppb	0.42	794531	20000	
Tl	205	209	2	2	0.326	338.853	ppb	1.73	27620	20000	
Pb	208	209	2	2	95.200	99007.987	ppb	0.56	5625436	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	69616	9.36	74021	94.05	70	120	
Li	6	2	727062	0.55	743687	97.76	70	120	
Ge	72	2	639919	0.44	669033	95.65	70	120	
Rh	103	2	4241449	0.22	4386442	96.69	70	120	
Tb	159	2	5849108	0.65	5953966	98.24	70	120	
Bi	209	2	3576535	0.33	3592313	99.56	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001DUP
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:44:49-04:00
Sample Type	Sample
Dilution	1040
Comment	455;S140925-01;1.04;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	49.874	51869.119	ppb	33.11	91029	50000	
Mg	24	72	1	1	802.901	835016.805	ppb	26.08	574694	50000	
Al	27	72	1	1	2183.418	2270755.204	ppb	25.90	631597	20000	
Si	28	72	1	1	327.795	340906.369	ppb	35.29	39897	100000	
K	39	72	1	1	274.520	285500.677	ppb	29.42	209346	50000	
Ca	44	72	1	1	1425.609	1482633.184	ppb	26.57	47967	150000	
Ti	47	72	1	1	75.175	78182.360	ppb	25.43	17987	15000	
V	51	72	1	1	12.820	13333.262	ppb	25.70	112535	20000	
Cr	52	72	1	1	6.821	7094.021	ppb	25.99	79180	20000	
Mn	55	72	1	1	105.525	109746.422	ppb	25.38	589096	20000	
Fe	56	72	1	1	6233.636	6482981.509	ppb	25.89	55299150	50000	
Co	59	72	1	1	2.862	2976.523	ppb	26.58	55756	20000	
Ni	60	72	1	1	6.692	6959.865	ppb	26.00	38321	20000	
Cu	63	72	1	1	64.562	67144.502	ppb	25.92	960108	20000	
Zn	66	72	1	1	144.923	150719.976	ppb	26.20	276611	15000	
As	75	72	1	1	2.992	3111.160	ppb	30.24	3926	20000	
Se	78	72	1	1	0.200	207.536	ppb	70.16	67	20000	
Be	9	6	2	2	0.184	191.409	ppb	12.67	1030	20000	
B	11	6	2	2	1.022	1063.372	ppb	15.23	27156	15000	
Mo	95	103	2	2	0.305	316.763	ppb	3.29	9011	20000	
Ag	107	103	2	2	0.072	75.303	ppb	2.54	4794	1000	
Cd	111	72	2	2	0.441	458.154	ppb	8.82	4109	15000	
Sn	118	103	2	2	3.760	3910.611	ppb	1.20	107581	15000	
Sb	121	159	2	2	0.157	163.555	ppb	4.95	6339	20000	
Ba	137	103	2	2	55.055	57257.375	ppb	1.14	792487	20000	
Tl	205	209	2	2	0.324	336.579	ppb	1.81	14973	20000	
Pb	208	209	2	2	94.372	98147.097	ppb	0.22	5588173	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	73316	18.24	74021	99.05	70	120	
Li	6	2	740125	0.41	743687	99.52	70	120	
Ge	72	2	645892	0.56	669033	96.54	70	120	
Rh	103	2	4264125	0.43	4386442	97.21	70	120	
Tb	159	2	5894681	0.40	5953966	99.00	70	120	
Bi	209	2	3583963	0.08	3592313	99.77	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001SD
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:49:13-04:00
Sample Type	Sample
Dilution	5200
Comment	455;S140925-01;1.04;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	12.353	64235.705	ppb	53.50	40451	50000	
Mg	24	72	1	1	174.574	907782.896	ppb	26.22	124488	50000	
Al	27	72	1	1	470.833	2448331.937	ppb	25.89	134952	20000	
Si	28	72	1	1	75.732	393808.745	ppb	86.05	19702	100000	
K	39	72	1	1	57.794	300530.739	ppb	47.34	73976	50000	
Ca	44	72	1	1	316.389	1645220.870	ppb	27.58	10949	150000	
Ti	47	72	1	1	16.331	84920.874	ppb	25.37	3867	15000	
V	51	72	1	1	2.735	14221.639	ppb	28.31	25472	20000	
Cr	52	72	1	1	1.388	7217.383	ppb	32.34	19732	20000	
Mn	55	72	1	1	23.176	120513.682	ppb	26.12	127968	20000	
Fe	56	72	1	1	1337.913	6957146.832	ppb	25.62	11739974	50000	
Co	59	72	1	1	0.596	3101.348	ppb	24.30	13024	20000	
Ni	60	72	1	1	1.331	6922.054	ppb	35.88	9293	20000	
Cu	63	72	1	1	13.518	70295.724	ppb	27.59	218195	20000	
Zn	66	72	1	1	31.728	164988.165	ppb	26.67	60485	15000	
As	75	72	1	1	0.642	3339.370	ppb	29.58	948	20000	
Se	78	72	1	1	-0.159	-826.001	ppb	-11.91	37	20000	
Be	9	6	2	2	0.101	525.637	ppb	5.96	589	20000	
B	11	6	2	2	0.403	2094.801	ppb	20.94	25316	15000	
Mo	95	103	2	2	-0.005	-27.327	ppb	-122.02	3705	20000	
Ag	107	103	2	2	0.041	211.088	ppb	18.77	3064	1000	
Cd	111	72	2	2	0.091	470.823	ppb	6.15	1582	15000	
Sn	118	103	2	2	0.771	4007.545	ppb	2.87	25248	15000	
Sb	121	159	2	2	0.090	465.713	ppb	6.89	3734	20000	
Ba	137	103	2	2	11.570	60165.956	ppb	0.64	167700	20000	
Tl	205	209	2	2	0.070	365.374	ppb	6.18	13030	20000	
Pb	208	209	2	2	19.625	102048.108	ppb	0.54	1163901	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	72483	19.07	74021	97.92	70	120	
Li	6	2	747000	0.60	743687	100.45	70	120	
Ge	72	2	646771	0.18	669033	96.67	70	120	
Rh	103	2	4283483	0.33	4386442	97.65	70	120	
Tb	159	2	5917782	0.40	5953966	99.39	70	120	
Bi	209	2	3586267	0.53	3592313	99.83	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001MS
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T21:53:32-04:00
Sample Type	Sample
Dilution	1040
Comment	455;S140925-01;1.04;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	235.692	245119.771	ppb	11.23	346858	50000	
Mg	24	72	1	1	973.596	1012539.853	ppb	11.21	712784	50000	
Al	27	72	1	1	2329.346	2422519.485	ppb	11.26	689289	20000	
Si	28	72	1	1	320.288	333099.659	ppb	12.65	40038	100000	
K	39	72	1	1	453.773	471923.824	ppb	11.90	327254	50000	
Ca	44	72	1	1	1588.295	1651826.442	ppb	9.83	54644	150000	
Ti	47	72	1	1	113.487	118026.016	ppb	10.26	27736	15000	
V	51	72	1	1	48.413	50349.582	ppb	11.05	427767	20000	
Cr	52	72	1	1	42.226	43915.378	ppb	10.98	474757	20000	
Mn	55	72	1	1	150.100	156103.678	ppb	10.73	794907	20000	
Fe	56	72	1	1	6328.233	6581362.373	ppb	10.85	57437152	50000	
Co	59	72	1	1	37.917	39433.350	ppb	11.03	754763	20000	
Ni	60	72	1	1	41.478	43137.514	ppb	10.58	230400	20000	
Cu	63	72	1	1	98.486	102425.660	ppb	10.76	1483740	20000	
Zn	66	72	1	1	183.396	190732.146	ppb	10.73	358005	15000	
As	75	72	1	1	38.117	39641.325	ppb	10.58	50711	20000	
Se	78	72	1	1	34.793	36184.681	ppb	11.22	2777	20000	
Be	9	6	2	2	40.663	42289.233	ppb	2.09	218962	20000	
B	11	6	2	2	1.031	1071.739	ppb	15.63	27234	15000	
Mo	95	103	2	2	40.445	42062.910	ppb	0.38	698777	20000	
Ag	107	103	2	2	31.921	33198.193	ppb	0.57	1750866	1000	
Cd	111	72	2	2	40.091	41694.167	ppb	0.62	371467	15000	
Sn	118	103	2	2	3.840	3993.850	ppb	0.59	109802	15000	
Sb	121	159	2	2	40.499	42118.780	ppb	0.27	1565525	20000	
Ba	137	103	2	2	95.764	99594.899	ppb	0.46	1378215	20000	
Tl	205	209	2	2	40.984	42623.160	ppb	0.82	3238302	20000	
Pb	208	209	2	2	134.484	139863.732	ppb	0.88	7926607	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	72671	4.01	74021	98.18	70	120	
Li	6	2	741607	1.31	743687	99.72	70	120	
Ge	72	2	650864	0.65	669033	97.28	70	120	
Rh	103	2	4264647	0.50	4386442	97.22	70	120	
Tb	159	2	5886113	0.32	5953966	98.86	70	120	
Bi	209	2	3567968	1.44	3592313	99.32	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001PS
Data File Name	020SMPL.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T21:57:57-04:00
Sample Type	Sample
Dilution	832
Comment	455;S140925-01;1.04;2.50g;50ml;50;;;1;
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1120.251	932048.576	ppb	4.63	1489563	50000	
Mg	24	72	1	1	2274.569	1892441.319	ppb	4.56	1592907	50000	
Al	27	72	1	1	3464.332	2882324.290	ppb	4.66	981532	20000	
Si	28	72	1	1	531.057	441839.594	ppb	5.56	54627	100000	
K	39	72	1	1	1453.544	1209348.937	ppb	4.25	920300	50000	
Ca	44	72	1	1	3297.135	2743216.128	ppb	4.40	108042	150000	
Ti	47	72	1	1	120.528	100279.538	ppb	4.55	28222	15000	
V	51	72	1	1	68.726	57179.780	ppb	4.23	580809	20000	
Cr	52	72	1	1	59.227	49277.005	ppb	4.73	635802	20000	
Mn	55	72	1	1	213.505	177635.803	ppb	4.82	1166409	20000	
Fe	56	72	1	1	10870.922	9044607.057	ppb	5.10	94445442	50000	
Co	59	72	1	1	52.076	43326.959	ppb	5.09	992436	20000	
Ni	60	72	1	1	58.986	49076.069	ppb	5.07	312835	20000	
Cu	63	72	1	1	148.052	123179.140	ppb	5.26	2123147	20000	
Zn	66	72	1	1	271.494	225882.809	ppb	5.01	507018	15000	
As	75	72	1	1	52.193	43424.418	ppb	5.31	66455	20000	
Se	78	72	1	1	48.153	40063.116	ppb	4.56	3664	20000	
Be	9	6	2	2	52.731	43872.235	ppb	0.35	284051	20000	
B	11	6	2	2	1.353	1125.684	ppb	6.95	28325	15000	
Mo	95	103	2	2	52.432	43623.036	ppb	0.41	891552	20000	
Ag	107	103	2	2	43.169	35916.304	ppb	0.43	2332947	1000	
Cd	111	72	2	2	51.119	42531.409	ppb	0.88	470018	15000	
Sn	118	103	2	2	5.681	4726.976	ppb	0.72	158238	15000	
Sb	121	159	2	2	51.780	43080.704	ppb	0.12	1992997	20000	
Ba	137	103	2	2	135.438	112684.260	ppb	0.93	1920524	20000	
Tl	205	209	2	2	52.658	43811.505	ppb	0.40	4111038	20000	
Pb	208	209	2	2	191.430	159270.094	ppb	0.41	11149150	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	69786	9.17	74021	94.28	70	120	
Li	6	2	741782	0.33	743687	99.74	70	120	
Ge	72	2	645891	0.61	669033	96.54	70	120	
Rh	103	2	4202435	0.53	4386442	95.81	70	120	
Tb	159	2	5861010	0.32	5953966	98.44	70	120	
Bi	209	2	3525578	0.75	3592313	98.14	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	022_CCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T22:06:43-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	261.026	ppb	8.279	359636	3.20	250	104.4	90	110	
Mg	24	1	1	260.305	ppb	7.225	180783	3.21	250	104.1	90	110	
Al	27	1	1	25.933	ppb	12.039	7869	5.74	25	103.7	90	110	
Si	28	1	1	550.500	ppb	11.310	55208	1.84	250	220.2	90	110	> +-10%
K	39	1	1	257.881	ppb	9.559	191500	2.43	250	103.2	90	110	
Ca	44	1	1	244.214	ppb	9.714	8386	4.93	250	97.7	90	110	
Ti	47	1	1	24.658	ppb	10.886	5684	3.02	25	98.6	90	110	
V	51	1	1	24.881	ppb	7.420	208396	2.90	25	99.5	90	110	
Cr	52	1	1	24.490	ppb	8.180	261502	2.44	25	98.0	90	110	
Mn	55	1	1	24.917	ppb	8.002	129507	3.64	25	99.7	90	110	
Fe	56	1	1	255.281	ppb	7.528	2210109	3.30	250	102.1	90	110	
Co	59	1	1	24.271	ppb	7.740	455507	3.06	25	97.1	90	110	
Ni	60	1	1	24.199	ppb	8.254	127627	2.68	25	96.8	90	110	
Cu	63	1	1	24.391	ppb	9.217	364444	2.96	25	97.6	90	110	
Zn	66	1	1	24.027	ppb	7.269	45009	2.36	25	96.1	90	110	
As	75	1	1	24.825	ppb	7.464	30023	3.30	25	99.3	90	110	
Se	78	1	1	25.561	ppb	7.056	1806	7.06	25	102.2	90	110	
Be	9	2	2	24.789	ppb	1.620	135095	1.48	25	99.2	90	110	
B	11	2	2	25.613	ppb	1.465	110902	1.46	25	102.5	90	110	
Mo	95	2	2	24.027	ppb	0.549	419998	0.79	25	96.1	90	110	
Ag	107	2	2	22.542	ppb	0.560	1074537	0.38	25	90.2	90	110	
Cd	111	2	2	24.824	ppb	1.086	228681	0.80	25	99.3	90	110	
Sn	118	2	2	24.852	ppb	0.542	694873	0.19	25	99.4	90	110	
Sb	121	2	2	24.475	ppb	0.986	940450	0.37	25	97.9	90	110	
Ba	137	2	2	23.913	ppb	0.260	347285	0.25	25	95.7	90	110	
Tl	205	2	2	25.703	ppb	0.692	2011898	0.65	25	102.8	90	110	
Pb	208	2	2	23.973	ppb	1.278	1400513	1.68	25	95.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68814	8.98	74021	92.97	70	120	
Li	6	2	2	750361	0.35	743687	100.90	70	120	
Ge	72	2	2	647073	0.49	669033	96.72	70	120	
Rh	103	2	2	4298855	0.38	4386442	98.00	70	120	
Tb	159	2	2	5850427	0.64	5953966	98.26	70	120	
Bi	209	2	2	3533147	0.41	3592313	98.35	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	023LCCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T22:11:01-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	5.891	155.488	27472	3.86	5	117.8	70	130	
Mg	24	1	1	4.174	28.104	4534	7.90	5	83.5	70	130	
Al	27	1	1	0.511	12.052	971	11.44	0.5	102.1	70	130	
K	39	1	1	5.088	406.419	41139	3.94	5	101.8	70	130	
Ca	44	1	1	4.235	83.926	719	3.89	5	84.7	70	130	
Ti	47	1	1	0.494	31.592	134	22.36	0.5	98.8	70	130	
V	51	1	1	0.393	39.725	5740	12.32	0.5	78.5	70	130	
Cr	52	1	1	0.443	41.631	9796	9.05	0.5	88.7	70	130	
Mn	55	1	1	0.444	22.065	2935	5.19	0.5	88.8	70	130	
Fe	56	1	1	4.530	36.968	68192	10.16	5	90.6	70	130	
Co	59	1	1	0.482	26.079	9241	15.00	0.5	96.4	70	130	
Ni	60	1	1	0.364	39.876	4223	7.92	0.5	72.9	70	130	
Cu	63	1	1	0.534	401.821	26468	4.75	0.5	106.9	70	130	
Zn	66	1	1	0.436	47.920	1751	12.70	0.5	87.2	70	130	
As	75	1	1	0.450	28.193	629	12.48	0.5	90.0	70	130	
Se	78	1	1	0.443	189.710	64	36.69	0.5	88.6	70	130	
Be	9	2	2	0.557	4.389	3042	4.86	0.5	111.5	70	130	
B	11	2	2	0.411	20.100	25157	0.55	0.5	82.3	70	130	
Mo	95	2	2	0.452	2.378	11619	1.51	0.5	90.3	70	130	
Ag	107	2	2	0.430	3.555	8834	3.07	0.5	86.0	70	130	
Cd	111	2	2	0.511	5.269	4761	5.61	0.5	102.2	70	130	
Sn	118	2	2	0.527	1.956	18544	1.66	0.5	105.4	70	130	
Sb	121	2	2	0.523	1.239	20306	2.15	0.5	104.5	70	130	
Ba	137	2	2	0.506	4.187	7840	4.04	0.5	101.2	70	130	
Tl	205	2	2	0.415	2.568	48752	2.24	0.5	83.0	70	130	
Pb	208	2	2	0.503	3.784	30898	3.23	0.5	100.7	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	73093	12.50	74021	98.75	70	120	
Li	6	2	2	741463	0.56	743687	99.70	70	120	
Ge	72	2	2	646636	0.87	669033	96.65	70	120	
Rh	103	2	2	4294073	0.17	4386442	97.89	70	120	
Tb	159	2	2	5843953	0.99	5953966	98.15	70	120	
Bi	209	2	2	3548826	0.46	3592313	98.79	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T22:15:25-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-2.356	ppb	-28.08	20212	2.1	5	
Mg	24	1	1	-0.532	ppb	-26.80	1068	10.6	5	
Al	27	1	1	-0.226	ppb	-132.72	583	13.7	0.5	
K	39	1	1	1.936	ppb	87.03	38341	0.3	5	
Ca	44	1	1	2.060	ppb	133.00	613	13.9	5	
Ti	47	1	1	-0.010	ppb	-457.63	12	83.4	0.5	
V	51	1	1	-0.062	ppb	-10.90	1710	5.2	0.5	
Cr	52	1	1	-0.136	ppb	-18.04	3236	5.5	0.5	
Mn	55	1	1	-0.001	ppb	-1010.45	484	11.4	0.5	
Fe	56	1	1	-0.648	ppb	-15.59	20667	3.9	5	
Co	59	1	1	0.001	ppb	79.68	166	14.6	0.5	
Ni	60	1	1	-0.140	ppb	-10.92	1461	4.0	0.5	
Cu	63	1	1	-0.330	ppb	-3.29	19411	1.9	0.5	
Zn	66	1	1	0.185	ppb	29.48	1229	6.6	0.5	
As	75	1	1	-0.008	ppb	-94.97	49	20.8	0.5	
Se	78	1	1	-0.095	ppb	-236.68	39	39.6	0.5	
Be	9	2	2	0.008	ppb	157.22	85	82.8	0.5	
B	11	2	2	-0.477	ppb	-26.71	22059	1.5	0.5	
Mo	95	2	2	-0.118	ppb	-11.60	1752	13.5	0.5	
Ag	107	2	2	0.003	ppb	72.07	985	11.5	0.5	
Cd	111	2	2	0.000	ppb	-1794.75	56	60.0	0.5	
Sn	118	2	2	0.070	ppb	14.60	5843	4.9	0.5	
Sb	121	2	2	0.004	ppb	60.26	404	23.1	0.5	
Ba	137	2	2	-0.002	ppb	-595.68	482	30.1	0.5	
Tl	205	2	2	0.071	ppb	7.13	7344	5.9	0.125	
Pb	208	2	2	0.011	ppb	15.39	2045	4.8	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68012	2.25	74021	91.88	70	120	
Li	6	2	2	737353	0.46	743687	99.15	70	120	
Ge	72	2	2	644356	0.54	669033	96.31	70	120	
Rh	103	2	2	4279184	0.03	4386442	97.55	70	120	
Tb	159	2	2	5835411	0.54	5953966	98.01	70	120	
Bi	209	2	2	3539313	0.50	3592313	98.52	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	035_CCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T23:03:38-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	237.180	ppb	5.952	335167	12.10	250	94.9	90	110	
Mg	24	1	1	237.894	ppb	6.660	168613	13.69	250	95.2	90	110	
Al	27	1	1	23.632	ppb	1.363	7372	10.44	25	94.5	90	110	
Si	28	1	1	476.420	ppb	2.959	50481	8.55	250	190.6	90	110	> +-10%
K	39	1	1	231.702	ppb	4.240	179152	10.80	250	92.7	90	110	
Ca	44	1	1	232.737	ppb	4.846	7879	10.00	250	93.1	90	110	
Ti	47	1	1	22.664	ppb	3.906	5331	10.45	25	90.7	90	110	
V	51	1	1	22.600	ppb	5.210	193114	12.25	25	90.4	90	110	
Cr	52	1	1	22.533	ppb	5.730	245775	12.77	25	90.1	90	110	
Mn	55	1	1	23.026	ppb	5.201	122086	12.81	25	92.1	90	110	
Fe	56	1	1	234.242	ppb	4.919	2068788	12.09	250	93.7	90	110	
Co	59	1	1	23.180	ppb	5.779	427127	12.66	25	92.7	90	110	
Ni	60	1	1	23.248	ppb	6.177	120548	12.57	25	93.0	90	110	
Cu	63	1	1	23.237	ppb	5.265	342899	11.75	25	92.9	90	110	
Zn	66	1	1	22.904	ppb	5.041	42170	11.91	25	91.6	90	110	
As	75	1	1	22.947	ppb	5.376	28260	11.28	25	91.8	90	110	
Se	78	1	1	22.715	ppb	5.059	1638	12.22	25	90.9	90	110	
Be	9	2	2	24.656	ppb	0.618	128744	0.77	25	98.6	90	110	
B	11	2	2	25.055	ppb	2.355	104436	1.28	25	100.2	90	110	
Mo	95	2	2	23.689	ppb	0.697	418674	0.24	25	94.8	90	110	
Ag	107	2	2	24.868	ppb	0.668	1082877	0.77	25	99.5	90	110	
Cd	111	2	2	24.688	ppb	1.902	228836	0.97	25	98.8	90	110	
Sn	118	2	2	24.653	ppb	1.153	696888	0.78	25	98.6	90	110	
Sb	121	2	2	24.105	ppb	0.670	946824	0.05	25	96.4	90	110	
Ba	137	2	2	23.814	ppb	1.596	349635	1.16	25	95.3	90	110	
Tl	205	2	2	25.351	ppb	0.448	2015858	0.08	25	101.4	90	110	
Pb	208	2	2	24.298	ppb	1.202	1441924	1.43	25	97.2	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	69735	9.25	74021	94.21	70	120	
Li	6	2	2	718930	0.61	743687	96.67	70	120	
Ge	72	2	2	651139	1.27	669033	97.33	70	120	
Rh	103	2	2	4346038	0.45	4386442	99.08	70	120	
Tb	159	2	2	5980490	0.63	5953966	100.45	70	120	
Bi	209	2	2	3589185	0.41	3592313	99.91	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	036LCCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-29T23:08:01-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	4.098	62.938	25999	2.44	5	82.0	70	130	
Mg	24	1	1	4.035	16.842	4357	14.64	5	80.7	70	130	
Al	27	1	1	0.630	30.559	1030	7.35	0.5	125.9	70	130	
K	39	1	1	5.144	162.012	39675	2.72	5	102.9	70	130	
Ca	44	1	1	5.053	42.359	731	13.17	5	101.1	70	130	
Ti	47	1	1	0.378	18.625	104	14.74	0.5	75.6	70	130	
V	51	1	1	0.447	13.936	5005	10.54	0.5	89.4	70	130	
Cr	52	1	1	0.446	14.840	9668	11.52	0.5	89.2	70	130	
Mn	55	1	1	0.454	8.301	2934	9.80	0.5	90.9	70	130	
Fe	56	1	1	4.428	8.909	66227	9.13	5	88.6	70	130	
Co	59	1	1	0.475	9.791	8998	12.56	0.5	95.0	70	130	
Ni	60	1	1	0.373	16.904	4189	11.61	0.5	74.6	70	130	
Cu	63	1	1	0.515	3.959	25201	6.82	0.5	103.1	70	130	
Zn	66	1	1	0.478	5.521	1797	5.30	0.5	95.7	70	130	
As	75	1	1	0.443	6.247	613	11.57	0.5	88.7	70	130	
Se	78	1	1	0.430	76.404	64	24.44	0.5	86.1	70	130	
Be	9	2	2	0.506	7.500	2693	7.40	0.5	101.1	70	130	
B	11	2	2	0.271	118.019	24066	4.00	0.5	54.1	70	130	> +- 30%
Mo	95	2	2	0.401	2.438	10887	1.65	0.5	80.2	70	130	
Ag	107	2	2	0.440	5.783	9138	5.06	0.5	88.0	70	130	
Cd	111	2	2	0.507	6.399	4757	6.48	0.5	101.4	70	130	
Sn	118	2	2	0.511	6.257	18351	5.08	0.5	102.3	70	130	
Sb	121	2	2	0.518	2.609	20425	3.12	0.5	103.7	70	130	
Ba	137	2	2	0.520	2.645	8144	2.35	0.5	104.0	70	130	
Tl	205	2	2	0.361	2.792	43132	2.27	0.5	72.1	70	130	
Pb	208	2	2	0.505	2.556	31422	2.62	0.5	101.1	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	70605	6.75	74021	95.38	70	120	
Li	6	2	2	722895	0.38	743687	97.20	70	120	
Ge	72	2	2	651249	0.21	669033	97.34	70	120	
Rh	103	2	2	4351578	0.26	4386442	99.21	70	120	
Tb	159	2	2	5925196	0.57	5953966	99.52	70	120	
Bi	209	2	2	3595243	0.44	3592313	100.08	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T23:12:20-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	-3.348	ppb	-23.29	18992	1.1	5	
Mg	24	1	1	-0.529	ppb	-5.92	1072	4.4	5	
Al	27	1	1	0.029	ppb	1601.33	652	13.9	0.5	
K	39	1	1	1.021	ppb	319.91	37889	1.7	5	
Ca	44	1	1	1.688	ppb	47.71	603	2.4	5	
Ti	47	1	1	-0.023	ppb	-201.24	9	108.3	0.5	
V	51	1	1	-0.133	ppb	-11.14	1127	5.5	0.5	
Cr	52	1	1	-0.152	ppb	-9.29	3086	4.7	0.5	
Mn	55	1	1	0.015	ppb	93.29	574	18.7	0.5	
Fe	56	1	1	-0.692	ppb	-15.47	20343	2.1	5	
Co	59	1	1	0.001	ppb	272.22	156	29.3	0.5	
Ni	60	1	1	-0.166	ppb	-6.53	1335	7.0	0.5	
Cu	63	1	1	-0.412	ppb	-16.23	18308	1.8	0.5	
Zn	66	1	1	0.154	ppb	29.83	1176	2.4	0.5	
As	75	1	1	-0.023	ppb	-30.22	30	29.4	0.5	
Se	78	1	1	-0.065	ppb	-195.52	41	16.9	0.5	
Be	9	2	2	0.002	ppb	105.19	52	24.7	0.5	
B	11	2	2	-0.326	ppb	-44.83	22081	1.4	0.5	
Mo	95	2	2	-0.155	ppb	-4.49	1137	10.8	0.5	
Ag	107	2	2	0.002	ppb	205.71	937	20.4	0.5	
Cd	111	2	2	0.000	ppb	1557.88	59	28.6	0.5	
Sn	118	2	2	0.060	ppb	20.26	5669	6.0	0.5	
Sb	121	2	2	0.002	ppb	73.76	333	17.3	0.5	
Ba	137	2	2	0.005	ppb	101.50	596	13.7	0.5	
Tl	205	2	2	0.021	ppb	3.31	3453	1.6	0.125	
Pb	208	2	2	0.006	ppb	38.81	1745	7.7	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	68293	6.33	74021	92.26	70	120	
Li	6	2	2	721730	0.79	743687	97.05	70	120	
Ge	72	2	2	653808	0.78	669033	97.72	70	120	
Rh	103	2	2	4363981	0.10	4386442	99.49	70	120	
Tb	159	2	2	5940306	0.21	5953966	99.77	70	120	
Bi	209	2	2	3576251	0.13	3592313	99.55	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	047ICSA.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-29T23:56:18-04:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	82487.893	ppb	24697876.6	4.6	5000000	
Ti	47	1	1	1811.491	ppb	448300.5	4.4	50000	
V	51	1	1	-0.094	ppb	1566.8	10.7	5	
Cr	52	1	1	0.745	ppb	13431.9	4.2	5	
Mn	55	1	1	1.914	ppb	11584.8	3.0	5	
Co	59	1	1	1.479	ppb	29980.0	3.0	5	
Ni	60	1	1	1.194	ppb	9007.5	2.3	5	
Cu	63	1	1	-0.237	ppb	22431.7	9.5	5	
Zn	66	1	1	1.481	ppb	3888.5	5.9	5	
As	75	1	1	0.157	ppb	274.5	5.1	5	
Se	78	1	1	-0.046	ppb	46.7	32.7	5	
Be	9	2	2	0.000	ppb	40.8	31.5	5	
B	11	2	2	-0.165	ppb	22426.2	4.9	5	
Mo	95	2	2	2175.496	ppb	33476185.5	0.2	50000	
Ag	107	2	2	0.032	ppb	2322.8	9.9	5	
Cd	111	2	2	1.915	ppb	18770.4	5.6	5	
Sn	118	2	2	0.149	ppb	7143.6	3.4	5	
Sb	121	2	2	0.701	ppb	26579.8	0.6	5	
Ba	137	2	2	0.575	ppb	7855.3	5.8	5	
Tl	205	2	2	0.011	ppb	2326.5	0.6	1.25	
Pb	208	2	2	0.188	ppb	10935.6	0.6	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	73725	4.32	74021	99.60	70	120	
Li	6	2	2	717541	5.27	743687	96.48	70	120	
Ge	72	2	2	686570	1.13	669033	102.62	70	120	
Rh	103	2	2	3818737	0.84	4386442	87.06	70	120	
Tb	159	2	2	5720718	0.70	5953966	96.08	70	120	
Bi	209	2	2	3131145	0.72	3592313	87.16	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	048_CCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-30T00:00:50-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	258.004	ppb	17.720	377729	11.10	250	103.2	90	110	
Mg	24	1	1	240.937	ppb	18.761	177587	13.24	250	96.4	90	110	
Al	27	1	1	24.627	ppb	17.723	7984	11.24	25	98.5	90	110	
Si	28	1	1	542.502	ppb	27.388	57896	14.27	250	217.0	90	110	> +-10%
K	39	1	1	245.692	ppb	19.705	195691	10.11	250	98.3	90	110	
Ca	44	1	1	234.061	ppb	21.707	8546	14.64	250	93.6	90	110	
Ti	47	1	1	23.253	ppb	19.442	5697	13.99	25	93.0	90	110	
V	51	1	1	23.170	ppb	18.061	206079	12.42	25	92.7	90	110	
Cr	52	1	1	22.753	ppb	18.391	258246	12.66	25	91.0	90	110	
Mn	55	1	1	22.639	ppb	18.372	129667	12.80	25	90.6	90	110	
Fe	56	1	1	240.206	ppb	18.325	2207948	12.67	250	96.1	90	110	
Co	59	1	1	22.557	ppb	17.863	449238	12.30	25	90.2	90	110	
Ni	60	1	1	23.214	ppb	18.203	125329	12.34	25	92.9	90	110	
Cu	63	1	1	24.342	ppb	16.849	386595	10.26	25	97.4	90	110	
Zn	66	1	1	23.275	ppb	18.685	44601	12.77	25	93.1	90	110	
As	75	1	1	22.703	ppb	17.980	30251	12.62	25	90.8	90	110	
Se	78	1	1	23.651	ppb	18.837	1774	13.22	25	94.6	90	110	
Be	9	2	2	24.150	ppb	1.553	132233	0.92	25	96.6	90	110	
B	11	2	2	24.588	ppb	3.619	107921	2.21	25	98.4	90	110	
Mo	95	2	2	26.296	ppb	1.141	509891	1.36	25	105.2	90	110	
Ag	107	2	2	24.690	ppb	0.446	1096269	0.67	25	98.8	90	110	
Cd	111	2	2	24.556	ppb	0.400	233433	0.91	25	98.2	90	110	
Sn	118	2	2	24.569	ppb	0.941	706937	1.06	25	98.3	90	110	
Sb	121	2	2	24.173	ppb	0.170	950869	0.32	25	96.7	90	110	
Ba	137	2	2	23.806	ppb	0.416	355772	0.40	25	95.2	90	110	
Tl	205	2	2	25.401	ppb	0.072	2012620	0.32	25	101.6	90	110	
Pb	208	2	2	24.279	ppb	1.584	1435680	1.79	25	97.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	73262	6.59	74021	98.97	70	120	
Li	6	2	2	753930	1.01	743687	101.38	70	120	
Ge	72	2	2	667688	0.70	669033	99.80	70	120	
Rh	103	2	2	4423500	0.25	4386442	100.84	70	120	
Tb	159	2	2	5988903	0.28	5953966	100.59	70	120	
Bi	209	2	2	3576337	0.33	3592313	99.56	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	049LCCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-30T00:05:09-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	5.253	93.500	34868	3.83	5	105.1	70	130	
Mg	24	1	1	4.707	55.888	4830	18.01	5	94.1	70	130	
Al	27	1	1	0.522	67.863	1096	8.52	0.5	104.4	70	130	
K	39	1	1	6.163	321.168	43152	5.05	5	123.3	70	130	
Ca	44	1	1	4.728	78.187	752	7.55	5	94.6	70	130	
Ti	47	1	1	0.404	43.646	111	16.53	0.5	80.8	70	130	
V	51	1	1	0.445	61.896	6110	14.88	0.5	89.1	70	130	
Cr	52	1	1	0.481	64.532	10124	12.28	0.5	96.1	70	130	
Mn	55	1	1	0.485	48.577	3191	22.00	0.5	97.1	70	130	
Fe	56	1	1	5.330	51.149	74978	11.31	5	106.6	70	130	
Co	59	1	1	0.469	38.094	9242	18.37	0.5	93.8	70	130	
Ni	60	1	1	0.420	65.121	4481	13.35	0.5	83.9	70	130	
Cu	63	1	1	0.460	61.885	43430	1.51	0.5	92.0	70	130	
Zn	66	1	1	0.478	71.295	1812	14.52	0.5	95.7	70	130	
As	75	1	1	0.457	35.476	659	11.32	0.5	91.5	70	130	
Se	78	1	1	0.389	139.493	74	26.24	0.5	77.9	70	130	
Be	9	2	2	0.472	1.444	2549	1.82	0.5	94.3	70	130	
B	11	2	2	0.327	26.565	24578	1.66	0.5	65.3	70	130	> +- 30%
Mo	95	2	2	0.582	4.386	29563	4.50	0.5	116.4	70	130	
Ag	107	2	2	0.431	4.181	8997	3.09	0.5	86.2	70	130	
Cd	111	2	2	0.509	4.747	4879	4.77	0.5	101.8	70	130	
Sn	118	2	2	0.509	4.300	18522	2.67	0.5	101.8	70	130	
Sb	121	2	2	0.508	2.703	20120	2.77	0.5	101.6	70	130	
Ba	137	2	2	0.496	2.928	7896	2.28	0.5	99.1	70	130	
Tl	205	2	2	0.502	1.856	41646	2.00	0.5	100.5	70	130	
Pb	208	2	2	0.513	2.788	31745	2.03	0.5	102.6	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	75176	23.34	74021	101.56	70	120	
Li	6	2	2	732593	0.59	743687	98.51	70	120	
Ge	72	2	2	665355	0.23	669033	99.45	70	120	
Rh	103	2	2	4410463	0.76	4386442	100.55	70	120	
Tb	159	2	2	5953784	0.30	5953966	100.00	70	120	
Bi	209	2	2	3580421	0.92	3592313	99.67	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	050_CCB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-30T00:09:34-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.266	ppb	563.12	25174	0.7	5	
Mg	24	1	1	-0.361	ppb	-40.79	1263	0.9	5	
Al	27	1	1	-0.285	ppb	-97.72	604	6.3	0.5	
K	39	1	1	0.769	ppb	522.57	40264	2.9	5	
Ca	44	1	1	4.000	ppb	32.75	722	3.3	5	
Ti	47	1	1	-0.036	ppb	-6.18	7	0.0	0.5	
V	51	1	1	-0.035	ppb	-51.51	2061	1.0	0.5	
Cr	52	1	1	-0.157	ppb	-5.72	3241	9.0	0.5	
Mn	55	1	1	0.010	ppb	164.81	579	12.7	0.5	
Fe	56	1	1	-0.454	ppb	-39.16	23861	3.7	5	
Co	59	1	1	0.000	ppb	507.76	153	22.7	0.5	
Ni	60	1	1	-0.134	ppb	-24.02	1590	6.7	0.5	
Cu	63	1	1	0.494	ppb	45.27	32882	2.4	0.5	
Zn	66	1	1	0.160	ppb	58.64	1266	11.8	0.5	
As	75	1	1	-0.018	ppb	-53.73	39	26.2	0.5	
Se	78	1	1	-0.113	ppb	-186.49	40	36.3	0.5	
Be	9	2	2	0.002	ppb	302.57	48	53.3	0.5	
B	11	2	2	-0.158	ppb	-66.52	22764	1.2	0.5	
Mo	95	2	2	0.275	ppb	10.51	8823	6.0	0.5	
Ag	107	2	2	0.000	ppb	-238.85	848	2.0	0.5	
Cd	111	2	2	0.001	ppb	663.15	70	105.1	0.5	
Sn	118	2	2	0.062	ppb	21.22	5791	6.3	0.5	
Sb	121	2	2	0.000	ppb	379.20	259	4.9	0.5	
Ba	137	2	2	0.003	ppb	213.61	574	19.1	0.5	
Tl	205	2	2	0.008	ppb	33.41	2445	7.9	0.125	
Pb	208	2	2	0.007	ppb	33.50	1797	6.8	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	72953	8.46	74021	98.56	70	120	
Li	6	2	2	725964	0.56	743687	97.62	70	120	
Ge	72	2	2	666390	0.08	669033	99.60	70	120	
Rh	103	2	2	4426126	0.22	4386442	100.90	70	120	
Tb	159	2	2	5962765	0.29	5953966	100.15	70	120	
Bi	209	2	2	3580746	0.54	3592313	99.68	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	051ICSB.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-30T00:13:53-04:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	78554.467	14.761	24196672	10.00	100000	78.6	-1000	1000	
Ti	47	1	1	1701.847	14.814	433180	9.50	5000	34.0	-1000	1000	
V	51	1	1	-0.056	-35.345	1956	2.73	0.5	-11.3	-1000	1000	
Cr	52	1	1	16.999	14.433	202274	9.17	20	85.0	80	120	
Mn	55	1	1	18.122	13.613	108276	8.97	20	90.6	80	120	
Co	59	1	1	17.084	13.937	354444	8.96	20	85.4	80	120	
Ni	60	1	1	16.377	13.859	96298	8.53	20	81.9	80	120	
Cu	63	1	1	17.801	14.881	263896	8.51	20	89.0	80	120	
Zn	66	1	1	16.442	11.894	34420	9.19	20	82.2	80	120	
As	75	1	1	17.041	14.935	23647	9.16	20	85.2	80	120	
Se	78	1	1	0.021	118.087	53	6.25	0.5	4.3	-1000	1000	
Be	9	2	2	0.003	111.510	56	34.63	0.5	0.6	-1000	1000	
B	11	2	2	-0.157	-341.248	22274	2.72	2	-7.9	-1000	1000	
Mo	95	2	2	2116.485	0.365	32640759	0.57	5000	42.3	-1000	1000	
Ag	107	2	2	22.052	0.361	770053	0.33	20	110.3	80	120	
Cd	111	2	2	18.945	1.043	184268	1.01	20	94.7	80	120	
Sn	118	2	2	1.830	89.842	48867	83.87	0.5	365.9	-1000	1000	
Sb	121	2	2	0.686	1.262	25912	2.04	0.5	137.1	-1000	1000	
Ba	137	2	2	0.526	7.527	7240	7.55	0.5	105.1	-1000	1000	
Tl	205	2	2	0.017	27.910	2767	11.85	0.125	13.6	-1000	1000	
Pb	208	2	2	0.181	5.234	10532	4.58	0.125	144.7	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	76202	8.24	74021	102.95	70	120	
Li	6	2	2	712267	5.58	743687	95.78	70	120	
Ge	72	2	2	683141	0.68	669033	102.11	70	120	
Rh	103	2	2	3827096	0.55	4386442	87.25	70	120	
Tb	159	2	2	5700208	1.12	5953966	95.74	70	120	
Bi	209	2	2	3117225	0.05	3592313	86.77	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	Final CCV
Data File Name	053_CCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-30T00:22:41-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	244.029	ppb	19.654	361973	11.02	250	97.6	90	110	
Mg	24	1	1	236.542	ppb	19.348	176088	11.97	250	94.6	90	110	
Al	27	1	1	23.839	ppb	24.803	7812	16.75	25	95.4	90	110	
Si	28	1	1	500.089	ppb	24.377	55100	10.03	250	200.0	90	110	> +-10%
K	39	1	1	239.226	ppb	21.491	193518	10.50	250	95.7	90	110	
Ca	44	1	1	241.713	ppb	18.708	8595	9.31	250	96.7	90	110	
Ti	47	1	1	22.951	ppb	20.642	5680	14.23	25	91.8	90	110	
V	51	1	1	22.905	ppb	19.489	205677	12.04	25	91.6	90	110	
Cr	52	1	1	22.602	ppb	19.130	259072	11.50	25	90.4	90	110	
Mn	55	1	1	23.336	ppb	18.351	130070	11.54	25	93.3	90	110	
Fe	56	1	1	236.786	ppb	19.132	2198442	11.87	250	94.7	90	110	
Co	59	1	1	23.101	ppb	19.148	447413	12.10	25	92.4	90	110	
Ni	60	1	1	23.081	ppb	18.870	125869	11.45	25	92.3	90	110	
Cu	63	1	1	24.084	ppb	19.120	372976	10.60	25	96.3	90	110	
Zn	66	1	1	23.021	ppb	19.888	44556	12.46	25	92.1	90	110	
As	75	1	1	23.149	ppb	19.792	30014	14.03	25	92.6	90	110	
Se	78	1	1	22.993	ppb	27.275	1734	17.75	25	92.0	90	110	
Be	9	2	2	24.736	ppb	1.180	129755	1.90	25	98.9	90	110	
B	11	2	2	25.393	ppb	2.331	106012	1.29	25	101.6	90	110	
Mo	95	2	2	24.928	ppb	0.320	445001	0.64	25	99.7	90	110	
Ag	107	2	2	24.544	ppb	0.703	1079973	0.57	25	98.2	90	110	
Cd	111	2	2	24.332	ppb	0.451	229906	0.96	25	97.3	90	110	
Sn	118	2	2	24.383	ppb	0.645	696540	0.80	25	97.5	90	110	
Sb	121	2	2	24.041	ppb	0.422	943478	0.41	25	96.2	90	110	
Ba	137	2	2	23.861	ppb	0.594	354011	0.93	25	95.4	90	110	
Tl	205	2	2	25.281	ppb	0.750	1998477	0.17	25	101.1	90	110	
Pb	208	2	2	24.159	ppb	0.387	1425282	0.21	25	96.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	74202	9.99	74021	100.24	70	120	
Li	6	2	2	722185	0.76	743687	97.11	70	120	
Ge	72	2	2	663681	0.94	669033	99.20	70	120	
Rh	103	2	2	4391553	0.36	4386442	100.12	70	120	
Tb	159	2	2	5975128	0.77	5953966	100.36	70	120	
Bi	209	2	2	3568188	0.59	3592313	99.33	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	Final LLCCV
Data File Name	054LCCV.d
Data Path Name	D:\Data\6020\pg455a.b
Acq Date Time	2014-09-30T00:27:04-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	4.844	19.683	33534	2.40	5	96.9	70	130	
Mg	24	1	1	4.979	7.900	5043	7.24	5	99.6	70	130	
Al	27	1	1	0.588	10.614	1128	8.36	0.5	117.7	70	130	
K	39	1	1	5.833	44.581	43960	3.46	5	116.7	70	130	
Ca	44	1	1	6.296	22.074	782	10.53	5	125.9	70	130	
Ti	47	1	1	0.478	11.558	129	9.08	0.5	95.6	70	130	
V	51	1	1	0.485	16.828	6453	7.63	0.5	96.9	70	130	
Cr	52	1	1	0.517	17.422	10453	7.39	0.5	103.4	70	130	
Mn	55	1	1	0.451	8.027	3027	10.56	0.5	90.2	70	130	
Fe	56	1	1	5.552	12.821	76456	9.05	5	111.0	70	130	
Co	59	1	1	0.468	9.295	9234	9.96	0.5	93.6	70	130	
Ni	60	1	1	0.413	18.183	4402	6.44	0.5	82.6	70	130	
Cu	63	1	1	0.354	17.156	38536	1.05	0.5	70.8	70	130	
Zn	66	1	1	0.446	22.555	1748	11.88	0.5	89.1	70	130	
As	75	1	1	0.446	4.830	639	4.70	0.5	89.1	70	130	
Se	78	1	1	0.455	68.030	72	17.47	0.5	90.9	70	130	
Be	9	2	2	0.483	7.595	2567	7.39	0.5	96.6	70	130	
B	11	2	2	0.188	29.629	23725	1.00	0.5	37.7	70	130	> +- 30%
Mo	95	2	2	0.366	4.503	19916	3.84	0.5	73.2	70	130	
Ag	107	2	2	0.417	7.029	8674	6.72	0.5	83.4	70	130	
Cd	111	2	2	0.467	2.810	4450	2.56	0.5	93.4	70	130	
Sn	118	2	2	0.512	3.576	18485	3.38	0.5	102.4	70	130	
Sb	121	2	2	0.513	4.754	20157	4.88	0.5	102.5	70	130	
Ba	137	2	2	0.514	4.698	8115	4.09	0.5	102.8	70	130	
Tl	205	2	2	0.499	3.185	41111	2.99	0.5	99.7	70	130	
Pb	208	2	2	0.503	1.069	30980	1.67	0.5	100.6	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	71009	7.20	74021	95.93	70	120	
Li	6	2	2	720614	0.25	743687	96.90	70	120	
Ge	72	2	2	660340	0.85	669033	98.70	70	120	
Rh	103	2	2	4379875	0.69	4386442	99.85	70	120	
Tb	159	2	2	5911929	0.80	5953966	99.29	70	120	
Bi	209	2	2	3559583	0.66	3592313	99.09	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Final CCB
Data File Name	055_CCB.d
Data Path Name	D:\Data\6020\pg
Acq Date Time	2014-09-30T00:31:23-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.644	ppb	752.50	25393	0.4	5	
Mg	24	1	1	0.207	ppb	306.50	1653	7.3	5	
Al	27	1	1	0.333	ppb	234.65	775	6.8	0.5	
K	39	1	1	2.578	ppb	629.46	40935	1.7	5	
Ca	44	1	1	3.412	ppb	180.72	689	4.2	5	
Ti	47	1	1	-0.041	ppb	-90.20	6	173.2	0.5	
V	51	1	1	-0.015	ppb	-411.42	2211	2.7	0.5	
Cr	52	1	1	-0.149	ppb	-57.23	3269	2.8	0.5	
Mn	55	1	1	0.017	ppb	179.51	613	13.9	0.5	
Fe	56	1	1	-0.069	ppb	-1090.41	27025	1.2	5	
Co	59	1	1	-0.001	ppb	-428.56	130	21.0	0.5	
Ni	60	1	1	-0.117	ppb	-54.12	1687	9.6	0.5	
Cu	63	1	1	0.144	ppb	283.16	27618	4.7	0.5	
Zn	66	1	1	0.188	ppb	133.48	1279	13.1	0.5	
As	75	1	1	-0.024	ppb	-9.81	32	23.9	0.5	
Se	78	1	1	-0.065	ppb	-136.68	44	11.5	0.5	
Be	9	2	2	0.006	ppb	90.44	74	45.8	0.5	
B	11	2	2	-0.601	ppb	-68.69	21840	1.4	0.5	
Mo	95	2	2	0.127	ppb	16.81	6154	6.0	0.5	
Ag	107	2	2	0.000	ppb	-860.56	841	11.8	0.5	
Cd	111	2	2	0.002	ppb	301.67	78	71.4	0.5	
Sn	118	2	2	0.071	ppb	8.19	6039	3.2	0.5	
Sb	121	2	2	0.000	ppb	1183.62	259	15.1	0.5	
Ba	137	2	2	0.002	ppb	286.37	545	12.4	0.5	
Tl	205	2	2	0.009	ppb	9.60	2519	2.5	0.125	
Pb	208	2	2	0.001	ppb	248.08	1474	11.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	74900	24.48	74021	101.19	70	120	
Li	6	2	2	745800	6.02	743687	100.28	70	120	
Ge	72	2	2	668804	0.95	669033	99.97	70	120	
Rh	103	2	2	4408775	0.46	4386442	100.51	70	120	
Tb	159	2	2	5968267	0.42	5953966	100.24	70	120	
Bi	209	2	2	3595059	0.11	3592313	100.08	70	120	

Analytical Sequence

Method : 7471B Soil

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		BLKS140925-01-455
10	10		LCSS140925-01-455
11	11		E14-09161-001
12	12		E14-09161-001DUP
13	13		E14-09161-001MS
14	14		E14-09160-001
15	15		E14-09160-002
16	16		E14-09160-003
17	17		E14-09160-004
18	18		E14-09160-005
19	2	QC	CCV
20	1	QC	CCB
21	19		E14-09178-001
22	20		E14-09167-001
23	21		E14-09167-002
24	22		E14-09144-001
25	23		E14-09145-001
26	24		E14-09146-001
27	25		E14-09147-001
28	26		E14-09148-001
29	27		E14-09149-001
30	28		E14-09150-001
31	2	QC	CCV
32	1	QC	CCB
33	29		E14-09151-001
34	30		E14-09152-001
35	31		E14-09153-001
36	32		E14-09139-006
37	2	QC	CCV
38	1	QC	CCB

E14-09161 0450

==========

Analysis Begun

Logged In Analyst: chris **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: AS-91**

Sample Information File: J:\Metal\RunLog\FIMsSeq\455.SIF
Batch ID: 455SOIL
Results Data Set: pg455ahg_14
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

==========

Method Loaded
Method Name: 7471B Soil **Method Last Saved: 7/26/2013 2:16:39 PM**
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank 1 **Date Collected: 9/26/2014 1:03:53 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0006	0.0006	0.0001	13:04:45	Yes
2		[0.00]	0.0008	0.0008	0.0001	13:05:18	Yes
3		[0.00]	0.0039	0.0039	0.0003	13:05:51	Yes
Mean:		[0.00]	0.0018				
SD:		0.00	0.0019				
%RSD:		0.00	104.82				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 3**
Sample ID: Calib Std 1 **Date Collected: 9/26/2014 1:06:10 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 1

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0103	0.0121	0.0023	13:07:03	Yes
2		[0.25]	0.0107	0.0125	0.0024	13:07:36	Yes
3		[0.25]	0.0098	0.0116	0.0023	13:08:09	Yes
Mean:		[0.25]	0.0103				
SD:		0.00	0.0005				
%RSD:		0.00	4.63				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.04109 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 4**
Sample ID: Calib Std 2 **Date Collected: 9/26/2014 1:08:29 PM**
Analyst: **Data Type: Original**

Replicate Data: Calib Std 2

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1057	0.1074	0.0220	13:09:23	Yes
2		[2.500]	0.1081	0.1099	0.0222	13:09:56	Yes
3		[2.500]	0.1086	0.1104	0.0223	13:10:28	Yes
Mean:		[2.500]	0.1075				
SD:		0.000	0.0016				
%RSD:		0.000	1.46				

Standard number 2 applied. [2.500]
Correlation Coef.: 0.999991 Slope: 0.04306 Intercept: -0.00023

==========

Sequence No.: 4 **Autosampler Location: 5**

Sample ID: Calib Std 3 Date Collected: 9/26/2014 1:10:49 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2081	0.2099	0.0431	13:11:43	Yes
2		[5.000]	0.2126	0.2144	0.0438	13:12:16	Yes
3		[5.000]	0.2127	0.2145	0.0434	13:12:49	Yes
Mean:		[5.000]	0.2111				
SD:		0.000	0.0026				
%RSD:		0.000	1.24				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999951 Slope: 0.04232 Intercept: 0.00022

Sequence No.: 5 Autosampler Location: 6
Sample ID: Calib Std 4 Date Collected: 9/26/2014 1:13:10 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.2938	0.2956	0.0607	13:14:05	Yes
2		[7.500]	0.3002	0.3019	0.0623	13:14:38	Yes
3		[7.500]	0.2980	0.2998	0.0616	13:15:10	Yes
Mean:		[7.500]	0.2973				
SD:		0.000	0.0032				
%RSD:		0.000	1.09				

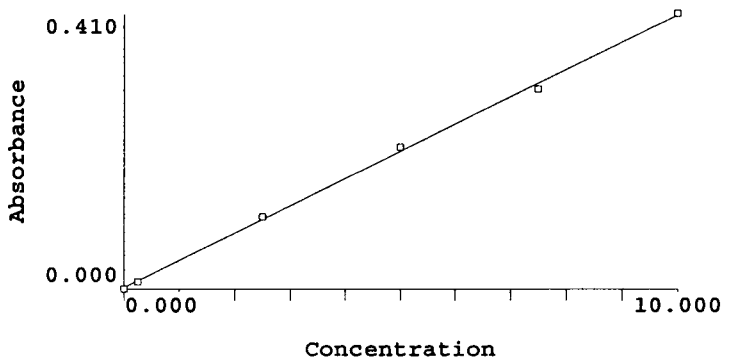
Standard number 4 applied. [7.500]
Correlation Coef.: 0.998988 Slope: 0.04012 Intercept: 0.00287

Sequence No.: 6 Autosampler Location: 7
Sample ID: Calib Std 5 Date Collected: 9/26/2014 1:15:32 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4051	0.4069	0.0825	13:16:27	Yes
2		[10.000]	0.4133	0.4150	0.0836	13:17:00	Yes
3		[10.000]	0.4128	0.4146	0.0838	13:17:33	Yes
Mean:		[10.000]	0.4104				
SD:		0.000	0.0046				
%RSD:		0.000	1.12				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999437 Slope: 0.04057 Intercept: 0.00203



Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

Calib Blank 1	0.0000	0	-0.04999	0.00	104.8
Calib Std 1	0.0103	0.25	0.20318	0.00	4.6
Calib Std 2	0.1075	2.500	2.59853	0.00	1.5
Calib Std 3	0.2111	5.000	5.15423	0.00	1.2
Calib Std 4	0.2973	7.500	7.27849	0.00	1.1
Calib Std 5	0.4104	10.000	10.06556	0.00	1.1

Correlation Coef.: 0.999437 Slope: 0.04057 Intercept: 0.00203

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 9/26/2014 1:18:16 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		5.3039	0.2172	0.2190	0.0444	13:19:09	Yes
2		5.3923	0.2208	0.2226	0.0447	13:19:42	Yes
3		5.4520	0.2232	0.2250	0.0450	13:20:14	Yes
Mean:		5.3827	0.2204				
SD:		0.07452	0.0030				
%RSD:		1.3845	1.37				

QC value within limits for Hg 253.7 Recovery = 107.65%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 9/26/2014 1:20:34 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.06837	-0.0007	0.0010	0.0001	13:21:26	Yes
2		-0.09085	-0.0017	0.0001	0.0001	13:21:59	Yes
3		-0.09771	-0.0019	-0.0002	0.0001	13:22:32	Yes
Mean:		-0.08564	-0.0014				
SD:		0.01534	0.0006				
%RSD:		17.916	43.03				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: BLKS140925-01-455 **Date Collected: 9/26/2014 1:22:51 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BLKS140925-01-455

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.01647	-0.08237	-0.0013	0.0005	0.0001	13:23:44	Yes
2	-0.01835	-0.09173	-0.0017	0.0001	0.0001	13:24:16	Yes
3	-0.01925	-0.09627	-0.0019	-0.0001	0.0001	13:24:49	Yes
Mean:	-0.01802	-0.09012	-0.0016				
SD:	0.00142	0.00708	0.0003				
%RSD:	7.8609	7.8609	17.65				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: LCSS140925-01-455 **Date Collected: 9/26/2014 1:25:08 PM**
Analyst: Rob **Data Type: Original**

all reruns

Replicate Data: LCSS140925-01-455

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.3719	6.8594	0.2803	0.2821	0.0596	13:26:01	Yes
2	1.4059	7.0297	0.2872	0.2890	0.0601	13:26:33	Yes
3	1.4062	7.0309	0.2873	0.2891	0.0592	13:27:06	Yes

Mean:	1.3947	6.9733	0.2849
SD:	0.01974	0.09868	0.0040
%RSD:	1.4152	1.4152	1.41

Sequence No.: 11 — **Autosampler Location: 11**
Sample ID: E14-09161-001 — **Date Collected: 9/26/2014 1:27:26 PM**
Analyst: Rob — **Data Type: Original**

Replicate Data: E14-09161-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.72937	3.5066	0.1443	0.1461	0.0301	13:28:18	Yes
2	0.74677	3.5903	0.1477	0.1495	0.0313	13:28:51	Yes
3	0.74554	3.5843	0.1474	0.1492	0.0310	13:29:24	Yes
Mean:	0.74056	3.5604	0.1465				
SD:	0.00971	0.04670	0.0019				
%RSD:	1.3117	1.3117	1.29				

Sequence No.: 12 — **Autosampler Location: 12**
Sample ID: E14-09161-001DUP — **Date Collected: 9/26/2014 1:29:43 PM**
Analyst: Rob — **Data Type: Original**

Replicate Data: E14-09161-001DUP

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.73278	3.5230	0.1450	0.1467	0.0305	13:30:37	Yes
2	0.74131	3.5640	0.1466	0.1484	0.0308	13:31:09	Yes
3	0.74501	3.5818	0.1473	0.1491	0.0310	13:31:42	Yes
Mean:	0.73970	3.5562	0.1463				
SD:	0.00627	0.03014	0.0012				
%RSD:	0.84744	0.84744	0.84				

Sequence No.: 13 — **Autosampler Location: 10**
Sample ID: LCSS140925-01-455 — **Date Collected: 9/26/2014 1:32:02 PM**
Analyst: Rob — **Data Type: Original**

Replicate Data: LCSS140925-01-455

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.0574	5.2868	0.2165	0.2183	0.0440	13:32:54	Yes
2	1.0781	5.3903	0.2207	0.2225	0.0446	13:33:27	Yes
3	1.0555	5.2775	0.2161	0.2179	0.0441	13:34:00	Yes
Mean:	1.0636	5.3182	0.2178				
SD:	0.01252	0.06262	0.0025				
%RSD:	1.1775	1.1775	1.17				

Sequence No.: 14 — **Autosampler Location: 13**
Sample ID: E14-09161-001MS — **Date Collected: 9/26/2014 1:34:20 PM**
Analyst: Rob — **Data Type: Original**

dlc review

Replicate Data: E14-09161-001MS

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.2490	6.0048	0.2457	0.2474	0.0521	13:35:15	Yes
2	1.2594	6.0549	0.2477	0.2495	0.0519	13:35:48	Yes
3	1.2394	5.9586	0.2438	0.2455	0.0510	13:36:21	Yes
Mean:	1.2493	6.0061	0.2457				
SD:	0.01001	0.04814	0.0020				
%RSD:	0.80144	0.80144	0.79				

Sequence No.: 15 — **Autosampler Location: 14**
Sample ID: E14-09160-001 — **Date Collected: 9/26/2014 1:36:41 PM**
Analyst: Rob — **Data Type: Original**

Replicate Data: E14-09160-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.2450	17.909	0.7286	0.7304	0.1518	13:37:37	Yes
	Sample concentration is greater than that of the highest standard.						
2	4.2387	17.882	0.7275	0.7293	0.1508	13:38:10	Yes
	Sample concentration is greater than that of the highest standard.						
3	4.2619	17.980	0.7315	0.7333	0.1510	13:38:44	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	4.2485	17.923	0.7292				
SD:	0.01200	0.05063	0.0021				
%RSD:	0.28246	0.28246	0.28				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 16 **Autosampler Location: 15**
Sample ID: E14-09160-002 **Date Collected: 9/26/2014 1:39:26 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09160-002

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.6817	26.154	1.0631	1.0649	0.2203	13:40:21	Yes
	Sample concentration is greater than that of the highest standard.						
2	5.7550	26.491	1.0768	1.0786	0.2221	13:40:54	Yes
	Sample concentration is greater than that of the highest standard.						
3	5.7899	26.652	1.0833	1.0851	0.2233	13:41:27	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	5.7422	26.432	1.0744				
SD:	0.05526	0.25436	0.0103				
%RSD:	0.96231	0.96231	0.96				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 17 **Autosampler Location: 16**
Sample ID: E14-09160-003 **Date Collected: 9/26/2014 1:42:09 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09160-003

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.05511	0.23249	0.0115	0.0132	0.0023	13:43:04	Yes
2	0.04546	0.19180	0.0098	0.0116	0.0023	13:43:37	Yes
3	0.04329	0.18263	0.0094	0.0112	0.0023	13:44:10	Yes
Mean:	0.04795	0.20231	0.0102				
SD:	0.00629	0.02654	0.0011				
%RSD:	13.120	13.120	10.52				

Sequence No.: 18 **Autosampler Location: 17**
Sample ID: E14-09160-004 **Date Collected: 9/26/2014 1:44:31 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09160-004

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.6577	6.1313	0.2508	0.2526	0.0522	13:45:25	Yes
2	1.6718	6.1832	0.2529	0.2547	0.0532	13:45:58	Yes
3	1.6836	6.2270	0.2547	0.2564	0.0532	13:46:31	Yes
Mean:	1.6710	6.1805	0.2528				
SD:	0.01295	0.04792	0.0019				
%RSD:	0.77526	0.77526	0.77				

Sequence No.: 19 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 9/26/2014 1:46:52 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		5.3019	0.2171	0.2189	0.0444	13:47:45	Yes
2		5.3355	0.2185	0.2203	0.0447	13:48:18	Yes
3		5.3522	0.2192	0.2209	0.0446	13:48:51	Yes
Mean:		5.3299	0.2183				
SD:		0.02562	0.0010				
%RSD:		0.48061	0.48				

QC value within limits for Hg 253.7 Recovery = 106.60%
All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/26/2014 1:49:11 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.06531	-0.0006	0.0012	0.0002	13:50:03	Yes
2		-0.09254	-0.0017	0.0000	0.0001	13:50:36	Yes
3		-0.09761	-0.0019	-0.0002	0.0001	13:51:09	Yes
Mean:		-0.08515	-0.0014				
SD:		0.01737	0.0007				
%RSD:		20.396	49.39				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 13**
Sample ID: E14-09161-001MS **Date Collected: 9/26/2014 1:51:28 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09161-001MS

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.6530	8.2649	0.3373	0.3391	0.0708	13:52:22	Yes
2	1.6916	8.4580	0.3452	0.3470	0.0720	13:52:55	Yes
3	1.6856	8.4280	0.3440	0.3457	0.0717	13:53:28	Yes
Mean:	1.6767	8.3837	0.3422				
SD:	0.02079	0.10394	0.0042				
%RSD:	1.2398	1.2398	1.23				

Sequence No.: 22 **Autosampler Location: 18**
Sample ID: E14-09160-005 **Date Collected: 9/26/2014 1:54:09 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09160-005

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	47.959	211.47	8.5817	8.5835	1.2170	13:55:04	Yes
	Sample concentration is greater than that of the highest standard.						
2	47.251	208.35	8.4551	8.4569	1.1991	13:55:36	Yes
	Sample concentration is greater than that of the highest standard.						
3	47.050	207.47	8.4192	8.4210	1.1918	13:56:09	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	47.420	209.10	8.4853				
SD:	0.47723	2.1043	0.0854				
%RSD:	1.0064	1.0064	1.01				

Sample concentration is greater than that of the highest standard.

Sequence No.: 23 **Autosampler Location: 19**
Sample ID: E14-09178-001 **Date Collected: 9/26/2014 1:56:52 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09178-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.10778	0.54868	0.0243	0.0261	0.0039	13:57:47	Yes
2	0.06147	0.31296	0.0147	0.0165	0.0033	13:58:20	Yes
3	0.06613	0.33664	0.0157	0.0175	0.0032	13:58:52	Yes
Mean:	0.07846	0.39943	0.0182				
SD:	0.02550	0.12980	0.0053				
%RSD:	32.497	32.497	28.88				

Sequence No.: 24 Autosampler Location: 20
Sample ID: E14-09167-001 Date Collected: 9/26/2014 1:59:14 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09167-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.12102	0.61076	0.0268	0.0286	0.0054	14:00:09	Yes
2	0.11790	0.59499	0.0262	0.0279	0.0054	14:00:41	Yes
3	0.11901	0.60061	0.0264	0.0282	0.0053	14:01:14	Yes
Mean:	0.11931	0.60212	0.0265				
SD:	0.00158	0.00799	0.0003				
%RSD:	1.3276	1.3276	1.23				

Sequence No.: 25 Autosampler Location: 21
Sample ID: E14-09167-002 Date Collected: 9/26/2014 2:01:36 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09167-002

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.32904	1.3346	0.0562	0.0579	0.0114	14:02:31	Yes
2	0.32548	1.3201	0.0556	0.0574	0.0114	14:03:04	Yes
3	0.32512	1.3187	0.0555	0.0573	0.0115	14:03:37	Yes
Mean:	0.32655	1.3245	0.0558				
SD:	0.00217	0.00879	0.0004				
%RSD:	0.66334	0.66334	0.64				

Sequence No.: 26 Autosampler Location: 22
Sample ID: E14-09144-001 Date Collected: 9/26/2014 2:03:58 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09144-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.04415	0.20138	0.0102	0.0120	0.0022	14:04:54	Yes
2	0.03908	0.17827	0.0093	0.0110	0.0022	14:05:27	Yes
3	0.04012	0.18298	0.0095	0.0112	0.0022	14:06:00	Yes
Mean:	0.04112	0.18755	0.0096				
SD:	0.00268	0.01221	0.0005				
%RSD:	6.5118	6.5118	5.14				

Sequence No.: 27 Autosampler Location: 23
Sample ID: E14-09145-001 Date Collected: 9/26/2014 2:06:22 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09145-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.04137	0.21773	0.0109	0.0126	0.0025	14:07:17	Yes
2	0.04139	0.21784	0.0109	0.0126	0.0025	14:07:50	Yes
3	0.04045	0.21290	0.0107	0.0124	0.0025	14:08:23	Yes

Mean:	0.04107	0.21616	0.0108
SD:	0.00054	0.00282	0.0001
%RSD:	1.3040	1.3040	1.06

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Sequence No.: 28 **Autosampler Location: 24**
Sample ID: E14-09146-001 **Date Collected: 9/26/2014 2:08:45 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09146-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.03473	0.16451	0.0087	0.0105	0.0021	14:09:36	Yes
2	0.03692	0.17487	0.0091	0.0109	0.0021	14:10:07	Yes
3	0.03417	0.16185	0.0086	0.0104	0.0021	14:10:39	Yes
Mean:	0.03527	0.16708	0.0088				
SD:	0.00145	0.00688	0.0003				
%RSD:	4.1158	4.1158	3.17				

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Sequence No.: 29 **Autosampler Location: 25**
Sample ID: E14-09147-001 **Date Collected: 9/26/2014 2:10:57 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09147-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.03610	0.16953	0.0089	0.0107	0.0021	14:11:48	Yes
2	0.03565	0.16740	0.0088	0.0106	0.0022	14:12:19	Yes
3	0.03510	0.16481	0.0087	0.0105	0.0022	14:12:52	Yes
Mean:	0.03562	0.16725	0.0088				
SD:	0.00050	0.00237	0.0001				
%RSD:	1.4141	1.4141	1.09				

==========

Sequence No.: 30 **Autosampler Location: 26**
Sample ID: E14-09148-001 **Date Collected: 9/26/2014 2:13:10 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09148-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.05124	0.26070	0.0126	0.0144	0.0029	14:14:02	Yes
2	0.05323	0.27082	0.0130	0.0148	0.0030	14:14:35	Yes
3	0.05214	0.26529	0.0128	0.0146	0.0030	14:15:07	Yes
Mean:	0.05221	0.26560	0.0128				
SD:	0.00100	0.00507	0.0002				
%RSD:	1.9084	1.9084	1.61				

==========

Sequence No.: 31 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 9/26/2014 2:15:26 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		5.1755	0.2120	0.2138	0.0433	14:16:19	Yes
2		5.1898	0.2126	0.2144	0.0432	14:16:51	Yes
3		5.1666	0.2116	0.2134	0.0433	14:17:24	Yes
Mean:		5.1773	0.2121				
SD:		0.01172	0.0005				
%RSD:		0.22629	0.22				

QC value within limits for Hg 253.7 Recovery = 103.55%
All analyte(s) passed QC.

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Sequence No.: 32 **Autosampler Location: 1**

Sample ID: CCB
Analyst:
Date Collected: 9/26/2014 2:17:43 PM
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.07063	-0.0008	0.0009	0.0002	14:18:36	Yes
2		-0.08867	-0.0016	0.0002	0.0001	14:19:08	Yes
3		-0.08694	-0.0015	0.0003	0.0001	14:19:41	Yes
Mean:		-0.08208	-0.0013				
SD:		0.00995	0.0004				
%RSD:		12.125	31.01				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33
Sample ID: E14-09149-001
Analyst: Rob
Autosampler Location: 27
Date Collected: 9/26/2014 2:20:00 PM
Data Type: Original

Replicate Data: E14-09149-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.06272	0.33303	0.0155	0.0173	0.0036	14:20:53	Yes
2	0.06462	0.34310	0.0159	0.0177	0.0036	14:21:25	Yes
3	0.06349	0.33711	0.0157	0.0175	0.0036	14:21:58	Yes
Mean:	0.06361	0.33774	0.0157				
SD:	0.00095	0.00507	0.0002				
%RSD:	1.5000	1.5000	1.31				

Sequence No.: 34
Sample ID: E14-09150-001
Analyst: Rob
Autosampler Location: 28
Date Collected: 9/26/2014 2:22:17 PM
Data Type: Original

Replicate Data: E14-09150-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.03271	0.15632	0.0084	0.0101	0.0020	14:23:10	Yes
2	0.03106	0.14841	0.0080	0.0098	0.0021	14:23:43	Yes
3	0.03027	0.14464	0.0079	0.0097	0.0021	14:24:16	Yes
Mean:	0.03134	0.14979	0.0081				
SD:	0.00125	0.00596	0.0002				
%RSD:	3.9809	3.9809	2.98				

Sequence No.: 35
Sample ID: E14-09151-001
Analyst: Rob
Autosampler Location: 29
Date Collected: 9/26/2014 2:24:35 PM
Data Type: Original

Replicate Data: E14-09151-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.04719	0.22207	0.0110	0.0128	0.0027	14:25:28	Yes
2	0.04929	0.23197	0.0114	0.0132	0.0027	14:26:01	Yes
3	0.04899	0.23052	0.0114	0.0132	0.0027	14:26:34	Yes
Mean:	0.04849	0.22818	0.0113				
SD:	0.00114	0.00535	0.0002				
%RSD:	2.3435	2.3435	1.92				

Sequence No.: 36
Sample ID: E14-09152-001
Analyst: Rob
Autosampler Location: 30
Date Collected: 9/26/2014 2:26:54 PM
Data Type: Original

Replicate Data: E14-09152-001

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	mg/kg	ug/L	Signal	Area	Height		Stored
1	0.06121	0.30047	0.0142	0.0160	0.0033	14:27:47	Yes
2	0.06064	0.29768	0.0141	0.0159	0.0034	14:28:20	Yes
3	0.04767	0.23400	0.0115	0.0133	0.0023	14:28:52	Yes
Mean:	0.05650	0.27739	0.0133				
SD:	0.00766	0.03760	0.0015				
%RSD:	13.554	13.554	11.48				

Sequence No.: 37 **Autosampler Location: 31**
Sample ID: E14-09153-001 **Date Collected: 9/26/2014 2:29:12 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09153-001

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.02930	0.16183	0.0086	0.0104	0.0017	14:30:06	Yes
2	0.01961	0.10831	0.0064	0.0082	0.0013	14:30:38	Yes
3	0.01939	0.10712	0.0064	0.0081	0.0013	14:31:11	Yes
Mean:	0.02277	0.12575	0.0071				
SD:	0.00566	0.03125	0.0013				
%RSD:	24.850	24.850	17.78				

Sequence No.: 38 **Autosampler Location: 32**
Sample ID: E14-09139-006 **Date Collected: 9/26/2014 2:31:31 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09139-006

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.66182	0.21085	0.0106	0.0124	0.0020	14:32:25	Yes
2	0.44936	0.14316	0.0078	0.0096	0.0017	14:32:58	Yes
3	0.30321	0.09660	0.0059	0.0077	0.0015	14:33:31	Yes
Mean:	0.47147	0.15020	0.0081				
SD:	0.18032	0.05745	0.0023				
%RSD:	38.247	38.247	28.70				

Sequence No.: 39 **Autosampler Location: 33**
Sample ID: E14-09160-005x20 **Date Collected: 9/26/2014 2:33:51 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09160-005x20

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	55.805	15.626	0.6360	0.6377	0.1030	14:34:46	Yes
	Sample concentration is greater than that of the highest standard.						
2	39.524	11.067	0.4510	0.4528	0.0856	14:35:18	Yes
	Sample concentration is greater than that of the highest standard.						
3	36.572	10.240	0.4175	0.4193	0.0731	14:35:51	Yes
Mean:	43.967	12.311	0.5015				
SD:	10.358	2.9002	0.1177				
%RSD:	23.558	23.558	23.46				
	Sample concentration is greater than that of the highest standard.						

Sequence No.: 40 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 9/26/2014 2:36:33 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		2.2251	0.0923	0.0941	0.0162	14:37:26	Yes
2		0.96999	0.0414	0.0432	0.0072	14:37:59	Yes
3		4.4891	0.1842	0.1859	0.0416	14:38:32	Yes
Mean:		2.5614	0.1059				

SD:	1.7835	0.0724
%RSD:	69.630	68.30

QC value less than the lower limit for Hg 253.7 Recovery = 51.23%
QC Failed. Retry.

Sequence No.: 41 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 9/26/2014 2:38:52 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		6.0097	0.2458	0.2476	0.0495	14:39:45	Yes
2		6.0043	0.2456	0.2474	0.0494	14:40:17	Yes
3		6.0128	0.2460	0.2477	0.0495	14:40:50	Yes
Mean:		6.0090	0.2458				
SD:		0.00429	0.0002				
%RSD:		0.07142	0.07				

QC value greater than the upper limit for Hg 253.7 Recovery = 120.18%
QC Failed. Continue with analysis.

↑ recovery rounds to 120%, CCV passes

Sequence No.: 42 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/26/2014 2:41:10 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		-0.06267	-0.0005	0.0013	0.0002	14:42:02	Yes
2		-0.07048	-0.0008	0.0009	0.0001	14:42:37	Yes
3		-0.07863	-0.0012	0.0006	0.0001	14:43:14	Yes
Mean:		-0.07059	-0.0008				
SD:		0.00798	0.0003				
%RSD:		11.304	38.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

METALS PREP LOGS
STANDARD PREP LOGS

2014 PG: 455 METALS'S DIGESTION LOG

Date: 09/25/14 08:30

MATRIX: SOIL	PREP. SOLUTION	DATE	LOT #	ANALYSIS METHOD: 6020A	Hg DIG. DATE: 9/25/14
DIGESTION METHOD: 3050B	NaCl:	9/10/14	134874	Hg ANAL. METHOD: 7471B	
SPIKES: 1.0ml M482, M483	Hydroxylamine:	9/10/14	134386	LOT# HNO3: 141569	ICPMS ICV: M331
Hg DIGESTION METHOD: 7471B	KMnO4:	9/3/14	121666	LOT# H2SO4:135111	ICPMS Cal. Stds.: M327,M361
Hg SPIKE: 2.50 PPB M493-2	1:1 HNO3:	9/18/14		LOT# HCL: 137354	
Hg ICV: 2.50 PPB M455-1	AQUAREGIA:	9/25/14			

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (g)	BASE final vol ml	Hg (g)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						0.25	50			M493-2		
Hg	STD2 2.50 PPB						0.25	50			M493-2		
Hg	STD3 5.00 PPB						0.25	50			M493-2		
Hg	STD4 7.50 PPB						0.25	50			M493-2		
Hg	STD5 10.0 PPB						0.25	50			M493-2		
Hg	ICV 5.00 PPB						0.25	50			M455-1		
	BLKS140925-01			1	2.50	50	0.250	50			BMS1		
	LCSS140925-01			1	2.50	50	0.250	50			BSS1		
PPM	E14-09161-001		B	1.04	2.50	50	0.250	50	U1	10/6			
	E14-09161-001DUP		B	1.04	2.50	50	0.250	50	U1				
	E14-09161-001MS		B	1.04	2.50	50	0.250	50	U1				
TAL	E14-09160-001		B	1.28	2.41	50	0.270	50	U1	10/6	SEE ATTACH FOR METAL LIMIT		*
TAL	E14-09160-002		B	1.26	2.37	50	0.290	50	U1				
TAL	E14-09160-003		B	1.28	2.33	50	0.270	50	U1				
TAL	E14-09160-004		B	1.46	2.31	50	0.270	50	U1				
TAL	E14-09160-005		B	1.27	2.34	50	0.280	50	U1				
TAL	E14-09178-001		Y	1.10	2.39	50	0.280	50	U1	10/1			
TAL	E14-09167-001		Y	1.07	2.34	50	0.270	50	U1	10/6	HOLD		
TAL	E14-09167-002		Y	1.43	2.39	50	0.290	50	U1		HOLD		
TAL	E14-09144-001		Y	1.14	2.35	50	0.260	50	U1	10/1	HOLD		
TAL	E14-09145-001		Y	1.14	2.38	50	0.300	50	U1	10/1	HOLD		
TAL	E14-09146-001		Y	1.14	2.32	50	0.270	50	U1	10/1	HOLD		
TAL	E14-09147-001		Y	1.15	2.38	50	0.270	50	U1	10/1	HOLD		
TAL	E14-09148-001		Y	1.14	2.32	50	0.290	50	U1	10/1	HOLD		
TAL	E14-09149-001		Y	1.13	2.31	50	0.300	50	U1	10/1	HOLD		
TAL	E14-09150-001		Y	1.13	2.37	50	0.270	50	U1	10/1	HOLD		
TAL	E14-09151-001		Y	1.19	2.33	50	0.280	50	U1	10/1	HOLD		
TAL	E14-09152-001		Y	1.10	2.35	50	0.270	50	U1	10/1	HOLD		
TAL	E14-09153-001		Y	1.05	2.39	50	0.290	50	U1	10/1	HOLD		
As Be Cd Ca Cr Cu Pb Hg Mo Ni K Se Zn	E14-09139-006		N	16.9	10.32	50	0.270	50	U1	10/6	SEE ATTACH FOR METAL LIMIT; Sludge-mg/Kg		*

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	9/25/14 – 1700	Received by:	9/25/14 1700
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	9/25/14 – 1200	Received by:	9/25/14 1200
Relinquished by:		Received by:	
Disposal:			E14-09161 0463

	SAMPLE	2101		BLKS140925-01	1000
	SAMPLE	2102		LCSS140925-01	1000
	SAMPLE	2103		E14-09161-001	1040
	SAMPLE	2104		E14-09161-001DUP	1040
	SAMPLE	2105		E14-09161-001SD	5200
	SAMPLE	2106		E14-09161-001MS	1040
	SAMPLE	2107		E14-09161-001PS	832
	SAMPLE	2108		E14-09160-001	1327.801
	SAMPLE	2109		E14-09160-002	1329.114
	SAMPLE	2110		E14-09160-003	1373.391
	SAMPLE	2111		E14-09160-004	1580.087
	SAMPLE	2112		E14-09160-005	1356.838
	SAMPLE	2201		E14-09178-001	1150.628
	SAMPLE	2202		E14-09167-001	1143.162
	SAMPLE	2203		E14-09167-002	1495.816
	SAMPLE	2204		E14-09144-001	1212.766
	SAMPLE	2205		E14-09145-001	1197.479
	SAMPLE	2206		E14-09146-001	1228.448
	SAMPLE	2207		E14-09147-001	1207.983
	SAMPLE	2208		E14-09148-001	1228.448
	SAMPLE	2209		E14-09149-001	1222.944
	SAMPLE	2210		E14-09150-001	1191.983
	SAMPLE	2211		E14-09151-001	1276.824
	SAMPLE	2212		E14-09152-001	1170.213
	SAMPLE	2301		E14-09153-001	1098.326
	SAMPLE	2302		E14-09139-006	4093.992

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 091514

Standard Name	091514-01	091514-02	091514-03	091514-04	091514-05	091514-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	9/15/14	9/15/14	9/15/14	9/15/14	9/15/14	9/15/14
Standard Name	091514-07	091514-08	091514-09	091514-10	091514-11	091514-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	9/22/14	9/22/14	9/22/14	9/22/14	9/22/14	9/22/14
Standard Name	091514-13	091514-14	091514-15	091514-16	091514-17	091514-18
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	9/29/14	9/29/14	9/29/14	9/29/14	9/29/14	9/29/14
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK	DK		
Date	9/15/14	9/22/14	9/29/14		

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK	DK		
Date	9/15/14	9/22/14	9/29/14		

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK	DK		
Date	9/15/14	9/22/14	9/29/14		

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu,
Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-1	CL10-122YPY	M-490	2/28/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn;
5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-903	S120531006	M-433	12/2014	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S
20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-484	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL10-38YPY	M-488	2/28/15	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

DR
INITIAL

9/15/14
DATE

E14-09161 0466

TCLP
METALS

TCLP
METALS QC SUMMARY

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 457
SDG #: E14-09143, E14-09161, E14-09109, E14-09190, E14-09239, E14-09240

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			9/26/14 17:45		9/26/14 18:55		9/26/14 19:43			
	INST.	ICV & CCV	ICV		CCV		CCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	25.0	24.3	97.2	24.2	96.8	24.0	96.0		
Barium	0.500	25.0	24.4	97.6	24.3	97.2	24.2	96.8		
Cadmium	0.125	25.0	25.6	102	24.9	99.6	24.8	99.2		
Chromium	0.500	25.0	24.2	96.8	24.1	96.4	24.1	96.4		
Lead	0.250	25.0	22.9	91.6	22.6	90.4	23.2	92.8		
Mercury	0.150	5.00	5.41	108	5.35	107	5.30	106		
Nickel	0.500	25.0	24.5	98.0	23.8	95.2	24.0	96.0		
Selenium	0.500	25.0	23.3	93.2	23.4	93.6	23.3	93.2		
Silver	0.125	25.0	24.5	98.0	24.3	97.2	24.0	96.0		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION

Batch (Page) #: 457
SDG #: E14-09143, E14-09161, E14-09109, E14-09190, E14-09239, E14-09240

Matrix: TCLP Method: 6020A Concentration/Units: ppm (mg/L)

		9/26/14 18:07	9/26/14 19:04	9/26/14 19:52			
ANALYTE	INST. MDL	ICB	CCB	CCB			
Arsenic	0.0005	ND	ND	ND			
Barium	0.0005	ND	ND	ND			
Cadmium	0.000125	ND	ND	ND			
Chromium	0.0005	ND	ND	ND			
Lead	0.00025	ND	ND	ND			
Mercury	0.00015	ND	ND	ND			
Nickel	0.0005	ND	ND	ND			
Selenium	0.0005	ND	ND	ND			
Silver	0.000125	ND	ND	ND			

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

09/26/2014 06:20 PM

Batch (Page) #: 457
Associated Lab Case for Blank 1: E14-09109, E14-09143, E14-09161, E14-09190, E14-09239, E14-09240

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	REAGENT BLANK BLKT140926-01
Arsenic	0.100	ND
Barium	0.100	ND
Cadmium	0.025	ND
Chromium	0.100	ND
Lead	0.050	ND
Mercury	0.0003	ND
Nickel	0.100	ND
Selenium	0.100	ND
Silver	0.025	ND

Associated Sample for Blank 1:
09109-001; 09143-001; 09161-001; 09190-001
09239-001; 09240-001

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Instrument: Agilent7700
Batch (Page) #: 457
SDG #: E14-09143, E14-09161, E14-09109, E14-09190, E14-09239, E14-09240

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	TRUE		INITIAL FOUND			CONTROL
	SOL A	SOL B	SOL A	SOL A+B	%R	LIMIT %R
Chlorine	1000000	-	-	-	-	NA
Carbon	200000	-	-	-	-	NA
Aluminum	100000	-	94800	92700	92.7	NA
Calcium	100000	-	96800	94800	94.8	NA
Iron	100000	-	100000	97800	97.8	NA
Potassium	100000	-	98000	96500	96.5	NA
Magnesium	100000	-	95000	94300	94.3	NA
Sodium	100000	-	95400	95200	95.2	NA
Phosphorus	100000	-	-	-	-	NA
Sulfur	100000	-	-	-	-	NA
Molybdenum	2000	-	2350	2270	114	NA
Titanium	2000	-	2130	2070	104	NA
Silver	-	20.0	-	22.1	111	80-120
Arsenic	-	20.0	-	22.0	110	80-120
Cadmium	-	20.0	-	21.0	105	80-120
Cobalt	-	20.0	-	21.6	108	80-120
Chromium	-	20.0	-	21.8	109	80-120
Copper	-	20.0	-	21.5	108	80-120
Manganese	-	20.0	-	22.5	113	80-120
Nickel	-	20.0	-	21.0	105	80-120
Zinc	-	20.0	-	20.8	104	80-120

%R = Percent Recovery

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Batch (Page) #: 457
SDG #: E14-09109, E14-09143, E14-09161, E14-09190, E14-09239, E14-09240

Matrix: TCLP Unit: ppm (mg/L)

ANALYTE	LCST140926-01 TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	4.00	4.67	117			
Barium	4.00	4.72	118			
Cadmium	4.00	4.68	117			
Chromium	4.00	4.63	116			
Lead	4.00	4.51	113			
Mercury	0.010	0.010	100			
Nickel	4.00	4.79	120			
Selenium	4.00	4.75	119			
Silver	4.00	4.52	113			

(1) Control Limits % Recovery = 80-120%

LCST140926-01 9/26/14 18:25

09109-001; 09143-001; 09161-001; 09190-001
09239-001; 09240-001

METALS QUALITY CONTROL

LOW LEVEL INITIAL & CONTINUING CALIBRATION VERIFICATION

Batch (Page) #: 457
SDG #: E14-09143, E14-09161, E14-09109, E14-09190, E14-09239, E14-09240

Matrix: TCLP Method: 6020A Units: ppb (ug/L)

			9/26/14 17:50		9/26/14 19:00		9/26/14 19:48			
	INST.	ICV & CCV	LLICV		LLCCV		LLCCV			
ANALYTE	MDL	TRUE	FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	0.500	0.516	103	0.465	93.0	0.558	112		
Barium	0.500	0.500	0.480	96.0	0.474	94.8	0.495	99.0		
Cadmium	0.125	0.500	0.532	106	0.478	95.6	0.507	101		
Chromium	0.500	0.500	0.517	103	0.495	99.0	0.562	112		
Lead	0.250	0.500	0.481	96.2	0.485	97.0	0.472	94.4		
Nickel	0.500	0.500	0.558	112	0.509	102	0.495	99.0		
Selenium	0.500	0.500	0.467	93.4	0.516	103	0.531	106		
Silver	0.125	0.500	0.432	86.4	0.451	90.2	0.413	82.6		

(1) Control Limits: 70-130

METALS QUALITY CONTROL
SPIKE SAMPLE RECOVERY

Batch (Page) #: 457
SDG #: E14-09109, E14-09143, E14-09161, E14-09190, E14-09239, E14-09240

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	9/26/14 18:42 SSR1	9/26/14 18:29 SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	4.44	ND	111	4.00					75-125
Barium	5.96	1.37	115	4.00					75-125
Cadmium	4.69	ND	117	4.00					75-125
Chromium	4.33	ND	108	4.00					75-125
Lead	4.48	ND	112	4.00					75-125
Mercury	0.010	ND	100	0.010					75-125
Nickel	4.51	ND	113	4.00					75-125
Selenium	4.38	ND	110	4.00					75-125
Silver	4.47	ND	112	4.00					75-125

SSR = Spike Sample Result
SR = Sample Result
SA = Spike Added
%R = Percent Recovery
NC = Non-calculable % R; Spike sample concentration > 4 x Spike Concentration.

QC Sample 1: E14-09143-001
% Solids: NA
QC Sample 1 for following samples:
09109-001; 09143-001; 09161-001; 09190-001
09239-001; 09240-001

QC Sample 2: _____
% Solids: _____
QC Sample 2 for following samples:

METALS QUALITY CONTROL
DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 457
SDG #: E14-09109, E14-09143, E14-09161, E14-09190, E14-09239, E14-09240

Matrix: TCLP Concentration/Units: ppm (mg/L)

ANALYTE	CONTROL LIMIT 1	9/26/14 18:29 S1	9/26/14 18:33 D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Barium	20	1.37	1.39	1.45				
Cadmium	NA	ND	ND	NC				
Chromium	NA	ND	ND	NC				
Lead	NA	ND	ND	NC				
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				

S1 = Sample 1
D1 = Duplicate 1
NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

S2 = Sample 2
D2 = Duplicate 2

QC Sample 1: E14-09143-001
% Solids: NA
QC Sample 1 for following samples:
09109-001; 09143-001; 09161-001; 09190-001
09239-001; 09240-001

QC Sample 2:
% Solids:
QC Sample 2 for following samples:

METALS QUALITY CONTROL
SERIAL DILUTIONS & POST SPIKES 1

Batch (Page) #: 457
SDG #: E14-09109, E14-09143, E14-09161, E14-09190, E14-09239, E14-09240

Matrix: TCLP Concentration/Units: ppm (mg/L)

	SERIAL DILUTION			POST SPIKE		
ANALYTE	9/26/14 18:29 SR	9/26/14 18:38 SDR	% Difference	9/26/14 18:46 SPR	SA	% Recovery
Arsenic	ND	ND	NC	4.41	4.00	110
Barium	1.37	1.36	0.733	5.97	4.00	115.0
Cadmium	ND	ND	NC	4.70	4.00	118
Chromium	ND	ND	NC	4.32	4.00	108
Lead	ND	ND	NC	4.46	4.00	112
Nickel	ND	ND	NC	4.49	4.00	112
Selenium	ND	ND	NC	4.56	4.00	114
Silver	ND	ND	NC	4.51	4.00	113

SR = Sample Result
SDR = Sample Dilution Result
SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 80-120% Recovery

QC Sample1: E14-09143-001
QC Sample 1 for following samples:
09109-001; 09143-001; 09161-001; 09190-001
09239-001; 09240-001

Tune Report

Batch Folder D:\Data\6020\pg457.b
Report Comment
Instrument Name G3281A JP12382037

[1]

Mass	Range	Count	RSD%	Background
59		8255		
89		6165		
205		16917		

Integration Time [sec] 0.1

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	-5.0 V	Omega Lens	8.3 V	Deflect	2.6 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	true	OctP Bias	-18.0 V	Energy Discrimination	5.0 V
He Flow	4.1 mL/min	OctP RF	190 V		

[2]

Mass	Range	Count	RSD%	Background
7		12427		
89		47769		
205		25475		
59		31240		

Integration Time [sec] 0.1

Mass	Peak Height	Axis	W-50%	W-X%
7	2014.52	6.95	0.65	0.736
89	8271.15	89.00	0.60	0.726
205	4729.27	205.00	0.56	0.724
59	5104.89	58.95	0.65	0.764

X = 10 **Integration Time [sec]** 0.1 **Acquisition Time [sec]** 30.02 **Y Axis** Linear

Tune Parameters
Plasma Paramters

Plasma Mode General Purpose
Lenses Parameters

Extract 1	2.1 V	Omega Lens	7.1 V	Deflect	14.0 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-45 V
Omega Bias	-65 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	false	OctP Bias	-8.0 V	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP RF	120 V		

E14-09161 0478

METALS INTERNAL STANDARD AREA SUMMARY
2014 PG457
September 26, 2014
Method: 6020A

	ISTD	Li-6 [2]		Ge-72 [1]		Ge-72 [2]		Rh-103 [2]		Tb-159 [2]		Bi-209 [2]		
003CALB.d	BLANK	722706		56204		475317		2995533		3652855		2138775		
		Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	Area Count	% Rec	
	Lower Limit	505894	70	39343	70	332722	70	2096873	70	2556998	70	1497142	70	
	Upper Limit	867247	120	67445	120	570380	120	3594640	120	4383426	120	2566530	120	
004CALS.d	STD1	739509	102	56244	100	458695	97	2884034	96	3534967	97	2062254	96	
005CALS.d	STD2	767839	106	56252	100	476741	100	3011826	101	3677421	101	2139579	100	
006CALS.d	STD3	761150	105	56531	101	477752	101	3002881	100	3680842	101	2142921	100	
007CALS.d	STD4	753444	104	56455	100	472265	99	2983978	100	3691892	101	2149771	101	
008CALS.d	STD5	749778	104	55113	98	473457	100	2980738	100	3725287	102	2162971	101	
010_CCV.d	ICV	755967	105	56484	100	474247	100	3014013	101	3702726	101	2150830	101	
011LCCV.d	LLICV	759963	105	54127	96	477714	101	3046892	102	3721747	102	2164570	101	
012_ICB.d	ICB	768745	106	57579	102	483986	102	3066762	102	3753718	103	2180357	102	
013SMPL.d	TCLP140924	758404	105	55486	99	480046	101	3038343	101	3701871	101	2171709	102	
014SMPL.d	TCLP140925	761673	105	57249	102	484107	102	3042007	102	3726897	102	2178021	102	
015SMPL.d	BLKT140926-01	757066	105	56161	100	479223	101	3033561	101	3708899	102	2141339	100	
016SMPL.d	LCST140926-01	757233	105	54245	97	478633	101	3027565	101	3738299	102	2150506	101	
017SMPL.d	E14-09143-001	763519	106	57847	103	479835	101	3024072	101	3736967	102	2180434	102	
018SMPL.d	E14-09143-001DUP	755912	105	56367	100	476355	100	2997319	100	3708337	102	2161016	101	
019SMPL.d	E14-09143-001SD	755987	105	57135	102	481853	101	3037499	101	3716168	102	2179447	102	
020SMPL.d	E14-09143-001MS	747230	103	57509	102	472667	99	2986134	100	3698605	101	2144121	100	
021SMPL.d	E14-09143-001PS	755187	104	57526	102	474927	100	3008943	100	3706266	101	2157014	101	
022SMPL.d	E14-09161-001	754207	104	54580	97	477002	100	2993194	100	3693807	101	2159503	101	
023_CCV.d	CCV	756940	105	57444	102	475114	100	3013848	101	3736316	102	2149578	101	
024LCCV.d	LLCCV	756770	105	56391	100	479334	101	3041267	102	3721751	102	2161047	101	
025_CCB.d	CCB	761796	105	57220	102	479000	101	3030516	101	3714896	102	2165641	101	
026SMPL.d	E14-09109-001	758661	105	57211	102	480292	101	3023231	101	3738311	102	2174069	102	
027SMPL.d	E14-09190-001	758076	105	55490	99	481086	101	3022009	101	3728610	102	2152328	101	
028SMPL.d	E14-09239-001	753495	104	57817	103	475318	100	2972564	99	3710345	102	2168717	101	
029SMPL.d	E14-09240-001	749756	104	56363	100	471472	99	2983767	100	3730716	102	2175275	102	
031CSA.d	ICSA	673743	93	56639	101	502510	106	2572294	86	3558200	97	1908862	89	
032CSB.d	ICSAB	681625	94	57774	103	527131	111	2685171	90	3638473	100	1922994	90	
033_CCV.d	FINAL CCV	762321	105	57698	103	489235	103	3095908	103	3844121	105	2208589	103	
034LCCV.d	FINAL LLCCV	747838	103	53705	96	494200	104	3105475	104	3836736	105	2230721	104	
035_CCB.d	FINAL CCB	691462	96	56838	101	489320	103	3085265	103	3817187	104	2207339	103	

A* in last column indicates the analysis has failed QC criteria
Sample Limits = 70-120% of reference Standard (CAL BLANK L1)
QC Sample Limits = 80-120% of reference Standard (CAL BLANK L1)

[1] = [He]; [2] = [No Gas]
Ge-72 [1] = Na,Mg,Al,Si,K,Ca,Ti,V,Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se
Li-6 [2] = Be,B; Ge-72 [2] = Cd; Rh-103 [2] = Mo,Ag,Sn; Tb-159 [2] = Sb,Ba

67-LIMS-10-14

METALS QUALITY CONTROL

TUMBLE BLANK RESULTS SUMMARY

Batch (Page) #: 457
Associated Lab Case: 09109, 09143, 09161

Matrix: TCLP Unit: ppm (mg/L) Method: 6020A

ANALYTE	SAMPLE MDL	TCLP140924 BLANK
Arsenic	0.1	ND
Barium	0.1	ND
Cadmium	0.025	ND
Chromium	0.1	ND
Lead	0.05	ND
Mercury	0.0003	ND
Nickel	0.1	ND
Selenium	0.1	ND
Silver	0.025	ND

Associated Sample ID:

09109-001, 09143-001, 09161-001

TCLP
METALS RAW DATA

	SAMPLE	2101		TCLP140924	200
	SAMPLE	2102		TCLP140925	200
	SAMPLE	2103		BLKT140926-01	200
	SAMPLE	2104		LCST140926-01	200
	SAMPLE	2105		E14-09143-001	200
	SAMPLE	2106		E14-09143-001DUP	200
	SAMPLE	2107		E14-09143-001SD	1000
	SAMPLE	2108		E14-09143-001MS	200
	SAMPLE	2109		E14-09143-001PS	200
	SAMPLE	2110		E14-09161-001	200
	SAMPLE	2111		E14-09109-001	200
	SAMPLE	2112		E14-09190-001	200
	SAMPLE	2201		E14-09239-001	200
	SAMPLE	2202		E14-09240-001	200

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:15:18-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	14211	0.00
Mg	24	1	1	476	2.36
Al	27	1	1	249	3.46
K	39	1	1	31691	0.01
Ca	44	1	1	469	1.06
Ti	47	1	1	6	624.54
V	51	1	1	2531	0.35
Cr	52	1	1	2072	0.08
Mn	55	1	1	1889	0.77
Fe	56	1	1	13162	0.02
Co	59	1	1	74	33.12
Ni	60	1	1	697	1.85
Cu	63	1	1	16770	0.01
Zn	66	1	1	1250	0.92
As	75	1	1	46	24.54
Se	78	1	1	34	85.87
Be	9	2	2	33	299.94
B	11	2	2	24900	0.01
Mo	95	2	2	348	6.63
Ag	107	2	2	404	14.71
Cd	111	2	2	7	1169.25
Sn	118	2	2	2749	0.37
Sb	121	2	2	178	19.57
Ba	137	2	2	367	3.60
Tl	205	2	2	600	4.04
Pb	208	2	2	582	2.51

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	1	56204	0.65
Li	6	2	2	722706	10.25
Ge	72	2	2	475317	0.67
Rh	103	2	2	2995533	0.35
Tb	159	2	2	3652855	0.08
Bi	209	2	2	2138775	0.20

Calibration Standard Report

Sample Table

Sample Name	STD1
Data File Name	004CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:19:36-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	19379	0.00
Mg	24	1	1	3243	0.14
Al	27	1	1	442	2.22
K	39	1	1	33629	0.01
Ca	44	1	1	561	3.06
Ti	47	1	1	127	26.53
V	51	1	1	5667	0.03
Cr	52	1	1	5909	0.05
Mn	55	1	1	2458	0.12
Fe	56	1	1	43922	0.00
Co	59	1	1	6761	0.02
Ni	60	1	1	2695	0.15
Cu	63	1	1	21686	0.00
Zn	66	1	1	1452	0.09
As	75	1	1	554	1.23
Se	78	1	1	69	42.34
Be	9	2	2	2664	0.22
B	11	2	2	26410	0.01
Mo	95	2	2	6532	0.06
Ag	107	2	2	9568	0.06
Cd	111	2	2	2953	0.17
Sn	118	2	2	12318	0.04
Sb	121	2	2	12952	0.04
Ba	137	2	2	4902	0.12
Tl	205	2	2	23698	0.02
Pb	208	2	2	17136	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56244	0.93	56204	100.07	70	120	
Li	6	2	2	739509	2.79	722706	102.32	70	120	
Ge	72	2	2	458695	3.86	475317	96.50	70	120	
Rh	103	2	2	2884034	3.77	2995533	96.28	70	120	
Tb	159	2	2	3534967	3.94	3652855	96.77	70	120	
Bi	209	2	2	2062254	4.24	2138775	96.42	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2
Data File Name	005CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:23:59-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	81431	0.00
Mg	24	1	1	27430	0.01
Al	27	1	1	2110	0.13
K	39	1	1	64907	0.00
Ca	44	1	1	4713	0.07
Ti	47	1	1	905	0.54
V	51	1	1	33705	0.00
Cr	52	1	1	41700	0.00
Mn	55	1	1	25853	0.00
Fe	56	1	1	338169	0.00
Co	59	1	1	67901	0.00
Ni	60	1	1	19892	0.00
Cu	63	1	1	65822	0.00
Zn	66	1	1	35113	0.00
As	75	1	1	5143	0.04
Se	78	1	1	320	5.76
Be	9	2	2	27635	0.01
B	11	2	2	42212	0.01
Mo	95	2	2	63118	0.00
Ag	107	2	2	91708	0.01
Cd	111	2	2	30992	0.01
Sn	118	2	2	96748	0.00
Sb	121	2	2	130177	0.00
Ba	137	2	2	47030	0.00
Tl	205	2	2	237247	0.00
Pb	208	2	2	168035	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56252	3.16	56204	100.09	70	120	
Li	6	2	2	767839	0.53	722706	106.25	70	120	
Ge	72	2	2	476741	0.70	475317	100.30	70	120	
Rh	103	2	2	3011826	0.54	2995533	100.54	70	120	
Tb	159	2	2	3677421	0.72	3652855	100.67	70	120	
Bi	209	2	2	2139579	0.16	2138775	100.04	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3
Data File Name	006CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:28:16-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	251863	0.00
Mg	24	1	1	127496	0.00
Al	27	1	1	5878	0.03
K	39	1	1	147562	0.00
Ca	44	1	1	6952	0.00
Ti	47	1	1	4546	0.11
V	51	1	1	158768	0.00
Cr	52	1	1	201031	0.00
Mn	55	1	1	104553	0.00
Fe	56	1	1	1628599	0.00
Co	59	1	1	342889	0.00
Ni	60	1	1	96228	0.00
Cu	63	1	1	278137	0.00
Zn	66	1	1	38039	0.00
As	75	1	1	26242	0.01
Se	78	1	1	1565	0.44
Be	9	2	2	139990	0.00
B	11	2	2	110083	0.00
Mo	95	2	2	316654	0.00
Ag	107	2	2	507250	0.00
Cd	111	2	2	159451	0.00
Sn	118	2	2	455943	0.00
Sb	121	2	2	657800	0.00
Ba	137	2	2	237462	0.00
Tl	205	2	2	1139578	0.00
Pb	208	2	2	850843	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56531	16.21	56204	100.58	70	120	
Li	6	2	2	761150	0.70	722706	105.32	70	120	
Ge	72	2	2	477752	0.64	475317	100.51	70	120	
Rh	103	2	2	3002881	0.12	2995533	100.25	70	120	
Tb	159	2	2	3680842	0.26	3652855	100.77	70	120	
Bi	209	2	2	2142921	0.39	2138775	100.19	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4
Data File Name	007CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:32:40-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	466441	0.00
Mg	24	1	1	242415	0.00
Al	27	1	1	10785	0.01
K	39	1	1	251065	0.00
Ca	44	1	1	12353	0.01
Ti	47	1	1	8862	0.01
V	51	1	1	298645	0.00
Cr	52	1	1	379081	0.00
Mn	55	1	1	197993	0.00
Fe	56	1	1	3092568	0.00
Co	59	1	1	653463	0.00
Ni	60	1	1	184044	0.00
Cu	63	1	1	510292	0.00
Zn	66	1	1	69628	0.00
As	75	1	1	49903	0.00
Se	78	1	1	3112	0.02
Be	9	2	2	263452	0.00
B	11	2	2	183540	0.00
Mo	95	2	2	601023	0.00
Ag	107	2	2	961580	0.00
Cd	111	2	2	299239	0.00
Sn	118	2	2	866768	0.00
Sb	121	2	2	1272956	0.00
Ba	137	2	2	446714	0.00
Tl	205	2	2	2336263	0.00
Pb	208	2	2	1733374	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56455	0.99	56204	100.45	70	120	
Li	6	2	2	753444	1.09	722706	104.25	70	120	
Ge	72	2	2	472265	0.50	475317	99.36	70	120	
Rh	103	2	2	2983978	0.21	2995533	99.61	70	120	
Tb	159	2	2	3691892	0.41	3652855	101.07	70	120	
Bi	209	2	2	2149771	0.62	2138775	100.51	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD5
Data File Name	008CALS.d
Data Path Name	D:\Data\6020\p
Acq Date Time	2014-09-26T17:36:59-04:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Na	23	1	1	948770	0.00
Mg	24	1	1	503453	0.00
Al	27	1	1	21909	0.01
K	39	1	1	486708	0.00
Ca	44	1	1	25645	0.00
Ti	47	1	1	18206	0.00
V	51	1	1	615819	0.00
Cr	52	1	1	782961	0.00
Mn	55	1	1	417204	0.00
Fe	56	1	1	6427546	0.00
Co	59	1	1	1349923	0.00
Ni	60	1	1	377975	0.00
Cu	63	1	1	1031987	0.00
Zn	66	1	1	144239	0.00
As	75	1	1	102502	0.00
Se	78	1	1	5990	0.05
Be	9	2	2	543561	0.00
B	11	2	2	364410	0.00
Mo	95	2	2	1268136	0.00
Ag	107	2	2	2059519	0.00
Cd	111	2	2	617091	0.00
Sn	118	2	2	1963688	0.00
Sb	121	2	2	2727873	0.00
Ba	137	2	2	936147	0.00
Tl	205	2	2	4910746	0.00
Pb	208	2	2	3617133	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	55113	0.96	56204	98.06	70	120	
Li	6	2	2	749778	0.29	722706	103.75	70	120	
Ge	72	2	2	473457	1.05	475317	99.61	70	120	
Rh	103	2	2	2980738	0.43	2995533	99.51	70	120	
Tb	159	2	2	3725287	0.48	3652855	101.98	70	120	
Bi	209	2	2	2162971	0.56	2138775	101.13	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	ICV
Data File Name	010_CCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T17:45:42-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	252.692	ppb	0.697	254155	1.27	250	101.1	90	110	
Mg	24	1	1	254.428	ppb	1.584	130166	1.59	250	101.8	90	110	
Al	27	1	1	23.954	ppb	1.504	5533	2.05	25	95.8	90	110	
Si	28	1	1	534.694	ppb	4.663	49071	3.56	250	213.9	90	110	> +-10%
K	39	1	1	254.145	ppb	0.877	149337	0.97	250	101.7	90	110	
Ca	44	1	1	230.073	ppb	0.869	6354	1.39	250	92.0	90	110	
Ti	47	1	1	24.266	ppb	3.255	4487	2.94	25	97.1	90	110	
V	51	1	1	24.426	ppb	0.764	154509	0.47	25	97.7	90	110	
Cr	52	1	1	24.214	ppb	0.923	193881	0.80	25	96.9	90	110	
Mn	55	1	1	23.545	ppb	1.462	100576	0.85	25	94.2	90	110	
Fe	56	1	1	251.202	ppb	0.863	1645156	0.55	250	100.5	90	110	
Co	59	1	1	24.243	ppb	0.757	332119	0.40	25	97.0	90	110	
Ni	60	1	1	24.459	ppb	0.843	94388	0.63	25	97.8	90	110	
Cu	63	1	1	24.379	ppb	0.598	268384	0.34	25	97.5	90	110	
Zn	66	1	1	23.628	ppb	1.695	35724	1.01	25	94.5	90	110	
As	75	1	1	24.288	ppb	2.782	25323	2.19	25	97.2	90	110	
Se	78	1	1	23.327	ppb	2.599	1462	2.66	25	93.3	90	110	
Be	9	2	2	24.509	ppb	1.471	133528	1.47	25	98.0	90	110	
B	11	2	2	26.104	ppb	1.512	113897	0.36	25	104.4	90	110	
Mo	95	2	2	24.338	ppb	0.680	309028	0.70	25	97.4	90	110	
Ag	107	2	2	24.514	ppb	0.968	755161	0.51	25	98.1	90	110	
Cd	111	2	2	25.555	ppb	1.125	157317	1.26	25	102.2	90	110	
Sn	118	2	2	23.638	ppb	2.128	458871	1.27	25	94.6	90	110	
Sb	121	2	2	24.364	ppb	1.032	652594	0.70	25	97.5	90	110	
Ba	137	2	2	24.353	ppb	1.523	228792	1.26	25	97.4	90	110	
Tl	205	2	2	23.634	ppb	1.443	1141518	0.94	25	94.5	90	110	
Pb	208	2	2	22.854	ppb	0.987	814718	0.35	25	91.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56484	0.62	56204	100.50	70	120	
Li	6	2	2	755967	1.02	722706	104.60	70	120	
Ge	72	2	2	474247	1.05	475317	99.77	70	120	
Rh	103	2	2	3014013	0.91	2995533	100.62	70	120	
Tb	159	2	2	3702726	0.38	3652855	101.37	70	120	
Bi	209	2	2	2150830	1.06	2138775	100.56	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV
Data File Name	011LCCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T17:50:06-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	6.297	30.230	19322	0.83	5	125.9	70	130	
Mg	24	1	1	5.064	12.091	2916	1.89	5	101.3	70	130	
Al	27	1	1	0.507	133.278	293	16.97	0.5	101.3	70	130	
K	39	1	1	6.309	74.213	34368	0.23	5	126.2	70	130	
Ca	44	1	1	4.819	43.501	570	13.06	5	96.4	70	130	
Ti	47	1	1	0.567	27.249	106	27.23	0.5	113.5	70	130	
V	51	1	1	0.363	20.446	4581	3.82	0.5	72.6	70	130	
Cr	52	1	1	0.517	9.810	5900	2.42	0.5	103.4	70	130	
Mn	55	1	1	0.430	26.724	2393	2.16	0.5	86.0	70	130	
Fe	56	1	1	4.910	14.150	43019	2.19	5	98.2	70	130	
Co	59	1	1	0.534	13.861	7032	5.37	0.5	106.8	70	130	
Ni	60	1	1	0.558	15.108	2705	5.88	0.5	111.6	70	130	
Cu	63	1	1	0.520	42.319	18858	2.09	0.5	104.0	70	130	
Zn	66	1	1	0.584	11.223	1187	9.21	0.5	116.9	70	130	
As	75	1	1	0.516	8.338	557	6.75	0.5	103.1	70	130	
Se	78	1	1	0.467	34.507	73	25.31	0.5	93.4	70	130	
Be	9	2	2	0.513	5.866	2841	5.19	0.5	102.6	70	130	
B	11	2	2	1.197	14.245	30403	1.68	0.5	239.5	70	130	> +- 30%
Mo	95	2	2	0.497	6.990	6728	6.53	0.5	99.4	70	130	
Ag	107	2	2	0.432	5.438	9972	4.79	0.5	86.5	70	130	
Cd	111	2	2	0.532	5.717	3308	4.86	0.5	106.5	70	130	
Sn	118	2	2	0.462	0.464	11807	0.25	0.5	92.4	70	130	
Sb	121	2	2	0.506	3.581	13801	3.29	0.5	101.2	70	130	
Ba	137	2	2	0.480	4.430	4924	3.70	0.5	96.0	70	130	
Tl	205	2	2	0.645	1.486	31944	0.71	0.5	129.0	70	130	
Pb	208	2	2	0.481	1.471	17209	1.28	0.5	96.3	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	54127	8.00	56204	96.31	70	120	
Li	6	2	2	759963	0.67	722706	105.16	70	120	
Ge	72	2	2	477714	1.04	475317	100.50	70	120	
Rh	103	2	2	3046892	0.44	2995533	101.71	70	120	
Tb	159	2	2	3721747	0.57	3652855	101.89	70	120	
Bi	209	2	2	2164570	0.91	2138775	101.21	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	012_ICB.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:07:52-04:00
Sample Type	6-ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.182	ppb	40.0	15029	1.0	5	
Mg	24	1	1	0.448	ppb	18.3	720	5.5	5	
Al	27	1	1	0.254	ppb	49.2	398	17.7	0.5	
K	39	1	1	-0.296	ppb	-138.0	32046	1.1	5	
Ca	44	1	1	2.684	ppb	13.8	568	1.5	5	
Ti	47	1	1	-0.007	ppb	-159.3	4	43.4	0.5	
V	51	1	1	-0.122	ppb	-8.6	1818	3.1	0.5	
Cr	52	1	1	-0.005	ppb	-433.5	2084	8.8	0.5	
Mn	55	1	1	-1.057	ppb	-6.1	718	9.7	0.5	
Fe	56	1	1	0.041	ppb	82.1	13757	1.9	5	
Co	59	1	1	0.000	ppb	-89.2	74	2.6	0.5	
Ni	60	1	1	0.005	ppb	119.8	744	4.2	0.5	
Cu	63	1	1	-0.100	ppb	-10.0	14361	1.5	0.5	
Zn	66	1	1	0.151	ppb	28.4	1563	5.6	0.5	
As	75	1	1	-0.015	ppb	-66.8	31	32.7	0.5	
Se	78	1	1	0.054	ppb	486.4	40	58.3	0.5	
Be	9	2	2	-0.001	ppb	-84.8	26	24.8	0.5	
B	11	2	2	0.120	ppb	129.7	27075	2.0	0.5	
Mo	95	2	2	0.000	ppb	-656.3	352	9.1	0.5	
Ag	107	2	2	-0.005	ppb	-76.7	311	25.8	0.5	
Cd	111	2	2	0.001	ppb	89.3	15	43.3	0.5	
Sn	118	2	2	0.290	ppb	9.4	8500	6.3	0.5	
Sb	121	2	2	-0.001	ppb	-128.3	167	13.3	0.5	
Ba	137	2	2	0.005	ppb	128.8	419	13.1	0.5	
Tl	205	2	2	0.044	ppb	12.1	2786	9.3	0.125	
Pb	208	2	2	0.000	ppb	-742.3	589	5.0	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	57579	0.66	56204	102.45	70	120	
Li	6	2	2	768745	0.30	722706	106.37	70	120	
Ge	72	2	2	483986	0.72	475317	101.82	70	120	
Rh	103	2	2	3066762	0.41	2995533	102.38	70	120	
Tb	159	2	2	3753718	0.93	3652855	102.76	70	120	
Bi	209	2	2	2180357	0.16	2138775	101.94	70	120	

Sample Report

Sample Table

Sample Name	TCLP140924
Data File Name	013SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:12:11-04:00
Sample Type	Sample
Dilution	200
Comment	457;;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1.105	221.072	ppb	89.50	15031	50000	
Mg	24	72	1	1	1.408	281.593	ppb	10.54	1173	50000	
Al	27	72	1	1	0.464	92.703	ppb	55.06	344	20000	
Si	28	72	1	1	-29.647	-5929.390	ppb	-37.91	14680	100000	
K	39	72	1	1	-0.100	-20.062	ppb	-3576.44	31193	50000	
Ca	44	72	1	1	-1.420	-284.087	ppb	-146.17	426	150000	
Ti	47	72	1	1	-0.012	-2.452	ppb	-253.31	3	15000	
V	51	72	1	1	-0.123	-24.700	ppb	-5.79	1745	20000	
Cr	52	72	1	1	0.008	1.684	ppb	52.46	2111	20000	
Mn	55	72	1	1	-0.393	-78.679	ppb	-0.65	244	20000	
Fe	56	72	1	1	-0.257	-51.472	ppb	-32.30	11336	50000	
Co	59	72	1	1	-0.001	-0.122	ppb	-111.56	66	20000	
Ni	60	72	1	1	-0.019	-3.862	ppb	-131.23	616	20000	
Cu	63	72	1	1	-0.369	-73.808	ppb	-17.79	12795	20000	
Zn	66	72	1	1	-0.544	-108.708	ppb	-6.36	454	15000	
As	75	72	1	1	-0.020	-4.013	ppb	-23.34	24	20000	
Se	78	72	1	1	-0.061	-12.115	ppb	-361.75	30	20000	
Be	9	6	2	2	0.005	1.096	ppb	42.01	63	20000	
B	11	6	2	2	-0.535	-107.073	ppb	-20.64	24503	15000	
Mo	95	103	2	2	-0.003	-0.657	ppb	-99.17	311	20000	
Ag	107	103	2	2	-0.006	-1.283	ppb	-20.15	211	1000	
Cd	111	72	2	2	0.001	0.115	ppb	306.85	11	15000	
Sn	118	103	2	2	-0.002	-0.442	ppb	-327.35	2745	15000	
Sb	121	159	2	2	-0.003	-0.654	ppb	-19.58	93	20000	
Ba	137	103	2	2	0.004	0.892	ppb	303.54	415	20000	
Tl	205	209	2	2	0.038	7.532	ppb	4.52	2445	20000	
Pb	208	209	2	2	-0.004	-0.832	ppb	-48.35	441	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	55486	4.89	56204	98.72	70	120	
Li	6	2	758404	0.39	722706	104.94	70	120	
Ge	72	2	480046	1.04	475317	100.99	70	120	
Rh	103	2	3038343	0.98	2995533	101.43	70	120	
Tb	159	2	3701871	0.31	3652855	101.34	70	120	
Bi	209	2	2171709	0.54	2138775	101.54	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	TCLP140925
Data File Name	014SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:16:34-04:00
Sample Type	Sample
Dilution	200
Comment	457;;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	0.720	144.059	ppb	80.24	15164	50000	
Mg	24	72	1	1	1.760	352.060	ppb	7.82	1393	50000	
Al	27	72	1	1	0.316	63.189	ppb	56.12	324	20000	
Si	28	72	1	1	-45.385	-9076.947	ppb	-14.98	14204	100000	
K	39	72	1	1	-0.175	-35.053	ppb	-984.28	32193	50000	
Ca	44	72	1	1	-0.980	-195.900	ppb	-49.77	452	150000	
Ti	47	72	1	1	-0.018	-3.676	ppb	-111.30	2	15000	
V	51	72	1	1	-0.121	-24.129	ppb	-15.73	1819	20000	
Cr	52	72	1	1	0.002	0.341	ppb	182.61	2125	20000	
Mn	55	72	1	1	-0.382	-76.359	ppb	-3.23	301	20000	
Fe	56	72	1	1	-0.270	-54.038	ppb	-24.38	11625	50000	
Co	59	72	1	1	0.000	-0.051	ppb	-393.21	72	20000	
Ni	60	72	1	1	-0.014	-2.804	ppb	-12.36	656	20000	
Cu	63	72	1	1	-0.450	-90.019	ppb	-9.67	12372	20000	
Zn	66	72	1	1	-0.546	-109.222	ppb	-2.54	466	15000	
As	75	72	1	1	-0.019	-3.746	ppb	-32.56	27	20000	
Se	78	72	1	1	-0.048	-9.632	ppb	-644.00	32	20000	
Be	9	6	2	2	0.004	0.820	ppb	148.57	56	20000	
B	11	6	2	2	-0.725	-144.932	ppb	-37.22	23966	15000	
Mo	95	103	2	2	-0.008	-1.593	ppb	-43.34	252	20000	
Ag	107	103	2	2	-0.006	-1.213	ppb	-35.83	222	1000	
Cd	111	72	2	2	0.002	0.349	ppb	209.90	19	15000	
Sn	118	103	2	2	0.009	1.759	ppb	78.10	2964	15000	
Sb	121	159	2	2	-0.001	-0.192	ppb	-113.09	156	20000	
Ba	137	103	2	2	-0.001	-0.282	ppb	-383.88	359	20000	
Tl	205	209	2	2	0.032	6.429	ppb	11.47	2182	20000	
Pb	208	209	2	2	-0.006	-1.129	ppb	-48.76	389	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	57249	1.31	56204	101.86	70	120	
Li	6	2	761673	0.79	722706	105.39	70	120	
Ge	72	2	484107	0.64	475317	101.85	70	120	
Rh	103	2	3042007	0.40	2995533	101.55	70	120	
Tb	159	2	3726897	0.23	3652855	102.03	70	120	
Bi	209	2	2178021	0.82	2138775	101.83	70	120	

TuneStep	TuneModeName
1	1
2	2

E14-09161 0493

Sample Report

Sample Table

Sample Name	BLKT140926-01
Data File Name	015SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:20:52-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1.238	247.508	ppb	40.92	15369	50000	
Mg	24	72	1	1	1.406	281.124	ppb	11.07	1188	50000	
Al	27	72	1	1	0.431	86.219	ppb	8.88	343	20000	
Si	28	72	1	1	-37.880	-7576.097	ppb	-12.35	14386	100000	
K	39	72	1	1	0.409	81.864	ppb	224.62	31855	50000	
Ca	44	72	1	1	-3.877	-775.368	ppb	-17.25	370	150000	
Ti	47	72	1	1	-0.024	-4.829	ppb	-43.36	1	15000	
V	51	72	1	1	-0.103	-20.593	ppb	-12.05	1894	20000	
Cr	52	72	1	1	0.033	6.643	ppb	87.09	2333	20000	
Mn	55	72	1	1	-0.374	-74.873	ppb	-3.31	327	20000	
Fe	56	72	1	1	-0.215	-43.080	ppb	-9.56	11762	50000	
Co	59	72	1	1	0.001	0.179	ppb	276.51	87	20000	
Ni	60	72	1	1	-0.006	-1.218	ppb	-309.10	673	20000	
Cu	63	72	1	1	-0.405	-81.045	ppb	-2.55	12601	20000	
Zn	66	72	1	1	-0.532	-106.473	ppb	-10.10	477	15000	
As	75	72	1	1	-0.022	-4.499	ppb	-8.29	22	20000	
Se	78	72	1	1	0.019	3.867	ppb	324.16	36	20000	
Be	9	6	2	2	0.001	0.292	ppb	450.79	41	20000	
B	11	6	2	2	-0.767	-153.468	ppb	-21.24	23680	15000	
Mo	95	103	2	2	-0.003	-0.655	ppb	-144.76	311	20000	
Ag	107	103	2	2	-0.007	-1.424	ppb	-15.64	189	1000	
Cd	111	72	2	2	0.003	0.594	ppb	91.39	26	15000	
Sn	118	103	2	2	-0.001	-0.259	ppb	-613.26	2760	15000	
Sb	121	159	2	2	-0.001	-0.270	ppb	-170.40	144	20000	
Ba	137	103	2	2	0.004	0.759	ppb	263.55	407	20000	
Tl	205	209	2	2	0.030	5.902	ppb	6.55	2019	20000	
Pb	208	209	2	2	-0.008	-1.508	ppb	-24.81	315	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	56161	0.13	56204	99.92	70	120	
Li	6	2	757066	0.67	722706	104.75	70	120	
Ge	72	2	479223	0.60	475317	100.82	70	120	
Rh	103	2	3033561	0.73	2995533	101.27	70	120	
Tb	159	2	3708899	0.50	3652855	101.53	70	120	
Bi	209	2	2141339	0.57	2138775	100.12	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	LCST140926-01
Data File Name	016SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:25:15-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	137.001	27400.297	ppb	13.13	137406	50000	
Mg	24	72	1	1	116.235	23247.071	ppb	10.77	66233	50000	
Al	27	72	1	1	120.005	24000.911	ppb	12.10	27435	20000	
Si	28	72	1	1	-29.076	-5815.164	ppb	-104.48	14277	100000	
K	39	72	1	1	118.696	23739.286	ppb	17.93	91193	50000	
Ca	44	72	1	1	112.628	22525.692	ppb	14.06	3645	150000	
Ti	47	72	1	1	26.733	5346.612	ppb	12.12	4708	15000	
V	51	72	1	1	23.317	4663.486	ppb	11.48	157358	20000	
Cr	52	72	1	1	23.168	4633.595	ppb	11.37	205680	20000	
Mn	55	72	1	1	23.367	4673.338	ppb	11.52	102411	20000	
Fe	56	72	1	1	115.748	23149.668	ppb	12.29	846471	50000	
Co	59	72	1	1	23.423	4684.616	ppb	11.90	342575	20000	
Ni	60	72	1	1	23.960	4792.071	ppb	11.37	98702	20000	
Cu	63	72	1	1	23.244	4648.758	ppb	12.72	282159	20000	
Zn	66	72	1	1	22.412	4482.365	ppb	13.42	37475	15000	
As	75	72	1	1	23.374	4674.732	ppb	10.81	27063	20000	
Se	78	72	1	1	23.743	4748.548	ppb	5.88	1657	20000	
Be	9	6	2	2	23.908	4781.691	ppb	0.72	140846	20000	
B	11	6	2	2	-0.654	-130.864	ppb	-22.56	24066	15000	
Mo	95	103	2	2	24.594	4918.823	ppb	1.42	313668	20000	
Ag	107	103	2	2	22.576	4515.113	ppb	0.83	753595	1000	
Cd	111	72	2	2	23.406	4681.212	ppb	0.66	163204	15000	
Sn	118	103	2	2	0.011	2.212	ppb	13.15	2993	15000	
Sb	121	159	2	2	21.716	4343.299	ppb	0.18	684150	20000	
Ba	137	103	2	2	23.577	4715.393	ppb	2.11	240109	20000	
Tl	205	209	2	2	21.703	4340.609	ppb	1.19	1221293	20000	
Pb	208	209	2	2	22.549	4509.883	ppb	0.77	867405	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	54245	11.02	56204	96.52	70	120	
Li	6	2	757233	0.72	722706	104.78	70	120	
Ge	72	2	478633	0.92	475317	100.70	70	120	
Rh	103	2	3027565	0.60	2995533	101.07	70	120	
Tb	159	2	3738299	0.80	3652855	102.34	70	120	
Bi	209	2	2150506	0.18	2138775	100.55	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09143-001
Data File Name	017SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:29:33-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	5978.966	1195793.244	ppb	1.93	5826554	50000	
Mg	24	72	1	1	100.417	20083.331	ppb	1.91	52906	50000	
Al	27	72	1	1	2.176	435.149	ppb	7.74	748	20000	
Si	28	72	1	1	-15.599	-3119.728	ppb	-67.28	16195	100000	
K	39	72	1	1	10.213	2042.587	ppb	10.93	37452	50000	
Ca	44	72	1	1	210.850	42169.909	ppb	1.26	6004	150000	
Ti	47	72	1	1	-0.018	-3.684	ppb	-110.63	2	15000	
V	51	72	1	1	-0.118	-23.587	ppb	-12.42	1855	20000	
Cr	52	72	1	1	0.019	3.874	ppb	16.38	2290	20000	
Mn	55	72	1	1	73.174	14634.780	ppb	1.10	316014	20000	
Fe	56	72	1	1	1.048	209.605	ppb	11.91	20516	50000	
Co	59	72	1	1	0.456	91.157	ppb	1.20	6471	20000	
Ni	60	72	1	1	0.258	51.657	ppb	11.44	1730	20000	
Cu	63	72	1	1	-0.422	-84.405	ppb	-3.36	12801	20000	
Zn	66	72	1	1	-0.221	-44.130	ppb	-37.59	957	15000	
As	75	72	1	1	0.009	1.834	ppb	87.79	57	20000	
Se	78	72	1	1	-0.139	-27.761	ppb	-102.99	27	20000	
Be	9	6	2	2	0.007	1.351	ppb	34.83	70	20000	
B	11	6	2	2	0.211	42.253	ppb	50.54	27201	15000	
Mo	95	103	2	2	0.012	2.453	ppb	70.32	507	20000	
Ag	107	103	2	2	0.001	0.210	ppb	274.18	441	1000	
Cd	111	72	2	2	0.018	3.571	ppb	40.82	119	15000	
Sn	118	103	2	2	-0.002	-0.471	ppb	-353.71	2730	15000	
Sb	121	159	2	2	0.005	0.930	ppb	43.80	307	20000	
Ba	137	103	2	2	6.837	1367.367	ppb	1.76	64717	20000	
Tl	205	209	2	2	0.053	10.628	ppb	14.38	3212	20000	
Pb	208	209	2	2	0.023	4.656	ppb	12.65	1434	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	57847	0.80	56204	102.92	70	120	
Li	6	2	763519	0.45	722706	105.65	70	120	
Ge	72	2	479835	0.57	475317	100.95	70	120	
Rh	103	2	3024072	0.46	2995533	100.95	70	120	
Tb	159	2	3736967	0.41	3652855	102.30	70	120	
Bi	209	2	2180434	0.30	2138775	101.95	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09143-001DUP
Data File Name	018SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:33:56-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6246.229	1249245.871	ppb	1.61	5929690	50000	
Mg	24	72	1	1	105.754	21150.748	ppb	2.73	54248	50000	
Al	27	72	1	1	2.573	514.589	ppb	9.43	816	20000	
Si	28	72	1	1	-15.427	-3085.329	ppb	-61.99	15785	100000	
K	39	72	1	1	11.994	2398.835	ppb	6.66	37313	50000	
Ca	44	72	1	1	217.769	43553.900	ppb	1.97	6025	150000	
Ti	47	72	1	1	0.065	13.097	ppb	160.21	18	15000	
V	51	72	1	1	-0.100	-20.051	ppb	-8.24	1918	20000	
Cr	52	72	1	1	0.033	6.692	ppb	39.09	2343	20000	
Mn	55	72	1	1	76.772	15354.349	ppb	1.58	322915	20000	
Fe	56	72	1	1	1.095	218.988	ppb	10.40	20289	50000	
Co	59	72	1	1	0.474	94.702	ppb	2.95	6544	20000	
Ni	60	72	1	1	0.239	47.813	ppb	6.11	1612	20000	
Cu	63	72	1	1	-0.425	-84.975	ppb	-10.22	12441	20000	
Zn	66	72	1	1	-0.259	-51.894	ppb	-19.97	875	15000	
As	75	72	1	1	0.007	1.486	ppb	131.99	53	20000	
Se	78	72	1	1	0.128	25.565	ppb	76.88	42	20000	
Be	9	6	2	2	0.012	2.466	ppb	33.52	100	20000	
B	11	6	2	2	0.269	53.807	ppb	75.08	27123	15000	
Mo	95	103	2	2	-0.005	-1.065	ppb	-98.22	282	20000	
Ag	107	103	2	2	-0.004	-0.829	ppb	-38.53	278	1000	
Cd	111	72	2	2	0.010	2.037	ppb	20.32	70	15000	
Sn	118	103	2	2	0.006	1.244	ppb	234.51	2871	15000	
Sb	121	159	2	2	-0.002	-0.406	ppb	-48.76	126	20000	
Ba	137	103	2	2	6.933	1386.642	ppb	0.40	65042	20000	
Tl	205	209	2	2	0.022	4.496	ppb	12.31	1697	20000	
Pb	208	209	2	2	0.016	3.277	ppb	11.82	1174	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	56367	2.39	56204	100.29	70	120	
Li	6	2	755912	0.58	722706	104.59	70	120	
Ge	72	2	476355	0.49	475317	100.22	70	120	
Rh	103	2	2997319	0.38	2995533	100.06	70	120	
Tb	159	2	3708337	0.65	3652855	101.52	70	120	
Bi	209	2	2161017	0.31	2138775	101.04	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09143-001SD
Data File Name	019SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:38:14-04:00
Sample Type	Sample
Dilution	1000
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	1239.072	1239072.208	ppb	1.14	1204007	50000	
Mg	24	72	1	1	21.929	21929.197	ppb	1.64	11791	50000	
Al	27	72	1	1	0.445	445.228	ppb	25.43	453	20000	
Si	28	72	1	1	-43.381	-43380.868	ppb	-23.98	14291	100000	
K	39	72	1	1	1.652	1652.022	ppb	110.90	32978	50000	
Ca	44	72	1	1	45.057	45056.837	ppb	4.75	1642	150000	
Ti	47	72	1	1	0.024	23.567	ppb	80.26	10	15000	
V	51	72	1	1	-0.076	-75.693	ppb	-15.20	2098	20000	
Cr	52	72	1	1	0.012	11.679	ppb	70.05	2201	20000	
Mn	55	72	1	1	14.940	14940.465	ppb	2.16	65242	20000	
Fe	56	72	1	1	-0.046	-45.856	ppb	-136.25	13079	50000	
Co	59	72	1	1	0.098	98.131	ppb	6.44	1435	20000	
Ni	60	72	1	1	0.046	45.823	ppb	24.55	887	20000	
Cu	63	72	1	1	-0.455	-454.833	ppb	-5.02	12299	20000	
Zn	66	72	1	1	-0.505	-505.366	ppb	-10.79	524	15000	
As	75	72	1	1	0.002	2.162	ppb	1078.12	49	20000	
Se	78	72	1	1	0.078	77.687	ppb	347.87	40	20000	
Be	9	6	2	2	0.003	2.808	ppb	151.90	48	20000	
B	11	6	2	2	-0.499	-499.073	ppb	-34.83	24548	15000	
Mo	95	103	2	2	-0.002	-2.387	ppb	-298.25	322	20000	
Ag	107	103	2	2	-0.007	-7.008	ppb	-31.38	193	1000	
Cd	111	72	2	2	0.008	7.682	ppb	39.87	56	15000	
Sn	118	103	2	2	0.006	6.159	ppb	67.32	2908	15000	
Sb	121	159	2	2	-0.004	-3.562	ppb	-70.57	85	20000	
Ba	137	103	2	2	1.364	1364.017	ppb	3.32	13267	20000	
Tl	205	209	2	2	0.016	16.042	ppb	17.25	1397	20000	
Pb	208	209	2	2	-0.001	-1.142	ppb	-365.42	552	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	57135	1.97	56204	101.66	70	120	
Li	6	2	755987	0.30	722706	104.61	70	120	
Ge	72	2	481853	0.72	475317	101.38	70	120	
Rh	103	2	3037499	0.93	2995533	101.40	70	120	
Tb	159	2	3716168	0.68	3652855	101.73	70	120	
Bi	209	2	2179447	0.66	2138775	101.90	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09143-001MS
Data File Name	020SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:42:37-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6202.637	1240527.308	ppb	1.59	6008127	50000	
Mg	24	72	1	1	193.629	38725.834	ppb	2.21	117545	50000	
Al	27	72	1	1	114.763	22952.683	ppb	1.59	28066	20000	
Si	28	72	1	1	-23.724	-4744.732	ppb	-27.93	15603	100000	
K	39	72	1	1	117.362	23472.319	ppb	3.12	96782	50000	
Ca	44	72	1	1	290.937	58187.375	ppb	2.59	9304	150000	
Ti	47	72	1	1	23.356	4671.299	ppb	3.93	4396	15000	
V	51	72	1	1	21.672	4334.406	ppb	1.21	156513	20000	
Cr	52	72	1	1	21.653	4330.554	ppb	1.57	205590	20000	
Mn	55	72	1	1	91.780	18356.064	ppb	1.67	424292	20000	
Fe	56	72	1	1	108.226	21645.261	ppb	1.62	847324	50000	
Co	59	72	1	1	22.065	4413.041	ppb	1.23	345104	20000	
Ni	60	72	1	1	22.537	4507.424	ppb	0.62	99283	20000	
Cu	63	72	1	1	21.815	4363.064	ppb	2.13	284238	20000	
Zn	66	72	1	1	21.548	4309.545	ppb	3.01	38603	15000	
As	75	72	1	1	22.181	4436.281	ppb	3.27	27439	20000	
Se	78	72	1	1	21.876	4375.144	ppb	4.59	1627	20000	
Be	9	6	2	2	23.861	4772.112	ppb	0.91	138703	20000	
B	11	6	2	2	0.405	81.012	ppb	116.29	27260	15000	
Mo	95	103	2	2	24.500	4899.995	ppb	0.65	308212	20000	
Ag	107	103	2	2	22.349	4469.824	ppb	0.28	735854	1000	
Cd	111	72	2	2	23.461	4692.289	ppb	0.15	161558	15000	
Sn	118	103	2	2	0.003	0.670	ppb	346.58	2804	15000	
Sb	121	159	2	2	21.711	4342.232	ppb	0.55	676713	20000	
Ba	137	103	2	2	29.807	5961.450	ppb	0.24	299317	20000	
Tl	205	209	2	2	21.258	4251.645	ppb	0.15	1192703	20000	
Pb	208	209	2	2	22.404	4480.891	ppb	0.45	859269	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	57509	1.63	56204	102.32	70	120	
Li	6	2	747230	0.54	722706	103.39	70	120	
Ge	72	2	472667	0.23	475317	99.44	70	120	
Rh	103	2	2986134	0.59	2995533	99.69	70	120	
Tb	159	2	3698605	0.30	3652855	101.25	70	120	
Bi	209	2	2144121	0.09	2138775	100.25	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09143-001PS
Data File Name	021SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:46:56-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6238.247	1247649.421	ppb	1.12	6045207	50000	
Mg	24	72	1	1	194.801	38960.167	ppb	0.60	118315	50000	
Al	27	72	1	1	114.453	22890.512	ppb	1.32	28003	20000	
Si	28	72	1	1	-15.317	-3063.395	ppb	-41.87	16125	100000	
K	39	72	1	1	116.255	23250.973	ppb	1.05	96224	50000	
Ca	44	72	1	1	292.155	58431.077	ppb	3.93	9347	150000	
Ti	47	72	1	1	24.434	4886.898	ppb	4.08	4602	15000	
V	51	72	1	1	21.604	4320.815	ppb	0.77	156093	20000	
Cr	52	72	1	1	21.624	4324.861	ppb	0.66	205414	20000	
Mn	55	72	1	1	91.611	18322.268	ppb	0.90	423708	20000	
Fe	56	72	1	1	108.236	21647.218	ppb	0.32	847791	50000	
Co	59	72	1	1	22.030	4405.931	ppb	0.05	344695	20000	
Ni	60	72	1	1	22.455	4490.940	ppb	0.74	98960	20000	
Cu	63	72	1	1	21.583	4316.612	ppb	0.65	281535	20000	
Zn	66	72	1	1	21.380	4276.045	ppb	0.59	38336	15000	
As	75	72	1	1	22.033	4406.672	ppb	0.60	27272	20000	
Se	78	72	1	1	22.820	4564.041	ppb	1.94	1697	20000	
Be	9	6	2	2	23.979	4795.744	ppb	1.65	140875	20000	
B	11	6	2	2	0.235	46.928	ppb	67.82	26982	15000	
Mo	95	103	2	2	24.558	4911.531	ppb	1.20	311307	20000	
Ag	107	103	2	2	22.527	4505.315	ppb	1.32	747326	1000	
Cd	111	72	2	2	23.516	4703.250	ppb	0.61	162715	15000	
Sn	118	103	2	2	0.006	1.285	ppb	111.99	2886	15000	
Sb	121	159	2	2	21.754	4350.855	ppb	0.77	679447	20000	
Ba	137	103	2	2	29.861	5972.234	ppb	0.46	302155	20000	
Tl	205	209	2	2	21.390	4277.995	ppb	0.38	1207316	20000	
Pb	208	209	2	2	22.311	4462.221	ppb	0.31	860833	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	57526	0.34	56204	102.35	70	120	
Li	6	2	755187	0.33	722706	104.49	70	120	
Ge	72	2	474927	0.94	475317	99.92	70	120	
Rh	103	2	3008943	0.51	2995533	100.45	70	120	
Tb	159	2	3706266	0.58	3652855	101.46	70	120	
Bi	209	2	2157014	0.29	2138775	100.85	70	120	

TuneStep	TuneModeName
1	1
2	2

Sample Report

Sample Table

Sample Name	E14-09161-001
Data File Name	022SMPL.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:51:22-04:00
Sample Type	Sample
Dilution	200
Comment	457;T140926-01;NA;25ml;50ml;100;;;1;
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Step	Mode	Conc	FinalConc	Units	Conc %RSD	CPS	LDR	QC Flag
Na	23	72	1	1	6603.869	1320773.745	ppb	4.24	6061119	50000	
Mg	24	72	1	1	21.048	4209.694	ppb	6.42	10803	50000	
Al	27	72	1	1	3.455	691.087	ppb	8.85	976	20000	
Si	28	72	1	1	-9.461	-1892.255	ppb	-235.86	15589	100000	
K	39	72	1	1	18.942	3788.371	ppb	17.51	39179	50000	
Ca	44	72	1	1	430.040	86008.028	ppb	4.94	11059	150000	
Ti	47	72	1	1	-0.011	-2.238	ppb	-176.57	3	15000	
V	51	72	1	1	-0.104	-20.898	ppb	-25.93	1825	20000	
Cr	52	72	1	1	0.024	4.887	ppb	57.28	2196	20000	
Mn	55	72	1	1	20.252	4050.434	ppb	5.47	83684	20000	
Fe	56	72	1	1	32.128	6425.607	ppb	4.86	214086	50000	
Co	59	72	1	1	0.067	13.314	ppb	9.80	950	20000	
Ni	60	72	1	1	0.200	40.045	ppb	12.33	1415	20000	
Cu	63	72	1	1	1.084	216.854	ppb	10.50	27052	20000	
Zn	66	72	1	1	14.183	2836.561	ppb	4.69	21171	15000	
As	75	72	1	1	0.025	5.078	ppb	48.78	70	20000	
Se	78	72	1	1	0.047	9.391	ppb	810.16	36	20000	
Be	9	6	2	2	0.012	2.474	ppb	72.22	100	20000	
B	11	6	2	2	-0.471	-94.132	ppb	-19.16	24585	15000	
Mo	95	103	2	2	0.011	2.237	ppb	2.04	489	20000	
Ag	107	103	2	2	-0.004	-0.707	ppb	-55.20	296	1000	
Cd	111	72	2	2	0.065	13.037	ppb	13.23	411	15000	
Sn	118	103	2	2	-0.007	-1.494	ppb	-72.26	2604	15000	
Sb	121	159	2	2	0.021	4.196	ppb	25.98	741	20000	
Ba	137	103	2	2	2.066	413.292	ppb	1.20	19616	20000	
Tl	205	209	2	2	0.032	6.426	ppb	13.82	2163	20000	
Pb	208	209	2	2	3.364	672.738	ppb	1.16	120909	20000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	54580	5.93	56204	97.11	70	120	
Li	6	2	754207	0.40	722706	104.36	70	120	
Ge	72	2	477002	0.81	475317	100.35	70	120	
Rh	103	2	2993194	0.59	2995533	99.92	70	120	
Tb	159	2	3693807	0.73	3652855	101.12	70	120	
Bi	209	2	2159503	0.38	2138775	100.97	70	120	

TuneStep	TuneModeName
1	1
2	2

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T18:55:41-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	250.892	ppb	0.338	256729	0.32	250	100.4	90	110	
Mg	24	1	1	250.886	ppb	0.810	130547	1.19	250	100.4	90	110	
Al	27	1	1	24.258	ppb	1.626	5696	1.96	25	97.0	90	110	
Si	28	1	1	501.889	ppb	0.296	47885	0.38	250	200.8	90	110	> +-10%
K	39	1	1	253.050	ppb	1.063	151361	1.00	250	101.2	90	110	
Ca	44	1	1	240.753	ppb	2.073	6740	2.24	250	96.3	90	110	
Ti	47	1	1	24.112	ppb	1.199	4535	1.57	25	96.4	90	110	
V	51	1	1	24.103	ppb	0.610	155095	0.88	25	96.4	90	110	
Cr	52	1	1	24.063	ppb	0.271	195967	0.70	25	96.3	90	110	
Mn	55	1	1	23.222	ppb	0.761	100915	0.82	25	92.9	90	110	
Fe	56	1	1	247.606	ppb	0.398	1649437	0.94	250	99.0	90	110	
Co	59	1	1	23.706	ppb	0.866	330306	1.41	25	94.8	90	110	
Ni	60	1	1	23.761	ppb	0.199	93277	0.73	25	95.0	90	110	
Cu	63	1	1	23.679	ppb	0.082	265604	0.52	25	94.7	90	110	
Zn	66	1	1	23.440	ppb	1.275	36054	0.98	25	93.8	90	110	
As	75	1	1	24.243	ppb	2.560	25710	2.94	25	97.0	90	110	
Se	78	1	1	23.376	ppb	3.606	1490	3.08	25	93.5	90	110	
Be	9	2	2	24.367	ppb	0.930	132926	0.45	25	97.5	90	110	
B	11	2	2	24.939	ppb	0.952	110128	0.29	25	99.8	90	110	
Mo	95	2	2	24.115	ppb	0.695	306185	0.79	25	96.5	90	110	
Ag	107	2	2	24.287	ppb	0.958	748159	0.70	25	97.1	90	110	
Cd	111	2	2	24.886	ppb	1.133	153492	1.68	25	99.5	90	110	
Sn	118	2	2	23.333	ppb	0.908	453011	1.37	25	93.3	90	110	
Sb	121	2	2	23.882	ppb	0.826	645524	0.93	25	95.5	90	110	
Ba	137	2	2	24.256	ppb	0.650	227886	1.16	25	97.0	90	110	
Tl	205	2	2	23.309	ppb	0.573	1125311	1.00	25	93.2	90	110	
Pb	208	2	2	22.605	ppb	0.095	805454	0.47	25	90.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	57444	0.54	56204	102.21	70	120	
Li	6	2	2	756940	0.94	722706	104.74	70	120	
Ge	72	2	2	475114	0.83	475317	99.96	70	120	
Rh	103	2	2	3013848	0.57	2995533	100.61	70	120	
Tb	159	2	2	3736316	0.71	3652855	102.28	70	120	
Bi	209	2	2	2149578	0.45	2138775	100.51	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCV
Data File Name	024LCCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:00:04-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	6.114	9.097	20047	2.65	5	122.3	70	130	
Mg	24	1	1	5.038	5.495	3038	1.56	5	100.8	70	130	
Al	27	1	1	0.497	22.329	328	8.65	0.5	99.4	70	130	
K	39	1	1	4.619	48.632	34821	1.10	5	92.4	70	130	
Ca	44	1	1	4.379	55.281	509	2.65	5	87.6	70	130	
Ti	47	1	1	0.400	42.928	80	43.50	0.5	80.0	70	130	
V	51	1	1	0.407	7.207	5064	0.54	0.5	81.4	70	130	
Cr	52	1	1	0.495	2.803	5990	2.95	0.5	98.9	70	130	
Mn	55	1	1	0.529	15.079	2367	0.98	0.5	105.8	70	130	
Fe	56	1	1	4.688	5.490	43577	0.62	5	93.8	70	130	
Co	59	1	1	0.503	1.330	6953	2.04	0.5	100.6	70	130	
Ni	60	1	1	0.509	5.480	2646	4.62	0.5	101.8	70	130	
Cu	63	1	1	0.617	1.411	17444	2.20	0.5	123.3	70	130	
Zn	66	1	1	0.537	8.627	1139	6.48	0.5	107.4	70	130	
As	75	1	1	0.465	1.230	529	2.98	0.5	93.0	70	130	
Se	78	1	1	0.516	46.757	48	14.53	0.5	103.2	70	130	
Be	9	2	2	0.499	4.167	2752	4.08	0.5	99.7	70	130	
B	11	2	2	0.263	61.038	27134	2.05	0.5	52.5	70	130	> +- 30%
Mo	95	2	2	0.492	5.429	6654	5.56	0.5	98.4	70	130	
Ag	107	2	2	0.451	24.584	10361	24.02	0.5	90.1	70	130	
Cd	111	2	2	0.478	8.902	2982	9.52	0.5	95.6	70	130	
Sn	118	2	2	0.447	3.691	11495	3.00	0.5	89.4	70	130	
Sb	121	2	2	0.500	6.720	13638	6.38	0.5	100.0	70	130	
Ba	137	2	2	0.474	5.098	4861	5.02	0.5	94.8	70	130	
Tl	205	2	2	0.503	4.645	24985	4.65	0.5	100.5	70	130	
Pb	208	2	2	0.485	4.522	17324	4.29	0.5	97.1	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56391	3.29	56204	100.33	70	120	
Li	6	2	2	756770	0.06	722706	104.71	70	120	
Ge	72	2	2	479334	0.64	475317	100.85	70	120	
Rh	103	2	2	3041267	0.44	2995533	101.53	70	120	
Tb	159	2	2	3721751	0.40	3652855	101.89	70	120	
Bi	209	2	2	2161047	0.12	2138775	101.04	70	120	

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Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:04:23-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	0.679	ppb	10.50	16212	1.0	5	
Mg	24	1	1	0.448	ppb	12.29	716	4.6	5	
Al	27	1	1	0.300	ppb	37.70	421	14.5	0.5	
K	39	1	1	0.395	ppb	105.75	32822	2.4	5	
Ca	44	1	1	4.091	ppb	27.47	610	6.6	5	
Ti	47	1	1	0.017	ppb	60.75	9	21.6	0.5	
V	51	1	1	-0.115	ppb	-19.86	1852	7.5	0.5	
Cr	52	1	1	-0.003	ppb	-318.82	2084	3.8	0.5	
Mn	55	1	1	-0.997	ppb	-7.28	782	11.0	0.5	
Fe	56	1	1	0.029	ppb	180.27	13594	3.1	5	
Co	59	1	1	0.000	ppb	78.82	79	2.4	0.5	
Ni	60	1	1	-0.003	ppb	-358.58	691	10.2	0.5	
Cu	63	1	1	-0.155	ppb	-5.71	12741	2.6	0.5	
Zn	66	1	1	0.082	ppb	30.17	1426	3.7	0.5	
As	75	1	1	0.001	ppb	1360.58	48	42.1	0.5	
Se	78	1	1	0.019	ppb	606.45	37	27.3	0.5	
Be	9	2	2	0.005	ppb	94.65	63	44.4	0.5	
B	11	2	2	-0.161	ppb	-33.90	25880	1.1	0.5	
Mo	95	2	2	0.002	ppb	533.87	374	31.2	0.5	
Ag	107	2	2	0.000	ppb	-2633.93	404	42.1	0.5	
Cd	111	2	2	0.003	ppb	151.27	26	107.8	0.5	
Sn	118	2	2	0.372	ppb	6.27	10001	5.4	0.5	
Sb	121	2	2	-0.002	ppb	-146.47	130	57.1	0.5	
Ba	137	2	2	-0.009	ppb	-54.96	285	15.7	0.5	
Tl	205	2	2	0.012	ppb	14.37	1200	6.5	0.125	
Pb	208	2	2	0.006	ppb	96.28	793	25.3	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	57220	0.64	56204	101.81	70	120	
Li	6	2	2	761796	1.10	722706	105.41	70	120	
Ge	72	2	2	479000	0.98	475317	100.77	70	120	
Rh	103	2	2	3030516	1.18	2995533	101.17	70	120	
Tb	159	2	2	3714896	0.53	3652855	101.70	70	120	
Bi	209	2	2	2165641	0.67	2138775	101.26	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	031ICSA.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:30:29-04:00
Sample Type	6-ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	CPS	%RSD	Upper Limit	QC Flag
Al	27	1	1	94770.387	ppb	20957684.4	1.0	5000000	
Ti	47	1	1	2126.598	ppb	393879.7	0.9	50000	
V	51	1	1	-0.176	ppb	1456.8	2.6	5	
Cr	52	1	1	1.147	ppb	11197.8	0.6	5	
Mn	55	1	1	1.957	ppb	10127.1	2.2	5	
Co	59	1	1	1.779	ppb	24505.8	0.4	5	
Ni	60	1	1	1.746	ppb	7407.6	2.9	5	
Cu	63	1	1	0.958	ppb	26809.6	2.1	5	
Zn	66	1	1	1.334	ppb	3210.5	4.9	5	
As	75	1	1	0.254	ppb	311.1	8.7	5	
Se	78	1	1	-0.166	ppb	24.4	20.8	5	
Be	9	2	2	0.000	ppb	29.6	21.7	5	
B	11	2	2	0.487	ppb	24826.4	0.9	5	
Mo	95	2	2	2345.648	ppb	25390566.5	0.7	50000	
Ag	107	2	2	0.062	ppb	1978.2	3.5	5	
Cd	111	2	2	2.152	ppb	14045.8	3.0	5	
Sn	118	2	2	0.143	ppb	4708.9	5.6	5	
Sb	121	2	2	0.764	ppb	19838.2	3.0	5	
Ba	137	2	2	0.626	ppb	5327.7	2.7	5	
Tl	205	2	2	0.017	ppb	1274.3	18.2	1.25	
Pb	208	2	2	0.200	ppb	6850.9	6.0	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56639	0.93	56204	100.77	70	120	
Li	6	2	2	673743	0.43	722706	93.23	70	120	
Ge	72	2	2	502510	0.26	475317	105.72	70	120	
Rh	103	2	2	2572294	0.16	2995533	85.87	70	120	
Tb	159	2	2	3558200	0.52	3652855	97.41	70	120	
Bi	209	2	2	1908862	0.20	2138775	89.25	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	032ICSB.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:34:56-04:00
Sample Type	6-ICSAB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Al	27	1	1	92736.258	1.321	20915485	1.31	100000	92.7	-1000	1000	
Ti	47	1	1	2069.629	2.145	390897	0.95	5000	41.4	-1000	1000	
V	51	1	1	-0.178	-10.016	1470	6.60	0.5	-35.6	-1000	1000	
Cr	52	1	1	21.818	2.415	178837	0.64	20	109.1	80	120	
Mn	55	1	1	22.479	2.165	98274	0.50	20	112.4	80	120	
Co	59	1	1	21.639	2.352	303112	0.27	20	108.2	80	120	
Ni	60	1	1	21.023	1.856	83060	0.85	20	105.1	80	120	
Cu	63	1	1	21.521	3.169	244244	0.45	20	107.6	80	120	
Zn	66	1	1	20.802	2.652	32312	0.83	20	104.0	80	120	
As	75	1	1	22.029	2.267	23490	0.68	20	110.1	80	120	
Se	78	1	1	0.002	3485.750	36	14.32	0.5	0.4	-1000	1000	
Be	9	2	2	0.005	197.250	56	91.65	0.5	1.0	-1000	1000	
B	11	2	2	1.211	11.376	27312	1.97	2	60.5	-1000	1000	
Mo	95	2	2	2265.081	0.220	25594420	0.64	5000	45.3	-1000	1000	
Ag	107	2	2	22.120	0.582	607130	0.47	20	110.6	80	120	
Cd	111	2	2	21.038	1.006	143956	1.45	20	105.2	80	120	
Sn	118	2	2	1.230	4.176	23610	3.38	0.5	246.0	-1000	1000	
Sb	121	2	2	0.735	4.660	19520	3.74	0.5	147.1	-1000	1000	
Ba	137	2	2	0.589	1.917	5250	1.49	0.5	117.8	-1000	1000	
Tl	205	2	2	0.016	1.982	1219	1.39	0.125	12.6	-1000	1000	
Pb	208	2	2	0.194	5.078	6703	5.11	0.125	155.2	-1000	1000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	57774	2.53	56204	102.79	70	120	
Li	6	2	2	681625	0.45	722706	94.32	70	120	
Ge	72	2	2	527131	1.38	475317	110.90	70	120	
Rh	103	2	2	2685171	0.45	2995533	89.64	70	120	
Tb	159	2	2	3638473	0.98	3652855	99.61	70	120	
Bi	209	2	2	1922994	0.47	2138775	89.91	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	Final CCV
Data File Name	034_CCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:43:42-04:00
Sample Type	6-CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Na	23	1	1	274.208	ppb	0.715	280458	0.98	250	109.7	90	110	
Mg	24	1	1	256.720	ppb	1.530	134141	0.71	250	102.7	90	110	
Al	27	1	1	23.996	ppb	3.842	5660	2.89	25	96.0	90	110	
Si	28	1	1	504.484	ppb	4.245	48246	1.70	250	201.8	90	110	> +-10%
K	39	1	1	262.395	ppb	1.687	156423	0.45	250	105.0	90	110	
Ca	44	1	1	235.333	ppb	1.604	6628	2.84	250	94.1	90	110	
Ti	47	1	1	24.224	ppb	2.684	4578	4.13	25	96.9	90	110	
V	51	1	1	24.363	ppb	1.370	157409	0.31	25	97.5	90	110	
Cr	52	1	1	24.079	ppb	0.840	196950	0.71	25	96.3	90	110	
Mn	55	1	1	23.026	ppb	0.602	100516	0.97	25	92.1	90	110	
Fe	56	1	1	247.887	ppb	0.487	1658490	1.04	250	99.2	90	110	
Co	59	1	1	23.827	ppb	0.487	333431	1.06	25	95.3	90	110	
Ni	60	1	1	24.006	ppb	0.003	94647	1.50	25	96.0	90	110	
Cu	63	1	1	25.389	ppb	1.665	284763	0.65	25	101.6	90	110	
Zn	66	1	1	23.105	ppb	1.033	35718	2.48	25	92.4	90	110	
As	75	1	1	24.018	ppb	0.579	25582	1.23	25	96.1	90	110	
Se	78	1	1	23.299	ppb	9.540	1491	8.64	25	93.2	90	110	
Be	9	2	2	24.412	ppb	0.827	134117	0.41	25	97.6	90	110	
B	11	2	2	25.127	ppb	1.808	111550	0.98	25	100.5	90	110	
Mo	95	2	2	23.791	ppb	0.974	310309	1.20	25	95.2	90	110	
Ag	107	2	2	24.033	ppb	0.925	760511	0.97	25	96.1	90	110	
Cd	111	2	2	24.848	ppb	1.090	157798	0.61	25	99.4	90	110	
Sn	118	2	2	23.311	ppb	0.673	464912	0.55	25	93.2	90	110	
Sb	121	2	2	24.004	ppb	0.512	667531	0.68	25	96.0	90	110	
Ba	137	2	2	24.162	ppb	0.729	233181	0.55	25	96.6	90	110	
Tl	205	2	2	22.938	ppb	0.746	1137762	0.81	25	91.8	90	110	
Pb	208	2	2	23.160	ppb	0.915	816757	1.28	25	92.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	57698	1.50	56204	102.66	70	120	
Li	6	2	2	762321	0.69	722706	105.48	70	120	
Ge	72	2	2	489235	0.61	475317	102.93	70	120	
Rh	103	2	2	3095908	0.24	2995533	103.35	70	120	
Tb	159	2	2	3844121	0.25	3652855	105.24	70	120	
Bi	209	2	2	2208589	0.95	2138775	103.26	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	Final LLCCV
Data File Name	035LCCV.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:48:00-04:00
Sample Type	LCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Na	23	1	1	6.382	16.547	28804	1.50	5	127.6	70	130	
Mg	24	1	1	5.459	12.069	3080	1.70	5	109.2	70	130	
Al	27	1	1	0.526	63.613	316	17.69	0.5	105.2	70	130	
K	39	1	1	6.126	48.593	38105	0.84	5	122.5	70	130	
Ca	44	1	1	4.600	188.391	468	7.85	5	92.0	70	130	
Ti	47	1	1	0.640	21.154	117	15.91	0.5	128.1	70	130	
V	51	1	1	0.485	21.411	5251	2.59	0.5	97.0	70	130	
Cr	52	1	1	0.562	17.122	6165	1.68	0.5	112.3	70	130	
Mn	55	1	1	0.546	29.194	2380	4.51	0.5	109.2	70	130	
Fe	56	1	1	5.288	11.912	44997	1.38	5	105.8	70	130	
Co	59	1	1	0.538	11.280	7034	5.04	0.5	107.6	70	130	
Ni	60	1	1	0.495	12.267	3232	1.33	0.5	99.0	70	130	
Cu	63	1	1	0.556	22.339	30385	1.21	0.5	111.3	70	130	
Zn	66	1	1	0.519	4.186	1047	5.74	0.5	103.8	70	130	
As	75	1	1	0.558	20.695	589	11.34	0.5	111.5	70	130	
Se	78	1	1	0.531	82.528	78	51.13	0.5	106.2	70	130	
Be	9	2	2	0.510	4.512	2778	3.46	0.5	101.9	70	130	
B	11	2	2	0.355	24.505	27119	1.19	0.5	71.0	70	130	
Mo	95	2	2	0.571	6.552	7818	6.65	0.5	114.1	70	130	
Ag	107	2	2	0.413	2.343	9727	1.90	0.5	82.6	70	130	
Cd	111	2	2	0.507	11.418	3256	10.41	0.5	101.4	70	130	
Sn	118	2	2	0.443	4.475	11662	3.91	0.5	88.6	70	130	
Sb	121	2	2	0.495	2.403	13912	2.27	0.5	98.9	70	130	
Ba	137	2	2	0.495	4.003	5168	4.10	0.5	99.1	70	130	
Tl	205	2	2	0.505	2.639	25902	2.81	0.5	101.0	70	130	
Pb	208	2	2	0.472	2.417	17413	2.63	0.5	94.4	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	53705	9.53	56204	95.55	70	120	
Li	6	2	2	747838	1.01	722706	103.48	70	120	
Ge	72	2	2	494200	1.13	475317	103.97	70	120	
Rh	103	2	2	3105475	0.54	2995533	103.67	70	120	
Tb	159	2	2	3836736	0.58	3652855	105.03	70	120	
Bi	209	2	2	2230721	0.50	2138775	104.30	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Final CCB
Data File Name	036_CCB.d
Data Path Name	D:\Data\6020\pg457.b
Acq Date Time	2014-09-26T19:52:24-04:00
Sample Type	2-CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Step	Tune Mode	Conc	Units	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Na	23	1	1	3.378	ppb	1.16	22991	1.4	5	
Mg	24	1	1	0.453	ppb	17.21	713	4.6	5	
Al	27	1	1	0.193	ppb	55.14	359	16.5	0.5	
K	39	1	1	2.248	ppb	25.72	35178	1.3	5	
Ca	44	1	1	2.620	ppb	77.45	559	12.6	5	
Ti	47	1	1	-0.006	ppb	-158.76	4	43.4	0.5	
V	51	1	1	-0.044	ppb	-38.71	2286	3.9	0.5	
Cr	52	1	1	0.006	ppb	97.04	2148	3.3	0.5	
Mn	55	1	1	-1.054	ppb	-3.72	712	6.7	0.5	
Fe	56	1	1	0.170	ppb	5.03	14426	1.3	5	
Co	59	1	1	-0.001	ppb	-57.48	66	7.8	0.5	
Ni	60	1	1	0.092	ppb	13.72	1212	5.5	0.5	
Cu	63	1	1	0.257	ppb	14.74	24080	4.1	0.5	
Zn	66	1	1	0.157	ppb	33.67	1556	5.8	0.5	
As	75	1	1	-0.002	ppb	-515.80	44	18.9	0.5	
Se	78	1	1	0.034	ppb	935.88	38	75.0	0.5	
Be	9	2	2	-0.002	ppb	-173.23	19	91.7	0.5	
B	11	2	2	0.550	ppb	142.29	25538	0.5	0.5	>RL
Mo	95	2	2	0.059	ppb	23.82	1119	16.2	0.5	
Ag	107	2	2	0.000	ppb	-2272.78	411	30.1	0.5	
Cd	111	2	2	0.004	ppb	114.30	33	88.2	0.5	
Sn	118	2	2	0.281	ppb	5.84	8389	3.9	0.5	
Sb	121	2	2	-0.003	ppb	-80.46	111	52.9	0.5	
Ba	137	2	2	-0.004	ppb	-150.03	337	18.2	0.5	
Tl	205	2	2	0.005	ppb	83.88	863	23.4	0.125	
Pb	208	2	2	0.002	ppb	122.23	659	11.5	0.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	1	56838	1.03	56204	101.13	70	120	
Li	6	2	2	691462	8.43	722706	95.68	70	120	
Ge	72	2	2	489320	0.18	475317	102.95	70	120	
Rh	103	2	2	3085265	0.04	2995533	103.00	70	120	
Tb	159	2	2	3817187	1.07	3652855	104.50	70	120	
Bi	209	2	2	2207339	0.72	2138775	103.21	70	120	

2014 PG: 457

METALS'S DIGESTION LOG

Date: 09/26/14 08:30

MATRIX: LEACHATE (TCLP) | PREP. SOLUTION | DATE | LOT # | ANALYSIS METHOD: 6020A | Hg DIG. DATE: 9/26/14

DIGESTION METHOD: 3010A | NaCl: | 9/10/14 | 134874 | Hg ANAL. METHOD: 1311/7470A

SPIKES: 1.00ml M473 | Hydroxylamine: | 9/10/14 | 134386 | LOT# HNO3: 141569 | ICPMS ICV: M331

Hg DIGESTION METHOD: 7470A | KMnO4: | 9/3/14 | 121666 | LOT# H2SO4: 135111 | ICPMS Cal. Stds.: M327,M361

Hg SPIKE: 2.50 PPB M493-2 | K2S2O8: | 4/17/14 | 117411 | LOT# HCL: 137354

Hg ICV: 2.50 PPB M455-1

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M493-2		
Hg	STD2 2.50 PPB						25	50			M493-2		
Hg	STD3 5.00 PPB						25	50			M493-2		
Hg	STD4 7.50 PPB						25	50			M493-2		
Hg	STD5 10.0 PPB						25	50			M493-2		
Hg	ICV 5.00 PPB						25	50			M455-1		
	TCLP140924				25	50	25	50					
	TCLP140925				25	50	25	50					
	BLKT140926-01				25	50	25	50			BMT1		
	LCST140926-01				25	50	25	50			BST1		
TCLP + Ni	E14-09143-001	*	Y		25	50	25	50	U1-LT	9/29	R-72(9/29 11:00); TCLP140924		
	E14-09143-001DUP	*	Y		25	50	25	50	U1-LT				
	E14-09143-001MS	*	Y		25	50	25	50	U1-LT				
TCLP Pb	E14-09161-001	*	B		25	50			U1-LT	10/6	TCLP140924		
TCLP	E14-09109-001	*	Y		25	50	25	50	U1-LT	10/3	TCLP140924		
TCLP	E14-09190-001	*	Y		25	50	25	50	U1-LT	10/6	TCLP140925		
TCLP	E14-09239-001	*	Y		12.5	25	25	50	U1-LT	9/30	R-72(9/30 16:00); Solid; TCLP140925		
TCLP	E14-09240-001	*	Y		12.5	25	25	50	U1-LT	9/30	R-72(9/30 16:00); Solid; TCLP140925		

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	9/26/14 - 1105	Received by:	
Relinquished by:		Received by:	
Disposal:			

E14-09161 0510

Analytical Sequence

Method : 7470A TCLP

Seq.	Loc.		Sample ID
1	1		Calib Blank 1
2	3		Calib Std 1
3	4		Calib Std 2
4	5		Calib Std 3
5	6		Calib Std 4
6	7		Calib Std 5
7	2	QC	ICV
8	1	QC	ICB
9	9		TCLP140924-457
10	10		TCLP140925-457
11	11		BLKT140926-01-457
12	12		LCST140926-01-457
13	13		E14-09143-001
14	14		E14-09143-001DUP
15	15		E14-09143-001MS
16	16		E14-09109-001
17	17		E14-09190-001
18	18		E14-09239-001
19	2	QC	CCV
20	1	QC	CCB
21	19		E14-09240-001
22	2	QC	CCV
23	1	QC	CCB

E14-09161 0511

==========

Analysis Begun

Logged In Analyst: chris
Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550
Autosampler Model: AS-91

Sample Information File: J:\Metal\RunLog\FIMsSeq\457.SIF
Batch ID: 457LEACHATE (TCLP)
Results Data Set: pg457ahg_14
Results Library: C:\data-AA\FIMS 100\Results\Results.mdb

==========

Method Loaded
Method Name: 7470A TCLP
Method Last Saved: 7/16/2013 2:55:27 PM
Method Description: SnCl2 0.25, 2.5, 5.0, 7.5, 10ppb stds

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 9/26/2014 4:30:14 PM
Analyst:
Data Type: Original

Replicate Data: Calib Blank 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0011	0.0011	0.0001	16:31:06	Yes
2		[0.00]	0.0011	0.0011	0.0001	16:31:39	Yes
3		[0.00]	0.0009	0.0009	0.0001	16:32:12	Yes
Mean:		[0.00]	0.0011				
SD:		0.00	0.0001				
%RSD:		0.00	13.40				

Auto-zero performed.

==========

Sequence No.: 2
Autosampler Location: 3
Sample ID: Calib Std 1
Date Collected: 9/26/2014 4:32:31 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 1

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.25]	0.0119	0.0130	0.0024	16:33:24	Yes
2		[0.25]	0.0117	0.0128	0.0024	16:33:57	Yes
3		[0.25]	0.0118	0.0129	0.0024	16:34:30	Yes
Mean:		[0.25]	0.0118				
SD:		0.00	0.0001				
%RSD:		0.00	0.97				

Standard number 1 applied. [0.25]
Correlation Coef.: 1.000000 Slope: 0.04732 Intercept: 0.00000

==========

Sequence No.: 3
Autosampler Location: 4
Sample ID: Calib Std 2
Date Collected: 9/26/2014 4:34:50 PM
Analyst:
Data Type: Original

Replicate Data: Calib Std 2

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.500]	0.1168	0.1179	0.0226	16:35:44	Yes
2		[2.500]	0.1179	0.1189	0.0231	16:36:17	Yes
3		[2.500]	0.1176	0.1187	0.0232	16:36:49	Yes
Mean:		[2.500]	0.1174				
SD:		0.000	0.0006				
%RSD:		0.000	0.47				

Standard number 2 applied. [2.500]
Correlation Coef.: 1.000000 Slope: 0.04696 Intercept: 0.00004

==========

Sequence No.: 4
Autosampler Location: 5

Sample ID: Calib Std 3 Date Collected: 9/26/2014 4:37:10 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 3

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.000]	0.2356	0.2366	0.0458	16:38:05	Yes
2		[5.000]	0.2392	0.2403	0.0465	16:38:38	Yes
3		[5.000]	0.2360	0.2370	0.0459	16:39:10	Yes
Mean:		[5.000]	0.2369				
SD:		0.000	0.0020				
%RSD:		0.000	0.85				

Standard number 3 applied. [5.000]
Correlation Coef.: 0.999990 Slope: 0.04735 Intercept: -0.00019

Sequence No.: 5 Autosampler Location: 6
Sample ID: Calib Std 4 Date Collected: 9/26/2014 4:39:31 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 4

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[7.500]	0.3463	0.3474	0.0681	16:40:26	Yes
2		[7.500]	0.3498	0.3508	0.0683	16:40:59	Yes
3		[7.500]	0.3495	0.3506	0.0683	16:41:32	Yes
Mean:		[7.500]	0.3485				
SD:		0.000	0.0019				
%RSD:		0.000	0.55				

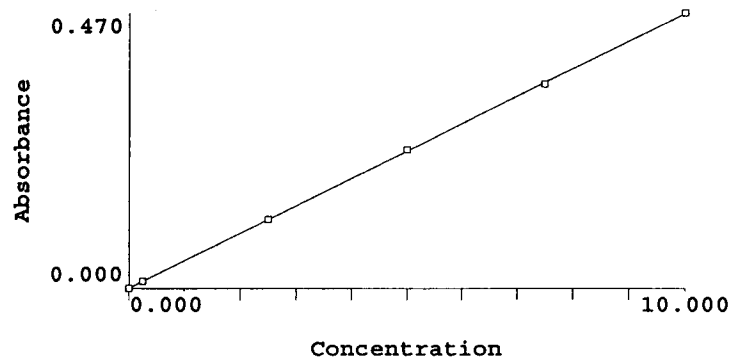
Standard number 4 applied. [7.500]
Correlation Coef.: 0.999923 Slope: 0.04666 Intercept: 0.00064

Sequence No.: 6 Autosampler Location: 7
Sample ID: Calib Std 5 Date Collected: 9/26/2014 4:41:53 PM
Analyst: Data Type: Original

Replicate Data: Calib Std 5

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.000]	0.4684	0.4695	0.0909	16:42:49	Yes
2		[10.000]	0.4717	0.4728	0.0913	16:43:22	Yes
3		[10.000]	0.4708	0.4719	0.0919	16:43:55	Yes
Mean:		[10.000]	0.4703				
SD:		0.000	0.0017				
%RSD:		0.000	0.36				

Standard number 5 applied. [10.000]
Correlation Coef.: 0.999950 Slope: 0.04688 Intercept: 0.00023



Calibration data for Hg 253.7 Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD

E14-09161 0513

Calib Blank 1	0.0000	0	-0.00490	0.00	13.4
Calib Std 1	0.0118	0.25	0.24747	0.00	1.0
Calib Std 2	0.1174	2.500	2.50042	0.00	0.5
Calib Std 3	0.2369	5.000	5.04904	0.00	0.8
Calib Std 4	0.3485	7.500	7.43013	0.00	0.5
Calib Std 5	0.4703	10.000	10.02784	0.00	0.4

Correlation Coef.: 0.999950 Slope: 0.04688 Intercept: 0.00023

Sequence No.: 7 **Autosampler Location: 2**
Sample ID: ICV **Date Collected: 9/26/2014 4:44:17 PM**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00537	5.3730	0.2521	0.2532	0.0484	16:45:10	Yes
2	0.00541	5.4089	0.2538	0.2549	0.0488	16:45:43	Yes
3	0.00544	5.4403	0.2553	0.2563	0.0489	16:46:16	Yes
Mean:	0.00541	5.4074	0.2537				
SD:	0.00003	0.03366	0.0016				
%RSD:	0.62244	0.62244	0.62				

QC value within limits for Hg 253.7 Recovery = 108.15%
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 9/26/2014 4:46:35 PM**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00001	0.00680	0.0005	0.0016	0.0002	16:47:28	Yes
2	0.00000	0.00007	0.0002	0.0013	0.0001	16:48:01	Yes
3	-0.00001	-0.01230	-0.0003	0.0007	0.0001	16:48:33	Yes
Mean:	0.00000	-0.00181	0.0001				
SD:	0.00001	0.00969	0.0005				
%RSD:	535.05	535.05	313.67				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 9**
Sample ID: TCLP140924-457 **Date Collected: 9/26/2014 4:48:52 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: TCLP140924-457

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00662	-0.0001	0.0010	0.0001	16:49:45	Yes
2	-0.00002	-0.00895	-0.0002	0.0009	0.0001	16:50:17	Yes
3	-0.00003	-0.01661	-0.0005	0.0005	0.0001	16:50:50	Yes
Mean:	-0.00002	-0.01073	-0.0003				
SD:	0.00001	0.00522	0.0002				
%RSD:	48.682	48.682	89.61				

Sequence No.: 10 **Autosampler Location: 10**
Sample ID: TCLP140925-457 **Date Collected: 9/26/2014 4:51:09 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: TCLP140925-457

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.01106	-0.0003	0.0008	0.0001	16:52:02	Yes
2	-0.00003	-0.01676	-0.0006	0.0005	0.0001	16:52:35	Yes
3	-0.00003	-0.01268	-0.0004	0.0007	0.0001	16:53:07	Yes

Mean:	-0.00003	-0.01350	-0.0004
SD:	0.00001	0.00294	0.0001
%RSD:	21.787	21.787	34.20

Sequence No.: 11 **Autosampler Location: 11**
Sample ID: BLKT140926-01-457 **Date Collected: 9/26/2014 4:53:27 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: BLKT140926-01-457

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00003	-0.01523	-0.0005	0.0006	0.0001	16:54:20	Yes
2	-0.00003	-0.01517	-0.0005	0.0006	0.0002	16:54:53	Yes
3	-0.00004	-0.01778	-0.0006	0.0005	0.0001	16:55:25	Yes
Mean:	-0.00003	-0.01606	-0.0005				
SD:	0.00000	0.00149	0.0001				
%RSD:	9.2950	9.2950	13.38				

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: LCST140926-01-457 **Date Collected: 9/26/2014 4:55:44 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: LCST140926-01-457

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01037	5.1861	0.2433	0.2444	0.0471	16:56:37	Yes
2	0.01047	5.2333	0.2456	0.2466	0.0474	16:57:10	Yes
3	0.01049	5.2440	0.2461	0.2471	0.0478	16:57:43	Yes
Mean:	0.01044	5.2211	0.2450				
SD:	0.00006	0.03081	0.0014				
%RSD:	0.59008	0.59008	0.59				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: E14-09143-001 **Date Collected: 9/26/2014 4:58:03 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09143-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00109	0.0002	0.0012	0.0001	16:58:56	Yes
2	-0.00004	-0.01861	-0.0006	0.0004	0.0001	16:59:29	Yes
3	-0.00002	-0.01220	-0.0003	0.0007	0.0001	17:00:02	Yes
Mean:	-0.00002	-0.01063	-0.0003				
SD:	0.00002	0.00887	0.0004				
%RSD:	83.384	83.384	154.66				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: E14-09143-001DUP **Date Collected: 9/26/2014 5:00:21 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09143-001DUP

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00002	-0.01172	-0.0003	0.0007	0.0001	17:01:15	Yes
2	-0.00005	-0.02662	-0.0010	0.0000	0.0001	17:01:48	Yes
3	-0.00003	-0.01718	-0.0006	0.0005	0.0001	17:02:21	Yes
Mean:	-0.00004	-0.01850	-0.0006				
SD:	0.00002	0.00754	0.0004				
%RSD:	40.740	40.740	55.41				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: E14-09143-001MS **Date Collected: 9/26/2014 5:02:41 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09143-001MS

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.01031	5.1531	0.2418	0.2429	0.0467	17:03:35	Yes
2	0.01044	5.2206	0.2450	0.2460	0.0468	17:04:08	Yes
3	0.01037	5.1868	0.2434	0.2444	0.0473	17:04:40	Yes
Mean:	0.01037	5.1868	0.2434				
SD:	0.00007	0.03373	0.0016				
%RSD:	0.65034	0.65034	0.65				

Sequence No.: 16 Autosampler Location: 16
Sample ID: E14-09109-001 Date Collected: 9/26/2014 5:05:01 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09109-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	0.00085	0.0003	0.0013	0.0001	17:05:55	Yes
2	-0.00004	-0.02085	-0.0007	0.0003	0.0001	17:06:28	Yes
3	-0.00005	-0.02477	-0.0009	0.0001	0.0001	17:07:00	Yes
Mean:	-0.00003	-0.01492	-0.0005				
SD:	0.00003	0.01380	0.0006				
%RSD:	92.468	92.468	137.67				

Sequence No.: 17 Autosampler Location: 17
Sample ID: E14-09190-001 Date Collected: 9/26/2014 5:07:21 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09190-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00001	0.00523	0.0005	0.0015	0.0002	17:08:15	Yes
2	-0.00003	-0.01636	-0.0005	0.0005	0.0002	17:08:48	Yes
3	-0.00002	-0.01139	-0.0003	0.0008	0.0002	17:09:21	Yes
Mean:	-0.00002	-0.00750	-0.0001				
SD:	0.00002	0.01130	0.0005				
%RSD:	150.63	150.63	434.05				

Sequence No.: 18 Autosampler Location: 18
Sample ID: E14-09239-001 Date Collected: 9/26/2014 5:09:42 PM
Analyst: Rob Data Type: Original

Replicate Data: E14-09239-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00001	-0.00486	0.0000	0.0011	0.0002	17:10:36	Yes
2	-0.00001	-0.00365	0.0001	0.0011	0.0002	17:11:09	Yes
3	-0.00004	-0.01869	-0.0006	0.0004	0.0002	17:11:42	Yes
Mean:	-0.00002	-0.00906	-0.0002				
SD:	0.00002	0.00836	0.0004				
%RSD:	92.182	92.182	200.63				

Sequence No.: 19 Autosampler Location: 2
Sample ID: CCV Date Collected: 9/26/2014 5:12:03 PM
Analyst: Data Type: Original

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00531	5.3128	0.2493	0.2504	0.0482	17:12:56	Yes
2	0.00538	5.3827	0.2526	0.2536	0.0495	17:13:29	Yes
3	0.00536	5.3611	0.2516	0.2526	0.0487	17:14:02	Yes

Mean:	0.00535	5.3522	0.2511
SD:	0.00004	0.03579	0.0017
%RSD:	0.66865	0.66865	0.67

QC value within limits for Hg 253.7 Recovery = 107.04%
All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/26/2014 5:14:21 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00269	0.0001	0.0012	0.0001	17:15:14	Yes
2	-0.00002	-0.01685	-0.0006	0.0005	0.0001	17:15:47	Yes
3	-0.00003	-0.02828	-0.0011	-0.0000	0.0001	17:16:19	Yes
Mean:	-0.00002	-0.01594	-0.0005				
SD:	0.00001	0.01282	0.0006				
%RSD:	80.424	80.424	116.12				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 19**
Sample ID: E14-09240-001 **Date Collected: 9/26/2014 5:16:39 PM**
Analyst: Rob **Data Type: Original**

Replicate Data: E14-09240-001

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.00003	-0.01349	-0.0004	0.0007	0.0001	17:17:33	Yes
2	-0.00003	-0.01695	-0.0006	0.0005	0.0001	17:18:06	Yes
3	-0.00004	-0.01902	-0.0007	0.0004	0.0001	17:18:39	Yes
Mean:	-0.00003	-0.01649	-0.0005				
SD:	0.00001	0.00280	0.0001				
%RSD:	16.967	16.967	24.14				

Sequence No.: 22 **Autosampler Location: 2**
Sample ID: CCV **Date Collected: 9/26/2014 5:19:00 PM**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00532	5.3186	0.2496	0.2506	0.0485	17:19:53	Yes
2	0.00530	5.3049	0.2489	0.2500	0.0486	17:20:26	Yes
3	0.00529	5.2855	0.2480	0.2491	0.0483	17:20:59	Yes
Mean:	0.00530	5.3030	0.2488				
SD:	0.00002	0.01664	0.0008				
%RSD:	0.31373	0.31373	0.31				

QC value within limits for Hg 253.7 Recovery = 106.06%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 9/26/2014 5:21:18 PM**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc mg/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.00000	-0.00452	0.0000	0.0011	0.0001	17:22:11	Yes
2	-0.00003	-0.02710	-0.0010	0.0000	0.0001	17:22:43	Yes
3	-0.00002	-0.02091	-0.0008	0.0003	0.0001	17:23:16	Yes
Mean:	-0.00002	-0.01751	-0.0006				
SD:	0.00001	0.01167	0.0005				

%RSD: 66.636 66.636 92.53
QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

TCLP METALS
PREP LOGS
STANDARD PREP LOGS

2014 PG: 457

METALS'S DIGESTION LOG

Date: 09/26/14 08:30

MATRIX: LEACHATE (TCLP)
DIGESTION METHOD: 3010A
SPIKES: 1.00ml M473
Hg DIGESTION METHOD: 7470A
Hg SPIKE: 2.50 PPB M493-2
Hg ICV: 2.50 PPB M455-1

PREP. SOLUTION	DATE	LOT #
NaCl:	9/10/14	134874
Hydroxylamine:	9/10/14	134386
KMnO4:	9/3/14	121666
K2S2O8:	4/17/14	117411

ANALYSIS METHOD: 6020A
Hg ANAL. METHOD: 1311/7470A
LOT# HNO3: 141569
LOT# H2SO4: 135111
LOT# HCL: 137354

Hg DIG. DATE: 9/26/14
ICPMS ICV: M331
ICPMS Cal. Stds.: M327,M361

TEST REQUESTED	SAMPLE ID	pH < 2	QC Y/N	MDL MOIST FACT	BASE (ml)	BASE final vol ml	Hg (ml)	Hg final vol ml	JAR #	Due Date	COMMENTS	SILT (%)	*N
Hg	STD1 0.25 PPB						25	50			M493-2		
Hg	STD2 2.50 PPB						25	50			M493-2		
Hg	STD3 5.00 PPB						25	50			M493-2		
Hg	STD4 7.50 PPB						25	50			M493-2		
Hg	STD5 10.0 PPB						25	50			M493-2		
Hg	ICV 5.00 PPB						25	50			M455-1		
	TCLP140924				25	50	25	50					
	TCLP140925				25	50	25	50					
	BLKT140926-01				25	50	25	50			BMT1		
	LCST140926-01				25	50	25	50			BST1		
TCLP + Ni	E14-09143-001	*	Y		25	50	25	50	U1-LT	9/29	R-72(9/29 11:00); TCLP140924		
	E14-09143-001DUP	*	Y		25	50	25	50	U1-LT				
	E14-09143-001MS	*	Y		25	50	25	50	U1-LT				
TCLP Pb	E14-09161-001	*	B		25	50			U1-LT	10/6	TCLP140924		
TCLP	E14-09109-001	*	Y		25	50	25	50	U1-LT	10/3	TCLP140924		
TCLP	E14-09190-001	*	Y		25	50	25	50	U1-LT	10/6	TCLP140925		
TCLP	E14-09239-001 .	*	Y		12.5	25	25	50	U1-LT	9/30	R-72(9/30 16:00); Solid; TCLP140925		
TCLP	E14-09240-001 .	*	Y		12.5	25	25	50	U1-LT	9/30	R-72(9/30 16:00); Solid; TCLP140925		

Base	Date/Time/Signature		Date/Time/Signature
Relinquished by:	9/26/14 - 1115 -	Received by:	9/26/14 1115
Relinquished by:		Received by:	
Disposal:			

Hg	Date/Time/Signature		Date/Time/Signature
Relinquished by:	9/26/14 - 1105 -	Received by:	9/26/14 1105
Relinquished by:		Received by:	
Disposal:			

E14-09161 0520

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

	Calibration Stock (500ppb Trace and 5ppm Major elem.)
Instrument Calibration Standard 1	1.25 ml
Instrument Check Standard 3	1.25 ml
1000 ppm Si	2.50 ml
1000 ppm Ti	25 ul
1000ppm B	25 ul
1000 ppm Sn	25 ul
Final Vol. in 2% HNO_3 + 0.5% HCl	50 ml

	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
(trace elem.) *	0	0.5 ppb	5.0 ppb	25 ppb	50 ppb	100 ppb
(major elem.) **	0	5.0 ppb	50 ppb	250 ppb	500 ppb	1000 ppb
Calibration Stock	0	0.05ml	0.5ml	2.5ml	5ml	10ml
Final Vol.	50 mL	50 mL	50 mL	50 mL	50 mL	50 mL

* Trace elem. = Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

** Major elem. = Na, Mg, K, Ca, Fe

CAL # 091514

Standard Name	091514-01	091514-02	091514-03	091514-04	091514-05	091514-06
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	9/15/14	9/15/14	9/15/14	9/15/14	9/15/14	9/15/14
Standard Name	091514-07	091514-08	091514-09	091514-10	091514-11	091514-12
Prepared by:Initial	DK	DK	DK	DK	DK	DK
Date	9/22/14	9/22/14	9/22/14	9/22/14	9/22/14	9/22/14
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						
Standard Name						
Prepared by:Initial						
Date						

ICV/CCV

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 0.05 mL ICV custom standard

Prepared by:Initial	DK	DK			
Date	9/15/14	9/22/14			

ICSA / ICSAB

- Prepared in class A 50mL plastic vials (filled to 50mL with DI water).

ICSA: 1 mL HNO3 + 5 mL Interference Check Solution 1

ICSAB: 1 mL HNO3 + 5 mL Interference Check Solution 1 + 0.10 mL Interference Check Solution 2

Prepared by:Initial	DK	DK			
Date	9/15/14	9/22/14			

Internal Standard

- Prepared in class A 50 mL plastic vials (filled to 50mL with DI water).
- 1mL HNO3 + 5mL Int Std 1+ 0.05mL 1000ppm Ge + 0.05mL 1000ppm Rh

Prepared by:Initial	DK	DK			
Date	9/15/14	9/22/14			

E14-09161 0521

Standard Preparation Worksheet for ICP-MS

Aglient 7700cx S/N JP12382037

Calibration Standards

Instrument Calibration Standard 1: 20ppm Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn in 5% HNO_3/tr Tart. Acid

Instrument Check Standard 3 : 200ppm Na, Mg, K, Ca, Fe in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Instrument Calibration Standard 1	SPEX	CL-CAL-1	CL11-57YPY	M-505	9/15/2015	
Instrument Check Standard 3	SPEX	CL-ICS-1	CL10-122YPY	M-490	2/28/2015	
1000 ppm Si	I.V.	CGSI01-1	F2-SI03020	M-492	5/1/2015	
1000 ppm Ti	SCP	140-050-221	S140218022	M-498	12/31/2015	
1000ppm B	SCP	140-050-051	S130911020	M-497	9/30/2015	
1000 ppm Sn	I.V.	CGSNCL1-1	F2-SN02047	M-496	5/1/2015	

ICV/CCV

Multi-Element Standard: 25ppm Al, As, B, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn; 5ppm Ag; 12.5ppm Hg; 250ppm Na, Mg, K, Ca, Fe, Si in 5% HNO_3/0.1% HF

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Multi-Element Standard	SCP	600-078-903	S120531006	M-433	12/2014	Expires 1 year after opening

ICSA / ICSAB

Interference Check Solution 1: 10000ppm Cl, 2000ppm C, 1000ppm Al,Ca,Fe,K,Mg,Na,P,S 20ppm Mo, Ti in 5% HNO_3/TrHF

Interference Check Solution 2: 10ppm Ag, As, Cd, Co, Cr, Cu, Mn, Ni, Zn in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Interference Check Solution 1	SPEX	CL-INT-A2	CL9-140YPY	M-484	2/28/15	
Interference Check Solution 2	SPEX	CL-INT-B2	CL7-164YPY	M-491	4/30/15	

Internal Standard

Multi-element Internal Standard 1: 10ppm Bi, HO, In, Li6, Sc, Tb, Y in 2% HNO_3

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
1000ppm Ge	I.V.	CGGE1-1	E2-GE01091	M-495	5/1/2015	
1000ppm Rh	I.V.	CGRH1-1	F2-RH01112	M-494	5/1/2015	
Multi-element Internal Standard 1	SPEX	CLISS-1	CL10-38YPY	M-488	2/28/15	

	Vendor	Cat No.	Lot No.	IAL No.	Exp Date	Comments
Distilled Water	Tulpenhocken		4496031-105		10/4/15	
Nitric Acid	Fisher		122766		12/11/22	

JR INITIAL

9/15/14 DATE

E14-09161 0522

GENERAL ANALYTICAL CHEMISTRY

E14-09161 0523

GENERAL ANALYTICAL CHEMISTRY QC SUMMARY

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfur as S

Matrix: Soil
Unit: mg/Kg

Batch: AP091-0026
Method: D129

Date: 10/07/2014

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS141007	< 825	NA	NA	NA	NA	NA
LCS	LCSS141007	277000	333000	NA	NA	83.2	80-120
SAMPLE	E14-09161-001	973	NA	NA	NA	NA	NA
DUP	E14-09161-001DUP	1000	NA	2.74	20	NA	NA

The above blank result applies to the follow samples:

E14-09161-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

GENERAL ANALYTICAL CHEMISTRY
RAW DATA
INSTRUMENT LOGS

Sulfur D129

	BKS 0.09	0.1073	0.1073	ND
	LCS 0.05	0.1104	0.2117	277000
	9161-001	0.1073	0.1107	973
	-001D	0.1055	0.1054	1000

RA 61-16 used as control sample -

1063	0.1063	ND
107	0.2117	277000
1103	0.1123	ND
1003	0.1026	
1075	0.1101	
1086	0.1105	
054	0.1069	

0.1111	0.1111	
0.1093	0.2103	278000
0.1098	0.1127	ND
0.1097	0.1125	
0.1096	0.1111	
0.1114	0.1124	
0.1119	0.1128	
0.1091	0.1091	
0.1095	0.1122	

089	0.1069	
073	~~0.1086 0.1073~~	173
084	0.1101	
071	0.1086	
1070	0.1088	

E14-09161 0527

MISCELLANEOUS PARAMETERS INITIAL CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 10/7/14
INITIAL CALIBRATION TIME: 17:00

PROJECT NO: _____
CONTRACT NO: _____

ANALYTE	BLANK	1	2	3	4	5	6	TRUE VALUE	ICV
Sulfur								333000	277000

E14-09161 0528

NJDEP FORM M-9A (12/94)

MISCELLANEOUS PARAMETERS CONTINUING CALIBRATION VERIFICATION

LABORATORY NAME: IAL
INITIAL CALIBRATION DATE: 10/7/14
INITIAL CALIBRATION TIME: 17:00

PROJECT NO: _____
CONTRACT NO: _____

ANALYTE	ICV1	CCV1	% REC	CCV2	% REC	CCV3
Sulfur	277000					
ANALYTE		CCV4	% REC	CCV5	% REC	CCV6
Sulfur						
ANALYTE		CCV7	% REC	CCV8	% REC	
Sulfur						

E14-09161 0529

LABORATORY CONTROL SAMPLE RECOVERY DATA SHEET

SAMPLE: ICV

LABORATORY NAME: IAL

PROJECT NO: _____

MATRIX: Soil

CONTRACT NO: _____

UNITS (circle one): (mg/Kg)

ANALYTE	SAMPLE	AMOUNT	SPIKE		CONTROL LIMITS			
Sulfur	RESULTS	ADDED	CONC.	% REC				
ICV	ND	333000	277000	83				

E14-091611

CNJDEP FORM G-2 (12/94)

0530

INORGANIC ANALYSIS BLANK REPORT FORM

MISCELLANEOUS PARAMETERS

LABORATORY NAME: IAL PROJECT NO: _____

PREPARATION BLANK UNITS: mg/Kg CONTRACT NO: _____

ANALYTE	INITIAL CALIB. BLANK (µg/L)	CONTINUING CALIBRATION BLANK (µg/L) 1	2	3	4	PREPARATION BLANK
sulfur						<852
sulfur		5	6	7	8	

GENERAL ANALYTICAL CHEMISTRY
STANDARD PREP LOGS

SIGMA-ALDRICH®

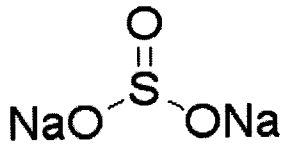
sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Sodium sulfite - ≥98%

Product Number:	**S0505**
Lot Number:	**091M1408V**
Brand:	SIAL
CAS Number:	7757-83-7
MDL Number:	MFCD00003503
Formula:	Na2O3S
Formula Weight:	126.04 g/mol
Quality Release Date:	04 OCT 2011



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 100 mg/mL, H2O	Clear	Clear
Titration by Iodine	≥ 98 %	98 %

Rodney Burbach, Manager
Analytical Services
St. Louis, Missouri US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

E14-09161 0533

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746

Project Name: **GPEC RI PH 3 WC**
IAL Case Number: **E19-02986**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E19-02986

Client GEI Consultants Inc. - Huntington Station

Project GPEC RI PH 3 WC

Received On 4/25/2019@14:00

Lab ID	Client Sample ID	Depth Top/Bottom	Sampling Time	Matrix	# of Container
02986-001	AREA 8SB-042519WC	n/a	4/25/2019@08:00	Soil	8

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DATA QUALIFIERS AND FLAGS

B Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C Indicates analyte is a common laboratory contaminant.
D Indicates analyte was reported from diluted analysis.
E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
M Indicates matrix interference
N Presumptive evidence of a compound from the use of GC/MS library search.
X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y Indicates DO depletion in the BOD blank is >0.20ppm
Z Indicates internal standard failure. Sample results are either biased high or biased low.
$ Value outside NJDEP DKQP Limits
***** Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative
- The case narrative for this SDG should be consulted to determine any non-conformances
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E19-02986

Integrated Analytical Laboratories, LLC. received one (1) sample from GEI Consultants Inc. - Huntington Station (IAL SDG# **E19-02986**, Project: GPEC RI PH 3 WC) on April 25, 2019 for the analysis of :

(1) TCL VO
(1) TCLP VO
(1) TCL BNA
(1) TCLP BNA
(1) NJ-EPH (DRO) Cat 1
(1) TCL PCB
(1) TCLP Herbicides
(1) TCLP Pesticides
(1) SRS Metals
(1) TCLP Metals
(1) Sulfur as S

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By SW 1311/8260C **Batch: J190426-01** **Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E19-02986
- All samples were received within holding time.
- All samples were leached within holding time.
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E19-02986

Volatiles By SW 8260C | **Batch: J190426-02** | **Matrix: MEOH**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E19-02986
- All samples were received within holding time.
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.

Dilution Summary:

Sample ID	DF(s)	Dilution For	MeOH Run For
E19-02986-001	1	NA	High Target Compounds.

Semivolatiles By SW 1311/8270D | **Batch: 190426-02** | **Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Internal standard recovery met QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E19-02986
- All samples were received within holding time.
- All samples were leached within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E19-02986

Semivolatiles By SW 8270D | **Batch: 190426-01** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Internal standard recovery met QC criteria.
- Surrogate recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.

E19-02986
- All samples were received within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	2	Matrix Interference.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

Herbicides By SW 1311/8151A | **Batch: 190425-11** | **Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E19-02986
- All samples were received within holding time.
- All samples were leached within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

NJ-EPH-DRO By Method 10.08 Rev 3 | **Batch: 190425-07** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS Percent Recovery met QC criteria.
- RPD between the Sample/Duplicate met QC criteria.

E19-02986
- All samples were received within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E19-02986

PCB By SW 8082A **Batch: 190502-04** **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E19-02986
- All samples were received within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

Pesticides By SW 1311/8081B **Batch: 190501-05** **Matrix: TCLP Leachate**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001.

E19-02986
- All samples were received within holding time.
- All samples were leached within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

Metals By SW 1311/6020B/7470A **Batch: T190429-01 (252A)** **Matrix: TCLP Leachate**

QC
- Calibration Curve Linearity met QC criteria.
- Internal Standard Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS Percent Recovery met QC criteria.
- RPD between Sample/Duplicate met QC criteria.
- Serial Dilution met QC criteria.

E19-02986
- Leachate Holding Time met requirement for each sample.
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E19-02986

Metals By SW 6020B/7471B | **Batch: S190429-01 (251A)** | **Matrix: Soil**

QC
- Calibration Curve Linearity met QC criteria.
- Internal Standard Recovery met QC criteria.
- Method Blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS Percent Recovery met QC criteria.
- RPD between Sample/Duplicate met QC criteria.
- Serial Dilution met QC criteria.
- QC samples run at a 10x dilution for Hg due to high concentrations.

E19-02986
- Digestion Holding Time met requirement for each sample.
- Analysis Holding Time met requirement for each sample.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E19-02986-001	1	NA

Sulfur as S By ASTM D129 | **Batch: AP091-0011** | **Matrix: Soil**

QC
- All QC passed criteria.

E19-02986
- All samples were received within holding time.
- All samples were analyzed within holding time.

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

5/10/2019
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Dichlorodifluoromethane	ND		0.083
Chloromethane	ND		0.054
Vinyl chloride	ND		0.025
Bromomethane	ND		0.060
Chloroethane	ND		0.066
Trichlorofluoromethane	ND		0.075
1,1-Dichloroethene	ND		0.069
Acetone	ND		0.329
Carbon disulfide	ND		0.037
Methylene chloride	ND		0.167
trans-1,2-Dichloroethene	ND		0.047
Methyl tert-butyl ether (MTBE)	ND		0.045
1,1-Dichloroethane	ND		0.033
cis-1,2-Dichloroethene	ND		0.026
2-Butanone (MEK)	ND		0.118
Bromochloromethane	ND		0.029
Chloroform	ND		0.028
1,1,1-Trichloroethane	ND		0.018
Carbon tetrachloride	ND		0.020
1,2-Dichloroethane (EDC)	ND		0.046
Benzene	0.295		0.024
Trichloroethene	ND		0.035
1,2-Dichloropropane	ND		0.019
1,4-Dioxane	ND		6.19
Bromodichloromethane	ND		0.048
cis-1,3-Dichloropropene	ND		0.038
4-Methyl-2-pentanone (MIBK)	ND		0.134
Toluene	0.134		0.029
trans-1,3-Dichloropropene	ND		0.041
1,1,2-Trichloroethane	ND		0.039
Tetrachloroethene	ND		0.046
2-Hexanone	ND		0.165
Dibromochloromethane	ND		0.064
1,2-Dibromoethane (EDB)	ND		0.044
Chlorobenzene	ND		0.047
Ethylbenzene	0.461		0.046
Total Xylenes	0.232		0.149
Styrene	ND		0.073
Bromoform	ND		0.071
Isopropylbenzene	ND		0.065
1,1,2,2-Tetrachloroethane	ND		0.134
1,3-Dichlorobenzene	ND		0.050
1,4-Dichlorobenzene	ND		0.066
1,2-Dichlorobenzene	ND		0.055

ND = Analyzed for but Not Detected at the MDL

Continued on next page

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
1,2-Dibromo-3-chloropropane	ND		0.097
1,2,4-Trichlorobenzene	ND		0.061
1,2,3-Trichlorobenzene	ND		0.087
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.059
Methyl acetate	ND		0.082
Cyclohexane	ND		0.093
Methylcyclohexane	ND		0.084
1,3-Dichloropropene (cis- and trans-)	ND		0.041
TOTAL VO's:	1.12		
TCLP Volatiles (Units)	*(mg/L)*		
Vinyl chloride	ND		0.00745
1,1-Dichloroethene	ND		0.021
2-Butanone (MEK)	ND		0.035
Chloroform	ND		0.00815
Carbon tetrachloride	ND		0.00595
1,2-Dichloroethane (EDC)	ND		0.014
Benzene	ND		0.0072
Trichloroethene	ND		0.010
Tetrachloroethene	ND		0.014
Chlorobenzene	ND		0.014
1,4-Dichlorobenzene	ND		0.020
Semivolatiles - BNA (Units)	*(mg/Kg)*		
N-Nitrosodimethylamine	ND		0.042
Pyridine	ND		0.050
Phenol	ND		0.052
Aniline	ND		0.048
Bis(2-chloroethyl) ether	ND		0.041
2-Chlorophenol	ND		0.047
1,3-Dichlorobenzene	ND		0.041
1,4-Dichlorobenzene	ND		0.061
Benzyl alcohol	ND		0.062
1,2-Dichlorobenzene	ND		0.045
2-Methylphenol	ND		0.063
2,2'-Oxybis(1-Chloropropane)	ND		0.068
4-Methylphenol **	ND		0.066
N-Nitrosodi-n-propylamine	ND		0.045
Hexachloroethane	ND		0.041
Nitrobenzene	ND		0.041
Isophorone	ND		0.063
2-Nitrophenol	ND		0.041
2,4-Dimethylphenol	ND		0.042

ND = Analyzed for but Not Detected at the MDL
Continued on next page

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)	*(mg/Kg)*		
Bis(2-chloroethoxy) methane	ND		0.043
Benzoic acid	ND		0.043
2,4-Dichlorophenol	ND		0.044
1,2,4-Trichlorobenzene	ND		0.041
Naphthalene	0.692	D	0.049
4-Chloroaniline	ND		0.043
Hexachlorobutadiene	ND		0.042
4-Chloro-3-methylphenol	ND		0.052
2-Methylnaphthalene	0.226	D	0.042
Hexachlorocyclopentadiene	ND		0.046
2,4,6-Trichlorophenol	ND		0.041
2,4,5-Trichlorophenol	ND		0.041
2-Chloronaphthalene	ND		0.041
2-Nitroaniline	ND		0.060
Dimethyl phthalate	ND		0.041
2,6-Dinitrotoluene	ND		0.057
Acenaphthylene	0.319	D	0.049
3-Nitroaniline	ND		0.051
Acenaphthene	0.774	D	0.041
2,4-Dinitrophenol	ND		0.041
4-Nitrophenol	ND		0.041
2,4-Dinitrotoluene	ND		0.041
Dibenzofuran	0.122	D	0.043
Diethyl phthalate	ND		0.044
Fluorene	0.566	D	0.041
4-Chlorophenyl phenyl ether	ND		0.041
4-Nitroaniline	ND		0.055
4,6-Dinitro-2-methylphenol	ND		0.044
N-Nitrosodiphenylamine	ND		0.049
1,2-Diphenylhydrazine	ND		0.052
4-Bromophenyl phenyl ether	ND		0.058
Hexachlorobenzene	ND		0.041
Pentachlorophenol	ND		0.053
Phenanthrene	2.72	D	0.041
Anthracene	0.769	D	0.041
Carbazole	ND		0.046
Di-n-butyl phthalate	ND		0.041
Fluoranthene	3.01	D	0.067
Benzidine	ND		0.041
Pyrene	3.23	D	0.054
Butyl benzyl phthalate	ND		0.052
3,3'-Dichlorobenzidine	ND		0.041
Benzo[a]anthracene	1.74	D	0.049

ND = Analyzed for but Not Detected at the MDL
Continued on next page

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
Semivolatiles - BNA (Units)		*(mg/Kg)*	
Chrysene	1.68	D	0.041
Bis(2-ethylhexyl) phthalate	ND		0.061
Di-n-octyl phthalate	ND		0.065
Benzo[b]fluoranthene	1.24	D	0.060
Benzo[k]fluoranthene	1.38	D	0.052
Benzo[a]pyrene	1.69	D	0.041
Indeno[1,2,3-cd]pyrene	1.04	D	0.041
Dibenz[a,h]anthracene	0.369	D	0.047
Benzo[g,h,i]perylene	0.969	D	0.065
TOTAL BN'S:	22.5		
TCLP Semivolatiles (Units)		*(mg/L)*	
Pyridine	ND		0.00392
2-Methylphenol	ND		0.005
4-Methylphenol	ND		0.00408
3-Methylphenol	ND		0.00408
Hexachloroethane	ND		0.00452
Nitrobenzene	ND		0.00856
Hexachlorobutadiene	ND		0.00366
2,4,6-Trichlorophenol	ND		0.00358
2,4,5-Trichlorophenol	ND		0.00368
2,4-Dinitrotoluene	ND		0.00284
Hexachlorobenzene	ND		0.00498
Pentachlorophenol	ND		0.00368
PCB's (Units)		*(mg/Kg)*	
Aroclor-1016	ND		0.016
Aroclor-1221	ND		0.016
Aroclor-1232	ND		0.016
Aroclor-1242	ND		0.016
Aroclor-1248	ND		0.016
Aroclor-1254	ND		0.016
Aroclor-1260	ND		0.016
Aroclor-1262	ND		0.016
Aroclor-1268	ND		0.016
PCBs	ND		0.016
TCLP Pesticides (Units)		*(mg/L)*	
gamma-BHC (Lindane)	ND		0.000025
Heptachlor	ND		0.000025
Heptachlor epoxide	ND		0.000025
Endrin	ND		0.000025
Methoxychlor	ND		0.000025
Chlordane	ND		0.0003
Toxaphene	ND		0.0003

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
TCLP Herbicides (Units)	*(mg/L)*		
2,4-D	ND		0.040
2,4,5-TP (Silvex)	ND		0.040
NJ-EPH-DRO (Units)	*(mg/Kg)*		
C9-C28	228		20.5
C28-C40	38.7	J	20.5
C9-C40 Total	266		20.5
Metals (Units)	*(mg/Kg)*		
Aluminum	5070		2.35
Antimony	ND		0.235
Arsenic	2.29		0.176
Barium	51.3		0.294
Beryllium	0.288	J	0.176
Cadmium	ND		0.352
Chromium	11.2		0.294
Cobalt	5.66		0.176
Copper	56.5		0.411
Lead	48.5		0.294
Manganese	221		0.411
Mercury	0.038		0.010
Nickel	12.5		0.411
Selenium	ND		1.76
Silver	ND		0.352
Thallium	ND		0.294
Vanadium	15.8		0.294
Zinc	53.6		1.17
TCLP Metals (Units)	*(mg/L)*		
TCLP Arsenic	ND		0.040
TCLP Barium	0.829		0.050
TCLP Cadmium	ND		0.070
TCLP Chromium	ND		0.070
TCLP Lead	0.361		0.060
TCLP Mercury	ND		0.010
TCLP Selenium	ND		0.300
TCLP Silver	ND		0.060

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: GEI Consultants Inc. - Huntington Station
Project: GPEC RI PH 3 WC
Lab Case No.: E19-02986

Lab ID:	**02986-001**		
Client ID:	**AREA 8SB-042519WC**		
Matrix:	**Soil**		
TCLP Matrix:	**TCLP Leachate**		
Sampled Date	**4/25/19**		
PARAMETER(Units)	Conc	Q	MDL
General Analytical (Units)			
Sulfur as S(mg/Kg)	ND		NA

ND = Analyzed for but Not Detected at the MDL

All required protocols were followed during analyses. These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB-042
Date Received: 04/25/2019
Date Analyzed: 04/27/2019
Data file: J0781.D 04/27/2019 07:55

GC/MS Column: DB-624
Sample wt/vol: 0.0322g
Matrix-Units: Soil-mg/Kg
% Moisture: 8.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.169	0.083
Chloromethane	ND		0.084	0.054
Vinyl chloride	ND		0.169	0.025
Bromomethane	ND		0.169	0.060
Chloroethane	ND		0.084	0.066
Trichlorofluoromethane	ND		0.084	0.075
1,1-Dichloroethene	ND		0.084	0.069
Acetone	ND		0.338	0.329
Carbon disulfide	ND		0.084	0.037
Methylene chloride	ND		0.169	0.167
trans-1,2-Dichloroethene	ND		0.084	0.047
Methyl tert-butyl ether (MTBE)	ND		0.084	0.045
1,1-Dichloroethane	ND		0.084	0.033
cis-1,2-Dichloroethene	ND		0.084	0.026
2-Butanone (MEK)	ND		0.338	0.118
Bromochloromethane	ND		0.169	0.029
Chloroform	ND		0.084	0.028
1,1,1-Trichloroethane	ND		0.084	0.018
Carbon tetrachloride	ND		0.169	0.020
1,2-Dichloroethane (EDC)	ND		0.084	0.046
Benzene	0.295		0.084	0.024
Trichloroethene	ND		0.084	0.035
1,2-Dichloropropane	ND		0.084	0.019
1,4-Dioxane	ND		16.9	6.19
Bromodichloromethane	ND		0.084	0.048
cis-1,3-Dichloropropene	ND		0.084	0.038
4-Methyl-2-pentanone (MIBK)	ND		0.338	0.134

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB-042
Date Received: 04/25/2019
Date Analyzed: 04/27/2019
Data file: J0781.D 04/27/2019 07:55

GC/MS Column: DB-624
Sample wt/vol: 0.0322g
Matrix-Units: Soil-mg/Kg
% Moisture: 8.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	0.134		0.084	0.029
trans-1,3-Dichloropropene	ND		0.169	0.041
1,1,2-Trichloroethane	ND		0.084	0.039
Tetrachloroethene	ND		0.084	0.046
2-Hexanone	ND		0.338	0.165
Dibromochloromethane	ND		0.084	0.064
1,2-Dibromoethane (EDB)	ND		0.084	0.044
Chlorobenzene	ND		0.084	0.047
Ethylbenzene	0.461		0.084	0.046
Total Xylenes	0.232		0.169	0.149
Styrene	ND		0.169	0.073
Bromoform	ND		0.084	0.071
Isopropylbenzene	ND		0.084	0.065
1,1,2,2-Tetrachloroethane	ND		0.169	0.134
1,3-Dichlorobenzene	ND		0.084	0.050
1,4-Dichlorobenzene	ND		0.084	0.066
1,2-Dichlorobenzene	ND		0.084	0.055
1,2-Dibromo-3-chloropropane	ND		0.169	0.097
1,2,4-Trichlorobenzene	ND		0.169	0.061
1,2,3-Trichlorobenzene	ND		0.169	0.087
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.169	0.059
Methyl acetate	ND		0.084	0.082
Cyclohexane	ND		0.169	0.093
Methylcyclohexane	ND		0.084	0.084
1,3-Dichloropropene (cis- and trans-)	ND		0.169	0.041
Total Target Compounds (52):	1.12			

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM190426-02
Client ID: BLKM190426-02
Date Received:
Date Analyzed: 04/27/2019
Data file: J0769.D 04/27/2019 02:36

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.050	0.025
Chloromethane	ND		0.025	0.016
Vinyl chloride	ND		0.050	0.00745
Bromomethane	ND		0.050	0.018
Chloroethane	ND		0.025	0.020
Trichlorofluoromethane	ND		0.025	0.022
1,1-Dichloroethene	ND		0.025	0.021
Acetone	ND		0.100	0.098
Carbon disulfide	ND		0.025	0.011
Methylene chloride	ND		0.050	0.050
trans-1,2-Dichloroethene	ND		0.025	0.014
Methyl tert-butyl ether (MTBE)	ND		0.025	0.013
1,1-Dichloroethane	ND		0.025	0.00965
cis-1,2-Dichloroethene	ND		0.025	0.0078
2-Butanone (MEK)	ND		0.100	0.035
Bromochloromethane	ND		0.050	0.0087
Chloroform	ND		0.025	0.00815
1,1,1-Trichloroethane	ND		0.025	0.00525
Carbon tetrachloride	ND		0.050	0.00595
1,2-Dichloroethane (EDC)	ND		0.025	0.014
Benzene	ND		0.025	0.0072
Trichloroethene	ND		0.025	0.010
1,2-Dichloropropane	ND		0.025	0.0055
1,4-Dioxane	ND		5.00	1.84
Bromodichloromethane	ND		0.025	0.014
cis-1,3-Dichloropropene	ND		0.025	0.011
4-Methyl-2-pentanone (MIBK)	ND		0.100	0.040

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKM190426-02
Client ID: BLKM190426-02
Date Received:
Date Analyzed: 04/27/2019
Data file: J0769.D 04/27/2019 02:36

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.025	0.0087
trans-1,3-Dichloropropene	ND		0.050	0.012
1,1,2-Trichloroethane	ND		0.025	0.012
Tetrachloroethene	ND		0.025	0.014
2-Hexanone	ND		0.100	0.049
Dibromochloromethane	ND		0.025	0.019
1,2-Dibromoethane (EDB)	ND		0.025	0.013
Chlorobenzene	ND		0.025	0.014
Ethylbenzene	ND		0.025	0.014
Total Xylenes	ND		0.050	0.044
Styrene	ND		0.050	0.022
Bromoform	ND		0.025	0.021
Isopropylbenzene	ND		0.025	0.019
1,1,2,2-Tetrachloroethane	ND		0.050	0.040
1,3-Dichlorobenzene	ND		0.025	0.015
1,4-Dichlorobenzene	ND		0.025	0.020
1,2-Dichlorobenzene	ND		0.025	0.016
1,2-Dibromo-3-chloropropane	ND		0.050	0.029
1,2,4-Trichlorobenzene	ND		0.050	0.018
1,2,3-Trichlorobenzene	ND		0.050	0.026
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.017
Methyl acetate	ND		0.025	0.024
Cyclohexane	ND		0.050	0.027
Methylcyclohexane	ND		0.025	0.025
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.012

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM190426-02
Client ID: BLKM190426-02
Date Received:
Date Analyzed: 04/27/2019
Data file: J0769.D 04/27/2019 02:36

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB-042
Date Received: 04/25/2019
Date Analyzed: 04/26/2019
Data file: J0753.D 04/26/2019 19:32

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.00745
1,1-Dichloroethene	ND		0.025	0.021
2-Butanone (MEK)	ND		0.100	0.035
Chloroform	ND		0.025	0.00815
Carbon tetrachloride	ND		0.050	0.00595
1,2-Dichloroethane (EDC)	ND		0.025	0.014
Benzene	ND		0.025	0.0072
Trichloroethene	ND		0.025	0.010
Tetrachloroethene	ND		0.025	0.014
Chlorobenzene	ND		0.025	0.014
1,4-Dichlorobenzene	ND		0.025	0.020

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA190426-01
Client ID: BLKA190426-01
Date Received:
Date Analyzed: 04/26/2019
Data file: J0743.D 04/26/2019 15:06

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Chloromethane	ND		0.500	0.317
Vinyl chloride	ND		1.00	0.149
Bromomethane	ND		1.00	0.356
Chloroethane	ND		0.500	0.390
Acrolein	ND		10.0	1.72
1,1-Dichloroethene	ND		0.500	0.409
Methylene chloride	ND		1.00	0.990
Acrylonitrile	ND		10.0	2.90
trans-1,2-Dichloroethene	ND		0.500	0.281
1,1-Dichloroethane	ND		0.500	0.193
Chloroform	ND		0.500	0.163
1,1,1-Trichloroethane	ND		0.500	0.105
Carbon tetrachloride	ND		1.00	0.119
1,2-Dichloroethane (EDC)	ND		0.500	0.271
Benzene	ND		0.500	0.144
Trichloroethene	ND		0.500	0.205
1,2-Dichloropropane	ND		0.500	0.110
Bromodichloromethane	ND		0.500	0.286
2-Chloroethyl vinyl ether	ND		2.00	0.953
cis-1,3-Dichloropropene	ND		0.500	0.222
Toluene	ND		0.500	0.174
trans-1,3-Dichloropropene	ND		1.00	0.241
1,1,2-Trichloroethane	ND		0.500	0.232
Tetrachloroethene	ND		0.500	0.270
Dibromochloromethane	ND		0.500	0.381
Chlorobenzene	ND		0.500	0.278
Ethylbenzene	ND		0.500	0.270
Bromoform	ND		0.500	0.423
1,1,2,2-Tetrachloroethane	ND		1.00	0.791
1,3-Dichlorobenzene	ND		0.500	0.296
1,4-Dichlorobenzene	ND		0.500	0.392
1,2-Dichlorobenzene	ND		0.500	0.324

Total Target Compounds (32): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA190426-01
Client ID: BLKA190426-01
Date Received:
Date Analyzed: 04/26/2019
Data file: J0743.D 04/26/2019 15:06

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP VOLATILE ORGANICS

Lab ID: TCLP190426
Client ID: TCLP190426
Date Received:
Date Analyzed: 04/26/2019
Data file: J0752.D 04/26/2019 19:05

GC/MS Column: DB-624
Sample wt/vol: 0.1ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.00745
1,1-Dichloroethene	ND		0.025	0.021
2-Butanone (MEK)	ND		0.100	0.035
Chloroform	ND		0.025	0.00815
Carbon tetrachloride	ND		0.050	0.00595
1,2-Dichloroethane (EDC)	ND		0.025	0.014
Benzene	ND		0.025	0.0072
Trichloroethene	ND		0.025	0.010
Tetrachloroethene	ND		0.025	0.014
Chlorobenzene	ND		0.025	0.014
1,4-Dichlorobenzene	ND		0.025	0.020

Total Target Compounds (11): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: C2666.D 04/26/2019 22:52

GC/MS Column: DB-5
Sample wt/vol: 15.9g
Matrix-Units: Soil-mg/Kg
% Moisture: 8.00
Dilution Factor: 2

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.068	0.042
Pyridine	ND		0.068	0.050
Phenol	ND		0.068	0.052
Aniline	ND		0.068	0.048
Bis(2-chloroethyl) ether	ND		0.068	0.041
2-Chlorophenol	ND		0.068	0.047
1,3-Dichlorobenzene	ND		0.068	0.041
1,4-Dichlorobenzene	ND		0.068	0.061
Benzyl alcohol	ND		0.068	0.062
1,2-Dichlorobenzene	ND		0.068	0.045
2-Methylphenol	ND		0.068	0.063
2,2'-Oxybis(1-Chloropropane)	ND		0.068	0.068
4-Methylphenol **	ND		0.068	0.066
N-Nitrosodi-n-propylamine	ND		0.068	0.045
Hexachloroethane	ND		0.068	0.041
Nitrobenzene	ND		0.068	0.041
Isophorone	ND		0.068	0.063
2-Nitrophenol	ND		0.068	0.041
2,4-Dimethylphenol	ND		0.068	0.042
Bis(2-chloroethoxy) methane	ND		0.068	0.043
Benzoic acid	ND		0.684	0.043
2,4-Dichlorophenol	ND		0.068	0.044
1,2,4-Trichlorobenzene	ND		0.068	0.041
Naphthalene	0.692	D	0.068	0.049
4-Chloroaniline	ND		0.068	0.043
Hexachlorobutadiene	ND		0.068	0.042
4-Chloro-3-methylphenol	ND		0.068	0.052
2-Methylnaphthalene	0.226	D	0.068	0.042
Hexachlorocyclopentadiene	ND		0.068	0.046
2,4,6-Trichlorophenol	ND		0.068	0.041
2,4,5-Trichlorophenol	ND		0.068	0.041
2-Chloronaphthalene	ND		0.068	0.041
2-Nitroaniline	ND		0.068	0.060
Dimethyl phthalate	ND		0.068	0.041

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: C2666.D 04/26/2019 22:52

GC/MS Column: DB-5
Sample wt/vol: 15.9g
Matrix-Units: Soil-mg/Kg
% Moisture: 8.00
Dilution Factor: 2

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.068	0.057
Acenaphthylene	0.319	D	0.068	0.049
3-Nitroaniline	ND		0.068	0.051
Acenaphthene	0.774	D	0.068	0.041
2,4-Dinitrophenol	ND		0.684	0.041
4-Nitrophenol	ND		0.068	0.041
2,4-Dinitrotoluene	ND		0.068	0.041
Dibenzofuran	0.122	D	0.068	0.043
Diethyl phthalate	ND		0.068	0.044
Fluorene	0.566	D	0.068	0.041
4-Chlorophenyl phenyl ether	ND		0.068	0.041
4-Nitroaniline	ND		0.068	0.055
4,6-Dinitro-2-methylphenol	ND		0.684	0.044
N-Nitrosodiphenylamine	ND		0.068	0.049
1,2-Diphenylhydrazine	ND		0.068	0.052
4-Bromophenyl phenyl ether	ND		0.068	0.058
Hexachlorobenzene	ND		0.068	0.041
Pentachlorophenol	ND		0.068	0.053
Phenanthrene	2.72	D	0.068	0.041
Anthracene	0.769	D	0.068	0.041
Carbazole	ND		0.068	0.046
Di-n-butyl phthalate	ND		0.068	0.041
Fluoranthene	3.01	D	0.068	0.067
Benzidine	ND		0.068	0.041
Pyrene	3.23	D	0.068	0.054
Butyl benzyl phthalate	ND		0.068	0.052
3,3'-Dichlorobenzidine	ND		0.068	0.041
Benzo[a]anthracene	1.74	D	0.068	0.049
Chrysene	1.68	D	0.068	0.041
Bis(2-ethylhexyl) phthalate	ND		0.068	0.061
Di-n-octyl phthalate	ND		0.068	0.065
Benzo[b]fluoranthene	1.24	D	0.068	0.060
Benzo[k]fluoranthene	1.38	D	0.068	0.052
Benzo[a]pyrene	1.69	D	0.068	0.041
Indeno[1,2,3-cd]pyrene	1.04	D	0.068	0.041
Dibenz[a,h]anthracene	0.369	D	0.068	0.047
Benzo[g,h,i]perylene	0.969	D	0.068	0.065
Total Target Compounds (71):	22.5	D		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS190426-01
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: C2651.D 04/26/2019 19:00

GC/MS Column: DB-5
Sample wt/vol: 15.0g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		0.033	0.020
Pyridine	ND		0.033	0.024
Benzaldehyde	ND		0.033	0.020
Phenol	ND		0.033	0.025
Aniline	ND		0.033	0.023
Bis(2-chloroethyl) ether	ND		0.033	0.020
2-Chlorophenol	ND		0.033	0.023
1,3-Dichlorobenzene	ND		0.033	0.020
1,4-Dichlorobenzene	ND		0.033	0.030
Benzyl alcohol	ND		0.033	0.030
1,2-Dichlorobenzene	ND		0.033	0.022
2-Methylphenol	ND		0.033	0.031
2,2'-Oxybis(1-Chloropropane)	ND		0.033	0.033
4-Methylphenol **	ND		0.033	0.032
N-Nitrosodi-n-propylamine	ND		0.033	0.022
Acetophenone	ND		0.033	0.022
3-Methylphenol	ND		0.033	0.032
Hexachloroethane	ND		0.033	0.020
Nitrobenzene	ND		0.033	0.020
Isophorone	ND		0.033	0.031
2-Nitrophenol	ND		0.033	0.020
2,4-Dimethylphenol	ND		0.033	0.021
Bis(2-chloroethoxy) methane	ND		0.033	0.021
Benzoic acid	ND		0.333	0.021
2,4-Dimethylaniline	ND		0.033	0.024
2,4-Dichlorophenol	ND		0.033	0.022
1,2,4-Trichlorobenzene	ND		0.033	0.020
Naphthalene	ND		0.033	0.024
4-Chloroaniline	ND		0.033	0.021
4-Aminotoluene	ND		0.033	0.020
Hexachlorobutadiene	ND		0.033	0.020
Caprolactam	ND		0.033	0.033
2-Aminotoluene	ND		0.033	0.020
4-Chloro-3-methylphenol	ND		0.033	0.025
2-Methylnaphthalene	ND		0.033	0.021
Hexachlorocyclopentadiene	ND		0.033	0.023
2,4,6-Trichlorophenol	ND		0.033	0.020
2,4,5-Trichlorophenol	ND		0.033	0.020
1,1'-Biphenyl	ND		0.033	0.020
2-Chloronaphthalene	ND		0.033	0.020
2-Nitroaniline	ND		0.033	0.029
Dimethyl phthalate	ND		0.033	0.020

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKS190426-01
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: C2651.D 04/26/2019 19:00

GC/MS Column: DB-5
Sample wt/vol: 15.0g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.028
Acenaphthylene	ND		0.033	0.024
3-Nitroaniline	ND		0.033	0.025
Acenaphthene	ND		0.033	0.020
2,4-Dinitrophenol	ND		0.333	0.020
4-Nitrophenol	ND		0.033	0.020
2,4-Dinitrotoluene	ND		0.033	0.020
Dibenzofuran	ND		0.033	0.021
Diethyl phthalate	ND		0.033	0.021
Fluorene	ND		0.033	0.020
4-Chlorophenyl phenyl ether	ND		0.033	0.020
4-Nitroaniline	ND		0.033	0.027
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.020
2,3,4,6-Tetrachlorophenol	ND		0.033	0.020
4,6-Dinitro-2-methylphenol	ND		0.333	0.021
N-Nitrosodiphenylamine	ND		0.033	0.024
1,2-Diphenylhydrazine	ND		0.033	0.026
4-Bromophenyl phenyl ether	ND		0.033	0.028
Hexachlorobenzene	ND		0.033	0.020
Atrazine	ND		0.033	0.020
Pentachlorophenol	ND		0.033	0.026
Phenanthrene	ND		0.033	0.020
Anthracene	ND		0.033	0.020
Carbazole	ND		0.033	0.023
Di-n-butyl phthalate	ND		0.033	0.020
Fluoranthene	ND		0.033	0.033
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.026
3,3'-Dimethylbenzidine	ND		0.033	0.020
Butyl benzyl phthalate	ND		0.033	0.025
3,3'-Dichlorobenzidine	ND		0.033	0.020
Benzo[a]anthracene	ND		0.033	0.024
Chrysene	ND		0.033	0.020
Bis(2-ethylhexyl) phthalate	ND		0.033	0.030
Di-n-octyl phthalate	ND		0.033	0.031
Benzo[b]fluoranthene	ND		0.033	0.029
Benzo[k]fluoranthene	ND		0.033	0.025
Benzo[a]pyrene	ND		0.033	0.020
Indeno[1,2,3-cd]pyrene	ND		0.033	0.020
Dibenz[a,h]anthracene	ND		0.033	0.023
Benzo[g,h,i]perylene	ND		0.033	0.032

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
--- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS190426-01
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: C2651.D 04/26/2019 19:00

GC/MS Column: DB-5
Sample wt/vol: 15.0g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: B2051.D 04/26/2019 23:14

GC/MS Column: DB-5
Sample wt/vol: 50ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00392
2-Methylphenol	ND		0.020	0.005
4-Methylphenol	ND		0.020	0.00408
3-Methylphenol	ND		0.020	0.00408
Hexachloroethane	ND		0.020	0.00452
Nitrobenzene	ND		0.020	0.00856
Hexachlorobutadiene	ND		0.020	0.00366
2,4,6-Trichlorophenol	ND		0.020	0.00358
2,4,5-Trichlorophenol	ND		0.020	0.00368
2,4-Dinitrotoluene	ND		0.020	0.00284
Hexachlorobenzene	ND		0.020	0.00498
Pentachlorophenol	ND		0.020	0.00368

Total Target Compounds (12): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA190426-02
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: B2046.D 04/26/2019 21:40

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
N-Nitrosodimethylamine	ND		1.00	0.150
Pyridine	ND		1.00	0.196
Benzaldehyde	ND		1.00	0.324
Phenol	ND		1.00	0.147
Aniline	ND		1.00	0.212
Bis(2-chloroethyl) ether	ND		1.00	0.338
2-Chlorophenol	ND		1.00	0.252
1,3-Dichlorobenzene	ND		1.00	0.275
1,4-Dichlorobenzene	ND		1.00	0.302
Benzyl alcohol	ND		1.00	0.258
1,2-Dichlorobenzene	ND		1.00	0.275
2-Methylphenol	ND		1.00	0.250
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.472
4-Methylphenol **	ND		1.00	0.204
N-Nitrosodi-n-propylamine	ND		1.00	0.220
Acetophenone	ND		1.00	0.282
3-Methylphenol	ND		1.00	0.204
Hexachloroethane	ND		1.00	0.226
Nitrobenzene	ND		1.00	0.428
Isophorone	ND		1.00	0.227
2-Nitrophenol	ND		1.00	0.163
2,4-Dimethylphenol	ND		1.00	0.253
Bis(2-chloroethoxy) methane	ND		1.00	0.304
Benzoic acid	ND		10.0	0.298
2,4-Dimethylaniline	ND		1.00	0.221
2,4-Dichlorophenol	ND		1.00	0.254
1,2,4-Trichlorobenzene	ND		1.00	0.215
Naphthalene	ND		1.00	0.275
4-Chloroaniline	ND		1.00	0.299
4-Aminotoluene	ND		1.00	0.300
Hexachlorobutadiene	ND		1.00	0.183
Caprolactam	ND		1.00	0.187
2-Aminotoluene	ND		1.00	0.298
4-Chloro-3-methylphenol	ND		1.00	0.182
2-Methylnaphthalene	ND		1.00	0.150
Hexachlorocyclopentadiene	ND		1.00	0.193
2,4,6-Trichlorophenol	ND		1.00	0.179
2,4,5-Trichlorophenol	ND		1.00	0.184
1,1'-Biphenyl	ND		1.00	0.351
2-Chloronaphthalene	ND		1.00	0.227
2-Nitroaniline	ND		1.00	0.198
Dimethyl phthalate	ND		1.00	0.242

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Lab ID: BLKA190426-02
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: B2046.D 04/26/2019 21:40

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.153
Acenaphthylene	ND		1.00	0.160
3-Nitroaniline	ND		1.00	0.201
Acenaphthene	ND		1.00	0.326
2,4-Dinitrophenol	ND		1.00	0.109
4-Nitrophenol	ND		1.00	0.901
2,4-Dinitrotoluene	ND		1.00	0.142
Dibenzofuran	ND		1.00	0.341
Diethyl phthalate	ND		1.00	0.265
Fluorene	ND		1.00	0.282
4-Chlorophenyl phenyl ether	ND		1.00	0.285
4-Nitroaniline	ND		1.00	0.176
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.490
2,3,4,6-Tetrachlorophenol	ND		1.00	0.146
4,6-Dinitro-2-methylphenol	ND		1.00	0.159
N-Nitrosodiphenylamine	ND		1.00	0.135
1,2-Diphenylhydrazine	ND		1.00	0.188
4-Bromophenyl phenyl ether	ND		1.00	0.237
Hexachlorobenzene	ND		1.00	0.249
Atrazine	ND		1.00	0.288
Pentachlorophenol	ND		1.00	0.184
Phenanthrene	ND		1.00	0.289
Anthracene	ND		1.00	0.245
Carbazole	ND		1.00	0.227
Di-n-butyl phthalate	ND		1.00	0.142
Fluoranthene	ND		1.00	0.235
Benzidine	ND		1.00	0.150
Pyrene	ND		1.00	0.366
3,3'-Dimethylbenzidine	ND		1.00	0.114
Butyl benzyl phthalate	ND		1.00	0.407
3,3'-Dichlorobenzidine	ND		1.00	0.270
Benzo[a]anthracene	ND		1.00	0.181
Chrysene	ND		1.00	0.462
Bis(2-ethylhexyl) phthalate	ND		1.00	0.493
Di-n-octyl phthalate	ND		1.00	0.554
Benzo[b]fluoranthene	ND		1.00	0.224
Benzo[k]fluoranthene	ND		1.00	0.326
Benzo[a]pyrene	ND		1.00	0.138
Indeno[1,2,3-cd]pyrene	ND		1.00	0.111
Dibenz[a,h]anthracene	ND		1.00	0.146
Benzo[g,h,i]perylene	ND		1.00	0.367

Total Target Compounds (83): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

** - represents the total of 3+4-Methylphenol
B --- Compound detected in Blank
Q --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA190426-02
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: B2046.D 04/26/2019 21:40

GC/MS Column: DB-5
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

TCLP SEMIVOLATILE ORGANICS

Lab ID: TCLP190425-02
Client ID: .
Date Received: NA
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: B2047.D 04/26/2019 21:59

GC/MS Column: DB-5
Sample wt/vol: 50ml
Matrix-Units: Leachate-mg/L
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Pyridine	ND		0.020	0.00392
2-Methylphenol	ND		0.020	0.005
4-Methylphenol	ND		0.020	0.00408
3-Methylphenol	ND		0.020	0.00408
Hexachloroethane	ND		0.020	0.00452
Nitrobenzene	ND		0.020	0.00856
Hexachlorobutadiene	ND		0.020	0.00366
2,4,6-Trichlorophenol	ND		0.020	0.00358
2,4,5-Trichlorophenol	ND		0.020	0.00368
2,4-Dinitrotoluene	ND		0.020	0.00284
Hexachlorobenzene	ND		0.020	0.00498
Pentachlorophenol	ND		0.020	0.00368

Total Target Compounds (12): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 05/02/2019
Date Analyzed: 05/02/2019
Data file: Y5366.D 05/02/2019 22:01

GC Column: DB-5/DB1701P
Sample wt/vol: 5.29g
Matrix-Units: Soil-mg/Kg
% Moisture: 8.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS190502-04
Client ID: PCB
Date Received: NA
Date Extracted: 05/02/2019
Date Analyzed: 05/02/2019
Data file: Y5347.D 05/02/2019 16:09

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 05/01/2019
Date Analyzed: 05/02/2019
Data file: O4126.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP PESTICIDES

Lab ID: BLKA190501-05
Client ID: Pest
Date Received: NA
Date Extracted: 05/01/2019
Date Analyzed: 05/02/2019
Data file: O4118.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 200ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
gamma-BHC (Lindane)	ND		0.00005	0.000025
Heptachlor	ND		0.00005	0.000025
Heptachlor epoxide	ND		0.00005	0.000025
Endrin	ND		0.00005	0.000025
Methoxychlor	ND		0.00005	0.000025
Chlordane	ND		0.000625	0.0003
Toxaphene	ND		0.000625	0.0003

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: E19-02986-001
Client ID: AREA_8SB
Date Received: 04/25/2019
Date Extracted: 04/26/2019
Date Analyzed: 04/26/2019
Data file: W8816.D

GC Column: DB-5/DB1701P
Sample wt/vol: 2.5ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.100	0.040
2,4,5-TP (Silvex)	ND		0.100	0.040

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

TCLP HERBICIDES

Lab ID: BLKA190425-11
Client ID: Herb
Date Received: NA
Date Extracted: 04/25/2019
Date Analyzed: 04/26/2019
Data file: W8807.D

GC Column: DB-5/DB1701P
Sample wt/vol: 2.5ml
Matrix-Units: Leachate-mg/L
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
2,4-D	ND		0.100	0.040
2,4,5-TP (Silvex)	ND		0.100	0.040

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	E19-02986-001	GC Column:	RTX-5
Client ID:	AREA_8SB	Sample wt/vol:	10.63g
Date Received:	04/25/2019	Matrix-Units:	Soil-mg/Kg
Date Extracted:	04/26/2019	Dilution Factor:	1
Date Analyzed:	04/27/2019	% Moisture:	8.00
Data File:	IB5699.D		

Compound	Concentration	Q	RL	MDL
C9-C28	228		51.1	20.5
C28-C40	38.7	J	51.1	20.5
C9-C40 Total	266		51.1	20.5

INTEGRATED ANALYTICAL LABORATORIES

NJ-EPH-DRO

Lab ID:	BLKS190425-07	GC Column:	RTX-5
Client ID:	NJ-EPH-D	Sample wt/vol:	10.0g
Date Received:	NA	Matrix-Units:	Soil-mg/Kg
Date Extracted:	04/25/2019	Dilution Factor:	1
Date Analyzed:	04/26/2019	% Moisture:	NA
Data File:	IB5683.D		

Compound	Concentration	Q	RL	MDL
C9-C28	ND		50.0	20.0
C28-C40	ND		50.0	20.0
C9-C40 Total	ND		50.0	20.0

METALS

Client/Project: GEI-HSTA/GPEC RI PH 3 WC

Lab ID: E19-02986-001
Client ID: AREA 8SB-042519WC
Date Collected: 04/25/19 08:00
Date Received: 04/25/19 14:00
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 8.00
Batch #: 251

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	5070		1	5.87	2.35	05/01/19 03:03	SW 6020B
Antimony	ND		1	0.587	0.235	05/01/19 03:03	SW 6020B
Arsenic	2.29		1	0.587	0.176	05/01/19 03:03	SW 6020B
Barium	51.3		1	0.587	0.294	05/01/19 03:03	SW 6020B
Beryllium	0.288	J	1	0.587	0.176	05/01/19 03:03	SW 6020B
Cadmium	ND		1	0.587	0.352	05/01/19 03:03	SW 6020B
Chromium	11.2		1	0.587	0.294	05/01/19 03:03	SW 6020B
Cobalt	5.66		1	0.587	0.176	05/01/19 03:03	SW 6020B
Copper	56.5		1	0.587	0.411	05/01/19 03:03	SW 6020B
Lead	48.5		1	0.587	0.294	05/01/19 03:03	SW 6020B
Manganese	221		1	0.587	0.411	05/01/19 03:03	SW 6020B
Mercury	0.0380		1	0.0257	0.0103	04/30/19 10:35	SW 7471B
Nickel	12.5		1	0.587	0.411	05/01/19 03:03	SW 6020B
Selenium	ND		1	4.11	1.76	05/01/19 03:03	SW 6020B
Silver	ND		1	0.587	0.352	05/01/19 03:03	SW 6020B
Thallium	ND		1	0.587	0.294	05/01/19 03:03	SW 6020B
Vanadium	15.8		1	0.587	0.294	05/01/19 03:03	SW 6020B
Zinc	53.6		1	5.87	1.17	05/01/19 03:03	SW 6020B

ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

05/01/2019 12:44 AM

Batch (Page) #: 251
Associated Lab Case for Blank 1: E19-02751, E19-02971, E19-02986, E19-02989, E19-02992, E19-03002

Matrix: Soil Unit: ppm (mg/kg) Method: 6020B/7471B

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKS190429-01
Aluminum	2.50	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.250	ND
Beryllium	0.250	ND
Cadmium	0.250	ND
Calcium	25.0	ND
Chromium	0.250	ND
Cobalt	0.250	ND
Copper	0.250	ND
Iron	25.0	ND
Lead	0.250	ND
Magnesium	25.0	ND
Manganese	0.250	ND
Mercury	0.013	ND
Nickel	0.250	ND
Potassium	25.0	ND
Selenium	1.75	ND
Silver	0.250	ND
Sodium	25.0	ND
Thallium	0.250	ND
Vanadium	0.250	ND
Zinc	2.50	ND

Associated Sample for Blank 1:
02751-011; 02971-001,003,005,007,009,011; 02986-001
02989-001~007; 02992-002~004; 03002-001

TCLP METALS

Client/Project: GEI-HSTA/GPEC RI PH 3 WC

Lab ID: E19-02986-001
Client ID: AREA 8SB-042519WC
Date Collected: 04/25/19 08:00
Date Received: 04/25/19 14:00
Matrix-Units: TCLP Leachate-mg/L (ppm)
% Moisture: NA
Batch #: 252

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
TCLP Arsenic	ND		1	0.100	0.0400	04/30/19 22:39	SW 1311/6020B
TCLP Barium	0.829		1	0.100	0.0500	04/30/19 22:39	SW 1311/6020B
TCLP Cadmium	ND		1	0.100	0.0700	04/30/19 22:39	SW 1311/6020B
TCLP Chromium	ND		1	0.100	0.0700	04/30/19 22:39	SW 1311/6020B
TCLP Lead	0.361		1	0.100	0.0600	04/30/19 22:39	SW 1311/6020B
TCLP Mercury	ND		1	0.0250	0.0100	04/29/19 15:19	SW 1311/7470A
TCLP Selenium	ND		1	1.00	0.300	04/30/19 22:39	SW 1311/6020B
TCLP Silver	ND		1	0.100	0.0600	04/30/19 22:39	SW 1311/6020B

ND = Analyzed for but Not Detected at the MDL

METALS QUALITY CONTROL

BLANK 1 RESULTS SUMMARY

04/30/2019 09:32 PM

Batch (Page) #: 252
Associated Lab Case for Blank 1: E19-02811, E19-02851, E19-02878, E19-02903, E19-02986

Matrix: TCLP Unit: ppm (mg/L) Method: 1311/6020B/7470A

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKT190429-01
Arsenic	0.050	ND
Barium	0.050	ND
Beryllium	0.050	ND
Cadmium	0.050	ND
Chromium	0.050	ND
Lead	0.050	ND
Mercury	0.013	ND
Selenium	0.500	ND
Silver	0.050	ND

Associated Sample for Blank 1:
02811-001; 02851-001; 02878-004; 02903-001
02986-001

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Sulfur as S

Client/Project: GEI-HSTA/GPEC RI PH 3 WC

Date Received: 04/25/19 14:00
Method: ASTM D129

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	% Solid	Date Collected	Date Analyzed
E19-02986-001	AREA 8SB-042519WC	ND		1	Soil-mg/Kg	NA	1080	92.0	04/25/19 08:00	05/06/19 14:45

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Certified for NJDEP, NY(DOH)
NJ ID# 14751
NY ID# 11402

General Chemistry Quality Control

Sulfur as S

Matrix: Soil
Unit: mg/Kg

Batch: AP091-0011
Method: ASTM D129

Date: 05/06/2019

	Sample ID	Result	TrueValue / SpikeAdded	RPD	RPD Limit	% Recovery	%Recovery Limit
BLK	BLKS190506	< 989	NA	NA	NA	NA	NA
LCS	LCSS190506	289000	333000	NA	NA	86.8	80-120
SAMPLE	E19-02986-001	< 1080	NA	NA	NA	NA	NA
DUP	E19-02986-001DUP	< 1080	NA	NC	NC	NA	NA

The above blank result applies to the follow samples:

E19-02986-001
E19-03166-001

NA - Not Applicable
ND - Not Detected
NC - Non calculable RPD due to value less than the detection limit

SAMPLE TRACKING

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4254
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: GEI Consultants Inc.
Address: 110 Walt Whitman Rd.
Huntington Station, NY 11746
Telephone #: 631-759-2967
Fax #:
Project Manager: CMorris@GEIConsultants.com
EMAIL Address: Chris Morris
Project Name: GPEC RI PH 3 WC
Project Location (State): Brooklyn, NY
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: George Holmes

COMPLETED BY IAL:
_____ Field Sampling _____ Equipment Rental

Reporting Information

REPORT TO:
Address: EastRegionData@GEIConsultants.com
Attn: Jamie Wargo
FAX #
INVOICE TO:
Address: GEIPayables@GEIConsultants.com
Attn: Sandra St. Hilaire
PO # 125180-3-1302
Quote #

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only (Level I)
☐ Reduced (Level II/III)
☐ Regulatory/ Full* (Level IV)

NY
☒ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☒ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** Standard
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ CT ETPH
☐ DRO-8015

TAT for PHC, if other than 2 weeks:

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs
	OTHER Regulatory Requirements - specify in comments
	Sample Specific Notes:

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	EPH	Total VOC's 8260B	SRS Metals 6010B	SVOC's 8270C	PCB's 8080	Sulfur	full TCLP
Area 8SB-042519WC	-	4/25/19	0800	S	8	1	X	X	X	X	X	X	X
Preservative (use code)							1	4	1	1	1	1	1
Container Type (use code)							D	T	D	D	D	D	D

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 1/2019

Special Instructions/QC Requirements & Comments: Send copy of results to Data group
Greenpoint Energy Center former MGP (287 Maspeth Ave)

Carrier (check one):
☒ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
GEI	4/25/19	1100		4/25/19	1100
	4/25/19	1400		4/25/19	1400

FOR LAB USE ONLY
SDG #: 2986
Cooler Temp: 3 °C

E19-02986 Page 51

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 1

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E19-02986: GPEC RI PH 3 WC

To: Chris Morris
GEI Consultants Inc. - Huntington Station
Fax:
EMail: cmorris@geiconsultants.com

Report To

GEI Consultants Inc. - Huntington Station
110 Walt Whitman Road
Suite 104
Huntington Station, NY 11746
Attn: Chris Morris

Bill To

GEI Consultants Inc. - Huntington Station
400 Unicorn Park Drive

Woburn, MA 01801
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category A	125180-3-1302	Apr 25, 2019 @ 14:00	NA	May 09, 2019	May 16, 2019 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. No EDD

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02986-001	AREA 8SB-042519WC	NA	04/25/19@08:00	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO	Analyze	8260C	STD/2 WKS	5/9/2019
	TCLP VO	Analyze	1311/8260C	STD/2 WKS	5/9/2019
	TCLP BNA	Analyze	1311/8270D	STD/2 WKS	5/9/2019
	TCL BNA	Analyze	8270D	STD/2 WKS	5/9/2019
	NJ-EPH (DRO) Cat 1	Analyze	Method 10.08 Rev 3	STD/2 WKS	5/9/2019
	TCLP Pesticides	Analyze	1311/8081B	STD/2 WKS	5/9/2019
	TCLP Herbicides	Analyze	1311/8151A	STD/2 WKS	5/9/2019
	TCL PCB	Analyze	8082A	STD/2 WKS	4/24/2020
	SRS Metals	Analyze	6020B/7471B	STD/2 WKS	5/23/2019
	TCLP Metals	Analyze	1311/6020B/7470A	STD/2 WKS	5/23/2019
	Sulfur as S	Analyze	D129	STD/2 WKS	5/23/2019
	Sample Pick-Up	Analyze		STD/2 WKS	4/25/2019

Project Notes:

NOTE 1 taken by kfalconer on 04/25/2019 03:03
COC REQUESTS EPH, SVOC, FULL TCLP

PER GEORGE HOLMES - EPH-DRO CAT 1, TCL BNA, NO RCRA CHARACTERISTICS REQUIRED

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (12129), New York (11402), and Pennsylvania (68-00773).

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E19-02986: GPEC RI PH 3 WC

NOTE 2 taken by kfalconer on 04/25/2019 03:04
SEE ATTACH A258 FOR LIST & LIMITS. ANY E QUALIFIED RESULTS NEED A COMBINED FORM 1.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 19** **02986** CLIENT: GEL

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL AP DATE 4/25/19

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 4.26.19

Laboratory Custody Chronicle

IAL Case No.

E19-02986

Client GEI Consultants Inc. - Huntington Station

Project GPEC RI PH 3 WC

Received On 4/25/2019@14:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO	02986-001	Soil	n/a	n/a	4/26/19	Mei
TCLP VO	-001	Soil	n/a	n/a	4/26/19	Mei

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL BNA	-001	Soil	4/26/19	Frank L.	4/26/19	Eleanor
TCLP BNA	-001	Soil	4/26/19	Frank L.	5/ 3/19	Trudy

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NJ-EPH (DRO) Cat 1	-001	Soil	4/26/19	Archimede	4/27/19	Jolanta
TCL PCB	-001	Soil	5/ 2/19	Archimede	5/ 3/19	Latha
TCLP Herbicides	-001	Soil	4/26/19	Archimede	4/29/19	Iwona
TCLP Pesticides	-001	Soil	5/ 1/19	Archimede	5/ 2/19	Iwona

Department: Metals			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
SRS Metals	-001	Soil	4/29/19	Frank R.	5/ 1/19	Danielle
TCLP Metals	-001	Soil	4/29/19	Frank R.	4/30/19	Danielle

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Sulfur as S	-001	Soil	n/a	n/a	5/ 6/19	Robert

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

LAST PAGE OF DOCUMENT

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-187735-1
Client Project/Site: GPEC

For:
GEI Consultants, Inc.
110 Walt Whitman Road
Suite 204
Huntington Station, New York 11746

Attn: Christopher Morris

Omayra Penas

Authorized for release by:
8/5/2019 8:41:37 AM

Omayra Penas, Senior Project Manager
(732)593-2538
omayra.penas@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Omayra Penas
Senior Project Manager
8/5/2019 8:41:37 AM

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Definitions/Glossary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Indicates an estimated value.
U	Analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	Surrogate is outside acceptance limits.
U	Analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Sample result is greater than the MDL but below the CRDL
U	Indicates analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-187735-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: GEI Consultants, Inc.

Project: GPEC

Report Number: 460-187735-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 07/29/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.2 C.

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. As per the PM toxicity has been cancelled by the client on 7/31/19.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample Frac Tank (460-187735-1) was analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 08/02/2019.

The continuing calibration verification (CCV) analyzed in batch 460-629195 was outside the method criteria for the following analytes: Chloroethane (bias high), Dichlorodifluoromethane and Trichlorofluoromethane (bias low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample duplicate (LCSD) for analytical batch 460-629195 recovered outside control limit for Chloroethane. The analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)

Job ID: 460-187735-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

Sample Frac Tank (460-187735-1) was analyzed for semivolatile organic compounds (GC/MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/31/2019 and analyzed on 08/01/2019.

The continuing calibration verification (CCV) analyzed in batch 460-628708 was outside the method criteria for the following analyte(s): 2,2'-oxybis[1-chloropropane]. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The laboratory control sample (LCS) for preparation batch 460-628518 and analytical batch 460-628708 recovered outside control limits for the following analytes: Benzo[g,h,i]perylene and Chrysene. The LCSD recovery was within limits; therefore, the data have been reported.

Surrogates recoveries for the following laboratory control sample and laboratory control sample duplicate (LCS/LCSD) associated with batch 460-628518 were outside limits. All spike recoveries were within limits. Sample has been qualified and reported.

Refer to the QC report for details.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample Frac Tank (460-187735-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 07/31/2019 and analyzed on 08/01/2019.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

METALS

Sample Frac Tank (460-187735-1) was analyzed for Metals in accordance with 6020B. The samples were prepared on 07/31/2019 and analyzed on 08/01/2019.

No difficulties were encountered during the Metals analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Sample Frac Tank (460-187735-1) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/01/2019.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

IGNITABILITY

Sample Frac Tank (460-187735-1) was analyzed for ignitability in accordance with EPA SW-846 Method 1010A. The samples were analyzed on 08/01/2019.

No difficulties were encountered during the flashpoint analysis.

All quality control parameters were within the acceptance limits.

REACTIVE CYANIDE

Sample Frac Tank (460-187735-1) was analyzed for reactive cyanide in accordance with EPA SW-846 Method 7.3.3/9014. The samples

Job ID: 460-187735-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

were prepared and analyzed on 08/01/2019.

No difficulties were encountered during the reactive cyanide analysis.

All quality control parameters were within the acceptance limits.

REACTIVE SULFIDE

Sample Frac Tank (460-187735-1) was analyzed for reactive sulfide in accordance with EPA SW-846 Method 7.3.4/9034. The samples were prepared and analyzed on 08/01/2019.

No difficulties were encountered during the reactive sulfide analysis.

All quality control parameters were within the acceptance limits.

PH (FIELD)

Sample Frac Tank (460-187735-1) was analyzed for pH (Field) in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 07/31/2019.

No difficulties were encountered during the pH analysis.

All quality control parameters were within the acceptance limits.

Detection Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Client Sample ID: Frac Tank

Lab Sample ID: 460-187735-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.44	J	1.0	0.30	ug/L	1		8260C	Total/NA
Aluminum	112		40.0	18.8	ug/L	2		6020B	Total/NA
Arsenic	18.4		2.0	0.73	ug/L	2		6020B	Total/NA
Barium	122		4.0	1.2	ug/L	2		6020B	Total/NA
Chromium	2.6	J	4.0	2.3	ug/L	2		6020B	Total/NA
Copper	61.5		4.0	2.0	ug/L	2		6020B	Total/NA
Iron	1090		120	51.1	ug/L	2		6020B	Total/NA
Lead	9.6		1.2	0.55	ug/L	2		6020B	Total/NA
Nickel	10.9		4.0	2.4	ug/L	2		6020B	Total/NA
Zinc	13.6	J	16.0	11.1	ug/L	2		6020B	Total/NA
Flashpoint	>200		1.00	1.00	Degrees F	1		1010A	Total/NA
Corrosivity	8.4	HF			SU	1		9040C	Total/NA
Temperature	20.7	HF			Degrees C	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Client Sample ID: Frac Tank

Date Collected: 07/29/19 07:00
Date Received: 07/29/19 19:00

Lab Sample ID: 460-187735-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/02/19 15:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			08/02/19 15:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			08/02/19 15:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			08/02/19 15:26	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			08/02/19 15:26	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/02/19 15:26	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			08/02/19 15:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			08/02/19 15:26	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			08/02/19 15:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			08/02/19 15:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			08/02/19 15:26	1
1,4-Dioxane	50	U	50	28	ug/L			08/02/19 15:26	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			08/02/19 15:26	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			08/02/19 15:26	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			08/02/19 15:26	1
Acetone	5.0	U	5.0	4.4	ug/L			08/02/19 15:26	1
Benzene	1.0	U	1.0	0.20	ug/L			08/02/19 15:26	1
Bromoform	1.0	U	1.0	0.54	ug/L			08/02/19 15:26	1
Bromomethane	1.0	U	1.0	0.55	ug/L			08/02/19 15:26	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			08/02/19 15:26	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			08/02/19 15:26	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			08/02/19 15:26	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			08/02/19 15:26	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			08/02/19 15:26	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			08/02/19 15:26	1
Chloroform	1.0	U	1.0	0.33	ug/L			08/02/19 15:26	1
Chloromethane	1.0	U	1.0	0.40	ug/L			08/02/19 15:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			08/02/19 15:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			08/02/19 15:26	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			08/02/19 15:26	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			08/02/19 15:26	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			08/02/19 15:26	1
Ethylbenzene	**0.44**	**J**	1.0	0.30	ug/L			08/02/19 15:26	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			08/02/19 15:26	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			08/02/19 15:26	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			08/02/19 15:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			08/02/19 15:26	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			08/02/19 15:26	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			08/02/19 15:26	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			08/02/19 15:26	1
o-Xylene	1.0	U	1.0	0.36	ug/L			08/02/19 15:26	1
Styrene	1.0	U	1.0	0.42	ug/L			08/02/19 15:26	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			08/02/19 15:26	1
Toluene	1.0	U	1.0	0.38	ug/L			08/02/19 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			08/02/19 15:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			08/02/19 15:26	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			08/02/19 15:26	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			08/02/19 15:26	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			08/02/19 15:26	1

Client Sample ID: Frac Tank

Date Collected: 07/29/19 07:00
Date Received: 07/29/19 19:00

Lab Sample ID: 460-187735-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/02/19 15:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/02/19 15:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			08/02/19 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*08/02/19 15:26*	*1*
4-Bromofluorobenzene	*94*		*77 - 124*		*08/02/19 15:26*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*08/02/19 15:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/02/19 15:26*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		07/31/19 08:56	08/01/19 00:01	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4,5-Trichlorophenol	10	U	10	0.28	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4,6-Trichlorophenol	10	U	10	0.30	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4-Dichlorophenol	10	U	10	0.42	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4-Dimethylphenol	10	U	10	0.24	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4-Dinitrophenol	20	U	20	14	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,4-Dinitrotoluene	2.0	U	2.0	1.0	ug/L		07/31/19 08:56	08/01/19 00:01	1
2,6-Dinitrotoluene	2.0	U	2.0	0.39	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Chlorophenol	10	U	10	0.38	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Methylnaphthalene	10	U	10	1.1	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Methylphenol	10	U	10	0.26	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Nitroaniline	10	U	10	0.47	ug/L		07/31/19 08:56	08/01/19 00:01	1
2-Nitrophenol	10	U	10	0.75	ug/L		07/31/19 08:56	08/01/19 00:01	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		07/31/19 08:56	08/01/19 00:01	1
3-Nitroaniline	10	U	10	0.96	ug/L		07/31/19 08:56	08/01/19 00:01	1
4,6-Dinitro-2-methylphenol	20	U	20	13	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Chloroaniline	10	U	10	1.9	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Methylphenol	10	U	10	0.24	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Nitroaniline	10	U	10	0.54	ug/L		07/31/19 08:56	08/01/19 00:01	1
4-Nitrophenol	20	U	20	0.69	ug/L		07/31/19 08:56	08/01/19 00:01	1
Acenaphthene	10	U	10	1.1	ug/L		07/31/19 08:56	08/01/19 00:01	1
Acenaphthylene	10	U	10	0.82	ug/L		07/31/19 08:56	08/01/19 00:01	1
Acetophenone	10	U	10	0.79	ug/L		07/31/19 08:56	08/01/19 00:01	1
Anthracene	10	U	10	0.63	ug/L		07/31/19 08:56	08/01/19 00:01	1
Atrazine	2.0	U	2.0	1.3	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzaldehyde	10	U	10	0.59	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzo[b]fluoranthene	2.0	U	2.0	1.1	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzo[g,h,i]perylene	10	U *	10	1.4	ug/L		07/31/19 08:56	08/01/19 00:01	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		07/31/19 08:56	08/01/19 00:01	1

Client Sample ID: Frac Tank
Date Collected: 07/29/19 07:00
Date Received: 07/29/19 19:00

Lab Sample ID: 460-187735-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	10	U	10	0.24	ug/L		07/31/19 08:56	08/01/19 00:01	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.30	ug/L		07/31/19 08:56	08/01/19 00:01	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.7	ug/L		07/31/19 08:56	08/01/19 00:01	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		07/31/19 08:56	08/01/19 00:01	1
Caprolactam	10	U	10	0.68	ug/L		07/31/19 08:56	08/01/19 00:01	1
Carbazole	10	U	10	0.68	ug/L		07/31/19 08:56	08/01/19 00:01	1
Chrysene	2.0	U *	2.0	0.91	ug/L		07/31/19 08:56	08/01/19 00:01	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		07/31/19 08:56	08/01/19 00:01	1
Dibenzofuran	10	U	10	1.1	ug/L		07/31/19 08:56	08/01/19 00:01	1
Diethyl phthalate	10	U	10	0.98	ug/L		07/31/19 08:56	08/01/19 00:01	1
Dimethyl phthalate	10	U	10	0.77	ug/L		07/31/19 08:56	08/01/19 00:01	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		07/31/19 08:56	08/01/19 00:01	1
Di-n-octyl phthalate	10	U	10	4.8	ug/L		07/31/19 08:56	08/01/19 00:01	1
Fluoranthene	10	U	10	0.84	ug/L		07/31/19 08:56	08/01/19 00:01	1
Fluorene	10	U	10	0.91	ug/L		07/31/19 08:56	08/01/19 00:01	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		07/31/19 08:56	08/01/19 00:01	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		07/31/19 08:56	08/01/19 00:01	1
Hexachlorocyclopentadiene	10	U	10	1.7	ug/L		07/31/19 08:56	08/01/19 00:01	1
Hexachloroethane	2.0	U	2.0	1.2	ug/L		07/31/19 08:56	08/01/19 00:01	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	1.3	ug/L		07/31/19 08:56	08/01/19 00:01	1
Isophorone	10	U	10	0.80	ug/L		07/31/19 08:56	08/01/19 00:01	1
Naphthalene	10	U	10	1.1	ug/L		07/31/19 08:56	08/01/19 00:01	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		07/31/19 08:56	08/01/19 00:01	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		07/31/19 08:56	08/01/19 00:01	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		07/31/19 08:56	08/01/19 00:01	1
Pentachlorophenol	20	U	20	1.4	ug/L		07/31/19 08:56	08/01/19 00:01	1
Phenanthrene	10	U	10	0.58	ug/L		07/31/19 08:56	08/01/19 00:01	1
Phenol	10	U	10	0.29	ug/L		07/31/19 08:56	08/01/19 00:01	1
Pyrene	10	U	10	1.6	ug/L		07/31/19 08:56	08/01/19 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*26 - 139*	*07/31/19 08:56*	*08/01/19 00:01*	*1*
2-Fluorobiphenyl	*89*		*45 - 107*	*07/31/19 08:56*	*08/01/19 00:01*	*1*
2-Fluorophenol (Surr)	*44*		*25 - 58*	*07/31/19 08:56*	*08/01/19 00:01*	*1*
Nitrobenzene-d5 (Surr)	*98*		*51 - 108*	*07/31/19 08:56*	*08/01/19 00:01*	*1*
Phenol-d5 (Surr)	*26*		*14 - 39*	*07/31/19 08:56*	*08/01/19 00:01*	*1*
Terphenyl-d14 (Surr)	*95*		*40 - 148*	*07/31/19 08:56*	*08/01/19 00:01*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 13:46	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 13:46	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 13:46	1

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Client Sample ID: Frac Tank

Date Collected: 07/29/19 07:00
Date Received: 07/29/19 19:00

Lab Sample ID: 460-187735-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	65		10 - 150	07/31/19 09:24	08/01/19 13:46	1
DCB Decachlorobiphenyl	67		10 - 150	07/31/19 09:24	08/01/19 13:46	1

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**112**		40.0	18.8	ug/L		07/31/19 06:07	08/01/19 17:51	2
Arsenic	**18.4**		2.0	0.73	ug/L		07/31/19 06:07	08/01/19 17:51	2
Barium	**122**		4.0	1.2	ug/L		07/31/19 06:07	08/01/19 17:51	2
Cadmium	2.0	U	2.0	0.81	ug/L		07/31/19 06:07	08/01/19 17:51	2
Chromium	**2.6**	**J**	4.0	2.3	ug/L		07/31/19 06:07	08/01/19 17:51	2
Cobalt	4.0	U	4.0	1.6	ug/L		07/31/19 06:07	08/01/19 17:51	2
Copper	**61.5**		4.0	2.0	ug/L		07/31/19 06:07	08/01/19 17:51	2
Iron	**1090**		120	51.1	ug/L		07/31/19 06:07	08/01/19 17:51	2
Lead	**9.6**		1.2	0.55	ug/L		07/31/19 06:07	08/01/19 17:51	2
Nickel	**10.9**		4.0	2.4	ug/L		07/31/19 06:07	08/01/19 17:51	2
Selenium	10.0	U	10.0	5.4	ug/L		07/31/19 06:07	08/01/19 17:51	2
Silver	2.0	U	2.0	0.59	ug/L		07/31/19 06:07	08/01/19 17:51	2
Zinc	**13.6**	**J**	16.0	11.1	ug/L		07/31/19 06:07	08/01/19 17:51	2
Tin	16.0	U	16.0	4.5	ug/L		07/31/19 06:07	08/01/19 17:51	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/01/19 05:40	08/01/19 09:33	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	**8.4**	**HF**			SU			07/31/19 12:03	1
Temperature	**20.7**	**HF**			Degrees C			07/31/19 12:03	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>200**		1.00	1.00	Degrees F			08/01/19 06:45	1
Cyanide, Reactive	25.0	U	25.0	25.0	mg/L		08/01/19 11:00	08/01/19 16:12	1
Sulfide, Reactive	20.0	U	20.0	20.0	mg/L		08/01/19 11:00	08/01/19 16:07	1

Surrogate Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (74-132)	BFB (77-124)	DBFM (72-131)	TOL (80-120)
460-187735-1	Frac Tank	106	94	102	99
LCS 460-629195/3	Lab Control Sample	101	95	100	100
LCSD 460-629195/4	Lab Control Sample Dup	103	96	102	101
MB 460-629195/8	Method Blank	104	94	101	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (26-139)	FBP (45-107)	2FP (25-58)	NBZ (51-108)	PHL (14-39)	TPHL (40-148)
460-187735-1	Frac Tank	99	89	44	98	26	95
LCS 460-628518/2-A	Lab Control Sample	105	85	51	94	34	96
LCS 460-628518/4-A	Lab Control Sample	114	100	62 *	115 *	40 *	131
LCSD 460-628518/3-A	Lab Control Sample Dup	115	91	52	100	34	104
LCSD 460-628518/5-A	Lab Control Sample Dup	112	97	57	109 *	35	122
MB 460-628518/1-A	Method Blank	89	73	44	85	28	95

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (10-150)	DCBP2 (10-150)
460-187735-1	Frac Tank	65	67
LCS 460-628533/2-A	Lab Control Sample	61	71
LCSD 460-628533/3-A	Lab Control Sample Dup	55	62
MB 460-628533/1-A	Method Blank	65	77

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-629195/8
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/02/19 15:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			08/02/19 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			08/02/19 15:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			08/02/19 15:01	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			08/02/19 15:01	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/02/19 15:01	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.36	ug/L			08/02/19 15:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			08/02/19 15:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			08/02/19 15:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			08/02/19 15:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			08/02/19 15:01	1
1,4-Dioxane	50	U	50	28	ug/L			08/02/19 15:01	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			08/02/19 15:01	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			08/02/19 15:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			08/02/19 15:01	1
Acetone	5.0	U	5.0	4.4	ug/L			08/02/19 15:01	1
Benzene	1.0	U	1.0	0.20	ug/L			08/02/19 15:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			08/02/19 15:01	1
Bromomethane	1.0	U	1.0	0.55	ug/L			08/02/19 15:01	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			08/02/19 15:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			08/02/19 15:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			08/02/19 15:01	1
Chlorobromomethane	1.0	U	1.0	0.41	ug/L			08/02/19 15:01	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			08/02/19 15:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/02/19 15:01	1
Chloroform	1.0	U	1.0	0.33	ug/L			08/02/19 15:01	1
Chloromethane	1.0	U	1.0	0.40	ug/L			08/02/19 15:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			08/02/19 15:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			08/02/19 15:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			08/02/19 15:01	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			08/02/19 15:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			08/02/19 15:01	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			08/02/19 15:01	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			08/02/19 15:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			08/02/19 15:01	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			08/02/19 15:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			08/02/19 15:01	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			08/02/19 15:01	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			08/02/19 15:01	1
m-Xylene & p-Xylene	1.0	U	1.0	0.30	ug/L			08/02/19 15:01	1
o-Xylene	1.0	U	1.0	0.36	ug/L			08/02/19 15:01	1
Styrene	1.0	U	1.0	0.42	ug/L			08/02/19 15:01	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			08/02/19 15:01	1
Toluene	1.0	U	1.0	0.38	ug/L			08/02/19 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			08/02/19 15:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			08/02/19 15:01	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			08/02/19 15:01	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			08/02/19 15:01	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 460-629195/8
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	0.17	ug/L			08/02/19 15:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/02/19 15:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/02/19 15:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			08/02/19 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*08/02/19 15:01*	*1*
4-Bromofluorobenzene	*94*		*77 - 124*		*08/02/19 15:01*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*08/02/19 15:01*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/02/19 15:01*	*1*

Lab Sample ID: LCS 460-629195/3
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.9		ug/L		99	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/L		107	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.9		ug/L		94	59 - 150
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	78 - 120
1,1-Dichloroethane	20.0	20.5		ug/L		102	77 - 123
1,1-Dichloroethene	20.0	19.5		ug/L		97	74 - 123
1,2,3-Trichlorobenzene	20.0	20.7		ug/L		104	78 - 131
1,2,4-Trichlorobenzene	20.0	20.1		ug/L		100	80 - 124
1,2-Dichloropropane	20.0	20.7		ug/L		104	77 - 123
1,3-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120
1,4-Dichlorobenzene	20.0	19.8		ug/L		99	80 - 120
1,4-Dioxane	400	438		ug/L		110	10 - 150
2-Butanone (MEK)	100	96.5		ug/L		96	64 - 120
2-Hexanone	100	102		ug/L		102	71 - 125
4-Methyl-2-pentanone (MIBK)	100	105		ug/L		105	78 - 124
Acetone	100	96.4		ug/L		96	39 - 150
Benzene	20.0	21.1		ug/L		106	77 - 121
Bromoform	20.0	20.5		ug/L		103	53 - 120
Bromomethane	20.0	27.4		ug/L		137	10 - 150
Carbon disulfide	20.0	20.6		ug/L		103	69 - 133
Carbon tetrachloride	20.0	19.8		ug/L		99	70 - 132
Chlorobenzene	20.0	20.2		ug/L		101	80 - 120
Chlorobromomethane	20.0	20.5		ug/L		103	77 - 127
Chlorodibromomethane	20.0	20.7		ug/L		103	73 - 120
Chloroethane	20.0	29.7		ug/L		149	52 - 150
Chloroform	20.0	20.7		ug/L		103	80 - 120
Chloromethane	20.0	21.3		ug/L		107	56 - 131
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	80 - 120
cis-1,3-Dichloropropene	20.0	20.6		ug/L		103	77 - 120
Cyclohexane	20.0	18.8		ug/L		94	56 - 150
Dichlorobromomethane	20.0	20.8		ug/L		104	76 - 120
Dichlorodifluoromethane	20.0	17.6		ug/L		88	50 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 460-629195/3
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	19.4		ug/L		97	80 - 120
Ethylene Dibromide	20.0	21.7		ug/L		109	80 - 120
Isopropylbenzene	20.0	20.0		ug/L		100	80 - 123
Methyl acetate	40.0	36.5		ug/L		91	66 - 144
Methyl tert-butyl ether	20.0	21.3		ug/L		106	79 - 122
Methylcyclohexane	20.0	17.7		ug/L		88	61 - 145
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123
m-Xylene & p-Xylene	20.0	19.5		ug/L		98	80 - 120
o-Xylene	20.0	19.7		ug/L		98	80 - 120
Styrene	20.0	20.2		ug/L		101	80 - 120
Tetrachloroethene	20.0	19.7		ug/L		99	78 - 122
Toluene	20.0	20.7		ug/L		103	80 - 120
trans-1,2-Dichloroethene	20.0	19.8		ug/L		99	79 - 120
trans-1,3-Dichloropropene	20.0	20.7		ug/L		104	76 - 120
Trichloroethene	20.0	19.7		ug/L		99	77 - 120
Trichlorofluoromethane	20.0	20.0		ug/L		100	71 - 143
Vinyl chloride	20.0	21.1		ug/L		105	62 - 138
1,2-Dichloroethane	20.0	20.6		ug/L		103	76 - 121
1,2-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 120
1,2-Dibromo-3-Chloropropane	20.0	21.8		ug/L		109	55 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*
4-Bromofluorobenzene	*95*		*77 - 124*
Dibromofluoromethane (Surr)	*100*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 460-629195/4
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.3		ug/L		106	75 - 125	7	30
1,1,2,2-Tetrachloroethane	20.0	23.4		ug/L		117	74 - 120	9	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.4		ug/L		97	59 - 150	3	30
1,1,2-Trichloroethane	20.0	22.9		ug/L		114	78 - 120	9	30
1,1-Dichloroethane	20.0	21.9		ug/L		110	77 - 123	7	30
1,1-Dichloroethene	20.0	20.7		ug/L		103	74 - 123	6	30
1,2,3-Trichlorobenzene	20.0	22.9		ug/L		114	78 - 131	10	30
1,2,4-Trichlorobenzene	20.0	22.2		ug/L		111	80 - 124	10	30
1,2-Dichloropropane	20.0	22.7		ug/L		113	77 - 123	9	30
1,3-Dichlorobenzene	20.0	21.4		ug/L		107	80 - 120	9	30
1,4-Dichlorobenzene	20.0	21.6		ug/L		108	80 - 120	9	30
1,4-Dioxane	400	456		ug/L		114	10 - 150	4	30
2-Butanone (MEK)	100	104		ug/L		104	64 - 120	8	30
2-Hexanone	100	111		ug/L		111	71 - 125	8	30
4-Methyl-2-pentanone (MIBK)	100	114		ug/L		114	78 - 124	8	30
Acetone	100	99.7		ug/L		100	39 - 150	3	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 460-629195/4
Matrix: Water
Analysis Batch: 629195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			20.0	22.7		ug/L		114	77 - 121	7	30
Bromoform			20.0	22.3		ug/L		111	53 - 120	8	30
Bromomethane			20.0	28.1		ug/L		140	10 - 150	3	30
Carbon disulfide			20.0	22.4		ug/L		112	69 - 133	9	30
Carbon tetrachloride			20.0	21.0		ug/L		105	70 - 132	6	30
Chlorobenzene			20.0	21.7		ug/L		108	80 - 120	7	30
Chlorobromomethane			20.0	22.2		ug/L		111	77 - 127	8	30
Chlorodibromomethane			20.0	22.4		ug/L		112	73 - 120	8	30
Chloroethane			20.0	31.1	*	ug/L		155	52 - 150	4	30
Chloroform			20.0	22.6		ug/L		113	80 - 120	9	30
Chloromethane			20.0	22.5		ug/L		112	56 - 131	5	30
cis-1,2-Dichloroethene			20.0	21.7		ug/L		109	80 - 120	8	30
cis-1,3-Dichloropropene			20.0	22.2		ug/L		111	77 - 120	8	30
Cyclohexane			20.0	20.0		ug/L		100	56 - 150	6	30
Dichlorobromomethane			20.0	22.6		ug/L		113	76 - 120	9	30
Dichlorodifluoromethane			20.0	17.8		ug/L		89	50 - 131	2	30
Ethylbenzene			20.0	21.0		ug/L		105	80 - 120	8	30
Ethylene Dibromide			20.0	23.2		ug/L		116	80 - 120	7	30
Isopropylbenzene			20.0	21.3		ug/L		107	80 - 123	6	30
Methyl acetate			40.0	41.3		ug/L		103	66 - 144	12	30
Methyl tert-butyl ether			20.0	23.3		ug/L		116	79 - 122	9	30
Methylcyclohexane			20.0	18.9		ug/L		94	61 - 145	7	30
Methylene Chloride			20.0	22.0		ug/L		110	77 - 123	7	30
m-Xylene & p-Xylene			20.0	21.1		ug/L		106	80 - 120	8	30
o-Xylene			20.0	21.3		ug/L		106	80 - 120	8	30
Styrene			20.0	22.1		ug/L		110	80 - 120	9	30
Tetrachloroethene			20.0	21.0		ug/L		105	78 - 122	6	30
Toluene			20.0	22.0		ug/L		110	80 - 120	6	30
trans-1,2-Dichloroethene			20.0	21.1		ug/L		105	79 - 120	6	30
trans-1,3-Dichloropropene			20.0	22.5		ug/L		112	76 - 120	8	30
Trichloroethene			20.0	21.1		ug/L		106	77 - 120	7	30
Trichlorofluoromethane			20.0	20.5		ug/L		103	71 - 143	2	30
Vinyl chloride			20.0	21.5		ug/L		108	62 - 138	2	30
1,2-Dichloroethane			20.0	22.4		ug/L		112	76 - 121	8	30
1,2-Dichlorobenzene			20.0	22.0		ug/L		110	80 - 120	9	30
1,2-Dibromo-3-Chloropropane			20.0	23.5		ug/L		118	55 - 134	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
4-Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-628518/1-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628518

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	10	U	10	1.2	ug/L		07/31/19 08:56	07/31/19 22:16	1
1,2,4,5-Tetrachlorobenzene	10	U	10	1.2	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,2'-oxybis[1-chloropropane]	10	U	10	0.63	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,3,4,6-Tetrachlorophenol	10	U	10	0.75	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4,5-Trichlorophenol	10	U	10	0.28	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4,6-Trichlorophenol	10	U	10	0.30	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4-Dichlorophenol	10	U	10	0.42	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4-Dimethylphenol	10	U	10	0.24	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4-Dinitrophenol	20	U	20	14	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,4-Dinitrotoluene	2.0	U	2.0	1.0	ug/L		07/31/19 08:56	07/31/19 22:16	1
2,6-Dinitrotoluene	2.0	U	2.0	0.39	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Chloronaphthalene	10	U	10	1.2	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Chlorophenol	10	U	10	0.38	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Methylnaphthalene	10	U	10	1.1	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Methylphenol	10	U	10	0.26	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Nitroaniline	10	U	10	0.47	ug/L		07/31/19 08:56	07/31/19 22:16	1
2-Nitrophenol	10	U	10	0.75	ug/L		07/31/19 08:56	07/31/19 22:16	1
3,3'-Dichlorobenzidine	10	U	10	1.4	ug/L		07/31/19 08:56	07/31/19 22:16	1
3-Nitroaniline	10	U	10	0.96	ug/L		07/31/19 08:56	07/31/19 22:16	1
4,6-Dinitro-2-methylphenol	20	U	20	13	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Bromophenyl phenyl ether	10	U	10	0.75	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Chloro-3-methylphenol	10	U	10	0.58	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Chloroaniline	10	U	10	1.9	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Chlorophenyl phenyl ether	10	U	10	1.3	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Methylphenol	10	U	10	0.24	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Nitroaniline	10	U	10	0.54	ug/L		07/31/19 08:56	07/31/19 22:16	1
4-Nitrophenol	20	U	20	0.69	ug/L		07/31/19 08:56	07/31/19 22:16	1
Acenaphthene	10	U	10	1.1	ug/L		07/31/19 08:56	07/31/19 22:16	1
Acenaphthylene	10	U	10	0.82	ug/L		07/31/19 08:56	07/31/19 22:16	1
Acetophenone	10	U	10	0.79	ug/L		07/31/19 08:56	07/31/19 22:16	1
Anthracene	10	U	10	0.63	ug/L		07/31/19 08:56	07/31/19 22:16	1
Atrazine	2.0	U	2.0	1.3	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzaldehyde	10	U	10	0.59	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzo[a]anthracene	1.0	U	1.0	0.59	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzo[a]pyrene	1.0	U	1.0	0.41	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzo[b]fluoranthene	2.0	U	2.0	1.1	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzo[g,h,i]perylene	10	U	10	1.4	ug/L		07/31/19 08:56	07/31/19 22:16	1
Benzo[k]fluoranthene	1.0	U	1.0	0.67	ug/L		07/31/19 08:56	07/31/19 22:16	1
Bis(2-chloroethoxy)methane	10	U	10	0.24	ug/L		07/31/19 08:56	07/31/19 22:16	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.30	ug/L		07/31/19 08:56	07/31/19 22:16	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.7	ug/L		07/31/19 08:56	07/31/19 22:16	1
Butyl benzyl phthalate	10	U	10	0.85	ug/L		07/31/19 08:56	07/31/19 22:16	1
Caprolactam	10	U	10	0.68	ug/L		07/31/19 08:56	07/31/19 22:16	1
Carbazole	10	U	10	0.68	ug/L		07/31/19 08:56	07/31/19 22:16	1
Chrysene	2.0	U	2.0	0.91	ug/L		07/31/19 08:56	07/31/19 22:16	1
Dibenz(a,h)anthracene	1.0	U	1.0	0.72	ug/L		07/31/19 08:56	07/31/19 22:16	1
Dibenzofuran	10	U	10	1.1	ug/L		07/31/19 08:56	07/31/19 22:16	1
Diethyl phthalate	10	U	10	0.98	ug/L		07/31/19 08:56	07/31/19 22:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-628518/1-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628518

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	10	U	10	0.77	ug/L		07/31/19 08:56	07/31/19 22:16	1
Di-n-butyl phthalate	10	U	10	0.84	ug/L		07/31/19 08:56	07/31/19 22:16	1
Di-n-octyl phthalate	10	U	10	4.8	ug/L		07/31/19 08:56	07/31/19 22:16	1
Fluoranthene	10	U	10	0.84	ug/L		07/31/19 08:56	07/31/19 22:16	1
Fluorene	10	U	10	0.91	ug/L		07/31/19 08:56	07/31/19 22:16	1
Hexachlorobenzene	1.0	U	1.0	0.40	ug/L		07/31/19 08:56	07/31/19 22:16	1
Hexachlorobutadiene	1.0	U	1.0	0.78	ug/L		07/31/19 08:56	07/31/19 22:16	1
Hexachlorocyclopentadiene	10	U	10	1.7	ug/L		07/31/19 08:56	07/31/19 22:16	1
Hexachloroethane	2.0	U	2.0	1.2	ug/L		07/31/19 08:56	07/31/19 22:16	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	1.3	ug/L		07/31/19 08:56	07/31/19 22:16	1
Isophorone	10	U	10	0.80	ug/L		07/31/19 08:56	07/31/19 22:16	1
Naphthalene	10	U	10	1.1	ug/L		07/31/19 08:56	07/31/19 22:16	1
Nitrobenzene	1.0	U	1.0	0.57	ug/L		07/31/19 08:56	07/31/19 22:16	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.43	ug/L		07/31/19 08:56	07/31/19 22:16	1
N-Nitrosodiphenylamine	10	U	10	0.89	ug/L		07/31/19 08:56	07/31/19 22:16	1
Pentachlorophenol	20	U	20	1.4	ug/L		07/31/19 08:56	07/31/19 22:16	1
Phenanthrene	10	U	10	0.58	ug/L		07/31/19 08:56	07/31/19 22:16	1
Phenol	10	U	10	0.29	ug/L		07/31/19 08:56	07/31/19 22:16	1
Pyrene	10	U	10	1.6	ug/L		07/31/19 08:56	07/31/19 22:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*26 - 139*	*07/31/19 08:56*	*07/31/19 22:16*	*1*
2-Fluorobiphenyl	*73*		*45 - 107*	*07/31/19 08:56*	*07/31/19 22:16*	*1*
2-Fluorophenol (Surr)	*44*		*25 - 58*	*07/31/19 08:56*	*07/31/19 22:16*	*1*
Nitrobenzene-d5 (Surr)	*85*		*51 - 108*	*07/31/19 08:56*	*07/31/19 22:16*	*1*
Phenol-d5 (Surr)	*28*		*14 - 39*	*07/31/19 08:56*	*07/31/19 22:16*	*1*
Terphenyl-d14 (Surr)	*95*		*40 - 148*	*07/31/19 08:56*	*07/31/19 22:16*	*1*

Lab Sample ID: LCS 460-628518/2-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	80.0	60.1		ug/L		75	54 - 108
1,2,4,5-Tetrachlorobenzene	80.0	59.8		ug/L		75	46 - 105
2,2'-oxybis[1-chloropropane]	80.0	46.5		ug/L		58	50 - 108
2,3,4,6-Tetrachlorophenol	80.0	63.4		ug/L		79	57 - 122
2,4,5-Trichlorophenol	80.0	60.6		ug/L		76	59 - 117
2,4,6-Trichlorophenol	80.0	64.9		ug/L		81	62 - 120
2,4-Dichlorophenol	80.0	60.0		ug/L		75	62 - 102
2,4-Dimethylphenol	80.0	56.0		ug/L		70	61 - 95
2,4-Dinitrophenol	160	122		ug/L		76	45 - 125
2,4-Dinitrotoluene	80.0	65.4		ug/L		82	70 - 123
2,6-Dinitrotoluene	80.0	67.1		ug/L		84	68 - 121
2-Chloronaphthalene	80.0	59.1		ug/L		74	54 - 105
2-Chlorophenol	80.0	55.2		ug/L		69	54 - 92
2-Methylnaphthalene	80.0	56.0		ug/L		70	47 - 104
2-Methylphenol	80.0	46.1		ug/L		58	43 - 80

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-628518/2-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	80.0	63.2		ug/L		79	46 - 124
2-Nitrophenol	80.0	66.1		ug/L		83	58 - 109
3,3'-Dichlorobenzidine	80.0	60.9		ug/L		76	68 - 123
3-Nitroaniline	80.0	51.4		ug/L		64	60 - 117
4,6-Dinitro-2-methylphenol	160	138		ug/L		86	59 - 132
4-Bromophenyl phenyl ether	80.0	63.4		ug/L		79	57 - 126
4-Chloro-3-methylphenol	80.0	58.6		ug/L		73	58 - 98
4-Chloroaniline	80.0	47.7		ug/L		60	51 - 108
4-Chlorophenyl phenyl ether	80.0	61.9		ug/L		77	60 - 114
4-Methylphenol	80.0	41.5		ug/L		52	34 - 78
4-Nitroaniline	80.0	55.9		ug/L		70	48 - 135
4-Nitrophenol	160	51.6		ug/L		32	11 - 47
Acenaphthene	80.0	63.1		ug/L		79	58 - 107
Acenaphthylene	80.0	59.7		ug/L		75	61 - 106
Acetophenone	80.0	61.7		ug/L		77	54 - 115
Anthracene	80.0	59.0		ug/L		74	70 - 118
Benzo[a]anthracene	80.0	66.1		ug/L		83	73 - 119
Benzo[a]pyrene	80.0	61.4		ug/L		77	76 - 125
Benzo[b]fluoranthene	80.0	64.1		ug/L		80	78 - 123
Benzo[g,h,i]perylene	80.0	49.6	*	ug/L		62	63 - 133
Benzo[k]fluoranthene	80.0	62.8		ug/L		78	71 - 126
Bis(2-chloroethoxy)methane	80.0	60.8		ug/L		76	67 - 104
Bis(2-chloroethyl)ether	80.0	60.7		ug/L		76	63 - 106
Bis(2-ethylhexyl) phthalate	80.0	65.7		ug/L		82	63 - 135
Butyl benzyl phthalate	80.0	70.7		ug/L		88	66 - 129
Carbazole	80.0	62.0		ug/L		78	68 - 121
Chrysene	80.0	56.4	*	ug/L		71	73 - 121
Dibenz(a,h)anthracene	80.0	48.2		ug/L		60	59 - 136
Dibenzofuran	80.0	59.9		ug/L		75	67 - 108
Diethyl phthalate	80.0	63.3		ug/L		79	61 - 129
Dimethyl phthalate	80.0	62.4		ug/L		78	65 - 121
Di-n-butyl phthalate	80.0	67.7		ug/L		85	64 - 130
Di-n-octyl phthalate	80.0	60.9		ug/L		76	64 - 131
Fluoranthene	80.0	61.3		ug/L		77	66 - 123
Fluorene	80.0	60.8		ug/L		76	67 - 112
Hexachlorobenzene	80.0	67.2		ug/L		84	63 - 125
Hexachlorobutadiene	80.0	50.5		ug/L		63	34 - 99
Hexachlorocyclopentadiene	80.0	46.6		ug/L		58	18 - 99
Hexachloroethane	80.0	44.9		ug/L		56	39 - 92
Indeno[1,2,3-cd]pyrene	80.0	62.1		ug/L		78	57 - 142
Isophorone	80.0	61.7		ug/L		77	55 - 105
Naphthalene	80.0	55.8		ug/L		70	51 - 98
Nitrobenzene	80.0	62.1		ug/L		78	56 - 106
N-Nitrosodi-n-propylamine	80.0	57.0		ug/L		71	48 - 118
N-Nitrosodiphenylamine	80.0	64.1		ug/L		80	69 - 118
Pentachlorophenol	160	140		ug/L		88	54 - 120
Phenanthrene	80.0	62.2		ug/L		78	70 - 117
Phenol	80.0	25.0		ug/L		31	16 - 43
Pyrene	80.0	66.5		ug/L		83	63 - 129

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	105		26 - 139
2-Fluorobiphenyl	85		45 - 107
2-Fluorophenol (Surr)	51		25 - 58
Nitrobenzene-d5 (Surr)	94		51 - 108
Phenol-d5 (Surr)	34		14 - 39
Terphenyl-d14 (Surr)	96		40 - 148

Lab Sample ID: LCS 460-628518/4-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Atrazine	160	208		ug/L		130	38 - 146
Benzaldehyde	160	178		ug/L		111	46 - 111
Caprolactam	160	50.9		ug/L		32	10 - 43

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	114		26 - 139
2-Fluorobiphenyl	100		45 - 107
2-Fluorophenol (Surr)	62	*	25 - 58
Nitrobenzene-d5 (Surr)	115	*	51 - 108
Phenol-d5 (Surr)	40	*	14 - 39
Terphenyl-d14 (Surr)	131		40 - 148

Lab Sample ID: LCSD 460-628518/3-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628518

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	80.0	68.4		ug/L		86	54 - 108	13	30
1,2,4,5-Tetrachlorobenzene	80.0	69.5		ug/L		87	46 - 105	15	30
2,2'-oxybis[1-chloropropane]	80.0	53.6		ug/L		67	50 - 108	14	30
2,3,4,6-Tetrachlorophenol	80.0	73.1		ug/L		91	57 - 122	14	30
2,4,5-Trichlorophenol	80.0	68.1		ug/L		85	59 - 117	12	30
2,4,6-Trichlorophenol	80.0	76.0		ug/L		95	62 - 120	16	30
2,4-Dichlorophenol	80.0	68.7		ug/L		86	62 - 102	14	30
2,4-Dimethylphenol	80.0	64.6		ug/L		81	61 - 95	14	30
2,4-Dinitrophenol	160	145		ug/L		91	45 - 125	17	30
2,4-Dinitrotoluene	80.0	77.5		ug/L		97	70 - 123	17	30
2,6-Dinitrotoluene	80.0	77.5		ug/L		97	68 - 121	14	30
2-Chloronaphthalene	80.0	67.7		ug/L		85	54 - 105	13	30
2-Chlorophenol	80.0	61.9		ug/L		77	54 - 92	11	30
2-Methylnaphthalene	80.0	65.7		ug/L		82	47 - 104	16	30
2-Methylphenol	80.0	52.0		ug/L		65	43 - 80	12	30
2-Nitroaniline	80.0	73.6		ug/L		92	46 - 124	15	30
2-Nitrophenol	80.0	77.7		ug/L		97	58 - 109	16	30
3,3'-Dichlorobenzidine	80.0	70.1		ug/L		88	68 - 123	14	30
3-Nitroaniline	80.0	61.8		ug/L		77	60 - 117	18	30
4,6-Dinitro-2-methylphenol	160	158		ug/L		99	59 - 132	14	30
4-Bromophenyl phenyl ether	80.0	72.2		ug/L		90	57 - 126	13	30
4-Chloro-3-methylphenol	80.0	67.3		ug/L		84	58 - 98	14	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-628518/3-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628518

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloroaniline			80.0	53.9		ug/L		67	51 - 108	12	30
4-Chlorophenyl phenyl ether			80.0	71.8		ug/L		90	60 - 114	15	30
4-Methylphenol			80.0	48.2		ug/L		60	34 - 78	15	30
4-Nitroaniline			80.0	67.2		ug/L		84	48 - 135	18	30
4-Nitrophenol			160	58.0		ug/L		36	11 - 47	12	30
Acenaphthene			80.0	73.1		ug/L		91	58 - 107	15	30
Acenaphthylene			80.0	68.3		ug/L		85	61 - 106	13	30
Acetophenone			80.0	73.0		ug/L		91	54 - 115	17	30
Anthracene			80.0	66.7		ug/L		83	70 - 118	12	30
Benzo[a]anthracene			80.0	75.5		ug/L		94	73 - 119	13	30
Benzo[a]pyrene			80.0	70.5		ug/L		88	76 - 125	14	30
Benzo[b]fluoranthene			80.0	74.0		ug/L		92	78 - 123	14	30
Benzo[g,h,i]perylene			80.0	56.3		ug/L		70	63 - 133	13	30
Benzo[k]fluoranthene			80.0	72.6		ug/L		91	71 - 126	15	30
Bis(2-chloroethoxy)methane			80.0	70.1		ug/L		88	67 - 104	14	30
Bis(2-chloroethyl)ether			80.0	69.9		ug/L		87	63 - 106	14	30
Bis(2-ethylhexyl) phthalate			80.0	77.2		ug/L		96	63 - 135	16	30
Butyl benzyl phthalate			80.0	82.8		ug/L		103	66 - 129	16	30
Carbazole			80.0	70.4		ug/L		88	68 - 121	13	30
Chrysene			80.0	65.1		ug/L		81	73 - 121	14	30
Dibenz(a,h)anthracene			80.0	55.1		ug/L		69	59 - 136	13	30
Dibenzofuran			80.0	69.6		ug/L		87	67 - 108	15	30
Diethyl phthalate			80.0	73.7		ug/L		92	61 - 129	15	30
Dimethyl phthalate			80.0	72.2		ug/L		90	65 - 121	15	30
Di-n-butyl phthalate			80.0	77.9		ug/L		97	64 - 130	14	30
Di-n-octyl phthalate			80.0	71.6		ug/L		89	64 - 131	16	30
Fluoranthene			80.0	69.1		ug/L		86	66 - 123	12	30
Fluorene			80.0	69.6		ug/L		87	67 - 112	13	30
Hexachlorobenzene			80.0	76.1		ug/L		95	63 - 125	12	30
Hexachlorobutadiene			80.0	60.3		ug/L		75	34 - 99	18	30
Hexachlorocyclopentadiene			80.0	53.4		ug/L		67	18 - 99	14	30
Hexachloroethane			80.0	56.5		ug/L		71	39 - 92	23	30
Indeno[1,2,3-cd]pyrene			80.0	71.0		ug/L		89	57 - 142	13	30
Isophorone			80.0	70.9		ug/L		89	55 - 105	14	30
Naphthalene			80.0	66.2		ug/L		83	51 - 98	17	30
Nitrobenzene			80.0	73.9		ug/L		92	56 - 106	17	30
N-Nitrosodi-n-propylamine			80.0	67.5		ug/L		84	48 - 118	17	30
N-Nitrosodiphenylamine			80.0	70.9		ug/L		89	69 - 118	10	30
Pentachlorophenol			160	160		ug/L		100	54 - 120	13	30
Phenanthrene			80.0	69.9		ug/L		87	70 - 117	12	30
Phenol			80.0	26.7		ug/L		33	16 - 43	7	30
Pyrene			80.0	77.0		ug/L		96	63 - 129	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*115*		*26 - 139*
2-Fluorobiphenyl	*91*		*45 - 107*
2-Fluorophenol (Surr)	*52*		*25 - 58*
Nitrobenzene-d5 (Surr)	*100*		*51 - 108*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-628518/3-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628518

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Phenol-d5 (Surr)	*34*		*14 - 39*
Terphenyl-d14 (Surr)	*104*		*40 - 148*

Lab Sample ID: LCSD 460-628518/5-A
Matrix: Water
Analysis Batch: 628708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628518

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Atrazine			160	207		ug/L		129	38 - 146	0	30
Benzaldehyde			160	168		ug/L		105	46 - 111	6	30
Caprolactam			160	38.8		ug/L		24	10 - 43	27	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*112*		*26 - 139*
2-Fluorobiphenyl	*97*		*45 - 107*
2-Fluorophenol (Surr)	*57*		*25 - 58*
Nitrobenzene-d5 (Surr)	*109*	*	*51 - 108*
Phenol-d5 (Surr)	*35*		*14 - 39*
Terphenyl-d14 (Surr)	*122*		*40 - 148*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 460-628533/1-A
Matrix: Water
Analysis Batch: 628783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1221	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1232	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1242	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1248	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1254	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1260	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor-1262	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 09:49	1
Aroclor 1268	0.40	U	0.40	0.11	ug/L		07/31/19 09:24	08/01/19 09:49	1
Polychlorinated biphenyls, Total	0.40	U	0.40	0.12	ug/L		07/31/19 09:24	08/01/19 09:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*10 - 150*	*07/31/19 09:24*	*08/01/19 09:49*	*1*
DCB Decachlorobiphenyl	*77*		*10 - 150*	*07/31/19 09:24*	*08/01/19 09:49*	*1*

Lab Sample ID: LCS 460-628533/2-A
Matrix: Water
Analysis Batch: 628783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628533

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			4.00	3.77		ug/L		94	78 - 150		

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 460-628533/2-A
Matrix: Water
Analysis Batch: 628783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628533

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			4.00	4.20		ug/L		105	78 - 150		
Aroclor 1260			4.00	4.14		ug/L		104	80 - 150		
Aroclor 1260			4.00	4.28		ug/L		107	80 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*61*		*10 - 150*
DCB Decachlorobiphenyl	*71*		*10 - 150*

Lab Sample ID: LCSD 460-628533/3-A
Matrix: Water
Analysis Batch: 628783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628533

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016			4.00	3.66		ug/L		92	78 - 150	3	30
Aroclor 1016			4.00	4.27		ug/L		107	78 - 150	2	30
Aroclor 1260			4.00	4.14		ug/L		103	80 - 150	0	30
Aroclor 1260			4.00	4.33		ug/L		108	80 - 150	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*55*		*10 - 150*
DCB Decachlorobiphenyl	*62*		*10 - 150*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 460-628475/1-A ^2
Matrix: Water
Analysis Batch: 628613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	40.0	U	40.0	18.8	ug/L		07/31/19 06:07	07/31/19 15:27	2
Arsenic	2.0	U	2.0	0.73	ug/L		07/31/19 06:07	07/31/19 15:27	2
Barium	4.0	U	4.0	1.2	ug/L		07/31/19 06:07	07/31/19 15:27	2
Cadmium	2.0	U	2.0	0.81	ug/L		07/31/19 06:07	07/31/19 15:27	2
Chromium	4.0	U	4.0	2.3	ug/L		07/31/19 06:07	07/31/19 15:27	2
Cobalt	4.0	U	4.0	1.6	ug/L		07/31/19 06:07	07/31/19 15:27	2
Copper	4.0	U	4.0	2.0	ug/L		07/31/19 06:07	07/31/19 15:27	2
Iron	120	U	120	51.1	ug/L		07/31/19 06:07	07/31/19 15:27	2
Lead	1.2	U	1.2	0.55	ug/L		07/31/19 06:07	07/31/19 15:27	2
Nickel	4.0	U	4.0	2.4	ug/L		07/31/19 06:07	07/31/19 15:27	2
Selenium	10.0	U	10.0	5.4	ug/L		07/31/19 06:07	07/31/19 15:27	2
Silver	2.0	U	2.0	0.59	ug/L		07/31/19 06:07	07/31/19 15:27	2
Zinc	16.0	U	16.0	11.1	ug/L		07/31/19 06:07	07/31/19 15:27	2
Tin	16.0	U	16.0	4.5	ug/L		07/31/19 06:07	07/31/19 15:27	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 460-628475/2-A ^2
Matrix: Water
Analysis Batch: 628613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2500	2575		ug/L		103	80 - 120
Arsenic	50.0	50.98		ug/L		102	80 - 120
Barium	50.0	50.81		ug/L		102	80 - 120
Cadmium	25.0	25.52		ug/L		102	80 - 120
Chromium	50.0	52.13		ug/L		104	80 - 120
Cobalt	25.0	25.96		ug/L		104	80 - 120
Copper	50.0	52.88		ug/L		106	80 - 120
Iron	2500	2615		ug/L		105	80 - 120
Lead	25.0	25.64		ug/L		103	80 - 120
Nickel	50.0	52.75		ug/L		106	80 - 120
Selenium	50.0	49.49		ug/L		99	80 - 120
Silver	25.0	26.22		ug/L		105	80 - 120
Zinc	250	253.8		ug/L		102	80 - 120
Tin	50.0	50.20		ug/L		100	80 - 120

Lab Sample ID: 460-187805-F-3-C MS ^2
Matrix: Water
Analysis Batch: 628613

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 628475

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	260		2500	2912		ug/L		106	75 - 125
Arsenic	1.5	J	50.0	55.23		ug/L		107	75 - 125
Barium	107		50.0	154.6		ug/L		95	75 - 125
Cadmium	2.0	U	25.0	27.68		ug/L		111	75 - 125
Chromium	3.9	J	50.0	57.68		ug/L		107	75 - 125
Cobalt	4.0	U	25.0	26.79		ug/L		107	75 - 125
Copper	4.0	U	50.0	55.34		ug/L		111	75 - 125
Iron	313		2500	3026		ug/L		109	75 - 125
Lead	1.2	U	25.0	27.69		ug/L		111	75 - 125
Nickel	4.0	U	50.0	54.18		ug/L		108	75 - 125
Selenium	10.0	U	50.0	52.52		ug/L		105	75 - 125
Silver	2.0	U	25.0	26.97		ug/L		108	75 - 125
Zinc	16.0	U	250	260.5		ug/L		104	75 - 125
Tin	16.0	U	50.0	53.49		ug/L		107	75 - 125

Lab Sample ID: 460-187805-F-3-B DU ^2
Matrix: Water
Analysis Batch: 628613

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 628475

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	260		233.5		ug/L		11	20
Arsenic	1.5	J	2.08		ug/L		32	20
Barium	107		109.2		ug/L		2	20
Cadmium	2.0	U	2.0	U	ug/L		NC	20
Chromium	3.9	J	3.80	J	ug/L		4	20
Cobalt	4.0	U	4.0	U	ug/L		NC	20
Copper	4.0	U	4.0	U	ug/L		NC	20
Iron	313		328.4		ug/L		5	20
Lead	1.2	U	1.2	U	ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-187805-F-3-B DU ^2
Matrix: Water
Analysis Batch: 628613

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 628475

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nickel	4.0	U	4.0	U	ug/L		NC	20
Selenium	10.0	U	10.0	U	ug/L		NC	20
Silver	2.0	U	2.0	U	ug/L		NC	20
Zinc	16.0	U	16.0	U	ug/L		NC	20
Tin	16.0	U	16.0	U	ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-628765/13-A
Matrix: Water
Analysis Batch: 628896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/01/19 05:40	08/01/19 09:05	1

Lab Sample ID: LCS 460-628765/14-A
Matrix: Water
Analysis Batch: 628896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.08		ug/L		108	80 - 120

Lab Sample ID: 460-187353-E-3-D MS
Matrix: Water
Analysis Batch: 628896

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 628765

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.07		ug/L		107	75 - 125

Lab Sample ID: 460-187353-A-3-B DU
Matrix: Water
Analysis Batch: 628896

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 628765

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.20	U	0.20	U	ug/L		NC	20

Method: 1010A - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-393898/1
Matrix: Water
Analysis Batch: 393898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Lab Sample ID: 240-116636-A-1 DU
Matrix: Water
Analysis Batch: 393898

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Flashpoint	>200		>200		Degrees F		NC	20

Method: 9014 - Cyanide, Reactive

Lab Sample ID: MB 460-628951/1-A
Matrix: Water
Analysis Batch: 628960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628951

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	25.0	U	25.0	25.0	mg/L		08/01/19 11:00	08/01/19 16:12	1

Lab Sample ID: LCS 460-628951/2-A
Matrix: Water
Analysis Batch: 628960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	40.0	25.0	U	mg/L		25	10 - 100

Lab Sample ID: 460-187735-1 DU
Matrix: Water
Analysis Batch: 628960

Client Sample ID: Frac Tank
Prep Type: Total/NA
Prep Batch: 628951

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Reactive	25.0	U	25.0	U	mg/L		NC	10

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 460-628950/1-A
Matrix: Water
Analysis Batch: 628958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628950

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	20.0	U	20.0	20.0	mg/L		08/01/19 11:00	08/01/19 16:07	1

Lab Sample ID: LCSSRM 460-628950/3-A
Matrix: Water
Analysis Batch: 628958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628950

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Reactive	23.2	20.0	U	mg/L		76.8	18.5 - 163.8

Lab Sample ID: 460-187735-1 MS
Matrix: Water
Analysis Batch: 628958

Client Sample ID: Frac Tank
Prep Type: Total/NA
Prep Batch: 628950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Reactive	20.0	U	320	290.2		mg/L		91	67 - 133

Lab Sample ID: 460-187735-1 MSD
Matrix: Water
Analysis Batch: 628958

Client Sample ID: Frac Tank
Prep Type: Total/NA
Prep Batch: 628950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide, Reactive	20.0	U	320	282.6		mg/L		88	67 - 133	3	10

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Method: 9040C - pH

Lab Sample ID: MB 460-628501/2
Matrix: Water
Analysis Batch: 628501

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Corrosivity	6.3				SU			07/31/19 11:18	1
Temperature	21.7				Degrees C			07/31/19 11:18	1

Lab Sample ID: LCSSRM 460-628501/3
Matrix: Water
Analysis Batch: 628501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Corrosivity			5.67	5.7		SU		100.9	96.5 - 103.5		

Lab Sample ID: 460-187789-E-1 DU
Matrix: Water
Analysis Batch: 628501

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Corrosivity	7.9			7.9		SU				0.3	10
Temperature	20.2			20.3		Degrees C				0	

QC Association Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

GC/MS VOA

Analysis Batch: 629195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	8260C	
MB 460-629195/8	Method Blank	Total/NA	Water	8260C	
LCS 460-629195/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-629195/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 628518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	3510C	
MB 460-628518/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-628518/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 460-628518/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-628518/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 460-628518/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 628708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	8270D	628518
MB 460-628518/1-A	Method Blank	Total/NA	Water	8270D	628518
LCS 460-628518/2-A	Lab Control Sample	Total/NA	Water	8270D	628518
LCS 460-628518/4-A	Lab Control Sample	Total/NA	Water	8270D	628518
LCSD 460-628518/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	628518
LCSD 460-628518/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	628518

GC Semi VOA

Prep Batch: 628533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	3510C	
MB 460-628533/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-628533/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-628533/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 628783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	8082A	628533
MB 460-628533/1-A	Method Blank	Total/NA	Water	8082A	628533
LCS 460-628533/2-A	Lab Control Sample	Total/NA	Water	8082A	628533
LCSD 460-628533/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	628533

Metals

Prep Batch: 628475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	3010A	
MB 460-628475/1-A ^2	Method Blank	Total/NA	Water	3010A	
LCS 460-628475/2-A ^2	Lab Control Sample	Total/NA	Water	3010A	
460-187805-F-3-C MS ^2	Matrix Spike	Total/NA	Water	3010A	
460-187805-F-3-B DU ^2	Duplicate	Total/NA	Water	3010A	

Metals

Analysis Batch: 628613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-628475/1-A ^2	Method Blank	Total/NA	Water	6020B	628475
LCS 460-628475/2-A ^2	Lab Control Sample	Total/NA	Water	6020B	628475
460-187805-F-3-C MS ^2	Matrix Spike	Total/NA	Water	6020B	628475
460-187805-F-3-B DU ^2	Duplicate	Total/NA	Water	6020B	628475

Prep Batch: 628765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	7470A	
MB 460-628765/13-A	Method Blank	Total/NA	Water	7470A	
LCS 460-628765/14-A	Lab Control Sample	Total/NA	Water	7470A	
460-187353-E-3-D MS	Matrix Spike	Total/NA	Water	7470A	
460-187353-A-3-B DU	Duplicate	Total/NA	Water	7470A	

Analysis Batch: 628896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	7470A	628765
MB 460-628765/13-A	Method Blank	Total/NA	Water	7470A	628765
LCS 460-628765/14-A	Lab Control Sample	Total/NA	Water	7470A	628765
460-187353-E-3-D MS	Matrix Spike	Total/NA	Water	7470A	628765
460-187353-A-3-B DU	Duplicate	Total/NA	Water	7470A	628765

Analysis Batch: 628898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	6020B	628475

General Chemistry

Analysis Batch: 393898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	1010A	
LCS 240-393898/1	Lab Control Sample	Total/NA	Water	1010A	
240-116636-A-1 DU	Duplicate	Total/NA	Water	1010A	

Analysis Batch: 628501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	9040C	
MB 460-628501/2	Method Blank	Total/NA	Water	9040C	
LCSSRM 460-628501/3	Lab Control Sample	Total/NA	Water	9040C	
460-187789-E-1 DU	Duplicate	Total/NA	Water	9040C	

Prep Batch: 628950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	7.3.4	
MB 460-628950/1-A	Method Blank	Total/NA	Water	7.3.4	
LCSSRM 460-628950/3-A	Lab Control Sample	Total/NA	Water	7.3.4	
460-187735-1 MS	Frac Tank	Total/NA	Water	7.3.4	
460-187735-1 MSD	Frac Tank	Total/NA	Water	7.3.4	

Prep Batch: 628951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	7.3.3	

General Chemistry (Continued)

Prep Batch: 628951 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-628951/1-A	Method Blank	Total/NA	Water	7.3.3	
LCS 460-628951/2-A	Lab Control Sample	Total/NA	Water	7.3.3	
460-187735-1 DU	Frac Tank	Total/NA	Water	7.3.3	

Analysis Batch: 628958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	9034	628950
MB 460-628950/1-A	Method Blank	Total/NA	Water	9034	628950
LCSSRM 460-628950/3-A	Lab Control Sample	Total/NA	Water	9034	628950
460-187735-1 MS	Frac Tank	Total/NA	Water	9034	628950
460-187735-1 MSD	Frac Tank	Total/NA	Water	9034	628950

Analysis Batch: 628960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-187735-1	Frac Tank	Total/NA	Water	9014	628951
MB 460-628951/1-A	Method Blank	Total/NA	Water	9014	628951
LCS 460-628951/2-A	Lab Control Sample	Total/NA	Water	9014	628951
460-187735-1 DU	Frac Tank	Total/NA	Water	9014	628951

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Client Sample ID: Frac Tank

Date Collected: 07/29/19 07:00
Date Received: 07/29/19 19:00

Lab Sample ID: 460-187735-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	629195	08/02/19 15:26	SZD	TAL EDI
Total/NA	Prep	3510C			628518	07/31/19 08:56	DXD	TAL EDI
Total/NA	Analysis	8270D		1	628708	08/01/19 00:01	SK	TAL EDI
Total/NA	Prep	3510C			628533	07/31/19 09:24	DXB	TAL EDI
Total/NA	Analysis	8082A		1	628783	08/01/19 13:46	JHP	TAL EDI
Total/NA	Prep	3010A			628475	07/31/19 06:07	GMC	TAL EDI
Total/NA	Analysis	6020B		2	628898	08/01/19 17:51	MDC	TAL EDI
Total/NA	Prep	7470A			628765	08/01/19 05:40	TJS	TAL EDI
Total/NA	Analysis	7470A		1	628896	08/01/19 09:33	TJS	TAL EDI
Total/NA	Analysis	1010A		1	393898	08/01/19 06:45	TPH	TAL CAN
Total/NA	Prep	7.3.3			628951	08/01/19 11:00	YAH	TAL EDI
Total/NA	Analysis	9014		1	628960	08/01/19 16:12	YAH	TAL EDI
Total/NA	Prep	7.3.4			628950	08/01/19 11:00	YAH	TAL EDI
Total/NA	Analysis	9034		1	628958	08/01/19 16:07	YAH	TAL EDI
Total/NA	Analysis	9040C		1	628501	07/31/19 12:03	AAP	TAL EDI

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Laboratory: Eurofins TestAmerica, Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11452	04-01-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total
9014	7.3.3	Water	Cyanide, Reactive
9034	7.3.4	Water	Sulfide, Reactive
9040C		Water	Temperature

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State		2927	02-23-20
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-20
Florida	NELAP		E87225	06-30-20
Illinois	NELAP	5	200004	07-31-20
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
Kansas	NELAP		E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-21
New Jersey	NELAP	2	OH001	06-30-20
New Jersey	NELAP		OH001	06-30-20
New York	NELAP	2	10975	03-31-20
New York	NELAP		10975	03-31-20
Ohio VAP	State Program	5	CL0024	06-05-21
Oregon	NELAP	10	4062	02-23-20
Oregon	NELAP		4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Pennsylvania	NELAP		68-00340	08-31-19
Texas	NELAP	6	T104704517-18-10	08-31-19 *
Texas	NELAP		T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19 *
Virginia	NELAP		010101	09-14-19
Washington	State		C971	01-12-20
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State		210	12-31-19
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL EDI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
6020B	Metals (ICP/MS)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI
1010A	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CAN
9014	Cyanide, Reactive	SW846	TAL EDI
9034	Sulfide, Reactive	SW846	TAL EDI
9040C	pH	SW846	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI
7.3.3	Cyanide, Reactive	SW846	TAL EDI
7.3.4	Sulfide, Reactive	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: GEI Consultants, Inc.
Project/Site: GPEC

Job ID: 460-187735-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-187735-1	Frac Tank	Water	07/29/19 07:00	07/29/19 19:00	

Franklin

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

NYC 222

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Chris Morris	Samplers Name (Printed): George Holmes	Site/Project Identification: GPEC	
Company: GEI Consultants Inc.	P. O. #: 125180-3-1302	State (Location of site): NJ: ☐ NY: ☒ Other:	
		Regulatory Program: Results Only	DKQP: ☐
Address: 110 Walt Whitman Rd.	Analysis Turnaround Time: Standard ☒		
City: Huntington Station State: NY 11746	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		
Phone: 631-759-2967 Fax: CMorris@GEIConsultants.com			

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	VOC's 8260	SVOC's 8270	PCB's 8082	Total RCRA Metals plus copper, nickel, zinc, cobalt, tin, aluminum, iron	Flash point	Reactivity	Toxicity	PH	Sample Numbers
Frac Tank	7/29/19	0700	Aq	10	X	X	X	X	X	+	+	+	X	1
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:										
6 = Other _____, 7 = Other _____				Water:	2	1	1	4	4	1	1	1	1	

LAB USE ONLY
Project No:
Job No: 187735
Sample Numbers

5-Day RUSH

460-187735 Chain of Custody

Special Instructions: Greenpoint Energy Center former MGP (287 Maspeth Ave, Brooklyn) Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1)		GEI	7/29/19 1020	1)	
2)			7/29/19 1520	2)	
3)			7/29/19 1900	3)	7/30/19 1900
4)				4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) 3.2(32 Hg

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 187735

Number of Coolers: 1 IR Gun # 4

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.1 °C	3.1 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2											

If pH adjustments are required record the information below:

Sample No(s). adjusted: NA

Preservative Name/Conc.: NA Volume of Preservative used (ml): NA

Lot # of Preservative(s): NA Expiration Date: NA

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

*Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: ~ Date: 7/29/19

1.4/1.5

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Penas, Omayra	Carrier Tracking No(s):	COC No: 460-55541.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: omayra.penas@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-187735-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/5/2019			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: National Grid - Greenpoint	Project #: 46028503			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

W 1/0

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1010A/ Flashpoint	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Frac Tank (460-187735-1)	7/29/19	07:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7/30/19 1900	Company AEI	Received by:	Date/Time: 7-31-19 920	Company EMAC		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client ETA - Edison Site Name _____ Cooler unpacked by:

Cooler Received on 7-31-19 Opened on 7-31-19

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 14 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **+0.1** °C) Observed Cooler Temp. 1.9 °C Corrected Cooler Temp. 1.5 °C
   IR GUN #36 (CF **+0.6**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes No	NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA	pH Strip Lot# **HC984738**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 460-187735-1

Login Number: 187735
List Number: 1
Creator: Callahan, April R

List Source: Eurofins TestAmerica, Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	